



1999 Youth Risk Behavior Survey Middle and High School Level Summary Report

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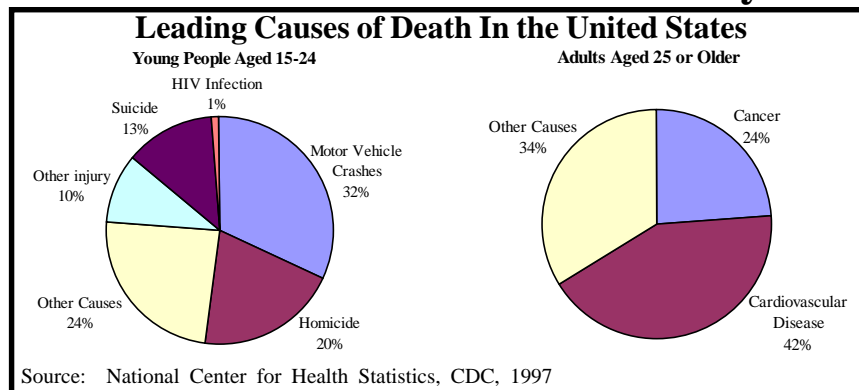
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Assessing Health Risk Behaviors Among Young People

Youth Risk Behavior Surveillance System



The Youth Risk Behavior Surveillance System (YRBSS) was developed by the Division of Adolescent and School Health, National Centers for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention in collaboration with representatives from 71 state and local departments of education and 19 other federal agencies. Its main purpose is to monitor priority health-risk behaviors that contribute to the leading causes of morbidity, mortality, and social problems among youth and adults in the United States.

"The health of young people—and the adults they will become—is critically linked to the health-related behaviors they choose to adopt. A limited number of behaviors contribute markedly to today's major killers." (CDC, 2000) These behaviors, often established during youth, include:

- ❖ **Behaviors that may result in unintentional injuries (motor vehicle crashes) and intentional injuries (violence and suicide)**
- ❖ **Tobacco use**
- ❖ **Alcohol and other drug use**
- ❖ **Sexual behaviors that may result in unintended pregnancies and sexually transmitted diseases (STDs) (including human immunodeficiency virus [HIV] infection)**
- ❖ **Unhealthy dietary behaviors**
- ❖ **Inadequate physical activity**

Findings are used in the following ways:

- To assess the prevalence and age of initiation of health-risk behaviors.
- To create awareness of the extent of risk behaviors among young people.
- Provide evidence-based data to support the need for health education curricula, coordinated school health programs, and professional development activities.
- To set program goals and objectives and monitor the progress toward those goals.
- To implement or modify programs/services to address the behaviors of young people in a specific area.
- To compare local trends in youth risk behaviors with those of the nation.
- To monitor progress toward achieving the *Healthy People 2000* and *Healthy People 2010* objectives and the National Education Goals for safe, disciplined, and drug-free schools.
- To identify, adopt and modify new and existing programs/services (i.e. health education, comprehensive school health programs and professional development).

Comparison of San Francisco YRBS with the National YRBS¹ - 1999 High School Level

In comparison with the national results from 1999 (N=15,349), San Francisco high school students (N=1,654) show lower prevalence of risk behaviors in some categories (i.e., unintentional and intentional injuries, tobacco use, alcohol and other drug use), and higher prevalence in others (i.e., dietary behaviors and physical activity). Highlights of these differences are summarized below.

Areas in which San Francisco students reported fewer risk behaviors:

Unintentional or Intentional Injuries

- ✓ Nine percent of San Francisco students rarely or never used safety belts when riding in a vehicle driven by someone else, compared to 16% of students nationwide. Nationally, 33% rode with a driver who had been drinking alcohol and 13% drove after drinking alcohol, as compared to 18% and 4%, respectively, among San Francisco high school students.
- ✓ Significantly fewer students in the San Francisco sample (23%) had engaged in a physical fight in the past 12 months than students in the national sample (36%).
- ✓ Serious thoughts in the past year about attempting suicide were lower in San Francisco (18%) than nationally (19%).

Tobacco Use

- ✓ Lifetime cigarette use was significantly lower for students in San Francisco (56%) than for students across the nation (70%).

Alcohol and Other Drug Use

- ✓ Lifetime alcohol use was lower in the San Francisco sample (56%) than in the national sample (81%), as were marijuana use (31% in San Francisco and 47% nationally), cocaine use (5% vs. 10%), and other illegal drug use (9% in San Francisco and 12% nationally).

Sexual Behaviors

- ✓ The percentage of students who reported having sexual intercourse was lower in San Francisco (27%) than nationwide (50%), as was the percentage who reported having four or more sexual partners (7% in San Francisco and 16% nationwide).
- ✓ The rate of condom use at last intercourse was higher among sexually experienced students in the San Francisco sample (62%) than in the national sample (58%).

Areas in which San Francisco students reported more risk behaviors:

Dietary Behaviors

- ▶ Significantly more San Francisco students (35%) than nationwide students (30%) described themselves as overweight.

Physical Activity

- ▶ Significantly fewer students in San Francisco (52%) than nationwide (65%) had engaged in aerobic exercise on three or more days in the week prior to taking the survey.

Executive Summary - Middle School YRBS

The Middle School YRBS is a modified version of CDC's Youth Risk Behavior Survey, conducted biennially to a random sample of San Francisco students.

During the 1999 spring semester, the Middle School YRBS was administered to a random sample of 2,122 students in grades six through eight. Parent/guardian consent forms (in six languages) were sent home with students in selected classes. Only students with positive parent/guardian permission were allowed to complete the survey. The survey was administered by staff who had been trained in proper methods of survey administration, including protecting students' anonymity. Student participation was voluntary. They could decline to participate, turn in blank or incomplete surveys, or stop completing the survey at any time.

The results of this survey can be used to make important inferences concerning the health-risk behavior of all San Francisco public middle school students in grades 6 through 8.

Unintentional Injuries

- ⇒ Seventy-four percent of the students reported wearing a seat belt most or all of the time.
- ⇒ Seat belt use has increased significantly, from 56% in 1991 to 74% in 1999.
- ⇒ Use of a helmet "most of the time" or "always" when riding a bicycle increased from 6% in 1991 to 26% in 1999.
- ⇒ In the month prior to surveying, 21% of the students had ridden in a vehicle with someone who had been drinking alcohol.
- ⇒ The percentage of students who report having ridden in a vehicle driven by someone who has been drinking alcohol increased from 22% in 1991 to 26% in 1997, and decreased to 21% in 1999.

Intentional Injuries

- ⇒ Fifteen percent of the students had carried a knife, 6% had carried a club, and 4% had carried a gun as a weapon at some time in their lives; 2% had carried a knife or club and 1% had carried a gun *on school property*.
- ⇒ Club carrying increased from 8% in 1995 to 10% in 1997, and decreased to 6% in 1999. Knife carrying also increased from 1995 (21%) to 1997 (23%), and decreased in 1999 (15%).
- ⇒ The percentage of students who have carried a gun rose from 9% in 1995 to 12% in 1997, and fell to 4% in 1999.
- ⇒ Fifteen percent had not attended school at some time because they felt they would be unsafe there.
- ⇒ Nearly half (49%) of the students had been in a physical fight in the past year.
- ⇒ Fighting decreased from 56% in 1991 to 49% in 1999.
- ⇒ In the month prior to the survey, 14% of students had felt sad and depressed on 10 or more days.
- ⇒ Twenty-one percent said they had seriously thought about ending their life; 8% had attempted suicide.
- ⇒ In the past 30 days, students had been the victim of a verbal slur because of their ethnicity (16%), physical appearance (22%), and 7% had been the victim of a verbal slur because of their gender or sexual orientation.

Tobacco Use

- ⇒ More than two-thirds (68%) of the middle school students had not tried cigarette smoking.

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- ⇒ There has been a decrease in lifetime cigarette use over the years, from 39% in 1991 to 32% in 1999.
 - ⇒ Recent cigarette use has remained relatively stable (11% to 12%), with a peak of 16% in 1993 and an all-time low of 9% in 1999.

Alcohol and Other Drug Use

- ⇒ Thirty-five percent of the students had tried alcohol.
- ⇒ Lifetime alcohol use increased from 37% in 1991 to 50% in 1999.
- ⇒ The percentage of middle school students who had their first drink prior to age 11 has increased drastically, from 19% in 1991 to 53% in 1999.
- ⇒ In the month prior to surveying, 5% had consumed five or more drinks within a couple of hours.
- ⇒ Heavy drinking fluctuated between 6% and 9% from 1991 to 1997, and reached a low of 5% in 1999.
- ⇒ Twelve percent had used marijuana at some time in their life; 5% had used cocaine.
- ⇒ Marijuana use among middle school students increased from 10% to 17%, between 1991 and 1997, but decreased to 12% in 1999.
- ⇒ Ten percent had used inhalants such as glue, spray cans, or paints to get high.

Sexual Behaviors

- ⇒ Ninety percent had not engaged in sexual intercourse.
- ⇒ The percentage of students who have had sexual intercourse remained steady from 1991 through 1993 (between 16% and 18%) and dropped to 10% in 1995. There was a slight increase in 1997 to 13% and a return to 10% in 1999.

- ⇒ Of those who had engaged in sexual intercourse, 33% reported having had sex with three or more partners, and 28% used no method of protection at last intercourse. Approximately 7% had been told by a doctor or nurse that they had a sexually transmitted disease.
- ⇒ The percentage of students reporting condom use rose from 56% in 1991 to 61% in 1993; from 1995 to 1999, condom use at last intercourse has ranged between 60% and 62%.

Dietary Behaviors

- ⇒ During the past nine years, the percentage of students who describe themselves as slightly or very overweight has remained stable, between 26% and 28%. The percentage trying to lose weight remained between 34% and 35% percent from 1991 to 1995, and increased in 1997 and 1999 to 39% and 40%, respectively.

Physical Activity

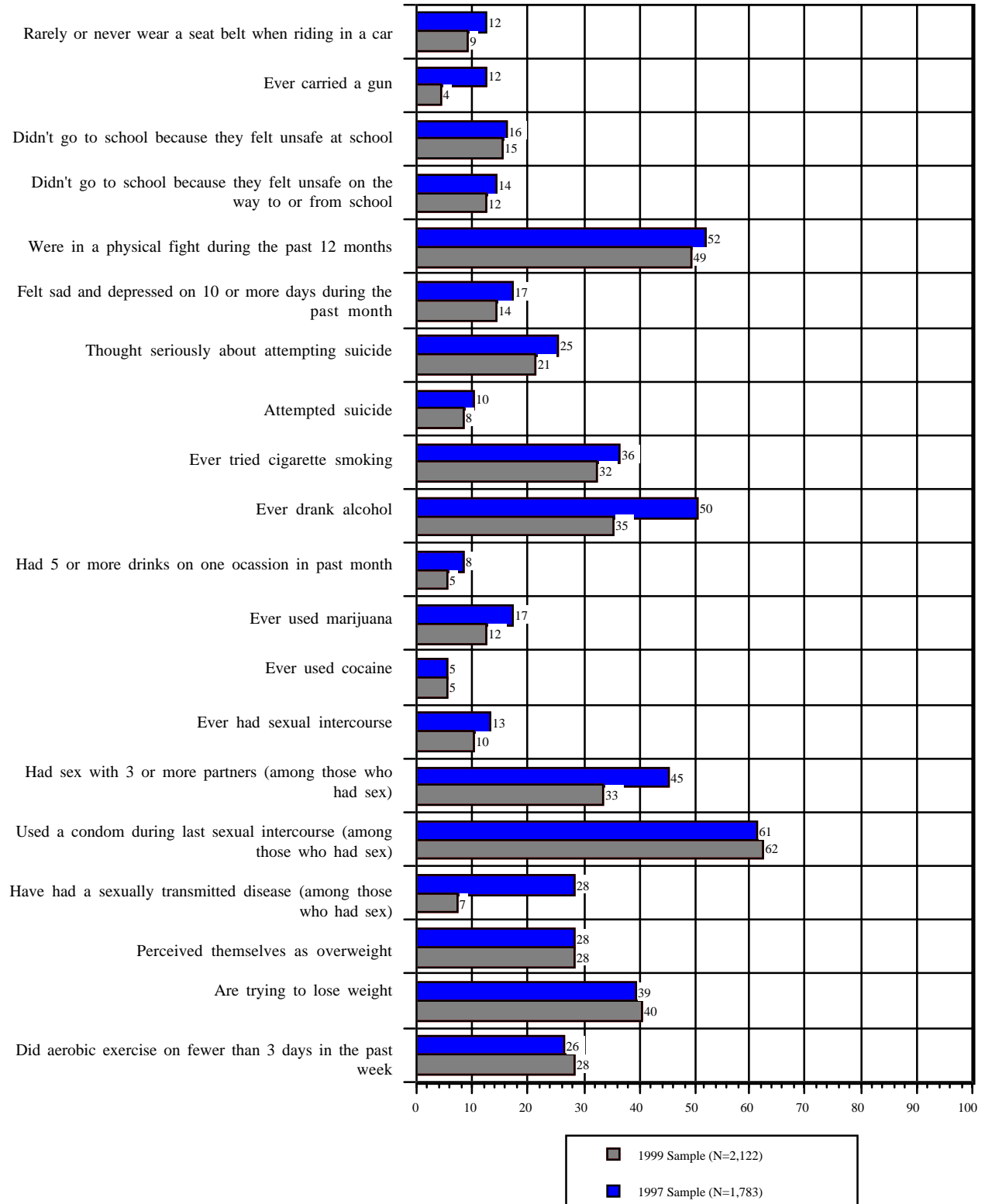
- ⇒ Nearly three-quarters (72%) of the students had done aerobic exercise on three or more days in the week prior to taking the survey.
- ⇒ Participation in aerobic activity (defined as three or more days in the past week) has fluctuated between 72% and 78% over the years.
- ⇒ Strengthening exercises have decreased, from 61% in 1993 to 52% in 1999, though up from 1995 (46%) and 1997 (50%). Stretching has also decreased, from 73% in 1993 to 66% in 1999.

⇒ On an average school day, 57% of middle school students watch three or more hours of TV. This percentage increased from 6th grade (48%) to 8th grade (65%), and was higher for males (59%) than females (54%).

Based on these results, there were some encouraging findings in the 1999 Middle School Youth Risk Behavior Survey, and general improving trends since 1991. However, it is clear that many San Francisco middle school students are still engaging in behaviors that could result in serious health consequences. These findings substantiate the need for continued comprehensive health programs and primary prevention efforts at the middle school level.

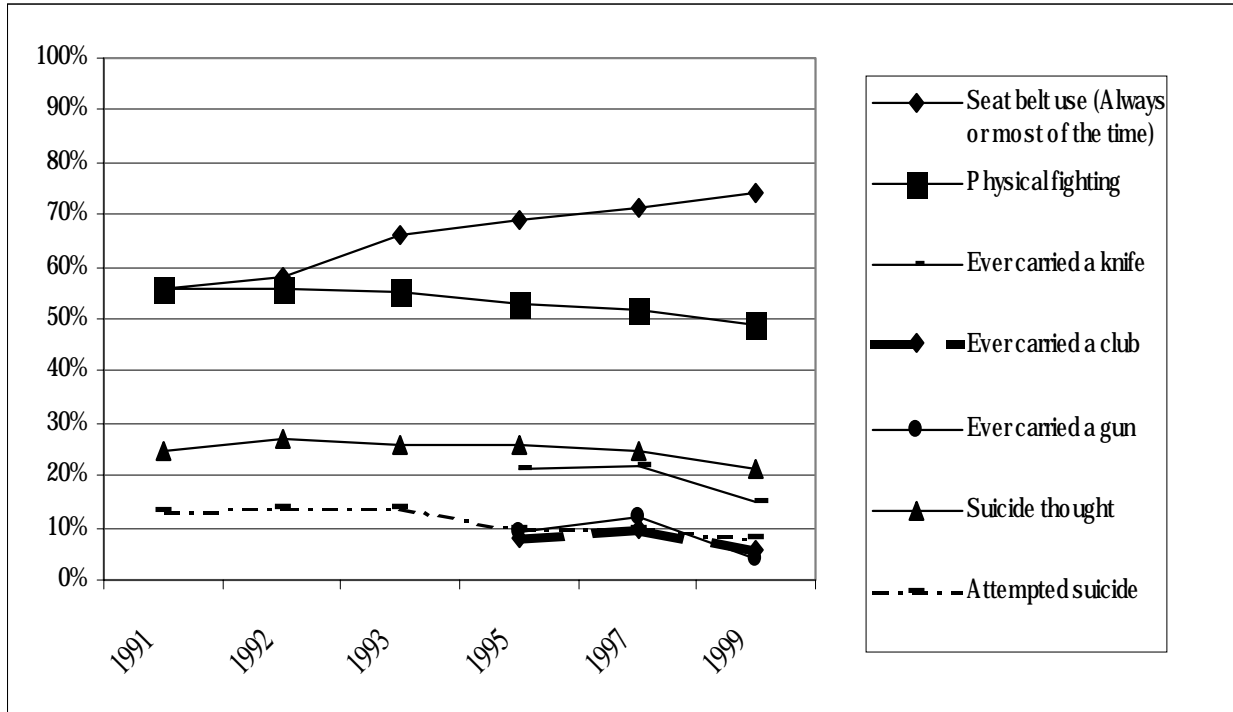
Key Findings - Middle School

Percentage of Respondents Who:

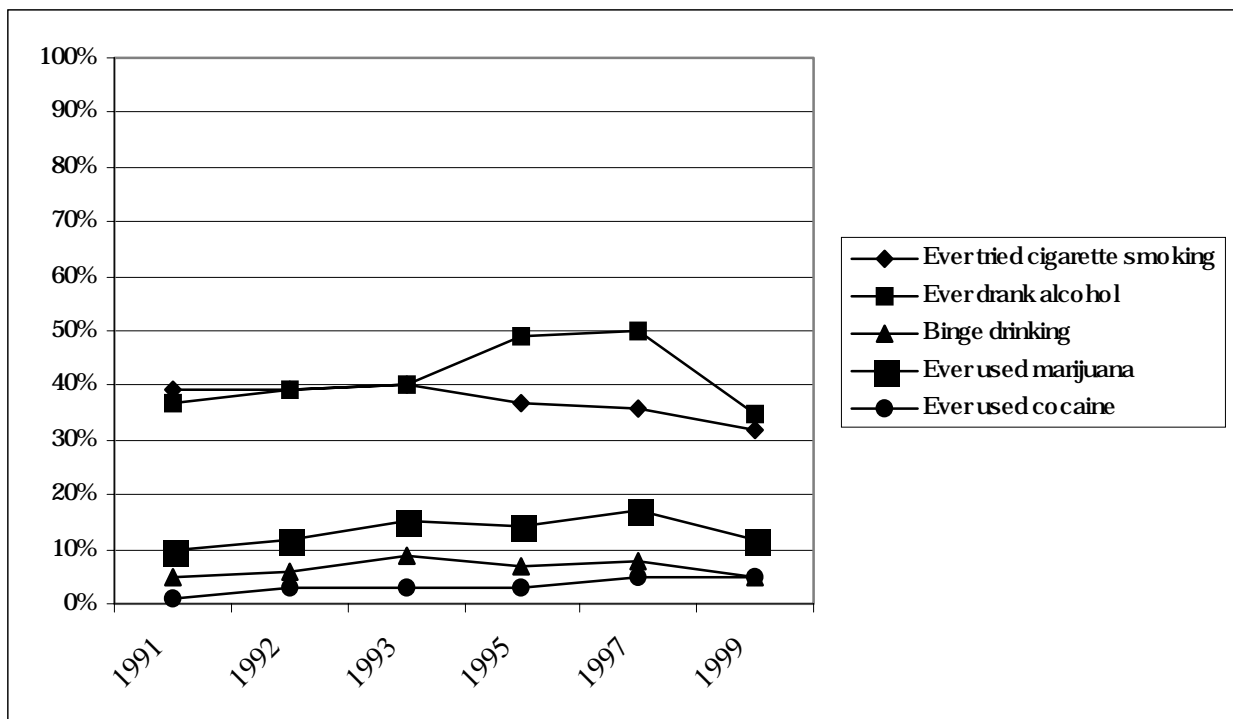


SFUSD Trends in Middle School Youth Risk Behaviors (1991-1999)

Behaviors that may result in unintentional injuries and intentional injuries

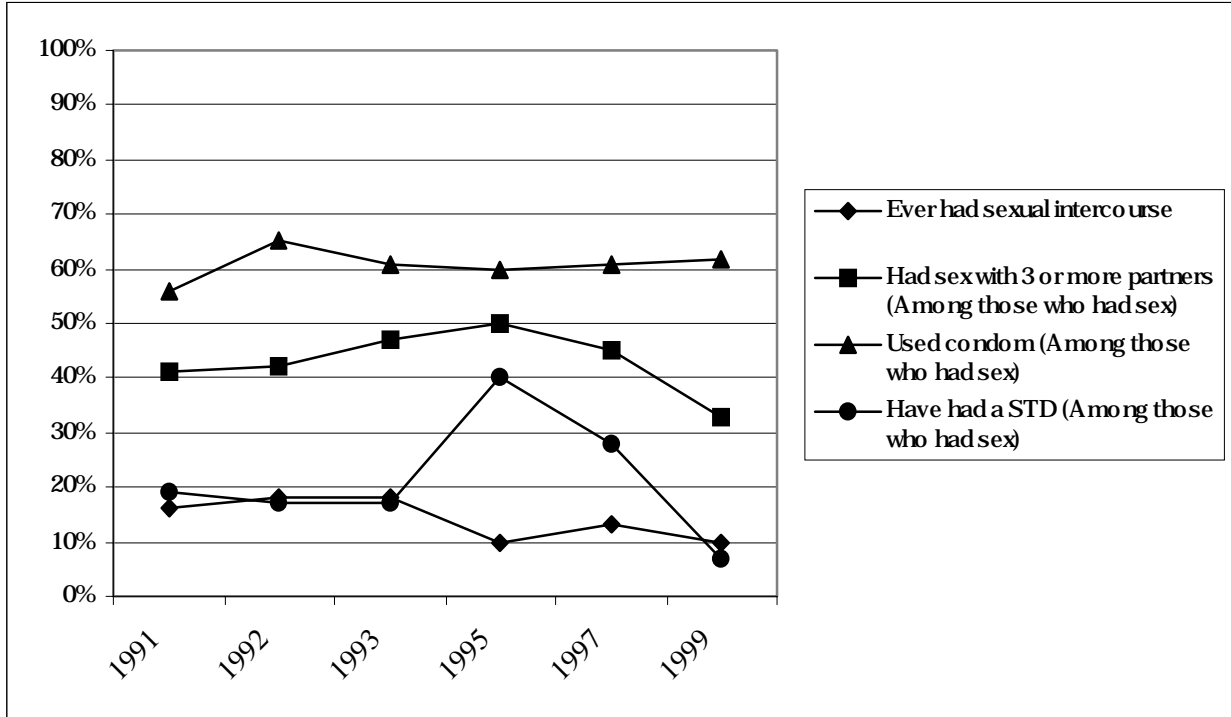


Tobacco, alcohol and other drug use

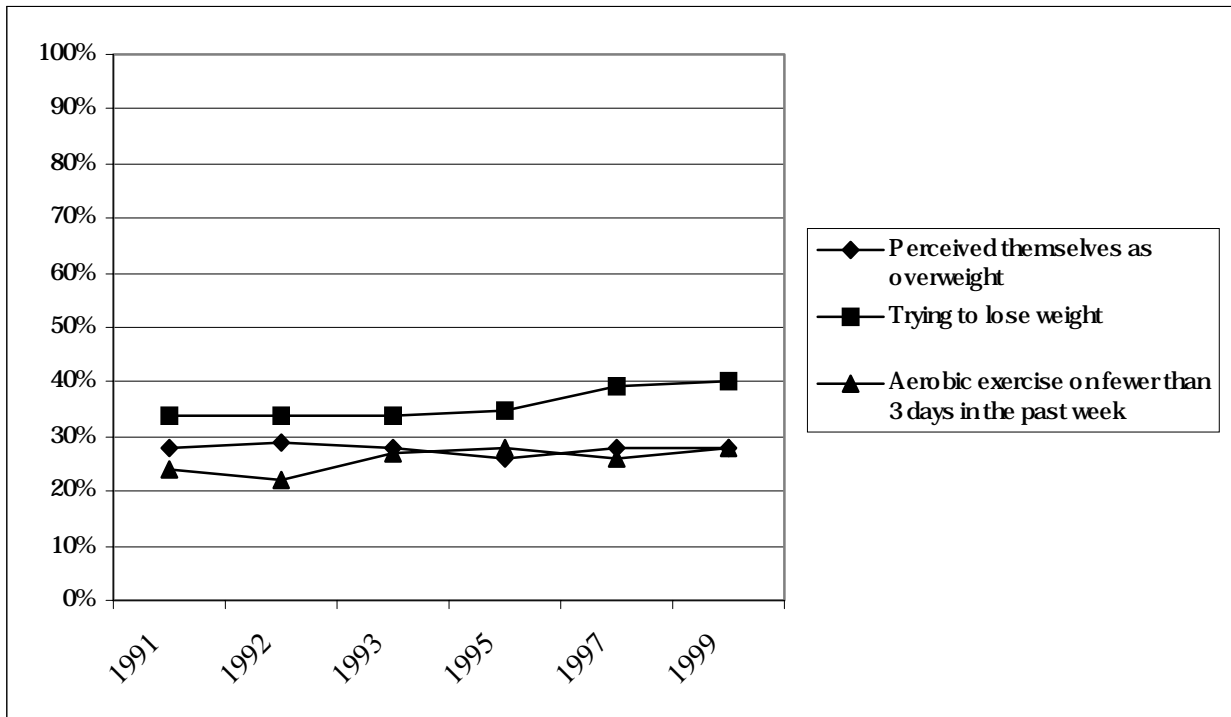


SFUSD Trends in Middle School Youth Risk Behaviors (1991-1999)

Sexual behaviors that may result in unintended pregnancies and STDs



Unhealthy dietary behaviors and inadequate physical activity



Executive Summary - High School YRBS

The High School YRBS is conducted biennially to a random sample of San Francisco students, as part of a national survey effort, which included 39 states, four territories, and 15 other cities over the past ten years. Additional questions were added by the School Health Programs Department to measure issues of special interest to San Francisco.

During the 1999 spring semester, a modified version of the multiple choice Youth Risk Behavior Survey (YRBS) was administered to a random sample of 1,654 students in grades nine through twelve. Parent/guardian consent forms (in six languages) were sent home with students in the selected classes. Only students with positive parent/guardian permission were allowed to complete the survey. The survey was administered by staff who had been trained in the proper methods of survey administration, including protecting students' anonymity. Student participation was voluntary. They could decline to participate, turn in blank or incomplete surveys, or stop completing the survey at any time.

The results of this survey can be used to make important inferences concerning the health-risk behavior of all San Francisco public high school students in grades 9 through 12.

Unintentional Injuries

- ◆ Seventy-seven percent of high school students reported wearing a seat belt most or all of the time when riding in a car.
- ◆ The percentage of high school students who report seat belt use increased from 59% in 1991 and 1992, to 78% and 77% in 1997 and 1999, respectively.
- ◆ In the month prior to taking the survey, about one-fifth (18%) of the high school students had ridden in a vehicle with some-

one who had been drinking alcohol; 4% had driven a car after they had been drinking.

- ◆ The percentage of students who report having ridden in the past 30 days with a driver who had been drinking has decreased from 24% in 1991 to 18% in 1999. The percentage of students who have driven after drinking has fluctuated throughout the years between 3% and 6%.

Intentional Injuries

- ◆ In the past month, 8% had carried a knife, 3% had carried a club, and 2% had carried a gun as a weapon; 7% had carried a weapon *on school property*.
- ◆ Five percent had not attended school in the 30 days prior to surveying because they felt that they would be unsafe at school, or on the way to or from school.
- ◆ Five percent had been threatened or injured by someone with a weapon *on school property* in the past 12 months.
- ◆ Twenty-three percent had been in a physical fight in the past year; 9% reported fighting *on school property* during that time.
- ◆ The percentage of high school students reporting violence-related incidents has decreased over the past nine years, including weapon carrying (from 21% in 1991 to 10% in 1999) and physical fighting (from 35% in 1991 to 23% in 1999).
- ◆ During the 30 days prior to the survey, 33% of high school students had been the victim of a verbal slur because of their ethnicity, physical appearance, gender, sexual orientation, or religion.
- ◆ In the year prior to taking the survey, 8% of students had been hit, slapped, or physically hurt by their boyfriend or girlfriend. This percentage increased by grade, from 7% in 9th grade to 10% in 12th grade, and was higher for females (9%) than males (6%).

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- ◆ Seven percent of students had been forced to have sex when they did not want to at least once in their life. This percentage doubled from 5% in 9th grade to 10% in 12th grade, and was higher for females (9%) than males (4%).
 - ◆ Eighteen percent had seriously thought about ending their life in the past year.
 - ◆ From 1991 to 1999 there has been a general decrease in the percentage of high school students who have considered attempting suicide in the year prior to taking the survey, from 27% in 1991 to 18% in 1999. The percentage of students who have made a suicide plan has ranged between 14% and 18% over the years. The percentage of students who have attempted suicide has remained relatively stable, at 8% in 1991 and 7% in 1997 and 1999, with a peak of 10% in 1993.

Tobacco Use

- ◆ Fifty-six percent had tried cigarette smoking.
- ◆ From 1991 to 1993, there was a significant increase in the percentage of students who reported smoking in the past month (from 14% to 22%); this rate decreased slightly to 20% in 1995, and to 19% in both 1997 and 1999.
- ◆ There have been no significant changes in daily smoking.
- ◆ Lifetime cigarette use has fluctuated between 56 and 62 percent.

Alcohol and Other Drug Use

- ◆ Over half (56%) of high school students had tried alcohol, 31% marijuana, 5% cocaine, 9% other illegal drugs, and 9% inhalants.

- ◆ In the month prior to the survey, 11% had consumed five or more drinks within a couple of hours.
- ◆ Lifetime alcohol use among high school students ranged between 58% and 61% between 1991 and 1997, and fell to a low of 56% in 1999.
- ◆ Recent alcohol use has remained relatively steady, between 26% and 29%, with the exception of a peak in 1993 (33%).
- ◆ Heavy alcohol use has also remained stable, between 11% and 13%, with a peak of 16% in 1993.
- ◆ There has been a general increase in marijuana use in high school students, from 27% in 1991 to 33% in 1997, and a slight decrease in 1999 to 31%.
- ◆ Recent marijuana use rose from 14% in 1991 to 17% in 1997, and fell to 15% in 1999.
- ◆ Lifetime cocaine use has generally remained steady over the years (6% to 7%), though it was at an all-time low of 5% in 1999.
- ◆ Recent cocaine and steroid use also have remained steady (between 2% and 3%). "Other" illegal drug use has fluctuated between 8% and 10%.

Sexual Behaviors

- ◆ Twenty-seven percent had engaged in sexual intercourse; of these students, 39% reported having had sex with three or more partners (and 26% with four or more partners).
- ◆ Seventy-three percent had not engaged in sexual intercourse.
- ◆ Lifetime sexual intercourse rates remained fairly stable (between 38% and 40%) from 1991 through 1993, and dropped in 1995 (35%) and 1997 (32%). In 1999 lifetime sexual intercourse fell to a low of 27%.

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- ◆ From 1991 to 1995 the percentage of students who had sex before age 13 ranged between 18% and 22%. In 1997 this percentage fell to 12%, and in 1999 it rose slightly to 14%.
 - ◆ The percentage of students who have had sex with four or more partners has declined in recent years, from 35% in 1993 to 26% in 1999.
 - ◆ Among the sexually experienced students, 62% used a condom the last time they had sex.
 - ◆ Condom use increased from 1993 (59%) to 1995 (65%), but decreased in 1997 (60%); in 1999 it rose slightly to 62%.
 - ◆ Of the sexually-experienced students, 15% used no method of protection the last time they had sex, and 11% used withdrawal.
 - ◆ Ten percent had been told by a doctor or nurse that they had a sexually transmitted disease.
 - ◆ Pregnancy rates have also dropped recently, from 10% in 1993 to 5% in 1999. Alcohol or drug use before last intercourse has also declined recently, from 20% in 1993 to 15% and 16% in 1995 and 1997, respectively; this percentage rose slightly in 1999 to 17%.
 - ◆ Ninety percent of the students had been taught about AIDS or HIV infection in school.

Dietary Behaviors

- ◆ Thirty-five percent of the students described themselves as slightly or very overweight.
- ◆ The percentage of students who describe themselves as slightly or very overweight ranged from 30% to 33% from 1991 to 1997, and peaked at 35% in 1999.
- ◆ The percentage of students trying to lose weight has increased, from 36% in 1991 to 44% in 1999.

- ◆ In the 30 days prior to surveying, 6% of males and 9% of females had fasted for 24 hours or more to lose weight.
- ◆ Twenty-three percent of students had consumed two or more glasses of milk per day in the week prior surveying; 33% had eaten foods high in carbohydrates, such as rice, pasta, potatoes, or other grain products.

Physical Activity

- ◆ Only 52% percent had done aerobic exercise on three or more days in the past week.
- ◆ There has been a general decrease in aerobic exercise from 1992 (62%) to 1999 (52%).
- ◆ Strengthening exercise rates fluctuated between 37% and 41% from 1991 to 1997, and reached a high of 43% in 1999.
- ◆ The percentage of students who attend physical education classes all five days of the week has decreased from 47% in 1991 to 36% in 1999; the percentage of students who do 20 or more minutes of actual exercise during a physical education class has also generally decreased, from 41% in 1991 to 34% in 1997, though this percentage rose to 37% in 1999.
- ◆ Participation in sports teams run by organizations outside of school increased from 23% in 1991 to 27% in 1995, but dropped to 25% in 1997. From 1991 to 1997 students were asked about their participation on sports teams in school and their participation on sports teams outside of school. In 1999 they were asked about their participation on teams in school or the community; 37% had played on sports teams in the 12 months prior to being surveyed.

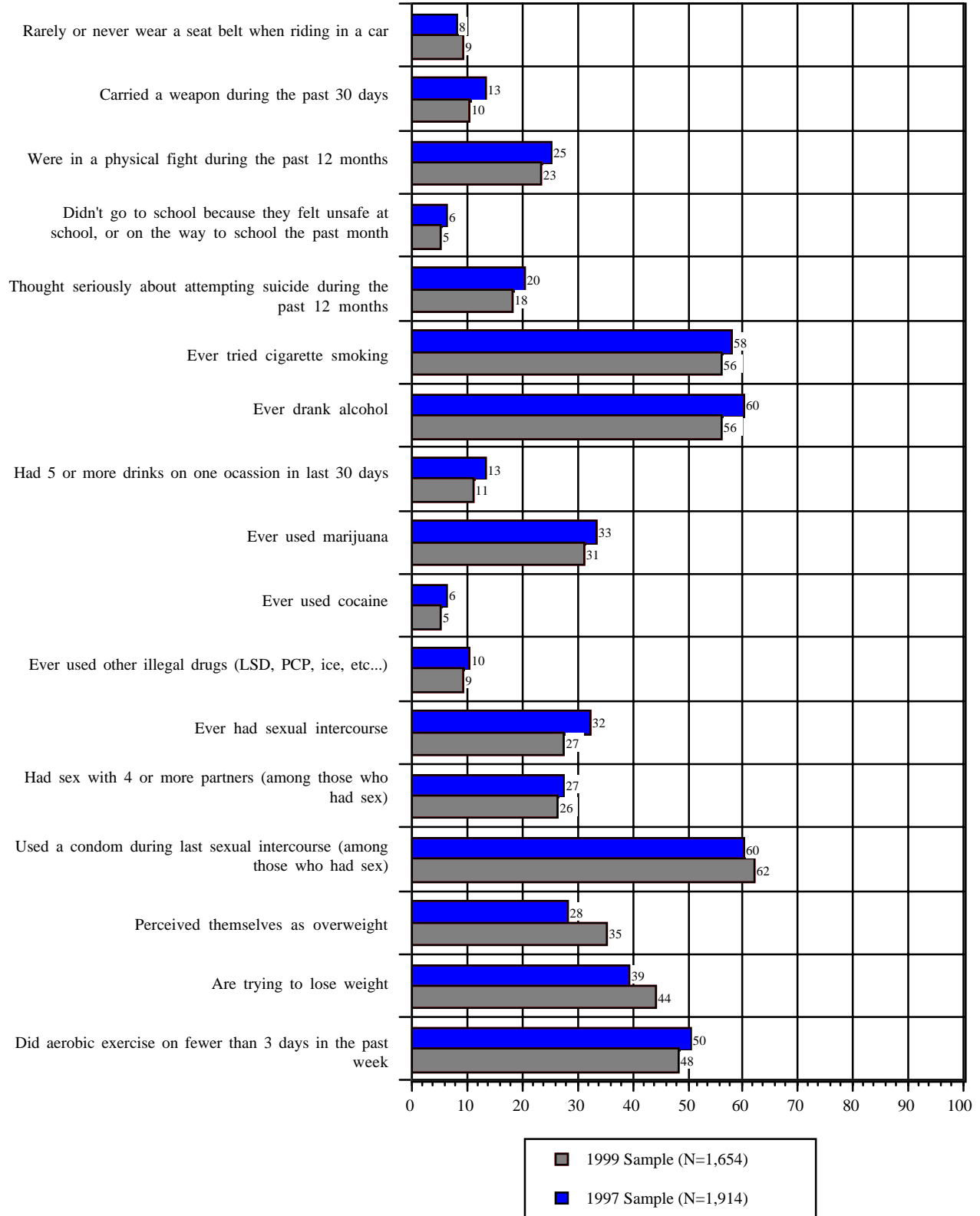
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- ◆ On an average school day, 45% of students watch TV for three or more hours. This percentage decreased from 9th grade (56%) to 11th grade (37%), and increased to 50% in 12th grade. There was no significant difference between males and females.

There are some encouraging findings in the 1999 survey results and improving trends between 1991 and 1999. However, there are also several areas of concern based on the prevalence of health-related behaviors and their potentially serious consequences.

Results of the Youth Risk Behavior Survey indicate that many San Francisco high school students are engaging in behaviors that could result in serious health consequences. Comprehensive health programs and primary prevention efforts at the high school level should be expanded to address these priority health areas and to include skill-building strategies, such as decision-making, communication, stress management, conflict management, and goal setting skills.

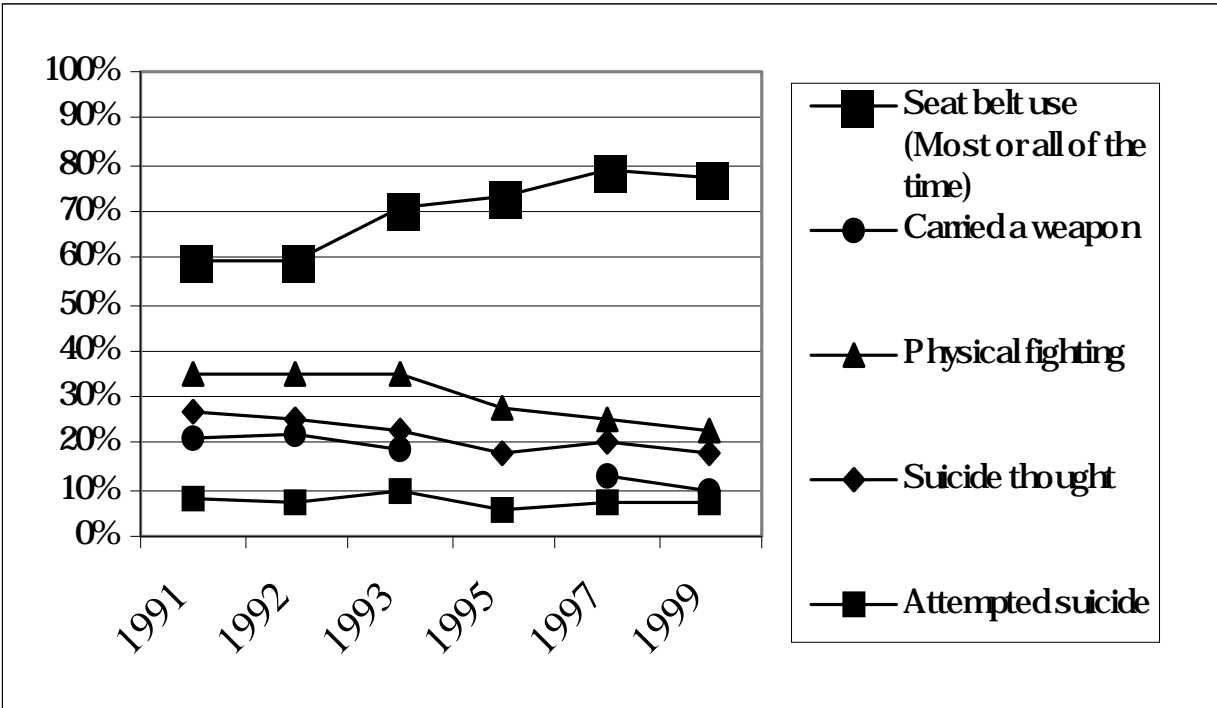
Key Findings - High School

Percentage of Respondents Who:

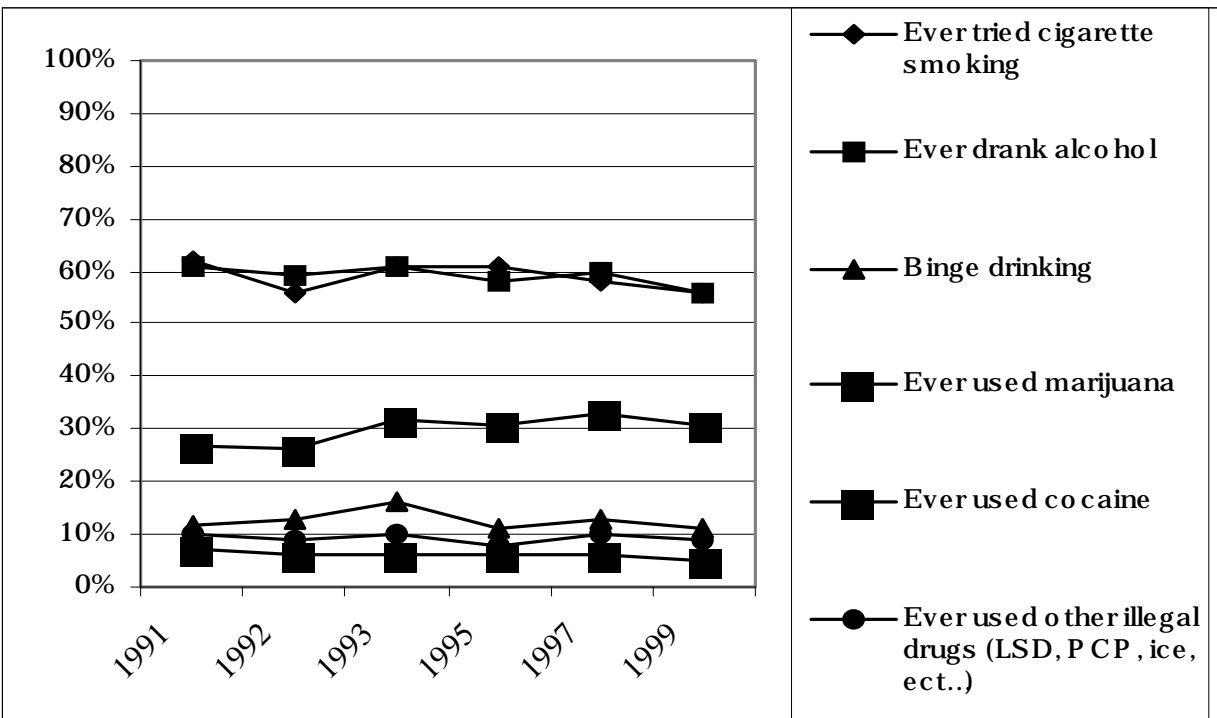


SFUSD Trends in High School Youth Risk Behaviors (1991-1999)

Behaviors that may result in unintentional injuries and intentional injuries

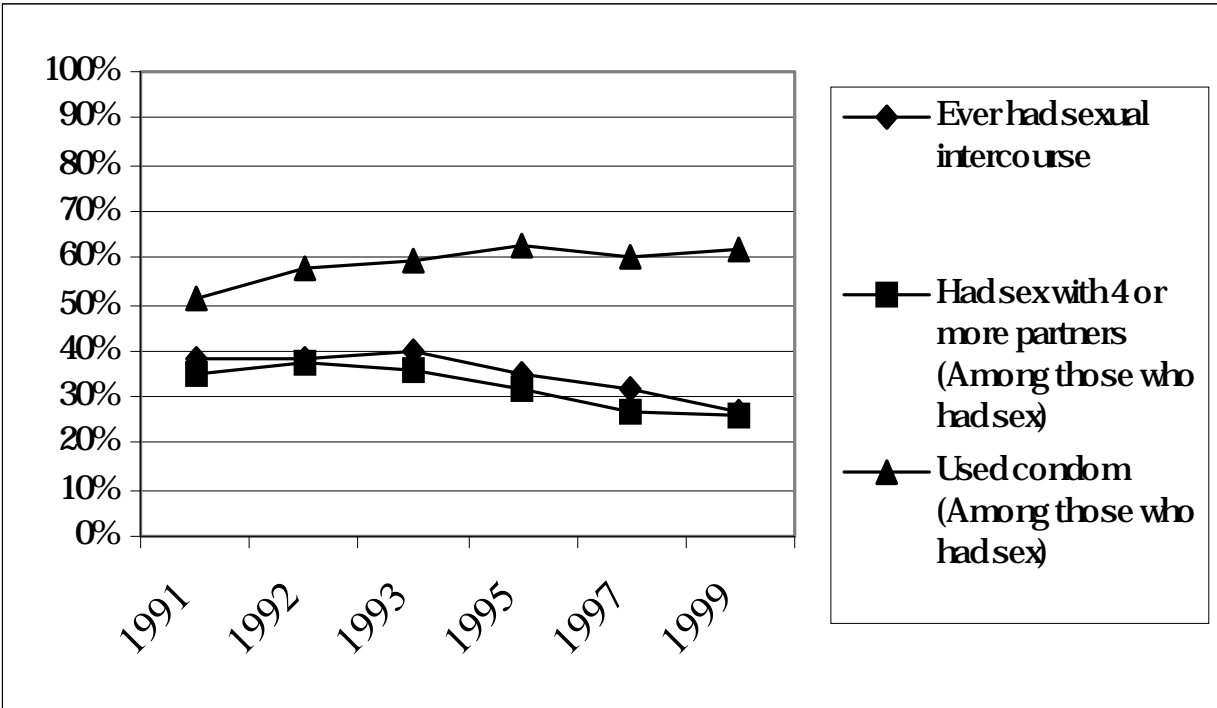


Tobacco, alcohol and other drug use

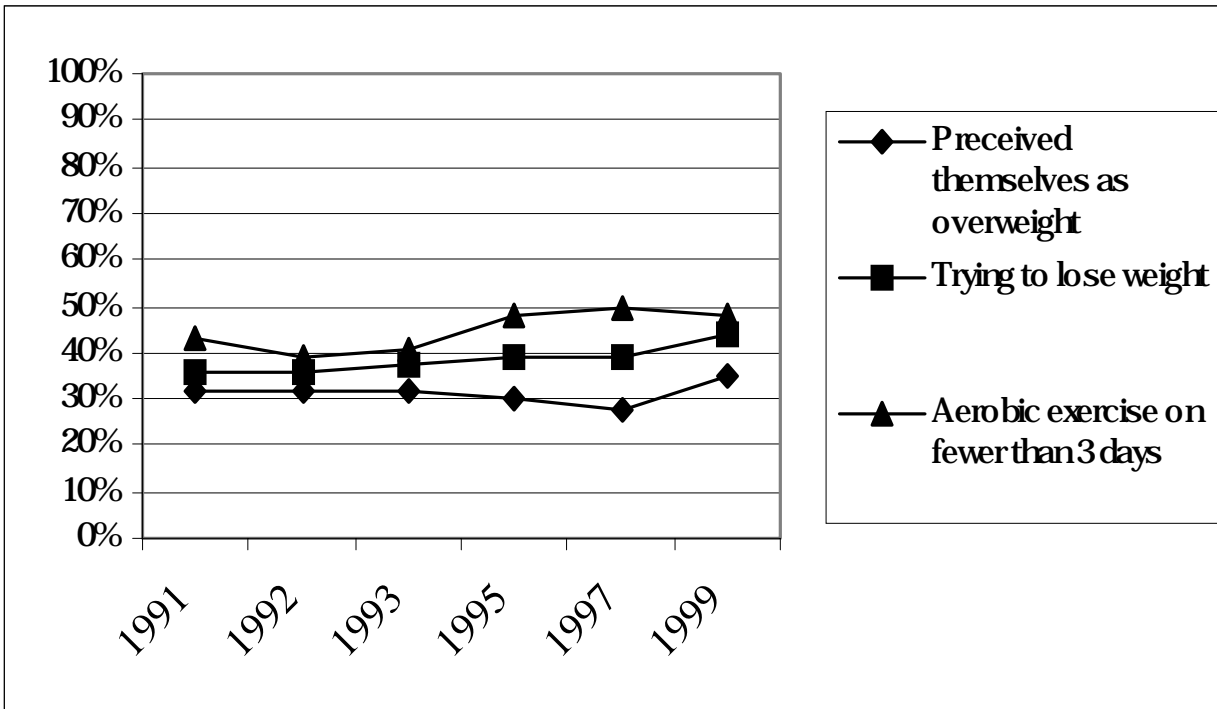


SFUSD Trends in High School Youth Risk Behaviors (1991-1999)

Sexual behaviors that may result in unintended pregnancies and STDs



Unhealthy dietary behaviors and inadequate physical activity



Description of the Student Sample

Middle School YRBS

The Middle School Health Survey was completed by 2,122 students in grades six through eight in 17 San Francisco middle schools (student response rate=67%).

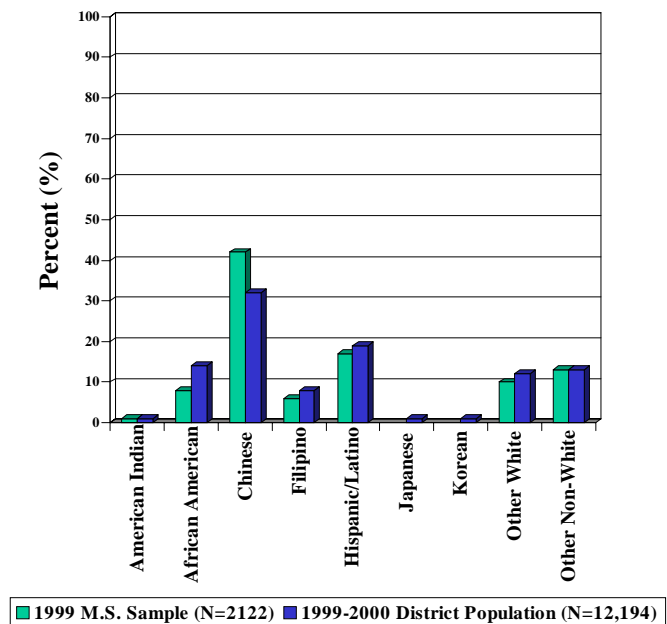
Students were evenly distributed by gender (51% males and 49% females) and grade (33% sixth graders, 33% seventh graders, and 34% eighth graders). The majority of students (64%) were either 12 or 13 years old. Sixty-eight percent of the students surveyed were born in the United States.

The largest percentage of students described themselves as Chinese (34%), followed by Hispanic/Latino (21%), African American (11%), White (10%), Filipino (10%), American Indian (1%), and Korean (1%). Eight percent indicated that they were of another ethnicity. These ethnic breakdowns were similar across gender and grade level.

In comparing the student sample with the San Francisco Unified School District profile, the sample appears to be representative of gender and grade level. Related to ethnicity, the sample is slightly under-representative of African American students (see Figure 1). This information should be considered when interpreting the survey results.

Because the response rate for 1999 YRBS middle school was over 60%, the results can be generalized to the entire population of San Francisco Unified School District middle school students.*

Figure 1: Comparison of Ethnicity of Middle School Sample and District Population.



*The Centers for Disease Control and Prevention uses a 60% response rate as the cut-off for weighting data. CDC weights the data by applying a weighting factor to each student record to adjust for nonresponse and the varying probabilities of selection.

Description of the Student Sample

High School YRBS

The Youth Risk Behavior Survey was completed by 1,654 students in grades nine through twelve in 18 San Francisco high schools (student response rate=59%).

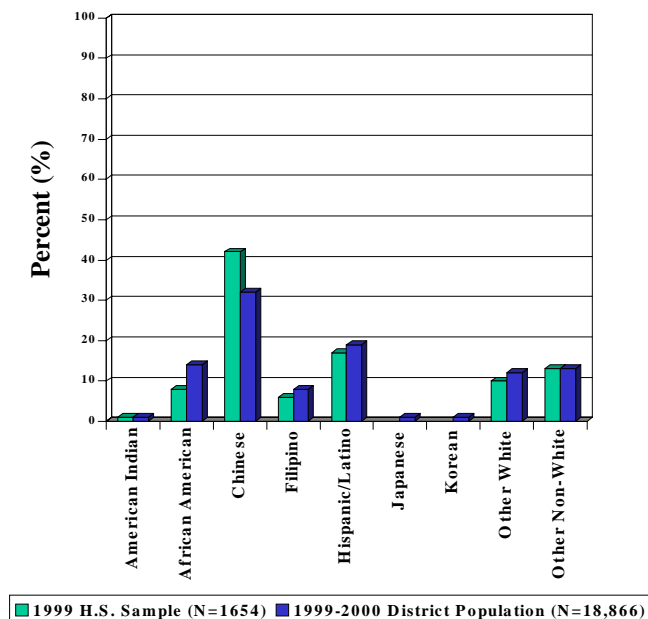
Students were distributed relatively even by gender (47% males and 53% females). The sample contained higher percentages of tenth (32%) and 11th (27%) graders than ninth (22%) and 12th graders (20%). Students' ages ranged from 12 years old or younger (in only two cases) to 18 years old or older. The majority of students (67%) were 15, 16, or 17 years old.

The largest percentage of students described themselves as Chinese (42%), followed by Hispanic/Latino (17%), White (10%), African American (8%), Filipino (6%), and American Indian (1%). Thirteen percent indicated that they were of another ethnicity. These ethnic breakdowns were similar across gender. There was a lower percentage of African American students in 11th grade than in the other grades.

In comparing the student sample with the San Francisco Unified School District profile, the sample appears to be representative of gender and underrepresentative of 9th graders, who make up 28% of the district's high school population. Related to ethnicity, the sample is overrepresentative of Chinese students and under-representative of African American students (see Figure 2). This information should be considered when interpreting the survey results.

Because the response rate for the 1999 YRBS high school was less than 60%, the results reflect only those students who participated in the survey and cannot be generalized to other students.*

Figure 2: Comparison of Ethnicity of High School Sample and District Population.



*The Centers for Disease Control and Prevention uses a 60% response rate as the cut-off for weighting data. CDC weights the data by applying a weighting factor to each student record to adjust for nonresponse and the varying probabilities of selection.

Injuries

In the United States, injuries are the leading cause of death and disability for people aged 1 to 34 years. Almost 75% of all deaths among adolescents aged 10-24 years are attributed to injuries from only four causes: motor vehicle crashes (30%), all other unintentional injuries (10%), homicide (20%), and suicide (13%).² These injuries occur at home, on the roads, at work, and at school. Highly associated with these injuries are adolescent behaviors such as physical fights, carrying weapons, not using seatbelts and drinking alcohol. In fact, alcohol is linked to a wide variety of injury causes including drowning, motor vehicle crashes, homicide and suicide.

Unintentional Injuries

Unintentional injuries are the leading cause of death among children between the age of 5 and 14 and young people between the ages of 15 and 24.² Motor vehicle crashes were the leading cause of death for persons of every age from 5 to 29 years old in the United States.³ In 1998, there were an estimated 6,334,000 police-reported traffic crashes, in which 41,471 people were killed and 3,192,000 people were injured.³ Safety belts, when used, reduce the risk of fatal injury to front-seat passenger car occupants by 45 percent and the risk of moderate-to-critical injury by 50 percent; from 1975 through 1998, an estimated 112,086 lives were saved by safety belts.⁴ Since 1993, the enactment of safety belt use laws in California have increased belt use and thereby reduce deaths and injuries in motor vehicle crashes.

In 1998, 761 bicyclists were killed and an additional 53,000 were injured in traffic crashes.³ Almost one-third (30 percent) of the bicyclists killed in traffic crashes in 1998 were between 5 and 15 years old.³ Bicycle helmets are 85-88 percent effective in mitigating head

and brain injuries, making the use of helmets the single most effective way to reduce head and brain injuries and fatalities resulting from bicycle crashes.⁵ The first bicycle helmet law was passed in California in 1986 and was amended in 1993 to cover all children under age 18. Per vehicle mile, motorcyclists are approximately 14 times as likely as passenger car occupants to die in a traffic crash. In 1998, 2,284 motorcyclists were killed and an additional 49,000 were injured in traffic crashes in the United States.⁶ Helmets are estimated to be 29 percent effective in preventing fatal injuries, and 67 percent effective in preventing brain injuries to motorcyclists.⁴ In California, helmet use is required for all motorcycle operators and passengers.

In 1998, there were 15,395 fatalities in alcohol-related vehicle crashes, which represents an average of one alcohol-related fatality every 33 minutes.³ NHTSA estimates that alcohol was involved in 39 percent of fatal crashes and in 7 percent of all crashes in 1998.³ The intoxication rate for 16 to 20 year-old drivers involved in fatal crashes in 1998 was 14 percent and were a leading cause of death in the teenage and young adult populations.³ Drinking and driving is particularly dangerous for young people because the risk begins at very low blood alcohol concentrations (BACs); at all BACs, the risk for crash involvement is greater for younger drivers than for older drivers.

The 1999 San Francisco YRBS asked students to report seat belt use, and helmet use when riding motorcycles, bicycles, and skateboard, or rollerblading. In addition, students reported driving after using alcohol in the past month (asked only at the high school level), and riding in vehicles driven by people who have been using alcohol.

Middle School YRBS

Results from 1999. Approximately 74% of the middle school students reported wearing seat belts most or all of the time when riding in a car driven by someone else. Seat belt use declined from 77% in grade 6 to 73% in grade 8 (see Figure 3). Over two-thirds (74%) of middle school students reported riding a bicycle, and over half (61%) reported rollerblading or skateboarding. However, 50% of those who rode a bicycle and 59% of those who rollerbladed or rode a skateboard “never” or “rarely” wore a helmet.

In the 30 days prior to the survey, 21% percent of middle school students had ridden in a car driven by someone who had been drinking alcohol. Although this percentage seems high, it should be viewed cautiously because it may include youth who rode with parents or guardians who may have had only one drink. Eighth graders were more likely to have ridden in a vehicle with a person under the influence of alcohol than sixth graders (26 % vs. 15%).

Figure 3: Percentage of students who reported wearing a seat belt most or all of the time: Comparison across grade levels 6-12.

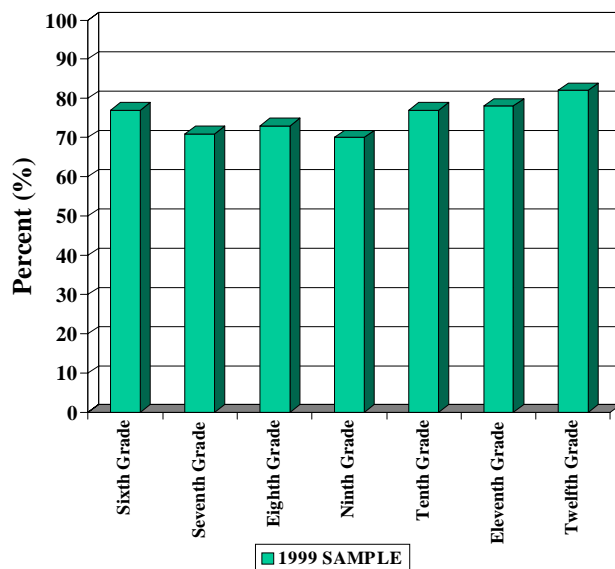
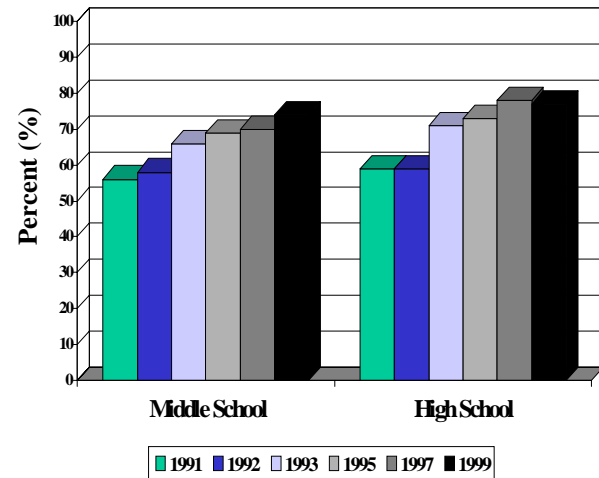


Figure 4: Percentage of students who reported wearing a seat belt most or all of the time: Comparison of 1999 results with 1991-1997.



Males were slightly more likely than females to have ridden in a vehicle with someone who had been drinking (22% vs. 20%, respectively).

Changes over time. The percentage of middle school students who report seat belt use “most of the time” or “always” has increased significantly, from 56% in 1991 to 74% in 1999 (see Figure 4). Use of a helmet “most of the time” or “always” when riding a bicycle has also increased significantly since 1991 (from 6% in 1991 to 26% in 1999). The percentage of students who report having ridden in a vehicle driven by someone who has been drinking alcohol increased from 22% in 1991 to 26% in 1997, and decreased to 21% in 1999.

High School YRBS

Results from 1999. More than three-quarters of the high school students (77%) reported wearing seat belts most or all of the time when riding in a car driven by someone else (see Figure 4). Seat belt use increased consistently by grade level, from 70% in grade 9 to 82% in grade 12 (see Figure 3). Eleven percent of students had ridden a motorcycle in the year prior to the

survey; of these students, 58% reported using a helmet "most of the time" or "always." Fifty percent of students had ridden a bicycle in the past year; of these, only 22% had used a helmet "most of the time" or "always."

In the 30 days prior to the survey, nearly one in five students (18%) had ridden in a vehicle driven by someone who had been drinking. This percentage was highest for 9th graders (20%) and lowest for 12th graders (16%). Four percent of students had driven after drinking. Driving after drinking ranged from 3% in 10th grade to 5% in 9th and 11th grades. Females and males were equally likely to have ridden with a driver who had been drinking (18% for both). Males were slightly more likely to have driven after drinking (5% versus 3% for females).

Changes over time. The percentage of high school students who report seat belt use "most of the time" or "always" has increased over the years, from 59% in 1991 and 1992, to 78% and 77% in 1997 and 1999, respectively (see Figure 4). During this period, the percentage of students who report having ridden in the past 30 days with a driver who had been drinking has decreased from 24% in 1991 to 18% in 1999. The percentage of students who have driven after drinking has fluctuated throughout the years between 3% and 6%.

Intentional Injuries

Concern has grown recently around juvenile violence and criminal activity. The U.S. Department of Justice (1998) reports that on the national level the juvenile violent crime arrest rate in 1997 was 49 percent above the 1988 level, while the comparable adult violent crime arrest rate was 19 percent above the 1988

levels.⁷ In the United States, homicide is the second leading cause of death for persons 15 to 24 years of age and third for those aged 5 to 14 years, and the leading killer of Black adolescents and young adults.² Approximately nine out of ten homicide victims are killed with a weapon such as a gun, knife, or club.² Of the 2,100 juveniles murdered in 1997, 56% were killed with a firearm.⁷ Arrest rates for weapons offenses among youths 10 to 17 years of age doubled between 1987 and 1993, then dropped 24% by 1997.⁸ In 1997, 5.9% of students in a national survey reported carrying a firearm at least once in the previous 30 days.⁹ In 1995, this was true of 7.6% of students—a decline of 22.4% over the two year period.¹⁰ Nationally, minorities, young males, and those living in poor, urban communities are at greatest risk of death by homicide. Fighting is the most important antecedent behavior for a great proportion of homicides among adolescents.

While violence at school continues to be a concern due to recent national events, students are much more likely to be victims of serious violent crime away from school than at school. Between July 1992 and June 1994, 105 violent deaths occurred on or near school grounds or at school-associated events. The majority (81%) were homicides and firearms were used in most (77%) of the deaths.¹¹

Suicide took the lives of 30,535 Americans in 1997 (11.4 per 100,000 population).² More people die from suicide than from homicide. In 1997, there were 1.5 times as many suicides as homicides. Females are more likely to attempt suicide than males; however, due to more violent methods, males are four times more likely to die from suicide than are females. Nearly 3 of every 5 suicides in 1997 (58%) were committed with a firearm.² Persons under

age 25 accounted for 15% of all suicides in 1997. For young people 15-24 years old, suicide is the third leading cause of death, behind unintentional injury and homicide. In 1997, more teenagers and young adults died from suicide than from cancer, heart disease, AIDS, birth defects, stroke, pneumonia and influenza, and chronic lung disease **combined**. From 1952-1995, the incidence of suicide among adolescents and young adults nearly tripled.² From 1980-1997, the rate of suicide among persons aged 15-19 years increased by 11% and among persons aged 10-14 years by 109%. From 1980-1996, the rate increased 105% for African American males aged 15-19.^{2,12} Among persons aged 15-19 years, firearm-related suicides accounted for 62% of the increase in the overall rate of suicide from 1980-1997.² The risk for suicide among young people is greatest among young White males; however, from 1980 through 1995, suicide rates increased most rapidly among young Black males.¹³ Although suicide among young children is a rare event, the dramatic increase in the rate among persons aged 10-14 years underscores the urgent need for intensifying efforts to prevent suicide among persons in this age group.

The 1999 San Francisco YRBS asks students to report physical fighting and weapon carrying (in general and on school property), as well as other school-related safety and violent incidents (such as verbal, physical and sexual abuses, threats with weapons on school property and deliberate damage of personal property on school grounds). It also asked students to report suicidal thoughts and behaviors, including feeling of sadness and depressed, serious consideration of suicide, plans to attempt suicide, actual suicide attempts, and medical treatment from a doctor or nurse as a result of suicide attempts.

Middle School YRBS

Fighting and Weapon Carrying

Results from 1999. Almost half (49%) of the middle school students said they had been in a physical fight in the previous year. Fourteen percent of students had been in a fight four or more times. Most students reported fighting with a friend or someone they know the last time they were in a fight (51% of those who had been in a fight). Forty-nine percent of 6th graders, 51% of 7th graders, and 47% of 8th graders had been in a fight in the past year. Males were more likely to have been in a fight than females (60% vs. 38%). A total of 7% of students had been in a fight that required treatment by a doctor or nurse at least once in their lives.

Fifteen percent of middle school students had carried a knife, 6% had carried a club, and 4% had carried a gun as a weapon at some time in their life. In general, weapon carrying increased by grade level (see Figure 5) and was significantly higher among males than females.

Figure 5: Percentage of middle school students who have carried a weapon by grade.

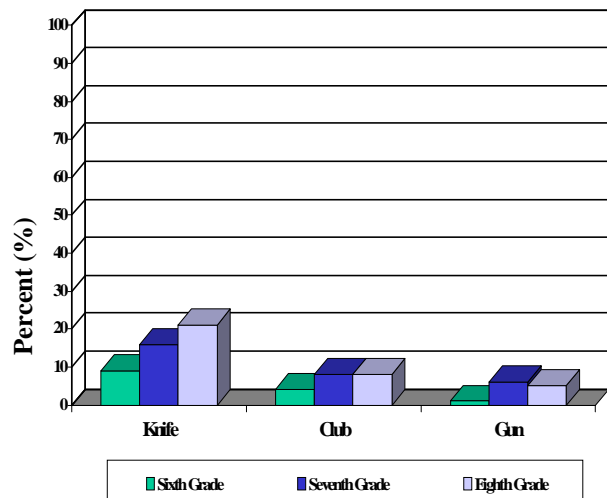
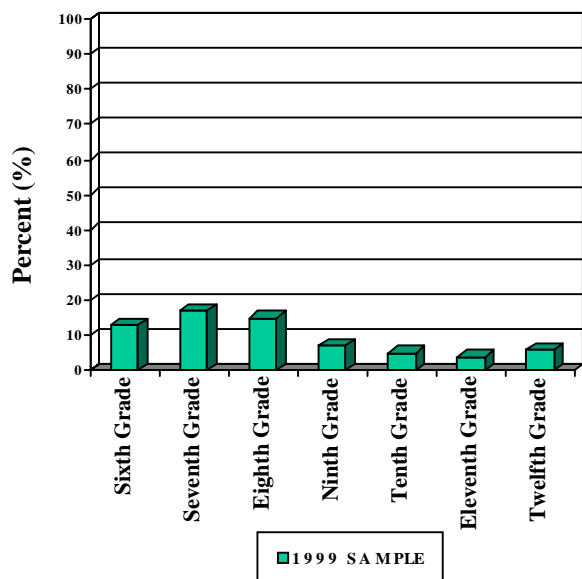


Figure 6: Percentage of students who did not go to school because they felt unsafe by grade.



NOTE: Middle school results reflect the percentage of students who have ever missed school because they felt they would be unsafe there; high school results reflect percentages of students who in the past 30 days missed school because they felt they would be unsafe at school or on the way to or from school.

In addition, 2% of students had carried a knife or club *on school property*, and 1% had carried a gun to school. Fifteen percent of students had at some time not attended school because of feeling unsafe at school, and 12% had not attended because they did not feel safe on the way to or from school. The percentage of middle school students who reported feeling unsafe at school increased from 6th to 7th grade, and decreased in 8th grade (see Figure 6).

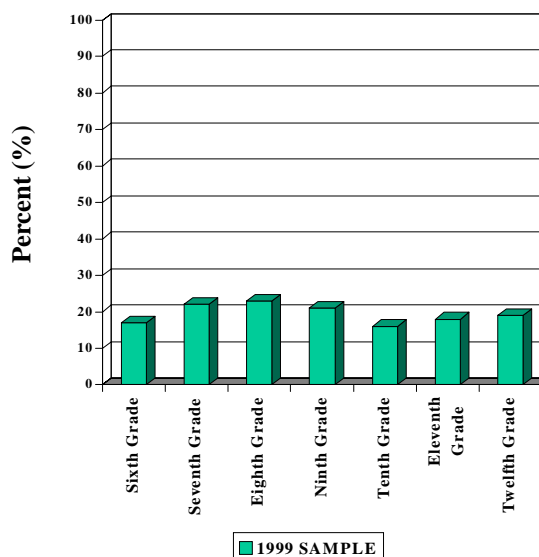
Changes over time. There has been a decrease in physical fighting during the past nine years, from 56% in 1991 to 49% in 1999. Questions about weapon carrying and safety have only been asked of middle school students from 1995 to 1999. The percentage of students who have carried a gun rose from 9% in 1995 to 12% in 1997, and fell to 4% in 1999. Club carrying

has had a similar pattern, increasing from 8% in 1995 to 10% in 1997, and decreasing to 6% in 1999. Knife carrying also increased from 1995 (21%) to 1997 (23%), and decreased in 1999 (15%).

Suicide Ideation

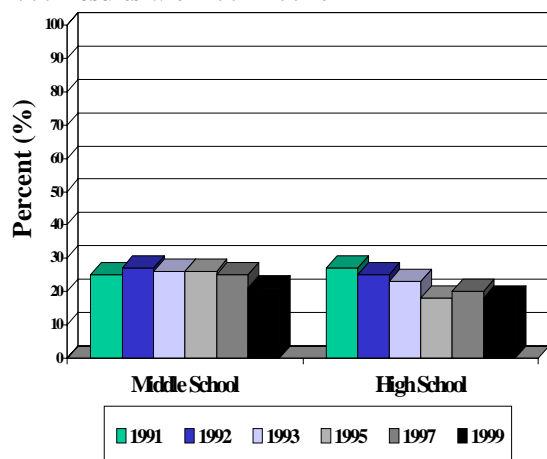
Results from 1999. Fourteen percent of the middle school students had felt sad and depressed on 10 to 30 days in the month prior to the survey. Twenty-one percent said they had at some time thought seriously about ending their own life. Serious thoughts of suicide were more common among females (24%) than males (18%) and increased by grade, from 17% in 6th grade to 23% in 8th grade (see Figure 7). Fourteen percent of students had made a plan to commit suicide. Females (16%) were more likely than males (12%) to have made a plan to kill themselves. Seventh and 8th graders were

Figure 7: Percentage of students who have seriously thought about committing suicide by grade.



NOTE: Middle school results reflect the percentage of students who have ever seriously thought about attempting suicide. High school results reflect the percentage of students who seriously considered attempting suicide in the past 12 months.

Figure 8: Percentage of students who have seriously thought about committing suicide: Comparison of 1999 results with 1991-1997.



NOTE: Middle school results for 1991 to 1993 reflect the percentage of students who seriously considered suicide in the past year; 1995 to 1999 results reflect the percentage who have ever seriously considered suicide. All high school results reflect the past year.

more likely to have made a suicide plan than were 6th graders (15%, 17%, and 10%, respectively). Of concern, 8% of the middle school students said they had made a suicide attempt. A larger percentage of female students (10%) than male students (6%) had attempted suicide.

Changes over time. The wording for several of the suicide items has changed over the years, making comparisons over time somewhat more difficult. The percentage of students who have seriously thought about ending their life has remained relatively stable over the years, though in 1999 it was at an all-time low of 21% (see Figure 8); however, the wording of this item changed as of 1995. From 1991 to 1993 students were asked if they had thought about ending their life *in the past year*, whereas in 1995, 1997, and 1999 they were asked if they had *ever* thought about ending their life. The item regarding a suicide plan also changed: from 1991 to 1993 students were asked whether they had made a suicide plan *in the past year*; in

1995, 1997, and 1999 they were asked if they had *ever* made a suicide plan. Interestingly, the percentage of students reporting a suicide plan has generally decreased over the years, from 18% in 1991 to 13% and 14% in 1997 and 1999, respectively, despite the broader wording of the question in recent years.

Finally, the percentage of students who have made a suicide attempt has decreased from 13% in 1991 to 8% in 1999, despite the same wording changes as noted above (i.e., changing from *past year* to *ever*).

New Behaviors. Students were asked three new items about verbal slurs in 1999. In the past 30 days, 16% of students had been the victim of a verbal slur because of their ethnicity, 22% had been the victim of a verbal slur because of their physical appearance, and 7% had been the victim of a verbal slur because of their gender or sexual orientation.

High School YRBS

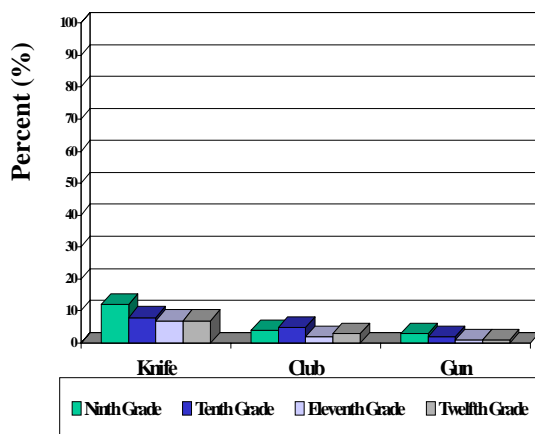
Fighting and Weapon Carrying

Results from 1999. In the 12 months prior to taking the survey, 5% of high school students had been threatened or injured with a weapon such as a gun, knife, or club, *on school property*; 25% had their property stolen or damaged at school. Twenty-three percent had been in a physical fight in the past 12 months, and 9% percent had been in a fight *on school property* during that time. Of students who had been in a fight, 10% required treatment by a doctor or nurse one or more times.

In the 30 days prior to the survey, 10% of students had carried a weapon of any kind, and 2% had carried a gun. Seven percent of students had carried a weapon *on school property*.

Five percent of students had not attended school on one or more days because of feeling unsafe at school or on the way to or from school. Knife, gun, and club carrying generally declined by grade level (see Figure 9). Males were more likely than females to report weapon carrying (club: 6% vs. 1%; knife: 12% vs. 5%;

Figure 9: Percentage of high school students who carried a weapon in the past month by grade.



gun: 3% vs. 1%). Physical fighting declined from 9th to 12th grade (from 33% to 20%). Males were more likely than females to report physical fighting (30% vs. 18%). The percentage of students who had missed school because they felt unsafe ranged from 4% in 11th grade to 7% in 9th grade (see Figure 6), and was about the same for males and females (6% vs. 5%).

Changes over time. In general, the percentage of high school students reporting violence-related incidents has decreased over the past nine years, including weapon carrying (from 21% in 1991 to 10% in 1999) and physical fighting (from 35% in 1991 to 23% in 1999).

Suicide Ideation

Results from 1999. Thirty percent of students had felt so sad or hopeless in the past 12 months that they stopped doing some of their usual activities. Nearly a fifth of high school students (18%) had seriously considered suicide in the past 12 months (see Figure 8), 15% had made a plan about how they would attempt suicide, and 7% had attempted suicide one or more times.

Among students who had attempted suicide, 25% had required treatment by a doctor or nurse because of an injury, poisoning, or overdose. The percentage of students who had attempted suicide in the past 12 months was highest in 9th graders (10%) and about equal in all other grades (6%, 6%, and 7% for 10th, 11th, and 12th graders, respectively). Suicide attempts were reported by more than three times as many females (10%) as males (3%). Females were significantly more likely than males to have considered (22% vs. 14%), planned (19% vs. 11%), and attempted (10% vs. 3%) suicide. Females were also slightly more likely to have received medical treatment as a result of a suicide attempt (26% vs. 24%).

Changes over time. From 1991 to 1999 there has been a general decrease in the percentage of high school students who have considered attempting suicide in the year prior to taking the survey, from 27% in 1991 to 18% in 1999 (see Figure 9). The percentage of students who have made a suicide plan has ranged between 14% and 18% over the years. The percentage of students who have attempted suicide has remained relatively stable, at 8% in 1991 and 7% in 1997 and 1999, with a peak of 10% in 1993. Finally, the overall percentage of students who have received medical treatment as a result of a suicide attempt has ranged between 2% and 3%.

New Behaviors. During the 30 days prior to the survey, 33% of high school students had been the victim of a verbal slur because of their ethnicity, physical appearance, gender, sexual orientation, or religion. In the year prior to taking the survey, 8% of students had been hit, slapped, or physically hurt by their boyfriend or girlfriend. This percentage increased by grade,

from 7% in 9th grade to 10% in 12th grade, and was higher for females (9%) than males (6%). Seven percent of students had been forced to have sex when they did not want to at least once in their life. This percentage doubled from 5% in 9th grade to 10% in 12th grade, and was higher for females (9%) than males (4%).

Tobacco Use

Tobacco use, including cigarette smoking, cigar smoking, and smokeless tobacco use, is the single leading preventable cause of death in the United States. Each year smoking causes more than 400,000 premature deaths and 5 million years of potential life lost. The estimated direct and indirect costs associated with smoking in the United States exceed \$68 billion annually.¹⁴

During the first decades of the 20th century, lung cancer was rare; however, as cigarette smoking became increasingly popular, first among men and later among women, the incidence of lung cancer became epidemic. In 1930, the lung cancer death rate for men was 4.9 per 100,000; in 1990, the rate had increased to 75.6 per 100,000.¹⁵ Other diseases and conditions now known to be caused by tobacco use include heart disease, atherosclerotic peripheral vascular disease, laryngeal, oral and esophageal cancer, chronic obstructive pulmonary disease, intrauterine growth retardation, and low birthweight. During the latter part of the 20th century, the adverse health effects from exposure to environmental tobacco smoke also were documented to cause lung cancer, asthma, respiratory infection, and decreased pulmonary function.¹⁶ In addition, smokeless tobacco use causes oral cancer and other oral health problems; approximately 7% of the adult population are current users of smokeless tobacco.

Each day nearly 3000 young people take up daily smoking. Three out of five children who try cigarettes will become daily smokers, and approximately one of every two lifelong smokers will eventually die from tobacco-related illnesses.¹⁷ Approximately 80% of tobacco use occurs for the first time among young people less than 18 years of age.¹⁴ In 1997, 36% of high schools students reported current cigarette use and 22% reported current cigar use. In

addition, 9% of high school students and 21% of white male high school students reported current smokeless tobacco use.⁹ The prevalence of cigarette smoking nationwide among middle and high school students increased during the 1990s. Based on the National Youth Tobacco Survey, 12.8% of middle school students use any type of tobacco.¹⁸ If current smoking patterns continue, an estimated 25 million persons alive today, including 5 million children younger than 18 years of age, will die prematurely of smoking-attributable diseases.¹⁷ Smoking in adolescents is also associated with drinking and illicit drug use, and poor school performance.

The 1999 San Francisco YRBS asked students to report their history of and current use of cigarettes and smokeless tobacco products, in general and on school property. In addition, the survey asked students about attempts to quit smoking, and methods of obtaining tobacco products.

Figure 10: Percentage of students who have ever smoked cigarettes by grade.

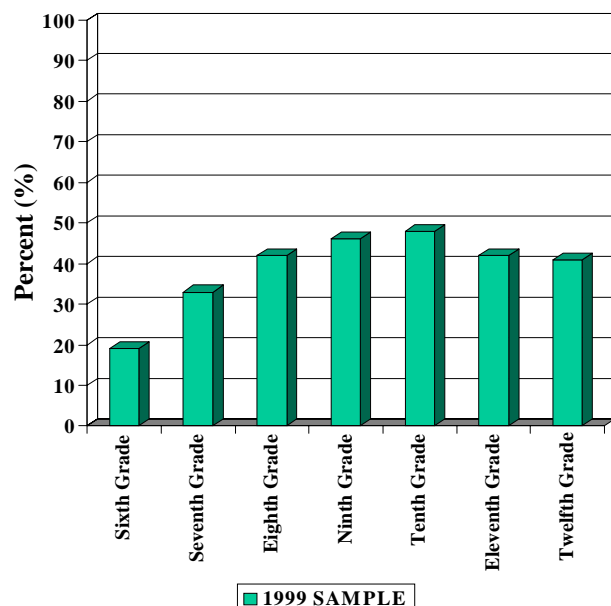
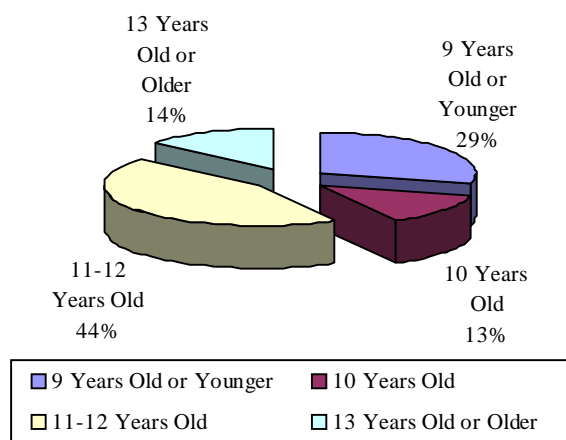


Figure 11: Initiation of tobacco use among middle school students who have smoked (n=395).



Middle School YRBS

Results from 1999. Nearly one-third (32%) of middle school students reported that they had tried cigarette smoking. This percentage increased by grade level, from 19% to 42% (see Figure 10) and was higher for males (34%) than for females (30%). Of students who had smoked, 42% smoked their first whole cigarette prior to age 11. An additional 44% started smoking when they were 11 or 12 years old (see Figure 11). Three percent had used chewing tobacco or snuff in the past month.

Nine percent of middle school youth had smoked cigarettes in the past month; however, most of these current smokers (64%) had smoked on five or fewer days, and 88% had smoked five or fewer cigarettes per day. Students were asked how they had usually obtained their cigarettes in the 30 days prior to the survey. Twenty-six percent of smokers said they borrowed them from someone, 15% gave someone money to buy them, 14% stole them, and 13% purchased them in a store. Only 26% of students who had bought cigarettes in a store were asked to show proof of age.

Changes over time. There has been a decrease in lifetime cigarette use over the years, from 39% in 1991 to 32% in 1999. Recent cigarette use has remained relatively stable (11% to 12%), with a peak of 16% in 1993 and an all-time low of 9% in 1999.

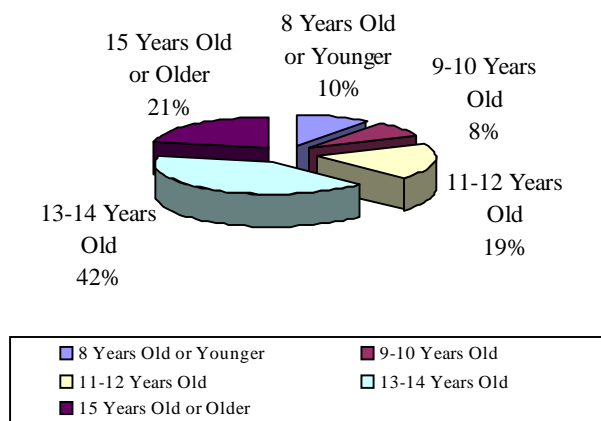
High School YRBS

Results from 1999. Fifty-six percent of high school students reported having tried cigarettes. In the month prior to the survey, one in five students (19%) had smoked cigarettes, 4% had smoked regularly (daily), and 2% had used smokeless tobacco. Nine percent had smoked cigarettes *on school property*.

Lifetime use of cigarettes decreased from 46% in 9th grade to 41% in 12th grade (see Figure 10). Of students who had smoked, 36% smoked their first whole cigarette before they were 13 years old. An additional 42% started smoking when they were 13 or 14 (see Figure 12).

Of those students who had smoked regularly in the month prior to the survey, 18% had smoked 6 or more cigarettes per day. Among these

Figure 12: Initiation of tobacco use among high school students who have smoked (n=628).



current smokers, 32% had purchased cigarettes in a store (convenience store, supermarket, or gas station) during the past 30 days. Forty-six percent of students who had bought cigarettes in a store were asked to show proof of age. Fourteen percent of students had ever smoked regularly (at least one cigarette every day for 30 days). Of these students, 72% have tried to quit at some time (24% of all high school students).

Males were more likely than females to have tried smoking (57% vs. 54%), to have smoked prior to age 13 (41% vs. 32% of those who had smoked), to have smoked in the past 30 days (19% vs. 18%), and to have smoked *on school property* (10% vs. 8%).

Changes over time. From 1991 to 1993, there was a significant increase in the percentage of students who reported smoking in the past month (from 14% to 22%); this rate decreased slightly to 20% in 1995, and to 19% in both 1997 and 1999. There have been no significant changes in daily smoking. Lifetime cigarette use has fluctuated between 56 and 62 percent.

Alcohol Use

The use of alcohol has an enormous impact on the physical, mental and social health of the nation's youth. Each year in the United States, approximately 100,000 deaths result from the misuse of alcohol.¹⁹ Alcohol use is a factor in approximately half of all deaths from motor vehicle crashes and from intentional injuries.²⁰ Alcohol use has also been linked to physical fights, academic and occupational problems, and illegal behavior. Long-term alcohol misuse is associated with liver disease, cancer, cardiovascular disease, and neurological damage. Dependence on alcohol is also associated with psychiatric problems such as depression, anxiety or antisocial personality disorder. Alcohol use contributes markedly to infant morbidity and mortality.

Unfortunately, alcohol is also the most widely used substance among adolescents, and during the nineties there has been a decline in adolescents' estimates of the risks involved in frequent or heavy alcohol consumption.²¹ Since 1991, current use of alcohol has remained steady at about half of all high school students with nearly one third of all 9th-12th grade students reporting episodic heavy drinking.⁹ Adolescent alcohol use can threaten health directly. In several cases this past year, young people have died after consuming toxic levels of alcohol at parties. Although most adults can drink responsibly and safely, recent research evidence indicates that people who begin drinking before age 15 are four times more likely to develop alcohol dependence and more than twice as likely to develop alcohol abuse than those who delay drinking until age 21; alcohol dependence or alcoholism is estimated to affect one in thirteen Americans.^{22,23}

Findings from the National Household Survey on Drug Abuse (NHSDA), show a substantial

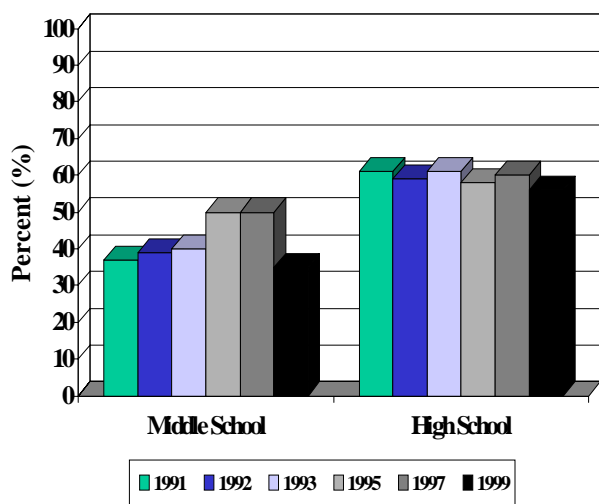
decrease in alcohol use by youths age 12 to 17 during the past decade. Since the late 1980's, the rate of past month alcohol use among youths has declined from 41 percent in 1985 to 19 percent in 1998. The rates for binge alcohol use (drinking 5 or more drinks on at least one occasion in the past month) have also declined from 22 percent in 1985 to 8 percent in 1998. Yet despite these trends, it is important to note that in 1998, an estimated one in five teenagers (4.3 million) were current alcohol drinkers and one in thirteen teenagers (1.7 million) were binge alcohol drinkers.²⁴ Alcohol use is strongly associated with illicit drug and cigarette use, as well as a major cause of fatal motor vehicle crashes. Surveys of adolescents suggest that alcohol use is associated with risky sexual behavior and increased vulnerability to coercive sexual activity; other alcohol-related problems among youth include missing school or work and getting arrested.^{25, 26}

The 1999 San Francisco YRBS asked students to report lifetime and recent patterns of alcohol use on and off school property.

Middle School YRBS

Results from 1999. Thirty-five percent of middle school students reported having tried alcohol. (Note: In responding to questions about alcohol use, students were told not to include drinking for religious reasons.) The percentage of students who had tried alcohol increased significantly by grade, from 23% in 6th grade to 43% in 8th grade, and was higher for males (37%) than females (32%). Among students who had tried alcohol, 53% did so before their 11th birthday. An additional 34% started drinking when they were 11 or 12 (see Figure 14).

Figure 13: Percentage of students who have tried alcohol: Comparison of 1999 results with 1991-1997.

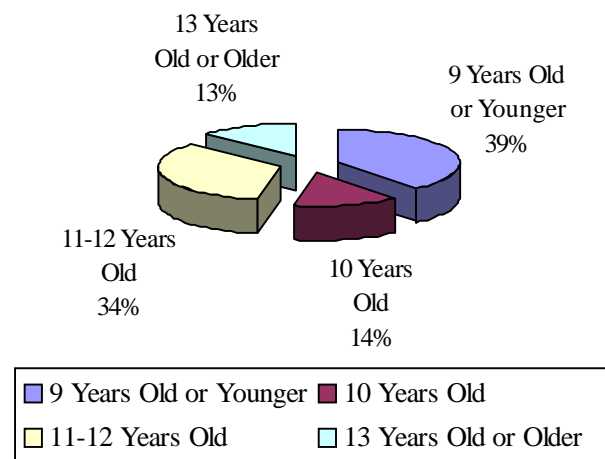


Fourteen percent of middle school students reported drinking alcohol in the month prior to the survey. Among these current drinkers, one in five (19%) had used alcohol on six or more days.

To assess heavy drinking patterns, students were asked to indicate the number of days they had consumed five or more drinks in a row in the past month. Five percent of all middle school students who completed the survey reported excessive drinking in the previous month. Seventh and eighth graders were more likely to report heavy drinking than were sixth graders (7%, 6%, and 2%, respectively). Males were more likely to report drinking heavily than females (7% vs. 4%).

Changes over time. Lifetime alcohol use has remained relatively constant, with the exception of a peak in 1995 and 1997 (see Figure 13). The percentage of middle school students who had their first drink prior to age 11 has in-

Figure 14: Initiation of alcohol use among middle school students who have used alcohol (n=635).



creased drastically, from 19% in 1991 to 53% in 1999. Heavy drinking fluctuated between 6% and 9% from 1991 to 1997, and reached a low of 5% in 1999.

High School YRBS

Results from 1999. Fifty-six percent of high school students reported having tried alcohol (lifetime use), while 27% had consumed at least one drink of alcohol during the past 30 days (recent use). (Note: In responding to questions about alcohol use, students were told not to include drinking for religious reasons.) Lifetime alcohol use increased from 50% in 9th grade to 61% in 12th grade. Recent use also increased by grade, from 25% in 9th grade to 31% in 12th grade.

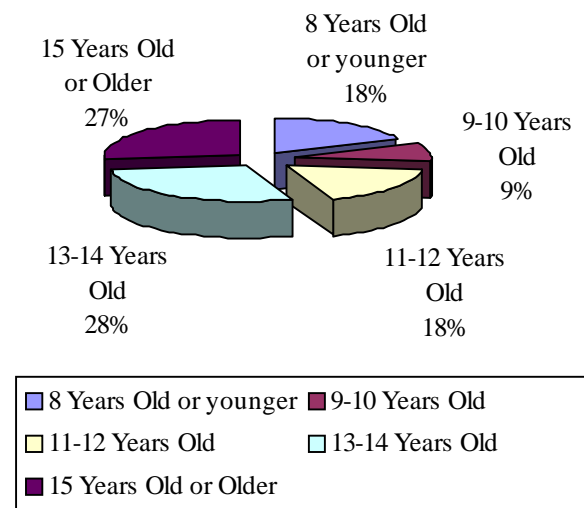
Among students who had tried alcohol, almost half (44%) did so before their 13th birthday. An additional 29% started drinking when they were 13 or 14 years old (see Figure 15). Of those who had tried alcohol, more males (52%) than females (38%) reported having their first

drink prior to age 13. Five percent of all students had used alcohol *on school property* during the past 30 days. This percentage was the same for males and females. Of students who reported having at least one drink of alcohol in the past 30 days, 9% drank on 10 or more days and 1% drank every day.

To assess heavy drinking patterns, students were asked to indicate the number of days in the past month on which they had consumed five or more drinks in a row. Approximately 11% of students reported excessive drinking. Heavy alcohol use increased by grade level, from 9% in 9th grade to 15% in 12th grade. Males were more likely to report heavy drinking than were females (13% vs. 10%). Of concern, among these heavy drinkers 30% had consumed five or more drinks on three or more days in the month prior to the survey.

Changes over time. Lifetime alcohol use among high school students ranged between 58% and 61% between 1991 and 1997, and fell to a low of 56% in 1999 (see Figure 13). Recent alcohol use has remained relatively steady, between 26% and 29%, with the exception of a peak in 1993 (33%). Heavy alcohol use has also remained stable, between 11% and 13%, with a peak of 16% in 1993.

Figure 15: Initiation of alcohol use among high school students who have used alcohol (n=832).



Drug Use

The use of illegal drugs in adolescence can have both short and long-term health consequences and is associated with intentional and unintentional injuries, early unwanted pregnancy, school failure, and delinquency.²⁷ Heavy marijuana use, for example, impairs cognitive functioning, coordination, and learning.^{28,29} Use of inhalants can cause severe damage to the brain and central nervous system.³⁰ Injected drug use, particularly when it involves the sharing of needles, is a major transmission route for HIV infection. Dependence on drugs is also associated with psychiatric problems such as depression, anxiety or antisocial personality disorder. Drug use contributes directly and indirectly to the HIV epidemic, and drug use contributes markedly to infant morbidity and mortality.

Unfortunately, substance use among high school students is high, and in some cases increasing. Current marijuana use has nearly doubled from 14.7% in 1991 to 26.2% in 1997.⁹ According to the most recent National Household Survey, an annual survey conducted by the Substance Abuse and Mental Health Services, approximately 13.6 million Americans (6.1 percent of those 12 years and older) can be considered current users of some illicit drug; that is, they used an illegal drug at least once in the previous month; an estimated 1.8 million (0.8 percent) Americans age 12 and older were current users of cocaine in 1998. One in ten (9.9%) youths aged 12-17 reported current use of illicit drugs in 1998; 8.3 percent were current users of marijuana; and 1.1 percent were current use of inhalants. An estimated 4.1 million people met diagnostic criteria for dependence on illicit drugs in 1997 and 1998, including 1.1 million youths age 12-17.²⁷ In 1996, there were 14,843 deaths from drug-induced causes (legal and illegal drugs), and 142,164 cocaine-related emergency room episodes in 1995.³¹

Unfortunately, current adolescent attitudes and beliefs do not reflect the seriousness of illegal drug use. Nationally, there was a substantial decrease in the nineties in the percentage of students who view drug use, especially marijuana use, as posing any great risk to health.

The San Francisco YRBS asked students to report recent and lifetime use of a variety of illicit drugs, including marijuana, cocaine (all forms, including crack/freebase), inhalants, steroids, and other illegal drugs. Students were also asked specifically about injection of illegal drugs.

Middle School YRBS

Results from 1999. Twelve percent of middle school students reported having used marijuana at some time in their lives. Marijuana use increased significantly by grade, from 4% to 19% (see Figure 16). Males were more likely to have used marijuana than females (13% vs. 10%). Of those who reported prior use, over half (52%) tried marijuana before the age of 12.

Figure 16: Percentage of students who have tried marijuana by grade.

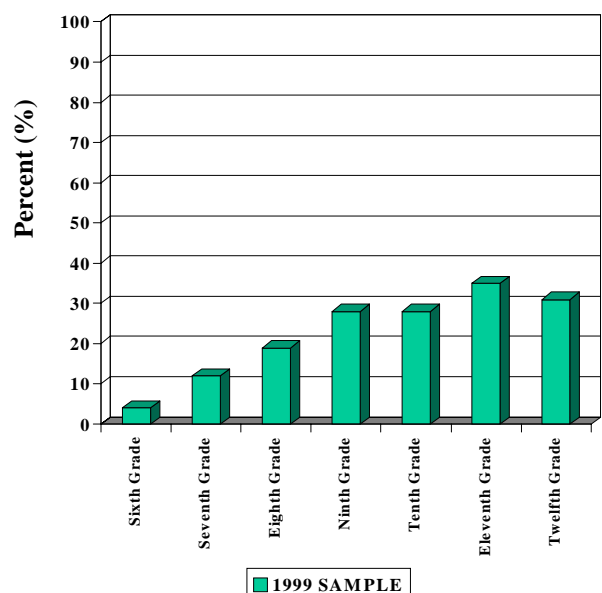
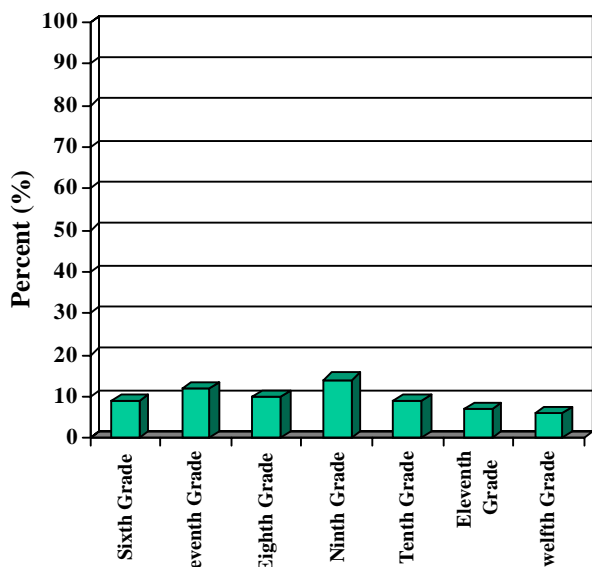


Figure 17: Percentage of students who have used inhalants to get high by grade.

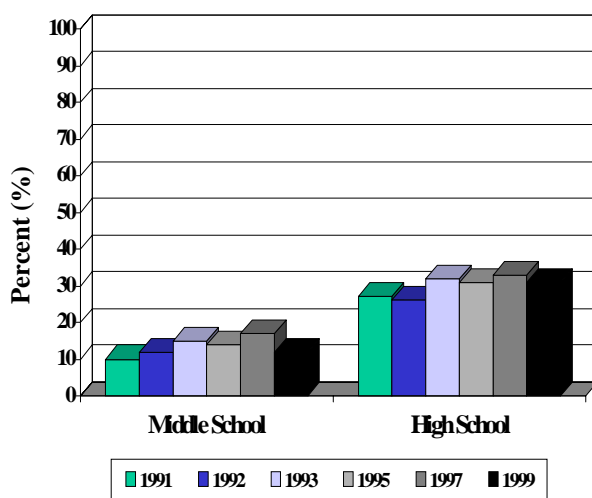


Approximately 5% of the middle school students had tried any form of cocaine. Cocaine use ranged from 4% in 8th grade to 5% in 6th grade and was similar among males (5%) and females (4%).

Ten percent of middle school students had sniffed glue or other inhalants. Two percent had used steroids, and 2% had used a needle to inject drugs. Inhalant use increased from 6th to 7th grade, and decreased in 8th grade (see Figure 17).

Changes over time. There has been a general increase in lifetime marijuana use in middle school students over the years, from 10% in 1991 to 17% in 1997, though this rate declined to 12% in 1999 (see Figure 18). Cocaine use has also increased, from 1% in 1991 to 5% in both 1997 and 1999. Use of inhalants more than doubled from 1991 (7%) to 1997 (15%), and decreased to 10% in 1999.

Figure 18: Percentage of students who have tried marijuana: Comparison of 1999 results with 1991-1997.



High School YRBS

Results from 1999. One third of all high school students (31%) reported having tried marijuana. Among these students, nearly one quarter (27%) used marijuana for the first time before age 13, and an additional 41% initiated use at 13 or 14. Lifetime use increased from 9th and 10th grade (28%) to 11th grade (35%), and decreased in 12th grade to 31% (see Figure 16). Fifteen percent of all students had used marijuana in the 30 days prior to the survey, and 6% had used marijuana *on school property* during that time. Lifetime marijuana use was similar among males (30%) and females (31%).

Five percent of high school students had used any form of cocaine in their lifetime, while 2% had used any form in the past 30 days. Of

those who had used cocaine, 20% reported starting before the age of 13. An additional 35% started at age 13 or 14. Cocaine use increased by grade level, from 3% in 9th grade to 6% in 12th grade, and was higher among males (6%) than females (4%). Three percent of students reported having tried crack or freebase forms of cocaine (4% of males and 3% of females).

Nine percent of students reported having used inhalants at some time in their life (3% in the past 30 days), 2% had used steroids without a doctor's prescription, and 9% had used "other" illegal drugs (e.g., LSD, PCP, ecstasy, mushrooms, speed, ice, heroin). One percent of students had used injected drugs.

Use of inhalants decreased by grade level (see Figure 17), while use of "other" illegal drugs increased. Use of injected drugs remained about the same across grade level, and steroid use ranged between 1% and 3%. Male students

reported slightly higher lifetime use of cocaine, crack, steroids, and "other" illegal drugs; females reported a slightly higher rate of marijuana use. Inhalant and injected drug use were about equal in males and females.

During the year prior to the survey, 37% of students had been offered, sold, or given an illegal drug *on school property*.

Changes over time. There has been a general increase in marijuana use in high school students, from 27% in 1991 to 33% in 1997, and a slight decrease in 1999 to 31% (see Figure 18). Recent marijuana use rose from 14% in 1991 to 17% in 1997, and fell to 15% in 1999.

Lifetime cocaine use has generally remained steady over the years (6% to 7%), though it was at an all-time low of 5% in 1999. Recent cocaine and steroid use also have remained steady (between 2% and 3%). "Other" illegal drug use has fluctuated between 8% and 10%.

Sexual Behaviors

Unprotected sexual intercourse and multiple sex partners place young people at risk for HIV infection, other STDs, and pregnancy. Each year, approximately three million cases of sexually transmitted diseases (STDs) occur among teenagers, which account for one quarter of the 12 million STD cases estimated annually.³² The United States has the highest teenage pregnancy rate of all developed countries; about 1 million teenagers become pregnant each year, in which 95% of those pregnancies are unintended, and almost one third end in abortions. Public costs from teenage childbearing totaled \$120 billion from 1985-1990; \$48 billion could have saved if each birth had been postponed until the mother was at least 20 years old.³³ The birth rate for teenagers in 1998 was 51.1 live birth per 1,000 women aged 15-19 years, 2 percent lower than the rate in 1997, and 18 percent lower than in 1991. The U.S. teen birth rate rose 24 percent from 1986 to 1991, when it reached 62.1, the highest level recorded in 20 years (64.5 in 1971).³⁴ Human immunodeficiency virus (HIV) infection is the sixth leading cause of death among persons aged 15-24 years in the United States. As of June 1999, CDC reported 104,744 persons "living with HIV infection" and 378,703 persons "living with AIDS" in the United States. In 1998, 1,798 young people (ages 13 to 24) were reported with AIDS, bringing the cumulative total to 27,860 cases of AIDS in this age group.³⁵ Because HIV infection frequently occurs more than a decade before the onset of AIDS, these figures underestimate the extent of HIV infection in youths. Among 13-24 year olds, 51% of all AIDS cases reported among males in 1998 were among young men who have sex with men (MSM); 10% were among injection drug users (IDU); and 9% were among young men infected homosexually. In 1998, among young women the same age, 47% were infected

heterosexually and 14% were IDUs.³⁶ In 1997, 48% of high school students had ever had sexual intercourse, 16% of these high school students had had four or more sex partners during their lifetime, and 43% of sexually active high school students did not use a condom at last sexual intercourse.⁹

The 1999 San Francisco YRBS asked students to report lifetime and recent sexual intercourse, including the number and gender of sexual partners, perception of sexual intercourse, age at first intercourse, use of condoms for pregnancy prevention and STD prevention, use of other forms of contraception, use of alcohol/drugs before sexual intercourse, and locations for obtaining condoms.

Middle School YRBS

Results from 1999. Ten percent of middle school students reported having engaged in sexual intercourse. This percentage increased from 5% in 6th grade to 14% in 8th grade. Males were twice as likely to have had sex than

Figure 19: Age of initiation of sexual intercourse among sexually experienced middle school students (N=191).

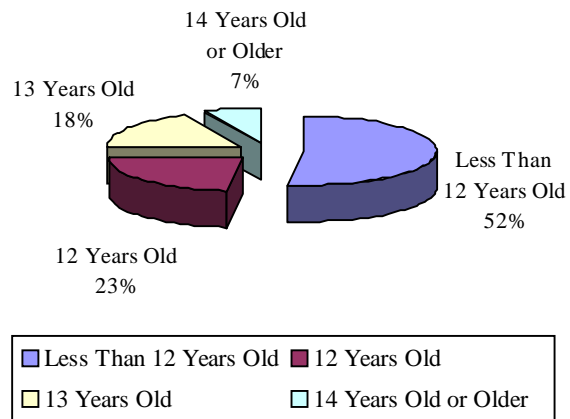


Figure 20: Number of sexual partners among sexually experienced middle school students (N=193).

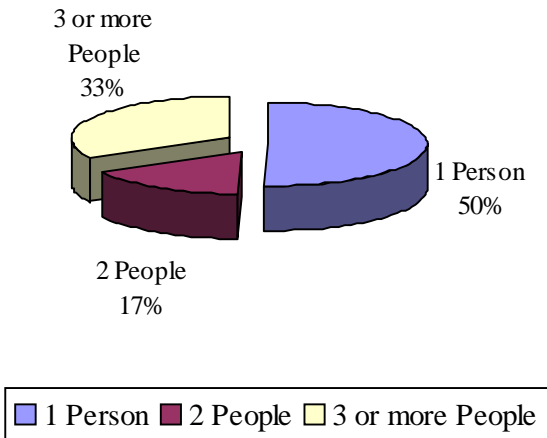
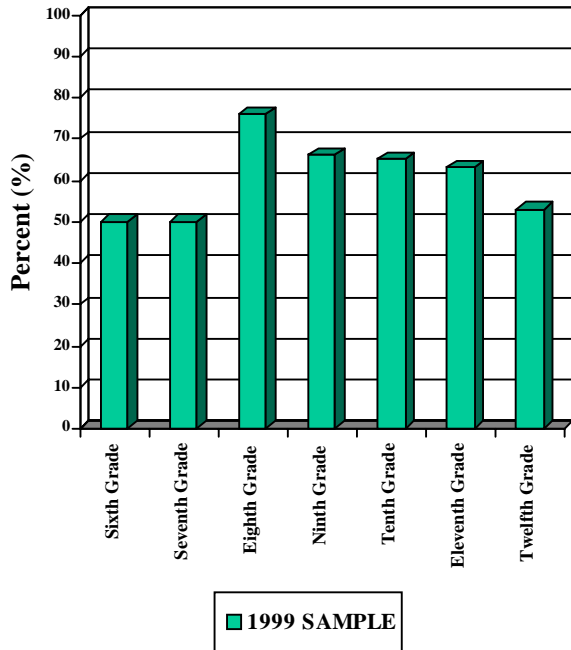


Figure 21: Percentage of students who used a condom the last time they had sex by grade.



NOTE: Middle school results for 1991 to 1993 reflect the percentage of students who chose "condom" as the one method of birth control they used at last intercourse; 1995 to 1999 results reflect the percentage of students who reported using a condom at last intercourse. High school results reflect the latter.

females (14% vs. 7%). Among those who reported having sexual intercourse, 52% did so before their 12th birthday, and an additional 40% did so at 12 or 13 (see Figure 19). Of concern, 33% of the sexually experienced students reported having three or more partners (see Figure 20). One in four sexually experienced students (26%) used alcohol or drugs before they had intercourse the last time. At last intercourse, 62% of the sexually experienced students used condoms. Twenty-eight percent of the sexually experienced students used no method of birth control. Condom use remained about the same in 6th and 7th grades, and increased in 8th grade (see Figure 21). Approximately 7% of sexually experienced students (1% of all middle school students) had been told by a doctor or nurse that they have a sexually transmitted disease.

Changes over time. The percentage of students who have had sexual intercourse remained steady from 1991 through 1993 (between 16% and 18%) and dropped to 10% in 1995. There was a slight increase in 1997 to 13% (see Figure 22) and a return to 10% in 1999. From

Figure 22: Percentage of students who have had sex: Comparison of 1999 results with 1991 -1997.

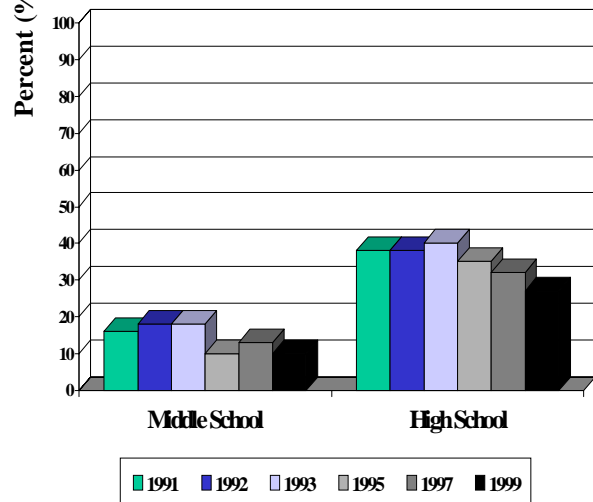
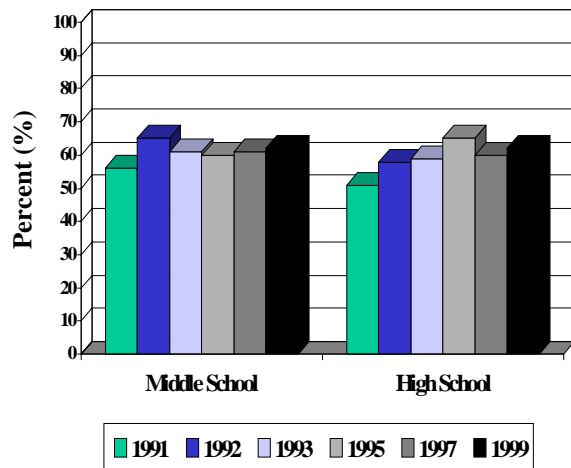


Figure 23: Percentage of students who used a condom the last time they had sex: Comparison of 1999 results with 1991-1997.

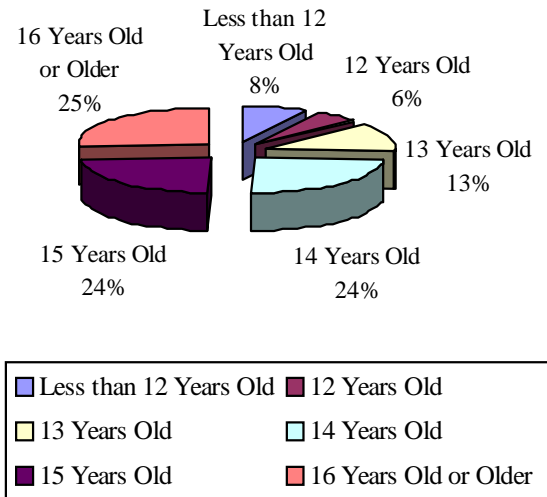


1995 to 1999, condom use at last intercourse has ranged between 60% and 62% (see Figure 23). From 1995 to 1999, students were specifically asked whether they had used a condom at last intercourse. From 1991 to 1993 students were asked what *one* method they had used to prevent pregnancy from a list of numerous methods. The percentage of students reporting condom use rose from 56% in 1991 to 61% in 1993, though these figures may underrepresent the percentage of students who used condoms, because students who used condoms along with another method were forced to report on only one method.

New Behaviors. Students were asked how likely it was that they would have sex in the next year. Seventeen percent responded, "I am sure that I will" or "I probably will." This percentage increased from 12% in 6th grade to 19% in 8th grade, and was more than twice as high for males (23%) than for females (10%).

Eighty-six percent of students (91% of females and 82% of males) agreed or strongly agreed

Figure 24: Age of initiation of sexual intercourse among sexually experienced high school students (N=408).



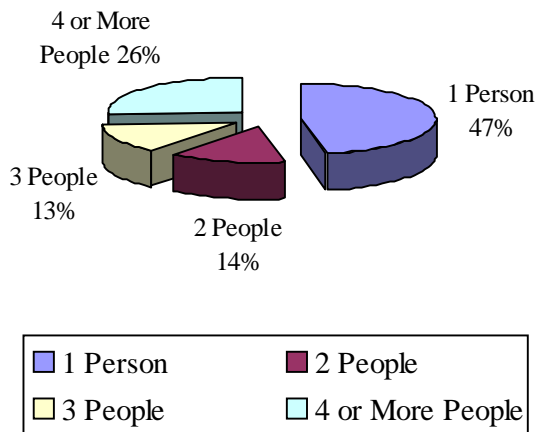
with the statement, "For students my age, not having sexual intercourse is a better choice than having sexual intercourse."

High School YRBS

Results from 1999. More than a quarter of high school students (27%) reported having sexual intercourse in their lifetime. The percentage of students who reported having sex almost doubled from 9th grade (20%) to 12th grade (39%). Of the sexually experienced students, 14% had sex before age 13, and an additional 37% had sex at age 13 or 14 (see Figure 24). Twenty-six percent of the sexually experienced students reported having sex with four or more partners in their life (see Figure 25). Almost a fifth of students (18%) had sex in the past 3 months. Three percent of male students and 2% of female students reported sexual contact with a member of the same sex.

Approximately 14% of sexually experienced students (5% of all high school students) reported having been pregnant or having gotten

Figure 25: Number of sexual partners among sexually experienced high school students (N=408).



someone pregnant. Approximately 10% of sexually experienced students (3% of all high school students) had been told by a doctor or nurse that they have a sexually transmitted disease.

Among all contraceptive methods listed, condoms were the most commonly used. Sixty-two percent of sexually experienced students used a condom at last intercourse. Of those who used a condom at last intercourse, 71% used them primarily to prevent pregnancy, and 20% used them to prevent HIV infection and other diseases. Students were asked how they obtained their condoms the last time they used them. Seventeen percent got them from a condom availability program at school; 22% from a family planning clinic, hospital, or health clinic; 32% from a store; and 18% from a friend or relative. Condom use among sexually active students declined by grade level (see Figure 21).

The percentage of sexually active students who used birth control pills to prevent pregnancy increased from 3% in 9th grade to 9% in 12th grade, and peaked at 12% in the 11th grade.

(Note: The item used called for respondents to choose which *one* method of contraception they used at last intercourse from a list of several). Fifteen percent of students did not use any method of pregnancy prevention the last time they had intercourse, and 11% used withdrawal. The percentage of students who did not use birth control at last intercourse decreased from 21% in 9th grade to 8% in 11th grade, and increased to 15% in 12th grade. Seventeen percent of the sexually experienced students used alcohol or drugs before they had sexual intercourse the last time.

Lifetime sexual activity is similar among adolescent males (26%) and females (27%), but recent sexual activity (past 3 months) is higher among females than males (21% vs. 15%). Among sexually active students, a greater percentage of males than females report higher incidence of intercourse prior to age 13 (20% vs. 9%), four or more sexual partners in their lifetime (35% vs. 19%), alcohol or drug use before last intercourse (18% vs. 16%), and condom use at last intercourse (70% vs. 56%).

Changes over time. Lifetime sexual intercourse rates remained fairly stable (between 38% and 40%) from 1991 through 1993, and dropped in 1995 (35%) and 1997 (32%). In 1999 lifetime sexual intercourse fell to a low of 27% (see Figure 22).

From 1991 to 1995 the percentage of students who had sex before age 13 ranged between 18% and 22%. In 1997 this percentage fell to 12%, and in 1999 it rose slightly to 14%. The percentage of students who have had sex with four or more partners has declined in recent years, from 35% in 1993 to 26% in 1999.

Pregnancy rates have also dropped recently, from 10% in 1993 to 5% in 1999. Condom use increased from 1993 (59%) to 1995 (65%), but decreased in 1997 (60%); in 1999 it rose slightly to 62% (see Figure 23). Alcohol or drug use before last intercourse has also declined recently, from 20% in 1993 to 15% and 16% in 1995 and 1997, respectively; this percentage rose slightly in 1999 to 17%.

Dietary and Exercise Patterns

Poor diet and physical inactivity account for an estimated 300,000 deaths per year, second only to tobacco use among preventable causes of death.³⁷ A growing obesity epidemic is threatening the health of millions of Americans in the United States. Overall, about 10 percent of U.S. children and half of American adults are overweight, according to the Department of Health and Human Services. The economic cost of obesity is approximately \$100 billion (1995 dollars).³⁸ Research shows that 60% of overweight 5 to 10 year old children already have at least one risk factor for heart disease, including hyperlipidemia and elevated blood pressure or insulin levels.³⁷

Healthy eating is associated with reduced risk for many diseases, including the three leading causes of death: heart disease, cancer, and stroke. Healthy eating in childhood and adolescence is important for proper growth and development and can prevent health problems such as obesity, dental caries, and iron deficiency anemia. Most young people are not following "Dietary Guidelines for Americans" recommendations: of U.S. youth aged 6-19, 67% exceed dietary guidelines recommendations for fat intake, 72% exceed recommendations for saturated fat intake, and only 18% eat the recommended five daily servings of fruits and vegetables (when fried potatoes and potato chips are excluded).³⁷

Physical activity reduces the risk of premature mortality in general, and of coronary heart disease, hypertension, colon cancer, and diabetes mellitus in particular. Regular physical activity in childhood and adolescence improves strength and endurance, helps build healthy bones and muscles, helps control weight, reduces anxiety and stress, increases self-esteem, and may improve blood pressure and

cholesterol levels. Positive experiences with physical activity at a young age help lay the basis for being regularly active throughout life. Nearly half of young people aged 12-21 years do not regularly engage in vigorous physical activity, and participation in physical activity declines strikingly as children age. About 14 percent report no recent physical activity. Inactivity is more common among females (14%) than males (7%) and among black females (21%) than white females (12%).³⁹

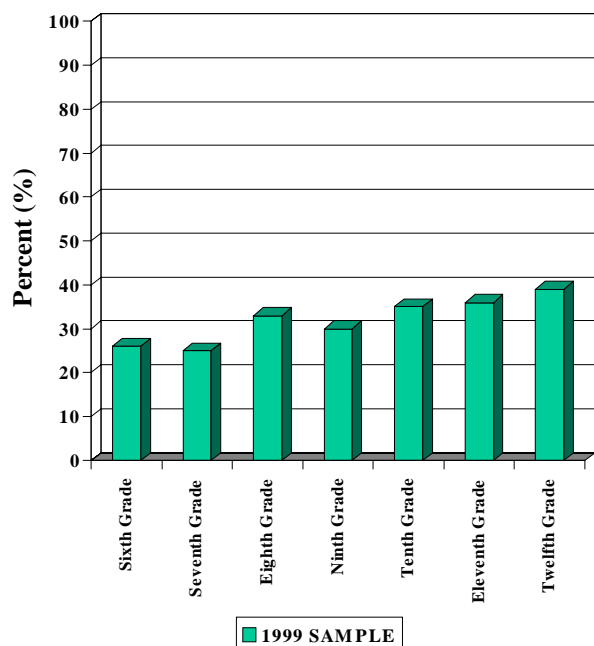
Low levels of physical activity and poor eating habits among young people may be two factors responsible for the steep increases in childhood obesity seen in recent years: the percentage of young people who are overweight has more than doubled in the past 30 years.³⁷ In addition, epidemiological studies have shown increased television watching and the decline in the proportion of American children eating dinner with their family to be risk factors for the development of obesity in children.

The 1999 San Francisco YRBS asked students to report self-perceptions of their body weight, efforts to change/maintain body weight, food choices, behaviors that may lead to eating disorders and other health problems and exercise patterns.

Middle School YRBS

Results from 1999. Twenty-eight percent of middle school students described themselves as slightly or very overweight. This rate increased from 26% in 6th grade to 33% in 8th grade (see Figure 26). Females were more likely to consider themselves overweight than were males (32% vs. 25%). Forty percent of all students were trying to lose weight at the time of the survey; this percentage decreased from

Figure 26: Percentage of students who describe themselves slightly or very overweight.



6th to 7th grade, and increased from 7th to 8th grade. Significantly more females than males were trying to lose weight (46% vs. 35%).

When asked what they had ever done to lose or keep from gaining weight, 39% of students reported having eaten less food, fewer calories, or foods low in fat (45% of females and 33% of males). Fifty-nine percent had exercised (61% of females and 57% of males). Four percent had vomited (4% of females and 3% of males), and three percent had taken diet pills, powders, or liquids (4% of females and 2% of males). Eighth graders were more likely to have exercised to lose weight than 6th and 7th graders (61%, 58%, and 57%, respectively). A similar pattern was found for dieting. Fasting, use of diet pills, and vomiting increased slightly from 6th to 8th grade.

Students were asked about their food intake on the day before completing the survey. Almost

half of the students (48%) had eaten fruit, and 41% had consumed fruit juice two or more times. Twenty-two percent had eaten cooked vegetables, while 9% had eaten green salad two or more times. The percentages of students who had eaten fruit and cooked vegetables decreased by grade level; the percentages who had consumed juice and salad remained about the same. On the day prior to the survey, 13% of students had eaten hamburgers, hot dogs, or sausage; 15% had eaten french fries or potato chips; and 20% had eaten cookies, doughnuts, pie, or cake two or more times.

The majority of the middle school students (72%) had engaged in exercise that made them sweat or breathe hard on three or more days in the week prior to the survey. In fact, 52% had exercised strenuously on five to seven days. Aerobic exercise patterns remained fairly consistent across grade level (see Figure 27). Males were more likely to have participated in aerobic activities than were females (78% vs.

Figure 27: Percentage of students who did aerobic exercise three or more days in the past week by grade.

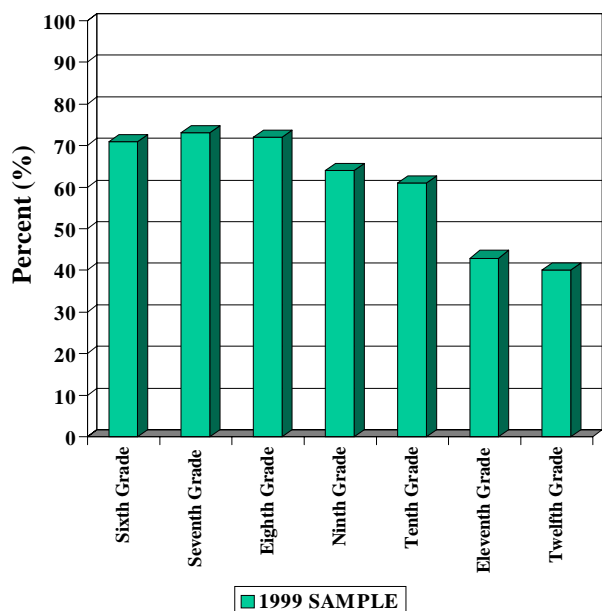
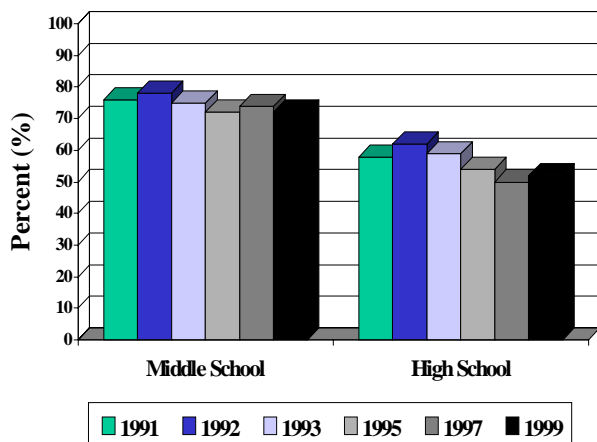


Figure 28: Percentage of students who did aerobic exercise three or more days in the past week: Comparison of 1999 results with 1991-1997.



66%). Fifty-two percent of students had done strengthening exercises, and 66% had done stretching exercises on three or more days in the week prior to the survey. Males were more likely than females to have engaged in strengthening and stretching exercises.

Eighty-nine percent of the students reported attending physical education classes on all five school days. Forty-one percent reported playing on sports teams run by their school or community groups at the time of the survey.

Changes over time. During the past nine years, the percentage of students who describe themselves as slightly or very overweight has remained stable, between 26% and 28%. The percentage trying to lose weight remained between 34% and 35% percent from 1991 to 1995, and increased in 1997 and 1999 to 39% and 40%, respectively.

In the past three administrations of the YRBS (1995 to 1999) students were asked whether they had ever vomited or taken laxatives to lose weight, and whether they had taken diet pills to lose weight (in 1999 they were asked whether

they had taken diet pills, powders, or liquids without a doctor's prescription). The percentage of students who reported vomiting or laxative use remained stable from 1995 to 1999 (4%), and the percentage who had taken diet pills ranged from 3% to 4%. In previous years (1991 to 1993), students were asked to choose one method from a list of methods they had used to lose weight in the past seven days. None or almost none of the students reported vomiting or laxatives as their one method for losing weight on the 1991-1993 surveys. These results were likely due to the fact that there were other more commonly used options available, such as dieting and exercising.

Participation in aerobic activity (defined as three or more days in the past week) has fluctuated between 72% and 78% over the years (see Figure 28). Strengthening exercises have decreased, from 61% in 1993 to 52% in 1999, though up from 1995 (46%) and 1997 (50%). Stretching has also decreased, from 73% in 1993 to 66% in 1999.

New Behavior. On an average school day, 57% of middle school students watch three or more hours of TV. This percentage increased from 6th grade (48%) to 8th grade (65%), and was higher for males (59%) than females (54%).

High School YRBS

Results from 1999. At the high school level, more than one in three students (35%) described themselves as slightly or very overweight, and 44% were trying to lose weight. Females were more likely than males to describe themselves as overweight (43% vs. 26%) and to report trying to lose weight (58% vs. 27%). Self-perception as overweight increased by grade

level (see Figure 26). The percentage of students trying to lose weight ranged from 42% in 10th grade to 46% in 12th grade.

Students were asked what they had done in the 30 days prior to the survey to lose or keep from gaining weight. Twenty-three percent of males and 43% of females had eaten less food, fewer calories, or foods low in fat; 40% of males and 57% of females had exercised; 2% of males and 4% of females had vomited or taken laxatives; and 4% of males and females had taken diet pills, powders, or liquids.

In the week prior to surveying, 18% of students had eaten fruit, 20% had consumed fruit juice, 4% had eaten green salad, and 16% had eaten other vegetables two or more times per day.

Half of the students (52%) had participated in hard physical activity and 36% in light activity for 30 minutes or more three or more times in the week prior to the survey; 43% had participated in strengthening/toning exercises. Participation in hard physical activity decreased significantly by grade level, from 64% in 9th grade to 40% in 12th grade (see Figure 28).

Thirty-six percent of the students attended physical education classes on all five school days, though 50% did not attend physical education classes at all. Thirty-seven percent reported actually engaging in physical activity for more than 20 minutes during an average physical education class. Thirty-nine percent had played on one or more sports teams in school or the community in the past 12 months.

Changes over time. The percentage of students who describe themselves as slightly or very overweight ranged from 30% to 33% from 1991 to 1997, and peaked at 35% in 1999. The percentage of students trying to lose weight has

increased, from 36% in 1991 to 44% in 1999.

From 1991 to 1997, consumption of fruit, fruit juice, and cooked vegetables generally increased, while consumption of green salad remained stable. In 1999 these survey questions were changed to reflect eating behavior the *week* prior to the survey as opposed to the *day* prior to the survey, making comparisons with previous years difficult.

There has been a general decrease in aerobic exercise from 1992 (62%) to 1999 (52%). Strengthening exercise rates fluctuated between 37% and 41% from 1991 to 1997, and reached a high of 43% in 1999.

The percentage of students who attend physical education classes all five days of the week has decreased from 47% in 1991 to 36% in 1999; the percentage of students who do 20 or more minutes of actual exercise during a physical education class has also generally decreased, from 41% in 1991 to 34% in 1997, though this percentage rose to 37% in 1999. Participation in sports teams run by organizations outside of school increased from 23% in 1991 to 27% in 1995, but dropped to 25% in 1997. From 1991 to 1997 students were asked about their participation on sports teams in school and their participation on sports teams outside of school. In 1999 they were asked about their participation on teams in school or the community; 37% had played on sports teams in the 12 months prior to being surveyed.

New Behaviors. In the 30 days prior to surveying, 6% of males and 9% of females had fasted for 24 hours or more to lose weight.

Twenty-three percent of students had consumed two or more glasses of milk per day in the week prior surveying; 33% had eaten foods high in

carbohydrates, such as rice, pasta, potatoes, or other grain products.

On an average school day, 45% of students watch TV for three or more hours. This percentage decreased from 9th grade (56%) to 11th grade (37%), and increased to 50% in 12th grade. There was no significant difference between males and females.

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