

Executive summary

A profile of student behavior over the past 10 years offers an illuminating look at what has changed for the better, for the worse, or remained the same. Examining behavioral trends highlights which prevention programs may have had an impact and which have not.

Although the rate of any cigarette smoking for 6th and 9th grade students in Minnesota has leveled off in the past three years, a small increase was seen for 12th graders. Of greater concern is the increase in heavy smoking among 12th graders during that time. Students do not appear to have difficulty obtaining tobacco products either. Students obtain tobacco mainly from social sources, such as friends and family members or by getting someone else to purchase tobacco for them. Underage high school seniors are more likely than younger students to purchase their own tobacco.

While alcohol use declined among the youngest students since 1995 and stayed the same for 12th graders, the rate for 9th graders went up. Unfortunately, one-third of 12th graders still drink at least five drinks when they drink. Friends, family members, and parties are the main sources of alcohol for students. However, half of the 12th graders reported getting someone else to buy it for them, while many 6th and 9th grade students reported stealing it from their home or a friend's home.

Other drug use is relatively uncommon in Minnesota, with the exception of marijuana. Marijuana use has increased steadily since 1992 for all grades surveyed. Frequent marijuana use (40 or more times in the past year) has also increased for 9th and 12th graders. Overall, the use of any other drug has declined since 1992. Students obtain drugs from a variety of sources. Most students obtain drugs from friends or people they know, while few students obtain drugs from dealers they do not know.

Some of the findings reported here may mean that ongoing comprehensive prevention efforts are reducing the number of adolescents exposed to the potentially harmful effects of alcohol and other drugs. Current efforts, however, may not be enough to curb the increasing rates of tobacco and marijuana use as well as high levels of heavy drinking—use patterns that put adolescents at great risk for harm.

Prevention efforts appear to be working to reduce sexual behavior among Minnesota students. Since 1995, rates of sexual activity have declined for both male and female students. Furthermore, more sexually active students are protecting themselves against sexually transmitted diseases.

Reports of antisocial activity such as truancy, vandalism, and weapon carrying have generally remained constant over time. In 1998, half of male 6th graders and about one-third of female 6th graders and male 9th graders reported being kicked, bitten, or hit at school. Younger students appear to be the victims of violence more often than older students, and school bathrooms are reported to be a relatively unsafe place.

Many prevention programs and most public service announcements aim to stop initiation of smoking, drinking, drug use, sexual activity, and antisocial activity. The efforts aimed at reducing sexual activity among students are good examples. Existing efforts serve a worthy purpose and should continue. It is clear, however, that more effort is needed to reach young people who are already engaging in behaviors that are harmful to their health or the safety of others. Identifying protective factors that may thwart or delay participation in harmful behaviors is needed. Furthermore, prevention efforts may be more effective if gender differences are taken into account. An emphasis on early intervention with young students may also be more effective than relying on more intensive treatment of problems when risk behaviors have already become well-established.

Executive summary

Recommendations

The Minnesota Student Survey results support the following recommendations:

- **Reinforce home, school, and community efforts that are working to deter adolescents from harmful and risky behavior.** In recent years, there has been an increase in resources and prevention programs in schools and communities. Decreases in some risk behaviors appear to indicate these efforts are succeeding.
- **Tobacco use among adolescents must receive greater attention.** Heavy tobacco use increased among Minnesota youth, and cigarette smoking rates for Minnesota 12th graders are higher than national rates. Laws against sale of tobacco products to minors must be enforced, but other efforts to restrict access from social sources such as older students and family members should be developed or enhanced. Prevention education in schools and communities needs to focus on building young people's skills to refuse tobacco use and cope with peer pressure to use substances. A comprehensive approach should also incorporate involvement of parents and siblings to reinforce refusal skills, include countermarketing initiatives, and make available cessation programs for young people.
- **More efforts are needed to reduce marijuana use among adolescents.** Marijuana use has been steadily increasing since 1992 for Minnesota students. Campaigns are needed to counter the common misperception that marijuana is an innocuous drug.
- **Alcohol use must be a continued focus of prevention efforts.** While the rate of any alcohol use declined for the youngest students, the percentage of students who use frequently, and in large amounts, has remained about the same. A disturbing number of high school seniors report heavy drinking and drinking and driving. Enforcement of laws against sale to minors must be enforced along with other efforts to curb underage access to alcohol.
- **More work is needed to identify the motivations that influence experimentation and continued use of substances.** Efforts are needed to identify the most effective ways to influence attitudes about substance use among youth prior to experimentation, and to counter specific motivations to use or perceived benefits of use once use has been initiated.
- **Efforts to increase safety at school need to be examined, particularly for young students.** Many younger students have been victimized on school property. Efforts to decrease the opportunity for victimization such as increased monitoring by adults coupled with efforts to promote more respectful behavior among students may be useful.

Introduction

About the survey and report

The 1998 Minnesota Student Survey provides a comprehensive picture of Minnesota youth. It includes questions about school, activities, and health. It asks specifically about behaviors that put young people at risk: alcohol, tobacco, and other drug abuse; violence; and sexual activity. The Minnesota Student Survey also asks for adolescents' perspectives on the positive and negative aspects of their lives, such as how much their parents care about them and whether they feel safe in their schools and neighborhoods. Taken together, adolescents' responses to these questions can be used by educators, parents, communities, and youths themselves to identify the strengths of young people and to respond to their needs and concerns.

This report focuses on trends over time. The survey has been administered four times, in 1989, 1992, 1995, and 1998. Many of the same questions were asked at each survey administration so comparisons can be made across time to determine whether high risk behaviors are increasing or decreasing. This way, educators and others can evaluate whether initiatives devoted to improving the lives of adolescents are having the anticipated impact. Although there are numerous topics of interest in the Minnesota Student Survey, this report focuses on key issues related to tobacco, alcohol and other drug abuse; sexual behavior; antisocial behavior; victimization at school; and school climate. The report presents behaviors for each grade surveyed. Gender and geographic area differences are presented whenever these factors are important in understanding specific high-risk behaviors. Geographic comparisons will include three areas: school districts in the cities of Minneapolis and St. Paul, the remaining school districts in the 7-county Minneapolis/St. Paul metropolitan area, and school districts in the rest of the state.

A subsequent report will discuss in much greater detail the interrelationships among many behaviors and risk and protective factors reported by students. The next report will provide a more comprehensive examination of issues only highlighted in this report, and present topics from the 1998 survey which were not covered in previous years.

Survey procedures and participation rates

The Minnesota Student Survey was administered in the spring of 1989, 1992, 1995, and 1998 to 6th, 9th, and 12th grade public school students across the state. Since all schools that participate use the same survey, and many questions have remained the same, the survey allows for comparisons of student behaviors and experiences throughout the state and over time.

Public schools in Minnesota have a good track record for participation in the Minnesota Student Survey. The district participation rate was 90% in 1989, almost 100% (all but one) in 1992, and 92% in 1995 and 1998. Participation totaled 90,000 in 1989, 135,000 in 1992, 133,000 in 1995, and 134,000 in 1998. The participating districts in 1998 represent approximately 97% of the state's public school students in grades 6, 9, and 12. Survey participation by school districts is voluntary. However, most districts participate because each participating district receives a detailed report of results for their district and a statewide report for comparison. Also, since the Department of Children, Families and Learning and the Department of Human Services pay for the survey design, printing, data analysis, and production of reports, individual districts can participate without direct cost.

Participation by individual students is also voluntary. Parents are informed about the survey in advance and can choose not to have their children participate. Students themselves can decline to take the survey, or if they take the survey, they can skip any question or stop at any

Introduction

point. Surveys are mailed back to the state offices for data processing. School officials do not see individual students' answers. Because the surveys are anonymous, answers cannot be traced to an individual.

How comparisons are made from year to year

In order to accurately compare state results across different years, this report analyzed data only from school districts, and grades within those districts, that participated in the survey for all four years. Therefore, data from one school district may include 6th, 9th, and 12th graders while data from another school district may include only one or two of the grades. This method of school district selection resulted in the inclusion of data from 72% of school districts. The technical aspects of this process and the validity of student responses are discussed at the end of this report (see page 29).

It is important to keep in mind that this survey and report refer only to students who were in mainstream schools. Students who have dropped out of these schools are more likely to suffer from poor school performance, substance abuse, and other serious problems. Consequently, the changing Minnesota school dropout rate needs to be considered when making comparisons of the survey results over time. Changes in dropout rates would have the greatest effect on comparisons of findings for 12th graders.

The dropout rate in Minnesota has been gradually increasing since 1989. For this reason, positive findings in Minnesota Student Survey results for 12th graders in 1998 compared with earlier years must be interpreted cautiously, particularly if younger students do not manifest similarly positive changes. In part, positive changes for 12th graders could reflect the possibility that during the 1998 survey period, a higher proportion of students

may have dropped out of school by senior year, leaving a higher percentage of better-functioning students in the survey pool.

Many high-risk adolescents who drop out of mainstream schools attend alternative schools or area learning centers. Others may be in the juvenile justice system or in treatment for emotional or behavioral problems. The 1998 Minnesota Student Survey was also administered to adolescents in these settings, and future reports will present the results for these populations.

Introduction

Overview of Minnesota's student population

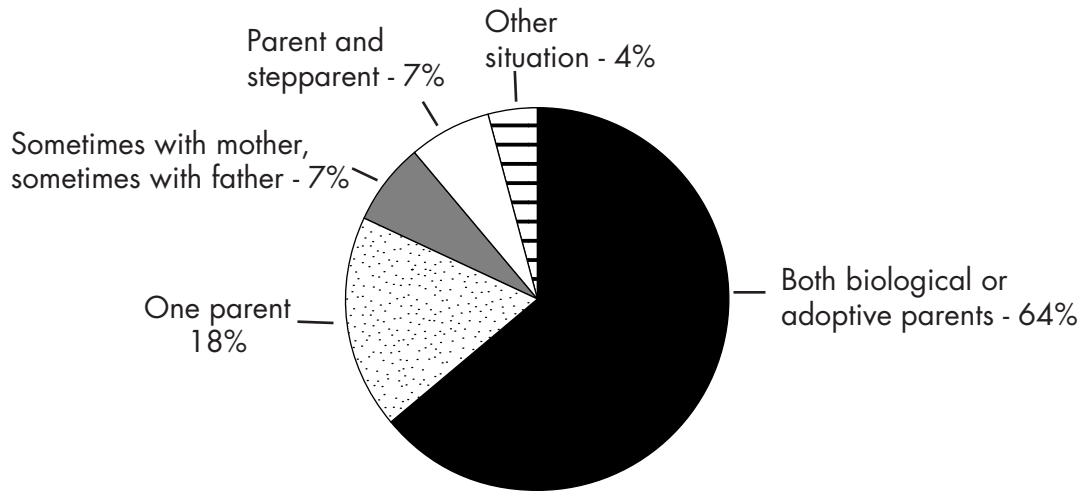
Family composition

In 1998, more than two-thirds of Minnesota students surveyed lived in two-parent households, most of these with two biological or adoptive parents (64%), and a much smaller number with parent and stepparent (7%). The similarity of reported family living situations across four survey years indicates that this factor is unlikely to account for differences in student responses in other areas.

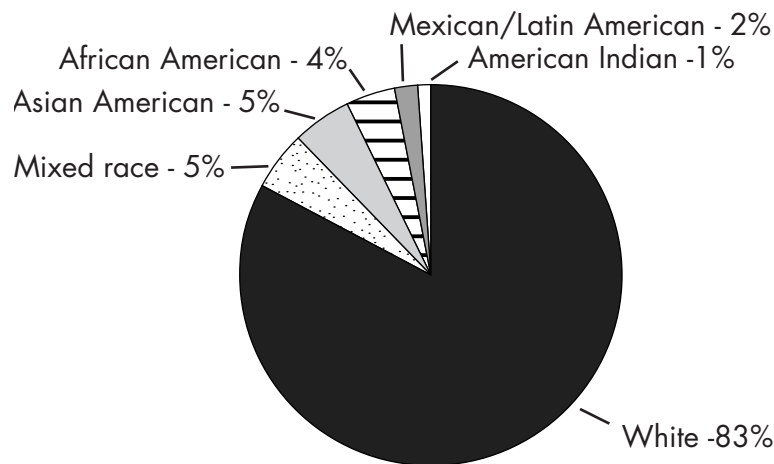
Race/ethnicity

The proportion of students of color in Minnesota's schools has been gradually increasing. Based on school enrollment figures, survey participants appear to be representative of the racial/ethnic composition of students in grades 6, 9, and 12 for each of the survey years.

Living situation 1998



Racial/ethnic composition 1998



Tobacco, alcohol, and other drugs

Comparisons with national results

A well-known national student survey, the Monitoring the Future Study, is funded through the National Institute on Drug Abuse. Because there is always a great deal of interest in comparing Minnesota students with their peers nationwide, the Minnesota Student Survey was designed to provide some comparisons. Comparative results will be included in this report.

Comparisons between the Minnesota Student Survey and the Monitoring the Future Study must take four factors into account. The national survey is based on a sample of 125 to 160 public and private schools at three grade levels and approximately 15,000 to 18,000 students in each of these grades. There is a greater chance of sampling error in the national survey results than in the Minnesota Student Survey, which is completed by most students in the grades surveyed. Another factor to be considered is the inclusion of private schools in the national sample. The Minnesota Student Survey data reflect only public school students.

A third important difference is that the Minnesota survey targets grades 6, 9, and 12, while the national survey targets grades 8, 10, and 12. Direct grade comparisons between state and national results can be made only for 12th graders. However, since alcohol and other drug use increases with age, general trends reflecting increasing or decreasing use can be examined for other grades as well.

The national survey is administered each year, the Minnesota survey every three years. Comparisons with the national sample will be made beginning in 1992 because the 1989 Minnesota Student Survey phrased questions differently than in later years.

Tobacco, alcohol, and other drugs

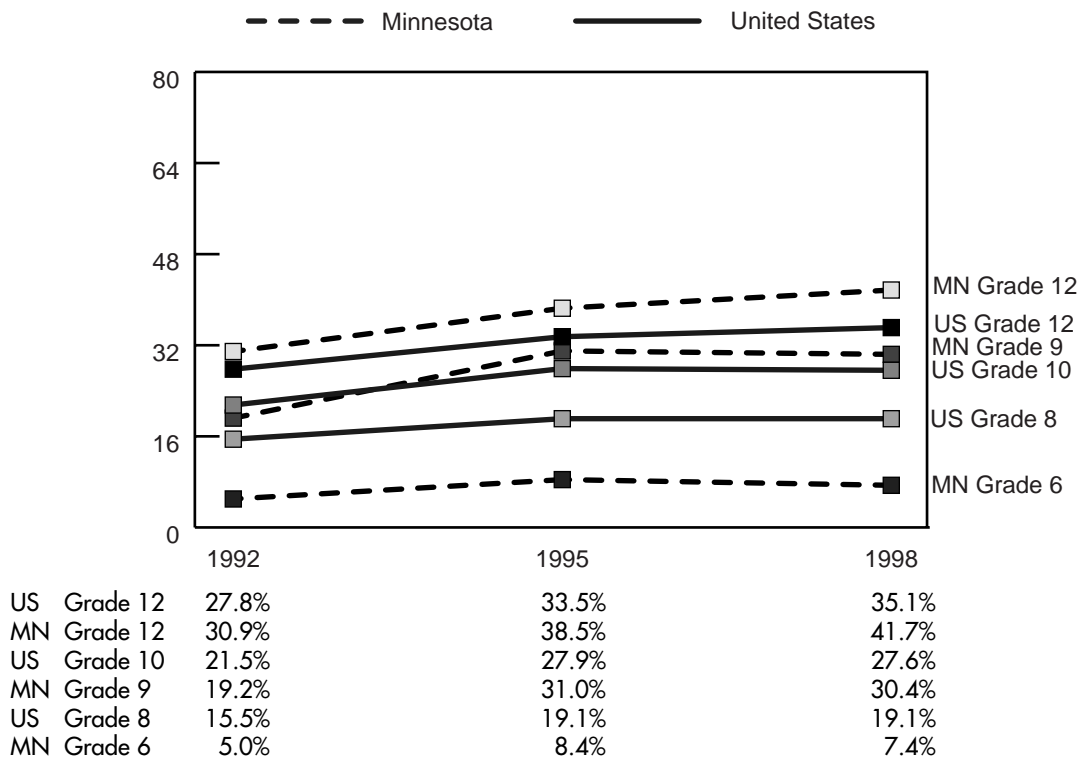
Tobacco use

Any cigarette smoking

Across the country and in Minnesota, the rates of cigarette smoking among most age groups of adolescents are either remaining stable or increasing. One comparative measure of cigarette smoking is the proportion of students who have smoked any cigarettes during the previous 30 days. National survey results show that 30-day prevalence of any cigarette smoking has steadily increased since 1992 among 12th graders; the rate leveled-off between 1995 and 1998 for 8th and 10th graders. Between 1992 and 1995, Minnesota students also showed increased rates of cigarette smoking although, by 1998, the rate of cigarette smoking among Minnesota 6th and 9th graders dropped slightly or leveled off. In every year, more Minnesota 12th graders have reported smoking than 12th graders across the nation. However, Minnesota has a lower school dropout rate than the national rate which could explain the elevated smoking rate among Minnesota 12th graders.

Any cigarette use in past 30 days

State and national comparisons



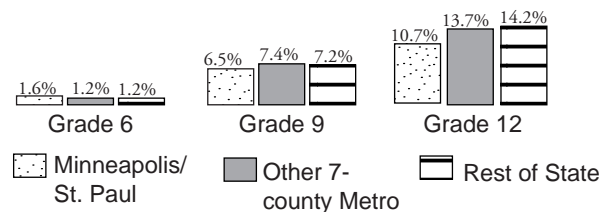
Tobacco, alcohol, and other drugs

Heavy cigarette smoking

Heavy smoking (a half a pack or more per day) increases health risks. Between 1992 and 1995, heavy smoking among adolescents increased slightly in Minnesota and across the nation for all grades surveyed. Between 1995 and 1998, national rates of heavy smoking for 8th and 10th graders remained fairly constant while rates increased slightly for 12th graders. Similarly, the change in the rate of heavy cigarette smoking in Minnesota between 1995 and 1998 varied by grade level. Heavy cigarette smoking remained fairly stable for 6th and 9th graders, but increased for 12th graders. Overall, the rates of heavy smoking for Minnesota students are somewhat higher than for students nationally.

Heavy smoking rates varied somewhat across the state. For 6th graders, rates are slightly higher in the Minneapolis and St. Paul schools than the remaining 7-county metropolitan schools and schools in the rest of the state. For 9th and 12th graders, the rates of heavy smoking follow a different pattern, with Minneapolis and St. Paul students less likely than other students to smoke heavily.

Heavy cigarette smoking
1998 geographic comparisons



Year and grade	MN %	Year and grade	US %
1992		1992	
6	0.8	8	2.9
9	5.0	10	6.0
12	11.6	12	10.0
1995		1995	
6	1.6	8	3.4
9	8.1	10	8.3
12	13.6	12	12.4
1998		1998	
6	1.3	8	3.6
9	8.2	10	7.9
12	15.6	12	12.6

Tobacco, alcohol, and other drugs

Access to tobacco for tobacco users

Adolescents who use tobacco products (cigarettes, cigars, or smokeless tobacco) obtain them from various sources. Some sources are commercial (such as convenience stores, gas stations, and bars) and other sources are social (friends, family members, home, getting someone else to buy). For the first time, the 1998 Minnesota Student Survey asked tobacco users about their sources of tobacco. The analyses of access to tobacco are limited to students under age 18 since 18 is the legal age to purchase tobacco in Minnesota. One-third of 12th graders and all students in younger grades were underage when they completed the survey.

Most of the media and policy focus of adolescent tobacco access is concentrated on commercial sources; however, the survey shows that more underage students in Minnesota obtain tobacco from social sources.

Whether commercial or social sources are used varies substantially by grade. Almost half of 6th grade tobacco users reported obtaining tobacco from their friends. One out of five reported stealing it from their homes or getting someone else to buy for them. Getting tobacco from family members was also fairly common. (It is unknown whether the individuals who purchase tobacco for these young people or the family members who give them tobacco are minors or adults.) Many 6th grade tobacco users also reported stealing tobacco products from stores and from their friends' homes. Very few bought tobacco from commercial sources, although some bought it from vending machines.

Like the 6th graders, 9th grade tobacco users were most likely to get tobacco from social sources with over two-thirds of them obtaining tobacco from friends. Almost half of the 9th grade tobacco users obtained tobacco by getting someone else to buy for them. The home environment was also a likely place for 9th grade tobacco users to obtain tobacco with one out of

five getting it directly from family members or stealing it from home. One-quarter of 9th grade tobacco users reported buying their own tobacco from gas stations or convenience stores. One out of six 9th grade tobacco users also reported stealing tobacco from stores.

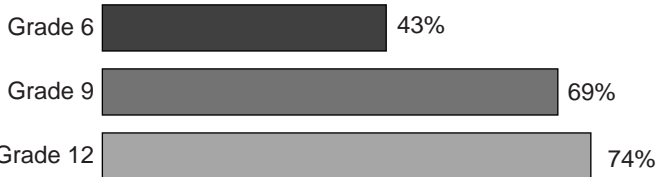
Almost three-quarters of under-age 12th grade tobacco users obtained tobacco products from their friends, and it is possible that their friends are legal-age. Almost half got someone else to buy tobacco for them, and more than half purchased tobacco themselves from gas stations or convenience stores. Underage 12th graders were about twice as likely as younger students to purchase from grocery, discount or drug stores, their rates of purchasing from other locations were fairly similar. Underage 12th graders were less likely to shoplift tobacco or take it from home.

Tobacco, alcohol, and other drugs

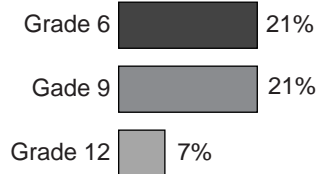
Access to tobacco for tobacco users in past 30 days* 1998 grade comparisons

Social sources

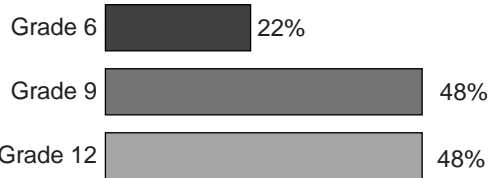
Got it from friends



Took it from my home



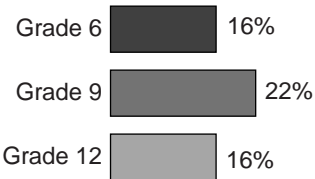
Got it by getting someone else to buy for me



Took it from a friend's home

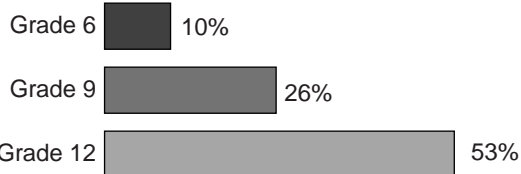


Got it from family members

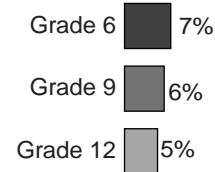


Commercial sources

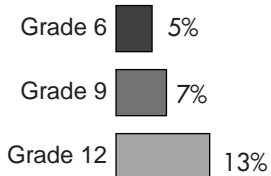
Bought it at a gas station/convenience store



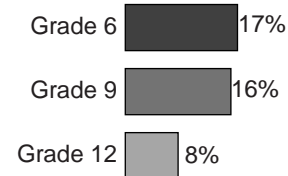
Bought it at a bowling alley/video arcade/pool hall



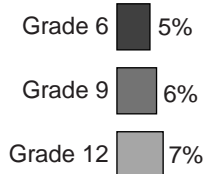
Bought it at a grocery/discount/drug store



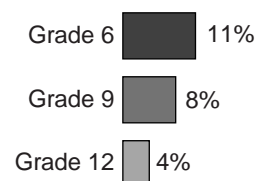
Took it from stores



Bought it at bars or restaurants



Bought it from vending machines



*Includes only students under the age of 18.

Tobacco, alcohol, and other drugs

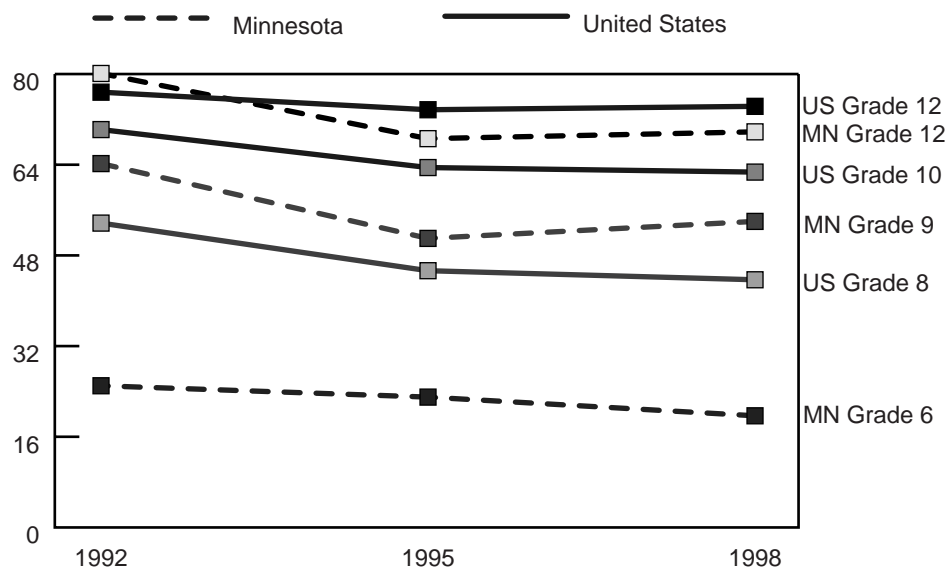
Alcohol use

Any drinking

Between 1995 and 1998, annual alcohol use leveled off nationally. Annual use means any use in the past 12 months. The same trend was seen for Minnesota 12th graders. Among 9th graders, the rate increased, and among 6th graders, the rate decreased.

The annual alcohol prevalence rate for Minnesota 12th graders in 1998 was lower than the 12th grade national rate.

Any alcohol use in past 12 months
State and national comparisons



US Grade 12	76.8%	73.7%	74.3%
MN Grade 12	80.1%	68.6%	69.8%
US Grade 10	70.2%	63.5%	62.7%
MN Grade 9	64.2%	51.0%	54.0%
US Grade 8	53.7%	45.3%	43.7%
MN Grade 6	25.0%	23.0%	19.7%

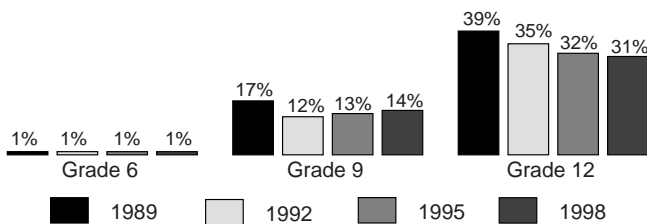
Tobacco, alcohol, and other drugs

High quantity drinking

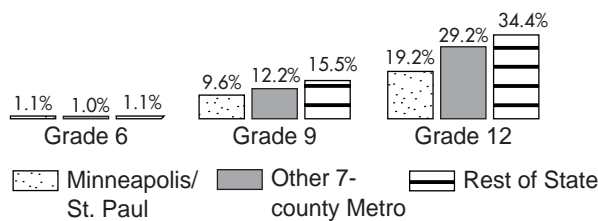
For students in all three grades, the percentage who said they typically drink at least 5 drinks when they drink remained pretty stable. However, the fact that about one-third of 12th graders reported such high-quantity drinking is a concern.

High-quantity drinking differs by geographic area for 9th and 12th graders, with less high-quantity drinking among students in Minneapolis/St. Paul compared with other students. More than one-third of high school seniors in schools outside of the Twin Cities metropolitan area reported high-quantity drinking.

Has 5 or more drinks on typical occasion Comparisons over time



1998 geographic comparisons



Access to alcohol for alcohol users

Gaining access to alcoholic beverages does not appear to be difficult for students in Minnesota. Unlike for tobacco, however, students of all ages acquire alcohol primarily from social sources rather than commercial sources. Purchasing and shoplifting alcohol were relatively uncommon among all Minnesota students.

The most common source of alcohol reported by 6th grade alcohol users was family members. About one-third of 6th grade users also reported obtaining alcohol from friends. Obtaining alcohol at parties and stealing it from their homes were also common. It is unknown whether the parties are supervised, but it is clear that young school children are most likely to obtain alcoholic beverages from social sources close to home with or without consent.

Almost two-thirds of 9th grade users reported obtaining alcohol from friends and half reported getting it at parties. More than one-fourth of 9th grade users received alcohol from a family member and more than one-fourth stole it from home. As a matter of fact, 9th grade alcohol users were 2 ½ times more likely than 12th graders to report stealing alcohol from their own homes. As with 6th graders, 9th grade users appear to be getting alcohol from social sources close to home or from within their home. However, one out of three 9th grade users were able to convince someone else to purchase alcohol for them.

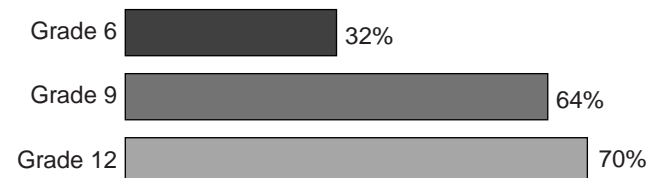
As with 9th grade students, the two most common sources of alcoholic beverages for 12th grade users were friends and parties. However, half of 12th grade users obtained alcohol by getting someone else to buy it for them.

Tobacco, alcohol, and other drugs

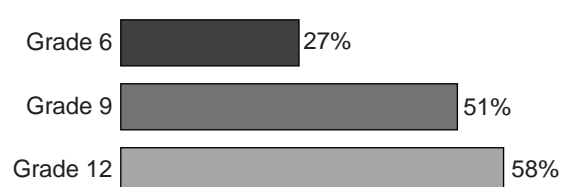
Access to alcohol for alcohol users in past 30 days 1998 grade comparisons

Social sources

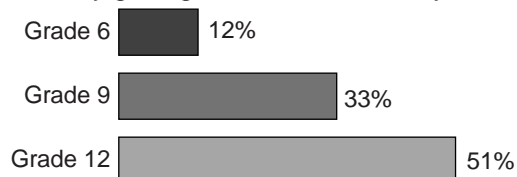
Got it from friends



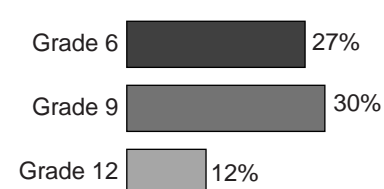
Got it at parties



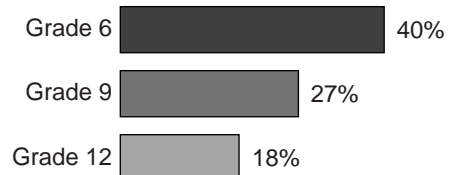
Got it by getting someone else to buy for me



Took it from my home



Got it from family members

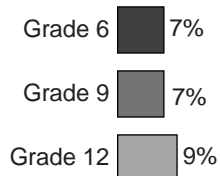


Took it from a friend's home

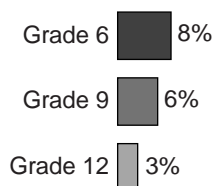


Commercial sources

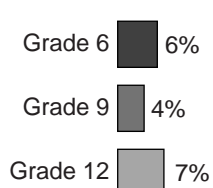
Bought it at stores



Took it from stores



Bought it at bars or restaurants



Tobacco, alcohol, and other drugs

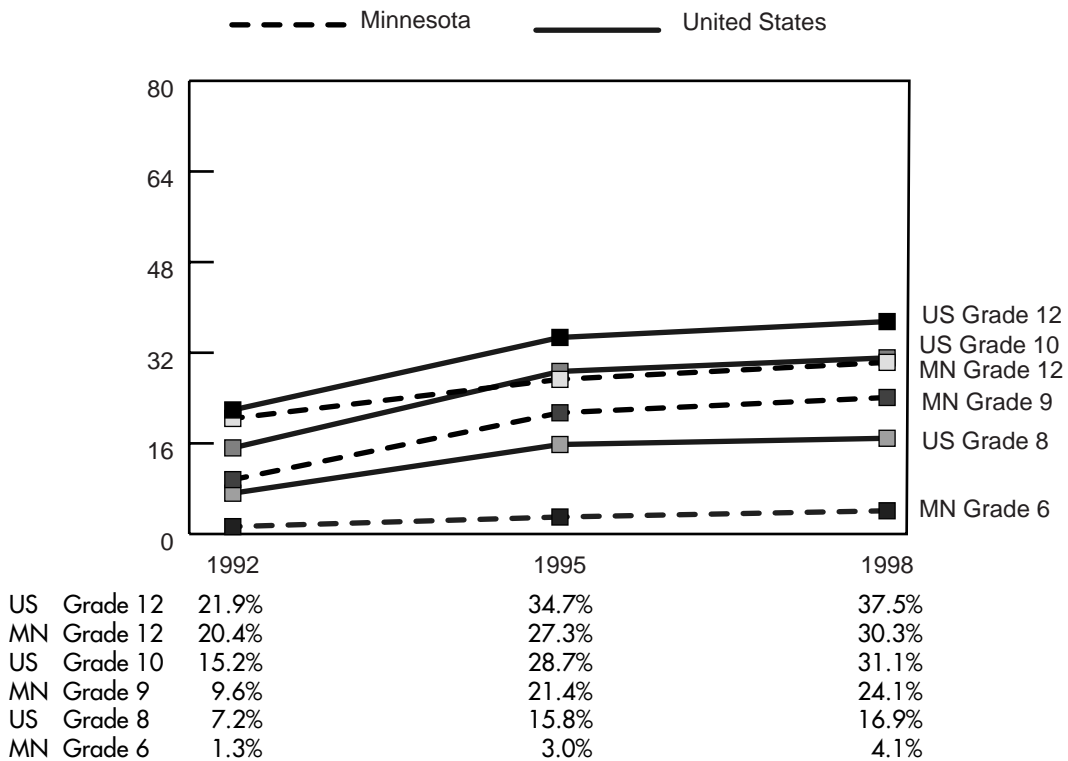
Marijuana and other drug use

Marijuana use has showed marked increases since 1992 for all grade levels in both the national and Minnesota data. However, marijuana use rates have been lower in Minnesota than nationally. Among Minnesota 6th, 9th and 12th graders, any use in the past 12 months increased from 1992 to 1998. The national rate for 12th graders in 1998 is substantially higher than the rate for Minnesota 12th graders. Frequent use of marijuana (at least 40 times in the past year) also showed increases from 1995 to 1998 in 9th (4% to 6%) and 12th (7% to 9%) graders. Less than one percent of 6th graders reported using marijuana frequently in each of the survey years.

Prior to 1995, the Minnesota Student Survey asked drug questions in a format different from

the national Monitoring the Future Study; therefore, adequate comparisons between the two studies cannot be made before this point. However, in 1995 and 1998, the 9th and 12th grade Minnesota Student Survey used a format similar to the national survey to ask about the use of hallucinogens, cocaine or crack, amphetamines and other stimulants, barbiturates and tranquilizers, and heroin or other opiates. These drugs combine to make the category of drug use “other than alcohol and marijuana” presented in this report. The 6th grade version of the Minnesota Student Survey contained fewer drug questions than the version for older students and comparisons are available only for inhalants.

Any marijuana use in past 12 months
State and national comparisons



Tobacco, alcohol, and other drugs

The use of any drug other than alcohol or marijuana in the past 12 months declined between 1995 and 1998 for Minnesota 9th and 12th graders.

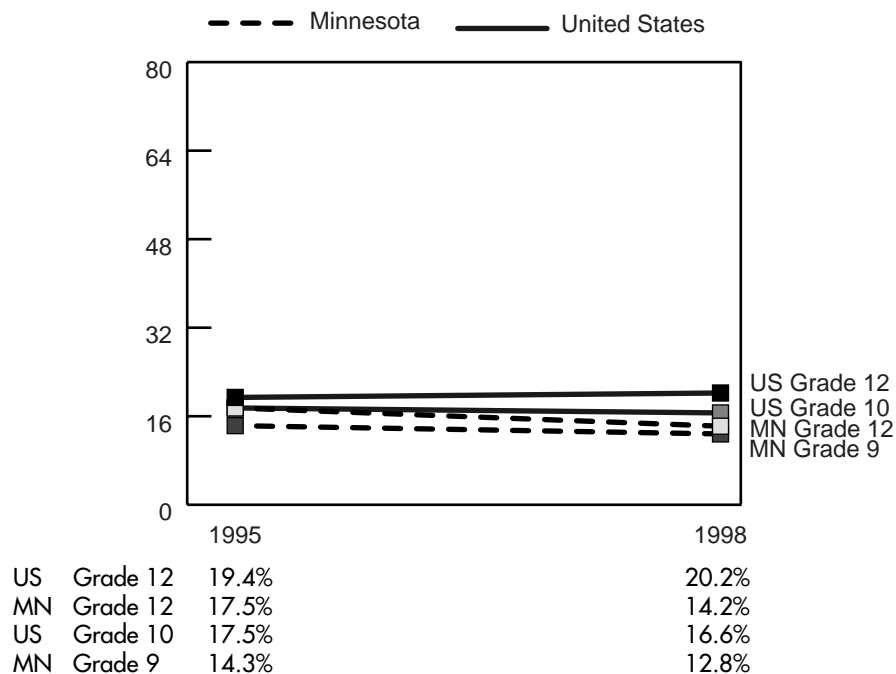
The national rate for 10th graders followed a similar pattern; however, the national 12th grade rate increased slightly between 1995 and 1998. Compared to 12th graders nationally, Minnesota teens are less likely to use any drug other than alcohol and marijuana. However, there are some departures from this overall decline for individual substances. Individual drug comparisons can be made between Minnesota and the national sample only for inhalants and stimulants due to wording differences in the questions regarding other drugs.

Between 1995 and 1998, annual inhalant use decreased among all students in Minnesota, which parallels the national trend. In 1998, the rate of inhalant use for Minnesota 12th graders in 1998 was less than half the rate for national 12th graders (3.2% versus 8.0%).

Use of specific drugs in past 12 months
Comparisons over time

Substance and grade	MN	
	1995 %	1998 %
Inhalants		
6	8.1	5.9
9	8.6	6.5
12	3.8	3.2
LSD		
9	5.8	6.0
12	7.1	7.5
Stimulants		
9	11.9	10.1
12	11.3	8.9
Cocaine		
9	3.1	5.5
12	2.9	5.7
Barbiturates		
9	5.3	4.5
12	4.0	3.1
Opiates		
9	5.0	4.0
12	3.3	2.9

Any drug use (other than marijuana) in past 12 months
State and national comparisons



Tobacco, alcohol, and other drugs

The use of LSD and other hallucinogens in the past 12 months increased slightly for Minnesota 9th and 12th graders.

The use of stimulants by students across the nation has increased since 1992. In contrast, amphetamine and other stimulant use in Minnesota has decreased during the same time period. In 1998, Minnesota 12th graders reported less stimulant use than 12th graders across the nation (8.9% versus 10.1%).

Unfortunately, the rate of cocaine/crack use increased between 1995 and 1998 for Minnesota students. The Minnesota increase parallels the national trend.

Use of barbiturates or tranquilizers and opiates or narcotics decreased between 1995 and 1998 for Minnesota students.

Access to marijuana and other drugs for drug users

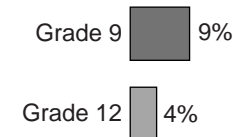
Considering the increased rate of marijuana use and the lack of substantial decline in other drug use, understanding how students are obtaining these substances is important for prevention and intervention planning. By far students' most common sources for drugs are getting them from friends and buying them from people they know. (Questions regarding access to drugs were not included in the 6th grade version of the Minnesota Student Survey.) About two-thirds of 9th and 12th grade users reported getting drugs from friends. Many students also reported getting drugs at parties. Fewer users obtained other drugs from family members or stole them. These findings indicate that Minnesota students are less likely to buy drugs from unknown drug dealers than to purchase or share drugs with their friends.

Access to marijuana and other drugs for drug users in past 30 days 1998 grade comparisons

Got them from friends



Took them from my home



Got them by getting someone else to buy for me



Took them from a friend's home



Got them from family members



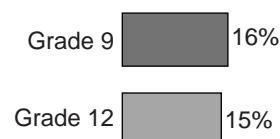
Bought them from people I know



Got them at parties



Bought them from people I don't know



Tobacco, alcohol, and other drugs

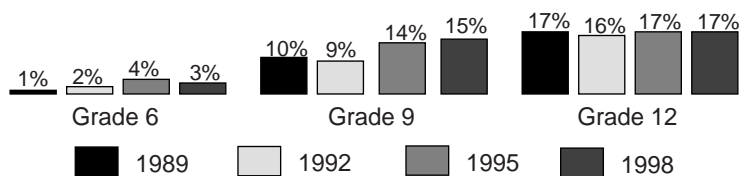
Substance use before or during school

Any alcohol or drug use among students is of major concern. However, when an adolescent begins using alcohol or drugs outside of social gatherings, such as parties, and starts using before or during school, the likelihood of a serious problem is greatly increased. The Minnesota Student Survey has measured this problematic pattern of use since 1989. While there was a slight increase in this use pattern for 6th graders between 1989 and 1995, very few 6th graders reported using alcohol or drugs before or during school. However, this pattern of use continued to rise over time for 9th graders with more than one out of seven reporting this behavior in 1998. More than one out of six 12th graders reported using alcohol or drugs before or during school, but the rate has not changed since 1989.

Driving under the influence

The rate of driving under the influence of alcohol or other drugs in the past year by 12th graders was relatively stable between 1995 and 1998 with 33% of students reporting this behavior in 1995 and 32% in 1998. However, the fact that the survey indicates that one-third of high school seniors are still engaging in this dangerous behavior is probably more important than the stabilization of rates over time.

Ever used alcohol or other drugs before or during school
Comparisons over time



Sexual behavior

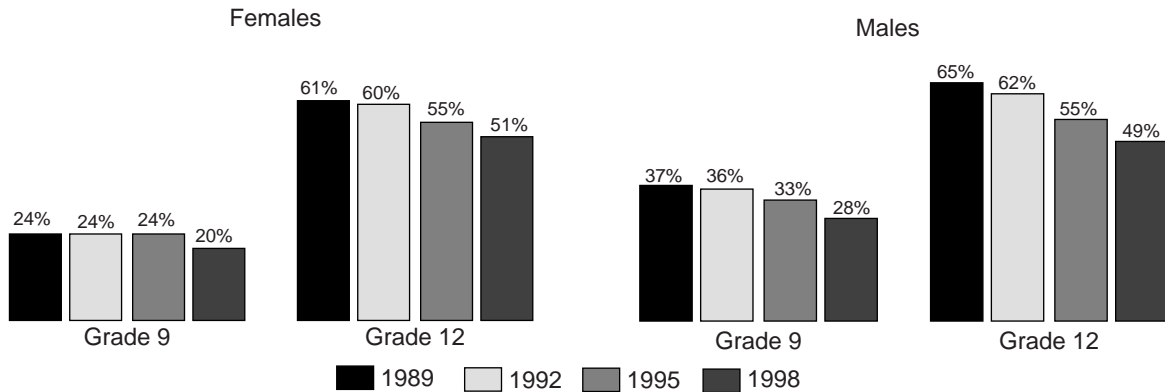
Sexual intercourse

The percentage of students who reported having had sexual intercourse declined from 1989 to 1998. In the most recent survey, more than one-quarter of 9th grade males and one-fifth of 9th grade females reported engaging in sexual intercourse; half of 12th grade males and females reported having had sexual intercourse. (Questions regarding sexual activity were not included in the 6th grade survey.) Since 1989, there has been a proportional decrease of approximately 25% in the rate of sexual intercourse for male students and a proportional decrease of about 16% for female students. The magnitude of this decrease over the course of one decade is promising.

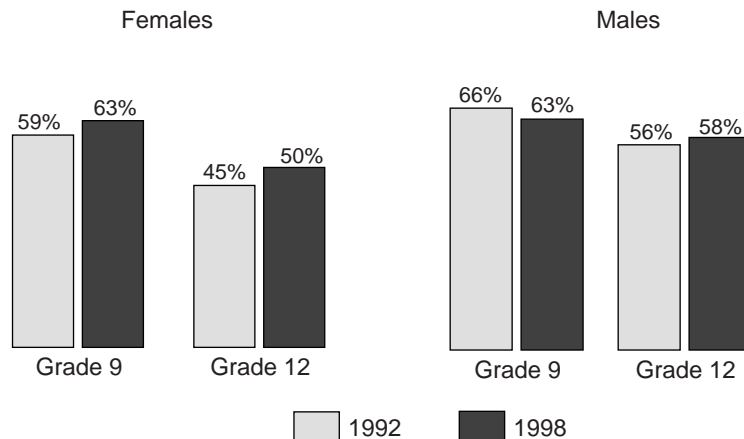
Condom use

In 1998, more than half of sexually active students reported that either they or their partner used a condom the last time they had sexual intercourse. In both 1992 and 1998 (this question was not asked in 1995), 9th grade students were more likely than 12th grade students to report that a condom was used during the last sexual encounter. Since 1992, condom use rates have increased for female 9th graders and both male and female 12th graders; however, there was a slight decrease in condom use for male 9th graders.

Ever had sexual intercourse
Comparisons over time by gender



Used condom last time had intercourse*
Comparisons over time by gender



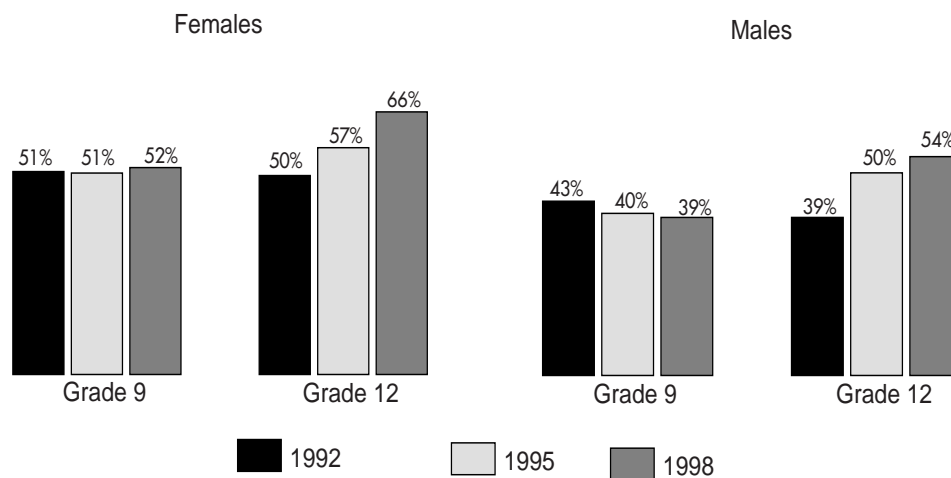
*Responses reflect only students who reported having sexual intercourse

Sexual behavior

Communication with partner

The number of sexually active adolescents practicing safer sexual behavior over time varied by grade. Between 1992 and 1998, there was very little change in the percentage of sexually active 9th grade female students who reported communicating with their partners about protecting themselves from sexually transmitted diseases; a slight decrease was evident for 9th grade males. In contrast, the rate of communication with partners among 12th grade females and males increased substantially over time. Regardless of grade, females were more likely than males to report this type of discussion.

Talked with each sexual partner about sexually transmitted diseases*
Comparisons over time by gender



*Responses reflect only students who reported having sexual intercourse

Violence, victimization, and school climate

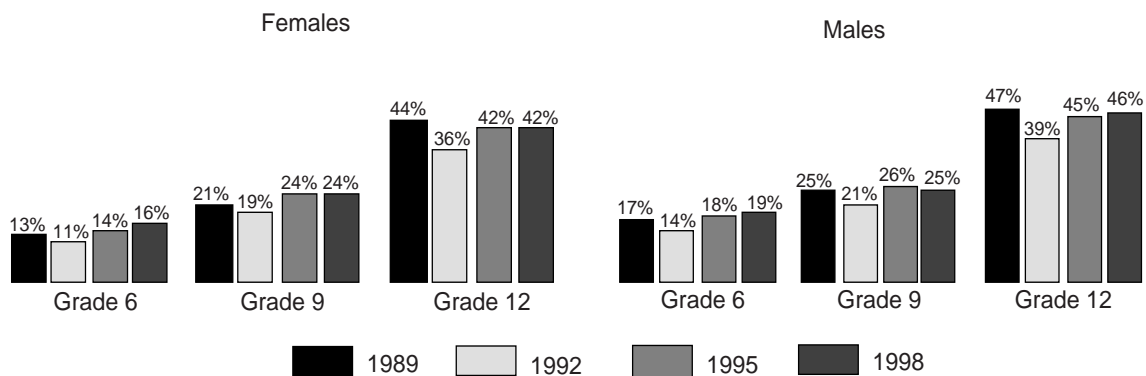
Antisocial behavior

The Minnesota Student Survey asks about five antisocial behaviors that are interesting to look at over time: truancy, vandalism, physical fights, carrying guns on school property, and carrying other weapons on school property.

Truancy

Truancy (skipping full days of school) in the past 30 days was reported more often by older students than younger students. In 1998, almost half of 12th graders skipped school at least one day in the 30 days prior to survey administration. In contrast, fewer than one out of five 6th graders reported recent truancy. Since 1989, truancy has increased slightly or remained constant for both males and females in all grades, with the exception of a decrease in all grades in 1992. The truancy rate is slightly higher among males than females.

Any truancy in past 30 days
Comparisons over time by gender



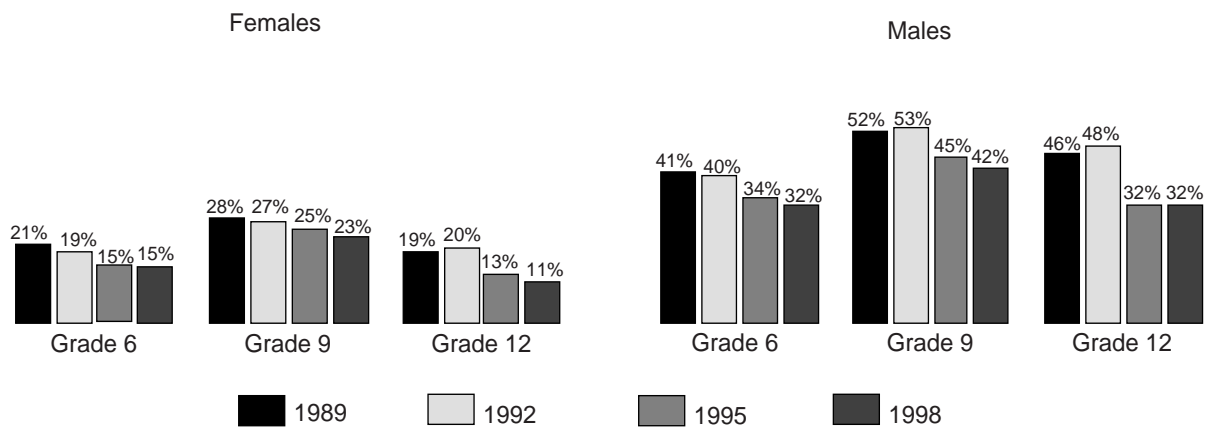
Violence, victimization, and school climate

Vandalism and physical fights

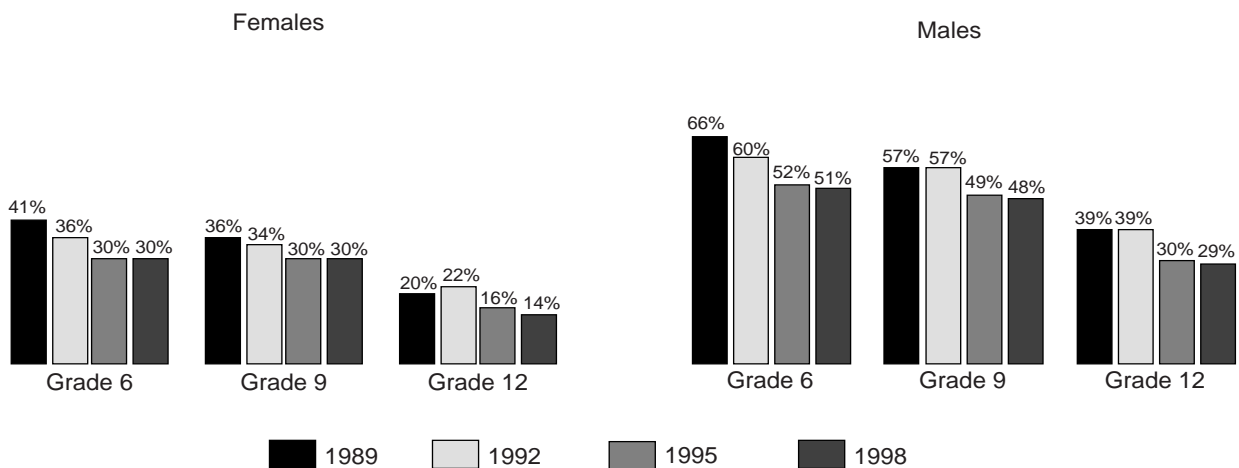
Vandalism and physical fights decreased among students in all three grades from 1992 to 1998, after slight increases in some groups in the 1989-1992 comparison. Rates reported were for any occurrence of the behavior in the previous 12 months. The decrease in vandalism

and physical fights was most dramatic for 6th and 12th graders. However, the lower rates over time for 12th graders may be a result of an increase in the number of students with problem behaviors dropping out of school or attending alternative education programs.

Any vandalism in past 12 months Comparisons over time by gender



Any physical fights in past 12 months Comparisons over time by gender



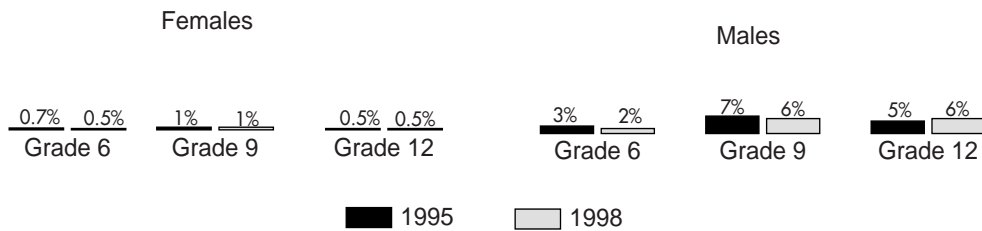
Violence, victimization, and school climate

Carrying guns to school

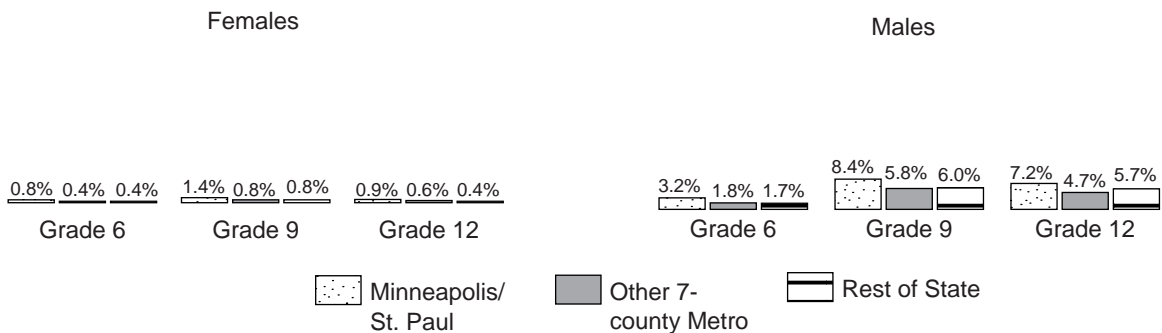
In 1995, the Minnesota Student Survey began asking students whether they carried guns or other weapons on school property in the past 30 days. Between 1995 and 1998, the percentage of students carrying guns on school property remained small and very stable. Male students are much more likely to carry a gun to school than female students.

Differences in 1998 rates between students attending Minneapolis/St. Paul schools and schools in the remaining 7-county metropolitan area or the rest of the state are not substantial. Male students from Minneapolis/St. Paul schools were more likely to carry guns to school than males from other parts of the state. However, differences among geographic areas should be interpreted with caution due to the small numbers of students engaging in this behavior.

Carried a gun on school property in past 30 days
Comparisons over time by gender



1998 geographic comparisons



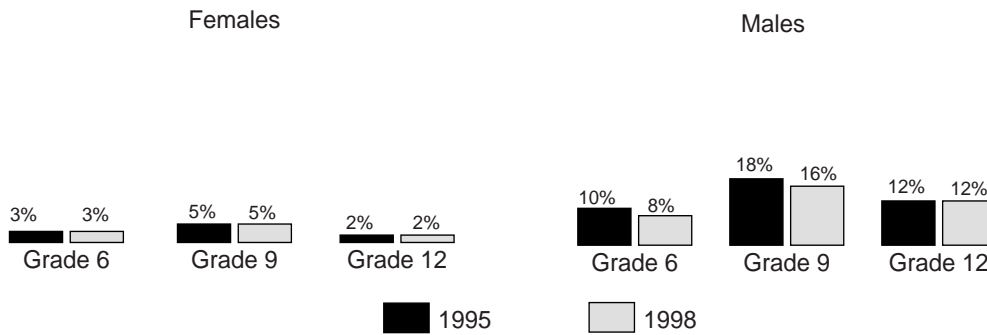
Violence, victimization, and school climate

Carrying other weapons to school

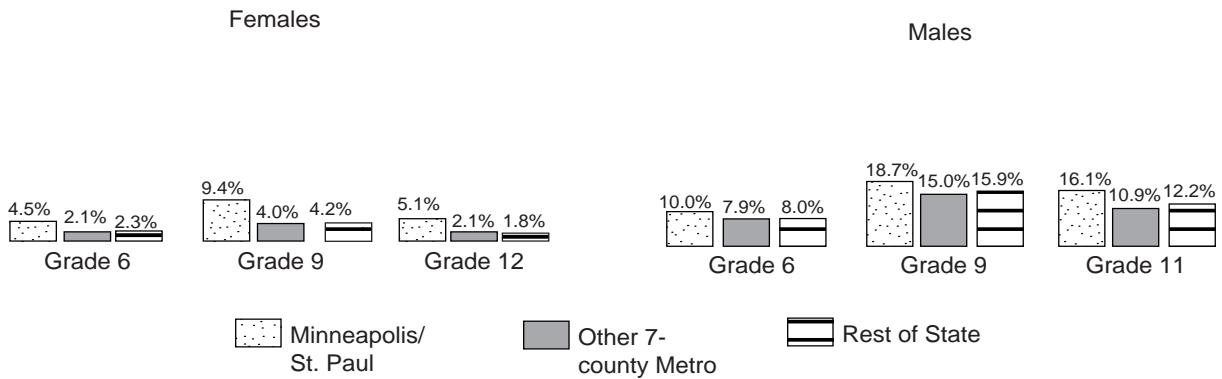
Carrying other weapons, such as knives, on school property is more common than carrying guns to school. Ninth grade males had the highest rate, with one out of six 9th grade males carrying a weapon other than a gun to school in 1998. The rate of carrying such weapons remained very stable between 1995 and 1998 for females in all grades surveyed and 12th grade males; rates dropped for 6th and 9th grade males. Male students are much more likely than female students to carry other weapons to school.

The rates of carrying other weapons to school differed by geographic area. In 1998, male students in Minneapolis/St. Paul schools were slightly more likely than male students in other areas in the state to carry weapons other than guns to school. Differences in rates of weapon carrying behavior by geographic area were more substantial for females. Twice as many female students in Minneapolis/St. Paul reported carrying other weapons to school than their counterparts in the rest of the state.

Carried other weapon on school property in past 30 days
Comparisons over time by gender



1998 geographic comparisons



Violence, victimization, and school climate

Victimization at school

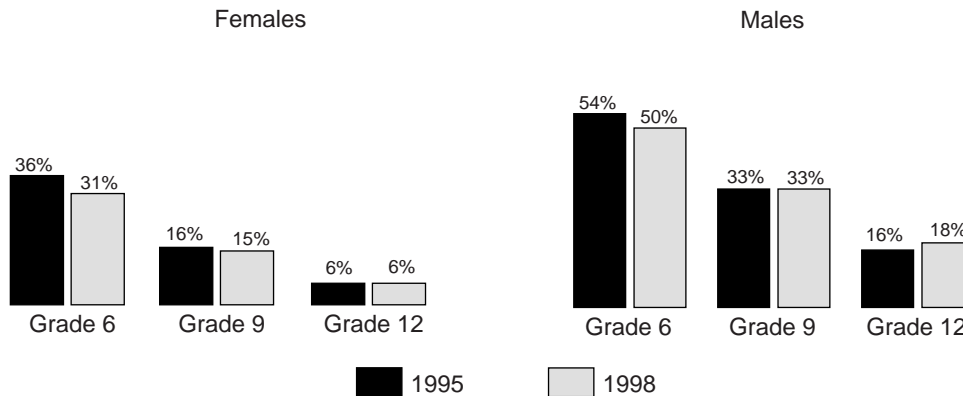
Kicking, biting, and hitting

Reports of being a victim of violence on school property are common. In 1998, half of male 6th graders reported being kicked, bitten, or hit while on school property in the past 12 months. About one-third of female 6th graders and male 9th graders also reported being victims of this kind of violence. Rates were lower for female 9th graders and all 12th graders. Very little change has occurred since 1995 in the reporting of this physical victimization for 9th and 12th graders.

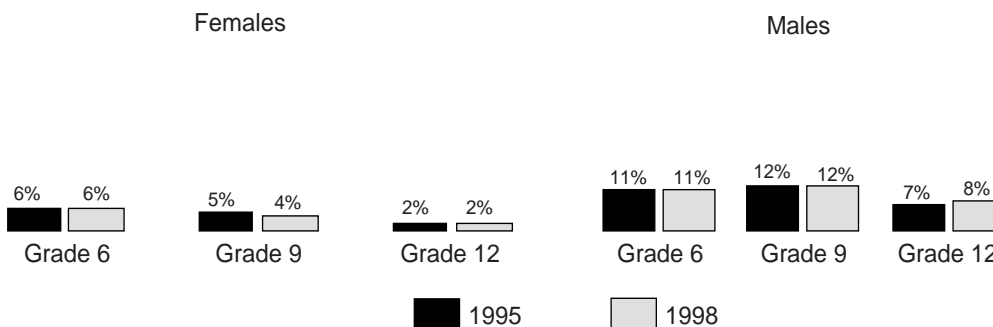
Threatened with weapon

Reports of being threatened or injured with a weapon on school property in the past 12 months remained very stable between 1995 and 1998. In 1998, the rate of victimization was twice as high for males as females in 6th grade, three times as high in 9th grade, and four times as high in 12th grade.

Has been kicked, bitten, or hit on school property in the past 12 months
Comparisons over time by gender



Has been threatened or injured with weapon on school property in the past 12 months
Comparisons over time by gender



Violence, victimization, and school climate

Reports of being stabbed or fired at on school property were very infrequent for both male and female students across all grades surveyed. However, even a few reports of such incidents are alarming. Males were at least three times more likely than females to report being stabbed or fired at by someone on school property. Overall, rates of such victimization have not changed in the past three years.

School climate

School safety

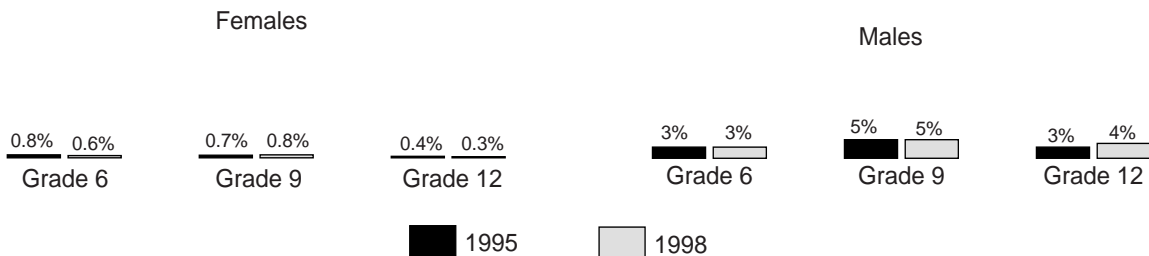
Most students in Minnesota feel safe at school. However, in 1998, about one out of eleven 6th and 9th graders and one out of twenty 12th graders reported not feeling safe at school.

Small gender differences are apparent with more males than females reporting not feeling safe. There has been a very slight decrease in the rate of feeling unsafe at school since 1995.

Reports of feeling unsafe at school were higher among students in Minneapolis/St. Paul schools than students in other schools. Minneapolis/St. Paul 6th graders were slightly more likely to report feeling unsafe at school than their classmates in schools across the rest of the state. Ninth graders in Minneapolis/St. Paul schools were about twice as likely to feel unsafe as their counterparts in other schools. The differences in feelings of unsafety were almost three times higher for Minneapolis/St. Paul 12th graders than 12th graders in other schools.

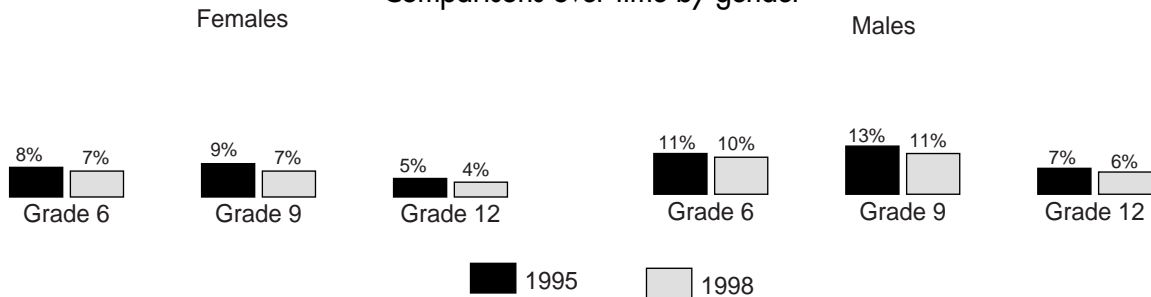
Has been stabbed or fired at on school property in past 12 months

Comparisons over time by gender

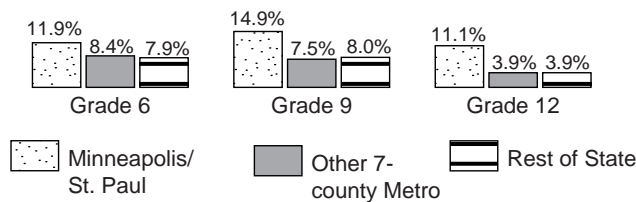


Does not feel safe at school

Comparisons over time by gender



1998 geographic comparisons

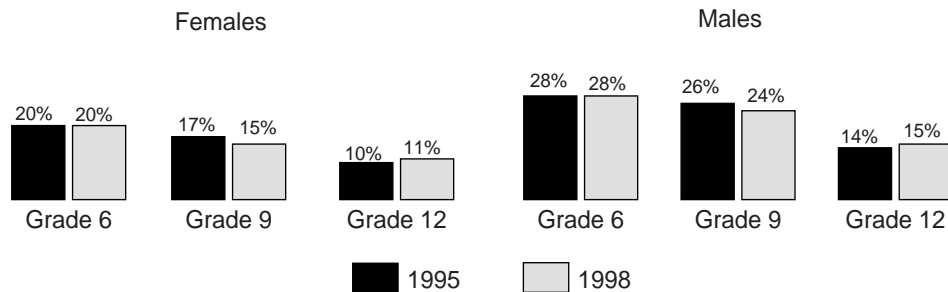


Violence, victimization, and school climate

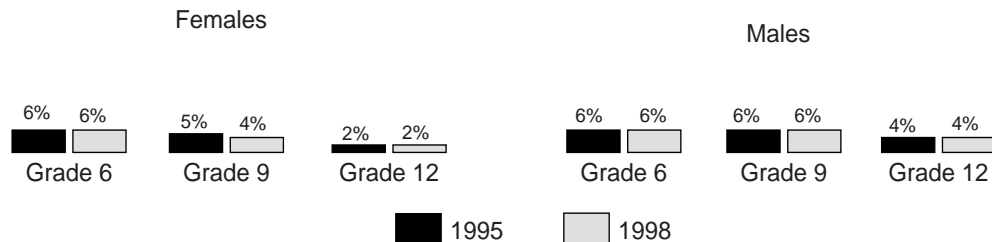
Students report that school bathrooms are a relatively dangerous place. (They were also asked about feeling safe at school or going to and from school.) One-quarter of 6th graders reported that school bathrooms are an unsafe place. This perception decreases with age and not much change has occurred over the past three years. However, male students consistently report feeling unsafe in school bathrooms more often than female students.

Very few students reported skipping school because they felt unsafe and there was little change over time. The rate of skipping school because of feeling unsafe was almost twice as high for Minneapolis/St. Paul students as their counterparts in the remainder of the 7-county metropolitan area and the rest of the state.

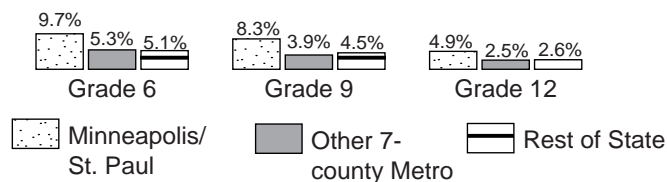
Believes bathrooms in school are not safe
Comparisons over time by gender



Skipped school in past 30 days because of feeling unsafe
Comparisons over time by gender



1998 geographic comparisons



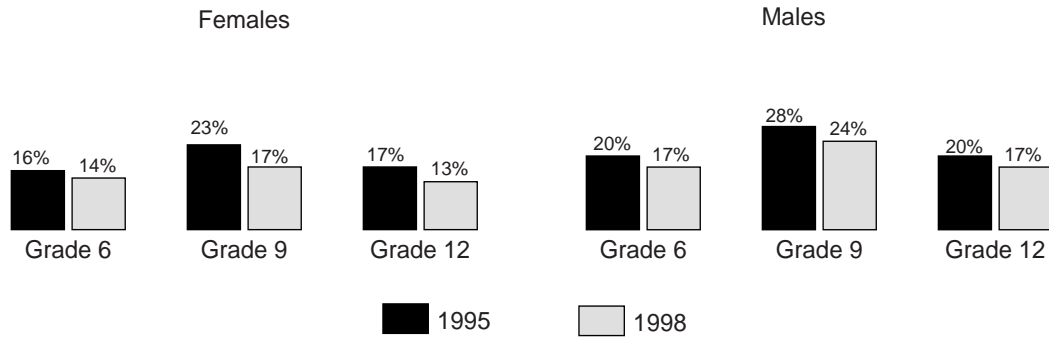
Violence, victimization, and school climate

Gang activity

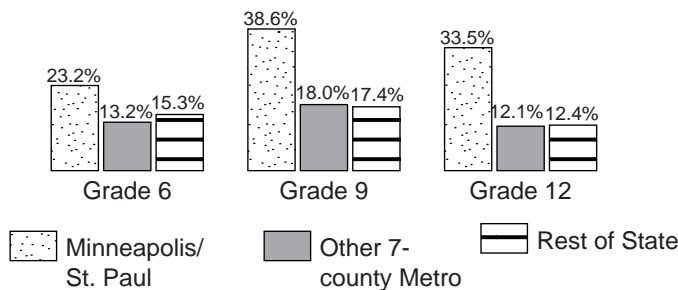
At each grade level, more males than females reported that illegal gang activity is a problem at school. Students in 9th grade were more likely than students in 6th or 12th grades to report gang activity in their school. The perception of illegal gang activity has decreased since 1995. However, in 1998, one-out of five 9th graders thought their school had problems with gang activity.

Gang activity was seen as a problem by a much greater percentage of students in Minneapolis/St. Paul schools than students in the remaining schools of the 7-county metropolitan area or schools in the rest of the state. The greatest differences were seen in 9th and 12th grade where more than one-third of students in Minneapolis/St. Paul perceived a problem with gang activity in school.

Believes gang activity is a problem at school
Comparisons over time by gender



1998 geographic comparisons



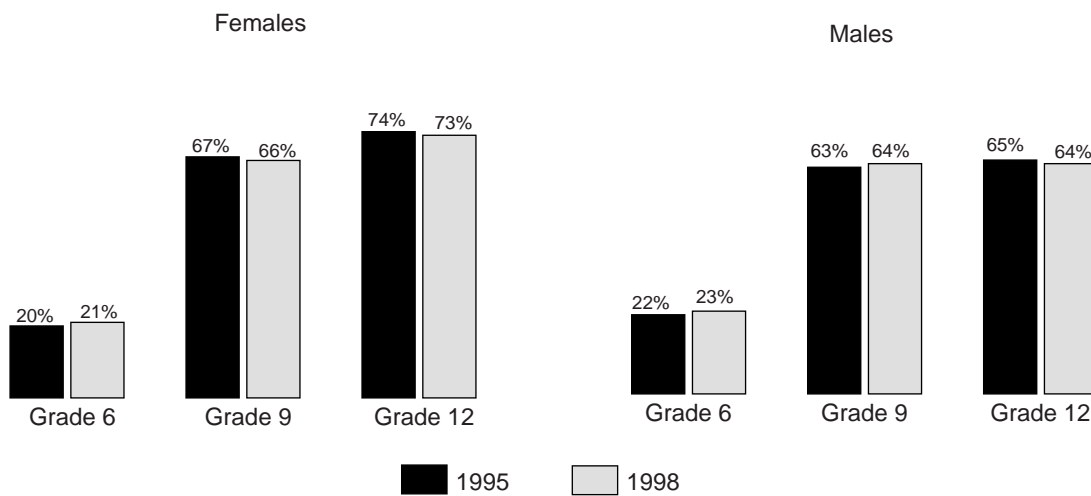
Violence, victimization, and school climate

Alcohol and drug problems

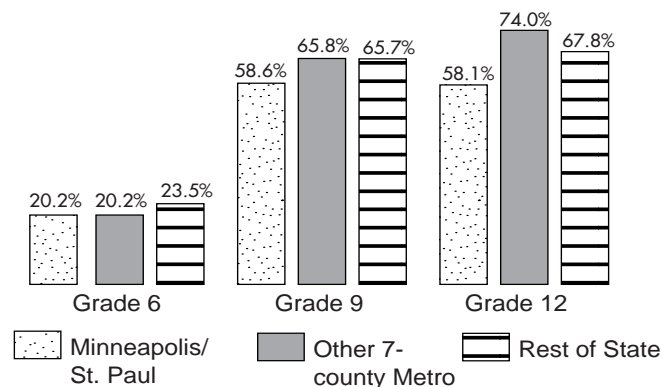
Alcohol and drug use by students was seen by many students as a problem in their school. In 1998, about two-thirds of 9th graders and male 12th grade students perceived student substance use to be a problem. This perception was highest among 12th grade females. Moreover, there was little change in this perception in the past three years.

The perception of student alcohol and drug use as a problem at school varied by geographic area. A smaller percentage of 9th and 12th grade Minneapolis/St. Paul students reported this problem compared with their counterparts in schools across the rest of state. Almost three-quarters of 12th graders in the 7-county metropolitan area (excluding schools in Minneapolis/St. Paul) were concerned about student alcohol and drug use. Differences across the state were minimal for 6th graders.

Believes student alcohol/drug use is a problem at school
Comparisons over time by gender



1998 geographic comparisons



Technical issues

Defining the sample

Not all school districts participated in the Minnesota Student Survey in each of the four years. Therefore, the first step for this comparison report was to limit the analyses to those districts, and grades within those districts, that participated in the survey for all four years. The statewide student population was still well represented: 247 districts had at least one grade participate in all four years (72% of the total).

An accurate comparison involved more than just including qualifying districts. Within these districts not all students completed the survey. For example, in 1992 a few large districts sampled their student populations. In addition, some districts had different participation rates for the four years.

Weighting district samples

The best way to correct for less-than-total participation is sample weighting. The weighting procedure was conducted independently for each grade for each district within each survey year. Besides correcting for disproportional representation created by district sampling, weighting also adjusted for differences in district participation rates across the four survey years.

Each district weighted sample was created by dividing the individual district's enrollment by the total enrollment for that grade and year for districts that participated. This ratio was then multiplied by the ratio of the total number of surveys included statewide for that grade and year to the number of district surveys completed for that grade and year.

The result is the weight given to each district's surveys for a given grade and year. This formula weights each survey so that the district contributes to the sample total in the same proportion as the district enrollment contributes to the total enrollment for participating districts.

The key point of this discussion is that every possible step was taken to ensure the most accurate and meaningful comparison of student survey results from one year to another. Students move in and out of school districts. With an anonymous survey it is impossible to say how many of the same students took the survey in 1989, 1992, 1995, and 1998. Despite such limitations the Minnesota Student Survey provides the most accurate and comprehensive information available about adolescents in the state.

Do students tell the truth?

One question that comes up often about student surveys is whether students' responses are honest and accurate. To some extent the question reflects a particular distrust of adolescents since the same challenge to the honesty and motivation of adults is rarely heard when adult poll results are released. Researchers use a variety of data analysis techniques to examine the accuracy of anonymous surveys. Surveys with grade or gender missing or with numerous inconsistencies or improbable answers were excluded from data analysis; this totals less than 5% of surveys from each survey year.

The vast majority of students exhibited patterns of responses to questions that were consistent and reasonable. In addition, as results have demonstrated, percentages for many answers were identical or almost identical for all four years. Such similarities could occur only if the results represented the actual situation; it is extremely unlikely that these patterns could be duplicated over time by chance. This combination of individual response patterns, plausible relationships between answers, consistency over time, and consistency with other studies all attest to the credibility of student responses.

Acknowledgments

The Office of Community Services of the Minnesota Department of Children, Families and Learning coordinated implementation of the 1998 Minnesota Student Survey.

We are indebted to all the students who responded to the survey and to all the school boards, administrators, and teachers who conducted the survey.

We are very pleased to acknowledge our partnership with the Minnesota Department of Human Services Performance Measurement and Quality Improvement Division. This partnership allows us to make better and more extensive use of the data collected in the Minnesota Student Survey.

The Prevention staff of the Minnesota Department of Children, Families and Learning are integral to the full implementation and dissemination of the Minnesota Student Survey results. The project team includes staff from Safe and Healthy Communities, Safe & Drug Free Schools & Communities, and Coordinated School Health (including their counterparts at the Minnesota Department of Health). Also, we appreciate Michael Luxenberg, Matthew Christenson, and Annette Kavanaugh at Professional Data Analysts, Inc. for their extensive data base management and data analysis work, and the survey scanning services provided by Jon Westerhaus, Dick Berg, and Jim Strobel at Survey and Ballot Systems, Inc.

Project Co-Directors

Barbara Yates

Minnesota Department of Children, Families and Learning

Patricia Harrison

Minnesota Department of Human Services

Minnesota Department of Human Services

Jayne Fulkerson

Mitzi Nelson

Lana Albrecht

Pamela Adelman

Timothy Beebe

Minnesota Department of Children, Families and Learning

Jim Colwell

Matt Mosiman

Minnesota Student Survey
1989 • 1992 • 1995 • 1998

Behavioral Trends for Minnesota's Youth

Minnesota Department of Children, Families and Learning, Roseville, Minnesota

This report may be reproduced without restriction,
provided that acknowledgment is given as follows:

This study was conducted by the Minnesota Department of Children, Families and Learning's Office of Community Services and the Minnesota Department of Human Services Performance Measurement and Quality Improvement Division.

This booklet was produced with federal funds from the Improving America's Schools Act of 1994, Title IV: Safe and Drug Free Schools and Communities. Data analysis and report writing were supported by funds from contract number 270-97-7034 under the State Systems Development Program administered by the Division of State Programs, Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration.

Cover illustration by Kenneth Wurl.

This document can be made available in alternative formats, such as large print, Braille, audio tape, or computer disk by calling 651/582-8328 or (TTY) 651/582-8201.

For more information, please contact Jim Colwell 651/582-8328.

Minnesota Student Survey
1989 • 1992 • 1995 • 1998

Behavioral Trends for Minnesota's Youth

Minnesota Department of Children, Families and Learning
Office of Community Services
1500 West Highway 36
Roseville, MN 55113

March 1999

Table of Contents

Executive summary	1
Introduction	
About the survey and report	3
Survey procedures and participation rates	3
How comparisons are made from year to year	4
Overview of Minnesota's student population	5
Tobacco, alcohol, and other drugs	
Comparisons with national results	6
Tobacco use	7
Any cigarette smoking	7
Heavy cigarette smoking	8
Access to tobacco	9
Alcohol use	
Any drinking	11
High quantity drinking	12
Access to alcohol	12
Marijuana and other drug use	
Any marijuana use	14
Any other drug use	15
Access to marijuana and other drugs	16
Substance use before or during school	17
Driving under the influence	17
Sexual behavior	
Sexual intercourse	18
Condom use	18
Communication with partner	19
Violence, victimization, and school climate	
Antisocial behavior	20
Truancy	20
Vandalism and physical fights	21
Carrying guns to school	22
Carrying other weapons to school	23
Victimization at school	
Kicking, biting, and hitting	24
Threatened or injured with weapon	24
School climate	
School safety	25
Gang activity	27
Student alcohol and drug problems	28
Technical issues	29
Acknowledgments	30