Investing IN Adolescent Health

A Social Imperative for California's Future

A Strategic Plan *BY THE*

California Adolescent Health Collaborative

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Activities of the Center include: 1) increasing the availability of information related to the health of adolescents through a coordinated strategy that links collection, analysis, and dissemination of Maternal and Child Health-related and other national activities; 2) improving the capacity of state Title V agencies to plan, deliver and improve access and coordination of comprehensive primary care for adolescents; 3) conducting short-term and long-term studies to synthesize research findings, identify health trends, compare policy approaches and analyze current and proposed legislation affecting adolescents; and 4) developing strategies to increase the public's awareness of the health needs of special populations. The National Adolescent Health Information Center is supported primarily by a grant from the Maternal and Child Health Bureau, 4H06MC0002, Health Resources and Services Administration, Public Health Service, U.S. Department of Health and Human Services.

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A Social Imperative for California's Future

PREPARED BY

Serena Clayton, PhD

Claire Brindis, DrPH

Jill Hamor, MPH

Hannah Raiden-Wright, MSW/MPH

Claire Fong, BS

National Adolescent Health Information Center

Division of Adolescent Medicine, Department of Pediatrics,

and Institute for Health Policy Studies,

School of Medicine, University of California, San Francisco

California Adolescent Health Collaborative

Participants in the Strategic Planning Process

Colette Auerswald, MD
Division of Adolescent Medicine,
University of California, San Francisco

Steve Barrow
Results Strategies and Advocacy Institute

Robert Bates, MD, MPH
Maternal and Child Health Branch,
California Department of Health Services

Victoria Berends
California Project LEAN,
Public Health Institute

Lea Ann Bernick, MHA
Valencia Health Services, University of
California, San Francisco

Jennifer Bing, MPA
Health Initiatives for Youth

Lydia Bourne, RN, MA
California School Nurses Organization

Anand Chabra, MD, MPH
San Mateo County Health Services Agency

Gilberto Chavez, MD, MPH
Maternal and Child Health Branch,
California Department of Health Services

Charlene Clemens, MPA
Family Service Agency of San Francisco

Joel Cohen
California Research Bureau

Larry Cohen, MSW
Children's Safety Network

Jeanne Finberg, JD
Bay Area Legal Aid

MaeRetha Franklin, MBA, CPHQ
Office of Women's Health, California
Department of Health Services

Nancy Gelbard, MS, RD
School Health Connections, California
Department of Health Services

David Ginsburg, MPH
Office of Family Planning, California
Department of Health Services

Sandi Goldstein, MPH
Alameda County Health Care Services Agency

Eldyne Gray
Planned Parenthood, Los Angeles

Shanna Holland
California Center for Childhood Injury
Prevention, San Diego State University

Taj James
Coleman Advocates for Children and Youth

Sharon L. Kalemkiarian, JD
Project Heartbeat, San Diego County Bar
Association

Beth Kiernan, MPH
University of California, San Diego Medical
Center

Kathy Kneer
Planned Parenthood Affiliates of California

David Lawrence
California Center for Childhood Injury Prevention, San Diego State University

Leslie S. Linton
Pre-Teen Health Project, San Diego State University

Jo Ann Madigan
American College of Obstetricians and Gynecologists, District IX

Barbara Marquez, MPH
Office of Community Challenge Grants, California Department of Health Services

Lynn McKibbin, PHN
California Conference of Local Directors of Maternal, Child and Adolescent Health

Milton Morris, MPP
Prevention Institute

James Muldavin
California Center for Civic Participation and Youth Development

Charlotte Maxwell Newhart
American College of Obstetricians and Gynecologists, District IX

Amanda Purcell, MPH
California Project LEAN, Public Health Institute

Lani Schiff-Ross, LCSW
San Joaquin County Public Health Services

Susan Rabinovitz, RN, MPH
Division of Adolescent Medicine, Childrens Hospital Los Angeles

Jessica Reich
Children Now

Caroline Roberts, MPH, RD
School Health Connections, California Department of Education

Peggy Russo, MPH
Peggy K. Russo and Associates

Don Saylor, MPA
Board of Education, Davis Joint Unified School District

Margie Fites Seigle
California Family Health Council, Inc.

Janet Shalwitz, MD
San Francisco Department of Public Health

Ronda Simpson-Brown
Cal-SAFE Program, California Department of Education

Terrence Smith, MD, MPH
Maternal and Child Health Branch, California Department of Health Services

Robert Sparks, MD
California Medical Association Foundation

Steven R. Sproger, LCSW, PhD
Children's Medical Services Branch, California Department of Health Services

Don Taylor, MA
Maternal and Child Health Branch, California Department of Health Services

Thelma King Thiel
Hepatitis Foundation International

Janet N. Treat, PHN, MN
Office of Family Planning, California Department of Health Services

Carol Turk-Henry, RN, BS
Fresno Human Services System, Department of Community Health

Scott Vivona, MPA
Maternal and Child Health Branch, California Department of Health Services

Amos White
Political Consultant

Gayle Wilson, LCSW
Center for Youth Policy and Advocacy

Joan Meis Wilson
Healthy Community Forum

Tina Zenzola
California Center for Childhood Injury Prevention, San Diego State University

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Foreword

The California Adolescent Health Collaborative (AHC) is a public-private partnership seeking to mobilize forces to improve adolescent health and well-being across the state. The AHC was formed in 1996 and includes representatives from over 40 organizations and agencies. Over time, the AHC recognized the need for a statewide strategic plan to set a direction for efforts to promote adolescent health. *Investing in Adolescent Health: A Social Imperative for California's Future* was completed in November 2000. This strategic plan identifies three important directions the state must take to improve adolescent health:

- **Making youth a policy priority.**
- **Creating supports and opportunities for all youth.**
- **Improving services and service systems.**

The data, recommendations, and strategies included in the plan provide a road map for moving forward in these three directions.

The planning process was supported by the Maternal and Child Health Branch of the California Department of Health Services, the Federal Maternal and Child Health Bureau, Federal Region IX, the Title X Program, the California Family Health Council, The California Wellness Foundation, the Sierra Health Foundation, the American College of Obstetrics and Gynecology, Planned Parenthood, and in-kind support from many of the AHC member organizations. Staffing for the development of the plan was provided by the National Adolescent Health Information Center (NAHIC), Division of Adolescent Medicine, Department of Pediatrics and the Institute for Health Policy Studies at the University of California, San Francisco.

A number of steps were taken to develop a plan that reflected a convergence of opinion among a variety of stakeholders. These steps included:

- Review of state and national data on multiple adolescent health indicators, including the national Healthy People 2010 objectives;
- Review of adolescent health plans from other states, California strategic plans, and national blue ribbon documents on adolescent health, including a review of 1,000 recommendations derived from 36 national reports on adolescent health;
- Interviews with specific content experts;
- Two forums, one in Northern and one in Southern California, drawing over 150 participants;
- Focus group discussions with four groups of adolescents from across the state actively involved in health-related issues in their communities; and
- Public review and input from stakeholders across the state.

NAHIC staff and the AHC devoted a full year to the synthesis of information, the gathering of multiple opinions, and the discussion of priority strategies to be included in the plan. The goal was to create a plan that would be both comprehensive and practical. The plan was designed to serve as a tool for engaging a wide variety of stakeholders in working together to improve adolescent health. Readers are invited to use this plan to identify action steps, whether large or small, short- or long-term, to contribute to this effort.

Chapter 1

Understanding Adolescent Health: Issues AND Approaches

The health and well-being of California teens has a major impact on the overall social and economic health of our state. Today's teens are tomorrow's workforce, parents, and leaders, and their future is shaped by the opportunities we create for them today. Most parents make significant personal investments in their children's future. Yet as a society, we are not making the investments necessary to ensure the health and well-being of all of our youth.

During adolescence (10 to 19 years of age) young people confront new issues that affect their physical and mental health. Similarly, young adults (20 to 24) continue to experience many of the same challenges to their health and well-being. The health issues of teens and young adults are easy to overlook because they are not, for the most part, acute illnesses or chronic diseases. Instead, they are largely behavioral and social issues. Addressing these issues requires change at multiple levels—from service delivery, to funding priorities, to community resources and environments, and, more fundamentally, to the behavior and attitudes of California's adults.

Why is adolescent health a critical issue in California?

ADOLESCENT HEALTH PROBLEMS RESULT IN GREAT PERSONAL, SOCIAL, AND MONETARY COSTS. Adolescents are particularly prone to risk-taking and experimentation as they learn to manage new capabilities and greater freedom. These behaviors are often a normal part of establishing independence, but they can also lead to negative and potentially serious health consequences. Every year in California, approximately:

- 500 teens are killed in motor vehicle crashes.
- 170 teens commit suicide.
- 28,000 hospitalizations occur for mental health disorders among youth ages 10 to 19.
- 3,200 young people ages 13 to 20 are hospitalized due to assault.
- 59,000 teens become parents.
- 8.7 billion dollars are spent treating adults for tobacco-related illnesses caused by a habit that began in adolescence.

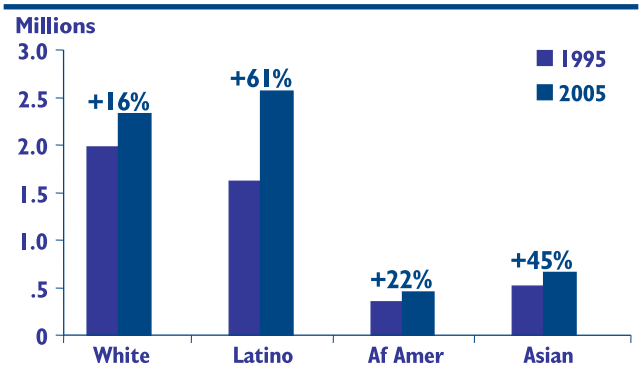
CALIFORNIA'S ADOLESCENT POPULATION IS GROWING, ESPECIALLY IN COMMUNITIES WHERE NEEDS ARE GREATEST. It is estimated that between 1995 and 2005, the number of youth ages 10 to 19 in California will grow from 4.4 to 6.0 million—a 34% increase. By contrast, this age group will grow by only 13% nationally. California's adolescent population, already among the most ethnically diverse in the nation, will become even more diverse. While the number of white youth will grow by 16%, the number of African American youth will grow by 22%, Asian youth by 45%, and Latino youth by 61% (Figure 1.1). The Native American youth population will grow by only 2%. Because the sheer number of adolescents in the state is increasing, and because this increase is greater among groups that often have poorer health outcomes and less access to health care, we can anticipate growing demands on the service system.

ADOLESCENCE OFFERS AN OPPORTUNITY FOR PREVENTION. Many of the health and social problems we pay for as a society can be averted during adolescence.

- Sixteen percent of California AIDS cases occur among young adults, ages 20 to 29. Given the average 10 to 12 year latency period between HIV infection and the onset of symptoms, it is likely that many of these individuals were infected as teens.

FIGURE 1.1

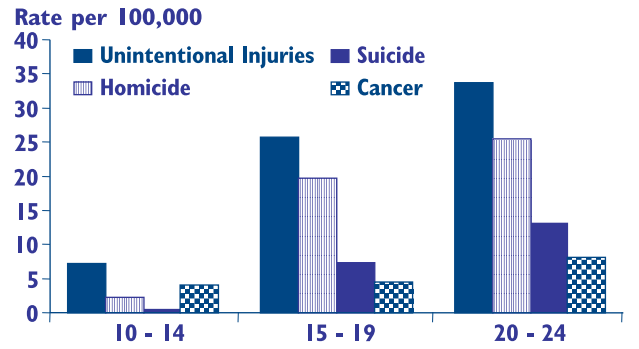
Growth in California's Adolescent Population, 10-19 between 1995-2005



Source: *California Department of Finance, Race/Ethnic Population with Age and Sex Detail, 1970-2040*

- The teenage years are a critical time for the initiation of tobacco use. Ninety percent of current adult smokers started smoking during adolescence, and new evidence suggests that teens become addicted to nicotine more quickly than adults.[1, 2]
- Poor diet and physical inactivity are second only to tobacco as preventable causes of death among adults.[3] These lifestyle habits are often formed in adolescence.

FIGURE 1.2
Leading Causes of Death among California Youth



Source: *California Department of Health Services, Vital Statistics, 1998*

- More than half of all school-age children have untreated tooth decay, which is easily and inexpensively preventable.

WE CAN MAKE A DIFFERENCE. Risk behaviors such as substance use, early and unprotected sex, and drinking and driving, are not an inevitable part of adolescence. In fact, the leading causes of death among adolescents are preventable (Figure 1.2). The success of public initiatives in several areas illustrates the type of results we can expect to achieve with further public investment in effective prevention and intervention strategies.

- Motor vehicle safety is improving: motor vehicle deaths are lower than the national average and use of seat belts is higher.
- Teen birth rates fell by 28% from 1991 to 1998 and are now only slightly higher than national rates.
- Juvenile homicide arrests declined from 696 in 1991 to 308 in 1998.
- There has been a steady decline in the percentage of dropouts from California's public high schools across all ethnic groups.

How should we approach adolescent health?

The World Health Organization's definition of health has become a standard in the field of public health. Health is defined as more than just the "absence of disease," but rather a state of "complete physical, mental, and social well-being." This broad definition has particular relevance to adolescent health. Adolescent health encompasses not only the prevention and treatment of disease and disability, but also behavioral and social issues. Issues of safety, social relationships, self-esteem, education and skill development all figure into healthy adolescent development. Thus, to make progress in improving adolescent health, a combination of perspectives and approaches is needed.

SPOTLIGHT ON...

Project ABLE (Adolescent Beliefs Learned through Education) run by the Los Angeles Free Clinic reaches teens who are homeless, runaway, incarcerated, in foster care, and in drug treatment programs. The project's goal is to help them make choices that will protect their health. Project ABLE's traveling peer educators perform a hard-hitting one-act play about adolescent health issues. During the sessions that follow, youth work together on projects that give them an opportunity to share educational messages with their peers through creative productions such as plays, poems, stories, newsletter articles or drawings.

Promoting resiliency and creating supportive environments

Traditionally, adolescent health has been defined as the absence of problems (e.g., pregnancy, violent behavior, drug use).[4] Early efforts focused on eliminating these problems, often through approaches that were too narrow or failed to address the root causes of these issues. Too often we blamed teens for these behaviors, without fully acknowledging that adolescent behavior mirrors that of adults and is shaped by their social and cultural environments, including families, communities, schools, media, popular culture, and public opinion.

A fundamental shift in orientation is beginning to take place. Rather than focusing solely on reducing risk factors for morbidity and mortality, new approaches look at strengthening resiliency. Resiliency is the ability of youth to overcome obstacles, to meet the new social demands of adolescence, and to build the competencies necessary for success as adults. Resilient adolescents have benefited from supportive relationships and opportunities enabling them to move successfully into adulthood. In many cases, resilient adolescents are successful even when the odds are stacked against them as a result of risk factors in their environments.

A growing body of research on the clustering of risk-taking behaviors and adolescent health problems suggests that several factors contribute to adolescent resiliency.[5] Adolescents are less likely to engage in risk behaviors if they:

- have a sense of physical, emotional, and economic security;
- have connections with adults and peers—in particular, a strong relationship with a caring adult;
- are able to make a contribution to the community and have input into decision-making;
- believe that others have high expectations of them; and
- have opportunities for participation in challenging and engaging activities that build skills and competencies.

Shifting the focus to building resiliency and healthy development points to the need to ensure access to services and opportunities to enable *all* youth to thrive. It turns our attention to creating *supportive environments* rather than looking to correct deficiencies in teens themselves.

Although many existing programs do seek to build supports for youth, a broader shift is needed. For example, we collect statewide data on the percentage of youth who smoke, or use illicit drugs, but we know very little about the percentage of youth who have a caring adult in their lives. The focus on creating supportive environments must be strengthened in order to move beyond narrow, categorical approaches and to make substantial progress in addressing the root causes of adolescent health issues.

Targeting approaches and recognizing special needs

Although many adolescent health outcomes will be improved by enhancing supports and services for *all* teens, targeted approaches can be useful for making progress on specific health outcomes. Chapter 3 presents data and strategies in seven *targeted action areas:*

- Injury Prevention
- Mental Health and Suicide
- Nutrition and Physical Activity
- Alcohol, Tobacco, and Other Drugs
- Teen Pregnancy and Sexually Transmitted Infections
- Oral Health
- Environmental and Occupational Health

To build resiliency among *all* teens, it is also important to consider the challenges brought about by special circumstances or characteristics of youth such as chronic illness and disability, foster care, homelessness, immigration status, incarceration, race/ethnicity, and sexual orientation.

Chronic Illness and Disability. Youth with chronic illnesses, both physical and mental, often require more frequent and complex medical services than other youth. They face special social, psychological, and educational challenges during the adolescent years and in transition to adulthood. Data from the 1994 National Health Interview Survey indicate that approximately 8% of children ages 6 to 18 experience some degree of limitation in their activities due to chronic conditions, and 0.2% experience severe limitations.[6]

Foster Care. Adolescents who lack a permanent and stable home encounter formidable challenges to their physical and mental well-being. The number of California youth in foster care has almost doubled from approximately 59,000 in 1988 to 103,024 in 1999.[7,8] The growth in the foster care caseload is related to the increase of youth living in poverty, the increase of youth in single-parent households, and the number of parents abusing drugs and alcohol.[9] Youth in the foster care system are more likely to be poor and suffer from problems affecting their health and overall development than youth who live with their families.[10] Approximately half of all foster youth suffer from chronic conditions, and 60% to 80% are estimated to have moderate to severe mental health disorders.[9] Studies have shown

> ***"I think it's worked out better than if I hadn't had a disability. If I'd been able-bodied, I probably would've been snotty and materialistic. I like what I've become."***
>
> **Youth participant, 2nd Bay Area Adolescent Health Conference**

SPOTLIGHT ON...

Dimensions is an evening clinic in San Francisco dedicated to health services for lesbian, gay, bisexual, transgender, and questioning youth. The clinic was spearheaded by Health Initiatives for Youth which called together a group of Bay Area providers to discuss the results of a needs assessment of gay/lesbian youth. The lack of services geared specifically toward this population was identified as an important gap. The Department of Public Health stepped forward to offer space and clinical staff. The clinic now provides comprehensive services including primary care, mental health assessment and referral, confidential HIV testing, transgender-sensitive services, and peer health education.

that many older adolescents who exit out-of-home care have significant problems caring for themselves, and, in many cases, continue to be dependent on public programs.[11] One of the barriers to providing appropriate services for foster youth is that caregivers often lack access to their medical histories or other service records.[12]

Homelessness. In California, an estimated 20,000 to 25,000 youth are homeless and living on the streets with no supervision or family support.[13] Many are separated from homeless families; others have left their homes often due to abuse or neglect; and still others are former foster children who have "aged out" of the system. More than 60% of the youth residing in shelters and transitional living facilities have been physically or sexually abused by their parents, and 20% have experienced violence from other family members.[14] Although these youth are often eligible for public programs, they are unlikely to access them without tailored outreach and service approaches.

Immigration. Since 1990, the number of youth in immigrant families in the United States has expanded about seven times faster than the number with U.S.-born parents.[15] One of every five children under the age of 18—14 million altogether—is an immigrant or has an immigrant parent. Available evidence suggests that, on many measures of health and well-being, they fare as well or better than U.S.-born children with U.S.-born parents.[15] However, immigrant youth are more likely to have difficulty accessing health services. The care they receive is often episodic and frequently occurs in emergency rooms, limiting the provision of continuous, preventive and comprehensive care.[16] Undocumented immigrants fear that accessing services will alert immigration authorities or cause them to be labeled a "public charge," thereby jeopardizing their chances of obtaining residency or citizenship. All immigrants or refugees, regardless of residency status, may experience barriers related to language and culture that make it difficult or uncomfortable to seek medical care. In California, the size and diversity of the refugee/immigrant population make issues of language and cultural sensitivity extremely important.

Incarceration. Among the 50 states and the District of Columbia, California has the third highest rate of juveniles in custody (549 per 100,000 compared to the national rate of 368).[8] In June 1998, more than 14,000 youth were under the jurisdiction of the California Youth Authority, over 8,000 of whom were incarcerated, with the

remainder on parole.[17] This population is disproportionately minority, particularly African American (Table 1.1). These racial/ethnic differences are related to crime rates, social factors and the way cases are processed in the legal system.

TABLE 1.1
California Juveniles in Custody, by Race/Ethnicity

Race	Rate per 100,000 (October 1997)
African American	1,819
Latino	654
Native American	548
White	299
Asian	268

Source: *Snyder, H. & Sickmund, M. Juvenile Offenders and Victims: 1999 National Report. Washington D.C.: Office of Juvenile Justice and Delinquency Prevention, 1999.*

More than 50% of all youth entering detention facilities have health-related problems; nearly half have a previously undiagnosed learning disability; and 90% have dental problems.[18,19] Incarcerated youth are also at significantly greater risk for health problems and health compromising behaviors, including sexually transmitted and infectious diseases, pregnancy, substance abuse, psychotic behavior, depression, suicide attempts, physical/sexual abuse, and trauma.[20, 21]

RACE/ETHNICITY. Information about disparities in health status among racial/ethnic groups can be used to target interventions and to tailor strategies to the needs of individual communities. However, it is important to recognize that racial/ethnic disparities often are caused by underlying socioeconomic differences.

- Nationally, Native American youth have the worst health and social status indicators of any racial/ethnic group. Motor vehicle death and suicide rates among Native Americans are three times those of the general population, and substance abuse rates are higher than in any other ethnic group.[22,23]
- African Americans experience the highest homicide and incarceration rates, along with the highest rates of poverty and foster care placement.[7]
- Latino youth experience high rates of poverty, homicide, incarceration, and teen birth, as well as low rates of health insurance coverage.[15,22]
- White teens generally have better outcomes and more favorable socioeconomic indicators, yet suicide rates, rates of tobacco use—particularly smokeless tobacco—and substance abuse rates are higher than among other racial/ethnic groups.

- Although Asian/Pacific Islander Americans generally have favorable health indicators, there are exceptions. For example, Asian 15 year olds are more than 13 times less likely to have received dental sealants than their white counterparts. In addition, aggregate data obscure significantly worse outcomes among some Asian groups. For example, in California, Vietnamese are four times as likely as Japanese to live below the poverty line.[24]

Sexual Orientation. Gay, lesbian, bisexual, and transgender youth who self-identify during high school are at greater risk for a variety of health risk and problem behaviors, including suicide, victimization, sexual risk-taking, and multiple substance use.[25,26,27] They are less likely to seek health care due, in part, to fear that medical providers will respond negatively to them or reveal their sexual orientation to their family.[28]

Focusing on Outcomes

At the federal, state, and local levels, a new emphasis is being placed on assessing the outcomes of programs and policies. This focus represents a departure from previous monitoring approaches that counted the number and types of services delivered and assumed that improvements in health status would follow. By contrast, tracking outcomes allows us to gauge progress in addressing important health issues, and to identify policies and programs that work.

Tracking adolescent health outcomes requires the collection of data on specific indicators. At the federal level, the Centers for Disease Control and Prevention's (CDC) Healthy People 2010 objectives are a set of indicators designed to assess progress in public health in a wide range of areas. These objectives contain a subset of 21 critical indicators for adolescent health. In addition, the state collects data on Maternal and Child Health (MCH) Performance Measures to report progress to the federal Maternal and Child Health Bureau. Drawing largely on these two indicator sets, as well as on efforts to develop new indicators, we identified 27 indicators of adolescent health that can be used to assess the impact of program and policy changes in California (Table 1.2).

Resiliency and supportive environments. The identification of indicators of resiliency and the collection of population-based data are in their early stages. California is at the forefront of this effort with the California Healthy Kids Survey which includes a module on resiliency. Although not entirely representative of the state population, data currently available from over 26,000 students across the state provide a first look at indicators of supports and opportunities for adolescents in the home, school, and community environments.

Healthy choices. Indicators of health behavior provide important information about whether teens are making healthy choices. Many of these choices can have long-term effects on health and the need for health services. Major areas of concern for adolescents include: motor vehicle safety, including drinking and driving; early or unprotected sexual

TABLE 1.2
Adolescent Health Indicators for California

Resiliency and Healthy Development

1. Increase the proportion of youth who have supportive relationships and opportunities at home (p. 28).
2. Increase the proportion of youth who have supportive relationships and opportunities in the community (p. 33).
3. Increase the proportion of youth who have supportive relationships and opportunities at school (p. 35).

Healthy Choices

4. Reduce the proportion of young people who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol (p. 43).
5. Increase use of safety belts (p. 44).
6. Reduce physical fighting among adolescents (p. 47).
7. Reduce weapon carrying by adolescents on school property (p. 46).
8. Reduce tobacco use by adolescents (p. 63).
9. Reduce binge drinking among adolescents (p. 64).
10. Reduce adolescent use of marijuana (p. 66).
11. Increase the proportion of young persons who engage in vigorous physical activity that promotes cardiorespiratory fitness (p. 59).
12. Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active (p. 73).
13. Reduce pregnancies among adolescent females (p. 70).

Health Services

14. Reduce the percentage of children and adolescents without health insurance (p. 19).
15. Increase the proportion of children with mental health problems who receive treatment (p. 50).
16. Increase the proportion of children who have dental sealants on their molar teeth (p. 79).

Reduced Morbidity and Mortality

17. Reduce deaths of adolescents and young adults (10-14, 15-19, 20-24 years) (p. 10).
18. Reduce deaths caused by motor vehicle crashes (p. 42).
19. Reduce deaths and injuries caused by alcohol- and drug-related motor vehicle crashes (p. 43).
20. Reduce adolescent homicide deaths (p. 45).
21. Reduce the youth suicide rate (p. 51).
22. Reduce the rate of suicide attempts by adolescents (p. 52).
23. Reduce the proportion of adolescents and young adults with *Chlamydia trachomatis* infections (p. 72).
24. Reduce the number of cases of HIV infection among adolescents and young adults (p. 74).
25. Reduce the proportion of adolescents with dental caries experience in their permanent teeth (p. 78).
26. Reduce the proportion of children and youth with disabilities who are reported to be sad, unhappy, or depressed (p. 53).
27. Reduce the proportion of children and adolescents (12-19) who are overweight or obese (p. 58).

intercourse; use of tobacco, alcohol, and other drugs; poor nutrition and lack of physical activity; and involvement in activities that increase exposure to violence.

HEALTH SERVICES. Adolescents' use of health services is an important indicator of the extent to which service systems are meeting their needs. Currently, there is a lack of adolescent-specific data on key indicators, including health insurance coverage and use of preventive medical and dental services.

Reduced morbidity. Indicators of morbidity provide important information for the prevention of illness and injury and the management of chronic conditions. Preventable medical problems among teens include sexually transmitted infections, hepatitis, dental diseases, obesity and other cardiovascular risk factors such as high blood pressure and high cholesterol. A variety of chronic conditions, such as asthma and diabetes, can be life-threatening if not managed appropriately.

REDUCED MORTALITY. Mortality indicators show that the leading causes of death among teens and young adults are homicide, motor vehicle crashes, suicide, cancer, and other unintentional injuries. With the exception of some forms of cancer, all of the leading causes of death among adolescents are fully preventable.

ADOLESCENT HEALTH INDICATOR

Reduce deaths of adolescents and young adults.

Sources: Healthy People 2010; MCH Performance Measures

DATA POINTS

Mortality rate per 100,000

	10-14	15-19	20-24
US	22.14	70.57	95.27
CA	20.68	60.75	82.52

Source: Centers for Disease Control and Prevention, Vital Statistics, 1998

California's Challenge

The tremendous social, economic, and demographic changes that lie ahead place our state at an important crossroads. The challenge is to ensure that all of California's teens have the supports they need for healthy development and a smooth transition to adulthood. Meeting this challenge will require significant improvements in infrastructure, service systems, and community-level supports. Continuing past policies and categorical approaches that far too often ignore the multidimensional needs and assets of youth is unlikely to produce significant changes. However, if we combine forces, and begin to seriously address the social, cultural and economic factors that shape adolescent health, there is tremendous potential to improve the health of our teens and our society.

Chapter 2

Moving Forward: Eight *Core Recommendations* FOR Adolescent Health

Throughout the state, there is a significant amount of work taking place to improve the health and well-being of adolescents. This work includes broad initiatives, policy advocacy, and service programs, as well as informal and personal efforts. In addition, a number of statewide strategic plans have laid out priorities for various specific issues in adolescent health. In developing a comprehensive adolescent health strategic plan, it was important that the plan be consistent with existing documents, but also that it have added value, rather than simply repackaging the same messages under a new cover. Thus, the goal in creating the core recommendations was to address the factors that are common to many adolescent health issues, and to identify approaches that bridge various disciplines and issue areas. The eight core recommendations move the state in three major policy directions:

- **Making youth a policy priority.**
- **Improving services and service systems.**
- **Creating supports and opportunities for all youth.**

To improve adolescent health and well-being, California must:

- Build strong public support for investment in youth.
- Involve youth in the policy process.
- Ensure access to comprehensive, youth-friendly health services.
- Coordinate systems for the delivery of services to teens.
- Build stable families that can support teens.
- Create communities that offer youth positive life options.
- Design schools to promote health and development.
- Use data to support responsive programs and policy.

Build strong public support for investment in youth

The health, social, and educational support adolescents need requires consistent, long-term investments. Political will to make these investments and to prioritize the needs of youth is often lacking. Controversy over adolescent behaviors, especially early sexual activity and substance use, makes it difficult to reach a consensus on how to approach some of these issues. As a result, it is challenging to develop a strong, unified public position in support of youth.

In recent years, California's social policy has often focused on punitive strategies oriented toward controlling youth to eliminate undesirable behaviors, while neglecting strategies to support positive behaviors. For example, between 1985 and 1995, California's rate of youth incarceration increased from 176 to 250 per 100,000 and is now 47% higher than the national average.[8,29] According to the Family Resource Coalition, "...by the year 2002, 18% of California's budget will be spent on corrections and a mere 1% on higher education."[30] At the local level, Coleman Advocates for Youth reports that San Francisco's juvenile probation budget is five times higher than the recreation budget for teenagers.[31]

> ***"Adults should realize that youth are an asset in their communities. A lot of youth aren't being used to their potential."***
>
> **Youth Member, Northern Circle Alliance Indian Housing Authority**

Negative public stereotypes of adolescents are partially responsible for these policy trends. A recent survey by Public Agenda found that adults express "stunning hostility" toward adolescents.[32] Although the adolescent years offer an opportunity to develop positive behaviors and skills, far too often public attention has focused on the problematic, turbulent, and stressful aspects of adolescence. These negative images, often presented through the media, reduce public interest in investing in adolescents.

Although progress will come incrementally by improving service delivery and refining prevention strategies, the impact of these efforts can be magnified many times if we, as a society, begin to think differently about our youth. The public generally supports programs and policies that support youth, such as education and after-school programs.[33] This type of public support must be strengthened to create the political will needed for long-term commitment to investing in youth. This commitment is critical to the success of many of the recommendations in this plan.

Strategies

1. Establish an Office of Youth at the state level.

- This office would work within and across departments to promote policies that support adolescent health and youth development.

2. Educate policymakers about youth.

- Encourage legislators and agency heads to meet with youth in their own communities and in policy settings.
- Conduct regular polling of youth to provide an accurate picture of their attitudes and opinions, and to assess the extent to which youth across the state have the supports and opportunities they need.
- Provide ongoing information to legislators, local policymakers and private funders about youth issues and promising practices for improving adolescent health.

3. Increase public understanding of and support for teens.

- Work at the community level (e.g., through faith-based organizations, businesses, and organizations of older adults) to bridge the gap between youth and older generations.
- Educate community members about the needs of youth, the contributions they can make to the community, and ways that communities can better support teens.

4. Use the media to promote balanced images of youth.

- Encourage media outlets to form youth advisory councils to review and advise on stories related to youth.
- Create awards and/or report cards for media outlets based on their coverage of youth issues and their presentation of youth.
- Raise awareness among media outlets of how their programming creates negative images of youth and how they can create more positive social environments for youth (e.g., highlighting the accomplishments of youth in the community; publicizing the availability, or lack of resources; having a regular "youth" or "family" section).

SPOTLIGHT ON...

The Kid's First Initiative was a ballot measure passed with 75% of the vote in Oakland in 1996. The measure sets aside 2.5% of the city's unrestricted general fund for services that benefit children and youth. Broad grassroots support with the active involvement of youth enabled Oakland to pass one of the nation's largest children's initiatives. The fund established by the initiative is called the Oakland Fund for Children and Youth and is governed by a board that is 49% youth under the age of 22. This means that youth are not token participants, but actually direct the planning, implementation and evaluation of the $5.4 million in annual grants. Of this amount, $1.2 million is allocated to youth-to-youth grants and to the training of youth to apply for grants and be part of the youth-to-youth grantmaking process.

- Implement a statewide media campaign to foster public and political will to invest state resources in providing youth with support and opportunities, rather than in punishing negative behaviors.
- Modify existing media campaigns that present images of family/community so that they include adolescents, and not simply adults and young children. Raise awareness among private funders, state agencies, and communications professionals of the importance of including teens in portraits of the family.

Recommendation 2

Involve youth in the policy process

Involving young people in the policy process is a critical step toward the creation of public policy that supports adolescent health. Young people have firsthand knowledge of their school, family, and community environments which should form the basis of policies that impact youth. They can conduct youth outreach and collect data in ways that adults cannot. Moreover, youth often provide pragmatic and fresh perspectives that challenge and expand traditional thinking. Their desire to look beyond conventional parameters and their ability to give a firsthand account of the issues make youth effective in attracting the attention of policymakers and the media.

The tremendous contributions that young people can make to the policy process are largely untapped. Many young people remain disillusioned and disengaged from decisions that affect their lives, as evidenced by low rates of voter registration and turnout among young adults. There is a notable lack of emphasis within schools and communities on educating young people to participate in community decision-making and public policy. Too many youth lack the knowledge, skills, and opportunities to become informed and active citizens.

> ***"This conference made me feel teens could make changes in our cities, communities and state. I learned how to influence government. Before this I felt I couldn't make a difference."***
>
> **Delegate to the Youth Summit for Healthy Communities[34]**

Fortunately, some organizations and communities are beginning to recognize the importance of a youth perspective. The State Board of Education has a student member and hears recommendations from a student advisory board each year. Some cities and counties have established youth commissions or youth advisory councils, and some professional conferences are making an effort to include youth participants. Many non-profits are working with youth to identify and address policy issues. At the state level, examples include The California Wellness Foundation's initiatives on violence prevention and teen pregnancy prevention, and the California Youth Council run by Teenwork, a private, non-profit. Youth ALIVE! is an example of a successful effort to involve youth in policy locally. Their group, Teens on Target, has worked to ban gun show ads from the Oakland *Tribune.* Other organizations are teaching youth about the policy process through mock trials and legislatures, and service-learning

organizations are beginning to connect youth volunteer work with engagement in broader policy issues. Still other projects train adults to be more competent at involving youth in decision-making capacities.

At the same time that adults are beginning to open doors for youth to participate in the policy process, youth are demanding a seat at the table. The emergence of Raptivism, which combines rap music with political activism, is one element of a new generation and genre of youth activism. Today's youth activism is led by ethnically and socioeconomically diverse youth concerned about issues such as jobs, juvenile justice, and the environment. The groundswell of youth protests against Proposition 21, the March 2000 juvenile crime initiative, was a clear indication that young people are ready to make themselves heard.

Given the opportunity, many youth are eager to learn about public policy and to become actively involved in changing the rules and systems that impact them. However, giving youth a meaningful role requires resources, time, and flexibility. Resources are needed for practical concerns such as transportation, staff supervision and support, meeting space, refreshments, and incentives or compensation. Involving youth requires time for training and discussion. Youth involvement also can require operational changes such as holding meetings when teens are available which may require staff to work evenings or weekends. Thus, the call for greater youth involvement must be coupled with practical strategies and adequate resources to make the process work.

Moreover, true youth involvement requires even deeper changes. Adults need to be willing to change established practices and to share control of decision-making. This does not mean that there is no room for guidance; in fact, young people thrive in situations where caring adults offer support and room for them to test solutions, grow and achieve. But there must be an understanding that youth are important resources with valuable contributions to make. Involving youth in the policy process requires adults to become true partners with youth in efforts to create change.

SPOTLIGHT ON...

The Youth Commission of the City of West Sacramento, one of the first in the state, provides a meaningful role for teens in the policy process. Youth Commission members make recommendations to the City Council and other city commissions on a range of issues, particularly those that affect youth. For example, when the City Council determined that no money was available for a teen center, the Youth Commission continued their advocacy efforts and successfully secured grant funding for 50% of the construction costs. As a result, the City Council included the remaining 50% of the construction costs in the Capital Improvement Budget and approved general funds to run the facility and its programs.

Strategies

1. Provide youth with the skills needed to influence policy.

- Provide youth with training in areas such as leadership, collaboration, organizing, policy advocacy, and media.
- Develop channels for disseminating information to youth about policy issues affecting their lives.
- Encourage adults who speak about issues related to youth to share the podium with qualified youth speakers.

> ***"Young people seem to have a knack for saying things that trigger new thinking."***
>
> **Director and CEO of Community Partnerships with Youth[35]**

2. Create opportunities for youth to shape policy.

- Include youth in hearings, boards, and commissions at the state level and support their participation with leadership development training, transportation, and incentives such as school credit.
- Create youth commissions within local government. Youth commission members can play a variety of roles including shaping policy, holding conferences, sitting on other commissions, or partnering with policymakers as advisors on youth issues.
- Engage youth in asset mapping projects in their communities to identify community resources and needs from a youth perspective. Involve youth in the publication and dissemination of the results within the community.
- Require and fund grantees to involve youth in program planning for state and foundation initiatives.

Ensure access to comprehensive, youth-friendly health services

Although physical health problems are relatively rare in adolescence, the social and developmental changes of adolescence create a variety of health risks and risk behaviors. Health services can make a critical difference between a healthy adolescence and one that is disrupted by serious physical, psychological, or social problems. Yet adolescents and young adults have the lowest rates of health service utilization of any age group. For example, in 1996, only 18% of adolescents ages 15 to 20 received a medical screen through the Early Periodic Screening, Diagnosis and Treatment (EPSDT) program, whereas 76% of eligible infants were screened.[36] The low utilization of health services among teens is due to a variety of factors including lack of health coverage, concerns about confidentiality, lack of health services that are comfortable and convenient for youth, and lack of public recognition of the importance of preventive care for adolescents.

Comprehensive health services provided to adolescents prevent the development of long-term health issues that are expensive to treat. Comprehensive care for adolescents must include:

- primary care
- reproductive health
- mental health services
- substance abuse prevention and treatment
- immunization
- oral health
- case management
- psychosocial supports
- health education

Health coverage

Health insurance is a critical first step in providing youth with access to health care. Uninsured youth are 3.5 times more likely than insured youth to go without needed health care, and six times more likely to have no usual health care provider.[37] In 1998, among California's 9.7 million children and youth, approximately 54% had employer-based health coverage, 20% had Medi-Cal, 4% purchased coverage privately, and 21% (2 million) were uninsured.[38] With the national average of uninsured children and youth at 15%, California has a significantly larger gap in health insurance for children and youth.

Of the state's uninsured young people, 41% are eligible for Medi-Cal and approximately 32% are eligible for the Healthy Families program (Figure 2.1).[38] More effective enrollment in existing programs could result in a 73% reduction in the number of uninsured children and youth. The remaining uninsured children and youth are not eligible for public programs because they are undocumented or because their family income is above the eligibility level—currently 250% of the federal poverty level.

ADOLESCENT HEALTH INDICATOR

Reduce the percentage of children and adolescents without health insurance.

Source: MCH Performance Measure

DATA POINTS

Percentage of uninsured children 0-18 years.

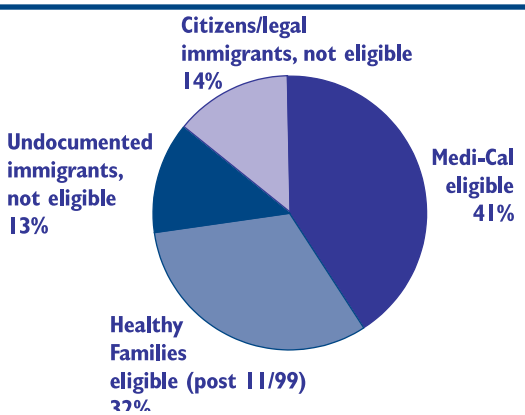
US 15%
CA. 21%

Source: The State of Health Insurance in California, 1999.

California's Family Planning, Access, Care and Treatment program (Family PACT), implemented in January of 1997, has become an important source of publicly funded health care for teens. Although Family PACT is not insurance coverage, it enables teens with family incomes under 200% of poverty to access comprehensive clinical family planning services and primary care when they are unable to use services through Medi-Cal or Healthy Families. All Medi-Cal providers may enroll in Family PACT to provide and be reimbursed for these services under the program. There are currently over 2,800 providers participating in the Family PACT program.

Many youth, even those with public or private health insurance coverage, lack access to comprehensive health care benefits. In particular, behavioral health services (mental health and substance abuse treatment) have been found to be difficult to access and inadequate in scope. The amount of the health insurance premium dedicated to behavioral health services in a typical employer-based health plan is small and has been declining—from 6.1% to 3.1% between 1988 and 1997.[39] The median level of outpatient mental health coverage is 20 visits, but the number of covered visits can be as low as 10 in some HMOs.[38] Mental health inpatient treatment can be difficult to obtain, especially for teens with special health care needs or physical disabilities which many mental health facilities are not prepared to handle. Access to mental health services often requires a crisis, such as a suicide attempt, making prevention and early intervention difficult.

FIGURE 2.1
Status of California's Uninsured Children & Youth



Source: *The State of Health Insurance in California, 1999*

Dental services are also often excluded from health care coverage. Nationally, almost 30% of children and adolescents who have health insurance do not have dental insurance. A needs assessment by the Dental Health Foundation found that approximately 44% of the 10th grade students they surveyed did not have dental health coverage. Both Medi-Cal and Healthy Families offer comprehensive dental benefits for youth under age 21. However, in 1990, less than 40% of dentists in California treated Medi-Cal patients, falling below the national standard of 50%.[40]

Quality of Care

There are several recognized standards for adolescent preventive care such as EPSDT guidelines, the American Medical Association's *Guidelines for Adolescent Preventive Services* (GAPS), and the federal Maternal and Child Health Bureau's *Bright Futures: National Guidelines for Health Supervision of Infants, Children, and Adolescents*.[41] Clinical preventive services guidelines for children and adolescents also have been developed by the American Academy of Pediatrics, the American Academy of Family Physicians and the CDC's Preventive Services Task Force. Overall, these guidelines offer comparable recommendations for preventive services, including screening, health counseling, and broadening the scope of traditional medical care to address the many important behavioral issues facing adolescents.[42]

Obstacles to implementation of these guidelines include inadequate reimbursement, lack of time, and inadequate provider training. California's model for EPSDT, the Child Health and Disability Prevention program (CHDP), does not reimburse for all of the examinations recommended by GAPS. Whereas *annual* examinations are recommended by GAPS during the adolescent years, CHDP covers only one examination between the ages of 13 and 16, and another between 17 and 20. Moreover, health screening and counseling require time, but often are not reimbursable. Inadequate capitation rates and the cost-saving emphasis of managed care are forcing physicians to spend less time with patients. Thus, although 72% of adolescents in California see a physician at least once a year, these visits average less than 15 minutes.[43]

To provide quality health care to teens, providers need to learn to communicate effectively with them, and to ask about sensitive issues such as sexual and substance-use histories. They also must understand the needs of gay/lesbian, foster care, runaway and other groups of youth with special needs. Training in non-medical issues such as these is not typically emphasized in medical education. Many practitioners (e.g., pediatricians, internists, nurse practitioners) receive little training in adolescent health issues and are not comfortable with these topics. In addition, adolescent medicine specialists are in short supply. Adolescent medicine was established as a new sub-specialty of both Pediatrics and Internal Medicine in 1994. As of

August 1999, only 49 California physicians were board certified in Adolescent Medicine.[44]

Quality assurance requirements for managed care organizations, using reporting systems such as HEDIS (Health Employer Data Information Systems), are a potential leverage point for improving the care adolescents receive. HEDIS 3.0, released in 1996, includes four adolescent-specific measures. Of these, two have been implemented: a preventive services visit within the previous 12 months, and adolescent immunization status. Two additional measures are currently in the developmental phase: physician counseling regarding substance use, and chlamydia screening for young women aged 15 to 25 years. The Foundation for Accountability is working with the National Committee for Quality Assurance to develop an Adolescent Preventive Care Measurement Set for youth ages 14 to 18. In addition, the RAND Corporation has developed a set of indicators to assess the quality of adolescent care, and the National Adolescent Health Information Center at the University of California, San Francisco has developed a checklist for assisting managed care organizations with improving adolescent health care.[45,46]

Youth-friendliness

Because of developmental characteristics, a desire for independence, concerns about confidentiality, and lack of experience in negotiating complex health systems, adolescents need to be able to access health care from *multiple entry points*, including community-based centers, school-based and school-linked health centers, physicians' offices, family planning clinics, HMOs, and hospitals.[47] Yet, among the 8,000 schools in California, only 92 have school-based health centers. These health centers and other safety-net providers are struggling to survive in the new, highly competitive health care marketplace.

The characteristics of youth-friendly services—services that youth can and want to use—will vary by community. However, there are several important characteristics that emerge repeatedly. The most crucial is confidentiality. Teens will not access care or raise sensitive concerns if they fear the information will be shared with parents or find its way to peers through gossip or careless conversation in the clinic. Secondly, the overall environment makes a critical difference in how teens respond. Teens are comfortable when staff enjoy

SPOTLIGHT ON...

EOC Health Services in San Luis Obispo County uses the Wellness Peer Provider service delivery model to provide reproductive health outreach, education, and clinical services to male and female adolescents in their community. As one of five clinics receiving funding from The California Wellness Foundation to implement this model, EOC Health Services trains and certifies both male and female adolescents as reproductive health clinic staff to counsel clients. During special teen clinic hours, the only adults working are a clinician and a supervisor. Peer providers staff the front desk, register clients, conduct intake, health education, and counseling services, and work in the lab drawing blood and giving injections. The teen clinic is extremely popular and has been particularly successful in attracting male clients. The teen patients report that they are more comfortable being seen by the Peer Providers than by adult staff. As one client stated, "I didn't know that the staff would be teens— it's great because they understand me more than adults do."

> ***"Adults should be real with teens instead of sugar-coating everything."***
>
> **San Diego Youth Congress Member**

working with them, welcome them, do not treat them with suspicion, listen to them, and answer their questions in a straightforward manner. Language and culture are also important issues for California's increasing population of immigrant and non-English speaking youth. Transportation to service locations can be a barrier for all adolescents, but particularly for those who live in rural communities that are geographically isolated or lack adequate public transportation. In addition, some teens prefer to go outside their communities for medical care, making public transportation a crucial link to health care.

Involving youth in the design of services and in their delivery can greatly enhance the "teen friendliness" of medical, mental health, health education and other services. Recent approaches include involving teens as peer health educators, as staff in medical settings, and as members of advisory and planning groups. However, although the involvement of peers as staff or educators has been successful, it does not appeal to all teen patients. Concerns about confidentiality make some teens more comfortable with people whom they are less likely to see in other settings.

Strategies

1. Promote comprehensive, high-quality health care, and improve the diversity and skills of adolescent health providers.

- Adopt nationally recognized professional guidelines for adolescent health care as the standard of care for all publicly- and privately-funded health care.
- Develop models and tools that can be disseminated at the local level to assist providers in establishing effective programs for adolescents.
- Increase the number of racially and ethnically diverse professionals working with adolescents by providing funding for scholarships, mentoring programs, and outreach to potential professionals.
- Increase offerings in the area of adolescent health within continuing medical education programs.

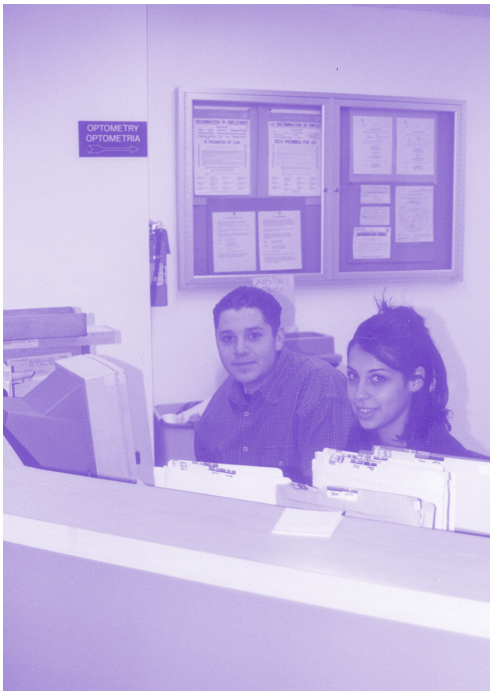
2. Ensure an adequate supply of services and providers.

- Establish parity between mental and physical (including dental) health services within public and private health plans.
- Ensure the availability of inpatient services for youth who have a combination of medical and mental health disorders.

- Create a workgroup at the state level to conduct periodic cost analyses and make recommendations for adjusting capitation rates under public programs so that they are adequate for all services—including prevention, counseling, and education—recommended by nationally recognized professional guidelines for adolescent health care.
- Expand provider pools in publicly financed health services by including all providers, both public and private, and by employing billing methods that are easy to use.
- Establish mechanisms by which school-based health centers can receive reimbursement under state programs, and create a grant program to support school-based health centers.

3. Make health care easy and comfortable for all teens to access.

- Publicize the type of confidential health services available to all teens in California through state- and local-level outreach and education. Dedicate funding for Medi-Cal/Healthy Families outreach to adolescents and their families as distinct from general outreach to children.
- Ensure that all publicly financed health services for adolescents include point-of-service eligibility and on-site self-enrollment. Eliminate co-payments and premiums for all youth.
- Enable minors to consent to general, non-emergency, primary medical care.
- Promote health and social services that respond to the needs of teens in the community, considering factors such as: confidentiality, location, hours, transportation, language and cultural competence, youth-friendly environments, and staff gender and ethnicity.
- Ensure that services are provided in a manner that protects the rights of minors.
- Inform health plan members about health professionals who have been trained in adolescent medicine or specialize in serving teens.



4. Involve adolescents in the planning and delivery of health services.

- Establish adolescent advisory councils, conduct needs assessments and focus groups with clients, and expand peer provider training opportunities.
- Require and fund grantees to involve youth in program planning for state and foundation initiatives.
- Develop "report cards" to capture youth evaluations of service providing agencies and reward those that do well.

RECOMMENDATION 4

Coordinate service delivery systems for teens

Each time a teen accesses health care or services of any type, there is an opportunity to link him or her with other services or support systems. Teens and their families should be able to access a broad array of services from multiple entry points. These entry points might include recreation programs, social service agencies, public health clinics, schools, or the juvenile justice system. Linkage with the educational system is particularly important because it offers the potential to reach youth and families before, or soon after, the first signs of difficulties occur.[48] Improving the integration of services involves changing conditions for service providers and improving coordination at the administrative level.

Barriers to coordination among service providers

The human service system lacks resources at all levels, resulting in limited time to devote to each client. For medical providers, pressure to see a large volume of patients makes it difficult to conduct the type of comprehensive assessments that are needed. Similarly, social workers have notoriously high case loads; teachers have large classes; and school nurses cover multiple schools. The system is stretched in all directions and cannot function to its full potential.

Once teens make contact with any service system, comprehensive needs assessments are an essential first step in providing integrated services. However, some providers lack the skills or comfort level to venture beyond their realm of expertise. Most training programs—whether in medicine, education, or law enforcement—do not prepare practitioners to address the full range of adolescent needs. Teachers have not been trained to identify signs of eating disorders; general practitioners have little preparation for discussing sexuality with teens; and law enforcement officers do not learn to screen for mental illness.

Moreover, in some settings, there are limited incentives for practitioners to conduct comprehensive screenings. Some adults who work with teens are reluctant to uncover problems because, without referral relationships or a collaborative team approach in place, they fear the responsibility for addressing the problems will fall exclusively to them. Finally, providers in many communities lack information about additional resources available to adolescents. Without this information, their ability to make appropriate referrals is limited.

Barriers to coordination at the state and county levels

Lack of an overall plan at the state level to create a network of health, social and educational services to support adolescents leaves communities to cobble together a patchwork of independent interventions. Health services, for example, are funded primarily through reimbursement for discrete services, providing no impetus to craft broader systems of care that meet the needs of adolescents in a comprehensive manner. Similarly, services run by school districts and community agencies are funded through many separate and uncoordinated grants.

In large measure, this situation results from the fact that the government agencies that administer the vast majority of health and social service funds are not structured in a way that facilitates the efficient delivery of services to youth. Funding for youth services is often fragmented into many narrow categories by statutory language at the federal and state levels, limiting public funds to similarly narrow uses. When funding comes in disease- or issue-specific categories, such as HIV, substance abuse, or nutrition, programs tend to be developed in isolation from each other. Many counties and service providers would like to create more cohesive service systems, but often fight an uphill battle when faced with bureaucratic restrictions dictating how money should be spent or how services should be provided.

Improving this situation at the state level would require state agencies to engage in joint planning and coordination of programs. Yet there are few incentives for state programs to do so. Similarly, at the local level, there is considerable room for planning and coordination in most counties. Although counties are constrained by requirements at the state level, they have some ability to blend funding and/or create administrative structures that improve service coordination. Counties participating in the Youth Pilot Project (AB 1741) have been able to waive certain regulations to better coordinate services for some youth. With private funders playing an increasingly important role in the health field in California, increased communication between public and private sector funders also is needed to improve service coordination.

> ***"Because providers typically concentrate on what they are able to provide, rather than what their clients need, they are unlikely to discover critical difficulties that are not yet being addressed or to join forces with other agencies to fill these gaps."***
>
> **Education and Human Services Consortium[49]**

Strategies

1. Create connections between services and service providers.

- Expand use of strategies for care coordination such as case management, "one-stop shopping," family resource centers, school-based health centers, and a continuous medical home concept.
- Develop local provider and referral guides for issues common in adolescence.

SPOTLIGHT ON...

Project Heartbeat, sponsored by the San Diego County Bar Association, led a two-year planning process to create an integrated system of services for children and youth with serious emotional disturbances. County mental health, the court, social services, probation, schools, private sector providers, families, and youth all participated in the design and implementation of the system of care. Services are funded through a blending of funds from child welfare, Medi-Cal mental health, local mental health, and federal and state grants. Over 1200 clients, most of them adolescents, will be served by the end of the first year in 2001. A family service coordinator will work with a "wrap-around care" team to provide a full continuum of care, including outpatient and inpatient mental health services, home-based services, family and peer mentoring, and school-linked interventions.

- Promote a culture among service providers in which collaboration is the norm so that more service providers meet on a regular basis, apply for funding jointly, coordinate their services, and maintain referral relationships.

2. Coordinate administrative structures.

- Create mechanisms at the state and local levels to authorize departments/agencies to change statutes. Waive regulations to improve coordination and effectiveness of youth-serving programs and systems.
- Identify opportunities to support service integration by: conducting inventories of youth-serving programs and funding streams; identifying successful practices in service integration at the national, state, or local level; and identifying opportunities for interdepartmental coordination and key barriers to change. This process should involve top-level administrators, build in incentives to increase participation, and reduce competition and fear of change.
- Develop a more coordinated approach to planning and funding youth services by strengthening communication between public agencies and private funders.
- Create administrative and fiscal incentives for local demonstration projects and other innovative efforts in coordination and collaboration.
- Assist local agencies in developing accounting procedures that enable them to blend funding while providing accurate financial reports for separate funding sources.

3. Fund and support a system of local adolescent health coordinators.

- Use local coordinators to promote best practices and coordinated approaches to adolescent health. Some of their functions might include disseminating information to policymakers and practitioners, convening stakeholders, serving as liaisons to the state, and participating in policy development.

RECOMMENDATION 5

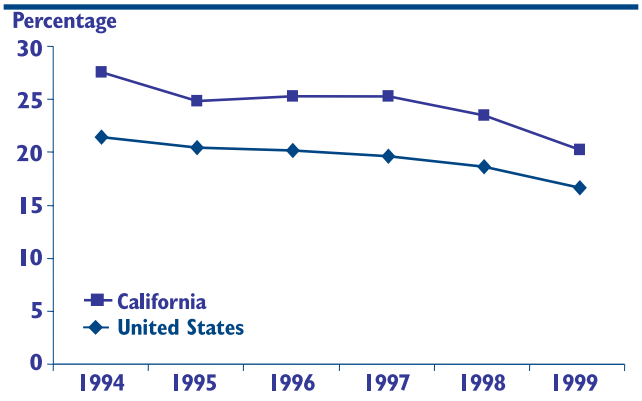
Build stable families that can support teens

The role of families in assuring a successful transition through adolescence into adulthood and in enhancing youth resiliency is well established. The family often serves as one of the most important elements in an adolescent's life, creating the initial environment in which they receive emotional, social, and economic support. Supportive family relationships protect youth against many different kinds of health risks, including emotional distress and suicidal thoughts and attempts; cigarette, alcohol, and marijuana use; violent behavior; and early sexual activity. Data from the California Healthy Kids Survey suggest that most teens feel supported by their families, but that the perception of family support diminishes as teens age.

Financial Stability

California is entering the new millennium with one of the strongest economies in many decades. Yet many low-income families are experiencing increasing hardships. Despite the state's tremendous prosperity, the percentage of children living in poverty in California (20.3%) is above the national average of 16.9% (Figure 2.2), and is the fifth highest in the nation. Many children and youth in California live with parents who do not have full-time, year-round employment —31% in California compared to 27% nationally. In 1997-1998, 1.4 million California youth were receiving public assistance or living in families supported by public assistance.[7] The cost of housing in some areas is emerging as a critical obstacle to successfully moving families from welfare to work. In many communities, it is not uncommon for families on welfare to spend more than 50% of their grant on housing. In 1996-

FIGURE 2.2
Trend in the Percentage of Children in Poverty in California & the U.S.



Source: *California Department of Finance, and U.S. Bureau of the Census Current Population Survey, 1995-2000*

"People are talking about increasing parent involvement in schools, but parents have to struggle just to meet basic necessities like paying the rent, finding work, and finding childcare. We need more than bandaid solutions."

Pilots to Policy 2000 Youth Delegate

1997, a national survey found that approximately 25% of low-income California parents experienced problems paying their mortgage, rent, or utility bills.[50]

These figures are cause for concern. Almost all health indicators become considerably worse as either income or education decreases. Low income youth, for example, are at least 50% more likely than higher income youth to die during childhood. They are five times more likely to die from infectious diseases before the age of 18, and are more than twice as likely to lack a recent physician visit.[51,52] They are also more likely to have risk factors such as cigarette smoking, a sedentary lifestyle, and obesity, which put them at higher risk for cardiovascular disease and cancer.[53,54] Given the impact of poverty on health status, health service utilization and health behaviors, the high percentage of youth living in poverty or in economically unstable households must be addressed in order to improve health outcomes.

Supportive Family Relationships

Supportive family relationships are an important foundation for healthy adolescent development. A recent national study on adolescent health found that, controlling for demographic factors, youth who reported feeling connected to a parent were protected against many different kinds of health risks including emotional distress and suicidal behavior; cigarette, alcohol, and marijuana use; violent behavior; and early sexual activity.[55] Yet the changing needs of children as they enter adolescence, parents' lack of understanding of these developmental processes, and generational differences make it challenging for parents to support, discipline, and communicate with their teens. Nonetheless, statewide data from the California Healthy Kids Survey indicate that 60% to 76% of teens experience a high level of family support (Indicator box). Similarly, among over 1,556 ethnically diverse youth surveyed throughout the state, 89% rated their family as "one of the best things they had going for them."[56] Data from a national sample of predominantly white, rural and suburban youth found that 64% reported supportive family situations.[57]

Changes in the family environment have increased the challenge of providing teens with the supports they need. The percentage of single-parent families in California increased from 23% in 1985 to 26% in 1997.[58] Slightly

ADOLESCENT HEALTH INDICATOR

Increase the proportion of youth who have supportive relationships and opportunities in the home.

Source: California Healthy Kids Survey

DATA POINTS

	7th	9th	11th
Low	4.4%	5.4%	7.1%
Medium	19.5%	28.8%	32.8%
High	76.1%	65.8%	60.1%

Source: California Healthy Kids Survey, Fall 1999 (unweighted)

more than half of all California youth today will spend at least part of their childhood living with only one parent.[59] In addition, there are now fewer extended families living together and many more families with two working parents. These changes have contributed to a decrease in the amount of time that teens spend with their parents or other adults.

Services have not kept pace with changing family needs. Many families have great difficulty finding community resources such as after-school activities for teens, recreation areas, or accessible public transportation. Family-friendly employment arrangements are still difficult for many families to find. And while there has been significant investment in parent education for childbirth and infant care, far less societal attention has been placed on equipping parents with the knowledge and skills they need to successfully raise their adolescents. The programs that do exist tend to be crisis-oriented—reaching families after problems have already emerged—rather than prevention-oriented.

Strategies

1. Help families achieve social and economic stability.

- Enact a state earned-income credit (EIC) (a refundable tax credit for low-income working families) to supplement the federal EIC. Eleven other states (as of January 2000) have enacted EICs.
- Establish a permanent source of funding to help the private market, public-housing agencies and non-profit housing organizations build affordable housing units for low-income Californians.
- Ensure the availability of adequate funding for community-based support and treatment services that assist families in coping with severe stressors such as domestic or community violence, substance abuse, gang participation, and caring for children with severe disabilities or special health care needs.

SPOTLIGHT ON...

The Montebello Unified School District strengthened its Community Challenge Grant parent-teen sex education program by garnering the support of the local Catholic church. Program staff provided the church with information on the prevalence of teen pregnancy and sexually transmitted infections in the community and the importance of educating families. The church now holds the classes at the church itself, building trust among community members who felt comfortable attending the classes. The classes have been so successful that parents have requested further classes on communication and parenting skills.

- Increase family economic security by taking full advantage of existing state, federal, and private funds, and by strengthening services such as adult education, family literacy, job training/search, housing assistance, affordable childcare, etc.

2. Support families in raising teens.

- Increase funding for family and teen resource centers through new funding or mandated blending of existing categorical programs. Ensure that new and existing family resource centers meet the needs of teens and their families.
- Provide incentives for employers to adopt family-friendly policies such as flexible hours or job sharing.
- Increase the availability and accessibility of parent education and support for parents of adolescents. Place special emphasis on assisting parents in supporting all types of adolescents (e.g., those with special health care needs, gay/lesbian youth, foster children). Promote strategies that bring parents together in mutual-support settings (discussion groups, parent-to-parent programs) as opposed to one-way informational presentations.

Recommendation 6

Create communities that offer youth positive life options

Communities play a critical role in promoting adolescent health and well-being. As youth grow older, they spend more time in community settings outside of their immediate family environment. These settings must be safe and must provide youth with a wide range of opportunities to support their growth and development. These opportunities include recreation, work, skill development, and connections with caring adults.

Opportunities for skill development, recreation, and contribution to the community

Participation in activities and part-time employment during non-school hours provides youth with the opportunity to engage in socially positive activities, contribute to their community, build new skills, and have fun. The benefits of these opportunities can last a lifetime. For example, high school employment has been shown to contribute to increased rates of employment and better wages up to a decade after high school completion. However, studies also show that working more than 20 hours per week can have a detrimental effect on youth.[60]

Activities during the 'critical' non-school hours, particularly between 2:00 and 6:00 p.m., also keep youth safe and reduce risk behaviors. These hours are critical because juvenile violence and crime triple in the hour immediately after school.[61] Unsupervised youth are at significantly higher risk for truancy, poor grades, accidents, and risk-taking behaviors, including sexual risk-taking and substance abuse.[62]

> ***"Some teens don't want to do community service. But once they do something and see that it's useful, they get hooked."***
>
> **Alameda H.O.M.E. Project Youth Member**

Youth themselves recognize the importance of having opportunities outside of school. Approximately 89% of the teens responding to an informal survey voiced their support for legislation that would provide $25 million for youth projects in disadvantaged neighborhoods.[63] There is increasing evidence that California voters also support these programs. Seventy-seven percent of registered voters surveyed by the California Center for Health Improvement said they are "very or somewhat willing" to pay for more after-school enrichment programs.[33]

SPOTLIGHT ON...

The Rites of Passage Program run by the National Latino Fatherhood and Family Institute in Los Angeles guides young Latino males through the manhood preparation process. It deals with lifeskills, cultural identity, and prevention of pregnancy, violence, relationship violence, and substance abuse. The program emphasizes the principles of being "un joven noble," a noble young man. An important part of the program is its connection with the Compadres network. Through this network young men, many of whom come from single parent homes with no father present, are connected with community elders. This connection provides positive role models, counters negative concepts of manhood defined by gang participation or fathering a child, and promotes the idea that the young men themselves will become guides for the next generation.

Available data do not provide a clear picture of the proportion of California youth that participate in extracurricular activities or part-time employment. A survey of parents found that approximately 82% of California youth participated in at least one extracurricular activity (e.g., lessons, clubs, sports), comparable to a national average of 84%. Adolescents from low-income families were less likely to be involved in extracurricular activities—74% in California and 73% nationally.[50] On the other hand, a survey of San Francisco youth found that 60% reported that they never participated in after school activities; 25% participated sporadically; and only 15% participated once a week.[31] Nationally, surveys find that approximately 80% of high school students say that they have held a job sometime during their high school years.

Safety

Youth are extremely concerned about violence in their communities. In addition to ranking safe neighborhoods as one of the most important elements of an ideal community, respondents to an informal survey conducted by teen participants in the Youth Summit on Healthy Communities identified violence, crime, and gangs as the second most important obstacle to making their communities a healthy place for teens.[63]

There are a number of factors associated with violence in the community, including poor economic conditions. Among individuals living in households with incomes of less than $15,000 per year, the violent crime rate is significantly higher than it is among households with incomes over this level.[64] The availability of firearms is another community factor that affects the safety of teens. In too many communities, young people are able to obtain firearms illegally through a variety of channels including illegal markets, street sales, and older friends.[65]

Connections with Adults

Even in the absence of a strong parental relationship, a supportive bond with a caring adult can provide emotional support, guidance, and the high expectations that may be critical in steering an adolescent toward a constructive, life-affirming path. Though several mentoring programs exist throughout the state, thousands of youth remain in need of a mentor. In 1998, at least 78,000 California youth were on waiting lists for a mentor through the California Mentor Initiative. Other mechanisms for connecting

youth and adults, involving schools, faith organizations, businesses, etc., must be developed in communities by increasing the sense of shared responsibility for supporting youth.

ADOLESCENT HEALTH INDICATOR

Increase the proportion of youth who have supportive relationships and opportunities in the community.

Source: California Healthy Kids Survey

DATA POINTS

	7th	9th	11th
Low	7.0%	9.0%	10.3%
Medium	20.2%	28.2%	31.2%
High	72.8%	62.8%	58.5%

Source: California Healthy Kids Survey, Fall 1999 (unweighted)

Strategies

1. Expand community opportunities for teens.

- Building upon the After School Learning and Safe Neighborhoods Act, fund and support expansion of programs/activities for youth during non-school hours with particular focus on: 1) developing strategies (e.g., outreach, transportation, incentives, stipends) based on local needs to attract teens who are least likely to participate, 2) improving the supply of programs in areas of greatest need, and 3) developing partnerships with the private sector—similar to those developed for childcare—to increase available resources so that parents may be assured of their teens' safety and well-being while they are at work.
- Provide incentives for employers to employ school-age youth in positions with opportunities for skill development, career exploration, and advancement.
- Designate funding to expand programs that promote community service and service learning, such as the federal AmeriCorps and Learn and Serve programs.
- Encourage foundations to make one time grants for capital expenditures to establish community youth centers.
- Create internships for youth within city and county departments.
- Require community service and/or service learning for high school graduation.

2. Create positive social connections for youth.

- Expand mentoring programs and pilot new strategies to connect youth with adults, including senior citizens.
- Develop peer-to-peer mentoring that fosters connections between older and younger teens.

- Foster mutual understanding by building bridges between teens and other community sectors. Proactively create opportunities for dialogue and collaboration in joint activities (e.g., neighborhood cleanup), with an emphasis on involving specific populations of teens (e.g., ethnic minorities, gay/lesbian) and community sectors that tend to come into conflict with teens such as law enforcement or business.
- Foster opportunities for marginalized youth, such as those who are homeless or have been incarcerated, to contribute positively to their community in a supportive environment.

3. Create community conditions that promote safe, healthy choices.

- Increase funding and incentives for community initiatives that engage communities in asset mapping and planning, build social networks, create channels for information dissemination, and strengthen other community assets to support youth development.
- Decrease youth access to firearms and alcohol.
- Increase opportunities and support for healthy eating and physical activity.
- Increase transportation and street safety.

4. Improve the ability of adults in the community to work with and support teens.

- Provide professionals who work with teens, parents, and other adults with information, training, and referral protocols to help them identify and handle issues that affect adolescent health and development.
- Create a "Youth Work" major within the University of California and California State University system that would prepare graduates to work with youth outside of classroom settings. A number of European countries have such training program/departments.

SPOTLIGHT ON...

Opportunities Industrialization Center West (OICW) is a non-profit community-based job training center on the Menlo Park-East Palo Alto border. OICW offers youth after-school classes, full-time vocational training programs, basic skills training, GED preparation, job placement assistance, and youth development programs. High school students enrolled in the SASSY (School After School for Successful Youth) program can choose from a variety of vocational training classes, including: culinary arts, desktop publishing, electronics, office skills, and printing technology. SASSY teachers demonstrate the relevance of academics through immediate hands-on classroom applications. SASSY students attend OICW classes after the end of their high school day and earn elective academic credits for participating in the program.

RECOMMENDATION 7

Design schools to promote health and development

Schools are important environments for the growth and development of teens. Schools should provide youth with academic and vocational skills, a secure environment that facilitates healthy choices, comprehensive health education, and opportunities to make a contribution to the school and community. The School Health Connections Office, jointly administered by the California Department of Education and the Department of Health Services, recently completed a blueprint that provides detailed strategies for promoting coordinated school health programs.[66]

High School Completion

Within the last decade there have been several positive trends among California's public school students. The percentage of high school dropouts has declined steadily from 14% in 1989 to 10% in 1997. This trend is apparent across all ethnic groups. In addition, the four-year high school completion rate, an estimate of the likelihood that a ninth-grade student will stay in school through grade 12, was 81.2% from 1996 to 1998 compared to 78.7% from 1993 to 1995.

School Environments

In terms of serious physical violence, school is one of the safest places for teens to be. Only 1% of all adolescent homicides occur at school. Although school violence has decreased in recent years relative to overall enrollment, it remains a concern. According to the National Center for Education Statistics, 10% of all public schools in the country (most frequently middle and high schools) reported one or more serious violent crimes during the 1996-1997 school year.[67] Schools in low-income and urban areas, and those in areas with a high presence of street gangs and drugs, have higher rates of serious violent crime.[68] Among high school students responding to California's 1999 Youth Risk Behavior Survey (YRBS), 9.2% report that in the past 12

ADOLESCENT HEALTH INDICATOR

Increase the proportion of youth who have supportive relationships and opportunities at school.

Source: California Healthy Kids Survey

DATA POINTS

	7th	9th	11th
Low	10.9%	19.4%	21.7%
Medium	33.7%	43.9%	44.9%
High	55.3%	36.7%	33.4%

Source: California Healthy Kids Survey, Fall 1999 (unweighted)

months they were threatened or injured with a weapon on school property, and 11.8% report being in a physical fight on school property. These experiences were reported more among boys, younger students, and African American students.

In addition to providing youth with a safe place to learn, schools can promote adolescent health by facilitating healthy lifestyle choices. Many schools are also involved in promoting healthy choices in the area of sexual behavior through educational programs and school-based health services. These aspects of school environment are discussed further in Chapter 3 under the targeted action areas of Nutrition and Physical Activity, and Teen Pregnancy and Sexually Transmitted Infections.

School Health Education

Although there are health education requirements within the California Education Code, schools have a great deal of latitude in choosing how much health education to provide and how to provide it. The only specific requirement, HIV education, can be met through a single presentation in middle school and another in high school. A variety of factors prevent many schools from venturing beyond the minimal requirements, including lack of funding and resources, and fear of political controversy over health education topics. Moreover, recent educational reform efforts have linked school funding to improved performance on standardized tests. Although these measures may have a positive effect on academic performance, they are having a negative impact on health education and health programs. Schools are concentrating resources on subjects covered by standardized tests, while cutting back on class time, materials, and professional development in other areas.

Teens clearly recognize the importance of schools in their lives. Youth respondents to a survey conducted by the Youth Advocacy Summit on Healthy Communities chose "an effective, well-supported school system that meets the needs of all youth" as their top priority.[63]

Despite concerns about political opposition, public opinion strongly supports health education in schools. A 1999 poll found that Californians overwhelmingly support some of the most controversial health education topics. Eighty-eight percent of the parents in the sample supported age-appropriate sexuality education, and 84% said specific instruction on pregnancy and STD prevention should be provided.[69]

Community Service

Community service and service learning provide teens with valuable work experience and teach them that they can make positive contributions to their communities. Career development and school-to-work programs enable adolescents to explore various career options and become better prepared for their transition into adulthood. California has a number of school-to-work transition programs, but these programs only operate in some locations and are in differing stages of development and implementation. The 1999 California School-to-Career State Plan found that the existing education and training infrastructure has much to offer as a basis for enhancing California's school-to-work system, but still needs better coordination of resources and programs to form a coherent statewide system.[70]

Strategies

1. Provide schools with the human and financial resources necessary to address the needs of youth.

- Improve the capacity of schools to address student health needs by increasing funding for credentialed school nurses, social workers, counselors, credentialed health educators, physical education specialists and school-based health centers.
- Lengthen the school day to provide adequate time for health and physical education, lunch, and the breaks necessary for students to integrate learning.
- Designate funding for arts and recreation programs within the education budget.

2. Improve school health education.

- Make a one-semester health education course a high school graduation requirement, and promote age-appropriate health education in every grade based on sequential standards and curricula.
- Increase the pre-service and in-service training teachers receive in health.

SPOTLIGHT ON...

kNOw MORE is a peer education project teaching youth about the devastating and long-lasting effects of violence in teen relationships. The project, developed in partnership with local high schools, is part of the Fresno County Count to Ten partnership to raise public awareness of domestic violence. kNOw MORE provides selected high school students with a three-day, comprehensive peer education training after which they make 45-minute presentations to other teens. The project provides a forum for teens to speak to other teens and uses drama, music, real-life situations and staggering statistics of abuse in teen relationships to demonstrate the seriousness of the problem.

SPOTLIGHT ON...

The Community Foods Security Project improves nutrition in schools by initiating Farmer's Market Salad Bars. The project began in Santa Monica and now is being piloted in the Los Angeles Unified School District. Districts purchase produce directly from farmers to serve in salad bars in school cafeterias. Messages about healthy eating are further reinforced by corresponding classroom curricula, nutrition and environmental education, school garden projects, and farm tours. An estimated 30% of school meals served are from the salad bar. The project adapts to varying cultural preferences by involving youth and parents in tasting foods and making decisions about purchasing.

- Improve dissemination of research findings and research-based curricula for health education and prevention programs through the Healthy Kids Resource Center, County Offices of Education, or other channels such as regional centers.
- Administer the California Healthy Kids Survey on a regular basis to document needs and evaluate program effectiveness.
- Improve health education programs for teens in special education programs and for teens with learning or developmental disabilities.

3. Increase the connection between schools and community.

- Require, promote and/or facilitate the use of school facilities for youth and community activities during non-school hours.
- Increase parent and community involvement in schools through active outreach, extending the Head Start model where parents are an integral component of the school, and/or strengthening parental oversight mandated in Title I schools.

4. Create safe schools and support healthy choices.

- Develop comprehensive school safety plans that involve collaboration between the school administrators, teachers, parents, community members, and teens.
- Create a school climate that supports racial, cultural, and other forms of diversity, and in which harassment, discrimination, and/or violence towards others are not tolerated.
- Increase opportunities and support for healthy eating and physical activity within schools.

Recommendation 8

Use data to support responsive programs & policy

Data are an essential tool for achieving many of the recommendations in this plan. Data can be used to raise awareness of adolescent health issues, to plan program and service delivery, and to formulate policy at the state and local levels. Although the volume of data generated through research, evaluation, and program monitoring is tremendous, there are several issues that limit the use of these data.

There is a lack of comparability in data elements collected by different agencies and programs. For example, some programs may track use of *any* illicit drug, whereas others may track use of several specific drugs. Inconsistencies such as this make it difficult to obtain an accurate picture of the needs of youth and the impact of programs and policies. In order to address this issue, the Department of Health Services, Maternal and Child Health Branch and the Family Health Outcomes Project at UCSF are developing the technical capacity within local Maternal, Child, and Adolescent Health programs to collect a core set of data elements for the comprehensive assessment of youth needs. Efforts such as this must be expanded to improve the consistency of data collection.

Lack of access to data on individual clients is a major obstacle to the development of effective, integrated services. Innovative efforts are needed to enable agencies serving the same youth to share relevant information about their clients without violating confidentiality. CATS (Common Application Transaction System) projects in several counties that enable clients to apply for multiple state programs through a single application have made progress in developing systems for maintaining client confidentiality. These models must be expanded to service providers at the local level.

Finally, there is much room for improvement in the use of existing data. At both the state and local levels, data often remain buried in databases, reports, or research articles rather than being brought to the attention of policymakers. To more effectively shape

programmatic and policy decisions, data must be presented in clear and compelling formats that the public and policymakers can understand.

Strategies

1. Increase standardization of data collected by state departments

- Provide financial and/or human resources to departments to 1) identify the most useful outcome indicators for tracking adolescent health, 2) identify gaps in existing data collection systems, and 3) develop strategies for filling these gaps.
- Standardize definitions of indicators (e.g., special health care needs, abuse of alcohol, truancy), and identify a set of required core indicators that each department must collect on the youth it serves. This work should build on existing efforts in the child health arena (e.g., Family Health Outcomes Project, the Child Health Indicators Taskforce).
- Consolidate program evaluation and reporting for state-funded programs and base evaluations on standardized data definitions and measures. When possible, rely on existing instruments such as the California Healthy Kids Survey.

2. Improve the utility of data for program and policy development

- Explore long-term opportunities for individual-level data sharing that would make possible an integrated case management system without violating confidentiality.
- Create a "child and adolescent health report card" that captures both system and outcome indicators and provides a mechanism for accountability.
- Provide technical assistance to counties and communities to assist them in using data to drive changes in service delivery and health policy.
- Collect statewide data on indicators of youth resiliency and supportive environments.
- Assess the impact of youth development interventions on improved health outcomes and reductions in risk behaviors.

SPOTLIGHT ON...

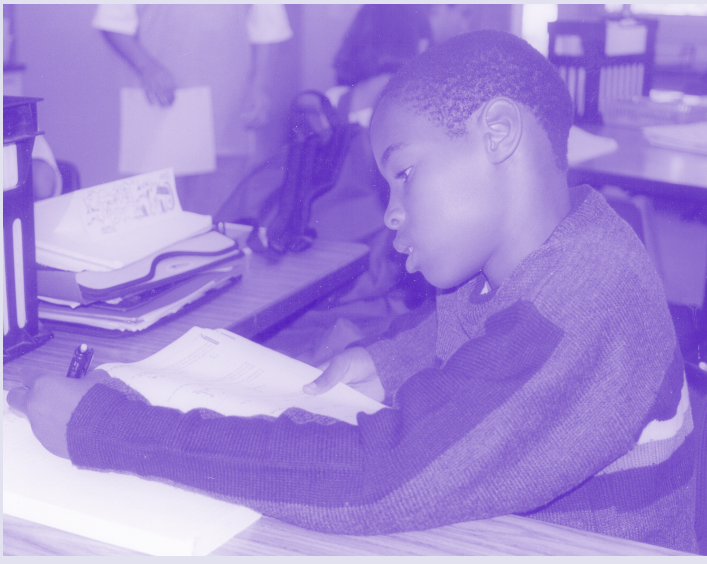
The Berkeley Media Studies Group provides media advocacy training to help communities work more effectively with the media. One of many aspects of the training is the concept of social math, the practice of "making large numbers comprehensible and compelling by placing them in a social context that provides meaning." For example, the Prevent Handgun Violence Against Kids campaign compares the number of gun dealers in California (11,094) to the number of high schools (2,170), the number of libraries (1,024), and the number of McDonald's restaurants (850). Through its comparison with things that are familiar to youth—schools and libraries—this strategy also reminds the audience of what society could provide more of for youth.

Chapter 3
Targeting Our Efforts: Strategies IN Seven Outcome Areas

Chapter 2 presents eight core recommendations that focus on the root causes of many adolescent health issues. Although the core recommendations can have a profound impact on a wide range of health outcomes, there may still be a need for strategies focusing on specific outcomes. For example, while the core recommendations highlight the need for enhancing community capacity to create healthful environments for youth, this chapter provides more information about specific issues in teens' environments, such as limiting the availability of tobacco, restricting access to firearms, or increasing opportunities for healthy eating. This chapter is provided as a supplement to the core recommendations for communities seeking to address specific outcomes. Thus, readers are encouraged to review the core recommendations first, before turning to a specific outcome area.

The sections that follow present data, information on current efforts, strategies, and additional resources in the areas of:

- Injury Prevention
- Mental Health and Suicide
- Nutrition and Physical Activity
- Alcohol, Tobacco, and Other Drugs
- Teen Pregnancy and Sexually Transmitted Infections
- Oral Health
- Environmental and Occupational Health



Injury Prevention

Injuries are the primary cause of death for adolescents. Unintentional injuries account for the greatest proportion of deaths among 10 to 24 year olds. The majority of these deaths (73%) are motor vehicle related, and the remainder are caused by a variety of factors including firearms and explosives, falls, bicycle crashes, poisonings, and being struck by an object.[72] Intentional injury follows closely behind unintentional injury as a leading cause of death among teens. Although California compares favorably to the rest of the nation in terms of motor vehicle deaths, our homicide rate is far above the national average. Suicide, another form of intentional injury and the third leading cause of death among adolescents, is covered in the following section.

ADOLESCENT HEALTH INDICATOR

Reduce deaths caused by motor vehicle crashes.

Sources: Healthy People 2010; MCH Performance Measures

DATA POINTS

Death rate per 100,000 adolescents (15-19) due to motor vehicle crashes.

US 26.4
CA 17.8

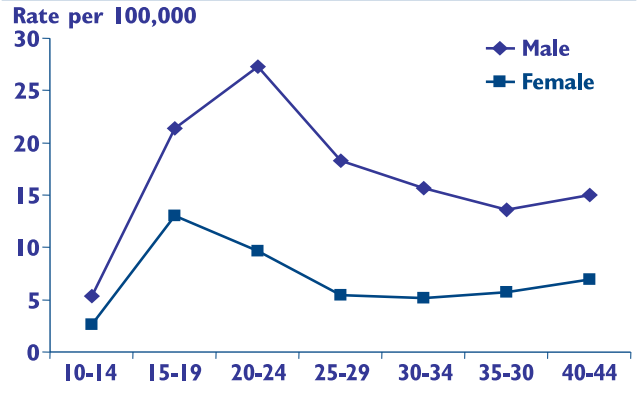
Source: National Highway Traffic Safety Administration, Fatal Analysis Reporting System, 1998

Data Snapshot

Motor Vehicle Crashes

The **motor vehicle crash death rate** among adolescents and young adults is higher than at any other time of life, particularly for males (Figure 3.1). Speed, high-risk and drunk driving, and inexperience all contribute to teen motor vehicle crashes. **Trends** in motor vehicle deaths have been positive, with rates falling consistently in California and the U.S. over the last decade (Figure 3.2). California's motor vehicle death rate is significantly lower than that of the nation as a whole (Indicator box).

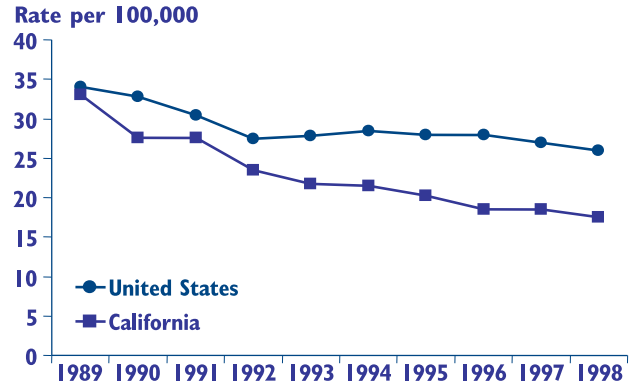
FIGURE 3.1
California Motor Vehicle Deaths, by Age & Gender



Source: *National Center for Injury Prevention and Control, California Vital Statistics, 1998*

The use of **seat belts** has the potential to save hundreds of adolescent lives every year. California is well above the national average in seat belt use. In California, only 6% of the high school students responding to the Youth Risk Behavior Survey (YRBS) reported *never* or *rarely* wearing seat belts compared to 16% nationally. The percentage of students that reported *always* wearing seat belts increased from 56% in 9th grade to 62% in 12th grade. Females were more likely to report always wearing seat belts than were males (62% vs. 54%).[73]

FIGURE 3.2
Trends in Motor Vehicle Death Rates among Youth 15-19, California & the U.S.



Source: *National Highway Traffic Safety Administration, Fatal Analysis Reporting System, 1989-1998*

Alcohol plays an important role in motor vehicle deaths. In 1998, 24% of teen drivers ages 15 to 20 involved in fatal motor vehicle crashes had been drinking alcohol.[74] The role of alcohol in motor vehicle crash deaths in California has decreased over the past decade. In 1990, 30% of drivers ages 15 to 20 had been drinking when involved in a fatal collision. By 1998, that figure had fallen to 24%. One-third of California students responding to the YRBS reported riding in a vehicle driven by someone who had been drinking alcohol within the past 30 days. A second data source, the California Student Substance Use Survey (CSS), found that in 1999-2000, 22% of 9th grade students and 36% of 11th grade students reported that they had driven after drinking or had ridden with a driver who was drinking.[23]

ADOLESCENT HEALTH INDICATOR

Reduce deaths and injuries caused by alcohol- and drug-related motor vehicle crashes.

Source: Healthy People 2010

DATA POINTS

Alcohol-related motor vehicle crash death rate per 100,000 (drivers and passengers) among persons 15-24 years.

US 10.6
CA. 6.6

Source: National Highway Traffic Safety Administration, Fatal Analysis Reporting System, 1998

ADOLESCENT HEALTH INDICATOR

Reduce the proportion of young people who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol.

Source: Healthy People 2010

DATA POINTS

Percentage of adolescents who rode, in the past 30 days, with a driver who had been drinking alcohol.

US. 33.1%
CA 33.1%

Source: Youth Risk Behavior Survey, 1999 (CA data unweighted)

Other Causes of Unintentional Injury

In 1998, **bicycle accidents** in California were responsible for 13 fatalities and 692 hospitalizations among young people age 13 to 20.[75] According to the California Office of Traffic Safety, helmets could prevent up to 50% of bicycle deaths. Although bicycle helmets are required by law for youth under age 18, 52% of the high school students responding to the 1999 California YRBS reported that they never or rarely wore a bicycle helmet.

In 1998 in California, 49 young people between the ages of 13 and 20 died, and 505 were hospitalized in a **motor vehicle vs. pedestrian** incident.[75] Policy changes which limit the growth of traffic volume and reduce speed where children and adolescents walk or play have the potential to reduce the number of motor vehicle related injuries and fatalities.[65]

Although rarely fatal, **sports or recreational activities** account for 21% of all traumatic brain injuries among youth in the U.S.

ADOLESCENT HEALTH INDICATOR

Increase use of safety belts.

Source: Healthy People 2010

DATA POINTS

Percentage of students in grades 9-12 who report always wearing seat belts when riding in a car.

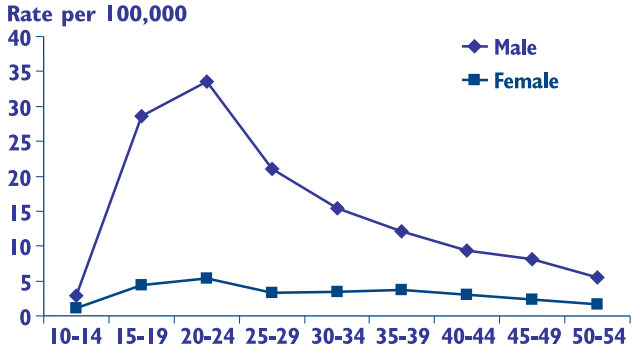
US 37.9%
CA 57.5%

Source:Youth Risk Behavior Survey, 1999
(CA data unweighted)

Homicide

In 1998, homicide accounted for 24% (881) of deaths to California youth between the ages of 10 to 24. Although California adolescent homicide death rates dropped between 1994 and 1998 from 34.3 to 17.1 per 100,000 teens ages 15 to 19, California rates are still well above the national average of 11.7 per 100,000.[76] **Homicide deaths** among males increase as teens age and then drop sharply in early adulthood (Figure 3.3). At all ages, and among all ethnic groups, homicide rates are much higher among males than females. African American and Latino males are much more likely to be homicide victims than are males of other ethnicities (Figure 3.4).

FIGURE 3.3
California Homicide Deaths, by Age & Gender



Source: *National Center for Injury Prevention and Control, California Vital Statistics, 1998*

Non-fatal Intentional Injury

In 1998, **non-fatal assaults** in California resulted in 3,237 hospitalizations among young people 13 to 20 years of age. This figure represents an increase in the number of hospitalizations due to non-fatal assault per 100,000 population from 73.7 in 1990 to

88.9 in 1998.[75] Data from the YRBS suggest that California is comparable to the nation in terms of **physical fighting** among youth. Physical fighting is more common among males than females—45% versus 24% within the past 12 months.

ADOLESCENT HEALTH INDICATOR

Reduce adolescent homicide deaths.

Sources: Healthy People 2010; MCH Performance Measures

DATA POINTS

Homicide death rate per 100,000 teens.

	10-14	15-19
US	1.5	11.7
CA	2.0	17.1

Source: California Department of Health Services, and Centers for Disease Control and Prevention, Vital Statistics, 1998

Relationship violence is a significant source of sexual and physical abuse of girls. A 1995 Gallup poll found that 40% of girls ages 14 to 17 said they had a friend their own age who had been hit or beaten by a boyfriend.[77] **Sexual abuse** is almost three times higher among girls than boys. Sixty percent of forcible **rape** occurs before the victim is 18 years old and 29% before the victim is 11 years of age.[78] Persons with intellectual impairments/developmental disabilities are at far greater risk for being victims of both sexual and physical abuse.[79]

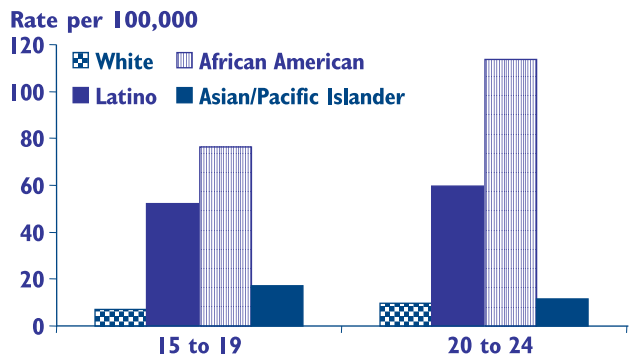
Factors Related to Intentional Injury

In 1997, **firearms** were used in approximately 87% of all homicides involving young people ages 10 to 24 in California.[80] Data from the YRBS suggest that California is comparable to the nation in terms of **weapon carrying** by high school students. Sixteen percent of California respondents and 17% of respondents nationwide reported carrying a weapon in the past 30 days. In California, 7% carried a weapon to school, and 2% of female and 9% of male students reported **carrying a gun** in the previous 30 days.[73]

Gangs and **alcohol** play a role in intentional injury among teens. In 1998, 40% of homicides among victims 5 to 17 years of age were gang-related,[80] however the perpetrators were not necessarily juveniles. Among juvenile perpetrators of homicide, half have elevated blood alcohol levels if caught in time to test.[81,82]

The role of the media in promoting violent behavior continues to be a cause of concern. A recent study of **television violence** found that 54% of programming contains violence and most often in a context that is harmful—when perpetrators go unpunished, negative consequences are not portrayed, and there is a high level of blood and gore.[83]

FIGURE 3.4
California Male Homicide Deaths, by Age & Ethnicity



Source: *California Department of Health Services, Vital Statistics, 1998*

Examples of Current Efforts

- **Safe Moves**, through the California Office of Traffic Safety, is a statewide bicycle and traffic safety program offering interactive workshops to youth that demonstrate the consequences of risky traffic behavior.
- The **California Safe Communities Program** is a joint state-local public health and traffic safety initiative intended to promote new partnerships between traffic safety and health experts.
- The **School Violence Reduction Program** provides grants to schools, districts, and county offices of education reducing violence on campus, teaching non-violent conflict resolution strategies to students and staff, and providing safe passage to and from school.
- The **School Law Enforcement Partnership**, through the California Department of Education and the Attorney General's Crime and Violence Prevention Center, encourages schools and law enforcement agencies to develop interagency partnerships, and activities that improve school attendance, encourage good citizenship, and promote safe schools.
- Under the School Law Enforcement Partnership, the **Gang Risk Intervention Program (GRIP)** establishes ties between youth, law-enforcement, businesses and community organizations to provide youth with counseling, job training, sports, and cultural activities.
- **Title IV of the Improving America's Schools Act (IASA)—Safe and Drug Free Schools and Communities**, provides funding through the California Department of Education for school violence prevention programs that emphasize students' sense of individual responsibility.
- The **Battered Women Shelter Program**, administered through the California Department of Health Services, funds collaborative community interventions to prevent youth relationship abuse and provides technical assistance and training to community organizations on teen relationship abuse.
- The **Violence Prevention Initiative of The California Wellness Foundation** supports a public health approach to violence prevention by providing grants for multi-sector collaboration and comprehensive solutions to the problems that contribute to violence against youth. The **Pacific Center for Violence Prevention** serves as the policy center for the Initiative by providing policy and media advocacy training, library and information resources, news media analysis, ongoing public opinion research, and education of policy makers.

ADOLESCENT HEALTH INDICATOR

Reduce weapon carrying by adolescents on school property.

Source: Healthy People 2010

DATA POINTS

Percentage of high school students who carried a weapon on school property on one or more of the past 30 days.

US 6.9%
CA 6.6%

Source: Youth Risk Behavior Survey, 1999
(CA data unweighted)

- The **Prevention Institute** in Berkeley is a national non-profit organization established to develop new methodologies and strategies to strengthen and expand primary prevention.
- The **California Center for Childhood Injury Prevention** at San Diego State University serves as a resource center on child and adolescent injury prevention by providing data and technical assistance in the development, implementation and evaluation of injury prevention programs. They also serve to create linkages between agencies, researchers, and advocates.

ADOLESCENT HEALTH INDICATOR

Reduce physical fighting among adolescents.

Source: Healthy People 2010

DATA POINTS

Percentage of high school students in at least one physical fight during the past 12 months.

US 35.7%
CA 34.5%

Source: Youth Risk Behavior Survey, 1999
(CA data unweighted)

Strategies for Injury Prevention

1. Decrease access to firearms.

- Create and enforce weapons laws that will further reduce availability of weapons to youth, and increase criminal penalties for selling or transferring a gun to a juvenile.
- Limit or tax the sale of ammunitions.
- Trace the origin of guns used in youth crimes to identify sources of illegal weapons.
- Require safety features on firearms (e.g., magazine disconnect safety, trigger resistance, passing the "drop test," manual safeties, and child safety locks).

2. Reduce youth access to alcohol.

- Increase sales tax on alcohol.
- Enforce laws prohibiting the sale of alcohol to minors.
- Educate families about the risks of consumption of alcohol by teens.

3. Increase transportation and street safety.

- Increase compliance with seat belt laws through education and enforcement.
- Create bicycle paths to reduce motor vehicle vs. bicycle injuries and increase physical activity.
- Conduct education and public awareness campaigns to promote use of bicycle helmets and to educate young drivers and their parents about automobile safety and drunk driving.
- Develop and enforce local and statewide policies that limit traffic volume and speed.
- Create speed bumps and barriers to reduce speed and traffic on residential streets.

- Place streetlights, crosswalks, cameras, and reduced speed zones at potentially dangerous intersections that are frequented by pedestrians.

4. Assist youth in forming safe and healthy interpersonal relationships.

- Increase attention given to teen relationship violence within educational, policy, and research efforts.
- Provide training on teen relationship violence to staff within multiple sectors (e.g., Children's Protective Services, schools, health and social services, community-based and youth agencies, law enforcement, mental health, and juvenile justice).
- Implement programs that engage young men in taking responsibility for ending violence against women.
- Implement programs for young women that foster empowerment and leadership skills and allow them to develop self-confidence outside the context of dating relationships.

5. Reduce gang-related violence.

- Conduct systematic assessments of the nature and extent of local gang activities and the forces that contribute to the creation of youth gangs.
- Provide young people with social and economic opportunities, including education, training, and job programs. Place special emphasis on assisting older gang members in supporting themselves and their families through legal activities.
- Create connections between community members/agencies and law enforcement to suppress gang activities without violating civil liberties of youth.
- Provide services and support for perpetrators and victims of gang violence immediately following the event to prevent "revenge" attacks.

Additional Resources

J.U.M.P. (Join Us Make Peace): 16 Power Plays for Preventing Youth Violence. California Attorney General's Youth Council on Violence Prevention, 1998 Report.

Injury Among California's Children and Adolescents: Who's at Risk? California Department of Health Services, Epidemiology and Prevention for Injury Control. Epic Proportions, October 1997, Report No. 9.

Strategic Plan for Injury Prevention and Control in California, 1993-97. California Department of Health Services, Epidemiology and Prevention for Injury Control.

Youthquake Ahead: The Impact of Generation Y on Traffic Safety in California. California Office of Traffic Safety and the California Coalition Against Driving Under the Influence, August 1997.

Cultivating Peace in Salinas. Cohen, L. & Erlenborn, J., Prevention Institute, June, 1999.

Youth Violence: Lessons from the Experts. Mann Rinehart, P., Borowsky, I., Stolz, A., Latts, E., Cart, C.U., & Brindis, C.D. Division of Pediatrics and Adolescent Medicine, Department of Pediatrics, University of Minnesota and the Division of Adolescent Medicine, Department of Pediatrics and Institute for Health Policy Studies, School of Medicine, University of California, San Francisco, 1998.

Youth and Violence in California Newspapers. McManus, J., Dorfman, L. Berkeley Media Studies Group. Issue 9. April 2000.

Mental Health and Suicide

Adolescence is an important time to prevent, detect, and treat mental health issues as many mental illnesses often appear for the first time during the teenage years. For example, an estimated 8% to 12% of adolescents suffer from depression, compared to only 2% to 3% of children.[84,85] Many teens and adults may not recognize symptoms of mental illness that should be a cause for concern because normal adolescent development entails tremendous cognitive, behavioral, and emotional changes. Research has shown that unrecognized or untreated mental and emotional health disorders increase young people's risk of school failure and dropout, alcohol and drug use, HIV transmission, somatic ailments, and an array of other difficulties.[39] In a recent survey, 70% of California parents stated that they were somewhat to very worried about depression, suicide or mental health disorders among youth who live in their community.[39]

Data Snapshot

Mental Health

Mental illness is the most common cause of **hospitalization** for persons between the ages of 10 and 24, with the exception of childbirth, and is the second leading cause of disability for young adults.[75] Estimates of the **prevalence of mental health disorders** among youth vary depending on the definitions used and the age group studied.

ADOLESCENT HEALTH INDICATOR

Increase the proportion of children with mental health problems who receive treatment.

Source: Healthy People 2010

DATA POINTS

Estimated proportion of children and youth with diagnosable mental disorders receiving mental health services.

US 50%

Source: Surgeon General's Report on Mental Health, 1999

- The Center for Mental Health Services within the U.S. Department of Health and Human Services reports that approximately 20% of youth ages 9 to 17 have some "diagnosable disorder," and 9% to 13% are afflicted with a "serious emotional disturbance, with substantial functional impairment."[8]
- The Census Bureau reports that 5% of all school age youth suffer from severe emotional disability.[11]

- The 1992 California Mental Health Survey conducted by the California Department of Mental Health indicates serious mental health disorders in 5% to 7% of youth 0 to 17 years old, a range of 460,000 to 644,000 children and youth.[11]

TABLE 3.1
Percentage of Youth 9-17 in the U.S. Experiencing the Following Mental Disorders in a Six-Month Period

Anxiety Disorders (e.g., social phobia, obsessive-compulsive disorder, separation anxiety)	13.0
Mood Disorders (e.g., major depressive disorder, bipolar disorder)	6.2
Disruptive Disorders (e.g., attention-deficit disorder, disruptive behavior disorders)	10.3
Substance Use Disorders	2.0
Any Disorder (e.g., eating disorders, anxiety disorders, mood disorders)	20.9

Source: *Shaffer et al., 1996, as cited in* Mental Health: A Report of the Surgeon General, 1999

The most common **types of mental health issues** among youth are listed in Table 3.1. Other common disorders include eating disorders (e.g., anorexia nervosa), learning and communication disorders, schizophrenia, and tic disorders (Tourette's disorder). **Risk factors** for mental health disorders include: physical problems, intellectual disabilities, family history of mental and addictive disorders, and sexual orientation. For example, one analysis reports that 20% to 25% of all gay/lesbian/bisexual youth make a suicide attempt, while over 50% consider it seriously, and upwards of 30% of all youth suicides may involve lesbian and gay youth.[26]

The **consequences** of mental health disorders are serious for both youth and society. National data indicate that 20% of students with serious emotional disorders are arrested at least once before leaving high school; 50% drop out of high school; and almost 75% of those who drop out are arrested within five years of leaving school.[86,87] Among youth entering juvenile corrections facilities, 73% have mental health disorders, and 57% have had prior mental health treatment or hospitalization.[88]

ADOLESCENT HEALTH INDICATOR

Reduce the youth suicide rate.

Source: MCH Performance Measures, Healthy People 2010

DATA POINTS

Suicide rate per 100,000 youth 15-19 years.

US	8.9
CA	6.4

Source: California Department of Health Services, and Centers for Disease Control and Prevention, Vital Statistics, 1998

There is a **lack of mental health services** for youth. An estimated two-thirds of all young people are not getting the mental health treatment they need.[87,84] Publicly-funded county mental health programs reach only 2% of the 13 to 17 year old population.[89] When youth do receive care, the services they receive are often inappropriate.[85] Mental health services are too often crisis-driven, leaving many youth without timely preventive care. A recent survey of youth service providers conducted by the California

Children Youth and Family Coalition found that 89% indicated that there was **inadequate funding of preventive services** in schools and other community-based settings. Approximately 86% felt that adults lack knowledge of how to help teens access needed mental health services, and 84% indicated that adults who interact with teens on a daily basis fail to recognize their mental health needs. Within California schools, there are **too few mental health clinicians** to address a growing need for psychological services in response to social changes such as decreased family stability, school and community violence, and teen suicide. California's Education Code does not mandate a minimum ratio of school psychologists to students.

There is a **dearth of research** on children and adolescent mental health, especially in the area of medications for youth with mental health disorders.

ADOLESCENT HEALTH INDICATOR

Reduce the rate of suicide attempts by adolescents.

Source: Healthy People 2010

DATA POINTS

Percentage of youth in grades 9-12 that attempted suicide one or more times during the past 12 months.

US 8.3%
CA 8.7%

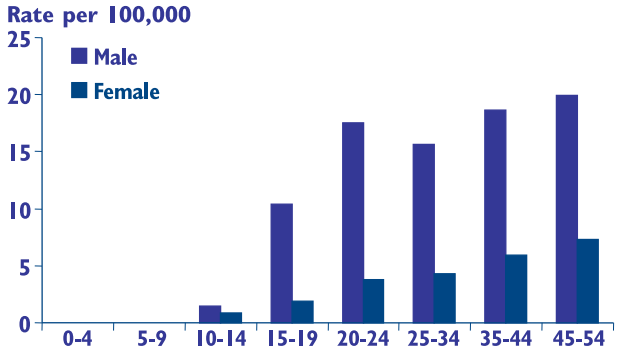
Source: Youth Risk Behavior Survey, 1999 (CA data unweighted)

Suicide

Suicide rates increase dramatically as teens move from early to middle adolescence (Figure 3.5). **Trends in youth suicide rates** show a slight decline since the mid-1980's especially among young adults 20 to 24 in California (Figure 3.6). Suicide is a complex behavior usually caused by a combination of factors. According to the National Institute of Mental Health, a history of depression, alcohol or other drug use, and aggressive or disruptive behaviors are the strongest risk factors for attempted suicide in youth.[90] **Other risk factors** for suicide include adverse life events, family violence, family history of suicide, prior suicide attempt, firearm in the home, incarceration, and exposure to the suicidal behavior of others, including family, peers, or in the news or fictional stories. Over 64% of youth suicides nationwide involve **firearms.**[91]

FIGURE 3.5

California Suicide Rates, by Age & Gender



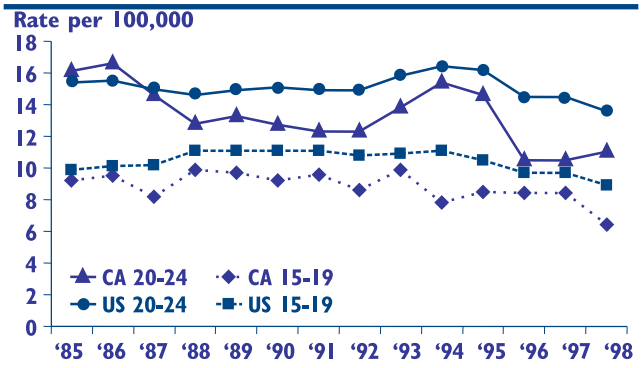
Source: *California Department of Health Services, Vital Statistics, 1998*

There are significant **gender disparities** in suicide rates, with males having much higher rates during adolescence and throughout life (Figure 3.5). Although there are more completed suicides among males, suicide attempts are much more common among females—12% within the previous year as compared to 5% for males (Figure 3.7).[73] Males are more likely to use lethal methods such as guns or hanging, whereas females

are more likely to try methods such as poisoning and overdosing. There are also **ethnic disparities** in suicide rates. In California, 1998 suicide rates per 100,000 in the 15 to 24 age group were: white 10.4, Hispanic 7.2, Asian 5.6, and African American 7.7.[72] Although the population of Native American youth in California is too small to establish a reliable rate for the state, the national suicide rate of Native American youth is twice that of whites.

FIGURE 3.6

Trends in Suicide Rates, California & the U.S.



Source: *Centers for Disease Control and Prevention, Vital Statistics, 1985-1998*

Examples of Current Efforts

- **Medi-Cal** is a major source of public funding for mental health and related support services. Medi-Cal also supports the federal Early and Periodic Screening Diagnosis and Treatment (EPSDT) program, known as the **Child Health and Disability Prevention (CHDP)** program in California. EPSDT requirements are designed to promote delivery of health care services which address the developmental and mental health needs of children and youth.
- The California Department of Mental Health's **Children's System of Care** model (CSOC) is administered by counties to improve services for seriously emotionally disturbed children and youth served by more than one public agency. CSOC brings together various child-serving agencies and systems to collaboratively provide special education, child welfare, health, and juvenile justice services that address the needs of youth within the least restrictive environment possible.
- The federal **Individuals with Disabilities Education Act (IDEA)** provides funding for school psychologists. With the goal of promoting safety and violence prevention, **AB 166**, which passed in 1999, provides funding for additional school psychologists and counselors. It also establishes an in-service training program for school staff to learn to identify at-risk pupils, to communicate effectively with them, and to make referrals to appropriate counseling.

ADOLESCENT HEALTH INDICATOR

Reduce the proportion of children and youth with disabilities who are reported to be sad, unhappy, or depressed.

Source: Healthy People 2010

DATA POINTS

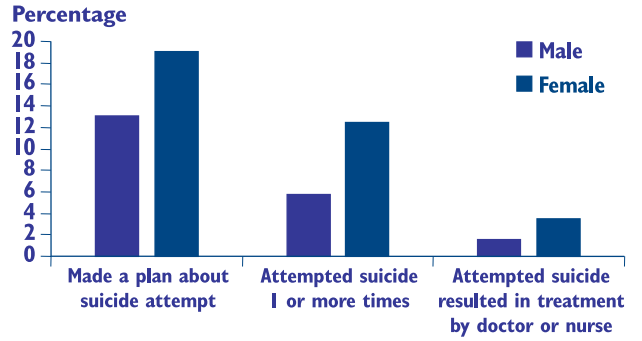
Percentage of children and adolescents with disabilities reported to be sad, unhappy, or depressed.

US 31%

Source: Centers for Disease Control and Prevention, National Health Interview Survey, 1997

- Although not specifically focused on mental health, **California's Healthy Start Initiative,** administered by the California Department of Education, enables schools to hire direct service staff or a coordinator who establishes linkages with community-based service providers. Many of these programs address student and family mental health needs.

FIGURE 3.7
Suicide Ideation & Attempts During the Past 12 Months among California High School Students



Source: *California Youth Risk Behavior Survey, 1999 (unweighted)*

- The **UCLA School Mental Health Project (SMHP)** was created in 1986 to address mental health and psychosocial concerns through school-based interventions. The SMHP has established the **UCLA Center for Mental Health in Schools**, one of two national training and technical assistance centers funded by the federal Maternal and Child Health Bureau. The UCLA center approaches mental health and psychosocial concerns from the broad perspective of addressing barriers to learning and promoting healthy development. Specific attention is given to reducing fragmentation and enhancing collaboration between school and community programs.

Strategies to improve mental health and reduce youth suicide

1. Increase and improve mental health services for youth.

- Increase state funding to expand the availability of mental health services for youth including case management, client support services, and brief interventions.
- Improve compensation levels for community-based mental health providers.
- Establish coordinated systems of care in all counties which address the mental health needs of youth, and open community mental health services to all youth regardless of insurance status.
- Expand Medi-Cal for youth through age 21 to strengthen transitional mental health services and ensure continuity of care.
- Eliminate barriers in public and private insurance programs to the provision of quality mental health and substance abuse treatment, and create incentives to treat patients with coexisting mental and substance abuse disorders.

- Use EPSDT resources to fund a mental health assessment process for children and youth served by the public mental health, child welfare, and juvenile probation systems.

2. Expand outreach, screening and support for mental health disorders.

- Expand community awareness of, and resources for, youth-focused suicide prevention and for mental health and substance abuse assessment and treatment. Train youth, professionals, and community members (e.g., clergy, teachers, coaches, correctional workers, and social workers) to recognize youth suicide risk and mental health disorders and to connect youth with services and supports.
- Help families recognize and deal with mental health issues (e.g., psychosocial support, counseling, support groups, and respite care).
- Increase funding for preventive services and expand care for youth with mental health disorders *prior to crisis events*.
- Increase the use of schools, school-based health centers, workplaces, primary care, and family-planning services as access and referral points for mental health services.
- Develop and implement programs for adolescents and young adults that emphasize peer support, peer relationships, and competency in social skills.
- Expand crisis centers and hotlines. Train volunteers and paid staff to provide telephone counseling, "drop-in" crises services, and referral to mental health services.
- Develop and implement strategies to reduce the stigma associated with mental illness, substance abuse, suicidal behavior and with seeking help for such problems.

3. Improve research on youth suicide prevention and mental health.

- Increase research in the area of adolescent mental health on topics such as risk and protective factors related to suicide, effective suicide prevention programs, clinical treatments for suicidal individuals, and youth specific interventions.
- Develop additional strategies for evaluating suicide prevention interventions and ensure that evaluation components are included in all suicide prevention programs.
- Establish mechanisms for state- and local-interagency public health collaboration to improve monitoring systems for suicide and suicidal behaviors. Develop and promote standard terminology in these systems.

4. Decrease access to firearms.

- Create and enforce weapons laws that will further reduce availability of weapons to youth and increase criminal penalties for selling or transferring a gun to a juvenile.
- Limit or tax the sale of ammunitions.
- Trace the origin of guns used in youth crimes to identify sources of illegal weapons.
- Require safety features on firearms (e.g., magazine disconnect safety, trigger resistance, passing the "drop test," manual safeties, and child safety locks).

Additional Resources

Surgeon General's Call to Action to Prevent Suicide. Department of Health and Human Services, U.S. Public Health Service, 1999.

Mental Health: A Report of the Surgeon General. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999.

The Children's Budget 1999-2000. Chapter 5: Children With Special Health Care Needs. Fellmeth, R.C. Children's Advocacy Institute. www.acusd.edu/childrensissues, January 2000.

Nutrition & Physical Activity

Within the United States, poor diet and physical inactivity are second only to tobacco as preventable causes of death among adults.[92] Childhood and adolescence are critical times for the development of these lifestyle habits. Moreover, adolescent nutrition and physical activity are important for the development of bone density and the prevention of obesity. The incidence of obesity has increased affecting approximately one out of five adolescents, a two-fold increase over the past two decades.[93,94,95] Obese adolescents are at higher risk for being obese adults and developing cardiovascular disease, diabetes, and hypertension.[96]

The Dietary Guidelines for Americans recommend that to stay healthy, one should eat a variety of foods and choose a diet that is plentiful in grain products, vegetables, and fruits; moderate in salt, sodium, and sugars; and low in fat, saturated fat, and cholesterol.[97] In addition, regular physical activity throughout life is important for maintaining a healthy body, enhancing psychological well-being, and preventing premature death. The California Department of Health Services recommends that adolescents engage in a minimum of 30 minutes of moderate to vigorous physical activity per day on most days of the week as part of play, games, sports, work, transportation, recreation, physical education, or planned exercise, in the context of family, school, and community activities.[98]

Data Snapshot

Nutrition

CalTEENS, the first representative survey of the **dietary practices** of California adolescents indicates that, like adults, adolescents are far from meeting many of the dietary recommendations (Table 3.2). Most notably, well under half ate the recommended amount of fruits, vegetables, and whole grains. In general, as adolescents age, they are less likely to meet the recommendations. Although adults

TABLE 3.2
Adherence to Recommendations of the California Daily Food Guide

Percentage of teens 12-17 whose diet the previous day included:	Male	Female
Fruits & vegetables. . . . . (boys: 7 servings; girls: 5 servings)	23	38
Whole grains. . . . . (4 servings)	19	16
Fat free or 1% milk . . . . . (3 servings)	75	63
Beans. . . . . (1 serving*)	45	45

Source: *California Teen Eating, Exercise and Nutrition Survey, 1998*

* California Daily Food guide recommends one serving of beans every other day.

and adolescents have similar diets in terms of healthy foods, adolescents are twice as likely as adults to report eating high calorie, low nutrient foods. Sixty-eight percent of teens reported that on the previous day they had eaten at least two of the following: pastries, deep-fried foods, bakery desserts, chips, or candy/soda.[99]

Many adolescents have **dietary deficiencies**. Females, in particular, often have calcium, iron and folate intakes below recommended values. Low income adolescents have lower than average intakes of vitamin A, vitamin C, vitamin B10, folate, calcium, iron, and zinc than do adolescents from higher-income groups.[100]

ADOLESCENT HEALTH INDICATOR

Reduce the proportion of children and adolescents (12-19) who are overweight or obese.

Source: Healthy People 2010

DATA POINTS

Percentage of teens 12-17 classified as overweight by the NHANES III.*

US 11%
CA. 7%

Source: National Health and Nutrition Examination Survey III, 1988-1994; California teen Eating, Exercise and Nutrition Survey, 1998

** Overweight is defined as body mass index (BMI) at or above the sex- and age-specific 95th percentile BMI cutoff points calculated from the 1966-70 National Health Examination Survey.*

The 1988-1994 National Health and Nutrition Examination Survey (NHANES) III found that approximately 10 to 20% of teens ages 12 to 19 were overweight depending on the definition used. Data from previous NHANES indicate that this percentage has been increasing. In California, 7% of teens are classified as **overweight,** with this percentage varying from 4% among whites and Asians, to 10% among Latinos and 19% among African Americans.[99]

Access to nutritious foods at low-cost is limited whereas access to fast and junk foods through snack bars, restaurants, liquor stores, convenience stores, and vending machines is easy. Moreover, low-income neighborhoods often lack access to grocery stores which provide healthy food choices. **Schools** are required to provide lunches that meet USDA guidelines, but can also serve other foods as a la carte items. These items tend to be higher in fat, sodium, and sugar. A la carte sales account for more than 40% of total food sales in nearly 60% of high schools.[101] Food sold outside of the school lunch program through vending machines and fundraising sales further increase the availability of appealing foods with little nutritional value. Additional resources available to California's schools under the **National School Lunch Act** are underutilized. Only one fourth of the school districts in the state have taken advantage of automatic enrollment of youth receiving foodstamps and CalWorks.

Physical Activity

ADOLESCENT HEALTH INDICATOR

Increase the proportion of young persons who engage in vigorous physical activity that promotes cardiorespiratory fitness.

Source: Healthy People 2010

DATA POINTS

Percentage of students in grades 9-12 who report at least 20 minutes of vigorous physical activity three or more days per week.

US 64.7%
CA 68.8%

Source: Youth Risk Behavior Survey, 1999 (CA data unweighted)

The CalTEENS survey asked adolescents about their participation in different activities on the day preceding the survey. On average, adolescents reported spending 47 minutes involved in **vigorous physical activity** and 130 minutes watching television or playing video games. Fifty-eight percent of teens reported being involved in physical activity at least five times a week, and 29% reported getting the one or more hours of vigorous physical activity per day recommended in the California Daily Food Guide. This survey found that 10% of adolescents reported no physical activity, slightly less than the 14% reported in the 1999 California Youth Risk Behavior Survey (YRBS).[73,99] One of the factors that limits physical activity in many communities is lack of **access to safe outdoor spaces**.[102]

The 1999 YRBS shows significant overall **grade level differences** with amounts of physical activity dropping off sharply as students age. Only 56% of students in 12th grade as compared to 80% of students in 9th grade engaged in physical activity at least three times per week.[73]

There are also significant **gender differences** in physical activity. The CalTEENS survey found that 94% of males as compared to 86% of females were involved in physical activity five times per week. In addition, adolescent girls became less physically active as they get older. [99]

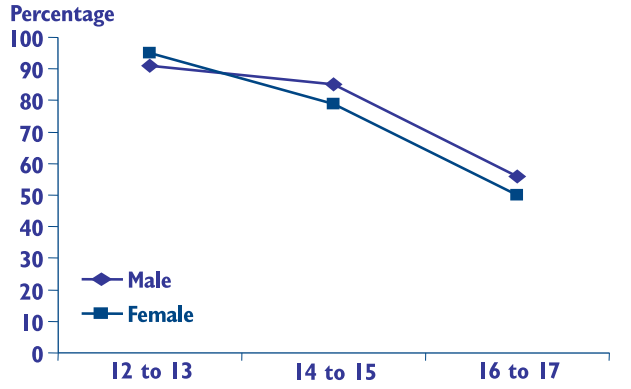
Physical education in school is a key component of a coordinated school health program and is required by the California Education Code. Although the Education Code contains specific requirements for the number of minutes of physical education, additional efforts and resources are needed to ensure that these requirements are met.[66] Participation in school physical education drops sharply among both males and females as students age (Figure 3.8).

Examples of Current Efforts

- The **SHAPE program (Shaping Health as Partners in Education)**, through the Nutrition Education and Training Section (NETS), California Department of Education, assists school districts in providing nutrition education, offering healthy meals, and establishing policies that promote good nutrition.
- Through NETS, the California Endowment is offering **Model Nutrition Education Grants** to schools and school districts for implementing innovative programs that promote healthy eating and nutrition education.

- The California Department of Health Services' **Project LEAN Food on the Run campaign**, promotes healthy eating and physical activity to multi-ethnic high school students and their families through education and peer advocacy. Project LEAN focuses on environmental change and education to support healthy eating and physical activity.

FIGURE 3.8
Percentage of California Students Taking Physical Education in School



SOURCE: California Teen Eating, Exercise and Nutrition Survey, 1998

- State School Superintendent Delaine Easton has made it a priority to create a garden in every school through the **School Garden Project Grant Program**. Garden projects offer the opportunity to learn about healthy eating while learning the skills to grow healthy foods. The program has primarily attracted elementary schools, but also some middle and high schools.
- **California Food Policy Advocates (CFPA)** works to increase access to free and low-cost meals for low-income students by educating schools and communities about provisions under the National School Lunch Act which can increase access to school lunches and reduce stigma. Schools with over 30% eligibility for free meals can break even by establishing universal free lunches. Schools receive increased subsidies for increased participation and avoid the administrative costs associated with establishing eligibility.
- **California Adolescent Nutrition and Fitness (CanFit)** is a statewide program that strives to improve physical fitness and nutrition among young adolescents (ages 10 to 14) by developing culturally appropriate and innovative community-based programs, training youth service providers, and providing scholarships to youth interested in careers in nutrition and fitness.
- **Active Community Environments (ACE)** works to make communities more amenable to walking and biking by linking public health to land use and transportation planning. ACE is a component of the California Physical Activity and Health Initiative, a joint project of the California Department of Health Services and the Institute for Health and Aging at the University of California, San Francisco.

Strategies to Improve Nutrition and Physical Activity

1. Increase opportunities and support for healthy eating within families, schools, and communities.

- Make fast, low-cost, and appealing healthy food options available as part of school lunches, fundraising activities, rewards, snacks served and/or sold at after school activities and other public spaces such as movie theaters.
- Reduce the number of corner markets, which tend to be outlets of alcohol, tobacco, and junk foods, while ensuring that community residents have access to affordable fresh produce at a local grocery store.
- Enhance participation in school food programs, particularly in the under-utilized school breakfast and summer food programs. Pilot strategies to eliminate the stigma associated with participation in subsidized food programs.
- Encourage food companies and the media to limit commercials featuring unhealthy food during programming for youth.
- Assess the prevalence of eating disorders and unhealthy weight reduction regimes common with adolescents, and create school-based programs that address them.

2. Increase opportunities and support for physical activity within families, schools, and communities.

- Provide the physical education in schools taught by credentialed physical education specialists for the number of minutes per week required by the Education Code.
- Administer the mandated Fitnessgram physical fitness assessment instrument in grades 5, 7 and 9 and make results available within the community.
- Create a range of free or low-cost community sports and recreation/fitness programs that are attractive to all young people by expanding safe park and recreational facilities and encouraging schools and other organizations (such as faith organizations and community groups) to make their facilities available after hours.
- Encourage families to support adolescents' participation in physical activity, to be physically active role models, and to include physical activity in family events.
- Create bike lanes to promote biking and enhance bike safety.

3. Promote social norms that support healthy eating and physical activity.

- Use advertising and the media to change the way eating is portrayed so that youth will want to eat healthier foods.
- Reduce the presence of advertising on school campuses that encourages youth to drink sodas and eat fast food.
- Promote appealing physical activities—such as dancing, skating, climbing, and rollerblading—that involve social interaction and are perceived as fun and easy to do.
- Encourage health care providers to talk routinely to adolescents about the importance of physical activity to their health.

Additional Resources

Physical Activity for Children: A Statement of Guidelines. Corbin C.B. and Pangrazi R.P. Council for Physical Education for Children. National Association for Sport and Physical Education. Reston, VA, 1998.

Creating an Adolescent Nutrition and Physical Activity Policy Agenda: A Report on a Public Policy Needs Assessment. Craypo, L., Samuels, S. Prepared for California Project LEAN Food on the Run Campaign. August, 1998.

Playing the Policy Game: Preparing Teen Leaders to Take Action on Healthy Eating and Physical Activity. Craypo, L., Samuels, S. Prepared for California Project LEAN. February, 1999.

2000 California High School Fast Food Survey: Findings and Recommendations. Public Health Institute and California Project LEAN. February, 2000.

Guidelines for school and community programs to promote lifelong physical activity among young people. U.S. Department of Health and Human Services. Morbidity and Mortality Weekly Report. 46(RR-6). Washington, D.C. March 7, 1997.

Guidelines for school health programs to promote lifelong healthy eating. U.S. Department of Health and Human Services. Morbidity and Mortality Weekly Report. 45(RR-9). Washington, D.C. June 14, 1996.

The President's Council on Physical Fitness and Sports Report: Physical Activity and Sport in the Lives of Girls, Physical and Mental Health Dimensions from an Interdisciplinary Approach. U.S. Department of Health and Human Services. Spring, 1997.

A Report of the Surgeon General. Physical Activity and Health. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Disease Control and Prevention and Health Promotion, Atlanta, GA, 1996.

Alcohol, Tobacco & Other Drugs

For the majority of adolescents, experimentation with tobacco, alcohol, and drugs represents a brief period of testing limits that is often characteristic of adolescence. For some teens, however, experimentation with alcohol and drugs leads to negative consequences including direct physiological harm, impaired judgment leading to risk-taking and violence, disengagement from school, and the support of illegal drug trafficking that has a profound effect on community life. In addition, adolescent substance use, particularly tobacco, can pave the way for adult addictions. Ninety percent of current adult smokers start smoking during adolescence. Long-term use of tobacco, alcohol, and other drugs can lead to serious illness and death, increased medical care utilization, and higher health care costs.[103]

ADOLESCENT HEALTH INDICATOR

Reduce tobacco use by adolescents.

Source: Healthy People 2010

DATA POINTS

Percentage of students grades 9-12 who smoked cigarettes on one or more of the past 30 days.

	10th	12th
US w/o CA	25.7	34.6
CA	27.2	35.6

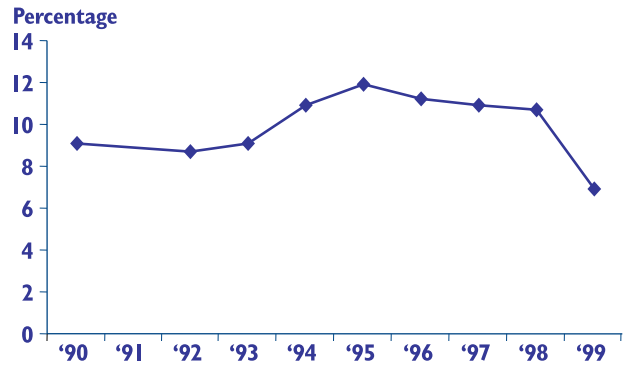
Source: Monitoring the Future, 1996

Data Snapshot

Tobacco

Between 1990 and 1993, when California's tobacco control program (funded by Proposition 99) took effect, **teen smoking prevalence** (defined as smoking at least one cigarette within the past 30 days) remained relatively constant while it was increasing across the nation. However, between 1993 and 1995, teen smoking in California rose from

FIGURE 3.9
Trends in Smoking Prevalence among California Youth 12-17

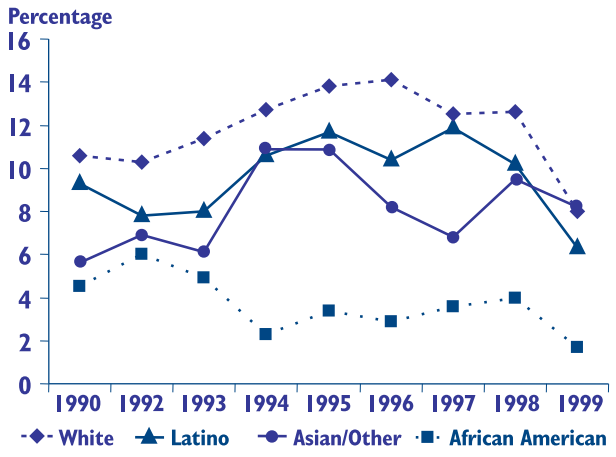


Source: *California Tobacco Survey: 1990, 1992-1993; California Youth Tobacco Survey: 1994-1999*

9.1% to 11.9%, after which it fell, reaching 6.9% in 1999 (Figure 3.9). The Monitoring the Future study puts smoking prevalence among California's 10th grade students at 25.7%.[104]*

There are significant **ethnic differences** in tobacco use (Figure 3.10). Although white youth smoke more than any other ethnic group, recent data indicate that Latinos and Asians are approaching comparable levels. Asian teens have had the greatest increase in tobacco use since 1990, whereas African Americans continue to have the lowest rates of tobacco use.

FIGURE 3.10
California Youth Smoking Prevalence, by Race/Ethnicity



Source: *California Tobacco Survey: 1990, 1992-1993; California Youth Tobacco Survey: 1994-1999*

Cigar and smokeless tobacco use are more common among whites and among males. The 1999 California Youth Risk Behavior Survey (YRBS) found that boys were twice as likely to have tried cigars as girls, 20% versus 9% respectively. Approximately 12% of white male adolescents reported smokeless tobacco use within the previous month.[73]

Alcohol and Illicit Drug Use

Alcohol continues to be the most popular drug among California youth. The 1999-2000 California Student Substance Use Survey (CSS) found that 44% of students in 11th grade and 16% of those in 7th grade reported drinking alcohol within the past 30 days (Figure 3.11). These figures reflect a downward trend since the early 1990s. However, there has been little change in the percentage of youth who engage in **binge drinking**—five or more drinks within a two hour period during the preceding two weeks. This level of drinking has been reported by approximately one-quarter of 11th grade students and between 5% and 10% of 7th grade students since the early 1990s.[23] Data from the California YRBS show similarly high levels of binge drinking (Indicator box).

ADOLESCENT HEALTH INDICATOR

Reduce binge drinking among adolescents.

Source: Healthy People 2010

DATA POINTS

Percentage of students in grades 9-12 who had five or more drinks of alcohol in a row on one or more of the past 30 days.

US 31.5%
CA 30.2%

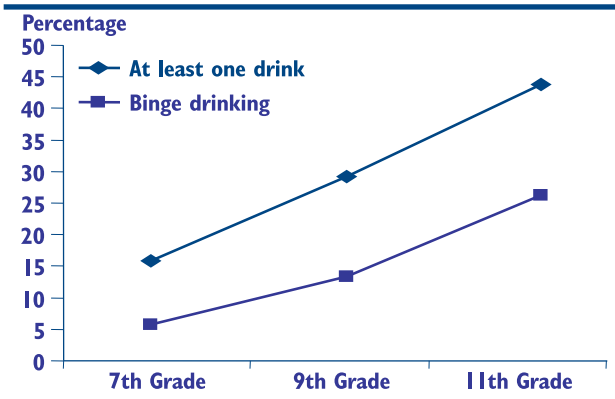
Source: Youth Risk Behavior Survey, 1999 (CA data unweighted)

** The Monitoring the Future Survey and the California Tobacco Survey produce significantly different estimates of teen smoking prevalence. These differences are attributed to methodological differences in the two surveys.*

Drinking causes problems in daily life for some teens. For example, the CSS found that 6% of 11th grade students say they that drinking has hurt their school work or caused them to be arrested.

Twenty percent of 7th grade students and 39% of 11th grade students report having used any **illicit drug** at least once in the past six months (Table 3.3).[23] The reported use of illicit drugs in 1999-2000 is considerably lower than 1997-1998 levels after remaining fairly constant since the early 1990s. Marijuana remains the most commonly used illicit drug. Approximately one quarter of high school students responding to the 1999 YRBS reported using marijuana within the past 30 days (Indicator box) and the CSS found that almost 13% of students in 11th grade reported weekly use. However among younger adolescents, inhalants have rivaled or surpassed marijuana in terms of popularity during the 1990s.

FIGURE 3.11
Alcohol Use by Students in Grades 7, 9 & 11



Source: *Eighth Biennial California Student Substance Use Survey, 1999-2000*

** Binge drinking defined as drinking five drinks in a row in a two-hour period within the past two weeks.*

Data from the CSS can be used to calculate the proportion of adolescents who are **high-risk illicit drug users**. These are youth who, in the past six months, have engaged in: cocaine or crack use, frequent polydrug use (three or more times), weekly marijuana use, or high frequency use of other drugs. In 1999-2000, 11% of 9th and 21% of 11th grade students were classified as high-risk drug users.

TABLE 3.3
Six-Month Prevalence of Illicit Drug Use by Students in Grades 7 & 11

Percentage of students who have used:	7th				11th			
	93-94	95-96	97-98	99-00	93-94	95-96	97-98	99-00
Any illicit drug	25	26	27	20	47	49	49	39
Marijuana	11	11	11	11	40	43	42	35
Inhalants	17	16	18	11	13	15	15	10
Cocaine	3	2	3	3	5	7	8	9
Methamphetamine	3	3	3	2	10	10	12	10

Source: *Eighth Biennial California Student Substance Use Survey, 1999-2000*

Factors Related to Substance Use

According to the CSS, teens' reasons for using alcohol and drugs changed little during the 1990s. In 1999-2000, the reasons most commonly endorsed by 11th grade students were to have fun (67%), to see what it is like (57%), because friends are using (52%), and to avoid problems (47%). Only 36% reported using alcohol and drugs because they were bored or had nothing to do. Use of alcohol and drugs also is influenced by their availability. Significant percentages of 11th grade students believe that it is easy to obtain alcohol (81%), marijuana (78%), and methamphetamines (39%). One-third of the students responding to the 1999 California YRBS reported being offered, sold, or given an illegal drug on school property.[73]

ADOLESCENT HEALTH INDICATOR

Reduce adolescent use of marijuana.

Source: Healthy People 2010

DATA POINTS

Percentage of students in grades 9-12 who report using marijuana during the past 30 days.

US 26.7%
CA 25.5%

Source:Youth Risk Behavior Survey, 1999
(CA data unweighted)

A review of the content of the most popular rental movies and songs from 1996 and 1997 found that of the 200 movies studied, alcohol appeared in 93%, tobacco in 89%, and illicit drugs in 22%.[83] Slightly more than one-fourth (27%) of the 1,000 songs surveyed contained a direct reference to alcohol, tobacco, or illicit drugs (75% of Rap songs, 20% of Hot-100, 20% of Alternative Rock, 14% of Country Western, and 12% of Heavy Metal).

Examples of Current Efforts

- **Proposition 99**, which was approved by California voters in 1988, added an additional 25-cent tax to each pack of cigarettes, and has made an average of $74 million available each year to California's Tobacco Control Program. The program implemented a major statewide anti-smoking media campaign beginning in the early 1990's.
- California's Tobacco Control Program allocates funding to the California Department of Education for school-based **Tobacco-Use Prevention Education (TUPE)** programs, locally designed for students in grades four through twelve.
- In 1994, California's Tobacco Control Program developed the **Operation Storefront** campaign to stem the proliferation of tobacco advertising and promotion in communities.
- The **STAKE (Stop Tobacco Access to Kids Enforcement) Act** prohibits the sale of or furnishing of tobacco to anyone under 18, requires retailers to check ID of anyone under 18 and post warning signs at sales counters, and authorizes $6,000 fines for violations.
- **Title IV-Safe and Drug-free Schools and Communities** provides funding for age-appropriate drug and violence prevention and education programs for all K-12 students through linkages between schools and communities.

- The **California Mentoring Initiative (CMI),** through the California Department of Alcohol and Drug Programs (ADP) was initiated in 1995. CMI works in partnership with many community-based organizations to reduce four major problem areas: alcohol/drug use, teen pregnancy, educational failure, and gangs and violence.
- **The California Friday Night Live (FNL) Program**, funded by ADP, was established in 1984 to promote a teenage lifestyle free of alcohol and other drugs. FNL's mission is to build partnerships for positive and healthy youth development which engage youth as active leaders and resources in their communities.
- **Club Live** is a prevention program aimed at middle school students in California and is an extension of the successful FNL program. It assists students in developing alternatives to using alcohol, tobacco, and other drugs.
- **TEENWORK, INC.**, is a private agency working to provide a forum for youth to share ideas and discuss solutions to the critical issues facing teens today. Every year since 1984, California high school students spend seven months planning a training institute that focuses on substance use prevention and includes broader issues such as pregnancy, gangs, suicide, HIV/AIDS, and recovery. Special consideration is given to recruiting high-risk students. The discussions initiated through this process result in the implementation of programs and activities at the local level.

Strategies to Reduce Teens' Use of Alcohol, Tobacco & Other Drugs

1. Raise awareness of the harms of substance use.

- Use educational strategies to help youth improve critical life and social skills, including decision making and refusal skills.
- Distribute useful, relevant and effective information to targeted populations, such as policymakers, health providers, health plans, individuals, families, and communities to help them make wise decisions about strategies to prevent youth substance use.

2. Combat advertising which promotes the use of alcohol, tobacco, or other drugs, especially advertising aimed at youth.

- Continue and intensify mass media campaigns, including Proposition 99 funded anti-tobacco advertisements, to counteract the image appeal of pro-tobacco messages aimed at children and youth.
- Prohibit the sale or giveaway of tobacco products like caps, jackets, or gym bags that carry cigarette or smokeless tobacco product brand names or logos.
- Negotiate with billboard companies to reduce the number of alcohol billboards. Encourage the federal government to address the expansion of alcohol advertising on television and radio stations.

3. Limit youth access to alcohol, tobacco, and other drugs.

- Reduce youth access to tobacco and alcohol by licensing tobacco vendors; limiting vending machine sales and self-service displays to places where minors are not allowed, such as certain bars and nightclubs; and prohibiting the sale of single cigarettes.
- Mobilize communities to counter drug activity, especially where youth might be present. Advocate for positive community-wide change through legal and regulatory initiatives, such as lowering legal blood alcohol limits for drivers, limiting bar hours, and restricting the number of alcoholic beverage outlets in any given area.
- Establish hotel networks to intervene when underage youth attempt to rent rooms for parties.

4. Provide substance-free environments and alternatives for youth.

- Encourage activities and initiatives that will change community standards and emphasize healthy lifestyles. Promote sobriety as a positive lifestyle choice.
- Provide for the participation of targeted adolescent populations in activities that exclude alcohol, tobacco, and other drug use by youth.

5. Improve substance treatment and promote harm-reduction approaches for adolescents' unique needs.

- Develop sufficient resources to meet community needs for appropriate levels of treatment for youth, and special populations of adolescents.
- Identify and remove barriers that inhibit adolescents from entering treatment.
- Use relevant research to identify and incorporate key variables that contribute to successful treatment outcomes for youth.
- Address the treatment needs of youth in the criminal justice system.
- Improve assessment and early intervention strategies in schools, primary care, family planning, after-school programs, probation, and foster care.
- Encourage the use of comprehensive harm reduction approaches. Promote the use of designated drivers and safe ride programs that provide free or low cost transportation to a safe destination (usually home).

Additional Resources

Preventing Tobacco Use Among Young People: A Report of the Surgeon General. U.S. Department of Health and Human Services, Public Health Service, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, Atlanta, GA, 1994.

Reducing the Health Consequences of Smoking: 25 Years of Progress. A Report of the Surgeon General. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1989.

Youth Smoking Trends in California Fact Sheet. California Department of Health Services, Tobacco Control Section, Sacramento, CA, 1998.

Seventh Biennial Student Substance Use Survey. Grades 7, 9 and 11. 1997-98. Austin, G. and Skager, R. Sacramento: California Department of Justice, Office of the Attorney General, 2000.

Toward a Tobacco-Free California: Renewing the Commitment 1997-2000. Tobacco Education and Research Oversight Committee, California Department of Health Services, Tobacco Control Section, January, 2000.

A Model for Change: The California Experience in Tobacco Control. California Department of Health Services, Tobacco Control Section. October, 1998.

Preventing Drug Use Among Children and Adolescents: A Research Based Guide. National Institute on Drug Abuse. National Institutes of Health. 1997. http://www.nida.nih.gov

Drug Abuse Prevention for At-Risk Individuals. National Institute on Drug Abuse. National Institutes of Health. 1997. http://www.nida.nih.gov

Teen Pregnancy & Sexually Transmitted Infections

Although sexual development is an integral part of adolescence, early sexual activity can have a number of negative consequences. The vast majority of adolescents who become pregnant indicate that their pregnancies were unplanned, unintended, or mistimed.[106] Adolescents who have children, as well as the children themselves, suffer educational and economic disadvantages that persist into adulthood.[107,108,109] For both biological and behavioral reasons, adolescents are at greater risk for STIs than older people.[110] Untreated STIs can cause pelvic inflammatory disease, ectopic pregnancies, infertility, genital cancers, and death from AIDS. There is growing concern that HIV infection may be spreading in this age group despite education, prevention, and treatment programs.

ADOLESCENT HEALTH INDICATOR

Reduce pregnancies among adolescent females.

Source: Healthy People 2010

DATA POINTS

Estimated pregnancy rate per 1,000 females ages 15-19.

US 97
CA 125*

Source: Alan Guttmacher Institute, 1996

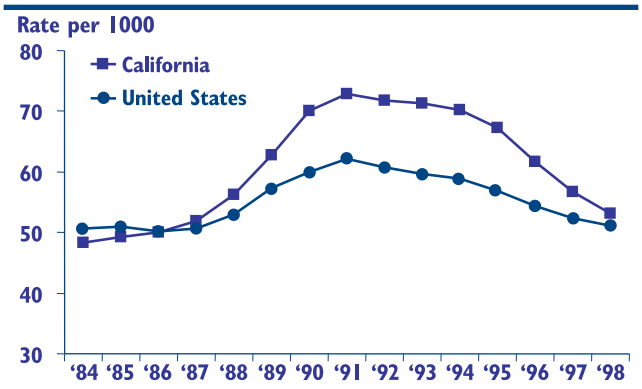
** Calculated using abortion data from neighboring or similar states.*

Data Snapshot

Teen Births

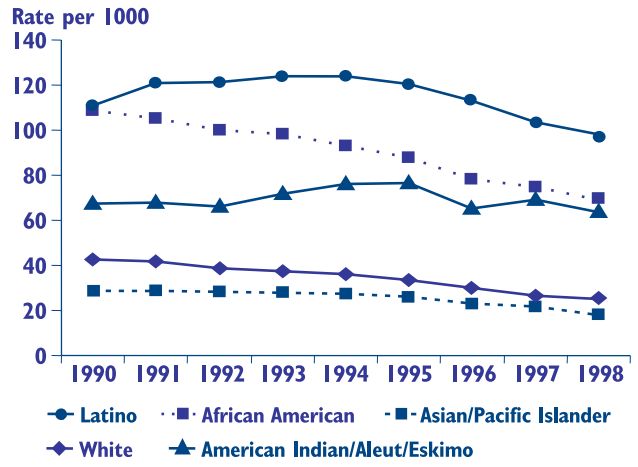
In 1998, there were 59,207 **births** to California residents under the age of 20, 10,000 fewer than in 1991. This represents a 27% drop in the 15 to 19 teen birth rate from 72.9 per 1000 in 1991 to 53.2 per 1000 in 1998 (Figure 3.12). There are pronounced **ethnic disparities** in teen birth rates with rates among Latinos almost five times those of whites or Asian/Pacific Islanders

FIGURE 3.12
Birth Rates among Females 15-19, California & the U.S.



Source: *California Department of Health Services, Vital Statistics, 1984-1998*

FIGURE 3.13
Birth Rates among California Females 15-19, by Race/Ethnicity



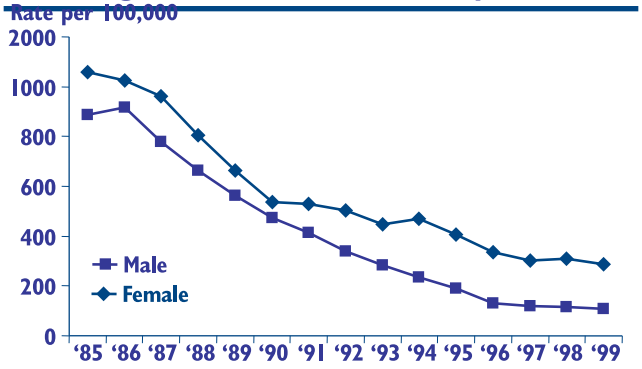
Source: *California Department of Health Services, Vital Statistics, 1990-1998*

(Figure 3.13). In 1998, birth rates per 1000 teens ages 15 to 19 were: white 25.2, African American 68.1, Latino 97.0, Asian/Pacific Islander 19.8, and American Indian/Aleut/Eskimo 64.7. Whereas teen birth rates among Latinos and African Americans were comparable in 1990, birth rates among African Americans dropped sharply during the 1990s such that the rate is now 25% lower than among Latinos. There are also **geographic and income disparities** in teen birth rates. Teen birth rates are particularly high in major population centers, including Los Angeles County, San Diego County, the San Francisco Bay Area, and much of the Central Valley.[111] Teen births are more prevalent among populations of lower socio-economic status. **Factors related to reductions in teen birth rates** include increased numbers of teens who are delaying sexual activity; increased use of traditional contraception; increased use of long lasting methods of contraception such as Norplant and Depo-Provera; and health education, social service supports and media campaigns.[112,113]

Sexually Transmitted Infections

Rates of **gonorrhea** and **syphilis** have been brought to historic lows. Between 1985 and 1999, gonorrhea rates for 15 to 19 year olds dropped by 73% among females and by 88% among males (Figure 3.14). Syphilis rates fell 96% between 1985 and 1999. On the other hand, between 1990 and 1999, **Chlamydia** rates in California increased 45% among youth ages 15 to 19. The vast majority of cases occur in the 15 to 25 year old age group (Figure 3.15). An estimated 5% to 10% of sexually active adolescent girls are

FIGURE 3.14
Trends in Gonorrhea Rates among California Youth 15-19, by Gender



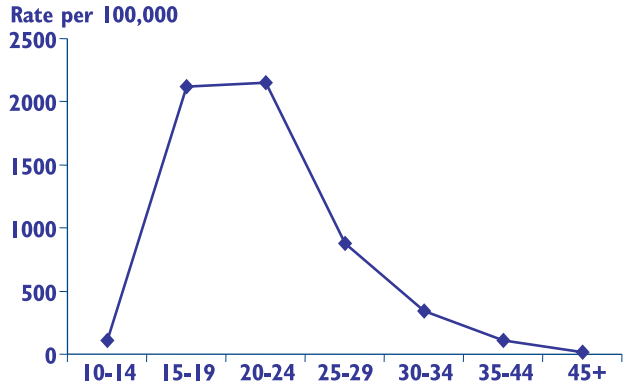
Source: *California Department of Health Services, STD Prevalence Data, 1985-1999*

infected. Rates among African American and Latino teens are at least three times the rate among whites.[114]

Although the number of actual **AIDS** cases among teens is low, HIV infection during these years is significant. Sixteen percent of AIDS cases occur among young adults, ages 20 to 29. Given the average 10 to 12 year latency period between HIV infection and the onset of symptoms, many of these individuals were infected during their teenage years. Nationally, of all youth diagnosed with AIDS, more than 50% are African American or Latino.[115]

FIGURE 3.15

Rates of Chlamydia for Females,* by Age



Source: *California Department of Health Services, STD Prevalence Data, 1999*

** Chlamydia infection rates among males are poorly defined because few males are tested and the tests do not reliably detect infection.*

Sexual Behavior

The 1999 California Youth Risk Behavior Survey (YRBS) indicates that a substantial percentage of high school students are **sexually active** (40%), and a smaller but significant percentage have had **multiple sexual partners** (12%) (Table 3.4). Males are more likely to report sexual activity and multiple partners than are females, and there are significant ethnic disparities in sexual behavior (Table 3.4). Eighty-four percent of California high school students protect themselves from sexually transmitted infections (STIs) and unplanned pregnancy through **abstinence** or use of **condoms.** Sixty percent of sexually active students in grades 10 to 12 reported using a condom the last time they had sexual intercourse.[73] Although there are no trend data for California, national data indicate that condom use increased from 46% to 58% between 1991 and 1999.[116] However for some teens, embarrassment, cost, and lack of knowledge continue to be obstacles to condom use. Among older teens, condom use decreases as their use of non-barrier methods increases. While oral contraceptives, Depo-Provera and Norplant are highly effective at preventing pregnancy, they leave many teens vulnerable to STIs.

ADOLESCENT HEALTH INDICATOR

Reduce the proportion of adolescents and young adults with *Chlamydia trachomatis* infections.

Source: Healthy People 2010

DATA POINTS

Rate per 100,000 of female adolescents with *Chlamydia trachomatis* infection.

	10-14	15-19	20-24
US	147	2484	2187
CA	107	2122	2150

Source: Centers for Disease Control and Prevention, and California Department of Health Services, STD Prevalence Data, 1999

TABLE 3.4
Sexual Behavior among California High School Students

Percentage of students who:	Total	GENDER F	GENDER M	GRADE 9	GRADE 10	GRADE 11	GRADE 12	RACE Wh	RACE Af Am	RACE Hisp	RACE Asian
Ever had sexual intercourse	40	36	44	24	40	44	58	37	52	46	22
Had four or more sexual partners	12	8	15	8	8	13	19	4	17	13	11

Source: *California Youth Risk Behavior Survey, 1999 (unweighted)*

Examples of Current Efforts

- For over 20 years, the Office of Family Planning, within the Department of Health Services (DHS) has funded the **Information and Education** program, providing $2 million to 32 community-based organizations to conduct reproductive health education in the schools. In recent years, the emphasis has been to target alternative, continuing education and other non-traditional schools. This program is well accepted by many districts.
- The **Male Involvement Program (MIP)** aims to reduce teen pregnancy by promoting primary prevention skills and motivation in adolescent boys and young men. Funded by DHS at $2 million, MIP funds 25 grantees to implement programs using a variety of strategies involving schools, recreation programs, and job training programs.
- The Maternal and Child Health Branch of DHS administers 47 local **Adolescent Family Life Program (AFLP)** projects providing case management services to pregnant or parenting teenagers and their siblings. The goal of AFLP is to prevent or delay subsequent pregnancies and to keep parenting teens in school. AFLP works in close coordination with the **CalLearn Program**. Administered by the California Department of Social Services, CalLearn includes financial benefits to pregnant and parenting teens for staying in school and for maintaining a certain level of academic performance.
- The California Department of Health Service's **Partnership for Responsible Parenthood** is a multi-pronged parenting initiative that includes a major media campaign and the **Community Challenge Grant Program (CCG)**. Grants have been made to 134 local agencies to develop local solutions to the problem of teenage pregnancy. CCG stresses the

ADOLESCENT HEALTH INDICATOR

Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.

Source: Healthy People 2010

DATA POINTS

Percentage of students in grades 9-12 who have never had intercourse or who used a condom at last intercourse.

US 79.0%
CA 84.0%

Source: Youth Risk Behavior Survey, 1999 (CA data unweighted)

delay of sexual activity, community-based youth development activities, and expanded roles for males in both pregnancy prevention and child-rearing.

ADOLESCENT HEALTH INDICATOR

Reduce the number of cases of HIV infection among adolescents and young adults.

Source: Healthy People 2010 Modified

DATA POINTS

Estimated number of HIV cases among young persons 15-24 in California: 2900 - 4000

Source: Department of Health Services, Office of AIDS, HIV/AIDS Epidemiology Branch, 1996

- **Legislation** supports quality sex education in California. Section 51553 of the Education Code prevents schools from withholding information about contraception by requiring that it be covered if sex education is offered. AB 246, passed in 1999, requires that factual information presented in course materials and instruction for sex education courses be medically accurate and free of racial, ethnic, and gender biases. However, there is no requirement that sex education be offered.
- The **Teenage Pregnancy Prevention Grant Program (SB 1170)**, administered by the California Department of Education, funds 37 local education agencies to implement school-based interventions using school-based strategies previously shown to be effective.
- The California Wellness Foundation has funded a 10 year, $60 million **Teen Pregnancy Prevention Initiative** that supports a public education campaign (Get Real), community action programs, policy projects, and leadership development.
- **Positively Speaking** is a statewide program that trains individuals affected by HIV to give classroom presentations. Positively Speaking grew out of a collaboration between the STD Control Branch within the California DHS and the Healthy Kids Resource Center to further incorporate STI education into ongoing HIV prevention received by students in grades 7 through 12.
- The **Family Planning, Access, Care and Treatment Program (Family PACT)**, under the auspices of the California Office of Family Planning, enables teens with family incomes under 200% of the federal poverty level to access comprehensive clinical family planning services and primary care when they are unable to use services through Medi-Cal or Healthy Families. All Medi-Cal providers may enroll to provide and be reimbursed for these services under the program. There are currently over 2,800 providers participating in the Family PACT program.
- **TeenSMART** provides enhanced reproductive health counseling for pregnancy prevention and STI risk reduction to sexually active adolescents enrolled in Family PACT clinics.
- The **California Chlamydia Action Forum**, sponsored by DHS and the California Healthcare Foundation took place in October of 1998. The Forum resulted in a five year public and private Chlamydia prevention and control strategy for California. Governor Davis has allocated $1.3 million to the **Chlamydia Awareness Grant** to be used to hire regional health educators and to conduct outreach and awareness activities.

- To establish the point prevalence of Chlamydia in teens and young adults, the **"Get Tested" Campaign** was launched by the STD Control Branch within DHS in the beginning of 2000. This campaign will provide resources for screening adolescents for Chlamydia in a variety of settings, such as health clinics, school-based health centers, and youth-serving organizations.

Strategies to Reduce Teen Pregnancy and STIs

1. Provide teens with the information, skills, and support they need to practice safe sexual behavior, including abstinence.

- Offer family life education to youth that is age appropriate, culturally sensitive, teaches sexual and reproductive options, and emphasizes the benefits of abstinence. Build on current knowledge of best practices by emphasizing communication, skill-building activities, and role-playing.
- Educate teenagers about the risks of sexually transmitted diseases, including HIV/AIDS, and the need for prompt treatment. Integrate Chlamydia messages into existing HIV and teen pregnancy prevention campaigns and family life education modules.
- Establish and reinforce community norms that value healthy adolescent sexuality but do not sanction pregnancies and high risk behavior.
- Change the perception of teen pregnancy as an individual/family problem and recognize the role of the social environment.
- Incorporate promising strategies into comprehensive pregnancy prevention programs including: individual and peer education, counseling, case management, after school activities, and building support systems and relationships with caring adults.

2. Increase access to reproductive health care.

- Encourage all health care providers who provide care to youth to include comprehensive, age-appropriate information on sexual health issues, including prevention of unintended pregnancies and STIs.
- Make confidential STI screening and treatment services easily accessible to teenagers along with culturally sensitive counseling and education regarding the use of available protective measures.

3. Increase the role males play in preventing adolescent pregnancy.

- Educate males at an early age to identify and understand the legal, financial, and emotional roles and responsibilities of parenthood.
- Involve males in teen pregnancy prevention efforts, make programs comfortable for males, and conduct outreach to young men who are not using services for which they are eligible.
- Enforce statutory rape laws against adult men involved with girls who are minors.

4. Decrease glamorization of irresponsible sexual behavior in the media.

- Add more educational content to regular programming which provides realistic and positive portrayals of life and reduces the glamorization of premarital and extramarital sex and teenage parenthood.
- Portray characters in situations where they demonstrate responsible sexual behavior and are shown facing and discussing abstinence as well as the consequences of sexual relations, including unintended pregnancy, sexually transmitted diseases, AIDS, and early parenting.

Additional Resources

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Oral Health

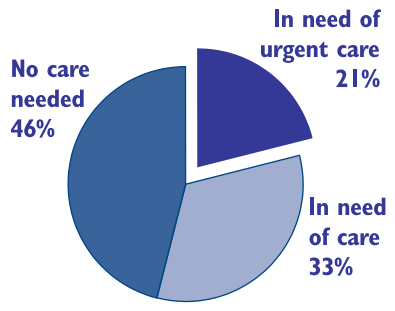
For many California teens, oral health problems, such as tooth decay (dental caries), gum disease, and oral injuries, cause significant pain, interference with eating, poor self-image, and valuable time lost from school and work. Oral diseases are almost entirely preventable, yet appropriate preventive measures are not being adequately used. For example, community water fluoridation can prevent as much as 40% of all tooth decay, and the combined use of fluorides and dental sealants could prevent almost all decay.[117] Yet too many youth in California lack access to these preventive measures. In particular, lack of adequate dental insurance is a major obstacle that can lead to chronic oral diseases and dental disability.

Data Snapshot

The California Oral Health Needs Assessment was conducted in 1993-94 among a sample of California schools representing urban, rural, and suburban areas including both fluoridated and non-fluoridated areas.[117] The assessment provides the best data currently available on oral health needs in California. The data presented here were collected from 898 10th grade students in 40 different high schools across the state.

Approximately one-fifth (21%) of 10th grade students were in **urgent need of dental care** for extensive decay, pain or infection (Figure 3.16), 16% had moderate to severe orthodontic needs, and 78% had experienced some tooth decay, with an average of four teeth affected. Nearly 40% of the students had early damage to the gums and 6% had advanced **gum disease**, which can lead to abscesses, loose teeth, and tooth loss. Approximately 11% had early gum disease (gingivitis), which can be reversed through brushing and flossing. There are significant **ethnic disparities** in adolescent oral health. For example, in non-fluoridated urban areas (comprising the majority of the state's population), 90% of Hispanic

FIGURE 3.16
Need for Dental Care among California Students in 10th Grade



Source: *Dental Health Foundation, 1997*

ADOLESCENT HEALTH INDICATOR

Reduce the proportion of adolescents with dental caries experience in their permanent teeth.

Source: Healthy People 2010

DATA POINTS

Percentage of adolescents with dental caries.

US . . . . . 61% (age 15)
CA . . . . . 78% (grade 10)

Source: National Health and Nutrition Examination Survey III, 1988-1994, and Dental Health Foundation, 1997

students had experienced tooth decay, compared to 83% of African American students, 76% of Asian students, and 69% of white students.

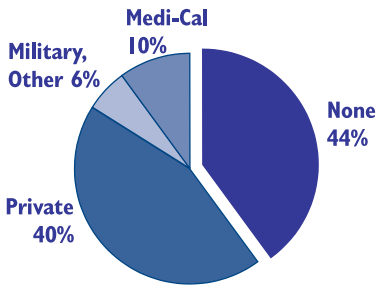
While there are few indicators of the extent to which California teens utilize the **oral health care system**, a question included in the 1995 California Youth Risk Behavior Survey, revealed that 62% of high school students reported having visited the dentist at least once in the previous 12 months. The California Oral Health Needs Assessment found that 12% of the 10th grade students in their sample had *never* visited a dentist. Approximately 44% of the students had no **dental insurance** coverage, and only 10% were covered by Medi-Cal (Figure 3.17). Only 13% of the 10th grade students had received **protective sealants** on the occlusal (chewing) surfaces of at least one permanent molar tooth. Dental sealants reduce decay in pits and fissures on the chewing surfaces of back teeth and can prevent more than 80% of dental decay in youth.

With the recent **fluoridation** of Los Angeles and Sacramento, approximately 30% of the state's population now benefits from access to fluoridated public drinking water. Rates are expected to increase even further due to implementation of a state fluoridation law and funding provided by the California Endowment. Youth in non-fluoridated areas have 36% to 54% more tooth decay than those in fluoridated areas.[118]

Current Efforts

- **Denti-Cal**, the dental portion of the Medi-Cal program, provides dental care for youth under 21 years of age (up to 100% of the federal poverty level for youth over six years of age). Services include diagnostic and preventive care such as examinations and prophylaxis (cleaning), restorative services, such as fillings, and oral surgery.
- **Healthy Families** provides access to health services, including dental benefits, for youth up to age 19 in families with incomes up to 250% of the federal poverty level.

FIGURE 3.17
Dental Insurance Coverage among California Students in 10th Grade



Source: *Dental Health Foundation, 1997*

Covered services are similar to those under Denti-Cal.

- **California Children Services (CCS)** provides medical and dental care for youth under 21 years of age who have eligible handicapping conditions. CCS also provides medically necessary orthodontic services to youth with handicapping malocclusion, cleft palate, and/or craniofacial anomalies.
- The **Child Health and Disability Prevention (CHDP) Program** is a state and federally-funded preventive health care program for Medi-Cal beneficiaries younger than 21 years of age, youth of low income families who are younger than 19 years of age, and children participating in Head Start or specified state preschool programs. CHDP provides for periodic, comprehensive examinations that include a dental assessment.
- The Dental Health Foundation's **Children's Dental Health Initiative** is producing a strategic plan for oral health in California based on the Oral Health Needs Assessment. This Initiative also has funded a number of school-based dental clinics which provide sealants and other preventive care. The goal is to have these clinics become sustainable without continuous foundation support.
- The California Department of Health Services (DHS) **Dental Workgroup** is coordinated by the Maternal and Child Health Branch. Comprised of representatives from various public and private dental programs and organizations, the Dental Workgroup addresses the coordination of oral health activities within maternal and child health programs.
- The **California Fluoridation Implementation Project** is a federally funded program that provides consultation and technical assistance to communities interested in fluoridating their drinking water and includes a public/private partnership to assist in obtaining funds for these efforts. The California Endowment has contributed $15 million towards fluoridating California communities.
- The Sierra Health Foundation, in collaboration with the California Endowment and the Dental Health Foundation, provides funding for dental projects under their **brightSMILES** program to increase access to oral health services in many underserved communities throughout Northern California.

ADOLESCENT HEALTH INDICATOR

Increase the proportion of adolescents who have dental sealants on their molar teeth.

Source: Healthy People 2010

DATA POINTS

Percentage of adolescents who have dental sealants on their molar teeth.

US . . . . . 15% (age 14)
CA . . . . . 13% (age 15)

Source: National Health and Nutrition Examination Survey III, 1988-1994, and Dental Health Foundation, 1997

Strategies

1. Promote good oral health practices among teens.

- Emphasize the importance of brushing, flossing, fluoride use, and dental sealants in school curricula, through public awareness campaigns targeting youth, and through culturally appropriate educational and outreach programs targeting youth at highest risk for dental health problems.
- Encourage healthy eating practices among adolescents, including practices that promote oral health.
- Build on existing prevention programs that educate youth about the harms of alcohol and tobacco use (including cigarettes, cigars, and chew/dip tobacco) and their contribution to oral cancer.
- Encourage or require schools and community-sponsored sports leagues to use mouthguards during contact sports.
- Expand the Children's Dental Disease Prevention Program to serve adolescents.

2. Promote statewide fluoridation efforts.

- Seek financial support for capital, operations and maintenance costs for community water fluoridation.
- Support local community water fluoridation efforts (e.g., through development of printed patient education materials, sample editorials and letters to newspapers, "bill stuffers," and spokesperson training).
- Develop community awareness campaigns for water fluoridation in non-fluoridated areas.
- Engage youth in local efforts to promote fluoridation.

3. Improve youth access to dental care and preventive dental programs.

- Set reimbursement levels for dental services under public programs at levels that make it financially attractive for providers to participate.
- Fund a variety of community-based dental care delivery systems for underserved youth (e.g., school-based clinics, portable dental equipment in schools, shared dental equipment between different programs, and mobile dental vans.)
- Increase utilization of allied dental health care providers in oral screenings, oral health education programs and the provision of preventive services.
- Increase the capacity of traditional and safety-net providers to deliver dental services to underserved youth.

- Expand school- and community-based preventive dental programs, particularly school-based dental sealant programs for low-income youth not covered by private insurance or publicly-funded programs such as Denti-Cal.
- Facilitate linkages between school-based preventive dental programs and community dental health providers.
- Change the Healthy Families program so that youth who already have medical insurance can get dental-only coverage through Healthy Families.

4. Strengthen the capacity of the public sector.

- Conduct periodic assessments of the extent to which youth are covered for oral health by public or private health insurance, and include oral health questions in the California Healthy Kids Survey.
- Provide for a state dental director position in the Department of Health Services to be responsible for the periodic assessment of oral diseases and dental care needs and the development of appropriate preventive programs. This individual should have expertise in dental public health.
- Provide for county or regional dental director positions, with expertise in dental public health, throughout California.
- Conduct oral health needs assessments every five years, including an evaluation of existing resources and available capacity, to identify gaps in services and resources and to determine effectiveness of interventions targeted toward youth.
- Provide training and technical assistance to local communities interested in evaluating the oral health status of their communities.

Additional Resources

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Environmental & Occupational Health

The environment plays an important role in the health of people of all ages, contributing to illnesses such as asthma and cancer, and to neurodevelopmental and reproductive conditions. However, environmental concerns vary somewhat based on age and development. Children and young adolescents are physically smaller than adults, increasing their vulnerability to lower exposures of toxins and to workplace hazards. Most importantly, adolescence is a time of rapid physical and sexual growth; the body is particularly vulnerable to disruption of the hormonal and endocrine changes necessary for normal development and reproduction. Fortunately, we are seeing a positive trend toward considering the needs of children and adolescents in environmental and occupational health regulations. Still, much remains to be learned about how to best protect youth from environmental hazards.

Data Snapshot

Schools

The **physical condition** of schools in California has raised concerns about the exposure of youth to environmental hazards. Forty-three percent of California public schools report that at least one on-site building is in inadequate condition and 87% report a need to upgrade or repair on-site buildings.[119]

The **portable classrooms** used to alleviate overcrowding and create space for class size reduction are often constructed from materials that release irritant chemicals into the air. The concentration of these chemicals can reach dangerous levels if classrooms are not adequately ventilated. Improved compliance with the most stringent heating, ventilation, and air conditioning systems regulations is needed. In addition, air filters are needed to reduce airborne dust, pollen and microorganisms from

recirculated and outdoor air streams which may contribute to asthma and other problems.

A recent study of California public schools found that 4.7% of responding schools had at least one classroom with **radon levels** exceeding the levels recommended by the U.S. Environmental Protection Agency (EPA).[120] The EPA estimates that approximately 14,000 lung cancer deaths per year occur in the U.S. due to residential radon exposures.

School buildings are densely populated, with the typical school having approximately four times as many occupants as office buildings for the same amount of floor space. There are a **variety of pollutant sources** in schools, such as art and science supplies, industrial and vocational shop areas, home economics classes, and others.

An assessment of toxic **pesticide use** in schools found that 52% of responding California schools reported using one or more pesticides identified by the U.S. Environmental Protection Agency and the State of California as being a reproductive or developmental toxin.[121]

Home and Community Environments

Environmental tobacco smoke (ETS) also called "secondhand smoke," is a major indoor air pollutant that affects youth. One study of the health effects of ETS found that children who were exposed to environmental tobacco smoke had a higher incidence of acute respiratory illnesses, twice as many days of restricted activity, and more school absences per year than children who were not exposed to ETS.[122] Exposure to high level of **allergens such as dust mites and cockroaches** also has been shown to exacerbate asthma.[123,124] Both of these allergens are more prevalent in lower income environments, which is consistent with the higher death and hospitalization rates from asthma among poor and African American children.[125]

Another potentially hazardous exposure in the house is to pesticides. Although **pesticide residues** on food have received a great deal of public attention, youth are often exposed to higher levels of pesticides through use at home and in schools. In a monitoring project conducted by the Environmental Working Group in 1998, 64% of the air samples collected contained traces of **pesticides** known to cause cancer, brain damage, birth defects, acute poisoning and other illnesses.[126]

SPOTLIGHT ON...

Asian Youth Advocates (AYA) trains girls and young women in the Laotian community of Richmond in leadership, advocacy, and community organizing with a focus on environmental contamination, reproductive health, and cultural awareness. AYA members have conducted their own surveys on levels of fish consumption from contaminated waters and on possible lead exposure and contamination through gardening. They fought to shut down a nearby incinerator which was emitting toxic pollutants, and testified before government panels about the dangers of dioxin poisoning from the fish their families have caught from the San Francisco Bay.

A growing number of youth are affected by **asthma,** the most common chronic illness of childhood.[127] Between 1980 and 1994, the prevalence of asthma among children 5 to 14 years old increased by 74% (from 42.8 to 74.4 per 1,000).[128] Common **air pollutants** are associated with increased respiratory illnesses, aggravation of asthma, and decreases in lung function. High levels of fine particulate matter and carbon monoxide have been found to be associated with emergency room visits for asthma in youth.[127] Ground-level ozone, which is a ubiquitous air pollutant, also has been linked to a higher incidence of asthmatic attacks.[129]

Environmental racism is a growing concern in many low-income communities and communities of color that have a disproportionate share of waste disposal sites and industries with potentially hazardous emissions.[130]

Workplace Health and Safety

According to the 1990 Census, there are almost 800,000 youth (ages 16 to 19) in the labor force in California. Nationally, **work related injuries** are responsible for approximately 100,000 hospitalizations and 70 deaths among young people each year. The most common causes of work-related deaths among 16 and 17 year olds are motor vehicle related, electrocutions, and homicides. Adolescents' rate of injury per hour worked is almost twice as high as the rate for adults (4.9 injured per 100 compared to 2.8 per 100). **Factors contributing to youth injuries at work** are lack of adequate health and safety training, inadequate supervision, lack of experience, and assignment of tasks for which youth may not be prepared, physically, cognitively, or emotionally.[60] In addition, the physical conditions of most job sites, health and safety protection standards, and health and safety training are often adult-oriented. The federal 1938 Fair Labor Standards Act, the principal federal law addressing the protection of children at work, contains many outdated provisions. Agricultural occupations carry fewer restrictions for laborers under age 18. This is a concern for California's youth given the hazardous nature of agricultural work and its prevalence in California.

Examples of Current Efforts

- The **Children's Environmental Health Network** is a national, multidisciplinary project dedicated to promoting a healthy environment and to protecting children from environmental hazards. The Network is composed of experts who address children's environmental health issues through education, research, and policy.

- The **California Department of Toxic Substances Control** works to protect the public and the environment from hazardous substances and includes programs such as site clean-up, pollution prevention, and environmental technology certification and education.
- The **State Environmental Health Investigations Branch** responds to environmental health problems, conducts health and exposure investigations as well as surveillance, provides public health oversight and assistance to state and local health agencies, and develops policy recommendations.
- The **Labor Occupational Health Program (LOHP)**, established in 1974, is a community outreach program at the University of California, Berkeley dedicated to improving health and safety in the workplace. LOHP provides information and training to unions, workers, joint labor-management groups, community organizations, health professionals, government, and schools with an emphasis on toxic substances, hazardous waste, youth in the workforce, workplace violence, ergonomics, workers' compensation, and environmental justice.
- The **State Division of Environmental and Occupational Disease Control** conducts surveillance, investigation, laboratory analyses, education, and technical assistance on environmental and occupational diseases.
- In the area of occupational health, the **State of California Department of Industrial Relations, Division of Labor Standards Enforcement** has regulatory oversight of California's child labor laws. California's child labor laws generally were less stringent than federal law until 1994 when the legislature voted to bring them into compliance with federal standards.

Strategies to Improve Environmental & Occupational Health

1. Create safer school environments.

- Create specific standards regarding portables in the Building Standards Code that will adhere to the State Department of General Services' specifications on portable classrooms.
- Eliminate schools' use of pesticides that cause cancer and other adverse effects and ensure that school pesticide use is reported under the state pesticide use reporting system.
- Include the California Department of Toxic Substance Control, school districts, and the California Department of Education in the review and clean-up of all new school sites where the presence of toxins is suspected.

2. Support broad-based environmental health strategies.

- Revise existing federal and state regulatory standards establishing allowable levels of exposure to hazardous toxins in order to adequately incorporate adolescents' differential exposure and susceptibility.
- Study the effects of environmental toxins on adolescents, particularly concerning the interaction of environmental chemicals and reproductive development.
- Create community-based pollution prevention campaigns targeting, for example, city councils, city environmental managers, school boards, superintendents, and others.
- Create pollution prevention plans through collaboration between local government and private industry that allow changes to be made in a phased, strategic way.
- Enhance awareness among parents and communities about the hazards of environmental tobacco smoke to the health of children and adolescents, and promote tobacco-free environments for children and adolescents.

3. Enhance teens' safety in the workplace.

- Develop and provide information and training to employers, educators, parents, and youth to reduce the risks and enhance the benefits associated with youth employment.
- Ensure that each school district in California establishes a comprehensive system for issuing work permits and increase compliance with permit requirements.
- Establish "Commendable Workplaces for Youth" as an incentive to encourage employers to create and maintain safe workplaces for youth.
- Regularly review regulations prohibiting youth employment in jobs deemed too hazardous for youth under the age of 18 (and under the age of 16 in agriculture).

Additional Resources

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Afterword

Given the magnitude and complexity of issues confronting California's youth, it is easy to feel overwhelmed and difficult to know where to begin. For those who devote their time, either personally or professionally, to working with youth or supporting adolescent health, simply managing the existing workload can be a struggle. Organizations within the health and human services arena are typically working with limited resources that are often stretched thin just to cover the basic services they provide. As we attempt to move forward to realize our vision for adolescent health and well-being, we must be selective and realistic, recognizing organizational and financial constraints.

As you read the background information, recommendations, and strategies outlined in this plan, we hope that some stand out as particularly relevant to your work. We recognize that some readers will be coming from a community-based perspective and will be assessing the contents of this plan in terms of its relevance to their specific communities. Others may be involved in state-level work, whether it is policy, advocacy, funding, or research. Regardless of your perspective or your role, we hope that you will come away from this plan with at least one "action item." This action item may be something small and short-term that can be implemented by a single individual, or it may be something larger and more ambitious that requires collaboration, funding, or policy change.

Choosing a plan of action will involve consideration of several factors:

- What currently exists in your community, or in your area of work?
- Where are the significant gaps?
- What resources are available to you or your organization?
- Are your resources being used in the most effective manner or should they be deployed differently?
- Who are the partners in your community or professional field with whom you could work?
- What level of time and commitment are feasible?
- Which ideas are most exciting to you?

Recognizing that time and resources are limited, we hope to promote a practical approach that involves a broad array of stakeholders in making a contribution, however small, to pushing forward the agenda of this plan and to better supporting California's teens.

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Notes

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