ALASKA LEGISLATURE COMMITTEE FILES, 2005-2006 8672

11766 SENATE HEALTH,EDUCATION & SOCIAL SERVICES

OFFICE OF NATIONAL DRUG CONTROL POLICY

MEDIACAMPAIGN

NATIONAL YOUTH ANTI-DRUG MEDIA CAMPAIGN

STEER CLEAR

Teens, Drugs and Driving: Steer Clear of Pot
Fact Sheet

Teens of driving age are at a higher risk for using marijuana than other teens.

- A recent study found that high school students are more likely to drink, smoke cigarettes, and smoke marijuana during the period immediately after earning their drivers' licenses and their driving behaviors become riskier with more driving experience.[1]
- One in four (27 percent) 16-year-olds reported using marijuana in the past year compared to 18 percent of 15 year olds.[2]
- Approximately 271,000 16-year-olds reported driving under the influence of illicit drugs in 2003.[3]

Today's teens are just as likely to drive under the influence of marijuana as alcohol.

- According to Monitoring the Future data, approximately one in six (15 percent) teens reported driving under the influence of marijuana, a number nearly equivalent to those who reported driving under the influence of alcohol (16 percent), despite higher prevalence of alcohol consumption among teens.[4]
- A majority (68 percent) of licensed teen drivers who use drugs regularly report that they "drug and drive."[5]
- Only 18 percent of teens cited "planning to drive" as a top reason to not use drugs. Nearly twice as many (30 percent) cited "planning to drive" as a reason not to drink.[6]
- Sixteen percent of 12th graders reported smoking marijuana in a car and 10 percent reported drinking beer in a car. Cars were second to a friend's house as the most common place for high school seniors to report smoking marijuana.[7]

Marijuana impairs driving. Marijuana is harmful and can lead to risky decisions, such as driving while high or riding with someone under the influence of marijuana.

- Marijuana affects concentration, perception, coordination and reaction time, many of the skills required for safe driving. These effects can last up to 24 hours after smoking marijuana.[8]
- An ongoing study of a large shock trauma unit found that 19 percent of crash victims under age 18 tested positive for marijuana.[9]
- An estimated 38,000 high school seniors in the U.S. reported in 2001 that they crashed while driving under the influence of marijuana and 46,000 reported that they crashed while impaired by alcohol.[10]
- Alcohol and marijuana are also frequently used together, which results in a dramatic decrease in driving performance and spike in impairment levels.[11]

Combining drug use and alcohol with teens' inexperience on the road and risk-taking behavior is a recipe for disaster. While the rate of alcohol-related fatal crashes involving teen drivers is declining they still have the highest overall crash risk of any age group.[12]

- Traffic crashes continue to be the leading cause of death for 15 to 20 year olds.[13]
- Nearly one in five 16-year-old drivers is involved in a collision in their first year of driving.[14]
- Young people aged 15 to 20 years of age make up 6 percent of licensed drivers in the U.S., but are involved in 14 percent of all fatal crashes, and 18 percent of all police-reported crashes.[15]
- The risk of crashing per mile driven among 16- to 19-year-olds is four times higher than the risk among older drivers.[16]

Parents are the most important influence on their teen when it comes to marijuana use and other risky behaviors, including risky driving. Parents of new drivers can use the milestone of getting a driver's license to discuss the dangers of marijuana and being responsible behind the wheel. They can help keep kids drug-free and reduce other risks by closely supervising their time, knowing who they are with, and setting clear rules.

- Greater parent involvement, setting driving rules and parental supervision are associated with less risky teen driving behavior. Crashes were one-seventh as likely to occur and traffic violations were one-fourth as likely to occur among teens with strong parental monitoring.[17]
- Fifty-nine percent of teens who drive say their parents have the most influence on their driving, followed by 27% who say their friends are most influential.[18]
- One in three high school students report they "want" or "need" to spend more time with their parents.[19]
- Two-thirds of youth aged 13 to 17 say that upsetting their parents or losing the respect of family and friends is one of the main reasons they don't smoke marijuana or use other drugs.[20]
- Kids who learn about the risks of drug abuse from their parents or caregivers are about 36 percent less likely to smoke marijuana than kids who don't.[21]

Sources

[1] McCarthy D.M. & Brown, S.A., "Changes in Alcohol Involvement, Cognitions and Drinking and Driving Behavior for Youth after They Obtain a Driver's License," *Journal of Studies on Alcohol* (Vol. 65, pp. 289-296), May 2004

[2] Substance Abuse and Mental Health Services Administration, 2003 National Survey on Drug Use and Health, Illicit Drug Use Tables (1.20A and 1.20B), September 2004

[3] Substance Abuse and Mental Health Services Administration, 2003 National Survey on Drug Use and Health, Illicit Drug Use Table (7.62A), September 2004

[4] Unpublished estimates derived from U.S. Census Bureau and Monitoring the Future data from O'Malley, Patrick and Johnston, Lloyd, "Unsafe Driving by High School Seniors: National Trends from 1976 to 2001 in Tickets and Accidents After Alcohol, Marijuana and Other Illegal Drugs," *Journal of Studies on Alcohol*, (64) 305-12), May 2003. [*Data show that 15% of U.S. high school seniors surveyed said they drove after using marijuana and 16% drove under the influence of alcohol. Monitoring the Future data are nationally representative.*]

[5] Students Against Destructive Decisions and Liberty Mutual Group, "Teens Today," 2002

[6] Students Against Destructive Decisions and Liberty Mutual Group, "Teens Today," 2004.

[7] 2002-2003 PRIDE Surveys National Summary, "PRIDE Questionnaire Report for Grades 6 thru 12," August 29, 2003.

[8] National Institutes of Health, National Institute on Drug Abuse, "Marijuana: Facts Parents Need to Know," Revised, November 1998.

[9] Epidemiology of Alcohol & Other Drug Use Among Motor Vehicle Crash Victims Admitted to a Trauma Center, J Michael Walsh, et al, 2004.

[10] Unpublished estimate derived from U.S. Census Bureau and Monitoring the Future data from O'Malley, Patrick and Johnston, Lloyd, "Unsafe Driving by High School Seniors: National Trends from 1976 to 2001 in Tickets and Accidents After Alcohol, Marijuana and Other Illegal Drugs," *Journal of Studies on Alcohol*, (64: 305-12), May 2003. [*Data show that 0.94% of U.S. high school seniors surveyed said they were drivers in collisions after using marijuana and 1.16% were drivers in collisions after using alcohol. Monitoring the Future data are nationally representative.*]

[11] U.S. Department of Transportation, National Highway Traffic Safety Administration, "Traffic Tech: Technology Transfer Series, Number 201: Marijuana and Alcohol Combined Increase Impairment," June 1999. [*Based on the Institute for Human Psychopharmacology's "Marijuana, Alcohol and Actual Driving Performance"*]

[12] U.S. Department of Transportation, National Highway Traffic Safety Administration, "Traffic Safety Facts: Young Drivers," 2003.

[13] Ibid.

[14] Williams, Alan, *Journal of Safety Research*, "Teenage Drivers: Patterns of Risk," 34 (2003) 5-15.

[15] U.S. Department of Transportation, National Highway Traffic Safety Administration, "Traffic Safety Facts: Young Drivers," 2003.

[16] Insurance Institute for Highway Safety, "Fatality Facts: Teenagers," November 2002.

[17] Simons-Morton, Bruce and Hartos, Jessica, *Journal of Safety Research*, "How Well Do Parents Manage Young Driver Crash Risks?" (34: 91-97), 2003.

[18] Students Against Destructive Decisions and Liberty Mutual Group, "Teens Today," 2004.

[19] Ibid.

[20] Partnership for a Drug-Free America [PDFA], Partnership Attitude Tracking Study, 2002.

[21] PDFA, Partnership Attitude Tracking Study, 1999.

Return to Steer Clear ►

Home | Newsroom | Publications | Get Involved | Ad Gallery | Mobile
Our Partners | About the Campaign

Search | Contact | Site Map | Privacy Policy | ONDCP

Last Updated: December 2, 2004

FOR IMMEDIATE RELEASE
December 2, 2004

Contact:
Jennifer DeVallance (202) 395-6648
Julie Tacinelli (202) 828-8807

Drugged Driving Poses Serious Safety Risk to Teens

Campaign to Urge Teens to 'Steer Clear of Pot' During National Drunk and Drugged Driving (3D) Prevention Month

RESOURCES

Download 'Steer Clear of Pot' Resources

(Washington, D.C.)—Today the Nation's Drug Czar announced a renewed effort to educate parents and teens about the driving-related risks of marijuana use. Joined by the National Highway Traffic Safety Administration (NHTSA), Students Against Destructive Decisions (SADD), GEICO and the American Association of Motor Vehicle Administrators (AAMVA), the Drug Czar cited higher marijuana rates among young driving crash victims and urged teens to "steer clear of pot" at the start of National Drunk and Drugged Driving (3D) Prevention Month.

"Unfortunately, many young drivers don't yet understand the risks associated with marijuana and driving," said John P. Walters, Director of National Drug Control Policy. "Marijuana impairs driving and leads to risky decisions. Parents of new drivers can use the milestone of earning a driver's license to discuss the dangers of marijuana and being responsible behind the wheel—before they hand over the car keys."

"Teens' inexperience on the road and risk-taking behavior, combined with drug and alcohol use, is a recipe for disaster," said NHTSA Administrator Jeffrey W. Runge, M.D. "As we look back at a year marred by several high-profile teen crashes and fatalities, we are reminded that we still have a lot of work to do to steer new drivers in the right direction."

Results of an ongoing study at a large shock trauma unit found that one in six (17 percent) crash victims tested positive for marijuana. These rates were higher among the younger crash victims with 19 percent under age 18 testing positive for marijuana (*Epidemiology of Alcohol and Other Drug Use Among Motor Vehicle Crash Victims Admitted to a Trauma Center*, 2004).

Recent findings published in the *Journal of Studies on Alcohol* show that

high school students are more likely to drink, smoke cigarettes, and smoke marijuana during the period immediately after earning their drivers' licenses and their driving behaviors become riskier with more driving experience.

Teens are just as likely to drive under the influence of marijuana as alcohol. According to Monitoring the Future data, approximately one in six (15 percent) teens reported driving under the influence of marijuana, a number nearly equivalent to those who reported driving under the influence of alcohol (16 percent) despite higher prevalence of alcohol consumption among teens.

Additionally, only 18 percent of teens cited "planning to drive" as a top reason not not use drugs in the SADD/Liberty Mutual Group *Teens Today* 2004 report released earlier this week by SADD. Nearly twice as many (30 percent) cited "planning to drive" as a reason not to drink.

Marijuana affects concentration, perception, coordination, and reaction time, many of the skills required for safe driving and other tasks. These effects can last up to 24 hours after smoking marijuana.

Greater parent involvement, clear rules, and parental supervision are associated with less risky teen behavior, such as marijuana use and driving while high or under the influence of alcohol. This year's SADD/Liberty Mutual Group *Teens Today* 2004 report found that nearly 60 percent of teens who drive say their parents have the most influence on their driving, followed by 27 percent who say their friends are most influential. In addition, one in three high school students in the survey reported they "want to" or "need to" spend more time with their parents

The National Youth Anti-Drug Media Campaign and its partners will raise public awareness on the issues of drugged driving and the harmful effects of teen marijuana use through the promotion of free "Steer Clear of Pot" materials; new Web content on www.TheAntiDrug.com and www.Freevibe.com, a drivers' safety kit for teens and parents; and partnerships with GEICO, SADD, the AAMVA, and others to distribute drugged driving and marijuana prevention materials to drivers' education teachers, teens, and parents

SADD, a national peer-to-peer youth education and prevention organization, will help distribute teen materials through its estimated 10,000 middle school, high school, and college SADD chapters nationwide. And, AAMVA will distribute materials to state officials and to DMVs across the nation.

GEICO, the fifth-largest private passenger auto insurer in the United States, unveiled a new DVD that promotes safe driving and responsible behavior that will be distributed to policy holders who have new teen drivers in the family. In addition, GEICO has incorporated the Media Campaign's messages into its existing "Can I Borrow the Car?" teen driving and safety materials and will also provide co-branded versions of those materials through the Campaign's "New Teen Driver Kit." Overall, the company will distribute co-branded Steer Clear of Pot materials and promote the Media Campaign's resources to its 5.5 million policyholders and 22,000 GEICO associates.

Since 1981, every President of the United States has demonstrated his commitment to preventing impaired driving by proclaiming December as National Drunk and Drugged Driving (3D) Prevention Month. Stopping

impaired driving requires a commitment from communities nationwide. Throughout 3D Month NHTSA cautions the public not to drive impaired by alcohol or drugs and encourages the use of sober designated drivers.

To learn more about preventing youth marijuana and other illicit drug use, log on to www.TheAntiDrug.com for parents and www.Freevibe.com for teens.

In 1998, with bipartisan support, Congress created the National Youth Anti-Drug Media Campaign with the goal of educating and enabling young people to reject illicit drugs. The Campaign is a strategically integrated communications effort that combines advertising with public communications outreach to deliver anti-drug messages and skills to America's youth, their parents, and other influential adults.

For more information on the ONDCP National Youth Anti-Drug Media Campaign, visit www.mediacampaign.org

# # #

Last Updated December 2, 2004

SB

74

DOCUMENTS FOR (FILE 2)

B

MARIJUANA AND STATE PRISONERS

I. Alaska Prison Inmates Have High Rates Of Marijuana Use And Abuse.

- 23% of Alaskan prisoners in a recent survey had a marijuana disorder they needed treatment for during the past year when they were not incarcerated. *See, State of Alaska, Department of Health and Social Services, Division of Alcoholism and Drug Abuse, Substance Abuse Treatment Needs of Alaska's Newly Incarcerated Prisoner Population Prior to Incarceration, Executive Summary, p.viii.*
- These prisoners are committing crimes other than drug offenses. (Only 6.1% of inmates surveyed in 1999 had a controlled substance charge as the primary charge) *Alaska Justice Forum, Vol. 17, No. 1,*
- Marijuana was the most commonly used drug of the Alaskan prisoners. (93%) This figure is 16% higher than found in a 1997 national survey of state inmates. *State Survey cited above, at p. 37, Table 9.*
- 49% of Alaskan prisoners surveyed had used marijuana in the month prior to incarceration and 20% reported using marijuana on a daily basis during the year prior to incarceration. *State Survey cited above, at p. 39, Table 10.*
- 22% of the prisoners self-reported having been dependent on, or having a problem with marijuana. *Id. at p. 41.* 38% have had a marijuana disorder

within their lifetime. *State Survey cited above, at p.42, Table 11.*

MARIJUANA AND STATE PRISONERS

1. Alaska Prison Inmates Have High Rates Of Marijuana Use And Abuse.

- 23% of Alaskan prisoners in a recent survey had a marijuana disorder they needed treatment for during the past year when they were not incarcerated. *See, State of Alaska, Department of Health and Social Services, Division of Alcoholism and Drug Abuse, Substance Abuse Treatment Needs of Alaska's Newly Incarcerated Prisoner Population Prior to Incarceration, Executive Summary, p.viii.*
- These prisoners are committing crimes other than drug offenses. (Only 6.1% of inmates surveyed in 1999 had a controlled substance charge as the primary charge) *Alaska Justice Forum, Vol. 17, No. 1,*
- Marijuana was the most commonly used drug of the Alaskan prisoners. (93%) This figure is 16% higher than found in a 1997 national survey of state inmates. *State Survey cited above, at p.37, Table 9.*
- 49% of Alaskan prisoners surveyed had used marijuana in the month prior to incarceration and 20% reported using marijuana on a daily basis during the year prior to incarceration. *State Survey cited above, at p. 39, Table 10.*
- 22% of the prisoners self-reported having been dependent on, or having a problem with marijuana. *Id. at p. 41.* 38% have had a marijuana disorder

within their lifetime. *State Survey cited above, at p.42, Table 11.*

State of Alaska
Department of Health and Social Services
Division of Alcoholism and Drug Abuse

Substance Abuse Treatment Needs of Alaska's Newly Incarcerated Prisoner Population Prior to Incarceration:

Final Report

William E. McAuliffe
Richard LaBrie
Eric Sevigny
Ryan Woodworth
Jaime Mellitt
Timothy Stablein

North Charles Research and Planning Group
North Charles, Inc.
875 Massachusetts Avenue
Cambridge, MA 02139
December 26, 2001

Substance Abuse Treatment Needs of Alaska's Newly Incarcerated Prisoner Population Prior to Incarceration:

Final Report

CSAT CONTRACT # 270-98-7058

Table of Contents

ACKNOWLEDGMENTS

North Charles Research and Planning Group extends our thanks to the individuals and institutions whose support has assisted our work: Alaska Department of Corrections, Sarah Williams, Gary Webster, Ken Braz, Dr. P.A. Crandell; Hiland Mountain Correctional Center, Bruce Ronchetti, Samuel Edwards, Sergeant Mark Oakley; Palmer Correctional Center, Sergeant Noel Gast, Terry McCarron, John Atwell, Janet Afcan, Dianne Wilson, Darcy King; Wildwood Correctional Center, Dale Long, George Miller, Sergeant Richard Sitbon, Gary Kanuk, Joseph Tuckfield, Alfred Allen, and Ryan Clapsaddle. We wish to thank Clay McDowall for his continuing support, understanding, patience, and encouragement during the study. This study was supported by a contract from the State Treatment Needs Assessment Program of the Center for Substance Abuse Treatment (CSAT) to the State of Alaska.

The authors wish to acknowledge the contributions of the following former North Charles staff members: Stephen Haddad, Kimberly Dahl, and Jocelyn Leary.

EXECUTIVE SUMMARY

This report describes the results of an interview survey of Alaska's newly incarcerated prison inmates to determine their substance use disorder treatment service needs in the last year prior to incarceration. North Charles Research and Planning Group (NCRPG) conducted the study under contract with the Division of Alcoholism and Drug Abuse of the Alaska Department of Health and Social Services. The study is one of a family of studies that the State is conducting as part of the Center for Substance Abuse Treatment's State Treatment Needs Assessment Project. Designed to yield a comprehensive estimate of the need for treatment services in the state during the past year, the family of studies includes a social indicator study, a telephone survey of the general household population, and interview surveys of high-risk populations that would be missed by the household survey, including a face-to-face survey of arrestees and the present telephone survey of newly incarcerated people. The primary object of the present study is to estimate the amount of unmet need for Block Grant and state-funded treatment services during the past year represented by these subjects prior to their entering prison. This estimate is needed as a supplement to the telephone survey estimate of need. The study also provides the prison system with an objective measure of the number of entering inmates in need of prison-based substance abuse treatment services.

Methods

With the assistance of officials and staff of the Alaska Department of Corrections, NCRPG's research team surveyed a sample of prisoners by telephone using a specially-designed needs assessment questionnaire. The computerized instrument measured clinical criteria for assessing abuse and dependence on alcohol and controlled drugs. It also obtained a history of substance use and treatment utilization prior to incarceration. All subjects volunteered, gave informed written consent, and received $10 for participation. The study oversampled females in order to have enough cases for analysis, and the analysis reweighted the sample totals in order to obtain results representative of the number of female prisoners in the State.

Results

Between July 11 and October 13, 2000, the study team completed 208 interviews with Alaskan adult residents who entered state correctional facilities during the past year. At a minimum, 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 interviewed all eligible inmates at the prisons who were willing to participate. The study achieved a 77% response rate, with a range from 74% to 84% at the three facilities. 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, and employed (72%) when not incarcerated. They had completed a median of 11 years of education. Thirty-nine percent of the subjects were Alaska Natives, 31% were 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. The prisoners in all three prisons had been incarcerated a median of four times. On average, the respondents had been on the outside for 5.6 months during the last year.

The Alaskan prisoners had extensive histories of alcohol use and nonmedical use of controlled drugs. All of the prisoners reported using alcohol, and 95% reported some experience using controlled drugs for nonmedical purposes. The comparable rate of lifetime controlled drug use in a 1977 national sample of state prisoners was 83%. The most commonly used drugs by the Alaskan inmates were marijuana (93%) and cocaine (76%). Nearly three of four (74%) Alaskan inmates admitted illegal drug use in the full year before they were incarcerated, and more than half (61%) of the respondents used an illegal drug in the month before entering prison. Forty percent used cocaine in the past 12 months, and over a quarter (27%) reported cocaine use in the 30 days prior to incarceration.

Nine out of ten prisoners (91%) had a substance use disorder at some time in their lives. Although the order of magnitude is consistent with previous studies, this rate is as high or higher than any rates previously reported in the scientific literature since standardized diagnostic studies of prisoners commenced two decades ago. Four out of five recently incarcerated Alaskan inmates have had an alcohol use disorder, and two out of five have had a cocaine use disorder. The males at Palmer Minimum and Wildwood were more likely to have had alcohol use disorders, while the females at Hiland Mt. were more likely to have had a cocaine use disorder. Males were also more likely than females to have abused hallucinogens. With the exception of hallucinogens and sedative use disorders, most of the subjects with a substance use disorder met criteria for dependence rather than abuse.

Seventy-nine percent (79%) of the Alaskan prisoners had a substance use disorder during the past year when they are not incarcerated and therefore needed treatment on the outside during the past 12 months. This rate of past year substance use disorders was among the highest rates found in other prisoner studies to date, and these results are consistent with Alaska's ranking as third highest in the country with regard to its substance abuse treatment needs in the general population. Sixty-seven percent (67%) of the Alaskan prisoners had an alcohol use disorder in the last year when not in prison during the past year, and 43% had a drug use disorder in the last year when on the outside. Cocaine and marijuana use disorders were the most common causes of the drug use disorders (28% and 23% respectively). The remaining drugs accounted for a much smaller part of the drug use disorders.

There was no difference between Alaskan male and female prisoners in the rate with which they needed treatment during the last year, but Alaska Natives were more likely to have needed treatment (88%) than were Whites or African Americans (76% and 74% respectively). Virtually every Native Alaskan prisoner (97%) had a history of having a substance use disorder.

Most of the prisoners had received treatment for substance use disorders in the past when not incarcerated. Seventy-nine percent (79%) had received some form of substance abuse treatment (specialty, self help, or nonspecialty) during their lives. While the largest percentage (42%) of these prisoners had received treatment once or twice in the past, 25% of the total sample 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 controlled drug problems. During the past year, 53% of the prisoners received treatment for substance use disorder before they entered prison. There was no difference between the prison samples in this regard.

A 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, slightly more than half (57% or 45% of the sample of 208) received substance abuse treatment of some type in the last year when they were on the outside. One third of the total sample of 208 needed treatment but did not receive it in the last year.

Some of the group that received treatment may have been underserved. Only half of the prisoners who needed and received some form of treatment (29% of those in need) received specialty treatment in the last year; the rest (28% of those in need) received services from nonspecialists or self help groups. Thus, about two out of three who were incarcerated in the past year and needed treatment when they were on the outside either had not obtained specialty treatment or any treatment at all, despite severe substance abuse problems. Outreach and increased availability of specialty services for persons with criminal histories is an attractive intervention strategy.

If the sample's percentage of unmet need generalized to the total population of Alaska's prisoners, 481 prisoners incarcerated at the time of the study needed, and 205 did not receive some form of treatment in the last year. Those figures should be added to the household survey estimate of the number who needed and who did not receive treatment.

There was also evidence of unmet 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 when on the outside if it had been available. Thirty-seven percent (37%) of the subjects responded affirmatively. Half of them said that they had taken concrete steps in an effort to obtain care, but were unsuccessful. 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. Thus, greater availability of services might have reduced the consequences of the respondents' substance use disorders and in some cases perhaps might have prevented the crimes that brought these inmates into custody. If that percentage of prisoners in the state who needed and wanted treatment but did not receive it were generalized to the state prison system, there would be 293 prisoners in prison at the time of the survey who represented unmet demand for treatment in the past year and should be added to the similar figure obtained in the telephone survey.

The interview asked subjects what explained their failure 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 respondents 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. Nine out of ten inmates had a history of clinical problems with alcohol or drugs. Eight of ten prisoners needed treatment in the past year. While the sample focused on only recently incarcerated prisoners, it is likely that these figures are also relevant for prisoners who have been in jail longer. Most of the prisoners who had a disorder have sought treatment in the past and wanted treatment when it was not available. These statistics suggest that treatment and relapse prevention services should be available for the vast majority of prisoners.

While many who are currently in need had received needed treatment on the outside, about a third of the prisoners were seriously ill substance abusers but were apparently falling through the cracks in the system. 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 population are great, and a substantial number of those who needed treatment in the past year would have sought more if it had been available.

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, its medical complications, and committing crimes as a result of their continued dependence on alcohol and drugs. For the prison system, the proportion of prisoners in the course of a year who need treatment when they entered the prison is large. The failure of prisoners-to-be to obtain effective treatment is a significant concern for society at large.

INTRODUCTION

This report describes the results of an assessment of the substance-use-disorder treatment needs of recently incarcerated prison inmates to determine their treatment needs during the last year when they were on the outside. North Charles Research and Planning Group (NCRPG) conducted the study under contract with the Division of Alcoholism and Drug Abuse of the Alaska Department of Health and Social Services. The study is part of a family of studies that the State is conducting under contract with the Center for Substance Abuse Treatment (CSAT) as part of its State Treatment Needs Assessment Project. Alaska's family of studies includes a social indicator study, a telephone survey of the general household population, and interview surveys of high-risk populations that would be missed by the household survey (Johnson & Alaska Department of Health and Social Services, Division of Alcoholism and Drug Abuse 1998; The Gallup Organization 1998; Bhardwaj, Moore, et al. 1998). One of the high-risk studies, the present investigation was a telephone survey of newly incarcerated people.

Study Goals

The study's primary objective was to supplement Alaska's statewide estimate of treatment service needs outside of prison during the past year by assessing the needs of a high-risk population that Alaska's telephone survey of the general household population had missed Using the National Technical Center's (NTC) needs assessment questionnaire, Alaska previously obtained a statewide estimate of the number of people who needed substance abuse treatment by interviewing the population living in households with telephones. The present study will add to that statewide estimate of treatment need by estimating the number of persons who were on the outside and needed treatment during the past year but whom the household survey would have missed because they would have been incarcerated when the household survey was underway. Prisoners represent the largest and most high-risk institutionalized population who were missed by the household survey (McAuliffe et al. 1998).

The unmet treatment needs on the outside of people who are incarcerated may represent a useful gauge of the overall performance of the State's substance abuse treatment system. An especially troubling recent case illustrates this point. After a week-long binge, a mentally-ill young man with a severe alcohol dependence sought detoxification for three days running, but each day he was refused admission because the local detoxification unit had no beds available. Sent home from a hospital emergency room with inadequate medication to see him through the night, he began drinking heavily in the early morning. An argument over this relapse ended with his girlfriend's death by a kitchen knife. He is now serving 20 years for second-degree murder. Recently incarcerated persons who have substance use disorders, especially those who sought but were unable to obtain treatment and who committed substance-related property or violent crimes, may be valuable indicators of system failure. Information on this population can be used to justify requests to the legislature for more funds for the state's treatment system

and can act as a baseline for evaluating the effects of improved system planning on the performance of the treatment system in the coming years.

Finally, although the study's focus was not on estimating the in-prison treatment needs of these prisoners, the statistics on lifetime and current need for treatment should be useful for prison officials evaluating the adequacy of their services for incoming inmates.

The Family-of-Studies Research Strategy

The rationale for the present study design is that it is part of a multimode approach to estimating the treatment needs of the State's population during the previous year, as recommended by the National Technical Center for Substance Abuse Needs Assessment (NTC) in ..s model family of studies (McAuliffe et al. 1995). The NTC recommended conducting a family of studies in which most of the population would be surveyed by telephone in their households about their treatment needs in the past year, while the remainder (approximately 5%) would ideally be assessed using the same instrument in surveys of specific high-risk, non-household populations. The remainder included people living in households without telephones, the homeless, and people who were institutionalized at the time of the telephone survey but who needed publicly-funded treatment during the past year. Because prisoners constitute the largest high-risk institutionalized population, Alaska conducted the present study.

Previous Studies of Substance Use Disorders Among Arrestees and Prisoners

The published scientific literature shows clearly that people who were incarcerated during the past year are likely to have been at high risk of needing substance abuse treatment prior to incarceration. There is a strong correlation between criminal behavior and substance use disorders (Green 1981; Chaiken and Chaiken 1982; Gropper 1985; Inciardi 1986; Rolph and Chaiken 1987; Chaiken and Johnson 1988; Visher 1990). Over the past 15 years, inmates with primary drug abuse offenses in Alaskan prison facilities have increased 2.4 times from 4.9% in 1985 to 6.1% of all prisoners in 1999 (Alaska Justice Statistical Analysis Unit and Justice Center 2000a, Table 2). In federal prisons, the percentage has increased even more dramatically, from 25% in 1980 to over 60% in 1997 (Alaska Justice Statistical Analysis Unit and Justice Center 2000a, Table 1; Mumola 1999, p. 1).

The National Institute of Justice's Drug Use Forecasting (DUF) program has found that most arrestees recently used one or more drugs (National Institute of Justice 1995). In a 1999 Arrestee Drug Abuse Monitoring (ADAM) study of Anchorage arrestees, 54% of males and 56% of females had a positive urine test indicating use of one or more drugs (Alaska Justice Statistical Analysis Unit and Justice Center 2000b).

CSAT has funded research which established that arrestees have high rates of substance use disorders and treatment need. The studies found that between one-third and two-thirds of all arrestees met clinical criteria for abuse or dependence on one or more substances (Blane et al. 1995; Cochran et al. 1996; Kroliczak et al. 1996; University of Alabama at Birmingham,

Department of Psychiatry, Substance Abuse Programs 1996; Institute of Public Affairs, University of South Carolina 1997; Hudik et al. 1996; Baumer et al. 1995).

Johnson, Bassin & Shaw, Inc. (Johnson & Alaska Department of Health and Social Services, Division of Alcoholism and Drug Abuse 1998) conducted Alaska's own study of treatment need among arrestees at three sites: Anchorage (two facilities, Sixth Avenue and Cook Inlet), Fairbanks, and Bethel. A total of 658 arrestees completed interviews that included diagnostic criteria based the revised third edition of the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R) (1987), and 503 of the subjects also provided urine samples. The biological specimens were assayed for traces of illicit drugs. The results showed that 60% had a substance use disorder diagnosis during the past year. These findings clearly establish that there is a high level of treatment need among Alaska's criminal justice population. However, because arrestees are a part of the general population, the results cannot be easily combined with the telephone survey results to estimate the precise level of treatment service needs in Alaska.

Studies of prisoners have found many indications of high rates of substance use. A national survey of state prisoners in 1991 found that 78% had ever used an illicit drug, 50% regularly used an illicit drug, and 31% had been using a drug at the time of their offense (Beck et al. 1993). More than a quarter of the inmates sentenced for robbery, burglary, or larceny self-reported that they committed these crimes to pay for their drug habits. Research has also shown that heavy alcohol use is prevalent among prisoners. Twenty-nine percent of male inmates and 19% of female inmates were daily drinkers before they were imprisoned, and more than half of the drinkers had received treatment for an alcohol use disorder (Beck et al. 1993).

Prisoners' Need for Treatment. Diagnostic studies of prisoners have shown that they have some of the highest rates of substance use disorders of any population other than treatment clients (Table 1). The pioneering Epidemiological Catchment Area (ECA) Study used the Diagnostic Interview Schedule (DIS-III) to assess the prevalence of substance use disorders of a combined sample of 715 prisoners from five sites in 1980-1984 (Regier et al. 1990; Robins & Regier, 1991). The DIS permitted lay survey interviewers to determine whether respondents met criteria for alcohol and drug use disorders according to the Diagnostic and Statistical Manual, third edition (DSM-III) of the American Psychiatric Association (1980). Seventy-two percent of the inmates had a history of substance abuse or dependence (Regier et al. 1990). This rate was the highest of any of the major population groups surveyed in the classic study. In a 1983-84 study, Teplin (1994) evaluated a sample of 728 male Jail detainees in Cook County using the DIS-III. She found that 29% had a current substance use disorder (19% alcohol and 15% drugs), and 61% had a lifetime substance use disorder. Similar results were obtained ten years later in another study of Illinois inmates using the revised version of the NIMH instrument, the DIS-III-R (Illinois Department of Corrections 1995). It found that 56.6% of 526 male prisoners and 62.5% of 104 female prisoners (57% in the overall weighted sample) had a diagnosis of abuse or dependence on one or more drugs during their lives. The Illinois study used the same DSM-III-R instrument as Alaska used in its household survey to measure the revised criteria of the

American Psychiatric Association (1987).

Studies conducted elsewhere have found even higher rates of substance use disorders among prisoners. Bland et al. (1990) found that nearly nine out of ten male inmates (87%), 18 to 44 years of age, in Canada had a lifetime substance use disorder. In Iowa, experienced substance abuse counselors conducted clinical assessments of newly incarcerated prisoners and found that 81% of the males and 71% of the females had symptoms indicating a current diagnosis of substance abuse or dependence (Hudik et al. 1994). A Texas study conducted in 1993 and another one in 1994 found that 63% of both males and females had a current substance use disorder diagnosis (Farabee 1994, 1995). A survey of males entering prison in Kentucky by the same author found that 59% had a lifetime diagnosis of a substance use disorder according to the American Psychiatric Association's DSM-IV criteria (Farabee 1997). Peters et al. (1998) found that 56% of a sample of Texas inmates had a current substance use disorder, and Kerber (2000) found that 64% of another Texas prisoner sample had a current substance use disorder.

Table 1. Studies of Substance Use Disorders among Prisoners

Reference	Data Collection Location / Date	Study Population	Diagnostic Measurement	% Alcohol or Drug Use Disorder		
				Current		Lifetime
				Time Frame	Estimate	
Regier et al. 1990	five-site ECA areas 1980-84	715 combined ECA prisoner sample	DIS-III			72
Teplin 1994	Chicago, IL 1983-84	728 males at Cook County Department of Corrections	DIS-III	Past 2 weeks	29	61
Bland et al. 1990	Edmonton, Canada 1986-87	222 males, 18-44 years of age in two correctional centers	DIS-III	Past six months	62	87
Teplin et	Chicago	1,272 females	DIS-III-R	At Least	60	70

Table 1. Studies of Substance Use Disorders among Prisoners

Reference	Data Collection Location / Date	Study Population	Diagnostic Measurement	% Alcohol or Drug Use Disorder		
				Current		Lifetime
				Time Frame	Estimate	
al. 1996	, IL 1991-93	awaiting trial at Cook County Dept of Corrections		One Symptom in the Last Six Months		
Hudik et al. 1994	Iowa 1993	242 males and 132 females newly admitted to Iowa's prisons.	Substance abuse counselors using local assessment scale	Time of interview	80	85
Farabee 1994, 1995	Texas 1993, 1994	1,030 entering adult males (except gang members and known homosexuals); 500 females	DIS-III-R items. Asked if had 10+ drinks or used illicit drugs in past year. Dependence = 3 + Sx, abuse = 1 or 2 Sx.	Past year	63	
Illinois Dept of Corrections 1995	Illinois 1994	630 new inmates in four intake sites	DIS-III-R	Past year	35	57
Peters et al. 1998	Huntsville, TX 1996	400 inmates in Holliday Transfer Facility	DSM-IV (SCID-IV)	Past month	56	74
Farabee et al.	Kentucky 1997	600 inmates (567 male/ 33 female)	Items based on DSM-IV.			59

Table 1. Studies of Substance Use Disorders among Prisoners

Reference	Data Collection Location / Date	Study Population	Diagnostic Measurement	% Alcohol or Drug Use Disorder		
				Current		Lifetime
				Time Frame	Estimate	
1997		from 15 prisons	Qualify for items if ever used alcohol or ever felt addicted to drugs.			
Kerber 2000	Texas 1998	792 males newly admitted to 4 intake facilities	DIS-III-R	Time of interview	64	
McAuliffe et al. 2000	Rhode Island 1999	198 adult inmates recently incarcerated in Adult Correctional Institution or Intake Service Center.	DIS-IV	During Past Year When on Outside	82	84

In a study recently completed in Rhode Island using the same instrument and research design employed in the present study, McAuliffe et al. (2000a) found that 82% of recently incarcerated prisoners had a substance use disorder in the past year during the time when they were on the outside. As in the ECA study, McAuliffe et al. (2000b) found that prisoners had the highest rate of substance use disorders besides clients in treatment.

Taken together, the studies in Table 1 suggest that approximately three out of four (74%) prisoners had a history of a substance use disorder, and about three out of five (63%) had a substance use disorder during the past year. However, developing a precise estimate for Alaska from these studies is difficult because they occurred at different times, used different versions of the diagnostic instruments and screening criteria, and defined "current" differently (time of interview, last month, last year). Changes in mandatory sentencing laws have also led to a steady increase in the number of persons in prison for drug-related crimes (Schiraldi et al. 2000). Consequently, studies conducted 20 years ago may have limited relevance to estimating inmate substance abuse prevalence currently. Because the most comparable results are the

recent Rhode Island study that used the same instrument and procedures, the present report will use the results of that out-of-state study when appropriate to provide some of the context needed to interpret Alaska's results.

Because Alaska's Department of Corrections (DOC) does not conduct diagnostic assessments of the substance use disorder treatment needs of prisoners when they enter prison, the State has no hard statistics of its own on the size of the substance use disorder problem among its prisoners (Alaska Justice Statistical Analysis Unit and Justice Center 2000c).

Unmet Demand for Treatment among Prisoners

Although measuring the need for treatment among Alaska's recently incarcerated prisoners is important, it is also essential to measure the demand for and adequacy of access to treatment services. The growing prevalence of substance use disorders and related problems among prisoners, combined with a recognition that appropriate substance use disorder treatment can reduce recidivism in this population, has led to the widely held belief that an effective way to attack the nexus between substance abuse and criminality is by providing ample substance abuse treatment services in prisons and jails (Early 1996; Feeley 1992; Gendreau 1993; Gerstein and Harwood 1990; Inciardi 1994; Lipton 1995; Nurco et al. 1995; Stewart 1997; Wexler 1994). As a result, there have been a variety of recent initiatives to expand and revamp correctional substance abuse treatment services (Corrections Program Office 1997; Hayes and Schimmel 1993; Peterson and Johnstone 1995; Taylor 1997). However, an assessment of institutional requirements for substance abuse treatment found that many inmates with histories of extensive substance use did not seek or obtain treatment prior to incarceration or while in prison, apparently because they were insufficiently motivated or were deterred from seeking it by various barriers to treatment (Petersilia 1990). It is important therefore to assess the level of treatment demand and barriers among inmates who were in need of treatment as they entered prison.

Qualitative evidence indicates that the current services in Alaska have not kept up with prisoner demand, but it is unclear by how much. According to a report by the Alaska Justice Statistical Analysis Unit and Justice Center (2000c), the available treatment services in Alaska's prison system are limited, the programs are reportedly always full, and more inmates request treatment than receive it. Despite the more than two-fold increase in prisoners with drug offenses, the Alaska DOC's budget for substance abuse services has not increased in eight years (Alaska Justice Statistical Analysis Unit and Justice Center 2000c).

There is also reason to believe that the supply of state-funded treatment services on the outside are not fully adequate to meet the needs of Alaska's populace. Recent national studies have found that treatment services are inadequate to meet treatment needs (Woodward et al. 1997), and McAuliffe et al. (1999b, 1999c, 2000c) found that Alaska's treatment needs in 1991-1993 (as measured by alcohol- and drug-related death and arrest rates) were 12th greatest in the country, but its treatment client rate in 1993 ranked 23rd highest according to the federal UFDS survey. The present authors' update of those studies for 1994-1996 found that Alaska's combined alcohol and drug treatment needs were third greatest in the country. The State's

treatment clients per capita for those years ranked 7th in the country. Consequently, in a nation where services are generally inadequate, Alaska's services have been below its high level of need.

To supply Alaska with precise information on unmet demand for treatment among people heading to prison, the present study has obtained treatment histories and assessed the motivation for treatment and perceived obstacles to obtaining it among recently incarcerated inmates.

Specific Questions and Issues that the Study Addressed

In sum, the study 1) estimated the number of inmates who needed treatment during the past year when they were on the outside, 2) estimated the number of inmates with an active substance use disorder who obtained treatment or would have sought treatment if it had been available in the last year, and 3) conducted an analysis of the barriers that prevented some of them from obtaining treatment.

The study used this information to test the following hypotheses:

- Recently incarcerated prisoners have substance abuse and dependence rates that greatly exceed rates in the general population. Failing to include these subjects in a statewide needs assessment would result in underestimating overall treatment need and overlooking one of the groups most in need of services.
- Many of the prisoners with a history of substance use disorders have not received treatment, and many would have sought it if it had been readily available.
- Many prisoners-to-be encountered obstacles when trying to obtain treatment.

METHODS

Study Design Overview

The study design was a cross-sectional interview survey of 208 people recently admitted to Alaska's prisoner populations. The study surveyed inmates serving sentences who were not incarcerated for a month or more during the last year. Participation in the study was voluntary, and the study paid $10 to each participant.

Data collection employed an updated version of the NTC's needs assessment questionnaire (McAuliffe et al. 1995) adapted for use with prisoners. The instrument measured the need for treatment services when the subjects were on the "outside" during the last year. The research staff programmed the questionnaire for computer-assisted telephone interviewing (CATI). A coordinator at the prisons recruited respondents, while trained interviewers in Cambridge, MA, conducted the interviews by cellular telephone.

Institutional Review Board (IRB) Approval of Study Methods. The IRB of the North

Charles Foundation reviewed and approved of the study's design and methods on April 7, 2000. The study team prepared an application for studying prisoners according to the guidelines for the Harvard Medical School and Harvard School of Dental Medicine Human Subjects Application, and submitted it to the North Charles Institutional Review Board. North Charles, Inc. is affiliated with the Harvard Medical School's Department of Psychiatry at Cambridge Hospital.

Site Selection

The study team selected three Alaska correctional centers in the Anchorage area to interview prisoners: the Wildwood Correctional Center (Wildwood for short), the Palmer Correctional Center (Palmer), and the Hiland Mountain Correctional Center (Hiland Mt.). To develop the sampling plan, the study team reviewed an inmate daily census for June 15, 2000, obtained from the Alaska Department of Corrections (DOC). On that day, the DOC listed 2,655 people incarcerated in Alaska's prisons. One thousand thirty-nine (1,039) of those prisoners were awaiting trial or sentencing. Of the remaining 1,616 sentenced inmates, 796 had begun serving their sentences more than 11 months previously and were therefore ineligible. These prisoners were not in the general population for sufficient time in the past year (less than one month) to receive services. Thus, there were 820 inmates in 15 prison facilities who were potentially eligible for the study (Table 2). The study's interviewers would have to obtain more information from these individuals to determine how many would meet all of the study's eligibility criteria and whether they would volunteer to participate.

Table 2. Census of Inmates Sentenced in the Last 11 Months, By Correction Center (6/15/00)

Correction Center	Location	Number of Potentially Eligible Inmates Sentenced in Last 11 Months
Wildwood	Kenai	165
Palmer	Sutton	126
Spring Creek	Seward	115
Point McKenzie Rehabilitation Project	Wasilla	66
Hiland Mountain	Eagle River	63
Lemon Creek	Juneau	62
Eight remaining facilities		less than 50

Total	820

Budget constraints and study logistics were important considerations in the selection of the interview sites. Travel costs ruled out selection of remote prisons. Because establishing the logistics for conducting interviews at each facility consumed a substantial amount of time staff time, the study selected the two largest facilities, Wildwood and Palmer. At Palmer, the study sample included only inmates at the minimum security facility. The medium security facility had many inmates who had not yet been sentenced and many who were transfers from other facilities. Lacking statistical information on when those inmates were last on the outside, the investigators were less able to project how many of them would be eligible in this facility than in other facilities. The study coordinator experienced difficulty implementing the study's respondent selection procedures at the medium security unit and began encountering inmates who were apparently underreporting substance use to make the interview go more quickly. The senior staff decided to drop the medium facility as a study site and to interview the remainder of the sample at another facility. Because the Alaska DOC sequesters most women prisoners (81%) at the Hiland Mt. prison, it was an obvious additional choice to insure an adequate representation of females in the sample. Another large correctional facility nearby was the Point McKenzie Rehabilitation Project, but it had to be dropped when the cellular phones would not work adequately there. The three selected sites housed a substantial portion (43%) of the system's 820 potentially eligible prisoners.

In order to obtain a reasonably reliable estimate of their treatment needs, the study interviewed all willing participants among the recently incarcerated female inmates at the Hiland Mt. facility. Women comprise 9% of the people in DOC custody. If the study had employed a proportional sampling by gender, it would have interviewed only 18 inmates. By oversampling females, the study obtained enough cases to support separate analyses of female inmates. In the present report, the authors reweighted the estimates for the total sample in order to adjust for the oversampling of females.

Subject Selection

Eligibility Criteria. The study employed a series of eligibility criteria. A prisoner was eligible if he or she was currently at least 18 years old and was a resident of Alaska on the day before he or she was incarcerated.[1] As a practical matter, prisoners incarcerated outside of Alaska were not be eligible for the study. Only sentenced prisoners or convicted prisoners awaiting sentencing were eligible for the study. People awaiting trial were not yet convicted and might return to the general population before the field staff could interview them. Also, they might not be incarcerated long enough to participate in treatment programming.

[1] To be considered a resident according to the Medicaid requirements, the person had to be living in Alaska voluntarily with the intention of making Alaska his or her permanent home, not staying in the state temporarily.

The study further defined eligible inmates as those who were in the general population (not institutionalized in prison, residential treatment facility, halfway house, etc.) for a minimum of 30 days during the last year. The study's primary goal was to estimate the need and utilization of Block-Grant funded treatment services on the outside (nonprison services) during the past year. Obviously, inmates who have been in prison for the entire year or longer could not have needed or utilized those services. The study team concluded that the questions regarding use of services in the last year would not be meaningful if the prisoner had less than 30 days on the outside.

The potential respondents also had to meet minimum practical requirements for completing the interview. Inmates were ineligible if they lacked sufficient fluency in English, were severely mentally ill, had significant cognitive impairment, were agitated (could not sit still), or were otherwise unable to respond (e.g., due to physical impairments).The coordinator or interviewer administered the Short Blessed Cognitive Impairment Scale to inmates who appeared to have cognitive difficulties. More than ten errors on the Blessed Scale is indicative of cognitive impairment (Katzman et al. 1983).

Selection Process. The study team assumed that it would have to approach all eligible inmates at each study site in order to meet the target for at least 200 completed interviews. Experience conducting a similar study in Rhode Island suggested that some of the potentially eligible inmates would be unwilling to participate or would turn out to be ineligible when the study coordinator obtained more information about them.

The study team prepared a randomized list of all potentially eligible inmates (incarcerated in the past 11 months) at each study site, and the study coordinator contacted inmates in order according to their position on the list. Before beginning the formal interview process, the study coordinator verified the eligibility of the prospective participant. The coordinator screened out inmates without sufficient time in the general population, who were not Alaska residents, or who could not competently complete the interview. The coordinator also excluded inmates who were not available to be interviewed because they were in medical treatment, solitary confinement, or away from the facility on work-release during interview hours.[2]

Interviewing and Questionnaire

[2]The study interviewed prisoners on work release when they were available.

Interviewing Methods. The study team used cellular telephones in the Alaska sites to allow interviewers in Cambridge to conduct the interviews (a methodology pioneered by Appel 1995). Cellular telephoning assured high interview quality. The study team used on-staff interviewers who had experience interviewing prisoners with the same instrument in Rhode Island, and the project staff obtained the data immediately and could apply quality control measures to correct any interviewing errors. Since Alaska's household study was a telephone survey, the present study shared the same telephone survey mode. Although one potential site had to be dropped because it had inadequate cellular telephone coverage, at the other sites the on-site study coordinator easily remedied the minor transmission and telephone equipment problems which sometimes arose at the beginning of the interviewing period.

Questionnaire Content and Revisions. For this study, NCRPG employed a revised version of its core needs assessment instrument, the "Substance Abuse Epidemiology and Services Research Questionnaire," (McAuliffe et al. 1999a). The core instrument collected information on all essential aspects of measuring the need for substance abuse treatment. Modular in construction, the core questionnaire had modules on demographics, substance use, DSM-IV diagnoses of substance use disorders, history of treatment, demand for treatment, and barriers to obtaining treatment. The diagnostic module incorporated the widely accepted diagnostic criteria presented in the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM-IV) (American Psychiatric Association 1994) as they have been operationalized in the Diagnostic Interview Schedule (DIS-IV) (Robins et al. 1998). The DIS-IV is one of the most validated substance abuse diagnostic instruments currently available (see McAuliffe et al. 1995 for a review of relevant research).

Questionnaire Revisions Needed for Prisoners. The study team adapted the core instrument to make it suitable for an incarcerated population and the study's goal of measuring treatment needs prior to incarceration during the past 12 months. Only pre-institutional substance use and symptoms were relevant to Block Grant treatment planning, since the Block Grant does not fund substance use and treatment within correctional institutions. The study team revised the questions about treatment to distinguish between prison-based and non-prison-based services. The study team also revised the demographic questions concerning living arrangements, telephone access, and similar questions that did not apply to institutionalized persons. See Appendix B for a detailed discussion of the questionnaire modifications.

Data Collection

Pretesting. NCRPG had thoroughly pretested the questionnaire before commencement of the study. The study team had previously used the telephone version of the questionnaire in several studies and the face-to-face version of the questionnaire in Rhode Island to interview samples of homeless subjects, people receiving treatment, and prisoners. In the course of these prior studies, the study team had corrected CATI programming errors, modified individual

questions that were difficult to administer, added response codes that were discovered by review of open-end responses, expanded context-directed CATI help displays, and developed comprehensive administration instructions for interviewers.

Field Activity Procedures. The Study Procedures Manual provided detailed guidance to field staff during the interviewing period. The document explained the study's purpose, described how the field coordinator should recruit subjects and obtain informed consent, how the interviews should be conducted, and it also stipulated how field staff should report any problems encountered each day with the equipment (particularly the cell phones), interviewees, site facilities, site managers, transportation, or study protocol to senior staff immediately. Staff addressed field problems not covered by the Manual by bringing them to the project director. In general, the staff corrected the problem by reinterviewing the subject, modifying the instrument, or occasionally establishing new or revising old procedures to rectify the problem.

The field staff recorded all problems, decisions, and procedural modifications in the Prisoner Field Activities Database. The database included individual records for recording information regarding the study sites, individual respondents, interviewers, and so on. The research team designed the field-activities database to help schedule and contact the prospective respondents, to keep track of the outcomes of every contact with all selected potential respondents, and to remind interviewers about what needed to be done next. As a result, the Prisoner Field Activities Database contained all of the information tracking the progress of each respondent from initial selection through payment for participation.

Initial Contact and Obtaining Informed Consent. The on-site study coordinator attempted to speak to all eligible subjects in the correction center. As an incentive to participate and reimbursement for the time and energy required for the interview, the study offered a small gratuity of $10 to be paid in a manner approved by the administration of the Alaska Department of Corrections and the Institutional Review Board. A few inmates told the person designated to escort the inmate to the study interview rooms that they refused to participate. These inmates did not meet with the study coordinator to determine final eligibility. If a prospective respondent refused to participate, the coordinator tried to address any concerns and answer any questions. If the person still refused, the coordinator went on to enroll the next potential subject. Before starting each interview, the on-site study coordinator introduced him- or herself to a prospective subject and explained the purpose and nature of the study. The coordinator described what was expected of the respondent during an interview, including the types of questions asked and the approximate length of the interview. In this preliminary discussion, the coordinator sought to establish rapport and make the respondent comfortable with the procedures. The introduction stressed confidentiality and informed the respondent about potential risks and the small stipend that he or she would receive upon completion of the interview. The respondent then read the IRB-approved consent form. The coordinator confirmed the subject's understanding of the information before asking him or her to sign the form. The on-site study coordinator returned the signed consent forms to NCRPG.

Interviewers. Five trained, college-educated research assistants (three females and two males) conducted these interviews. Two staff members (a male and a female) acted as site coordinators. Because there were only two interview rooms at the sites, the study team conducted no more than two interviews at the same time.

Computer Assisted Telephone Interviewing Methods. The interviewers completed all of the prisoner interviews with the assistance of networked computers and the CASES (Computer-Assisted Survey Methods Program 1998) programmed questionnaires. After obtaining written consent, the coordinator placed the call to an staff interviewer in Cambridge. The interviewer assigned a unique case identification number to the respondent. The interviewer then entered the date, his or her identification number, and a code for the correctional center. Once the interview began, the interviewer asked questions directly from the computer screen. The interviewer would read the questions exactly as written in the questionnaire. If the respondent did not understand a question, the interviewer repeated it more slowly and clearly. If the comprehension problem persisted, the interviewer would attempt to explain the question as best as he or she could with as little elaboration as possible to minimize variability in questioning.

Data Processing

Quality Control. Staff cleaned the interview data as rapidly as possible. When the interviewers completed each day's interviews (usually late in the evening given the four-hour difference in time between Alaska and the interview site in Massachusetts), they transferred the completed interviews from the hard drives of their desktop computers to the central workstation. The statistical programmer monitored the information to assure accurate transfer. He transformed the raw interview data into SPSS-formatted analytic records. At this step, he made any corrections, additions, or changes to the data that interviewers indicated were necessary because of events that had occurred during the interview. For example, if the respondent's answers revealed an inconsistency with an earlier response, the interviewer would ask the respondent to explain his responses. Sometimes, this explanation would suggest that the interviewer should modify the earlier response (either change or amplify it). If the original question occurred very early in the interview, the interviewer would make a note and ask the programmer to modify the data before he entered it into the data base.

The research staff examined several forms of information to determine whether they should exclude any of the previous day's interviews from further analysis because the data were of poor quality. The information included interviewer ratings of interview quality, respondent comprehension, self reports regarding truthfulness, excessive numbers of "don't know" or refused responses, missing or inaccurate data that prevented obtaining a substance use diagnosis, and interview length (e.g., excessively short interviews).

Open-End Coding. The research team prepared a detailed coding guide for the highly

structured core questionnaire and for the modifications made for the Alaska prisoner study. The interviewers used these codes to record the respondents' answers. Because many of the questions also had open-end response options that permitted respondents to give answers that the developers had not anticipated when designing the questions, the research staff had to code those responses. In most cases, these open-end responses were recorded for a response-alternative described as "Other (please specify)." The coding guide already contained codes for most open-end responses to these items because respondents gave the responses in the previous studies in which the questionnaire was used. However, the study team occasionally had to devise a new code when a response clearly did not fit any of the existing codes. To develop the new codes, the study team reviewed the open-end responses in light of the theoretical or substantive purpose of the questions. Sometimes, the open-end "other" responses turn out to be misunderstandings by the respondent, repetition of one of the closed-end response categories already part of the question, or answers that were not truly responsive to the questions. In such cases, the study team coded the open-end response as irrelevant or invalid.

Case Weights Used in the Analyses

Depending on the goal of the analysis, the analysts used one of two sets of case weights in these analyses. One set of weights adjusted for oversampling females, and the second set adjusted for demographic differences between the sample and the total population of prisoners in Alaska.

Sampled Interview Weights. The first set of weights corrects the sample totals for the disproportionate sampling of females. As noted earlier, the study oversampled females in order to have enough cases to make comparisons with the males. The weights in this instance insure that the totals obtained when combining all 208 interviews reflect the percentage of males and females in the total prison population. Strictly speaking, the results of analyses that used the sampled population case weights apply only to the 208 recently incarcerated prisoners at the three correctional facilities from which the study obtained subjects. However, a simple sum of the responses would reflect a much higher proportion of females than found in the prisons. The authors therefore reweighted the sample totals to generate results that would have resulted if the study had proportionately sampled men and women. In the tables presented in this report, the statistics that describe the total sample have been reweighted in order to avoid the effect of overweighting females. Statistics that apply to individual prisons, of course, have not been reweighted because at each prison the inmates were either all males or all females.

Statewide Inmate Population Case Weights. The statewide population case weights sought to produce estimates for all eligible inmates in the total prison system. Results of analyses that used the statewide inmate population case weights may be interpreted as heuristic estimates of the treatment needs of all of Alaska's recently sentenced prisoners who eligibility criteria at a

given time (610)[3].

[3]The DOC provided the study with an analysis indicating that the number of inmates serving sentences in Alaska on the last day of the year who were incarcerated during the past 12 months was 678. This figure had to be adjusted in two ways. First, some prisoners who entered DOC custody in the first month of the year and who were still in prison at the end of the year would not meet the study's eligibility criterion that the inmates were in the general population for a month or more in the year. To eliminate these people who lacked even one month on the outside, the study assumed a flat rate of intake during the year, and estimated that 11/12ths of the 678 prisoners who entered custody (622 prisoners) would satisfy the criterion for a minimum length of one month not incarcerated. Second, the DOC information also did not identify the

residence of the prisoners. The Alaska Prisoner Study asked 315 recently sentenced inmates if they were Alaska residents. Six of the 315 inmates (1.9%) reported that they were not residents. The study assumed that this rate applied to the DOC count, which reduced the estimated population of study-eligible prisoners to 610. Thus, the population size (610) was the number of persons the total number of recently incarcerated prisoners.

Using the interview results to develop an idea of the likely treatment needs of the total eligible population was justified on logical rather than statistical grounds. The study's sampling design did not provide statistical justification for generalizing the sample results to all of Alaska's prisoners. Rather, the projection of the results is made on the basis of assumption that the inmates of the sampled prisons were the best available approximation of the treatment needs as prisoners throughout the system and that adjustments for demographic differences (sex, age, and race) would eliminate some of the known differences between the sample and the total population. Analysis showed that the demographics of the sampled respondents (208) did not differ markedly from the demographics of the total prisoner population. In addition, the sample of 208 inmates constituted a reasonably large percentage of the total eligible population (610), 55% for women and 31% for men. In effect, the estimates produced by applying the population-weight are what one would get if the interviews were generalizable to the total population after the sample interviews had been adjusted to match the demographics of the total population. These weights have been used in only key analyses, and the text specifically identifies those instances.

Statistical Methods

The study employs standard descriptive statistics: means, proportions, ranges, and so on. Because the samples were 100% samples of the eligible prisoners in the facilities at the time, statistical inference from sample to population was not necessary. It would be reasonable to expect that the study's results might have varied if it had been conducted in the same facilities at a different time, but there is no statistical basis or model for statistically generalizing the current results to all possible times. Some variability in the results may also occur due to random measurement errors. The selected prisons were not selected randomly from the population of facilities. As just noted above, the few generalizations from the interviewed prisoners to the total prisoner population were made on the basis of logical inference rather than statistical inference. Accordingly, the text does not include the results of statistical tests or confidence intervals. Nevertheless, readers should bear in mind the modest size of the prison samples as well as the magnitude and consistency of any differences in the statistical results.

RESULTS

Research Design Implementation

Completed Interviews and Exclusions. The study of recently incarcerated prisoners interviewed 208 eligible inmates at three correctional facilities from July 11, 2000, through October 13, 2000. The interviewers conducted a total of 211 interviews, but three of them had to be excluded from the sample. Two interviewed respondents turned out to be ineligible because upon further questioning the interviewer learned that the subjects did not meet the requirement of living in the general population (not institutionalized) for a month or more during the last year. Information obtained during the interviews indicated that when they were not incarcerated in the past year they were in halfway houses (operated by the DOC in at least one of the cases). The interviewers completed the interviews because the disqualifying information became apparent only after the interviews were well underway. The Procedures Manual did not contain explicit instructions regarding people living in halfway houses when not incarcerated. The study procedures directed interviewers to complete questionable interviews and pay the respondents. The senior staff reviewed the cases and decided to exclude the interviews. Review of National Household Survey on Drug Abuse (NHSDA) data on residents of halfway houses indicated that the residents used drugs at much lower rates when in the halfway houses than when not (National Institute on Drug Abuse 1994). Another respondent failed to meet the residency eligibility criterion because she had been arrested on an outstanding Alaskan warrant and extradited to Alaska from Washington where she was living. The interviewer decided to conduct the interview because of the unusual circumstance. After senior staff reviewed this case, they decided that her *yes* to the qualifying question, "Were you living in Alaska when you were incarcerated?" was not accurate. When arrested in Washington State, she was residing there after having moved from Alaska.

Recruitment Efforts and Outcomes. The study began recruiting participants at the Hiland Mt. CC first. The study team used the June 15, 2000 census (P. A. Crandell, personal communication, 2000a[4]) to generate the randomized roster of potentially eligible inmates at Hiland Mt. The roster included inmates who were not sentenced in order to include inmates sentenced between June 15 and July 11. The study coordinator updated the initial roster to remove the names of inmates who were no longer at the facility and inmates who were still not sentenced. There were 67 potentially eligible female inmates at Hiland Mt. (Table 3). Ten of them were not in the general population for at least 30 days before incarceration. One inmate, describe above, was living out of state when she was returned to Alaska because of an outstanding warrant. Two inmates were away from the facility receiving medical treatment. Forty eligible inmates completed interviews, and 14 refused to do so. The resulting completion

[4]NCRPG wishes to thank Dr. P. A. Crandell for making these rosters available.

rate was 74%.

Some of the potentially eligible women who refused to participate might have been ineligible. They had learned from other subjects about the survey and had refused to attend the screening interview with the study coordinator. Consequently, the study could not assess the subjects' actual eligibility. The computation of the completion rate uses the conservative approach of assuming that all inmates who refused to participate were actually eligible.

Table 3. Outcomes of Sample Recruitment Efforts, by Interview Site

	Correction Center			
Disposition	Hiland Mt.	Palmer Min.	Wildwood	Total
Potentially Eligible Inmates	67	118	130	315
Not Eligible or Not Available	13	17	15	45
Less than 30 Days Free	*10*	*9*	*9*	*28*
Not Alaska Resident	*1*	*4*	*1*	*6*
Medically Unavailable	*2*	*1*	*1*	*4*
In Work Release Program	*0*	*3*	*0*	*3*
In Solitary Confinement	*0*	*0*	*2*	*2*
Not Competent	*0*	*0*	*2*	*2*
Number of Eligible Inmates	54	101	115	270
Refused	14	16	32	62
Completed Interview	40	85	83	208
Completion Rate	74%	84%	72%	77%

A few days before beginning interviewing inmates at the next site, the Minimum Security facility at Palmer CC, the study team obtained an inmate census that included information on whether the inmates were sentenced or not (only six were not sentenced) and when they were admitted to Palmer. The study team generated a randomized roster from the census after eliminating inmates who were not sentenced and inmates who were admitted more than 11 months before recruitment began. The roster initially identified 149 potentially eligible inmates but 31 were transferred or released before they could be contacted for an interview, leaving 118

potentially eligible inmates. Proportionately fewer inmates at Palmer (9 of 118, or 8%) were not eligible because of the length of their incarceration compared to the women inmates at Hiland Mt.(10 of 67, or 15%). Four inmates at Palmer Min. were not Alaskan residents when they were arrested. These inmates were working in Alaska temporarily. Seven were on work-release at a nearby meat processing plant. The study coordinator arranged for the inmates to be excused from work and interviewed at the meat processing plant. Three other inmates were on work-release at other sites where they could not be interviewed. The completion rate at Palmer Min. was 84% (Table 3).

The study team followed a similar recruitment procedure at the final study site, Wildwood. A few days before the interviewing began at Wildwood CC, the study team obtained an inmate census and eliminated inmates not yet sentenced or admitted to Wildwood more than 11 months before. The DOC examined its records about the remaining potential participants and identified the inmates whose total current incarceration was longer than 11 months (Crandell, personal communication, 2000b). NCRPG's coordinator verified the accuracy of DOC's identification of ineligible subjects. The study team was in the field for two days before the DOC prepared the list. In those two days, the study coordinator checked the roster for accuracy by directly questioning 20 inmates whom the roster as having too little time outside of prison. The addition of information on time at risk increased the efficiency of recruitment at Wildwood.

When the study team had exhausted the original randomized list of potential participants, it had completed interviews with 78% of the eligible inmates. The study team decided to take advantage of the remaining planned recruitment time (approximately two days) to enroll additional inmates. NCRPG generated a supplementary randomized list of 29 potentially eligible inmates admitted to Wildwood during the recruitment period. DOC had not screened this list for time-at-risk.

Of the 130 potentially eligible inmates at Wildwood, 15 proved to be ineligible or unavailable. The study coordinator screened out nine inmates from the supplementary list because they had too little time outside in the last year. Ten inmates on the supplementary list refused to participate. One inmate was at the prison but too sick to be interviewed. The study coordinator screened out two inmates because they could not competently complete an interview. One inmate could not adequately converse in English, and the other failed the study's mental competency test. Two prisoners in solitary confinement could not be interviewed. The final completion rate for Wildwood was 73% (Table 3). The completion rate for the three sites combined was 77%.

Table 4. Reasons for Refusal to Participate in the Study, by Recruitment Site

Reasons	Hiland Mt. (n=14)	Palmer Min. (n= 16)	Wildwood (n=32)	Total (n=62)
Non-specific ("not interested," "do not	71% (10)	50% (8)	69% (22)	65% (40)

Table 4. Reasons for Refusal to Participate in the Study, by Recruitment Site

Reasons	Hiland Mt. (n=14)	Palmer Min. (n= 16)	Wildwood (n=32)	Total (n=62)
want to," "don't want to answer questions for anybody," and would not speak to field coordinator)				
Dislike/distrust of subject matter (paranoia over subject matter, apprehension over subject matter, not wanting to talk about drugs or treatment, dislike of treatment)	0	13% (2)	16% (5)	11% (7)
Time (being "busy" or that the interview would "take too long")	14% (2)	19% (3)	0	8% (5)
Dislike/distrust of research (not wanting "to do research")	14% (2)	6% (1)	0	5% (3)
Wanting more money (feeling story is worth more money, not willing to do it for "less than twenty dollars")	0	13% (2)	0	3% (2)
Concern over confidentiality (would participate but concerned that NCRPG would have the signed consent forms as documentation of their participation)	0	0	6% (2)	3% (2)
Impending release from prison (not wanting to discuss subject because being released soon)	0	0	6% (2)	3% (2)
Dislike of cellular phones	0	0	3% (1)	2% (1)
Total	100%	100%	100%	100%

Reasons for Refusals to Participate. Sixty-two inmates (23%) refused to participate at the three interview sites: 14 at Hiland Mt., 16 at Palmer Min., and 32 at Wildwood. To check for unknown obstacles to participation, the study coordinators routinely asked subjects who refused why they were unwilling to participate. The coordinators recorded the reasons, and NCRPG's study team coded them (Table 4).

There were three basic reasons for refusal to participate at Hiland Mt. Two respondents

belong in the "time" category: one stated that she was too busy to do the interview, while the other stated that the interview would take too long. Two respondents refused because they were suspicious or disliked the research project. The field coordinator invited the suspicious subject to speak with a Cambridge interviewer who could tell her more about the project, but the inmate refused the invitation. The other woman told the field coordinator that she did not want "to do research," and told the coordinator to not ask her to participate again. The other women did not give specific reasons for refusing to participate. They merely told the field coordinator that they did not want to do the interview (three) or they had no interest (seven). When the coordinator probed for a more specific reason, they reiterated that they just did not want to do the interview.

At the Palmer Min. facility, the field coordinator reported 16 refusals. NCRPG's research assistant categorized these responses into four categories: time, dislike/distrust of research, dislike/distrust of the subject matter, wanting more money, and non-specific. Three respondents refused because of time reasons: two respondents were "busy" (they also did not want to reschedule at a more convenient time), and another respondent stated that the interview would take too long. One respondent disliked the idea of participating in a research project, and he defiantly told the field coordinator that he would not be participating.

Two respondents refused because they did not like the subject of the interview. One of these respondents did not want to talk about treatment issues, while the other respondent did not believe that what he would say would help anybody since "change comes from within [a person] and not some treatment center." Two respondents wanted more money for doing the interview: one respondent said that he felt his story was worth more than ten dollars, and the other respondent would not do the study for less than twenty dollars. The field coordinator thanked them for their time and did not re-contact them.

Eight Palmer Min. respondents refused to participate for non-specific reasons, but with varying levels of assertiveness. One person would not come down and speak with the field coordinator. Two respondents had "no interest in doing the interview," while another respondent "did not want to do the interview." Two other respondents defiantly told the interview that they were "not doing the interview." The other two non-specific refusals included an individual who was invited for interview three times but refused after the third time when he had thought it over. The other individual may have refused because he was hard of hearing and felt that he would not be able to participate fully in a study using cellular phones.

There were thirty-two refusals to participate at Wildwood. The individuals at Wildwood often refused to come down and even talk with the field coordinator, which may account for the relatively large number of refusals at this correctional center. The study team coded the thirty-two reasons for refusal into five categories: 1) concerns over confidentiality, 2) impending release from prison, 3) dislike of cellular telephones, 4) dislike/distrust of subject matter, and 5) non-specific reasons. Two Wildwood men agreed to do the interview until they learned that they would have to sign a consent form. They both stated that they would do the interview only if they could be anonymous. Two individuals refused to participate because they were being released soon. When assured of confidentiality, both respondents again refused–one of the two respondents added that he was "was just not ready for anything like this yet."

One prospective Wildwood respondent refused because he did not want to use a cell phone. Five respondents refused because they did not want to talk about drugs or treatment. One of these respondents felt that the interview sought information that was too personal. Another was recently given a maximum sentence for a drug offense. He felt bitter toward "the system" and politely declined to be interviewed. Two of the five respondents became apprehensive and declined when they learned of the subject matter. The final respondent included in this category declined and seemed slightly paranoid to the study coordinator regarding the subject matter.

NCRPG categorized the remaining twenty-two refusals as non-specific. As previously mentioned, 11 individuals refused to come down. Two of these inmates expressed anger about being awoken for the study. The first Wildwood refusal fit into this category: He angrily stated that he was not interested and not convinced that participation would help him. Four other individuals also reported that they were not interested. One respondent stated that he did not want to answer any questions for anyone. Another individual refused to enter the interview room–he refused participation at the doorway and persisted in his refusal even after listening to a brief explanation of the study. One respondent wanted to be left alone. One respondent was hesitant and said that he might come back, but he never did. Another respondent stated that he did not want to do the interview. The final respondent refused but would not give a reason. The field coordinator reported that the potential participant appeared offended when probed for a reason.

Data Quality

Interviewer Ratings of Quality of Interview Data. At the end of each interview, the interviewer rated the quality of the interview data by responding to the question: "How would you rate the quality of the information obtained in this interview?" (Table 5). NCRPG's policy is to review any cases rated as "poor" or "inadequate." If the review of the case confirmed that its data quality was "poor" or "inadequate," the project director excluded the case from the study's sample.

The study team did not exclude any interviews because the information received "poor" or "inadequate" ratings. Initially, an interviewer rated one interview as "poor" because of the respondent's slow comprehension. After discussing the case with the project director, the interviewer changed the rating to "fair" because she acknowledged that the respondent eventually understood the questions and gave reasonable responses. The information obtained in the 208 interviews received ratings of excellent (61%), good (30%), or fair (9%). The distributions of the ratings were similar across the sites, although the interviewers rated more interviews as excellent at Hiland Mt. and Wildwood than at Palmer Min. (Table 5).

Table 5. Interviewer Ratings of the Quality of the Interview Data (percent)

"How would you (the interviewer) rate the quality of the information obtained	Wildwood (n=83)	Hiland Mt.	Palmer Min.	Total

in this interview?		(n=40)	(n= 85)	(n=208)
Excellent (no problems at all)	69	62	53	61
Good (a few problems but overall quality good)	23	28	38	30
Fair (a number of problems but overall acceptable)	8	10	9	9
Poor (many problems, overall quality open to question)	0	0	0	0
Inadequate (interview was terminated by interviewer, or quality judged too poor to include in the data set)	0	0	0	0
Total	100	100	100	100

N = Number interviewed.

For the 81 cases that received good or fair quality ratings, the interviewers explained why the data were not excellent by responding *yes* or *no* to the 11 possible reasons listed in Table 6. One response option was for the interviewer to enter an open-end "other" reason for why the interview quality was not excellent. The principal reasons for the interview information being less than excellent were the respondents did not understand the meaning of some of the drug or treatment questions (52%), had trouble due to interruptions or distractions (48%), had trouble hearing due to phone problems, background noise, or hearing loss (47%); had difficulty due to the mental or physical competency to respond to the questions (11%), had problems because English was not their first language (10%), did not take the interview as seriously as most respondents did (5%), seemed to be rushing to get through the interview (5%), and appeared to be put off by the content of the interview (2%). Eleven percent of the interviews were rated as good or fair for "other" reasons, such as the interview being interrupted for periods of a day or longer, cellular battery problems, extreme responses, respondent being tired, respondent fearing that his answers would incriminate him, respondent rambling, and respondent feeling that the interview was not applicable to him.

There were more phone problems at Hiland Mt and Palmer Min. than at Wildwood. At Wildwood, the field coordinator always plugged the cellular phones into their adapters and the phones had a headset adaptor that the respondents could choose to use. As a result, the phone problems due to static and low batteries declined dramatically (Table 6). At Wildwood interviews were more likely to be less than excellent because of respondents had language problems and difficulty understanding the questions.

Table 6. Reasons for Less than "Excellent" Rating of Quality of Interview Data (percent)

"What were the reasons that the quality of information was less than excellent?"	Hiland Mt. (n=15)	Palmer Min. (n=40)	Wildwood (n=26)	Total (n=81)
Respondent did not understand the meaning of some of the drug or treatment questions	47	38	77	52
Interruptions or distractions	60	65	15	48
Hearing and phone problems (static, hearing difficulties)	73	65	4	47
Lack of mental or physical competency to respond	0	10	19	11
Other (tired, rambling, etc.)	27	5	12	11
Interview not in respondent's native language	7	3	23	10
Respondent did not take interview seriously	7	3	8	5
Respondent rushed interview	20	0	4	5
Respondent put off by content of interview	0	0	8	2

N= the number of cases with less than excellent rating. Percentages sum to more than 100% because there may be more than one reason per case.

Respondent Comprehension. NCRPG staff examined interviewer ratings of the respondents' comprehension. If the interviewers rated the respondent's comprehension as "poor" or "inadequate," the project director considered the case for exclusion. The interviewers rated one respondent's comprehension as "inadequate." The study team examined the interviewer's notes and discussed the case with the interviewer. She reported that the rating was a typographical error and, instead, rated the respondent's comprehension as "good." There were no other cases with "poor" or "inadequate" comprehension ratings.

Respondent Truthfulness. At the end of the interview, the interviewer asked the respondent if he or she had answered truthfully when asked three key alcohol and drug use questions. The questions focused on whether the subject had a problem with alcohol in the past and whether the subject had used cocaine and used heroin in the past year. The study team chose these items because they were among the questions that qualified the subjects for the diagnostic questions. The senior staff advised the interviewers to ask these questions carefully and directed them to probe respondents whose tone suggested that they might have been dishonest. In previous studies, interviewers noticed that respondents often misunderstand this question. In this study, one interviewer reported that approximately four respondents misunderstood the first honesty question but when probed indicated that they had answered truthfully. It is noteworthy that these questions led to exclusions in other studies that have used the present instrument. Ninety-four respondents answered the truthfulness question on having a problem with alcohol, 125 answered the question on use of cocaine in the last year, and 196 answered the question on use of heroin or other opiates in the last year. All of the Alaskan inmates whom the interviewers asked these questions reported that their responses denying having an alcohol problem or using cocaine or heroin in the last year had been truthful.

Don't Knows and Refusals to Answer Specific Items. Another criterion for determining the quality of an interview was the number of don't know responses or refused responses. In particular, NCRPG considered whether the respondent failed to provide information critical to determining need for treatment. Sixty-one percent of the interviewees had no *don't know* responses. Only eight participants (4%) had eight or more *don't know* responses. One subject had 14 *don't knows*. No respondent refused to answer any question.

NCRPG staff examined the pattern of missing responses for participants who did not know the answer to eight or more questions. The study team found that none of these missing responses affected the diagnostic scoring. The respondents most often said that they did not know the complete answer to questions that asked for the month and year of symptoms and other events that happened more than two years ago. It is of course reasonable for a respondent to not remember the month when a symptom last occurred when many years have passed since the event. Moreover, for the purposes of assessing need for treatment in the last year, the study did not have to know the month of distant events. In fact, the instrument included a follow-up question when respondents did not know one of these dates. The follow-up question simply asked whether or not the event occurred in the last two years.

Missing or Inconsistent Data Preventing a Substance Use Diagnosis Course Specification. As part of the study's quality control procedures, the study team periodically (usually daily) scored the diagnostic data from the newly completed interviews. The primary purposes of this study was to assess Alaskan prisoner's need for treatment prior to incarceration. A key element in measuring treatment need was the presence of a substance use

disorder diagnosis and having a course specification of active, partial remission, or early full remission. Persons who never had a diagnosis or who were in sustained full remission during the entire past year were not in need of treatment. Therefore, the study team examined any cases that received a diagnostic score signaling that the interview contained missing or inaccurate data that prevented its scoring program from obtaining a specific diagnostic course, which in turn may have affected assessment of the need for treatment. If the interview contained missing/inaccurate data or there was a problem in the questionnaire program or scoring program, a respondent could obtain an "indeterminate diagnostic" score for the specific substance.

The study team detected cases with potentially problematic diagnostic scores. The most common problems were due to 1) the respondents' misinterpretation of one ambiguously worded course-specification question dealing with the date of events relevant to determining the precise form or remission, 2) programming errors in the skip directions in the questionnaire program that led to missing data, and 3) the respondents changed an answer so late in the interview that questions that depended on that answer could not be asked. An inconsistent date could result in an indeterminate course specification. Whenever possible, the study team reinterviewed respondents to obtain consistent responses or obtain responses to items that had been skipped in error. If reinterviewing the subject was impossible, NCRPG examined the case to determine whether treatment need could be determined even if the diagnostic course specification was ambiguous. For example, a person in partial remission (still has one or two dependence or abuse symptoms after meeting dependence criteria in the past) presumably still needed some form of treatment or aftercare during the past year, even if the interview data did not allow the analysts to determine whether the exact form of partial remission was early or sustained.

There were 17 instances of an indeterminate course specification: 11 cases for alcohol; 3 cases for cocaine, 1 case for marijuana, 1 case for stimulant drugs and 1 case for heroin or other opiate drugs. In all of these cases the subject may have needed treatment as a result of a diagnosis associated with another substance. Fifteen of the 17 indeterminate course specifications stemmed from the respondents giving inconsistent dates in the DSM diagnosis section for one or more substances. The interviewers asked respondents if they had three or more symptoms around the same time during the last two years. A *yes* answer indicated a clustering of dependence symptoms in the last two years. If respondents answered affirmatively, interviewers asked if they had experienced a symptom-free period of a month or longer since that *last* time that they had the clustering. Respondents who indicated *yes* to both of these questions were then asked for the date when the symptom-free period began. An indeterminate course specification resulted if respondents gave a date that was more than two years ago. That data contradicts their assertion that the last time they had three or more symptoms around the same time during the last two years. Apparently, some respondents thought that the interviewer was asking about the very first time the respondents had a symptom free period following clustering, not the most recent time. The study team discovered

these inconsistent responses at a time when it could still reinterview two of the 15 respondents and obtain their correct course specifications. The other thirteen cases could not be interviewed. Fortunately, there was enough other information in these interviews to allow the study team to code these cases with regard to need for treatment, even though the precise course specification was somewhat ambiguous. While there was some loss of information regarding the detailed course specification, except for its use in determining need for treatment that level of detail is largely of academic interest.

The other two indeterminate scores were caused by an error in the CASES programming of the instrument that could be fixed after the fact. In the DSM diagnosis section discussed above, respondents were asked for a date of the symptom free period. If they had three or more substance use disorder symptoms in the last two years, the date should be in the last two years. When respondents gave a date of exactly 24 months ago, the diagnostic scoring program would erroneously categorize their response as being more than 24 months ago–giving them an indeterminate score. The study's programmers revised the questionnaire program to categorize dates of exactly two years ago as falling within the two-year guideline. After the staff made this change in the program, the diagnosis scoring program produced correct course specifications for these two cases.

While examining the scoring program, the study team found an additional error in the scoring program. This error affected four instances (two cases with two instances each). The scoring program indicated that these two individuals were not asked the DSM substance disorder questions even though they did answer these questions. The error was due to an error in the scoring program's syntax. The programmers repaired this error and successfully rescored the cases to obtain their correct diagnostic scores.

The study team encountered a case at Wildwood with missing diagnostic scores for sedatives. The questionnaire failed to ask this respondent the DSM diagnostic questions for sedatives even though the respondent qualified for them. The staff immediately discovered the omission and reinterviewed the respondent and fixed the questionnaire program. The programmers traced the problem to a typographical error in the CASES programming. This problem affected diagnostic questions for cocaine, sedatives, stimulants, and heroin or other opiate drugs.

After finding this error, the study team found three additional cases where the respondent should have been asked the questions for sedatives but were not. Unfortunately, it was too late to reinterview these three respondents. The project director concluded that the final diagnostic score for sedatives would be "missing" for these three cases. However, there are several reasons to believe that these subjects did not have a current diagnosis for sedative abuse or dependence. None of them reported extensive use of sedatives: two used them only one to five times in the past year, and one used the drug once or twice a week. None used the drug every day for four weeks or more in the last month. Moreover, few nonmedical substance abusers use only sedatives. All three subjects qualified for the diagnostic questions concerning their use of alcohol and marijuana, and two qualified of other substances (cocaine,

hallucinogens and stimulants) as well. If they had a substance use disorder, it is more likely that they would have needed treatment for one for those drugs rather than for sedatives. In fact, the subject who reported the largest amount of sedative use was actively dependent on both alcohol and cocaine in the past year. Therefore that subject clearly needed treatment and would not be missed due to these missing data regarding sedatives. Neither of the other two subjects needed treatment in the past year as a result of any other substance. One never had substance use disorder diagnosis although he qualified for the diagnostic questions for other substances, and the other was a past abuser of alcohol only. Thus, while some of the diagnostic data on three subjects was missing, it is unlikely that it had an impact on our overall estimates of need for substance abuse treatment in this prisoner sample.

In the analyses described below, these two cases were treated differently depending on the context. They were coded and analyzed as missing (i.e., removed from both the denominator and the numerator) when reporting the percentage of cases with sedative use disorders specifically. However, in the measures of lifetime and past year rates of substance use disorders that combined all substances these cases were treated as if the respondent did not have diagnosis. As just explained, it appeared to be highly unlikely that they had a sedative use disorder, and data on the other substances was not missing. If the sedative responses were treated as missing, then the cases would automatically be missing for the combined measures even though data was available for all of the other drugs and the likely outcome for sedatives was clear.

This programming error also caused seven individuals to be asked DSM diagnosis questions for substances (cocaine, sedatives, stimulants, or heroin or other opiate drugs) that they should not have been asked about because they did not qualify for the diagnostic or treatment items. Our programmers examined these cases and verified that their diagnostic scoring was accurate, and the additional data was treated as irrelevant. The scoring program does not calculate a diagnosis if the subject did not qualify for the items.

There were six respondents who changed their answers too late to allow the interviewer to go back and correct their response. If a respondent reported that he or she had not used a specific substance, the questionnaire program skipped the respondent past follow-up questions regarding symptoms due to use of that substance and treatment for abuse of the substance. If the respondent changed the answer shortly thereafter, the interviewer could go back to the original question, record the changed response, and continue on from that point. However, if respondent admitted using the substance much latter in the interview, the interviewer simply recorded the change in a note and did not go back. To go back would not have been practical, since the respondent would grow weary and the overall validity of the interview could have been undermined. Another version of this problem occurred because several respondents were confused by the questionnaire wording (e.g., assumed that "stimulant" included cocaine even though the interview distinguished cocaine from other stimulants, or the respondent confused prescribed medical use of sedatives with nonmedical use). As the interview proceeded, these respondents eventually realized the confusion and informed the interviewer. In all but one

instance of underreporting, the interviewers reinterviewed the subject on a subsequent data with regard to only the substance in question. With regard to the four cases of over-reporting due to confusion, the study team corrected the data to indicate that the person had not used the substance.

The study team took corrective action to eliminate additional occurrences of these problems. The project director revised the confusing symptom-free period questions in the diagnosis section. These revised questions and additional interviewer training prevented additional problems. The study team found several programming errors in the questionnaire program and the scoring program. The corrections made to these programs resolved many of the inaccurate diagnoses and prevented future problems. Although the number of these problems was surprising, their impact on the study's findings was small.

Interview Length. The length of interviews can be used as an indicator of quality. Interviews can be very short if respondents deny all substance use. Consequently, the study team examined short interviews to determine whether there was any indication of obvious underreporting. Interviews can be excessively long if subjects ramble in their responses. Interruptions due to poor telephone connections and other disturbances can also lengthen an interview. Long interviews can also result from the interviewer failing to close the program correctly or from conducting an interview on two days.

The median length of the interviews was 59 minutes (n=201). Seven interviews that appeared to be very long represented interrupted interviews, mechanical problems, or programming errors, and the length of interview data were therefore invalid and not analyzed. The shortest interview was 16 minutes long. Only two interviews were less than 25 minutes, and both respondents had no alcohol use in the last two years, no marijuana use in the last two years, and never used any other controlled drugs. Consequently these subjects did not qualify for the diagnostic or treatment questions. Such cases are common in general population surveys, and NCRPG designed the instrument to make their interviews short. Ten (5%) of the interviews were less than a half hour long. The longest interview lasted two hours (123 minutes). The subject had language and comprehension difficulties, and he had used many drugs. Thus, a large number of items regarding drug use and related symptoms had to be repeated several times for each substance in this interview.

Interview length varied somewhat from institution to institution. Interviews at Hiland Mt., Palmer Min., and Wildwood lasted a median of 67, 62, and 54 minutes, respectively. Cellular telephone transmission quality partly explained this variance in interview length. When the interviewing began at Hiland Mt., the interviewers reported that the sound quality caused delays in the interviewing. Static would force a temporary suspension of the interview or would cause the interviewer to hang up and call back to restore the clarity to the transmission. By the end of the field period, the interviewers had developed solutions to most of the telephone problems, and by luck transmission at Wildwood was good.

Summary of Data Quality. The study's evaluation of data quality found it to be very good. Interviews conducted at Palmer Medium had to be dropped because of staff errors when recruiting respondents and the senior staff's suspicion that some respondents were intentionally underreporting to reduce the length of the interview. At the other three prisons, the study did not have to exclude any interviews because of poor or inadequate data quality. NCRPG eliminated three respondents because they were ineligible by the study's criteria. The interviewers rated all 208 interviews as excellent, good, or fair. The majority (64%) of the interviews received excellent ratings, a figure that is only slightly lower than the ratings found in our study of Rhode Island's prison, where 72% of the interviews received an excellent rating. Only eight respondents (4% of the sample) had eight or more "don't know" responses. In every instance, the relatively large number of *don't know* responses appeared to be justified. No subjects refused to answer a question. Most of the problems caused by missing or inaccurate data that affected the course specifications could be corrected by reinterviewing subjects, recoding the data, or by modifying the scoring and questionnaire programs. Three respondents had missing sedative diagnostic data.

Demographic Characteristics

The Alaskan inmate sample had a preponderance of unmarried males, Alaska Natives and whites, and people in their mid-thirties who were employed full time prior to incarceration (Table 7). Males made up eighty-one percent of the inmate sample, a figure determined by the study's decision to oversample female inmates in order to have enough cases for analysis of gender. In order to adjust for this research decision in descriptive analysis, the study team reweighted the sample to reflect the percentage of females in the total prison population (9%). Accordingly, the percent female of the weighted total in Table 7 was 9%. Alaska Natives were the largest racial group, comprising 39% of the weighted sample. The rest of the sample was 31% white, 16% African American, 2% Asian/Pacific Islander, 1% other race (mostly people who described their race as Hispanic alone), and 11% more than one race. When specifically asked whether they were Hispanic, six percent of the sample responded affirmatively. The interviewees averaged 35 years of age, with a range from 19 to 66. They had completed a median of 11 years in school. However, sixty-five of the 105 inmates who did not finish high school reported that they had a high school equivalency certificate. Consequently, 81% of the prisoner sample had a high school degree or its equivalent. Seventy-two percent were employed prior to incarceration. Four percent were in school. One in five of the prisoners was homeless for a month or more in the last year. Fourteen percent of the sample were married, and another 37% were living with someone in a marriage-like relationship prior to incarceration.

Table 7. Demographic Characteristics of Prisoner Sample

Characteristic	Hiland Mt. (n=40)	Palmer Min. (n=85)	Wildwood (n=83)	Total (n=208)
Gender (% female)	100	0	0	9
Mean Age (minimum-maximum)	35 (20-66)	35 (19-59)	34 (19-61)	35 (19-66)
Race:				
% Alaska Native/American Indian	30	41	40	39
% White	37	27	35	31
% African American	18	19	12	16
% Asian or Pacific Islander	0	2	1	2
% Other Race (e.g., Hispanic, etc.)	5	0	0	1
More than One Race	10	11	12	11
Ethnicity: % Hispanic	8	9	2	6
Median grade or years of education completed (range)	11 (5-15)	11 (7-18)	11 (2-14)	11 (2-18)
% Employed prior to incarceration	58	82	64	72
% In School Just Before Being Incarcerated	0	4	6	4
% Homeless Just Before Being Incarcerated	25	15	23	20
% Married	15	15	13	14

Besides gender, there were only minor variations in most demographic characteristics of the inmate groups at the three prisons. The mean ages, years of education, and percent married were virtually identical at all sites. The female prisoners at Hiland Mountain were more likely than the male prisoners at the other two prisons to be divorced (43% versus 13%), while the males were more likely than the females to have never married (35% versus 67%).

Native Alaskans and whites were the most common racial groups in all prisons, although the percentage of Native Alaskan females at Hiland Mt. was smaller than the percentage of Native Alaskan males at the other two prisons. There were fewer Hispanics at Wildwood, and a higher percentage of the inmates at Palmer Minimum than at the other two prisons were employed before becoming incarcerated.

Criminal Justice Characteristics

An important descriptive question is how many of the prisoners had criminal-justice-related risk-factors for substance use disorders prior to incarceration (Table 8). Many of the prisoners were repeat offenders. The median number of times ever incarcerated was 4 for all three prisons. A few prisoners reported many incarcerations (as many as 48 in one case), so the mean (6.9) was much higher than the median.

Another key characteristic for the study was the amount of time the respondents were on the outside in the last year, because many of the questions refer to this time period. The unweighted mean for the entire sample was 5.6 months (median and mode of 5.0 months), with a range between one month and 12 months (a value of 12 months could include any subject who entered prison within the two weeks prior to the interview). The three samples varied slightly on this measure: 5.3 months for Hiland Mountain inmates, 6.1 months for Palmer Minimum inmates, and 5.0 for Wildwood.

One in ten (10%) of the prisoners had been arrested for a drug violation in the last year, with the rate among the female prisoners (23%) being more than twice as high as the rate among the male prisoners (9%). According to the Alaska Department of Corrections' (1999) statistics, 13% of the female prisoners and 5% of the male prisoners in state correctional institutions on December 31, 1999, were sentenced for a controlled drug offense. Most of the 24 prisoners who were arrested for a drug violation had only one such arrest in the last year, but six had between two and five drug violation arrests. The females who were arrested for drug violations were arrested more often (1.8 times on average) than the male prisoners who had been arrested for drug abuse violation (1.2 times on average). The males were more than twice as likely to have been arrested for disorderly conduct or drunkenness, while females were more likely than the males to have been arrested for a DUI in the last year. Thirty-seven percent of the 208 prisoners had been arrested for a drug- or alcohol-defined offense (DUI, disorderly conduct, or drunkenness) in the past year. Department of Corrections' (1999) statistics indicated that 25% of the females and 10% of the males in the State's correctional institutions were classified as having committed either an alcohol or drug violation. The results show that more of the prisoners were arrested for a drug or alcohol violation in the last year than were incarcerated for one of the two types of offenses.

Table 8. Criminal Justice Characteristics of Prisoner Sample

Characteristic	Hiland Mt. (n=40)	Palmer Min. (n= 85)	Wildwood (n=83)	Total Sample (n=208)
Mean (median) Number of Times in Prison Lifetime	7.8 (3.5)	6.0 (4)	7.5 (4)	6.9 (4)
% Arrested for Drug Abuse Violation in Last Year	23	9	8	10
Of Those Arrested, Mean Number of Times Arrested for Drugs	1.8	1.3	1.1	1.3
% Arrested for Drunkenness or Disorderly Conduct in Last Year*	7.5	14.5	18.3	15.6
Of Those Arrested, Mean Number of Times Arrested for Drunkenness or Disorderly Conduct in Last Year	2.7	3.1	1.7	2.2
% Arrested for Driving Under the Influence (DUI) in Last Year	20.0	15.3	15.7	15.9
Number of Times Arrested for Driving Under the Influence in Last Year	2.0	1.2	1.1	1.2
% Arrested for a Drug- or Alcohol-Defined Offense in the Last Year	45.0	34.1	37.3	36.6

*n= 205 for drunk or disorderly conduct arrests due to missing data in three cases: two from Palmer Minimum and one from Wildwood. Total weighted for gender.

Health

When asked about their emotional or psychological health in the past year, half of the Alaskan prisoners said that their health was only "poor" or "fair," rather than "good," "very good," or "excellent." The interviewers asked the 148 subjects who rated their psychological health no better than "good" whether they had been in counseling or treatment for a psychological or emotional problem other than substance abuse in the last year. Twenty-three (11% of the total sample) said that they had received psychological counseling in the last year.

Ten of them (5% of the total sample) had received a prescribed medication for a psychological or emotional problem in the last year. Forty-eight subjects (23% of the sample) reported that they had been "limited, disabled, or impaired in any way in [their] daily activities because of physical, mental, or emotional problems."

Substance Use

Nearly every member of the Alaskan prisoner sample had an extensive history of substance use. Although the diagnostic scales incorporated in the study's questionnaire focus on symptoms caused by substance use rather than substance use per se, establishing lifetime and recent substance use is an essential prerequisite for asking about the problems caused by chronic excessive use. Moreover, learning about substance use is important for describing the sample and comparing it to other populations described in the literature.

Lifetime Substance Use. The Alaskan prisoners reported extensive lifetime (ever) use of every one of the major categories of substances of abuse (Table 9). Alcohol use was universal, and use controlled drugs was nearly so (95%). Ninety-three percent of the sample admitted using marijuana, but only 13% reported that marijuana was the only illicit drug that they used. Four subjects had not used marijuana, but had used cocaine. All of the other respondents reported using more than one controlled drug. Three of four (76%) inmates had tried cocaine at least once. The Alaskan prisoners were least likely to have tried opiates (25%) and inhalants (25%). While some underreporting may be present in these data, the amount of illegal drug use freely admitted by the prisoners during the interviews was substantial even for this population. Having nearly every respondent willing to report a history of illegal drug use is an essential prerequisite for a valid assessment of the substance abuse treatment needs of the inmates.

Table 9. Lifetime Substance Use: Percent Ever Used by Alaskan and Rhode Island Prisoners

Substance	1997 National Survey of Inmates		Rhode Island Prisoners (n=198) Ages 18+	Alaska Prisoners			
	Federal	State		Hiland Mt. (n=40)	Palmer Min. (n= 85)	Wildwood (n=83)	Total (N=208)
Alcohol	NA	NA	100	100	100	100	100
Alcohol, No Controlled Drug Use	NA	NA	5	0	8	4	5
Any Controlled Drug Use	73	83	95	100	92	96	95

Table 9. Lifetime Substance Use: Percent Ever Used by Alaskan and Rhode Island Prisoners

Substance	1997 National Survey of Inmates		Rhode Island Prisoners (n=198) Ages 18+	Alaska Prisoners			
	Federal	State		Hiland Mt. (n=40)	Palmer Min. (n= 85)	Wildwood (n=83)	Total (N=208)
Marijuana	65	77	92	95	92	94	93
Marijuana Only Controlled Drug Used	NA	NA	13	10	14	12	13
Cocaine	45	49	67	83	69	81	76
Hallucinogens	19	29	59	50	57	63	59
Stimulants	21	28	27	45	42	46	44
Sedatives	17	24	34	35	35	35	35
Opiates	16	25	48	30	21	28	25
Inhalants	8	14	18	15	20	31	25

Note: Source for the national survey was Mumola (1999). The Alaska prisoner total is reweighted for gender, while the Rhode Island sample was reweighted for gender and oversampling of persons incarcerated in the last month.
NA= not available.

To provide a perspective for evaluating the substance use levels in the sample of Alaskan prisoners, the authors compared the Alaskan prisoner survey's findings with a 1997 national survey on inmates in state and federal prisons (Mumola 1999) and with a Rhode Island prisoner sample that McAuliffe et al. (2000a) interviewed recently using the same questionnaire (Table 9). Both the Alaskan and Rhode Island samples reported higher rates of use of controlled drugs than the national samples of inmates in federal and state prisons in 1997. For example, whereas 95% of the Alaskan and Rhode Island prisoners had ever used an illicit drug, 83% of the 1997 national sample of state prisoners reported having ever used an illicit drug. It is noteworthy that a national sample of inmates of state correctional facilities in 1974 found that 61% admitted ever using a controlled drug for nonmedical purposes (Barton 1980). A national survey of local jail inmates in 1996 found that 82% reported ever having used illicit drugs (Wilson 2000).

The correspondence between the Alaska prisoner sample and the Rhode Island prisoner sample was remarkable, although there were some differences in the substance preferences. For

the Alaskan and Rhode Island prisoner samples the percentages reporting lifetime use of alcohol, marijuana, hallucinogens, and sedatives were identical or nearly so. It is noteworthy that both of these prisoner samples were more likely to have ever smoked marijuana as to have ever smoked tobacco cigarettes 100 times or more (86% of Alaska's prisoners and 88% of Rhode Island's prisoners ever smoked 100 or more cigarettes). Alaskan prisoners reported more cocaine (76% versus 67%), stimulant (44% versus 27%), and inhalant use (25% versus 18%) than the Rhode Island Prisoners reported, but Alaskan prisoners reported less heroin and other opiate use (25% versus [illegible]%) than the Rhode Island prisoners reported.

Statistics from other sources (Synectics for Management Decisions, Inc. & SAMHSA, OAS 1999; McAuliffe et al.1999, 2000c) suggest that these differences between the two prisoner samples are reflections of general differences between the drug abuse scenes in the two states. For example, according to TEDS admissions statistics Alaska and Rhode Island had about the same number of admissions in 1997 (8,455 for Alaska and 9,146 for Rhode Island), but more of Alaska's than Rhode Island's admissions were for stimulants (55 versus 7), slightly fewer for cocaine (715 versus 828), but far fewer for opiates (124 versus 3,930) (Synectics for Management Decisions, Inc. & SAMHSA, OAS 1999, pp.88-89).

Recent Alcohol Use. Most of the Alaskan inmates drank alcohol in the full year prior to being imprisoned, and they generally drank heavily. Eighty-three percent of the Alaskan prisoners reported alcohol use during the year, and 76% drank during the month prior to incarceration (Table 10). Of those who abstained in the last year, half drank during the year before last. Nearly a quarter (24%) of those who drank during the 12 months prior to incarceration did so every day or nearly every day. Most (62%) of the others drank at least once a week during the year. A commonly used definition for "binge drinking" (e.g., the definition used in the BRFSS surveys and in many college studies) is having five drinks in one day. Seventy-two percent of the prisoners who drank alcohol during the 12 months prior to incarceration reported that they had five drinks or more on average every day that they drank. The median for drinkers was eight drinks per drinking day on average. The interviewers also asked directly, "In your lifetime, have you ever gone on binges where you kept drinking for a couple of days or more without sobering up?" Sixty-two percent of the prisoners said that they had. This more stringent definition of binge drinking came from the Diagnostic Interview Schedule (Robins et al. 1998).

Table 10. Recent Use of Substances: Last Year and Last Month Prior to Incarceration

	1997 National Survey of Inmates: % Month Prior to Offense	Rhode Island Prisoners (n=198)	Alaska Prisoners (n=208)

	Federal	State	% Any Use in Last year	% Last Month	% Any Use in Last year	% Last Month
Alcohol	NA	NA	81	70	83	75
Marijuana	30	39	66	57	63	49
Cocaine	20	25	48	38	40	27
Sedatives	3	5	23	14	13	6
Hallucinogens	2	4	23	10	10	4
Heroin and other opiates	5	9	35	27	6	3
Stimulants	8	9	5	1	8	3
Inhalants	1	1	3	1	2	1
Any controlled drug use	45	57	85	81	74	61

NA= Not Available; Source for the 1997 national survey of federal and state prisoners was (Mumola 1999).The Alaska prisoner total is reweighted for gender, while the Rhode Island sample was reweighted for gender and oversampling of persons incarcerated in the last month.

In the BRFSS survey, "chronic drinking" is defined as having sixty drinks or more a month. In this sample, all of the 40 subjects (19% of the total sample) who reported daily drinking during the past year averaged at least three drinks a day and would therefore qualify as a chronic drinkers. When asked how many drinks they had on the day that they drank the most in the last year, the median prisoner who drank reported that he or she had 18 drinks that day.

Recent Controlled Drug Use. Three out of four (74%) Alaskan inmates admitted illegal drug use during the full year before they were incarcerated, and more than half (61%) of the respondents used an illegal drug in the month before entering jail (Table 10). Half (49%) of the Alaskan inmates admitted marijuana use in the month before incarceration, and 20% of the total sample reported using the drug on a daily basis during the year prior to incarceration. More than a quarter (27%) of the sample reported cocaine use in the 30 days prior to incarceration, and seven percent of the total sample used cocaine on a daily basis in the year prior to incarceration.

Just as in their lifetime use, the inmates were most likely to have used marijuana and cocaine during the periods just prior to becoming incarcerated this time. Few of them reported recent use of heroin and stimulants.

The Alaskan prisoners' use of controlled drugs in the month before incarceration closely paralleled the levels of use reported by the national sample of state prisoners. Although the Alaskan prisoners reported a higher level of marijuana use (49%) than the national sample of state prisoners reported (39%), the Alaskan prisoners reported lower levels of use of opiates and stimulants than the national state inmate sample reported (9% for the national sample versus 3% for the Alaskan sample). Otherwise the two samples were quite similar with regard to past-month use of other controlled drugs (cocaine, sedatives, hallucinogens, and inhalants).

With the exception of stimulants, more of the Rhode Island sample than the Alaskan prisoner sample reported use of controlled drugs prior to incarceration. Eighty-one percent of the Rhode Island prisoners reported use of a controlled drug during the month before their being incarcerated, a rate that was 20% higher than the percent reported by the Alaskan prisoners. The largest percentage difference between the two samples was with regard to opiate use. The eight-fold difference between the Alaskan and Rhode Island prisoner samples regarding recent use of opiates was even larger than the difference observed for lifetime use. Relatively few of the Alaskan prisoners used opiates in the last year (6%) and in the last month (3%), while large proportions of the Rhode Island sample had done so (35% in the last year and 27% in the last month).

Self-Reported Substance Problems and Self-Diagnoses

The interview included a series of questions to assess the extent to which the subject's drinking or drug use led to common substance-related problems. As part of the qualifying criteria for being asked the DSM diagnostic questions, these items occurred prior to questions about the clinical symptoms of abuse and dependence. Twenty-seven percent of the Alaskan inmates reported that they had ever been admitted to hospital or emergency room for an alcohol-related injury or illness. More of the prisoners at Palmer Minimum (30%) had been in a hospital due to alcohol use than the prisoners at Palmer Minimum (25%) or at Hiland Mountain (20%). Thirty-seven percent of the total weighted Alaskan sample said that a doctor or health professional told them that they should cut down on drinking before it caused serious damage to their health.

The interviewers asked subjects about alcohol problems and dependence directly, "Have you ever had a drinking problem or felt dependent on alcohol?" Fifty-seven percent (118 of 208 inmates) of the sample responded yes. When asked when was the last time that they had a problem or were dependent on alcohol, nearly half (48% of 118) gave a date in the current calendar year (2000). Seventy-seven percent of the 118 persons who admitted having an alcohol problem gave a date in the past three years (1998 to 2000).

Several questions assessed the presence of severe problems due to use of one or more controlled drugs. Fourteen percent of the Alaskan prisoners said that they had gone to an

emergency room for a drug overdose, bad reaction, or drug-related illness or injury at least once in their lives. Forty-four percent said that they had ever had a drug problem or been dependent on a drug. A larger percentage of the Highland Mountain inmates (63%) than the Wildwood (43%) or Palmer Minimum inmates (41%) admitted to having had a drug problem or having been dependent on a drug. Conklin et al. (2000) reported that more female than male inmates in a Massachusetts prison reported having an alcohol problem and having a drug problem. The percentages of Alaska's inmates reported having been dependent on or had a problem with each specific drug were: cocaine (29%), marijuana (22%), opiates (8%), stimulants (6%), inhalants (2%), and hallucinogens (1%). There was a remarkably close match between these lifetime percentages and the percentages of the sample who needed treatment for these substances in the last year.

Substance Use Disorders

Lifetime Substance Use Disorder Diagnoses. A remarkable ninety-one percent of Alaska's prisoners have had a substance use disorder (abuse or dependence) according to DSM-IV criteria at some time in their lives (Table 11). Only two subjects failed to qualify for the diagnostic questions. Most often, the subjects who had a lifetime substance use disorder met the DSM-IV's clinical criteria for substance dependence at some time in their lives. Eighty-four percent of the Rhode Island prison inmates had a lifetime substance use disorder. Four out of five (81%) of the Alaskan prisoners have had an alcohol use disorder, and three out of five (61%) have had a drug use disorder in their lives. Many more (24%) met formal criteria for alcoholism than the 57% who admitted that they had a problem or felt dependent on alcohol when asked directly. Two out of five (38%) respondents had a cocaine use disorder. The males at Palmer Minimum and Wildwood were more likely than the females at Hiland Mt. to have had alcohol use disorders, while the females at Hiland Mt. were more likely than the males in the other two prisons to have had a cocaine use disorder. Males were also more likely than females to have abused hallucinogens. With the exception of hallucinogens and sedatives, most of these substance use disorders were dependence rather than abuse. Clearly, the prisoners had extensive histories of substance use disorders involving the full range of legal and illegal substances.

Table 11. Lifetime Substance Use Disorders

	% At Individual Institutions			% Total Alaska Prisoners (n=208)[a]		
Substance	Hiland Mt. (n=40)	Palmer Min. (n= 85)	Wildwood (n=83)	Abuse	Dependence	Substance Use Disorder
Alcohol	65	85	80	21	59	81

Table 11. Lifetime Substance Use Disorders

Substance	% At Individual Institutions			% Total Alaska Prisoners (n=208)[a]		
	Hiland Mt. (n=40)	Palmer Min. (n= 85)	Wildwood (n=83)	Abuse	Dependence	Substance Use Disorder
Cocaine	63	33	39	3	35	38
Marijuana	33	41	35	13	25	38
Stimulants	15	8	16	2	10	12
Opiates	13	9	10	2	8	10
Hallucinogens	3	9	12	7	3	10
Sedatives	5	2	6	2	2	4*
Inhalants	0	1	8	2	3	4
Any Controlled Drug	68	56	64	8	53	61
Any Substance	85	92	90	16	75	91

*N = 205 for sedatives. [a] Reweighted by gender.

Treatment Need: Substance Use Disorder Diagnoses in the Last Year. Consistent with findings from other states reported in previous studies (see Table 1), a large majority (79%) of the recently incarcerated prisoners in Alaska had a substance use disorder (abuse or dependence) during the past year when on the outside (Table 12). Sixty-seven percent of the Alaskan prisoners had an alcohol use disorder in the last year when not in prison during the past year, and 43% had a drug use disorder in the last year when on the outside. Cocaine and marijuana use disorders (30% and 22% respectively) were the most common causes of drug use disorders. Thirty-three percent of the total sample had a use disorder for a drug other than marijuana during

the 12 prior to the interview when the respondent was on the outside. These data suggest that most of the Alaskan prisoners in the study's three subsamples had an active substance use disorder that warranted treatment services prior to their incarceration, and they would presumably benefit from treatment services during and upon release from custody.

Table 12. Treatment Need in the Last Year on the Outside

Substance	% Rhode Island Prisoners (n=198)[b]			% Alaska Prisoners (n=208)[a]		
	Abuse	Dependence	Needed Treatment	Abuse	Dependence	Needed Treatment
Any Substance	9	73	82	12	67	79
Alcohol	15	43	58	13	54	67
Any Controlled Drug	4	58	62	4	39	43
Cocaine	2	36	38	1	27	28
Marijuana	5	21	26	6	17	23
Stimulants	0.2	1	2	1	5	6
Heroin**	4	25	28	1	4	5
Hallucinogens	1	4	5	2	2	4
Sedatives***	3	7	9	1	2	3*
Inhalants**	0.2	0	0.2	0	1	1

*n=205;**n=197; ***n=196. [a] Reweighted by gender.[b] Reweighted by gender and admission in last month.

Alaska's prisoners, specifically the men, were more likely than Rhode Island prisoners to have needed treatment for alcohol use disorders in the past year (67% versus 58%), while Rhode Island's prisoners were more likely than Alaskan prisoners to have needed treatment for controlled drug use disorders (62% versus 43%) (Table 12). The biggest difference involved abuse and dependence on heroin and other opiates (28% in Rhode Island versus 5% in Alaska).

Table 13. Need for Treatment During the Last Year When on the Outside, by Prison

Substance	Hiland Mt. (n = 40)	Palmer Min. (n = 85)	Wildwood (n = 83)
Any Substance	79	80	78
Alcohol	58	73	63
Any Controlled Drug	60	40	42
Cocaine	53	22	28
Marijuana	18	25	22
Stimulants	10	2	6
Heroin	5	4	4
Hallucinogens	0	2	7
Sedatives*	5	0	6
Inhalants	0	0	2

*N = 39 for Hiland Mt., 83 for Palmer Min., and 83 for Wildwood.

These differences between the two states are consistent with findings from the present authors' social indicator analyses of alcohol and drug problems among states (McAuliffe et al. 1999, 2000). In 1994-1996, whereas Alaska had the second greatest level of need for alcoholism treatment in the country, Rhode Island had the 34th highest level of need for alcohol treatment. During the same period, Rhode Island ranked 18th with regard to drug treatment needs, while Alaska ranked 31st on the same composite drug need index. Alaska had only 134 opiate treatment admissions in 1997, and the present data suggests that there is no large body of opiate addicts in Alaska who are ending up in jail for lack of treatment services. Like the prisoner interview results, treatment admissions statistics reported to TEDS in 1998 indicated that most of the people who obtained treatment in Alaska reported a primary problem with alcohol, cocaine, or marijuana (Office of Applied Studies 2000a, p. 106). Thus, any new treatment services in Alaska's prisons most likely should focus on treatment of alcohol, cocaine, and marijuana use disorders.

Treatment Need by Gender and Race. The percentage of inmates who ever needed treatment in their lives and in the last year were similar at all three prisons, although the women at Hiland Mountain were more likely to need treatment for cocaine and other stimulants while the men at the other two prisons were somewhat more likely to need treatment for alcohol, marijuana, and hallucinogens (Tables 13 and 14). The males had a higher rate of lifetime substance use disorders (91% versus 85%). The difference between the genders narrowed so that

the males and females had virtually the same rate of current substance use disorders.

Table 14. Lifetime Use Disorder Diagnoses and Current Treatment Need, by Demographic Characteristics

Characteristic		% with Lifetime Substance Use Disorder Diagnosis	% Needing Treatment in the Last Year
Gender	Male (n = 168)	91	79
	Female (n = 40)	85	78
Race	Alaska Native, American Indian (n = 89)	97	88
	White (n = 79)	90	76
	African American (n = 35)	83	74

Note: The race estimates have been reweighted by gender.

The category of Native Alaskans/American Indians had the highest lifetime (97%) and current rates (88%) of substance use disorders among Alaskan Prisoners. These statistics are consistent with other research documenting the high rates of alcohol problems among Native Alaskans (Beauvais 1998; Segal 1998). Whites had the next highest rates (90% lifetime, 76% current), while African Americans had the lowest rates (83% lifetime, 74% current) among the three largest racial groups in the sample.

Medical Complications of Alcohol and Drug Use Disorders. During the interview, the interviewers asked a series of questions on general health that included items on medical and psychiatric conditions that are associated with substance use disorders but only one of which explicitly mentioned alcohol or drugs (Table 15). The first set were contagious diseases, and the second set were injuries. When asked about diseases and injuries associated with substance use disorders, the Alaskan prison samples did not differ markedly. The women at Hiland Mt. were more likely to report contagious diseases and high blood pressure, while the men were more likely to have automobile accidents and head injuries. All prison samples were equally likely to have an overdose or untoward reaction to drugs or alcohol.

Table 15. Medical Complications of Drug-use Disorders (Percent)

Have you ever been told by a doctor or other medical professional that you	Hiland Mt. (n=40)	Palmer Min.	Wildwood (n=83)	Weighted Total

have:		(n=85)		Prisoner Sample
Tuberculosis, Syphilis, Hepatitis, or endocarditis?	35	20	21	22
Gastritis, cirrhosis, or cancer of the lip, throat or stomach?	8	7	4	6
High blood pressure?	23	18	15	17
In the past year while on the outside, have you gone to an emergency room, hospital, health center, or doctor's office because of . . .				
A fall, burn, or injuries from a fight?	18	19	15	17
An automobile accident that was your fault?	3	2	7	6
An overdose or bad reaction from alcohol or drugs?	8	8	7	8
A head injury?	10	6	13	10

Treatment History

Alaska's prisoners reported receiving substance abuse treatment services from a variety of providers outside of prison. The present analysis includes a broad array of treatment forms but distinguishes between treatment provided on the outside by specialists, self-help organizations such as Alcoholics Anonymous (AA) and Narcotics Anonymous (NA), and by nonspecialists (e.g., pastoral counselors or general therapists). Substance abuse treatment funded by the federal Substance Abuse Prevention and Treatment (SAPT) Block-Grant and other state funds is provided mostly by professionals or paraprofessionals who are substance abuse treatment specialists. As described in Table 18, this form of treatment includes detoxification in a hospital or specialty treatment facility, residential rehabilitation or halfway house, outpatient counseling, and special medications such as methadone and Antabuse. Many substance abusers who receive specialty treatment also depend on self help groups as part of their care, while other substance abusers may utilize only self help treatment. There is also a range of other providers who do not specialize in substance abuse services but who provide a significant proportion of substance abuse services. When asking about treatment from these providers, the instrument carefully specified that care was for alcohol or drug problems.

Table 16. Treatment Received on the Outside, Lifetime and Past Year

Type of Treatment on Outside	% Lifetime (n=208)	% Past Year (n=208)
Any Type of Treatment	79	53
Specialty	68	27
Self Help	66	37
Nonspecialty	47	33
Combinations of Providers:		
Specialty Only	5	2
Specialty and Self Help, or Nonspecialty, or Both	63	25
Self Help and/or Nonspecialty	11	26

The interviewers asked all of the prisoners who reported ever using alcohol or controlled drugs, "Alcohol [drug] treatment might include a stay in a hospital, treatment center, or halfway house. Treatment could also consist of seeing a counselor, attending a self-help meeting (like AA [Narcotic Anonymous]), or receiving medication such as Antabuse [methadone]. Have you ever received any kind of treatment or counseling for alcohol [drug] use outside of prison?" If the respondents answered *yes* to either of these questions, the interviewers asked a series of follow-up questions regarding the number of episodes of treatment lifetime and during the months when the inmates were on the outside during the past year. The interviewers also asked about specific modalities of treatment, including care from specialty, self help, and nonspecialty providers. Even if the respondents said that they had never received drug or alcohol treatment per se, the interviewers skipped to the questions about nonspecialty and self help treatment. For example, they asked, "Did you ever obtain counseling for drinking or drug use from a psychiatrist, social worker, family therapist, or counselor who does not specialize in treating substance abuse or work in a substance abuse program?" The questions about nonspecialty treatment covered services from providers that were not explicitly mentioned in the general question about receiving treatment. Nonspecialty treatment included employee assistance counselors, pastoral counselors, family doctors, outreach workers, acupuncturists, general health counselors or advisors, drunk-driving classes or court-appointed treatment classes, and emergency care facilities or programs for acute intoxication. The questions about sources after family doctors focused only on the last year.

Any Type of Treatment. In the broadest definition of treatment used in this analysis, all of these forms of care have been included as nonspecialty treatment, as distinct from professional and paraprofessional specialty care and self help (Table 16). During their lives, 79% of the

Alaskan prisoner sample received treatment on the outside from specialty, self help, or nonspecialty providers. A larger percentage of the female inmates at Hiland Mountain (85%) than the male inmates at Palmer Minimum (80%) and Wildwood (76%) and had ever received treatment of any kind on the outside.

In the past year, 53% of the Alaska prisoners received some form of treatment on the outside. There was little difference between the women incarcerated at Hiland Mountain (55%) and the men at the other two prisons (53%) in the percentage that received treatment on the outside in the past year.

Specialty, Self Help, and Nonspecialty Providers. Sixty-eight percent of the total sample received specialty treatment at some time in their lives. 66% attended self help groups, and 47% received help with alcohol or drug problems from nonspecialty services at some point in their lives. While a small group of respondents (5%) had received only specialty treatment in their lives, most of the Alaska prisoner respondents received specialty treatment in combination with self help or nonspecialty services (63% of the total sample lifetime). Another group (11%) of the inmates had received only self help or nonspecialty treatments in their lives.

In the past year, twenty-seven percent received treatment from specialty providers, in nearly all cases receiving care from self help or nonspecialty providers as well. Twenty-six percent of the total sample received treatment from only self-help groups or nonspecialty providers in the last year. In nearly all instances, the Alaskan prisoners received treatment just once in the last year, which is not surprising since they were on the outside slightly less than half of the year on average. Because of the importance of specialty services funded by the Block Grant and state funds, the analyses will focus on the respondents who received specialty care versus those who did not.

Lifetime Specialty Treatment History. More of the Alaskan inmate sample (68%) than the Rhode Island inmate sample (52%) and the 1997 national samples of state (35%) and federal (25%) prison inmates reported having received specialty treatment during their lives (Mumola 1999).[5] Many of the prisoners had received treatment repeatedly during their lives. When the interviewers asked the Alaskan prisoners how many different times (episodes of care) they had received treatment for a substance use disorder, forty-two percent said that they had received treatment once or twice, and 25% said that they had received it three or more times. The Rhode Island prisoners were more likely than the Alaskan prisoners to have received treatment three or more times (34%), but the Rhode Island inmates were less likely than the Alaskan prisoners to have received treatment once or twice versus (18%) in their lives. Thus, a substantial majority of the Alaskan prisoners who received substance abuse tr tment on the outside, and a quarter of

[5]Because most studies have ignored nonspecialty care for substance abuse services, what we have distinguished as specialty and self help treatment other studies typically refer to as "treatment."

the sample had a history of multiple episodes of some form of care during their lives. The Hiland Mountain inmates were more likely to have received specialty treatment at least once in their lives (78%) than were the Palmer Minimum inmates (69%) or the Wildwood inmates (65%).

Of the prisoners in the Alaska sample who received professionally-delivered specialty substance abuse treatment at least once in their lives, more had ever received residential rehabilitation treatment than other forms of specialty treatment. The relative frequency of residential treatment is an indication of the severity of the inmates' substance abuse problems, since only 11% of Alaska's treatment clients in 1998 were in residential treatment according to the federal Uniform Facilities Data Set (UFDS) study (Office of Applied Studies 2000b, p. 64). The Alaskan prison respondents reported having received outpatient counseling delivered by professional specialty providers next most often after residential treatment.

With the exception of detoxification treatment, more of the Alaskan prisoners than the Rhode Island prisoners reported lifetime treatment in specialty treatments, although the relative proportions who received different types of treatment were fairly similar in the two samples. For example, long-term residential treatment was the most common specific form of professionally-delivered specialty treatment in both samples. The largest differences were the much higher proportion of Alaskan prisoners than Rhode Island prisoners who had ever been in short-term residential treatment and intensive outpatient treatment. Rhode Island prisoners were more likely than the Alaskan prisoners to have received methadone treatment in their lives.

Table 17. Lifetime and Past-Year Professional Specialty Treatment for Substance Abuse When Outside of Prison

Measure	% Rhode Island Prisoners (n=198)[a]		% Alaska Prisoners (n=208)[a]	
	Lifetime	Past Year	Lifetime	Past Year
Specialty Treatment (With and Without Self Help And/or Nonspecialty Treatment)	52	31	68	27
Types of Specialty Treatment Received:				
Detox Treatment	34	17	25	3
In Hospital	16	4	7	0
In Residential Facility	27	11	22	3
Outpatient	6	4	4	1
Outpatient/Residential Rehabilitation	34	18	53	15
Residential, Long-term (> 30 days)	30	16	38	11

Table 17. Lifetime and Past-Year Professional Specialty Treatment for Substance Abuse When Outside of Prison

Measure	% Rhode Island Prisoners (n=198)[a]		% Alaska Prisoners (n=208)[a]	
	Lifetime	Past Year	Lifetime	Past Year
Residential, Short-term (< 30 days)	8	3	24	5
Hospital	8	1	5	1
Halfway House	11	5	19	4
Outpatient	28	15	45	15
Less intensive	22	11	33	11
Intensive	9	3	19	6
Methadone	7	6	1	1
Antabuse	5	0	5	0

[a] The Alaska prisoner sample was reweighted to adjust for oversampling females, while the Rhode Island prisoner sample was reweighted to adjust for oversampling females and newly incarcerated persons (incarcerated within the last month). One Alaska prisoner's responses for treatment in the past year was missing due to interviewer error.

Specialty Treatment in the Past Year. In the past year, 26% of the inmates received specialty treatment once or twice, while just 1% received it more than twice. Inmates at Palmer Minimum were more likely (32%) than were the inmates at Hiland Mountain (25%) or Wildwood (23%) to have received specialty treatment in the last year when on the outside. The professionally-delivered specialty treatment consisted most often of outpatient counseling (11%) or long-term residential care (11%). The next most common treatments were intensive outpatient treatment and short-term residential. With the exception of admissions to detox and methadone maintenance, the past-year treatment experiences reported by the Rhode Island prisoners were remarkably similar to those reported by the Alaskan prisoners.

Self Help and Nonspecialty Sources of Substance Use Disorder Treatment. The most frequently utilized source of treatment by far was self help groups such as Alcoholics Anonymous (Table 16). Three times as many prisoners obtained care from self help groups than from any other specialty or nonspecialty treatment source (Table 18). The next most frequently used nonspecialty professional treatment sources were psychological therapists (20% lifetime and 8% in the past year) and faith-based counselors (18% lifetime and 12% past year). Fourteen

percent of the sample had attended a DUI or court-appointed treatment class. Only a small percentage of respondents received care from the remaining sources in Table 18.

The Hiland Mountain inmates were slightly more likely (80%) than the Palmer Minimum (78%) or the Wildwood (69%) inmates to have received nonspecialty substance abuse treatment at least once on the outside. The Hiland Mountain inmates were about as likely (55%) as the Palmer Minimum (54%) and slightly more likely than the Wildwood inmates (47%) to have received this form of treatment in the last year when they were on the outside.

Treatment in Prison. A substantial proportion of the inmates had received treatment when they were incarcerated at some time in their lives. The interviewers asked all subjects who had used alcohol whether they had ever received treatment in prison. Fifty-five percent of the total sample had been treated for alcohol problems when in prison at some point in their lives. Because the male prisoners were more likely than the female prisoners, it was not surprising that the male prisoners in Palmer Minimum (64%) and Wildwood (51%) were much more likely than the female prisoners in Hiland Mountain (30%) to have been treated for alcohol problems while in prison at least once in their lives.

The interviewers asked the 107 prisoners who said that they had ever received alcohol treatment in prison, how often they had received treatment and whether they received it during the current incarceration. Eighty-five percent of them had received substance abuse treatment once or twice, 9% received it three or four times, and 6% received it more often. Somewhat more of the female male prisoners (66%) than the male prisoners (59%) who have ever been treated for alcoholism in prison have received some form of treatment during their current incarceration. According to Department of Corrections information (Williams 1995), all three of the institutions sampled in this study have outpatient treatment programs for substance use disorders.

Prisoners who received treatment for drug abuse on the outside were asked whether they ever received treatment for drug abuse in prison. Fifty-six percent responded affirmatively.

Table 18. Nonspecialty Sources of Alcohol and Drug Use Disorder Treatment

Nonspecialty Treatment Sources	% Received Treatment (n=208)	
	Lifetime	Last Year
Nonspecialty Therapists, Such as General Psychiatrist, Counselor	20	8
Religious or Pastoral Counselors	18	12
Family Doctor	8	3
Employee Assistance Counselor	5	2
Drunk-driving or Court-appointed Treatment Class	NA	14

Table 18. Nonspecialty Sources of Alcohol and Drug Use Disorder Treatment

Nonspecialty Treatment Sources	% Received Treatment (n=208)	
	Lifetime	Last Year
Acupuncturist, Outreach Worker, or General Health Counselor or Advisor	NA	8
Emergency Care or Acute Intoxication Facility or Program	NA	3

NA=Not available because the questionnaire asked about the last year only for the bottom three treatment sources in this table.

Met Need for Treatment

On the Outside. Although most inmates who have ever needed treatment have obtained it at some time in their lives, nearly half of those who needed treatment in the past year did not obtain treatment. Of the 187 Alaskan prisoners who ever had a substance use disorder, 82% (reweighted) received some form of substance abuse treatment on the outside at some time in their lives (Table 19). Thus, 18% of the newly incarcerated prisoners have lifetime histories of substance use disorders but have never received any form of treatment. While most (71%) of the those with lifetime need received specialty treatment, with or without self help and nonspecialty treatment, 11 percent of the persons with lifetime need for treatment received only nonspecialty or self help treatment services. The female prisoners at Hiland Mountain who had a lifetime substance use disorder were more likely to have received treatment on the outside (91%) than were the males prisoners at Palmer Minimum (82%) and at Wildwood (80%). Alaska Natives in need during their lives were about as likely to have obtained some form of treatment on the outside at least once (81%) as were Whites (81%) and African Americans (79%). These statistics show that the percentage who have obtained some form of treatment in their lives is quite high in virtually every segment of the inmate population.

Of the 163 inmates who had a substance use disorder during the last year, 57% received treatment in the last year (Table 19). Twenty-nine percent received substance abuse treatment from specialty sources with or without self help or nonspecialty care as well in the last year when they were on the outside, and another 28% of those with a current diagnosis received treatment from self help or nonspecialty sources only. In previous studies of the general population, McAuliffe et al. (1991; 2000b) found that about one in five or six respondents who had a current diagnosis had received treatment in the past year.

Table 19. Met Need for Treatment (Percent)

	Highland Mt.	Palmer Min.	Wildwood	Total Alaska Sample
% of Persons with a Lifetime Substance Use Disorder Diagnosis Who Were Ever Treated on the Outside	91	82	80	82
% of Persons with a Substance Use Disorder Diagnosis in the Last Year Who Obtained Treatment in the Last Year on the Outside	55	63	52	57

Note: total sample n=187 for lifetime diagnoses, and total sample n=163 for current diagnoses.

Clearly, a substantial proportion (43%) of prisoners in need had not received treatment services prior to incarceration. If that percentage generalized to the total population of Alaska's prisoners, 481 persons currently in prison needed treatment on the outside during the last year. That is the figure that should be added to the estimated number of state residents who needed treatment as estimated from the household survey. Of that number, 141 received specialty treatment, 135 received only self help or nonspecialty treatment, and 205 received no treatment at all. It would be reasonable to assume that the 135 may be somewhat underserved and that the 205 were unserved. Those 340 inmates were therefore in need of specialty services in the last year.

There were 18 inmates who did not have a diagnosis in the last year but who nevertheless obtained some form of treatment (half specialty and half only self help and nonspecialty treatment) on the outside. Fifteen of these 18 prisoners were in sustained full remission from dependence (12 cases) or were past abusers (three cases). The remaining three respondents never met criteria for abuse or dependence, although all three qualified for diagnostic questions and reported one or more symptoms of dependence. One of the three said that he/she had a problem or dependence on marijuana when asked directly, and the other two subjects reported having experienced three symptoms of dependence but denied that the symptoms that the symptoms clustered within a one-year period as required by the DSM-IV criteria for dependence. With one exception, these subjects with no diagnoses reported receiving treatment from either self-help groups or from a general health counselor or a DUI class. It appears likely therefore that these three subjects were on the borderline, while the other 15 were in remission.

The existence of these cases suggests several implications. By focusing on only persons who have a current diagnosis of substance use disorder, the analysis is conservative in its measurement of the need and demand for treatment. Because addiction is a chronically relapsing condition, it is reasonable to assume that these 15 subjects needed the treatment that they received (e.g., attendance at AA meetings), even though they were technically in remission or

did not have a substance use disorder. Although the three subjects who did not have a diagnosis may have used the treatment as a form of secondary prevention, it is likely that they represent instances of insensitivity of the diagnostic instrument, perhaps due to the respondents' underreporting of symptoms or difficulty pinpointing the timing of symptoms. Reporting the clustering of symptoms and when it occurred was the most demanding aspect of the diagnostic interview. The subjects who were in remission nevertheless committed a crime for which they were incarcerated. Consequently, successful treatment of a substance use disorder may not insure that the criminal will abstain from criminal activity, but there is little doubt that recovery would reduce the probability or amount of crime.

In Prison. Among the 164 prisoners who needed alcoholism treatment in their lives, 64% ever received alcohol treatment when in prison. Among the 27 prisoners who ever needed alcohol treatment but said that they had never received treatment on the outside, 53% received alcohol treatment in prison. Although this percentage was lower than the percentage who had received specialty treatment on the outside (66%) and non-specialty treatment only (63%), more than half of those who had a problem but never received treatment on the outside obtained it in prison at least once.

Among the prisoners who were in need of alcohol treatment on the outside during the past year and who ever received alcohol treatment in prison, 48% received treatment in prison during the current prison sentence.

Unmet Demand For Treatment

Questioning the subjects who qualified for the diagnostic questions based on use alcohol or drugs in the last year but who did not obtain any type of treatment on the outside, the interviewers asked whether they would have sought treatment if it had been available. Among the subjects who had a diagnosis (needed treatment) but who failed to obtain care in the last year, thirty-seven percent (26 of 69) said that they would have sought treatment. If the number of prisoners in the study sample were generalized to the entire Alaskan prison population, there would be 293 prisoners in the last year who represented unmet demand for treatment. That number should be added to the similar figure in the telephone survey to obtain a more comprehensive estimate of unmet demand for treatment in the state.

The interviewers asked those 26 subjects whether they had taken any steps to obtain treatment. A majority (14 of 26, or 54%) said that they had taken steps. The interviewers then asked them whether the steps included any items on a list which contained an open-ended item asking about any other steps the person might have taken. A majority of the 14 subjects who took steps, reported taking two or more steps. One subject responded *yes* to seven different steps that the person took to obtain care. Two subjects who did not have a current diagnosis also said that they would have sought treatment and had taken steps to obtain it. The steps, in the order of frequency, included calling a detox or other program (9 prisoners), talking to a knowledgeable person, such as clergy, a relative, or a family friend (9), getting a referral (6), asking friends

about what is available (4), visiting a treatment program including AA (3), talking to a doctor or nurse (2), or talking to an employee assistance counselor (1). None of the prisoners mentioned any other steps. The interviewers also asked those subjects who had taken steps to obtain treatment whether they had ever been on a waiting list. Five of 14 said that they had been on a waiting list in the last year.

Type of Treatment Desired. The interviewers then asked those respondents which types of treatment they would have sought (Table 20). While no single form of treatment stood out, the largest percentages of subjects said that they would have sought mostly long-term forms of care (halfway house [21%], intensive outpatient care [18%], self help groups [18%], lower intensity outpatient counseling [17%], and residential treatment that lasted less than 30 days [15%]).

Table 20. Type of Treatment Sought by Respondents Who Did Not Receive Treatment

Type of Treatment That Would Have Been Sought	Percentage of Respondents Who Qualified for Diagnostic Questions But Had Not Been Treated Last Year (Weighted Sample)
Detox Treatment	12
Residential	11
Hospital	6
Outpatient	6
Methadone	0
Inpatient/Residential	20
Residential, < 30 days	15
Hospital	7
Residential, > 30 days	13
Halfway House	21
Outpatient	22
Less Intensive	17
Day Treatment	14
Intensive	18

Table 20. Type of Treatment Sought by Respondents Who Did Not Receive Treatment

Type of Treatment That Would Have Been Sought	Percentage of Respondents Who Qualified for Diagnostic Questions But Had Not Been Treated Last Year (Weighted Sample)
Methadone	8
Nonspecialty Therapists	14
Employee Assistance Program	10
Self-Help Group	18
Religious	12

Unmet Demand for Additional or a Higher Level of Treatment. 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. If these results were projected to the state population, 149 prisoners were estimated as wanting additional treatment in the past year when on the outside. This finding suggests a level of motivation among the prisoners who obtained treatment. The largest proportion of them wanted treatment outside of formal programs, outpatient counseling, and self-help groups (Table 21).

Table 21. Unmet Demand for Additional Treatment: Type of Treatment Wanted

Type of Treatment	Percent Who Wanted It (n = 54)
Treatment Outside of a Formal Program	93
Outpatient Counseling	92
Self-Help Groups such as AA or NA	88
Residential or Inpatient Rehabilitation	76
Halfway House, Recovery House or Group Home	72
Other types of services such as child care, family counseling, case management, food stamps, and so on	69
Detox	54

Note: The sample size is reweighted to reflect the percentage of females in the prison population. The unweighted sample size was 55.

Obstacles to Obtaining Treatment

The interview asked a subgroup of subjects about obstacles to obtaining treatment. The subjects were those who wanted and needed treatment or additional treatment but did not obtain it. The most common reason for failing to obtain treatment was the absence of insurance or a way to pay for treatment (Table 22). The prisoners also cited 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. Relatively few of the prisoners said that they were deterred from obtaining or seeking treatment because the programs did not represent the prisoners' language or ethnic background. By contrast, the small number of females in each group were somewhat more likely to feel that the programs were insensitive to the special needs of women. Few complained that the desired type of treatment or their preferred treatment was not available in Alaska.

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)
You didn't have insurance or any way to pay	62	71	44
The facility, program, or provider put you through too much red tape or hassles getting admitted to treatment	54	58	52
The treatment facilities or programs were full	52	36	13
You did not have transportation to get to or from treatment	36	51	14
The treatment was available only during hours when you had to work or care for children	51	24	27