The 1990 Prevention Objectives for Alcohol and Drug Misuse: Progress Report

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THE PUBLIC HEALTH SERVICE in 1980 set forth specific, measurable national prevention objectives to be achieved by the year 1990 in 15 health priority areas identified in "Promoting Health/Preventing Disease: Objectives for the Nation." (*1*). In this article we report on activities related to reaching the objectives pertaining to alcohol and drug abuse.

Alcohol and Drug Abuse Problems

The social and economic costs to the nation resulting from alcohol and drug abuse totaled $66 billion in 1977 (*2*), the most recent year for which comprehensive data are available. This amount includes both direct costs, such as medical treatment, drug traffic control, motor vehicle damages, and fire losses associated with alcohol and drugs, and indirect costs, including productivity losses from illness and premature mortality attributable to alcohol and drug problems.

Approximately 10 million adult Americans—7 percent of all persons 18 years or older—can be considered problem drinkers. Youth between 14 and 17 years with problems related to alcohol and drug abuse add another 3 to 3.5 million persons to the population affected. Ten percent of all deaths in the United States are alcohol-related (*3*). Cirrhosis of the liver, which is largely attributable to excessive alcohol consumption, ranks among the 10 leading causes of death. Alcohol use also is associated with cancer of the liver, pancreas, esophagus, and mouth. Alcohol consumption during pregnancy is linked with a wide range of possible harmful effects to the fetus—among them decreased birth weight, spontaneous abortion, and physical and mental birth defects. The leading cause of death for youths aged 15–24 years is traffic accidents; half of these are alcohol-related.

Drug abuse also is a major public health problem in the United States today, although the 1982 National Survey on Drug Abuse (*4*) indicates that use of illicit drugs may be on the decline. The decline is discussed in a subsequent section. In this survey, nevertheless, it was found that 33 percent of the American population 12 years or older has used marijuana, hallucinogens, cocaine, heroin, or a psychotherapeutic drug for nonmedical purposes sometime in their lives. Drug abuse leads to numerous social and health problems. For instance, excessive use of depressants can result in both physical and psychological dependence. Heroin use can lead to premature death, family disruption, and crime committed to maintain the user's habit. Misusers of sedatives and hallucinogens often need emergency medical services. Acute marijuana intoxication interferes with many aspects of mental functioning and has serious effects on perception and skills needed in driving and other complex tasks involving motor skills or quick judgment.

Trends in Drugs, Alcohol Use

Researchers who conducted the National Survey on Drug Abuse and the High School Senior Survey (*5*) reported decreases in 1982 in the percentage of Americans using marijuana, tranquilizers, hallucinogens (notably PCP), and methaqualone. The rapid increase in cocaine use which occurred among young Americans during the late 1970s also leveled off in 1982, although cocaine use by persons 26 and older showed a slight increase.

In the high school survey researchers noted a decline for the fourth successive year in daily use of marijuana by seniors. The rate dropped from 10.7 percent in 1978 to 6.3 percent in 1982. The decline in marijuana use apparently is associated with high

school seniors' growing concern about health consequences of regular marijuana use and with less peer acceptance of the drug's use. Alcohol use by high school seniors remained level in 1982; 93 percent of the seniors had used alcohol at some time and 70 percent within the last month. Daily alcohol use by seniors also remained steady in 1982, at approximately 6 percent, roughly the level it has held since the survey began in 1975.

1990 Objectives

Goals for the reduction of drug and alcohol misuse are spelled out in objectives aimed at improving the health status of the population, reducing risk factors, increasing awareness of the health hazards, and improving the means of surveillance and protection. Indications of progress and plans for further activities related to 13 of the objectives are reported in this paper.

The Assistant Secretary of Health and Human Services assigned lead agency responsibility for meeting these prevention targets to the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA).

The mission of ADAMHA is to administer Federal programs that increase knowledge and develop effective strategies for treating and preventing health problems associated with the use and misuse of alcohol and drugs, as well as preventing mental illness and promoting mental health. ADAMHA comprises the National Institute on Alcohol Abuse and Alcoholism (NIAAA), National Institute on Drug Abuse (NIDA), and National Institute on Mental Health (NIMH).

Before the enactment of the Omnibus Budget Reconciliation Act of 1981 that created the alcohol, drug abuse, and mental health services block grants, most prevention activities of NIAAA and NIDA were supported with community assistance funds. These funds were used for the development and evaluation of prevention models, State and local capacity building of personnel, technical assistance to State and local community prevention programs, and the dissemination of information. These funds have been turned over to the States in accordance with the legislation, and at least 20 percent of the block grant funds in each State are to be used to support drug and alcohol prevention services. State prevention coordinators now provide leadership in these activities.

Subsequent to the passage of the block grant legislation, ADAMHA has continued to pursue the 1990 disease prevention-health promotion objectives, principally by expanding research on new preventive interventions and determining what interventions work; by broadening its collaboration with other Federal agencies, including the Centers for Disease Control and the National Highway Traffic Safety Administration; and by fulfilling the Federal responsibility to disseminate information on research, provide technical assistance, and mobilize community resources in cooperation with the private sector.

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In addition to their agencies' individual projects, NIAAA and NIDA staffs work collaboratively to meet many of the specific objectives. Some activities, such as conducting media information campaigns, clearly have an impact on more than one objective.

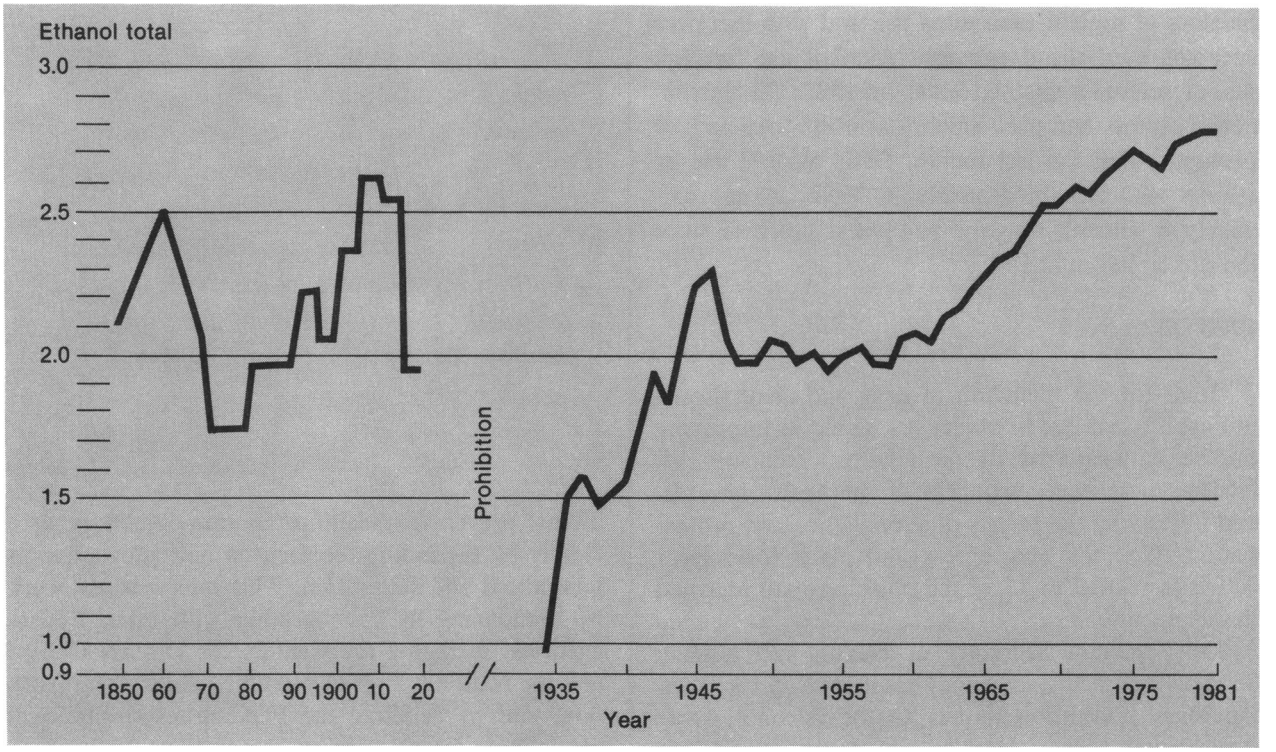
Alcohol Misuse

The National Institute on Alcohol Abuse and Alcoholism was established in 1971 in recognition that alcoholism in our society is both a debilitating disease and a major public health problem in need of significant Federal response and leadership. The 1990 objectives concerning alcohol are in response to problems which have been identified as needing continuing priority attention. They provide a means of measuring both what has been accomplished and assessing what is yet to be done.

1. By 1990, per capita consumption of alcohol should not exceed current levels (1978 baseline: 2.82 gallons of absolute alcohol consumed annually per person aged 14 years and older).

Since Prohibition, apparent consumption of alcohol has shown a constant upward trend, although the rate of increase has been slowing (fig. 1). Com-

Figure 1. Trends in apparent consumption of ethanol in gallons per person



SOURCE: National Institute on Alcohol Abuse and Alcoholism data based on information from the Distilled Spirits Council of the United States, U.S. Department of Commerce, U.S. Brewers' Association, and the Wine Institute.

plex factors affect the consumption level—pricing and taxation structures, legal and regulatory policies affecting availability, and community attitudes (*6*).

NIAAA supports research on the public policy aspects of prevention. Newly implemented State and local changes in policy and legislation provide a valuable opportunity to examine the impact of these changes on consumption and alcohol-related problems. To achieve the 1990 objective of no increase in the per capita consumption level, both the public and private sectors will be required to intensify those preventive measures that are proving most effective. These might include higher prices caused by increased taxation, raising the minimum drinking age, and school-community programs to increase resistance among youth to negative peer pressures.

2. By 1990, the proportion of adolescents 12 to 17 years old who abstain from using alcohol or other drugs should not fall below the 1977 level (1977 baseline: 68.8 percent for alcohol; for other drugs, ranging from 83.9 percent for marijuana to 99.5 percent for heroin).

One of NIAAA's major efforts to address alcohol use by youth has been the Alcohol Public Education Campaign. This 1981–82 campaign was developed in cooperation with State and local government agencies, national voluntary organizations and their local affiliates, and many other groups interested in preventing alcohol abuse. It encompassed radio and TV public service announcements, brochures for general and professional audiences, sample editorials, scripts for radio announcers and talk shows, and special materials for use by participating organizations. Dissemination and broadcast of the campaign's TV spots has been especially effective because local organizations make direct contact with stations to deliver media materials and urge their use. As a result, more than $3.5 million in free air time was provided in the first 6 months of the campaign, far exceeding the cost for developing the materials.

The problems of adolescent drinking received additional attention in October 1982 when the Secretary of Health and Human Services announced a new departmental initiative on teenage alcohol abuse. In an early 1983 series of 10 regional conferences for school administrators and teachers, PTAs, and program personnel from alcoholism and drug abuse prevention and treatment agencies, the participants examined a variety of model programs in alcohol education. A second series of regional conferences

is planned for late 1983 to help communities assess their needs and take steps to begin work on comprehensive treatment services for youth. A primary theme of these meetings will be to build upon existing community and national resources to make meaningful strides in combating the tragedy of teenage alcohol abuse.

In addition, the Secretary's Conference for Youth on Teenage Drinking and Driving was held in March 1983 in Chevy Chase, Md. The conference, attended by more than 30 students and 54 school superintendents from every State in the nation, facilitated an exchange of information on successful "don't drink and drive" programs run by students within their schools, in order to foster more of these programs around the country (*7*).

3. By 1990, the proportion of women of childbearing age aware of the risks associated with pregnancy and drinking, in particular, the Fetal Alcohol Syndrome, should be greater than 90 percent (1979 baseline: 73 percent).

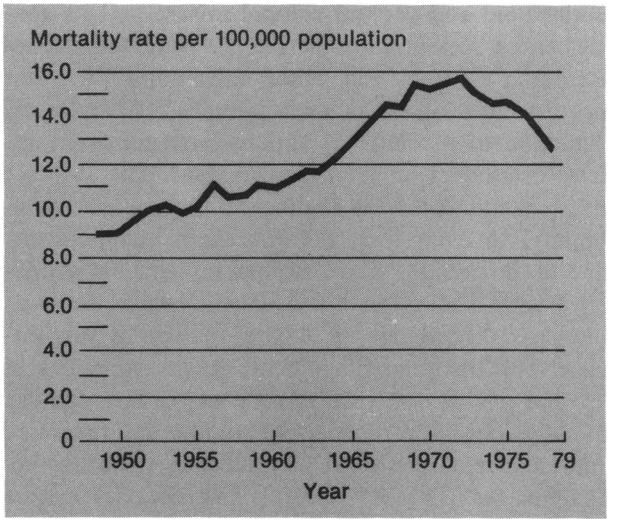
A common pattern of birth defects and mental retardation among some children of alcoholic women has raised serious concern among scientists and health authorities in recent years and prompted intensive research into the relationship between the abnormalities and malformations labeled Fetal Alcohol Syndrome (FAS) and the consumption of alcoholic beverages by pregnant women. The evidence confirms an association between maternal drinking during pregnancy and an increased risk of poor pregnancy outcome. A Surgeon General's Advisory on Alcohol and Pregnancy was issued in July 1981 (*8*).

4. By 1990, the incidence of infants born with the Fetal Alcohol Syndrome should be reduced by 25 percent (1977 baseline: 1 per 2,000 births or 1,650 cases per year).

In monitoring progress toward this objective, it is likely that the reported incidence of FAS will increase as the professional community becomes more aware of the syndrome. However, it is anticipated that this increased professional awareness will in turn result in increased awareness by women of childbearing age of the risks from alcohol consumption during pregnancy, and ultimately lead to a real reduction in alcohol-related birth defects. NIAAA is now collaborating in the maternal and child health programs of the Health Resources and Services Administration to increase awareness of the risks of alcohol use during pregnancy.

'The Institute . . . is initiating basic research to explore the genetic or ethnological basis of the particularly high incidence of cirrhosis among urban blacks ages 24–35 years, as well as among American Indians, particularly Indian women.'

Figure 2. Trends in alcohol - related cirrhosis mortality rates



SOURCE: Reference 19.

5. By 1990, the cirrhosis mortality rate should be reduced to 12 per 100,000 (1978 baseline: 13.8).

Overall alcohol-related mortality has remained relatively constant in recent years, although cirrhosis mortality rates have declined each year after reaching a peak in 1973 (fig. 2). The mechanisms by which alcohol injures the liver are not well understood, but they are probably less direct than those that produce injury to the respiratory and digestive tracts. The Institute is supporting studies of the effects of heavy and chronic alcohol use in a primate colony and is initiating basic research to explore the genetic or ethnological basis of the particularly high incidence of cirrhosis among urban blacks ages 24–35 years, as well as among American Indians, particularly Indian women.

6. By 1990, fatalities from motor vehicle accidents involving drivers with blood alcohol levels of .10 percent or more should be reduced to less than 9.5 per 100,000 population per year (1977 baseline: 11.5).

Very high priority has been placed on reducing fatalities involving drunk drivers. The Institute is working closely with the Presidential Commission on Drunk Driving and the National Highway Traffic Safety Administration to increase national awareness of the risks associated with driving while inebriated. These joint efforts include regional hearings on the problem and local action models, development of print and broadcast media materials, and cooperative efforts with State and local governments, as well as other public and private organizations.

Research and knowledge dissemination. The NIAAA invests a majority of its resources on research to understand and prevent alcohol misuse and its consequences. Research projects at the National Alcohol Research Centers and other extramural programs have made progress in such areas as genetics, early detection of alcoholism, and understanding the effects of alcohol on fetal development. The Institute has communicated the findings to the research community, to caregivers, policy-makers and planners, and to the millions who have had no personal experience with alcoholism but who will benefit from an increased knowledge of the true nature of this disease. The Institute will increase its investigations of alcohol-related birth defects by expanding primate models, long-term prospective studies, and increased surveillance of alcohol-related morbidity through the Centers for Disease Control's international system of monitoring.

Current Institute priorities in prevention research include the following projects: the development and evaluation of approaches to populations with recognized risks, particularly women of childbearing age, teenagers and youths, and black males; the development and evaluation of intervention strategies suitable for occupational settings; and assessments of nationally occurring experiments, such as legislative, economic, judicial, and policy changes that affect alcohol consumption and alcohol-related deaths and injuries.

7. By 1990, the proportion of adults who are aware of the added risk of head and neck cancers for people with excessive alcohol consumption should exceed 75 percent (baseline data unavailable).

NIAAA is also taking steps to increase awareness of head and neck cancers from excessive alcohol use. Epidemiologic and clinical observations in the past century have shown that alcohol consumption clearly is involved in the etiology of cancer. Although the mechanism of causation is unkown, heavy alcohol consumption has been related to an increased risk of cancer at various sites, particularly malignancies of the mouth, pharynx, larynx, and esophagus. The Third National Cancer Survey (9) of 7,518 cancer cases, published in 1977, revealed that a significant positive association exists between alcohol intake and cancers of the oral cavity and larynx and a less striking association between alcohol and cancers of the esophagus, stomach, colon, liver, breast, and thyroid gland. The NIAAA has a cooperative agreement with the National Cancer Institute and will continue to encourage and support research on alcohol-related cancers. Findings will be disseminated among caregivers and others.

8. By 1990, the proportion of major firms providing a substance abuse prevention and referral program should be greater than 70 percent (1976 baseline: 50 percent of the Fortune 500 firms).

Expansion of employee assistance programs. Cooperation between the Federal Government and private industry has stimulated the expansion of services to problem drinkers and drug abusers via employee assistance programs (EAPs). Employee assistance programs, now available to approximately 12 percent of the total workforce, are on the increase. Surveys of the Fortune 500 firms indicate that 57 percent of those large companies have EAPs, up from 24 percent in 1972. This significant increase, and indications that the trend will continue, make it apparent that the objective to increase the proportion of major companies offering such programs to 70 percent is achievable.

NIAAA, which has lead responsibility for EAP programming in ADAMHA, provides resources for materials and technical assistance to develop EAPs, while industry has provided necessary staff, space, and encouragement. The primary impetus has been the clear financial benefit to industry through decreased absenteeism and increased productivity. In future months, NIAAA will strengthen its emphasis on designing strategies and models for EAPs that cover employees in smaller firms.

Drug Misuse

9. By 1990, other drug-related mortality should be reduced to 2 per 100,000 per year (1978 baseline: 2.8).

There are compelling reasons for a special sense of urgency by the National Institute on Drug Abuse

in meeting the 1990 prevention goals. The United States is believed to have the highest level of drug use by youth of any developed nation in the world. Among national health concerns drug abuse is unique in two respects: one is the rapidity of changes in drug abuse patterns during the last two decades. Before 1960 an estimated 1 to 2 percent of youth had tried an illicit drug; by 1983 more than two-thirds had. The second concern is the illicit profit-making network that actively promotes drug use.

The major target of NIDA's prevention program is youth. The age of onset of illicit drug use has been steadily declining in the United States. Several studies have suggested that the younger a child starts drug use, the more likely he or she is to become a heavy user and to develop serious negative health consequences (*10*). It is important, therefore, to interrupt the progression at an early age, that is, to prevent or delay serious drug use in as large a proportion of youngsters as possible.

Four of the 1990 drug prevention objectives reflect the focus on youth.

2. By 1990, the proportion of adolescents 12 to 17 years old who abstain from using alcohol or other drugs should not fall below the 1977 level (1977 baseline: 68.8 percent for alcohol; for other drugs, ranging from 83.9 percent for marijuana to 99.5 percent for heroin).

10. By 1990, the proportion of young adults 18 to 25 years old reporting frequent use of other drugs should not exceed 1977 levels (1977 baseline: less than 1 percent for drugs other than marijuana and 18.7 percent for marijuana).

11. By 1990, the proportion of adolescents 12 to 17 years old reporting frequent use of other drugs should not exceed 1977 levels (1977) baseline: less than 1 percent for drugs other than marijuana and 8.7 percent for marijuana).

12. By 1990, 80 percent of high school seniors should state that they perceive great risk associated with frequent regular cigarette smoking, use of marijuana and barbiturates, or alcohol intoxication (1979 baseline data: 63 percent for smoking cigarettes, 42 percent for marijuana, 72 percent for barbiturates, and 35 percent for alcohol).

NIDA uses two principal sources of information to monitor the incidence and prevalence of drug use by young people. The High School Senior Survey, conducted by the University of Michigan's Institute for Social Research, has studied a large sample of high school seniors each year since 1975. The 1982 sample included more than 17,700 seniors in public and private schools throughout the country. The National Survey on Drug Abuse, conducted by the George Washington University, is a biennial assessment funded by NIDA since 1971. The 1982 data are based on 7,224 interviews, including 2,165 youths between 12 and 17 years old.

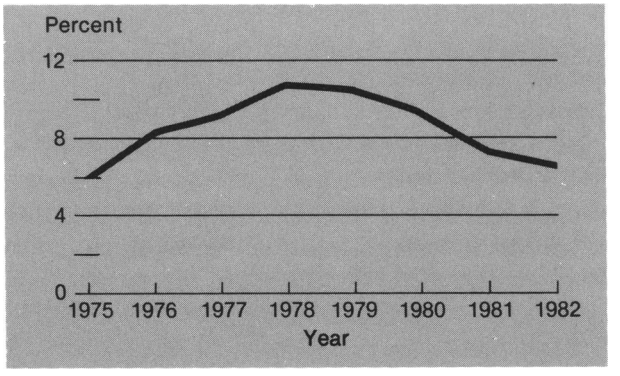
These national data bases are useful because of their continuity, consistency with other local surveys, and the trends they reveal. They no doubt yield conservative incidence and prevalence estimates of drug use and abuse, since they do not survey a subpopulation of youth that probably exhibits the highest levels of drug use—those who have left home and school.

The most important findings on patterns of youthful drug use from the two surveys in 1982 follow:

- About two out of every three seniors (65 percent) report illicit drug use at some time in their lives.
- About 4 in every 10 seniors (39 percent) report using an illicit drug other than marijuana at some time.
- Thirty-one percent of high school seniors report that their initial experiences with marijuana occurred in the seventh, eighth, and ninth grades, that is, presumably between the ages of 12 and 14.

NIDA, together with other health, welfare, and educational organizations throughout the country, has actively promulgated drug abuse education. The effect is dramatically illustrated by some of the findings in the latest High School Senior Survey. The steady rise in daily marijuana use observed since 1975 peaked in 1978, at nearly 11 percent of high school seniors. Daily use has since dropped dramatically to 6.3 percent of seniors in 1982 (fig. 3). This decrease is accompanied by two corresponding indi-

Figure 3. Trends in 30-day prevalence of daily use of marijuana by high school seniors



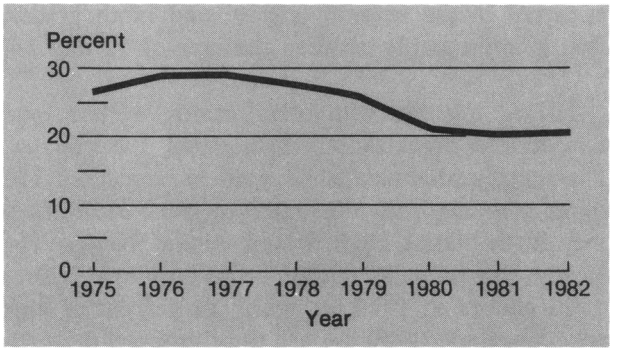
SOURCE: Reference 5.

cators. Daily cigarette smoking dropped from a 1977 high of 28.8 percent to 21.1 percent in 1982, though the lower proportion reflects a slight upturn from 20.3 percent in 1981 (fig. 4). These declines have been accompanied by a corresponding increase in perceived harmfulness of marijuana (fig. 5), as well as an increased perception of peer and parent disapproval.

From 1975 through 1978, there had been a decline in the harmfulness perceived from all levels of marijuana use but, beginning in 1979, there was an increase in this perception, and it has continued at a steady pace. The most impressive increase has occurred for regular marijuana use; the proportion perceiving it as involving great risk jumped from 35 percent in 1978 to 60 percent in 1982. This dramatic change occurred during a period when substantial scientific and media attention was devoted to the potential dangers of heavy marijuana use.

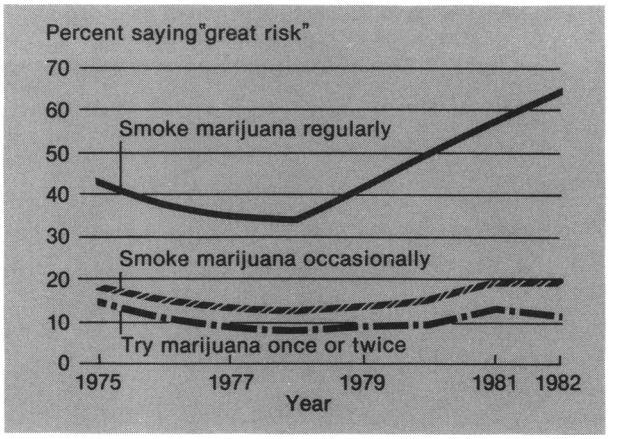
Stimulants (amphetamines) were the only drug of abuse to show considerable increase in the proportion of users since 1980. This observation is of considerable importance, since stimulants are the most widely used class of illicit drugs other than marijuana. The high school survey again reveals a direct correlation between perceived risk and usage. The proportion of seniors perceiving harm in the use of amphetamines decreased from 35 to 25 percent between 1975 and 1982 (fig. 6), while those using amphetamines within the last 30 days increased from 8.5 percent to 14 percent.

Figure 4. Trends in 30-day prevalence of daily use of cigarettes by high school seniors



SOURCE: Reference 5.

Figure 5. Trends in high school seniors' perception of the harmfulness of marijuana



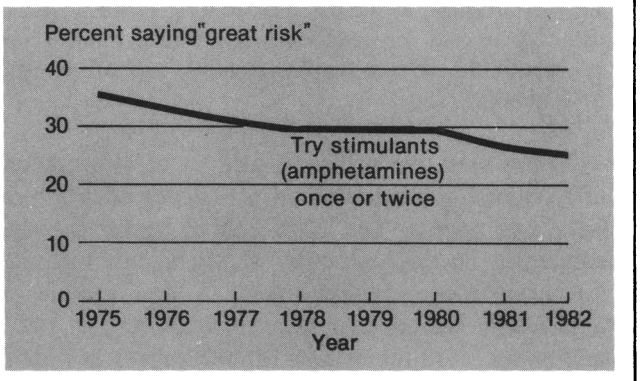
SOURCE: Reference 5.

Cigarette smoking trends (fig. 4) are especially encouraging, since cigarettes are one of the so-called gateway drugs, harmful in themselves but also serving as the entry point to the use of illicit drugs. The gateway theory does not say that the use of these drugs is an inevitable stepping stone to illicit drug use. With few exceptions, however, those involved with illicit drugs have worked their way toward them after early use of alcohol or cigarettes.

Over the past 5 years, NIDA has evaluated a number of strategies to prevent drug abuse by teenagers. Research has been directed at systematically determining the effects of specific strategies to prevent, delay, and reduce the onset of regular drug use. These approaches can be subdivided into generic programs (for example, affective education and alternative activities) and into programs specifically structured to supply information and directed educational experiences to reduce drug usage. Although generic projects and many drug information programs have shown little specific effect in deterring drug use, there is evidence from several university research studies that "saying no" strategies, developed initially in tobacco smoking prevention, have promise for preventing the onset of regular use of tobacco, alcohol, and other drugs by adolescents.

The body of prevention research literature on tobacco smoking applies social learning and social

Figure 6. Trends in high school seniors' perception of the harmfulness of stimulants (amphetamines)



SOURCE: Reference 5.

control theories to prevent cigarette smoking by adolescents. By getting them to examine what motivates their initial use of tobacco, students are trained to resist subtle or explicit pressures to smoke that emanate from their peers or the media. Positive peer role models help to persuade youngsters that saying "no" to cigarettes is a socially acceptable and desirable thing to do.

In some studies (*11–13*) these positive peer pressure techniques have resulted in a 50 percent reduction in the onset of regular tobacco smoking of study groups compared to control groups, with demonstrable effects lasting for several years. Moreover, the data suggest that these approaches, even when focused primarily on cigarette smoking, also result in reduced use of alcohol and marijuana. Accordingly, there is reason to believe that programs structured on the same principles, but aimed more deliberately at alcohol, marijuana, and other illicit drugs, would have considerable potential in persuading adolescents not to use psychoactive substances. NIDA is currently concentrating much of its prevention research on developing these approaches further and on determining their efficacy and cost effectiveness.

Another major advance in recent years has been the rapid growth of parent action groups that seek to reduce youthful drug abuse. These groups work to create a climate in which the entire community is actively concerned about drug use by youth and formulates broad prevention policies. More than 3,000 organized groups are now working to promote environments in which youth get "don't use drugs" messages from parents, schools, the media, and the community at large. Parent groups have lobbied for legislation (for example, drug paraphernalia laws), set guidelines for their children's drug and alcohol behavior, and assumed oversight roles in drug abuse policies and programs in their communities and schools.

NIDA has published a variety of materials for parent groups and has provided technical assistance. In 1982, the Institute convened regional conferences and family collaboration workshops to support the movement and increase coordination with the States. Workshop agendas were drawn up by planning teams that included representatives from NIDA, single State drug abuse agencies, State prevention coordinators within the regions, and local parent groups. Workshop participants explored how best to identify and use community resources and develop collaborative relationships and networking mechanisms. NIDA also has promoted mobilization of community resources throughout the nation via the Channel One projects. Channel One supports local activities in which public and private sectors work together to initiate alternative programs for youth who assume leadership responsibility and participate in projects to benefit their communities. More than 150 projects involving more than 30 private sector businesses are in operation in 46 States and Territories.

NIDA's own broad public information and education program is directed at increasing the public's awareness of drug abuse and its adverse health consequences. Along with producing factual and credible reports about the health consequences of drugs, NIDA actively endeavors to stimulate the media to become conscious of the images that they transmit and to attempt to deglamorize the use of drugs.

In its research functions, NIDA sponsors and conducts basic and applied research on drugs of abuse, collects and analyses epidemiologic data on the nature and extent of drug abuse, and monitors emerging trends in drug use. The Institute is currently pursuing the following research priorities:

- Development and evaluation of strategies for preventing drug abuse by youth, with particular priority given to studies that use skill-building techniques to teach resistance to peer pressure and to studies involving the family.
- Commonalities in the addictive process, including basic studies of the possible common neural mechanisms underlying many compulsive disorders.
- Vulnerability factors, including studies of the role of endogenous substances and their receptors and other risk factors in the predisposition to and progression of addictive disorders, and studies of the possible role of genetic factors in drug abusing behavior.
- Exploring the potential of demographic patterns as predictors of drug abuse trends.

Other Federal Agencies

ADAMHA staff work with several other agencies in pursuing the alcohol and drug abuse objectives.

National Highway Traffic Safety Administration. Drunk driving continues to be a serious public health and safety problem; millions of people have been injured and 250,000 have died in motor vehicle accidents involving alcohol in the past 10 years. Eliminating drunk driving will require increased effort by all levels of government and society. The ultimate responsibility for eliminating it must be ac-

cepted at the local level, where attitudes toward drinking and driving are established and where the consequencese of drunk driving are most acutely felt.

Accordingly, the National Highway Traffic Safety Administration (NHTSA) has developed a six-element local level program that provides technical assistance and training to State and local governments in the design and implementation of comprehensive laws against drunk driving. NHTSA is also implementing a recently enacted incentive grants program to give funds to States that have tightened laws against drunk driving. Technical assistance and evaluation activities have been funded to disseminate what is known about model demonstrations against drunk driving. Public information materials have been developed for State and local groups to use to prevent drunk driving. In addition, NHTSA trains public officials such as judges and police officers to deal with drunk drivers.

Centers for Disease Control. Several activities of the Centers for Disease Control (CDC) contribute to the achievement of the 1990 objectives to reduce misuse of alcohol and drugs. Under the preventive health and health services block grant to States, CDC sponsors the design and evaluation of school health curriculums, health risk appraisal instruments, and risk factor prevalence surveys. The Primary Grades Health Curriculum Project (*14*) and the School Health Curriculum Project (*15*), which are used in more than 2,000 schools nationwide, incorporate learning activities pertinent to alcohol and drug use at each grade level. In the Teenage Health Teaching Modules Project, a comprehensive curriculum for use in junior and senior high schools is being planned and field tested. Private groups such as the American Lung Association and the American School Health Association have participated in the development of these curriculums and in encouraging their use.

Since July 1981, CDC and Health and Welfare Canada have collaborated on research related to health risk appraisals. CDC is updating the methodology for calculating risk indicators, and this new methodology will be shared with the Canadians, who have considerable experience in dealing with alcohol as a risk factor. Alcohol use also is among the questions in the CDC risk factor prevalence surveys being conducted by State health departments. In collaboration with U.S. schools of public health, CDC has provided technical assistance to States to help them design the surveys and interpret and apply the results. CDC also has sought to expand the epidemiology of alcohol-related problems through collaboration with Harvard University Medical School on a study to identify genetic factors related to alcoholism. Under a Memorandum of Understanding between ADAMHA and CDC, studies will be initiated on the relationship between genetic factors and alcoholism, the role of alcohol use in injuries, and the effect of alcohol use on selected infectious diseases. The results of these studies will be applied to CDC prevention programs in health promotion, injury control, chronic disease control, and infectious disease prevention.

Current Surveys and Future Needs for Data

13. By 1990, a comprehensive data capability should be established to monitor and evaluate the status and impact of misuse of alcohol and drugs.

Survey mechanisms to monitor progress toward each of the 1990 objectives on alcohol and drug abuse are in place or are being planned. In addition to the High School Senior Survey and National Survey of Drug Abuse, other sources of data are necessary in monitoring progress. Data on the Fetal Alcohol Syndrome are available from a variety of sources, including NIAAA reports, published studies (*16–18*), and the Vital Statistics of the United States series, published by the National Center for Health Statistics. Progress on reducing cirrhosis mortality (*19*) can also be tracked in Vital Statistics.

Drug-related mortality data are reported by the NIDA Drug Abuse Warning Network, which collects information from 750 hospital emergency rooms and 85 medical examiners' offices in 26 major Standard Metropolitan Statistical Areas. Mortality data will also be gathered via a supplement to the National Center for Health Statistics survey. The Department of Transportation makes data available on drunk driving fatalities through its annual publication, the Fatal Accident Reporting System (*20*).

Baseline data concerning awareness of the risks of excessive alcohol use during pregnancy are available, but monitoring of progress will require a supplement to the 1985 collection activities planned for the National Center for Health Statistics. Baseline data on awareness of the risk of head and neck cancers as a consequence of alcoholism are currently not available, and a special supplement to NCHS surveys during 1985 is also required to establish a data base. A followup supplement is planned for 1990.

The most recent employee assistance program data (*21*) were obtained through a National Insti-

tute on Alcohol Abuse and Alcoholism study in 1979. Updating and monitoring these data will require additional joint efforts with the private sector.

Data on per capita alcohol consumption is available from tax revenues, but the proportion of young adults who are frequent drug users will be monitored through collaborative efforts of NIAAA, NIDA, and NCHS.

In addition to gathering data for various objectives, the final objective on alcohol and drugs misuse suggests establishment of a more comprehensive data capability. Building such a comprehensive data capacity will be accomplished through new cooperative efforts between the Institutes and the National Institute for Occupational Safety and Health, National Center for Health Statistics, Department of Transportation, and Centers for Disease Control. The combined statistics-gathering capacity of these agencies will make it feasible to collect additional data on health status, alcohol- and drug-related nonfatal motor vehicle accidents, interpersonal aggression and violence, accidental injuries, and industrial accidents.

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