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DWI Offenders under Correctional Supervision

By Laura M. Maruschak
BJS Statistician

In 1997 an estimated 513,200 offenders were on probation or in jail or prison for driving while intoxicated by alcohol (DWI): 454,500 on probation, 41,100 in jail, and 17,600 in State prison. DWI offenders accounted for nearly 14% of probationers, 7% of jail inmates, and 2% of State prisoners.

Compared to other offenders, DWI offenders are older, better educated, and more commonly white and male. Of DWI offenders, about half of those in jail reported drinking for at least 4 hours prior to their arrest, while about half on probation reported drinking at least 3 hours. About half of DWI offenders in jail reported consuming at least 5.8 ounces of ethanol (equivalent to about 12 beers or 6 glasses of wine); about half of those on probation reported consuming 4.0 ounces of ethanol. The estimated average blood alcohol concentration (BAC) of DWI offenders in jail was .24 grams of alcohol per deciliter of blood; for those on probation it was .19 g/dl.

These findings are based on personal interviews of probationers, jail inmates, and State prisoners. The 1995 Survey of Adults on Probation, the 1996 Survey of Inmates in Local Jails, and the 1997 Survey of Inmates in State Correctional Facilities collected detailed data on offenders. While each survey covers a broad range of issues, this report focuses on criminal histories of DWI offenders and the extent of their alcohol use and treatment.

Highlights

	Arrests for driving under the influence*	
	Number	Rate per 100,000 drivers
1990	1,810,800	1,084
1991	1,771,400	1,048
1992	1,624,500	938
1993	1,524,800	881
1994	1,384,600	789
1995	1,436,000	813
1996	1,467,300	817
1997	1,477,300	809

*Includes driving under the influence of alcohol or drugs (DUI).

	Number of DWI offenders under supervision, 1997	
	Male	Female
Probation	375,500	79,000
Jail	38,200	2,900
State prison	16,600	1,000

Prior DWI	Percent of DWI offenders	
	Probation	Jail
None	67.3%	38.6%
1	18.5	12.3
2	6.0	14.8
3 or more	8.3	34.3

Experiences with alcohol	Percent of DWI offenders	
	Probation	Jail
Dependent	37.4%	46.6%
Domestic dispute	55.0	65.7
Lost job	9.6	22.8
In fights	33.9	49.9

Alcohol Treatment Program	Percent of DWI offenders	
	Probation	Jail
Ever*	59.7%	55.2%
Current sentence	46.4	4.2
Ever*	69.0%	66.7%
Current sentence	61.7	17.3

*Includes drug treatment and programs for jail inmates.

- Between 1990 and 1997 the number of arrests for driving under the influence of alcohol or drugs decreased 18%, while the number of licensed drivers increased nearly 15%.

- The largest number of DWI offenders under correctional supervision (89%) were on probation; the remaining 11% were in jail (8%) and in State prison (3%).

- A third of DWI offenders on probation compared to about two-thirds in jail reported prior DWI sentences. Of DWI offenders, 34% in jail and 8% on probation reported three or more prior DWI offenses.

- Of DWI offenders, about 37% on probation and nearly 47% in jail exhibited indicators of past alcohol dependence. Over half of DWI offenders in jail (66%) or on probation (55%) reported a domestic dispute while under the influence of alcohol.

- Of DWI offenders on probation, over half reported ever receiving alcohol treatment or participating in a self-help program. More probationers than jail inmates reported that since their sentence began they had received alcohol treatment (46% versus 4%) or had participated in a self-help program (62% versus 17%).

Arrests for driving under the influence of alcohol or drugs (DUI) have been generally declining since 1986

In 1997 there were an estimated 183 million licensed drivers in the United States, up from 159 million in 1986 (table 1). While the number of licensed drivers increased, the number of DUI arrests as reported by the FBI Uniform Crime Reports declined from about 1.8 million in 1986 to 1.5 million in 1997. As a result, the overall rate of arrest for DUI offenders per 100,000 drivers decreased from 1,124 in 1986 to 809 in 1997.

The number of DUI arrests fluctuated from year to year between 1986 and 1990. After 1990 the number of arrests began to fall steadily until 1995 when the number began to rise.

The decline in the number of DUI arrests may be partially explained by the aging of licensed drivers. In 1997 there were more licensed drivers age 35-54 than in 1986. While the percentage of arrests that these offenders account for increased, their rate of arrest decreased.

In 1986 and 1997 persons age 21-24 accounted for the largest number of DUI arrests per 100,000 drivers (2,384 and 1,695, respectively); those 65 or older accounted for the smallest number (114 and 78, respectively) (table 2). Although those 65 and older accounted for more than 12% of drivers in 1986 and 1997, they made up less than 1.5% of persons arrested for DUI.

In 1986 persons age 16-20 accounted for nearly 11% of DUI arrests; in 1997, about 9%. The sharpest decline in the rate of arrest over the same period occurred for those age 19-20 (a 33% decline). While every State in 1997 had a legal minimum drinking age of 21, some States in 1986 still had lower minimum drinking ages.

Table 1. Number of licensed drivers, number of arrests for driving under the influence of alcohol or drugs (DUI), and rate of arrest for DUI, 1986-97

Year	Number		Rate of arrest for DUI per 100,000 drivers
	Licensed drivers*	Arrests for DUI	
1986	159,486	1,793,300	1,124
1987	161,816	1,727,200	1,067
1988	162,854	1,792,500	1,101
1989	165,554	1,736,200	1,049
1990	167,015	1,810,800	1,084
1991	168,995	1,771,400	1,048
1992	173,125	1,624,500	938
1993	173,149	1,524,800	881
1994	175,403	1,384,600	789
1995	176,628	1,436,000	813
1996	179,539	1,467,300	817
1997	182,709	1,477,300	809
Percent change, 1986-97	14.6%	-17.6%	-28.0%
Average annual change, 1986-97	1.2%	-1.7%	-2.9%

*Estimated in thousands.

Sources: FBI, *Crime in the United States* (1986-97).

Federal Highway Administration, *Highway Statistics* (1986-97).

Most States report a decline in DUI arrest rates

In 1991 the FBI in its Uniform Crime Report began including DWI arrests by State. Between 1991 and 1997 some States experienced sharp declines in the rate of DUI arrests. In 1991 New Mexico reported the highest rate of DUI arrest in the country (2,213 per 100,000 drivers), followed by Colorado (1,865) and Kentucky (1,727). However, since 1991 New Mexico and Colorado have experienced the sharpest declines in the rate of DUI arrest (down to 1,156 and 827, respectively in 1997).

Although data are not available for Kentucky for 1997, by 1994 its rate of DUI arrest had decreased to 685 per 100,000 drivers.

In 1997 Minnesota reported the highest rate of DUI arrest (1,385 per 100,000), followed by Washington (1,261) and North Carolina (1,252).

In 1991 the States with the lowest rates of DUI arrest were Rhode Island (348), New York (453), and Pennsylvania (510). In 1997 the States with the lowest rates were Rhode Island (306) and Massachusetts (419).

Table 2. Licensed drivers and arrests for driving under the influence (DUI), by age, 1986 and 1997

Age	1997			1986			Percent change in rates, 1986-97
	Percent of		Arrests per 100,000 drivers	Percent of		Arrests per 100,000 drivers	
	Drivers	Arrests		Drivers	Arrests		
Total*	100%	100%	809	100%	100%	1,124	-28.0%
16-18	3.7	3.2	696	4.3	3.8	990	-29.7
19-20	3.2	5.3	1,353	3.8	6.8	2,006	-32.6
21-24	6.7	14.1	1,695	9.3	19.7	2,384	-28.9
25-29	10.0	16.9	1,372	12.9	22.0	1,924	-28.7
30-34	10.8	16.3	1,227	12.3	15.8	1,445	-15.1
35-39	11.5	15.8	1,105	11.1	11.1	1,122	-1.5
40-44	11.0	11.5	849	8.8	7.2	921	-7.9
45-49	9.7	7.4	620	7.0	4.9	783	-20.8
50-54	8.0	4.3	438	6.2	3.4	613	-28.6
55-59	6.1	2.3	309	6.1	2.4	446	-30.7
60-64	5.0	1.3	213	5.8	1.5	299	-28.8
65 or older	14.3	1.4	78	12.3	1.2	114	-31.6

Note: Percents may not add to 100% because of rounding.

*Total includes a few licensed drivers and arrests for persons under age 16.

In 1991, 13 out of 45 States with DUI arrest data had a rate greater than 1,200 per 100,000 drivers; in 1997, 5 out of the 35 States with available data had a rate at that level. In 1991, 14 States reported a rate of less than 900 per 100,000 drivers; in 1997, 24 States had such a rate.

While the Nation experienced a general decline in the rate of DUI, a few States saw increased rates. North Carolina experienced the greatest increase. In 1991 there were 645 DUI arrests for every 100,000 drivers; in 1997 the rate increased to 1,252 (table 3).

In 1991 North Carolina was among the five States with the lowest rate of DUI arrests, and by 1997, North Carolina was among the top three. The rate of DUI arrests also increased in Minnesota (from 1,145 per 100,000 drivers in 1991 to 1,385 in 1997) and in West Virginia (from 661 in 1991 to 760 in 1997).

Average DUI arrest rate higher in States with a .08 g/dl legal blood alcohol concentration (BAC) limit than in States with a .10 g/dl limit

Prior to 1983 no State had a law setting the BAC limit at .08 grams of alcohol per deciliter of blood. In 1983 Oregon and Utah enacted .08 g/dl BAC illegal *per se* laws, which made it illegal in and of itself to drive with an alcohol concentration measured at or above .08 g/dl. By the end of 1991 three additional States had adopted this limit. By the end of 1997, 15 States had the legal BAC limit of .08 g/dl. The remaining States and the District of Columbia had a legal BAC limit of .10 g/dl.

In 1997 the average DUI arrest rate for those States with a .08 g/dl legal BAC level was 952 per 100,000 drivers; for those States with a .10 g/dl legal limit, the rate was 829 per 100,000.

1997 legal BAC limit (g/dl)	Average DUI arrest rate per 100,000 drivers*
0.08	952
0.10	829

*Weighted averages based on available data from 10 States with a .08 g/dl legal limit and 24 States with a .10 g/dl limit.

Table 3. Number of DUI arrests and rate per 100,000 drivers, by State, 1991, 1994, and 1997

	Estimated number of DUI arrests			Rate of DUI arrests per 100,000 drivers		
	1997	1994	1991	1997	1994	1991
Total^a	1,477,300	1,384,600	1,771,400	809	789	1,048
Alabama ^b	21,600	19,800	24,000	638	691	819
Alaska	--	5,200	5,200	--	1,196	1,640
Arizona	33,100	27,700	30,500	1,062	973	1,271
Arkansas	19,400	19,000	20,900	1,032	1,073	1,215
California ^b	193,400	207,000	311,200	949	1,027	1,561
Colorado	23,500	30,900	38,900	827	1,132	1,865
Connecticut	12,500	11,100	17,900	551	481	808
Delaware	--	--	--	--	--	--
District of Columbia	--	3,400	2,700	--	927	672
Florida ^b	--	52,000	--	--	473	--
Georgia	--	58,600	57,600	--	1,216	1,248
Hawaii ^b	5,300	4,300	7,900	721	578	1,134
Idaho ^b	10,400	10,400	9,500	1,227	1,295	1,338
Illinois ^b	--	--	48,600	--	--	660
Indiana	26,700	29,200	33,700	681	758	977
Iowa	14,200	16,200	--	725	855	--
Kansas ^b	--	--	25,400	--	--	1,429
Kentucky	--	17,200	41,700	--	685	1,727
Louisiana	17,300	19,500	19,600	645	750	756
Maine ^b	7,600	7,100	9,900	839	781	1,112
Maryland	23,700	21,300	31,000	709	643	964
Massachusetts	18,400	18,000	27,900	419	403	662
Michigan	55,600	52,000	61,900	823	788	962
Minnesota	39,300	33,300	29,200	1,385	1,230	1,145
Mississippi	--	--	--	--	--	--
Missouri	30,800	34,100	38,000	823	1,008	1,019
Montana	--	--	5,800	--	--	995
Nebraska	13,600	13,900	14,500	1,156	1,210	1,356
Nevada	--	6,600	8,200	--	654	902
New Hampshire ^b	--	6,900	7,900	--	786	932
New Jersey	25,700	24,400	29,300	461	449	517
New Mexico ^b	13,800	--	23,900	1,156	--	2,213
New York	--	55,500	46,500	--	535	453
North Carolina ^b	67,600	30,800	29,300	1,252	637	645
North Dakota	3,700	3,200	--	829	731	--
Ohio	44,500	47,100	53,000	544	660	709
Oklahoma	20,400	23,000	24,000	895	980	1,050
Oregon ^b	16,400	18,800	27,900	719	739	1,174
Pennsylvania	--	39,400	40,600	--	485	510
Rhode Island	2,100	2,000	2,400	306	286	348
South Carolina	14,500	17,300	23,100	557	693	961
South Dakota	--	7,200	5,300	--	1,418	1,064
Tennessee	--	--	--	--	--	--
Texas	84,300	102,800	112,600	657	849	997
Utah ^b	7,800	7,300	10,300	577	583	963
Vermont ^b	--	2,900	3,600	--	640	877
Virginia ^b	31,500	33,400	45,300	643	725	975
Washington	50,600	25,100	47,700	1,261	664	1,366
West Virginia	9,800	8,600	8,500	760	660	661
Wisconsin	33,200	35,300	35,200	904	992	1,037
Wyoming	4,300	4,800	5,600	1,214	1,392	1,652

Note: The number of arrests in each State were estimated by multiplying the number reported to the FBI times the ratio of the total population to the population in the participating law enforcement agencies. Estimates were then rounded to the nearest 100.

--Insufficient data to provide State estimates.

^aNational estimates include data from States not shown separately.

^bStates with a legal BAC limit of .08 g/dl in 1997.

Sources: FBI, *Crime in the United States* (1991, 1994, and 1997)

and Federal Highway Administration, *Highway Statistics* (1991, 1994, and 1997).

Table 4. Number of DWI offenders on probation or in jail or prison, 1986, 1990, and 1997

	DWI offenders, 1997		DWI offenders, 1990		DWI offenders, 1986	
	Estimated number	Percent	Estimated number	Percent	Estimated number	Percent
Total	513,200	100.0%	593,000	100.0%	270,100	100.0%
Probationers^a	454,500	88.6%	548,900	92.5%	248,200	91.9%
Felons	78,200	15.5	--	--	--	--
Misdemeanants	376,300	73.3	--	--	--	--
Jail inmates^b	41,100	8.0%	34,500	5.8%	18,600	6.9%
Convicted	33,600	6.5	31,200	6.6	16,300	7.6
Unconvicted	7,500	1.5	3,300	0.7	2,300	1.1
State prisoners^c	17,600	3.4%	9,600	1.7%	3,300	1.2%

--Not available.

^aBased on estimates from the Survey of Adults on Probation, 1995, and counts from the Annual Probation Survey, 1986, 1990, and 1997.

^bBased on estimates from the Survey of Inmates in Local Jails,

1983, 1989, and 1996, and adjusted to the 1986, 1990, and 1996 estimates from the Annual Survey of Jails.

^cBased on estimates from the Survey of Inmates in State Adult Correctional Facilities, 1986, 1991, and 1997, and adjusted to the yearend custody counts reported in the National Prisoner Statistics (NPS-1), 1986, 1990, and 1997.

The number of DWI offenders under correctional supervision nearly doubled between 1986 and 1997

In 1997 an estimated 513,200 DWI offenders were under correctional supervision, down from 593,000 in 1990 and up from 270,100 in 1986 (table 4).

Estimates of the number of DWI offenders in 1997 were derived from the 1997 Annual Probation Survey, the 1996 Survey of Inmates in Local Jails, and the 1997 Survey of Inmates in State Correctional Facilities. In these surveys, DWI offenders represented 14% of all adults on probation, 7% of all local jail inmates, and 2% of State prisoners. The percentage of DWI offenders in each population was applied to the 1997 total population count of each to produce a 1997 estimate. (See *Methodology* for further detail.)

The number of DWI offenders on probation in 1997 (454,500) was up from 248,200 in 1986 and down from 548,900 in 1990. The number in jail increased from 18,600 to 41,100, and the number in prison increased from 3,300 to 17,600. In all 3 years about 90% of those under correctional supervision for DWI were on probation. Between 1986 and 1997 there was a gradual increase in the percentage of DWI offenders in prison (1.2% to 3.4%) and in jail (6.9% to 8.0%).

As the number of DWI arrests decreased between 1986 and 1997, the number of DWI offenders under correctional supervision per 1,000 arrests increased. In 1997 for every 1,000 DWI arrests, 347 DWI offenders were under correctional supervision. In 1990 there were 327 supervised offenders per 1,000 arrests, and in 1986, 151.

	DWI offenders under supervision	
	Number	Per 1,000 arrests
1997	513,200	347
1990	593,000	327
1986	270,100	151

DWI offenders serving time in jail had an average sentence of 11 months

Convicted DWI offenders in jail were sentenced to serve on average 11 months; half were sentenced to at least 6 months. State prisoners convicted of DWI were sentenced to serve on average 49 months; half were sentenced to serve at least 3 years. Among those on probation, the average sentence length was 26 months; half were sentenced to serve 2 years or more.

DWI offenders ^b	Total maximum sentence length ^a	
	Mean	Median
Probationers	26 mo	24 mo
Jail inmates	11	6
State prisoners	49	36

^aSee *Methodology* for detail on measuring sentence length.

^bCalculated for persons with DWI as their most serious offense.

Nearly a third of DWI offenders on probation had served time in jail or in prison for their current DWI offense

Of DWI offenders on probation, 69% received a sentence that included only probation, while the remaining 31% received a split sentence and were incarcerated for a period for their current DWI offense. An estimated 29% had served time in a local jail, and 2%, in a State prison.

Sentence served	Percent of DWI offenders on probation
Probation only	68.8%
Probation and —	
Jail	29.4
Prison	1.6
Jail and prison	0.2

All DWI offenders on probation had at least one condition to their sentence

Almost all DWI offenders on probation (94%) had also been sentenced to pay a fee, fine, or court costs — the most common type of condition imposed by the court (table 5). About a quarter were required to perform some type of community service. Thirteen percent were either confined or monitored, which included house arrest, electronic monitoring, curfews, and other restrictions of movement. About 4 in 10 DWI offenders on probation were formally required to maintain employment or to enroll in some type of educational or training program. Over a fifth were required to attend counseling.

An estimated 86% of DWI offenders on probation were required to get treatment for alcohol abuse; 27% were required to receive treatment for drug abuse. About 10% were given the condition that they remain alcohol/drug free; about 28% had mandatory drug testing.

As a condition to their sentence, felons on probation for DWI more frequently than misdemeanants were required to be confined or monitored (20% versus 10%), to perform some type of community service (35% versus 22%), or to enroll in some type of educational or training program (50% versus 41%).

Misdemeanants more frequently than felons were required to receive counseling (22% versus 8%) or to attend alcohol abuse treatment (88% versus 77%), while felons more frequently were

Table 6. Number of prior DWI sentences among DWI offenders under correctional supervision

Prior DWI sentences	Percent of DWI offenders		
	Probationers*	Jail inmates*	State prisoners
Total	100%	100%	100%
None	67.3	38.6	38.1
1	18.5	12.3	30.0
2	6.0	14.8	14.9
3	5.5	17.0	7.2
4	1.1	5.7	4.0
5 or more	1.7	11.6	5.9

Note: Percents may not add to 100% because of rounding.
*Includes prior sentences for DUI.

Table 5. Conditions of sentences of DWI offenders on probation

Condition of sentence	Percent of DWI offenders on probation		
	Total	Felony	Misdemeanor
Any condition*	100%	100%	100%
Fees/fines/court costs	93.8	90.7	95.1
Confinement/monitoring	13.2	20.2	10.2
Community service	24.3	35.1	21.5
Employment and training	41.1	49.7	41.0
Counseling	20.5	7.8	22.3
Driving restriction	12.7	20.7	11.4
Alcohol treatment	85.5	76.8	87.8
Drug treatment	26.9	31.1	27.0
Mandatory drug testing	27.9	34.6	28.1
Remain alcohol/drug free	9.9	15.3	9.3

Note: Detail sums to more than 100% because probationers may have more than one condition on their sentence.
*Includes other conditions not reported separately.

required to take mandatory drug tests (35% versus 28%) or to attend drug treatment (31% versus 27%).

A third of DWI offenders on probation and nearly two-thirds of those incarcerated reported prior DWI sentences

Of DWI offenders, 33% of those on probation, 61% of those in jail, and 62% of those in prison reported prior DWI offenses (table 6). Thirty-four percent of those in jail, 17% of those in prison, and 8% of those on probation reported three or more DWI priors.

Among DWI offenders, more of those on probation than those who were incarcerated were first-time offenders for any type of crime. Almost two-thirds of DWI offenders on probation were first-time offenders. About a third of probationers were repeat DWI offenders: 19% had DWI priors only, and nearly 15% had a combination of DWI and other prior offenses. Four percent of DWI offenders on probation had been convicted in the past of only non-DWI offenses.

Prior sentences	Percent of DWI offenders		
	Probationers*	Jail inmates*	State prisoners
First-time offender	62.7%	32.5%	14.3%
DWI priors only	18.5	18.7	19.2
Other offense priors only	4.1	6.1	23.8
DWI and other priors	14.7	42.7	42.7

*Includes prior sentences for DUI.

Of persons sentenced for a DWI offense, about 33% of those sentenced to jail and 14% of those sentenced to prison were first-time offenders. About 19% of those sentenced to jail had only prior DWI convictions, 6% had only other prior offenses, and 43% had both DWI and other offense priors. Of those sentenced to prison, 19% had only DWI priors, about 24% had other offense priors only, and 43% had a combination of DWI and other offense priors.

Over half of DWI offenders in jail were on probation, parole, or pretrial release at time of new offense

Of DWI offenders in jail, 52% were on probation, parole, or pretrial release when they committed the new offense for which they were incarcerated. DWI offenders on probation or in jail or prison and involved in the criminal justice system at the time of arrest were most commonly arrested while on probation or parole: 9% of probationers, 45% of jail inmates, and 56% of prisoners. Of DWI offenders on probation, nearly 9 out of 10 were not involved in the criminal justice system at time of arrest. Of incarcerated offenders, 46% of those in jail and 43% of those in prison had no criminal justice status at time of arrest.

Criminal justice status at time of arrest	Percent of DWI offenders		
	Probationers	Jail inmates	State prisoners
No status	88.7%	46.3%	42.5%
Probation/parole	8.6	44.8	55.5
Bail/pretrial release	2.7	7.5	--
Other type of release	0	1.5	2.0

--Data not collected.

DWI offenders were older, better educated, and more commonly white and male

DWI offenders under correctional supervision were about 5 years older on average than other offenders. Their average age ranged from 36 to 38, depending on the population (table 7). Among probationers and State prisoners, about 1 in 5 DWI offenders were age 45 or older, compared to 1 in 9 offenders sentenced for other offenses. Among jail inmates, 15% of DWI offenders, compared to 7% of other offenders, were in this age group. For probationers or jail inmates, about 10% of the DWI offenders but nearly 33% of other offenders were under age 25.

DWI offenders were better educated than other offenders. Thirty-seven percent of DWI offenders on probation, 18% of those in jail, and 16% of those in prison had attended some college. Among

other offenders, 27% of those on probation, 15% of those in jail, and 13% of those in State prison had some college education.

Although correctional populations are predominantly male, women constitute a smaller proportion among DWI offenders than among other types of offenders. Among probationers, females accounted for 17% of DWI offenders, 7% of those in jail, and 6% of those in prison. Among other offenders, females accounted for 22% of probationers, 10% of jail inmates, and about 6% of State prisoners.

Over two-thirds of DWI offenders under correctional supervision (74% of probationers and 68% of both jail inmates and prisoners) were white and non-Hispanic. Among other offenders, 58% of probationers, 35% of jail inmates, and 33% of prisoners were white.

Among DWI offenders Hispanics represented a higher percentage of jail and prison inmates than of probationers. About 17% of both jail and prison DWI inmates were Hispanic, compared to 9% of those on probation.

Females account for a growing number of DWI offenders in jails

Although males accounted for over 90% of DWI offenders in jail in 1983, 1989, and 1996, females accounted for slightly more offenders in 1996 (7%) than in 1989 (4%) and 1983 (5%).

The DWI jail population was also slightly older in 1996 than in 1989 and 1983. Fifty-two percent in 1996 were 35 or older, the age category of 39% in 1989 and of 41% in 1983. Most of the increase occurred among inmates age 35-39, representing 25% of all DWI offenders in jail in 1996, more than double the 12% in both 1989 and 1983.

Table 7. Characteristics of offenders on probation, in local jails, and in State prisons, by offense type

Characteristic	Percent of probationers in 1995 charged with –		Percent of jail inmates in 1996 charged with –		Percent of State prison inmates in 1997 charged with –	
	DWI offenses	Other offenses	DWI offenses	Other offenses	DWI offenses	Other offenses
Gender						
Male	82.6%	78.4%	92.8%	89.6%	94.2%	93.7%
Female	17.4	21.6	7.2	10.4	5.8	6.3
Age						
20 or younger	1.7%	12.7%	1.3%	16.3%	0.5%	6.1%
21-24	9.9	18.3	8.8	16.4	3.3	14.0
25-29	15.6	17.5	18.6	18.4	11.0	18.9
30-34	19.8	16.8	19.0	18.9	24.4	19.3
35-39	18.4	14.5	24.8	14.2	26.2	17.5
40-44	13.9	9.0	12.2	8.7	13.9	11.7
45-49	6.3	5.6	7.0	4.1	9.2	6.1
50 or older	14.6	5.6	8.3	3.0	11.6	6.3
Mean	37	32	36	30	38	33
Race/Hispanic origin						
White*	73.5%	58.0%	67.5%	34.9%	68.0%	32.5%
Black*	11.9	28.0	10.7	43.2	9.8	47.1
Hispanic	9.4	11.5	17.4	18.5	17.3	17.1
Other	5.1	2.5	4.4	3.3	5.0	3.1
Education						
8th grade or less	8.0%	8.5%	8.9%	13.4%	10.6%	9.3%
Some high school	17.2	23.7	27.3	34.0	25.9	20.3
GED	10.5	11.2	17.7	19.0	27.9	31.6
High school graduate	27.0	29.9	27.7	18.5	19.9	15.5
Some college	37.2	26.7	18.4	15.2	15.8	13.3
Marital status						
Married	30.9%	26.5%	20.5%	15.4%	17.3%	16.6%
Divorced/widowed	29.3	17.7	36.2	15.6	35.0	20.1
Separated	5.1	6.1	9.3	8.7	6.8	5.8
Never married	34.7	49.7	34.0	60.4	40.8	57.5

Note: Percents may not add to 100% because of rounding.
*Excludes Hispanics

	Percent of DWI offenders in jail	
	1983	1989
Gender		
Male	94.7%	96.3%
Female	5.3	3.7
Age		
20 or younger	2.4%	0.9%
21-24	22.3	9.7
25-29	17.3	23.6
30-34	17.1	26.5
35-39	11.6	11.6
40-44	8.0	9.4
45-49	6.9	9.2
50 or older	14.3	9.0

Over a third of convicted DWI offenders in jail consumed 7 or more ounces of ethanol prior to their arrest

During the personal interviews, offenders were asked about their alcohol consumption prior to their arrest. Questions included the total amount of beer, wine, and liquor consumed at the time of their offense and the number of hours they had been drinking. From that information the amounts of alcohol consumed were converted into a standard measure — ounces of ethanol. Two beers (12-ounce cans), one glass of wine (7 ounces), or two shots of liquor (1 ounce each) are the equivalent of 1 ounce of ethanol. (See *Methodology* for key survey items and details on calculating amounts of ethanol consumed.)

Because of the small number of DWI offenders in State prisons, their ethanol consumption was not estimated. Likewise, further analysis in this report which breaks down DWI offenders into smaller populations by certain criteria excludes DWI offenders in prison.

Forty percent of jail inmates reported consuming 7 or more ounces of ethanol, while 23% of DWI offenders on probation reported the same amount of ethanol consumption (table 8). Twenty-one percent of DWI offenders on probation and 13% of those in jail said they consumed less than the amount of ethanol in four 12-ounce beers.

Half of all DWI offenders in jail reported consuming at least 5.8 ounces of ethanol, and half of those on probation reported consuming at least 4.0 ounces.

Males on probation reported consuming about the same amount of ethanol as females (4.1 and 3.8, respectively). However, of DWI offenders in jail, males reported consuming more ethanol than females: half of the men said they had consumed 5.8 ounces or more, while half of the women disclosed that they had consumed 4.2 ounces or more.

Table 8. Alcohol consumption prior to arrest by probationers and jail inmates convicted of DWI

Ounces of ethanol consumed	Percent of DWI offenders on probation			Percent of convicted DWI offenders in jail		
	Total	Male	Female	Total	Male	Female
Total	100%	100%	100%	100%	100%	100%
0.01-1.99 oz	20.7%	20.5%	21.4%	12.9%	12.1%	22.6%
2-4.99	41.7	40.6	47.0	27.4	27.1	31.1
5-6.99	14.8	13.9	19.1	20.0	21.2	4.6
7-9.99	9.9	11.2	3.8	12.9	13.0	11.5
10-14.99	5.8	5.9	5.2	14.9	14.6	19.0
15 oz or more	7.1	7.8	3.4	11.9	11.9	11.2
Median	4.0 oz	4.1 oz	3.8 oz	5.8 oz	5.8 oz	4.2 oz

Note: Percents may not add to 100% because of rounding. Only jail inmates convicted of DWI reported the amount of alcohol consumed prior to arrest. See *Methodology* for calculation of ounces of ethanol.

Table 9. The type of alcoholic beverage and amount of ethanol consumed prior to arrest by probationers and jail inmates convicted of DWI

Ounces of ethanol consumed	Percent of DWI offenders who drank —					
	Beer only		Liquor only		Beer and liquor	
	Probationers	Jail inmates	Probationers	Jail inmates	Probationers	Jail inmates
Total	100%	100%	100%	100%	100%	100%
0.01-1.99 oz	28.9%	15.5%	22.6%	6.8%	6.8%	9.0%
2-4.99	41.9	35.7	28.5	27.2	47.9	12.8
5-6.99	13.4	22.8	16.6	7.3	17.5	17.2
7-9.99	9.4	9.0	5.4	4.6	9.7	23.9
10-14.99	4.0	9.4	10.2	39.1	7.7	18.2
15 oz or more	2.4	7.6	16.7	15.1	10.4	18.8

Note: Percents may not add to 100% because of rounding. Only those jail inmates convicted of DWI answered questions about the type and amount of alcohol consumed prior to arrest.

Table 10. Number of hours spent drinking and amount of ethanol consumed prior to arrest by probationers and jail inmates convicted of DWI

Hours spent drinking	Percent of DWI offenders		Average ethanol consumed	
	Probationers	Jail inmates	Probationers	Jail inmates
Total	100%	100%	6.0 oz	8.2 oz
1 hour or less	13.2%	15.8%	2.1 oz	2.1 oz
2-3	37.8	27.6	4.4	4.2
4-5	22.6	25.3	5.4	7.6
6-7	11.1	14.4	7.5	10.6
8-9	7.2	6.7	9.3	10.6
10-11	1.9	2.6	9.2	11.1
12 hours or more	6.1	7.6	11.5	18.1
Median	3.0 hours	4.0 hours	4.0 oz	5.8 oz

Note: Percents may not add to 100% because of rounding. Only those inmates convicted of DWI reported data on amount of time spent drinking prior to arrest.

About half of the DWI offenders who reported drinking prior to arrest consumed beer only

Half of DWI offenders on probation and over half of those in jail reported drinking only beer prior to their arrest. Nearly 30% of DWI offenders on probation or in jail reported drinking a combination of beer and liquor.

	Percent of DWI offenders	
	Probationers	Jail inmates
Beer only	49.8%	56.9%
Liquor only	16.6	9.7
Beer and liquor	28.7	29.8
Other combination	4.8	3.6

The amount of ethanol consumed prior to arrest varied by the type of alcoholic beverage. Those DWI offenders who drank beer only consumed less than those who drank liquor or a combination of liquor and other alcohol. Over two-thirds of DWI offenders on probation who drank only beer consumed less than 5 ounces of ethanol. About half of those who drank liquor only or a combination of beer and liquor said they consumed less than 5 ounces (table 9).

Convicted DWI offenders in jail, regardless of type of alcohol consumed, drank more than those on probation. Over half of jail inmates who drank beer only consumed less than 5 ounces of ethanol, while over a quarter consumed more than 7 ounces. Of those who drank liquor only, 34% consumed less than 5 ounces; about 60% consumed more than 7 ounces. And of those who drank liquor and beer, 22% consumed less than 5 ounces, and over 60% consumed more than 7 ounces.

DWI offenders on probation drank for fewer hours and consumed less ethanol than those in jail

About half of DWI offenders on probation reported drinking for 3 or more hours prior to their arrest; among those in jail, about half said they drank for 4 or more hours (table 10). On average, DWI offenders on probation reported consuming 6 ounces of ethanol, and those in jail, 8.2 ounces.

Eight percent of DWI offenders on probation and 11% of those in jail reported drinking for 10 or more hours prior to their arrest. Of DWI offenders who drank for more than 10 hours prior to their arrest, those on probation on average consumed less ethanol than those in jail (11.0 ounces and 16.3 ounces, respectively).

Fifty-one percent of DWI offenders on probation and 43% of those in jail reported drinking for 3 hours or less before arrest. On average, these probationers drank the equivalent to 3.2 ounces of ethanol, and the jail inmates drank 3.3 ounces.

Average ethanol consumption, by hours spent drinking

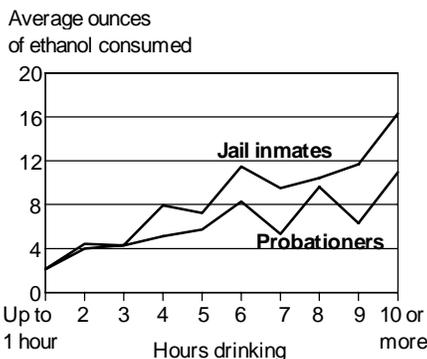


Table 11. Estimated BAC levels for DWI offenders on probation and jail inmates convicted for DWI, by selected characteristics

	BAC levels (g/dl)			
	Probationers		Jail inmates	
	Mean	Median	Mean	Median
Total	0.19	0.13	0.24	0.19
Gender				
Male	0.18	0.12	0.24	0.19
Female	0.22	0.20	0.30	0.25
Age				
20 or younger	0.13	0.13	0.25	0.21
21-24	0.23	0.17	0.26	0.24
25-29	0.18	0.11	0.26	0.22
30-34	0.20	0.14	0.25	0.19
35-39	0.19	0.12	0.27	0.21
40-44	0.18	0.11	0.17	0.11
45-49	0.18	0.15	0.18	0.12
50 or older	0.15	0.09	0.25	0.25
Number of priors				
0	0.18	0.12	0.24	0.19
1	0.19	0.18	0.24	0.14
2	0.20	0.15	0.22	0.18
3	0.24	0.12	0.24	0.16
4	0.19	0.14	0.25	0.25
5 or more	0.10	0.08	0.29	0.29
Beverage consumed prior to arrest				
Beer only	0.15	0.09	0.20	0.14
Liquor only	0.22	0.12	0.31	0.37
Beer and liquor	0.23	0.19	0.30	0.27
Other combination	0.21	0.19	0.26	0.19
Hours spent drinking				
1 hour or less	0.13	0.08	0.14	0.08
2-3	0.15	0.10	0.17	0.12
4-5	0.19	0.14	0.26	0.20
6-7	0.25	0.21	0.29	0.25
8-9	0.28	0.26	0.31	0.30
10 hours or more	0.28	0.22	0.36	0.45

Note: Only those inmates convicted of DWI reported amount consumed and hours drinking; therefore, BAC could only be calculated for convicted jail inmates.

BAC levels were higher among DWI offenders in jail than among those on probation

The National Highway Traffic Safety Administration has provided a formula that permits estimation of blood alcohol concentration (BAC). The formula incorporates estimates of ethanol consumption, the number of hours spent drinking, and the offender's gender and body weight. (See *Methodology* for further detail and underlying assumptions.)

The estimated average BAC for DWI offenders on probation was .19 grams of alcohol per deciliter of blood, while for convicted DWI offenders in jail it was .24 g/dl (table 11). Females had a slightly higher estimated average BAC than males among both probationers (.22 g/dl compared to .18 g/dl) and jail inmates (.30 g/dl compared to .24 g/dl). Estimated BAC levels were the highest

among probationers age 21-24 (.23 g/dl) and jail inmates age 35-39 (.27 g/dl). Except for offenders age 40-49, average BAC levels were higher for jail inmates than for probationers in every age group.

Among DWI offenders in jail, those who drank liquor (.31 g/dl) or a combination of beer and liquor (.30 g/dl) prior to their arrest had a higher mean BAC than those who drank only beer (.20 g/dl). Among probationers, those who drank beer and liquor prior to their arrest had a higher estimated average BAC than those drinking other combinations of alcohol or beer only (.23 g/dl, .21 g/dl, and .15 g/dl, respectively).

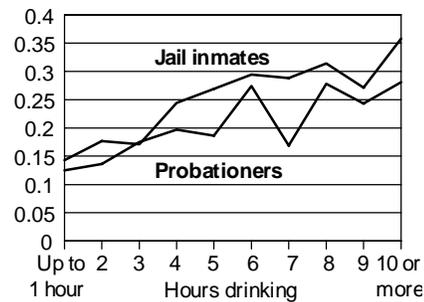
Table 12. Usual drinking behavior of DWI offenders on probation and jail inmates convicted of DWI, by amount of ethanol consumed prior to arrest

Frequency of usual drinking	Percent of DWI probationers, by amount of ethanol consumed prior to arrest					Percent of DWI- convicted jail inmates, by amount of ethanol consumed prior to arrest				
	All DWI probationers	.01-1.99 ounces	2-4.99 ounces	5-9.99 ounces	10 or more ounces	All DWI convicted jail inmates	.01-1.99 ounces	2-4.99 ounces	5-9.99 ounces	10 or more ounces
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Daily	30.6%	19.7%	25.8%	34.0%	48.2%	39.8%	21.4%	35.2%	42.1%	51.5%
At least once a week	50.8	53.3	54.0	50.9	45.1	43.9	59.0	39.0	49.1	39.1
Less than once a week	5.6	3.0	7.4	4.8	2.2	5.2	2.5	6.4	3.1	3.3
Once a month	6.5	12.8	6.4	5.5	0	8.5	7.8	16.9	2.9	5.7
Less than once a month	6.6	11.2	6.4	4.8	4.5	2.6	9.3	2.5	2.9	0.4

Note: Percents may not add to 100% because of rounding. Only jail inmates convicted of DWI reported frequency of drinking alcohol and amount of alcohol consumed prior to arrest.

BAC, by hours spent drinking

Blood alcohol concentration (g/dl)



Average BAC levels increased sharply with the number of hours spent drinking. Among DWI offenders who said they had been drinking for more than 3 hours, those in jail had consistently higher average BAC levels than those on probation. Of those drinking for at least 8 hours prior to their arrest, the estimated BAC levels were nearly 3 times the legal limit of .10 g/dl.

Nearly 1 in 3 DWI offenders on probation and 2 in 5 in jail reported drinking daily

About 31% of DWI offenders on probation and nearly 40% of those in jail reported drinking daily (table 12). Over half of probationers and 44% of jail inmates reported drinking at least once a week.

DWI offenders on probation or in jail who consumed more alcohol prior to their arrest reported a higher frequency of usual drinking. Of probationers who reported consuming less than 2 ounces of ethanol prior to arrest, 73% reported that they usually drank daily or at least once per week; of those in jail, 80%. Of those on probation or in jail who reported consuming 10 or more ounces of ethanol, 94% and 91%, respectively, reported usually drinking daily or at least once per week.

Over a third of DWI offenders on probation and nearly half in jail exhibited signs of past alcohol dependence

According to the CAGE diagnostic instrument, 37% of DWI offenders on probation and 47% of those in jail reported experiences which were consistent with a history of alcohol abuse or dependence (table 13). More DWI offenders on probation or in jail reported alcohol abuse or dependence than other offenders. Among other offenders, about 1 in 6 probationers and 1 in 4 jail inmates reported 3 or more signs of alcohol dependence.

Table 13. Signs of alcohol dependency as determined by the CAGE questionnaire among probationers and jail inmates

CAGE questions	Percent of probationers		Percent of jail inmates	
	DWI offenders	Other offenders	DWI offenders	Other offenders
Have felt you should cut down on your drinking	68.2%	38.7%	74.1%	46.7%
People have annoyed you by criticizing your drinking	38.8	21.2	47.6	28.9
Have felt bad or guilty about your drinking	56.5	29.6	60.9	35.0
Have had a drink first thing in the morning	23.8	16.4	37.7	27.4
3 or 4 yes responses*	37.4%	18.0%	46.6%	25.0%

Note: Percents do not add to 100% because the categories are not mutually exclusive
*Denotes history of alcohol abuse or dependence.

The CAGE questionnaire is a diagnostic instrument for detecting a person's history of alcohol abuse or dependence. CAGE is an acronym for the four questions used by the instrument — attempts to (C)ut back on drinking, (A)nnoyance at others' criticism of one's drinking, feelings of (G)uilt about drinking, and needing a drink first thing in the morning as an (E)ye opener to steady the nerves. The CAGE instrument determines a person's likelihood of alcohol abuse by the number of positive responses to these four questions.

In a clinical test involving hospital admissions, three or more positive CAGE responses carried a .99 predictive value for alcohol abuse or dependence. Data on predictive values were taken from "Screening for Alcohol Abuse Using the CAGE Questionnaire" by B. Bush and others, *The American Journal of Medicine*, Vol. 82, February 1987, pp. 231-35.

Across each category of the CAGE questionnaire, a higher percentage of DWI offenders on probation or in jail reported positive responses than did other offenders. DWI offenders on probation or in jail most commonly reported they felt they should cut down on their drinking (68% and 74%). Both less frequently reported needing to have a drink first thing in the morning (24% of probationers and 38% of jail inmates).

DWI offenders reported more alcohol-related troubles than other offenders

To determine experiences related to alcohol use, offenders were asked whether because of their drinking they had lost a job or had been arrested or held at a police station or whether while drinking they had been in a domestic dispute or had gotten into a physical fight. A substantial percentage of both probationers and jail inmates reported troubled behavior associated with alcohol use. DWI offenders on probation or in jail reported higher rates of involvement

in all four activities than did other offenders (table 14).

Among DWI offenders on probation or in jail, the most commonly reported experience associated with alcohol use was being arrested or held at a police station, reported by 77% of those on probation and 82% of those in jail. Over half of both probationers (55%) and jail inmates (66%) reported involvement in a domestic dispute while they were drinking. Nearly 10% of DWI offenders on probation and 23% in jail reported losing their job because of drinking.

DWI offenders who consumed greater amounts of ethanol reported more signs of alcohol dependence

As the amount of ethanol that DWI offenders reported consuming before arrest increased, so did their rates of involvement in alcohol-related experiences (table 15). Of DWI offenders who consumed less than 2 ounces of ethanol prior to arrest, 29% on probation and 38% in jail showed signs of alcohol dependence. Of those who consumed 10 or more ounces of ethanol prior to arrest, 73% of probationers and 60% of jail

Table 14. Experiences while under the influence of alcohol, by offenders on probation and in local jails

Alcohol-related experiences	Percent of probationers		Percent of jail inmates	
	DWI offenders	Other offenders	DWI offenders	Other offenders
Argued with family, friends, spouse, or boyfriend/girlfriend while drinking	55.0%	38.1%	65.7%	46.4%
Lost a job because of drinking	9.6	7.6	22.8	12.3
Arrested or held at a police station because of drinking	77.3	26.0	82.3	32.7
In a physical fight while drinking	33.9	29.0	49.9	41.0

Note: Percents will not add to 100% because the specified categories are not mutually exclusive.

Table 15. Alcohol dependence and related experiences, by the amount of alcohol that DWI offenders on probation and in local jails consumed prior to arrest

Ounces of ethanol consumed	Percent of DWI probationers by the amount of ethanol consumed					Percent of DWI jail inmates by the amount of ethanol consumed				
	.01-1.99 ounces	2-4.99 ounces	5-6.99 ounces	7-9.99 ounces	10 or more ounces	.01-1.99 ounces	2-4.99 ounces	5-6.99 ounces	7-9.99 ounces	10 or more ounces
Signs of alcohol dependence										
Have felt you should cut down on your drinking	57.0%	63.8%	68.3%	78.1%	91.8%	65.3%	68.2%	62.3%	84.5%	88.8%
People have annoyed you by criticizing your drinking	30.2	29.4	43.0	41.1	76.3	42.5	38.7	35.2	51.1	60.4
Have felt bad or guilty about drinking	43.4	54.0	63.7	62.0	75.0	47.7	51.0	54.7	65.3	77.2
Have had a drink first thing in the morning	12.1	12.4	30.3	27.1	60.3	28.1	29.7	18.6	32.1	61.8
3 or 4 yes responses*	28.5%	25.3%	51.7%	42.6%	73.0%	37.9%	40.7%	32.7%	46.2%	60.4%
Alcohol-related experiences										
Argued with family, friends, spouse, or boyfriend/girlfriend while drinking or right after drinking	38.3%	56.0%	52.5%	53.6%	79.7%	49.8%	51.1%	60.5%	83.3%	86.7%
Lost a job because of drinking	2.5	8.9	8.7	3.9	25.8	4.9	14.9	14.5	28.4	38.9
Arrested or held at a police station because of your drinking	65.9	76.7	85.8	76.0	90.3	69.9	77.8	82.8	88.1	91.9
In a physical fight while drinking	21.8	29.7	29.6	36.0	64.7	34.9	35.7	44.0	78.2	65.4

Note: Columns will not add to 100% because specific categories are not mutually exclusive.

*Denotes history of alcohol abuse or dependence.

inmates showed signs of alcohol dependence.

DWI offenders on probation or in jail reported more individual signs of alcohol dependence as the amount of ethanol consumed prior to arrest increased. Regardless of the amount of ethanol consumed, DWI offenders on probation or in jail most commonly reported they felt they should cut down on their drinking.

High levels of past drug use reported by DWI offenders

Over three-quarters of DWI offenders in jail and two-thirds of those on probation also reported using drugs in the past (table 16). Among DWI probationers, marijuana (65%) and stimulants (29%) were the most commonly used drugs, followed by cocaine-based drugs including crack (28%), hallucinogens (20%), depressants (15%), and opiates including heroin (6%). Among jail inmates held for DWI, marijuana (73%) and cocaine-based drugs including crack (41%) were the most commonly used followed by stimulants (36%), hallucinogens (33%), depressants (28%), and opiates including heroin (19%).

Thirty percent of those in jail and 17% of those on probation reported drug use in the month prior to arrest. More DWI offenders in jail (10%) than on probation (3%) reported using drugs at the time of offense. Although jail inmates more commonly reported past use, use in the past month, and use at the time of arrest, more probationers (56%) reported being a regular user of drugs than did jail inmates (48%).

In addition to being asked questions regarding alcohol-related experiences, offenders were also asked about experiences related to drug use. DWI offenders on probation or in jail reported lower rates of troubled behaviors than did other offenders across the four drug-related experiences considered (table 17).

Table 16. Prior drug use reported by probationers and jail inmates

Level of prior drug use	Percent of probationers		Percent of jail inmates	
	DWI offenders	Other offenders	DWI offenders	Other offenders
Ever used drugs ^a	67.9%	69.9%	76.5%	83.2%
Marijuana/hashish	64.6	67.2	72.7	78.9
Cocaine/crack	28.1	31.7	40.6	51.4
Heroin/opiates	5.7	8.8	18.9	24.5
Depressants ^b	14.6	15.6	27.6	30.2
Stimulants ^c	28.5	24.4	35.5	33.7
Hallucinogens ^d	19.9	19.6	33.2	32.2
Ever used drugs regularly ^e	55.6%	64.2%	47.6%	65.9%
Used drugs in month before arrest	16.6%	35.7%	30.2%	51.2%
Used drugs at time of arrest	3.3%	16.1%	9.5%	34.1%

^aOther unspecified drugs are included in the totals.

^bIncludes barbiturates, tranquilizers, and Quaalude.

^cIncludes amphetamine and methamphetamine.

^dIncludes LSD and PCP.

^eUsed drugs at least once a week for at least a month.

Table 17. Experiences while under the influence of drugs among probationers and local jail inmates

	Percent of probationers		Percent of jail inmates	
	DWI offenders	Other offenders	DWI offenders	Other offenders
Argued with family, friends, spouse, or boyfriend/girlfriend while under the influence of drugs	19.4%	27.1%	24.9%	40.7%
Lost a job because of drug use	2.6	7.7	10.2	17.6
Arrested or held at a police station because of drug use	11.2	19.1	18.6	28.5
In a physical fight while under the influence of drugs	8.1	14.7	14.7	28.7

Note: Percents will not add to 100% because the specified categories are not mutually exclusive.

Among DWI offenders, the most commonly reported experience associated with drug use was domestic disputes: 19% of probationers and 25% of jail inmates said they had arguments with their family, friends, spouse, or boyfriend/girlfriend while under the influence of drugs. Nearly 1 in 5 of those in jail for DWI and about 1 in 10 of those on probation had been arrested or held in a police station as a result of their drug use. About 10% of DWI offenders in jail and 3% on probation had lost a job because of their drug use, and about 15% of those in jail and 8% of those on probation said they had been in a physical fight while under the influence of drugs.

About two-thirds of DWI probationers and jail inmates had ever received any alcohol/drug treatment

Nearly two-thirds of DWI offenders on probation and over half of those in jail reported ever attending alcohol or drug abuse treatment, such as time spent in a residential facility, professional counseling, detoxification, or use of a maintenance drug (table 18). Since admission, nearly half (46%) of probationers and 4% of jail inmates reported receiving these types of alcohol treatment; 8% and 2%, respectively, reported receiving drug abuse treatment.

About 71% of DWI offenders on probation and 67% of those in jail reported past participation in an alcohol or drug abuse program, such as self-help groups, peer counseling, and education/awareness

Table 18. Alcohol and drug treatment of DWI offenders on probation and in local jails

Type of treatment or program	Percent of DWI offenders	
	Probationers	Jail inmates
Ever in any alcohol/drug program or treatment	72.4%	78.1%
Ever any alcohol/drug treatment ^a	61.2%	55.2%
Since sentence began —		
Alcohol treatment	46.4	4.2
Drug treatment	8.2	1.6
Ever any alcohol/drug program ^b	70.8%	66.7%
Since sentence began —		
Alcohol program	61.7	17.3
Drug program	6.6	5.0

^aTreatment includes residential facilities, professional counseling, detoxification, or use of maintenance drugs.

^bPrograms include self-help groups, peer counseling, and education/awareness programs.

programs. Sixty-two percent of probationers and 17% of jail inmates reported participation in an alcohol program since their sentencing; 7% and 5%, respectively, reported being in drug treatment.

Overall, about three-quarters of DWI offenders on probation (72%) or in jail (78%) had taken part in either substance abuse treatment or other alcohol and drug programs in the past.

DWI offenders who exhibited the greatest need more frequently reported receiving treatment

Over three-quarters of DWI offenders on probation and nearly a quarter of those in jail who were alcohol dependent reported participating in alcohol treatment or programs. If they answered yes to fewer than three CAGE queries, 65% of the DWI offenders on probation and 15% of those in jail participated in alcohol treatment or programs.

DWI offenders with prior DWI offenses reported higher rates of participation in alcohol treatment and programs than did those with no prior DWI offense. Among DWI offenders on probation with prior DWI offenses, those who reported five or more had a higher rate of participation in alcohol treatment and programs than did those who reported one to two prior DWI offenses (100% and 82%, respectively). Of DWI offenders in jail with prior DWI offenses, between 21% and 25% reported that they had participated in alcohol treatment or programs.

Among DWI offenders with no prior history of DWI offenses, 67% of probationers and 11% of jail inmates had received treatment while under sentence.

	Percent of DWI offenders in alcohol treatment or program since sentence began	
	Probationers	Jail inmates
CAGE responses		
Fewer than 3	65.0%	14.9%
3 or more	83.6	21.3
Number of prior DWI sentences		
0	66.9%	10.6%
1-2	81.9	21.0
3-4	74.0	24.2
5 or more	100.0	22.2

Since their sentence began, over 40% of DWI offenders on probation who reported using drugs at the time of their offense had participated in drug treatment or programs: 13% of those who reported

prior drug use, and 22% of those who were regular drug users. Of DWI offenders in jail who reported using drugs at the time of their offense, 25% reported some type of drug treatment since their admission, as did 7% of those who reported any prior drug use and 9% of those who were regular users.

Drug use	Percent of DWI offenders in drug treatment or program since sentence began	
	Probationers	Jail inmates
Ever used	13.2%	7.1%
Ever used regularly*	22.1	9.0
Used at time of offense	43.3	25.4

*Used drugs at least once per week for at least a month.

About 1 in 7 DWI offenders on probation and 1 in 5 in jail reported ever receiving mental health treatment

Overall, a smaller proportion of DWI offenders than other offenders received mental health treatment. Fifteen percent of DWI offenders on probation and 20% of those in jail reported ever receiving mental health treatment, compared to 23% of other, non-DWI offenders on probation and 26% of those in jail (table 19). About 9% of other offenders on probation and 11% of those in jail reported receiving treatment since their sentence began; among DWI offenders, 4% of those on probation and 10% of those in jail had received treatment since their sentence began.

Table 19. Mental health treatment received by offenders on probation and in local jails

Mental health treatment	Percent of probationers		Percent of jail inmates	
	DWI offenders	Other offenders	DWI offenders	Other offenders
Ever received any mental health treatment	15.0%	22.9%	20.4%	25.5%
Received mental health treatment since sentence began	3.9	8.8	10.1	11.3
Took prescribed medication				
Ever	8.0	12.7	13.6	17.6
Since sentence began	3.6	7.2	8.4	9.1
Admitted to a mental hospital				
Ever	4.8	9.1	8.9	10.2
Since sentence began	0.5	2.3	1.3	1.4
Received individual/group counseling				
Ever	14.1	20.9	12.2	19.0
Since sentence began	4.2	11.8	2.4	4.6
Received other mental health services				
Ever	1.6	3.5	1.8	3.0
Since sentence began	0.4	2.1	0.1	0.5

The most commonly reported mental health treatment received by DWI offenders on probation was individual or group counseling (14% ever receiving it and 4% since their sentence began). Among DWI offenders in jail, the most common mental health treatment reported was the use of prescription medication (14% ever having taken medication and 8% since their sentence began).

Methodology

Data sources

Data in this report are based on personal interviews with probationers, jail inmates, and State prison inmates. In three BJS surveys, the 1995 Survey of Adults on Probation (SAP), the 1996 Survey of Inmates in Local Jails, and the 1997

Survey of Inmates in State Correctional Facilities, offenders were randomly selected from a nationally representative sample of agencies or facilities and were asked questions regarding their current offense and sentence, criminal history, personal and family background, alcohol and drug use and treatment, and mental health treatment.

Detailed descriptions of the methodology and sample design of each survey can be found in the following: *Substance Abuse and Treatment of Adults on Probation, 1995* (NCJ 166611); *Profile of Jail Inmates, 1996* (NCJ 164629); and *Substance Abuse and Treatment of State and Federal Prisoners, 1997* (NCJ 172871).

Accuracy of the estimates

The accuracy of the estimates presented in this report depends on two types of error: sampling and nonsampling. Sampling error is the variation that may occur by chance because a sample rather than a complete numeration of the population was conducted. Nonsampling error can be attributed to many sources, such as nonresponses, differences in the interpretation of questions among inmates, recall difficulties, and processing errors. In any survey the full extent of the nonsampling error is never known.

The sampling error, as measured by an estimated standard error, varies by the size of the estimate and the size of the base population. Estimates of the standard errors for selected characteristics have been calculated for the 1995 probation survey, the 1996 survey of jail inmates, and the 1997 survey of state prisoners (see appendix tables). These standard errors may be used to construct confidence intervals around percentages. For example, the 95% confidence interval around the percentage of probationers who were first-time offenders is approximately 62.7% plus or minus 1.96 times 2.58% (or 57.6% to 67.8%).

Key survey items on alcohol use at time of arrest

Had you been drinking alcohol at the time of the offense?
1 Yes 2 No

About how many hours had you been drinking?
Enter hours ____

In the hours you spent drinking prior to your arrest did you drink any beer?
1 Yes 2 No

What was the total amount of beer that you drank?

<input type="checkbox"/> 8-ounce glasses	<input type="checkbox"/> 40-ounce bottles
<input type="checkbox"/> 12-ounce glasses	<input type="checkbox"/> Pitchers
<input type="checkbox"/> 16-ounce glasses	<input type="checkbox"/> Six-packs (7-8 ounces)
<input type="checkbox"/> Quarts	<input type="checkbox"/> Six-packs (12 ounces)

In the hours you spent drinking prior to your arrest did you drink any wine?
1 Yes 2 No

What was the total number of glasses or bottles of wine or wine coolers that you drank?

<input type="checkbox"/> 6-ounce glasses	<input type="checkbox"/> Carafes (1 liter)
<input type="checkbox"/> 8-ounce glasses	<input type="checkbox"/> Magnums (50 ounces)
<input type="checkbox"/> 12-ounce glasses	<input type="checkbox"/> ½ gallons (63 ounces)
<input type="checkbox"/> 16-ounce glasses	<input type="checkbox"/> 3-liter bottles
<input type="checkbox"/> Wine bottles (25 ounces)	<input type="checkbox"/> Gallons (4 liters)

In the hours you spent drinking prior to your arrest did you drink any liquor?
1 Yes 2 No

What was the total amount of liquor that you drank?

<input type="checkbox"/> Ounces (shots)	<input type="checkbox"/> Fifths
<input type="checkbox"/> ½ pints	<input type="checkbox"/> Quarts or liters
<input type="checkbox"/> Pints	<input type="checkbox"/> ½ gallons

Figure 3

These standard errors may also be used to test the statistical significance of the difference between two sample statistics by pooling the standard errors of the two sample estimates. For example, the standard error of the difference between probationers and jail inmates who were first-time offenders would be 3.61% (or the square root of the sum of the squared standard errors for each group). The 95% confidence interval around the difference would be 1.96 times 3.61% (or 7.08%). Since the difference of 30.2% (62.7% minus 32.5%) is greater than 7.08%, the difference would be considered statistically significant.

Estimating the number of DWI offenders under correctional supervision

Estimates of the number of DWI offenders on probation were calculated from the

counts from the Annual Probation Survey, 1986, 1990, and 1997. The total number of DWI offenders was estimated from the annual surveys. The percentage of known DWI offenders was multiplied by the total probation population for each given year.

Estimates of the number of DWI offenders in local jail were calculated by multiplying the ratio of the number of DWI offenders to the total inmate population from the Survey of Inmates in Local Jails, 1983, 1989, and 1996, times the total jail population from the 1986, 1990, and 1997 Annual Survey of Jails.

Estimates of the number of DWI offenders in State prison were calculated by multiplying the 1986, 1991, and 1997 ratio of the number of DWI offenders in State prisons to the total population times

the 1986, 1991, and 1997 yearend custody counts reported in the National Prisoner Statistics.

Measuring sentence length

The average sentence lengths calculated for both probationers and jail inmates may be overestimates. Sentence length for probationers was calculated for persons currently on probation. Persons who entered probation with shorter sentences left probation more quickly, resulting in a longer average sentence length among persons remaining to be sampled for the SAP.

For jail inmates, sentence length was calculated for the population held in jail at the time of the survey. Because data on sentence length is restricted to persons in jail, they may overstate the average sentence to be served by those entering jail during a specified time period (an admission cohort). Persons with shorter sentences leave jail more quickly, so that the average sentence of a population in custody emphasizes those who stay longer.

Estimating ounces of ethanol consumed

Detailed data from probationers and jail inmates were collected on the quantity of beer, wine, and liquor consumed prior to their arrest. The reported amount of alcohol consumed was converted into ounces to estimate the ounces of ethanol consumed. One ounce of ethanol is equivalent to the following: 24 ounces of beer (4% alcohol content), 7 ounces of wine (14% alcohol content), or 2 ounces of liquor (100 proof or 50% alcohol content). To determine the amount of ethanol in a six-pack of 12-ounce beers, 6 is multiplied by 12 and then divided by 24, equating to 3 ounces of ethanol.

Conversions are approximations since some beer, wine, or liquor may have a different alcohol content. Mixed drinks were assumed to contain 1.5 ounces of liquor.

Appendix table 1. Standard errors of selected characteristics of DWI offenders on probation, in local jails, and in State prisons

Selected characteristics	Standard errors for estimated percentages		
	Probationers	Jail inmates	State prisoners
Gender			
Male	1.98%	1.02%	2.04%
Female	2.10	1.02	1.03
Age			
20 or younger	0.69%	0.59%	0.60%
21-24	1.59	1.55	1.52
25-29	1.93	1.98	2.66
30-34	2.12	2.18	3.66
35-39	2.06	2.61	3.74
40-44	1.84	1.96	2.95
45-49	1.29	1.39	2.46
50 or older	1.88	1.58	2.73
Race/Hispanic origin			
White*	2.35%	3.15%	4.43%
Black*	1.73	1.79	3.11
Hispanic	1.56	2.65	3.80
Other	1.17	1.07	1.86
Prior sentences			
First time offender	2.58%	2.53%	2.98%
DWI priors only	2.07	2.08	3.35
Other offense priors only	1.06	1.45	3.63
DWI and other priors	1.89	2.77	4.21
Prior DWI sentences			
None	2.52%	2.63%	4.14%
1	2.08	1.95	3.90
2	1.27	1.93	3.03
3	1.22	2.23	2.20
4	0.56	1.44	1.67
5 or more	0.69	2.12	2.01
Criminal justice status			
No status	1.69%	2.78%	4.24%
Probation/parole	1.50	2.87	4.26
Bail/pretrial release	0.87	1.40	--
Other type of release	0.00	0.60	1.20

*Excludes Hispanics

Appendix table 2. Standard errors of alcohol/drug use and treatment of DWI offenders on probation and in local jails

Alcohol/drug use and treatment	Standard errors for estimated percentages	
	Probationers	Jail inmates
Ounces of ethanol consumed		
.01-1.99 oz	2.23%	2.13%
2-4.99	2.72	3.07
5-6.99	1.96	2.88
7-9.99	1.65	2.04
10-14.99	1.29	2.47
15 oz or more	1.42	2.21
Hours spent drinking		
1 hour or less	1.84%	2.34%
2-3	2.63	2.63
4-5	2.27	2.78
6-7	1.71	2.11
8-9	1.40	1.66
10-11	0.74	1.27
12 hours or more	1.30	1.61
Signs of alcohol dependence		
Have felt you should cut down on your drinking	2.50%	2.55%
People have annoyed you by criticizing your drinking	2.63	2.82
Have felt bad or guilty about your drinking	2.66	3.14
Have had a drink first thing in the morning	2.29	3.02
3 or 4 yes responses*	2.58%	2.90%
Prior drug use		
Ever used	2.51%	2.39%
Ever used regularly	3.24	2.83
Used in month before arrest	2.00	2.74
Used at time of arrest	0.96	1.83
Alcohol/drug treatment or program		
Ever any alcohol/drug treatment	2.60%	3.31%
Ever any alcohol/drug program	2.43	2.72
Mental health treatment		
Ever received	1.91%	2.28%
Received since sentence began	1.04	1.75

*Denotes history of alcohol abuse or dependence

For further reading about DWI offenders and offenders' use of alcohol

Alcohol and Crime. BJS report, NCJ 168632, April 1998.

Alcohol Highway Safety, Problem Update. National Highway Traffic Safety Administration, April 1998.

Drunk Driving: 1989 Survey of Inmates in Local Jails. BJS Special Report, NCJ 134728, September 1992.

Drunk Driving. BJS Special Report, NCJ 109945, February 1988.

Jacobs, James B. *Drunk Driving: An American Dilemma.* Chicago and London: The University of Chicago Press, 1989.

ethanol ingested, and the time elapsed between drinking and testing. Several assumptions underlie the estimations made of blood alcohol concentration.

First, the average weight of the male and female DWI offenders was the body weight used in the calculation. Second, an average rate of metabolism was assumed for the jail inmates equivalent to the general population, though such differences exist in physiology and alcohol tolerance. Third, the rate of alcohol consumption was assumed to be stable over the drinking session prior to arrest. If, for example, 6 ounces of ethanol were consumed during a 4-hour drinking session, the formula assumes that 1.5 ounces of ethanol were consumed per hour. And, lower and upper BAC limits were set. Persons under correctional supervision for a DWI offense presumably at the time of their arrest had a BAC of .08 g/dl; therefore, any BAC falling below that level was recoded to .08 g/dl. Likewise, an upper BAC limit was set. When BAC levels increase to .50 g/dl or more, it is likely that breathing will stop and many will die. Therefore, all BAC levels higher than .50 g/dl were recoded to .51 g/dl.

Calculating BAC levels

$$BAC(h) = [(A/(r \times p)) / 10] - (h \times K)$$

The National Highway Traffic Safety Administration has provided a formula that permits an estimate of blood alcohol concentration (BAC) to be made based on the self-reported drinking behavior of the offender immediately preceding the commission of the offense. The formula requires the collection of data from offenders about the type of alcoholic beverage consumed, the alcohol content of the beverage, the quantity consumed, the amount of time spent drinking, the drinker's gender, and the body weight of the offender.

BAC(h) = Blood alcohol concentration at time h
 A = grams of ethanol consumed which is equal to:
 [(ounces of ethanol) x (.82)] / .035
 r = reduced body mass (.68 for males and .55 for females)
 p = weight in kilograms, which is equal to: weight in lbs./2.2046
 h = hours drinking
 K = estimated rate at which the body metabolizes ethanol (.015 ounces per hour)

The BAC may be affected by numerous factors, including physiological differences, food consumption, the amount of

The Bureau of Justice Statistics is the statistical agency of the U.S. Department of Justice. Jan M. Chaiken, Ph.D., is director.

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This report and others from the Bureau of Justice Statistics are available through the Internet —

<http://www.ojp.usdoj.gov/bjs/>

The data from the 1997 Surveys of Inmates in State and Federal Correctional Facilities, the 1995 Survey of Adults on Probation, and the 1996 Survey of Inmates in Local Jails are available from the National Archive of Criminal Justice Data, maintained by the Institute for Social Research at the University of Michigan, 1-800-999-0960. The archive may also be accessed through the BJS Internet site.