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11767 SENATE HEALTH EDUCATION & SOCIAL SERVICES

Table 22. Obstacles to Obtaining Treatment On the Outside in the Last Year (Percent of Weighted Sample)

"I am going to read a list of reasons some people give for not getting/for why they have not tried to get help or treatment for drug or alcohol problems. I will read each item on the list, and you tell me if it was a reason you did not get treatment/ additional treatment/try to get help during the last 12 months."	Obstacle to Obtaining Additional or More Intensive Treatment (n = 54)	Obstacle to Obtaining Treatment That Respondent Would Have Sought (n =30)	Obstacles to Obtaining Treatment Even Though Didn't Try to Obtain It (n=16)
The nearest available services were too far away	41	31	21
Your insurance company would not pay for the type of treatment that you needed (wanted)/additional or more intensive treatment	40	23	23
(IF FEMALE) The facility, program, or provider was not sensitive to the special needs of women.	42 (n=6)	11 (n=4))	40 (n=2)
You did not meet the admission requirements of the program or treatment	39	17	NA
You did not want anyone to know you had a substance abuse problem	35	30	17
The type of treatment that you wanted is not available in [STATE NAME]	20	9	10
(IF DISABLED) The facility was not accessible to you because you had a handicap or disability	22 (n=10)	12 (n=10)	0 (n=3)
The facility, program, or provider did not have counselors or doctors from your ethnic group or who spoke your language	15	4	10
Your counselor or doctor did not think that you needed the additional or more intensive treatment	16	NA	NA
You were on the waiting list, but you had	43	17	NA

Table 22. Obstacles to Obtaining Treatment On the Outside in the Last Year (Percent of Weighted Sample)

"I am going to read a list of reasons some people give for not getting/for why they have not tried to get help or treatment for drug or alcohol problems. I will read each item on the list, and you tell me if it was a reason you did not get treatment/ additional treatment/try to get help during the last 12 months."	Obstacle to Obtaining Additional or More Intensive Treatment (n = 54)	Obstacle to Obtaining Treatment That Respondent Would Have Sought (n =30)	Obstacles to Obtaining Treatment Even Though Didn't Try to Obtain It (n=16)
changed your mind by the time you were called			
The facilities or programs did not have the special services you needed, such as medical or mental health care, housing, employment counseling, or child care.	NA	22	16

SUMMARY AND CONCLUSIONS

Between July 11 and October 13, 2000, the study completed 208 interviews with Alaskan adult residents who entered state correctional facilities during the past year. The inmates had at least one month during the last year when they were not incarcerated. The female respondents (n=40) came from the Hiland Mountain Correctional Center, while the 168 male respondents came from the Palmer Correctional Center's minimum security unit (n=85) and the Wildwood Correctional Center (n=83). The study drew a 100% sample of the three prison units and interviewed all eligible inmates who were willing to participate. The study achieved a 77% response rate, with a range from 74% to 84% at the three prisons. Respondents understood and responded fully to the study's questions. The interviews averaged one hour in length. Measures built into the study design indicated that the data were high in quality.

The interviewed prison inmates were primarily males (81% actual, 91% weighted), aged 35 years, employed (72%) when not incarcerated, and had completed a median of 11 years of education. Thirty-nine percent of the subjects were Alaska Natives, 31% white, and 16% were African Americans. The age and race/ethnicity statistics closely matched statistics for all inmates in the state's prison facilities, except that the female inmates at Hiland Mountain were less likely to be Alaska Natives and less likely to be employed just prior to incarceration. One in five inmates were homeless during the year before imprisonment. On average (unweighted), the respondents had been on the outside for five and a half (5.6) months during the last year. The median prisoner in all three prisons had been incarcerated four times.

The Alaskan prisoners had extensive histories of alcohol use and nonmedical use of controlled drugs. All of the prisoners reported using alcohol at some point in their lives, and 95% reported using a controlled drug for nonmedical purposes. The comparable rate of lifetime controlled drug use in a national sample of state prisoners was 83%. The most widely used drugs by the Alaskan inmates were marijuana (93%) and cocaine (76%). Nearly three out of four (74%) of the Alaskan inmates admitted illegal drug use in the year before they were incarcerated, and more than half (61%) of the respondents used an illegal drug in the month before entering jail. Forty percent used cocaine in the past year, and over a quarter (27%) reported cocaine use in the 30 days prior to incarceration. These findings are consistent with or higher than the findings of other published prisoner studies, and the willingness of every study participant to admit extensive illegal drug use suggests that underreporting was not an overwhelming problem. Nevertheless, it would be reasonable to assume that the study's estimates are conservative.

Histories of substance abuse disorders were nearly universal among Alaska's inmates. Nine out of ten prisoners met formal DSM-IV diagnostic criteria for a substance use disorder at some time in their lives. These statistics are based on the same criteria required to justify admission to treatment services across the nation. Moreover, the study's questionnaire used DIS questions that are the most fully validated in the field. Although it comes as no surprise that many prisoners have drug and alcohol problems, the State now knows the full extent of these problems. The lifetime prevalence rate of substance use disorders among Alaska prisoners' was higher than the rates reported in any previously published studies that included standardized diagnostic measurements of prisoner samples (Table 1).

Four out of five Alaskan inmates have had an alcohol use disorder at some time in their lives, and two out of five had a cocaine use disorder. The males at Palmer Minimum and Wildwood were more likely to have had lifetime alcohol use disorders, while the females at Hiland Mt. were more likely to have had a lifetime cocaine use disorder. Males were also more likely than females to have abused hallucinogens at some time. With the exception of hallucinogens and sedatives, most of these substance use disorders were dependence rather than abuse.

Most (79%) of the Alaskan newly incarcerated inmates were actively abusing or dependent on a substance in the last year and therefore needed treatment provided during the past 12 months when they are not incarcerated. The rate of current substance use disorders was among the highest reported rates in the published literature (Table 1). Sixty-seven percent of the Alaskan prisoners had an alcohol use disorder when not in prison during the past year, and 43% had a drug use disorder in the last year when on the outside. Eighteen of the subjects who lacked a current substance use disorder had received treatment in the last year because either they were in remission or were borderline cases that may have been missed by the assessment instrument.

By comparison with the study's diagnostic findings, only 25% of female prisoners and 10% of male prisoners on December 31, 1999, had been sentenced for a drug-related offense

(Department of Correction 1999). Clearly, focusing on that statistic leads one to underestimate the level of treatment need among prisoners.

There was no difference between males and females in the rate with which they needed treatment during the last year, but Alaska Natives were more likely to have needed treatment in the past year (88%) than were Whites and African Americans (76% and 74% respectively). Nearly all (97%) of the Native Alaskan prisoners had lifetime histories of substance use disorders.

Many of the prisoners had received treatment for substance use disorders in the past when not incarcerated. Seventy-nine percent had received some form of substance abuse treatment (specialty, self help or nonspecialty) during their lives. While the largest percentage (43%) of these prisoners had received treatment once or twice in the past, 26% of this group had received treatment three or more times. In most cases (63% of the total sample), the prisoners had received specialty treatment as well as self help or nonspecialty treatment for their alcohol or drug problems. During the past year, 53% of the prisoners received treatment for substance use disorder in the months before they entered prison. There was no difference between the prison samples in this regard.

A substantial proportion of these subjects had unmet need for treatment services prior to incarceration. Of the Alaskan prisoners who had a lifetime substance use disorder, 18% never received treatment of any kind. Of the subjects who had a substance use disorder in the last year, 43% did not receive substance abuse treatment of any kind in the last year when they were on the outside. Outreach and expanded treatment availability to prisoners in need is an attractive intervention strategy.

There was also evidence of unmet need and demand for treatment in the prisoner sample that needed it. Of the subjects who received treatment in the last year, nearly half (49%) said that they would have wanted longer, more intensive, or additional services than they received if the services had been available.

The interviewers asked the 69 subjects who needed treatment in the last year but had not obtained treatment if they would have sought treatment if it had been available. Thirty-seven percent of the subjects responded affirmatively. Half of them said that they had taken concrete steps in an effort to obtain care. In most cases, they called a program, asked knowledgeable people about the availability of care, or obtained a referral. Some were on waiting lists for treatment. If that percentage of all prisoners in the state needed and wanted treatment but did not receive it, there would have been 293 prisoners in the last year who represented unmet demand for treatment.

The interview asked subjects who qualified for diagnostic questions but did not receive treatment or who wanted additional treatment what explained their fail to seek or obtain desired treatment. The most common reason was the absence of insurance or a way to pay for treatment. The prisoners were also concerned about red tape and hassles during the admissions process. A number of prisoners mentioned that the treatment programs were full, that the respondent lacked transportation, or that the programs were too far away.

Implications

The results showed that the prisoners had extensive histories of substance abuse and high levels of treatment need. The vast majority of inmates had problems with alcohol or drugs. Many had received needed treatment, but some of these seriously ill substance abusers are apparently falling through the cracks in the system. Of those who needed but did not receive treatment, more than a third said that they would have sought it if it had been available or had sought it without success. Of those who did receive treatment in the past year, half said that they would have sought more treatment if it had been available. Thus, the treatment needs of Alaska's prisoner-to-be population are great, many have received treatment, but many would utilize additional care if it is made available. These findings can be used to justify expansion of services in Alaska.

The study showed that failing to estimate the treatment needs of state residents who were in custody would result in underestimation of the overall state need for treatment services, although the actual number was small when compared to the total state population. While the rate of need among prisoners is probably greater than any group besides clients in treatment, the number of recently incarcerated prisoners at any point in time is not very large. In Alaska, the estimated number was 610. Part of the explanation is that on any day many of persons who were incarcerated during a year have been discharged. As a result, their treatment needs are part of the estimate obtained from the household survey of the general population or in estimates of the needs of homeless people, people in households without telephones, and persons who have died of diseases related to their substance use disorders. Despite their relatively small size, this population is at extremely high risk of substance abuse, medical complications, and committing crimes as a result of their continued dependence on alcohol and drugs.

The study confirmed the growing realization that substance abuse treatment should be a central feature of the rehabilitation of today's prisoners. The prevalence of substance use disorders has been steadily increasing over the last decade, and now we know that it is nearly a universal condition. Recent publications suggest that the correctional system's budget for treatment has increased little over the same period (Alaska Justice Statistical Analysis Unit and Justice Center 2000c). Many inmates who failed to obtain treatment on the outside have obtained it in prison. Addiction to alcohol and controlled drugs is a chronic condition, and most of these prisoners will soon be released. It would therefore be logical for the State to consider the potential value of undertaking an expansion of treatment services to meet the needs of all who require and want help.

APPENDIX A. POPULATION WEIGHTING OF THE ALASKA PRISON STUDY

This appendix provides further details of the creation of weights used by the study to project the sample results to the total population of prisoners in in-state institutions. This weighting adjusted the age, gender, and race distributions of the sample to that of the eligible population residing in in-state correctional institutions (excluding Alaskan prisoners in out-of-state correctional institutions, in Community Residential Centers, and in special offsite programs). Readers should bear in mind that the study did not sample from the total target population, and therefore generalizing from the sample to the total eligible in-state prison inmate population must be made on the basis of assumption empirical similarity rather than statistical inference. The purpose of the weighting is to remove observed differences due to these demographic characteristics (age, gender, and race), but the weighting would have no direct effect on any differences due to other factors unrelated to these demographic characteristics. Also, the weighting does not address differences between the in-state prisoners and the out-of-state prisoners or prisoners in community residential centers that are not part of the target population.

Target Population

The first step in creating weights is to define the population. The primary purpose of the Alaskan family of studies was to estimate the total number of Alaskan residents in the State's nonprison population who needed treatment during the past year. The telephone survey interviewed a sample of household residents about their need for treatment at any time during the trailing 12 months from the day of the interview. Of course, some of the people in the household population had been in prison for part of that year, and their treatment needs are subsumed by the results of the telephone survey. The prisoner study sought to interview persons who were not reachable by the telephone survey because they were incarcerated at the time of the survey. The Alaska Prisoner Study therefore sampled current inmates who were residents of the general Alaskan population and who may have needed treatment when they were on the outside for a month or more during the previous 12 months. Consequently, the eligible population of current inmates had to be Alaskan residents and outside of prison for at least one month during the year before they were interviewed.

In order to estimate the size of this "target population," the authors contacted the Alaska Department of Corrections (DOC) to obtain a count of the number prisoners at one point in time who had been sentenced during the past year. According to the Alaska Department of Corrections' *1999 Offender Profile*, there were 2,529 inmates in state correctional institutions on December 31, 1999. Many of these prisoners were in custody prior to sentencing, and therefore were incarcerated for more than one year. After removing those cases, the remaining total number of recently incarcerated prisoners in Alaska was 678. Prisoners who entered DOC custody in the first month of the fiscal year, and who were still in prison at the end of the year would not meet the criterion that they were in the general population for a month or more in the

year. In order to eliminate those cases, the authors assumed a flat rate of intake during the year, and estimated that 11/12ths of the 678 prisoners or 622 prisoners satisfied the criterion for length of time not incarcerated. Finally, it was necessary to decrease that number by removing inmates who were not Alaskan residents. Because the DOC count did not identify whether the prisoners were Alaskan residents, the authors used results from its screening of prisoners in order to recruit the sample for the present study. Six of the 315 screened inmates (1.9%) in the three prisons reported that they were not residents. The authors applied this rate of non-residents to the remaining DOC count of 622 prisoners. Thus, an estimated 12 nonresidents were eliminated from the 622. The final result was an estimate that the population size of the study-eligible prisoners was 610.

Representativeness of the Individual Prison Samples and the Total Interviewed Sample

The Alaska Prisoner Study sought to interview every eligible prisoner at each of the three participating correctional centers, Hiland Mountain, Palmer Minimum Security, and Wildwood. Because the authors thought that it would have to interview all eligible inmates in order to achieve its goal of two hundred interviews, all eligible prisoners were invited to participate. As a result, the study samples need no adjustment for unequal probabilities of selection that might make the study samples unrepresentative of all eligible prisoners at each site.

However, the total sampled population had a disproportionate number of female prisoners. As shown in Table A1, only nine percent (8.9% to be precise) of the Alaskan inmates were female. Nine percent of 200 would be just 18 cases, too small for a reliable analysis of differences between the treatment needs of male and female prisoners. In order to have enough females in the sample, the authors decided to oversample the females. Consequently, when describing the results for the sampled inmates, the authors have reweighted the results to reduce the weight of females to nine percent.

Projection to the Total Population

Although the study could not generalize its results from the sampled subject to the total inmate population on the basis of statistical inference, the authors felt that it was useful to consider what the study's results would imply if the sample were assumed to be representative of the total population. The Alaska Prison Study could not use a sampling plan that randomly selected correctional centers. Most (81%) of the women in Alaska prisons are incarcerated at the Hiland Mountain Correctional Center. Hiland Mountain had to be selected or the study goals would not be met. Some sites were not accessible. For example, the study could not interview prisoners at the Point McKenzie Rehabilitation Project because cellular phone transmission was not possible from that location. Budget constraints precluded conducting interviews at small prisons in remote locations. A key remote location was the Arizona Detention Center to which the State had sent 865 inmates (25% of the total prisoner population) as of December 31, 1999. According to the Alaska Department of Corrections' *1999 Offender Profile*, that group of

prisoners had a somewhat higher percentage of charges related to substance abuse than the prisoners housed in in-state institutions.

Despite a non-random selection of prisons, the authors assumed that the study's results would be relevant to the entire system in the absence of any other studies of this sort. If the results were used to plan for the entire system, then the authors should weight the study's sample results so that they would be as comparable as possible to the total population of eligible prisoners. The study interviewed a large proportion of all the eligible prisoners, i.e., 55% of the population of eligible female prisoners and 31% of the male prisoners. According to the 1999 *Offender Profile* (page 53), the sampled prisons spanned the range with regard to the percentage of prisoners with substance abuse charges. Highland Mountain ranked highest out of 15 in-state prisons with regard to the percent with alcohol related charges and 2nd with regard to controlled-drug related charges. Wildwood ranked 4th on alcohol and 8th on controlled drugs, while Palmer Minimum ranked 12th on alcohol and 5th on controlled drugs. The demographic characteristics of the sampled prisoners did not differ markedly from the demographic characteristics of the total population. Demographic information was not available on the subgroup of study-eligible prisoners. We compared the age and race distributions of the study sample to the distribution of all prisoners (Table A1). The age and race characteristics of the study sample were not significantly different from those of all prisoners. However, to make the study sample as representative as possible, the authors employed population weights that would project the study sample to the size of the total study-eligible population of recently incarcerated prisoners with an age and race distribution that matched the total population. Information was not available on the joint distribution of race and age. The weighting procedure used the marginal frequencies to generate separate weights for age and race. The extent to which the weighted study sample characteristics differed from those of all prisoners was a function of the extent to which the age distributions differed across race groups.

Table A1. Race and Age, by Gender for Survey Sample and Inmate Population on 12/31/99

Race	Females			Males		
	Survey Sample (N = 40)	Inmate Population (N = 225)	Weighted Survey Sample (N = 73)	Survey Sample (N = 168)	Inmate Population (N = 2304)	Weighted Survey Sample (N = 537)
Native Alaskans	33	28	30	42	39	39
White	42	53	53	35	44	44
Black	18	14	13	15	12	12
Other	7	5	4	8	5	5
Total	100%	100%	100%	100%	100%	100%
	Chi-square = 1.82, NS			Chi-square = 7.34, NS		
Age						
18 to 24	15	19	18	18	17	17
25 to 34	37	29	29	31	32	32
35 to 44	35	37	36	36	32	32
Over 44	13	15	17	15	19	19
Total	100%	100%	100%	100%	100%	100%
	Chi-square = 1.20, NS			Chi-square = 2.49, NS		

NS= not significant; Inmate data from the 1999 Offender Profile, Alaska Department of Corrections 1999)

Representativeness

For each gender, the race and age distributions of the survey sample and the in-state inmate population in Alaskan prisons did not differ significantly. For both males and females, there were slightly fewer white inmates and more Native Alaskan inmates in the survey sample

than in the total population. The age distribution of the survey sample also did not differ significantly from the age distribution of the total inmate population.

The weight assigned to each study respondent was the product of the population weight, the race weight, and the age weight. For each gender, the population weight was the ratio of the estimated total population to the number of prisoners who completed valid interviews. The age weight was the ratio of the percent of the total inmates in the respondent's age group to the percent of the study sample in that age group. A similar computation generated the race weight. The characteristics of the weighted study sample matched those of the total population (Table 1).

The differences between the weighted sample and the total population were not more than two percent in any of the 16 cells defined by gender, race, and age group.

SPSS Commands for Alaska Prisons Study Sample Weighting

This section of Appendix A describes the SPSS commands that generated the weights.

*** Weights for AK Prison study

RECODE

d1age

(1 thru 24=1) (25 thru 34=2) (35 thru 44=3) (45 thru Highest=4) INTO

agecoded .

VARIABLE LABELS agecoded 'Age recoded to intervals'.

EXECUTE .

*** Female weights

COMPUTE popwate = 1.825 .

COMPUTE Racewate = 1 .

IF (d1race1 = 1) Racewate = 1.2518 .

IF (d1race1 = 2) Racewate = 0.78286 .

IF (d1race1 = 5) Racewate = 0.87077 .

IF (d1race1 = 9) Racewate = 0.62667 .

COMPUTE Agewate = 1.0 .

IF (agecoded = 1) Agewate = 1.2333 .

IF (agecoded = 2) Agewate = 0.7787 .

IF (agecoded = 3) Agewate = 1.0657 .
IF (agecoded = 4) Agewate = 1.25 .

VARIABLE LABELS popwate 'Weight to size of population ' .
VARIABLE LABELS racewate 'Weight to race distribution ' .
VARIABLE LABELS agewate 'Weight to age distribution ' .

COMPUTE Totwate = popwate * racewate * agewate .
VARIABLE LABELS totwate 'Product of all weights ' .

EXECUTE .

*** Male weights

COMPUTE popwate = 3.19643 .

COMPUTE Racewate = 1 .
IF (dlrace1 = 1) Racewate = 1.168 .
IF (dlrace1 = 2) Racewate = 0.7485 .
IF (dlrace1 = 5) Racewate = 0.94647 .
IF (dlrace1 = 3) Racewate = 1.0 .
IF (dlrace1 = 4) Racewate = 1.0 .
IF (dlrace1 = 6) Racewate = 1.0 .
IF (dlrace1 = 7) Racewate = 1.0 .
IF (dlrace1 = 9) Racewate = 1.0 .

COMPUTE Agewate = 1.0 .
IF (agecoded = 1) Agewate = 0.94413 .
IF (agecoded = 2) Agewate = 1.05161 .
IF (agecoded = 3) Agewate = 0.87603 .
IF (agecoded = 4) Agewate = 1.25503 .
VARIABLE LABELS popwate 'Weight to size of population ' .
VARIABLE LABELS racewate 'Weight to race distribution ' .
VARIABLE LABELS agewate 'Weight to age distribution ' .

COMPUTE Totwate = popwate * racewate * agewate .
VARIABLE LABELS totwate 'Product of all weights ' .

EXECUTE .

APPENDIX B. CHANGES IN THE CORE QUESTIONNAIRE AND ADMINISTRATION GUIDE

This appendix describes the changes made when updating the core needs assessment questionnaire of the National Technical Center for the Alaska Prisoner Study.

Demographic Questions (Modules B and J). Because the subject matter of this study is sensitive, it is important to have a series of warm-up questions in the beginning of the interview. Consequently, we split the demographic questions into two modules. The first demographic module consists of non-threatening questions, and we lengthened this module by moving some demographic items up from the NTC instrument's second demographic section at the interview's end. Age is generally asked as part of the eligibility and respondent selection process; if not, we put an age question at the end of the introduction rather than in the demographic module in order to avoid the possibility of asking about age twice or including an item that would almost always be skipped. The gender question in the earlier questionnaire was simplified by asking the respondent to report his or her gender. Only if the person refused were the interviewers instructed to attempt to guess the respondent's gender from the respondent's voice. We updated the race and ethnicity questions to comply with the new Year 2000 Census categories and OMB requirements on this point. The instrument determines whether the respondent is of Hispanic or Latino origin first, and then asks about which Hispanic group, with categories for the most common Hispanic populations in the US. The race item follows and allows respondents to report as many as five race responses. We simplified the questions on employment to eliminate unnecessary questions regarding what unemployed persons were doing, and we moved the questions to this module from its place in the second demographic module of the earlier instrument. Our revisions of the response categories in the schooling questions now provide information on the respondent's year of education rather than broader categories. The remaining questions in this module on marital status and military duty, were moved up from the second part of the demographic module to this one, and we modified the items slightly.

The second part of the demographic module, which covers the more sensitive demographic topics, comes near the end of the interview after the diagnostic and treatment modules. We added questions to this module to obtain more precise information on pregnancy and child care for the measurement of treatment service mix and unmet demand for ancillary services. The interviewer asks women of childbearing age (under 55) about pregnancy, prenatal referrals, and prenatal care. This information would be relevant if the subject had needed treatment in the past year. If the woman was pregnant in the last year, the interviewer asks whether she received prenatal care and whether she had any serious consequences that required hospitalization. These questions will be relevant to this study and are asked only if a respondent had a substance use disorder, received treatment in the last year, or had unmet demand for treatment in the last year.

The questions on criminal activities and arrests relate to measurement of treatment service mix and efforts to determine whether the survey can accurately estimate substance-

related arrest statistics. For the inmate study, we also added questions about incarceration and having received treatment in prison during the past year. Persons who needed treatment in the last year and who received it in prison would be relevant for estimating the amount of unmet need and demand in prison.

Several questions were added to this module regarding suicide and being a danger to others. These items measure the severity of the need for treatment as well as the level of care that a person in need should receive. The sensitive nature of the items dictated their placement near the end of the questionnaire.

Finally, we revised the question about the respondent's family income. This item was the most frequently refused question in the previous version of the questionnaire, and so we revised it to minimize the number of refusals. Measuring income is usually essential to the study because it helps determine the respondent's eligibility for state-funded substance abuse treatment services. Typically, a respondent's family income and the number of people dependent on that income determine whether the State would pay for any of the respondent's treatment, and if so, what proportion of the costs that the State will pay. The presence of a pregnant person also bears on eligibility for public funding in some states.

Health Status and Insurance Questions (Module B): At the end of the first demographic module we have created a new submodule regarding health. Although general health is not a topic of interest for this questionnaire, there are several substance-abuse-related health issues on which we needed information. The questions assess general physical and psychological health status, disabilities, as well as health problems or injuries that are often found in people with alcohol or drug problems. Some of these items were scattered throughout the prior NTC questionnaire, but most are new to this instrument. To bolster the health context of the interview, we decided to gather the health-related questions together to create this health section and to place it early in the questionnaire.

The first questions in this module address general physical and emotional health. Taken from the Behavioral Risk Factor Surveillance Survey (BRFSS) telephone questionnaire (CDC 1997), the general physical and psychological health questions can be compared to BRFSS results to assess the validity of the current survey, but the items' primary role is to assess health status as part of our measure of treatment service mix. Poor physical or psychiatric health is a primary justification for needing a higher level of care, such as detoxification in a hospital or residential facility. We also ask whether the person was hospitalized in the last year, obtained psychiatric treatment, or required psychiatric medication as a way of measuring the seriousness of any health or psychiatric problems that might have warranted hospitalization if the respondent had sought treatment for substance abuse.

In the health section, we covered measuring disability. This information is relevant for assessing unmet treatment services needs due to disability and for ensuring that the disabled have equal access to treatment services. Because we collect these data by interview, we did not include a question on functional hearing impairment. For the purposes of the needs assessment study, we were interested in measuring disabilities besides substance abuse.

In order to ease respondents into describing their substance-abuse-related problems and

to help identify cases where substance abuse problems were likely but not reported, we included a series of questions about health problems associated with substance abuse. Covered in these questions are tuberculosis, syphilis, gastritis, cirrhosis, endocarditis, hepatitis, cancers of the lip, throat or stomach, falls, burns, automobile accidents and adverse reactions. The link between these health problems and substance abuse is not mentioned in the question, however. Included in this module are several items on high blood pressure and head injuries that were also needed for the treatment service mix scales.

The health section ends with questions, taken from the BRFSS questionnaire, about the source of payment for the respondent's health insurance coverage. We included these items to determine how any substance abuse treatment the respondent might have received or needed in the last year would have been financed. In particular, the questions determine whether the insurance coverage was paid privately, by Medicare, Medicaid, Indian Health Service, the military, by some other payer. We also asked whether there were any gaps in coverage, whether the coverage included substance abuse services, and whether any health care services received in the past year were paid for by the State. Eligibility for state payment of substance abuse services is determined in the second demographic section rather than here. By moving the insurance coverage questions to the health module, we substantially eliminated many of the insurance questions that were included in the treatment module of the previous questionnaire.

Recent and Ever Use of Tobacco, Alcohol, and Other Drugs (Adult Modules C and E): To the previous of other substance use in adults. Also, beginning with questions on tobacco use helps our strategy of leading the respondents gradually into questions on alcohol and then illicit drugs. The adult tobacco items come from the BRFSS's telephone survey questionnaire, and therefore they have the added value of being useful for validating the current telephone survey questionnaire. Because every state administers these BRFSS tobacco items in a telephone survey that runs continuously every year, states can compare the data of these item with the BRFSS data to obtain an indication of whether the current survey has obtained valid information. The questions determine whether the person had ever been a smoker (defined as having had 100 or more cigarettes in his or her life), whether the person is a current smoker, and if so how many cigarettes were smoked in the past 30 days.

Because tobacco use is a relatively more important issue for adolescent than adult substance abuse services, the module on tobacco is more extensive in the adolescent division of the instrument. The questions on lifetime use and use in the last 30 days are the BRFSS questionnaire (CDC 1997).

The items in this module measuring alcohol use and then the items measuring nonmedical use of controlled drugs ask a limited number of questions about the extent of use in the last year, the year before, and lifetime. These questions include assessments of ever use, any use in the last year, and the quantity and frequency of use in the last year. This module also contains several treatment service mix items designed to identify persons who had recent episodes of binge drinking and extremely high levels of intoxication during the past year. Subjects who reported binge drinking and very high levels of consumption per drinking episode would be candidates for hospital detoxification if they needed treatment. We also ask a series of

questions about lifetime substance use, including being hospitalized, being told to cut down or seek treatment by a health professional, having a "drinking/drug problem" or feeling dependent on substances, or having received alcohol or drug treatment. Although these last items are standard epidemiological questions, they play several different roles in this instrument—one of which we describe next.

Qualifying Criteria: One purpose of the alcohol and drug use items is to identify respondents who should not be asked questions in the remaining modules regarding substance use disorders and substance abuse treatment. It makes little sense to ask people who have not had a drink in the last year or two whether they needed treatment for alcohol abuse in the last year. Similarly, some respondents have had only a few drinks in their lives. It is inefficient for a survey to spend its resources questioning these subjects about symptoms of lifetime alcohol abuse or dependence. Because only about 10% of the general population is likely to have a current substance use disorder, investigators can realize substantial gains in survey efficiency by confining the diagnostic and treatment modules to only those respondents with a high likelihood of having a current or lifetime substance use disorder. If subjects do not qualify for the diagnostic and treatment-related questions, they skip most of the questionnaire. Using this strategy in the previous questionnaire, we found that the average length of this interview in a general household population was less than 10 minutes, even though the instrument was long.

In this instrument, a primary basis for deciding whether respondents should "qualify" for the diagnostic and treatment modules is the amount of substance use in the last year⁶. Most respondents report some drinking in the last year, but relatively few report enough drinking to warrant their being asked the diagnostic, treatment need, and patient placement questions.

Using data on the quantity and frequency of drinking in the last year from the NIAAA National Longitudinal Alcohol Epidemiology Survey (NLAES), we developed objective "qualifying criteria" for the alcohol diagnostic module in the previous version of our instrument (McAuliffe et al. 1995, pp. 6-9 to 6-13). The goal of the qualifying criteria was to skip the diagnostic and treatment modules with as many respondents as possible who were highly unlikely to have a current diagnosis. At the same time, we required that the qualifying criteria identify at least 90% of the persons who had a current alcohol dependence diagnosis. This analysis revealed that the levels of use reported by people who meet the criteria for alcohol

⁶We did not use the term "screening" in this context because we used that term when discussing whether subjects would be eligible to participate in the survey.

dependence is surprisingly small in many cases, and women with diagnoses of alcohol dependence report lower levels of drinking than do men with alcohol dependence diagnoses. In order to insure that our qualifying criteria were as efficient for both sexes, we used different cutoffs for men and women.. We have used the same alcohol items and cutoffs in the present survey instrument.

It is noteworthy that these empirically-derived cutoffs for women were so low that a few women who meet these qualifying criteria will object to being asked questions which seem to imply that the respondents may have had an alcohol use disorder. We have given much discussion and thought to how best to respond to these complaints. Raising the cutoff would result in missing a larger number of women who have alcohol dependence problems. The instrument would therefore underestimate women's dependence rate and need for services. Using the cutoffs at all implies some underestimation of the dependence rate. Keeping the cutoffs low would result in a slightly longer average length of the interview, possibly missing a few nonusers, and taking more time with the few complaining respondents. We concluded that it would be better for the survey's results, if not for the survey contractor, to instruct interviewers about how to manage these complaints than to increase the cutoffs.

One goal of this instrument is to estimate the lifetime prevalence of substance use disorders. That goal is important for epidemiological purposes and for assessing the validity results by comparing them with results from other studies. Lifetime events are most commonly measured in the same way, and research suggests that lifetime use is more accurately reported than recent use. In order to enhance the reliability of our qualifying criteria and to make sure that we did not miss respondents who had an alcohol or drug use disorder in the past but had been abstinent or using very small amounts in the last year (e.g., due to being in treatment or prison), we also included a series of qualifying criteria that were based on consequences of lifetime use. A respondent qualified for the alcohol diagnostic module if he or she reported having ever: 1) gone on binges of several days or more, 2) been hospitalized or visited an emergency room due to alcohol, 3) been warned by a doctor to cut down on drinking, 4) had a drinking problem or been addicted to alcohol, or 5) received treatment for alcoholism. Although explained here, these "qualifying" items are contained in Module D of the adult questionnaire.

We also used alcohol qualifying criteria from the DIS-IV that were based on the frequency of lifetime use. In order to ensure that the epidemiological results of the present survey could be compared to the results of epidemiological surveys using the DIS-IV, we added several qualifying questions that are employed for the same purpose in the DIS-IV. The DIS-IV's alcohol qualifying items focus on a respondent's ever having at least six drinks, having at least one drink a month during the year of heaviest drinking, and averaging more than five drinks a week during the weeks when the respondent drank in his or her year of heaviest drinking. Each respondent who meets either the DIS-IV or NCRPG qualifying criteria is asked the diagnostic modules, while all other respondents are skipped to the few remaining questions at the end of the instrument. Because the levels of use in the DIS-IV qualifying criteria are so low, it seems unlikely that we would screen out any subjects who had a lifetime diagnosis.

For the drug use qualifying criteria, we used the criteria that we had used in the previous

NTC instrument. Any respondent who reported using marijuana more than five times in the year prior to incarceration was asked the diagnostic questions for marijuana, and any respondent reporting using any of the other illicit drugs at least once in that year was asked the diagnostic questions for each such drug. These low levels of use appeared to be required as the qualifying standards because household respondents tend to underreport illicit drug use in the interview, and the authors wished to use the same qualifying criteria for the nonhousehold populations so that the data would be comparable.

A respondent also qualified for the diagnostic and treatment modules if he or she had ever been in a hospital or emergency room as a result of drug use, reported ever having a drug problem or addiction, ever having received treatment for drug abuse, and ever having used drugs by injection. These items are contained in Module E of the adult questionnaire. Finally, we also used the DIS-IV's criterion of anyone who reported ever using a drug six or more times in their life. The DIS-IV criterion was apparently derived from research by Robins and Murphy (1967) that found that anyone who used heroin six times or more eventually became addicted to the drug. As with alcohol, this rate of use is so low that it is unlikely that anyone with adverse effects of drug use would fail to meet these criteria if the respondent was forthcoming about her/his use. The authors believe that this combination of last-year and lifetime criteria based on the amount of use and adverse consequences of use offer the best chance of identifying all persons who are likely to have had a substance use disorder diagnosis at some time in their lives.

Diagnostic Questions (Adult Modules D and F): Each diagnostic section contains a series of questions designed to assess whether the respondent would meet the criteria developed by the American Psychiatric Association's (1994) fourth edition of its Diagnostic and Statistical Manual (DSM-IV) for diagnosis of a substance use disorder, including abuse and dependence. The diagnostic questions are derived, with modifications for telephone administration, from the latest versions of the Diagnostic Interview Schedule (DIS-IV) (Robins et al. 1998) for the adults and the Diagnostic Interview Schedule for Children (Shaffer et al. 1998).

Changes from DSM-III-R to DSM-IV: There were several major changes made in the DSM criteria in the transition from DSM-III-R to DSM-IV. The measurement of abuse was substantially modified in the DSM-IV by increasing the number of specific symptoms from two to four. One of the new items concerned failure to live up to role obligations, and the other concerned legal problems. The number of criteria for dependence were reduced from nine to seven by eliminating overlap with abuse and combining two items regarding withdrawal into one with two subparts. Other significant changes involved the "clustering" of abuse and dependence symptoms and the criteria for remission from dependence.

Substance Abuse: According to the DSM-IV (American Psychiatric Association 1994, page 182-183), substance abuse does not include tolerance, dependence or a pattern of compulsive use, although abuse does involve continued use despite negative consequences. Abuse includes "only the harmful consequences of repeated use." The criteria of recurrent and

significant consequences related to repeated use include: "repeated failure to fulfill major role obligations, repeated use in situations in which it is physically hazardous, multiple legal problems, and recurrent social and interpersonal problems." Like the DSM-III-R, the DSM-IV's substance abuse criteria do not include "course specifiers," such as partial or full remission. A diagnosis of abuse is superceded by a diagnosis of substance dependence. That is, a person can have an abuse diagnosis only if her or she has never met the criteria for substance dependence for that substance.

The specific DSM-IV criteria for a substance abuse diagnosis are:

1. Recurrent substance use resulting in failure to fulfill major role obligations at work, school, or home.
2. Recurrent substance use in situations in which it is physically hazardous.
3. Recurrent substance-related legal problems.
4. Continued substance use despite having persistent or recurrent social or interpersonal problems caused by or exacerbated by the effects of the substance (e.g., fights).

To receive a diagnosis of substance abuse, the person must meet one or more of the four criteria *within a 12-month period*. This requirement is called, the "clustering" criterion for an abuse diagnosis. It is worth noting that the DSM-IV says nothing about the logical possibility of a person who reported multiple symptoms of abuse in a year but none of the symptoms occurred repeatedly within a 12-month period. By the current criteria, that person does not have a diagnosis of abuse.

Substance Dependence: To receive a diagnosis of substance dependence according to DSM-IV criteria, a person has to manifest three or more of the following criteria, "occurring at any time in the same 12-month period:

1. Tolerance development
2. Withdrawal symptoms or using the substance to relieve or avoid withdrawal
3. Taking more of substance or for longer than intended
4. Persistent desire or unsuccessful efforts to quit or cut down
5. A great deal of time spent obtaining, using or getting over substance effects
6. Giving up important social, occupational or recreational activities because of use
7. Continued use despite having a persistent or recurrent physical or psychological problem caused by or exacerbated by the substance

Symptom Clustering: It is the requirement that the symptoms must occur within a 12-month period that is referred to as symptom "clustering" for dependence, which is somewhat different than it was for abuse. Clustering is probably the most important new feature of the DSM-IV criteria for abuse and dependence. Whereas the DSM-III-R criteria required only that

one ever experienced at least three out of nine symptoms to have a lifetime diagnosis of dependence, the DSM-IV criteria require that at least three of seven symptoms occur within a 12-month period. DSM-IV criteria for abuse require that at least one of the abuse symptoms occur more than once in a 12-month period. These clustering requirements will probably reduce the number of people who meet criteria for a substance use disorder.

To measure this clustering of symptoms, the DIS-IV and our instrument have added new items at the end of the relevant sections of the modules to determine whether the symptoms occurred within a 12-month period. Although clustering is conceptually simple, it is cognitively demanding for survey respondents, especially when the questionnaire is attempting to determine annual prevalence--how many respondents were dependent on a substance at any time during the past year. In this process of measuring symptom clustering, the respondent who has reported three or more symptoms of dependence must be reminded of all of the seven possible symptoms that he or she has reported, and then asked if three or more of these symptoms occurred within a 12-month period. Because the symptoms are complex ideas with several alternative manifestations and are not everyday concepts (e.g., narrowing of the behavioral repertoire), referring to these symptoms when asking the subjects about whether they occurred in a time period that is not anchored by specific date is challenging. A similar, although somewhat less taxing process is required for measuring the clustering of abuse symptoms. Although abuse involves only one "symptom" at a time, many of the abuse "symptoms" are composed of several sub-symptoms. For example, failure to fulfill role obligations involves family, job, and school responsibilities.

The techniques employed by the DIS and DISC to measure these complex concepts are not entirely satisfactory for telephone administration. Developed for in-person administration, the DIS uses a checklist of brief descriptions of the symptoms as a visual cue to help respondents keep track of the number of symptoms and sub-symptoms that they have experienced. For telephone administration, we have created "read-back tables" for the interviewers that use brief descriptions of the symptoms. For example, at the end of the questions on dependence, the interviewer "reminds" the respondent of the number of symptoms that he or she has reported and repeats the read-back of the dependence symptoms. Then the interviewer asks whether there was ever a time when three or more of those "problems" occurred within a 12-month period.

Dependence Course Specifiers: A person with a lifetime diagnosis of substance dependence may be actively dependent, in partial remission, or in full remission. The course specifiers for dependence in the DSM-III-R were revised in the DSM-IV. Whereas use of the substance was a key determinant of remission in the DSM-III-R, substance use is not part of the remission criteria in the DSM-IV. Also, the DSM-III-R used a six-month time frame for defining remission. A person had to be substance use or symptom free for at least six months to be in full remission. The DSM-IV changed the time frame and added new distinctions and requirements. Both partial and full remission now require at least a month free of all symptoms. DSM-IV added a new course specifier dimension, "early" and "sustained" remission. A person is in early remission if it has continued from one to eleven months. Once remission has continued for

twelve months or more, it is sustained remission. In the previous NTC instrument, we assumed that anyone who had active abuse or dependence or was in partial remission in the past year needed some form of treatment. In light of the new distinctions regarding remission in the DSM-IV, we have assumed that respondents who were actively abusing or dependent or in early remission in the last year, or partial remission were in need of treatment, whereas those in sustained full remission were not.

It is worth mentioning the rationale for including sustained partial and early full remission in the treatment-need group. Because a person in sustained partial remission can have as many as two symptoms of dependence, any number of symptoms of abuse, and was once dependent, we felt that these cases required some form of treatment (e.g., follow-up or self-help group participation). We felt that early full remission would call for aftercare, follow-up, or self-help group participation. While probably few managed care systems would provide treatment for people who were symptom free for six months or more, follow-up studies show that relapse is still sufficiently frequent to warrant low-cost forms of care.

Combined with the requirement of symptom clustering, these new DSM-IV course specifiers substantially increased the complexity of measuring the number of people who were in need of treatment in the past year. It is noteworthy, the authors of the DIS-IV and the DISC-IV made no attempt to measure partial remission at all, and they included only crude measures of sustained full remission. In the remainder of this section, we will describe changes in the DIS that have resulted from the changes in the DSM, and then we will describe unique aspects of our approach to measuring the DSM criteria, especially the course specifications, in a telephone survey of adults.

Changes in the DIS: Compared to the DIS-III-R, the DIS-IV included small wording changes in virtually every question, and there were several major structural changes dictated by the transition from the DSM-III-R to the DSM-IV. The current version of the DISC differed from previous versions even more than the DIS-IV differed from its previous versions. However, since the new version of the DISC is more like the adult DIS than were the previous versions of the DISC, we had less difficulty making one instrument combining the DIS and DISC than we would have if we had attempted doing so in the past.

However, the changes from the DSM-III-R to the DSM-IV turned out to be more complex than they first appeared, and they were difficult to measure. This difficulty is also apparent when comparing the DIS and DISC. The DIS-IV and the DISC-IV take somewhat different approaches to clustering and remission. For example, the DISC-IV focuses on measuring clustering of abuse symptoms in the last year, and does not attempt to obtain the information needed to determine whether the adolescent meets the clustering criterion for a lifetime diagnosis of substance abuse. Neither instrument attempted to measure partial remission, and measurement of full remission does not appear to be entirely satisfactory in either instrument.

The structure of the diagnostic questions follow the structure used in the DIS-IV. The interviewer asks all of the alcohol diagnostic questions first. Then, referring to all controlled drugs together, the interviewer asks whether the respondent ever experienced the first abuse

symptom as result of drug use. If the respondent answers *yes*, the interviewer repeats the question again for each drug for which the respondent has qualified. If the respondent answers *no*, the interviewer goes to the next abuse or dependence symptom, and he/she continues through all of the abuse and dependence symptoms. Once lifetime presence of the diagnostic symptoms is established, the DIS-IV asks about recent occurrence of the symptom. This same procedure was followed in older versions of the NTC questionnaire.

The DSM-IV diagnosis of abuse requires that the symptoms occur more than once in a 12-month period. In the DIS, respondents are asked whether they had ever experienced each of the symptoms. The questions are phrased in a fashion that explicitly or implicitly refers to the symptoms occurring recurrently. For example, "have you sometimes," "frequently," or "more than once [ever implied]." Those respondents who respond positively to any of these problems are asked, "Was there ever any year in your life when [the problem/one of the problems] from using alcohol occurred more than once." If so, the person meets the criteria for lifetime abuse if the person was never dependent. To determine whether the person currently meets the criteria for abuse due to any of the symptoms, the interviewer asks, "Did any of these problems occur several times in the last 12 months?"

Changes in the NTC Instruments: These changes from the DSM-III-R to the DSM-IV, additional changes from the DIS-III-R to the DIS-IV, and the differences between the DIS-IV and the DISC-IV required us to make significant changes in our adult telephone survey questionnaire as well. The differences between the DIS and the DISC diagnostic questions raised a fundamental dilemma from the outset. How could we follow instruments that differed substantially from one another while still producing an instrument that could be used in one survey and to compare adults with adolescents? While we recognized the need to modify some of the wording of the questions in the DIS in order to make them age-appropriate and more comprehensible for adolescents, the authors of the DISC made many changes that went far beyond those objectives. The rationale for other changes (e.g., the ordering of some related questions) was not obvious, and there was no documentation that we could obtain from the authors of the DISC that explained the many differences between the DISC and the DIS. While both instruments clearly sought to operationalize the DSM-IV, taking different approaches without strong justifications raises the possibility that the results of the two instruments will differ unnecessarily (Laton et al. 1984). Different results might be found, for example, with a person who was interviewed by the DISC-IV at 17 and a month later was interviewed with the DIS-IV because he or she had turned 18. In a survey of the entire population 12 and older, such differences are a concern, especially if the investigator or survey sponsor is interested in comparing adolescents and adults. Although in most cases we decided to adhere closely to the DISC and the DIS respectively in the adolescent and adult divisions in this version of our questionnaire, we made some changes as needed to maintain comparability. In some cases, we decided to follow one rather than the other because the one approach appeared to be superior, especially for telephone administration. Also, we occasionally found what we judged to be clear-cut errors in the DIS and DISC questions.

Measuring Substance Abuse: The DIS included a question about having a traffic accident in its questions regarding social and interpersonal problems stemming from alcohol use. We decided to move that question below the items on criterion #2 about intoxication in hazardous situations. We made this decision primarily because the question fit better conceptually in criterion #2, there was nothing comparable in the DIS's drug questions, there was nothing comparable in the adolescent questions, and we could not fashion a read back that could summarize the traffic question and the other questions in that set of items.

Measuring Clustering of Abuse Symptoms: One place in which our instrument differs substantially from both the DIS and the DISC concerns the clustering of the abuse symptoms. As we note earlier, the DIS asks its clustering question for all four symptoms of abuse at one time. The interviewer reads back a shortened version of the symptoms and asks, "Was there any year in your life when one of these problems from using alcohol occurred more than once." If so, the DIS asks a series of questions including one regarding whether "Any of these problems occurred several times in the last year." Although we liked the questions used for clustering, we felt that the read back could be confusing because the symptoms were multifaceted. The DISC, by contrast, asked a question about clustering immediately after each symptom, and only asked about several symptoms at once when several symptoms were experienced but no one symptom occurred more than once in a 12-month period. Because we felt that the DISC approach was cognitively less demanding and would work better in a telephone interview, we adapted its approach for both our adult and adolescent questions on abuse.

Another important difference between our instrument and the DIS and the DISC concerned the time period about which we asked respondents in the questions concerning clustering and remission. In our judgment, there is a key difference between clinical goals of the DSM criteria and their use in epidemiological and service research studies. The typical clinician seeks to determine the diagnosis of a person who is seeking treatment. The time referent is the day of the interview, and the twelve months lag employed in the instrument refers to the twelve months prior to the day of the interview. From an epidemiological perspective, counting the number of people who would have a diagnosis on the day of the interview would be a point-prevalence estimate. As we read the DIS and the DISC, we believe that their questions can only measure that type of prevalence estimate. Frequently, authors describe this estimate as a one-year prevalence, but we do not believe that the DIS and DISC obtain all the information needed for a one-year prevalence estimate of a disease that has clustering and remission-period features.

Because of the importance of this point, we will discuss it in some detail (also see McAuliffe et al. 1995). It is likely that during the past year there were individuals who would not have a diagnosis on the day that they were interviewed, but who would have had a diagnosis at some point during the previous year. For example, a person who was in sustained full remission might no longer have an active diagnosis when interviewed, but would have had an active diagnosis of dependence earlier in the year. Similar technical problems are present in estimating the prevalence of diseases, like cancer, that recur and which require a period free of symptoms before declaring that the disease has remitted. If a person is assumed to have a diagnosis until

five years have passed without any symptoms, that person should be counted in a one-year prevalence estimate. To obtain a one-year prevalence estimate, a researcher would have to ask about disease symptoms in the period covering up to the last six years. Consequently, epidemiological studies of one-year prevalence have a more complex measurement task than would a clinician who is attempting to determine whether a person has a diagnosis.

Health service studies, such as those estimating the need for treatment services in the last year, have a task similar to that of the epidemiologists. For example, a person who met the criteria for a diagnosis 11 months prior to the day of the interview would have needed treatment at that time, even if the person does not meet the diagnostic criteria on the day of the research interview. It is possible, for example, that the person may have had one symptom 11 months ago and two symptoms 11 months before that. The three symptoms occurred within a 12 month period, and therefore 11 months ago the person needed treatment, technically speaking. A person who was in partial remission eleven months before the interview was conducted would also have needed treatment (e.g., aftercare) during the first month of the past year. Thus, to estimate the need for treatment services for substance use disorders over the entire course of the last year and allow for the 12-month clustering requirement and the one-year lag required by the remission criteria, we had to measure the occurrence of symptoms in the past two years.

Thus the 12-month lag in achieving sustained full remission requires a 24-month period to conclude that no treatment was needed during any part of the previous 12 months. Clearly, the 12-month lag in the substance use diagnosis course specifiers complicates estimation of the need for treatment services in the past year.

In order to cope with this technical issue, we asked respondents who had a symptom of abuse several times in one year,

"When was the last time that this happened more than once in a 12-month period? Was it,

Entirely within the past two years?
More than two years ago?"

If the respondent agrees with the first response category, we are confident that the respondent had an active diagnosis at some time in the past year. In the most extreme case, the subject who had the symptom exactly two years ago would have needed treatment on the first day of the last year. Consequently, if the one year occurs within the last 24 months, the respondent needed treatment at some time in the last year.

Measuring Substance Dependence: At the end of the series of questions on dependence symptoms, the interviewer asks a respondent a series of questions designed to measure whether the person had a lifetime diagnosis and to determine the course specification.

The questionnaire follows a specific sequence of questions to assess the course specification. If the respondent reports three or more symptoms, the interviewer asks whether

there was ever a 12-month period in which at least three of those symptoms occurred. If the respondent answers no, he or she fails the clustering criterion and therefore has never had a dependence diagnosis according to DSM-IV criteria. Thus, the respondent never met the minimum requirements for needing treatment. If the respondent says yes, he or she meets the clustering criterion for a lifetime dependence diagnosis.

However, further questioning is needed to determine whether the person was actively dependent, in early or sustained partial remission, or in early or sustained full remission during the last year. Because a person may have more than one course specification in a year, we assume that he or she would have sought treatment when the disease was at its most severe during the period. That is, if the person is actively dependent at the beginning of the year and full remission for the rest of the current year, we assume that the treatment would have been needed when the person was actively dependent.

According to DSM-IV criteria, remission begins when the person has had at least one month that was entirely free of dependence *and* abuse symptoms outside of an institution and not counting chemotherapy such as methadone maintenance. Consequently, we ask a subject who clustered for alcohol or another drug, whether there has been a month free of all symptoms since the last time the person had three or more symptoms in one year. If not, the person is actively dependent, and no additional questions are needed. If yes, then we ask questions designed to determine whether the person is in partial or full remission.

Sustained full remission from dependence occurs when the respondent has had at least 12 months entirely free of all dependence and abuse symptoms. Until then, the person is in early full remission. If the person has had a reoccurrence of one or two symptoms, the person is in partial remission, which can also be either early or sustained depending on how long ago the person had a period entirely free of symptoms.

We determine whether the remission is "early" or "sustained" by a combination of when the symptom-free period began and when the symptoms last occurred. We first ask when the symptom-free period started. If it began during the current year, the person must have been actively dependent for part of the current year, and he/she receives that course specification. If the symptom-free period began in the year before last, then remission may be *early* full or partial remission, depending on whether any symptoms recurred and when that happened last. If the symptom-free period began more than two years ago, the person may have been in *sustained* full or partial remission, again depending on whether and when any symptoms last recurred.

For example if the person has not had any symptoms since the period with out symptoms began more than two years ago, then he or she is in sustained full remission. If the last symptom was in the year before last, the person is in early full remission. If there has been a recurrence of one or two symptoms and that happened most recently in the last year, then the person is in sustained partial remission as the year began. If the symptom-free period began in the year before last and some symptoms have occurred in the last year, the person is in early partial remission.

Substance Abuse Course Specifiers: Because there are no course specifiers for abuse

within the DSM-IV system, we were concerned that the DSM-IV criteria for abuse seemed incomplete. According to the DSM-IV, substance abuse is established when at least one of the abuse criteria has recurred in a 12-month period, and the person never met criteria for dependence. The symptoms include recurrent 1) substance use resulting in failure to fulfill major role obligations at work, school, or home; 2) substance use in situations in which it is physically hazardous; 3) substance-related legal problems; and 4) continued substance use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the substance. Consequently, if one of these symptoms occurred more than once in the last two years, the person who has never been dependent has an active substance abuse diagnosis. It follows that if none of these symptoms occurred in the last two years, then the person who previously had an abuse diagnosis is in remission, and he or she would not require treatment.

Secondary Prevention: We added several items designed to measure the need for secondary prevention services in the last year. Secondary prevention seeks to prevent a substance user (a heavy alcohol user or a user of controlled drugs) from becoming a person with a substance use disorder. We assumed that people who have not yet developed a full-blown substance use disorder, but who have developed a symptom of a substance use disorder would benefit from secondary prevention services. Consequently, we ask subjects who reported these symptoms when they were last experienced. If any abuse or dependence symptoms were experienced in the last year, but the person has not met criteria for a diagnosis of abuse or dependence, we assume that the person was in need of secondary prevention in the last year.

Treatment Questions: Met and Unmet Demand (Modules G, H, and I): Respondents who qualify for any substance use disorder diagnosis will then be asked a series of questions about treatment. In Module G, we ask respondents who have had any treatment about their treatment history and treatment utilization in the last year. We also ask about how these services were funded. An important modification in this section was to change the system of modalities of treatment to conform with the system employed in the most recent ASAM patient placement model. The number of detox modalities was expanded to include social setting detox and outpatient detox. Residential treatment was expanded to include therapeutic community treatment, chemical dependency programs, and "extended care" or "long-term care" treatments.

One major change to this module was to cover more non-specialty sources of treatment. The questionnaire now covers treatment by a psychological counselor, including psychiatrists, psychologists, and social workers. Family doctors and other nonspecialist physicians are a new category. We also ask about outreach workers, acupuncturists, general health advisors, and drunk-driving or court-appointed "treatment" classes.

The prisoner version of the questionnaire included questions about obtaining treatment in prison. The items asked whether the respondent had ever received treatment in prison, how many times, and whether the person had received treatment during the current incarceration.

In Module H, we ask respondents if they would have wanted additional treatment services in the past year had the services been readily available. If the respondents wanted

additional treatment, we asked them a series of questions to find out what additional services they would have wanted, what prevented them from getting these services, and how the services would have been paid for, especially if it would have been partly or wholly funded by the State.

In Module I, we ask respondents who needed treatment but did not receive any in the last year whether they would have wanted and sought services had the services been readily available. We also ask the respondent what steps if any they took to obtain treatment, and why they did not obtain the treatment that they wanted. We expanded the list of possible reasons for not getting desired services to include a broader range of factors. In the previous version of the questionnaire, we confined the list to factors that a planner could influence. In this version, we added reasons that could be addressed by clinical program modifications (e.g., adding outreach). We also ask the respondents what types of services they would have sought and how those services would have been paid for.

Treatment Mix Index (TMI) Questions: The treatment mix questions are located throughout the questionnaire. Although many of the treatment mix index questions are in the demographics and diagnostic sections, most are in the treatment modules. Many of the previous TMI items were revised for this version of the questionnaire, and many were added. One change was to expand the number of treatment modalities to match the new ASAM levels. In the first edition of their Patient Placement Criteria, the ASAM authors distinguished only four levels of care. In this version, the number of settings in which detoxification can take place was expanded from two (medically monitored residential facility and a medically managed hospital) to include in a doctor's office, a day treatment setting, and a residential social detox program. In the previous ASAM system, level II included partial hospitalization and intensive outpatient treatment. In this version, that level has been split into two sublevels. Level III has been split into four sublevels. With many new sublevels, the number of placement criteria and standards for each has also increased markedly. We created a series of new items to measure these new criteria. Also, since there are different groups of respondents who need to get these questions (those who got treatment, those who wanted treatment, and those who needed it but did not want it), these questions have had to take several different forms and are located in several different places in the questionnaire. Therefore, each respondent will be asked the questions once, but he/she will get the version of the questions which is appropriate for his/her treatment history.

Confidentiality and Truthfulness Questions Changes (Module K): A set of questions about the confidentiality of the interview was added after the second set of demographic questions. These questions assess whether there was anyone else in the room or listening in on another phone during the interview, and whether that possibility affected the respondent's responses. After the confidentiality items, the questions about truthfulness were also modified to try to obtain more accurate information.

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THE IMPACT OF MARIJUANA ON PARENTS AND CHILDREN

(Department of Health and Social Services
Office of Children's Services)

I. Marijuana is the primary substance abused in a significant number of homes generating reports of harm and CINA cases due to illegal drug abuse.

- Parental neglect of children is often a consequence of substance abuse and addiction. Such neglect often leads to sexual or physical abuse by others.
- A 1998 national survey found that children whose parents abuse drugs or alcohol were almost three times (2.7) likelier to be physically or sexually assaulted and more than four times (4.2) likelier to be neglected than children of parents who are not substance abusers. *Children of Substance-Abusing Parents, (1999) citing, Sedlak, A.J., & Broadhurst, D.D. (1996). Third National Incidence Study of Child Abuse and Neglect: Final Report. U.S. Dept. of Health and Human Services, Administration for Children; and, National Center on Child Abuse and Neglect, (1998). Living Arrangements of Children Under 18 Years Old: 1960 to the Present; U.S. Advisory Board on Child Abuse and Neglect. (1993) Neighbors helping Neighbors.*

- 20.5% of the 915 social workers and family court professionals surveyed cited marijuana as the leading substance of abuse in child abuse or neglect cases involving illegal drugs.
- Marijuana is a problem for Alaska families, and can result in contacts with OCS in a variety of ways. Parental neglect, abuse, or arrest for drug dealing - (news articles attached)
- OCS spends \$ _____ per year investigating reports of harm and handling CINA cases.

*Suggested Witness: James Steele, OCS Children
Services Manager, Southcentral Region*



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Drug Use Among Arrestees in Anchorage

Cassie Atwell and Matthew Giblin

A survey of 718 male and female arrestees in 1999 has revealed that cocaine and marijuana are the drugs used most often by those arrested in the Anchorage area. The group was studied by the Justice Center as part of the Arrestee Drug Abuse Monitoring (ADAM) project, a national research initiative undertaken by the National Institute of Justice (NIJ). The program, originally established in 1987 as the Drug Use Forecasting Program (DUF) and subsequently redesigned and renamed in 1997, operates in thirty-five sites across the country. Its purpose is to generate extensive and timely data on drug use among the arrestee population.

The drug use data obtained from ADAM

have implications for both national and local research and policymaking. On a national level, the data provide a national picture of drug use and abuse among a population that is difficult to reach from other drug use data collection programs (e.g., National Household Survey on Drug Abuse). In addition, data are used to analyze the relationship between drugs and crime. On a local level, the data provide local policymakers, law enforcement officials, and treatment professionals with a valuable resource from which to identify local drug trends, evaluate existing treatment programs and ascertain the need for additional or improved programs, advise local law enforcement personnel, and assist in formulating better policy decisions.

An earlier *Forum* article, "The National Drug Strategy: Escalation of the War on Drugs" by John Angell, Fall 1989, is available online at the Justice Center Web Site.

<http://www.uaa.alaska.edu/just/>

week period in both Anchorage booking facilities, Cook Inlet Pretrial and Sixth Avenue Correctional Center. The Justice Center and the Alaska Department of Corrections have worked together to administer a secure confidential collection procedure. The only criteria for inclusion in the study are that inmates must not have been in custody for more than forty-eight hours and that they must not be federal prisoners, Immigration and Naturalization Service detainees, or transfers from another facility. Once identified as eligible, the inmate is asked to participate in a two-pronged study protocol. The first part is an interview with a professionally trained interviewer. The main content of the interview focuses on current and prior drug use, and additional questions deal with criminal histories, drug treatment,

Please see *Anchorage Arrestees*, page 7

HIGHLIGHTS INSIDE THIS ISSUE

- Measuring the drug problem (page 2).
- Drug control in the national budget (page 3).
- Drug cases in federal and Alaska courts (page 4).
- Drug treatment in Alaska prisons (page 5).
- Incarceration for drug offenses (page 6).

Methodology

Data collection, using a uniform protocol, takes place in thirty-five sites across the country. The uniform protocol enhances the validity of program findings while also helping to make findings comparable across ADAM sites.

Four times a year (once every quarter) the Justice Center collects data for a two-

Table 1. Percentage of Arrestees Found Positive for Drugs, by Sex, Age, and Race, Anchorage, 1999

	Total sample (N)		Any drug		Cocaine		Marijuana		Opiates		Methamphetamine		PCP		Multiple drugs	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Per cent positive	563	155	53.8 %	56.1 %	25.6 %	36.1 %	37.5 %	31.0 %	3.0 %	1.9 %	0.5 %	0.0 %	0.0 %	0.0 %	12.1 %	12.9 %
By age																
15-20	51	19	66.7 %	52.6 %	13.7 %	21.1 %	60.8 %	36.8 %	0.0 %	5.3 %	0.0 %	0.0 %	0.0 %	0.0 %	7.8 %	10.5 %
21-25	95	28	57.9	60.7	18.9	21.4	55.8	50.0	3.2	0.0	1.1	0.0	0.0	0.0	18.9	10.7
26-30	87	22	55.2	40.9	27.6	31.8	42.5	13.6	0.0	0.0	0.0	0.0	0.0	0.0	14.9	4.5
31-35	97	28	56.7	71.4	35.1	53.6	27.8	39.3	5.2	0.0	1.0	0.0	0.0	0.0	10.3	21.4
35+	233	57	47.6	52.6	26.2	40.4	27.0	21.1	3.9	3.5	0.4	0.0	0.0	0.0	9.9	12.3
By race																
White	288	70	57.3 %	58.6 %	27.1 %	47.1 %	39.6 %	27.1 %	4.2 %	1.4 %	1.0 %	0.0 %	0.0 %	0.0 %	13.5 %	17.1 %
American Indian/ Alaska Native	144	63	-	-	11.8	15.9	32.6	33.3	1.4	3.2	0.0	0.0	0.0	0.0	-	-
Black	92	17	67.4	82.4	45.7	64.7	35.9	29.4	1.1	0.0	0.0	0.0	0.0	0.0	15.2	11.8
Hispanic	23	1	52.2	100.0	13.0	0.0	47.8	100.0	8.7	0.0	0.0	0.0	0.0	0.0	13.0	0.0
Asian	13	4	-	-	30.8	50.0	38.5	50.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-
Other	2	0	-	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	-	-

Source of data: Arrestee Drug Abuse Monitoring Program, National Institute of Justice

Measuring the Drug Problem

The ADAM program, which the Justice Center is administering with the Department of Corrections, is one of several national sources of data on the extent of the use of illicit drugs. As discussed in the article in this issue "Drug Use Among Arrestees in Anchorage," data from ADAM will be available to local agencies, and in the future the testing and survey questions will be tailored to elicit more information in response to the specific data needs of Alaska agencies. At present, while there are several sources of national data, there are few established, ongoing sources of accurate data on the extent of the illicit drug problem in Alaska.

Availability of Drugs

Law enforcement agencies in Alaska, including the in-state offices of the U.S. Drug Enforcement Agency (DEA), can only measure drugs which are seized and estimate the extent of the market using the size of their seizures and other information derived from investigations and case processing. In general, officers consider the estimates that they make to be conservative, that is, underestimates of the availability of drugs.

As a group, Alaska drug enforcement officials describe changes and trends in the drug market based on their work over a period of time—growth in marijuana cultivation,

increasing availability of amphetamines, persistence in the importation of large amounts of cocaine—and arrests on drug-related charges have increased over the last two decades, but the efforts of law enforcement agencies are not primarily directed toward measurement.

Federal Measurements of Drug Use

In addition to ADAM, the federal government has three other major drug use indicators: the National Household Survey on Drug Abuse (NHSDA), the Drug Abuse Warning Network (DAWN), and Monitoring the Future.

The National Household Survey on Drug Abuse, which is administered by the U.S. Department of Health and Human Services, has been conducted annually since 1990. Before then it was conducted periodically beginning in 1971. In-person interviews on past and current use of a wide range of licit and illicit substances are conducted with a probability sample of persons aged twelve or older drawn from the nation. Table 1 shows results from the NHSDA since the mid-1980s.

DAWN captures data semiannually on reports of deaths from drug abuse and emergency room treatment related to drug abuse from a national sample of emergency rooms

and medical examiners. The program has been collecting data since 1975.

Monitoring the Future, which is sponsored by the National Institute on Drug Abuse, surveys a national sample of high school students on availability and use of drugs and attitudes toward use. This survey has also been conducted since the mid-70s.

While the instruments provide different types of national data which may have relevance for Alaska, ADAM is currently the only national program which holds possibility for providing specific state-related data.

State Measurement of Drug Use

There seems to be no continuing in-state measurement of illicit drug use among the state population as a whole, although there are certainly data assembled by many agencies which belong to the overall drug abuse picture. The Alaska State Plan for Alcoholism and Drug Abuse Services, presented by the Advisory Board on Alcoholism and Drug Abuse as a statewide agenda for 1999 through 2003, has as part of its agenda improving the consistency and maintenance of data from various sources.

Various agencies, particularly the Alaska Department of Health and Human Services, have commissioned occasional individual

Table 1. Estimated Prevalence of Drug and Alcohol Use During Lifetime

Type of drug	1985 (N = 8,021)	1988 (N = 8,814)	1990 (N = 9,259)	1991 (N = 12,594)	1992 (N = 28,832)	1993 (N = 26,489)	1994 (N = 17,809)	1995 (N = 17,747)	1996 (N = 18,269)	1997 (N = 24,505)
Any illicit drug ^a	34.4 %	34.0 %	34.2 %	34.1 %	33.3 %	34.2 %	34.4 %	34.2 %	34.8 %	35.6 %
Marijuana and hashish	29.4	30.6	30.5	30.5	30.2	31.0	31.1	31.0	32.0	32.9
Cocaine	11.2	10.6	11.2	11.5	10.9	11.3	10.4	10.3	10.3	10.5
Crack	-	1.3	1.5	2.1	1.5	1.9	1.9	1.8	2.2	1.9
Inhalants	7.9	6.4	5.7	6.1	5.3	5.9	5.8	5.7	5.6	5.7
Hallucinogens	6.9	7.6	7.9	8.4	8.3	9.0	8.7	9.5	9.7	9.6
Heroin	0.9	0.9	0.8	1.2	0.8	1.0	1.0	1.2	1.1	0.9
Nonmedical use of any psychotherapeutic ^b	15.3	11.2	11.3	11.9	11.0	10.5	10.0	10.1	9.5	9.1
Stimulants	7.1	5.7	5.5	5.6	5.0	4.8	4.6	4.9	4.7	4.5
Sedatives	4.8	2.6	2.8	3.2	2.6	2.6	2.6	2.7	2.3	1.9
Tranquilizers	7.6	4.4	4.0	5.1	4.7	4.2	4.0	3.9	3.6	3.2
Analgesics	7.6	5.8	6.3	6.8	6.1	6.4	6.0	6.1	5.5	4.9
Any illicit drug other than marijuana ^c	22.4	19.3	19.5	19.8	18.9	19.7	18.8	19.1	18.9	18.9
Alcohol	84.9	84.0	82.2	83.6	81.9	82.6	84.2	82.3	82.6	81.9

a. Includes at least one use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP and LSD), heroin, or any prescription type psychotherapeutic used nonmedically.

b. Includes nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

c. Includes at least one use of any of these listed drugs, regardless of marijuana/hashish use; marijuana/hashish users who have used any of the other listed drugs are included.

Source: Sourcebook of Criminal Justice Statistics 1998, based on National Household Survey on Drug Abuse, U.S. Department of Health and Human Services

studies which look at the drug issue from various angles. In particular, in 1998 the Division of Alcohol and Drug Abuse and the Epidemiology Section of HHS sought to measure the extent of substance abuse as a basis for determining the need for treatment programs. The study, which was conducted by The Gallup Organization, concluded above all, as have other studies, that the substance abused most widely in Alaska is, by far, alcohol, and the number of adults needing treatment for alcoholism is much higher than number needing treat-

ment for other drugs. Among controlled drugs, dependency on marijuana was most common, with 4.2 per cent of the population estimated as dependant and an additional 1.0 per cent defined as abusers. The survey also found that 0.2 per cent of adult household residents showed evidence of a dependency on cocaine; 0.1 per cent, a dependency on amphetamines; and 0.1 per cent on hallucinogens.

The state also conducts the Youth Behavior Risk Survey every two years through the schools to assess attitudes and behaviors

which present risks to health. This survey, however, is not administered in all parts of the state.

While the plan presented by the Advisory Board on Alcoholism and Drug Abuse advocates improvements in coordination among existing data and studies and also recommends more regular surveys of the prevalence of alcoholism and drug abuse, the establishment of such testing measures will depend on resource allocations from the state legislature as well as acquisition of federal funds.

National Drug Control and the Budget

On a national level, the ADAM program discussed in this issue of the *Forum* cost 1.3 million dollars in 1999. Over the last two decades the money allocated by the federal

government for drug control has grown over 1100 per cent. For FY 2000 the federal government will spend an estimated 18.5 billion dollars on its drug control efforts—about

one per cent of the total federal budget. In FY 1981 the drug budget was 1.5 billion

Please see Drug Budget, page 4

Table 1. Federal Drug Control Spending by Goal and Function, FY 1999-2001

Budget authority in millions of dollars.

	FY 1999 actual		FY 2000 estimated		FY 2001 request		Change from FY 2000 to FY 2001	
	Amount	%	Amount	%	Amount	%	Amount	%
Drug goals								
Goal 1	2,028.8	11.5 %	2,166.4	11.7 %	2,234.8	11.6 %	68.3	3.2 %
Goal 2	7,574.5	42.8	7,568.8	41.0	8,233.8	42.9	665.0	8.8
Goal 3	3,300.6	18.6	3,539.2	19.2	3,741.6	19.5	202.4	5.7
Goal 4	2,724.9	15.4	2,243.4	12.2	2,500.3	13.0	256.8	11.4
Goal 5	2,082.5	11.8	1,982.6	10.7	2,185.9	11.4	203.3	10.3
Subtotal	17,711.2		17,500.6		18,896.4		1,395.9	8.0 %
Goal 5 (U.S. Support for Plan Colombia and the Andean Region)			954.4	5.2 %	318.1	1.7 %		
Total	17,711.2		18,455.0		19,214.5		759.6	4.1 %
Functions								
Criminal justice system	8,557.6	48.3 %	8,631.2	46.8 %	9,365.5	48.8 %	754.3	8.7 %
Drug treatment	2,949.0	16.7	3,147.0	17.1	3,382.0	17.6	234.9	7.5
Drug prevention	1,953.5	11.0	2,064.5	11.2	2,122.3	11.0	57.8	2.8
Interdiction	2,417.9	13.7	1,922.7	10.4	2,213.4	11.5	290.8	15.1
Research	781.3	4.4	856.2	4.6	898.3	4.7	42.1	4.9
Intelligence	277.3	1.6	289.9	1.6	305.3	1.6	15.4	5.3
International	774.7	4.4	589.0	3.2	589.6	3.1	0.6	0.1
Subtotal	17,711.2		17,500.6		18,896.4		1,395.9	8.0 %
International (U.S. Support for Plan Colombia and the Andean Region)			954.4	5.2 %	318.1	1.7 %		
Total	17,711.2		18,455.0		19,214.5		759.6	4.1 %
Functional areas								
Demand reduction	5,570.6	31.5 %	5,953.2	32.3 %	6,283.9	32.7 %	330.8	5.6 %
Domestic law enforcement	8,948.1	50.5	9,035.7	49.0	9,809.4	51.1	773.7	8.6
Interdiction	2,417.9	13.7	1,922.7	10.4	2,213.4	11.5	290.8	15.1
International	774.7	4.4	589.0	3.2	589.6	3.1	0.6	0.1
International (U.S. Support for Plan Colombia and the Andean Region)	-	0.0	954.4	5.2	318.1	1.7	-	-
Total	17,711.2		18,455.0		19,214.5		759.6	4.1 %

Source: Office of National Drug Control Policy

Drug Budget
(continued from page 3)

dollars, about .2 per cent of the national budget at that time.

The overall statement of national drug policy with its application to specific programs is presented in two documents entitled "National Drug Control Strategy" and "Strategic Goals and Objectives of 1999 National Drug Control Strategy." The documents, which are published by the Office of National Drug Control Policy (ONDCP), the executive agency bearing responsibility for coordinating the drug control effort within the federal government, present five goals

as the underlying structure of the drug war and its appropriation of funds: to educate and enable America's youth to reject illegal drugs as well as alcohol and tobacco; to increase the safety of America's citizens by substantially reducing drug-related crime and violence; to reduce health and social costs to the public of illegal drug use; to shield America's air, land and sea frontiers from the drug threat; and to break foreign and domestic drug sources of supply. These goals subsume seven functions: criminal justice, drug treatment, prevention, interdiction, research, intelligence and international efforts. The tables accompanying this article detail the drug control budget in terms

of these goals and functions. As Tables 1 and 2 show, the criminal justice system receives the largest sub-portion of the money, with the Department of Justice by far the recipient of the greatest amount among the major federal departments, but it is important to recognize that major thrust of the drug control effort is, in essence, directed toward enforcement and almost all of the main federal departments administer some drug-related enforcement program. Considerably more funds go into policing, corrections, interdiction, intelligence and international control efforts than go into treatment and prevention.

For many federal agencies the percentage of the agency budget now devoted to the drug control effort is growing (Table 3). For some agencies, such as the Federal Bureau of Prisons, the U.S. Marshals Service and the National Institutes of Health, the portion of the budget which is drug related is now over fifty per cent.

Table 2. Federal Drug Spending by Department
In millions of dollars

	FY 1999	FY 2000	FY 2001	Change FY 00-01	
	actual	estimated	request	Amount	%
Defense	974.9	1,005.2	1,029.1	238.8	2.4 %
Education	663.2	698.1	750.9	52.8	7.6
Health and Human Services	2,866.1	3,078.9	3,264.8	185.9	6.0
Housing and Urban Development	310.0	310.0	315.0	5.0	1.6
Justice	7,398.5	7,443.2	8,236.9	793.7	10.7
Office of National Drug Control Policy	453.2	461.4	496.8	35.4	7.7
State	498.7	282.8	276.8	(6.0)	(2.1)
Transportation	871.1	611.0	684.9	53.8	8.5
Treasury	1,756.7	1,499.6	1,688.3	188.7	12.6
Veterans Affairs	1,041.7	1,111.4	1,155.5	44.1	4.0
All other	877.3	978.8	997.5	18.7	1.9
Subtotal	17,711.2	17,500.6	18,896.4	1,395.9	8.0 %
Plan Columbia and Andean Region		954.4	318.1		
Total	1,771.2	18,455.0	19,214.5	759.6	4.1 %

Source: Office of National Drug Control Policy

Table 3. Selected Federal Agencies: Percentages of Budget Related to Drug Control

	FY 1999	FY 2000	FY 2001
	actual	estimated	request
Federal Bureau of Prisons	58.0 %	57.8 %	57.5 %
U.S. Marshals Service	52.6	52.6	52.4
Immigration and Naturalization Service	15.5	15.8	16.6
Bureau of Alcohol, Tobacco and Firearms	41.9	41.7	43.0
U.S. Customs	45.4	35.2	35.0
Office of Justice Programs	27.5	28.2	31.9
Federal Judiciary	18.7	18.7	18.7
U.S. Attorney	17.8	17.9	16.9
COPS	33.0	33.0	33.0
Department of Education	1.7	1.6	1.7
National Institutes of Health	74.6	74.5	74.2

Source: Office of National Drug Control Policy

Drug Cases in the Courts

The available figures for federal courts show a steady rise in the percentage of the caseload related to drug charges (Table 1) since the early 1980s. Between FY 1992 and FY 1999 the percentage of drug cases as part of the total caseload more than doubled, rising from 13.3 per cent to 29 per cent. The actual number of drug cases filed in U.S. District Courts nationwide more than quadrupled, from 4,193 in FY 82 to 17,483 in FY 99. Figures for case filings for U.S. District in Alaska do not reflect this national rise; in 1982 the percentage of total caseload was already 25 per cent and in 1999, 22.5 per cent. It has ranged from a high of 34.5 per cent to a low of 10.4 per cent.

The percentage of total felony filings in

the Alaska Court System which are drug cases has remained relatively stable since the early 1980s, neither rising nor falling significantly, although the actual number of

felony drug cases being filed each year has risen steadily, with 342 filed in 1982 and 809 filed in 1999—a growth of 137 per cent. (The Alaska Court System felony drug case

Table 1. Federal Drug Cases Filed in U.S. District Courts—U.S. and Alaska

Fiscal year	United States			Alaska		
	Total criminal cases	Drug cases		Total criminal cases	Drug cases	
		Number	% of total		Number	% of total
1982	31,623	4,193	13.3 %	190	48	25.3 %
1987	42,156	8,869	21.0	221	23	10.4
1992	47,472	12,833	27.0	286	68	23.8
1997	50,363	13,656	27.1	220	76	34.5
1998	57,691	16,281	28.2	261	49	18.8
1999	59,923	17,483	29.2	227	51	22.5

Sources: Sourcebook of Criminal Justice Statistics, 1983, 1988, 1993; Administrative Office of the U.S. Courts

The Alaska Department of Corrections: The Drug Treatment Picture

Although some plans for general screening of inmates for drug and alcohol problems are now being considered, the Alaska Department of Corrections at present does not test inmates for drug or alcohol problems at

the time they begin serving their sentences. As a result, no firm numbers are available on the extent of the drug problem among the inmate population. DOC does state that the available treatment programs are always

full, with those ordered by the courts into treatment receiving priority for available spaces and others being treated on a voluntary, first-come, first-served basis. More inmates request treatment than there are spaces available. (Table 1 provides national data on the extent of prior drug use among prisoners.)

The annual budget for DOC substance abuse programs is just under one million dollars. It has not increased in eight years. The department contracts with state-approved substance abuse treatment providers in the community for all of its programs. The department itself has only one regular position in this area, the Substance Abuse Program Coordinator, who administers the DOC programs. Because funding available for the programs has not increased, the number of treatment providers willing to contract with DOC is declining.

The department offers an inmate substance abuse program in each facility, but those at the Ketchikan, Palmer, Yukon-Kuskokwim, and Anvil Mountain Correctional Centers are educational programs only. At Sixth Avenue and Mat-Su Pretrial, orientation programs are offered. At Cook Inlet Pre-Trial and Fairbanks Correction Center education programs with an introduction to treatment

component are available. At Lemon Creek, Meadow Creek, Spring Creek, and Wildwood Correctional Centers and at the Point MacKenzie Rehabilitation Center, the programs offer a level of treatment comparable to that labeled as "outpatient treatment" in the general community. The only intensive residential treatment program is one for women at Hiland Mountain Correctional Center. Another intensive residential program, for men, which will be located at Wildwood, is in the planning stages. These intensive residential treatment programs are being primarily funded by federal monies, with some state matching funds required. (Federal funds are currently available only for residential

Table 1. Level of Prior Drug Use by State and Federal Prisoners by Type and Drug and Frequency of Use, 1991 and 1997

	Ever used in the past		Ever used drugs regularly ^a		Used drugs in the month prior to offense		Used drugs at the time of offense	
	1991	1997	1991	1997	1991	1997	1991	1997
State prisoners								
Marijuana/hashish	73.8 %	77.0 %	51.9 %	58.3 %	32.2 %	39.2 %	11.4 %	15.1 %
Cocaine/crack	49.4	49.2	31.9	33.6	25.2	25.0	14.5	14.8
Heroin/opiates	25.2	24.5	15.3	15.0	9.6	9.2	5.8	5.6
Depressants ^b	24.0	23.7	10.8	11.3	3.8	5.1	1.0	1.8
Stimulants ^c	29.7	28.3	16.6	16.3	7.4	9.0	2.9	4.2
Hallucinogens ^d	26.9	28.7	11.5	11.3	3.7	4.0	1.6	1.8
Inhalants	-	14.4	-	5.4	-	1.0	-	-
Any drug ^e	79.4 %	83.0 %	62.2 %	69.6 %	49.9 %	56.5 %	31.0 %	32.6 %
Federal prisoners								
Marijuana/hashish	52.8 %	65.2 %	32.2 %	46.6 %	19.2 %	30.4 %	5.9 %	10.8 %
Cocaine/crack	37.3	44.8	20.6	28.2	15.4	20.0	7.7	9.3
Heroin/opiates	14.1	16.1	9.3	8.9	5.5	5.4	3.7	3.0
Depressants ^b	13.1	16.5	5.3	8.0	1.4	3.2	0.3	1.0
Stimulants ^c	16.8	20.9	8.3	12.9	3.9	7.6	1.8	4.1
Hallucinogens ^d	14.8	19.0	4.8	6.4	1.2	1.7	0.5	0.8
Inhalants	-	7.7	-	2.6	-	0.5	-	-
Any drug ^e	60.1 %	72.9 %	42.1 %	57.3 %	31.8 %	44.8 %	16.8 %	22.4 %

Note: Details add to more than total because prisoners may have used more than one type of drug.

- a. Used drugs once a week or more for at least a month
- b. Includes barbiturates, tranquilizers, and Quaalude
- c. Includes amphetamine and methamphetamine.
- d. Includes LSD and PCP.
- e. Other unspecified drugs are included in the totals

Source: Sourcebook of Criminal Justice Statistics 1998

figures also include cases related to the importation of alcohol.)

Because of changes in data systems it is impossible to assemble consistent regular figures on the specific charges associated with drug case filings in the Alaska Court System over the last two decades, but a cursory examination of data from 1997, 1998 and 1999 reveals that most felony drug cases are filed under AS 11.71.030 and .040—misconduct involving a controlled substance in the third and fourth degrees.

Alaska does not have a discrete drug court which solely handles drug cases. According to figures from the Bureau of Justice Statistics, at the end of FY 98, there were 430 such courts nationwide in operation or in the planning stages. The majority of those in operation had been so for less than two

years. Plans to establish a drug court within the Alaska system have run into funding difficulties.

Table 2. Drug Cases Filed in the Alaska Court System

	Total criminal cases filed	Drug cases	
		Number	% of total
1982	1,607	342	21.3 %
1987	2,661	473	17.8
1992	2,763	519	18.8
1997	3,362	791	23.5
1998	3,588	836	23.3
1999	3,429	809	23.6

Note: Drug case totals include cases filed under statutes pertaining to contraband, controlled substances, drugs and the importation of alcohol.

Source: Alaska Court System annual reports

Please see Alaska DOC, page 6

Alaska DOC
(continued from page 5)

programs.)

According to DOC figures, during FY 1999, 1583 inmates were admitted to the programs comprising the substance abuse educational component and 306 to the outpatient-level programs. Since the residential treatment program for women opened at Hiland Mountain, 94 inmates have

been admitted. The Central Arizona Detention Center, the private correctional facility owned by Corrections Corporation of America in Florence, Arizona, which contracts with DOC, also offers a substance abuse day treatment program.

This Arizona facility, with close to 900 Alaska inmates, is, in effect, the state's largest institution. The rise in the number of inmates being sent to Arizona has an effect on the drug treatment situation within

other Alaska facilities. The shifts among inmate populations which occur as an administrative consequence of the use of the out-of-state prison can undermine the establishment of stable treatment program environments.

In addition to providing the treatment programs under contract, DOC also facilitates the formation of twelve-step programs such as Narcotics Anonymous and Alcoholics Anonymous in its facilities.

Incarceration on Drug Offenses

Table 1. Federal Prison Prisoners Sentenced for Drug Offenses, 1980-1998

	Total sentenced and unsentenced population	Sentenced population		
		Drug offenses		Per cent of total
		Total	Number	
1980	24,252	19,023	4,749	25.0 %
1981	26,195	19,765	5,076	25.7
1982	28,133	20,938	5,518	26.4
1983	30,214	26,027	5,201	27.7
1984	32,317	27,623	6,152	29.5
1985	36,042	27,623	6,491	34.4
1986	40,505	31,831	12,119	38.1
1987	43,683	34,163	14,354	42.0
1988	43,401	34,680	15,526	44.8
1989	50,173	38,969	19,459	49.9
1990	57,331	47,847	25,037	52.3
1991	63,711	53,526	30,498	57.0
1992	70,346	61,026	36,349	59.6
1993	79,483	70,557	42,945	60.9
1994	85,290	76,186	46,743	61.4
1995	89,564	79,347	48,118	60.6
1996	94,215	83,515	50,754	60.8
1997	100,639	89,748	54,099	60.3
1998*	106,536	95,522	56,291	58.9

Note: These data represent inmates housed in Federal Bureau of Prison facilities; inmates housed in contract facilities are not included.

* 1998 data are preliminary and subject to revision.

Source: Sourcebook of Criminal Justice Statistics 1998, based on data from the Federal Bureau of Prisons

Table 2. Alaska Department of Corrections: Inmates with Drug Offense as Primary Offense

	Drug offenses		% of total population	Total prison population
	Male	Female		
1985	-	-	4.4 %	2,124
1986	-	-	5.1	2,245
1991	-	-	6.7	2,483
1995	-	-	6.8	3,520
1996	-	-	6.7	3,721
1997	-	-	7.2	4,164
1998	-	-	6.7	4,097
1999	202	45	6.1	4,077

Note: Includes inmates in community residential centers.

Source of data: Alaska Department of Corrections

The "war on drugs" has led to an enormous increase in both the numbers and percentages of inmates in the federal system incarcerated primarily for drug offenses (Table 1), but to less of a proportional increase in similar imprisonments in the Alaska state system.

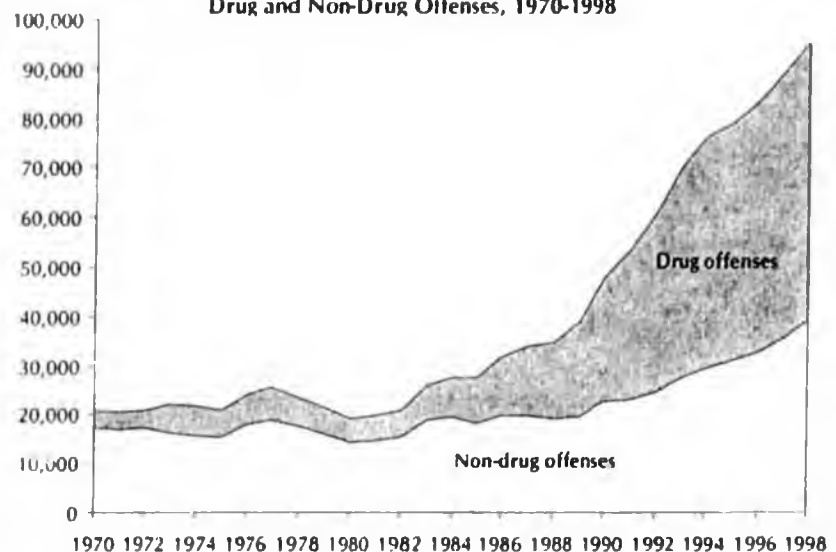
The inmate population sentenced for drug offenses is now almost 60 per cent of the total federal inmate population. Between 1985 and 1998 the number of federal inmates sentenced for drug charges grew by nearly 500 per cent.

The Alaska Department of Corrections does not show such a precipitous rise in the numbers or percentages of inmates sentenced primarily for drug offenses.

In December 1985, out of the total inmate population of 2124 reported

in the corrections data base, 105, or 5 per cent, were sentenced on a drug-related offense as the primary offense (Table 2). (Corrections became a separate state department in 1984; before then it was a division within Health and Human Services. The data base from which these figures were taken was put in place in late 1983.) By the end of 1999, the total DOC inmate population, including that in community residential centers, was 4077. Of these, 247—6.1 per cent—had a controlled substance charge as the primary charge. (These figures do not include those imprisoned on a parole or probation violation which was itself a drug offense, so they are undoubtedly somewhat low.) While the percentage of prisoners in the Alaska system on drug charges has grown only slightly, the actual number has increased by more than 135 per cent, paralleling the climb in the overall DOC population.

Figure 1. Federal Prison Population Sentenced for Drug and Non-Drug Offenses, 1970-1998



Note: These data represent inmates housed in Federal Bureau of Prison facilities; inmates housed in contract facilities are not included. 1998 Data are preliminary and subject to revision.

Source of data: Sourcebook of Criminal Justice Statistics 1998, based on data from the Federal Bureau of Prisons

Table 2. Percentage of Arrestees Reporting Drug Use in the Past 30 Days, by Age and Sex, Anchorage, 1999

	Crack		Cocaine		Crack and cocaine		Marijuana and cocaine		Opiates and cocaine		Any two or more drugs	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All ages	19.2 %	29.7 %	12.1 %	14.8 %	5.5 %	11.6 %	9.4 %	11.6 %	1.2 %	2.6 %	26.0 %	26.6 %
By age												
15-20	0.0 %	15.8 %	13.7 %	5.3 %	0.0 %	5.3 %	9.8 %	5.3 %	2.0 %	0.0 %	27.5 %	21.1 %
21-25	10.5	25.0	11.6	21.4	5.3	17.9	11.6	17.9	3.2	3.6	28.7	21.4
26-30	23.0	18.2	11.5	22.7	4.6	18.2	9.2	18.2	1.1	9.1	26.7	27.3
31-35	27.8	35.7	16.7	10.7	11.3	7.1	6.3	10.7	0.0	3.6	31.3	18.5
35+	21.9	36.8	10.4	14.0	4.7	10.5	9.9	8.8	0.9	0.0	22.1	33.3

Source of data: Arrestee Drug Abuse Monitoring Program, National Institute of Justice

Anchorage Arrestees
(continued from page 1)

educational background, desire for treatment, and demographics. The second part of the ADAM protocol involves the collection of a urine sample from the interviewee used to corroborate the information given in the interview. The specimen is shipped to a lab where it undergoes testing for the presence of ten different drugs.

Participation is strictly voluntary with the inmate having the right to refuse to answer any question asked or terminate the interview at any time. The urine sample is also voluntary and the interviewee may refuse to provide a specimen despite participating in the self-report interview. However, the sample is only collected if the inmate has completed the interview. All of the information obtained during the interview process is strictly confidential, and individual results cannot be made available to any law enforcement or prosecutorial agency. Strict measures are taken to ensure that the interviewer does not know the names of the persons being interviewed, and the survey instrument and urine sample are not marked in any way which could be traced back to the individual.

At the end of data collection the questionnaires are sent to Washington, D.C. for analysis; aggregate data are returned to each individual site for further study.

1999 Results

Though participation in the study is voluntary, the participation rate is relatively high. In 1999, 1,117 arrestees were approached; 76 per cent (n=844) contributed an interview. Of those who agreed to be interviewed, 85 per cent provided a urine specimen for testing (n=718). The results discussed below reflect findings from the participants that contributed both an interview and urine specimen.

In 1999, a total of 563 male and 155 female adult arrestees were surveyed. (An-

chorage is not currently surveying juveniles.) The results are for those arrested for all offenses—not just on drug related charges. The data show that cocaine and marijuana were used most frequently by both male and female arrestees.

Slightly more than half tested positive for any drug, while 25 per cent of the males and 36 per cent of the females tested positive for cocaine, and 37 per cent of males and 31 per cent of females were positive for marijuana. Less than five per cent of those arrested tested positive for opiates or methamphetamines. (See Table 1.)

The self-reported drug information shows that 31 per cent of males and 45 per cent of females admitted using either crack or powder cocaine within the last 30 days (Table 2).

Among those reporting the use of either crack or powder cocaine, males (n=108) used crack a mean 8.8 days and females (n=46), 12.7 days. The mean number of days for powder cocaine usage was 6.5 for males (n=68) and 8.6 for females (n=23). The number of days per month of reported use for marijuana was 11.2 for males (n=269) and 11.0 for females (n=69). (See Table 3.) As Table 4 shows, the data also underscore the fact that drug use is common among individuals arrested across the spectrum of crimes.

Since 1999 was the first full year of data for the Anchorage site, no statistical comparisons with previous years are possible. As data collection continues it will be possible to examine trends in drug use among Anchorage arrestees.

Applications of ADAM Data

In addition to providing a barometer of
Please see *Anchorage Arrestees*, page 8

Table 3. Mean Number of Days Arrestees Used Drugs in the Past 30 Days, Anchorage, 1999

	Male N = 563		Female N = 155	
	N	Mean number of days	N	Mean number of days
Crack	108	8.8 days	46	12.7 days
Cocaine	68	6.5	23	8.6
Marijuana	269	11.2	69	11.0
Opiates	15	5.9	5	11.0
Methamphetamines	13	6.5	4	8.3

Source: Arrestee Drug Abuse Monitoring Program, National Institute of Justice

Table 4. Percentage of Arrestees Found Positive for Any Drug, by Offense Category, Anchorage, 1999

Offense	Male N = 563		Female N = 155	
	N	% positive	N	% positive
Violent offense	152	46.1 %	35	37.1 %
Robbery	7	42.9	3	100.0
Assault	126	46.8	29	34.5
Weapons	12	66.7	1	100.0
Other violent offense	17	29.4	4	25.0
Property offense	106	57.5 %	31	61.3 %
Larceny/theft	46	67.4	23	65.2
Burglary	11	54.5	0	0.0
Stolen vehicle	10	80.0	2	100.0
Other property offense	43	47.2	10	50.0
Drug offense	16	87.5 %	6	50.0 %
Drug sales	1	100.0	0	0.0
Drug possession	15	86.7	6	50.0
Prostitution	0	0.0 %	7	71.4 %
Other offense	369	57.5 %	97	60.8 %

Note: Detail may not add to total because some arrestees may have been arrested for more than one offense.

Source: Arrestee Drug Abuse Monitoring Program, National Institute of Justice

Anchorage Arrestees (continued from page 7)

Local drug use patterns among the arrested population, ADAM data have a variety of other uses. A brief overview of how the data are being used in other cities can suggest



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possibilities for use in Alaska.

Researchers in Philadelphia are using ADAM data to explore the impact of certain "gateway" drugs on subsequent escalation to harder drug use. In addition, the same researchers are attempting to develop a typology of drug users, which can potentially lead to varied interventions or treatment based on user type. Other researchers are examining the relationship between drugs and crime.

It should be noted, however, that the ADAM data collection effort is not limited only to information about drugs. Researchers maximize the amount of data that can be collected through ADAM by creating addenda to the survey instrument. For example, after being interviewed about their drug use patterns, arrestees in 11 ADAM sites were questioned about firearms, including their reasons for owning a firearm, method of obtaining guns, and attitudes toward firearms.

Future of the Program in Anchorage

In January 2000, the ADAM survey instrument was expanded to include more relevant data for both law enforcement and treatment professionals. It will be possible to cross-link results to other national data-

bases such as the National Household Survey on Drug Abuse and the Treatment Episode Data Set. This, in turn, will provide even more specific information on drug use for local policymakers, treatment professionals and law enforcement. Furthermore, the Justice Center intends to supplement the new instrument with addenda specifically aimed at local issues such as alcohol use. The National Institute of Justice and the Institutional Review Board that oversees the project must first approve all addenda used.

In order to disseminate the aggregate data and enhance ADAM's utility to the Anchorage community, the Anchorage site will also assemble a Local Coordinating Council. It will include members of the community at large as well as professionals in the areas of drug abuse treatment, the judiciary, and law enforcement. We anticipate the implementation of an outreach program that will collect one quarter's data from other areas of the state such as Fairbanks, Juneau, Barrow and Bethel.

The ADAM program is in its infancy in Alaska but has the potential to increase useful information available for professionals across the state.

Cassie Atwell and Matthew Giblyn are research associates with the Justice Center.

Search for Historical Records

Dr. Lawrence Trostle of the Justice Center is compiling historical materials on Alaska Native policing from 1867 through 1959. He is interested in looking at any material—diaries, letters, government records, missionary or other church records, newspaper accounts—which relate to the contribution of Alaska Natives to law en-

forcement or to the general provision of justice services in the period after the purchase of Alaska from Russia through the enactment of statehood. He is also interested in speaking with anyone who may have personal reminiscences to recount. Trostle can be reached through the Justice Center at (907) 786-1815 or ajustl@uaa.alaska.edu.

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Drug Use Among Arrestees in Anchorage

Cassie Atwell and Matthew Giblin

A survey of 718 male and female arrestees in 1999 has revealed that cocaine and marijuana are the drugs used most often by those arrested in the Anchorage area. The group was studied by the Justice Center as part of the Arrestee Drug Abuse Monitoring (ADAM) project, a national research initiative undertaken by the National Institute of Justice (NIJ). The program, originally established in 1987 as the Drug Use Forecasting Program (DUF) and subsequently redesigned and renamed in 1997, operates in thirty-five sites across the country. Its purpose is to generate extensive and timely data on drug use among the arrestee population.

The drug use data obtained from ADAM

have implications for both national and local research and policymaking. On a national level, the data provide a national picture of drug use and abuse among a population that is difficult to reach from other drug use data collection programs (e.g., National Household Survey on Drug Abuse). In addition, data are used to analyze the relationship between drugs and crime. On a local level, the data provide local policymakers, law enforcement officials, and treatment professionals with a valuable resource from which to identify local drug trends, evaluate existing treatment programs and ascertain the need for additional or improved programs, advise local law enforcement personnel, and assist in formulating better policy decisions.

An earlier *Forum* article, "The National Drug Strategy: Escalation of the War on Drugs" by John Angell, Fall 1989, is available online at the Justice Center Web Site.

<http://www.uaa.alaska.edu/just/>

week period in both Anchorage booking facilities, Cook Inlet Pretrial and Sixth Avenue Correctional Center. The Justice Center and the Alaska Department of Corrections have worked together to administer a secure confidential collection procedure. The only criteria for inclusion in the study are that inmates must not have been in custody for more than forty-eight hours and that they must not be federal prisoners, Immigration and Naturalization Service detainees, or transfers from another facility. Once identified as eligible, the inmate is asked to participate in a two-pronged study protocol. The first part is an interview with a professionally trained interviewer. The main content of the interview focuses on current and prior drug use, and additional questions deal with criminal histories, drug treatment,

Please see Anchorage Arrestees, page 7

HIGHLIGHTS INSIDE THIS ISSUE

- Measuring the drug problem (page 2).
- Drug control in the national budget (page 3).
- Drug cases in federal and Alaska courts (page 4).
- Drug treatment in Alaska prisons (page 5).
- Incarceration for drug offenses (page 6).

Methodology

Data collection, using a uniform protocol, takes place in thirty-five sites across the country. The uniform protocol enhances the validity of program findings while also helping to make findings comparable across ADAM sites.

Four times a year (once every quarter) the Justice Center collects data for a two-

Table 1. Percentage of Arrestees Found Positive for Drugs, by Sex, Age, and Race, Anchorage, 1999

	Total sample (N)		Any drug		Cocaine		Marijuana		Opiates		Methamphetamine		PCP		Multiple drugs	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Per cent positive	563	155	53.8 %	56.1 %	25.6 %	36.1 %	37.5 %	31.0 %	3.0 %	1.9 %	0.5 %	0.0 %	0.0 %	0.0 %	12.1 %	12.9 %
By age																
15-20	51	19	66.7 %	52.6 %	13.7 %	21.1 %	60.8 %	36.8 %	0.0 %	5.3 %	0.0 %	0.0 %	0.0 %	0.0 %	7.8 %	10.5 %
21-25	95	28	57.9 %	60.7 %	18.9 %	21.4 %	55.8 %	50.0 %	3.2 %	0.0 %	1.1 %	0.0 %	0.0 %	0.0 %	18.9 %	10.7 %
26-30	87	22	55.2 %	40.9 %	27.6 %	31.8 %	42.5 %	13.6 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	14.9 %	4.5 %
31-35	97	28	56.7 %	71.4 %	35.1 %	53.6 %	27.8 %	39.3 %	5.2 %	0.0 %	1.0 %	0.0 %	0.0 %	0.0 %	10.3 %	21.4 %
35+	233	57	47.6 %	52.6 %	26.2 %	40.4 %	27.0 %	21.1 %	3.9 %	3.5 %	0.4 %	0.0 %	0.0 %	0.0 %	9.9 %	12.3 %
By race																
White	288	70	57.1 %	58.6 %	27.1 %	47.1 %	39.6 %	27.1 %	4.2 %	1.4 %	1.0 %	0.0 %	0.0 %	0.0 %	13.5 %	17.1 %
American Indian/ Alaska Native	144	63	-	-	11.8	15.9	32.6	33.3	1.4	3.2	0.0	0.0	0.0	0.0	-	-
Black	92	17	67.4 %	82.4 %	45.7 %	64.7 %	35.9 %	29.4 %	1.1 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	15.2 %	11.8 %
Hispanic	23	1	52.2 %	100.0 %	13.0 %	0.0 %	47.8 %	100.0 %	8.7 %	0.0 %	0.0 %	0.0 %	0.0 %	0.0 %	13.0 %	0.0 %
Asian	13	4	-	-	30.8	50.0	38.5	50.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-
Other	2	0	-	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0	-	-	-

Source of data: Arrestee Drug Abuse Monitoring Program, National Institute of Justice

Measuring the Drug Problem

The ADAM program, which the Justice Center is administering with the Department of Corrections, is one of several national sources of data on the extent of the use of illicit drugs. As discussed in the article in this issue "Drug Use Among Arrestees in Anchorage," data from ADAM will be available to local agencies, and in the future the testing and survey questions will be tailored to elicit more information in response to the specific data needs of Alaska agencies. At present, while there are several sources of national data, there are few established, ongoing sources of accurate data on the extent of the illicit drug problem in Alaska.

Availability of Drugs

Law enforcement agencies in Alaska, including the in-state offices of the U.S. Drug Enforcement Agency (DEA), can only measure drugs which are seized and estimate the extent of the market using the size of their seizures and other information derived from investigations and case processing. In general, officers consider the estimates that they make to be conservative, that is, underestimates of the availability of drugs.

As a group, Alaska drug enforcement officials describe changes and trends in the drug market based on their work over a period of time—growth in marijuana cultivation,

increasing availability of amphetamines, persistence in the importation of large amounts of cocaine—and arrests on drug-related charges have increased over the last two decades, but the efforts of law enforcement agencies are not primarily directed toward measurement.

Federal Measurements of Drug Use

In addition to ADAM, the federal government has three other major drug use indicators: the National Household Survey on Drug Abuse (NHSDA), the Drug Abuse Warning Network (DAWN), and Monitoring the Future.

The National Household Survey on Drug Abuse, which is administered by the U.S. Department of Health and Human Services, has been conducted annually since 1990. Before then it was conducted periodically beginning in 1971. In-person interviews on past and current use of a wide range of licit and illicit substances are conducted with a probability sample of persons aged twelve or older drawn from the nation. Table 1 shows results from the NHSDA since the mid-1980s.

DAWN captures data semiannually on reports of deaths from drug abuse and emergency room treatment related to drug abuse from a national sample of emergency rooms

and medical examiners. The program has been collecting data since 1975.

Monitoring the Future, which is sponsored by the National Institute on Drug Abuse, surveys a national sample of high school students on availability and use of drugs and attitudes toward use. This survey has also been conducted since the mid-70s.

While the instruments provide different types of national data which may have relevance for Alaska, ADAM is currently the only national program which holds possibility for providing specific state-related data.

State Measurement of Drug Use

There seems to be no continuing in-state measurement of illicit drug use among the state population as a whole, although there are certainly data assembled by many agencies which belong to the overall drug abuse picture. The Alaska State Plan for Alcoholism and Drug Abuse Services, presented by the Advisory Board on Alcoholism and Drug Abuse as a statewide agenda for 1999 through 2003, has as part of its agenda improving the consistency and maintenance of data from various sources.

Various agencies, particularly the Alaska Department of Health and Human Services, have commissioned occasional individual

Table 1. Estimated Prevalence of Drug and Alcohol Use During Lifetime

Type of drug	1985 (N=8,021)	1988 (N=8,814)	1990 (N=9,259)	1991 (N=12,594)	1992 (N=28,832)	1993 (N=26,489)	1994 (N=17,809)	1995 (N=17,747)	1996 (N=18,269)	1997 (N=24,505)
Any illicit drug ^a	34.4 %	34.0 %	34.2 %	34.1 %	33.3 %	34.2 %	34.4 %	34.2 %	34.8 %	35.6 %
Marijuana and hashish	29.4	30.6	30.5	30.5	30.2	31.0	31.1	31.0	32.0	32.9
Cocaine	11.2	10.6	11.2	11.5	10.9	11.3	10.4	10.3	10.3	10.5
Crack	-	1.3	1.5	2.1	1.5	1.9	1.9	1.8	2.2	1.9
Inhalants	7.9	6.4	5.7	6.1	5.3	5.9	5.8	5.7	5.6	5.7
Hallucinogens	6.9	7.6	7.9	8.4	8.3	9.0	8.7	9.5	9.7	9.6
Heroin	0.9	0.9	0.8	1.2	0.8	1.0	1.0	1.2	1.1	0.9
Nonmedical use of any psychotherapeutic ^b	15.3	11.2	11.3	11.9	11.0	10.5	10.0	10.1	9.5	9.1
Stimulants	7.3	5.7	5.5	5.6	5.0	4.8	4.6	4.9	4.7	4.5
Sedatives	4.8	2.6	2.8	3.2	2.6	2.6	2.6	2.7	2.3	1.9
Tranquilizers	7.6	4.4	4.0	5.1	4.7	4.2	4.0	3.9	3.6	3.2
Analgesics	7.6	5.8	6.3	6.8	6.1	6.4	6.0	6.1	5.5	4.9
Any illicit drug other than marijuana ^c	22.4	19.3	19.5	19.8	18.9	19.7	18.8	19.1	18.9	18.9
Alcohol	84.9	84.0	82.2	83.6	81.9	82.6	84.2	82.3	82.6	81.9

a. Includes at least one use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP and LSD), heroin, or any prescription-type psychotherapeutic used nonmedically.

b. Includes nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

c. Includes at least one use of any of these listed drugs, regardless of marijuana/hashish use; marijuana/hashish users who have used any of the other listed drugs are included.

Source: Sourcebook of Criminal Justice Statistics 1998; based on National Household Survey on Drug Abuse, U.S. Department of Health and Human Services

studies which look at the drug issue from various angles. In particular, in 1998 the Division of Alcohol and Drug Abuse and the Epidemiology Section of HHS sought to measure the extent of substance abuse as a basis for determining the need for treatment programs. The study, which was conducted by The Gallup Organization, concluded above all, as have other studies, that the substance abused most widely in Alaska is, by far, alcohol, and the number of adults needing treatment for alcoholism is much higher than number needing treat-

ment for other drugs. Among controlled drugs, dependency on marijuana was most common, with 4.2 per cent of the population estimated as dependant and an additional 1.0 per cent defined as abusers. The survey also found that 0.2 per cent of adult household residents showed evidence of a dependency on cocaine; 0.1 per cent, a dependency on amphetamines; and 0.1 per cent on hallucinogens.

The state also conducts the Youth Behavior Risk Survey every two years through the schools to assess attitudes and behaviors

which present risks to health. This survey, however, is not administered in all parts of the state.

While the plan presented by the Advisory Board on Alcoholism and Drug Abuse advocates improvements in coordination among existing data and studies and also recommends more regular surveys of the prevalence of alcoholism and drug abuse, the establishment of such testing measures will depend on resource allocations from the state legislature as well as acquisition of federal funds.

National Drug Control and the Budget

On a national level, the ADAM program discussed in this issue of the *Forum* cost 1.3 million dollars in 1999. Over the last two decades the money allocated by the federal

government for drug control has grown over 1100 per cent. For FY 2000 the federal government will spend an estimated 18.5 billion dollars on its drug control efforts - about

one per cent of the total federal budget. In FY 1981 the drug budget was 1.5 billion

Please see Drug Budget, page 4

Table 1. Federal Drug Control Spending by Goal and Function, FY 1999-2001

Budget authority in millions of dollars.

	FY 1999 actual		FY 2000 estimated		FY 2001 request		Change from FY 2000 to FY 2001	
	Amount	%	Amount	%	Amount	%	Amount	%
Drug goals								
Goal 1	2,028.8	11.5 %	2,166.4	11.7 %	2,234.8	11.6 %	68.3	3.2 %
Goal 2	7,574.5	42.8	7,568.8	41.0	8,233.8	42.9	665.0	8.8
Goal 3	3,300.6	18.6	3,539.2	19.2	3,741.6	19.5	202.4	5.7
Goal 4	2,724.9	15.4	2,243.4	12.2	2,500.3	13.0	256.8	11.4
Goal 5	2,082.5	11.8	1,982.6	10.7	2,185.9	11.4	203.3	10.3
Subtotal	17,711.2		17,500.6		18,896.4		1,395.9	8.0 %
Goal 5 (U.S. Support for Plan Colombia and the Andean Region)			954.4	5.2 %	318.1	1.7 %		
Total	17,711.2		18,455.0		19,214.5		759.6	4.1 %
Functions								
Criminal justice system	8,557.6	48.3 %	8,631.2	46.8 %	9,385.5	48.8 %	754.3	8.7 %
Drug treatment	2,949.0	16.7	3,147.0	17.1	3,382.0	17.6	234.9	7.5
Drug prevention	1,953.5	11.0	2,064.5	11.2	2,122.3	11.0	57.8	2.8
Interdiction	2,417.9	13.7	1,922.7	10.4	2,213.4	11.5	290.8	15.1
Research	781.3	4.4	856.2	4.6	898.3	4.7	42.1	4.9
Intelligence	277.3	1.6	289.9	1.6	305.3	1.6	15.4	5.3
International	774.7	4.4	589.0	3.2	589.6	3.1	0.6	0.1
Subtotal	17,711.2		17,500.6		18,996.4		1,395.9	8.0 %
International (U.S. Support for Plan Colombia and the Andean Region)			954.4	5.2 %	318.1	1.7 %		
Total	17,711.2		18,455.0		19,214.5		759.6	4.1 %
Functional areas								
Demand reduction	5,570.6	31.5 %	5,953.2	32.3 %	6,283.9	32.7 %	330.8	5.6 %
Domestic law enforcement	8,948.1	50.5	9,035.7	49.0	9,809.4	51.1	773.7	8.6
Interdiction	2,417.9	13.7	1,922.7	10.4	2,213.4	11.5	290.8	15.1
International	774.7	4.4	589.0	3.2	589.6	3.1	0.6	0.1
International (U.S. Support for Plan Colombia and the Andean Region)	-	0.0	954.4	5.2	318.1	1.7	-	-
Total	17,711.2		18,455.0		19,214.5		759.6	4.1 %

Source: Office of National Drug Control Policy

Drug Budget
(continued from page 3)

dollars, about .2 per cent of the national budget at that time.

The overall statement of national drug policy with its application to specific programs is presented in two documents entitled "National Drug Control Strategy" and "Strategic Goals and Objectives of 1999 National Drug Control Strategy." The documents, which are published by the Office of National Drug Control Policy (ONDCP), the executive agency bearing responsibility for coordinating the drug control effort within the federal government, present five goals

as the underlying structure of the drug war and its appropriation of funds: to educate and enable America's youth to reject illegal drugs as well as alcohol and tobacco; to increase the safety of America's citizens by substantially reducing drug-related crime and violence; to reduce health and social costs to the public of illegal drug use; to shield America's air, land and sea frontiers from the drug threat; and to break foreign and domestic drug sources of supply. These goals subsume seven functions: criminal justice, drug treatment, prevention, interdiction, research, intelligence and international efforts. The tables accompanying this article detail the drug control budget in terms of these goals and functions.

justice system receives the largest sub-portion of the money, with the Department of Justice by far the recipient of the greatest amount among the major federal departments, but it is important to recognize that major thrust of the drug control effort is, in essence, directed toward enforcement and almost all of the main federal departments administer some drug-related enforcement program. Considerably more funds go into policing, corrections, interdiction, intelligence and international control efforts than go into treatment and prevention.

For many federal agencies the percentage of the agency budget now devoted to the drug control effort is growing (Table 3). For some agencies, such as the Federal Bureau of Prisons, the U.S. Marshals Service and the National Institutes of Health, the portion of the budget which is drug related is now over fifty per cent.

Table 2. Federal Drug Spending by Department
In millions of dollars

	FY 1999	FY 2000	FY 2001	Change FY 00-01	
	actual	estimated	request	Amount	%
Defense	974.9	1,005.2	1,029.1	238.8	2.4 %
Education	663.2	698.1	750.9	52.8	7.6
Health and Human Services	2,866.1	3,078.9	3,264.8	185.9	6.0
Housing and Urban Development	310.0	310.0	315.0	5.0	1.6
Justice	7,398.5	7,443.2	8,236.9	793.7	10.7
Office of National Drug Control Policy	453.2	461.4	496.8	35.4	7.7
State	498.7	282.8	276.8	(6.0)	(2.1)
Transportation	871.1	631.0	684.9	53.8	8.5
Treasury	1,756.5	1,499.6	1,788.3	188.7	12.6
Veterans Affairs	1,041.7	1,111.4	1,155.5	44.1	4.0
All other	877.3	978.8	997.5	18.7	1.9
Subtotal	17,711.2	17,500.6	18,896.4	1,395.9	8.0 %
Plan Columbia and Andean Region		95.4	318.1		
Total	1,771.2	18,455.0	19,214.5	759.6	4.1 %

Source: Office of National Drug Control Policy

Table 3. Selected Federal Agencies: Percentages of Budget Related to Drug Control

	FY 1999	FY 2000	FY 2001
	actual	estimated	request
Federal Bureau of Prisons	58.0 %	57.8 %	57.5 %
U.S. Marshals Service	52.6	52.6	52.4
Immigration and Naturalization Service	15.5	15.8	16.6
Bureau of Alcohol, Tobacco and Firearms	41.9	41.7	43.0
U.S. Customs	45.4	35.2	35.0
Office of Justice Programs	27.5	28.2	31.9
Federal Judiciary	18.7	18.7	18.7
U.S. Attorney	17.8	17.9	16.9
COPS	33.0	33.0	33.0
Department of Education	1.7	1.6	1.7
National Institutes of Health	74.6	74.5	74.2

Source: Office of National Drug Control Policy

Drug Cases in the Courts

The available figures for federal courts show a steady rise in the percentage of the caseload related to drug charges (Table 1) since the early 1980s. Between FY 1992 and FY 1999 the percentage of drug cases as part of the total caseload more than doubled, rising from 13.3 per cent to 29 per cent. The actual number of drug cases filed in U.S. District Courts nationwide more than quadrupled, from 4193 in FY 82 to 17,483 in FY 99. Figures for case filings for U.S. District in Alaska do not reflect this national rise; in 1982 the percentage of total caseload was already 25 per cent and in 1999, 22.5 per cent. It has ranged from a high of 34.5 per cent to a low of 10.4 per cent.

The percentage of total felony filings in

the Alaska Court System which are drug cases has remained relatively stable since the early 1980s, neither rising nor falling significantly, although the actual number of

felony drug cases being filed each year has risen steadily, with 342 filed in 1982 and 809 filed in 1999—a growth of 137 per cent. (The Alaska Court System felony drug case

Table 1. Federal Drug Cases Filed in U.S. District Courts—U.S. and Alaska

Fiscal year	United States			Alaska		
	Total criminal cases	Drug cases		Total criminal cases	Drug cases	
		Number	% of total		Number	% of total
1982	31,623	4,193	13.3 %	190	48	25.3 %
1987	42,156	8,869	21.0	221	23	10.4
1992	47,472	12,833	27.0	286	68	23.8
1997	50,363	13,656	27.1	220	76	34.5
1998	57,691	16,281	28.2	261	49	18.8
1999	59,923	17,483	29.2	227	51	22.5

Sources: Sourcebook of Criminal Justice Statistics, 1983, 1988, 1993; Administrative Office of the U.S. Courts

The Alaska Department of Corrections: The Drug Treatment Picture

Although some plans for general screening of inmates for drug and alcohol problems are now being considered, the Alaska Department of Corrections at present does not test inmates for drug or alcohol problems at

the time they begin serving their sentences. As a result, no firm numbers are available on the extent of the drug problem among the inmate population. DOC does state that the available treatment programs are always

full, with those ordered by the courts into treatment receiving priority for available spaces and others being treated on a voluntary, first-come, first-served basis. More inmates request treatment than there are spaces available. (Table 1 provides national data on the extent of prior drug use among prisoners.)

The annual budget for DOC substance abuse programs is just under one million dollars. It has not increased in eight years. The department contracts with state-approved substance abuse treatment providers in the community for all of its programs. The department itself has only one regular position in this area, the Substance Abuse Program Coordinator, who administers the DOC programs. Because funding available for the programs has not increased, the number of treatment providers willing to contract with DOC is declining.

The department offers an inmate substance abuse program in each facility, but those at the Ketchikan, Palmer, Yukon-Kuskokwim, and Anvil Mountain Correctional Centers are educational programs only. At Sixth Avenue and Mat-Su Pretrial, orientation programs are offered. At Cook Inlet Pre-Trial and Fairbanks Correction Center education programs with an introduction to treatment

component are available. At Lemon Creek, Meadow Creek, Spring Creek, and Wildwood Correctional Centers and at the Point MacKenzie Rehabilitation Center, the programs offer a level of treatment comparable to that labeled as "outpatient treatment" in the general community. The only intensive residential treatment program is one for women at Hilland Mountain Correctional Center. Another intensive residential program, for men, which will be located at Wildwood, is in the planning stages. These intensive residential treatment programs are being primarily funded by federal monies, with some state matching funds required. (Federal funds are currently available only for residential

Table 1. Level of Prior Drug Use by State and Federal Prisoners by Type and Drug and Frequency of Use, 1991 and 1997

	Ever used in the past		Ever used drugs regularly ^a		Used drugs in the month prior to offense		Used drugs at the time of offense	
	1991	1997	1991	1997	1991	1997	1991	1997
State prisoners								
Marijuana/hashish	73.8 %	77.0 %	51.9 %	58.3 %	32.2 %	39.2 %	11.4 %	15.1 %
Cocaine/crack	49.4	49.2	31.9	33.6	25.2	25.0	14.5	14.8
Heroin/opiates	25.2	24.5	15.3	15.0	9.6	9.2	5.8	5.6
Depressants ^b	24.0	23.7	10.8	11.3	3.8	5.1	1.0	1.8
Stimulants ^c	29.7	28.3	16.6	16.3	7.4	9.0	2.9	4.2
Hallucinogens ^d	26.9	28.7	11.5	11.3	3.7	4.0	1.6	1.8
Inhalants	-	14.4	-	5.4	-	1.0	-	-
Any drug ^e	79.4 %	83.0 %	62.2 %	69.6 %	49.9 %	56.5 %	31.0 %	32.6 %
Federal prisoners								
Marijuana/hashish	52.8 %	55.2 %	32.2 %	46.6 %	19.2 %	30.4 %	5.9 %	10.8 %
Cocaine/crack	37.3	41.8	20.6	28.2	15.4	20.0	7.7	9.3
Heroin/opiates	14.1	16.1	9.3	8.9	5.5	5.4	3.7	3.0
Depressants ^b	13.1	16.5	5.3	8.0	1.4	3.2	0.3	1.0
Stimulants ^c	16.8	20.9	8.3	12.9	3.9	7.6	1.8	4.1
Hallucinogens ^d	14.8	19.0	4.8	6.4	1.2	1.7	0.5	0.8
Inhalants	-	7.7	-	2.6	-	0.5	-	-
Any drug ^e	60.1 %	72.9 %	42.1 %	57.3 %	31.8 %	44.8 %	16.8 %	22.4 %

Note. Details add to more than total because prisoners may have used more than one type of drug.

a. Used drugs once a week or more for at least a month.
 b. Includes barbiturates, tranquilizers, and Quaalude.
 c. Includes amphetamine and methamphetamine.
 d. Includes LSD and PCP.
 e. Other unspecified drugs are included in the totals.

Source: Sourcebook of Criminal Justice Statistics 1998

figures also include cases related to the importation of alcohol.)

Because of changes in data systems it is impossible to assemble consistent regular figures on the specific charges associated with drug case filings in the Alaska Court System over the last two decades, but a cursory examination of data from 1997, 1998 and 1999 reveals that most felony drug cases are filed under AS 11.71.030 and .040—misconduct involving a controlled substance in the third and fourth degrees.

Alaska does not have a discrete drug court which solely handles drug cases. According to figures from the Bureau of Justice Statistics, at the end of FY 98, there were 430 such courts nationwide in operation or in the planning stages. The majority of those in operation had been so for less than two

years. Plans to establish a drug court within the Alaska system have run into funding difficulties.

Table 2. Drug Cases Filed in the Alaska Court System

	Total criminal cases filed	Drug cases	
		Number	% of total
1982	1,607	342	21.3 %
1987	2,661	473	17.8
1992	2,763	519	18.8
1997	3,362	791	23.5
1998	3,588	836	23.3
1999	3,429	809	23.6

Note: Drug case totals include cases filed under statutes pertaining to contraband, controlled substances, drugs and the importation of alcohol.

Source: Alaska Court System annual reports

Please see Alaska DOC, page 6

Alaska DOC
(continued from page 5)

programs.)

According to DOC figures, during FY 1999, 1583 inmates were admitted to the programs comprising the substance abuse educational component and 306 to the outpatient-level programs. Since the residential treatment program for women opened at Hiland Mountain, 94 inmates have

been admitted. The Central Arizona Detention Center, the private correctional facility owned by Corrections Corporation of America in Florence, Arizona, which contracts with DOC, also offers a substance abuse day treatment program.

This Arizona facility, with close to 900 Alaska inmates, is, in effect, the state's largest institution. The rise in the number of inmates being sent to Arizona has an effect on the drug treatment situation within

other Alaska facilities. The shifts among inmate populations which occur as an administrative consequence of the use of the out-of-state prison can undermine the establishment of stable treatment program environments.

In addition to providing the treatment programs under contract, DOC also facilitates the formation of twelve-step programs such as Narcotics Anonymous and Alcoholics Anonymous in its facilities.

Incarceration on Drug Offenses

Table 1. Federal Prison Prisoners Sentenced for Drug Offenses, 1980-1998

	Total sentenced and unsentenced population	Sentenced population		
		Drug offenses		Per cent of total
		Total	Number	
1980	24,252	19,023	4,749	25.0 %
1981	26,195	19,765	5,076	25.7
1982	28,133	20,938	5,518	26.4
1983	30,214	26,027	7,201	27.7
1984	32,317	27,623	8,152	29.5
1985	36,042	27,623	9,491	34.4
1986	40,505	31,831	11,119	38.1
1987	43,683	34,163	13,354	42.0
1988	43,401	34,680	15,526	44.8
1989	50,173	38,969	19,459	49.9
1990	57,331	47,847	25,037	52.3
1991	63,711	53,526	30,498	57.0
1992	70,346	61,026	36,349	59.6
1993	79,483	70,557	42,945	60.9
1994	85,290	76,186	46,743	61.4
1995	89,564	79,347	48,118	60.6
1996	94,215	83,515	50,754	60.8
1997	100,639	89,748	54,099	60.3
1998*	106,536	95,522	56,291	58.9

Note: These data represent inmates housed in Federal Bureau of Prison facilities; inmates housed in contract facilities are not included.

* 1998 data are preliminary and subject to revision.

Source: Sourcebook of Criminal Justice Statistics 1998, based on data from the Federal Bureau of Prisons

Table 2. Alaska Department of Corrections: Inmates with Drug Offense as Primary Offense

	Drug offenses		% of total population	Total prison population
	Male	Female		
1985	-	-	4.9 %	2,124
1986	-	-	5.1	2,245
1991	-	-	7.7	2,483
1995	-	-	11.3	3,520
1996	-	-	11.7	3,721
1997	-	-	12.2	4,164
1998	-	-	11.7	4,097
1999	202	45	6.1	4,077

Note: Includes inmates in community residential centers.

Source of data: Alaska Department of Corrections

The "war on drugs" has led to an enormous increase in both the numbers and percentages of inmates in the federal system incarcerated primarily for drug offenses (Table 1), but to less of a proportional increase in similar imprisonments in the Alaska state system.

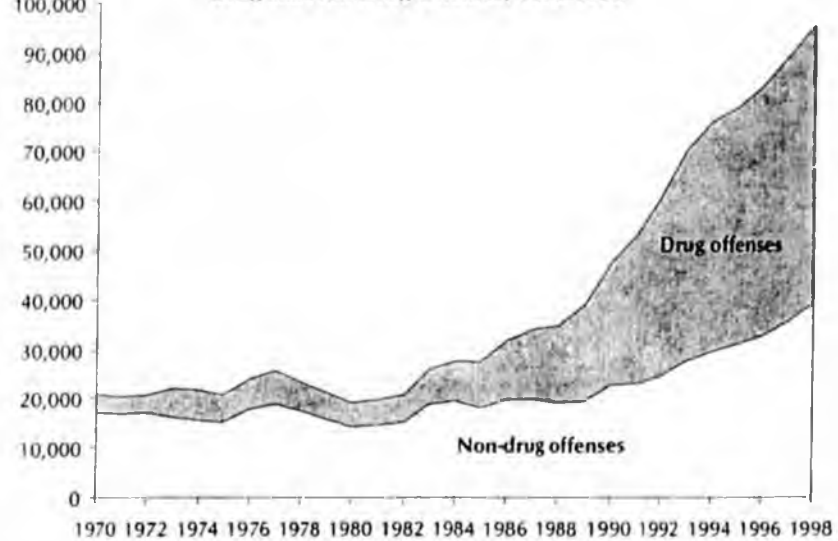
The inmate population sentenced for drug offenses is now almost 60 per cent of the total federal inmate population. Between 1985 and 1998 the number of federal inmates sentenced for drug charges grew by nearly 500 per cent.

The Alaska Department of Corrections does not show such a precipitous rise in the numbers or percentages of inmates sentenced primarily for drug offenses.

In December 1985, out of the total inmate population of 2124 reported

in the corrections data base, 105, or 5 per cent, were sentenced on a drug-related offense as the primary offense (Table 2). (Corrections became a separate state department in 1984; before then it was a division within Health and Human Services. The data base from which these figures were taken was put in place in late 1983.) By the end of 1999, the total DOC inmate population, including that in community residential centers, was 4077. Of these, 247—6.1 per cent—had a controlled substance charge as the primary charge. (These figures do not include those imprisoned on a parole or probation violation which was itself a drug offense, so they are undoubtedly somewhat low.) While the percentage of prisoners in the Alaska system on drug charges has grown only slightly, the actual number has increased by more than 135 per cent, paralleling the climb in the overall DOC population.

Figure 1. Federal Prison Population Sentenced for Drug and Non-Drug Offenses, 1970-1998



Note: These data represent inmates housed in Federal Bureau of Prison facilities; inmates housed in contract facilities are not included. 1998 Data are preliminary and subject to revision.

Source of data: Sourcebook of Criminal Justice Statistics 1998, based on data from the Federal Bureau of Prisons

Table 2. Percentage of Arrestees Reporting Drug Use in the Past 30 Days, by Age and Sex, Anchorage, 1999

	Crack		Cocaine		Crack and cocaine		Marijuana and cocaine		Opiates and cocaine		Any two or more drugs	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All ages	19.2 %	29.7 %	12.1 %	14.8 %	5.5 %	11.6 %	9.4 %	11.6 %	1.2 %	2.6 %	26.0 %	26.6 %
By age												
15-20	0.0 %	15.8 %	13.7 %	5.3 %	0.0 %	5.3 %	9.8 %	5.3 %	2.0 %	0.0 %	27.5 %	21.1 %
21-25	10.5	25.0	11.6	21.4	5.3	17.9	11.6	17.9	3.2	3.6	28.7	21.4
26-30	23.0	18.2	11.5	22.7	4.6	18.2	9.2	18.2	1.1	9.1	26.7	27.3
31-35	27.8	35.7	16.7	10.7	11.3	7.1	6.3	10.7	0.0	3.6	31.3	18.5
35+	21.9	36.8	10.4	14.0	4.7	10.5	9.9	8.8	0.9	0.0	22.1	33.3

Source of data: Arrestee Drug Abuse Monitoring Program, National Institute of Justice

Anchorage Arrestees
(continued from page 1)

educational background, desire for treatment, and demographics. The second part of the ADAM protocol involves the collection of a urine sample from the interviewee used to corroborate the information given in the interview. The specimen is shipped to a lab where it undergoes testing for the presence of ten different drugs.

Participation is strictly voluntary with the inmate having the right to refuse to answer any question asked or terminate the interview at any time. The urine sample is also voluntary and the interviewee may refuse to provide a specimen despite participating in the self-report interview. However, the sample is only collected if the inmate has completed the interview. All of the information obtained during the interview process is strictly confidential, and individual results cannot be made available to any law enforcement or prosecutorial agency. Strict measures are taken to ensure that the interviewer does not know the names of the persons being interviewed, and the survey instrument and urine sample are not marked in any way which could be traced back to the individual.

At the end of data collection the questionnaires are sent to Washington, D.C. for analysis; aggregate data are returned to each individual site for further study.

1999 Results

Though participation in the study is voluntary, the participation rate is relatively high. In 1999, 1,117 arrestees were approached; 76 per cent (n=844) contributed an interview. Of those who agreed to be interviewed, 85 per cent provided a urine specimen for testing (n=718). The results discussed below reflect findings from the participants that contributed both an interview and urine specimen.

In 1999, a total of 563 male and 155 female adult arrestees were surveyed. (An-

chorage is not currently surveying juveniles.) The results are for those arrested for all offenses—not just on drug related charges. The data show that cocaine and marijuana were used most frequently by both male and female arrestees.

Slightly more than half tested positive for any drug, while 25 per cent of the males and 36 per cent of the females tested positive for cocaine, and 37 per cent of males and 31 per cent of females were positive for marijuana. Less than five per cent of those arrested tested positive for opiates or methamphetamines. (See Table 1.)

The self-reported drug information shows that 31 per cent of males and 45 per cent of females admitted using either crack or powder cocaine within the last 30 days (Table 2).

Among those reporting the use of either crack or powder cocaine, males (n=108) used crack a mean 8.8 days and females (n=46), 12.7 days. The mean number of days for powder cocaine usage was 6.5 for males (n=68) and 8.6 for females (n=23). The number of days per month of reported use for marijuana was 11.2 for males (n=269) and 11.0 for females (n=69). (See Table 3.) As Table 4 shows, the data also underscore the fact that drug use is common among individuals arrested across the spectrum of crimes.

Since 1999 was the first full year of data for the Anchorage site, no statistical comparisons with previous years are possible. As data collection continues it will be possible to examine trends in drug use among Anchorage arrestees.

Applications of ADAM Data

In addition to providing a barometer of

Please see *Anchorage Arrestees*, page 8

Table 3. Mean Number of Days Arrestees Used Drugs in the Past 30 Days, Anchorage, 1999

	Male N = 563		Female N = 155	
	N	Mean number of days	N	Mean number of days
Crack	108	8.8 days	46	12.7 days
Cocaine	68	6.5	23	8.6
Marijuana	269	11.2	69	11.0
Opiates	15	5.9	5	11.0
Methamphetamines	13	6.5	4	8.1

Source: Arrestee Drug Abuse Monitoring Program, National Institute of Justice

Table 4. Percentage of Arrestees Found Positive for Any Drug, by Offense Category, Anchorage, 1999

Offense	Male N = 563		Female N = 155	
	N	% positive	N	% positive
Violent offense	152	46.1 %	35	37.1 %
Robbery	7	42.9	3	100.0
Assault	126	46.8	29	34.5
Weapons	12	66.7	1	100.0
Other violent offense	17	29.4	4	25.0
Property offense	106	57.5 %	31	61.3 %
Larceny/theft	46	67.4	23	65.2
Burglary	11	54.5	0	0.0
Stolen vehicle	10	80.0	2	100.0
Other property offense	43	47.2	10	50.0
Drug offense	16	87.5 %	6	50.0 %
Drug sales	1	100.0	0	0.0
Drug possession	15	86.7	6	50.0
Prostitution	0	0.0 %	7	71.4 %
Other offense	369	57.5 %	97	60.8 %

Note: Detail may not add to total because some arrestees may have been arrested for more than one offense.

Source: Arrestee Drug Abuse Monitoring Program, National Institute of Justice

Anchorage Arrestees
(continued from page 7)

Local drug use patterns among the arrested population, ADAM data have a variety of other uses. A brief overview of how the data are being used in other cities can suggest

possibilities for use in Alaska.

Researchers in Philadelphia are using ADAM data to explore the impact of certain "gateway" drugs on subsequent escalation to harder drug use. In addition, the same researchers are attempting to develop a typology of drug users, which can potentially lead to varied interventions or treatment based on user type. Other researchers are examining the relationship between drugs and crime.

It should be noted, however, that the ADAM data collection effort is not limited only to information about drugs. Researchers maximize the amount of data that can be collected through ADAM by creating addenda to the survey instrument. For example, after being interviewed about their drug use patterns, arrestees in 11 ADAM sites were questioned about firearms, including their reasons for owning a firearm, method of obtaining guns, and attitudes toward firearms.

Future of the Program in Anchorage

In January 2000, the ADAM survey instrument was expanded to include more relevant data for both law enforcement and treatment professionals. It will be possible to cross-link results to other national data-

bases such as the National Household Survey on Drug Abuse and the Treatment Episode Data Set. This, in turn, will provide even more specific information on drug use for local policymakers, treatment professionals and law enforcement. Furthermore, the Justice Center intends to supplement the new instrument with addenda specifically aimed at local issues such as alcohol use. The National Institute of Justice and the Institutional Review Board that oversees the project must first approve all addenda used.

In order to disseminate the aggregate data and enhance ADAM's utility to the Anchorage community, the Anchorage site will also assemble a Local Coordinating Council. It will include members of the community at-large as well as professionals in the areas of drug abuse treatment, the judiciary, and law enforcement. We anticipate the implementation of an outreach program that will collect one quarter's data from other areas of the state such as Fairbanks, Juneau, Barrow and Bethel.

The ADAM program is in its infancy in Alaska but has the potential to increase useful information available for professionals across the state.

Cassie Atwell and Matthew Giblin are research associates with the Justice Center.



**Alaska
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Search for Historical Records

Dr. Lawrence Trostle of the Justice Center is compiling historical materials on Alaska Native policing from 1867 through 1959. He is interested in looking at any material—diaries, letters, government records, missionary or other church records, newspaper accounts—which relate to the contribution of Alaska Natives to law en-

forcement or to the general provision of justice services in the period after the purchase of Alaska from Russia through the enactment of statehood. He is also interested in speaking with anyone who may have personal reminiscences to recount. Trostle can be reached through the Justice Center at (907) 786-1815 or allect@uaa.alaska.edu.

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C

MARIJUANA AND BEHAVIORIAL HEALTH

I. Children Of Parents Who Use Marijuana Frequently Are Much More Likely To Use The Drug Than Children In Homes Where Parents Do Not Use Marijuana.

- A person's perception of the risk from starting to use marijuana influences their use of the drug. Alaska ranks in the top 20% for rates of use of marijuana and in the bottom 20% for the perception of risk from using marijuana. *Douglas Wright, State Estimates of Substance Use From the 2002 NSDUH, Figures 2.5 – 2.10.*
- A 1990 survey of 5,458 students in grades 7-12 from 27 school districts across Alaska found that children in homes where parents used marijuana frequently were 350% more likely (22.6% vs. 5%) to use marijuana themselves than children in homes where the parents did not use marijuana. (*The State of Adolescent Health in Alaska, May, 1990.*)
- Nationally, among youth perceiving their parents would strongly disapprove of their trying marijuana once or twice, only 5.4% had used marijuana in the past month vs. 28.7% of youth in homes who perceived that their parents would only somewhat disapprove or neither approve or disapprove of their trying marijuana. *Overview of Findings from the 2003 National Survey on Drug Use and Health, Dept. Health and Human Services, SAMHSA, Office of Applied Studies, p.6, 23, .*

- “Recent studies have shown that prevalence of adolescent marijuana use is inversely proportional to the perceived risk associated with use” *Legalization of Marijuana, Potential Impact on Youth, American Academy of Pediatrics, June, 2004.*
- In 2003, (nationally) the percentage of youth reporting it would be easy to obtain marijuana was 53.6%. *Overview of Findings from the 2003 National Survey on Drug Use and Health, Dept. Health and Human Services, SAMHSA, Office of Applied Studies, p.6.*
- This is approximately 15% lower than the number (68%) of 4,129 Alaska youth grades 7-12 surveyed in 1988 who responded they had the actual opportunity to try marijuana. *Bernard Segal, Drug Taking Behavior Among School Aged Youth, The Alaska Experience and Comparisons with Lower 48 States, 1990, Figure 4.1.*

II. High THC Content Levels May Cause Increased Rates Of Abuse And Dependence.

- Average THC content in Alaska marijuana has increased from 1-2% to almost 14% in 2003. *Reports from the Mississippi Monitoring Project, Dr. Elsohly.*
- Nationally, among past year marijuana users, overall rates of past year abuse or dependence have increased while the approximate number of users has remained steady. This indicates that the increased potency of

marijuana may be to blame. *Compton, WM, et.al., JAMA, May 5, 2004.*

- In Alaska, there were approximately 59 treatment admissions for marijuana abuse in 1976. *Drug Taking Behavior Among School Aged Youth, Segal, B., 1990, p.9, citing, State Office of Drug Abuse, 1976, p.27)*
- There were an average of 434 marijuana treatment admissions in Alaska between 2000 and 2003. This represents a 600% increase since 1976. *SAMHSA, Substance Abuse Treatment Admissions, TEDS Data.*
- In 2003, approximately half of the marijuana admissions in Alaska were for youth aged 12-17. Over 1/3rd were Alaska natives. *Id.*
- More teens are in treatment each year for marijuana dependence than for alcohol and all other drugs combined. *U.S. Dept. of HHS, SAMHSA, Office of Applied Studies, TEDS Data, National Admissions to Substance Abuse Treatment Services, 1992-2001:39, table 5.1a, 5.1b, 156-157.*
- In Alaska natives, dependence on marijuana frequently shows up as a secondary or co-occurring disorder with alcohol dependence. (63% of Alaska Natives with alcohol dependence were also dependent on marijuana) *Alaska Natives Combatting Substance Abuse And Related Violence Through Self-Healing, Center for Alcohol and Addiction Studies, January, 1999.*

III. Marijuana Can Increase The Incidence Of Psychotic Symptoms In Young People And Has An Even Stronger Effect On Those Youth Predisposed To Psychosis.

- 2/3rds (approximately 4,000) of Alaska's new marijuana users are between the ages of 12 and 17. *Gfroerer, J., Initiation of Marijuana Use, Trends, Patterns, and Implications, SAMHSA, 2002.*
- Using marijuana during adolescence and young adulthood increases the risk of psychotic symptoms later in life, and smoking marijuana can lead to adverse psychiatric effects. *Os, J., et.al., Prospective Cohort Study of Cannabis Use, Predisposition for Psychosis, and Psychotic Symptoms in Young People, British Medical Journal; Zammit, S., et.al., Self Reported Cannabis Use as a Risk Factor for Schizophrenia in Swedish Conscripts of 1969; Johns, A., Psychiatric Effects of Cannabis, The British Journal of Psychiatry (2001)*
- Teens engaging in risk behaviors, such as use of drugs, including marijuana are at increased odds for depression, suicidal ideation, and suicide attempts. *Hallfors, D., et.al., Adolescent Depression and Suicide Risk, Am. J. Prev. Med., 2004; George C. Patton: Cannabis Use and Mental Health in Young People: Cohort Study, British Medical Journal, November, 2002.*
- Chronic marijuana use may be associated with cognitive deficits. *Cerebrovascular Perfusion In*

Marijuana Users During A Month Of Monitored Abstinence., Herning, R., et.al., Neurology, February, 2005.

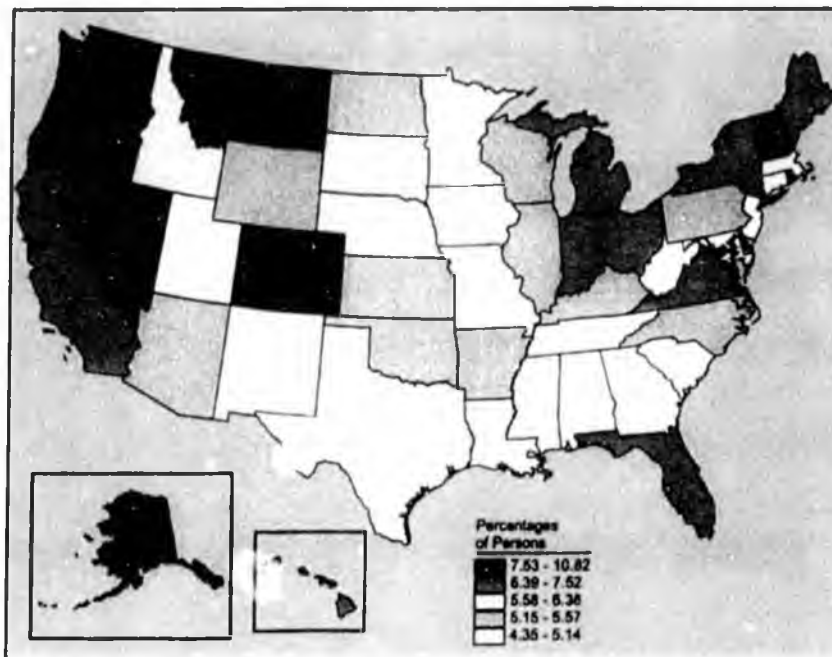
IV. Marijuana As A Gateway Drug.

- Use of Marijuana May Act As A Gateway To Other Drug Use. *Lynskey, M., et.al., Escalation of Drug Use In Eearly Onset Cannabis Users vs. Co-Twin Controls, JAMA, January 22, 2003; Gfroerer, J., Initiation of Marijuana Use, Trends, Patterns, and Implications, SAMHSA, 2002.*
- Youth who had ever used marijuana were more likely to have sold marijuana (24% vs. 1%) carried a handgun (21% vs. 7%) or been in a gang (14% vs. 2%) *Juvenile Offenders and Victims, 1999 National Report.*
- Youth who had ever sold marijuana were more likely to have sold hard drugs (cocaine or heroin) (40% vs. 1%) carried a handgun (35% vs. 8%) or been in a gang (24% vs. 4%) than youth who never sold marijuana. *Juvenile Offenders and Victims, 1999 National Report.*
- Initiation of marijuana use before age 15 was associated with a greater risk of using hard drugs such as heroin and cocaine. *Gfroerer, J., Initiation of Marijuana Use, Trends, Patterns, and Implications, SAMHSA, 2002.*
- Initiation of marijuana use before age 15 was associated with being 6 times as likely to be

dependent on an illegal drug. *Gfroerer, J., Initiation of Marijuana Use, Trends, Patterns, and Implications, SAMHSA, 2002.*

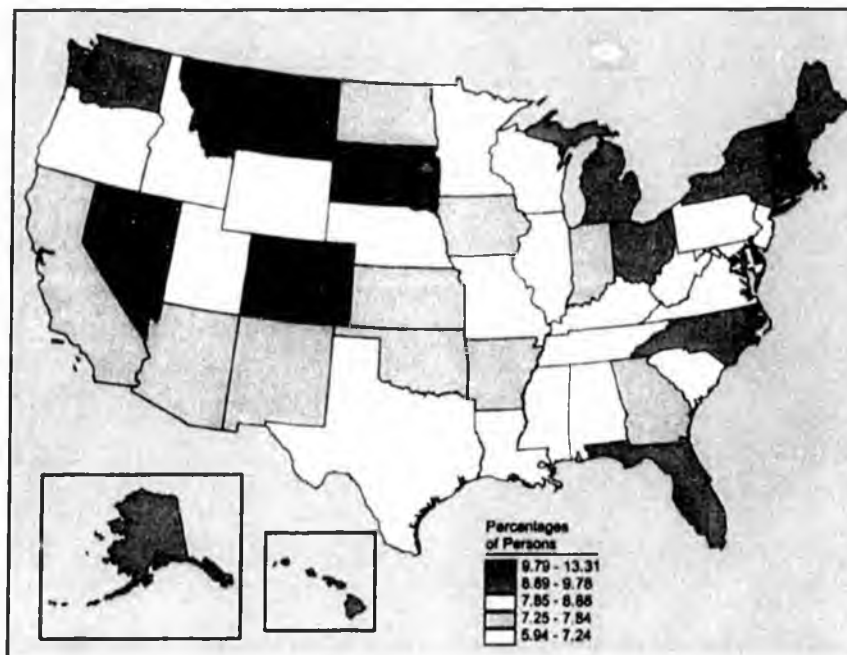
- Youths with an average grade of D or below were more than 4 times as likely to have used marijuana in the past year as youths who reported an average grade of A. *NHSDA Report, Marijuana Use Among Youths, July 19, 2002.*

Figure 2.5 Percentages Reporting Past Month Use of Marijuana among Persons Aged 12 or Older, by State: 2002



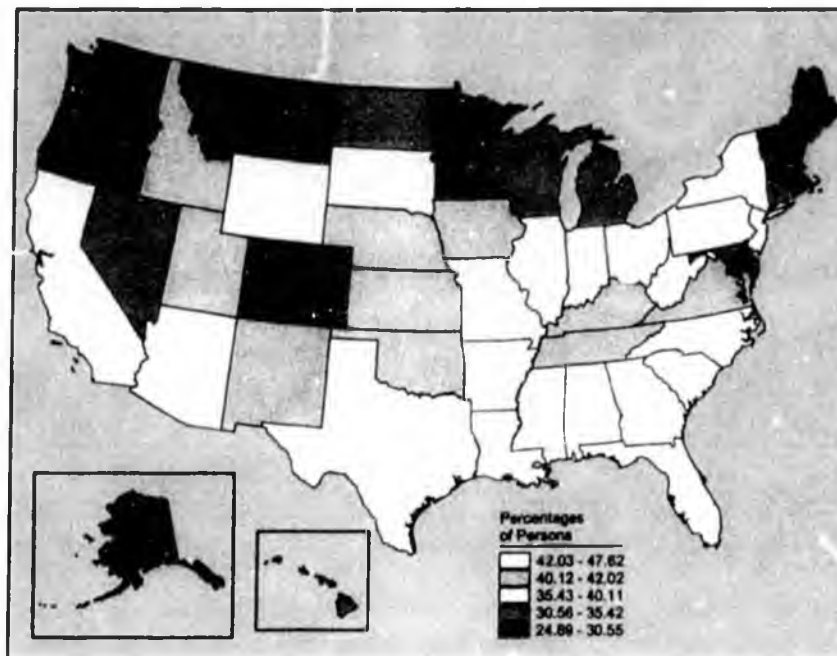
Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002.

Figure 2.6 Percentages Reporting Past Month Use of Marijuana among Youths Aged 12 to 17, by State: 2002



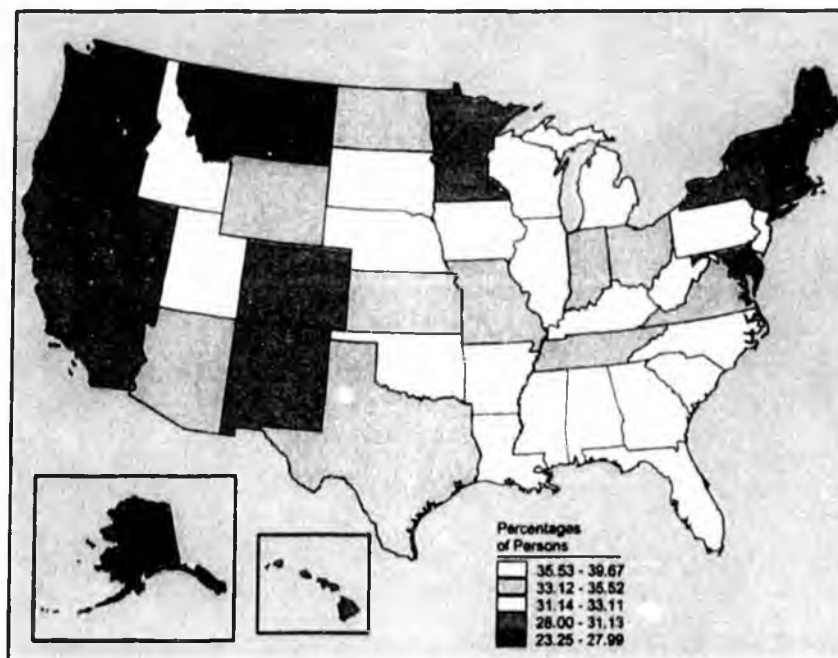
Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002.

Figure 2.9 Percentages Reporting *Perceptions of Great Risk of Smoking Marijuana Once a Month* among Persons Aged 12 or Older, by State: 2002



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002.

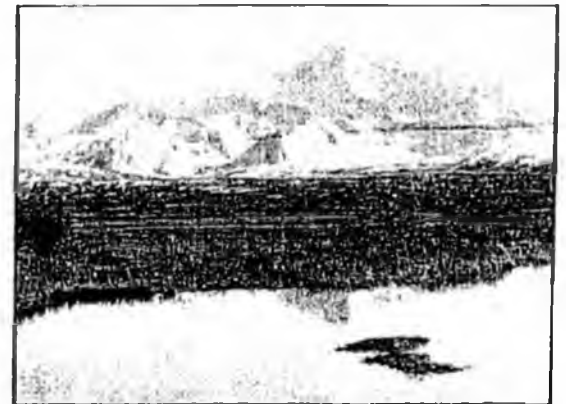
Figure 2.10 Percentages Reporting *Perceptions of Great Risk of Smoking Marijuana Once a Month* among Youths Aged 12 to 17, by State: 2002



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002.

The State of Adolescent Health in Alaska

May 1990



HEALTH
6867

Executive Summary

The Alaskan Adolescent Health Survey was undertaken in 1989 to draw a picture of the perceived health status and risk behaviors of youth in the state. It was intended to learn more about the health problems and concerns of youth from their perspective. The goal throughout has been to develop a statewide database which when coupled with morbidity and mortality data would provide information to those who plan and develop services at the state and local levels to better target those services.

While the entire state was invited to participate, the largest metropolitan areas declined, and as a consequence completed responses were received from 5,458 students in grades 7-12 representing rural areas, small towns, highway communities and regional centers from 27 school districts across Alaska. Seventy-seven percent of eligible students in participating districts completed the survey with the remaining students either having been absent the day of the survey (10%), having failed to bring the signed parental permission slip (10%), or having declined participation (3%).

The sample represents 13% of public school students in grades 7-12. While we cannot claim that the data are statistically generalizable to all rural and urban areas equally, we know this represents the largest study of youth health ever undertaken in Alaska.

Not only is it the largest study in terms of numbers of respondents, but it is the most comprehensive as well. The Alaskan Adolescent Health Survey contained 162 questions on a range of issues: health status; health-related behaviors; family life; feelings about school and school performance; behaviors and attitudes about foods and eating; use of alcohol, tobacco, and drugs; sexual behavior and contraception; and involvement in anti-social or deviant behaviors.

The results suggest that most youths surveyed see themselves to be healthy—at least physically healthy. On the other hand, because of their dietary or behavioral patterns 14 percent have risk factors which predispose to chronic illnesses later in life. These "predisposing factors" for illnesses such as cardiovascular disease and cancer appear to be more prevalent in smaller communities. In addition, compared with the nation, more Alaskan teens appear to be overweight.

Weight concerns are common among teens wherever they live; and Alaskan youths are no exception. For example, three out of ten females and 10% of males in this survey have a distorted body image; they see themselves as fat when they are not. Such distortions may lead to problem eating patterns of chronic dieting, bingeing and purging.

As is true for physical health, most teenagers in Alaska also see themselves as emotionally healthy. However, there is a significant minority of teenagers who report problems of grave concern. Over one-in-twenty describe themselves as severely stressed—a third of whom have been abused and half of whom have attempted suicide.

Overall, one-in-six Alaskan youths report they have attempted suicide—23% of females and 13% of males. Over half of these youths report having made multiple attempts. Over a third of all those who have made suicide attempts say they told no one. Many have family members or friends who have either attempted or completed suicide. As one would anticipate, there is a strong association between suicidal behavior and other risk factors (e.g., disordered eating, premature pregnancy) and especially abuse.

Physical and sexual abuse are relatively common among Alaskan youths with 23% of females and 8% of males reporting having been physically abused. A quarter of all girls and 3% of boys report sexual abuse. These figures especially for girls, are significantly higher than what many estimate to be the national prevalence. A total of 34% of girls surveyed report having been physically and/or sexually abused. Many youths who are abused tell no one.

When we turn to sexual activity we find that overall 43% of males and 38% of females in the survey report being sexually active. Upon closer examination, the patterns of sexual intercourse appear to parallel the nation as a whole with nearly three-quarters of females and two-thirds of males reporting being sexually active by the 12th grade.

Among those who have had intercourse, 15% of the girls report ever being pregnant; and 9% of sexually active males were aware that they had made someone pregnant. By the 12th grade, 21% of girls have been pregnant and, of those, more than one-in-four have been pregnant multiple times.

X



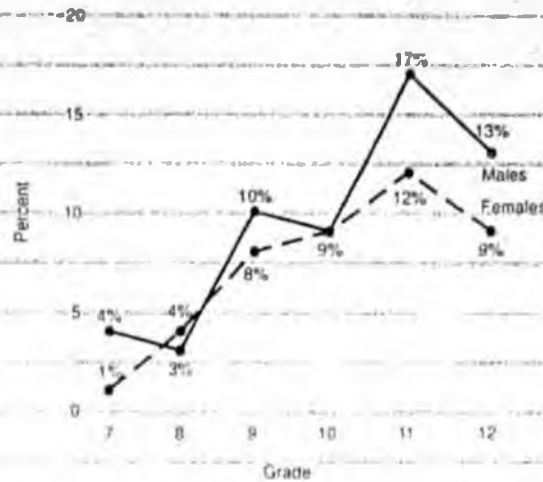
Related Problems

- Nearly three out of ten of those who do poorly in school are potential problem drinkers. About a tenth of those who do above average are potential problem drinkers.
- Those who have been abused are more likely to be potential problem drinkers (25%) compared to those who have not been abused (16%).
- 30% of potential problem drinkers have attempted suicide, compared to 13% of non-drinkers, and 22% of light drinkers.
- Compared with peers, potential problem drinkers are also engaged in more anti-social behavior, including vandalism, group fighting, and running away from home.

Marijuana

Students were asked about their use of marijuana:

- 22.2% of males and 20.5% of females in grades 7-9 had ever used marijuana.
- 45.9% of males and 45.8% of females in grades 10-12 had ever used marijuana (see Figure 25).
- While not dramatically so, marijuana, like tobacco, is somewhat more popular among youths from communities under 2,500 than youths from larger communities, with the greatest differ-



*Weekly and daily use were combined to represent regular use

- A third of those who have ever used marijuana (34.8%) report they have used it in the past week—15% within the past day. A fifth of users have smoked marijuana in the past month (20.8%), and the remainder have smoked marijuana over a month ago (see Figure 27).
- A quarter of those who have used marijuana within the past year also report they have used it before or during school.
- More adolescents who report their parents use marijuana frequently use marijuana themselves (22.6%) compared with five percent of youths whose parents do not use marijuana.

Inhalants

Inhalants are a substance of abuse among younger children: —7.7% of males and 7.0% of females in grades 7-9 have ever used inhalants. —6.0% of males and 3.6% of females in grades 10-12 have ever used inhalants (see Figure 26).

- Less than 2% of all students use inhalants on a monthly or more frequent basis.
- While most youth who have ever tried inhalants have used them only once, or a long time ago, about fifteen percent of those who have ever tried them, report using

Other Drugs of Abuse

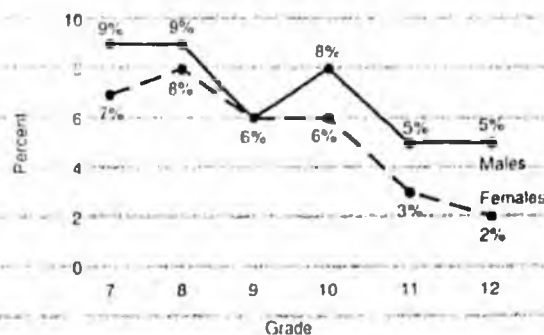
Speed* has been tried by 12.2% of 10-12th grade males, and 15.4% of females; yet few appear to use it with any frequency—2% of males, and 3% of females use it monthly or more often (see Table 32).

Cocaine has been tried by 9.2% of 10-12th grade males and 10.3% of females. Again, less than 2% of both gender groups use it monthly or more often.

Diet pills have been used by far more 10-12th grade females than males (19.3% vs. 3.2%). Nearly 7% of females report using diet pills monthly or more often, compared to less than one percent of males.

*Often teenagers report using speed when, in fact, they are using "look alike" drugs, drugs which appear to be amphetamines but are stimulants such as caffeine.

Figure 26: Percent Who Have Ever Used Inhalants



chemical health as a priority issue for teenagers in Alaska and to address those dynamics which predispose to drug use.

To meet this challenge, we must first acknowledge that the two primary substances of abuse are tobacco and alcohol.

When daily cigarette and alcohol data are compared for 12th graders against national norms, what we see is shown in Table 41.

For daily cigarette use, there is a much higher rate among female 12th graders in Alaska compared with the nation; however, based on self-report, there is less daily drinking by Alaskan seniors than for the nation as a whole. Regular

use of marijuana in Alaska among high school seniors (at least weekly) is nearly double that of the nation. Whether marijuana use has replaced alcohol as the preferred substance of regular use by Alaskan seniors remains a possibility. To look at these data in isolation from the other information collected in the Adolescent Health Survey is to ignore the dynamics which predispose to drug abuse. We know that those who do poorly in school are more likely to abuse substances; so, too, are those who

are emotionally stressed. We

Substance	Alaska		Monitoring the Future	
	Males	Females	Males	Females
Cigarettes	18.0%	27.0%	17.4%	18.1%
Alcohol	2.1%	1.2%	7.0%	3.9%

Bachrach, J.G., Johnston, R.P., O'Malley, P.M. (1987). Monitoring the Future: Questionnaire responses from the nation's high school seniors. Ann Arbor Survey Research Center, Institute for Social Research, University of Michigan.

Format for Alaska survey drug use questions were: Never, Over a year ago, 1-65 times/monthly, About monthly, About weekly, and Daily. In MIF, respondents are asked how many times in the past 30 days they have used each of the substances. The frequency options are 0, 1-2, 3-5, 6-9, 10-19, 20-39, 40 or more. In order to translate the MIF data to the Alaska continuum, the following equations were used: Daily = 20 or more times in the last 30 days.

know that those who are emotionally isolated are more likely to abuse drugs as are those who have been abused.

CHALLENGE #8: To invest adequately in the youth of Alaska with the realization that they are the state's most valuable resource.

Clearly, this is the most difficult challenge of all. This report paints a portrait of youth in Alaska which suggests cause for concern in a number of ar-

Simply stated, developing a substance abuse prevention program which does not address the predisposing factors and their interrelationships is

most likely to fail. It is critical to understand the forces which predispose youth to abuse drugs if we are to assist them in developing chemical health.

eas. Yet, after the dust settles, will we say, "They'll grow out of it. We did?" Or, will we look at these data and ask, "Where should we invest our resources to help the largest numbers and most troubled of our adolescents?"

These are not easy questions which lend themselves to

quick solutions. The meaning of these findings should be debated in our schools and in our legislature, in our churches, and in our communities. Only then may we develop a blueprint for action which will help all teenagers in Alaska achieve their maximum potential.

Overview of Findings from the 2003 National Survey on Drug Use and Health

DEPARTMENT OF HEALTH AND HUMAN SERVICES
Substance Abuse and Mental Health Services Administration
Office of Applied Studies

1. Introduction

This report presents the first information from the 2003 National Survey on Drug Use and Health (NSDUH), an annual survey of the civilian, noninstitutionalized population of the United States aged 12 years old or older. Prior to 2002, the survey was called the National Household Survey on Drug Abuse (NHSDA). This brief Overview report provides a concise summary of the main results of the 2003 NSDUH. A more complete presentation of the initial results of the survey is given in the full report, *Results from the 2003 National Survey on Drug Use and Health: National Findings* (Office of Applied Studies [OAS], 2004). Both reports present national estimates of rates of use, numbers of users, and other measures related to illicit drugs, alcohol, and tobacco products. Measures related to mental health problems also are included. State-level estimates from NSDUH will be presented in a separate report.

A major focus of this report is changes in substance use between 2002 and 2003. Because of improvements to the survey in 2002, the 2002 data constitute a new baseline for tracking trends in substance use and other measures. Therefore, estimates from the 2002 and 2003 NSDUHs should not be compared with estimates from the 2001 and earlier NHSDAs to assess changes in substance use over time.

1.1. Summary of NSDUH

NSDUH is the primary source of statistical information on the use of illegal drugs by the U.S. population. Conducted by the Federal Government since 1971, the survey collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at their places of residence. The survey is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA) of the U.S. Department of Health and Human Services and is planned and managed by SAMHSA's Office of Applied Studies (OAS). Data collection is conducted under contract with RTI International, Research Triangle Park, North Carolina.¹ This section briefly describes the survey methodology; a more complete description is provided in Appendix A in the full "National Findings" report (OAS, 2004).

NSDUH collects information from residents of households, noninstitutional group quarters (e.g., shelters, rooming houses, dormitories), and civilians living on military bases. Persons excluded from the survey include homeless persons who do not use shelters, military personnel on active duty, and residents of institutional group quarters, such as jails and hospitals. Appendix D in the full report describes surveys that cover populations outside the NSDUH sampling frame.

Since 1999, the NSDUH interview has been carried out using computer-assisted interviewing (CAI). Most of the questions are administered with audio computer-assisted self-interviewing (ACASI). ACASI is designed to provide the respondent with a highly private and confidential means of responding to questions to increase the level of honest reporting of illicit drug use and other sensitive behaviors. Less sensitive items are administered by interviewers using computer-assisted personal interviewing (CAPI).

¹ RTI International is a trade name of Research Triangle Institute.

Consistent with the 2002 survey, the 2003 NSDUH employed a 50-State sample design with an independent, multistage area probability sample for each of the 50 States and the District of Columbia to facilitate State-level estimation. The design also oversampled youths and young adults, so that each State's sample was approximately equally distributed among three major age groups: 12 to 17 years, 18 to 25 years, and 26 years or older.

Nationally, 130,605 addresses were screened for the 2003 survey, and 67,784 completed interviews were obtained. The survey was conducted from January through December 2003. Weighted response rates for household screening and for interviewing were 90.72 and 77.39 percent, respectively.

1.2. Trend Measurement

Although the design of the 2002 and 2003 NSDUHs is similar to the design of the 1999 through 2001 surveys, there are important methodological differences that impact comparability of 2002 and 2003 estimates with estimates from prior surveys. In addition to the name change, each NSDUH respondent is now given an incentive payment of \$30. These changes, both implemented in 2002 and continued in 2003, resulted in a substantial improvement in the survey response rate. The changes also affected respondents' reporting of many critical items that are the basis of prevalence measures reported by the survey each year. Comparability also could be affected by improved data collection quality control procedures that were introduced in the survey beginning in 2001, and by incorporating new population data from the 2000 decennial census into NSDUH sample weighting procedures. Analyses of the effects of each of these factors on NSDUH estimates have shown that 2002 and 2003 data should not be compared with 2001 and earlier NHSDA data to assess changes over time. Therefore, this report presents data only from the 2002 and 2003 NSDUHs to examine trends.

Limited trend assessment also can be done using information on prior substance use collected in the 2002 and 2003 NSDUHs. Specifically, questions on age at first use of substances, in conjunction with respondents' ages and interview dates, provide data that can be used to estimate the rates of first-time use (incidence) for years prior to 2002 and 2003. Trends for 1965 to 2002 in these incidence measures are discussed in Chapter 5 based on combined 2002 and 2003 data. Estimates of lifetime prevalence rates for years prior to 2002 were produced from 2002 NSDUH data on age at first use and included in the 2002 NSDUH full report (OAS, 2003). However, a recent evaluation assessing the validity of those estimates determined they were subject to significant bias (Gfroerer, Hughes, Chromy, Heller, & Packer, 2004). Therefore, these estimates of lifetime use are not included in this report. Further discussion of incidence estimates is given in Chapter 5 and Appendix B of the full report.

1.3. Purpose of This Report and Availability of Other Reports

This Overview report is intended to provide a concise summary of the key results from the 2003 NSDUH. It contains a subset of the results given in the full report, *Results from the 2003 National Survey on Drug Use and Health: National Findings* (OAS, 2004). Both reports present the results in separate chapters that discuss the national findings on seven topics: use of illicit drugs; use of alcohol; use of tobacco products; trends in initiation of substance use; prevention-related issues; substance dependence, abuse, and treatment; and mental health. The

Trends in Initiation of Substance Use (Incidence)

- There were an estimated 2.6 million new marijuana users in 2002. This means that each day, an average of 7,000 Americans tried marijuana for the first time. About two thirds (69 percent) of these new marijuana users were under age 18, and about half (53 percent) were female.
- The annual number of marijuana initiates generally increased from 1965 until about 1973. From 1973 to 1978, the annual number of marijuana initiates remained level at over 3 million per year. After that, the number of initiates declined, reaching a low point in 1990, then rose again until 1995. From 1995 to 2002, there was no consistent trend, with estimates varying between 2.4 million and 2.9 million per year.
- Decreases in initiation of both LSD (from 631,000 to 272,000) and Ecstasy (from 1.8 million to 1.1 million) were evident between 2001 and 2002, coinciding with an overall drop in hallucinogen incidence from 1.6 million to 1.1 million.
- Pain reliever incidence increased from 1990 (573,000 initiates) to 2000 (2.5 million). In 2001 and 2002, the number also was 2.5 million.
- The number of new daily cigarette smokers decreased from 2.0 million in 1997 to 1.4 million in 2002. Among youths under 18, the number of new daily smokers decreased from 1.1 million per year between 1997 and 2000 to 734,000 in 2002. This corresponds to a decrease from about 3,000 to about 2,000 new youth smokers per day.

Youth Prevention-Related Measures

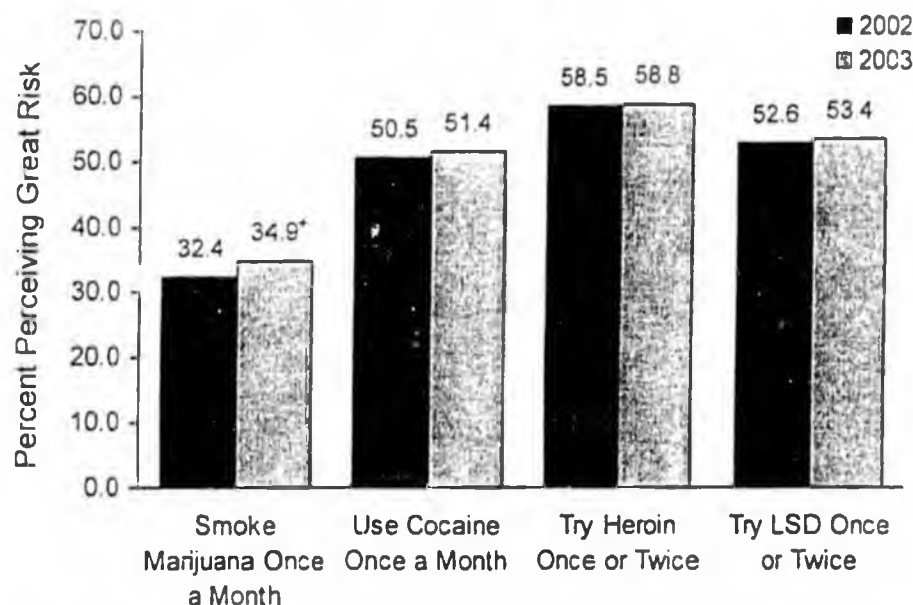
- The percentage of youths aged 12 to 17 indicating that smoking marijuana once a month was a great risk increased from 32.4 percent in 2002 to 34.9 percent in 2003. There were no changes between 2002 and 2003 in the percentages of youths perceiving a great risk associated with using cigarettes, alcohol, cocaine, heroin, and LSD.
- The percentage of youths reporting that it would be easy to obtain marijuana declined slightly between 2002 and 2003, from 55.0 to 53.6 percent. The percentage of youths reporting that LSD would be easy to obtain also decreased between 2002 and 2003, from 19.4 to 17.6 percent.
- Most youths (89.4 percent) reported that their parents would strongly disapprove of their trying marijuana once or twice. Among these youths, only 5.4 percent had used marijuana in the past month. However, among youths who perceived that their parents would only somewhat disapprove or neither approve nor disapprove of their trying marijuana, 28.7 percent used marijuana.

6. Youth Prevention-Related Measures

The National Survey on Drug Use and Health (NSDUH) includes an extensive set of questions about risk and protective factors directed at youths aged 12 to 17. Risk factors include those individual characteristics or social environments associated with an increased likelihood of substance use, while protective factors are related to a decreased likelihood of substance use. These factors derive from circumstances, influences, and perceptions at many levels, such as the individual, peer, family, school, and community levels (Hawkins, Catalano, & Miller, 1992).

Perceptions of Risk. Youths were asked how much they thought people risk harming themselves physically and in other ways when they use various substances. Response choices in the survey were "great risk," "moderate risk," "slight risk," or "no risk." The percentage of youths aged 12 to 17 indicating that smoking marijuana once a month was a great risk increased from 32.4 percent in 2002 to 34.9 percent in 2003. There were no statistically significant changes between 2002 and 2003 in the percentages of youths aged 12 to 17 perceiving a great risk in using cigarettes, alcohol, cocaine, heroin, and LSD (Figure 9).

Figure 9. Perceived Great Risk of Use of Selected Illicit Drugs among Youths Aged 12 to 17: 2002 and 2003



Note: Statistically significant differences (at 0.05 level) between 2002 and 2003 are denoted by "*".

Availability. In 2003, approximately one in six youths (16.1 percent) reported that he or she had been approached by someone selling drugs in the past month. This was about the same percentage as in 2002 (16.7 percent). The percentage of youths reporting that it would be easy to obtain marijuana declined slightly between 2002 and 2003, from 55.0 to 53.6 percent. The percentage of youths reporting that LSD would be easy to obtain also decreased, from 19.4 to 17.6 percent.

Parental Disapproval of Substance Use. In 2003, youths who perceived that their parents would "strongly disapprove" of their use of substances were much less likely to use those substances than youths who perceived that their parents would only "somewhat disapprove" or "neither approve nor disapprove." Among youths in 2003 who perceived that their parents would strongly disapprove of their trying marijuana or hashish once or twice, 5.4 percent used marijuana in the past month, while among youths whose parents would not strongly disapprove, 28.7 percent used marijuana in the past month.

The majority of youths in 2003 indicated that their parents would strongly disapprove if they used marijuana once or twice (89.4 percent) or if they used marijuana once a month or more (92.2 percent). Most youths also indicated that their parents would strongly disapprove if they were to smoke one or more packs of cigarettes per day (89.8 percent) or have one or two alcohol drinks nearly every day (88.5 percent). These rates of perceived parental disapproval were all similar to the rates in 2002.

Delinquent Behavior. In 2003, youths were asked if they had engaged in the following delinquent behaviors during the past year: gotten into a serious fight at school or work, participated in a group-on-group fight, attacked someone with the intent to seriously hurt him or her, carried a handgun, sold illegal drugs, or stolen or tried to steal something worth \$50 or more. Youths who had engaged in these behaviors were more likely to have used illicit drugs in the past month than other youths. Both the percentage of youths reporting that they had gotten into a serious fight at school or work and the percentage participating in a group-against-group fight in the past year increased between 2002 and 2003 from 20.6 to 23.8 percent and from 15.9 to 18.1 percent, respectively. The percentage selling illegal drugs in the past year decreased from 4.4 percent in 2002 to 3.6 percent in 2003. In 2003, 3.6 percent of youths indicated they had carried a handgun in the past year, 4.5 percent had stolen (or tried to steal) something worth more than \$50, and 8.3 percent had attacked someone with the intent to seriously harm him or her; these percentages were similar to those in 2002.

Exposure to Prevention Messages. In 2003, over half of all youths aged 12 to 17 (58.9 percent) indicated that they had talked with at least one parent in the past year about the dangers of tobacco, alcohol, or drug use. A majority of youths (83.6 percent) reported having seen or heard alcohol or drug prevention messages outside of school in the past year, and 78.1 percent of youths enrolled in school during the past 12 months reported having seen or heard drug or alcohol prevention messages in school. These percentages were all similar to the percentages in 2002.

AMERICAN ACADEMY OF PEDIATRICS

POLICY STATEMENT

Organizational Principles to Guide and Define the Child Health Care System and/or Improve the Health of All Children

Committee on Substance Abuse and Committee on Adolescence

Legalization of Marijuana: Potential Impact on Youth

ABSTRACT. As experts in the health care of children and adolescents, pediatricians may be called on to advise legislators concerning the potential impact of changes in the legal status of marijuana on adolescents. Parents, too, may look to pediatricians for advice as they consider whether to support state-level initiatives that propose to legalize the use of marijuana for medical purposes or to decriminalize possession of small amounts of marijuana. This policy statement provides the position of the American Academy of Pediatrics on the issue of marijuana legalization, and the accompanying technical report (available online) reviews what is currently known about the relationship between adolescents' use of marijuana and its legal status to better understand how change might influence the degree of marijuana use by adolescents in the future. *Pediatrics* 2004;113:1625-1626; *marijuana, legalization, substance abuse, decriminalization.*

INTRODUCTION

Substance abuse by adolescents is an ongoing concern of pediatricians. Marijuana is the illicit substance most commonly abused by adolescents.¹ Any change in the legal status of marijuana, even if limited to adults, could affect the prevalence of use among adolescents.² For example, tobacco and alcohol products, both legal for adults 18 and 21 years of age, respectively, are the psychoactive substances most widely abused by adolescents.

Marijuana currently is classified by the US Drug Enforcement Agency as a schedule I drug, which means that it has a high potential for abuse, has no currently accepted medical use in the United States, and lacks accepted safety for use under supervision by a physician. Rigorous scientific research to determine whether marijuana, especially cannabinoids, has any potential therapeutic effect is just beginning. In contrast, the significant neuropharmacologic, cognitive, behavioral, and somatic consequences of acute and long-term marijuana use are well known and include negative effects on short-term memory, concentration, attention span, motivation, and problem solving, which clearly interfere with learning; adverse effects on coordination, judgment, reaction time, and tracking ability, which contribute substantially to unintentional deaths and injuries among adolescents (especially those associated with motor vehicles); and negative health effects with repeated use similar to effects seen with smoking tobacco.³

More information, including historical perspec-

tives on the legal status of marijuana as well as concerns surrounding medicinal use of marijuana, is available in the accompanying technical report (available online).²

RECOMMENDATIONS

1. The American Academy of Pediatrics opposes the legalization of marijuana.
2. The American Academy of Pediatrics supports rigorous scientific research regarding the use of cannabinoids for the relief of symptoms not currently ameliorated by existing legal drug formulations.

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All policy statements from the American Academy of Pediatrics automatically expire 5 years after publication unless reaffirmed, revised, or retired at or before that time.

Legalization of Marijuana: Potential Impact on Youth
Committee on Substance Abuse and Committee on Adolescence
Pediatrics 2004;113;1825-1826
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PEDIATRICS

Legalization of Marijuana: Potential Impact on Youth
Alain Joffe, W. Samuel Yancy and the Committee on Substance Abuse and
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The online version of this article, along with updated information and services, is
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Aiain Joffe, MD, MPH, and W. Samuel Yancy, MD, the Committee on Substance Abuse and Committee on Adolescence

Legalization of Marijuana: Potential Impact on Youth

ABSTRACT. This technical report provides historical perspectives and comparisons of various approaches to the legal status of marijuana to aid in forming public policy. Information on the impact that decriminalization and legalization of marijuana could have on adolescents, in addition to concerns surrounding medicinal use of marijuana, are also addressed in this report. Recommendations are included in the accompanying policy statement. *Pediatrics* 2004;113:e632-e638. URL: <http://www.pediatrics.org/cgi/content/full/113/6/e632>; marijuana, legalization, substance abuse, decriminalization.

ABBREVIATIONS. AAP, American Academy of Pediatrics; IOM, Institute of Medicine.

BACKGROUND

Over the last 40 years, the legal status of marijuana has been debated vigorously. Proponents of policies that would permit individual possession of small amounts of marijuana argue that it is a safe drug and that criminal sanctions against personal use and possession represent at worst excessively harsh and at best unnecessary penalties. Echoing these sentiments, editors of *The Lancet* have concluded that "cannabis per se is not a hazard to society but driving it further underground may well be."¹ Advocates for legalization also point out that the morbidity, mortality, and economic costs to society associated with alcohol and tobacco use in the United States dwarf those associated with marijuana use.

Those opposing liberalization of current laws counter that marijuana is not a benign drug, especially in light of new psychopharmacologic information demonstrating that marijuana shares many features with other illicit drugs. They also contend that legalization or decriminalization of personal use of marijuana likely would trigger a substantial increase in use, with foreseeable increases in the social, economic, and health costs.

Most recently, the debate has focused on the medical use of marijuana (that is, the use of smoked marijuana to treat a variety of medical conditions). Eight states (Alaska, Arizona, California, Colorado, Maine, Nevada, Oregon, and Washington) have

passed ballot initiatives that provide for medical use of marijuana under certain circumstances; one other state (Hawaii) has enacted state legislation permitting medical marijuana use.² The federal government has opposed vigorously any efforts to permit physicians to prescribe marijuana for medical purposes, an approach characterized by the former editor of the *New England Journal of Medicine* as "misguided, heavy-handed, and inhumane."³

Controversy regarding marijuana is not limited to the United States. Australia has decriminalized the use of marijuana in some territories, and Canada⁴ as well as Switzerland and other European countries⁵ are reconsidering their approach to marijuana. However, the most widely publicized approach to regulation of marijuana is that of The Netherlands. Under a complex system of "law-on-the-books" and "law-in-action," Dutch law permits personal use of marijuana but outlaws possession.⁶

Pediatricians, too, are not of one mind in their views regarding the legal status of marijuana. In a periodic survey of fellows of the American Academy of Pediatrics (AAP) conducted in 1995,⁷ only a minority (18%) favored legalization, and 26% believed that possession or sale should be a felony; 31% felt that marijuana should be available by prescription for medical purposes to a certain class of patients, and 24% believed that marijuana should remain illegal but penalties for personal possession should be reduced or eliminated.

Since the periodic survey was conducted, much more has been learned about the psychopharmacologic properties of marijuana. Scientists have demonstrated that the emotional stress caused by withdrawal from marijuana is linked to corticotropin-releasing factor, the same brain chemical that has been linked to anxiety and stress during opiate, alcohol, and cocaine withdrawal.⁸ Others report that tetrahydrocannabinol, the active ingredient in marijuana, stimulates release of dopamine in the mesolimbic area of the brain, the same neurochemical process that reinforces dependence on other addictive drugs.⁹ Current scientific information about marijuana has been summarized in the AAP policy statement "Marijuana: A Continuing Concern for Pediatricians."¹⁰ Some of the significant neuropharmacologic, cognitive, behavioral, and somatic consequences of acute and long-term marijuana use are well known and include negative effects on short-

The guidance in this report does not indicate an exclusive course of treatment or serve as a standard of medical care. Variations, taking into account individual circumstances, may be appropriate.

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term memory, concentration, attention span, motivation, and problem solving, which clearly interfere with learning; adverse effects on coordination, judgment, reaction time, and tracking ability, which contribute substantially to unintentional deaths and injuries among adolescents (especially those associated with motor vehicles); and negative health effects with repeated use similar to effects seen with smoking tobacco. Three recent studies¹¹⁻¹³ demonstrate an association between marijuana use and the subsequent development of mental health problems; however, a small study of 56 monozygotic cotwins discordant for marijuana use did not find any such associations.¹⁴

DEFINITION OF TERMS

There are 3 general policy perspectives concerning the status of marijuana in the United States: prohibition, decriminalization, and legalization. Prohibition describes current federal policy toward marijuana use, which seeks to minimize or prevent use of marijuana with strong legal sanctions and aggressive interdiction of supply routes. Decriminalization and depenalization (used interchangeably in this report) refer to the elimination, reduction, and/or nonenforcement of penalties for the sale, purchase, or possession of marijuana although such activities remain illegal. Under decriminalization, penalties for use or distribution are at least possible theoretically, and advertising would be banned. Legalization, one step beyond decriminalization, would fundamentally change the status of marijuana in society. It is an acknowledgment that the government has no fundamental interest in an individual's use of a drug, although it may still seek to regulate its sale, distribution, use, and advertisement to safeguard the public's health. Such is the case with alcohol and tobacco. Of the 3 approaches, only the prohibitionist approach has reducing or limiting drug use as its explicit goal.

HISTORICAL PERSPECTIVES ON DRUG POLICIES IN THE UNITED STATES

Important perspectives on how changing the status of marijuana could affect use by adolescents can be gleaned from an examination of this country's experience with drugs over the last 200 years. During the 19th century, opiate drugs were legal and widely available. Opium use was common, especially among middle-class white women.¹⁵ Use of morphine also was extensive, and heroin was marketed as a "sedative for coughs." Cocaine, which routinely was added to patent medicines and beverages, also was legal; it was prized for its local anesthetic effect and its ability to counteract the effects of morphine. The national opiate addiction rate increased from 0.72 per 1000 in 1840 to 4.59 per 1000 in the 1890s, thereafter beginning a sustained decline.^{16(p28)}

Another wave of drug use began in the mid-1960s as enforcement of marijuana laws by police became lax and adolescent and layperson perceptions of the risk of regular use declined. Officials from the US Drug Enforcement Agency expressed the view that the fight against marijuana detracted from the more

important work of combating heroin use.^{16(p174)} Drug incarcerations per 1000 arrests began to drop in 1960 and remained low through 1979. The Carter administration (1977-1981) proposed removing criminal sanctions for possessing small amounts of marijuana.^{16(p175)} In 1975, 6% of high school seniors reported using marijuana daily during the previous 30 days. By 1978, the same year during which perceived risk of regular use of marijuana reached its lowest point ever, 10.7% of high school seniors reported using the drug daily.¹⁷

Drug use in America tends to follow cycles, often with one generation having to relearn the experiences of previous ones. Ninety years after the first cocaine epidemic, cocaine use began to increase in the 1970s and escalated substantially from 1980 to 1995. Because it had been so long since the previous epidemic, cocaine was perceived to be a safe drug. In a chapter on cocaine in the 1980 edition of a prominent textbook of psychiatry, the authors wrote: "If it is used no more than two or three times a week, cocaine creates no serious problems."¹⁸ In 1977, 10% of 18- to 25-year-olds had used cocaine; that proportion doubled to 20% in 1979. By 1985, one third of 18- to 25-year-olds had used cocaine, as had 17.3% of 12th graders.¹⁵ Only with subsequent widespread publicity about the health risks and addictive properties of cocaine and the epidemic of crack cocaine did cocaine use among young people begin to wane.

US AND INTERNATIONAL EXPERIENCES WITH MARIJUANA LEGALIZATION AND DEPENALIZATION

Because to our knowledge no country has completely legalized the sale, possession, and advertising of marijuana, there are no studies that examine the effect of legalization on marijuana use by young people. Hence, we examine data on adolescents' use of marijuana in states and countries that have, to a greater or lesser extent, decriminalized use and possession of this drug.

Analyzing data from the annual Monitoring the Future survey, Johnston et al¹⁹ concluded that decriminalization of marijuana in a number of states from 1975 to 1980 apparently had no effect on high school students' beliefs and attitudes about marijuana or on their use of the drug during those years. In contrast, Chaloupka et al,²⁰ analyzing data from the 1992-1994 Monitoring the Future surveys, found that "youths living in decriminalized states are significantly more likely to report currently using marijuana and may consume more frequently."

There are several possible explanations for these disparate findings. Although the study by Johnston et al did not find any effect of decriminalization, baseline marijuana use was higher in states that changed their laws compared with states that did not, although the subsequent rate of increase in all states was the same. It is possible that the higher baseline rates of use in the states that decriminalized marijuana use may have reflected a more lax or tolerant approach to marijuana use before decriminalization. Hence, decriminalization would not have resulted in any significant lessening of enforcement,