

DOCUMENT RESUME

ED 140 173

CG 011 453

TITLE A Survey of Substance Use Among Junior and Senior High School Students in New York State. Report No. 1: Prevalence of Drug and Alcohol Use, Winter 1974/75.

INSTITUTION New York State Office of Drug Abuse Services, Albany.

PUB DATE Nov 75

NOTE 52p.; For related Document, see CG 011 454

EDRS PRICE MF-\$0.83 HC-\$3.50 Plus Postage.

DESCRIPTORS Alcoholism; *Drinking; *Drug Abuse; High School Students; Junior High School Students; Marihuana; *Narcotics; Research; Secondary Education; *Secondary School Students; *Student Behavior; *Student Problems

ABSTRACT

The intent of this survey is to achieve an understanding of the drug using patterns of youngsters in New York's secondary schools. It was initiated to gather in detail the extent and dimensions of alcohol and drug use among a sample of New York students in grades seven through twelve. This survey was conceived as a benchmark study--to establish a statistical baseline against which trends could be measured. The report is organized into three parts: (1) sample and methodology; (2) questionnaire construction and application; and (3) findings. (Author/YRJ)

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DRUG ABUSE SERVICES

GG 011453



BUREAU OF SOCIAL SCIENCE RESEARCH
and
PROGRAM EVALUATION

A SURVEY OF SUBSTANCE USE AMONG JUNIOR AND SENIOR HIGH SCHOOL STUDENTS IN NEW YORK STATE

Report No. 1: Prevalence of Drug
and Alcohol Use

Winter 1974/75

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
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New York State
OFFICE OF DRUG ABUSE SERVICES

2 World Trade Center
New York, New York 10047

November, 1975

A SURVEY OF SUBSTANCE USE AMONG JUNIOR AND SENIOR
HIGH SCHOOL STUDENTS IN NEW YORK STATE
Report No. 1: Prevalence of Drug and Alcohol Use
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New York State Office of Drug Abuse Services
Two World Trade Center
New York, New York 10047

November 1975

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The Commission's Bureau of Prevention and Education was responsible for distributing questionnaires to schools, assisting schools with administration of the survey and returning completed questionnaires to the Bureau of Social Science Research. The faculty and staff of selected junior and senior high schools administered the questionnaire.

INTRODUCTION

Hundreds of surveys have been conducted, mainly among limited populations, to gain perspective on the scope and patterns of non-medical substance abuse. Policy makers and concerned citizens have used these surveys for rational planning of drug treatment and prevention programs, and for allocating resources to combat this serious public problem.

This survey is the fourth conducted by New York State. Its intent is to achieve an understanding of the drug using patterns of youngsters in the State's secondary schools. The three prior surveys were conducted in 1968, 1970 and 1971. The 1968 study surveyed the public's knowledge of the prevalence and effects of specific types of drug use, and its attitudes concerning users and treatment. This first survey by the newly organized Narcotic Addiction Control Commission found that the age grouping with the greatest knowledge about drugs and with the greatest proportion who knew at least one person using drugs was the 17-19 year olds.*

In 1970, the Commission assessed the prevalence of drug use in the general population of the State. It found that high school students comprised a measurable and, in some cases, a substantial proportion of regular drug users (those who used at least six times per month) for all of the seventeen drug categories in the study.**

* Glaser, D. and Snow, M., "Public Knowledge and Attitudes on Drug Abuse in New York State", N.Y. State Narcotic Addiction Control Commission, September, 1969.

** Chambers, Carl D. and Inciardi, James A., An Assessment of Drug Use in the General Population. New York: New York State Narcotic Addiction Control Commission, 1971.

Through the 1970-71 school year, the Commission assisted a number of school districts in a survey of drug use and attendant attitudes among their students. Data were reported out on the ninth and eleventh grades. Students were mainly from rural areas of the State. Alcohol use and drug use were reported by over 50% and over 20% of these students respectively.

This current assessment of youthful drug use in the State was planned during the latter part of 1973 and into 1974. Indications such as admissions to treatment showed this phenomenon to be complex and in flux. Moreover, the media as well as individuals in the prevention and treatment professions were reporting increased observations of alcohol use and poly-drug use among young people. Thus, this present survey was initiated to gather in detail the extent and dimensions of alcohol and drug use among a scientifically drawn sample of New York's students in grades seven through twelve. This survey, whose data were gathered in the winter of 1974-75, was conceived as a benchmark study - to establish a statistical baseline against which trends could be measured. In the future, reassessments will be made periodically using similar questionnaires.

The questionnaire used for this survey probed several related areas as well as drug use patterns among the State's junior and senior high school students. A subsequent report will examine the results generated by questions of prevention awareness and effectiveness. In this first report the data concern only the extent of alcohol and drug use. It is organized into three parts. First, we present the sample and how it was

drawn from all the seventh through twelfth grades in the public schools in New York State. (It should be noted that generalizations cannot, therefore, be made to out-of-school youngsters nor to youths in private and parochial schools.) In the second part, we discuss the questionnaire, its construction, and problems encountered in its application. The third part, presenting the findings of the study, is composed of three sections: overall prevalence, recency and frequency of use by substance; specific substance use by area and grade; and multiple substance use patterns.

From an overall methodological perspective, the data from suburban and rural areas appear considerably more reliable than the data gathered in New York City. Attendance-enrollment discrepancies and the proportion of incomplete questionnaires were substantially higher in the latter location. This is explored further in the section discussing the sample. It is pure guesswork to attribute drug use to any proportion of those who were absent or who did not answer a drug use question. Nevertheless, findings from New York City are likely to underrepresent to an unknown degree the actual amount of drug use there, and are consequently somewhat questionable.

SAMPLE

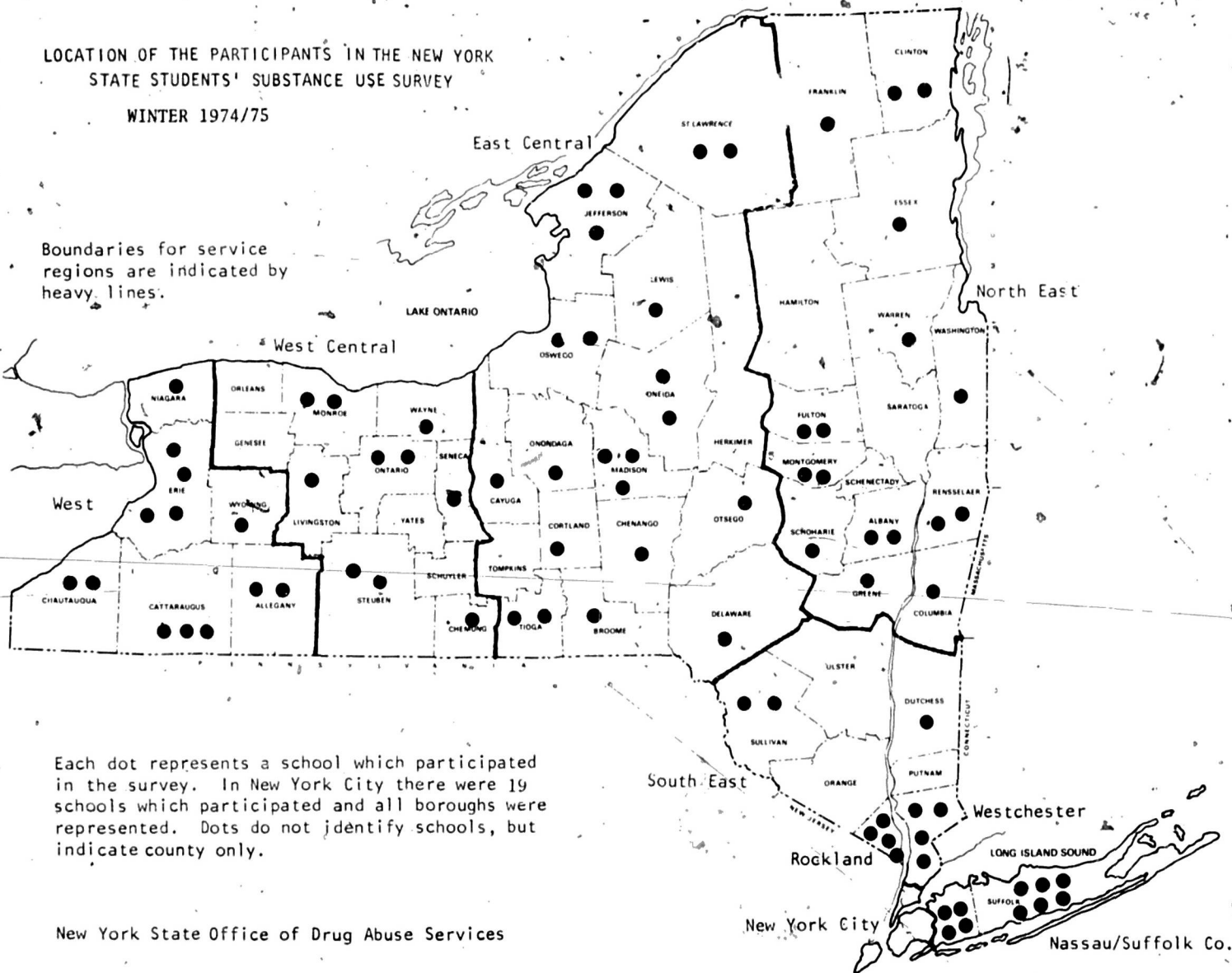
To achieve the objectives of this study, it was necessary to select a representative sample from the 1,600,000 students in grades 7 through 12 in the public schools of New York State. It was deemed impractical, from a logistical and administrative standpoint to draw a random sample of students from throughout the State. Furthermore, because of the small number of pupils who would have been included from each school, assurances of confidentiality would have been less convincing to the students. It was concluded, therefore, that the smallest analytic unit from which a sample could be drawn was an entire grade in a school.

The sampling frame listed all grades seven through twelve in the State. The schools that contained these grades were stratified into geographic areas corresponding to the seven regions indicated in Figure 1, and further allocated into strata by degree of urbanization. Schools were then randomly drawn to maximize the inclusion of a grade from each stratum, and in such a manner that each stratum in the sample contained school populations proportionate to the overall school population in the five New York City boroughs and the six upstate service regions. Thus, there were 42 combinations of the seven regions and six grades, 7 through 12. One hundred and two schools from all over the State cooperated in the survey - each school providing access to the randomly selected grade within the school. In all, 22,600 questionnaires were received from these schools. In order to fulfill our obligation of rapid feedback to all participating schools while maintaining representativeness, not all the questionnaires received were coded and tabulated.

LOCATION OF THE PARTICIPANTS IN THE NEW YORK STATE STUDENTS' SUBSTANCE USE SURVEY

WINTER 1974/75

Boundaries for service regions are indicated by heavy lines.



Each dot represents a school which participated in the survey. In New York City there were 19 schools which participated and all boroughs were represented. Dots do not identify schools, but indicate county only.

New York State Office of Drug Abuse Services

From each of the 42 region-grade level combinations, therefore, a random sample of completed questionnaires was drawn that was proportional to the 1973 student population in that area. Table 1 presents the composition of the student population and the sample.

In New York City the Board of Education, through the Office of Educational Evaluation, provided the administrative procedures used for contacting the schools. For the remainder of the State, cooperation for the study was sought by contacting the schools which fell into the sample. In all cases a copy of the questionnaire was sent to each principal, together with a letter explaining the purpose of the study, offering a pledge of confidentiality and detailing the procedures to be followed. Regional staff members of the Bureau of Prevention and Education assisted each of the schools in managing the logistics of distribution and collection of the questionnaires.

Optimally, in a survey of this nature, (a) all invited schools agree to participate in the study, (b) all students enrolled in the selected grade are present on the day of the survey, (c) all students who are present participate and (d) all students who participate fill out the questionnaire completely and consistently.

In fact, about two-thirds of the schools selected for the sample agreed to participate. About half the refusals cited administrative reasons, and about half cited the content of the questionnaire. When a school refused, the same grade from another randomly selected school in the same region was substituted. Figure 1 indicates the general locations of the participating schools.

TABLE 1

SCHOOL SURVEY PARTICIPANTS COMPARED WITH TOTAL SCHOOL POPULATION

New York State Students in 7th Through 12th Grades

Winter 1974/75

Area and Grade Level	1973 Total Enrollment*		1974-75 Sample	
	Number	Percent	Number	Percent
<u>New York City</u>	498,497	31.2%	2,616	30.6%
7- 8th Grade	157,001	9.8	733	8.6
9-10th Grade	202,480	12.7	1,118	13.1
11-12th Grade	139,016	8.7	765	8.9
<u>Suburbs N.Y. City</u>	414,386	25.9	2,524	29.5
7- 8th Grade	137,610	8.6	862	10.1
9-10th Grade	146,151	9.1	888	10.4
11-12th Grade	130,625	8.2	774	9.0
<u>Upstate N.Y.</u>	686,471	42.9	3,413	39.9
7- 8th Grade	237,649	14.9	1,175	13.7
9-10th Grade	241,981	15.1	1,160	13.6
11-12th Grade	206,841	12.9	1,078	12.6
<u>Geographic Regions**</u>				
New York City	498,497	31.2	2,616	30.6
Nassau/Suffolk Co.	305,853	19.1	1,667	19.5
Southeast Area	134,765	11.5	992	11.6
Northeast Area	120,804	7.6	672	7.9
East Central	195,668	12.2	1,075	12.6
West Central	130,098	8.2	607	7.1
West	163,669	10.2	924	10.8
<u>Grade Level</u>				
Seventh	270,969	17.0	1,478	17.3
Eighth	261,291	16.3	1,292	15.1
Ninth	295,668	18.5	1,620	18.9
Tenth	294,944	18.4	1,546	18.1
Eleventh	256,922	16.1	1,372	16.0
Twelfth	219,560	13.7	1,245	14.6
Number of Students	1,599,354	100.0%	8,553	100.0%

* State Education Department, Survey of Enrollment, Staff, and Schoolhousing, Fall 1973, The University Of The State of New York, Information Center on Education, Albany, N.Y.

** See map for counties included in regions.

Over 80 percent of the students enrolled in the grades sampled were in attendance on the day of the survey. This figure is somewhat lower than the reported attendance rate of 89 percent (on an average 1973 day) supplied by the New York State Department of Education.

In more than 90 percent of the schools, over 95 percent of the students in attendance participated in the survey. The schools with low student participation were not clustered in any grade or region. Thus, despite the voluntary nature of the survey, the obtained questionnaires represent most of the students in attendance.

As in any voluntary survey, the results must be interpreted with caution. Schools that declined to participate or had incomplete student participation may have different substance use patterns from those schools with full attendance or full participation represented in the survey. The tabulations are based only on participating schools and no attempt was made to correct for non-participating or incomplete schools.

Some students who participated did not respond to questions on substance use. Most students answered either all or none of these questions, so the analyses for the various substances are based primarily on the same students. The response rate was lower in New York City (especially in grades 7-8) than in the rest of the State. Therefore, the statewide average, to the extent non-respondents differ from respondents, underrepresents these New York City students. Insofar as users of substances may refuse to answer questions about use, comparisons between cohorts with different non-response rates are questionable.

THE QUESTIONNAIRE

The questionnaire employed in this survey was a ten-page booklet entitled "Statewide Periodic Assessment of Actions and Attitudes Among Young People." It was pretested in urban and suburban schools and found suitable for administration to the target study population. The instrument was designed to be self-administered and completed in one class period.

No questions on ethnicity, race or religion were included in this questionnaire so as not to violate New York City guidelines for research in public schools. With very few exceptions, the questions were the multiple choice type and simply required the student's circling or checking the appropriate response. The Bureau pledged confidentiality to the students, and they were instructed both by their teachers and by an introductory page in the instrument not to write their names anywhere on the booklet. In addition, gummed labels were provided for the students to seal their questionnaires upon completion.

The instrument has three major sections: The first section was designed to provide demographic and background information on the respondent as well as his/her awareness of drug treatment and information services in the community. The second section examined attitudes toward, and participation in, school drug education and prevention programs. It also assessed opinions about a wide range of community resources as believable and approachable sources of information and help with drug problems. Finally, it measured general attitudes toward risk-taking, family, peers and school.

In the third part of the questionnaire, there were items which pertained to the student's own use and friends' use of eight categories of substances listed and defined at the beginning of the section. These included alcohol, depressants, L.S.D. (or similar substances), marijuana/hashish, narcotics, solvents, stimulants and tobacco. Questions on tobacco use were included only to facilitate gathering data about the use of other substances; hence, these data will not be presented. The three most important sets of questions dealt with the respondent's recency of use (seven options from "never used" to "used last week"), frequency of use (six options from "not used in the last six months" to "used more than 30 times in the last six months"), and age of first use of the eight substance categories.

Some discrepancies in responses resulted from inconsistent terminology in the questionnaire. The section relating to age asked the student to indicate the age at which any of the substances were first tried, while the other two sections asked how recently and frequently they had been used. A substantial number of students responded that they had tried a substance for the first time at a particular age, but in the recency section stated that they had never used it. Our analysis revealed that the word "tried" seemed to connote to the students a one-time occurrence, while the word "used" seemed to imply more frequent involvement with a substance. This apparent inconsistency was resolved by categorizing the student as having "used" the substance.

In the frequency section, the lack of a specific "never used" category may have aroused suspicion in the students. The minimal frequency option was "not used in the last six months," and it was meant to be the response for those who had "never used" as well. Many students who had not used a particular substance responded to this section by creating their own "never used" codes or by writing in the words "never used" next to the appropriate substance. Students who left any of the frequency items blank but who had corroborating evidence from the other two sections of having never used were included in the "not used in the last six months" totals.

Finally, despite the Bureau's best efforts to design an instrument with language and instructions which could be understood by all the students surveyed, some difficulties in comprehension were encountered, particularly among seventh graders throughout the State and among Spanish-speaking students in New York City. The language problems were reported by members of the Prevention staff who helped distribute and oversee the administration of the survey in the schools.

In processing the questionnaires, several types of quality control procedures were employed to insure the usefulness of the data. When the questionnaires were coded, a rechecking of twenty percent of them was required. Additional mistakes were sought through computer programs designed to identify errors such as blank columns which should have contained data values. Corrections were made by returning to the original questionnaire booklets.

Internal consistency checks in the substance use section were made possible by the three types of data requested (recency, frequency and age of first use) and were done on a drug by drug basis. If a student answered none of the questions on use of a particular substance, he could not be included in the calculation of that drug use rate. Certain inconsistent responses (for example, a student who claimed never to have tried a drug but who reported how long ago he last used it) were treated as if no response were made; however, other inconsistent responses, such as the "age first tried-never used" discrepancy indicated earlier, had meaningful interpretations and were not excluded from the calculations.

If a student responded in a "frivolous" manner (for example, marking the highest recency and highest frequency categories for every substance) doubt was cast on the validity of all his answers in the drug use section. In such a case, his responses were excluded from the calculation of rates of use for all substances. Less than 4 percent of the students gave frivolous responses.

FINDINGS: Prevalence, Recency, and Frequency of Substance Use

The analysis of data is presented in the following text and tables. It should be noted that the use of depressants, narcotics, and stimulants is not necessarily illegal, since students may have used them under medical supervision.

Table 2 presents the prevalence and recency of use of the various substance categories. As expected, alcohol emerges as the substance which is used by most students. One-third of the students indicated that they used marijuana at least one time. Stimulants and depressants also emerge as salient substance categories being used by about one-tenth of the students. The recency data show similar patterns. Almost two-thirds of the students have used alcohol within the last six months, and 26 percent report marijuana use during the same period. Summary data at the bottom of Table 2 indicate that over a third of the students have used some substance other than alcohol, and that 28 percent of the students have done so within the last six months. The summary data also show that virtually all of the students who ever used any substance used alcohol, and that almost all students who ever used any substance other than alcohol used marijuana. It should be noted, however, that an additional analysis, not presented here, indicated that 60 percent of the marijuana users had never used any other substance with the possible exception of alcohol. These findings are important because they indicate that while most users of other drugs have used marijuana, marijuana use per se does not appear to lead to use of other drugs.

TABLE 2

STUDENTS' ADMITTED SUBSTANCE USE

Sampling of 8553 New York State Students in 7th Through 12th Grades

Winter 1974/75

Type of Substance*	Percent of Responding Students Who			Percent of Usable Responses***
	Never Used	Ever Used	Used in Last Six Months**	
ALCOHOL	18.3	81.7	64.1	90.6
DEPRESSANTS	90.7	9.3	5.6	90.7
L.S.D.	94.0	6.0	3.1	91.5
MARIJUANA/HASH.	68.2	31.8	26.5	90.5
NARCOTICS	96.3	3.7	2.2	90.5
SOLVENTS	94.8	5.2	1.9	91.0
STIMULANTS	91.3	8.7	5.5	90.6
Any one of above	17.2	82.8	66.7	90.6+
Any one of above except alcohol	65.1	34.9	28.2	90.1+

*ALCOHOL (beer, wine, hard liquor, etc.)
 DEPRESSANTS (downers, Quaalude[®], Secona[®],
 Tuina[®], barbs, etc.)
 L.S.D. OR SIMILAR SUBSTANCES (mescaline,
 peyote, psilocybin, DMT, etc.)
 MARIJUANA OR HASHISH (pot, grass, hash)

NARCOTICS (heroin, smack, junk, opium,
 codeine, paregoric, morphine, etc.)
 SOLVENTS (sniffing glue, gasoline,
 paint thinner, etc.)
 STIMULANTS (uppers, methedrine, speed,
 Dexedrine[®], Dexamy[®], cocaine, etc.)

**Base N's may change due to incomplete responses.

***Usable responses exclude those for which information was absent, internally inconsistent, or frivolous.

+Students who admitted some use of any substance or who denied use of all relevant substances.

Table 3 presents the extent to which students have used the various substance categories in the last six months. These data basically show that the frequency of substance use is low. Except for alcohol, a majority of students did not use any substance in the last six months. Even when substance use is admitted, the most commonly appearing frequency of such use is, with the exception of alcohol and marijuana, less than once a month.

Table 4 attempts to bring the recency of substance use into sharper focus. These data show the percentage of users of a particular substance who used that substance within the last six months. Thus, for example, the table shows that of the 82 percent of the students who ever used alcohol, about 78 percent used it in the last six months. Overall, the results show that if a student has ever used a substance, he is likely to have used that substance in the last six months. This generalization applies to over three-fourths of marijuana and alcohol users. It applies to more than half of the depressant, L.S.D., narcotics and stimulant users, but to only about a third of the solvent users.

FINDINGS: Specific Substance Use by Area and Grade

Tables 5 through 11 depict substance use by students in New York State according to area and grade. Area refers to each of the three geographical areas which comprise approximately equal school populations as follows: "New York City" includes the five boroughs; "suburbs" include Nassau, Suffolk, Westchester and Rockland counties; and "upstate" includes the remainder of New York State. Two grades are combined for each grade category so that the six grades studied are represented by

TABLE 3

FREQUENCY OF SUBSTANCE USE IN LAST SIX MONTHS

Sampling of 8553 New York State Students in 7th Through 12th Grades

Winter 1974/75

Type of Substance*	Frequency of Substance Use in Last Six Months (Percent of Responding Students)				Percent of Usable Responses
	No Use	1 to 5 Times	6 to 30 Times	31 or More Times	
ALCOHOL	33.5	32.1	28.3	5.5	84.7
DEPRESSANTS	94.6	3.2	1.9	0.3	90.0
L.S.D.	97.1	1.9	0.9	0.2	91.0
MARIJUANA/HASH.	73.8	9.0	10.8	6.4	88.5
NARCOTICS	98.0	1.0	0.7	0.3	90.1
SOLVENTS	98.2	1.1	0.5	0.2	90.5
STIMULANTS	94.6	2.9	2.0	0.4	89.9

*Substance types are defined in Table 2.

TABLE 4

RELATIVE REGENCY OF SUBSTANCE USE

Sampling of 8553 New York State Students in 7th Through 12th Grades

Winter 1974/75

Type of Substance*	Percent Who Ever Used Substance	Percent of Users Who Indicated Substance Use in Last Six Months	Percent of Usable Responses
ALCOHOL	81.7	78.5	90.6
DEPRESSANTS	9.3	60.1	90.7
L.S.D.	6.0	51.7	91.5
MARIJUANA/HASH.	31.8	83.3	90.5
NARCOTICS	3.7	60.2	90.5
SOLVENTS	5.2	36.4	91.0
STIMULANTS	8.7	63.6	90.6
Any one of above	82.8	80.5	90.6**
Any one of above except alcohol	34.9	80.8	90.1**

*Substance types are defined in Table 2.

**Students who admitted some use of any substance or who denied use of all relevant substances.

three mutually exclusive classifications. It should be noted that for most substances there are significant differences in rates of use between school grades that were grouped together. Even within specific grade and region combinations, there are significant differences between schools. Thus, the reported rates can only apply as generalities, and should not be applied to any particular grade or school.

Two indicators of substance use are presented in each of the seven tables that follows: (1) the percent of respondents who ever used a given substance and (2) the percent of students who used a given substance in the last six months. The used-in-the-last-six-months rates are a more useful measure of the youths' substance use behavior. This measure controls for the influence of age and, hence, time at risk, that is heavily reflected in the ever used rates. Therefore, substance use in the last six months provides an estimate of current drug behavior that is more relevant to the concerns of program planning, research and school personnel.

Throughout the following seven tables, three generalities prevail:

1. The percentage of students who have used substances in the last six months increases with grade category, except in the case of solvents.
2. New York City has lower substance use rates than other areas. It is felt that for all areas of the State the use rates are probably underestimates. This generalization particularly applies to New York City where there was a lower usable response rate (10 percent lower). Consequently, the findings for New York City could be

viewed as more conservative estimates. Alternatively, one could conjecture that the lower New York City rates are indicative of new trends.

3. Overall, the percentage differences between suburbs and upstate are not very great, but suburban rates are consistently higher than upstate rates.

Table 5, depicting alcohol use, indicates that almost 82 percent of the students in the sample have used this substance, with nearly two-thirds of them admitting recent use, that is, use within the last six months. The figures for suburban and upstate areas are notably similar.

Table 6 describes the use of depressants, with more than 9 percent of the sample admitting the use of these substances. As with alcohol, older students are more likely to admit recent depressant use than younger ones.

The use of hallucinogens, which are illegal substances, is indicated in Table 7. Their use appears to be most popular among older, suburban students, which is not dissimilar to depressant use depicted in Table 6.

Almost thirty-two percent of the sample admitted using marijuana or hashish as shown in Table 8. More than one-fourth of the sample admitted recent use of these substances. Most use occurred among students in the 11-12th grade category.

Table 9 describes narcotics use admitted by students in the sample. Once more, the phenomenon of use occurs primarily among older students. Less than 4 percent of all students in the sample admitted use, thereby making narcotics the substance category with the lowest usage rates.

TABLE 5

USE OF ALCOHOL BY AREA AND GRADE

Sampling of 8553 New York State Students in 7th Through 12th Grades

Winter 1974/75

Area and Grade Level	Alcohol Use			Percent of Usable Responses
	Percent Who Never Used	Percent Who Ever Used	Percent Who Used In Last Six Months	
<u>New York State</u>	<u>18.3</u>	<u>81.7</u>	<u>64.1</u>	<u>90.6</u>
<u>New York City</u>	<u>25.0</u>	<u>75.0</u>	<u>54.3</u>	<u>84.3</u>
7-8th Grade	44.8	55.2	30.8	72.7
9-10th Grade	20.1	79.9	59.8	88.7
11-12th Grade	16.6	83.4	64.8	88.8
<u>Suburbs of N.Y. City</u>	<u>15.0</u>	<u>85.0</u>	<u>69.3</u>	<u>93.4</u>
7-8th Grade	26.3	73.7	50.4	91.4
9-10th Grade	12.5	87.5	73.1	93.0
11-12th Grade	5.9	94.1	85.2	96.1
<u>Upstate New York</u>	<u>16.2</u>	<u>83.8</u>	<u>66.9</u>	<u>93.4</u>
7-8th Grade	29.0	71.0	47.8	92.7
9-10th Grade	12.9	87.1	70.1	91.1
11-12th Grade	6.1	93.9	83.8	96.8

*Alcohol use includes beer, wine, hard liquor, etc.

TABLE 6.

USE OF DEPRESSANTS* BY AREA AND GRADE

Sampling of 8553 New York State Students in 7th Through 12th Grades

Winter 1974/75

Area and Grade Level	Depressants Use			Percent of Usable Responses
	Percent Who Never Used	Percent Who Ever Used	Percent Who Used In Last Six Months	
<u>New York State</u>	<u>90.7</u>	<u>9.3</u>	<u>5.6</u>	<u>90.7</u>
<u>New York City</u>	<u>93.3</u>	<u>6.7</u>	<u>4.1</u>	<u>84.9</u>
7-8th Grade	97.3	2.7	2.2	75.0
9-10th Grade	94.0	6.0	3.5	89.6
11-12th Grade	89.1	10.9	6.6	87.5
<u>Suburbs of N.Y. City</u>	<u>88.9</u>	<u>11.1</u>	<u>6.4</u>	<u>93.1</u>
7-8th Grade	96.1	3.9	2.3	91.6
9-10th Grade	91.3	8.7	5.1	93.4
11-12th Grade	78.5	21.5	12.5	94.3
<u>Upstate New York</u>	<u>90.2</u>	<u>9.8</u>	<u>6.0</u>	<u>93.4</u>
7-8th Grade	96.2	3.8	2.3	93.3
9-10th Grade	91.9	8.1	5.0	91.2
11-12th Grade	82.3	17.7	10.8	95.9

*Depressants include downers, Quaalude[®], Secona[®], Tuina[®], barbs, etc.

TABLE 7

USE OF HALLUCINOGENS* BY AREA AND GRADE

Sampling of 8553 New York State Students in 7th Through 12th Grades

Winter 1974/75

Area and Grade Level	Hallucinogens Use			Percent of Usable Responses
	Percent Who Never Used	Percent Who Ever Used	Percent Who Used In Last Six Months	
<u>New York State</u>	<u>94.0</u>	<u>6.0</u>	<u>3.1</u>	<u>91.5</u>
<u>New York City</u>	<u>95.8</u>	<u>4.2</u>	<u>2.5</u>	<u>85.3</u>
7-8th Grade	97.8	2.2	1.1	75.0
9-10th Grade	96.7	3.3	2.1	89.9
11-12th Grade	92.8	7.2	4.3	88.5
<u>Suburbs of N.Y. City</u>	<u>92.6</u>	<u>7.4</u>	<u>3.8</u>	<u>94.1</u>
7-8th Grade	98.0	2.0	1.3	92.5
9-10th Grade	94.3	5.7	3.1	94.4
11-12th Grade	84.8	15.2	7.4	95.5
<u>Upstate New York</u>	<u>93.8</u>	<u>6.2</u>	<u>3.0</u>	<u>94.2</u>
7-8th Grade	98.2	1.8	1.1	93.9
9-10th Grade	95.6	4.4	2.2	92.1
11-12th Grade	87.5	12.5	5.7	96.9

*Hallucinogens include L.S.D., mescaline, peyote, psilocybin, DMT etc

TABLE 8

USE OF MARIJUANA OR HASHISH* BY AREA AND GRADE

Sampling of 8553 New York State Students in 7th Through 12th Grades

Winter 1974/75

Area and Grade Level	Marijuana or Hashish Use			Percent of Usable Responses
	Percent Who Never Used	Percent Who Ever Used	Percent Who Used In Last Six Months	
<u>New York State</u>	<u>68.2</u>	<u>31.8</u>	<u>26.5</u>	<u>90.5</u>
<u>New York City</u>	<u>66.6</u>	<u>33.4</u>	<u>27.1</u>	<u>84.5</u>
7-8th Grade	87.2	12.8	9.6	73.8
9-10th Grade	65.0	35.0	29.5	89.4
11-12th Grade	52.3	47.7	37.7	87.5
<u>Suburbs of N.Y. City</u>	<u>64.3</u>	<u>35.7</u>	<u>30.4</u>	<u>92.5</u>
7-8th Grade	87.6	12.4	9.8	91.5
9-10th Grade	63.5	36.5	32.1	91.3
11-12th Grade	40.1	59.9	50.6	95.0
<u>Upstate New York</u>	<u>72.1</u>	<u>27.9</u>	<u>23.3</u>	<u>93.6</u>
7-8th Grade	91.3	8.7	7.0	93.4
9-10th Grade	70.7	29.3	24.6	91.2
11-12th Grade	53.2	46.8	39.1	96.4

*Marijuana or hashish includes pot, grass, hash.

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TABLE 9

USE OF NARCOTICS* BY AREA AND GRADE

Sampling of 8553 New York State Students in 7th Through 12th Grades

Winter 1974/75

Area and Grade Level	Narcotics Use			Percent of Usable Responses
	Percent Who Never Used	Percent Who Ever Used	Percent Who Used In Last Six Months	
<u>New York State</u>	<u>96.3</u>	<u>3.7</u>	<u>2.2</u>	<u>90.5</u>
<u>New York City</u>	<u>96.9</u>	<u>3.1</u>	<u>1.7</u>	<u>84.8</u>
7-8th Grade	97.8	2.2	1.3	74.4
9-10th Grade	97.1	2.9	1.5	89.9
11-12th Grade	95.8	4.2	2.2	87.5
<u>Suburbs of N.Y. City</u>	<u>96.2</u>	<u>3.8</u>	<u>2.3</u>	<u>93.3</u>
7-8th Grade	97.6	2.4	1.4	91.5
9-10th Grade	96.9	3.1	2.4	93.1
11-12th Grade	94.0	6.0	3.2	95.5
<u>Upstate New York</u>	<u>96.0</u>	<u>4.0</u>	<u>2.5</u>	<u>92.9</u>
7-8th Grade	97.8	2.2	1.4	93.5
9-10th Grade	96.1	3.9	2.6	90.4
11-12th Grade	94.0	6.0	3.6	94.8

*Narcotics include heroin, smack, junk, opium, codeine, paregoric, morphine, etc.

The admitted use of solvents is shown in Table 10. In this case, however, the general substance use/age relationship is reversed. Solvents appear to be substances used mostly by younger students.

Figures reflecting admitted use of stimulants appear in Table 11. The reported use of stimulants among 11-12th graders is dramatically higher than in the lower grades. This difference occurs, strikingly, in all areas of New York State and, in the case of recent use, is more than twice the use indicated in the preceding grade category.

FINDINGS: Multiple Substance Use Patterns

Recently, the drug literature has begun to report the appearance of a hitherto unexplored phenomenon called multiple substance use or polydrug abuse. Basically, these terms refer to the ingestion of a variety of drugs, often serially or simultaneously, to achieve different kinds of "highs." While the data herein do not necessarily reflect simultaneous multiple substance abuse per se, one can nevertheless attempt to assess the use of more than one substance in a relatively delimited period of time - six months. Tables 12 and 13 present the numbers and kinds of substances used by the students in the six months prior to the survey.

Table 12 indicates the number of substances used exclusive of alcohol. In every area-grade combination, there were more single substance users than multiple substance users and still more students who had used no substance other than alcohol. Thus, multiple substance use is not the predominant pattern among students surveyed.

TABLE 10

USE OF SOLVENTS* BY AREA AND GRADE

Sampling of 8553 New York State Students in 7th Through 12th Grades

Winter 1974/75

Area and Grade Level	Solvents Use			Percent of Usable Responses
	Percent Who Never Used	Percent Who Ever Used	Percent Who Used In Last Six Months	
<u>New York State</u>	<u>94.8</u>	<u>5.2</u>	<u>1.9</u>	<u>91.0</u>
<u>New York City</u>	<u>96.9</u>	<u>3.1</u>	<u>1.4</u>	<u>85.1</u>
7-8th Grade	97.1	2.9	1.5	74.6
9-10th Grade	96.0	4.0	1.8	90.2
11-12th Grade	98.2	1.8	0.7	87.7
<u>Suburbs of N.Y. City</u>	<u>94.2</u>	<u>5.8</u>	<u>1.8</u>	<u>93.7</u>
7-8th Grade	94.6	5.4	3.0	91.6
9-10th Grade	94.0	6.0	1.8	93.7
11-12th Grade	94.2	5.8	0.5	95.9
<u>Upstate New York</u>	<u>93.6</u>	<u>6.4</u>	<u>2.3</u>	<u>93.6</u>
7-8th Grade	93.7	6.3	2.7	93.4
9-10th Grade	93.4	6.6	2.3	91.6
11-12th Grade	93.8	6.2	1.9	96.1

*Solvents include sniffing glue, gasoline, paint thinner, etc.

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TABLE 11

USE OF STIMULANTS* BY AREA AND GRADE

Sampling of 8553 New York State Students in 7th Through 12th Grades

Winter 1974/75

Area and Grade Level	Stimulants Use			Percent of Usable Responses
	Percent Who Never Used	Percent Who Ever Used	Percent Who Used In Last Six Months	
<u>New York State</u>	<u>91.3</u>	<u>8.7</u>	<u>5.5</u>	<u>90.6</u>
<u>New York City</u>	<u>93.6</u>	<u>6.4</u>	<u>4.3</u>	<u>84.5</u>
7-8th Grade	97.8	2.2	1.5	73.8
9-10th Grade	94.4	5.6	3.6	89.6
11-12th Grade	89.1	10.9	7.5	87.2
<u>Suburbs of N.Y. City</u>	<u>89.7</u>	<u>10.3</u>	<u>6.4</u>	<u>93.2</u>
7-8th Grade	96.2	3.8	1.9	91.9
9-10th Grade	91.7	8.3	5.4	93.5
11-12th Grade	80.4	19.6	12.4	94.4
<u>Upstate New York</u>	<u>90.9</u>	<u>9.1</u>	<u>5.8</u>	<u>93.5</u>
7-8th Grade	96.1	3.9	2.4	93.4
9-10th Grade	92.7	7.3	4.5	91.0
11-12th Grade	83.5	16.5	10.6	96.1

*Stimulants include uppers, methedrine, speed, Dexedrine[®], Dexamyl[®], cocaine, etc.

TABLE 12

PERCENTAGE OF STUDENTS WHO ADMITTED MULTIPLE SUBSTANCE USE IN THE LAST SIX MONTHS BY AREA AND GRADE LEVEL

Sampling of 8653 New York State Students in 7th Through 12th Grades

Winter 1974/75

Area and Grade Level	Number of Substances Admitted Other Than Alcohol*						Percent of Usable Responses**
	0	1	2	3	4	5+	
<u>New York State</u>	<u>71.8</u>	<u>19.8</u>	<u>3.7</u>	<u>2.2</u>	<u>1.6</u>	<u>1.0</u>	<u>90.1</u>
<u>New York City</u>	<u>71.5</u>	<u>22.0</u>	<u>3.0</u>	<u>1.8</u>	<u>1.1</u>	<u>0.7</u>	<u>84.1</u>
7- 8th Grade	89.1	8.4	0.9	0.4	0.4	0.7	72.9
9-10th Grade	69.4	24.6	2.8	1.6	1.1	0.5	89.2
11-12th Grade	60.5	29.0	4.8	3.1	1.6	0.9	87.3
<u>Suburbs of N.Y. City</u>	<u>68.2</u>	<u>21.9</u>	<u>4.1</u>	<u>2.6</u>	<u>2.1</u>	<u>1.0</u>	<u>92.3</u>
7- 8th Grade	88.1	7.9	2.0	0.6	0.5	0.8	90.7
9-10th Grade	66.9	24.3	4.1	2.3	1.6	0.9	91.4
11-12th Grade	48.6	34.2	6.4	4.9	4.3	1.5	95.1
<u>Upstate New York</u>	<u>74.6</u>	<u>16.7</u>	<u>3.8</u>	<u>2.1</u>	<u>1.5</u>	<u>1.2</u>	<u>93.1</u>
7- 8th Grade	90.2	6.6	1.3	0.7	0.6	0.6	92.2
9-10th Grade	73.7	18.8	3.4	1.6	1.6	0.9	90.9
11-12th Grade	59.3	25.3	6.8	4.1	2.4	2.0	96.4

*Substance types are defined in Table 2

**Students who admitted any substance use or who denied use of all substances

Table 13 further analyzes recent multiple substance use according to the particular substances involved. For example, if a student used three substances other than alcohol in the last six months, he would appear on three lines of the table -- once for each substance. For each of his three substances, he would be listed as using two additional substances. Table 13 points out a major difference between marijuana and the other substances: over two-thirds of the users of marijuana used only marijuana; however, very few of those who used some substance other than marijuana used that substance exclusively. Thus, recent multiple substance use is not predominant among marijuana users but is predominant among users of other substances.

Tables 6, 7, 9, 10, and 11 present use of five substances other than alcohol or marijuana. Since multiple substance use was common among students using these substances, there is considerable overlap in the users mentioned in these tables. Table 14 summarizes this information by defining a category that includes all students who admitted recent use of "one or more other substances" other than alcohol or marijuana. Most of these students used marijuana and at least one additional substance. Other categories of recent users are those who used marijuana (and perhaps alcohol) in the last six months, and those who used only alcohol. In all areas and grade levels, with one minor exception, there were more users of marijuana only than of other substances, and even more who used only alcohol but no other substance. This closely parallels the conclusions drawn from Table 12.

TABLE 13*

* PERCENTAGE OF USERS BY NUMBER OF OTHER TYPES OF SUBSTANCES USED IN LAST SIX MONTHS (Alcohol Use Is Omitted)

Sampling of 8553 New York State Students in 7th Through 12th Grades

Winter 1974/75

Type of Substance Used In Last Six Months*	No. of Students Who Admitted Use of Substance	Number of <u>Other</u> Substances Used In Last Six Months				
		0	1	2	3	4+
DEPRESSANTS	432	7.2	23.6	26.2	25.0	17.1
L.S.D.	242	2.1	15.9	19.4	34.3	27.3
MARIJUANA/HASH.	2051	60.9	12.0	7.7	5.8	3.7
NARCOTICS	171	3.5	17.5	19.9	20.5	33.5
SOLVENTS	143	25.7	18.0	13.5	15.5	26.4
STIMULANTS	429	3.0	22.8	30.1	26.3	17.7

*Substance types are defined in Table 2.

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TABLE 14

SELECTED SUBSTANCE USE IN LAST SIX MONTHS BY AREA AND GRADE LEVEL
 Sampling of 8553 New York State Students in 7th Through 12th Grades
 Winter 1974/75

Area and Grade Level ¹	Type of Substance Use Admitted					Percent of Usable Responses***
	All Substance Use Denied	No Substance Use Admitted In Last 6 Mos	Only Alcohol Use Admitted	Marijuana Use Admitted*	One or more Other Substances**	
<u>New York State</u>	<u>17.2</u>	<u>16.1</u>	<u>38.7</u>	<u>18.5</u>	<u>9.5</u>	<u>90.6</u>
<u>New York City</u>	<u>22.5</u>	<u>18.4</u>	<u>30.6</u>	<u>21.0</u>	<u>7.5</u>	<u>84.2</u>
7- 8th Grade	42.1	23.4	23.6	7.5	3.4	72.3
9-10th Grade	17.7	18.0	33.8	23.9	6.7	89.2
11-12th Grade	14.3	15.1	31.5	27.2	11.8	88.4
<u>Suburbs of N.Y. City</u>	<u>14.2</u>	<u>14.3</u>	<u>40.1</u>	<u>20.7</u>	<u>10.7</u>	<u>93.4</u>
7- 8th Grade	25.1	22.7	40.4	6.1	5.7	91.4
9-10th Grade	11.8	13.1	42.5	23.2	9.5	92.9
11-12th Grade	5.2	6.9	37.1	33.3	17.5	95.1
<u>Upstate New York</u>	<u>15.7</u>	<u>15.9</u>	<u>43.2</u>	<u>15.2</u>	<u>10.1</u>	<u>93.5</u>
7- 8th Grade	28.2	22.8	39.3	4.4	5.3	92.3
9-10th Grade	12.4	15.7	45.7	17.5	8.6	91.5
11-12th Grade	5.9	8.8	44.8	24.0	16.5	95.9

*Students in this category may also have used alcohol.

**Students in this category may also have used alcohol and/or marijuana. Substance types are defined in Table 2.

***Students who admitted some use of any substance or who denied use of all substances.

Although not reported here, similar analyses were performed on the reports of all substances ever used. Multiple substance use was thus defined as all those substances a person used in his lifetime rather than just in the last six months. The analysis of these data indicated that the conclusions concerning lifetime patterns of multiple substance use were the same as those reported here for recent use.

CONCLUSIONS

The following are some of the highlights presented in this report.

- 1) This study has focused on substance use. Except for L.S.D., marijuana, and solvents, whose use is illegal, all other substances may have been used legally.
- 2) Over 80 percent of the students have used alcohol at some time in their lives.
- 3) Almost one-third of the students have used marijuana at least once.
- 4) Each of the substances (other than alcohol and marijuana) was used by fewer than 10 percent of the students.
- 5) Virtually all of the students who have ever used any substance have also used alcohol.
- 6) Almost all users of substances other than marijuana have used marijuana as well; however, 60 percent of the marijuana users have never used any other substance with the possible exception of alcohol.
- 7) If a student has used a substance, he is likely to have used that substance in the last six months.
- 8) The percentages of students who used any substances other than alcohol and marijuana in the last six months were low.
- 9) Fewer than 10 percent of the students used more than one substance (other than alcohol) in the last six months.
- 10) Recent multiple substance use is not predominant among marijuana users, but is predominant among users of other substances.
- 11) About three-quarters of the students admitting using stimulants in the last six months used at least two or more other drugs in that same period.
- 12) About four of every five students who admitted recent narcotic use or hallucinogen use have used two or more other drugs recently.
- 13) Less than one-fifth of every hundred students who admitted recent marijuana use have used two or more other drugs recently.
- 14) The higher his grade category, the more likely it is that the student has used some substance.

- 15) New York City has lower substance use rates than either New York City suburbs or upstate. This finding may be due to lower response rates in New York City.
- 16) New York City suburbs generally have higher substance use rates than upstate, although the rate differences are not great.