



County of Yolo

Health Department

YOLO COUNTY YOUTH

A Summary Report of Health and Well Being Indicators 2005



Yolo County MCAH Program

INTRODUCTION

The period of adolescence (ages 12 to 20 years) is a time of rapid change. Not only physical transformation but emotional and social development take place as well. This is a time when individuals are uniquely vulnerable. Risky behavior may occur due to a confluence of social, emotional and physical changes and demands that constitute the normal course of adolescent development. Decisions made during adolescence can impact health and well-being immediately and for the entire life span. Risky behavior choices such as tobacco use, alcohol use and impaired driving can have lifelong consequences for the young person and their community. Thus it is of great importance that our society be vigilant and responsive to the needs of our youth.

The Yolo County Maternal Child and Adolescent Health (MCAH) Program has named prevention of childhood obesity and prevention of youth substance use as priority areas for Yolo County based on our 2004 Community Needs Assessment. These priority areas are part of a larger MCAH vision of a community environment that supports positive youth development. As a starting point to address these priority areas, this report was developed. It outlines health and wellness indicators measured in 2005 intended to reflect the health and wellness of Yolo County youth. We hope that the information presented will be of use to our department and other agencies and individuals in the community who share our vision.

Healthy Youth 2010 Objectives

The American Medical Association has developed a national initiative to improve adolescent health by 2010 based on the Healthy People 2010 goals and objectives. The goal of both programs is to increase quality of life, life expectancy and eliminate health disparities among different groups in the population. Healthy People 2010 includes 467 objectives in 28 areas. The initiative to improve adolescent health focuses on 21 objectives viewed as critical to improving the health of 10 to 24 year olds. These 21 objectives will be referenced as appropriate throughout the remainder of this report. These objectives are as follows:

1. Reduce deaths of adolescents and young adults (10-24 years).
2. Reduce deaths caused by motor vehicle crashes.
3. Reduce deaths and injuries caused by alcohol- and drug-related motor vehicle crashes.
4. Reduce the suicide rate.
5. Reduce homicides: 10 to 19 years of age.
6. Reduce pregnancies among adolescent females.
7. Reduce the number of cases of HIV infection among adolescents and adults.
8. Reduce the proportion of adolescents and young adults with Chlamydia trachomatis infections.
9. Reduce the proportion of children and adolescents who are overweight or obese.
10. Increase use of safety belts.
11. Reduce the proportion of adolescents who report that they rode, during the previous 30 days, with a driver who had been drinking alcohol.
12. Reduce the rate of suicide attempts by adolescents.
13. Reduce physical fighting among adolescents.
14. Reduce weapon carrying by adolescents on school property.
15. Reduce the proportion of children and adolescents with disabilities who are reported to be sad, unhappy or depressed.
16. Increase the proportion of children with mental health problems who receive treatment.
17. Reduce the proportion of persons engaging in binge drinking of alcoholic beverages.
18. Reduce the past-month use of illicit substances.
19. Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active.
20. Reduce tobacco use by adolescents.
21. Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion.⁽¹⁾

This report will present information about adolescents in Yolo County in several areas of adolescent health and risk behavior, including injuries, violence, tobacco use, alcohol and drug use, mental health, sexual health and behavior, obesity, nutrition, physical activity, and resiliency.

Data Sources

Much of the information in this report is drawn from data obtained from the California Healthy Kids Survey 2004-2005 (CHKS). This survey is completed anonymously during class time in our schools once every two years. It is administered to students in grades seventh, ninth, eleventh and “non-traditional” (continuation) schools in five Yolo County school districts, including Davis, Esparto, Washington, Winters and Woodland. The intended purpose of the survey is to assist schools in preventing health risk behavior in youth and fostering the development of resilience and well-being. We have been able to obtain this data to look at an aggregate picture of health and risk behavior of adolescents in Yolo County. Unless otherwise noted, the Yolo County data presented here is drawn from the California Healthy Kids Survey 2004-05 for Yolo County.⁽²⁾

Most of the national data presented here for comparison is drawn from the Youth Risk Behavior Survey 2005 report published in June 2006. This is a nationwide survey conducted every 2 years by the Centers for Disease Control to monitor health risk behavior by youth. It contains survey data from high school students (grades 9 to 12) in 40 states and 21 cities throughout the country. Unless otherwise noted, national data presented here is drawn from the Youth Risk Behavior Survey 2005 report.⁽³⁾

Limitation of the Data

There are limitations that must be kept in mind in interpreting data with regard to youth risk behavior.

First, most of the available data is self-report data. There is potential for both over and under reporting bias in any self-report data. Both the California Healthy Kids Survey and the National Youth Risk Behavior Survey contain mostly self-report data.

Second, there is also some inconsistency within California Healthy Kids data with regards to reporting of data from “non-traditional” high schools. Individual school districts report data from “non-traditional” school students separately but the countywide data does not separate out these students. This may slightly skew the data from eleventh grade students.

A Word About Non-Traditional Schools

Each district in the county maintains at least one non-traditional or continuation school. Most of the students attending these schools were not earning adequate credit toward graduation or were otherwise not experiencing success at their traditional high school. Most are eleventh and twelfth graders. Many of these students are already very at-risk adolescents before entering the non-traditional

Adolescents age 12 to 19 years account for about 14% of the county population. This percentage has been increasing over time.

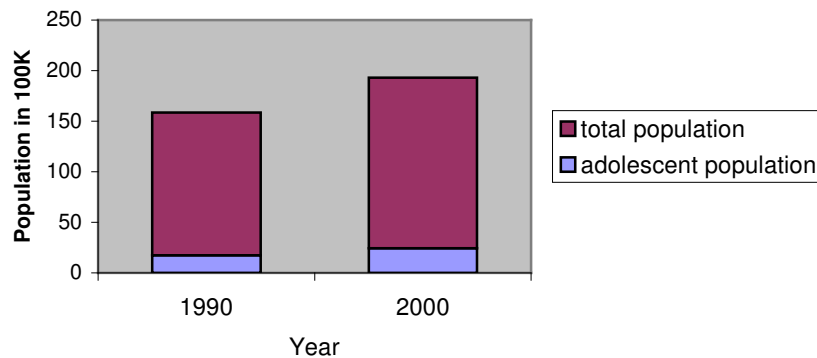
school, often already engaging in several high-risk behaviors, often with legal trouble, mental health problems or family difficulties. Although they represent only about 5% of the total high school population, their self-report data provides unique insight into the experiences of at-risk adolescents.

BACKGROUND

Population

From 1990 to 2000 the population of Yolo County grew from 141,092 to 168,660, a 19.5% increase in county population in 10 years. In 1990, the population of adolescents in Yolo County ages 12 through 19 years was 17,490 and 12.4% of the total population. By year 2000, the population of adolescents ages 12 through 19 years in Yolo County had risen to 24,414 and 14.4% of the total county population. It should be noted that in both 1990 and 2000 there are approximately double the number of 18 year olds and more than double the number of 19 year olds compared to any other single year age group of adolescents, presumably due to the influx of college students in this age group. While the population of the county as a whole grew 19.5% in these 10 years, the adolescent population grew somewhat more, with an increase of almost 40% from 1990 to 2000. ⁽⁴⁾

Population of Yolo County (US Census Data)

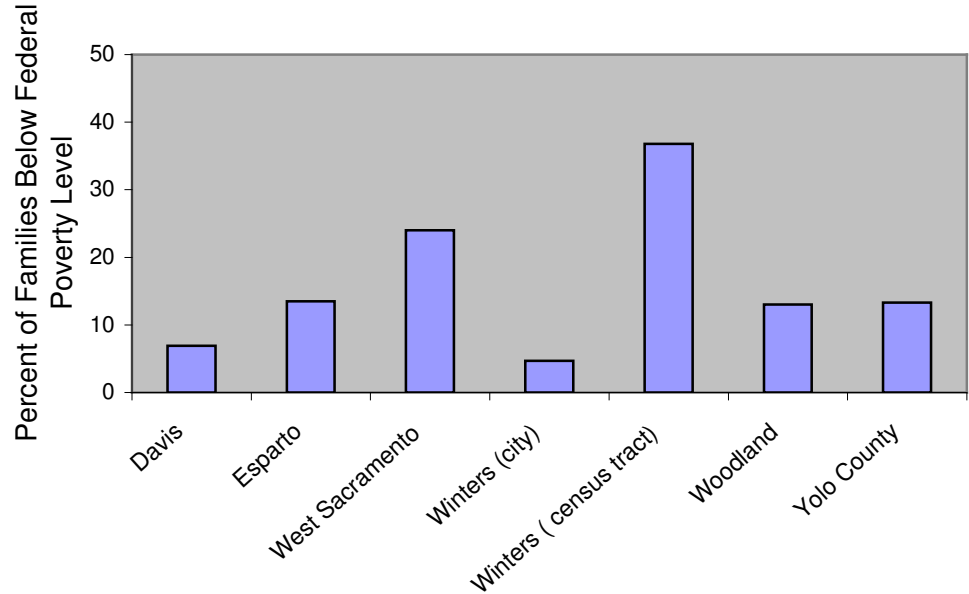


Economic Status

In 1999, approximately 2,048 12 to 17 year olds lived in poverty in Yolo County, or 14.8% of the total 12 to 17 year olds for whom economic data was available. Of all Yolo County households with children under 18 years old, 13.3% lived below the federal poverty level in 1999. More than 3 times as many female-headed households with children under 18 years lived in poverty than married couple households with children under 18 years in 1999 (29.6% of female-head households versus 8.2% married couple households.) The percent of families with children living below the poverty level varies greatly by community within Yolo County, and also varies by ethnic background. In Davis, 6.9% of families with children lived below the poverty level. This figure rose to 13.0% of families residing in Woodland and 24.0% of families living in West Sacramento. In the City of Winters, only 4.7% of families lived below the poverty level but in the remainder of the Winters Census Tract 36.8% of families with children under 18 years lived in poverty. In the Esparto Census Tract 13.5% of families with children lived in poverty. ⁽⁵⁾

Almost 15% of teens age 12 to 17 years in Yolo County live in poverty.

Percent of Families with Children Living in Poverty, Yolo County, 1999 (US Census 2000)



Selected Communities and Yolo County

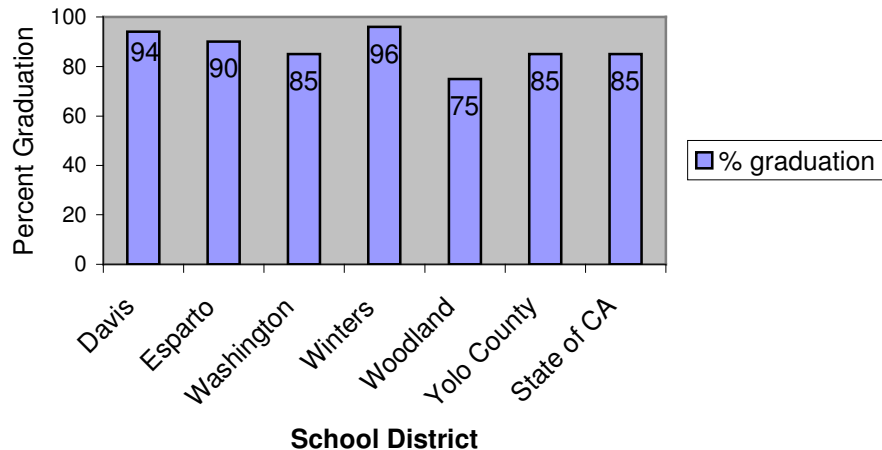
Again using data from 1999, 19.4% of Latino/Hispanic families with children under 18 years lived in poverty and 35.3% of Black or African American families with children under 18 years lived below the poverty level in Yolo County. This is in contrast to 10% of White (non-Hispanic) families with children in Yolo County who lived below the poverty level. ⁽⁶⁾

Over 15% of Yolo County students do not graduate from high school.

Education

The overall high school graduation rate for the County for 2003-2004 school year was 84.9% and very similar to the overall state graduation rate of 85.3%. However, high school graduation rate varied widely by school district as shown below. ⁽⁷⁾

Graduation Rates by District, County and State, 2004



Almost 15% of Yolo County high school students are designated as English Language Learners.

In Yolo County, for the 2004-2005 school year, 14.6% of high school students were designated as English Language Learners. In Yolo County, 32.1% of children over 5 years speak a language other than English at home. ^(8,5)

In Yolo County, 56% of high school graduates enrolled as freshmen in college in the community college, California State University or University of California systems. ⁽⁹⁾

INJURIES

Healthy Youth 2010 Objectives include:

- 1. Reduce deaths and injuries caused by alcohol and drug related motor vehicle crashes.***
- 2. Reduce deaths caused by motor vehicle crashes.***
- 3. Reduce deaths of adolescents and young adults.***
- 4. Increase use of safety belts.***
- 5. Reduce the proportion of adolescents who report they rode with a driver who had been drinking.***

Adolescents are at high risk for injury and are frequent recipients of emergency medical services for both intentional and unintentional injuries. A variety of risky behaviors, including alcohol and drug use and a perception of immortality may contribute to the frequency of injury in this age group.

Injuries are the leading cause of death in California for youth and adolescents. The leading causes of fatal injuries in California adolescents ages 13 to 20 in 2004 were motor vehicle accidents (555), homicide/assault (551), suicide (214) and unintentional poisonings (58). ⁽¹⁰⁾

The leading causes of hospitalized non-fatal injuries for California adolescents 13 to 20 years in California in 2004 were motor vehicle accident, attempted suicide, assault, unintentional fall and unintentional struck by object. ⁽¹¹⁾

Similarly the leading causes for hospitalized non-fatal injuries for Yolo County adolescents 13 to 20 years for 2004 were motor vehicle accident, attempted suicide, unintentional fall and assault. ⁽¹²⁾

Injuries accounted for 38% of emergency room visits for Yolo County teens ages 15 to 19 years for the first half of 2005. Of these, unintentional struck by object, unintentional fall, and motor vehicle accidents lead the list. Assaults, bicycle accidents and intentional self-inflicted injuries are all in the top ten. ⁽¹³⁾

A number of high risk behaviors can contribute to unintentional adolescent injury and death, including lack of seat belt use, lack of bicycle and motorcycle helmet use, driving under the influence of alcohol or drugs, and riding with a driver under the influence of alcohol or drugs. Risk factors for intentional injury will be discussed further in subsequent sections.

Nationwide, 10.2% of high school students report rarely or never wearing a seat belt. Of students who had ridden a bicycle in the past year, 83.4% reported rarely or never wearing a helmet. Of those who had ridden a motorcycle in the past

45% of 7th graders report riding in a car with a driver who had been drinking.

year, 36.4% reported rarely or never wearing a helmet. During the 30 days prior to the survey, 28.5% of students nationwide reported riding in a vehicle with a driver who had been drinking. Nationwide, 9.9% of students reported that in the prior 30 days they had driven a vehicle while they had been drinking. ⁽³⁾

Data regarding risk behavior for injury is limited for Yolo County adolescents but similarly concerning. In Yolo County, data regarding seat belt and bicycle helmet use is only available for seventh graders from one school district. Fifteen percent of these students reported rarely or never wearing a seatbelt in a vehicle. Forty-one percent of these seventh graders reported rarely or never wearing a bicycle helmet when riding a bicycle. Countywide, 29% of ninth graders and 30% of eleventh grade respondents indicated they had driven a car when they had been drinking or ridden in a car driven by a friend who had been drinking. Forty-five percent of seventh graders reported they had been a passenger in a car where the driver had been drinking. ⁽²⁾

VIOLENCE

Healthy Youth 2010 Objectives include:

- 1. Reduce homicides.***
- 2. Reduce physical fighting among adolescents.***
- 3. Reduce weapon carrying by adolescents on school property.***

As noted above, assault/homicide is the second leading cause of death for California teens 13 to 20 years. Statewide, assault is the 3rd leading cause of non-fatal hospitalized injuries.

Assault is the 4th leading cause of hospitalized injury for teens in Yolo County. Assault is 6th on the list of causes of emergency room visits for injury among Yolo County teens, accounting for 32 visits in the first 6 months of 2005. ⁽¹³⁾

In Yolo County, 25% of seventh graders, 25% of ninth graders and 14% of eleventh graders reported being in a physical fight on school property during the previous year. Twenty-nine percent of seventh graders, 21% of ninth graders and 14% of eleventh graders reported fear of being beaten up. Forty-four percent of seventh graders, 33% of ninth graders and 22% of eleventh graders reported being shoved or hit on school property in the previous year.

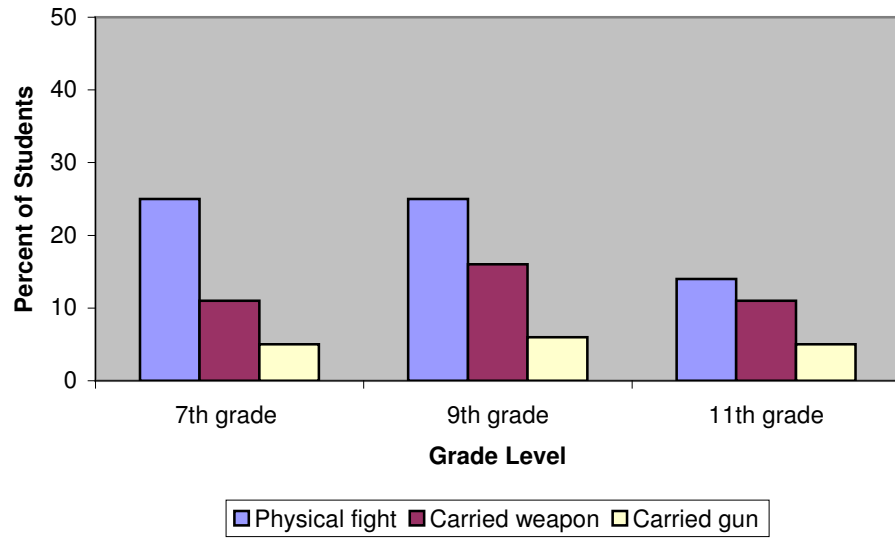
Regarding carrying weapons in Yolo County schools, 11% of seventh graders reported carrying a weapon and 5% reported carrying a gun on school grounds in the past year. Of ninth graders, 16% reported carrying any sort of weapon and 6% reported carrying a gun on school property in the past year. Of eleventh graders, 11% reported carrying a weapon and 5% reported carrying a gun.

Regarding seeing weapons in Yolo County schools, 31% of seventh graders, 40% of ninth graders and 29% of eleventh graders reported seeing someone with a weapon on campus in the previous 12 months. Eleven percent of seventh graders, 11% of ninth graders and 5% of eleventh graders reported being threatened with a weapon on school property in the past year. ⁽²⁾

11% of Yolo County seventh graders report carrying a weapon on school grounds.

Weapons, assaults, threats, harassment, gangs, relationship violence and lacking of feeling safe are significant problems on our school campuses.

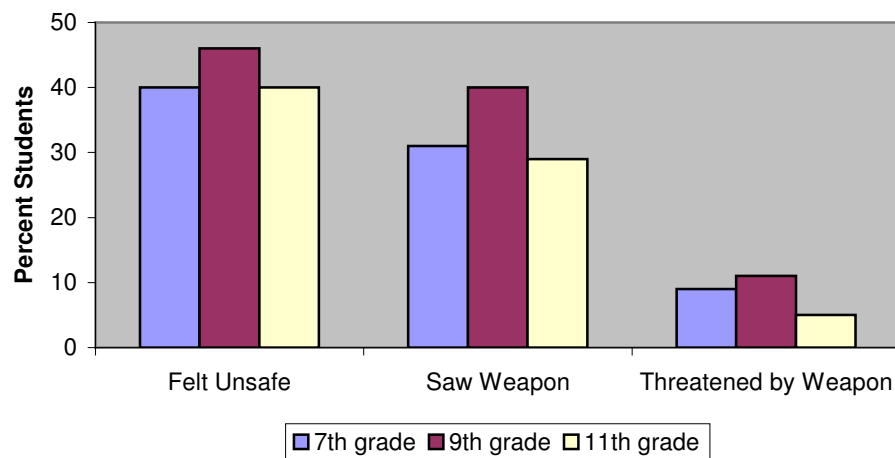
Students in Physical Fight, Carried Weapon or Carried Gun on School Campus



Regarding harassment, 42% of seventh graders, 41% of ninth graders and 35% of eleventh graders reported any harassment on school property. Only 60% of seventh graders, 54% of ninth graders and 60% of eleventh graders perceived their school as safe or very safe.

Gang involvement (ever) was reported as 11% by seventh graders, 14% by ninth graders and 10% by eleventh graders. ⁽²⁾

Students Who Felt Unsafe, Saw a Weapon and Were Threatened by a Weapon on Campus, Yolo County



Regarding violence in relationships, 4% of Yolo County seventh graders, 5% of ninth graders and 7% of eleventh graders reported physical violence by a boy/girlfriend. When you consider those who had a boy/girlfriend, this figure is approximately 10%, 10% and 12% of those with a boy/girlfriend for seventh, ninth and eleventh graders respectively. ⁽²⁾

Child and adolescent maltreatment at home is a significant problem.

Nationwide data paints a similar picture. Of high school students, 18.5% reported carrying a weapon (not specified as on school property) and 5.4% reported carrying a gun in the previous 30 days. In the previous 12 months 35.9% of students reported being in a physical fight and 3.6% had sustained an injury requiring medical treatment in such a fight. In the previous 30 days 6.5% of students had carried a weapon on school property and 7.9% had been threatened or injured with a weapon on school grounds in the previous year. In the previous year 13.6% of students had been in a fight on school property . Overall, 6.0% of students reported missing one or more days of school in the previous month because of fear for their safety at school or going to or from school. Nationwide, 9.2% of students reported being hit, slapped or purposefully hurt by their boy/girlfriend. ⁽³⁾

Thus, in Yolo County, as nationwide, physical fights, weapon carrying, harassment, gang involvement, feeling unsafe or threatened at school and physical violence in relationships are all very significant problems.

Exposure to violence or other maltreatment at home is another important type of violence affecting adolescents. On January 1, 2006, Yolo County had 452 children in a child welfare supervised placement. Of these children, 265 were ages 11 to 18 years.

There were 2,416 child welfare referrals for Yolo county children for the 12-month period from Oct 2004 to Sept 2005. Of these 2416 referrals, 589 were substantiated, an incidence of 12.3 per 1000. This is similar to the incidence of substantiated child welfare referrals statewide of 11.3 per 1000.

Of the 2416 Yolo Co child welfare referrals, 891 were for adolescents of ages 11 to 17. Of these 891 referrals, 155 were substantiated. Incidence of substantiated referrals for 11-15 year olds and 16-17 year olds in Yolo County is 7.6 and 7.3 per 1000 and is much lower than that for younger children. A similar trend is found in statewide data, where there are 9.5 per 1000 substantiated reports for 11-15 year olds and 6.6 per 1000 for 16-17 year olds. ⁽¹⁴⁾

MENTAL HEALTH AND SUICIDE

Healthy Youth 2010 Objectives include:

- 1. Reduce the suicide rate.***
- 2. Increase the proportion of adolescents with mental health problems who receive treatment.***

Nationwide, 16.9% of students reported they had seriously considered suicide in the past 12 months, 13.0% had a plan for suicide and 8.4% made one or more suicide attempts in the preceding 12 months. Also nationwide 2.3% reported suicide attempts which required the need for medical treatment. ⁽³⁾

Similar data is not available for Yolo County teens as these questions are not part of CHKS. However, 28% of seventh graders, 35% of ninth graders and 32% of eleventh graders in Yolo Co reported feeling so sad or hopeless for two or more weeks that they stopped some usual activities. At non-traditional schools this figure rose as high as 55% in one district with a range from 31% to 55% in non-

traditional schools in the five districts. ⁽²⁾

Between 1996 and 2004 there were 20 completed suicides in 13-20 year olds in Yolo County. ⁽¹⁵⁾ There were 17 hospitalizations for non-fatal suicide attempts by Yolo County teens in Yolo County in 2004. There were 17 emergency department visits by Yolo County teens for intentional self-inflicted injury in the first 6 months of 2005 alone. ⁽¹³⁾

TOBACCO

Healthy Youth 2010 Objectives include:

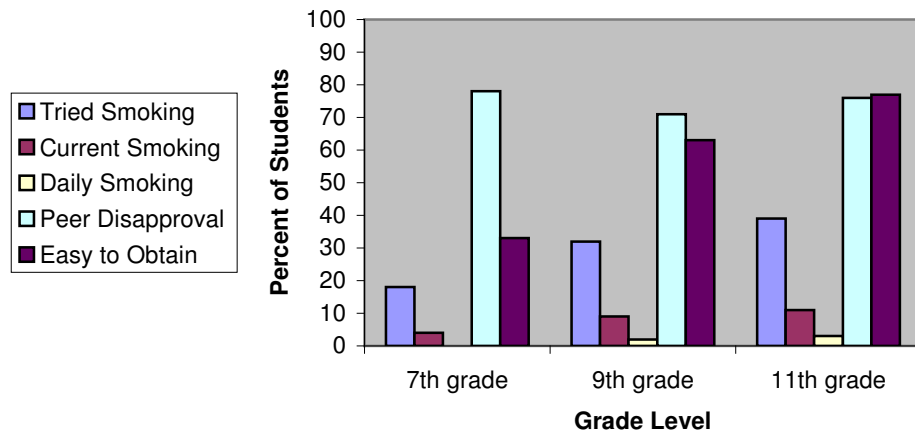
1. Reduce tobacco use in adolescents.

Nationwide, 54% of high school students have tried cigarette smoking and 13.4% smoke or have smoked daily. In the past month 23% of students had smoked at least once. Twenty-three percent of students had smoked at least once in the past 1 month. Nationwide, 28% of students reported current tobacco use, including smokeless tobacco and cigars. Sixteen percent of students reported they had smoked a whole cigarette before age 13 years. ⁽³⁾

In Yolo County, 18% of seventh graders, 32% of ninth graders and 39% of eleventh graders reported they had ever tried smoking a cigarette. Four percent of seventh graders, 9% of ninth graders and 11% of eleventh graders reported current cigarette use though only 2% of ninth graders and 3% of eleventh graders reported daily use. At non-traditional schools this figure was considerably higher, “ever used” ranged from 53% to 92%, current use ran from 23 to 55% and daily use from 7% to 22%. ⁽²⁾

39% of Yolo County eleventh graders have tried smoking tobacco and 77% believe it is easy to obtain cigarettes.

Tobacco Smoking Among Yolo County Youth



There certainly has been a consistent downward trend in the percentage of high school students nationwide that have tried cigarettes, from 71% in 1995 to 54% in 2005. However, it is still relatively easy for teens to obtain cigarettes, with 48% of students under 18 nationwide who attempted to buy cigarettes reporting they were not asked for proof of age. ⁽³⁾

Peer disapproval of cigarette use is high in Yolo County, at 78% for seventh graders, 71% for ninth graders and 76% for eleventh graders. Peer disapproval is much lower at non-traditional schools, ranging from 32% to 54% disapproval. Most students believe smoking is somewhat to extremely harmful: 96% of seventh graders, 94% of ninth graders and 96% of eleventh graders.

Many students in Yolo County also believe it is fairly to very easy to obtain cigarettes (33% of seventh, 63% of ninth and 77% of eleventh graders). Non-traditional school students also reported it was easy to obtain cigarettes (ranging from 73% to 92%).⁽²⁾

ALCOHOL USE

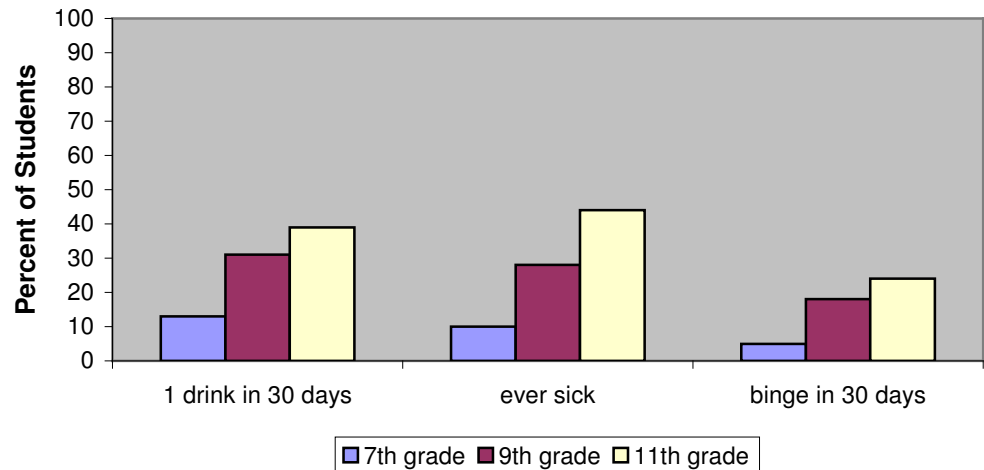
Healthy Youth 2010 Objectives include:

1. Reduce the proportion of adolescents engaging in binge drinking of alcohol.

Among Yolo County students, 13% of seventh graders, 31% of ninth graders and 39% of eleventh graders reported alcohol use (at least 1 full drink) in the previous 30 days. Ten percent of seventh graders, 28% of ninth graders and 44% of eleventh graders reported they had ever been very drunk or sick from alcohol use. Five percent of seventh graders, 18% of ninth graders and 24% of eleventh graders reported binge drinking (5 or more drinks in a row) in the previous 30 days. Approximately half of those who reported binge drinking reported doing so on 3 or more occasions in that month⁽²⁾

24% of eleventh graders reported engaging in binge drinking in the previous month.

Alcohol Use Among Yolo County Youth



California state data (2003-4) indicated that 10.0% of seventh graders, 24.7% of ninth graders and 37.1% of eleventh graders reported any alcohol use in the previous 30 days. State data also shows that 3.7% of seventh, 11.5% of ninth and 23.3% of eleventh graders reported binge drinking in the previous 30 days. Statewide, approximately half of this binge drinking group reported binge drinking on 3 or more occasions.⁽¹⁶⁾

National data indicates that 74.3% of students had consumed at least 1 drink of

alcohol in their lifetime and 43.3% of students had consumed at least 1 drink in the previous 30 days. In addition 25.5% of students had engaged In binge drinking in the previous month. ⁽³⁾

While experimentation with alcohol in adolescence is very common it can lead to many negative consequences including motor vehicle accidents, other injuries, violence and school failure. Use of alcohol in adolescence, particularly binge drinking, increases risk of alcohol abuse in adult life. Clearly, binge drinking is a very real problem among Yolo County youth.

ILLICIT DRUG USE

Healthy Youth 2010 Objectives include:

1. Reduce past month use of illicit substances.

Regarding marijuana use, 10% of seventh graders, 27% of ninth graders and 37% of eleventh graders in Yolo County reported ever trying marijuana. Five percent of seventh, 15% of ninth and 18% of eleventh graders reported using marijuana in the previous month. ⁽²⁾

Statewide, 8.3% of seventh graders, 22.8% of ninth graders and 38.7% of eleventh graders reported ever using marijuana. Statewide, 3.9% of seventh, 12.4% of ninth and 19.8% of eleventh graders reported use in the previous month. Nationwide, 38.4% of students report trying marijuana, though this varies greatly by geographic locale, from as low as 15.5% to as high as 52.1%. ^(16, 3)

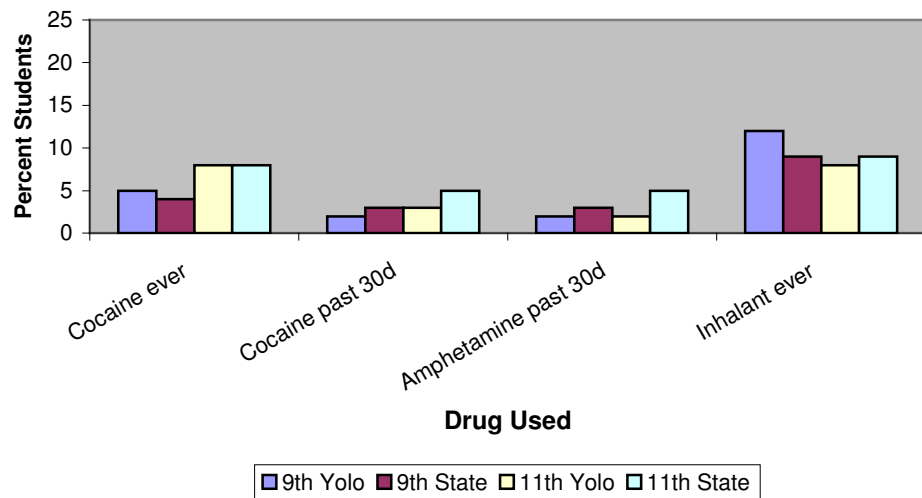
Regarding inhalant use (“sniffing” or “huffing”), 11% of seventh graders, 12% of ninth graders and 8% of eleventh graders in Yolo county reported ever trying this. Statewide, 6% of seventh, 8.7% of ninth and 8.9% of eleventh graders reported trying inhalants. Nationwide, 12.4% of students report trying this. ^(2, 16, 3)

Regarding cocaine use by Yolo County students, 5% of ninth graders and 8% of eleventh graders report ever using cocaine. Two percent of ninth graders and 3% of eleventh graders report trying it in the past month. (Data is not available for cocaine use by seventh graders in Yolo County). ⁽²⁾

Statewide, 2.1% of seventh graders, 4.0% of ninth and 7.6% of eleventh graders reported ever using cocaine. 2.7% of ninth graders and 4.8% of eleventh graders statewide reported cocaine use in the previous 30 days. Nationwide data reflects that 7.6% of students have tried cocaine. ^(16,3)

Amphetamine use as an aggregate of all the 5 Yolo county districts is reported only for ninth and eleventh graders and only with regard to the previous 30 days. Two percent of ninth graders, 2% of eleventh graders report amphetamine use in the previous 30 days. Statewide, 2.5% of ninth graders and 5.0% of eleventh graders report amphetamine use in the prior 30 days. Statewide, 2% of seventh, 3.5% of ninth and 7.6% of eleventh graders report ever trying methamphetamine. Nationally, 6.2% of students report having ever used methamphetamine. ^(2, 16, 3)

Stimulant and Inhalant Use In Yolo County and Statewide



Aggregate Yolo County data regarding "Ecstasy" (MDMA) usage was not available. Statewide, 1.2% of seventh, 3.0% of ninth and 6.3% of eleventh graders report trying Ecstasy. Nationally, 6.3 % report having tried Ecstasy.^(16, 3)

Illicit drug use was reported in very high percentages among all the Yolo County non-traditional schools surveyed. Lifetime marijuana use ranged from 60% to 88%. A history of inhalant use ranged from 12% to 24%. Lifetime cocaine use ranged from 19% to 43% and lifetime methamphetamine use ranged from 16% to 39%. Ecstasy use (ever) was reported by 12% to 33% of non-traditional school students.⁽²⁾

SEXUAL HEALTH AND PREGNANCY

Healthy Youth 2010 Objectives include:

- 1. Reduce pregnancies among adolescent females,**
- 2. Increase proportion of adolescents who abstain from intercourse or use condoms if sexually active**
- 3. Reduce proportion of adolescents with *Chlamydia trachomatis* infections**
- 4. Reduce numbers of cases of HIV infection in adolescents.**

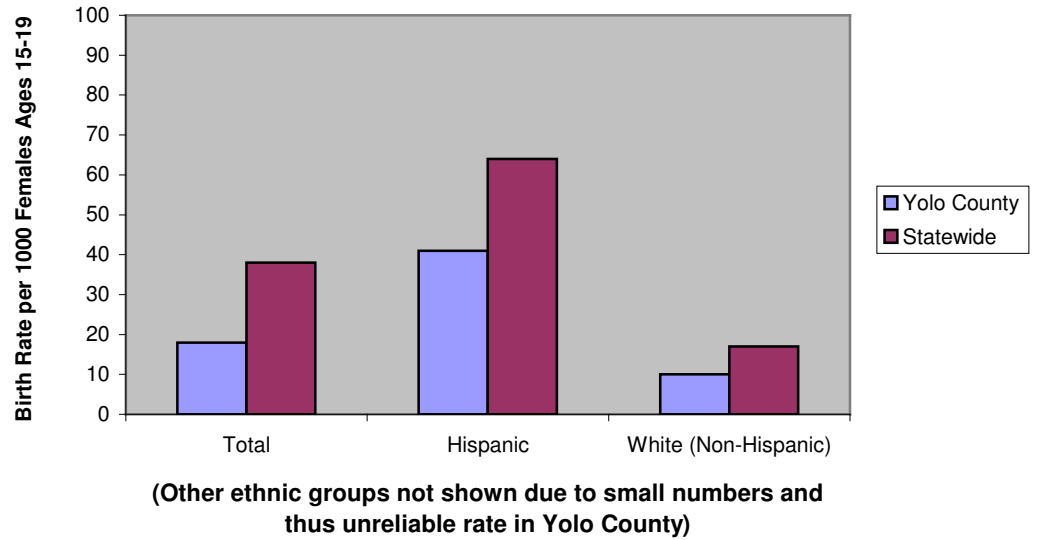
Very limited information is available regarding sexual health and risky behavior among Yolo teens. The CHKS module with questions about sexual health is optional and was not administered to Yolo County high school students. Limited information from 2001 indicated that 31% of Yolo County teens 15 to 17 years old had sexual intercourse and only approximately 50% of sexually active males 15 to 17 years used a condom at last intercourse.⁽¹⁷⁾

In Yolo County, there were 188 live births to teen mothers in 2005. None of these teen moms were under 15 years and 120 of these teens were 18 to 19 years old. In previous years, two or three births each year were to mothers under 15 years. The Yolo County teen birth rate for 2005 is 18.1 per 1000. This is considerably lower than the statewide teen birth rate of 38.1 per 1000. However, this birth rate

The birth rate for Hispanic teens is more than 4 times the birth rate for white teens in Yolo County.

varies considerably by geographic area of residence and by ethnicity. The birth rate to Hispanic teens in Yolo County is 41.7% per 1000 while it is 9.7% per 1000 for white teens. However, statewide the birthrate for Hispanic teens is even higher at 64.3% per 1000 and is 16.7% per 1000 for white teens. ⁽¹⁸⁾

Birth Rate to Teen Mothers, Ages 15-19, Yolo County and Statewide, 2005



The incidence of reported Chlamydia infections has risen steadily in Yolo County and statewide from 2001 to 2005. There were 532 reported cases of Chlamydia in Yolo County in 2005 for a case rate of 282 per 100,000 population. This compares with a statewide case rate of 352 per 100,000. Of the 532 cases in Yolo County, 150 cases or 28% were 15-19 years of age. Females comprise 75% of the reported cases. ⁽¹⁹⁾

There were 65 cases of Gonorrhea reported in Yolo County in 2005 and 15 of these (23%) were 15 to 19 years old. ⁽¹⁹⁾

As of March 2006, there were 162 individuals of all ages living with HIV or AIDS in Yolo County. Statewide, 2% of HIV cases are first diagnosed in 13 to 19 year olds. ⁽²⁰⁾

OBESITY AND OVERWEIGHT

Healthy Youth 2010 Objectives include:

- 1. Reduce the proportion of children and adolescents who are overweight or obese.***

Patterns of eating and physical activity that contribute to overweight and obesity are established in youth. Overweight and obese adolescents are much more likely to be overweight and obese adults. Overweight and obese individuals are at increased risk for a number of health problems including diabetes, heart disease, stroke, some cancers and depression to name a few. The percentage of adolescents who are overweight or obese has increased so significantly in recent years that it

is now considered a crisis. Social, economic, cultural and environmental factors contribute to the prevalence of overweight and obesity.

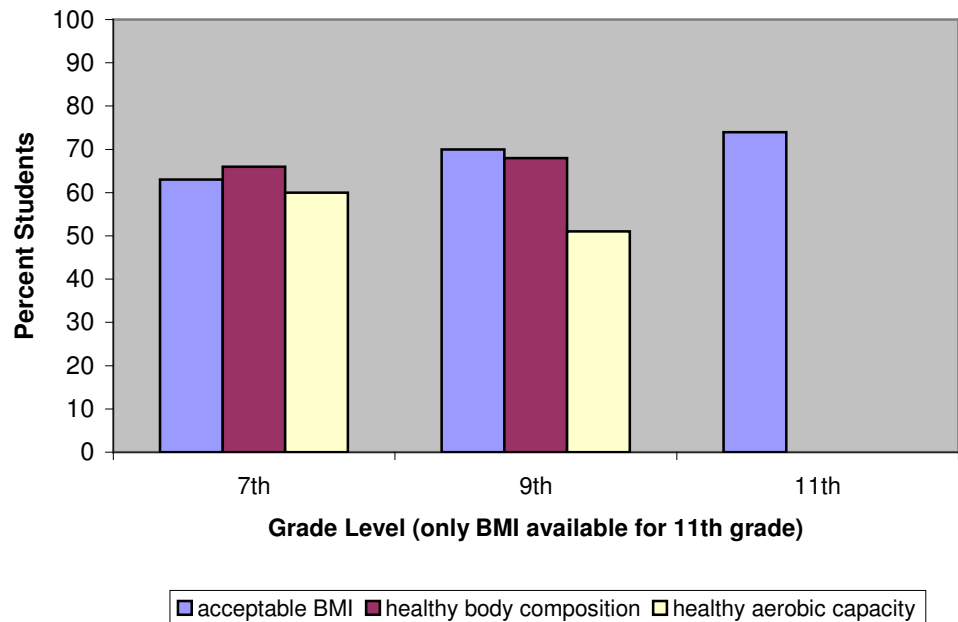
Obesity and overweight are determined based on BMI, or body mass index. BMI charts and BMI calculator wheels have become readily available to health care providers, making it easy to include an objective evaluation of weight as part of a routine physical examination. State funded programs such as CHDP that provide well child and well adolescent care in California are beginning to require recording of BMI in children's charts and are offering trainings and tools for doing this.

Nationwide, the percentage of adolescents who are overweight has more than tripled since 1980. By 2004, 17% of all children and teens ages 2 to 19 years were overweight and 32% of adults were obese. Overweight is more common among black and Hispanic adolescents nationwide than among non-Hispanic white adolescents. Type 2 diabetes has also experienced a dramatic rise in children and teens nationwide. The percent of newly diagnosed childhood diabetics with Type 2 diabetes has risen from 5% of the total in 1994 up to 50% of the total newly diagnosed diabetics 10 years later. ⁽²¹⁾

Based on data from 2004 for fifth, seventh and ninth graders, 28.1% of California youth (approximately 10 to 15 years of age) were overweight or obese, up from 26.5% 3 years earlier. In Yolo County as a whole in 2004, 26.1% of youth were overweight. This varied widely by community, with 14.3% of youth in Davis, 31.2% of youth in Woodland and 31.5% of youth in West Sacramento being overweight. ⁽²²⁾ Overweight varied widely in different communities around the state as well. In San Francisco 24.4% of youth were overweight, while 36.3% of youth in Los Angeles were overweight. ⁽²³⁾

More than one quarter (1/4) of Yolo County youth are overweight.

Body Mass Index, Body Composition and Aerobic Capacity of Yolo County Youth



The Healthy Kids survey estimated students' BMI range based on self-report of height and weight. Using this self-report method, only 63% of seventh graders, 70% of ninth graders and 74% of eleventh graders had an estimated BMI in an "acceptable" range. Most of the remainder were at risk of overweight or already overweight or obese. ⁽²⁾

Additional data from state physical fitness testing 2005 shows that 66% of fifth graders, 67% of seventh graders and 67% of ninth graders statewide have a body composition in this "healthy fitness zone". Yolo County data is again quite similar in this regard, with 68% of fifth graders, 66% of seventh graders and 68% of ninth graders with body composition in the healthy zone. ⁽²⁴⁾

Although this data is gathered very differently, the conclusion is the same, approximately one third of our younger teens and one fourth of older teens have a BMI outside of the ideal range, and most of these students are overweight or obese. Only a very small percentage (2% to 3%) are underweight.

PHYSICAL ACTIVITY

Healthy Youth 2010 Objectives include:

1. Increase the proportion of adolescents who engage in vigorous activity that promotes cardiorespiratory fitness 3 or more days per week for 20 minutes or more per occasion.

Note: Revised national guidelines (2005) now recommend 60 minutes of vigorous activity 5 or more days per week.

Poor nutrition and lack of physical activity are major contributors to the dramatic increase in overweight and obesity in our youth and adolescents. Data obtained from State physical fitness testing in 2005 indicates that only 58% of fifth graders, 60% of seventh graders and 51% of ninth graders statewide have aerobic capacity in a "healthy fitness zone." Yolo County data is similar to the state average with 63% of fifth graders, 57% of seventh graders and 50% of ninth graders with aerobic capacity in this healthy zone. ⁽²⁴⁾

Nationwide, 21% of students used a computer for non-school activities 3 or more hours/day and 37% of students watched 3 or more hours of TV per day. Among Yolo County seventh graders, 43% reported 3 or more hours per day of TV or video game usage. (Data is not available regarding Yolo County high school students). ^(3,2)

Nationwide, 36% of high school students reported meeting the revised recommended levels of physical activity in the 7 days prior to the survey (60 min of vigorous activity on 5 or more of 7 days). Sixty-nine percent reported meeting earlier recommended levels of activity (participating in 20 minutes of vigorous activity on 3 or more days or 30 minutes of moderate activity on 5 or more days per week). ⁽³⁾

Among Yolo county students, 89% of seventh graders, 91% of ninth graders and 81% of eleventh graders reported either moderate or vigorous exercise on at least

3 of the past 7 days.⁽²⁾

While it is difficult to compare data derived from multiple sources with questions asked differently, it is clear that at least 10% to 20% of Yolo County youth do not meet the Healthy Youth 2010 guidelines with regard to the amount of exercise. Many more (40% to 50%) do not meet state recommendations for aerobic fitness. It is also clear that at least 40% of our youth are engaged in screen activities (other than homework) for more than 3 hours per day.

NUTRITION

Healthy Youth 2010 Objectives include:

1. Reduce the proportion of children and adolescents who are overweight or obese.

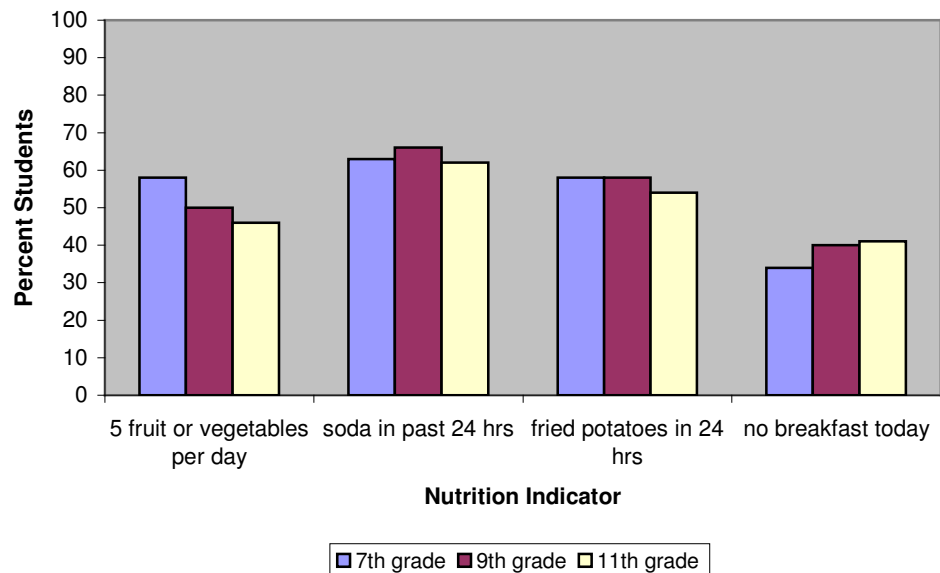
Nationwide, 20% of students reported eating 5 or more fruits and vegetables per day in the week prior to the survey. In Yolo County, 58% of seventh graders, 50% of ninth graders and 46% of eleventh graders reported consuming 5 or more portions of fruits or vegetables per day. At least by self-report fruit and vegetable consumption is much higher in Yolo County than nationwide.^(2,3)

However, over 70% of Yolo County students at all grade levels (72% to 74%) reported drinking soda pop in the past 24 hours and close to 60% (54% to 58%) of students across all grade levels reported consuming some form of fried potatoes in the prior 24 hours. Approximately 35% to 40% of students at all grade levels reported not eating breakfast on the day of the survey.⁽²⁾

Approximately half of Yolo County teens report consuming 5 or more servings of fruits or vegetables in a day, which is much higher than the national average.

Yolo County teens drink soda pop, consume fried potatoes and skip breakfast daily in large numbers.

Nutrition Indicators in Yolo County Teens



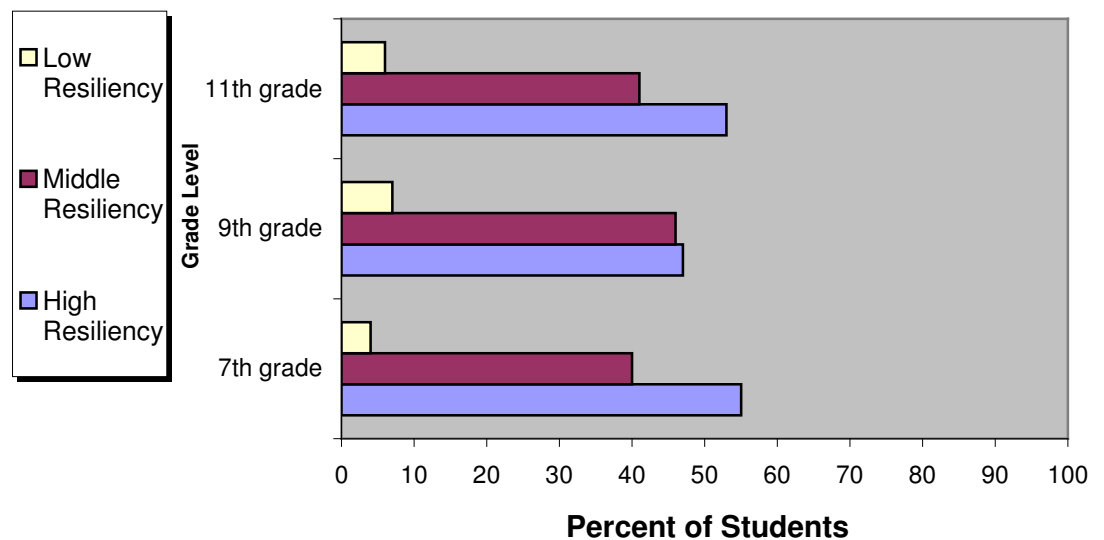
Clearly given the epidemic of obesity there is considerable room for improvement in the nutrition of our youth, especially with regard to high calorie and low nutrition value “junk foods”. While their reported intake of fruits and vegetables is higher than their counterparts elsewhere in the nation, their intake of “junk food” is not correspondingly lower.

RESILIENCY

Resiliency is a concept that refers to ability to achieve healthy development and the ability to rebound from adversity. Measures of resiliency include measures of “external assets”, or positive, protective factors in the youth’s environment as well as “internal assets”, or individual characteristics that are associated with healthy development and less risk-taking behavior. An entire module of CHKS is based on measuring resiliency, both internal and external assets. This framework is based on a body of research showing that children with higher scores on measures of resilience are less likely to be involved in risk-taking behavior. Home, schools, peer relationships and community-based youth organizations can all play an important part in promoting both external and internal assets, and thus increased resiliency for youth. CHKS attempts to measure external assets relating to caring relationships, high expectations and meaningful participation as well as internal assets relating to cooperation, communication, empathy, belief in self, problem solving, self awareness and goals for the future. The survey results are then presented as percentage of students scoring in high, middle or low ranges in each of these areas of internal and external assets. ⁽²⁾

External assets of caring relationships, high expectations and meaningful participation are measured in 4 environments: school, community, peers and home. Caring relationships and high expectations are reported in high or moderate ranges by 90% or more of students in community, peer and home environments across grade levels. Scores are somewhat lower in the school environment. Meaningful participation receives lower scores in school, home and community environments across grade levels. Meaningful participation hits its lowest point in the school environment for eleventh graders with only 66% having high or moderate scores and 34% with a low score on this measure. ⁽²⁾

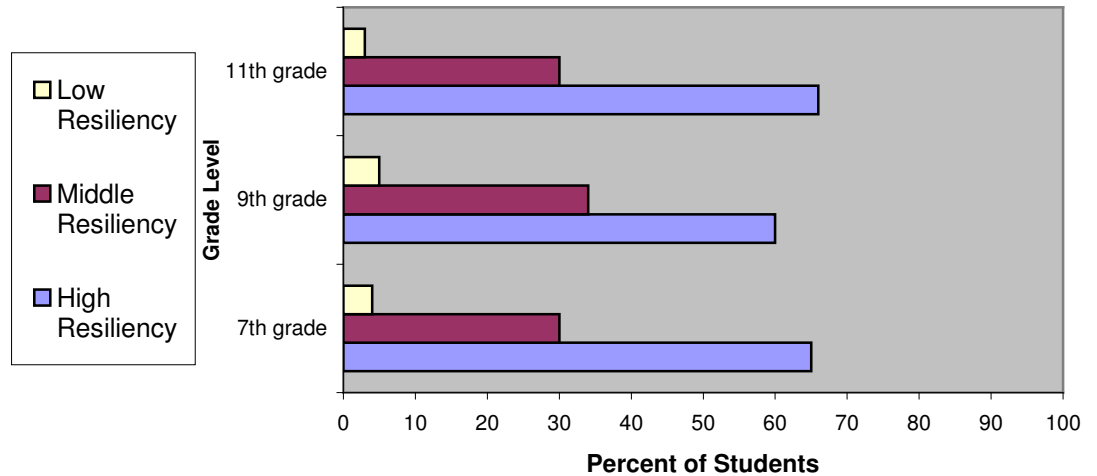
External Resiliency Overall Scores (Yolo County)



At least 5% of students have low scores overall for measures of external and internal asset measures of resiliency.

Internal assets are measured in 6 areas: cooperation and communication, self-efficacy, empathy, problem solving, self-awareness and goals and aspirations. Scores are in high or moderate range for over 90% of students across grade levels in all areas except problem solving. The highest scores across grade levels were reported for goals and aspirations.⁽²⁾

Internal Resiliency Overall Scores (Yolo County)



While scores for both external and internal assets are in the high or moderate range for most students in most areas, there are still approximately 5% of students across all grade levels with overall scores in the low range regarding external assets and internal assets. It is impossible to know if these same students are scoring low in both arenas, but the overall take-home message is there are at least 5 % of our students at very high risk for involvement in dangerous, unhealthy, risk-taking behavior based on very low resiliency scores. Another 30%-40% are scoring only in a moderate range while 50%-60% are scoring in a high range on asset scores. Meaningful participation and problem-solving skills are the weakest areas overall.

CONCLUSION

Summary

In this report we have had the opportunity to review various indicators which reflect levels of adolescent health and risky behavior. In most areas we find that Yolo County youth are engaged in risky behavior in similar numbers as we see both statewide and nationwide.

Exposure to violence and harassment and the fear of violence and harassment in our schools is found at an alarming rate.

Alcohol use in Yolo County and statewide has reached disturbing proportions. Marijuana use actually appears to be somewhat lower in our county than statewide. Stimulant abuse (cocaine, methamphetamine and Ecstasy) and inhalant abuse involve a small but significant minority of students given the extreme danger associated with these drugs. Data regarding stimulant abuse was unfortunately incomplete. Ready access to tobacco by underage teens is still widespread. CHKS does provide an optional module with more detailed drug use questions that our school district have not administered.

Recent data regarding sexual health and sexual behavior of Yolo County youth was not available since these optional modules of the CHKS were not administered. However, we do know that Chlamydia infection rates are very high and continuing to rise. Birth rates to teenage mothers are somewhat lower in Yolo County than statewide. The birth rate to Hispanic teens is still more than four times the birth rate to non-Hispanic white teens in this county.

Obesity is a large and growing problem in Yolo County as it is statewide and nationwide. Along with obesity goes the lack of physical fitness and lack of good nutrition practices.

Recommendations

Research shows positive youth development to be a powerful means to prevent behaviors that put health at risk ⁽²⁵⁾. Programs that focus on problem-oriented youth behaviors are far less effective in helping our young people be successful in navigating the teenage years. In general terms, when addressing youth issues, it is much better to intervene in ways which support healthy choices rather than focus on problem behaviors. A good source of information on programs which have been evaluated and found to be effective is the National Adolescent Health Information Center website: <http://nahic.ucsf.edu/>

The Yolo County data shows there is continued need for vigilance regarding exposure to violence and harassment at school and outside of school. This may indicate a need for increased emphasis on tolerance, diversity and cultural awareness in the school setting. It also includes enforcement of zero tolerance policies regarding violence and harassment at school as well as at after-school activities. Efforts to curb violence in the home may also need to be strengthened. This might include parenting classes, protective services involvement and drug treatment for parents.

There needs to be continued emphasis on injury prevention efforts including free or low cost bicycle helmets and education, enforcement regarding seatbelt usage and enforcement of underage drinking and driving laws.

Parents may feel they have little influence on their adolescents but they continue to be important role models in many respects. Parental behavior including use of bicycle helmets, seat belts, driving under influence of alcohol, tobacco use and in many other realms will impact the lifestyle choices of their children. Parenting classes should be available for parents of adolescents.

Efforts to discourage marketing of alcohol and tobacco to youth need to be strongly supported. Local efforts to enforce laws regarding sale of tobacco and alcohol to minors also need to be supported as well as enforcement of driving under the influence laws.

Unfortunately, little information is available regarding risky sexual behavior in Yolo County youth. Currently, we have very little data at the local level to provide us with insight into our youths' behavior and how best to target our efforts. One barrier youth may face is a lack of information about access to confidential services. We recommend that optional modules of CHKS including sexual behavior and drug use be administered in the future.

Healthy foods, including fresh fruits and vegetables need to be readily available in our public schools. Development of resources for physical activity in school (including sufficient quality physical education) and after school is clearly important. City and county planning for development and redevelopment should always address the need for access to safe parks, as well as walking and biking routes for youth.

Future surveys of youth in our community should contain measurements of positive community assets. Thus, we will be better able to monitor positive indicators of youth health as well as negative behavior reported on surveys. Efforts to foster the growth and development of increased resiliency in the home, at school and in after school programs deserve our strong support. This may include a wide variety of efforts. It may include increased after school, weekend and vacation activities for students. This might include sports, recreation, tutoring or mentoring programs. It might include volunteering or part-time employment opportunities for older teens or any variety of productive activities for students during non-school hours. It might include drug education and counseling, other support groups or counseling and improved access to confidential services. It certainly includes efforts to make schools a safer and more supportive environment, with increased education and enforcement to prevent and halt violence and harassment.

This report is just a starting point that provides baseline data which reflects the health and wellness of Yolo County youth. We hope to continue to present further data as it becomes available. We encourage all those who are working toward positive youth development in our schools, homes and community.

For any questions or comments about this report contact:

Jan Babb, MSN, PNP
MCAH Director
Yolo County Health Department
137 N. Cottonwood St.
Woodland, CA 95695
(530) 666-8645
(530) 666-7447 (Fax)
Jan.Babb@yolocounty.org

Constance Caldwell, MD
CCS Medical Consultant
Yolo County Health Department
137 N. Cottonwood St.
Woodland, CA 95695
(530) 666-8645
(530) 666-7447 (Fax)
Connie.Caldwell@yolocounty.org

REFERENCES

1. American Medical Association. (n.d.) Healthy Youth 2010: Supporting the 21 Critical Adolescent Objectives. American Medical Association.
2. California Healthy Kids Survey, Yolo County, 2004-5 [survey]. (2005) Los Alamitos, CA: West Ed.
3. Center for Disease Control and Prevention. (2006) Youth Risk Behavior Surveillance - United States, 2005. MMWR 2006;55(No SS-5).
4. U.S. Census Bureau. (2000) Census 2000 Summary File 1. Retrieved June 20, 2006 from <http://factfinder.census.gov>.
5. U.S. Census Bureau. (2000) Census 2000 Summary File 3. Retrieved June 29, 2006 from <http://factfinder.census.gov>.
6. U.S. Census Bureau. (2000) Census 2000 Summary File 4. Retrieved June 29, 2006 from <http://factfinder.census.gov>.
7. California Department of Education. (2006) Graduation Rates Based on NCES Definition - County Report. Retrieved August 31, 2006 from <http://data1.ced.ca.gov/dataquest>.
8. California Department of Education (2006) Number of English Language Learners by Language. Retrieved March 31, 2006 from <http://data1.cde.ca.gov/Dataquest>.
9. California Department of Education. (2006) 12th Grade Graduates Completing Courses Required for U.C. and/or C.S.U. Entrance. Retrieved August 31, 2006 from <http://data1.cde.ca.gov/dataquest>.
10. California Department of Health Services, EPIC Branch. (2006) Five Leading Causes of Fatal Injuries in California, 2004 Ages: 13 through 20. Retrieved July 6, 2006 from <http://www.applications.dhs.ca.gov/epicdata>.
11. California Department of Health Services, EPIC Branch. (2006) Five Leading Causes of Hospitalized Nonfatal Injuries in California, 2004 Ages: 13 through 20. Retrieved July 6, 2006 from <http://www.applications.dhs.ca.gov/epicdata>.
12. California Department of Health Services, EPIC Branch. (2006) Five Leading Causes of Hospitalized Nonfatal Injuries in Yolo County, 2004 Ages: 13 through 20. Retrieved July 6, 2006 from <http://www.applications.dhs.ca.gov/epicdata>.
13. personal communication, Tim Wilson. September 5, 2006. OSHPD data, ED Diagnoses by System.
14. Center for Social Services Research, University of California Berkeley. (2006) Child Welfare Services Reports for California. Retrieved July 6, 2006 from <http://cssr.Berkeley.edu/CWSCMSreports>.

15. California Department of Health Services, EPIC Branch. (2006) Self-Inflicted Injuries, 1991 to 2004 Fatal Injuries Yolo County Residents. Retrieved August 31, 2006 from <http://www.applications.dhs.ca.gov/epicdata>.
16. 10th Biennial California Student Survey Drug Alcohol and Tobacco Use 2003-4 [survey]. 2004 Sacramento, CA: California Attorney General's Office.
17. California Health Interview Survey [survey]. (2001) Retrieved March 28, 2006 from <http://www.chis.ucla.edu>.
18. Wilson, Tim. (2006) Live Birth Profile Yolo County 2005. Woodland, CA: Yolo County Health Department.
19. California Department of Health Services, STD Control Branch. (2006) Yolo County - Chlamydia, Gonorrhea, and Early Syphilis Cases and Rates Tables for 2005. Retrieved October 12, 2006 from <http://www.dhs.ca.gov/ps/dcdc/STD/docs>.
20. California Department of Health Services, Office of AIDS. (2006) California HIV Surveillance Report March 31, 2006. Retrieved July 6, 2006 from <http://www.dhs.ca.gov/aids/Statistics>.
21. National Diabetes Education Program. (2006) Overview of Diabetes in Children and Adolescents. Retrieved August 3, 2006 from <http://ndep.nih.gov/diabetes/youth>.
22. California Center for Public Health Advocacy. (2006) Overweight Children in California Counties and Communities, 2004: Yolo County. Retrieved February 2006 from <http://www.publichealthadvocacy.org>.
23. California Center for Public Health Advocacy. (2005) The Growing Epidemic: Childhood Overweight Rates on the Rise. Retrieved August 3, 2006 from <http://www.publichealthadvocacy.org>.
24. California Department of Education. (2005) 2004-05 California Physical Fitness Report . Retrieved August 3, 2006 from <http://data1.cde.ca.gov/Dataquest/PhysFitness/PFTTest>.
25. Clayton SL, Brindis CD et al. (2000) Investing in Adolescent Health: A Social Imperative for California's Future. San Francisco, CA: University of California San Francisco. National Adolescent Health Information Center.