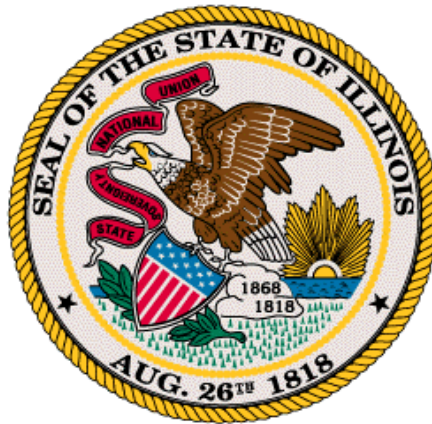


Alcohol, Tobacco, and Other Drug Use Among Adult Probationers in Illinois: Prevalence and Treatment Need, 2000



George H. Ryan, *Governor*
Linda Reneé Baker, *Secretary*



U.S. Center for
Substance Abuse
Treatment

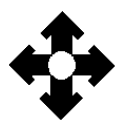


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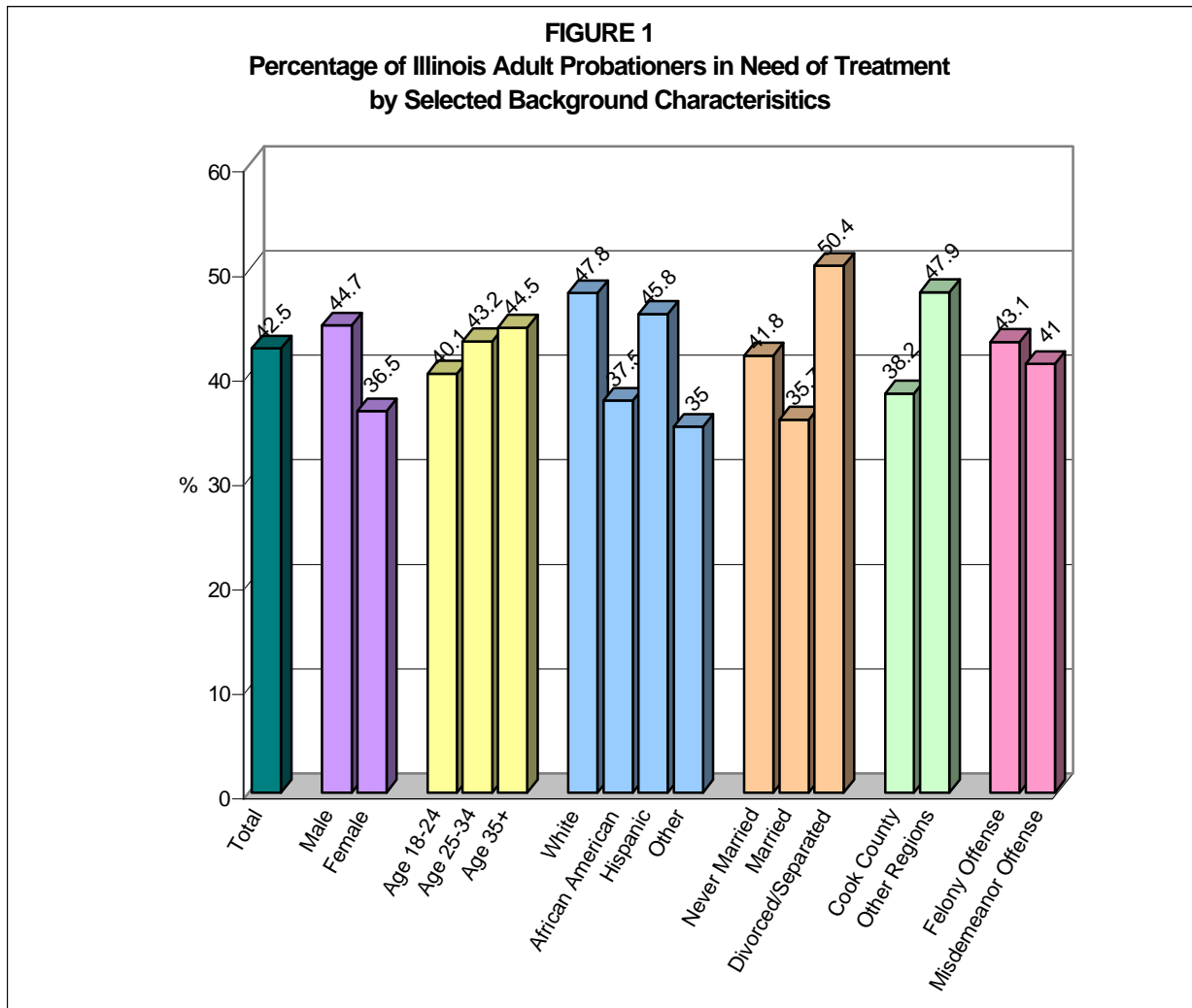
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EXECUTIVE SUMMARY

A sample of 627 Illinois adult probationers were interviewed to assess prevalence of alcohol, tobacco, and other drug use and substance abuse treatment needs. Findings are summarized below.

Need for Alcohol or Drug Abuse Treatment

Need for treatment was measured using DSM-III-R criteria for substance abuse and dependence. Basic results are presented in **Figure 1**.

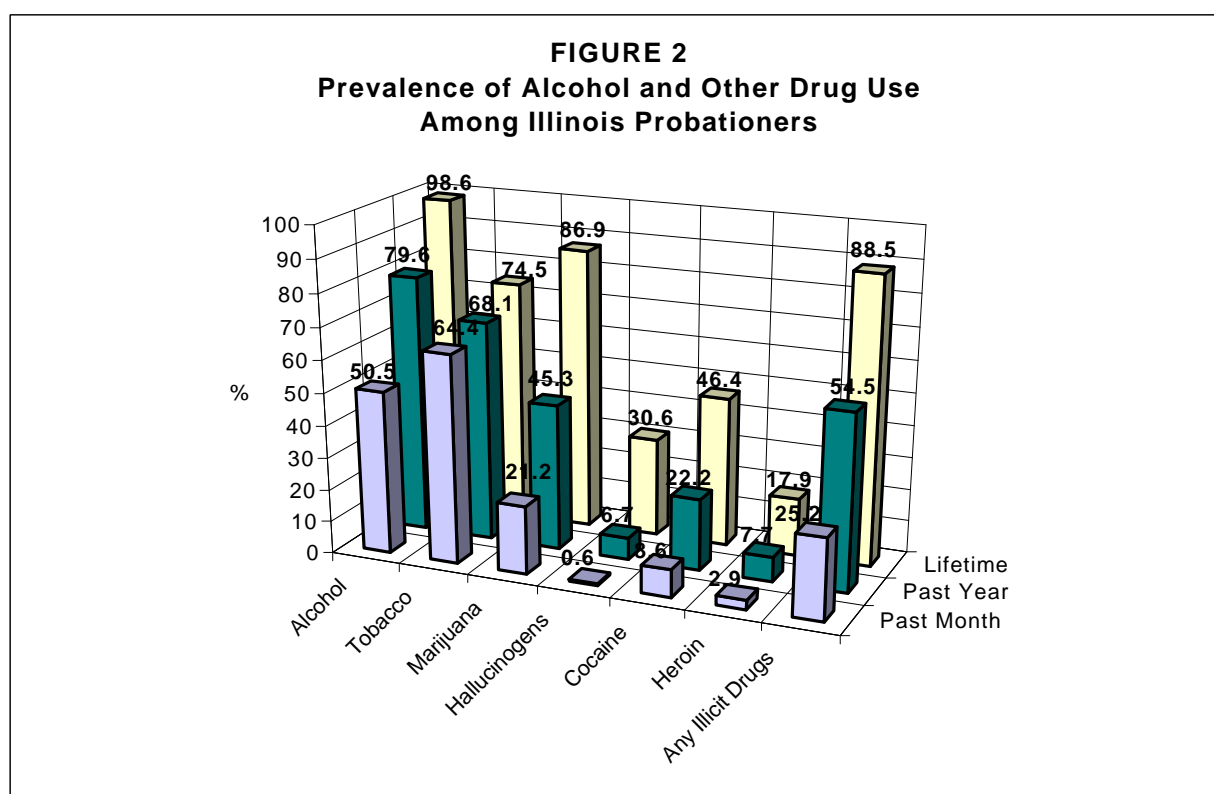


- Approximately 43 percent of Illinois probationers were diagnosed as being in need of alcohol or drug treatment in the last 12 months, and 13 percent of the sample had both alcohol and drug problems.
- Probationers in Cook County were less likely to report alcohol or drug problems compared to those in other regions of Illinois.

- The most frequently cited alcohol/drug abuse symptom was that substance use interferes with fulfilling important obligations such as work and/or places respondents in physically hazardous situations (44.8% of the sample cited).
- Overall, 39 percent of the Illinois probationers claimed they have been treated for alcoholism or substance abuse at least once in their lifetimes.
- Among those who have abused one or more substances, 66 percent have received treatment.

Prevalence of Alcohol and Other Drug Use

Prevalence rates of alcohol, tobacco, and other drug use also were estimated for lifetime, the past year, and the past month. **Figure 2** summarizes these findings.



- More than 98 percent of Illinois adult probationers reported lifetime use of alcohol, and more than half of the respondents used alcohol in the past 30 days.
- Illinois probationers drank an average of 4 drinks per day on those days that they drank during the last 18 months.
- Of the probationers interviewed, 32.7 percent were found to be heavy drinkers.
- Approximately three-quarters of the probationers reported having used tobacco regularly at some point in their lifetimes, and 64.4 percent indicated they had smoked during the previous 30 days.

- More than 88 percent of the probationers reported use of at least one illicit drug in their lifetimes, and 25 percent claimed using one or more illicit substances recently.
- The illicit drug most likely to have ever been used was marijuana (86.9%), followed by cocaine (46.4%).
- Forty-four percent of the probationers were found to have one or more lifetime psychiatric disorders. Substance abusers tended to have higher rates of the disorder than non-substance abusers.
- Fifty-five percent of those having one or more of the current psychiatric disorders were dependent on at least one substance.

I. Introduction

Probation is a community-based sentence that requires offenders to be supervised under mandatory and special conditions of release. Probation is defined by the American Correctional Association (1995) as “[a] court-ordered dispositional alternative through which an adjudicated offender is placed under the control, supervision, and care of a probation staff member in lieu of imprisonment, so long as the probationer meets certain standards of contact” (p. 3).

Basic eligibility for probation is fixed by statutes that generally preclude probation for certain serious felonies (e.g., homicide, kidnapping, armed robbery, rape). Mandatory or standard conditions of probation are also dictated by statute and include restrictions on offenders’ behaviors—for example, prohibiting them from carrying a weapon, requiring the sentencing judge’s permission before they can leave the jurisdiction, or ordering them to obey all laws and report to a probation officer (Schmallegger, 2001).

Special conditions of probation are responsive to the specific circumstances of cases and generally involve probationers seeking treatment for drug or alcohol problems or services for educational or vocational deficiencies; these are categorized as *treatment-oriented special conditions*. In addition, special conditions can order probationers to pay victim restitution or to perform community services (e.g., picking up trash in public parks); these are categorized as *punishment-oriented special conditions*. In legal terms, the conditions of probation form a contract between the offender and the court (Klein, 1997).

The guiding principles of probation, which are reflected in the conditions of supervision, are offender reintegration, rehabilitation, and reduction of institutional

overcrowding. In the words of Petersilia (1998):

The public does not really understand the multifaceted nature of probation, nor [its] importance to justice system decision making and public safety. Community-based corrections is not merely the “workhorse” of the U.S. justice system; its services are humanitarian to offenders, an important human point of contact for crime victims, and a vital means of public protection. Moreover, when properly funded, community-based corrections provides one of the best means for delivering effective offender rehabilitation programs, particularly substance abuse treatment. (p. 565)

As the preceding quote indicates, probation’s philosophy and services lie at the core of the nation’s community corrections system.

Probation has several advantages over imprisonment. It saves money and provides more opportunities for rehabilitation and participation in community services programs. Further, it is less stigmatizing than prison, reduces the risk of criminal socialization, and permits offenders to remain employed and to continue to care for their families and children (Petersilia, 1997; Schmallegger, 2001).

Probation is the most common criminal sanction in the United States (Petersilia, 1998; Schmallegger, 2001). Approximately two-thirds of all persons convicted of crimes are sentenced to probation, and nearly 60 percent of all persons under correctional supervision in the United States at the beginning of 1999 were on probation. In 1997, the probation population was three times larger than the prison population (Illinois Criminal Justice Information Authority, 1999). Judges sentence to probation 80 percent of adults

convicted of misdemeanors and 60 percent of adults convicted of felonies (Byrne, 1988; Camp & Camp, 1993; Petersilia, 1997, 1998; Schmalleger, 2001).

During the 1980s, the probation population increased 154 percent, growing at nearly the same rate as the prison population. At the start of the 1990s, more than 2.5 million adults were on probation in America (Camp & Camp, 1993). By the end of 1993, that number had increased to more than 2.8 million (Austin, 1995), and by the end of 1998, the probation population had reached 3.4 million, a 300 percent increase since 1980 (Bonczar & Glaze, 1999). Texas and California have the largest probation populations in the United States (Petersilia, 1997).

The range of probation sentences and the use of probation vary from state to state and are determined by a number of factors, such as overall crime rates, sentencing laws, and correctional resources (Illinois Criminal Justice Information Authority, 1999). The American Bar Association recommends five-year probation terms for felony convictions and two-year terms for misdemeanor convictions, but the average lengths of actual probation sentences differ widely across states (Abadinsky, 1997). Probation sentences in Texas, for example, can last up to twenty years or more. The lowest rate of probation use is in Kentucky (437 per 100,000 residents), whereas the highest rate of use is in Washington State (3,619 per 100,000 residents) (Bonczar & Glaze, 1999).

Statewide probation was originally instituted in Massachusetts in 1890 with the provision, which still appears in many modern statutes, that a probation officer cannot be an active member of the police force. Several other states enacted their first probation laws in the late nineteenth and early twentieth centuries. These statutes

were quite disparate in their requirements of how probation should be administered and organized.

Differences in the administration and organization of probation are still common today (Cromwell & Killinger, 1994). In some states, probation is part of the judicial branch of government; in others, it is part of the executive branch. Probation departments can be administered and funded at the state level, or they can operate as independent county agencies. Probation and parole are sometimes combined under the same authority. Moreover, the same probation agency can be responsible for monitoring both adult and juvenile offenders, or separate agencies can be responsible for monitoring these populations. The qualifications of probation officers can also vary from jurisdiction to jurisdiction. The current trend seems to favor statewide probation administration, which promotes greater uniformity in services and in training and educational standards for probation officers (Petersilia, 1997).

Probation officers perform several tasks, the most basic of which relate to monitoring offenders and serving the courts. The assessment of probationers is the first step in the supervision process. Most probation departments use a classification system that evaluates offenders on their risk of future criminality and places them into supervision levels that dictate the frequency and mode of offender contacts. In addition, classification systems evaluate offenders' needs for treatment and social services. Probation officers act as brokers of these services by referring offenders to appropriate community agencies and overseeing their progress in treatment programs. Furthermore, classification systems assign work units that require officers to supervise higher risk cases more closely than lower risk cases. Work unit analyses guide officers in allocating their time efficiently across cases. Such analyses also are designed to result in

equable workloads across officers (Clear & Braga, 1995; Petersilia, 1998).

Probation officers serve the court directly by conducting presentence investigations (PSIs) that provide judges with a comprehensive picture of a defendant's criminal record, educational background, social history, and financial status. Information from PSIs assist the court in determining an appropriate sentence and help probation officers in developing supervision plans for defendants who are eventually sentenced to probation (Petersilia, 1998).

Probation officers file petitions in court to revoke the probation of offenders who have violated a condition of their sentences. Technical violations are infractions that do not involve new offenses (e.g., failure to report), and they are less likely to result in a probation revocation than are new-offense violations. Offenders accused of violating their probation are entitled to a revocation hearing during which they may be represented by an attorney and may present witnesses and evidence on their own behalf (*Morrissey v. Brewer*, 408 U.S., 471, 1972; *Gagnon v. Scarpelli*, 411 U.S., 778, 1973).

Drug and Mental Health Problems

In 1992, more than one-third of the felons convicted of drug possession and nearly one-fourth of those convicted of drug trafficking were sentenced to probation (Langan & Perkins, 1994). A 1995 census of probation caseloads, conducted by the Bureau of Justice Statistics (BJS), indicated that 70 percent of the probationers reported that they had used illicit drugs at some time in the past, one-third stated that they had used drugs in the month preceding their arrests, and 14 percent were on drugs when they committed their initial offenses (Mumola, 1998).

In BJS's annual survey of adult probationers, researchers identified nearly 548,000 or 16 percent of the adults on probation at the end of 1998 as mentally ill. Probationers identified as mentally ill were those who reported that they had experienced an "emotional condition" or had been admitted overnight to a mental hospital, mental health facility, or both. The majority of mentally ill probationers were sentenced for public order or property crimes. Compared with non-mentally ill probationers, a higher percentage of mentally ill probationers were sentenced for violent crimes (18% versus 28%, respectively), and a lower percentage of them were sentenced for drug crimes (23% versus 16%, respectively) (Ditton, 1999).

Probation in Illinois

Probation in Illinois is administered at the county level, under the judicial branch of government. As in most other states, probation administrators in Illinois have been forced to manage continually increasing numbers of probationers, which has created pressures to implement more cost-effective supervision strategies and rehabilitative programs. At the end of 1998, the adult probation population in Illinois exceeded 83,000, a 13 percent increase since 1993 and twice the number of persons imprisoned in the state.

Approximately 40 percent of Illinois probationers are convicted of misdemeanors and about 60 percent of felonies (Illinois Criminal Justice Information Authority, 1999). Nearly one-fourth are convicted of DUIs, 22 percent of drug offenses, 22 percent of property offenses, and 19 percent of violent crimes (Olson & Lurigio, 2000). Adult probationers in Illinois have high rates of unemployment, low incomes, and prior involvement in the criminal justice system

(e.g., three-fourths have previous arrests, and nearly one-third have served previous probation sentences) (Lurigio, Seng, Ellsworth, & Weisheit, 1999).

Olson and Lurigio (2000) examined the predictors of probation outcomes in a sample of more than 2,400 discharged adult probationers in Illinois. They grouped predictor variables into three major categories (probationer characteristics, offense type, and sentence characteristics) and studied three different probation outcomes (rearrest, technical violations, and revocations). Results showed that different predictors were related to different outcomes and replicated many of the findings of previous research (see Morgan, 1993). Age, race, income, prior adult

convictions, and histories of drug abuse and dependence were significant predictors of all three outcomes; conviction offense, offense class, and supervision setting failed to predict any of the outcomes.

Prior convictions more than doubled the chances of Illinois probationers having their sentences revoked, being rearrested, and having technical violations. Most relevant to the current study, probationers with a history of drug abuse or dependence were more than twice as likely as non-drug abusing or dependent probationers to have technical violations or probation revocations. Further, they were more than 50 percent more likely to be arrested for new crimes while on probation (Olson & Lurigio, 2000).

II. Results

This section begins with a description of the demographic characteristics of the Illinois adult probationers sampled in this study. The prevalence of alcohol, tobacco, and other drug (ATOD) use, as well as the estimated treatment needs for alcohol and drug abuse, are also reported.

A. Sample Characteristics: Demographic Background

Table 1 presents a summary of demographic characteristics of the sample. Of the total sample of probationers, about three-quarters were males. The average age of the Illinois probationers in this study was 31, with a majority (52.6%) being less than 30 years old. Approximately 44 percent of the sample were African Americans, and 40 percent were whites. In terms of education, about 71 percent had completed high school or received their GED. About half of the sample were working full time, and more than 30 percent were not employed at the time of their interviews. Forty-seven percent of the probationers reported an annual family income of less than \$20,000 before taxes. The median income was in the range of \$20,000–\$29,999. With regard to marital status, a majority of respondents (61.5%) had never been married, and more than 20 percent were divorced or separated. About 55 percent of the probationers resided in Cook County. Finally, approximately 80 percent of probationers were convicted of felonies and about 20 percent of misdemeanors.

Table 1
Demographics of Adult Probationers in Illinois, Year 2000 (Weighted)

	N	%
TOTAL	627	100.0
<u>GENDER</u>		
Male	469	74.7
Female	158	25.3
<u>AGE</u>		
18–24	232	37.0
25–34	176	28.0
35+	219	35.0
<u>RACE/ETHNICITY</u>		
White	250	39.9
African American	275	43.8
Hispanic	82	13.1
Other	20	3.1
<u>EDUCATION</u>		
Some High School or Less	244	38.9
High School	219	34.9
More than High School	164	26.2
<u>EMPLOYMENT</u>		
Full Time	312	49.8
Part Time	120	19.1
Not Employed	195	31.1
<u>INCOME</u>		
\$0–9,999	161	26.8
\$10,000–19,999	122	20.3
\$20,000–29,999	119	19.7
\$30,000–39,999	60	9.9
\$40,000 or more	140	23.2
<u>MARITAL STATUS</u>		
Never Married	385	61.5
Married	113	17.9
Divorced/Separated	129	20.6
<u>REGION</u>		
Cook County	343	54.7
Other Regions	284	45.3
<u>TYPE OF OFFENSE</u>		
Felony	492	80.1
Misdemeanor	122	19.9

B. Overall Prevalence of Alcohol, Tobacco, and Other Drug Use

Prevalence rates are defined as the percentage of people who report use of a given substance during a specified time period, i.e., lifetime, past year, or past month. **Lifetime prevalence**, for instance, refers to the percentage of respondents who have used a substance at least once in their lifetimes. In the same way, **past year prevalence** assesses the percentage of people who have used any given substance at any point in the last 12 months, and **past month prevalence** refers to the percentage of respondents who used a substance in the 30 days prior to the interview.

Table 2 presents prevalence rates of alcohol, tobacco, and other drug use. Overall, more than 98 percent of Illinois adult probationers reported lifetime use of alcohol. The lifetime prevalence of alcohol among the Illinois general population in 1998 was 93.1 percent (Cho, Johnson, & Pickup, 2000). Approximately three-

quarters of the probationers said that they have smoked tobacco regularly at some point in their lifetimes. This figure is about 30 percentage points higher than the one estimated for Illinois general population.

Of the total sample of Illinois adult probationers, more than 88 percent reported use of at least one illicit drug (i.e., marijuana, hallucinogens, cocaine, heroin) in their lifetimes. Compared to the Illinois general population, probationers were about two and half times more likely to report lifetime use of any illicit drugs. The illicit drug most likely to have ever been used was marijuana (86.9%), followed by cocaine (46.4%). Heroin was the drug least likely to have ever been used by the probationers (17.9%). The same pattern was observed among the Illinois general population sample, but with much lower prevalence rates. Their rates range from 1.9 percent for heroin use to 37.3 percent for marijuana.

Table 2
Lifetime, Past Year, and Past Month ATOD Use Among Probationers,
Compared to the Illinois General Public

Substance	Lifetime		Past Year		Past Month	
	Probationers	General Household 1998	Probationers	General Household 1998	Probationers	General Household 1998
Alcohol	98.6	93.1	79.6	72.9	50.5	53.5
Tobacco	74.5	44.6	68.1	25.8	64.4	22.2
Marijuana	86.9	37.3	45.3	7.3	21.2	3.4
Hallucinogens	30.6	8.5	6.7	0.7	0.6	--
Cocaine	46.4	10.6	22.2	0.8	8.6	--
Heroin	17.9	1.9	7.7	--	2.9	--
Any Illicit Drugs	88.5	33.7	54.5	7.6	25.2	3.5

Almost 80 percent of Illinois probationers reported having used alcohol

in the last 18 months, and more than half of the respondents used alcohol in the 30 days

prior to the interview. In terms of tobacco use, past year and past month prevalence rates were 68.1 percent and 64.4 percent, respectively. These rates were more than 30 percentage points greater than the rates among the general population.

More than 50 percent of the Illinois probationers reported having used at least one illicit drug in the previous 12 months, and 25.2 percent reported past month use of an illicit drug. In general, probationers were more than seven times as likely as the general public to use an illicit drug during the past year or during the last 30 days. The most commonly used drug, again, was marijuana, followed by cocaine. Past year and past month prevalence rates of marijuana were 45.3 percent and 21.2 percent, respectively. More than 22 percent of probationers used cocaine in the past 12 months, and 8.6 percent of them reported having used cocaine in the last 30 days. Overall, probationers were substantially more likely to use tobacco and illicit drugs compared to the general population.

In making these comparisons, however, it is important to acknowledge variability in the demographic structure of the Illinois probationer populations relative to the general public. Most importantly, males and younger persons are overrepresented among probationers. Because these two demographic groups are also known to be overrepresented among substance users (Clark, 1991), it is to some extent less surprising to find elevated levels of substance use among the probationers.

C. Need for Alcohol and Drug Treatment

Estimating Treatment Need

Treatment need was estimated based on diagnosis criteria for substance abuse

and dependence from the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III-R) (American Psychological Association, 1987). During the interview, respondents were asked a series of questions about whether they experienced any problems/symptoms associated with any use of substances (alcohol, marijuana, hallucinogens, cocaine, and heroin) and about the duration of such symptoms or problems. The DSM-III-R symptoms include:

- Taking alcohol/drugs in larger amounts or for a longer period than intended.
- Persistent desire or unsuccessful efforts to control drinking/drug use.
- Spending much time getting, taking, or recovering from alcohol/drug use.
- Alcohol/drug use frequently interferes with fulfilling important obligations (e.g., missing work because of a hangover) or places one in physically hazardous situations (e.g., driving a car or boat while under the influence).
- Avoiding or giving up important activities (e.g., sports, work, or association with friends or relatives).
- Continuing use of alcohol/other drugs despite knowledge of persistent problems caused or exacerbated by them.
- Increased tolerance to alcohol/other drugs.
- Presence of withdrawal symptoms.
- Using alcohol or other drugs to relieve withdrawal symptoms.

Respondents experiencing three or more of the problems listed above, along with evidence of persistence (i.e., a repeated

occurrence of the symptoms over a longer period of time), were diagnosed as alcohol or drug dependents.

Persons with at least two of these persisting symptoms were diagnosed as alcohol or drug abusers.¹ For purposes of this report, both drug dependents and drug abusers were defined as being in need of treatment.

¹ For diagnosis of alcohol dependence or abuse, questions were addressed only to those who drank in the last 18 months. For other drugs, diagnosis was based on usage within the last 12 months.

Table 3
Percentage of Adult Probationers Meeting DSM-III-R Criteria for
Substance Dependence/Abuse by Demographic Characteristics (Last Year)

Category	Alcohol Problem Only	Drug Problem Only	Alcohol and Drug Problem	Alcohol or Drug Problem
TOTAL	13.7	15.6	13.2	42.5
<u>GENDER</u>				
Male	13.7	17.1	13.9	44.7
Female	13.9	11.4	11.3	36.5
<u>AGE</u>	**			
18–24	6.0	19.8	14.2	40.1
25–34	17.7	13.7	11.4	43.2
35+	18.7	12.3	13.2	44.5
<u>RACE/ETHNICITY</u>	**			
White	18.3	15.6	13.9	47.8
African American	8.0	18.2	11.3	37.5
Hispanic	19.5	10.8	15.9	45.8
Other	15.0	0.0	20.0	35.0
<u>EDUCATION</u>				
Some High School or Less	13.9	17.6	13.9	45.5
High School	14.2	16.0	12.3	42.5
More than High School	13.3	12.1	13.3	38.4
<u>EMPLOYMENT</u>		*		
Full Time	15.4	13.4	11.9	40.7
Part Time	11.7	23.5	10.0	45.0
Not Employed	12.3	14.4	16.9	43.8
<u>INCOME</u>	*		*	
\$0–9,999	14.3	17.3	9.3	40.4
\$10,000–19,999	10.7	9.8	21.3	41.0
\$20,000–29,999	22.7	14.4	16.0	52.9
\$30,000–39,999	16.7	10.0	10.0	35.0
\$40,000 or more	8.6	20.1	11.5	40.7
<u>MARITAL STATUS</u>	***	*		
Never Married	9.1	18.7	14.0	41.8
Married	18.8	8.0	8.8	35.7
Divorced/Separated	23.3	12.4	14.7	50.4
<u>REGION</u>			*	*
Cook County	11.4	16.0	10.5	38.2
Other Regions	16.5	15.1	16.2	47.9
<u>TYPE OF OFFENSE</u>		*		
Felony	12.6	17.5	13.0	43.1
Misdemeanor	18.7	9.0	13.9	41.0

* p <0.05; ** p<0.01; *** p<0.001 (Chi-Square Test).

Need for Treatment Among Probationers

Approximately 43 percent of the Illinois probationers were diagnosed as being in need of alcohol or drug treatment in the last 12 months. This figure is 30 percentage points higher than the *lifetime* treatment needs estimated for the Illinois household sample in 1998. As presented in **Table 3**, more than 13 percent of probationers interviewed had alcohol-related problems only, and 15.6 percent had drug problems without having alcohol problems. Another 13.2 percent of the sample had both alcohol and drug problems. Of the total sample of Illinois adult probationers, 16.6 percent were diagnosed as having a treatment need specifically for marijuana abuse, 14.5 for cocaine, 6.1 percent for heroin, and 1.3 percent for hallucinogens. (This information is not presented in **Table 3**.)

No gender differences in treatment need were found. The youngest age group (age 18–24) was, however, less likely to be in need of treatment for alcohol-related problems (without accompanying drug problems) compared to the older age groups.

Differences in racial/ethnic status were not associated with alcohol or drug treatment needs, but when compared to other groups, African Americans were less likely to be in need of treatment for alcohol problems only.

Overall treatment needs did not differ by level of education, employment status, income level, or marital status. When assessed separately by substance type, part-time workers and unmarried probationers were most likely to be in need of treatment for drug abuse. Divorced or separated probationers were in greater need of treatment for alcohol abuse than were married probationers.

When regions of residence were considered, probationers in Cook County were less likely to report alcohol or drug dependence/abuse. About 38 percent of probationers in Cook County were diagnosed as being in need of treatment for either substance, which was about 10 percentage points lower than the estimate among probationers in other parts of the state (47.9% of those probationers were in need of treatment). In addition, compared to those in other regions, Cook County probationers were also less likely to abuse both alcohol and drugs (10.5% vs. 16.2%).

Probationers' needs of drug or alcohol treatment did not vary by type of offense. Probationers convicted of a felony were, however, more likely than those charged with a misdemeanor to be in need of treatment for drug problems exclusively.

Specific Problems Associated with Alcohol and Other Drug Use

Table 4 presents the percentage of probationers who experienced each of the nine specific symptoms determining substance abuse/dependence. Overall, 63.6 percent of the total sample reported having experienced at least one of these symptoms. This was about 10 times higher than the percentage of the Illinois general household sample in 1998 who experienced at least one symptom in their lifetimes.

The most frequently cited symptom among probationers was that alcohol or drug use interferes with fulfilling important obligations such as work or places them in physically hazardous situations (44.8% of total sample). This symptom was reported by 10.2 percent of those without a DSM diagnosis and by 91.7 percent of those with a DSM diagnosis.

Among the probationers with a DSM diagnosis, the two other most frequently

reported symptoms were continuing use of alcohol or drugs while knowing it causes problems (89.1%) and using alcohol or drugs in a larger amount and/or for longer periods than intended (82.4%). Other DSM symptoms were experienced by the majority

of probationers who were diagnosed as being in need of treatment, except the presence of withdrawal symptoms.

Table 4
Percentage of Adult Probationers Reporting Substance-Related DSM-III-R Symptoms

DSM-III-R Symptoms	Without Diagnosis	With Diagnosis	Total Sample
• Using alcohol/drugs in larger amounts/longer than intended	11.9	82.4	41.9
• Having tried unsuccessfully to control drinking/drug use	8.3	68.9	34.1
• Spending much time getting, taking, or recovering from alcohol/drug use	3.3	73.0	33.0
• Alcohol/drug use interferes with fulfilling important obligations	10.2	91.7	44.8
• Avoiding or giving up important activities	1.9	52.4	23.4
• Continuing to use alcohol/other drugs while knowing it causes problems	6.4	89.1	41.6
• Increased physical tolerance to alcohol/drugs	5.0	76.3	35.3
• Presence of withdrawal symptoms	0.3	49.8	21.4
• Using other drugs to relieve withdrawal symptoms	1.1	56.2	24.6

Lifetime Treatment Experience

Probationers who used any alcohol or drugs in their lifetimes were asked if they had ever received any treatment for alcohol or drug abuse. Overall, 39% claimed that they had been treated at least once.

Of the respondents who met DSM criteria of alcohol or drug abuse/dependence, 66 percent reported that they had been treated at least once in their lifetimes. As presented in **Table 5**, male and female probationers with alcohol or drug problems were relatively equal in their likelihood of having lifetime treatment

experience. With regard to age groups, older probationers (age 35 and older) were more likely to have ever received treatment. In terms of race and ethnicity, whites were more likely than African Americans, Latinos, and others to have lifetime treatment experience. Overall, the level of education and employment status did not significantly influence probationers' lifetime treatment experience, although probationers with less than high school education were somewhat less likely (60.4%) and non-employed probationers were more likely (72%) to have had treatment experience. Probationers' income also did not have a noticeable effect on treatment experience. However, compared to probationers in other income categories, respondents with family income ranging from \$30,000 to less than \$40,000 were somewhat more likely to have been treated (81%). Treatment experience was differentiated by the marital status of probationers. Eighty percent of divorced or separated probationers reported past treatment, while 60.2 percent of the never-married and 65 percent of married probationers had been treated at least once in their lifetimes. A significant regional difference was also found: probationers in Cook County were less likely to have ever been treated compared to probationers in other regions of Illinois. The lifetime treatment rates in those two regions were 54.2 percent and 77.2 percent, respectively.

Table 5
Percentage of Adult Probationers Meeting DSM-III-R Criteria for Substance Dependence/Abuse and Having Ever Received Treatment by Demographic Characteristics

	Percent
TOTAL	66.0
<u>GENDER</u>	
Male	65.7
Female	67.2
<u>AGE</u>	
18–24	54.3
25–34	69.7
35+	74.5
<u>RACE/ETHNICITY</u>	
White	76.5
African American	62.7
Hispanic	47.4
Other	42.9
<u>EDUCATION</u>	
Some High School or Less	60.4
High School	71.0
More than High School	69.8
<u>EMPLOYMENT</u>	
Full Time	63.3
Part Time	62.3
Not Employed	72.1
<u>INCOME</u>	
\$0–9,999	65.2
\$10,000–19,999	56.9
\$20,000–29,999	66.7
\$30,000–39,999	81.0
\$40,000 or more	66.7
<u>MARITAL STATUS</u>	
Never Married	60.2
Married	65.0
Divorced/Separated	80.0
<u>REGION</u>	
Cook County	54.2
Other Regions	77.2
<u>TYPE OF OFFENSE</u>	
Felony	64.2
Misdemeanor	76.0

* p<0.05; ** p<0.01; *** p<0.001 (Chi-Square Test).

III. Prevalence of Alcohol, Tobacco, and Other Drug (ATOD) Use by Demographic Background

In this section of the report, prevalence rates of alcohol, tobacco, marijuana, hallucinogens, cocaine, and heroin use are cross-tabulated by demographic characteristics such as gender, age, race/ethnicity, education, employment status, annual family income, marital status, and region of residence.

A. Alcohol

As presented in **Table 6**, more than 98 percent of Illinois adult probationers reported drinking at some point in their lifetimes. Further, at least 95 percent of the probationers in every demographic subgroup reported some lifetime alcohol consumption.

Almost 80 percent of those interviewed reported using alcoholic beverages in the

past 18 months. Younger probationers were more likely to have consumed alcohol than older ones, while probationers with more than a high school education were less likely to have consumed alcoholic beverages. Those having earned a high school diploma were most likely to report drinking in the previous 18 months.

Approximately 50 percent of all probationers reported having one or more drinks during the preceding 30 days. Males were more likely than females to report past month drinking, while whites were substantially less likely than African Americans or Hispanics to report last 30-day drinking. Those living in Cook County were also more likely to consume alcoholic beverages, compared to probationers in other parts of the state.

Table 6
Percentage of Adult Probationers Reporting Use of Alcohol
by Demographic Characteristics

	<u>Lifetime Use</u>	<u>Past Year Use+</u>	<u>Past Month Use</u>
TOTAL	98.6	79.6	50.5
<u>GENDER</u>			*
Male	97.9	81.2	52.8
Female	100.0	74.7	43.7
<u>AGE</u>		**	
18–24	98.7	85.8	48.7
25–34	97.7	78.3	53.4
35+	98.6	74.1	50.2
<u>RACE/ETHNICITY</u>			***
White	98.4	76.5	39.6
African American	98.2	82.1	58.9
Hispanic	100.0	80.5	57.3
Other	100.0	80.0	42.1
<u>EDUCATION</u>		**	
Some High School or Less	98.8	80.3	52.5
High School	98.2	84.9	54.3
More than High School	98.2	71.3	42.7
<u>EMPLOYMENT</u>			
Full Time	98.1	78.9	51.9
Part Time	100.0	84.0	53.3
Not Employed	98.5	77.8	46.2
<u>INCOME</u>			
\$0–9,999	96.3	79.6	51.6
\$10,000–19,999	98.4	77.9	55.7
\$20,000–29,999	100.0	82.2	52.1
\$30,000–39,999	96.6	81.7	53.3
\$40,000 or more	100.0	78.6	44.3
<u>MARITAL STATUS</u>			
Never Married	98.4	80.8	51.4
Married	97.3	71.7	43.8
Divorced/Separated	98.4	82.2	53.5
<u>REGION</u>			**
Cook County	97.7	77.3	56.9
Other Regions	99.6	82.4	43.0
<u>TYPE OF OFFENSE</u>			
Felony	98.0	79.5	53.0
Misdemeanor	100.0	81.1	42.6

+ Past 18 months use of alcohol; * p<0.05; ** p<0.01; *** p<0.001 (Chi-Square Test).

Heavy Drinking

Probationers were also asked about the average number of drinks consumed per day on those days they drank during the last 18 months. Illinois probationers drank an average of 3.9 drinks per day, which was more than twice the average number of drinks per day estimated among the Illinois household sample in 1998. For the purpose of this report, an average of five or more drinks for males and four or more drinks for females were considered to be “heavy drinking.”

Of the total sample of probationers, 32.7 percent were found to be heavy drinkers, compared to 9.1 percent of adults participating in the general Illinois household sample. As presented in **Table 7**, heavy drinkers were more likely to be found among Hispanics, high school graduates, and probationers living outside of Cook County. Interestingly, African Americans and those with more than high school education were only about half as likely as other racial/ethnic groups and those with high school diplomas, respectively, to be heavy drinkers. In addition, probationers convicted of a felony were much less likely to drink heavily than were those convicted of a misdemeanor.

Table 7
Heavy Drinking During the Past Year
by Demographic Characteristics

	TOTAL	Percent
		32.7
<u>GENDER</u>		
Male		34.8
Female		26.6
<u>AGE</u>		
18–24		35.3
25–34		34.9
35+		28.2
<u>RACE/ETHNICITY</u>		***
White		39.4
African American		21.2
Hispanic		47.0
Other		45.0
<u>EDUCATION</u>		***
Some High School		33.6
High School		40.6
More than High School		20.7
<u>EMPLOYMENT</u>		
Full Time		34.0
Part Time		35.0
Not Employed		29.2
<u>INCOME</u>		
\$0–9,999		29.0
\$10,000–19,999		32.0
\$20,000–29,999		37.3
\$30,000–39,999		35.0
\$40,000 or more		33.8
<u>MARITAL STATUS</u>		
Never Married		33.9
Married		24.8
Divorced/Separated		35.7
<u>REGION</u>		***
Cook County		25.4
Other Regions		41.5
<u>TYPE OF OFFENSE</u>		**
Felony		30.1
Misdemeanor		43.1

** p<0.01; *** p<0.001 (Chi-Square Test).

B. Tobacco

Lifetime, past year, and past month prevalence of regular tobacco use (smoking cigarettes, cigars, or a tobacco pipe) among probationers was 74.5 percent, 68.1 percent, and 64.4 percent, respectively. Male and female probationers were relatively equal in their use of tobacco. While tobacco was more likely to have ever been used by older probationers, past year and past month use did not differ by age groups. White probationers were most likely to have used tobacco products ever, in the past year, and

in the past month. Education had a negative relationship with tobacco use: the higher the level of education, the less likely the probationer was to report regular use of tobacco products. Persons never having been married were least likely and those who were divorced or separated were most likely to use tobacco products. Finally, probationers residing in Cook County were less likely to report tobacco use than were those living in other parts of the state.

Table 8
Percentage of Adult Probationers Reporting Use of Tobacco
by Demographic Characteristics

	<u>Lifetime Use</u>	<u>Past Year Use+</u>	<u>Past Month Use</u>
TOTAL	74.5	68.1	64.4
<u>GENDER</u>			
Male	74.6	67.2	63.3
Female	74.3	70.7	67.7
<u>AGE</u>	**		
18–24	69.5	65.4	61.7
25–34	71.4	65.1	62.3
35+	82.8	73.7	69.4
<u>RACE/ETHNICITY</u>	**	*	*
White	81.0	74.1	70.3
African American	67.1	61.2	58.1
Hispanic	78.1	70.3	64.1
Other	60.0	60.0	60.0
<u>EDUCATION</u>	**	***	***
Some High School or Less	80.3	74.5	71.4
High School	73.8	69.7	67.0
More than High School	65.3	54.4	48.3
<u>EMPLOYMENT</u>			
Full Time	75.7	68.4	64.1
Part Time	70.3	67.6	64.0
Not Employed	74.9	67.9	65.1
<u>INCOME</u>			
\$0–9,999	76.0	73.2	72.1
\$10,000–19,999	80.2	73.8	66.7
\$20,000–29,999	74.6	63.1	59.8
\$30,000–39,999	68.3	63.3	61.7
\$40,000 or more	69.8	62.1	56.9
<u>MARITAL STATUS</u>	*	*	
Never Married	70.4	64.4	62.0
Married	79.6	69.0	62.8
Divorced/Separated	81.5	77.8	72.6
<u>REGION</u>	**	*	*
Cook County	70.1	63.9	60.6
Other Regions	79.5	72.9	68.8
<u>TYPE OF OFFENSE</u>			
Felony	72.4	65.2	60.8
Misdemeanor	73.8	61.5	57.4

* p<0.05; ** p<0.01; *** p<0.001 (Chi-Square Test).

C. Marijuana

Findings regarding probationers' lifetime, past year, and past month use of marijuana are presented in **Table 9**. Lifetime prevalence of marijuana use among probationers was 86.9 percent. With approximately 90 percent of males and 80 percent of females reporting that they had used this drug at least once in their lifetimes, male probationers were more likely than female probationers to have ever used marijuana. Age and racial/ethnic groups did not differ on lifetime prevalence. With regard to education, lifetime prevalence was highest among probationers with less than high school education (90.3%) and lowest among the persons with more than high school education (78.2%). Employment status, family income level, marital status, and region of residence were not associated with lifetime prevalence of marijuana use among probationers.

Past year and past month prevalence of marijuana use were about 45 percent and 21 percent, respectively. Males were also

more likely to use marijuana during the last year and during the preceding month. Compared to other age groups, the youngest probationers (age 18–24) were more likely to report using marijuana during the past year. The past year prevalence rate among the youngest respondents was 61.7 percent, compared to 24.9 percent among the oldest (age 35 and older). The past month prevalence rates for these two groups were 29.6 percent and 12 percent, respectively. As with lifetime use, probationers with more than high school education were less likely to have used marijuana during the past year and past month. Again, employment status and income were not associated with marijuana use during the past year or the preceding month. The prevalence rate for recent marijuana use (i.e., use in the year or month prior to the interview) was higher for single probationers than that of married or divorced/separated probationers. Rates of use of this substance did not vary by region of residence.

Table 9
Percentage of Adult Probationers Reporting Use of Marijuana
by Demographic Characteristics

	<u>Lifetime Use</u>	<u>Past Year Use+</u>	<u>Past Month Use</u>
TOTAL	86.9	45.3	21.2
<u>GENDER</u>	**	**	*
Male	89.3	48.9	23.3
Female	80.2	35.3	15.6
<u>AGE</u>		***	***
18–24	89.3	61.7	29.6
25–34	86.3	46.9	20.6
35+	84.7	24.9	12.0
<u>RACE/ETHNICITY</u>			
White	86.2	44.1	19.7
African American	87.6	47.3	25.2
Hispanic	90.6	46.9	17.2
Other	73.3	26.7	0.0
<u>EDUCATION</u>	**	***	**
Some High School or Less	90.3	51.0	26.3
High School	88.7	50.7	22.6
More than High School	78.2	27.2	10.2
<u>EMPLOYMENT</u>			
Full Time	88.4	44.9	20.3
Part Time	85.6	41.4	23.4
Not Employed	85.6	47.9	21.4
<u>INCOME</u>			
\$0–9,999	84.2	42.6	22.4
\$10,000–19,999	90.5	46.8	23.8
\$20,000–29,999	88.5	46.7	19.7
\$30,000–39,999	86.7	45.0	16.7
\$40,000 or more	85.3	44.0	20.7
<u>MARITAL STATUS</u>		***	**
Never Married	88.7	53.8	26.1
Married	83.2	31.0	10.6
Divorced/Separated	85.2	33.3	16.3
<u>REGION</u>			
Cook County	86.0	46.0	23.3
Other Regions	88.0	44.5	18.8
<u>TYPE OF OFFENSE</u>			
Felony	85.8	43.6	21.5
Misdemeanor	80.3	42.6	14.8

* p<0.05; ** p<0.01; *** p<0.001 (Chi-Square Test).

D. Cocaine

Lifetime, past year, and past month prevalence rates of cocaine were 46.4 percent, 22.2 percent, and 8.6 percent, respectively. Few background characteristics other than age and marital status influenced cocaine use. Age had a positive association with lifetime, past year, and past month use of this drug. For each measure, older probationers were more

likely to report having used cocaine. Cocaine use was also more prevalent among divorced or separated probationers. Finally, unemployed probationers and those convicted of a felony were more likely to report current cocaine use (i.e., past 30-day use) compared to those employed full time and those on probation for a misdemeanor offense.

Table 10
Prevalence of Cocaine Use Among Adult Probationers by Demographic Characteristics

	<u>Lifetime Use</u>	<u>Past Year Use+</u>	<u>Past Month Use</u>
TOTAL	46.4	22.2	8.6
<u>GENDER</u>			
Male	45.4	21.5	7.8
Female	49.1	24.0	10.8
<u>AGE</u>	***	***	**
18–24	27.6	12.3	4.1
25–34	54.3	23.4	8.0
35+	61.7	32.5	14.4
<u>RACE/ETHNICITY</u>			
White	48.6	19.7	6.9
African American	41.5	23.6	9.7
Hispanic	56.3	26.6	12.5
Other	46.7	26.7	6.7
<u>EDUCATION</u>			
Some High School or Less	49.8	23.9	11.6
High School	43.9	21.3	6.8
More than High School	44.2	20.4	6.1
<u>EMPLOYMENT</u>			*
Full Time	46.2	20.6	5.6
Part Time	38.7	20.7	9.9
Not Employed	50.7	25.1	12.1
<u>INCOME</u>			
\$0–9,999	47.0	25.1	10.9
\$10,000–19,999	47.6	22.2	8.7
\$20,000–29,999	48.4	21.3	9.8
\$30,000–39,999	43.3	13.3	5.0
\$40,000 or more	44.8	23.3	6.0
<u>MARITAL STATUS</u>	***	**	**
Never Married	39.8	20.1	8.4
Married	55.8	16.8	2.7
Divorced/Separated	57.0	32.6	14.1
<u>REGION</u>			
Cook County	46.3	23.6	10.4
Other Regions	46.6	20.5	6.5
<u>TYPE OF OFFENSE</u>			*
Felony	47.8	25.8	10.0
Misdemeanor	40.2	22.1	3.3

* p<0.05; ** p<0.01; *** p<0.001 (Chi-Square Test).

E. Heroin

As presented in **Table 11**, the lifetime prevalence of heroin use was approximately 18 percent, with past year and past month prevalence rates of 7.7 percent and 2.9 percent, respectively. As with the alcohol, tobacco, and cocaine use, gender differences in heroin use were not significant.

Heroin was more likely to be used by older probationers, African Americans, non-employed probationers, those living in Cook County, and probationers with a felony conviction.

Table 11
Prevalence of Heroin Use Among Adult Probationers by Demographic Characteristics

	<u>Lifetime Use</u>	<u>Past Year Use+</u>	<u>Past Month Use</u>
TOTAL	17.9	7.7	2.9
<u>GENDER</u>			
Male	17.2	7.0	3.0
Female	19.8	9.6	2.4
<u>AGE</u>	***	***	***
18–24	5.8	2.5	0.0
25–34	20.6	10.3	2.3
35+	29.7	11.5	6.7
<u>RACE/ETHNICITY</u>	*	**	**
White	16.2	4.8	0.3
African American	22.1	12.4	5.8
Hispanic	12.5	3.1	3.1
Other	0.0	0.0	0.0
<u>EDUCATION</u>			
Some High School or Less	20.5	10.0	4.6
High School	15.8	6.8	0.9
More than High School	16.3	4.8	2.7
<u>EMPLOYMENT</u>		**	*
Full Time	15.9	4.3	1.3
Part Time	13.5	6.3	1.8
Not Employed	22.8	13.0	5.6
<u>INCOME</u>			
\$0–9,999	20.2	9.8	3.8
\$10,000–19,999	18.3	7.1	2.4
\$20,000–29,999	15.6	5.7	4.1
\$30,000–39,999	18.3	8.3	
\$40,000 or more	15.5	6.0	0.9
<u>MARITAL STATUS</u>			
Never Married	15.3	6.6	2.4
Married	20.4	8.8	2.7
Divorced/Separated	23.0	9.6	4.4
<u>REGION</u>	**	**	***
Cook County	22.7	11.0	5.4
Other Regions	12.3	3.8	0.0
<u>TYPE OF OFFENSE</u>	*		*
Felony	21.0	8.9	4.1
Misdemeanor	11.5	6.5	0.0

* p<0.05; ** p<0.01; *** p<0.001 (Chi-Square Test).

F. Hallucinogens

As indicated in **Table 12**, 30.6 percent of the Illinois probationers interviewed claimed to have used hallucinogens at least once in their lifetimes. Lifetime use of hallucinogens was highest among whites and lowest among African Americans. Differences in patterns of lifetime use were also found across income groups, although no clear pattern could be identified. Finally, probationers living in Cook County were less likely to have ever used hallucinogens.

Just under 7 percent of all probationers reported having used hallucinogens during the preceding 12 months, with male probationers substantially more likely to have used hallucinogens than females. Younger probationers (age 18–24) were much more likely than others to report past year use of hallucinogens: almost 14 percent of the youngest age group reported having used hallucinogens, compared to about 2

percent of other age groups. Hallucinogens were least likely to be consumed by African Americans and most likely by members of the “other” racial category. Probationers in the highest income category (\$40,000 or more) were far more likely to have consumed this type of drug during the past year. About 16 percent of probationers in this income category reported having used hallucinogens, compared to less than six percent of those with lower incomes. Never-married probationers were more likely than others to have used hallucinogens in the past year. Hallucinogens were also more likely to be consumed during the preceding year by probationers living outside of Cook County and by persons convicted of a misdemeanor.

Prevalence of last month hallucinogen use was 0.6 percent.

Table 12
Prevalence of Hallucinogen Use Among Adult Probationers
by Demographic Characteristics

	TOTAL	Lifetime Use	Past Year Use
<u>GENDER</u>		30.6	6.7
Male		32.4	8.3
Female		25.7	2.4
<u>AGE</u>			***
18–24		29.6	13.6
25–34		30.3	2.3
35+		32.1	2.4
<u>RACE/ETHNICITY</u>		***	***
White		42.8	10.7
African American		15.9	1.2
Hispanic		35.9	9.4
Other		26.7	13.3
<u>EDUCATION</u>			
Some High School or Less		27.8	6.9
High School		31.7	8.6
More than High School		34.0	3.4
<u>EMPLOYMENT</u>			
Full Time		32.6	7.0
Part Time		28.8	6.3
Not Employed		28.8	6.5
<u>INCOME</u>		*	**
\$0–9,999		23.0	4.4
\$10,000–19,999		35.7	5.6
\$20,000–29,999		32.0	5.7
\$30,000–39,999		25.0	3.3
\$40,000 or more		38.8	15.5
<u>MARITAL STATUS</u>			**
Never Married		31.1	9.0
Married		31.9	6.2
Divorced/Separated		28.1	0.7
<u>REGION</u>		**	***
Cook County		25.1	2.4
Other Regions		37.0	11.6
<u>TYPE OF OFFENSE</u>			*
Felony		31.6	7.3
Misdemeanor		38.5	13.1

* p<0.05; ** p<0.01; *** p<0.001 (Chi-Square Test).

G. Any Illicit Drugs

Table 13 presents the lifetime, past year, and past month prevalence of any illicit drug use, including marijuana, cocaine, heroin, and hallucinogens.

Overall, lifetime prevalence of illicit drug use was 88.5 percent among the probationers interviewed. Lifetime illicit drug use was more likely to be reported by male probationers and persons with a high school education or less. Lifetime illicit drug use was not associated with other demographic factors such as age, race/ethnicity, employment status, income, marital status, and region of residence.

More than half of all probationers (54.5%) reported having used one or more illicit drugs during the preceding 12 months. Approximately 57 percent of males reported past-year illicit drug use, which was more than 10 percentage points greater than the

prevalence among females. With regard to past year use, illicit drugs were more likely to be consumed by younger probationers (age 18–24), African Americans, less educated persons, those never having been married, Cook County residents, and felony offenders.

About a quarter of the probationers interviewed reported having used one or more illicit drugs during the past month. As with past year use, African Americans, probationers with less than a high school education, never-married probationers, and probationers living in Cook County were more likely to have used illicit drugs during the preceding 30 days. Illicit drugs were also more likely to have been used during the past month by probationers convicted of a felony.

Table 13
Percentage of Adult Probationers Reporting Use of Any Illicit Drug
by Demographic Characteristics

	<u>Lifetime Use</u>	<u>Past Year Use+</u>	<u>Past Month Use</u>
TOTAL	88.5	54.5	25.2
<u>GENDER</u>	*	*	
Male	90.4	57.4	26.7
Female	83.2	46.7	21.0
<u>AGE</u>		**	
18–24	89.7	63.4	30.0
25–34	88.0	52.6	23.4
35+	87.6	45.9	21.1
<u>RACE/ETHNICITY</u>		**	**
White	87.2	47.2	20.7
African American	89.5	62.8	32.9
Hispanic	93.8	56.3	18.8
Other	73.3	46.7	6.7
<u>EDUCATION</u>	**	***	***
Some High School or Less	91.5	62.9	31.7
High School	90.0	55.7	25.3
More than High School	81.0	38.1	13.6
<u>EMPLOYMENT</u>			
Full Time	90.4	51.8	21.6
Part Time	85.6	52.3	29.7
Not Employed	87.4	59.5	27.9
<u>INCOME</u>			
\$0–9,999	87.4	56.3	27.9
\$10,000–19,999	90.5	54.8	26.2
\$20,000–29,999	89.3	54.1	24.6
\$30,000–39,999	88.3	51.7	20.0
\$40,000 or more	87.1	50.9	22.4
<u>MARITAL STATUS</u>		***	**
Never Married	90.5	60.9	29.8
Married	83.2	38.9	12.4
Divorced/Separated	87.4	49.6	23.0
<u>REGION</u>		*	**
Cook County	88.1	58.2	30.1
Other Regions	89.0	50.3	19.5
<u>TYPE OF OFFENSE</u>		*	*
Felony	88.2	56.0	26.4
Misdemeanor	82.8	45.5	16.3

* p<0.05; ** p<0.01; *** p<0.001 (Chi-Square Test).

IV. Psychiatric Conditions and Substance Abuse

In this section, we examine the prevalence of psychiatric illnesses in the Illinois adult probation sample and its relationship to substance abuse and gender. **Table 14** shows the prevalence of current and lifetime psychiatric disorders for non-substance abusing and substance abusing subjects as well as for the total sample.

The prevalence rates for psychiatric disorders for the total sample appear to be elevated, especially for lifetime (18.8%) and current (11.2%) psychotic disorders (i.e., schizophrenia, delusional disorder, “not otherwise specified” psychotic disorder) relative to recently published rates for the general population (Kessler et al., 1994). However, the rates of current psychiatric disorders shown in **Table 14** for the total sample are generally hard to compare with rates from other surveys because of the short time frames used (two weeks to past month) when compared to the time frames used in other surveys (past year). Despite this limitation, we still find that there are significant levels of psychiatric disorders among Illinois probationers, with almost 20 percent of the sample at some risk for suicide.

One counterintuitive finding was the lifetime rate for Antisocial Personality Disorder (ASP), which appears to be very low for this kind of population based on past surveys of similar groups (cf., Swartz & Lurigio, 1999; Teplin, 1994). Our sample had a rate of only 16 percent for ASP while, for instance, a study of jail detainees yielded a rate close to 50 percent. It is not clear if the low rate is a valid finding or if it reflects some limitation of the study instrument or methodology. Clearly, however, past

research suggests that the rate of ASP we found for Illinois probationers must be a lower bound for this population.

The data in **Table 14** do show a moderately strong relationship between psychiatric disorders and substance abuse for this sample; for almost every psychiatric disorder shown, substance abusers tend to have higher rates of the disorder than non-substance abusers. The relationship is especially pronounced for lifetime disorders. For example, subjects who abused substances had significantly higher rates of major depressive episode (16.9%) compared to non-substance-abusing subjects (10.6%). Substance-abusing subjects also had a much higher rate of suicide risk (24.1%) than their non-substance abusing counterparts (13.6%). The only disorders for which there were not significant differences between the two groups were current manic episode and current psychotic disorder.

One caveat for interpretation of these findings is that we cannot specifically examine with our data whether substance abuse was primary or secondary to the mental disorder. For instance, it could be that the relatively high rate of major depressive episode among the substance abusers in our sample “caused” the higher rate of substance abuse (e.g., using substances to self-medicate). Alternatively, it could be that the high rate of major depressive episode occurred as a consequence of the high rate of substance abuse because of the latter’s known influence on mood. Regardless, the higher rates of mental illness among the substance-abusing subjects are entirely consistent with findings from many other survey studies.

Table 14
Percentage of Adult Probationers Reporting Psychiatric Conditions:
Current (Last Year) Substance Abusers vs. Non-Abusers

	Non-Substance Abuser	Substance Abuser	p	Total Sample
Current Psychiatric Disorders (period)				
Major Depressive Episode (past 2 weeks)	10.6	16.9	*	13.2
Manic Episode (at interview)	1.9	4.5		3.0
Hypomanic Episode (at interview)	3.3	9.4	**	
Suicide Risk (past month)	13.6	24.1	**	18.1
Post-traumatic Stress Disorder (past month)	1.9	4.9	*	3.2
Psychotic Disorder (at interview)	10.3	12.4		11.2
Mood Disorder with Psychotic Features (at interview)	6.9	12.7	*	9.4
Lifetime Psychiatric Disorders				
Major Depressive Episode, Recurrent	4.2	10.2	**	6.7
Manic Episode	3.9	12.4	***	7.5
Hypomanic Episode	8.1	21.7	***	13.9
Psychotic Disorder	15.5	23.2	*	18.8
Antisocial Personality Disorder	9.7	24.3	***	15.9

* p<0.05; ** p<0.01; *** p<0.001 (Chi-Square Test).

Table 15 flips the relationships shown in **Table 14**. Previously, we looked at the rates of psychiatric disturbance among subjects who reported abusing and not abusing substances. In this section we look at the self-reported rates of substance dependence abuse among those with psychiatric disorders. Prior research has shown that the relationship between drug dependence and mental illness is not symmetrical. That is, people with psychiatric disturbances tend to have higher rates of substance dependence compared to the rates of psychiatric disturbances among

substance abusers. The data from our survey reflect the same pattern.

As shown in **Table 15**, 55 percent of those having one or more of the current psychiatric disorders shown in **Table 14** were dependent on one or more substances as compared to a rate of 36.8 percent for those without any psychiatric disturbance. Moreover, the rate of polysubstance dependence for those with at least one psychiatric disturbance (29.6%) was nearly three times higher than the rate of polysubstance dependence for those

without a current psychiatric diagnosis (10.9%). Thus, in these findings, as in a previous study of jail detainees in drug treatment, we find that psychiatric problems and drug dependence tend to cluster together among a small proportion of the sample. This finding is also consistent with national data collected on the general population (Kessler et al., 1994).

Among the diagnoses for dependence on individual drugs that were examined, all but one—dependence on opiates—was significantly related to having a psychiatric disorder. The strongest relationship found was for alcohol dependence, where the dependency rate was nearly twice as high among those with a psychiatric disorder compared to those without one (39.8% vs. 21.1%).

Interestingly, with respect to the lack of any findings for opiate dependence, two

of the authors of this report found a similar pattern in a population of former Social Security disability recipients for alcoholism and drug addiction (Swartz, Lurigio, & Goldstein, 2000). In that study, those too impaired to work were found to have elevated rates of cocaine use compared to those who were able to work, but both groups had comparable (and elevated) rates of opiate use. This relationship, in part, was mediated by a higher rate of psychiatric disturbances among those who were unemployed. Thus, in these two studies at least, opiate use and dependence seem to not be significantly related to psychiatric disorders as is the case with other drugs such as cocaine. More work is needed to determine if these were idiosyncratic results or if, indeed, the psychiatric and psychological profiles of those who abuse heroin and other opiates is somehow distinct from those who abuse other drugs.

Table 15
Prevalence of Past Year Dependence by Drug and Psychiatric Diagnoses

	Current Psychiatric Diagnosis		p	Total Sample
	None	1 or More		
DSM Past Year Diagnosis for Dependence on:				
Alcohol	21.1	39.8	***	26.9
Marijuana	13.2	24.0	**	16.6
Hallucinogens	.9	2.0		1.3
Cocaine	11.4	21.4	**	14.5
Opiates	5.8	6.7		6.1
Any drug	36.8	55.1	***	42.5
Two or more drugs	10.9	29.6	***	16.7

* p<0.05; ** p<0.01; *** p<0.001 (Chi-Square Test).

Gender and Psychiatric Disorder

Finally, in **Table 16**, we examine the relationship between gender and psychiatric disorder. Literature on similar data collected from both general populations (Kessler, 1994) have consistently shown that women have higher rates of affective disorders (e.g., depression, mania) than men, with comparable rates for other disorders (except for substance abuse, where men have higher prevalence rates than women for most substances).

The data collected from Illinois probationers show a roughly similar

pattern. Female probationers have twice the rate of a current major depressive episode (22%) compared to men (10.4%), over three times the rate of a current manic episode (6.3% versus a rate of 1.9% for the men), and twice the rate of a current post-traumatic stress disorder. Women are also somewhat more likely to be at risk for suicide compared to the men. The rates of current psychotic disorder, however, were not significantly different. Among the prevalence rates for lifetime psychiatric disorders, women had a significantly higher prevalence rate for recurrent major depressive episode.

Table 16
Percentage of Illinois Adult Probationers Reporting Psychiatric Conditions by Gender

	Male	Female	p	Total Sample
Current Psychiatric Disorders (period)				
Major Depressive Episode (past 2 weeks)	10.4	22.0	***	13.4
Manic Episode (at interview)	1.9	6.3	**	3.0
Hypomanic Episode (at interview)	5.8	6.3		5.9
Suicide Risk (past month)	16.4	23.4	*	18.2
Post-traumatic Stress Disorder (past month)	2.1	5.7	*	3.0
Psychotic Disorder (at interview)	11.1	11.4		11.2
Mood Disorder with Psychotic Features (at interview)	7.9	13.8	*	9.4
Lifetime Psychiatric Disorders				
Major Depressive Episode, Recurrent	5.1	12.0	**	6.9
Manic Episode	6.8	9.5		7.5
Hypomanic Episode	14.1	12.7		13.7
Psychotic Disorder	18.1	20.8		18.8
Antisocial Personality Disorder	16.6	13.8		15.9

* p<0.05; ** p<0.01; *** p<0.001 (Chi-Square Test).

V. Discussion

An important limitation of this research is that all estimates of substance use are based on self-reported behavior. Survey reports of sensitive and illicit activities such as those examined here are typically underreported (Harrison & Hughes, 1997; Fendrich et al., 1999). As such, the prevalence data presented here are likely conservative estimates of the actual patterns of drug use and treatment need in this population. These findings nonetheless provide important information regarding adult probationers in Illinois.

The current study is one of the first to estimate the prevalence of psychiatric and drug treatment needs among adult probationers. The major strengths of the research are its use of a standardized assessment tool, a set of formal diagnostic criteria, and a comprehensive statewide sample of offenders. This study is also one of the first to examine the prevalence of comorbidity in a sample of probationers. Our findings, overall, are consistent with previous investigations on the prevalence of substance abuse and psychiatric problems among incarcerated populations. In general, persons in jails, prisons, and on probation have significantly higher rates of mental illness, drug use problems, and co-occurring disorders, compared with persons in the general population (Watson, Hanrahan, Luchins, & Lurigio, in press).

The implications of this study for correctional policies and practices are clear. More resources must be invested in treating drug use, the need for and effectiveness of which have been demonstrated in numerous studies (e.g., Lurigio, 2000; Lurigio & Swartz, 1999). In stark contrast, a paucity of research has been done on mental illnesses among correctional populations, particularly among offenders in community corrections programs (Lurigio, 1996). The comorbidity of mental illness and substance misuse is an especially neglected but highly

important topic of research in light of the apparent relationship between comorbidity and violent behavior found in the MacArthur Study of Violence (e.g., Steadman et al., 1998). However, the proportion of mentally ill offenders who engage in violent behavior appears to be relatively small. The primary issue is that a large number of offenders are mentally ill and receive little or no treatment for their illnesses.

The dearth of research on the prevalence of mental illnesses in community corrections caseloads parallels the dearth of programs for mentally ill probationers (Lurigio, 1996). In Illinois, for example, there are only two specialized programs for mentally ill probationers located in two of the state's largest counties (Cook and DuPage). Because of limitations in funding, these programs serve only a relatively small number of probationers with mental illnesses.

The Cook County Adult Probation Department's specialized mental health unit has been nationally recognized as an exemplary program (i.e., an example of best practices) and has been funded in part by the Illinois Department of Human Services, Office of Mental Health (Lurigio & Martin, 1988). Cook County's program should be expanded and replicated in other departments that have high rates of mental illnesses on their caseloads. Rigorous screening for mental illness using a standardized and validated instrument should become just as much a part of part of the assessment process at all levels of criminal justice processing as screening for drug abuse. In addition, fully integrated drug and mental health programming must be implemented for persons with co-occurring disorders; they are a highly problematic group with multiple and complicated service needs and a greater risk of recidivism (Peters & Hills, 1997).

VI. References

- Abadinsky, H. (1997). *Probation and parole: Theory and practice*. Upper Saddle River, NJ: Prentice Hall.
- American Correctional Association. (1995). *Probation and parole directory*. Lanham, MD: Author.
- American Psychiatric Association. (1987). *Diagnostic and statistical manual of mental disorders* (3rd ed., revised). Washington, D.C.: Author.
- Austin, J. (1995). Correctional options: An overview. *Corrections Today*, 57, 1–8.
- Bonczar, T. P., & Glaze, L. E. (1999). *Probation and parole in the United States, 1998*. Washington, D.C.: Department of Justice, Bureau of Justice Statistics.
- Byrne, J. M. (1988). *Probation*. Washington, D.C.: Department of Justice, National Institute of Justice.
- Camp, G. M., & Camp, C. G. (1993). *The corrections yearbook 1993: Probation and parole*. South Salem, NY: Criminal Justice Institute.
- Cho, Y. I., Johnson, T. P., & Pickup, L. (2000). *Illinois household survey on alcohol, tobacco, and other drug use prevalence, 1998*. Chicago: Illinois Office of Alcoholism and Substance Abuse.
- Clark, W. B., & Hilton M. E. (1991). *Alcohol in America: Drinking practices and problems*. New York: State University of New York Press.
- Clear, T. R., & Braga, A. A. (1995). Community corrections. Pp. 421–44 in J. Q. Wilson & J. Petersilia (Eds.). *Crime*. San Francisco, CA: Institute for Contemporary Studies.
- Cromwell P. F., & Killinger, G. G. (1994). *Community-based corrections*. Minneapolis: West.
- Ditton, P. M. (1999). *Mental health and treatment of inmates and probationers*. Washington, D.C.: Department of Justice, Bureau of Justice Statistics.
- Gagnon v. Scarpelli*, 411 U.S. 778 (1972).
- Illinois Criminal Justice Information Authority. (1999). National and state trends in probation. *The Compiler*, 4–5.
- Kessler, R. C., McGonagle, K. A., Zhao, S., Nelson, C. B., Hughes, M., Eshleman, S., Wittchen, H. U., & Kendler, K. S. (1994). Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States: Results from the national comorbidity study. *Archive of General Psychology*, 51, 8-19.
- Klein, A. R. (1997). *Alternative sentencing, intermediate sanctions, and probation*. Cincinnati, OH: Anderson.
- Langan, P. A., & Perkins, C. A. (1994). *Felony sentences in the United States, 1990*. Washington, D.C.: U.S. Department of Justice, Bureau of Justice Statistics.
- Lurigio, A. J. (1996). Responding to the mentally ill on probation and parole: Recommendations and action plans. Pp. 166–71 in A. J. Lurigio (Ed.), *Community corrections in America: New directions and sounder investments for persons with mental illness and codisorders*. Seattle, WA: National Coalition for Mental and Substance Abuse Health Care in the Justice System.

- Lurigio, A. J., & Martin, N. (1998). Casework practice with mentally ill probationers. Pp. 280–84 in R. A. Wilkinson (Ed.), *Best practices: Excellence in corrections*. Lanham, MD: American Correctional Association.
- Lurigio, A. J., & Swartz, J. A. (2000). Changing the contours of the criminal justice system to meet the needs of persons with serious mental illness. Pp. 45–108 in J. Horney (Ed.), *NIJ 2000 Series: Policies, processes, and decisions of the criminal justice system* (Vol. 3). Washington, D.C.: National Institute of Justice.
- Lurigio, A. J., & Swartz, J. A. (1999). The nexus between drugs and crime: Theory, research, and practice. *Federal Probation*, 63, 67–72.
- Lurigio, A. J., & Swartz, J. A. (2000). Drug treatment availability and effectiveness: Studies of the general and criminal justice populations. *Criminal Justice and Behavior*, 27, 495–528.
- Lurigio, A. J., Seng, M., Ellsworth, T., & Weisheit, R. (1999). A comparative analysis of offenders on probation in Illinois, 1990 and 1995. *The Compiler*, 12–14.
- Morgan, K. (1993). Factors influencing probation outcome: A review of the literature. *Federal Probation*, 57, 23–29.
- Morrissey v. Brewer*, 408 U.S. 471 (1973).
- Mumola, C. J. (1998, March). *Substance abuse and treatment of adults on probation, 1995*. Washington, D.C.: Bureau of Justice Statistics.
- Olson, D. E., & Lurigio, A. J. (2000). Predicting probation outcomes: Factors associated with probation rearrest, revocations, and technical violations during supervision. *Justice Research and Policy*, 1, 73–86.
- Owens, L. (2000) *Probationer's substance abuse treatment survey: SRL Project 802, report on sample design and disposition*. Chicago: University of Illinois at Chicago Survey Research Laboratory.
- Peters, R., & Hills, H. A. (1997). *Intervention strategies for offenders with co-occurring disorders: What works?* Delmar, NY: GAINS Center.
- Petersilia, J. (1997). Probation. Pp. 149–200 in M. Tonry (Ed.), *Crime and justice: A review of research* (Vol. 22). Chicago: University of Chicago Press.
- Petersilia, J. (1998). Probation and parole. Pp. 563–88 in M. Tonry (Ed.), *The handbook of crime and punishment*. New York: Oxford University Press.
- Schmallegger, F. (2001). *Criminal justice: A brief introduction*. Englewood Cliffs, NJ: Prentice Hall.
- Steadman, H. J., Mulvey, E. P., Monahan, J., Robbins, P. C., Appelbaum, P. S., Grisso, T., Roth, L. H., & Silver E. (1998). Violence by people discharged from acute psychiatric inpatient facilities and by others in the same neighborhoods. *Archives of General Psychiatry* 55, 393–401.
- Swartz, J. A., & Lurigio, A. J. (1999). Psychiatric illness and comorbidity among adult male detainees in drug treatment. *Psychiatric Services* 50(12), 1628–30.
- Swartz, J. A., Lurigio, A. J., & Goldstein, P. (2000). Drug dependence, illegal drug use, and severe mental illness among former Supplemental Social Security (SSI) beneficiaries for drug addiction and alcoholism. *Archives of General Psychiatry*, 57(7), 701–7.

- Teplin, L. A. (1994). Psychiatric and substance abuse disorders among male urban jail detainees. *American Journal of Public Health* 84(2), 290–93.
- Watson, A., Hanrahan, P., Luchins, D., & Lurigio, A. J. (In press). Paths to jail among mentally ill persons: Service needs and services characteristic. *Psychiatric Annals*.

VI. Technical Appendix

Study Design

This study employed a stratified, multistage cluster design. The sample was initially stratified by region (Cook County vs. all other counties) in order to insure adequate statewide representation.

In Cook County, probationers were sampled from six facilities: Bridgeview, Rolling Meadows, Maywood, Skokie, Markham, and 26th and California. The remaining Cook County facilities were omitted because they were too small or had specialized caseloads. Details of the sampling strategy employed for this study can be found in SRL's *Sample Design and Disposition Report* (Owens, 2000).

In the balance of the state, eight counties were sampled with probabilities proportionate to size (PPS), where the measure of size was the number of felony and misdemeanor adult probationers residing in each county. The sampled counties included in this study were Franklin, Montgomery, Macoupin, Peoria, Bureau, Kane, DuPage, and McHenry.

Within Cook County, the sample was stratified by district and a proportionate number of probationers was randomly selected from each. Within each district, the sample was clustered by parole officer to minimize the burden placed on district staff. In the other counties included in the survey, the sampling method varied somewhat depending on the number of officers in each county.

Sampling frames of potentially eligible adult probationers were obtained from each county included in the sample only after first obtaining permission from the county's chief judge.

Data Collection

A pretest of the survey's instrument and procedures was conducted in the spring of 1999. Twenty-two pretest interviews were completed in Cook County. All interviewing for both the pretest and main survey was conducted in private in the participating probation offices by trained and supervised SRL interviewers.

Advance letters that introduced the study and requested cooperation were mailed to all sampled probationers prior to data collection.

Interviewing for the main survey began June 30, 1999, and was interrupted from August 27, 1999, to January 10, 2000, due to a restriction on human subjects research that was placed on the University of Illinois at Chicago by the federal government's Office of Protection from Research Risks. Interviewing was completed on May 22, 2000. This study was initially approved by the University of Illinois at Chicago Institutional Review Board (IRB#H-98-595) prior to the start of data collection. It was re-reviewed, along with all other active research protocols at the University, and re-approved subsequent to the imposition of the research restriction.

A \$30 incentive for completing an interview was given to each respondent. Interviews were conducted in English only.

A total of 627 interviews were completed with adults currently on probation in Illinois. The overall response rate for the survey was 64.5 percent (see **Table A-1**). The cooperation rate was 87.3 percent, and the refusal rate was 9.4 percent.

Just over half the sample was eligible to be interviewed (eligibility rate = 53.2%).

Reasons for ineligibility included the following: respondent (a) was no longer on probation at the time he/she was contacted, (b) had moved out of state, (c) was on warrant status, (d) was in jail or custody, (e) could not be interviewed in English, or (f) was deceased.

Analyses

Because of the complex sample design employed for this survey, all data were analyzed after weights were attached. These weights were used to statistically adjust for differential probabilities of respondent selection across counties, districts, and parole officers. In addition, a non-response adjustment was also included in the final study weights.

Table A-1
Survey Response and Cooperation
Rates of Adult Probationers: Total
Sample

	N	%
Total Sample	1805	
Nonduplicates	1794	99.4
Cooperation to Screen	1772	98.8
Eligible Cases	960	54.2
Contacted	718	74.7
Interview Completed	627	87.3
Response Rate		64.5
Cooperation Rate		87.3
Refusal Rate		9.4

- **Response rate:** proportion of the eligible respondents who completed the interview. Cases with unknown eligibility (n=22) were estimated to be eligible in similar proportions to that of cases with known eligibility (54.2%). Thus, 12 of 22 cases with unknown eligibility (54.2% of 22 cases) were classified as eligible for purposes of deriving the study's response rate $[(627/(960+12))*100=64.5]$.
- **Cooperation rate:** proportion of the respondents who were finally contacted by interviewer and completed the interview $[(627/718)*100=87.3]$.
- **Refusal rate:** proportion of eligible respondents who refused and were never interviewed $[(90/960)*100=9.4]$.