Drug and alcohol use at work: a survey of young workers

Data from the National Longitudinal Survey of Youth reveal that drug and alcohol use in the workplace is more common among men than women and among blue-collar than white-collar workers

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The incidence of drug use on the job among U.S. workers aged 19 to 27 was 7.0 percent in 1984, according to data from the 1984 National Longitudinal Survey of Youth. White men aged 19 to 23 reported the highest incidence of workplace drug use. Reported drug use is higher among men than women, among whites than minorities, and among workers aged 19 to 23 than those aged 24 to 27. Blue-collar workers have higher rates of drug use than white-collar workers. Also, drug use is most common among young workers in entertainment/recreation and construction industries, and least common among those in professional services and public administration industries. When each industry is classified by occupation, data show that transportation industry operatives have a relatively high rate of workplace drug use. This is notable in light of recent tragic accidents in the transportation industry attributed to the use of drugs.

Drug and alcohol use in the workplace has been a particular concern to employers and consumers who fear that workers who engage in this type of activity on the job are less productive, more likely to steal, and more likely to cause accidents than workers who do not use drugs or drink on the job. For these reasons, drug use in the workplace cost employers an estimated $16.4 billion in 1981.[1]

In response to this problem, a large number of firms have developed Employee Assistance Programs which attempt to identify and provide treatment to workers with drug and alcohol problems. These programs have become more prevalent; the Bureau of Labor Statistics estimates that in 1988, 30 percent of all workers had access to Employee Assistance Programs. Also, approximately 20 percent of all workers were employed by firms which had drug testing policies.[2]

Despite the severity of the problem and the growing concern among employers and society about the adverse consequences of drug use, there has been little research dealing with work-related drug use, primarily because very few data sets provide information on both an individual's drug usage and work activity. Some research identifies drug users by job category, but to date, there have been no studies examining drug use in the workplace.[3]

The National Longitudinal Survey of Youth is an ongoing study of the labor market experiences of individuals born between 1957 and 1964 and contains an overrepresentation of blacks, Hispanics, and economically disadvan-

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Table 1. **Percent of young workers, 19 to 27 years old, who reported using drugs at work, by race and Hispanic origin, 1984**

Sex and race	Total, 19 to 27 years of age	19 to 23 years of age	24 to 27 years of age
Total	7.0	7.8	5.7
Men	9.5	10.6	8.0
White	10.1	11.5	8.2
Black	6.7	5.9	8.0
Hispanic	6.5	7.8	4.2
Women	4.2	5.0	3.2
White	4.5	5.4	3.3
Black	2.8	2.8	2.6
Hispanic	2.9	2.9	2.8

SOURCE: National Longitudinal Surveys—Youth cohort, 1984.

taged whites.[4] Sponsored by the Bureau of Labor Statistics, this survey has been conducted annually since 1979.[5] The original sample size was 12,686; in the 1984 survey, 12,069 persons were still being interviewed.

For the first time, the 1984 youth survey asked participants if they had used drugs or felt high during work or break time within the past year. The specific drugs mentioned included marijuana, hashish, nonprescription amphetamines, stimulants, nonprescription barbiturates, sedatives or tranquilizers, psychedelics, cocaine, heroin or other narcotics, and inhalants. Questions about alcohol use were included in each survey from 1982 through 1985.[6] Participants were asked whether drinking has ever interfered with their work on a job, as well as specific questions about the effects of alcohol on their work behavior.

This article, based on the unique data on drug use available from the 1984 youth survey, describes patterns of drug and alcohol use among young workers.[7] The rates of workplace drug use among these workers in different age, sex, and race groups as well as in different industry and occupational classifications are also examined.

Data collection method

To date, the primary methods of estimating the extent of drug use are by individuals responding whether they do in fact use drugs, (self reports) and by testing individuals for drug use.[8] While self reports provide a great deal of information about an individual's behavior, the validity of this method is often questioned. The accuracy of drug test data is not disputed as much as are self reports, but the scope of drug test information is extremely narrow and estimates are rarely drawn from it.

Research by Barbara Mensch and Denise Kandel implies that fewer individuals in the 1984 youth survey reported using illicit drugs other than marijuana, compared with reports of other national surveys of drug use.[9] For instance, in a comparison with a similar age group from the 1982 General Household Survey, they found that approximately one-third fewer individuals in the youth survey reported involvement with cocaine and about half as many reported experimentation with hallucinogens and tranquilizers. The Mensch and Kandel study suggests that underreporting seems to be more common among light drug users (smoked marijuana 1 to 5 times in 1980) than heavy users (smoked marijuana more than 5 times in 1980), and more common among blacks and Hispanics than among whites.

By comparison, this article focuses specifically on questions dealing with drug use at work, whereas the Mensch and Kandel study looks at overall drug use in society. It might be that drug use at work is more socially unacceptable than drug use off-the-job, leading workers to not report on-the-job drug activity. However, it may also be that individuals who use drugs at work are more frequent users, and as Mensch and Kandel document, this group is less likely to underreport their drug use. Thus, it is unclear if responses to work-related drug use are more or less accurate than the responses to general drug use.

Also in the youth survey analysis, all illicit drugs are put into one category, whereas Mensch and Kandel differentiate by type of drug. If responses to questions regarding the use of marijuana at the workplace are answered truthfully, but responses to those on the use of other illicit drugs are underreported, then using a format in which all drugs are placed in a single category implies that the tabulations presented here should not be severely biased by underreporting.

Hence, while there exists the potential presence of underreporting in workplace drug data in the youth survey, it may not be significantly different from other surveys which rely on respondents to report their drug usage. Still, care should be taken in the interpretation of the results, particularly in comparing rates of workplace drug use by race or Hispanic origin.

Drug use at work

The rates of on-the-job drug use for demographic groups are shown in table 1. According to the 1984 youth survey, 7 percent of the U.S. work force aged 19–27 in 1984 had used drugs on the job within the previous year. There are a number of clear patterns in the incidence of use among demographic groups.[10] The rate of workplace

drug use is higher for younger members of this cohort. Workers aged 19 to 23 have a 7.8-percent rate of usage, while the rate for 24- to 27-year-olds is 5.7 percent.[11] These rates suggest that drug use declines with age, as has been found in other studies.[12]

It also appears that on-the-job drug use is more common among men than among women within age and racial groups, with average rates of 9.5 percent for men and 4.2 percent for women. The data also indicate that workplace drug use is more common among white workers than minorities, with the rate for whites being more than 50 percent greater than the rate for blacks or Hispanics.[13]

The workplace drug use of young workers by occupation and industry is shown in table 2. First, the occupational totals indicate that blue-collar workers tend to have a much higher rate of on-the-job drug use than do white-collar workers. For instance, craftworkers, operatives, and laborers all have rates of more than 9.0 percent, while 4.5 percent of professional workers and 3.2 percent of managers are workplace drug users. The industry totals indicate that the entertainment/recreation (13.9 percent) and construction (12.9 percent) industries have the highest reported rates of drug use, while the professional services (2.9 percent) and public administration industries (2.0 percent) have the lowest.

Many of the occupation/industry groups with high rates of reported drug use are those in which either public or worker safety could be threatened by the use of illicit drugs. For example, in the transportation industry, on-the-job drug use is a particular concern among operatives—13.1 percent of young workers in this field reported using drugs on the job. Drug use is also somewhat high among craftworkers, operatives, and laborers in the mining and construction industries, in which conditions are often dangerous. In construction, 16.1 percent of craftworkers and 15.3 percent of operatives have reported using drugs.

It is difficult to compare the occupation and industry findings to previous research because other studies use much broader occupational classifications and do not make any inferences about drug use by job category. Yet, other studies that examine drug use among workers do find that drug use is generally higher among younger workers than older workers, higher among men than women, and higher among whites than minorities, which is consistent with the results found here.[14]

Alcohol use at work

The 1984 youth survey also provides information about the use of alcohol on the job. Respon-

Table 2. **Percent of young workers, 19 to 27 years old, who used drugs while at work, by occupation and industry, 1984**

Industry	Occupation										
	Total	Professional and technical workers	Managers and officials	Sales workers	Clerical and kindred workers	Craft workers and supervisors	Operatives and kindred workers	Laborers, except farm	Farm laborers	Service workers	Private household workers
Total	7.0	4.5	3.2	5.3	5.0	11.2	9.3	9.6	6.6	8.0	7.1
Agriculture	6.0	12.8	[1]0	[1]0	13.6	[1]2.2	8.9	4.2	5.0	[1]0	—
Mining	6.2	0	[1]23.7	—	0	[1]5.6	8.6	9.6	—	[1]0	—
Construction	12.9	1.2	1.2	—	8.8	16.1	15.3	8.7	[1]0	19.8	—
Manufacturing	8.3	5.9	4.3	4.3	7.1	11.4	8.4	10.9	[1]0	5.1	—
Transportation	7.5	5.1	9.8	0	3.9	8.1	13.1	11.2	—	4.5	—
Wholesale and retail	7.4	7.4	1.2	7.9	4.8	5.0	10.1	9.1	20.9	11.4	—
Finance, insurance, and real estate	5.2	0.9	8.5	0	4.7	[1]46.0	[1]43.2	14.8	—	7.4	—
Business and repair services	7.2	9.2	3.2	1.2	6.6	9.7	4.4	12.5	—	4.4	—
Personal services	8.9	6.5	1.3	0	9.7	19.1	6.6	14.0	—	9.7	7.1
Entertainment and recreation	13.9	19.3	1.8	[1]0	11.8	0	—	32.5	—	13.6	—
Professional services	2.9	2.3	5.3	[1]0	3.1	6.4	10.4	0	—	2.7	[1]0
Public administration	2.0	0.8	0	[1]0	2.6	1.6	5.4	1.2	[1]0	2.1	—

[1] This industry/occupation has fewer than 10 unweighted observations.

NOTE: Dash indicates industry/occupational category not applicable.

SOURCE: National Longitudinal Surveys—Youth cohort, 1984

dents were asked if drinking has "ever interfered with work on a job." Because the phrase, "ever interfered with work on a job," produces a subjective response which depends on the view of the respondent, specific questions about the effects of alcohol at work during the past year were also asked.[15] Such questions referred to how alcohol may have limited both an individual's performance and his or her career progress.

Table 3 presents the responses from the questions dealing with alcohol use at work. As can be seen, 9.0 percent of all workers aged 19 to 27 believed that drinking has "ever interfered with work on a job." Men reported having alcohol interfere with their work at nearly twice the rate of women (11.6 percent, compared with 6.0 percent) The rate for white workers is much higher than that for blacks, with 12.7 percent of white men and 6.8 percent of white women having had alcohol interfere with their work, compared with rates of 6.1 percent for black men and 1.7 percent for black women. However, unlike the demographic patterns for drug use, the rate at which alcohol interferes with work is not similar for Hispanics and blacks. The rate at which alcohol interferes with work is much higher for Hispanics, at 10.2 percent for Hispanic men and 3.8 percent for Hispanic women, as compared with 6.1 percent for black men and 1.7 percent for black women.

While a fairly large number of workers reported that their drinking habits had affected their work performance, a much smaller number (about one-third as many) believed that drinking had adversely affected their career. In particular, while 3.0 percent of all workers had missed work and 3.1 percent had gotten drunk on the job during a 1-year period, only 0.9 percent felt that their chances for a promotion or raise had been hurt by their drinking, only 1.1 percent had been fired or nearly fired, and 0.9 percent had quit voluntarily because of their drinking. It is interesting to note that the difference between the percentage of men who have gotten drunk on the job and the percentage of women who have done so is quite large (4.4 percent versus 1.6 percent).

For the most part, the pattern of alcohol use by demographic group is similar to that of drug use. Specifically, men are more likely than women to answer the questions affirmatively, and whites tend to report their use of alcohol at work more often than do minorities.

Table 4 presents the responses to the questions about the effects of alcohol use at work by industry. While the small percentages make it difficult to make strong inferences, there are a few interesting findings. First, young workers in the two industries which have a relatively high incidence of drug use (construction and entertainment/recreation) also have relatively high rates of alcohol use. In the construction industry, 6.0 percent of all young workers have stayed at home within the previous year because of a hangover, and in the entertainment/recreation industry, 5.2 percent have gotten drunk on the job.

Second, although there are high rates of self-reported drug use among young workers in the transportation industry, the use of alcohol among those workers is relatively low. The transportation/communication industry has the lowest rates (among young workers in all industries) of employees missing work because of a hangover (1.0 percent) and getting drunk (1.5 percent).

Third, although 3.0 percent of young mining workers believe that their drinking has led them to be fired or almost fired, only 2.6 percent admit to being drunk on the job. This may be because

Table 3. **Percent of young workers, 19 to 27 years old, who drank alcohol at work by race and Hispanic origin and type of effect drinking produced, 1984**

Effect of drinking at work	Total	Men				Women			
		Total	White	Black	Hispanic	Total	White	Black	Hispanic
Interfered with work	9.0	11.6	12.7	6.1	10.2	6.0	6.9	1.7	3.8
Missed work because of hangover	3.0	3.4	3.6	2.4	3.3	2.4	2.7	1.0	1.7
Got drunk on the job	3.1	4.4	4.4	4.9	2.6	1.6	1.6	1.3	1.7
Lost or nearly lost job	1.1	1.5	1.5	1.1	1.7	.6	.6	.8	.7
Quit job	.9	1.2	1.3	.9	1.2	.5	.4	.7	.3
Hurt chances for raise or promotion	.9	1.3	1.3	1.1	.8	.5	.4	.8	.7

SOURCE: National Longitudinal Surveys—Youth cohort, 1984

employers in the mining industry are strict with respect to alcohol use because of hazards on the job.

As in the case of drug use, it is difficult to make comparisons of the industry findings to other studies because of the different job classifications and different types of questions used in these studies. However, previous research dealing with alcohol use at work does indicate that usage is higher for men than for women and for whites than for minorities, which is also the case from the present survey.[16]

WHILE IT IS DIFFICULT to measure the impact of drug and alcohol use on productivity and performance, information from the youth survey does provide a glimpse into the patterns of drug and alcohol use in the workplace. We hope additional research will increase our understanding and help form policies which would aid in reducing drug use and its consequences. [ ]

Table 4. **Percent of young workers, 19 to 27 years old, who drank alcohol at work, by type of effect drinking produced and industry, 1984**

Industry	Effect of drinking at work				
	Missed work because of hangover	Drunk on job	Lost or nearly lost job	Quit job	Not promoted
Total	3.0	3.2	1.1	0.9	.9
Agriculture	4.3	4.8	1.5	1.0	1.9
Mining	6.8	2.6	3.0	2.3	2.3
Construction	6.0	4.5	1.4	1.6	2.5
Manufacturing	4.7	3.6	1.7	1.1	1.2
Transportation and communication	1.0	1.5	.7	1.3	.8
Wholesale and retail	2.6	3.5	1.0	.7	.6
Finance, insurance, and real estate	3.0	3.1	1.3	.6	.7
Business and repair services	2.8	3.9	1.4	1.7	.9
Personal services	1.0	3.0	.1	.6	.4
Entertainment and recreation	3.6	5.2	1.4	.6	1.7
Professional services	1.8	1.8	.6	.6	.6
Public administration	1.6	1.5	.6	.1	.1

SOURCE: National Longitudinal Surveys—Youth cohort, 1984.

Footnotes

[1] See *The Study of the Economic Costs to Society of Alcohol, Drugs and Mental Disorders* (North Carolina, Research Triangle Institute, 1981).

[2] See *Survey of Employer Antidrug Programs*, Report 760 (Bureau of Labor Statistics, 1989).

[3] Studies that examine drug users by job category include: Roger F. Cook, "Drug Use Among Working Adults: Prevalence Rates and Estimation Methods," and Harwin L. Voss, "Patterns of Drug Use: Data From the 1985 National Household Survey." Both are published in Steven W. Gust and J. Michael Walsh, eds., *Drugs in the Workplace: Research and Evaluation Data*, National Institute on Drug Abuse Research Monograph Series, 1989.

[4] In this study, all results are weighted to control for the oversamples and for attrition, so that the findings are representative of this age group.

[5] See Marilyn Manser, Michael Pergamit, and Wanda Bland Peterson, "National Longitudinal Surveys: development and uses," *Monthly Labor Review*, July 1990, pp. 32–37.

[6] Data on alcohol use at work are now available from the 1988 survey.

[7] One examination of the relationship between drug use and work is by Robert Kaestner, "The Effect of Illicit Drug Use on the Wages of Young Adults," National Bureau of Economic Research Working Paper No. 3535, Dec. 1990.

[8] See Roger F. Cook, "Drug Use Among Working Adults."

[9] See Barbara S. Mensch and Denise B. Kandel, "Underreporting of Substance Use in a National Longitudinal Youth Cohort," *Public Opinion Quarterly*, vol. 52, 1988, pp. 100–124.

[10] All inferences drawn in this analysis are statistically significant at the 95-percent confidence level.

[11] An exception to the lower workplace drug use of younger workers is among black men. Only 5.9 percent of 19- to 23-year-old black men report using drugs, compared to 8.0 percent for 24-to 27-year-olds.

[12] See V.H. Raveis and Denise B. Kandel, "Changes in Drug Behavior from the Middle to Late Twenties: Initiation, Persistence, and the Cessation of Use," *American Journal of Public Health*, vol. 77, 1987, pp. 607–11; also Roger F. Cook, "Drug Use Among Working Adults."

[13] The extent of this difference may be overstated, as it was found by Mensch and Kandel ("Underreporting of Substance Abuse") that underreporting of drug and alcohol use is more common among minorities than whites.

[14] See Roger F. Cook, "Drug Use Among Working Adults" and Harwin L. Voss, "Patterns of Drug Use."

[15] Because no time frame is mentioned in this question, it is implied that the question refers to the entire working life of the respondent. However, there are a few cases in which the respondents claim that alcohol has never interfered with work, but in previous surveys (1982 and 1983), they have admitted that alcohol had interfered at some time. Therefore, in the data presented here, respondents have been assigned an affirmative answer if they answer affirmatively in the 1984 survey or have done so in any previous year.

[16] See Harwin L. Voss, "Patterns of Drug Use."