The Alcohol and Drug Defense Program was created by the North Carolina General Assembly to assist local school systems in developing school-based drug abuse prevention and intervention programs. As a first step, a statewide survey was conducted to examine drug use and attitudes about use among secondary school students in the state's public schools. Data were gathered on use of alcohol, nicotine, marijuana and hashish, cocaine and crack, hallucinogens, stimulants, depressants, and inhalants. This report presents findings from the survey in the areas of: (1) lifetime prevalence of selected drugs by grade grouping and drug use in the last 30 days; (2) descriptions of the most used drugs (alcohol, tobacco, and marijuana); (3) drug use by sex; (4) drug use by race; and (5) prevalence of drug use by urban and rural residence. Drug use in North Carolina is compared with drug use nationally as measured by the National Senior Survey. Also reported are student ratings of reasons not to use drugs and student information about drugs, including where students receive drug information, whom they would contact if they had a drinking or drug problem, and their first choice of school personnel they would talk to if they had a problem with alcohol or drugs. A summary of key findings is provided, plans for future surveys are discussed, and a map of North Carolina educational regions is given. Seventeen figures are included. (NB)
ALCOHOL AND OTHER DRUG USE
PATTERNS AMONG STUDENTS IN
NORTH CAROLINA PUBLIC SCHOOLS
GRADES 7-12

November, 1987

A Report By The
Alcohol and Drug Defense Program
a Division of the
North Carolina Department of Public Instruction

A. Craig Phillips
State Superintendent of
Public Instruction

Joseph B. Webb
Assistant State Superintendent
Instructional Services

Steven L. Hicks
Division Director
Alcohol and Drug Defense
ACKNOWLEDGMENTS

A study of this magnitude could not have been completed without the assistance of many people. Particular thanks must go to Dr. Bob Hubbard at Research Triangle Institute and to Dr. Yevonne Brannon, Larry Solomon, John Hice, Jody Greene, and the staff at the Center for Urban Affairs and Community Development at North Carolina State University for their technical assistance.

In house, special thanks are due to the eight Regional ADD Consultants who were responsible for administering the survey in their regions, and to Ms. Vikki Byrd for her careful editing.

Lastly, a great deal of credit goes to local school personnel across the state who saw the need for such a study, and gave their time unselfishly. It is these people who make North Carolina's public schools strong.

James H. Palmer, Ed.D.
Project Director
TABLE OF CONTENTS

Acknowledgments.................................................................................................................. iii
Table of Contents.................................................................................................................... v
List of Figures........................................................................................................................ vi

I. Introduction.......................................................................................................................... 1

II. Methodology......................................................................................................................... 2
   a. Sampling Plan.................................................................................................................. 2
   b. The Questionnaire........................................................................................................ 3
   c. Data Collection.............................................................................................................. 4

III. Prevalence of Drug Use....................................................................................................... 5
   a. Lifetime Prevalence of Selected Drugs by Grade Grouping........................................... 5
   b. Drug Use In Last 30 Days.............................................................................................. 5

IV. Description of Most Used Drugs........................................................................................ 8
   a. Alcohol.......................................................................................................................... 8
   b. Tobacco......................................................................................................................... 13
   c. Marijuana....................................................................................................................... 16

V. Drug Use by Sex.................................................................................................................. 17

VI. Drug Use by Race............................................................................................................... 17

VII. A Comparison of Drug Use in North Carolina With The National Senior Survey........... 22

VIII. Prevalence of Drug Use By Urban/Rural Residence......................................................... 22

IX. Reasons Not to Use Drugs.................................................................................................. 26
   a. Alcohol.......................................................................................................................... 26
   b. Marijuana....................................................................................................................... 26
   c. Tobacco........................................................................................................................ 28
   d. Cocaine........................................................................................................................ 28

X. Information About Drugs..................................................................................................... 29
   a. Where Students Received Drug Information............................................................... 29
   b. Who Students Would Talk To If They Had A Drinking or Drug Problem.................. 29
   c. First Choice of School Personnel Youth Would Talk To If They Had A Problem With Alcohol or Drugs.................. 29

XI. Summary of Key Findings.................................................................................................. 32

XII. Plans for Future Surveys................................................................................................... 35

XIII. Map of North Carolina Educational Regions................................................................. 36
LIST OF FIGURES

FIGURE 1. Percent Of Students Who Reported Ever Trying Selected Drugs By Grade Grouping.................................................. Page 6

FIGURE 2. Percent Of Students Who Reported The Use Of Selected Drugs By Grade Grouping (Within 30 Days Preceding Survey)................................................................. Page 7

FIGURE 3. Percent Of Students Who Reported Drinking By Location Of Drinking, Frequency Of Drinking, And Grade Grouping (In The Year Preceding Survey)......................... Page 10

FIGURE 4. Percent Of Students Who Reported Riding With A Teenage Driver Who Was Drinking By Frequency Of Occurrence And Grade Grouping (In The Year Preceding Survey)................................................................. Page 11

FIGURE 5. Percent Of Students Who Reported At Least One Problem Caused by Alcohol Use By Grade Grouping (In The Year Preceding Survey)................................. Page 12

FIGURE 6. Percent Of Students Who Reported Drinking By Beverage Type, Frequency Of Drinking, And Grade Grouping (In The Year Preceding Survey)................................. Page 14

FIGURE 7. Percent Of Students Who Reported Drinking By Number Of Drinks Consumed At One Time, Beverage Type, And Grade Grouping................................................. Page 15

FIGURE 8. Percent Of Students Who Reported At Least One Problem Caused By Marijuana Use By Grade Grouping (In The Year Preceding Survey)................................. Page 18
FIGURE 9. Percent Of Students Who Reported Ever Trying Selected Drugs By Sex Of Student

FIGURE 10. Percent Of Students Who Reported Using Selected Drugs By Sex Of Student (Within 30 Days Preceding Survey)

FIGURE 11. Percent Of Students Who Reported Ever Trying Selected Drugs By Race Of Student

FIGURE 12. Percent Of Students Who Reported Using Selected Drugs By Race Of Student (Within 30 Days Preceding Survey)

FIGURE 13. Percent Of North Carolina And United States High School Seniors Who Reported Ever Trying Selected Drugs


FIGURE 15. Percent Of Students Who Reported Ever Trying Selected Drugs By Residence Of Student

FIGURE 16. Students’ First Choice Of A Confidant If There Was A Drinking Or Drug Problem By Grade Grouping

FIGURE 17. School Personnel That Students Would Confide In If There Was A Drinking Or Drug Problem By Grade Grouping
In July of 1985, concern over the problem of drug and alcohol use among school-age youth prompted the North Carolina General Assembly to create the Alcohol and Drug Defense Program (ADD). Housed within the State Department of Public Instruction, ADD's main goal is to assist local school systems to develop school-based drug abuse prevention and intervention programs.

Before sound drug prevention programs could be developed for school-age youth, it was necessary to determine the extent of drug use and to examine factors which contributed to that use. Clinical and anecdotal evidence indicated substantial drug use among North Carolina's school-age youth; however, there simply was no hard data to corroborate this evidence. The data that were available came from two sources: a national survey of high school seniors conducted each year by the University of Michigan, and local surveys conducted by individual school districts around the state. The National Senior Survey gathers data on high school seniors only, and therefore provides little information of use to those planning drug prevention activities in earlier grades. Surveys conducted in individual school systems around the state provide more localized data, but generalizing these local findings to the state at large would not be feasible. Therefore, after consultation with other educators and youth service providers, ADD decided there was a clear need to conduct a survey of drug use and attitudes about use among school-age youth in North Carolina's public schools.

Information obtained from a statewide survey could be used to develop new prevention programs and to refine existing ones. Current survey data would also provide initial baseline data for future studies allowing educators to identify changing trends in drug-taking behavior. Lastly, factual data which documents the extent of drug use by young people could be an effective method of addressing the denial that too often surrounds the problem. More specifically, a survey was planned to answer the following questions:

- the term "drug use" will be used in this report instead of the more cumbersome "alcohol and drug use" or "substance use." By "drug use," we mean the use of illicit or licit substances including alcohol and tobacco.
1) What are the rates of use among junior high and high school students of various illicit and licit drugs?

2) What attitudes do junior high and high school students have towards illicit and licit drug use?

3) How does drug use by junior high and high school students in North Carolina compare with national norms?

4) Does drug use increase from junior high to high school?

5) At what grade level are students most likely to begin experimenting with drugs?

6) In what social setting are young people most likely to use drugs?

7) How frequently do young people use drugs?

8) What, if any, risk factors do young people associate with drug use?

9) Where do young people get their information about drugs?

The remainder of this report will explain the methodology used to gather data about drug use by North Carolina public school students, report the results, and discuss the findings.

**METHODOLOGY**

**Sampling Plan**

The population of study was all 7th through 12th graders enrolled in North Carolina's public schools in the spring of 1987. A stratified cluster sample design was used to select students. The population was stratified into three grade groupings: 7th - 8th grades, 9th - 10th grades, 11th - 12th grades, and also into strata which correspond to the eight educational administrative regions of the Department of Public Instruction.
Within each of these 24 strata (three grade groupings by eight regions), the sampling frame consisted of all schools in an educational region with any classes in the appropriate (7th - 12th) grade groupings. Sampling clusters consisted of all students attending English classes at randomly selected schools. English classes were selected because all 7th - 12th grade students are required to take English.

In order to establish an acceptable level of precision, it was estimated that between 400 and 500 students would need to be sampled in each stratum. Using an estimated class size of 25, and allowing for absenteeism, 22 schools were randomly selected with replacement from each stratum. Individual English classes were selected in the following manner. In each school, the English teachers in each grade grouping were listed in alphabetical order. The questionnaire was administered to the first period class of the first teacher on the alphabetical list. Because selection was done with replacement, some schools had more than one class selected in a stratum. If additional classes were selected from a school, the next teacher on the alphabetical list was chosen and the survey administered to his or her first period English class.

The sample was stratified by region so that drug use patterns could be analyzed within each region. Classes were surveyed in 66 randomly selected schools in each region; enough to provide satisfactory precision on inferences drawn about each region. However, because the eight regions vary in student population from 60,204 students in Region 1 to 194,276 students in Region 5, it was necessary to use a weighting scheme to derive statewide results. The weighting scheme accounted for the different relative proportions of the total state student population that attend schools in each region. Weights used are ratios of the student population in each region to the total statewide student population.

The Questionnaire
The questionnaire used was developed for use in the Wake County Schools by the Research Triangle Institute and has been used to survey 9th - 12th graders annually since 1983. The questionnaire format was altered slightly and several new questions were added about smokeless tobacco, crack (the potent new form of cocaine), and participation in organized athletics. The revised version was field tested in select classrooms around the state. The final questionnaire
used in the statewide survey was 20 pages long, contained 67 multiple choice questions, and was designed to be completed in one hour-long class period.

**Data Collection**

The survey was administered during the week of February 23 - 27, 1987. The following procedures were used in the collection of the data.

After the selection of schools was completed, a letter was sent to each school superintendent asking him or her to designate a person to be responsible for administering the questionnaire in all schools selected in that local education authority (LEA). The persons designated were then trained to administer the questionnaire by the Alcohol and Drug Defense (ADD) staff. To ensure conformity in administration, a detailed set of instructions was provided to each person administering the questionnaire and they were asked not to deviate from those instructions.

To increase the likelihood of honest responses, precautions were taken to protect the anonymity of individual students. The questionnaires were coded by region only, and it was made clear to students that their individual responses could not be identified. To further create a feeling of anonymity, the classroom teacher was asked to leave the room during administration. In the initial instructions, students were informed that their completed surveys would be placed in a large envelope, sealed, and sent directly to the Regional ADD Consultant without anyone from their school seeing them.

When the Regional ADD Consultant collected all of the questionnaires, they were then sent to Raleigh. Of the 141 LEA's in the state, 121 had at least one school selected, and 119 participated. Additional schools were selected at random to replace systems who did not participate.

The completed questionnaires were key-punched, edited, and placed onto a data tape under the supervision of the Center for Urban Affairs at North Carolina State University. Descriptive statistics were generated from the data using the Statistical Analysis System (SAS) computer package. Final unweighted sample size was 10,259. Males made up 48.75% of the sample, females 51.25%. Almost 75% (74.55%) of those surveyed were White; 21.89% Afro-American; 2.34% Native American; 0.57% Other; 0.37% Hispanic; and 0.28% Asian Pacific Islanders. Almost seven in ten (68.34%) of those surveyed reported they lived in households with both parents present. Single parent
Households made up 27.04% of the sample, with 23.07% being single parent families headed by females.

**PREVALENCE OF DRUG USE**

The following section reports information about the number of students who reported any use of a drug for a given period: during their lifetime, and within the month preceding survey administration. Data were gathered on use of the following drugs:

1) Alcohol
2) Nicotine
3) Marijuana and Hashish
4) Cocaine and Crack
5) Hallucinogens (LSD, PCP)
6) Uppers
7) Downers
8) Inhalants (Glue, Paint Thinner, RUSH, Locker Room)

**Lifetime Prevalence of Selected Drugs by Grade Grouping**

Figure 1. shows the percentage of 7th - 12th graders, by grade grouping, who admitted to having tried each drug at least once during their lifetime. Alcohol was the most widely used drug across all grade levels (59.59%); followed by cigarettes (48.74%); smokeless tobacco (31.83%); marijuana (30.49%); inhalants (22.54%); uppers (15.68%); and downers (11.05%). Cocaine had been tried by 6.22% of the total sample, and crack by 2.2% of the sample. Hashish had been tried by 8.24% of the total sample, and hallucinogens (such as PCP and LSD) by 4.82%.

As a rule, lifetime use of all drugs increased at each grade grouping level. The only exception was that 2.87% of 9th - 10th graders report having used crack; whereas, only 1.95% of 11th - 12th graders reported crack use. However, the percentage of those reporting crack use was so small that comparisons may not be valid.

**Drug Use in Last 30 Days**

In interpreting data regarding frequency of use, it is important to separate those who experiment briefly with a drug from those who continue to use drugs on a more frequent basis. Figure 2. shows the percentage of 7th - 12th graders,
Figure 1. Percent Of Students Who Reported Ever Trying Selected Drugs By Grade Grouping.
Figure 2. Percent of Students Reporting The Use Of Selected Drugs By Grade Grouping (Within 30 Days Preceding The Survey).
by grade grouping, who admitted to having used each drug at least once within 30 days preceding the survey. For the total sample, alcohol was the drug most frequently used (32.45%); followed by tobacco (cigarettes, 21.47%, smokeless tobacco, 11.51%); marijuana (12.52%); uppers (4.84%); downers (3.59%); hashish (1.83%); and hallucinogens (1.02%). Cocaine was used by 1.79% of the total sample (grades 7-12), and crack by 0.76%. Again, as with lifetime use, monthly use of drugs increased at every grade grouping.

DESCRIPTION OF MOST USED DRUGS

The following sections will examine more closely the drugs most used by North Carolina public school students: alcohol, tobacco, and marijuana.

**Alcohol**

Of the total sample of 7th - 12th graders, 40.41% reported that they had never used alcohol. Of the 7th - 8th graders, 38.93% reported they had used alcohol; 64.12% of the 9th - 10th graders; and 76.90% of the 11th - 12th graders reported using alcohol. Students, across all grade groupings, were most likely to have had their first drink of alcohol at home with family (21.6%) or at a party with others their age and no adult present (19.2%). The third most frequent response was use at a party with older teenagers or adults (12.9%). First use of alcohol on school grounds or at school functions was low. Only 1.19% reported first use of alcohol at a school activity and only 0.50% reported first use of alcohol on school grounds or during school.

A majority of 7th - 12th graders reported they tried alcohol for the first time because they were curious (51.6%), followed by 15% who said they first tried alcohol at a family celebration. Only 7.5% reported using alcohol to "fit in" with others their age.

Fifty-seven percent of the total sample of 7th - 12th graders reported that it was either easy or very easy to get alcohol at the home of older teenagers or adults; 48% reported it easy or very easy to get alcohol at neighborhood hangouts; while 18.4% reported it was easy or very easy to get alcohol at school.

Students were most likely to drink alcohol at parties where no adults were present: 64.4% reported use of alcohol at non-adult supervised parties in the past year. The second most likely situation was at the home of older teenagers...
or adults where 60.3% reported use of alcohol in the past year. Figure 3. reports the frequency of alcohol use in different locations by grade grouping.

In the past year, 52% of the total sample reported drinking alcohol while riding around or sitting in a car at night. A disturbing percentage of students in every grade grouping reported they frequently do so. Figure 4. provides a breakdown, by grade, of the frequency of those who reported drinking while riding around or sitting in a car at night. Almost 7% of the total sample of 7th - 12th graders admitted riding more than ten times in the preceding year with a teenage driver who had been drinking. For 11th - 12th graders, the figure rose to 11.4%.

Students were also asked how many bottles or cans of beer a person could drink and still drive safely. Over 62% of the total sample reported that any drinking will hurt driving skills. Another 5.42% said a person could drink five or six beers and still drive safely if they waited two hours before driving. Over 5.5% said some skilled drivers can drive safely after drinking six or more beers.

**Drinking and Intoxication**

Figure 5. illustrates the number of 7th - 12th graders, who because of their consumption of alcohol, experienced problems with others at least once in the past year. Almost 16% of all 11th - 12th graders reported problems with friends, another 16.51% with family, and 6.72% reported problems with the police as a result of their drinking.

Of the total sample of 7th - 12th graders, 44.46% indicated that they had not been high or light-headed after drinking in the past year. Almost 32% (31.82%) of the total sample admitted being drunk or very high at least once in the last year. Almost 13% (12.45%) of the total sample reported coming to school drunk or high at least once in the previous year. For 11th - 12th graders, this figure was 19.29% - almost one in five. Almost 17% (16.87%) of 7th - 12th graders reported being drunk in the last month, and for 11th - 12th graders, this figure was 26.25% - over one in four.

**Frequency of Drinking**

Over 7% of the 7th - 12th graders drank beer on an almost weekly basis (37-50 times); another 8.9% drank beer one to three times a month. Over 4.55% of 7th - 12th graders drank hard liquor weekly, while another 7% drank hard liquor three times a month. Frequency of consumption increased from
Figure 3. Percent of Students Who Reported Drinking By Location Of Drinking, Frequency Of Drinking, And Grade Grouping (In The Year Preceding The Survey).

Percent

Grades 7-8

Percent

Grades 9-10

Percent

Grades 11-12

At Home With Family
At Party With Peers & Parents
At Party With Peers & No Parents
At Home of Older Teenagers or Adults

[Graph showing data for Grades 7-8, Grades 9-10, and Grades 11-12 with different frequencies for each location.]

Legend:
- Once
- 2-5 Times
- 6-10 Times
- 11-36 Times
- 37-50 Times
Figure 4. Percent of students who reported riding with a teenage driver who was drinking by frequency of occurrence and grade grouping (in the year preceding the survey).
Figure 5. Percent of students who reported at least one problem caused by alcohol use by grade grouping (in the year preceding the survey).

Key:
- Teachers or Principal
- Friends
- Police
- Parents or Family
- Adults in Neighborhood
junior high to high school. Figure 6. illustrates frequency of drinking and beverage type by grade grouping.

**Amount of Alcohol Usually Consumed At One Time**

Over 13% of the 7th - 12th graders drank five beers or more at one time; 11.85% drank five or more wine coolers; 3.72% drank five or more glasses of wine; and 10.37% drank five or more mixed drinks or shots of liquor. The amount of consumption increased from junior high to high school, with over two in ten 11th - 12th graders reporting they usually drink five or more beers at one time. Figure 7. illustrates this by grade grouping.

The alcoholic beverage most widely used by 7th - 12th graders was beer, which was reported by 28.5% as the beverage usually consumed. Wine coolers were the second choice with 22%; mixed drinks were the third choice with 6.5%; hard liquor was fourth with 5.63%; and wine fifth with 4.94%. Almost one in five (19.21%) of 11th - 12th graders, 16.96% of the 9th - 10th graders, and 6.32% of the 7th - 8th graders reported using all of the beverages listed above.

**Tobacco**

Over one in five students (21.47%) reported smoking cigarettes in the month preceding administration of the survey. For 11th - 12th graders, this figure was 26.66%; whereas, only 14.97% of the 7th - 8th graders had smoked in the 30 days prior to the survey. Most who smoke, reported smoking less than a pack a month (8.63%); with 4.35% reporting smoking one-half to a pack a week; 2.28% two or three packs a week; and 6.2% a half a pack or more a day. Smokeless tobacco (chewing tobacco or snuff) was used by 11.51% of the 7th - 12th graders in the month preceding administration of the survey. Smokeless tobacco use for males was 21.59%. Only 1.88% of females reported smokeless tobacco use in the month preceding survey administration.

**Risks Associated with Tobacco Use**

A majority (50.7%) of all students reported they believed smoking one or more packs of cigarettes a day would cause someone their age to have a high chance of developing health problems. Another 28.95% believed one pack or more a day would cause a moderate chance of health problems. Over 8% (8.10%) said they did not know if smoking was a health risk. For smokeless
Figure 6. Percent of Students Who Reported Drinking By Beverage Type, Frequency of Drinking, and Grade Grouping (In the Year Preceding the Survey).

<table>
<thead>
<tr>
<th>Grades</th>
<th>Beer</th>
<th>Wine</th>
<th>Liquor</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9-10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11-12</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key:
- □ Once
- ■ 2-5 Times
- ▼ 6-10 Times
- □ 37-50 Times
- ■ 11-36 Times
Figure 7. Percent of students who reported drinking by number of drinks consumed at one time, beverage type, and grade grouping.

Key:  ■ 1-2 Drinks  □ 3-4 Drinks  ◐ 5 or More Drinks
tobacco, 38.62% perceived regular use as a high health risk, while 30.24% saw regular use as a moderate health risk. Ten percent of students did not know if regular use of smokeless tobacco was a health risk, and 21.1% felt that regular use poses either low or no risk to their health.

**Marijuana**

Lifetime prevalence of marijuana use was 12.43% for 7th - 8th graders; 32.16% for 9th - 10th graders; and 48.02% for 11th - 12th graders. Marijuana was used in the 30 days preceding the survey by 4.85% of the 7th - 8th graders; 13.30% of the 9th - 10th graders; and 19.93% of the 11th - 12th graders. The largest number of 7th-12th graders reported they first used marijuana because they wanted to find out what it was like (26.81%). The second most frequent choice was "Other" chosen by 6.48%; followed by "to get in a better mood" chosen by 3.65%; and "to fit in" with peers chosen by 2.98%. The most frequent location for first use of marijuana was at parties with no adults present (6.51%), followed by at the home of older teenagers or adults (6.11%). Less than 1% first used marijuana during or after a school activity (0.87%); on school grounds before or after school (0.99%); or during school hours, but not on school grounds (0.60%).

Almost 30% (29.6%) of students said it would be easy or very easy to get marijuana on school grounds. For 11th - 12th graders, this figure rose to 43.54%. The easiest place to obtain marijuana was "places outside their neighborhood," chosen by 34.06% of students as being easy or very easy.

**Places Marijuana Was Used**

The places students were most likely to use marijuana was at parties with their peers (19.46%) or at peer "hang-outs" (18.52%). Over 8% (8.37%) of 7th - 12th grade students said they used marijuana on school grounds at least once during the previous year. For 11th - 12th graders, the percentage was 11.9.

**Times Marijuana Was Used**

Almost one student in five (19.26%) admitted to using marijuana at least once in the last year while riding around or sitting in a car at night. For 11th - 12th graders, this percentage rose to 32.94%. After school was the second most likely time with 13.82% of the sample reporting use in the last year; followed by during or after school activities (such as football games or dances).
with 12.85% reporting use (21.05% for 11th - 12th graders); and before or at school with 9.99% reporting use in the last year. Broken down by grade groupings, only 2.97% of 7th - 8th graders reported using marijuana at or before school in the last year; whereas, 11.18% of the 9th - 10th graders and 15.26% of the 11th - 12th graders reported such use.

Marijuana Related Problems

Figure 8. shows the percentage of students, by grade groupings, who reported marijuana related problems in the past year. Marijuana use was most likely to cause problems with friends, family, teachers or principals, other adults, and lastly, the police.

Marijuana and Alcohol Use

Of those who reported use of marijuana, a significant percentage reported they use alcohol at the same time. Alcohol and marijuana were used at the same time at least occasionally by 6.75% of the 7th - 8th graders; 17.03% of the 9th - 10th graders; and 27.35% of the 11th - 12th graders. Almost 7.5% (7.47%) of the 11th - 12th graders reported combining alcohol with marijuana almost every time they used.

DRUG USE BY SEX

Figure 9. illustrates lifetime prevalence of drug use by sex. Males were more likely to have used all categories of drugs than were females. Drug use by sex in the 30 days preceding survey administration is illustrated in Figure 10. As with lifetime prevalence, more males used all categories of drugs than did females, although the differences were small for cigarettes and downers.

DRUG USE BY RACE

The sample was made up of 74.55% White; 21.89% Afro-American; 2.34% American Indian; 0.37% Hispanic; 0.28% Asian/Pacific Islander; and 0.57% Other.* Figure 11. illustrates lifetime prevalence of selected drugs by race for White, Afro-American, and American Indian. The other racial categories, because they are represented by such small numbers, are not reported.

* For the 1984-85 school year, North Carolina's public schools were made up of 67.2% White; 30.4% Afro-American; 1.6% American Indian; 0.3% Hispanic; and 0.6% Asian/Pacific Islanders.
Figure 8. Percent of Students Who Reported At Least One Problem Caused by Marijuana Use by Grade Grouping (in the year preceding the survey).

Percent

Grade Grouping

7 - 8  9 - 10  11 - 12

Key:
- Teachers or Principal
- Friends
- Police
- Parents or Family
- Adults in Neighborhood
Figure 9. Percent of students who reported ever trying selected drugs by sex of student.
Figure 10. Percent of Students Reporting The Use Of Selected Drugs By Sex Of Student (Within 30 Days Preceding The Survey).
Figure 11. Percent Of Students Who Reported Ever Trying Selected Drugs By Race Of Student.

- American Indian
- Black Or Afro-American
- White

Race Of Student

Key:
- Tobacco (Cigarettes)
- Alcohol
- Hashish
- Crack
- Uppers
- Hallucinogens (PCP, LSD)

- Tobacco (Smokeless)
- Marijuana
- Cocaine
- Downers
Figure 12 illustrates, by race, the percent of Afro-American, White, and American Indian who reported using selected drugs within the 30 days preceding the survey.

A COMPARISON OF DRUG USE IN NORTH CAROLINA WITH THE NATIONAL SENIOR SURVEY

Most information generated about drug use by young people in the United States comes from the National Senior Survey, conducted each year by the University of Michigan's Institute for Social Research. Use of selected drugs in North Carolina will be compared to this study; however, caution should be used when making such comparisons. The surveys took place at different points in time, used different methodologies, and used slightly different drug terminologies. All of these factors could affect the way respondents answered questions about their drug use.

National Senior Survey

The National Senior Survey was administered to over 15,000 high school seniors during 1986. Figure 13 compares lifetime prevalence of selected drugs from the National Senior Survey with all seniors in the North Carolina sample.

Figure 13 shows that North Carolina seniors exceeded national averages on lifetime use of marijuana/hashish, and inhalants, but were below national averages on hallucinogens, cocaine/crack, alcohol, and cigarettes.

Figure 14 illustrates drug use in the 30 days preceding the National Senior Survey and the North Carolina study. North Carolina seniors were below national averages for all drugs.

PREVALENCE OF DRUG USE BY URBAN/RURAL RESIDENCE

National research indicates that drug use is generally more of a problem in urban areas. In fact, many who live in more rural communities believe that drug problems are confined to large cities and do not exist in their small communities. To compare drug use in North Carolina by urban and rural setting, the sample was divided with population concentrations of over 20,000
Figure 12. Percent of Students Reporting the Use of Selected Drugs by Race of Student (Within 30 Days Preceding the Survey).

Race of Student

Key:
- Tobacco (Cigarettes)
- Tobacco (Smokeless)
- Alcohol
- Hashish
- Crack
- Uppers
- Hallucinogens (PCP, LSD)
- Downers

Percent
Figure 13. Percent of N.C. and U.S. High School Seniors Who Reported Ever Trying Selected Drugs.

Selected Drugs

Key: □ North Carolina □ United States
Figure 14. Percent of N.C. and U.S. High School Seniors Who Reported Using Selected Drugs (Within 30 Days Preceding The Survey).
being designated as urban. Figure 15. shows lifetime prevalence of drug use by urban and rural breakdown. Drug use was greater in urban areas for all drugs but smokeless tobacco and crack; however, with the exception of marijuana, these differences were small.

**REASONS NOT TO USE DRUGS**

To plan prevention activities, it is critical to know what influences a young person not to use drugs. Students were asked to rate as "not important at all," "important," or "very important" a list of reasons not to use alcohol, marijuana, cocaine, and tobacco. Below their responses are summarized by drug type.

**Alcohol**

Almost 86% (85.94%) of the 7th - 12th graders responded that parents not wanting them to drink was either important (21.59%) or very important (64.35%). There were differences by grade grouping; parents' opinions were very important for 73.9% of 7th - 8th graders, but only 54.51% of the 11th - 12th graders. The second most important reason not to use alcohol, chosen as "important" or "very important" by 81.06% of the sample, was that alcohol is addicting. "Other persons I admire are against someone my age drinking," was important or very important to 79% of the total sample; "friends don't want me to drink," was important or very important to 75.27%; and "teachers and counselors at school are against students drinking," was important or very important to 67.53% of all students.

**Marijuana**

Almost 90% (89.13%) of the total sample said that parents not wanting them to use marijuana was either important or very important. Parents' opinions became less important as grade level increased. The second most important reason not to use marijuana was that it is addicting, chosen as important or very important reason by 87.04% of the 7th - 12th graders. The third most important reason not to use marijuana was that it was illegal, chosen by 85.92% of the sample as being important or very important, followed by friends being against use (82.36%). Teachers and counselors at school being against marijuana use was chosen by 74.75% of the total sample as being an important
Figure 15. Percent Of Students Who Reported Ever Trying Selected Drugs By Residence Of Student.

- Tobacco (Cigarettes)
- Alcohol
- Hashish
- Crack
- Uppers
- Inhalants
- Tobacco (Smokeless)
- Marijuana
- Cocaine
- Hallucinogens (PCP, LSD)
- Downers
or very important reason not to use; however, over eight out of ten (82.87%) 7th - 8th graders thought teachers' and counselors' opinions important or very important.

**Tobacco**

Almost nine out of ten 7th - 12th graders (88.43%) reported they thought the health risks associated with tobacco use were an important or very important reason not to use tobacco. Parents being against tobacco use was very important or important for 83.45% of the total sample. Parents' opinions were important or very important to 87.09% of 7th - 8th graders, but to only 79.28% of 11th - 12th graders. Friends being against tobacco use was important or very important to 74.61% of the 7th - 12th graders, and teachers or counselors being against tobacco use was important or very important to 66.09% of the total sample.

**Cocaine**

Over nine out of ten (92.51%) 7th - 12th graders reported that the addicting nature of cocaine was an important or very important reason not to use the drug. Parents being against cocaine use was important or very important to over nine in ten (90.97%) 7th - 12th graders. Almost as many (90.64%) reported the illegality of cocaine as being an important or very important reason not to use. Friends being against cocaine use was chosen as being an important or very important reason not to use by 88.22% of all 7th - 12th graders, and teachers' and counselors' opinions by 80.08%.
INFORMATION ABOUT DRUGS

Students were asked a series of questions designed to identify sources from which they received their information about drugs. The results are summarized below.

Where Students Received Drug Information

Over 70% of all 7th - 12th graders surveyed reported that they received some information about drugs from their classes at school. Over one in four (25.4%) reported that they had received classroom drug information more than five times during the year. School counselors provided 56.83% of all students with drug information at least once in the year preceding the survey. Students also reported that 71.45% of them had received some drug information from their families; another 59.5% from their church; and 38.85% from youth activities outside of school.

Who Students Would Talk To if They Had A Drinking Or Drug

Students were asked who they would talk to first if they had a problem with drinking or drug use. Figure 16. illustrates their responses by grade grouping.

Parents and peers were the two most mentioned choices, with parents being the first choice of younger students and peers being the first choice of older students.

Choice Of School Personnel Youth Would Talk To If They Had A Drinking Or Drug Problem

When students were asked who, in the school setting, they would talk to if they had an alcohol or drug problem, they were most likely to choose a counselor or teacher; however, a surprisingly large percentage of all grades reported they either did not know who in the school they would talk to or that they would talk to no one at school. Figure 17. illustrates, by grade grouping, this breakdown.
Figure 16. Student’s First Choice Of A Confidant If There Was A Drinking Or Drug Problem By Grade Grouping.
Figure 17. School Personnel That Students Would Confide In If There Was A Drinking Or Drug Problem By Grade Grouping.

<table>
<thead>
<tr>
<th>Grade Grouping</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-8</td>
<td>30</td>
</tr>
<tr>
<td>9-10</td>
<td>25</td>
</tr>
<tr>
<td>11-12</td>
<td>20</td>
</tr>
</tbody>
</table>

Key:
- Would Not Talk With Anyone
- Counselor
- Nurse
- Teacher
- Home/School Coordinator
- Coach
- Principal
- Or Asst Principal
- I Don't Know
SUMMARY OF KEY FINDINGS

Presented in this section are some specific findings intended to provide an overall view of substance use by 7th-12th grade students in North Carolina's public schools. The most widely used drugs in order of popularity were alcohol, tobacco, marijuana/hashish, inhalants, uppers, downers, cocaine/crack and hallucinogens. More specifically:

- About six in every ten students reported use (more than just a sip) of alcohol at some time in their lives.
- Almost half reported cigarette use at some point in their lives.
- Almost four in every ten students reported marijuana/hashish use at some point in their lives.
- Three in ten students have used smokeless tobacco at some point in their lives.
- Cocaine and crack use was reported by less than one in ten students.

In the thirty days preceding the survey, the most frequently used drugs in order of popularity were alcohol, tobacco, marijuana/hashish, uppers, downers, cocaine/crack and hallucinogens. More specifically:

- Almost one in three students reported using alcohol in the month preceding the survey.
- Tobacco products (cigarettes or smokeless tobacco) were used by almost one in three students in the month preceding the survey.
- Marijuana and hashish use was reported by almost 15 percent of students in the month preceding the survey.
- Cocaine and crack were used by 2.55 percent of students in the month preceding the survey.
Alcohol was clearly the most abused drug. More specifically:

- Most students reported they drank alcohol at parties where no adults were present.

- Over half of the students reported drinking alcohol while riding around or sitting in a car at night.

- More than one in ten of the 11th - 12th graders reported they had ridden ten times or more in the past year with a teenage driver who was drinking.

- Almost one in three students reported being drunk or very high at least once in the last year.

- Almost 13 percent of the students reported coming to school drunk or high at least once in the previous year. For 11th - 12th graders, the figure was almost one in five.

- Beer was the most frequently used beverage, with 28.5 percent of the students reporting its use.

- Over two in ten 11th - 12th graders reported that when they drink beer, they generally consume five or more cans or bottles at one time.

Cigarette use in North Carolina, surprisingly, was well below the national average for seniors. With regards to tobacco use in North Carolina:

- Over one in five students reported smoking in the month preceding the survey.

- Over one in ten students reported using smokeless tobacco in the month preceding the survey. For males, this figure doubles to over two in ten.

- Over 8 percent of all students reported that they did not know if smoking was a health risk or not.
Marijuana was most likely to be used at parties where no adults were present or at peer "hangouts." In regards to marijuana use:

- Over 8 percent of all students said they used marijuana on school grounds last year.
- Almost two in ten students reported using marijuana while riding around or sitting in a car at night.
- Almost three in ten students reported it would be easy or very easy to get marijuana at school.
- Almost three in ten 11th - 12th graders reported using both alcohol and marijuana at the same time at least occasionally.

Other specific findings which help provide an overview are:

- Males used all drugs more frequently than females.
- Drug use by Blacks was lower in every drug category than drug use by Whites or American Indians.
- North Carolina seniors exceeded national averages for marijuana/hashish and inhalant use, but were below national averages for other drugs.
- Parents and teachers were more important in influencing students in lower grades not to use drugs, while peers were more important in influencing students in the upper grades.
- Over seven in ten students had received some information about drugs at school.
- Drug use in urban areas was greater than in rural areas.
PLANS FOR FUTURE SURVEYS

This survey will serve as baseline data for future studies. The results of this survey, when compared to future survey results, will allow educators to track drug use patterns and evaluate the effects of their prevention and intervention efforts. The Alcohol and Drug Defense Program plans to conduct similar prevalence surveys every two years. LEA's who are interested in doing local surveys are urged to do so and can expect technical assistance from the ADD Program.

This report is descriptive in nature; its purpose being simply to describe the prevalence of drug use. The survey was designed however, to help understand adolescents' attitudes and beliefs about drug use. More analysis will be done, and ADD will release these findings as they are completed.
North Carolina Educational Regions

STUDENT POPULATION
GRADES K-12

<table>
<thead>
<tr>
<th>REGION</th>
<th>STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>60,204</td>
</tr>
<tr>
<td>2</td>
<td>123,429</td>
</tr>
<tr>
<td>3</td>
<td>173,158</td>
</tr>
<tr>
<td>4</td>
<td>138,114</td>
</tr>
<tr>
<td>5</td>
<td>194,276</td>
</tr>
<tr>
<td>6</td>
<td>190,206</td>
</tr>
<tr>
<td>7</td>
<td>109,737</td>
</tr>
<tr>
<td>8</td>
<td>90,124</td>
</tr>
</tbody>
</table>