1994

**Texas School Survey of Substance**

**Use Among Students: Grades 4-6**

Texas Commission on

Alcohol and Drug Abuse

**B R I NG I N G T E X A S A NEW V I EW OF H U M A N PO T E N T I A L .**

**1994 Texas School Survey of Substance Use Among**

**Students: Grades 4-6**

Liang Y. Liu, Ph.D.

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**Acknowledgments**

Many people have contributed to the growth of the Texas School Survey project. Jim Dyer, Ph.D., has served as the project director at the Public Policy Research Institute (PPRI) at Texas A&M and has guided these data collection efforts since the beginning. Others at Texas A&M University who have contributed include Larry Ringer, Ph.D., Radmila Prislin, Ph.D., Clay Hanks, M.P.A., Laurie Kirts, Jin Muller, Lisa Halprin, and Ross Blakeley. TCADA staff who have been directly involved in developing this project and analyzing the results include Eric Fredlund, Ph.D., Jane Maxwell, M.A., and Richard Spence, Ph.D.

Special thanks go to Dr. Fredlund for sharing his experience, knowledge, and time through- out the study. Acknowledgments also go to Leslie Blair, M.A., for editing and coordinating the production of the final report.

TCADA extends a special recognition to Texas educational authorities such as the Texas Education Agency, the Educational Service Centers, and school administrators who have consistently provided their support and cooperation.

A special note of appreciation is given to Blanche Frank, Ph.D., Chief of the Bureau of Applied Studies of the New York State Office of Alcoholism and Substance Abuse Services. Dr. Frank was our advisor when TCADA first began the school survey in 1988, and her continuing guidance over the years should be recognized.

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**Executive Summary**

**Introduction**

Since its inception in 1988, the Texas School Survey has been a biannual collaborative effort between the Texas Commission on Alcohol and Drug Abuse (TCADA) and the Public Policy Research Institute (PPRI) at Texas A&M University to collect and analyze information on substance use among Texas youths. The statewide school survey monitors trends in substance abuse among public school students, identifies emerging problem areas, and serves as a basis of comparison for local school surveys which are conducted annually by various school districts throughout the state. The survey is also utilized by educators and policy-makers to allocate resources.

The school study began its survey of secondary students in

1988, while statewide data on elementary students was not gathered until 1990. The 1994 Texas School Survey results for elementary students were based on the responses of 66,674 students in fourth through sixth grades. In addition to the prevalence patterns of alcohol and drug use, this study addresses aspects of peer, parent, and school influences on substance use behaviors at a very early age when preven- tion and intervention is most effective.

**General Results**

***Comparison to 1994 Secondary Survey***

• Texas elementary students in 1994 were about one-half as likely as Texas secondary students to report lifetime use of alcohol and one-third as likely to report lifetime use of tobacco.

• Only 6 percent of the elementary students had ever used marijuana, compared to 25 percent of secondary students.

The 1994 Texas School Survey for grades 4-6 is based on the responses of

66,674 students.

In 1994, 27 percent of Texas students

in grades 4-6 used some type of substance— tobacco, alcohol, marijuana, and/or inhalants.

■ ■ ■

More than three times as many elementary students in 1994 than in 1992 reported lifetime marijuana use.

• Although low family income was correlated to substance use for grades 4-6, it was not a factor in the upper grades.

• Compared to secondary students, more elementary students have no idea how their parents feel about substance use.

***Drug-Specific Patterns of Use***

• In 1994, 27 percent of elementary school students in Texas used some type of substance—tobacco, alcohol, marijuana, and/or inhalants.

• In 1994, lifetime marijuana use among elementary students reached its highest level since the elementary survey began in

1990. More than three times as many elementary students in

1994 than in 1992 reported lifetime marijuana use.

• Prevalence of substance use increased with grade level. Sixth graders reported two or three times the lifetime use of fourth graders for tobacco, alcohol, inhalants, and marijuana.

• Alcohol is the most widely used substance among Texas elemen- tary students followed by tobacco. About 12 percent of elemen- tary students had used tobacco during the past school year and

23 percent had drunk alcohol during the past school year.

• Eight percent of fourth and fifth graders and 13 percent of sixth graders had ever used inhalants. Correction fluid and glue were the two most popular inhalants, each reported by 4 percent of elementary students in the 1994 survey.

***Demographic Variables and Substance Use***

• Male elementary students were more likely than female students to use all types of substances. For example, male students were three times more likely to use marijuana in the past school year than females. However, as the students get older, females in- crease their substance use at a faster rate than do males.

• As was true with secondary students, students who had college- educated parents were less likely to use substances than those whose parents had not graduated from college.

• Elementary students who lived with two parents were less likely to use substances than those who lived in other family situa- tions.

• A noticeable increase in prevalence was seen between fifth and sixth grades, indicating that many students begin experiment- ing with substances for the first time in sixth grade.

• Students who earned grades of C or lower reported two or three times as much substance use (for all substances) as students who earned As and Bs.

• African-American youths ranked highest in lifetime use of alcohol and marijuana, and Hispanics reported the greatest level of tobacco and inhalant use.

***Other Factors Related to Substance Use***

• Students who had been sent to the principal or who had cut class were more likely to use substances than other students.

• Approximately 37 percent of elementary students said that some or most of their close friends drank alcohol, 11 percent said that at least some of their close friends used inhalants, and

9 percent said that at least some of their close friends used marijuana. The extent of peer use gives some indication of a student’s opportunity to use substances and indicates the level of peer pressure to do so.

• 34 percent of elementary students had been offered alcohol, 30 percent had been offered cigarettes or smokeless tobacco, and

9 percent had been offered marijuana.

• Wine coolers were thought to be the least dangerous of the four types of alcoholic beverages surveyed.

• About two-thirds of the students thought inhalants were very dangerous to use and 83 percent thought that marijuana was.

• Among sixth graders in 1994, the average age of first use for alcohol was 9.5 years; for tobacco 9.9 years; for inhalants 10.1 years; and for marijuana 10.6 years.

• Elementary school students were most likely to get informa- tion about substances from school sources, but this declined from sixth grade through high school. 84 percent of fourth

and fifth graders said they got most of their information about substances from their teachers, whereas 78 percent of sixth graders said so.

***Conclusions***

• Increased marijuana use should be seen as an indication of potential future illicit drug use since use of marijuana almost always precedes other drug use.

• Although rates of substance use among elementary students

are fairly low, it should be remembered that these low percent-

Students who earned grades of Cs or

lower reported two to three times as much substance use as students who earned As and Bs.

Increased marijuana use may be an indicator of future illicit drug use since marijuana use almost always precedes other drug use.

■ ■ ■

Prevention efforts should be directed toward preadolescents and take into account factors such as peer use and parent/family

characteristics that may lead to the initiation and continuation of adolescent substance abuse.

ages translate into large numbers of students. For example, by translating the rates of use into actual numbers, it is estimated that about 80,000 Hispanic elementary students, 73,800 White elementary students, and 36,600 African-American elementary students were annual drinkers in 1994.

• Results from the 1994 survey suggest that prevention efforts should be directed toward preadolescents and take into account factors such as peer use and parent/family characteristics that may lead to the initiation and continuation of adolescent sub- stance abuse.

**Description of Survey and Limitations of Study**

**A Brief History**

Description of Survey

When the first Texas School Survey of substance abuse among secondary school students was conducted in 1988, it became clear that many students started abusing substances while still in elemen- tary school. In that year, a significant proportion of seventh grade inhalant users claimed that they had first used inhalants when they were ten years old or younger. However, the secondary school instru- ment was not appropriate for surveying elementary students. At six pages, it was too long to be completed by younger students in the required 15-20 minutes, and it asked about several substances rarely used by elementary students such as hallucinogens, uppers, and downers. Early in 1989, the Texas Commission on Alcohol and Drug Abuse (TCADA) and the Public Policy Research Institute (PPRI)

developed a survey instrument suitable for elementary students which maintained compatibility with the secondary instrument, but asked fewer questions about fewer kinds of drugs, and included fewer response categories. Questions about the perceived dangers of sub- stance use were added to the survey form in 1990. That was also the year the statewide survey for elementary students began.

In 1992, four new questions were added to the elementary survey. In order to provide more information about the students’ socioeconomic status, two questions asked students whether their parents had graduated from college and in what kind of home (i.e., house, apartment/duplex, or mobile home) they lived. The other two new questions addressed issues identified by school district personnel as being of particular interest. They asked students where they got alcoholic beverages and how long they had attended school in the same school district.

When the first Texas School Survey of substance abuse among secondary students was conducted in 1988, it became clear that many students started abusing substances while still in elementary

school.

The 1994 elementary survey content remained basically the same as the 1992 survey, but had one new question. The question which indicated the student’s socioeconomic status was changed from the type of home where the student lived to whether he/she qualified for a free

or reduced-price school lunch (Appendix A, question 9). Also, the wording for the responses that followed question number 10 which asked about inhalant use was modified. The question read, “*Have you ever sniffed any of the following inhalants to get high?*” The phrase “to get high” was added to the responses. For example, the response which in

1992 read “Gasoline” was changed to “Gasoline *to get high*;” the re- sponse “Paint thinner” was changed to “Paint thinner *to get high*.” There was concern that on previous surveys, some students may have answered that they had used a specific inhalant when they had sniffed it uninten- tionally or smelled it not intending to get high.

Also, the question regarding the use of substances during the school year was modified to read “*Since school began in the fall*, how many times have you used [substances]?” One of the responses to the question was changed from “Never used it” to ”Not used it” (Appendix A, question 12). In addition, the question about whether a student lived with two parents was modified to read “Do you live with: (Mark all

that apply).” The responses to the question were changed from “Yes”/ “No” to “Mother or Stepmother”/“Father or Stepfather” (Appendix A, question 3).

It should be noted that the modifications to the 1994 survey instrument possibly may have affected some of the prevalence rates from 1992 to 1994, especially in the case of inhalants.

**Survey Methods**

■ ■ ■

This report is based on data collected from

66,674 elementary students.

***Sampling***

The 1994 Texas School Survey was administered to 70,200 elementary students. As will be discussed below, some of the questionnaires were excluded from the results, therefore, this report is based on data collected from 66,674 elementary students (Table 1).

Students were randomly selected from school districts throughout the state using a multi-stage probability design. Stage one was the selection of districts; stage two, the selection of schools within the sampled districts; and stage three, the selection of classes within the sampled schools.

**Table 1. Total Number of Respondents to the Texas School Survey, by Grade and Demographic Characteristics: 1994**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Grade 4** | **Grade 5** | **Grade 6** | **Total** |
| **Total Sample** | 22,789 | 23,113 | 20,772 | 66,674 |
| **Sex** |  |  |  |  |
| Male | 11,290 | 11,521 | 10,279 | 33,090 |
| Female | 11,444 | 11,535 | 10,445 | 33,424 |
| **Race/Ethnicity**  White | 8,219 | 9,191 | 7,508 | 24,918 |
| African-American | 4,708 | 4,192 | 3,984 | 12,884 |
| Hispanic | 8,260 | 8,023 | 7,957 | 24,240 |
| Other | 1,114 | 1,235 | 974 | 3,323 |
| **Usual Grades** |  |  |  |  |
| As | 8,205 | 7,840 | 6,461 | 22,506 |
| Bs | 9,585 | 10,192 | 9,021 | 28,798 |
| Cs | 3,020 | 3,312 | 3,632 | 9,964 |
| Ds | 494 | 517 | 565 | 1,576 |
| Fs | 414 | 266 | 308 | 988 |
| **Family Structure** |  |  |  |  |
| Live With Mother/Stepmother | 5,992 | 5,996 | 5,344 | 17,332 |
| Live With Father/Stepfather | 864 | 902 | 818 | 2,584 |
| Live With Both Parents | 12,914 | 13,257 | 11,918 | 38,089 |
| **Age**  Age 8 or Younger | 37 | 1 | 9 | 47 |
| Age 9 | 7,162 | 62 | 2 | 7,226 |
| Age 10 | 13,010 | 6,802 | 29 | 19,841 |
| Age 11 | 2,309 | 13,447 | 6,071 | 21,827 |
| Age 12 | 119 | 2,495 | 11,820 | 14,434 |
| Age 13 | 11 | 147 | 2,722 | 2,880 |

Note: Numbers may not add to totals due to the missing frequency of the specific category.

***Instrumentation***

All fourth-, fifth-, and sixth-grade respondents in 1994 were questioned with the elementary survey instrument (see Appendix A).1

The elementary student instrument is three pages long and covers four types of substances: 1) tobacco (including cigarettes and snuff/ chewing tobacco); 2) alcohol (including beer, wine, wine coolers, and liquor); 3) inhalants; and 4) marijuana. A pseudo-drug was also included in the questionnaire to help identify exaggerators and detect invalid responses. Recency of use questions distinguish users who

have used in the current school year and those who have used prior to the current school year. Like the secondary instrument, the elemen- tary instrument could be optically scanned and was designed for self- administration in a supervised setting.

***Administration***

To allow for resolution of scheduling conflicts and other poten- tial difficulties, districts selected for inclusion in the state sample were contacted early on. They were initially notified of the project by mail, followed by a phone call to clarify the study objectives and to discuss in detail how the survey should be administered. Relevant personnel in the selected districts and campuses were provided with complete instructions and materials necessary to administer the survey. Teachers in selected classrooms were given a script to read so that all students would receive a standardized set of instructions. Teachers were also asked to provide information on the number of students that should have taken the survey but were absent, and the number that were present but failed to complete the survey. This information was useful for computing error estimates.

**Terminology**

Elementary students are those in grades four through six. Esti- mates for secondary students (those in grades seven through twelve) are presented in a separate document.

Prevalence refers to the percentage of students reporting use of a substance or substances at a given time. School-year prevalence refers to the percentage of students who had used substances within the current school year. Not-past-year prevalence refers to the percentage of students who used substances in the past but not within 12 months prior to the survey. Lifetime prevalence refers to the percent- age of students who had used substances at least once in their life, regardless of when the substance was last used.

Recency of use refers to the last time a substance was used: within the current school year or prior to the current school year. Frequency of use describes how often use has occurred.

**Limitations**

***Scope***

The Texas School Survey results can be generalized only to public school students because only public school students were sampled in this project. Although they are an important component of the youthful population of Texas, neither private school students nor dropouts were represented. This limitation should be kept in

mind when considering the implications of this data.2 The findings in this study, however, do represent reasonable estimates of the extent of substance use among public school students. The survey procedure employed in this research is an appropriate technique for estimating the prevalence and frequency of various forms of drug use in the

target population. A survey methodology appears to be the only feasible means for making estimates on these largely clandestine behaviors.

***Self-Reported Data***

Substance use estimates presented in this report were based entirely on self-disclosure. While many studies have established the usefulness of self-reported information for estimating the incidence and prevalence of drug use, the validity of these data ultimately depends on the truthfulness, recall, and comprehension of the respon- dents. This study was carefully designed to minimize the impact of these potential sources of error. Five percent of the questionnaires from the elementary sample were discarded because students either

reported impossibly high levels of substance abuse or claimed to use a non-existent drug. If students failed to report both their age and

grade level, the data were also dropped from the analyses. Other measures to reduce response bias included a full array of instrument construction, testing and review protocols, validity check procedures, and data processing protocols that have been developed over the past seven years on the basis of administering over 1.5 million surveys to in-school youths. For further information on these technical matters and tabular information necessary to estimate confidence limits, the reader may consult the separate technical report prepared by PPRI,

■ ■ ■ Measures to reduce response bias include testing and review protocols, validity check procedures,

and data processing protocols that have been developed on the basis of administering over

1.5 million school surveys.

■ ■ ■

the *Methodology Report for the 1994 Texas School Survey of Drug and*

*Alcohol Use*.3

Despite these precautions, some undetected under- and over- reporting may have occurred. However, any differences among sub- groups in veracity, recall, or comprehension are likely constant through time. Any reporting bias in the elementary data gathered in the three statewide surveys should be approximately equal in all survey years, making comparisons among elementary data gathered between 1990 and 1994 valid.

***Sampling Error***

The estimates presented in this study are based on a sample and therefore are subject to sampling error. This survey was designed and drawn such that confidence limits on all estimates can be ascertained. However, the procedures required to estimate confidence limits in

this project are more complex than can be summarized in a document intended for a general readership. Several factors contribute to this complexity:

• *Cluster Sampling* - Entire classrooms (as opposed to individual students) were randomly selected to participate in the survey. Textbook procedures for computing confidence intervals assume random selection of individual respondents, which was not the case for this study;

• *Weighting* - Some categories were oversampled, then the data were weighted to make it precisely reflect the demographic composition of Texas schools. Textbook procedures for com- puting confidence intervals assume all observations have equal weight, which was not true in this study; and,

• *Asymmetric Confidence Intervals* - Many estimates are 5 percent

or less and require asymmetric confidence intervals. Asymmet- ric confidence limits adjust for the fact that the true rate in a population cannot be less than 0 percent or greater than 100 percent. For example, if an estimate was 1 percent, where the computed upper boundary of the 95 percent confidence inter- val is plus 2 percent, the lower boundary cannot be symmetri- cal (i.e., minus 2 percent) because it is impossible for fewer than zero people to have the characteristic. Procedures for computing asymmetric confidence intervals ensure that this paradoxical situation does not occur.

These factors must be taken into account to correctly compute confidence intervals on the estimates presented herein. The statistical

basis for these computations and estimate of 95 percent confidence limits for this study are included in the *Methodology Report for the 1994*

*Texas School Survey of Drug and Alcohol Use*. The technical reader should refer to that document for additional information.

The Texas School Survey is based on a very large sample and the estimates have a high degree of statistical precision relative to most published survey research that employs cluster sampling. For esti- mates regarding the elementary school population as a whole, the 95 percent confidence interval is at most plus or minus 0.9 percent. In other words, if the estimate based on the school survey sample is that

30 percent of elementary school students have used a substance, there is a 95 percent chance that the true population rate is between 29.1 percent and 30.9 percent. This estimate of sampling error is conserva- tive for estimates of rates on the elementary school population as a whole. Actual 95 percent confidence intervals on most substances are smaller.

Where rates are presented for subgroups of the elementary school population (e.g., gender, racial/ethnic groups, school grades, etc.) the sampling error is greater because the samples contain fewer observa- tions. For example, the largest 95 percent confidence limit in any grade and on any substance is observed for tobacco in the sixth grade. In this case, the estimate of lifetime prevalence of use is 27.9 percent with the lower and upper boundaries of the 95 percent confidence interval of 25.5 percent and 30.4 percent, respectively. Confidence limits on all other substances in all other grades do not exceed this figure and in most cases are much smaller. For example, the lower and upper boundaries in the estimate of lifetime use of tobacco among fourth graders (11.1 percent) are 10.7 percent and 11.5 percent, respectively, a much narrower range than is observed among sixth graders.

A composite estimate summarizes the behaviors of students in several grades. In this study, composite estimates for all sub- populations are computed by using standard proportional

adjustments based on the overall proportion of elementary students in each grade. This procedure controls for the slight demographic variations that are present among subpopulations (e.g., female fourth graders comprise a slightly different proportion of all female elementary students than do male fourth graders of all male elementary students), and produces composite estimates that are directly comparable among subpopulations.

Estimates of inhalant use take into account responses to both specific questions (i.e., where actual substances are mentioned) and

generic questions (i.e., where the term “inhalants” is used). However, the reader should be aware that the technical problems associated with querying inhalant use can affect results. As a rule of thumb for

the elementary population, estimates of the prevalence of inhalant use are more reliable for the older students. In practical terms this means that estimates for sixth graders are more reliable than for fourth graders. Readers should take this into consideration when evaluating the data presented in the following chapters.

**Comparison to the 1994 Secondary Survey**

Because of the simplified nature of the elementary survey instrument, some of the questions and response options on the secondary survey instrument were not used for elementary students. For example, only secondary students were asked how often drugs were normally used. Also, secondary school students were asked how

Comparison with Secondary Survey

difficult it would be to get drugs, but elementary students were asked simply whether they had ever been offered drugs. Caution should be exercised when comparing these two versions of the survey. However, as much similarity as possible was retained between the elementary and secondary surveys, so that results over several problems are comparable.

In 1994, elementary students were about one-half as likely as the secondary students to report lifetime use of alcohol (33 percent versus

74 percent) and inhalants (10 percent versus 19 percent). These younger students were about one-third as likely as the older students to have ever used tobacco (19 percent versus 55 percent). The largest disparity between elementary and secondary student substance use was for marijuana: only 6 percent of students in grades 4-6 had ever used marijuana during their lifetime, compared to 25 percent of students in grades 7-12.

The prevalence differences in substance use between elementary and secondary students may result partly from the differences in the students’ perceptions of danger. More elementary students believed that substances were very dangerous to use than did secondary stu- dents in 1994. For example, 83 percent of students in grades 4-6 thought it was very dangerous to use marijuana in comparison to 67 percent of students in grades 7-12 (70 percent versus 46 percent for alcohol; 66 percent versus 41 percent for tobacco). However, fewer

In 1994, elementary students were about one-half as likely as the secondary students to report lifetime use of

alcohol and one-third as likely to report lifetime use of tobacco.

Elementary students were more likely than

secondary students to be unaware of

the attitudes of their parents toward substance use.

■ ■ ■

Children from low- income families were more likely to use substances than those from other families.

elementary students believed that inhalants were very dangerous for kids their age to use as compared to secondary students (68 percent versus 77 percent). This may be explained by the fact that many younger students taking the survey possibly did not fully comprehend what “inhalants” were.

As expected, elementary students were more likely to be unaware of the attitudes of their parents toward substance use than were second- ary students. In 1994, about 17 percent of all elementary students did not know how their parents felt about kids their age drinking beer, compared to only 10 percent of all secondary students (12 percent versus 8 percent about using marijuana). The older adolescents may better know the attitudes of their parents because as children get older, parents must often confront substance use by their children and make their own views known.

Family income level is clearly related to substance use among elementary students, such that children from low-income families were more likely to use substances than those from other families. About 25 percent of fourth graders who qualified for a free or reduced-price school lunch had used substances during the past year, compared to 17

80%

**Figure 1. Percentage of Students Who Had Used a Substance\***

**in the Past School Year, by Family Income Level and Grade:**

**1994 Elementary and Secondary Students**

70%

60%

50%

40%

30%

20%

10%

0% G

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| rade Grade Grade | | | Grade | Grade | Grade Grade Grade | Grade |
| 4 | 5 | 6 | 7 | 8 | 9 10 11 | 12 |

Low-Income Family Other Family

\* Tobacco, alcohol, inhalants, and/or marijuana.

percent of their counterparts (Figure 1). This pattern was true for fifth and sixth grades as well. Interestingly, no relationship between substance use and family income level was found among secondary students. This pattern of higher substance use, which may reflect environmental pressures associated with poverty, occurs in grade seven but not in the upper grades. That this pattern is not apparent

among older students may be explained by the fact that students who use substances in the lower grades are inclined to drop out, and dropping out is correlated both with socioeconomic class and sub- stance use.

**Drug Specific Patterns of Use**

In 1994, lifetime marijuana use among elementary students reached its highest level over the past three survey years.

1994 School Survey of Substance Use: Grades 4-6

**Introduction**

Although substance prevalence among elementary students is quite low compared to secondary students, it is in the elementary

grades that many students are exposed to alcohol and drugs for the first time. About 60 percent of fourth and fifth graders who had the oppor- tunity to try marijuana actually did so. Nine percent of all sixth graders had already tried marijuana, and 43 percent of the sixth graders had drunk alcohol at least once. In 1994, 27 percent of Texas elementary students had used either tobacco, alcohol, inhalants, and/or marijuana during the past school year.

Lifetime marijuana use among elementary students increased sharply between 1992 and 1994, while lifetime use of tobacco and alcohol remained quite stable, and the lifetime use of inhalants de- creased (Appendix B, Table B1). Also during this two-year period, past- year use increased for tobacco, alcohol, and marijuana, but not for inhalants.4 These results parallel those in the secondary school popula- tion, indicating that marijuana use increased across all grades from

1992-1994.

Lifetime use of marijuana among elementary students in 1994 (6 percent) surpassed that in 1990 (3 percent) and reached the highest level over the past three surveys. As reflected in the lifetime prevalence rate, slightly more elementary students in 1994 than in 1990 admitted using marijuana within the past school year. Although past-year preva- lence rates for tobacco and alcohol were higher in 1994 than in 1992, they were still below the peak levels of 1990. About 23 percent of all elementary students in 1994 had drunk alcohol during the past school year, compared to 29 percent in 1990.

Alcohol remained the most widely used substance by elementary students, and heavy alcohol drinking among youths is still of concern. Thirteen percent of fourth through sixth graders said they had first used alcohol by eight years of age. About 18 percent of students in grades 4-6 had drunk two or more beers in a row at least once during the 1994 school year. Of that group, 4 percent claimed to have done

so three or more times.

Prevalence of substance use increased with grade level (Appendix B, Table B2). Sixth graders reported two or three times the lifetime use of fourth graders for each substance. Twenty-eight percent of

sixth graders surveyed in 1994 reported lifetime tobacco use, com- pared to only 11 percent of fourth graders. Among the specific inhal- ants, correction fluid was the most frequently used inhalant by sixth graders, whereas glue was the favorite by fourth graders.

**Tobacco**

Tobacco is included in the Texas School Survey because of its addictive properties and its widespread use. It is considered an entry- level or “gateway” drug because it is often the first substance used in a progression to other substances. The tobacco category in the preva- lence tables shown in Appendix B includes use of both cigarettes and smokeless tobacco. Among Texas elementary students, tobacco is the second most widely used substance, following alcohol in popularity. In 1994, 19 percent of all elementary students reported having used some type of tobacco product in their lifetime. Lifetime prevalence rates were 11 percent among fourth graders, 18 percent among fifth graders, and 28 percent among sixth graders. About 12 percent of elementary students had used tobacco during the past school year (7 percent of fourth graders, 11 percent of fifth graders, and 18 percent of sixth graders). All of these measures were about the same as in

1992, but slightly lower than in 1990. Among sixth graders who had used tobacco, the average age of first use was 9.9 years, which is

earlier than for any other substance except alcohol.

Cigarette smoking was the most common form of tobacco con- sumption. Six percent of fourth graders, 9 percent of fifth graders, and 16 percent of sixth graders smoked cigarettes in the past school year prior to the 1994 survey (Figure 2). Comparable figures for smokeless tobacco were 3 percent, 4 percent and 5 percent for grades four, five, and six, respectively. Male students were much more likely than female students to use cigarettes (13 percent versus 8 percent)

Prevalence of substance use increased with grade level.

■ ■ ■

Among Texas elementary students, tobacco is the second most widely used substance, following alcohol in popularity.

**Figure 2. Percentage of Elementary Students Who Used**

**Cigarettes and Smokeless Tobacco in Past Year, by Grade:**

**1994**

18%

16%

14%

12%

10%

8%

6%

6%

4% 3%

2%

0%

16%

9%

5%

4%

Grade 4 Grade 5 Grade 6

Cigarettes Smokeless Tobacco

■ ■ ■

Lifetime tobacco prevalence among elementary students

decreased from 21 percent in 1990 to

19 percent in both

1992 and 1994.

and smokeless tobacco (6 percent versus 1 percent) during the past school year. Among the three main racial/ethnic groups, Hispanic youths had the highest past-year prevalence for cigarette smoking at 13 percent (9 percent for both White and African-American youths) in

1994. However, White youths reported a slightly higher past-year use of smokeless tobacco (4 percent) in comparison to African-American and Hispanic youths (3 percent).

Students who lived with two parents were less likely to use tobacco than those from other families. In 1994, 16 percent of elementary students from two-parent households reported lifetime tobacco use, compared to 24 percent of those from other family situations. Usual grades in school are also related to tobacco use by students. Elementary students who normally earned As or Bs were one-half as likely as those who usually earned Cs or below to report lifetime and past-year use of tobacco. For example, only 15 percent of sixth graders making As or Bs used tobacco during the past year, compared to 31 percent of those making Cs or below.

Though not statistically significant, lifetime tobacco prevalence among elementary students decreased slightly from 21 percent in 1990 to 19 percent in both 1992 and 1994. This decrease is also seen for

past-year prevalence rates, where slightly more elementary students in

1990 admitted using tobacco within the past school year (13 percent)

than did in 1992-1994 (12 percent).

**Alcohol**

Alcohol continues to be the most widely used substance among Texas elementary students. Many students begin drinking at an early age. Twenty-five percent of fourth graders, 30 percent of fifth graders, and 43 percent of sixth graders surveyed in 1994 reported that they had drunk alcohol at least once. Seventeen percent of fourth graders,

20 percent of fifth graders, and 30 percent of sixth graders consumed alcohol during the past school year (Figure 3). These figures were higher than in 1992 , but still below the peak levels of 1990.

The common use of alcohol may be generated by its availability. About 34 percent of elementary students in 1994 claimed that they had been offered alcohol, whereas only 8-9 percent of those had been offered inhalants and marijuana. When asked where they obtained alcohol, 14 percent of the students said that they got alcohol from home and 9 percent got alcohol from friends. Seventy percent of elementary students surveyed in 1994 thought it was very dangerous to use alcohol, compared to 83 percent who believed marijuana was very dangerous. In addition, 80 percent of all students in grades 4-6 said their parents did not like kids their age to drink beer, while 86 percent said so about using marijuana. The parental disapproval of

Alcohol continues to be the most widely used substance among Texas elementary students.

■ ■ ■

About 34 percent of the elementary students in 1994 claimed they had been offered alcohol, whereas only 8-9 percent of those had been offered inhalants and marijuana.

**Figure 3. Past-Year Use of Alcohol Among Elementary Students, by Grade: 1990, 1992, and 1994**

40%

35%

30%

25%

20%

15%

10%

5%

0%

1990 1992 1994

Grade 4 Grade 5 Grade 6

Males were more likely than females (39 percent versus

26 percent) to report lifetime use of alcohol.

drinking beer decreased slightly as the students aged. As compared to

1990, fewer sixth graders reported their parents “think it’s OK” to drink beer (1 percent in 1994 versus 4 percent in 1990).

Males (39 percent) were more likely than females (26 percent) to report lifetime use of alcohol among elementary students in 1994 (Figure 4). These figures decreased from 48 percent and 36 percent for males and females, respectively in 1990. Racial/ethnic differences in alcohol use among elementary students, however, were slightly different from those of secondary students. In 1990, African-American and Hispanic elementary students admitted an equal rate of lifetime alcohol use (43 percent), with the Whites the lowest (41 percent). However, in

1992 as in 1994, African-American elementary students reported more lifetime drinking than any other racial/ethnic group. About 45 percent of African Americans, 37 percent of Hispanics, and 27 percent of Whites in the 1994 elementary survey had ever drunk alcohol.

***Consumption of Specific Beverages***

Of the four alcoholic beverages surveyed in 1994, the largest proportion of elementary students had drunk beer (Figure 5). Seventeen percent of fourth graders, 20 percent of fifth graders, and 31 percent of sixth graders had ever drunk beer in their lives. Slightly fewer elemen- tary students had ever drunk wine coolers, the second most frequently

**Figure 4. Percentage of Elementary Students Who Had Ever**

**Used Alcohol, by Gender and Ethnicity: 1990, 1992, and 1994**

50%

45%

40%

35%

30%

25%

20%

15%

10%

5%

0%

48%

39% 39%

36%

28%

26%

41%

31%

27%

45%

43% 43%

39%

37%

35%

Males Females Whites African

Americans

Hispanics

1990 1992 1994

**Figure 5. Percentage of Elementary Students Who Had**

**Ever Used Specific Alcoholic Beverages, by Grade: 1994**

35%

30%

25%

20%

15%

10%

5%

0%

Beer Wine Wine Coolers Liquor

Grade 4 Grade 5 Grade 6

consumed alcoholic beverage (14 percent, 19 percent, and 30 percent for fourth, fifth, and sixth graders, respectively). Fewer elementary students had ever drunk wine, and even fewer had drunk liquor. Among sixth graders, for example, only 23 percent and 14 percent had ever consumed wine and liquor respectively. All these figures were similar to those in 1992. The largest disparity between 1992 and 1994 was in wine cooler consumption: 33 percent of sixth grad-

ers in 1992 had drunk wine coolers, compared to 30 percent in 1994.

Alcohol use increased with grade, as does the proportion of elementary students who had ever used more than twice (Appendix C, Table C1). For instance, 13 percent of fourth graders in 1994 had

drunk beer only one or two times in their lives, and 4 percent of them had drunk beer more than two times. Of sixth graders, however,

about 20 percent had consumed beer once or twice, and 11 percent reported drinking beer more than two times.

On average, sixth graders were 9.5 years old when they first tried alcohol, which is earlier than for any other substance. Among sixth graders who had drunk beer, first use occurred on average at 9.4 years of age. Comparable measures for wine, wine coolers, and liquor were

10.0, 10.1, and 10.3 years of age, respectively. The early initiation to beer may be an important predictor of why more elementary students have drunk beer than other alcoholic beverages.

On average, sixth graders were 9.5 years old when they first tried alcohol.

About one in five elementary students had drunk two or more beers in a row at least once during the past school year.

***Frequency of Heavy Alcohol Consumption***

Elementary students were asked how many times during the past twelve months they had two or more drinks in a row, which is a lot of alcohol for a person 12 years old or younger. Among the four types of alcoholic beverages, beer was the most likely to be consumed in large quantities (Table 2). About 18 percent of all elementary students (14 percent, 16 percent, and 24 percent for fourth, fifth, and sixth graders, respectively) had drunk two or more beers in a row at least once during the 1994 school year. Of that group, 4 percent claimed doing so three or more times. The proportion of heavy beer drinking on three or more

occasions also increases with grade: 3 percent of fourth and fifth graders in comparison to 7 percent of sixth graders reported doing so.

**Table 2. Frequency of Heavy Alcohol Consumption by Grade: 1994**

**Elementary Students**

During the past year, how many times have you had two or or more drinks in a row?

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Ever** | **1 Time** | **2 Times** | **3+ Times** | **Never** |
| **Beer** |  |  |  |  |  |
| All | 17.7% | 9.2% | 4.2% | 4.4% | 82.3% |
| Grade 4 | 14.0% | 7.9% | 3.1% | 3.0% | 86.0% |
| Grade 5 | 15.6% | 8.5% | 3.7% | 3.4% | 84.4% |
| Grade 6 | 23.6% | 11.1% | 5.7% | 6.7% | 76.4% |
| **Wine** |  |  |  |  |  |
| All | 12.1% | 6.9% | 2.9% | 2.2% | 87.9% |
| Grade 4 | 9.5% | 6.2% | 1.7% | 1.6% | 90.5% |
| Grade 5 | 9.7% | 5.4% | 2.6% | 1.7% | 90.3% |
| Grade 6 | 17.0% | 9.1% | 4.5% | 3.4% | 83.0% |
| **Wine Coolers** |  |  |  |  |  |
| All | 17.4% | 8.4% | 4.6% | 4.4% | 82.6% |
| Grade 4 | 13.4% | 6.8% | 3.6% | 2.9% | 86.6% |
| Grade 5 | 14.9% | 7.9% | 3.6% | 3.4% | 85.1% |
| Grade 6 | 23.9% | 10.5% | 6.7% | 6.7% | 76.1% |
| **Liquor** |  |  |  |  |  |
| All | 7.8% | 3.9% | 1.5% | 2.4% | 92.2% |
| Grade 4 | 4.5% | 2.6% | 0.6% | 1.3% | 95.5% |
| Grade 5 | 6.4% | 3.4% | 1.3% | 1.6% | 93.6% |
| Grade 6 | 12.5% | 5.5% | 2.7% | 4.2% | 87.5% |

**Figure 6. Consumption of Two or More Drinks in a Row at Least Once**

**During the Past School Year, Fourth and Fifth Graders Combined:**

**1990, 1992, and 1994**

25%

25%

20%

20%

15%

15% 15%

13%

14% 14%

10%

5%

10% 10%

7%

6% 6%

0%

Beer Wine Wine Coolers Liquor

1990 1992 1994

Only slightly fewer elementary students admitted heavy con- sumption of wine coolers during the past school year. Thirteen per- cent of fourth graders, 15 percent of fifth graders, and 24 percent of sixth graders had drunk two or more wine coolers in a row in the past school year. Grade-specific results showed that wine coolers were consumed in large quantities almost as often as beer. A much smaller percentage of elementary students reported heavy consumption of wine or liquor. Ten percent of fourth and fifth graders, and 17 percent of sixth graders had drunk two or more glasses of wine in the past

year. Comparable measures for liquor were 5 percent, 6 percent, and

13 percent for fourth, fifth, and sixth grades, respectively. Among sixth graders, only 3-4 percent drank that much wine or liquor on three or more occasions.

As compared to 1990, significantly fewer fourth and fifth grad- ers admitted heavy consumption of beer, wine, and wine coolers at least once during the past year (Figure 6).5 Heavy use of liquor among fourth and fifth graders essentially remained stable at 6-7 percent between 1990 and 1994. The percentage of fourth and fifth graders who consumed two or more beers in a row during the past year decreased from 25 percent in 1990 to 15 percent in 1992 as in 1994.

Similar patterns hold for heavy use of wine coolers (from 20 percent to

14 percent) and wine (from 13 percent to 10 percent).

■ ■ ■ Inhalants are readily available; their easy access and low cost make them an alluring alternative for young people experimenting with substances.

**Inhalants**

The term “inhalants” refers to hundreds of different household and commercial products which can be abused by sniffing or “huffing” (inhaling through the mouth). Abused inhalants include volatile sol- vents (such as gasoline, glue, paint, and polishes), anesthetics (such as ether, chloroform, and nitrous oxide), nitrites, and aerosols. Inhalants are readily available; their easy access and low cost make them an alluring alternative for young people experimenting with substances. Inhalants are the most prevalent substances after alcohol and tobacco among younger students.

Measurement of the incidence and prevalence of inhalant use is challenging because of the large number of products that can be used as inhalants, the nomenclature, and the age of the respondents. Many elementary students who sniff or huff substances to get high do not think of that behavior as inhalant use. The Texas School Survey used an array of specific and generic questions to estimate the prevalence and recency of inhalant use. The questionnaire first asked about use of specific inhalants (glue, gasoline, spray paint, etc.) to introduce and explain the concept of inhalant use. This explanation came before any of the questions using the generic term “inhalant.” Even so, a significant proportion of elementary students who admitted sniffing glue, gasoline, or some other chemical to get high did not appear to fully grasp the concept of inhalant abuse, evidenced by their negative responses to the questions about using “inhalants.” Apparently, there is a communica- tion problem to overcome before the issue can even be discussed with children of this age. Because of the constraints of using survey research methods (e.g., the physical length of the survey instrument), it has been suggested that ethnographic research or focus groups may be potential research strategies for acquiring information about the patterns of adolescent inhalant use.6

The 1994 Texas School Survey revealed that about 8 percent of

fourth and fifth graders and 13 percent of sixth graders in the 1994 survey had ever used inhalants in their lives. Past-year inhalant use was

4 percent, 5 percent, and 8 percent for fourth, fifth, and sixth graders, respectively. These numbers were much lower compared to 1990 and

1992, when 24 percent of sixth graders, for example, reported lifetime use of inhalants. Again, these decreases may partially be due to the

changes in the wording to the responses regarding specific types of inhalants in the 1994 survey.

Gender-specific results showed that 12 percent of male elemen- tary students in 1994 admitted lifetime use of inhalants, compared to

8 percent of females. However, the disparity between males and females narrowed for past-year use of inhalants (7 percent versus 5 percent). On the basis of race/ethnicity, Hispanic students in grades

4-6 had the highest prevalence of lifetime inhalant use at 13 percent, followed by African-Americans (9 percent) and Whites (8 percent). Inhalant use was correlated with poor academic performance in school. Elementary students who normally made grades of Cs or below were about two times more likely to have used inhalants in their lives than those who received As and Bs (16 percent versus 9 percent). This pattern was also true for past-year prevalence rates (10 percent versus 5 percent).

***Specific Inhalants***

In the 1994 survey, 4 percent of all elementary students had ever sniffed correction fluid or glue (Appendix C, Table C2). Gasoline or paint thinner (2 percent) had been used by fewer students. In addi- tion, 5 percent of elementary students reported using other inhalants. These measures were much lower than those in the previous surveys (Table 3). For example, in 1990-1992, lifetime glue use was reported by 9 percent of all elementary students and 6-7 percent for lifetime use of correction fluid or gasoline. Again, the decreased rates may

have resulted from the addition “to get high” to the responses listed in the specific inhalant question in 1994.

Grade-level patterns showed that lifetime prevalence of specific inhalants in 1994 remained low, with the largest rate at 6 percent among sixth graders for using correction fluid or other unspecified inhalants (Figure 7). The prevalence rates increased with grade level, except for glue and paint thinner. Fourth graders admitted higher

**Table 3. Percentage of Elementary Students Who Had**

**Ever Used Specific Inhalants: 1990, 1992, and 1994**

Elementary students who normally made grades of Cs or below were about

two times more likely to have used inhalants than those who made As and Bs.

■ ■ ■

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | 1990 | 1992 | 1994 |
| **Correction** | **Fluid** | 6% | 6% | 4% |
| **Gasoline** |  | 6% | 7% | 2% |
| **Glue** |  | 9% | 9% | 4% |
| **Paint Thinnner** | | 3% | 4% | 2% |
| **Other Inhalants** | | 4% | 5% | 5% |

For each specific inhalant, male students in grades

4-6 reported two times the lifetime prevalence of female students in

1994.

lifetime use of glue and paint thinner than fifth graders, although the prevalence doubled between fifth and sixth graders. Sixth graders also reported three times the lifetime correction fluid use of fourth graders (6 percent versus 2 percent). As noted earlier, these results may be due

to the inability of fourth graders to fully comprehend the questionnaire.

For each specific inhalant, male students in grades 4-6 reported two times the lifetime prevalence of females in 1994. Correction fluid was the most popular inhalant among Hispanic and African-American elementary students; lifetime use for each of these groups reached 7 percent in grade six. In comparison, White elementary students were the most likely to use glue, with the highest rate in grade six at 4 percent.

***Use of Multiple Inhalants***

About 10 percent of 1994 elementary students had used one or more of the specific inhalants listed on the elementary survey question- naire (correction fluid, gasoline, glue, paint thinner, or other inhalants). Of all elementary students, 5 percent had ever used one type of inhal- ant, 3 percent had ever used two or three different inhalants, and less than 0.5 percent said they had ever used four or five types of inhalants (Figure 8). Comparable measures were 6 percent, 4 percent, and 1 percent, respectively among sixth graders.

**Figure 7. Percentage of Elementary Students Who Had Ever**

**Used Specific Inhalants, by Grade: 1994**

7%

6%

5%

4%

3%

2%

1%

0%

Correciton

Fluid

Gasoline Glue Paint

Thinnner

Other

Inhalants

Grade 4 Grade 5 Grade 6

**Figure 8. Percentage of Elementary Students Who Had Ever**

**Used Inhalants, by Grade and Number of Different Types:**

**1994**

12%

10%

8%

6%

4%

2%

0%

All Grade 4 Grade 5 Grade 6

1 Type of Inhalants 2-3 Types of Inhalants

4-5 Types of Inhalants

This reporting pattern of multiple inhalant use was different from that found in 1990-1992. Elementary students who had used inhalants were more likely to use only one type of inhalant in 1994 than in the previous years.

**Marijuana**

Marijuana was the only illicit substance included in the elementary version of the Texas School Survey. Because it is relatively difficult for elementary students to obtain marijuana, it is not surprising that marijuana prevalence was much lower in elementary than secondary grades. Only 6 percent of elementary students in

1994 had ever tried marijuana compared to 25 percent of secondary students. Figure 9 shows that lifetime prevalence in sixth grade (9 percent) was substantially higher than that in fourth grade (4 percent) and in fifth grade (5 percent). About 2 percent of elementary students surveyed in 1994 used marijuana during the past school year, and

most of this more recent use was among the sixth graders. Four percent of sixth graders used marijuana since school began in the fall, compared to 1 percent of fourth or fifth graders. Students try marijuana later than any other substances. By 1994, the average age

■ ■ ■ Elementary students who had used inhalants were more likely to use only one type of inhalant in 1994

than in the previous years.

**Figure 9. Lifetime and Past-Year Use of Marijuana Among**

**Elementary Students, by Grade: 1994**

9%

8%

7%

6%

5%

4%

3%

2%

1%

0%

All Grade 4 Grade 5 Grade 6

Lifetime Use Past-Year Use

Four percent of sixth graders had used marijuana since school began in the fall,

compared to 1 percent of fourth or fifth graders.

of first use of marijuana among sixth graders was 10.6 years of age, which was the oldest age reported for any substance.

As with other substances, male elementary students were more likely than females to admit lifetime (7 percent versus 4 percent) and past-year (3 percent versus 1 percent) use of marijuana. The three racial/ ethnic groups reported similar percentages in marijuana use. Overall, African-American youths in 1994 had the highest rate of lifetime marijuana use at 7 percent, and Hispanics the highest past-year use rate at 3 percent. These ethnic patterns hold for each grade except for the lifetime use in sixth grade. Hispanic sixth graders were highest in lifetime marijuana use (10 percent), followed by African-American (9 percent) and White (8 percent) sixth graders. Elementary students who normally made Cs or below reported higher lifetime use of marijuana than those who received As and Bs (8 percent versus 5 percent). This pattern was true for fifth and sixth graders, but not for fourth graders, where 3 percent of fourth graders making Cs or lower in the 1994

survey had ever used marijuana, compared to 4 percent of those making

As and Bs.

Although marijuana use remained low among elementary stu- dents, significantly more youths reported both lifetime and past-year use of marijuana between 1992 and 1994. The prevalence rates in 1994 even surpassed those in 1990 and reached the highest levels over time.

Among sixth graders, 9 percent had ever smoked marijuana in 1994, up from 3 percent in 1992, and above the level of 5 percent in 1990. Similar patterns also occurred in past-year marijuana use, but the increases were much smaller than for lifetime use.

***Prevalence Differences Related to Availability, Attitudes, and***

***Use by Friends***

The sharp increase in marijuana use among elementary students seen from 1992 to 1994 might have resulted from the increased availability of marijuana, the reduction in the students’ perceived danger of using marijuana, and the rise of their friends’ marijuana use. In 1992, sixth graders were asked, “If you wanted some, how

easy would it be to get [substance]?”; about 9 percent of sixth graders said it was very or somewhat easy to obtain marijuana (Figure 10). However, sixth grade students in 1994 were asked if they had been offered marijuana, and 13 percent claimed so. Students also thought that marijuana was less dangerous to use during these two surveys.

Among sixth graders,

9 percent had ever smoked marijuana in

1994, up from 3 percent in 1992.

**Figure 10. Percentage of Sixth Graders Who Said Marijuana is Very/ Somewhat Easy to Get, Very Dangerous to Use, and Some/Most of Their Friends Use Marijuana: 1992 and 1994**

100%

90%

80%

70%

60%

50%

40%

30%

20%

10%

0%

13%

9%

92%

83%

10%

15%

Availability of Marijuana\*

Perceived Danger of Using Marijuana

Some/Most Friends Use Marijuana

1992 1994

\* In 1994, the question regarding the availability for marijuana read differently for sixth graders than it did in the 1992 survey because in 1992 sixth graders were surveyed with the secondary survey instrument.

Ninety-two percent of sixth graders in 1992 believed marijuana was very dangerous to use, whereas 83 percent felt so in 1994. With regard to the number of close friends who use marijuana, 10 percent of sixth graders in 1992 reported that some/most of their close peers used marijuana while 15 percent said so in the 1994 survey.7

**Demographic Variables and Substance Use**

**Introduction**

Demographic Variables and Substance Use

Subgroup differences in substance use among fourth through sixth graders generally reflected those of secondary students. Demo- graphic characteristics including gender, race/ethnicity, academic performance, family structure, socioeconomic status, and grade level are all associated with substance use by elementary students.

The results in the 1994 survey showed that male elementary students were more likely than female students to use all types of substances. African-American youths had the highest rates of lifetime use of alcohol and marijuana, whereas Hispanics reported the highest levels of lifetime use of tobacco and inhalants. Making poor grades in school and living in families other than two-parent families were each significantly related to prevalence estimates of substance use. The

past-year prevalence ranged from about two to four times greater in these groups than in the rest of the elementary population.

Youths who had college-educated parents were less likely to use substances than those whose parents did not graduate from college. The eligibility of a student for a free or reduced-price school lunch, a proxy of living in a low-income family, is also significantly related to

substance use. Elementary students from low-income families reported higher prevalence use of any substance than those from other families. The grade level of the student continues to be an crucial factor in differing prevalence rates of substance use. A noticeable prevalence increase was between fifth and sixth grades, which indicates that many students started experimenting with substances for the first time in

the sixth grade.

A noticeable prevalence increase was between fifth and sixth grades, which indicates that many students started experimenting with substances for the first time in the sixth grade.

About 24 percent of male elementary students had ever used tobacco compared to 14 percent of female students; 39 percent of the males had drunk alcohol compared to 26 percent of the females; 7 percent of the males had used marijuana compared to 4 percent of the females.

**Gender**

Gender-specific differences in substance use among elementary students were similar to those in the secondary population. More males had used substances than females (Appendix B, Tables B3-B4). About

24 percent of male elementary students had ever used tobacco in con- trast to 14 percent of females. Thirty-nine percent of male elementary students had ever drunk alcohol, compared to 26 percent of females. More males admitted lifetime use of inhalants (12 percent) and mari- juana (7 percent) than females (8 percent and 4 percent, respectively). These patterns are consistent for all grades.

Males also reported a higher prevalence of past school year use than females on all substances. Table 4 compares past-year use of all sub- stances between male and female elementary students, and presents a

**Table 4. Percentage of Elementary Students Who Had Used Substances in the Past School Year, by Gender and Grade: 1994**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Tobacco**  All  Grade 4  Grade 5  Grade 6  **Alcohol** All Grade 4  Grade 5  Grade 6  **Inhalants**  All  Grade 4  Grade 5  Grade 6  **Marijuana**  All  Grade 4  Grade 5  Grade 6 | **Males**  15.7%  10.5%  14.3%  22.4%  26.6%  22.3%  23.2%  34.2%  6.9%  5.6%  5.9%  9.2%  2.7%  1.1%  1.9%  5.1% |  | **Females**  8.3%  3.8%  7.5%  13.7%  18.6%  12.2%  17.4%  26.2%  4.5%  2.9%  3.7%  6.8%  1.0%  0.3%  0.5%  2.3% |  | **Ratio\***  1.9  2.8  1.9  1.6  1.4  1.8  1.3  1.3  1.5  1.9  1.6  1.4  2.7  3.3  4.1  2.2 |  |

\* (% Males) / (% Females)

ratio which is computed by dividing male prevalence of use by a female prevalence of use. Interpretation of this measure is straightfor- ward: males are [ratio] times more likely than females to use [type of substance]. For instance, male students were about three times more likely than females to use marijuana in the past school year (3 percent versus 1 percent). Grade-related ratios in past-year use narrowed from fourth through sixth grade for all substances except marijuana. Male fourth graders were 2.8 times more likely than female fourth graders to use tobacco in the past school year (11 percent versus 4 percent).

By the sixth grade, males were only 1.6 times more likely than

females to report past-year tobacco use (22 percent versus 14 percent). One main reason for this is that as students get older, females increase their substance use at a faster rate than males.

Compared to 1992, male and female elementary students in

1994 reported similar prevalence rates of tobacco and alcohol, but greater use of marijuana and lower use of inhalants. Lifetime rates in marijuana use increased dramatically among female fourth and fifth graders, where lifetime use was less than 0.5 percent in 1992 com- pared to 3-4 percent in 1994 (Figure 11). Among sixth graders, about three times as many males in 1994 (11 percent) than in 1992 (4 percent) had used marijuana at least once. Similarly, lifetime

**Figure 11. Lifetime Marijuana Use Among Elementary Students, by Gender and Grade: 1992 and 1994**

Male elementary students were more likely to use all types of substances in the past school year than females; however, as students get older, females increase

their substance use at a faster rate than males.

12%

10%

8%

6%

4%

2%

0%

Grade 4 Grade 5 Grade 6

Males-1992 Males-1994

Females-1992 Females-1994

marijuana use in 1994 was as much as two times greater than that in

1992 for female sixth graders (6 percent versus 3 percent).

Hispanic elementary students in 1994 reported the highest rates of lifetime use for tobacco and inhalants, whereas African-American students had the highest levels of lifetime use for alcohol and marijuana.

**Race/Ethnicity**

Hispanic elementary students in 1994 reported the highest rates of lifetime use for tobacco and inhalants, whereas African Americans had the highest levels of lifetime use for alcohol and marijuana (Appendix

B, Tables B5-B7). Twenty-one percent of Hispanic students had ever used tobacco, compared to 18 percent of White students and 17 percent of African-American students. Lifetime alcohol use was 45 percent, 37 percent, and 27 percent for African-American, Hispanic, and White students, respectively. Prevalence rates of lifetime inhalant use were higher among Hispanic students at 13 percent than for African Ameri- cans at 9 percent or Whites at 8 percent. Seven percent of African Americans, 6 percent of Hispanics, and 5 percent of Whites had ever used marijuana in their lives.

Some other notable racial/ethnic differences were observed in lifetime substance use (Figure 12). In the fourth grade, African-Ameri- can students (5 percent) admitted lifetime use of marijuana at higher rates than Hispanics and Whites (3 percent). In the sixth grade, more Hispanics (10 percent) than African Americans (9 percent) or Whites (8 percent) had ever used marijuana at least once.

**Figure 12. Percentage of Elementary Students Who Had Ever**

**Used Marijuana, by Race/Ethnicity and Grade: 1994**

10%

9%

8%

7%

6%

5%

4%

3%

2%

1%

0%

Grade 4 Grade 5 Grade 6

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Whites |  |  |  | African Americans Hispanics |
|  | | |

**Figure 13. Percentage of Elementary Students Who Had Used a**

**Substance in the Past Year, by Race/Ethnicity: 1994**

35%

30%

25%

30%

27%

20%

15%

10%

5%

0%

11% 11%

14%

18%

8%

4% 5%

3%

1% 2%

Tobacco Alcohol Inhalants Marijuana

Whites African Americans Hispanics

Hispanic elementary students generally admitted past-year substance use at higher rates than White and African-American students in 1994 (Figure 13). About 14 percent of Hispanics had used tobacco since school began, whereas 11 percent of Whites and African Americans had done so. Similar patterns were observed for past-year use of inhalants and marijuana. Prevalence rates for past-

year alcohol use, however, were higher for African-American students at 30 percent than for Hispanics (27 percent) and White (18 percent). It should be noted that whereas the rates of alcohol use were higher

for African Americans, the estimated number of Hispanic and White students using alcohol since school began was much larger than the number of African-American students. It is estimated that in Texas about 80,000 Hispanic elementary students, 73,800 White elemen- tary students, and 36,600 African-American elementary students were annual drinkers.8

Between 1990 and 1992, the percentage of elementary stu-

dents who drank in the past school year decreased substantially in all grades and racial/ethnic groups except for African-American fourth graders. But between 1992 and 1994, the proportion of past-year alcohol users increased in all three race/ethnicities, with the exception of White fifth and sixth graders (Table 5). Past-year drinking among African-American sixth graders increased from 28 percent in 1992 to

38 percent in 1994, while past-year drinking among White sixth

Hispanic elementary students generally admitted past-year substance use at higher rates than White and African- American students in

1994, except for alcohol use.

■ ■ ■

By translating the rates of use into actual numbers, it is estimated that about

80,000 Hispanic elementary students,

73,800 White elementary students, and 36,600 African- American elementary students were annual drinkers in 1994.

**Table 5. Percentage of Elementary Students Who Drank in the Past School Year, by Race/Ethnicity and Grade:**

**1992 and 1994**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Grade 4**  Whites  African Americans  Hispanics  **Grade 5**  Whites  African Americans  Hispanics  **Grade 6**  Whites  African Americans  Hispanics | **1992**  12%  24%  16%  17%  22%  18%  27%  28%  34% |  | **1994**  13%  27%  20%  17%  27%  24%  24%  38%  36% |  | **% Change**  10%  14%  26%  -2%  19%  32%  -11%  34%  7% |

graders decreased from 27 percent to 24 percent. Apparently, African- American fourth graders were the only group whose past-year preva- lence of alcohol use increased continuously from 20 percent in 1990 to

24 percent in 1992, and to 27 percent in 1994.

Students who earned Cs or below reported two or three times as

much use as their peers who earned As or Bs for all substances.

**Grades Earned in School**

As with secondary students, fourth through sixth graders who usually made Cs, Ds, or Fs were more likely to use substances than those who made As and Bs (Appendix B, Tables B8-B9). In the 1994 elementary survey, students who earned Cs or below reported two or three times as much use as their peers who earned As or Bs for all substances (Table 6). For example, about 45 percent of C-, D-, and F- students had ever drunk alcohol at least once, while 30 percent of A- and B-students had done so. Past-year marijuana use was 4 percent among students making Cs or lower, compared to only 1 percent of those receiving As or Bs. An exception was observed in lifetime mari- juana use by fourth graders, where slightly more A and B fourth grad- ers (4 percent) admitted marijuana use than did C, D, and F fourth graders (3 percent).

**Table 6. Percentage of Elementary Students Who Had Used Substances, by Usual Grades**

**Received in School: 1994**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tobacco**  **Alcohol**  **Inhalants**  **Marijuana** | **Ever Used**  **As or Bs Cs or Lower Ratio\***  16.6% 28.4% 1.7  29.9% 45.2% 1.5  8.5% 16.1% 1.9  5.0% 8.4% 1.7 |  | **Used This School Year**  **As or Bs Cs or Lower Ratio\***  10.2% 20.2% 2.0  20.1% 34.0% 1.7  4.8% 9.6% 2.0  1.3% 4.3% 3.2 |  |

\*( % C, D or F Students) / ( % A or B Students)

Academic status differences in the patterns of tobacco use enlarged from fourth through sixth grade. Among fourth graders, 11 percent of C, D, and F students used tobacco in the past year com- pared to 6 percent of A and B students (Figure 14). By the sixth grade, the past-year rates of tobacco use were 31 percent and 15 percent for students with lower grades and higher grades, respec- tively.

Over the past three surveys, academic-related differences in

marijuana use have lessened. One important reason is that marijuana use increased much more for students making As and Bs than those making Cs or below during 1990-1994. Lifetime use of marijuana

**Figure 14. Percentage of Elementary Students Who Had Used Tobacco in the Past Year, by Academic Status and Grade: 1994**

35%

30%

25%

20%

15%

10%

5%

0%

Grade 4 Grade 5 Grade 6

As or Bs Cs or lower

increased from 1 percent in 1990 to 4 percent in 1994 among A and B fourth graders, while the rates remained at 3 percent in 1990-1994 among C, D, and F fourth graders. During the same time period, sixth graders making As and Bs extended their marijuana use from 3 percent to 7 percent, compared to a small increase of those making poor grades (from 13 percent to 14 percent).

■ ■ ■

Although students who lived with two parents were less likely to use substances than those who lived in other family structures, family status differences in prevalence of substance use

tended to decrease with grade level.

**Family Structure**

Students who lived with two parents (including stepparents) were less likely to use substances than those from other family structures (Appendix B, Tables B10-B11). Of elementary students living in two- parent homes, 16 percent had used tobacco, 28 percent had drunk alcohol, and 5 percent had smoked marijuana at least once. Students from other family situations, by contrast, reported lifetime prevalence rates of 24 percent for tobacco, 42 percent for alcohol, and 7 percent for marijuana. This pattern is consistent for past-year substance use as well (Figure 15).

Family status differences in prevalence of substance use tended to decrease with grade level. For example, fourth graders who did not live with two parents were about twice as likely as those living in two- parent households to admit lifetime alcohol use (36 percent versus 20

**Figure 15. Percentage of Elementary Students Who Had Used Substances in the Past Year, by Family Structure: 1994**

30%

29%

25%

20%

15%

10%

5%

0%

10%

16%

20%

7%

5%

3%

1%

Tobacco Alcohol Inhalants Marijuana

Two-Parent Family Other Family Structures

percent). By the sixth grade, however, youths not living with two parents reported only 1.3 times as much lifetime prevalence of alcohol than those from two-parent families (51 percent versus 38 percent).

As expected, family structure is one of the strongest predictors of how early students begin using substances. Children living in two- parent homes showed a consistent propensity to wait longer before first trying substances than their counterparts from other family

situations. For example, 11 percent of elementary students living with two parents said they first used alcohol by eight years of age, com- pared to 17 percent of those from other family environments.

From 1990 to 1994, family status differences in alcohol use had exaggerated. A larger decreased rate in alcohol use was reported by two-parent-family students over years. This is more obvious among younger students. In the fourth grade, lifetime alcohol use decreased from 29 percent in 1990 to 20 percent in 1994 for students living in two-parent families, but the rate remained stable over time (from 37 percent to 36 percent) for students from other family structures.

**Socioeconomic Status**

Substance use is related to the socioeconomic status (SES) of students. In the elementary survey, two questions of indirect SES- indicators are covered: parental education status and eligibility for a free or reduced-price school lunch. Youths who had college-educated parents were less likely to use substances than those who did not (Table 7). About 25

**Table 7. Percentage of Elementary Students Who Had Used a Substance\***

**in the Past School Year, by Socioeconomic Variables and Grade: 1994**

■ ■ ■ Children who lived in two-parent homes tended to wait longer before first trying substances than children who lived in other family structures.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **All**  **Grade 4**  **Grade 5**  **Grade 6** | **Parental Education**  **Not**  **College College**  **Educated Educated**  24.8% 33.0%  18.7% 25.2%  23.7% 30.1%  32.1% 43.7% |  | **Family Income Level\*\***  **Free/**  **Reduced- No Free/**  **Price Reduced-Price**  **Lunch Lunch**  32.0% 22.8%  24.8% 17.1%  28.8% 20.9%  42.4% 30.3% |  |

\* Tobacco, alcohol, inhalants, and/or marijuana

\*\* Based on the Federal Register, Feb. 25, 1993 (58 FR 11394), children in a family of four earning

$18,655 a year or less in 1993-1994 are eligible for receiving a free school lunch; and, children in a family of four earning more than $18,655 but less than $26,548 a year are eligible for receiving a reduced-price school lunch.

About 25 percent of elementary students with a parent who had a college degree reported past-year use of any substance, compared to 33 percent of those whose parents did not graduate from college.

With the exception of lifetime inhalant use, which shows the lowest use among fifth-grade students, substance use increases with grade level.

percent of elementary students with a parent who had a college degree reported past-year use of any substance, compared to 33 percent of those whose parents did not graduate from college. This pattern holds

across all grades and the most evident difference is among sixth graders

(32 percent versus 44 percent).

The question of whether the student qualified for a free or re- duced-price school lunch was added to the 1994 school survey for the first time, and is a good measure of the family-income level of students. Unlike secondary students, there is a clear relationship between sub- stance use and the family income level among students in grades 4-6. Table 7 shows that elementary students who lived in low-income families were more likely to use a substance in the past year than those from other families.9 About 25 percent of fourth graders, 29 percent of fifth graders, and 42 percent of sixth graders who qualified for a free or reduced-price school lunch had used substances during the past year, compared to 17 percent, 21 percent, and 30 percent of fourth, fifth, and sixth graders, respectively, who did not qualify.

**Length of Residence in Town**

Elementary students were asked whether they had lived in the town for more than three years. There were only small differences in prevalence of substance use between students living in the town more than three years and students in the town three or fewer years (Appen- dix B, Tables B12-B13). In general, the “new” students reported slightly higher lifetime and past-year use of substances than the longer- resident students. About 21 percent of the new students had ever used tobacco in their lives, compared to 19 percent of students who had

resided in the town more than three years. The only exception was past- year alcohol consumption, where the longer-resident students admitted

a slightly higher rate of past-year alcohol use (23 percent) than did the

“new” students (22 percent) in the 1994 survey.

**Grade Level**

Grade level continues to be an important criterion in differing prevalence rates of substance use among elementary students. With the exception of lifetime use of inhalants, which shows the lowest use among fifth grade students, substance use increases with the grade level. A noticeable prevalence increase was between fifth and sixth grades, which indicates that many students begin experimenting with

**Figure 16. Percentage of Elementary Students Who Had Ever Used**

**Substances, by Grade: 1994**

45%

40%

35%

30%

25%

20%

15%

10%

5%

0%

Grade 4 Grade 5 Grade 6

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Tobacco |  |  |  | Alcohol Inhalants Marijuana |
|  | | |

substances for the first time in the sixth grade (Figure 16). One reason for this sharp increase is that in many school districts, sixth graders are integrated into middle school campuses where they are exposed to the substance use of older peers. Also, sixth grade students become increasingly independent as they enter early adolescence, and subsequently more inclined to experiment than younger students.

Lifetime prevalence of tobacco and alcohol increased from year to year among elementary students. In 1994, lifetime tobacco use increased from 11 percent to 18 percent between grades four and five, then to 28 percent among sixth graders. The proportion who had ever drunk alcohol rose from 25 percent to 30 percent between fourth and fifth grades, then increased to 43 percent among sixth graders. Life- time inhalant and marijuana use, on the other hand, remained stable in the fourth and fifth grade, then increased sharply in the sixth

grade. Lifetime inhalant use was about 8 percent for fourth and fifth graders, but increased to 13 percent among sixth graders. Lifetime marijuana use was 4 percent for fourth graders, 5 percent for fifth graders, then almost doubled to 9 percent among sixth graders.

The noticeable prevalence increase between fifth and sixth grades may be due to several

factors. One is that in many school districts, sixth graders are integrated into middle schools where they are exposed to substance use of older students.

**Factors and Behaviors Related to Substance Use**

The sharp increase in marijuana use between 1992 and

1994 School Survey of Substance Use: Grades 4-6

1994 corresponded to the increased availability of marijuana, the softened perceptions of danger about marijuana use, and the increased number of close friends who used marijuana.

**Introduction**

In most cases, children use alcohol and/or tobacco before they try marijuana, and use of marijuana almost invariably precedes use of other types of illicit drugs. What happens in elementary grades, thus, sets the stage for adolescent substance use. Therefore, the factors that may reduce or delay the onset of substance use among elementary students are important. Factors discussed in this section include

school problems, the number of close friends who use substances, availability of substances, perceived danger of substance use, and perceived parental attitudes about kids their age using substances.

As was also true for the secondary population, elementary stu- dents were more likely to admit higher levels of substance use if they had missed class or had disciplinary problems in school, if most of their friends also used substances, if they had been offered substances, if they did not view substances as dangerous, and if they reported parental approval of substance use. The sharp increase in marijuana use between 1992 and 1994 also corresponded to the increased avail- ability of marijuana, the softened perceptions of danger about mari- juana use, and the increased number of close friends who used mari- juana. In addition, elementary students’ early opinions toward sub- stance use can be affected by many school-based sources of informa- tion. The most likely source of information that elementary students is information from their teachers.

These findings highlight the need to think of substance use among youths as a multidimensional problem that cannot be solved without first considering knowledge, values, attitudes, availability, and use by friends. Prevention and intervention efforts of substance

abuse must extend their emphasis beyond the individual youth to include parents and schools, especially the development of parental support while encouraging children’s attendance in school and disas- sociation with deviant peers.

**School Problems**

Students who had cut class and/or had been sent to the principal were much more likely to have used substances than other students. Of those elementary students who had cut school since school began,

71 percent had drunk alcohol, 24 percent had used inhalants, and 23 percent had used marijuana in their lives. Lifetime prevalence was also high among students who had been sent to the principal since school began (52 percent for alcohol, 12 percent for inhalants, and 9 percent for marijuana). By contrast, students who had neither cut

school nor been sent to the principal reported much lower use of these substances: only 25 percent drank alcohol, 6 percent used inhalants, and 4 percent used marijuana during their lifetime.

**Close Friends Who Use**

Peer use is often cited as a factor associated with substance use among youths. In the elementary survey, students were asked “About how many of your close friends your age use [substances]?” Approxi- mately 37 percent of all elementary students in 1994 said some or most of their close friends drank alcohol, which was a much higher percentage than for other substances (Appendix C, Table C3). Only

11 percent of the students reported that at least some of their close friends used inhalants and 9 percent said that at least some of their close friends used marijuana.

The percentage of elementary students who reported tobacco- using peers increased with grade. About 21 percent of fourth graders,

29 percent of fifth graders, and 45 percent of sixth graders said that their close friends had used tobacco. In each grade, two to three times as many students had close friends who smoked cigarettes than had friends who used smokeless tobacco. Among sixth graders, 42 percent reported at least some of their peers smoked cigarettes, while only 17 percent had friends who used smokeless tobacco.

Like the self-reported use of alcoholic beverages, elementary students were most likely to have their close friends who drank beer (31 percent), followed by friends who drank wine coolers (24 per- cent). Fewer students had close friends who drank wine (18 percent)

Prevention efforts should include parents and schools, helping to develop parental support while encouraging

children’s attendance in school and disassociation with deviant peers.

Approximately 37 percent of all elementary students said some or most of their close friends drank alcohol, which is a much higher percentage than for other substances.

**Figure 17. Percentage of Elementary Students Who Said Some/Most of**

**Their Close Friends Used Various Alcoholic Beverages, by Grade: 1994**

45%

40%

35%

30%

25%

20%

15%

10%

5%

0%

Beer Wine Wine Coolers Liquor

Grade 4 Grade 5 Grade 6

■ ■ ■

The extent of peer use gives an indication of the student’s opportunity to experiment and indicates the level of peer pressure to use substances. While students

may be likely to deny their own substance use, they may be more straightforward about their friends’ use.

and fewest had friends who drank liquor (13 percent). Grade-specific data indicate that the proportion of elementary students who reported that close friends drink alcohol increased with grade (Figure 17). About 23 percent of fourth graders, 27 percent of fifth graders, and

41 percent of sixth graders said that their close friends had drunk beer.

Overall, 7 percent of fourth graders, 9 percent of fifth graders and 17 percent of sixth graders said that at least some of their close friends used inhalants (Appendix C, Table C3). These figures are low compared to most other substances. Very few elementary students reported having any close friends who used marijuana. Only 5 percent of fourth graders, 7 percent of fifth graders, and 15 percent of sixth graders had close friends who used this drug.

The extent of peer use implies opportunity to experiment and indicates the level of peer pressure to use substances. While students may be inclined to deny their own substance use behavior, they may be more straightforward about their friends’ use. This would partly explain why the reported peer use of substances, in general, was much higher than the observed personal use among students. For example,

32 percent of all elementary students said that at least some of their friends used tobacco, but many fewer students (19 percent) had ever used tobacco.

The general trends of friends’ use between 1990 and 1994 were consistent with those of the respondents’ own use for most substances except inhalants. Elementary students indicated that their friends’ use of alcohol decreased from 44 percent in 1990 to 37 percent in 1994. About 9 percent of all elementary students surveyed in 1990 had

their friends who used marijuana; the percentage dropped to 7 per- cent in 1992 and then increased to 9 percent in 1994.

**Availability of Substances**

Availability is another factor related to substance use among youths. In the elementary survey, students were asked “*Has any one ever tried to give you [substance]*?” About 34 percent of all elementary

students in 1994 reported they had been offered alcohol, while only 9 percent had been offered marijuana (Table 8). The percentage of availability increased with grade. For example, 39 percent of sixth graders claimed had been offered tobacco products, compared to 22 percent of fourth graders and 27 percent of fifth graders. In each grade, nearly twice as many as students had been offered cigarettes than had been offered smokeless tobacco.

Among the four alcoholic beverages surveyed, elementary stu- dents were most likely to have been offered beer. Twenty-one percent of fourth graders, 25 percent of fifth graders, and 37 percent of sixth graders said they had been offered beer, whereas only 6 percent of fourth graders, 9 percent of fifth graders, and 17 percent of sixth graders had been offered liquor. Students had been offered wine and wine coolers at rates between those of beer and liquor.

**Table 8. Percentage of Elementary Students Who Had Been**

**Offered Substances, by Grade: 1994**

About 34 percent of all elementary students in 1994 reported they had been offered alcohol, while only 9 percent had been offered marijuana.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Tobacco** | **A l l** | **Grade 4** | **Grade 5** | **Grade 6** |
| 30% | 22% | 27% | 39% |
| Cigarettes | 26% | 19% | 24% | 35% |
| Smokeless Tobacco | 12% | 9% | 11% | 17% |
| **Alcohol**  Beer | 34%  27% | 26%  21% | 31%  25% | 44%  37% |
| Wine | 15% | 10% | 14% | 22% |
| Wine Coolers | 19% | 12% | 17% | 27% |
| Liquor | 11% | 6% | 9% | 17% |
| **Inhalants** | 8% | 5% | 7% | 12% |
| **Marijuana** | 9% | 6% | 8% | 13% |

■ ■ ■

Six percent of fourth graders, 8 percent of fifth graders, and 13 percent of sixth graders reported they had been offered marijuana.

Only 8 percent of elementary students had been offered inhal- ants; this percentage is lower than for any other substance. What is most interesting about the inhalant response pattern is that fewer elementary students recall being offered inhalants than admit using them. For example, 8 percent of fourth graders had ever used inhal- ants whereas only 5 percent said they had ever been offered some- thing to inhale. For other substances queried in this survey, the relationship between availability and use was the reverse (for example,

9 percent of fourth graders had ever smoked cigarettes while 19 percent had been offered it). There are two potential explanations for this anomaly. First, many elementary students who sniffed volatile solvents did not know what the term “inhalants” means. Because they do not understand the concept of inhalants, they cannot correctly answer the question regarding whether or not they have been offered them. The second reason that so few elementary students recall being offered inhalants could be that because these substances are so easily available, kids may not remember being offered them or may have simply acquired the substances for themselves.

Six percent of fourth graders, 8 percent of fifth graders, and 13 percent of sixth graders in the 1994 survey reported they had been offered marijuana. These rates are quite low as compared to other substances. About 60 percent of fourth and fifth graders who had the opportunity to try marijuana actually did so, and 70 percent of sixth graders who had been offered marijuana had gone on to use it.

In general, the percentage of availability reported by elementary students decreased from 1990 to 1994. For example, about 40 per- cent of fourth graders and 46 percent of fifth graders in 1990 said they had been offered alcohol; these rates decreased to 26 percent and

31 percent in 1994. Although fewer students reported availability of substances over the past three surveys, significantly more students offered substances had actually used such substances. About 80 percent of fourth or fifth graders who had been offered alcohol actu- ally had drunk alcohol in the 1990 survey, while almost everyone of them (97 percent) who got the opportunity to drink alcohol actually did so in 1994. Likewise, only 16 percent of fourth or fifth graders offered marijuana had gone on to use it in 1990; the figure increased sharply to 60 percent in 1994. This finding indicates that youths were less hesitant to experiment with marijuana over time, presum- ably believing it is less dangerous to use.

Students were also asked where they got the alcohol they drank

(Figure 18). In the 1994 survey, students in fourth (12 percent), fifth

18%

**Figure 18. Percentage of Elementary Students Who Had Obtained**

**Alcohol From Various Sources, by Grade: 1994**

16%

14%

12%

10%

8%

6%

4%

2%

0%

Home Friends Somewhere Else

Grade 4 Grade 5 Grade 6

(14 percent), and sixth grade (18 percent) were most likely to indicate that they obtained alcohol at home. Relatively few said they normally got alcohol from friends although the percentage increased from 4 percent of fourth graders to 16 percent of sixth graders. A significant proportion of elementary students usually obtained alcohol from sources other than home or their friends: 8 percent, 11 percent, and

18 percent in fourth, fifth, and sixth grade, respectively. This sug- gests that while many young children find ways of getting alcoholic beverages in their homes, many look for other sources of alcohol. Compared to 1992, slightly fewer elementary students (most likely

1 percent lower) reported getting alcohol from various sources. The only evident disparity was among sixth graders, where 22 percent in

1992 said they got alcohol from home in comparison to 18 percent in

1994.

**Perceived Danger**

Elementary students were asked “How dangerous do you think it is for kids your age to use [substance]?” The responses range from “very dangerous” to “not at all dangerous” (Appendix C, Table C4). About 66 percent of all elementary students in 1994 thought that tobacco was very dangerous to use; 70 percent believed that alcohol was; and 83 percent thought it was very dangerous to use marijuana.

Elementary students were most likely to say that they got the alcohol they drank from home.

The survey results indicate that one in

12 elementary students have not yet made up their minds about the danger of using tobacco products.

These figures were much higher than those reported by their older counterparts in secondary school. However, fewer elementary students believed that inhalants were very dangerous to use as compared to secondary students (68 percent versus 77 percent). Again, this may be partly because many younger students taking the survey did not fully understand what “inhalants” were.

Sixty-four percent of fourth graders, 53 percent of fifth graders, and 43 percent of sixth graders believed that it was very dangerous to smoke cigarettes (Figure 19). These figures were lower than for other substances except some alcoholic beverages, suggesting that elemen- tary students may be less fearful of smoking cigarettes than using most of the other substances. Using smokeless tobacco was perceived more often as very dangerous than smoking cigarettes. The percent- ages who reported use of smokeless tobacco as “very dangerous” were

66 percent, 60 percent, and 50 percent for fourth, fifth, and sixth graders, respectively. Apparently, elementary students tend to believe that smokeless tobacco use is more dangerous than cigarette smoking. Seven to 10 percent of fourth, fifth, and sixth graders responded

“don’t know” to questions about the danger of smoking cigarettes and using smokeless tobacco. This indicates about one in twelve elemen- tary youths have not yet made up their mind about the danger of

using tobacco products.

**Figure 19. Percentage of Elementary Students Who Thought It Was**

**Very Dangerous to Use Various Substances, by Grade: 1994**

90%



80%

70%

60%

50%

40%

30%

20%

10%

0%

Cigarettes Smokeless

Tobacco

Beer Wine Wine

Coolers

Liquor Inhalants Marijuana

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Grade 4 |  |  |  | Grade 5 Grade 6 |
|  | | |

Compared to other substances, elementary students were gener- ally less concerned about the danger of drinking alcoholic beverages (Figure 19). Wine coolers were thought to be the least threatening of the four beverages surveyed: only 48 percent of fourth graders, 41 percent of fifth graders, and 32 percent of sixth graders said it was very dangerous for kids their age to drink wine coolers. Accordingly,

10 percent of elementary graders perceived that wine coolers were not at all dangerous while 12 percent responded ”don’t know,” indicating they had not yet made up their mind on this subject. Both figures were much higher than for any other substance. These results, jointly, suggest that young students perceive wine coolers as the least danger- ous type of alcohol to drink.

Beer and wine were perceived as more dangerous than wine coolers: about 54-55 percent of fourth graders, 48 percent of fifth graders, and 39-40 percent of sixth graders thought beer or wine was very dangerous to consume. The responses in perceived danger of liquor drinking suggest a higher level of concern. For example, 70 percent of fourth graders said that liquor was very dangerous, which is higher than the responses for other alcoholic beverages and tobacco products. Correspondingly, only 2 percent of fourth graders said it was not at all dangerous for kids their age to drink liquor. This pattern was also true for the fifth and sixth graders, indicating that liquor was clearly perceived as the most dangerous type of alcohol.

Unlike other substances surveyed, the percentages that reported inhalant use as “very dangerous” were similar for fourth graders (68 percent), fifth graders (69 percent), and sixth graders (68 percent). These numbers were generally higher than for most of the other substances. As compared to responses for inhalants, use of liquor and marijuana were identified more often as very dangerous among fourth graders. However, only use of marijuana was viewed more often as very dangerous than use of inhalants among fifth and sixth graders. An equal number of students (8 percent) in each grade also did not know how dangerous it was to use inhalants.

Eighty percent of fourth graders, 84 percent of fifth graders, and

83 percent of sixth graders thought that it was very dangerous to use marijuana, which is higher than on any of the other substances sur- veyed. Moreover, relatively few elementary students responded ”don’t know” when asked about the danger of using marijuana. Only 5 percent reported in each grade had no idea about using this drug, which is lower than for any other substance. These results indicate that elementary students were more likely to have formed an opinion about marijuana use, and that opinion tends to be negative.

Wine coolers were thought to be the least dangerous of the four types of alcohol surveyed: beer, wine, wine coolers, and liquor.

■ ■ ■

Just over two-thirds of all elementary students thought that inhalant use was very dangerous.

■ ■ ■

Eighty percent of fourth graders, 84 percent of fifth graders, and 83 percent of sixth graders said it was very dangerous to use marijuana.

Youths who believed substances were quite dangerous to use were less

likely to actually use those substances.

■ ■ ■

A higher proportion of fourth and fifth graders in 1994 than in 1992 perceived most substances as very dangerous, but fewer sixth graders believed that it is very dangerous to use substances.

***Relative Danger Associated With Prevalence Use***

A strong correlation exists between the students’ substance use and their attitudes toward substance use. Youths who believe sub- stances were quite dangerous to use were less likely to actually use those substances (Table 9). For instance, only 6 percent of elementary students who thought beer was very dangerous to consume actually drank in the past school year, compared to 49 percent of those who thought beer was not dangerous at all. Only 1 percent of elementary students who believed marijuana was very dangerous to use had actually used it in the past school year, whereas the past-year preva- lence of marijuana was 31 percent for those who believed marijuana use was not dangerous at all. This correlation was paralleled for other substances as well.

***Changes in Perceptions of Danger***

A higher proportion of fourth and fifth graders in 1994 com- pared to those surveyed in 1992 perceived use of most substances as

”very dangerous” to users, whereas fewer sixth graders believed that it was very dangerous to use various substances. This may indicate that older children have become less fearful of using substances over the past two years; the decreased trend of perceptions is also true for secondary students. The percentage of fourth graders who thought of tobacco use as very dangerous increased from 71 percent in 1992 to

74 percent in 1994, but the rate declined from 67 percent to 57 percent for sixth graders. While the perceived danger toward mari- juana use remained stable among fourth and fifth graders, the per-

**Table 9. Percentage of Elementary Students Who Used**

**Substances in the Past School Year, by Perceived Danger: 1994**

**Very**

**Dangerous Dangerous**

**Not**

**Dangerous**

**At All**

|  |  |  |  |
| --- | --- | --- | --- |
| **Cigarettes** | 4% | 14% | 53% |
| **Smokeless Tobacco** | 1% | 6% | 30% |
| **Beer** | 6% | 16% | 49% |
| **Wine** | 3% | 12% | 37% |
| **Wine Coolers** | 4% | 12% | 46% |
| **Liquor** | 2% | 9% | 38% |
| **Inhalants** | 3% | 8% | 43% |
| **Marijuana** | 1% | 6% | 31% |

centage of sixth graders reporting marijuana use as ”very dangerous” decreased from 92 percent in 1992 to 83 percent in 1994. The softened perceptions about the danger of using marijuana among sixth graders probably helped contribute to their sharp increase in marijuana use during 1992-1994.

**Perceived Parental Attitudes**

Parents’ attitudes toward substance use often influence their children’s decisions regarding substance use. Elementary students are potentially more strongly influenced by the attitudes of their parents than are secondary students. Compared to secondary students, almost twice as many elementary students have no idea how their parents feel about kids their age using marijuana or alcohol. Among students in grades 4-6, about 17 percent were not sure of the attitudes of their parents toward kids their age drinking beer, and 12 percent did not know how their parents felt about marijuana use (Table 10). For sec- ondary students in grades 7-12, these figures were only 10 percent and

8 percent, respectively, in the 1994 survey.

Grade-level data show that sixth graders were more likely than fourth or fifth graders to know their parents’ position on substance use.

**Table 10. Responses of Elementary Students in 1994 to the**

**Question, “How Do Your Parents Feel About Kids Your Age...”**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Drinking** | **Beer?** | **Don't** | **Don't** | **Think It's** | **Don't** |
|  |  | **Like It** | **Care** | **OK** | **Know** |
| All |  | 80.0% | 2.2% | 1.1% | 16.8% |
| Grade 4 |  | 80.5% | 1.5% | 1.2% | 16.8% |
| Grade 5 |  | 80.1% | 1.8% | 0.9% | 17.2% |
| Grade 6 |  | 79.3% | 3.2% | 1.2% | 16.3% |

**Using Marijuana?**

|  |  |  |  |
| --- | --- | --- | --- |
| **Don't** | **Don't** | **Think It's** | **Don't** |
| **Like It** | **Care** | **OK** | **Know** |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| All | 86.1% | 1.2% | 0.5% | 12.2% |
| Grade 4 | 84.7% | 1.1% | 0.5% | 13.7% |
| Grade 5 | 86.5% | 1.1% | 0.3% | 12.1% |
| Grade 6 | 87.2% | 1.5% | 0.5% | 10.8% |

About 80 percent of elementary

students felt their parents strongly opposed their drinking beer and

86 percent said their parents strongly opposed marijuana use.

Among sixth graders who had drunk alcohol, the average age of first use was 9.5 years.

About 11 percent of sixth graders did not know how their parents

feel about marijuana use, while 14 percent of fourth graders said they did not. The clear expression of parents’ attitudes continues to de- velop throughout the secondary population—as their children grow up, parents very likely must confront substance use by their children and make their views known.

Eighty percent of elementary students felt that their parents strongly opposed their drinking beer and 86 percent indicated their parents strongly opposed marijuana use. The message that beer is not acceptable becomes less effective as students grow older. Fewer sixth graders (79 percent) reported their parents ”don’t like it” for kids their age to drink beer, compared to 81 percent of fourth graders.

This trend continues to develop in secondary grades as well. However, more parents of sixth graders (87 percent) were perceived as strongly disapproving marijuana use in comparison to the parents of fourth graders (85 percent).

Between 1990 and 1994, the percentage of elementary students who said their parents did not like kids their age to drink beer in- creased from 77 percent to 80 percent; for marijuana use, however, the disapproval rate remained the level at 86 percent. By grade, the

parental disapproval of marijuana use among fourth graders decreased from 87 percent in 1990 to 85 percent in 1994; the comparable range for fifth graders was 89 percent to 87 percent. The decrease of paren- tal disapproval may partially account for the upsurge in marijuana use among fourth and fifth graders over the past three surveys. The corresponding trend, however, did not occur in sixth grade. Part of

the reason may be that the changes in the pattern of marijuana use among sixth graders were not effected by the differences of perceived parental attitudes but of some other predictors, such as the respon- dents’ perceived danger and their friends’ use of marijuana.

**Age of First Use**

Alcohol is the first substance that Texas elementary school students try (Table 11). Among sixth graders who had drunk alcohol, the average age of first use was 9.5 years, which was earlier than for any other substance. Initiation of tobacco use among sixth graders occurs about 0.4 years later than alcohol use; the first use of inhalants occurs about 0.6 years later than alcohol use; and the onset of mari- juana use was about 1.1 years later than alcohol use. Elementary students first try marijuana at an older average age than other sub-

**Table 11. Average Age of First Use of Substances, In**

**Years, by Grade: 1994**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Tobacco** | **Grade**  8.4 | **4** | **Grade**  9.1 | **5** | **Grade 6**  9.9 |
| **Alcohol** | 8.2 |  | 8.9 |  | 9.5 |
| Beer | 8.2 |  | 8.8 |  | 9.4 |
| Wine | 8.6 |  | 9.3 |  | 10.0 |
| Wine Coolers | 8.7 |  | 9.5 |  | 10.1 |
| Liquor | 8.7 |  | 9.5 |  | 10.3 |
| **Inhalants** | 8.3 |  | 9.2 |  | 10.1 |
| **Marijuana** | 8.7 |  | 9.7 |  | 10.6 |

stances. As found in the secondary population, elementary students start using licit substances earlier than they begin using illicit drugs. This observation is consistent with present views of substance use progression, which maintain that alcohol, tobacco, and inhalants are “gateway drugs” into the continuum of substance use.10

Among the four alcoholic beverages, beer is the first that

elementary students try. On average, sixth graders were 9.4 years old when they first drank beer. Comparable measures for wine, wine coolers, and liquor were 10.0, 10.1, and 10.3 years of age, respec- tively. The earlier initiation of beer drinking may lead to the result that more elementary students have consumed beer than other alcoholic beverages.

**Information Sources**

The early attitudes and opinions of elementary students toward substance use are affected by many different sources. Schools are in a position to be particularly influential in the decision processes of younger students. When asked whether they had gotten information on drugs or alcohol from any school source during the past school year, 94 percent of all elementary students in 1994 said they had (Appendix C, Table C5). This figure was quite similar to the compa- rable measure both in 1990 (95 percent) and 1992 (93 percent), indicating few changes in the percentage of elementary students receiving information about substance abuse from a school source. However, that figure was much lower for secondary students sur- veyed in 1994 (79 percent).

The most likely source of information that elementary students reported was their teachers (82 percent). Elementary students also

■ ■ ■ Elementary school students are most likely to get information regarding substances from their teachers (82 percent), assembly programs (69

percent) and visitors to their classroom (68 percent).

named assembly programs (69 percent) and visitors to class (68 percent) as ways they had learned about drugs or alcohol. Fifty-seven percent identified a guidance counselor as an information source and

50 percent said they had gotten information from some other school source as well.

Fourth and fifth graders were more likely to receive information from school sources than sixth graders. The percentage of students who obtained information from school sources decreased in the sixth grade, initiating a decline that continues throughout secondary school. About 78 percent of sixth graders in 1994 identified their teachers as a means of information about drugs or alcohol, compared to 84 percent of fourth and fifth graders. Similarly, only 46 percent of

sixth graders said they learned about substance abuse from a guidance counselor during the school year, which was fewer than in fourth (68 percent) or fifth grade (58 percent). All school-based sources of infor- mation reflect this pattern. One possible explanation for this finding

is that school districts may concentrate most of their attention on early prevention programs for fourth and fifth graders, with the number of drug and alcohol information programs actually decreasing somewhat in upper grade levels. On the other hand, students may be less receptive to school programs as they grow older and may there- fore not remember or report them on the survey.

**Figure 20. Percentage of Elementary Students Who Had Received Information on Substances from Various School Sources: 1990, 1992, and 1994**

90%

80%

70%

60%

50%

40%

30%

20%

10%

0%

An Assembly Program

A Guidance Counselor

Visitor to

Class

Your

Teacher

Some Other School Source

1990 1992 1994

Although an equal number of elementary students between

1990 and 1994 reported they learned about substance abuse from a school source, the percentage of students receiving information from their teachers decreased from 88 percent in 1990 to 82 percent in

1994 (Figure 20). Yet, more students said they obtained information from a guidance counselor (from 48 percent to 57 percent) as well as from a visitor to their class (from 65 percent to 68 percent) over the past three surveys.

**Conclusions**

Although substance use is quite low among elementary students compared to those in the secondary population, it should be remembered

1994 School Survey of Substance Use: Grades 4-6

that even low rates of use represent large numbers of students.

■ ■ ■

More than three times as many elementary students in 1994 than in 1992 reported lifetime use of marijuana.

Although substance use is quite low among elementary students compared to those in the secondary population, it should be remem- bered that even low rates of use represent large number of students. It is in the elementary grades that many youths are exposed to alcohol and drugs for the first time. If early initiation of substance use is a risk factor for later substance abuse, then any reduction or delay in early

use of substances is critical.

Alcohol remained the substance most frequently used by elemen- tary students in 1994. Heavy drinking is still of concern: about one in five elementary youths had drunk two or more beers in a row at least once during the past school year. Male elementary students showed prevalence rates well above those for females for all substances. The ethnicity data revealed that African-American youths ranked the highest in rates of lifetime use of alcohol and marijuana, while His- panics reported the greatest rates of use of tobacco and inhalants. Making poor grades and having conduct problems in school were each significantly related to the prevalence use of substances among stu- dents. Further, elementary children from low-income families were more likely to use substances than those from other families.

Family structure predicted experimental use of substances, such that children living in two-parent families showed a consistent pro- pensity to wait longer before first trying substances than their coun- terparts who did not live with both parents. In addition, parents’ attitudes toward substance use affected their children’s decisions of substance use. If parents are thought to have a permissive attitude toward substance use, then it becomes easier for their children to experiment and continue substance use.

More than three times as many as elementary students in 1994 than in 1992 reported lifetime use of marijuana. The increase in prevalence of marijuana use among elementary schoolchildren is consistent with that observed in the secondary population. Possible reasons for this increase in youthful marijuana use may be the de-

creased perceived danger of marijuana and the lowered perceptions of parental disapproval of marijuana use. Also, in 1994, more students reported being offered marijuana and seeing close friends use mari- juana, both of which may encourage students to view marijuana use

Factors and Behaviors Related to Substance Use

as an acceptable behavior. If it is the case that marijuana is a gateway drug to other illicit drugs, then the sharp increase in prevalence reported by elementary students should be read as a sign of potential increases in other illicit drug use in later years.

Substance use behavior as early as the elementary grade predicts similar behavior in secondary school. The association of peer, parent, and school factors with self-reported substance use in this study is consistent with relationships observed among older students. These results suggest the need for early prevention and intervention efforts of substance use to be directed toward preadolescents, and the pro- grams should take into account the impacts of peer factors as well as parent/family characteristics that may lead to the initiation and continuation of adolescent substance use.

The sharp increase in marijuana prevalence reported by elementary students should be read as a sign of potential increase in other illicit drug use in later years.

1994 School Survey of Substance Use: Grades 4-6

**Endnotes**

1 In 1990 and 1992, fourth and fifth grade respondents were questioned with the elementary survey instrument, whereas sixth graders were questioned with the secondary survey instrument. The two survey forms covered the same basic topic areas, but in some cases questions were asked differently. In 1994, the elementary survey was administered to fourth, fifth, and sixth graders.

2 Since the school survey samples only in-school students, it is likely that the study underestimates the prevalence of substance use in the adolescent population because school dropouts consistently have shown higher rates of substance use than those staying in school. See G. Globetti, “Teenage Drinking,” in *Alcoholism: Development, Consequences, and Interventions, Second Edition*, eds. N. J. Estes and M.

E. Heinemann (St. Louis, Missouri: The C. V. Mosby Co., 1992); W. B. Hansen,

L. M. Collins, C. K. Malotte, C. A. Johnson, and J. E. Fielding, “Attrition in Prevention Research,” *Journal of Behavioral Medicine* 8:3(1985): 261-275; and L. Y. Liu, *Substance Use Among Youths at High Risk of Dropping Out: Grades 7-12 in Texas,*

*1992* (Austin, Tx.: Texas Commission on Alcohol and Drug Abuse, 1994).

3 J. A. Dyer, R. Prislin, L. Ringer, and C. D. Hanks, *Methodology Report for the 1994*

*Texas School Survey of Drug and Alcohol Use* (College Station, Tx.: Public Policy

Research Institute, Texas A& M University, 1994).

4 As noted in the first section, the modification to the response options regarding specific types of inhalants may have resulted in less inhalant abuse being reported.

5 Heavy consumption of alcoholic beverages among sixth graders in 1994 was not comparable to those in 1990-1992. Since sixth graders responded to the secondary survey instrument in both 1990 and 1992, the question about heavy drinking

read differently, “During the past year, how often have you had 5 or more drinks at one time?”

6 E. V. Fredlund, “Epidemiology of Volatile Substance Abuse: The Texas Experi- ence,” in *Inhalant Abuse: A Volatile Research Agenda*, eds. C. Sharp, F. Beauvais, and R. Spence (Rockville, Md.: National Institute on Drug Abuse Research Mono- graph Series No. 129, 1992); D. L. Morgan, *Focus Groups as Qualitative Research* (Newbury Park, Calif.: Sage University Paper Series on Qualitative Research Methods, Vol. 16, 1988).

7 For sixth graders, different survey instruments were used in 1992 (the version for

secondary students) and in 1994 (the version for elementary students). Response categories regarding the number of close friends who use drugs differed slightly between these two versions. The secondary survey offered a five-point response scale (none, a few, some, most, or all) while the elementary survey offered a simplified three-point scale (none, some, or most). In order to be comparable to the 1994 results, the 1992 responses of a “few” and “some” were combined as “some,” and “most” and “all” were combined as “most” among sixth graders.

8 The number of annual drinkers was estimated by multiplying the past-year

alcohol prevalence derived from the elementary school survey by the 1993-1994 total elementary student enrollment in Texas for each racial/ethnic group:

413,136 for Whites, 120,488 for African Americans, and 300,417 for Hispanics.

Similary, the number of lifetime drinkers can be measured by applying the lifetime alcohol prevalence: about 110,700 Hispanic elementary students,

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109,900 Whites, and 54,000 African Americans were estimated as lifetime alcohol users.

9 Recent prevention literature indicates that for many low-income

families, parents worry more and more about their eroding economic security and have become increasingly pessimistic about their children’s future. These children who receive inadequate care and support are at high risk of being disconnected from school, depressed, and prone to drug use and early criminal activity. See Ann Goetting, “Do Americans Really Like Children?” *The Journal of Primary Preven- tion* 15, no. 1 (1994): 81-92.

10 D. B. Kandel, K. Yamaguchi, and K. Chen, “Stages of Progression in Drug Invovlement from Adolescence to Adulthood: Further Evidence for the Gateway Theory,” *Journal of Studies on Alcohol* 53 (1992): 447-

457; D. B. Kandal and K. Yamaguchi, “From Beer to Crack: Develop- mental Patterns of Drug Involvement,” *American Journal of Public Health* 83, no. 6 (1993): 851-855; M. R. Torabi, W. J. Bailey, and M. Majd-Jabbari, “Cigarette Smoking as a Predictor of Alcohol and Other Drug Use by Children and Adolescents: Evidence of the ‘Gateway Drug Effect’,” *Journal of School Health* 63, no. 7 (1993): 302-306.

1994 School Survey of Substance Use: Grades 4-6

**Appendix A - Survey Instrument**

Not available in electronic form.

Appendix B - Prevalence Tables

**Appendix B - Prevalence Tables**

**Table B.1. Prevalence and Recency of Use of Substances by Grade, Texas Elementary**

**Students: 1990, 1992, and 1994**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Ever**  **Used**  **1990** | **Ever**  **Used**  **1992** | **Ever**  **Used**  **1994** | **School**  **Year**  **1990** | **School**  **Year**  **1992** | **School**  **Year**  **1994** |
| **Tobacco** | **21.1%** | **18.8%** | **18.9%** | **13.3%** | **11.5%** | **12.0%** |
| Grade 4 | 13.3% | 10.8% | 11.1% | 8.2% | 6.5% | 7.1% |
| Grade 5 | 19.8% | 18.3% | 17.7% | 13.2% | 11.9% | 10.9% |
| Grade 6 | 30.5% | 27.4% | 27.9% | 18.7% | 16.1% | 18.1% |
| **Alcohol** | **41.8%** | **33.4%** | **32.6%** | **28.8%** | **20.5%** | **22.6%** |
| Grade 4 | 31.0% | 25.2% | 25.1% | 21.1% | 14.7% | 17.3% |
| Grade 5 | 38.5% | 28.6% | 30.3% | 28.1% | 18.0% | 20.3% |
| Grade 6 | 56.5% | 46.4% | 42.5% | 37.7% | 28.8% | 30.2% |
| **Inhalants\*** | **15.3%** | **16.4%** | **9.8%** | **11.4%** | **10.9%** | **5.7%** |
| Grade 4 | 12.7% | 14.6% | 8.4% | 9.5% | 10.8% | 4.2% |
| Grade 5 | 9.6% | 10.5% | 8.0% | 7.1% | 7.1% | 4.8% |
| Grade 6 | 24.0% | 24.0% | 13.0% | 17.8% | 14.8% | 8.0% |
| **Marijuana** | **2.7%** | **1.7%** | **5.6%** | **1.8%** | **1.0%** | **1.9%** |
| Grade 4 | 1.1% | 0.8% | 3.5% | 0.7% | \* \* | 0.7% |
| Grade 5 | 1.8% | 0.9% | 4.6% | 1.3% | 0.6% | 1.2% |
| Grade 6 | 5.4% | 3.4% | 8.8% | 3.6% | 2.0% | 3.7% |

\* Adjusted, based on all data from the survey to include all appropriate responses.

\*\* Less than 0.5%

**Table B.2. Prevalence and Recency of Use of Substances, All**

**Elementary Students: 1994**

**Ever**

**School**

**Not Past**

**Never**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Used** | **Year** | **Year** | **Used** |
| **Tobacco** | **18.9%** | **12.0%** | **6.9%** | **81.1%** |
| Grade 4 | 11.1% | 7.1% | 4.0% | 88.9% |
| Grade 5 | 17.7% | 10.9% | 6.8% | 82.3% |
| Grade 6 | 27.9% | 18.1% | 9.8% | 72.1% |
| **Alcohol** | **32.6%** | **22.6%** | **10.0%** | **67.4%** |
| Grade 4 | 25.1% | 17.3% | 7.8% | 74.9% |
| Grade 5 | 30.3% | 20.3% | 10.0% | 69.7% |
| Grade 6 | 42.5% | 30.2% | 12.3% | 57.5% |
| **Inhalants\*** | **9.8%** | **5.7%** | **4.2%** | **90.2%** |
| Grade 4 | 8.4% | 4.2% | 4.2% | 91.6% |
| Grade 5 | 8.0% | 4.8% | 3.3% | 92.0% |
| Grade 6 | 13.0% | 8.0% | 5.0% | 87.0% |
| **Marijuana** | **5.6%** | **1.9%** | **3.7%** | **94.4%** |
| Grade 4 | 3.5% | 0.7% | 2.8% | 96.5% |
| Grade 5 | 4.6% | 1.2% | 3.4% | 95.4% |
| Grade 6 | 8.8% | 3.7% | 5.0% | 91.2% |

\*Adjusted, based on all data from the survey to include all appropriate responses.

**Table B.3. Prevalence and Recency of Use of Substances, All Male**

**Elementary Students: 1994**

**Ever**

**School**

**Not Past**

**Never**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Used** | **Year** | **Year** | **Used** |
| **Tobacco** | **24.3%** | **15.7%** | **8.6%** | **75.7%** |
| Grade 4 | 15.7% | 10.5% | 5.1% | 84.3% |
| Grade 5 | 23.0% | 14.3% | 8.7% | 77.0% |
| Grade 6 | 34.3% | 22.4% | 11.9% | 65.7% |
| **Alcohol** | **39.0%** | **26.6%** | **12.4%** | **61.0%** |
| Grade 4 | 32.5% | 22.3% | 10.2% | 67.5% |
| Grade 5 | 35.8% | 23.2% | 12.6% | 64.2% |
| Grade 6 | 48.6% | 34.2% | 14.3% | 51.4% |
| **Inhalants\*** | **11.9%** | **6.9%** | **5.0%** | **88.1%** |
| Grade 4 | 10.1% | 5.6% | 4.5% | 89.9% |
| Grade 5 | 10.3% | 5.9% | 4.4% | 89.7% |
| Grade 6 | 15.3% | 9.2% | 6.2% | 84.7% |
| **Marijuana** | **7.0%** | **2.7%** | **4.4%** | **93.0%** |
| Grade 4 | 4.0% | 1.1% | 3.0% | 96.0% |
| Grade 5 | 5.8% | 1.9% | 3.9% | 94.2% |
| Grade 6 | 11.2% | 5.1% | 6.2% | 88.8% |

\*Adjusted, based on all data from the survey to include all appropriate responses.

**Table B.4. Prevalence and Recency of Use of Substances, All**

**Female Elementary Students: 1994**

**Ever**

**School**

**Not Past**

**Never**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Used** | **Year** | **Year** | **Used** |
| **Tobacco** | **13.6%** | **8.3%** | **5.2%** | **86.4%** |
| Grade 4 | 6.7% | 3.8% | 2.9% | 93.3% |
| Grade 5 | 12.6% | 7.5% | 5.1% | 87.4% |
| Grade 6 | 21.4% | 13.7% | 7.7% | 78.6% |
| **Alcohol** | **26.4%** | **18.6%** | **7.8%** | **73.6%** |
| Grade 4 | 17.7% | 12.2% | 5.5% | 82.3% |
| Grade 5 | 25.0% | 17.4% | 7.6% | 75.0% |
| Grade 6 | 36.4% | 26.2% | 10.3% | 63.6% |
| **Inhalants\*** | **7.7%** | **4.5%** | **3.2%** | **92.3%** |
| Grade 4 | 6.5% | 2.9% | 3.6% | 93.5% |
| Grade 5 | 5.9% | 3.7% | 2.2% | 94.1% |
| Grade 6 | 10.7% | 6.8% | 3.9% | 89.3% |
| **Marijuana** | **4.2%** | **1.0%** | **3.2%** | **95.8%** |
| Grade 4 | 2.9% | \* \* | 2.6% | 97.1% |
| Grade 5 | 3.5% | \* \* | 3.0% | 96.5% |
| Grade 6 | 6.2% | 2.3% | 3.9% | 93.8% |

\*Adjusted, based on all data from the survey to include all appropriate responses.

\*\* Less than 0.5 %

**Table B.5. Prevalence and Recency of Use of Substances, All White**

**Elementary Students: 1994**

**Ever**

**School**

**Not Past**

**Never**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Used** | **Year** | **Year** | **Used** |
| **Tobacco** | **18.2%** | **11.2%** | **7.0%** | **81.8%** |
| Grade 4 | 10.9% | 6.6% | 4.3% | 89.1% |
| Grade 5 | 17.8% | 10.5% | 7.3% | 82.2% |
| Grade 6 | 26.0% | 16.6% | 9.3% | 74.0% |
| **Alcohol** | **26.6%** | **17.9%** | **8.7%** | **73.4%** |
| Grade 4 | 19.2% | 13.0% | 6.3% | 80.8% |
| Grade 5 | 26.1% | 16.8% | 9.2% | 73.9% |
| Grade 6 | 34.5% | 23.8% | 10.6% | 65.5% |
| **Inhalants\*** | **7.9%** | **4.4%** | **3.5%** | **92.1%** |
| Grade 4 | 6.4% | 3.0% | 3.4% | 93.6% |
| Grade 5 | 6.6% | 3.9% | 2.7% | 93.4% |
| Grade 6 | 10.8% | 6.3% | 4.5% | 89.2% |
| **Marijuana** | **4.8%** | **0.9%** | **3.9%** | **95.2%** |
| Grade 4 | 3.0% | \* \* | 2.7% | 97.0% |
| Grade 5 | 4.0% | 0.6% | 3.4% | 96.0% |
| Grade 6 | 7.5% | 1.9% | 5.6% | 92.5% |

\*Adjusted, based on all data from the survey to include all appropriate responses.

\*\* Less than 0.5 %

**Table B.6. Prevalence and Recency of Use of Substances, All**

**African-American Elementary Students: 1994**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Ever**  **Used** | **School**  **Year** | **Not Past**  **Year** | **Never**  **Used** |
| **Tobacco** | **17.2%** | **10.5%** | **6.7%** | **82.8%** |
| Grade 4 | 9.6% | 6.1% | 3.5% | 90.4% |
| Grade 5 | 15.5% | 9.6% | 5.9% | 84.5% |
| Grade 6 | 26.4% | 15.7% | 10.6% | 73.6% |
| **Alcohol** | **44.8%** | **30.4%** | **14.5%** | **55.2%** |
| Grade 4 | 38.5% | 26.9% | 11.6% | 61.5% |
| Grade 5 | 41.0% | 26.6% | 14.5% | 59.0% |
| Grade 6 | 55.0% | 37.6% | 17.4% | 45.0% |
| **Inhalants\*** | **8.9%** | **5.1%** | **3.9%** | **91.1%** |
| Grade 4 | 8.3% | 3.5% | 4.9% | 91.7% |
| Grade 5 | 7.4% | 4.8% | 2.6% | 92.6% |
| Grade 6 | 11.1% | 7.1% | 4.1% | 88.9% |
| **Marijuana** | **7.2%** | **2.0%** | **5.2%** | **92.8%** |
| Grade 4 | 4.9% | 0.7% | 4.2% | 95.1% |
| Grade 5 | 7.4% | 1.1% | 6.3% | 92.6% |
| Grade 6 | 9.4% | 4.3% | 5.1% | 90.6% |

\*Adjusted, based on all data from the survey to include all appropriate responses.

**Table B.7. Prevalence and Recency of Use of Substances, All**

**Hispanic Elementary Students: 1994**

**Ever**

**School**

**Not Past**

**Never**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Used** | **Year** | **Year** | **Used** |
| **Tobacco** | **21.0%** | **14.2%** | **6.8%** | **79.0%** |
| Grade 4 | 11.6% | 8.4% | 3.2% | 88.4% |
| Grade 5 | 19.1% | 12.3% | 6.9% | 80.9% |
| Grade 6 | 32.2% | 21.9% | 10.3% | 67.8% |
| **Alcohol** | **36.8%** | **26.6%** | **10.2%** | **63.2%** |
| Grade 4 | 27.7% | 19.6% | 8.1% | 72.3% |
| Grade 5 | 33.7% | 24.2% | 9.5% | 66.3% |
| Grade 6 | 49.1% | 36.1% | 13.0% | 50.9% |
| **Inhalants\*** | **12.7%** | **7.6%** | **5.1%** | **87.3%** |
| Grade 4 | 11.2% | 6.1% | 5.1% | 88.8% |
| Grade 5 | 10.6% | 6.2% | 4.4% | 89.4% |
| Grade 6 | 16.3% | 10.5% | 5.8% | 83.7% |
| **Marijuana** | **6.0%** | **3.1%** | **2.9%** | **94.0%** |
| Grade 4 | 3.1% | 1.3% | 1.8% | 96.9% |
| Grade 5 | 4.9% | 2.3% | 2.6% | 95.1% |
| Grade 6 | 10.0% | 5.8% | 4.3% | 90.0% |

\*Adjusted, based on all data from the survey to include all appropriate responses.

**Elementary Students Who Reported Grades of As and Bs: 1994**

**Ever**

**School**

**Not Past**

**Never**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Used** | **Year** | **Year** | **Used** |
| **Tobacco** | **16.6%** | **10.2%** | **6.5%** | **83.4%** |
| Grade 4 | 10.2% | 6.3% | 3.9% | 89.8% |
| Grade 5 | 15.7% | 9.4% | 6.3% | 84.3% |
| Grade 6 | 24.0% | 14.8% | 9.2% | 76.0% |
| **Alcohol** | **29.9%** | **20.1%** | **9.8%** | **70.1%** |
| Grade 4 | 22.7% | 15.3% | 7.5% | 77.3% |
| Grade 5 | 28.5% | 18.9% | 9.6% | 71.5% |
| Grade 6 | 38.4% | 26.0% | 12.4% | 61.6% |
| **Inhalants\*** | **8.5%** | **4.8%** | **3.7%** | **91.5%** |
| Grade 4 | 7.1% | 3.5% | 3.6% | 92.9% |
| Grade 5 | 7.0% | 4.0% | 3.0% | 93.0% |
| Grade 6 | 11.5% | 6.9% | 4.5% | 88.5% |
| **Marijuana** | **5.0%** | **1.3%** | **3.7%** | **95.0%** |
| Grade 4 | 3.6% | \* \* | 3.1% | 96.4% |
| Grade 5 | 4.0% | 0.8% | 3.1% | 96.0% |
| Grade 6 | 7.4% | 2.6% | 4.8% | 92.6% |

\*Adjusted, based on all data from the survey to include all appropriate responses.

\*\* Less than 0.5 %

**Table B.9. Prevalence and Recency of Use of Substances, All**

**Elementary Students Who Reported Grades of Cs and Below: 1994**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Ever**  **Used** | **School**  **Year** | **Not Past**  **Year** | **Never**  **Used** |
| **Tobacco** | **28.4%** | **20.2%** | **8.2%** | **71.6%** |
| Grade 4 | 15.3% | 11.1% | 4.2% | 84.7% |
| Grade 5 | 27.8% | 18.8% | 9.0% | 72.2% |
| Grade 6 | 42.0% | 30.7% | 11.3% | 58.0% |
| **Alcohol** | **45.2%** | **34.0%** | **11.2%** | **54.8%** |
| Grade 4 | 38.3% | 28.6% | 9.8% | 61.7% |
| Grade 5 | 39.9% | 28.1% | 11.8% | 60.1% |
| Grade 6 | 57.4% | 45.3% | 12.1% | 42.6% |
| **Inhalants\*** | **16.1%** | **9.6%** | **6.5%** | **83.9%** |
| Grade 4 | 16.2% | 8.2% | 8.0% | 83.8% |
| Grade 5 | 13.3% | 8.4% | 4.9% | 86.7% |
| Grade 6 | 18.7% | 12.2% | 6.5% | 81.3% |
| **Marijuana** | **8.4%** | **4.3%** | **4.1%** | **91.6%** |
| Grade 4 | 3.0% | 1.8% | 1.2% | 97.0% |
| Grade 5 | 8.3% | 3.2% | 5.2% | 91.7% |
| Grade 6 | 13.8% | 7.9% | 5.9% | 86.2% |

\*Adjusted, based on all data from the survey to include all appropriate responses.

**Table B.10. Prevalence and Recency of Use of Substances, All**

**Elementary Students Who Lived with Two Parents: 1994**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Ever**  **Used** | **School**  **Year** | **Not Past**  **Year** | **Never**  **Used** |
| **Tobacco** | **16.1%** | **10.1%** | **6.1%** | **83.9%** |
| Grade 4 | 8.6% | 5.1% | 3.5% | 91.4% |
| Grade 5 | 15.6% | 9.9% | 5.7% | 84.4% |
| Grade 6 | 24.2% | 15.2% | 9.0% | 75.8% |
| **Alcohol** | **28.3%** | **19.6%** | **8.7%** | **71.7%** |
| Grade 4 | 20.2% | 14.0% | 6.2% | 79.8% |
| Grade 5 | 26.4% | 18.0% | 8.4% | 73.6% |
| Grade 6 | 38.3% | 26.8% | 11.4% | 61.7% |
| **Inhalants\*** | **9.2%** | **5.2%** | **4.0%** | **90.8%** |
| Grade 4 | 7.6% | 3.8% | 3.8% | 92.4% |
| Grade 5 | 7.5% | 4.4% | 3.0% | 92.5% |
| Grade 6 | 12.5% | 7.4% | 5.1% | 87.5% |
| **Marijuana** | **5.0%** | **1.3%** | **3.7%** | **95.0%** |
| Grade 4 | 3.1% | \* \* | 2.7% | 96.9% |
| Grade 5 | 4.2% | 1.0% | 3.3% | 95.8% |
| Grade 6 | 7.7% | 2.6% | 5.1% | 92.3% |

\*Adjusted, based on all data from the survey to include all appropriate responses.

\*\* Less than 0.5 %

**Table B.11. Prevalence and Recency of Use of Substances, All**

**Elementary Students Who Did Not Live with Two Parents: 1994**

**Ever**

**School**

**Not Past**

**Never**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Used** | **Year** | **Year** | **Used** |
| **Tobacco** | **24.3%** | **15.9%** | **8.5%** | **75.7%** |
| Grade 4 | 16.4% | 11.4% | 5.0% | 83.6% |
| Grade 5 | 22.4% | 13.2% | 9.3% | 77.6% |
| Grade 6 | 34.2% | 23.1% | 11.2% | 65.8% |
| **Alcohol** | **41.5%** | **29.2%** | **12.2%** | **58.5%** |
| Grade 4 | 35.6% | 24.9% | 10.7% | 64.4% |
| Grade 5 | 37.8% | 25.5% | 12.3% | 62.2% |
| Grade 6 | 51.0% | 37.3% | 13.7% | 49.0% |
| **Inhalants\*** | **11.3%** | **6.6%** | **4.7%** | **88.7%** |
| Grade 4 | 10.7% | 4.8% | 5.8% | 89.3% |
| Grade 5 | 9.0% | 5.4% | 3.6% | 91.0% |
| Grade 6 | 14.1% | 9.5% | 4.6% | 85.9% |
| **Marijuana** | **7.0%** | **3.0%** | **4.0%** | **93.0%** |
| Grade 4 | 4.5% | 1.4% | 3.1% | 95.5% |
| Grade 5 | 5.1% | 1.6% | 3.5% | 94.9% |
| Grade 6 | 11.5% | 6.0% | 5.5% | 88.5% |

\*Adjusted, based on all data from the survey to include all appropriate responses.

**Table B.12. Prevalence and Recency of Use of Substances, All**

**Elementary Students Who Lived in Town More Than Three Years:**

**1994**

**Ever**

**School**

**Not Past**

**Never**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Used** | **Year** | **Year** | **Used** |
| **Tobacco** | **18.5%** | **11.9%** | **6.6%** | **81.5%** |
| Grade 4 | 10.5% | 6.6% | 3.9% | 89.5% |
| Grade 5 | 17.4% | 11.0% | 6.4% | 82.6% |
| Grade 6 | 27.5% | 18.0% | 9.5% | 72.5% |
| **Alcohol** | **32.7%** | **22.9%** | **9.8%** | **67.3%** |
| Grade 4 | 25.5% | 17.9% | 7.6% | 74.5% |
| Grade 5 | 30.2% | 20.5% | 9.7% | 69.8% |
| Grade 6 | 42.4% | 30.3% | 12.1% | 57.6% |
| **Inhalants\*** | **9.9%** | **5.5%** | **4.3%** | **90.1%** |
| Grade 4 | 8.6% | 4.1% | 4.4% | 91.4% |
| Grade 5 | 8.0% | 4.5% | 3.5% | 92.0% |
| Grade 6 | 13.0% | 7.9% | 5.1% | 87.0% |
| **Marijuana** | **5.6%** | **1.8%** | **3.8%** | **94.4%** |
| Grade 4 | 3.6% | 0.7% | 3.0% | 96.4% |
| Grade 5 | 4.5% | 1.0% | 3.5% | 95.5% |
| Grade 6 | 8.7% | 3.7% | 5.0% | 91.3% |

\*Adjusted, based on all data from the survey to include all appropriate responses.

**Table B.13. Prevalence and Recency of Use of Substances, All**

**Elementary Students Who Lived in Town Less Than Three Years:**

**1994**

**Ever**

**Used**

**School**

**Year**

**Not Past**

**Year**

**Never**

**Used**

**Tobacco 20.9% 12.3% 8.7% 79.1%** Grade 4 13.5% 8.5% 5.1% 86.5% Grade 5 20.2% 10.9% 9.3% 79.8% Grade 6 29.1% 17.5% 11.6% 70.9%

**Alcohol 33.0% 21.7% 11.3% 67.0%** Grade 4 24.1% 15.8% 8.3% 75.9% Grade 5 32.6% 20.4% 12.2% 67.4% Grade 6 42.2% 28.9% 13.3% 57.8%

**Inhalants\* 10.1% 6.4% 3.7% 89.9%** Grade 4 8.8% 5.1% 3.7% 91.2% Grade 5 8.3% 6.1% 2.2% 91.7% Grade 6 13.3% 8.1% 5.3% 86.7%

**Marijuana 5.9% 1.9% 4.0% 94.1%** Grade 4 3.1% 0.5% 2.5% 96.9% Grade 5 5.2% 1.6% 3.5% 94.8% Grade 6 9.5% 3.5% 5.9% 90.5%

\*Adjusted, based on all data from the survey to include all appropriate responses.

Appendix C - Additional Tables

**Appendix C - Additional Tables**

**Table C. 1. Responses to the Question, “How Many Times in Your Life Have You**

**Used...” Texas Elementary Students, Grades 4-6: 1994**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Beer?** |  | | | | |
|  | **Ever**  **Used** | **1-2 Times** | **3-10**  **Times** | **11+**  **Times** | **Never**  **Used** |
| All Elementary Students | 22.9% | 16.1% | 4.5% | 2.2% | 77.2% |
| Grade 4 | 17.0% | 13.4% | 2.6% | 1.0% | 83.0% |
| Grade 5 | 20.4% | 15.1% | 3.8% | 1.5% | 79.6% |
| Grade 6 | 30.8% | 19.8% | 7.0% | 4.1% | 69.2% |
| **Wine?** |  |  |  |  |  |
|  | **Ever**  **Used** | **1-2**  **Times** | **3-10**  **Times** | **11+**  **Times** | **Never**  **Used** |
| All Elementary Students | 15.7% | 12.3% | 2.3% | 1.1% | 84.3% |
| Grade 4 | 10.5% | 8.8% | 1.2% | 0.5% | 89.5% |
| Grade 5 | 13.8% | 11.4% | 1.4% | 0.9% | 86.3% |
| Grade 6 | 22.7% | 16.6% | 4.3% | 1.8% | 77.3% |
| **Wine Coolers?** |  |  |  |  |  |
|  | **Ever**  **Used** | **1-2 Times** | **3-10**  **Times** | **11+**  **Times** | **Never**  **Used** |
| All Elementary Students | 21.2% | 15.9% | 3.7% | 1.6% | 78.8% |
| Grade 4 | 14.3% | 11.9% | 1.7% | 0.7% | 85.7% |
| Grade 5 | 19.2% | 15.0% | 3.1% | 1.1% | 80.8% |
| Grade 6 | 29.7% | 20.5% | 6.4% | 2.8% | 70.3% |
| **Liquor?** |  |  |  |  |  |
|  | **Ever**  **Used** | **1-2 Times** | **3-10**  **Times** | **11+**  **Times** | **Never**  **Used** |
| All Elementary Students | 8.7% | 6.4% | 1.6% | 0.7% | 91.3% |
| Grade 4 | 4.5% | 3.7% | 0.5% | 0.3% | 95.5% |
| Grade 5 | 7.5% | 5.9% | 1.1% | 0.4% | 92.6% |
| Grade 6 | 14.2% | 9.6% | 3.1% | 1.5% | 85.8% |

**Table C. 2. Percentage of Texas Elementary Students**

**Who Had Ever Used Specific Inhalants: 1994**

**Liquid Correction Fluid**

**Ever Used Not Used**

All Elementary Students 3.5% 96.5% Grade 4 1.9% 98.1% Grade 5 2.8% 97.2% Grade 6 5.8% 94.2%

**Gasoline**

**Ever Used Not Used**

All Elementary Students 2.4% 97.6% Grade 4 2.0% 98.0% Grade 5 2.3% 97.7% Grade 6 2.9% 97.1%

**Glue**

**Ever Used Not Used**

All Elementary Students 3.5% 96.5% Grade 4 3.6% 96.4% Grade 5 2.7% 97.3% Grade 6 4.2% 95.8%

**Paint Thinner**

**Ever Used Not Used**

All Elementary Students 2.1% 97.9% Grade 4 2.0% 98.0% Grade 5 1.4% 98.6% Grade 6 2.9% 97.1%

**Other Inhalants**

**Ever Used Not Used**

All Elementary Students 4.5% 95.5% Grade 4 3.6% 96.4% Grade 5 3.7% 96.3% Grade 6 6.3% 93.7%

**Table C. 3. Responses to the Question, “About How Many of Your**

**Close Friends Use. . .” Texas Elementary Students, Grades 4-6: 1994**

**Tobacco (Cigarettes, Smokeless Tobacco)?**

**Never**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| All Elementary Students | **Heard Of**  1.7% | **None**  66.7% | **Some**  26.8% | **Most**  4.8% |
| Grade 4 | 2.8% | 76.0% | 17.6% | 3.6% |
| Grade 5 | 1.5% | 69.9% | 25.1% | 3.5% |
| Grade 6 | 0.9% | 54.4% | 37.4% | 7.2% |
| **Cigarettes?** |  |  |  |  |
|  | **Never**  **Heard Of** | **None** | **Some** | **Most** |
| All Elementary Students | 2.5% | 68.9% | 24.6% | 4.0% |
| Grade 4 | 4.1% | 78.0% | 15.2% | 2.8% |
| Grade 5 | 2.3% | 72.0% | 23.0% | 2.8% |
| Grade 6 | 1.3% | 57.1% | 35.4% | 6.2% |

**Smokeless Tobacco?**

**Never**

**Heard Of None Some Most**

All Elementary Students 3.5% 84.0% 10.7% 1.8% Grade 4 5.9% 84.8% 7.6% 1.8% Grade 5 2.8% 86.1% 9.7% 1.4% Grade 6 2.0% 81.3% 14.6% 2.1%

**Alcohol (Beer, Wine, Wine Coolers, Liquor)?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Never**  **Heard Of** | **None** | **Some** | **Most** |
| All Elementary Students | 1.4% | 61.3% | 28.5% | 8.8% |
| Grade 4 | 1.9% | 69.6% | 22.3% | 6.2% |
| Grade 5 | 1.3% | 64.6% | 27.5% | 6.6% |
| Grade 6 | 1.0% | 50.0% | 35.5% | 13.6% |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Beer?** |  | | | |
|  | **Never**  **Heard Of** | **None** | **Some** | **Most** |
| All Elementary Students | 1.5% | 68.1% | 24.5% | 6.0% |
| Grade 4 | 2.1% | 75.4% | 18.2% | 4.4% |
| Grade 5 | 1.4% | 71.6% | 22.9% | 4.2% |
| Grade 6 | 1.0% | 57.6% | 32.1% | 9.3% |

**Table C. 3. Continued. “About How Many of Your Close Friends**

**Use. . .”**

**Wine? Never**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| All Elementary Students | **Heard Of**  2.2% | **None**  79.6% | **Some**  15.3% | **M o s t**  2.9% |
| Grade 4 | 3.4% | 83.7% | 10.9% | 2.0% |
| Grade 5 | 2.0% | 82.3% | 13.4% | 2.2% |
| Grade 6 | 1.3% | 73.0% | 21.2% | 4.5% |
| **Wine Coolers?** |  |  |  |  |
|  | **Never**  **Heard Of** | **None** | **Some** | **M o s t** |
| All Elementary Students | 5.1% | 70.6% | 19.0% | 5.4% |
| Grade 4 | 8.9% | 75.7% | 11.9% | 3.6% |
| Grade 5 | 4.2% | 74.2% | 17.5% | 4.1% |
| Grade 6 | 2.3% | 62.1% | 27.3% | 8.4% |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Liquor?** |  | | | |
|  | **Never**  **Heard Of** | **None** | **Some** | **M o s t** |
| All Elementary Students | 5.8% | 81.4% | 10.4% | 2.4% |
| Grade 4 | 10.3% | 82.8% | 5.7% | 1.2% |
| Grade 5 | 4.6% | 84.7% | 8.8% | 1.9% |
| Grade 6 | 2.7% | 76.7% | 16.5% | 4.1% |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Inhalants?** |  | | | |
|  | **Never**  **Heard Of** | **None** | **Some** | **M o s t** |
| All Elementary Students | 6.1% | 82.8% | 9.1% | 2.0% |
| Grade 4 | 10.5% | 82.9% | 5.6% | 1.1% |
| Grade 5 | 4.7% | 86.0% | 7.5% | 1.8% |
| Grade 6 | 3.4% | 79.5% | 14.0% | 3.1% |
| **Marijuana?** |  |  |  |  |
|  | **Never**  **Heard Of** | **None** | **Some** | **M o s t** |
| All Elementary Students | 6.3% | 85.0% | 6.5% | 2.3% |
| Grade 4 | 11.6% | 84.0% | 3.3% | 1.2% |
| Grade 5 | 4.5% | 88.8% | 4.9% | 1.7% |
| Grade 6 | 2.9% | 82.0% | 11.2% | 3.9% |

**Table C. 4. Responses to the Question, “How Dangerous Do You Think It Is For**

**Kids Your Age to Use. . .” Texas Elementary Students, Grades 4-6: 1994**

**Tobacco (Cigarettes, Smokeless Tobacco)?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never**  **Heard Of** | **Very**  **Dangerous** | **Dangerous** | **Not At All**  **Dangerous** | **Do Not**  **Know** |
| All Elementary Students | 0.9% | 65.8% | 26.0% | 1.7% | 5.5% |
| Grade 4 | 1.5% | 74.4% | 17.8% | 1.4% | 5.0% |
| Grade 5 | 0.8% | 66.7% | 25.8% | 1.0% | 5.7% |
| Grade 6 | 0.5% | 56.6% | 34.3% | 2.6% | 6.0% |

**Cigarettes?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never**  **Heard Of** | **Very**  **Dangerous** | **Dangerous** | **Not At All**  **Dangerous** | **Do Not**  **Know** |
| All Elementary Students | 1.5% | 53.0% | 34.9% | 2.3% | 8.3% |
| Grade 4 | 2.5% | 63.5% | 25.3% | 1.6% | 7.1% |
| Grade 5 | 1.2% | 52.5% | 36.3% | 1.5% | 8.5% |
| Grade 6 | 1.0% | 43.3% | 42.7% | 3.8% | 9.3% |

**Smokeless Tobacco?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never**  **Heard Of** | **Very**  **Dangerous** | **Dangerous** | **Not At All**  **Dangerous** | **Do Not**  **Know** |
| All Elementary Students | 2.2% | 58.3% | 28.4% | 2.4% | 8.7% |
| Grade 4 | 3.9% | 65.7% | 20.8% | 1.8% | 7.8% |
| Grade 5 | 1.7% | 59.7% | 28.1% | 1.9% | 8.7% |
| Grade 6 | 1.1% | 49.9% | 36.1% | 3.3% | 9.6% |

**Alcohol (Beer, Wine, Wine Coolers, Liquor)?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never**  **Heard Of** | **Very**  **Dangerous** | **Dangerous** | **Not At All**  **Dangerous** | **Do Not**  **Know** |
| All Elementary Students | 0.7% | 69.5% | 22.2% | 2.5% | 5.1% |
| Grade 4 | 1.1% | 75.7% | 16.3% | 2.1% | 4.9% |
| Grade 5 | 0.6% | 71.2% | 21.7% | 1.7% | 4.8% |
| Grade 6 | 0.4% | 61.9% | 28.5% | 3.6% | 5.6% |

**Table C. 4. Continued. “How Dangerous Do You Think It Is For Kids Your Age to**

**Use. . .”**

**Beer?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never**  **Heard Of** | **Very**  **Dangerous** | **Dangerous** | **Not At All**  **Dangerous** | **Do Not**  **Know** |
| All Elementary Students | 0.8% | 47.2% | 37.9% | 5.5% | 8.6% |
| Grade 4 | 1.2% | 53.7% | 32.0% | 4.7% | 8.4% |
| Grade 5 | 0.7% | 47.8% | 38.8% | 4.5% | 8.3% |
| Grade 6 | 0.4% | 40.3% | 42.7% | 7.4% | 9.1% |

**Wine?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never**  **Heard Of** | **Very**  **Dangerous** | **Dangerous** | **Not At All**  **Dangerous** | **Do Not**  **Know** |
| All Elementary Students | 1.1% | 47.3% | 35.1% | 6.2% | 10.3% |
| Grade 4 | 1.7% | 55.3% | 29.2% | 4.2% | 9.7% |
| Grade 5 | 1.0% | 47.9% | 36.0% | 5.5% | 9.7% |
| Grade 6 | 0.7% | 39.2% | 40.1% | 8.7% | 11.3% |

**Wine Coolers?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never**  **Heard Of** | **Very**  **Dangerous** | **Dangerous** | **Not At All**  **Dangerous** | **Do Not**  **Know** |
| All Elementary Students | 4.1% | 40.4% | 33.0% | 10.3% | 12.2% |
| Grade 4 | 7.2% | 48.2% | 25.9% | 7.1% | 11.7% |
| Grade 5 | 3.6% | 41.4% | 34.5% | 8.7% | 11.8% |
| Grade 6 | 1.7% | 31.8% | 38.5% | 14.8% | 13.2% |

**Liquor?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never**  **Heard Of** | **Very**  **Dangerous** | **Dangerous** | **Not At All**  **Dangerous** | **Do Not**  **Know** |
| All Elementary Students | 3.9% | 64.9% | 21.8% | 2.1% | 7.3% |
| Grade 4 | 7.4% | 69.5% | 14.9% | 1.6% | 6.7% |
| Grade 5 | 3.0% | 66.9% | 21.6% | 1.4% | 7.1% |
| Grade 6 | 1.5% | 58.5% | 28.6% | 3.3% | 8.2% |

**Table C. 4. Continued. “How Dangerous Do You Think It Is For Kids Your Age to**

**Use. . .”**

**Inhalants?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never**  **Heard Of** | **Very**  **Dangerous** | **Dangerous** | **Not At All**  **Dangerous** | **Do Not**  **Know** |
| All Elementary Students | 4.0% | 68.4% | 17.5% | 2.1% | 8.0% |
| Grade 4 | 7.7% | 68.1% | 14.1% | 2.0% | 8.0% |
| Grade 5 | 2.9% | 69.4% | 18.1% | 1.7% | 8.0% |
| Grade 6 | 1.7% | 67.6% | 20.2% | 2.6% | 7.9% |

**Marijuana?**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Never**  **Heard Of** | **Very**  **Dangerous** | **Dangerous** | **Not At All**  **Dangerous** | **Do Not**  **Know** |
| All Elementary Students | 4.0% | 82.6% | 7.5% | 1.3% | 4.7% |
| Grade 4 | 7.8% | 80.2% | 6.2% | 1.0% | 4.8% |
| Grade 5 | 2.8% | 84.2% | 7.3% | 0.9% | 4.8% |
| Grade 6 | 1.5% | 83.2% | 8.8% | 1.9% | 4.6% |

**Table C. 5. Responses to the Question, “Since School Began in the Fall, Have You Learned About Drugs or Alcohol from the Following School Sources,” 1990, 1992, and 1994 Texas School Surveys: Grades 4-6**

**An Assembly Program Your Teacher**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **1990** | **1992** | **1994** |  |  | **1990** | **1992** | **1994** |
| All | 70% | 63% | 69% |  | All | 88% | 86% | 82% |
| Grade 4 | 70% | 67% | 70% |  | Grade 4 | 88% | 85% | 84% |
| Grade 5 | 75% | 67% | 70% |  | Grade 5 | 87% | 86% | 84% |
| Grade 6 | 64% | 55% | 67% |  | Grade 6 | NA | NA | 78% |
| **A Guidance Counselor Some Other School Source** | | | | | | | | |
|  | **1990** | **1992** | **1994** |  |  | **1990** | **1992** | **1994** |
| All | 48% | 44% | 57% |  | All | 55% | 49% | 50% |
| Grade 4 | 50% | 51% | 68% |  | Grade 4 | 57% | 51% | 52% |
| Grade 5 | 51% | 44% | 58% |  | Grade 5 | 56% | 51% | 50% |
| Grade 6 | 41% | 38% | 46% |  | Grade 6 | 49% | 46% | 49% |
| **Visitor to Class Any School Source** | | | | | | | | |
|  | **1990** | **1992** | **1994** |  |  | **1990** | **1992** | **1994** |
| All | 65% | 63% | 68% |  | All | 95% | 93% | 94% |
| Grade 4 | 62% | 62% | 66% |  | Grade 4 | 97% | 95% | 94% |
| Grade 5 | 72% | 73% | 74% |  | Grade 5 | 98% | 97% | 96% |
| Grade 6 | 59% | 53% | 64% |  | Grade 6 | 90% | 88% | 93% |

NA: Not Available