



1997 Youth Risk Behavior Survey Middle and High School Level Summary Report

**San Francisco Unified School District
School Health Programs Department**

**San Francisco Unified School District
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Executive Summary - Middle School YRBS

The Youth Risk Behavior Survey (YRBS) 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. These behaviors fall into six categories:

- 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 HIV infection, other sexually transmitted diseases (STDs), and unintended pregnancies
- Unhealthy dietary behaviors
- Inadequate physical activity

The Middle School YRBS is administered biennially to a random sample of San Francisco students. Findings are used in the following ways:

- To support the need for comprehensive school health programs.
- To identify key health areas that should be addressed through curriculum, other programs, and professional development activities.

- To provide information about middle school students' health-risk behaviors over time.
- To identify ongoing needs for health programs and services for specific target groups.
- To compare local trends in youth risk behaviors with those of the nation.
- To monitor progress in achieving the Year 2000 National Health Promotion and Disease Prevention Objectives.

During the 1997 spring semester, the Middle School YRBS was administered to a random sample of 1,783 students in grades six through eight.

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 about the proper methods of survey administration, including protecting students' confidentiality and anonymity. Student participation was voluntary. They could decline to participate, turn in blank or incomplete surveys, or stop completing the survey at any time.

There are several encouraging findings in the 1997 survey results:

- Seventy percent of the students wore a seat belt most or all of the time.
- Nearly two-thirds (64%) of the middle school students reported that they had not yet tried cigarette smoking.
- Eighty-seven percent had not engaged in sexual intercourse.
- Nearly three-quarters (74%) of the students reported doing aerobic exercise three or more days in the previous week.

As shown in the Key Findings - Middle School section, there are also several areas of concern based on the prevalence of health-related behaviors and their potentially serious consequences.

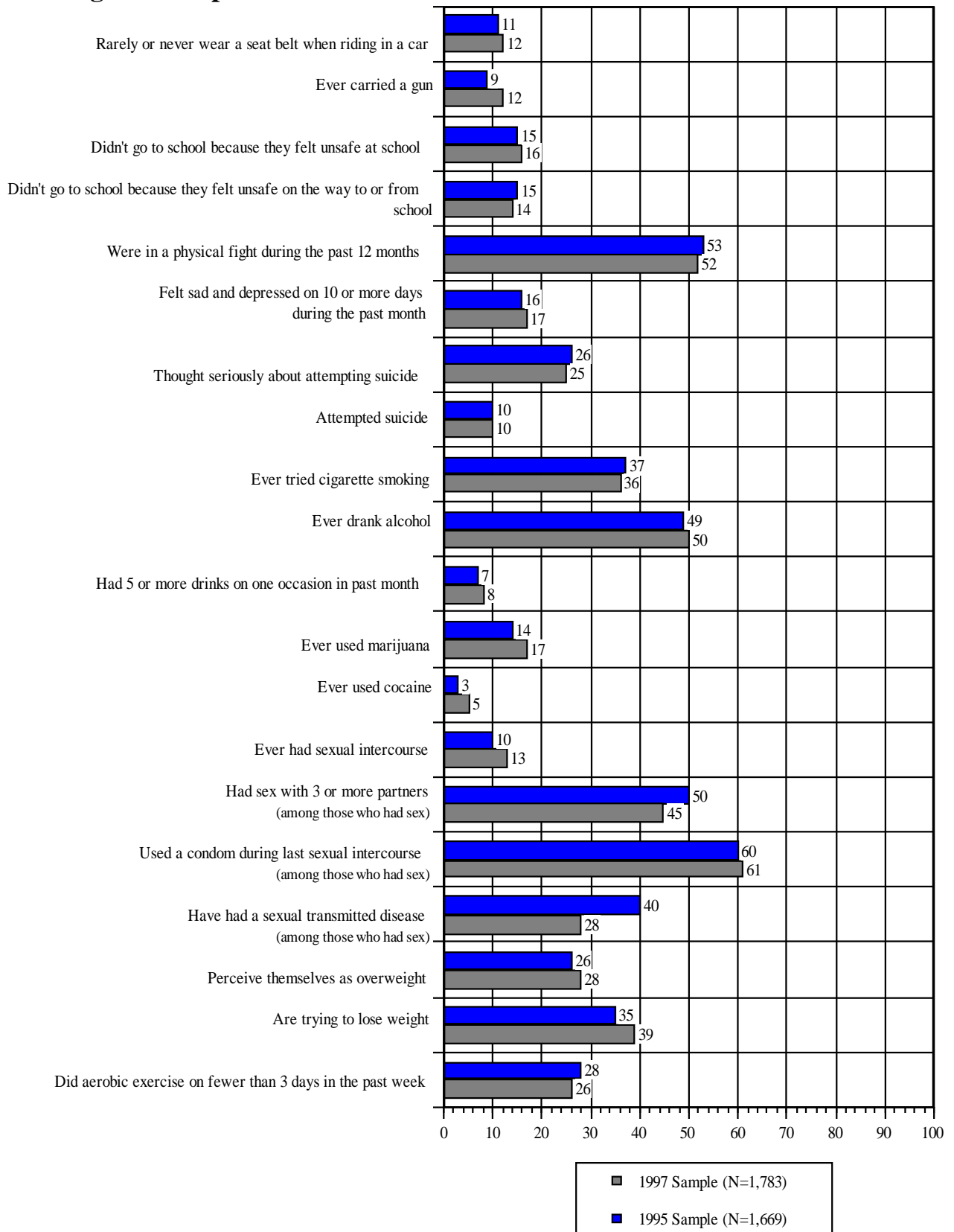
- In the previous month, 26% of the students rode in a vehicle with someone who had been drinking alcohol.
- Over one-fifth (22%) of the students carried a knife, 10% carried a club, and 12% carried a gun as a weapon at some time in their lives; 12% carried a knife or club and 3% carried a gun on school property at some time.
- Sixteen percent did not go to school because they felt they would be unsafe at school.
- More than half (52%) of the students had been in a physical fight in the past year.

- In the previous month, 17% of students felt sad and depressed on 10 or more days.
- Twenty-five percent said they had seriously thought about ending their lives; 10% had attempted suicide.
- Half of the students had tried alcohol.
- In the previous month, 8% had consumed five or more drinks within a couple of hours.
- Seventeen percent had used marijuana at some time in their lives, while 5% had used cocaine.
- Fifteen percent had used inhalants such as glue, spray cans, or paints to get high.
- Of those who had engaged in sexual intercourse, 45% had already had sex with three or more partners, 31% used no method of protection at last intercourse, and approximately 28% had been told by a doctor or nurse that they had a sexually transmitted disease.

Based on these results, it is clear that many San Francisco middle school students are engaging in behaviors that could result in serious health consequences. These findings substantiate the need for comprehensive health programs and primary prevention efforts at the middle school level.

Key Findings - Middle School

Percentage of Respondents Who:



Executive Summary - High School YRBS

The Youth Risk Behavior Survey (YRBS) 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. These behaviors fall into six categories:

- 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 HIV infection, other sexually transmitted diseases (STDs), and unintended pregnancies
- Unhealthy dietary behaviors
- Inadequate physical activity

The High School YRBS is administered biennially to a random sample of San Francisco students. Findings are used in the following ways:

- To support the need for comprehensive school health programs.
- To identify key health areas that should be addressed through curriculum, other programs, and professional development activities.

- To provide information about high school students' health-risk behaviors over time.
- To identify ongoing needs for health programs and services for specific target groups.
- To compare local trends in youth risk behaviors with those of the nation.
- To monitor progress in achieving the Year 2000 National Health Promotion and Disease Prevention Objectives.

During the 1997 spring semester, a modified version of the multiple choice Youth Risk Behavior Survey (YRBS) was administered to a random sample of 1,914 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 about the proper methods of survey administration, including protecting students' rights of confidentiality and anonymity. Student participation was voluntary. They could decline to participate, turn in blank or incomplete surveys, or stop completing the survey at any time.

There are some encouraging findings in the 1997 survey results:

- Seventy-eight percent of high school students wore a seat belt most or all of the time when riding in a car.
- Ninety-one percent of the students have been taught about AIDS or HIV infection in school; 52% have talked about AIDS or HIV infection with parents or other adults in their family.
- Among those who had sex, 60% used a condom the last time they had sex.
- Fifty percent did aerobic exercise three or more times per week.

As shown in the Key Findings - High School section, there are also several areas of concern based on the prevalence of health-related behaviors and their potentially serious consequences.

- In the previous month, about one-fifth (21%) of the high school students rode in a vehicle with someone who had been drinking alcohol; 5% drove a car after they had been drinking.
- In the previous month, 10% of the students carried a knife, 6% carried a club and 3% carried a gun as a weapon; 7% carried a weapon such as a gun, knife, or club on school property.
- Seven percent did not go to school because they felt that they would be unsafe at school, or on the way to or from school.
- Eight percent had been threatened or injured by someone with a weapon, such as a gun, knife, or club on school property in the past 12 months.

- One quarter of the students had been in a physical fight in the past year; 10% reported fighting on school property.
- Twenty percent said they had seriously thought about ending their lives in the past year.
- Fifty-eight percent had tried cigarette smoking, 60% alcohol, 33% marijuana, 6% cocaine, 10% other illegal drugs, and 8% inhalants.
- In the previous month, 13% had consumed five or more drinks within a couple of hours.
- Thirty-two percent reported they had engaged in sexual intercourse; of those, 39% had already had sex with three or more partners (and 27% with four or more partners).
- Of the sexually-experienced students, 16% used no method of protection the last time they had sex, and 13% used withdrawal. Twenty-two percent had been told by a doctor or nurse that they have had a sexually transmitted disease.
- Thirty-one percent of the students perceived themselves as slightly or very overweight.

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.

Comparison with National YRBS - High School

In comparison with the national results from 1997 (N=16,262), San Francisco high school students (N=1,914) show lower prevalence of risk behaviors in four of the six categories. Highlights of these differences are summarized below.

Unintentional or Intentional Injuries

- Nationwide, 19% of students rarely or never used safety belts when riding in a vehicle driving by someone else, which was well over two times higher than San Francisco students (8%).
- Significantly more students in the national survey engaged in a physical fight (37% vs. 25%).
- Serious thoughts about attempting suicide were slightly higher nationally than in San Francisco (21% vs. 20%).

Tobacco Use

- Cigarette use was significantly lower for San Francisco students (58%) than for students across the nation (70%),

Alcohol and Other Drug Use

- Alcohol use was lower among San Francisco students (60%) than nationwide (79%), as was marijuana use (33% in San Francisco and 47% nationwide) and other illegal drug use (10% in San Francisco and 17% across the nation).

Sexual Behaviors

- Percentages of students who had had sexual intercourse (48% vs. 32%) and had four or more sexual partners (16% vs. 11%) were greater nationwide than San Francisco, but the rate of condom use was higher for San Francisco sexually-experienced students (60% vs. 57%).

Dietary Behaviors

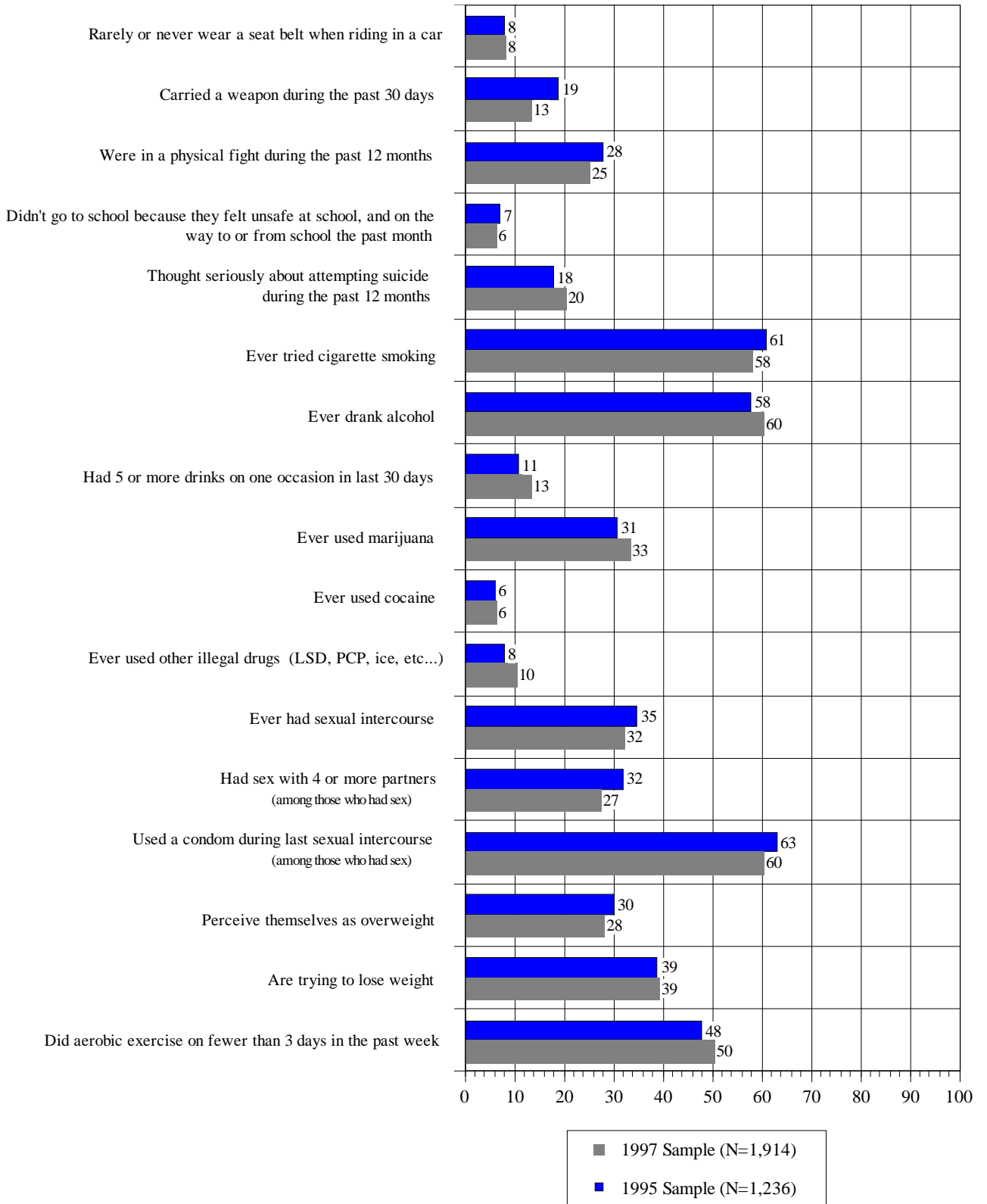
- More than one fourth (28%) of San Francisco high school students perceived themselves as overweight, as compared to 27% of high school students nationally.

Physical Activity

- Significantly more high school students nationwide (64%) than in San Francisco (50%) engaged in aerobic exercise on three or more days in the past week.

Key Findings - High School

Percentage of Respondents Who:



Description of the Student Sample

Middle School YRBS

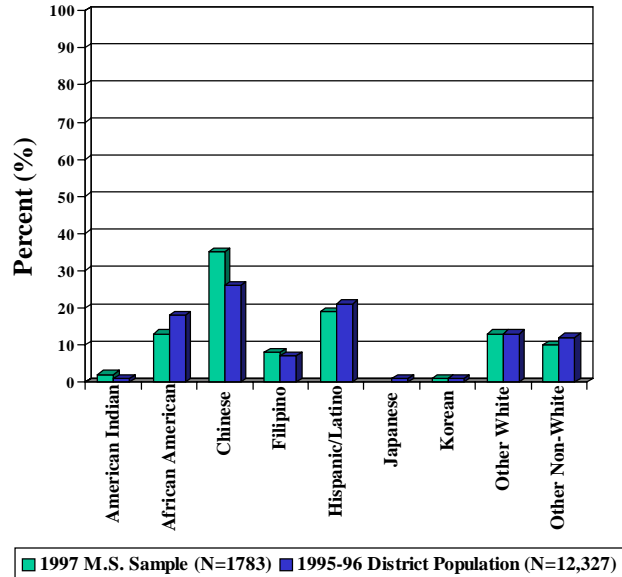
The Middle School Health Survey was completed by 1,783 students in grades six through eight in 19 San Francisco middle schools (response rate=60%).

Students were evenly distributed by gender (48% males and 52% females) and grade (33% sixth graders, 33% seventh graders, and 34% eighth graders). The majority of students (65%) were either 12 or 13 years old. Seventy percent of the students surveyed were born in the United States.

The largest percentage of students described themselves as Chinese (35%), followed by Hispanic/Latino (19%), African American (13%), White (13%), Filipino (8%), American Indian (2%), and Korean (1%). Ten percent indicated 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 over-representative of Chinese students and slightly under-representative of African American students (see Figure 1). This information should be considered when interpreting the survey results.

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



Description of the Student Sample

High School YRBS

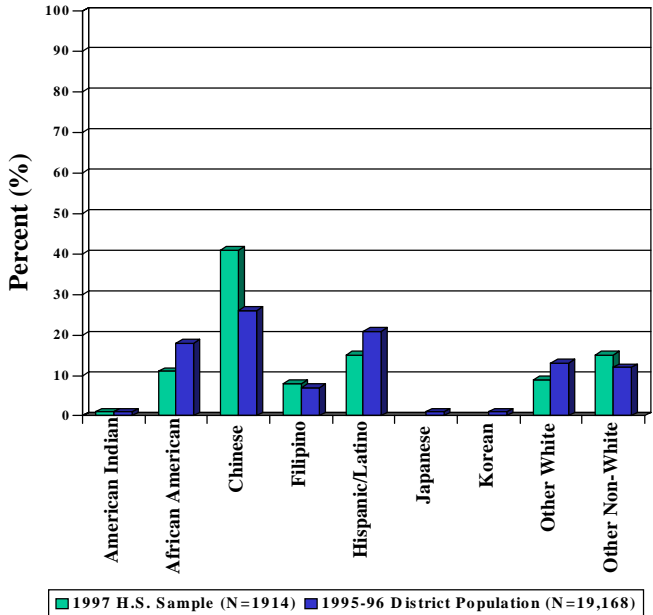
The Youth Risk Behavior Survey was completed by 1,914 students in grades nine through twelve in 19 San Francisco high schools (response rate=61%).

Students were distributed relatively even by gender (48% males and 52% females) and across grade levels (22% ninth, 28% tenth, 24% eleventh and 26% twelfth graders). Students' ages ranged from 12 years old or younger (in one case) to 18 years old or older. The majority of students (73%) were either 15, 16, or 17 years old.

The largest percentage of students described themselves as Chinese (41%), followed by Hispanic/Latino (15%), African American (11%), White (9%), Filipino (8%), and American Indian (1%). Fifteen percent indicated 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 overrepresentative of 12th graders, who make up only 17% of the district's high school population. Related to ethnicity, the sample is over-representative of Chinese students and slightly under-representative of African American, Hispanic/Latino, and White students (see Figure 2). This information should be considered when interpreting the survey results.

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



Unintentional Injuries

According to the U. S. Department of Health and Human Services, unintentional injuries are the leading cause of death among young people between the ages of 15 and 25. In 1993, motor vehicle crashes were the leading cause of premature death among persons between the ages of 15 and 24 in the United States. The use of seat belts is estimated to reduce motor vehicle fatalities by 40 to 50 percent, and serious injuries by 45 to 55 percent (1). Since 1993, it has been a law for all California residents to wear seat belts.

Over 90% of bicyclist deaths involve motor vehicles. Use of bicycle helmets, which is required by California law for persons under the age of 18, reduces head injury by approximately 85% and brain injury by 88% (2). Motorcycle helmets are required by California law. Motorcyclists who do not wear helmets are three times more likely to incur head injury than helmeted riders (3).

In 1996, alcohol-related motor vehicle crashes resulted in 17,126 deaths, and were a leading cause of death in the teenage and young adult populations (4). 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 (5).

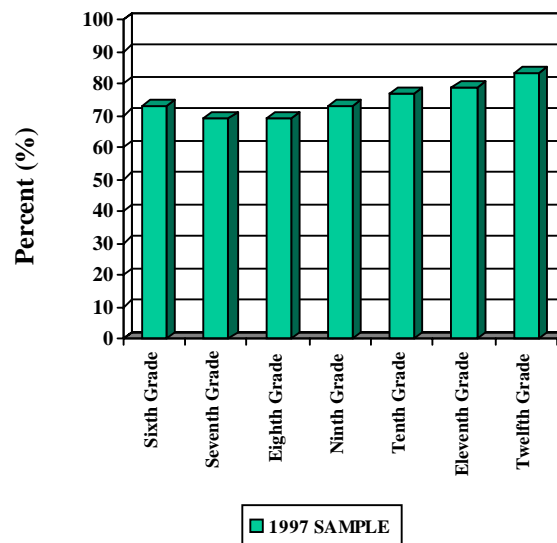
The 1997 San Francisco YRBS asked students to report seat belt use, and helmet use on motorcycles and bicycles. In addition, students reported driving after using alcohol in the past month, and riding in vehicles driven by people who have been using alcohol.

Middle School YRBS

Results from 1997. Approximately 70% of the middle school students wore seat belts most or all of the time when riding in a car driven by someone else. Seat belt use declined slightly by grade level (from 73% in grade 6 to 69% in grades 7 and 8) (see Figure 3). Over two-thirds (73%) of middle school students rode a bicycle, and over half (61%) rollerbladed or rode a skateboard. However, 51% of those who rode a bicycle and 65% of those who rollerbladed or rode a skateboard “never” or “rarely” wore a helmet.

More than a quarter (26%) of middle school students rode 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

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



alcohol than sixth graders (32 % vs. 20%, respectively). No significant differences were found between males and females.

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 70% in 1997 (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 25% in 1997). The percentage of students who report riding in a vehicle driven by someone who had been drinking alcohol has increased from 22% in 1991 to 26% in 1997.

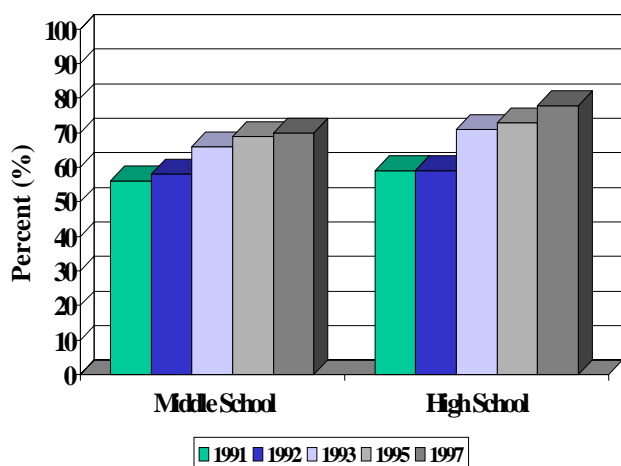
High School YRBS

Results from 1997. More than three quarters of the high school students (78%) wore 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 73% in grade 9 to 83% in grade 12 (see Figure 3). During the past 30 days, one in five students (21%) rode in a vehicle driven by someone who had been drinking, and 5% drove after they had been drinking. The percentage was lowest for 9th graders (15%) and highest among 12th graders. Driving after drinking increased consistently by grade, from 3% in 9th grade to 6% in 12th grade. Females and males were about equally likely to have ridden with a driver who had been drinking (21% and 22%, respectively). Males were slightly more likely to have driven after drinking (6%, versus 4% for females).

Changes over time. The percentage of high school students who report seat belt use “most of the time” or “always” has increased steadily over the years, from 59% in 1991 and 1992, to 78% in 1997 (see Figure 4). During this period, the percentage of students who report riding in vehicles in the past 30 days driven by persons who had been drinking alcohol has decreased from 24% in 1991 to 21% in 1995 and 1997. The percentage of students who drove after drinking has fluctuated slightly throughout the years between 3% and 6%.

Figure 4: Percentage of students who wore a seat belt most or all of the time: Comparison of 1997 results with 1991-1995.



Intentional Injuries

In the United States, homicide is the second leading cause of death among youth ages 15 to 24 years (6). The number of homicides committed with guns by teens doubled from 1985 to 1992 (7). Nationally, minorities, young males, and those living in poor, urban communities are at greatest risk of death by homicide (8). Physical fighting often precedes fatal violence among youth (9).

Guns are a significant cause of injuries among youth. Nationally, over half of teen deaths by suicide involve the use of a gun, and 39 percent more teens die each year from self-inflicted gunshots than from disease (10).

Every year in the United States, 30,000 deaths result from suicide. Suicide is the third leading cause of death for 15 to 24 year olds, and suicide rates among young males have more than tripled since the 1950's (11). The number one cause of suicide is untreated depression, but only a fraction of Americans who suffer from depression are diagnosed and treated accurately. Attempted suicide can be an indicator of other health problems, such as substance abuse, inability to cope with stress, and depression.

National Health Objectives for the Year 2000 include reducing the incidence of injurious suicide attempts and actual completed suicides among adolescents.

The 1997 San Francisco YRBS asks students to report physical fighting and weapon carrying (in general and on school property), as well as other school-related violent incidents (such as 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 during the past 12 months, including 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 1997. More than half (52%) of the middle school students said they had been in a physical fight in the previous year. Seventeen percent of the students had been in a fight four or more times. Most students reported fighting with a friend or someone they know (29%). Fighting decreased from 55% in 6th grade to 48% in 8th grade. Males were more likely to have been in a fight than females (66% versus 40%, respectively). Among middle school students who had been in a fight, 7% had to be treated by a doctor or nurse for injuries.

About one in five middle school students (22%) carried a knife, 10% carried a club, and 12% carried a gun as a weapon some time in their lives. Weapon carrying increased significantly by grade level (see Figure 5), and was significantly higher among males than females. In addition, 12% of students carried a knife or club on school property, and 3% carried a gun to school. Sixteen percent of students did not attend school because of feeling unsafe at school, and 14% did not attend because they did not feel safe on the way to or from school. The percentage of middle school students reporting these feelings was relatively consistent across grade levels (see Figure 6).

Changes over time. There has been a slight decrease in physical fighting during the last seven years (from 56% in 1991 to 52% in 1997). Questions about weapon carrying and safety have only been asked of middle school students in

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

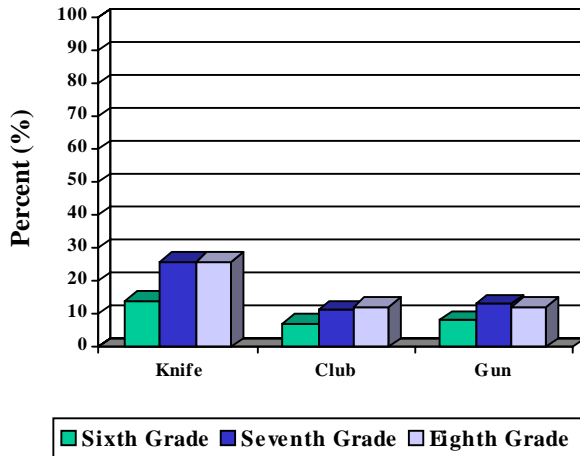
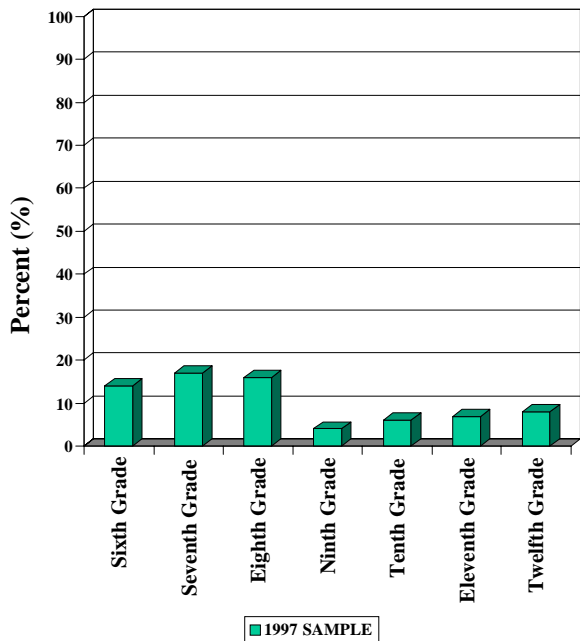


Figure 6: Percentage of students who did not go to school because they felt unsafe at school by grade.



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.

1995 and 1997. From 1995 to 1997 gun carrying increased from 9 to 12 percent, and club carrying increased from 8 to 10 percent. All other changes were minimal.

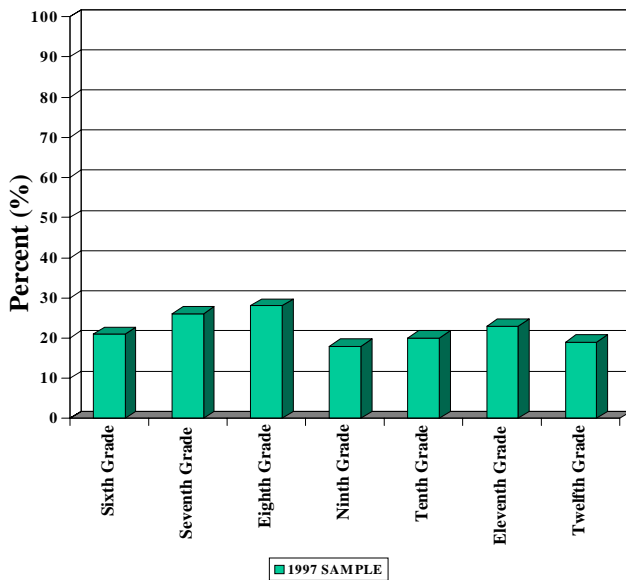
Suicide Ideation

Results from 1997. Seventeen percent of the middle school students felt sad and depressed on 10 to 30 days in the month prior to the survey. One quarter (25%) said they had seriously thought about ending their own lives. Serious thoughts of suicide were more common among females (30%) than males (20%), and increased by grade, from 21% in 6th grade to 28% in 8th grade (see Figure 7). Thirteen percent indicated they had actually made a plan to commit suicide. Females (16%) were more likely than males (10%) to report having made a plan to kill themselves. Similarly, 7th and 8th graders were more likely to have made a plan for suicide than were 6th graders (14%, 15%, and 10%, respectively). Of concern, 10% of the middle school students said they had made a suicide attempt. A larger percentage of female students (12%) than male students (7%) reported an 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 lives has remained relatively stable over the years (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 and 1997 they were asked if they had *ever* thought about ending their life.

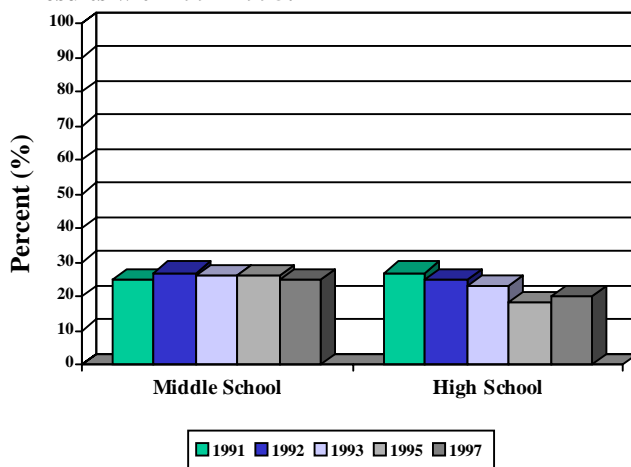
The item regarding a suicide plan also changed: from 1991 to 1993 students were asked whether

Figure 7: Percentage of students who 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 seriously thought about committing suicide: Comparison of 1997 results with 1991-1995.



NOTE: Middle school results for 1991 to 1993 reflect the percentage of students who seriously considered suicide in the past year; 1995 and 1997 results reflect the percentage of students who have ever seriously considered suicide. All high school results reflect the past year.

they had made a suicide plan *in the past year*; in 1995 and 1997 they were asked if they had *ever* made a suicide plan. Interestingly, the percentage of students reporting a suicide plan decreased across the years, from 18% in 1991 to 13% in 1997, despite the broader wording of the question in recent years.

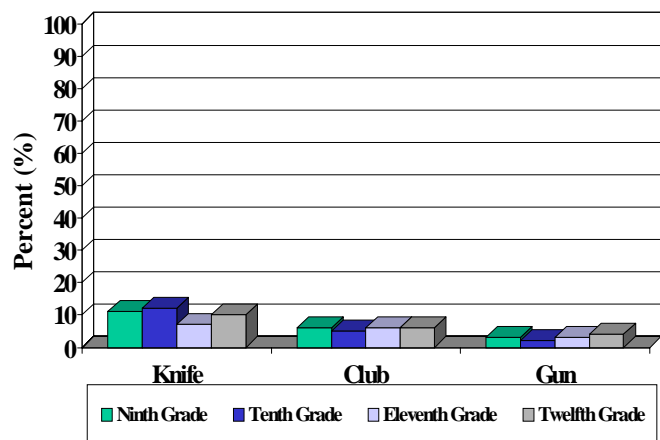
Finally, the percentage of students who made a suicide attempt has decreased from 13% in 1991 to 10% in 1995 and 1997, despite the same wording changes as noted above (i.e., moving from past year to ever).

High School YRBS

Fighting and Weapon Carrying

Results from 1997. One in twelve high school students (8%) was threatened or injured with a weapon, such as a gun, knife, or club, on school property. One in four students (25%) was in a

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



physical fight. One in ten students (10%) was in a physical fight on school property.

In the 30 days prior to the survey, 13% of students carried a weapon of any kind, and 3% carried a gun. Seven percent of students carried a weapon of any kind on school property. Six percent of students did not attend school on one or more days because of feeling unsafe at school or on the way to or from school.

Knife carrying generally declined by grade level, whereas gun carrying increased. Club carrying remained relatively consistent (see Figure 9). Male students were more likely than female students to report weapon carrying (club: 10% vs. 2%; knife: 16% vs. 5%; gun: 5% vs. 1%). Physical fighting declined from 9th to 11th grade (from 29% to 21%), and then increased to 26% in 12th grade. Males were more likely than females to report physical fighting (33% vs. 18%). The percentage of students who missed school because they felt unsafe increased by grade level (see Figure 6).

Changes over time. The percentage of high school students reporting violence-related incidents in general has decreased during the past seven years, including weapon carrying (from 21% in 1991 to 13% in 1997) and physical fighting (from 35% in 1991 to 25% in 1997).

Suicide Ideation

Results from 1997. One fifth of high school students (20%) seriously considered suicide (see Figure 8), 14% made a plan about how they would attempt suicide, and 7% actually attempted suicide one or more times. Among those who had attempted suicide, 37% resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse. The percentage of students attempting suicide during the past 12 months increased slightly from 9th grade (5%) to 12th grade (8%). Suicide attempts were reported by more than twice as many females (10%) as males (4%). In general, females were significantly more likely than males to consider (24% vs. 15%), plan (18% vs. 12%), and attempt (10% vs. 4%) suicide. Females were also more likely to report having received medical treatment as a result of a suicide attempt (41% vs. 26%).

Changes over time. From 1991 to 1997 there has been a general decrease in the percentage of high school students who considered attempting suicide in the past year, from 27% in 1991 to 20% in 1997 (see Figure 9). The percentage of students who made a suicide plan has decreased slightly from 16% in 1991 and 1992 to 14% in 1995 and 1997, with a peak of 18% in 1993. The percentage of students who have attempted suicide has remained relatively stable, at 8% in 1991 and 7% in 1997, with a peak of 10% in 1993. Finally, the percentage of students who received medical treatment as a result of a suicide attempt decreased from 3% in 1991 to 1% in 1995, and increased to 3% in 1997.

Tobacco Use

Tobacco use is the leading preventable cause of death in the United States, yet an estimated 60 million Americans (29% of the population) are current smokers (12). Tobacco use is responsible for one of every five deaths in the U.S.; cancer, respiratory illness, heart disease, and other tobacco-related health problems claim the lives of over 400,000 people each year (13). In addition, smokeless tobacco use causes oral cancer and other oral health problems (14). Approximately 6.8 million Americans (3.3% of the population) are current users of smokeless tobacco (12).

Each year in the United States, over one million adolescents begin smoking, and it is estimated that one-third will eventually die from tobacco-related illnesses (14). The 1995 Monitoring the Future Study reports statistically significant increases in national rates of smoking for middle school and high school youth since 1991 (15). Smoking in adolescents is also associated with drinking and illicit drug use, and poor school performance (16). Eighty percent of current adult smokers tried their first cigarette before age 18, and half of them became regular smokers by age 18 (17).

The 1997 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.

Middle School YRBS

Results from 1997. Over one third (36%) of middle school students reported that they had tried cigarette smoking. This percentage in-

creased by grade level, from 24% to 47% (see Figure 10), and was slightly higher for males (38%) than for females (34%). Of students who had smoked, nearly half (45%) smoked their first whole cigarette prior to age 11. An additional 41% started smoking when they were 11 or 12 years old (see Figure 11). Nine percent used chewing tobacco or snuff.

Twelve percent of middle school youth had smoked cigarettes during the previous month. However, most of these current smokers (57%) smoked on five days or less, and 83% smoked five cigarettes or less per day in the month prior to the survey. When students were asked how they obtain cigarettes, 29% said they borrowed them from someone and 14% said they purchased them in a store; only 32% of students who bought cigarettes in a store were asked to show proof of age.

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

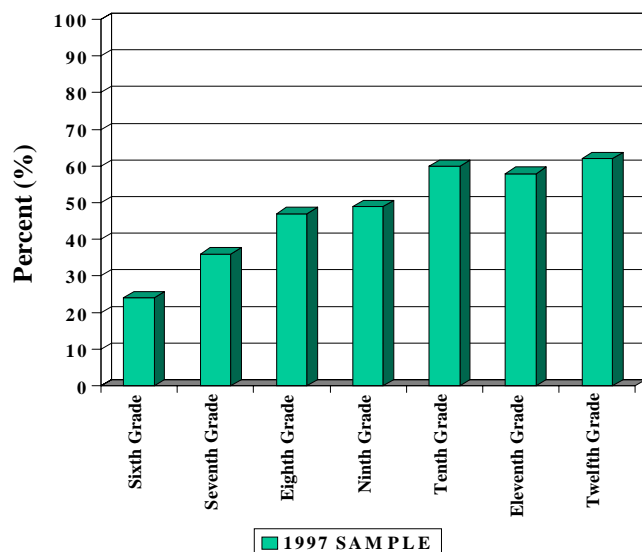
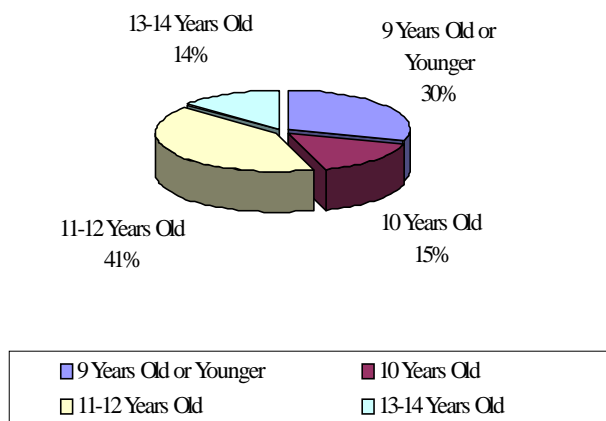


Figure 11: Initiation of tobacco use among middle school students who smoked cigarettes.



Changes over time. There has been a slight decrease in lifetime cigarette use, from 39% in 1991 to 36% in 1997. Recent cigarette use has remained relatively stable over the years (11% to 12%), with a peak of 16% in 1993.

High School YRBS

Results from 1997. Six of 10 high school students (58%) reported having tried cigarettes. In the month prior to the survey, one in five students (19%) smoked cigarettes, 5% smoked regularly (daily), and 2% used smokeless tobacco. In addition, one in ten students (9%) smoked cigarettes on school property.

Lifetime use of cigarettes increased from 49% in 9th grade to 62% in 12th grade (see Figure 10). Of students who had smoked, 40% smoked their first whole cigarette before they were 13 years old. An additional 36% initiated smoking when they were 13 or 14 years old (see Figure 12).

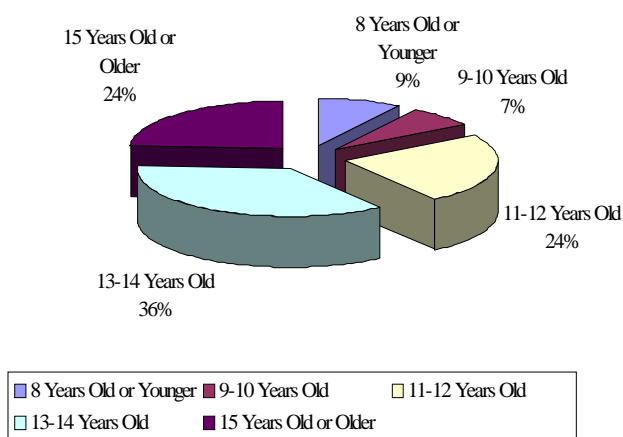
Of those students who smoked regularly in the month prior to the survey, 19% smoked 6 or more cigarettes per day. Among these current

smokers, 37% purchased cigarettes in a store (convenience store, supermarket, or gas station) during the past 30 days. Fifty-seven percent of students who bought cigarettes in a store were asked to show proof of age.

Nearly one third (31%) of all high school students report having tried to quit smoking cigarettes in their lifetimes. Males were more likely than females to have tried smoking (63% vs. 53%), to have smoked prior to age 13 (18% vs. 15%), to have smoked recently (21% vs. 18%), and to have smoked on school property (11% vs. 7%).

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 19% in 1997. There have been no significant changes in daily smoking or age of first cigarette use. Lifetime cigarette use has fluctuated between 56 and 62 percent over the years.

Figure 12: Initiation of tobacco use among high school students who smoked cigarettes.



Alcohol Use

Each year in the United States, approximately 100,000 deaths result from the misuse of alcohol (12). Alcohol is a contributing factor in at least half of all homicides, suicides, and motor vehicle crashes (18). Heavy use (or “binge drinking”) increases the risk for alcohol-related injury and disease. It is also linked conclusively with physical fighting, destroyed property, academic and job problems, and trouble with law enforcement authorities (19). Unfortunately, alcohol is also the most widely used substance among adolescents. National data show that the percentage of students across the nation who perceive heavy alcohol use as a highly risky behavior has declined since 1991 (14).

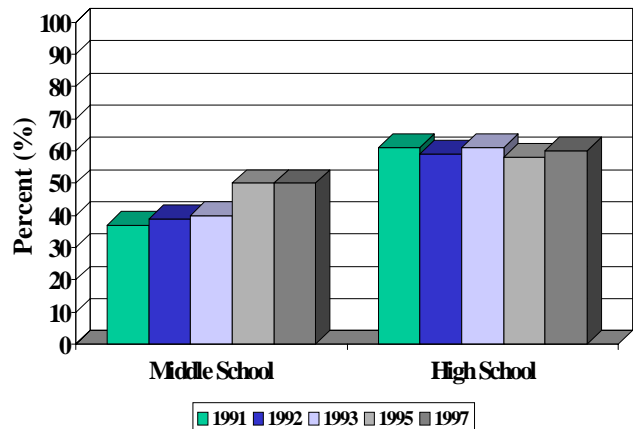
The 1997 San Francisco YRBS asked students to report lifetime and recent patterns of alcohol use on and off school property.

Middle School YRBS

Results from 1997. Half (50%) of middle school students reported having tried alcohol (see Figure 13). (Note: In responding to questions about alcohol use, students were told not to include drinking for religious reasons.) The percentage of students who tried alcohol increased significantly by grade level, from 34% of the sixth graders to 61% of the eighth graders, and was slightly higher for males (52%) than females (49%). Among students who had tried alcohol, 65% indicated that they had done so before their 11th birthday. An additional 28% started drinking when they were 11 or 12 (see Figure 14).

One in five (20%) middle school students drank alcohol in the month prior to the survey. Among these current alcohol users, one in five (22%) drank alcohol on six or more days.

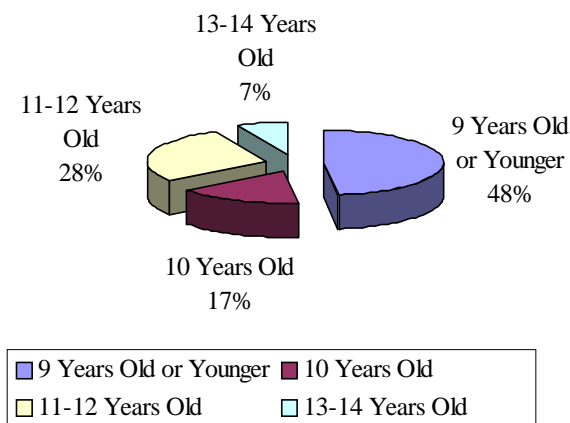
Figure 13: Percentage of students who have tried alcohol: Comparison of 1997 results with 1991 -1995.



To assess heavy drinking patterns, students were asked to indicate the number of days they had five or more drinks in a row in the past month. Eight percent of all middle school students who completed the survey reported excessive drinking in the previous month. Eighth graders (9%) were more likely to drink heavily than sixth graders (6%). Males and females were equally likely to drink heavily (8% for both).

Changes over time. Lifetime alcohol use has increased significantly since 1991, from 37% to 50% (see Figure 13), and the percentage of middle school students who had their first drink prior to age 11 increased from 19% in 1991 to 33% in 1997. Heavy drinking has fluctuated between 6 and 9 percent over the years.

Figure 14: Initiation of alcohol use among middle school students who drank alcohol.



High School YRBS

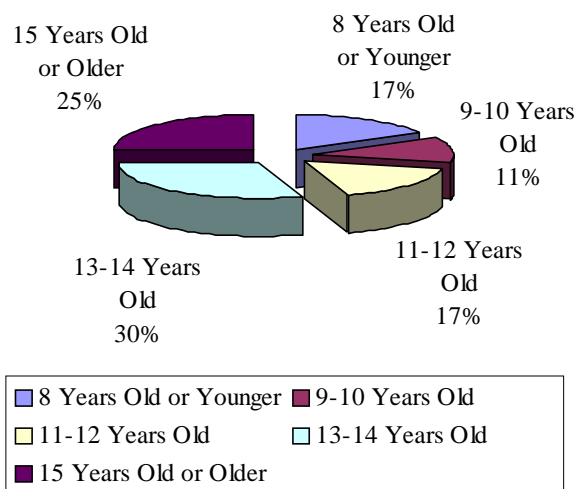
Results from 1997. Sixty percent of high school students reported having tried alcohol (lifetime use), while 27% had at least one drink of alcohol during the past 30 days (recent use). (Note: In responding to questions about alcohol use, students were told not to include drinking for religious reasons.) Lifetime alcohol use increased significantly from 9th to 12th grade (from 50% to 67%). Recent use increased steadily by grade, from 22% in 9th grade to 34% in 12th grade. Among students who had tried alcohol, almost one-half (45%) indicated they had done so before their 13th birthday. An additional 30% started drinking when they were 13 or 14 years old (see Figure 15). More males than females reported having their first drink of alcohol prior to age 13 (51% vs. 39%). Five percent of all students drank alcohol on school property during the past 30 days. Alcohol use on school property was similar among males and females. Of students who had at least one drink of alcohol during the past

30 days, 10% drank on 10 or more days and 2% drank every day.

To assess heavy drinking patterns, students were asked to indicate the number of days in the past month they had five or more drinks in a row. Approximately 13% percent of students reported excessive drinking. Heavy alcohol use increased consistently by grade level, from 8% in 9th grade to 18% in 12th grade. Males were more likely to report heavy drinking than were females (14% vs. 11%, respectively). Of concern, among these heavy drinkers, 28% consumed this level of alcohol on three or more days in the month prior to the survey.

Changes over time. Lifetime alcohol use among high school students has not changed significantly since 1991 (see Figure 13). Recent alcohol use has remained relatively steady, between 26% and 29%, except for a peak of 33% in 1993. 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 drank alcohol.



Drug Use

In the United States, approximately 12.6 million Americans report having used illicit drugs in the previous month, representing 6.0% of the population ages 12 years and older (12). National rates of illegal drug use are highest among young adults 18-21 years (15%) and youth 16-17 years (15%). Across the nation, drug use among persons age 12 and up has increased since the early 1990's. However, current rates of drug use are still half the peak rates that occurred in the late 1970's and early 1980's (14).

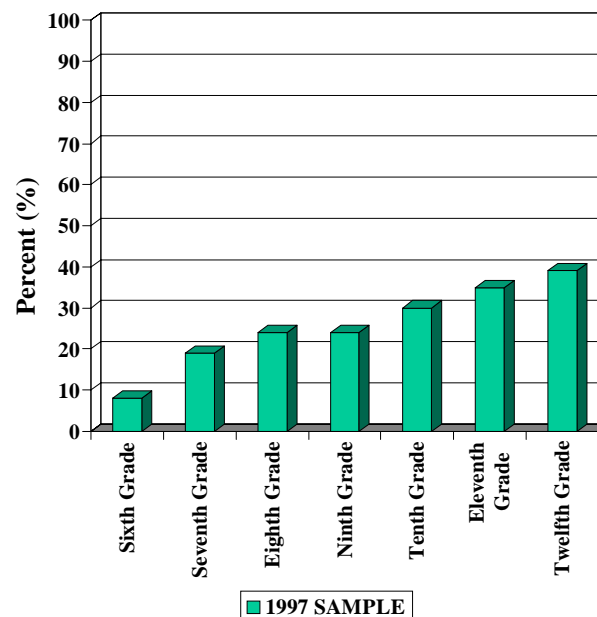
Among adolescents, perceived risk of harm in using drugs has decreased in recent years, and perceived availability of illicit drugs has increased (14). The abuse of illicit drugs is associated with intentional and unintentional injuries, school failure/delinquency, and the transmission of sexually transmitted diseases, including HIV (20). Specifically, steroid use is associated with other risk behaviors including physical fighting, weapon-carrying, and unprotected sexual intercourse.

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, injectable drugs, and other illegal drugs.

Middle School YRBS

Results from 1997. Seventeen percent of middle school students reported they had used marijuana (lifetime use). Marijuana use increased significantly by grade level (from 8% to 24%) (see Figure 16). Males were more likely to smoke marijuana than females (20% vs. 14%, respectively). 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.



Approximately 5% of the middle school students had tried any form of cocaine; 3% had used the crack or freebase forms of cocaine. Cocaine use increased by grade, from 2% in 6th grade to 7% in 8th grade. Cocaine use was slightly more prevalent among males (6%) than females (4%).

Fifteen percent of middle school students have sniffed glue or other inhalants. Three percent have used steroids, and 2% have used a needle to inject drugs. Inhalant use increased from 6th to 7th grade and then decreased in the 8th grade (see Figure 17). There was a similar pattern for steroid use and injected drug use.

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

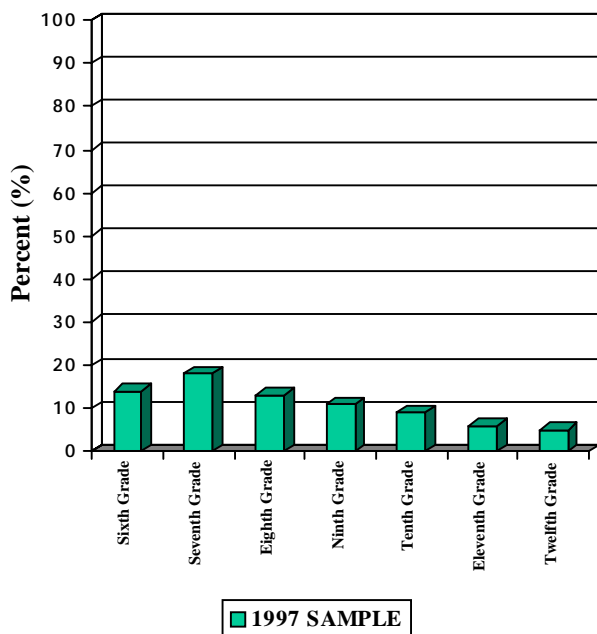
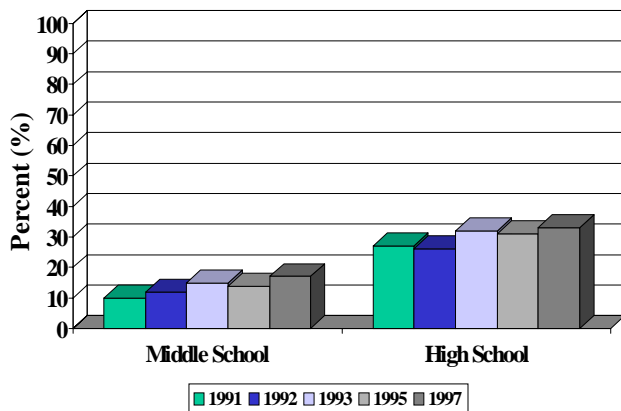


Figure 18: Percentage of Students Who Have Tried Marijuana: Comparison of 1995 results with 1991-1993.



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

High School YRBS

Results from 1997. One third of all high school students (33%) have tried marijuana. Among these students, nearly one quarter (24%) used marijuana for the first time before age 13, and an additional 47% initiated marijuana use at 13 or 14 years of age. Lifetime use increased by grade level, from 24% in 9th grade to 39% in 12th grade (see Figure 16). Seventeen percent of all students used marijuana in the 30 days prior to the survey, and 7% used marijuana on school property during this time. Male students reported higher lifetime use of marijuana than did female students (35% vs. 30%).

Six percent of high school students reported using any form of cocaine in their lifetime, while 2% had used any form in the past 30 days. Of those who had used cocaine, 21% reported starting before the age of 13. An additional 29% started at age 13 or 14. Cocaine use increased by grade level, from 4% in 9th grade to 9% in 12th grade, and was higher among males (8%) than females (5%). Two percent reported having tried crack or freebase forms of cocaine (4% of males and 2% of females).

Eight percent of students reported using inhalants, 3% used steroids without a doctor’s prescription, and 10% used “other” illegal drugs (e.g., LSD, PCP, ecstasy, mushrooms, speed, ice, heroin).

One percent of students 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. Steroid use remained constant from 9th through 11th grade, and increased in 12th grade. Male students reported slightly higher lifetime usage of all substances than did females. Rates of inhalant use were similar in males and females.

During the past year, 37% of students surveyed were 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 (see Figure 18). Recent marijuana use has also increased, from 14% in 1991 to 17% in 1997, with a peak of 19% in 1993.

Lifetime cocaine use has remained steady over the years (6% to 7%). Recent cocaine and steroid use also have remained steady (between 2% and 3%). "Other" illegal drug use has fluctuated between 8 and 10 percent.

Sexual Behaviors

Early sexual activity and multiple sexual partners are associated with unintended pregnancy and sexually transmitted diseases (STD's), including HIV infection. In addition, alcohol and drug use may contribute to unsafe sexual activity by lowering inhibitions and impairing judgment, especially among adolescents (21).

Each year in the United States, nearly one million adolescent females become pregnant: about half of the pregnancies end in birth and approximately 35% end in abortion (22). One third of all unintended pregnancies occur among teenagers, and three-quarters of teenage pregnancies occur among adolescents who are not using any form of contraception (23).

Further, every year in the United States, an estimated 12 million people acquire STD's, and two-thirds of these STD's occur in persons under age 25 years. Adolescents and young adults are at higher risk for acquiring STD's due to multiple sexual partners, engaging in unprotected intercourse, and having intercourse with high-risk partners. Also, adolescent females have a physiologically increased susceptibility to STD infection (24).

Through December 1997, over 89,000 people in their twenties have been diagnosed with AIDS. According to Centers for Disease Control and Prevention, it takes an average of eight to eleven years for HIV infection to result in an AIDS diagnosis; therefore, it is highly likely that many of these young people became infected with HIV when they were teenagers (25).

Correct and consistent use of latex condoms has been shown to reduce the risk of unintentional pregnancy, HIV, and other STD among sexually active youth.

The 1997 San Francisco YRBS asked students to report lifetime and recent sexual intercourse, including the number and gender of sexual partners, 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 1997. Thirteen percent of middle school students reported having engaged in sexual intercourse. This percentage increased by grade level (from 9% to 16%). Males were nearly twice as likely to have had sex than females (17% vs. 9%). Among those who have had sex, 52% did so before their 12th birthday, and an additional 45% had sex at age 12 or 13 (see Figure 19). Of concern, 45% of the sexually experienced students indicated they had already had three partners (see Figure 20). One in three students who had had sex (31%) used alcohol or drugs before they had sexual intercourse the last time. At last intercourse, 61% of the sexually experi-

Figure 19: Age of initiation of sexual intercourse among sexually experienced middle school students (N=206).

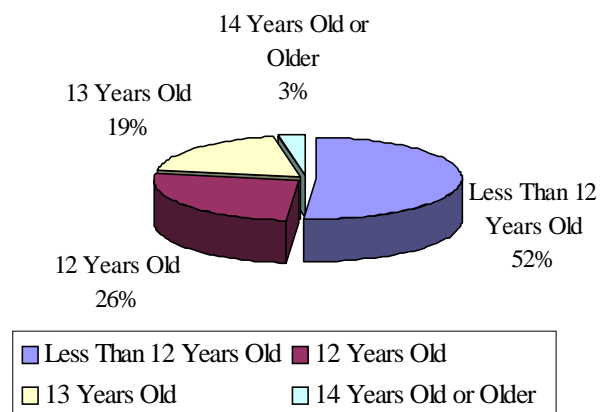


Figure 20: Number of sexual partners among sexually experienced middle school students (N=209).

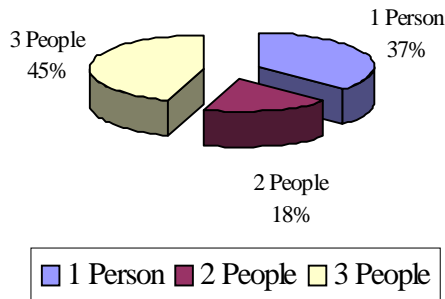
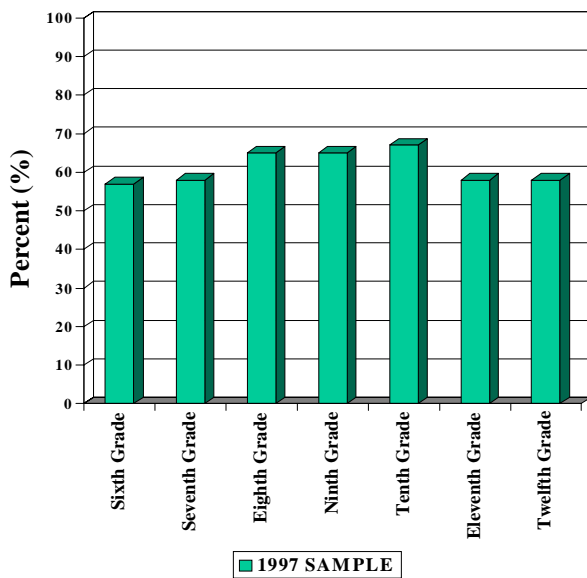


Figure 21: Percentage of students who used a condom the last time they had sex by grade.



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 and 1997 results reflect the percentage of students who reported using a condom at last intercourse. High school results reflect the latter.

enced students used condoms. Thirty-one percent of the sexually experienced students indicated that no method of birth control was used. Condom use remained about the same in 6th and 7th grades, and increased in 8th grade (see Figure 21). Three percent of all middle school students (approximately 28% of sexually active students) reported having been told by a doctor or nurse that they have a sexually transmitted disease. Twenty-four percent reported being vaccinated against the hepatitis B virus. Of those who had been vaccinated, 89% received their vaccination in a health clinic or by their doctor, and 7% received it at school.

Changes over time. The percentage of students who have had sexual intercourse remained steady from 1991 through 1993 (16% to 18%), and dropped to 10% in 1995. There was a slight increase in 1997 to 13% (see Figure 22). In 1995 and 1997 condom use at last intercourse has remained stable at 60% and 61%, respectively

Figure 22: Percentage of students who have had sex: Comparison of 1997 results with 1991 -1995.

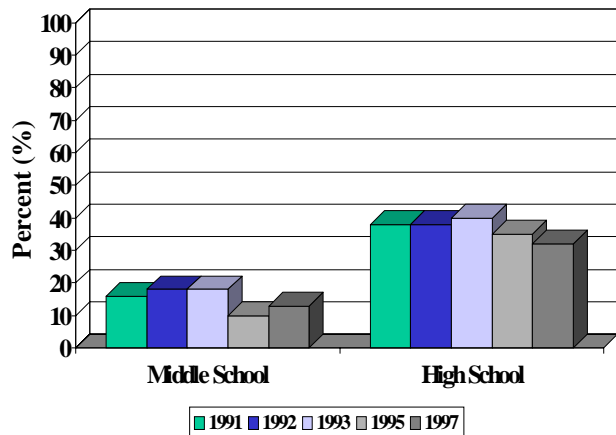


Figure 23: Percentage of students who used a condom the last time they had sex: Comparison of 1997 results with 1991-1995.

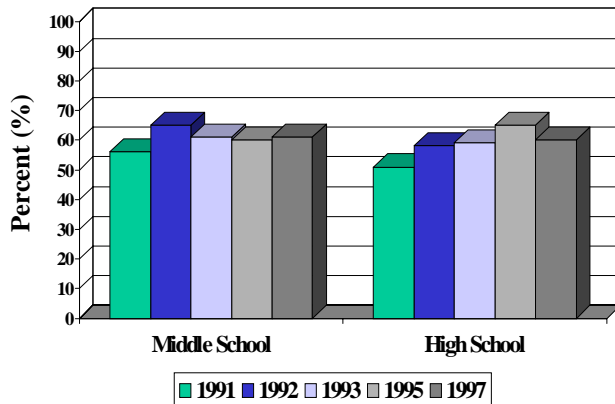
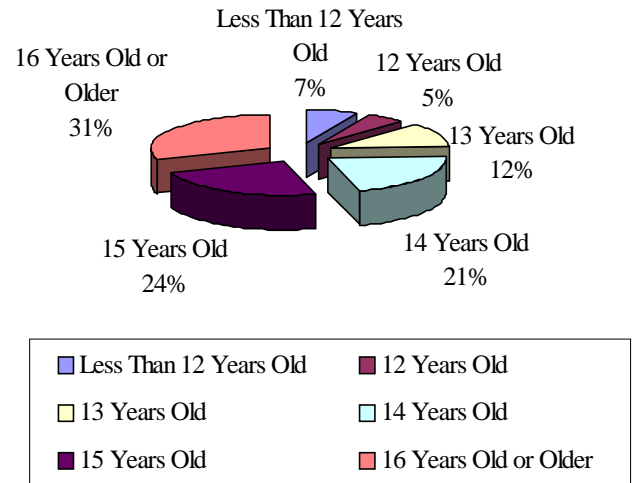


Figure 24: Age of initiation of sexual intercourse among sexually-experience high school students (N=562).



(see Figure 23). In 1995 and 1997, students were specifically asked whether they used a condom at last intercourse. From 1991 through 1993 students were asked what *one* method they used to prevent pregnancy from a list of numerous methods. Percentage of students reporting condom use in the early 1990s 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.

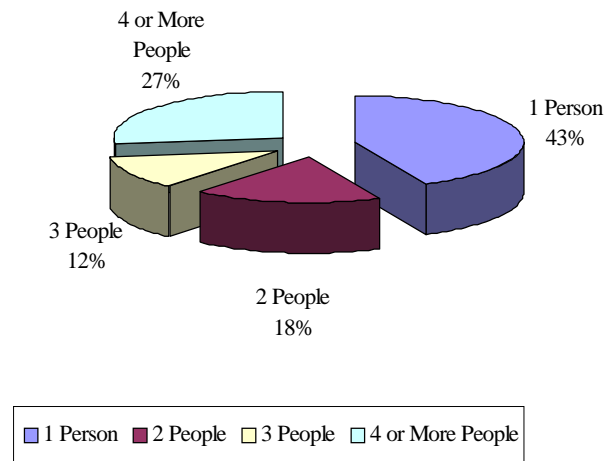
High School YRBS

Results from 1997. Nearly one third of high school students (32%) have had sexual intercourse in their lifetime. The percentage of students who have had sexual intercourse tripled from 15% in 9th grade to 51% in 12th grade. Of the sexually experienced students, 12% had sex before age 13, and an additional 33% had sexual intercourse at age 13 or 14 (see Figure 24).

Twenty-seven percent of the sexually experienced students have had sex with four or more persons in their lives (see Figure 25). One fifth of students (21%) had sex in the past 3 months. Overall, 0.2% of male students and 0% of female students reported sexual contact with a member of the same sex.

Six percent of all high school students (approximately 16% of sexually active students) reported having been pregnant or gotten someone pregnant. Seven percent (approximately 22% of sexually active students) report having been told by a doctor or nurse that they have a sexually transmitted disease. Fifty-one percent reported being vaccinated against the hepatitis B virus. Of those who had been vaccinated, 69% received their vaccination in a health clinic or by their doctor, and 28% received it at school.

Figure 25: Number of sexual partners among sexually experienced high school students (N=550).



Among all contraceptive methods listed, condoms are the most commonly used method. Sixty 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 24% used them to prevent HIV infection and other diseases. Among students who used condoms, 24% got them from a condom availability program at school; 16% from a family planning clinic, hospital, or health clinic; 26% from a store; and 22% from a friend or relative. Ninth and 10th graders were more likely to report using condoms than 11th and 12th graders (see Figure 21).

The percentage of students who used birth control pills to prevent pregnancy increased from 1% in 9th grade to 5% in 12th grade. Seventeen percent of students did not use any method of pregnancy prevention the last time they had intercourse, and 13% used withdrawal. The percentage of students who did not use birth control at last

intercourse increased from 17% and 16% in 9th and 10th grade, respectively, to 20% in 11th grade, and then decreased to 15% in 12th grade. Sixteen 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 and females (33% vs. 30%), but recent sexual activity (past 3 months) is higher among females than males (23% vs. 18%). Among sexually active students, a greater percentage of males than females report higher incidence of intercourse prior to age 13 (17% vs. 7%), multiple sexual partners (four or more) in their lifetime (32% vs. 22%), alcohol or drug use before last intercourse (19% vs. 12%), and condom use at last intercourse (68% vs. 53%).

Changes over time. Lifetime sexual intercourse remained fairly stable (between 38 and 40 percent) from 1991 through 1993, and dropped to 35% in 1995, and to 32% in 1997 (see Figure 22).

The percentage of students who had sex before age 13 remained stable from 1991 to 1995 (between 18 and 22 percent), and decreased to 12% in 1997. The percentage of students who have had sex with four or more partners has declined in recent years, from 35% in 1993 to 29% and 27% in 1995 and 1997, respectively.

Pregnancy rates have also dropped recently, from 10% in 1993 to 7% and 6% in 1995 and 1997, respectively. Condom use increased from 59% in 1993 to 65% in 1995, but decreased in 1997 to 60% (see Figure 23). Alcohol and drug use before intercourse has also declined recently, from 20% in 1993 to 15% and 16% in 1995 and 1997, respectively.

Dietary and Exercise Patterns

Across the nation, the percentage of overweight adolescents, ages 12 to 19 years, has increased in recent years to 21% (26). Obesity in adolescents is a predictor of obesity in adulthood, which is associated with increased risk for heart disease, diabetes mellitus, gallbladder disease, joint disease, certain cancers, and death (27). Obesity in adolescents is also related to social and mental health problems, including depression, problems with family relations, and poor school performance (28).

However, an overemphasis on being thin may contribute to eating disorders, such as anorexia nervosa and bulimia, which are highly associated with clinical depression (29). Approximately one percent of adolescent females develops anorexia nervosa, a disease in which people severely limit their food intake. An additional 2-3% of adolescent females develop bulimia, a disease which involves excessive overeating followed by episodes of “purging” through vomiting, use of laxatives, or compulsive exercising. Although eating disorders are most common in young females, 5-10% of eating disorders occur in males. About one in 10 cases of eating disorders lead to death from starvation, cardiac arrest, or suicide (30).

It is important for adolescents to choose nutritious foods because lifetime dietary patterns are established during youth. However, adolescents in the United States consume approximately 38% of their calories from fat and 15% of their calories from saturated fat. This pattern indicates that, on average, adolescents are consuming more fat than is recommended by U.S. health authorities. High fat diets are associated with increased risk of obesity, heart disease, and some types of cancer. Furthermore, people often consume high-fat foods while failing to eat foods high in complex carbohydrates and dietary fiber, conducive to good

health (31). High caloric intake, in combination with lack of physical activity, is thought to account for increases in obesity among adolescents. On the contrary, regular physical activity increases life expectancy, and is associated with good mental health and self-esteem. Physical education programs at school have been found to have a positive effect on the health of young people (32).

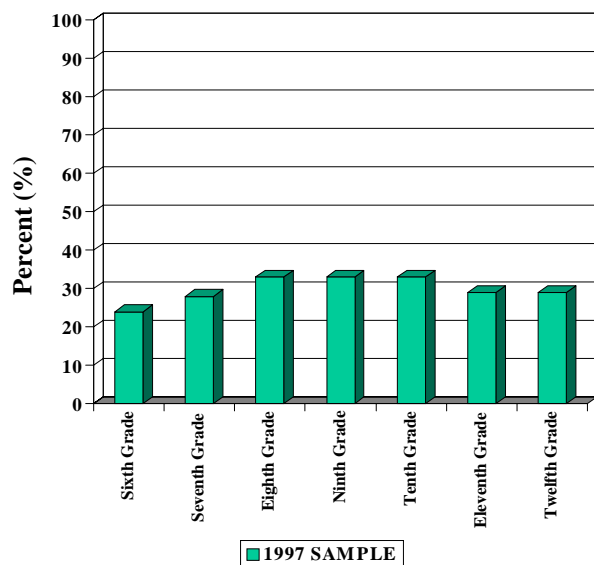
The 1997 San Francisco YRBS asked students to report self-perceptions of their body weight, efforts to change/maintain body weight, food choices, behaviors that may lead to eating disorders and other health problems and exercise patterns.

Middle School YRBS

Results from 1997. When asked how they perceived themselves in terms of weight, 28% of middle school students said they were slightly or very overweight. This perception of being overweight increased by grade, from 24% in 6th grade to 33% in 8th grade (see Figure 26). Females were more likely to consider themselves overweight than were males (32% vs. 24%). Thirty-nine percent of all students were trying to lose weight, and this percentage increased by grade level. Significantly more females than males reported attempting to lose weight (47% vs. 30%).

When asked what they were doing to change their weight, 29% of students reported dieting to lose weight (37% of females and 21% of males). Fifty-five percent reported exercising to lose weight (63% of females and 46% of males). Four percent have vomited to lose weight (6% of females and 3% of males), and four percent have taken pills (5% of females and 3% of males). Use of diet pills increased

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



by grade, from 2% in 6th grade to 5% in 8th grade. The percentage of students who vomited to lose weight remained similar across grade levels.

Students were asked about their food intake on the day before completing the survey. Half of the students (52%) ate fruit and over one third (38%) drank fruit juice two or more times. One in four students (24%) ate cooked vegetables, while one in 10 (11%) ate green salad two or more times. The percentage of students who drank fruit juice and ate fruit and green salad decreased slightly by grade level, while intake of vegetables remained about the same across grade levels. On the day prior to the survey, 12% of the students ate hamburgers, hot dogs, or sausage; 16% ate french fries or potato chip; and 22% ate cookies, doughnuts, pie, or cake two or more times.

The majority of the middle school students (74%) had engaged in aerobic exercise three or more days in the week prior to the survey. In

fact, 57% reported exercising strenuously five to seven days. Aerobic exercise patterns peaked in 7th grade and dropped in 8th grade (see Figure 27). Males were slightly more likely to participate in aerobic activities than were females (76% vs. 73%). Fifty percent of students did strengthening exercises, and 63% did stretching exercises three or more days in the week prior to the survey. Males were more likely than females to have engaged in strengthening exercises, while males and females were about equally likely to have done stretching exercises.

Eighty-seven percent of the students reported attending physical education classes on all five school days. Forty-six percent reported playing on sports teams run by their school or by other organizations outside of school. Finally, 46% participate in another organized physical activity, such as dance or swimming.

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

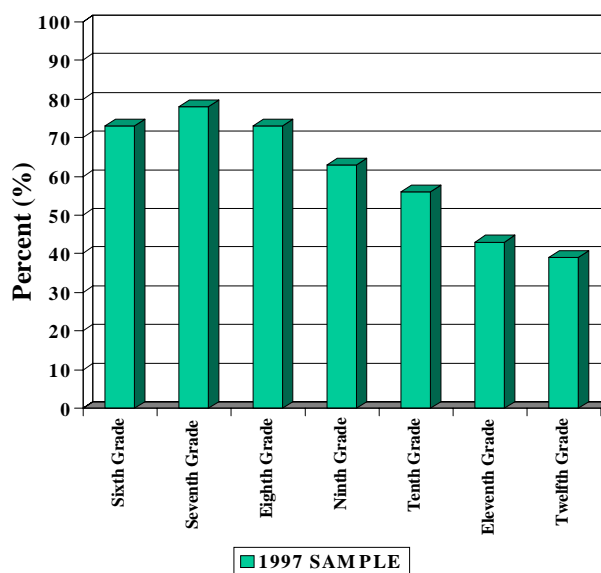
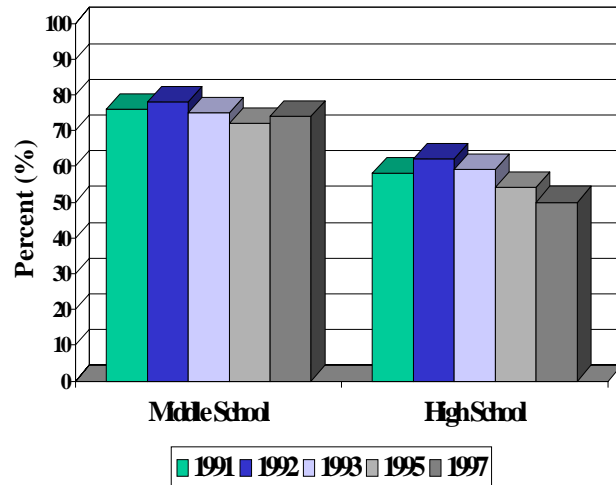


Figure 28: Percentage of students who did aerobic exercise three or more days in the previous week: Comparison of 1997 results with 1991-1995.



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

In the past two administrations (1995 and 1997) students were asked whether or not they had vomited or taken laxatives to lose weight, and whether they had taken diet pills to lose weight. The percentage of students who reported vomiting or laxative use remained stable (4%) in 1995 and 1997, as did the percentage who took diet pills (3% and 4% percent, respectively). 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 using vomiting or laxatives as the 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 in recent years, from 61% in 1993 to 46% and 50% in 1995 and 1997, respectively. Stretching has also decreased in recent years, from 73% in 1993 to 59% and 63% in 1995 and 1997, respectively.

High School YRBS

Results from 1997. At the high school level, nearly one in three students (31%) described themselves as slightly or very overweight, and 41% were trying to lose weight. Females were more likely than males to describe themselves as overweight (37% vs. 23%) and to report trying to lose weight (55% vs. 27%). A higher percentage of 9th and 10th graders (33% for each) than 11th and 12th graders (29% for each) saw themselves as overweight (see Figure 26). A slightly higher percentage of 10th graders reported trying to lose weight than students in other grades.

During the past 30 days, students engaged in various behaviors to lose weight or keep from gaining weight. For example, 15% of males and 37% of females dieted; 40% of males and 53% of females exercised; 3% of males and 5% of females vomited or took laxatives; and 3% of males and 5% of females took diet pills.

Over one-third of students (38%) ate fruit, 34% drank fruit juices, 7% ate green salad, and 20% ate cooked vegetables two or more times on the day prior to the survey. Eight percent of students ate hamburger, hot dogs, or sausage; 10% ate french fries or potato chips; and 18% ate

cookies, doughnuts, pie, or cake two or more times on the day prior to the survey.

Half of the students (50%) participated in aerobic exercise three or more times in the week prior to the survey. Forty-five percent participated in stretching exercises, and 38% participated in strengthening/toning exercises. Participation in aerobic exercise decreased significantly by grade level, from 63% in 9th grade to 39% in 12th grade (see Figure 28).

Forty-one percent of students walked or rode a bicycle for at least 30 minutes at a time on three or more days during the past week. Thirty-eight percent of the students attended physical education classes on all five school days, though 51% did not attend physical education at all. Thirty-four percent reported engaging in various forms of physical activity for more than 20 minutes during an average physical education class. Thirty-two percent played on one or more sports teams run by their school, while 25% played on one or more sports teams run by organizations outside of their school.

Changes over time. The percentage of students who perceive themselves as slightly or very overweight has remained relatively stable (between 30% and 33%) since 1991. The

percentage of students trying to lose weight has increased, from 36% in 1991 to 41% in 1997.

Consumption of fruit, fruit juice, and cooked vegetables has generally increased over the years, while consumption of green salad has remained stable. Consumption of foods high in fat and sugar (e.g., hamburgers and doughnuts) has also remained relatively stable.

There has been a gradual decrease in aerobic exercise during the past five years, from 62% in 1992 to 50% in 1997. The percentage of students engaging in stretching exercises increased from 44% in 1991 to 49% in 1995, and decreased to 45% in 1997. Strengthening exercises followed a similar pattern, increasing from 37% in 1991 to 41% in 1995, and decreasing to 38% in 1997.

The percentage of students who attend physical education classes all five days of the week has decreased from 47% in 1991 to 38% in 1997, and the percentage of students who do 20 or more minutes of actual exercise during a physical education class has also decreased, from 41% in 1991 to 34% in 1997. 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.

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