

**Substance Abuse and Mental Health Services Administration
(SAMHSA)
STATISTICS SOURCE BOOK, 1998**

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GUIDE

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Note: All blank pages containing graphics still under construction have been removed from this version.

PREVALENCE OF PAST-YEAR ALCOHOL, DRUG ABUSE, AND MENTAL DISORDERS

- ! About 52 million people age 15 to 54 have had some type of alcohol, drug abuse, or mental health (ADM) disorder in the past year.
- ! About 8 million people have had both a mental disorder and substance abuse/ dependence in the past year.
- ! Overall, 30 percent of persons, age 15 to 54, have had at least one alcohol, drug abuse or mental disorder with varying severity in the past year.

Persons With Alcohol, Drug Abuse, or Mental Disorder in the Past Year U.S. Population, Age 15 to 54, 1991

Alcohol, Drug Abuse and Mental Health (ADM) Disorder	Number with Disorder (millions)	Percent with Disorder
Any ADM Disorder	52	29.5%
Any Mental Disorder	40	22.9
Any Substance Abuse/ Dependence	20	11.3
Co-existing Mental Disorder and Substance Abuse/Dependence	8	4.7

Source: Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Dendler KS. 1994. "Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States." *Archives of General Psychiatry* 51:8-19, Table 2, and unpublished data from the survey. These estimates are from the National Comorbidity Survey (NCS). The survey was based on interviews administered to a probability sample of the noninstitutionalized U.S. civilian population. The NCS sample consisted of 8,098 respondents, age 15 to 54 years. This survey was conducted from September 1990 to February 1992. DSM-III-R criteria were used as the basis for assessing disorders in the general population. A random sample of initial nonrespondents was contacted further and received a financial incentive to participate. A nonresponse weight was used to adjust for the higher rates of ADM disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation. The "substance abuse/dependence" category includes drugs and alcohol. "Any ADM disorder" includes the following: affective, anxiety, substance abuse/dependence, nonaffective psychosis, and antisocial personality disorders.

**PREVALENCE OF SUBSTANCE ABUSE/DEPENDENCE AND
MOST COMMON MENTAL DISORDERS**

- ! In 1991, 27 percent of persons age 15 to 54 had a substance abuse/dependence disorder in their lifetimes; 25 percent, an anxiety disorder; and 19 percent, an affective disorder.
- ! Eleven percent of persons age 15 to 54 had a past-year substance abuse/dependence disorder.
- ! Among persons age 15 to 54, 17 percent had an anxiety disorder and 11 percent had an affective disorder during the past year.

**Lifetime and Past-Year Substance Abuse/Dependence and Mental Disorders
U.S. Population, Age 15 to 54, 1991**

<u>ADM Disorder</u>	<u>Lifetime</u>	<u>Past Year</u>
Substance abuse/dependence	26.6%	11.3%
Anxiety disorder	24.9	17.2
Affective disorder	19.3	11.3

Source: Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Dendler KS. 1994. "Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States." *Archives of General Psychiatry* 51:8-19, Table 2, and unpublished data from the survey. These estimates are from the National Comorbidity Survey (NCS). The survey was based on interviews administered to a probability sample of the noninstitutionalized U.S. civilian population. The NCS sample consisted of 8,098 respondents, age 15 to 54 years. This survey was conducted from September 1990 to February 1992. DSM-III-R criteria were used as the basis for assessing disorders in the general population. A random sample of initial nonrespondents was contacted further and received a financial incentive to participate. A nonresponse weight was used to adjust for the higher rates of ADM disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation. The "substance abuse/dependence" category includes drugs and alcohol. Affective disorders include major depressive episode, manic episode, and dysthymia. Anxiety disorders include panic disorder, agoraphobia, social phobia, simple phobia, and generalized anxiety disorder.

ALCOHOL, DRUG ABUSE, AND MENTAL DISORDERS BY GENDER

- ! In 1991, among persons age 15 to 54, males were more likely than females to have lifetime and past-year substance abuse and dependence disorders.
- ! In 1991, among persons age 15 to 54, antisocial personality disorder was more common among males than females.
- ! In 1991, females age 15 to 54 were more likely to suffer from lifetime and past-year affective and anxiety disorders than males in this age group.

**Lifetime and Past-Year ADM Disorders by Gender, 1991
U.S. Population, Age 15 to 54**

ADM Disorder	Lifetime		Past Year	
	Males	Females	Males	Females
Substance abuse/dependence ^a	35.4%	17.9%	16.1%	6.6%
Anxiety disorder ^b	19.2	30.5	11.8	22.6
Affective disorder ^c	14.7	23.9	8.5	14.1
Antisocial personality ^d	5.8	1.2	-	-
Nonaffective psychosis ^e	0.6	0.8	0.5	0.6

^a Substance abuse/dependence includes both abuse of and dependence on alcohol and other drugs.

^b Anxiety disorders include panic disorder, agoraphobia, social phobia, simple phobia, and generalized anxiety disorder.

^c Affective disorders include major depressive episode, manic episode, and dysthymia.

^d Assessed only on a lifetime basis.

^e Nonaffective psychoses include schizophrenias, delusional disorder, and atypical psychoses.

Source: Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Dendler KS. 1994. "Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States." *Archives of General Psychiatry* 51:8-19, and unpublished data from the survey. These estimates are from the National Comorbidity Survey (NCS). The survey was based on interviews administered to a probability sample of the noninstitutionalized U.S. civilian population. The NCS sample consisted of 8,098 respondents, age 15 to 54 years. DSM-III-R criteria were used as the basis for assessing disorders in the general population. A nonresponse weight was used to adjust for the higher rates of ADM disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation.

MENTAL SYNDROME AND SUBSTANCE USE

- ! In 1996, a higher prevalence of substance use was present among persons with major depressive episode, generalized anxiety disorder, and panic attack than in the general population.
- ! In 1996, of the four major mental syndromes, the prevalence of cigarette use was highest among those diagnosed with generalized anxiety disorder.
- ! Of those who experienced one of the mental syndromes, those diagnosed with major depressive episode and generalized anxiety disorder had the highest prevalence of heavy alcohol use.

Past-Year Substance Use by Mental Syndrome U.S. Population, Age 18 and Older, 1996

Substance*	Total adult population	Major depressive episode	Generalized anxiety disorder	Agora-phobia	Panic attack
Cigarettes	33.2%	50.4%	55.5%	47.0%	49.2%
Alcohol (heavy use)	18.9	23.6	23.0	14.3	20.1
Any illicit drug	10.1	20.6	14.4	15.7	19.9
Marijuana	8.1	16.2	11.0	10.1	15.1
Psychotherapeutics	2.9	7.8	4.9	7.7	8.6
Cocaine	1.9	5.0	4.4	2.0	4.0

*Heavy alcohol use is defined as being “drunk” or “very high” on three or more days in the past year. Psychotherapeutics includes the nonmedical use of any prescription-type stimulant, sedative, tranquilizer, or analgesic; does not include over-the-counter drugs.

Source: SAMHSA, Office of Applied Studies. 1997. Unpublished data from the 1996 National Household Survey on Drug Abuse. The 1996 survey employed a multistage area probability sample of 18,269 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1996. The survey incorporated an over-sampling of Blacks, Hispanics, and young people. It also included a module of questions asking adults about their mental health status during the past year. The adult mental health screening scale developed by the Institute for Social Research at the University of Michigan was used to estimate the presence of four clinical mental syndromes defined in the DSM-III-R (Revised Third Edition) published by the American Psychiatric Association (1987).

LIFETIME ALCOHOL, DRUG ABUSE, AND MENTAL DISORDER

- ! Of all persons with any alcohol, drug abuse, or mental (ADM) disorder during their lifetimes, 56 percent will have two or more of these disorders.
- ! Of persons age 15 to 24, 27 percent met DSM-III-R criteria for two or more lifetime ADM disorders.
- ! About 25 million, or 14 percent, of people have had three or more ADM disorders; these persons were the most likely to be severely impaired and to require hospitalization.

Prevalence and Comorbidity of Lifetime ADM Disorders, 1991 U.S. Population, Age 15 to 54

Number of ADM Disorders	Number (in millions)	Percent
Total	176.0	100
None	91.5	52
Any	84.5	48
<i>One</i>	37.0	21
<i>Two</i>	22.9	13
<i>Three or more</i>	24.6	14

Source: Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Dendler KS. 1994. "Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States." *Archives of General Psychiatry* 51:8-19, Table 3, and unpublished data from the survey. These estimates are from the National Comorbidity Survey (NCS). The survey was based on interviews administered to a probability sample of the noninstitutionalized U.S. civilian population. The NCS sample consisted of 8,098 respondents, age 15 to 54 years. This survey was conducted from September 1990 to February 1992. DSM-III-R criteria were used as the basis for assessing disorders in the general population. A random sample of initial nonrespondents was contacted further and received a financial incentive to participate. A nonresponse weight was used to adjust for the higher rates of ADM disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation.

CO-EXISTING MENTAL AND SUBSTANCE ABUSE DISORDERS

- ! About 14 percent of the population age 15 to 54 years has had both substance abuse and a mental disorder in their lifetimes.
- ! About 5 percent of the population experienced both types of disorders during the past year.
- ! About 21 percent of the population has had a mental disorder with no co-existing substance abuse disorder during their lifetimes.
- ! About 13 percent of the population with a substance abuse disorder had no co-existing mental disorder during their lifetimes.

Lifetime and Past-Year Substance Abuse* and Mental Disorders, 1991 U.S. Population, Age 15 to 54

Type of Disorder	Lifetime	During the Year
Any substance abuse or mental disorder	48.0%	29.5%
Only substance abuse	12.9	6.6
Only mental disorder	21.4	18.2
Both substance abuse and mental disorder	13.7	4.7

* Substance abuse includes both abuse of/dependence on alcohol and other drugs.

Source: Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Dendler KS. 1994. "Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States." *Archives of General Psychiatry* 51:8-19, Table 2. These estimates are from the National Comorbidity Survey (NCS). The survey was based on interviews administered to a probability sample of the noninstitutionalized U.S. civilian population. The NCS sample consisted of 8,098 respondents, age 15 to 54 years. DSM-III-R criteria were used as the basis for assessing disorders in the general population. A nonresponse weight was used to adjust for the higher rates of ADM disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation.

CO-EXISTING SUBSTANCE ABUSE AND MENTAL DISORDERS

- ! About 35 percent of the population age 15 to 54 years have had mental disorders in their lifetime.
- ! Of those with a mental disorder during their lifetimes, 39 percent also have a substance abuse disorder.
- ! Of those with mental disorder during the year, 21 percent also have a substance abuse disorder.

Mental Disorder With and Without Substance Abuse,* 1991 U.S. Population, Age 15 to 54

Type of Disorder	General Population		Persons with Mental Disorder	
	Lifetime	During the Year	Lifetime	During the Year
Any mental disorder**	35.1%	22.9%	--	--
Only mental disorder	21.4	18.2	61%	79%
Both substance abuse and mental disorder	13.7	4.7	39	21

* Substance abuse includes both abuse of and dependence on alcohol and other drugs.

** Does not include persons with only substance abuse.

Source: Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Dendler KS. 1994. "Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States." *Archives of General Psychiatry* 51:8-19, unpublished data from the survey. These estimates are from the National Comorbidity Survey (NCS). The survey was based on interviews administered to a probability sample of the noninstitutionalized U.S. civilian population. The NCS sample consisted of 8,098 respondents, age 15 to 54 years. DSM-III-R criteria were used as the basis for assessing disorders in the general population. A nonresponse weight was used to adjust for the higher rates of alcohol, drug abuse, and mental disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation. The survey included the following categories of disorders: affective, anxiety, substance abuse and dependence, nonaffective psychosis, and antisocial personality.

CO-EXISTING SUBSTANCE ABUSE AND MENTAL DISORDERS

- ! About 27 percent of the population age 15 to 54 years have a substance abuse disorder in their lifetimes.
- ! Of those with a substance abuse disorder during their lifetimes, 52 percent also have had a mental disorder.
- ! Of those with a substance abuse disorder during the year, 42 percent also have had a mental disorder.

Substance Abuse* With and Without Mental Disorder U.S. Population, Age 15 to 54, 1991

Type of Disorder	General Population		Persons with Substance Abuse Disorder	
	Lifetime	During the Year	Lifetime	During the Year
Any substance abuse disorder	26.6%	11.3%	--	--
Only substance abuse disorder	12.9	6.6	48%	58%
Both substance abuse and mental disorder	13.7	4.7	52	42

* Substance abuse includes both abuse of and dependence on alcohol and other drugs.

Source: Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Dendler KS. 1994. "Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States." *Archives of General Psychiatry* 51:8-19, unpublished data from the survey. These estimates are from the National Comorbidity Survey (NCS). The survey was based on interviews administered to a probability sample of the noninstitutionalized U.S. civilian population. The NCS sample consisted of 8,098 respondents, age 15 to 54 years. DSM-III-R criteria were used as the basis for assessing disorders in the general population. A nonresponse weight was used to adjust for the higher rates of alcohol, drug abuse, and mental disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation. The survey included the following categories of disorders: affective, anxiety, substance abuse and dependence, nonaffective psychosis, and antisocial personality.

CO-EXISTING SUBSTANCE ABUSE AND MENTAL DISORDERS BY AGE

- ! About 14 percent of the U.S. population age 15 and 54 years will have co-existing mental and substance abuse disorders during their lifetimes.
- ! About 2 percent of the population age 45 to 54 years had co-existing substance abuse and mental disorders during the year.
- ! About 6 percent of the population age 15 to 24 years experienced co-existing substance abuse and mental disorders during the year.
- ! During their lifetimes, about 10 percent of the population age 45 to 54 years have had co-existing substance abuse and mental disorders.
- ! About 17 percent of the population age 25 to 34 years have had co-existing substance abuse and mental disorders during their lifetimes.

Lifetime and Past-Month Prevalence of Co-Existing Mental and Substance Abuse* Disorders by Age U.S. Population, Age 15 to 54, 1991

Occurrence	Total	15-24 yrs	25-34 yrs	35-44 yrs	45-54 yrs
Lifetime	14%	12%	17%	15%	10%
During the year	5	6	5	4	2

* Substance abuse includes both abuse of/dependence on alcohol and other drugs.

Source: Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Dendler KS. 1994. "Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States." *Archives of General Psychiatry* 51:8-19, unpublished data from the survey. These estimates are from the National Comorbidity Survey (NCS). The survey was based on interviews administered to a probability sample of the noninstitutionalized U.S. civilian population. The NCS sample consisted of 8,098 respondents, age 15 to 54 years. DSM-III-R criteria were used as the basis for assessing disorders in the general population. A nonresponse weight was used to adjust for the higher rates of alcohol, drug abuse, and mental disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation.

SUBSTANCES OF ABUSE

- ! People are more likely to use legal substances (alcohol and tobacco) than illegal ones.
- ! About half of the U.S. population age 12 and older currently drink alcohol.
- ! About 30 percent of the U.S. population age 12 and older currently smoke cigarettes.
- ! About 6 percent of the U.S. population age 12 and older currently use an illegal drug.
- ! Marijuana is the most commonly used illegal drug. About 5 percent of the U.S. population age 12 and older used marijuana in the past month.

Prevalence of Past-Month Alcohol, Cigarette, and Other Drug Use U.S. Population, Age 12 and Older, 1997

Substance	Number Using (1,000s)	Percent Using
Alcohol	111,071	51.4%
Cigarettes	64,056	29.6
Any Illicit Drug*	13,904	6.4
Marijuana	11,109	5.1
Psychotherapeutics (nonmedical use)	2,665	1.2
Cocaine (includes crack)	1,505	0.7
Hallucinogens	1,632	0.8
Inhalants	883	0.4

* Any illicit drug includes marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP and LSD), heroin, and any prescription-type psychotherapeutic used nonmedically.

Source: SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 Household Survey on Drug Abuse*, Tables 5A and 5B, pp. 66-67. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997.

CURRENT ILLICIT DRUG USE

- ! Marijuana is the most commonly used illicit drug in the United States. In 1997, about 11 million people age 12 and older used marijuana in the past month; about 6 million used it on at least 51 days during the past year.
- ! About 1.5 million people used cocaine in the past month. About half of the current cocaine users were frequent users, that is, they used cocaine on at least 51 days during the past year.
- ! More people used hallucinogens in the past month than used inhalants. Current hallucinogen users also were more likely than inhalant users to be frequent users, that is, used it on at least 51 days during the past year.

Number of People (in Thousands) Currently Using Illicit Drugs U.S. Population, Age 12 and Older, 1997

Illicit Drug	Used in Past Month	Used on 51 or More Days in Past Year
Marijuana	11,109	6412
Cocaine (Includes Crack)	1,505	682
Hallucinogens	1,632	269
Inhalants	883	163

Source: **Past-month use:** SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 National Household Survey on Drug Abuse*, Table 5A, p. 66. **Past-year frequency:** SAMHSA, Office of Applied Studies. 1997. *National Household Survey on Drug Abuse: Population Estimates 1997*, Table 20A (marijuana) and Table 21A (cocaine/crack); and unpublished data. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997.

TRENDS IN FIRST USE OF CIGARETTES

- ! The annual number of new cigarette users age 12 and older increased during the 1960s and early 1970s, peaked in the mid-1970s, decreased through the early 1980s, and remained relatively stable from the early 1980s to the early 1990s. Recently, however, the number of persons who began smoking cigarettes has begun to increase again.
- ! During the peak of new smokers in 1974, about 3.7 million people age 12 and older began smoking cigarettes.
- ! In 1995, about 3.2 million people age 12 and older used cigarettes for the first time.

Estimated Number (in Thousands) of Persons Who First Used a Cigarette by Year, 1965-1995 U.S. Population, Age 12 and Older

Year	New Users (1,000s)	Year	New Users (1,000s)
1965	2,974	1981	2,735
1966	2,843	1982	2,750
1967	3,229	1983	2,739
1968	3,166	1984	2,679
1969	3,362	1985	2,816
1970	3,574	1986	2,782
1971	3,472	1987	2,566
1972	3,794	1988	2,484
1973	3,395	1989	2,503
1974	3,708	1990	2,645
1975	3,650	1991	2,567
1976	3,492	1992	2,707
1977	3,428	1993	2,897
1978	3,031	1994	3,178
1979	2,997	1995	3,263
1980	2,753		

Source: SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 National Household Survey on Drug Abuse*, Table 44, p. 109. The 1965 to 1992 data were estimated based on 1994 to 1997 NHSDA data. The 1993 data were estimated using 1995, 1996, and 1997 data. The 1994 data were estimated using 1996 and 1997 data. The 1995 data were estimated using 1997 data. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997.

TRENDS IN FIRST SMOKING CIGARETTE DAILY

- ! The annual number of persons age 12 and older who began smoking cigarettes daily increased during the 1960s, stabilized between 1971 and 1977 with a peak in 1974, decreased through the early 1980s, and has remained under 2 million thereafter.
- ! The peak year for new smokers was 1974 when about 2.4 million people age 12 and older began smoking cigarettes daily.
- ! In 1996, about 1.8 million people age 12 and older became daily smokers.

Estimated Number (in Thousands) of Persons Who First Used Cigarettes Daily by Year, 1965-1996, U.S. Population, Age 12 and Older

Year	New Users (1,000s)	Year	New Users (1,000s)
1965	1,606	1981	1,757
1966	1,716	1982	1,586
1967	1,741	1983	1,527
1968	2,268	1984	1,547
1969	2,055	1985	1,497
1970	1,910	1986	1,561
1971	2,175	1987	1,482
1972	2,004	1988	1,384
1973	2,276	1989	1,436
1974	2,403	1990	1,503
1975	1,811	1991	1,464
1976	1,976	1992	1,651
1977	2,284	1993	1,578
1978	1,984	1994	1,747
1979	1,955	1995	1,797
1980	1,704	1996	1,851

Source: SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 National Household Survey on Drug Abuse*, Table 45, p. 110. The 1965 to 1993 data were estimated based on 1994 to 1997 NHSDA data. The 1994 data were estimated using 1995, 1996, and 1997 data. The 1995 data were estimated using 1996 and 1997 data. The 1996 data were estimated using 1997 data. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997.

TRENDS IN FIRST USE OF ALCOHOL

- ! The annual number of first-time alcohol users increased from the 1960s to the late 1970s, decreased slightly through the late 1980s, and appears to have increased again somewhat in the early 1990s.
- ! Since 1965, more than 3 million people each year used alcohol for the first time; during the peak of first time drinkers in 1977, 4.5 million people began drinking for the first time.
- ! In 1995, about 4.3 million people used alcohol for the first time.

Estimated Number (in Thousands) of Persons Who First Used Alcohol by Year, 1965-1995 U.S. Population, Age 12 and Older

Year	New Users (1,000s)	Year	New Users (1,000s)
1965	3,121	1981	3,627
1966	3,663	1982	3,627
1967	3,734	1983	3,600
1968	3,768	1984	3,509
1969	4,231	1985	3,335
1970	4,022	1986	3,640
1971	3,638	1987	3,285
1972	4,488	1988	3,373
1973	4,420	1989	3,071
1974	4,425	1990	3,431
1975	3,988	1991	3,477
1976	4,060	1992	3,595
1977	4,575	1993	3,713
1978	4,512	1994	4,150
1979	4,048	1995	4,318
1980	4,074		

Source: SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 National Household Survey on Drug Abuse*, Table 43, p. 108. 1965 to 1992 data were estimated based on 1994 to 1997 NHSDA data. The 1993 data were estimated using 1995, 1996 and 1997 data. The 1994 data were estimated using 1996 and 1997 data. The 1995 data were estimated using 1997 data only. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997.

AGE OF FIRST MARIJUANA USE

- ! In 1997, the average age of first use of marijuana in the United States was 16.4 years.
- ! Females first used marijuana at a slightly younger age than males.
- ! On average, non-Hispanic Blacks first used marijuana at an older age than non-Hispanic Whites and Hispanics.
- ! People living in the Northeast first used marijuana at an older age compared with people living in other regions of the United States.

Average Age of First Use of Marijuana by Selected Demographic Characteristics U.S. Population, Age 12 and Older, 1997

Demographics	Mean Age
Total	16.4
Gender	
Male	17.2
Female	16.8
Race/ethnicity	
Non-Hispanic White	16.8
Non-Hispanic Black	18.6
Hispanic	16.4
Other	16.2
Population density	
Large metropolitan area	16.9
Small metropolitan area	17.0
Rural area	16.9
Region	
Northeast	18.1
North Central	16.4
South	17.1
West	16.5

Source: SAMHSA, Office of Applied Studies. 1998. Unpublished data from the 1997 National Household Survey on Drug Abuse. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population and incorporated an over-sampling of Blacks, Hispanics, and young people. The survey also included a module of questions asking adults about their mental health status during the past year. The adult mental health screening scale developed by the Institute for Social Research at the University of Michigan was used to estimate the presence of four clinical mental syndromes defined in the DSM-III-R (Revised Third Edition) published by the American Psychiatric Association (1987).

TRENDS IN FIRST USE OF MARIJUANA

- ! The annual number of new marijuana users age 12 and older increased during the 1960s, peaked in the 1970s, decreased in the 1980s, and resumed rising in the 1990s.
- ! In 1975, the peak year for new marijuana users, about 3.2 million people age 12 and older began using marijuana..
- ! In 1996 an estimated 2.5 million people age 12 and older used marijuana for the first time.

Estimated Number (in Thousands) of Persons Who First Used Marijuana by Year, 1965-1996 U.S. Population, Age 12 and Older

Year	New Users (1,000s)	Year	New Users (1,000s)
1965	617	1981	2,218
1966	900	1982	2,080
1967	1,467	1983	2,044
1968	1,590	1984	1,994
1969	2,218	1985	1,767
1970	2,668	1986	1,871
1971	2,799	1987	1,817
1972	2,897	1988	1,526
1973	2,782	1989	1,413
1974	3,008	1990	1,401
1975	3,185	1991	1,376
1976	2,824	1992	1,701
1977	2,884	1993	1,949
1978	2,879	1994	2,393
1979	2,585	1995	2,406
1980	2,492	1996	2,540

Source: SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 National Household Survey on Drug Abuse*, Table 38, p. 103. The estimates for 1965 through 1967 have low precision and are not reported. The 1968 to 1993 data were estimated based on 1994 to 1997 NHSDA data. The 1994 data were estimated using 1995, 1996 and 1997 data. The 1995 data were estimated using 1996 and 1997 data. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997.

TRENDS IN INCIDENCE OF COCAINE USE

- ! The annual number of new cocaine users age 12 and older increased during the 1960s and 1970s, peaked in the early 1980s, and decreased in the 1990s.
- ! During the peak years in the early 1980s, about 1.2 to 1.4 million persons began using cocaine each year.
- ! In 1996, more than a half-million people used cocaine for the first time.

Estimated Number (in Thousands) of Persons Who First Used Cocaine by Year, 1968-1995 U.S. Population, Age 12 and Older

Year	New Users (1,000s)	Year	New Users (1,000s)
1965	*	1981	1,383
1966	*	1982	1,389
1967	*	1983	1,220
1968	77	1984	1,230
1969	180	1985	1,174
1970	296	1986	1,210
1971	343	1987	961
1972	270	1988	776
1973	477	1989	762
1974	673	1990	631
1975	808	1991	480
1976	646	1992	488
1977	950	1993	553
1978	1,041	1994	537
1979	999	1995	653
1980	1,345	1996	675

*Low precision; no estimate reported.

Source: SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 National Household Survey on Drug Abuse*, Table 39, p. 104. The estimates for 1965 through 1967 have low precision and are not reported. The 1968 to 1993 data were estimated based on 1994 to 1997 NHSDA data. The 1994 data were estimated using 1995, 1996 and 1997 data. The 1995 data were estimated using 1996 and 1997 data. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997.

DRUG USE BY AGE AND GENDER

- ! Young adults age 18 to 25 are more likely than any other age group to report illicit drug use in the past month.
- ! Among youth age 12 to 17 years, females are almost as likely as males to use an illicit drug in the past month.
- ! Among the age groups age 18 and older, males are about twice as likely as females to have used an illicit drug in the past month.

Illicit Drug Use in the Past Month by Age and Gender U.S. Population, Age 12 and Older, 1997

Age	Total	Males	Females
Total	6.4%	8.5%	4.5%
12-17 years	11.4	12.3	10.6
18-25 years	14.7	19.6	9.6
26-34 years	7.4	9.6	5.2
35 years and older	3.6	5.0	2.3

Source: SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 National Household Survey on Drug Abuse* (NHSDA), Table 19. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997, and incorporates an over-sampling of Blacks, Hispanics, and young people.

HEAVY ALCOHOL USE BY AGE AND GENDER

- ! Young adults age 18 to 25 are more likely to report heavy alcohol use in the past month than persons in other age groups.
- ! Among youth age 12 to 17 years, females are almost as likely as males to drink heavily in the past month.
- ! Males are more likely to be heavy drinkers than females, especially in the older age groups.

Heavy Alcohol Use* in the Past Month by Age and Gender U.S. Population, Age 12 and Older, 1997

Age	Total	Males	Females
Total	5.4%	8.9%	2.1%
12-17 years	3.1	3.8	2.4
18-25 years	11.1	17.5	4.5
26-34 years	7.5	12.1	2.9
35 years and older	4.0	6.9	1.4

* Past-month heavy alcohol use is defined as drinking 5 or more drinks per occasion on each of 5 or more days in the last 30 days.

Source: SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 National Household Survey on Drug Abuse* (NHSDA), Table 29, p. 92. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997, and incorporates an over-sampling of Blacks, Hispanics, and young people.

CURRENT DRUG USE BY RACE/ETHNICITY

- ! In 1997, about 8 percent of non-Hispanic Blacks and about 6 percent Hispanics and non-Hispanic Whites used at least one illicit drug in the past month.
- ! Because non-Hispanic Whites comprise about 75 percent of the general population in the U.S., most of the current drug users are non-Hispanic Whites.
- ! The percent of each racial/ethnic group who are current illicit drug users is similar to the percent distribution of each group in the U.S. general population.

Illicit Drug Use in the Past Month by Race/Ethnicity U.S. Population, Age 12 and Older, 1997

Race/Ethnicity	Number Who Used (1,000s)	Percent of Race/Ethnicity Group Who Used	Percent of Total Drug Users	Percent of U.S. Population
Total	13,904	6.4%	100.0%	100.0%
Non-Hispanic White	10,330	6.4	74.3	75.0
Non-Hispanic Black	1,824	7.5	13.1	11.5
Hispanic	1,264	5.9	9.1	9.5
Other	486	3.6	3.5	4.0

Source: **Drug use:** SAMHSA, Office of Applied Studies. 1998. *National Household Survey on Drug Abuse: Population Estimates 1997*, pp. 11, 17-19. **U.S. Population:** Estimated 1997 data for the U.S. civilian, noninstitutionalized population 12 years and older: Bureau of the Census, Population Division. 1997. *Report PPL-57*, Appendix A. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997, and incorporates an over-sampling of Blacks, Hispanics, and young people.

HEAVY ALCOHOL AND ILLICIT DRUG USE AMONG MINORITIES

- ! In 1996, the prevalence of heavy drinking among Hispanics (6.2 percent) was about the same as that among American Indians and Alaskan Natives (6.4 percent).
- ! Puerto Ricans had the highest prevalence of heavy drinking among Hispanics.
- ! In 1996, American Indians and Alaskan Natives had higher prevalence of illicit drug use than Asian/Pacific Islanders or Hispanics.
- ! Asian/Pacific Islanders had the lowest prevalence of illicit drug use (3.7 percent) and heavy alcohol use (1.3 percent).

Past-Month Heavy Alcohol* and Illicit Drug Use Among Selected Racial/Ethnic Groups U.S. Population, Age 12 and Older, 1996

Race/Ethnicity (Sample Size)	Heavy Drinkers	Illicit Drug Users
American Indian/ Alaska Native (n=121)	6.4%	11.3%
Asian/Pacific Islander (n=454)	1.3	3.7
Total Hispanic (n=4,841)	6.2	5.3
Mexican American (n=3,241)	6.8	5.3
Puerto Rican (n=504)	7.3	5.4
Cuban (n=202)	5.1	5.3
Other Hispanics (n=894)	3.9	5.1

* Heavy alcohol use is defined as having 5 or more alcoholic drinks on the same occasion on each of 5 or more days in the past 30 days.

Source: SAMHSA, Office of Applied Studies. 1997. Unpublished data from the 1996 National Household Survey on Drug Abuse. The 1996 survey employed a multistage area probability sample of 18,269 noninstitutionalized civilian respondents 12 years and older interviewed from January through December 1996 and incorporates an over-sampling of Blacks, Hispanics, and young people.

CURRENT HEAVY ALCOHOL USE BY RACE/ETHNICITY

- ! Heavy alcohol use in the past month is defined as drinking five or more drinks per occasion on each of five or more days in the past 30 days.
- ! In 1997, about 6 percent of Hispanics, about 4 percent of non-Hispanic Blacks and about 6 percent of non-Hispanic Whites reported heavy drinking in the past month.
- ! Because non-Hispanic Whites comprise about 75 percent of the general population in the U.S., most of the current heavy drinkers are non-Hispanic Whites.
- ! The percent of non-Hispanic Blacks who are current heavy drinkers is less and the percent of Hispanics is slighter more than their percent distribution in the U.S. general population.

Heavy Alcohol Use* in the Past Month by Race/Ethnicity U.S. Population, Age 12 and Older, 1997

Race/Ethnicity	Number Who Were Heavy Drinkers (1,000s)	Percent of Race/Ethnicity Group Who Were Heavy Drinkers	Percent of Total Heavy Drinkers	Percent of U.S. Population
Total	11,249	5.4%	100.0%	100.0%
Non-Hispanic White	8,846	5.7	78.6	75.0
Non-Hispanic Black	887	3.8	7.9	11.5
Hispanic	1,319	6.3	11.7	9.5
Other	197	2.3	1.8	4.0

* Heavy alcohol use in the past month is defined as drinking 5 or more drinks per occasion on each of 5 or more days in the last 30 days.

Source: Alcohol use: SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 National Household Survey on Drug Abuse* (NHSDA), Table 17; and *NHSDA: Population Estimates 1997*, p. 11. Estimated 1997 data for the U.S. civilian, noninstitutionalized population 12 years and older: Bureau of the Census, Population Division. 1997. *Report PPL-57*, Appendix A. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997, and incorporates an over-sampling of Blacks, Hispanics, and young people.

CURRENT ILLICIT DRUG USE BY AGE

- ! Overall, between 1979 and 1997, the percent of the population who used at least one illicit drug in the past month decreased.
- ! Between the mid-1980s and 1992, past-month illicit drug use decreased in all age groups.
- ! Among youth age 12 to 17-year-olds, past-month illicit drug use doubled between 1992 and 1995, decreased significantly between 1995 and 1996, and increased significantly between 1996 and 1997.

Estimated Percentage Reporting Illicit Drug Use in the Past Month by Age, 1979-1997

Year	Age 12-17	Age 18-25	Age 26-34	Age 35+
1979	16.3%	38.0%	20.8%	2.8%
1985	13.2	25.3	23.1	3.9
1988	8.1	17.9	14.7	2.3
1990	7.1	15.0	10.9	3.1
1991	5.8	15.4	10.0	3.4
1992	5.3	13.1	11.4	2.5
1993	5.7	13.6	9.5	3.0
1994	8.2	13.3	8.5	3.2
1995	10.9	14.2	8.3	2.8
1996	9.0	15.6	8.4	2.9
1997	11.4	14.7	7.4	3.6

Source: SAMHSA, Office of Applied Studies. 1997. *Preliminary Results from the 1997 National Household Survey on Drug Abuse*, Table 11. The NHSDA employs a multistage area probability sample of about 24,000 persons in the U.S. civilian noninstitutionalized population. In 1994 the survey questionnaire and editing procedures underwent major changes that may have affected the reporting of substance use. An adjustment procedure was developed and applied to the pre-1994 estimates.

CURRENT ADOLESCENT ILLICIT DRUG USE

- ! In 1997, about 11 percent of youth age 12 to 17 reported using at least one illicit drug in the past month, representing a significant increase from 1996.
- ! Youth age 12 to 17 were more likely to report current use of marijuana than of any other illicit drug.
- ! In 1997, youth age 12 to 17 were as likely to report current non-medical use of psychotherapeutics as use of inhalants and hallucinogens.

Illicit Drug Use in the Past Month U.S. Population, Age 12 to 17, 1994-1997

Illicit Drug	1994	1995	1996	1997
Any Illicit Drug*	8.2%	10.9%	9.0%	11.4%
Marijuana	6.0	8.2	7.1	9.4
Cocaine (including crack)	0.3	0.8	0.6	1.0
Inhalants	1.6	2.1	1.7	2.0
Hallucinogens	1.1	1.7	2.0	1.9
Heroin	0.1	0.2	0.2	0.2
Psychotherapeutics (non-medical) **	1.7	1.6	1.9	2.1

* Any illicit drug indicates past-month use of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP and LSD), heroin, and any prescription-type psychotherapeutic used nonmedically.

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

Source: 1995, 1996 and 1997 data: SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 National Household Survey on Drug Abuse (NHSDA)*, Table 7. 1994 data: SAMHSA, Office of Applied Studies. 1997. *Preliminary Estimates from the 1996 NHSDA*, p. 69. The survey employs a multistage area probability sample of about 24,000 persons in the U.S. civilian noninstitutionalized population.

ALCOHOL USE - AMERICAN INDIAN STUDENTS

- ! A national survey of alcohol and other drug use by American Indian students on reservations has been conducted since 1975.
- ! In general, the percent of American Indian students in grades 7 to 12 who used any alcohol in their lifetime steadily declined from 1980 to 1994.
- ! The percent of American Indian students who drank to intoxication at least once in their lifetime has increased over the past decade.

Trends in Percent of American Indian Students in Grades 7 to 12 Reporting Alcohol Use and Intoxication in Lifetime, 1980-1994

Alcohol Use	1980-82 n=2,159	1982-84 n=1,411	1984-86 n=1,510	1986-88 n=2,683	1988-90 n=5,300	1990-92 n=1,710	1992-94 n=2096
Any Alcohol	85%	81%	79%	81%	75%	75%	68%
Alcohol Intoxication	NA	NA	46%	49%	55%	62%	51%

NA = Not available

Source: Beauvais, Fred. 1996. Trends in Drug Use Among American Indian Students and Dropouts, 1975 to 1994. *American Journal of Public Health* 86(11):1594-1598. This is a national representative survey of American Indian students in grades 7 to 12 residing on or near reservations. The Tri-Ethnic Center for Prevention Research at Colorado State University has conducted this survey since 1975. Students complete the questionnaire anonymously in a group setting. Tribes are stratified by demographic, cultural, and geographic factors. A sample of five to seven tribes is selected each year and the data aggregated over several years to produce stable estimates.

DRUG USE - AMERICAN INDIAN STUDENTS

- ! In general, the percent of American Indian students in grades 7 to 12 who used illicit drugs in their lifetime has declined from 1980 to 1994.
- ! Marijuana, inhalants, and stimulants are the most frequently reported illicit drug use by American Indian students.
- ! Psychedelics is the only drug category that more American Indian students have used in the 1990's than in the 1980's.

Trends in Percent of American Indian Students in Grades 7 to 12 Reporting Illicit Drug Use in Lifetime, 1980-1994

Illicit Drug Use	1980-82 n=2,159	1982-84 n=1,411	1984-86 n=1,510	1986-88 n=2,683	1988-90 n=5,300	1990-92 n=1,710	1992-94 n=2096
Marijuana	74%	70%	57%	61%	55%	56%	50%
Inhalants	30	31	21	24	24	25	21
Stimulants	24	22	21	25	17	18	13
Cocaine	11	6	7	8	9	12	9
Sedatives	9	7	10	11	7	6	4
Heroin	5	2	5	5	4	3	3
Psychedelics	9	6	9	10	13	22	19
Tranquilizers	6	3	7	7	3	2	2
PCP	NA	NA	10	10	7	3	3

*NA = Not available

Source: Beauvais, Fred. 1996. Trends in Drug use Among American Indian Students and Dropouts, 1975 to 1994. *American Journal of Public Health* 86(11):1594-1598. This is a national representative survey of American Indian students in grades 7 to 12 residing on or near reservations. The Tri-Ethnic Center for Prevention Research at Colorado State University has conducted this survey since 1975. Students complete the questionnaire anonymously in a group setting. Tribes are stratified by demographic, cultural, and geographic factors. A sample of five to seven tribes is selected each year and the data aggregated over several years to produce stable estimates.

TRENDS IN HEAVY DRINKING - - MILITARY

- ! The percentage of heavy drinking decreased about 4 percentage points between 1980 and 1995 across the total military.
- ! In 1995, the Navy and Air Force showed statistically significant decreases in heavy drinking over the 15-year period since 1980; but the Army and Marine Corps did not.
- ! Since 1980, the Air Force has shown the lowest rates of heavy drinking and the Marine Corps the highest rates.

Trends in Percent Reporting Heavy Drinking by Military Branch, 1980-1995

Military Branch	Year of Survey					
	1982	1985	1988	1990	1992	1995
Total Military	20.8%	24.1%	22.9%	17.0%	15.2%	17.1%
Army	20.3	24.7	25.2	19.5	17.2	18.0
Navy	25.6	27.7	24.9	14.6	13.8	18.8
Air Force	14.3	17.7	16.4	14.5	10.7	10.3
Marine Corps	28.6	30.6	29.4	23.9	25.5	27.8

Source: Bray, RM et al. 1995 Department of Defense Survey of Health Related Behaviors Among Military Personnel, Research Triangle Institute December 1995. This series of studies examines trends in substance use among active duty military personnel. The 1995 survey is the sixth survey in the series which began in 1980. It is the most comprehensive and includes assessments of mental health, stress and coping, cardiovascular disease risk factor, injury, sexually transmitted diseases, and special health needs of military women. In 1995, the sample consisted of 16,193 active duty military.

DRUG USE - - MILITARY

- ! In 1995, about 6.5 percent of the military reported using an illicit drug in the past 12 months
- ! Drug users in the military were more likely to be young, unmarried, male, with a high school or lower education, and stationed in the continental U.S.
- ! Military personnel without any college education were over 4 times more likely to use illicit drugs than college graduates in the military.

Percent of the Military Reporting Any Illicit Drug Use in Past 12 Months, 1995

Characteristic	Any Illicit Drug Use* in Past 12 Months
Total	6.5%
Sex:	
Male	6.7
Female	5.3
Race/ Ethnicity:	
White, non-Hispanic	6.4
Black, non-Hispanic	6.3
Hispanic	7.6
Other	6.8
Education:	
High school or less	9.6
Some college	6.0
College graduate+	2.0
Age:	
20 and under	14.9
21-25 years	9.4
26-34 years	3.9
35 and older	2.1
Family Status:	
Not married	10.6
Married, spouse not present	7.6
Married, spouse present	3.5
Pay Grade:	
E1-E3	14.3
E4-E6	5.8
E7-E9	1.5
W1-W5	1.0
O1-O3	2.0
O4-O10	1.0
Region:	
Contiguous U.S. (CONUS)	7.0
Outside CONUS (OCONUS)	4.4

*Steroids are not included.

Source: DOD Survey of Health Related Behavior Among Military Personnel, 1995. Bray, RM et al. 1995 Department of Defense Survey of Health Related Behaviors Among Military Personnel, Research Triangle Institute December 1995. This series of studies examines trends in substance use among active duty military personnel. The 1995 survey is the sixth survey in the series which began in 1980. It is the most comprehensive and includes assessments of substance use, mental health, stress and coping, cardiovascular disease risk factors, injury, sexually transmitted diseases, and special health needs of military women. In 1995, the sample consisted of 16,193 active duty military.

DRUG USE BY PERSONS WITH DISABILITIES

- ! Depending on the age group, person with disabilities were more likely to have ever used certain substances than persons without disabilities.
- ! Among young adults, age 18-24 years, persons with disabilities were more likely than those without disabilities to have ever used crack or heroin.
- ! Among adults, age 25-34 years, persons with disabilities were less likely than those without disabilities to have ever used marijuana.
- ! Among older adults age 35 and older, persons with disabilities were more likely than those without disabilities to have ever used sedatives and tranquilizers.

**Percent of Persons Reporting Having Ever Used a Drug in Lifetime
(Adjusted for Sex and Race/Ethnicity) by Disability Status****

Drug	Age 18-24		Age 25-34		Age 35+	
	With	Without	With	Without	With	Without
Alcohol	81.7	90.2	89.0	92.4	86.2	87.4
Cocaine	26.0	17.8	21.0	25.8	10.7	6.7
Crack	19.9	3.7 ^a	5.8	3.7	2.5	1.0
Heroin	5.0	0.7 ^a	3.7	1.8	3.1	1.4
Marijuana	61.4	50.4	45.7	54.3 ^b	25.1	23.6
Sedatives*	15.3	4.2	10.6	7.4	8.0	3.4 ^b
Tranquilizers*	15.5	7.4	9.5	10.0	8.1	4.1 ^a

^aDifferences are statistically significant at $p \leq .05$.

^bDifferences are statistically significant at $p \leq .01$.

*Non-medical use of these prescription-type drugs.

**Persons classified as “with disabilities” responded to the question on “present work situation” as “disabled, not able to work.”

Source: Gilson SF, Chilcoat HD, & Stapleton JM. 1996. Illicit Drug Use by Persons with Disabilities: Insights from the National Household Survey on Drug Abuse. *American Journal of Public Health*, 86:1613-1615. This study was an analysis of the 24,589 adults, age 18 and older who were respondents in the SAMHSA National Household Survey on Drug Abuse conducted in 1991. There were 577 persons classified as "with disability." They were primarily age 35 and older (86 percent) and white (69 percent); 21 percent were black. Persons with disabilities who were working were not classified "with disabilities" in the study and therefore may be included in the "without disabilities" group. Multiple logistic regression was used to adjust for sex and race/ethnicity.

CIGARETTE USE BY STATE

- ! While 26 percent of Americans age 12 and older were current smokers between 1991 and 1993, rates ranged from 23 to 31 percent across 26 States during the same period.
- ! Of the 26 States for which estimates were made, the States with the highest rates of current smokers between 1991 and 1993 were Kentucky (31 percent), West Virginia (31 percent), Tennessee (30 percent), Ohio (29 percent), and South Carolina (29 percent).
- ! The States with the lowest rates of current smokers between 1991 and 1993 were Minnesota (23 percent), California (23 percent), Wisconsin (24 percent), Washington (24 percent), and Kansas (24 percent).

Estimated Population (in Thousands) Age 12 and Older Using Cigarettes in the Past Month in Selected States, 1991-1993

State	Number (1,000s)	Percent	State	Number (1,000s)	Percent
Total U.S.	52,444	25.5%			
Northeast Region			North Central Region		
New Jersey	1,581	24.5	Illinois	2,434	26.0%
New York	3,534	23.7	Indiana	1,123	24.5
Pennsylvania	2,672	26.9	Kansas	485	24.2
South Region			Michigan	2,052	27.0
Florida	2,744	24.4	Minnesota	807	22.6
Georgia	1,433	26.3	Missouri	1,065	25.2
Kentucky	960	31.4	Ohio	2,612	29.2
Louisiana	872	25.7	Wisconsin	945	23.5
North Carolina	1,501	26.6	West Region		
Oklahoma	690	26.9	California	5,559	22.8
South Carolina	851	29.0	New Mexico	341	28.4
Tennessee	1,215	29.5	Oregon	612	25.5
Texas	3,601	26.2	Washington	971	23.7
Virginia	1,307	25.0			
West Virginia	458	30.6			

Source: SAMHSA, Office of Applied Studies. 1996. *Substance Abuse in States and Metropolitan Areas: Model-Based Estimates from the 1991-1993 National Household Survey on Drug Abuse, Summary Report*, pp. 85, 89. The estimates were developed from data collected in the National Household Survey on Drug Abuse (NHSDA) for 1991-1993, combined with local area indicators that were found to be associated with substance abuse. The local area indicators include variables such as drug-related arrests, alcohol-related death rates, and block-group level characteristics from the 1990 census. The estimates use a consistent methodology across States and metropolitan statistical areas and are constructed so that they sum to national estimates produced by the NHSDA. The small-area estimation methodology used employs logistic regression models that combine the NHSDA data with local area indicators. In general, estimates for the larger States and MSAs are better than those for smaller places.

CIGARETTE USE BY METROPOLITAN STATISTICAL AREA

- ! From 1991 to 1993, the rates of Americans age 12 and older who were current smokers ranged from 20 to 28 percent across 25 metropolitan statistical areas (MSAs).
- ! The MSAs with the highest rates of current smokers between 1991 and 1993 were Boston (28 percent), Denver (27 percent), Detroit (27 percent), San Antonio (26 percent), and Dallas (26 percent).
- ! The MSAs with the lowest rates of current smokers between 1991 and 1993 were Nassau-Suffolk (20 percent), El Paso (20 percent), and Miami-Hialeah (21 percent).

Estimated Population (in Thousands) Age 12 and Older Using Cigarettes in the Past Month by Metropolitan Statistical Area (MSA), 1991-1993

MSA	Number (1,000s)	Percent	MSA	Number (1,000s)	Percent
Anaheim-			Nassau-		
Santa Ana, CA	419	21.0%	Suffolk, NY	440	20.2%
Atlanta, GA	575	23.7	Newark, NJ	361	24.1
Baltimore, MD	498	25.0	New York, NY	1,640	23.2
Boston, MA	865	27.5	Oakland, CA	403	23.3
Chicago, IL	1,232	24.7	Philadelphia, PA-		
Dallas, TX	550	26.0	NJ	1,045	25.9
Denver, CO	365	27.1	Phoenix, AZ	440	24.8
Detroit, MI	953	26.5	San Antonio, TX	271	26.1
El Paso, TX	93	20.4	San Bernardino, CA	495	23.3
Houston, TX	667	25.1	San Diego, CA	465	22.3
Los Angeles, CA	1,555	21.8	St. Louis, MO-IL	507	25.3
Miami-Hialeah, FL	334	20.9	Tampa-		
Minneapolis-			St. Petersburg, FL	466	25.6
St. Paul, MN	461	22.6	Washington, DC	756	22.6

Source: SAMHSA, Office of Applied Studies. 1996. *Substance Abuse in States and Metropolitan Areas: Model-Based Estimates from the 1991-1993 National Household Survey on Drug Abuse, Summary Report*, pp. 87, 90. The estimates were developed from data collected in the National Household Survey on Drug Abuse (NHSDA) for 1991-1993, combined with local area indicators that were found to be associated with substance abuse. The local area indicators include variables such as drug-related arrests, alcohol-related death rates, and block-group level characteristics from the 1990 census. The estimates use a consistent methodology across States and MSAs and are constructed so that they sum to national estimates produced by NHSDA sample sizes. The small-area estimation methodology used employs logistic regression models that combine the NHSDA data with local area indicators. In general, estimates for the larger States and MSAs are better than those for smaller places.

ILLCIT DRUG USE BY STATE

- ! Between 1991 and 1993, 6 percent of Americans age 12 and older were current illicit drug users. Rates among 26 States ranged from 4 to 8 percent during this period.
- ! Of the selected States for which estimates were produced, those with the highest rates of current illicit drugs users between 1991 and 1993 were California (8 percent), New Mexico (8 percent), Oregon (7 percent), Oklahoma (7 percent), and New York (6 percent).
- ! Of the 26 selected States, those with the lowest rates of current illicit drug users between 1991 and 1993 were Wisconsin, West Virginia, and Louisiana (4 percent each).

Estimated Population (in Thousands) Age 12 and Older Using Illicit Drugs in the Past Month in Selected States, 1991-1993

State	Number (1,000s)	Percent	State	Number (1,000s)	Percent
Total U.S.	12,015	5.8%			
Northeast Region			North Central Region		
New Jersey	348	5.4	Illinois	435	4.6%
New York	959	6.4	Indiana	206	4.5
Pennsylvania	505	5.1	Kansas	101	5.0
South Region			Michigan	420	5.5
Florida	557	5.0	Minnesota	165	4.6
Georgia	317	5.8	Missouri	210	5.0
Kentucky	138	4.5	Ohio	481	5.4
Louisiana	148	4.4	Wisconsin	164	4.1
North Carolina	330	5.9	West Region		
Oklahoma	178	7.0	California	2,004	8.2
South Carolina	147	5.0	New Mexico	96	7.8
Tennessee	187	4.5	Oregon	170	7.1
Texas	767	5.6	Washington	248	6.1
Virginia	290	5.6			
West Virginia	63	4.2			

Source: SAMHSA, Office of Applied Studies. 1996. *Substance Abuse in States and Metropolitan Areas: Model-Based Estimates from the 1991-1993 National Household Survey on Drug Abuse, Summary Report*, pp. 85, 89. The estimates were developed from data collected in the National Household Survey on Drug Abuse (NHSDA) for 1991-1993 combined with local area indicators that were found to be associated with substance abuse. The local area indicators include variables such as drug-related arrests, alcohol-related death rates, and block-group level characteristics from the 1990 census. The estimates use a consistent methodology across States and MSAs and are constructed so that they sum to national estimates produced by NHSDA sample sizes. The small area estimation methodology used employs logistic regression models that combine the NHSDA data with local area indicators. In general, estimates for the larger States and MSAs are better than those for smaller places.

ILLICIT DRUG USE BY METROPOLITAN STATISTICAL AREA

- ! From 1991 to 1993, the rate of Americans age 12 and older who were current illicit drug users ranged from 4 to 11 percent across 25 metropolitan statistical areas (MSAs).
- ! The MSAs with the highest rates of current illicit drug users from 1991 to 1993 were Oakland (11 percent), Anaheim-Santa Ana (8 percent), Denver (8 percent), San Bernardino (7 percent), and San Diego (7 percent).
- ! The MSAs with the lowest rates of current illicit drug users from 1991 to 1993 were El Paso, Miami-Hialeah, and Houston (4 percent each).

Estimated Population (in Thousands) Age 12 and Older Using Illicit Drugs in the Past Month by Metropolitan Statistical Area (MSA), 1991-1993

MSA	Number (1,000s)	Percent	MSA	Number (1,000s)	Percent
Anaheim-			Nassau-		
Santa Ana, CA	176	8.2%	Suffolk, NY	143	6.6%
Atlanta, GA	142	5.9	Newark, NJ	93	6.2
Baltimore, MD	100	5.0	New York, NY	425	6.0
Boston, MA	212	6.7	Oakland, CA	197	11.4
Chicago, IL	275	5.5	Philadelphia, PA-		
Dallas, TX	121	5.7	New Jersey	231	5.7
Denver, CO	112	8.3	Phoenix, AZ	121	6.8
Detroit, MI	197	5.5	San Antonio, TX	45	4.4
El Paso, TX	16	3.6	San Bernardino, CA	158	7.4
Houston, TX	108	4.1	San Diego, CA	148	7.1
Los Angeles, CA	476	6.7	St. Louis, MO-		
Miami-Hialeah, FL	60	3.8	Illinois	104	5.2
Minneapolis-			Tampa-		
St. Paul, MN	106	5.2	St. Petersburg, FL	96	5.3
			Washington, DC	180	5.4

Source: SAMHSA, Office of Applied Studies. 1996. *Substance Abuse in States and Metropolitan Areas: Model-Based Estimates from the 1991-1993 National Household Survey on Drug Abuse, Summary Report*, pp. 87, 90. The estimates were developed from data collected in the National Household Survey on Drug Abuse (NHSDA) for 1991-1993, combined with local area indicators that were found to be associated with substance abuse. The local area indicators include variables such as drug-related arrests, alcohol-related death rates, and block-group level characteristics from the 1990 census. The estimates use a consistent methodology across States and MSAs and are constructed so that they sum to national estimates produced by NHSDA sample sizes. The small-area estimation methodology used employs logistic regression models that combine the NHSDA data with local area indicators. In general, estimates for the larger States and MSAs are better than those for smaller places.

CURRENT HEAVY ALCOHOL USE BY REGION

- ! From 1994 to 1996, heavy drinking in the past month decreased across all regions except in the South; from 1996 to 1997 it decreased across all regions except in the Northeast.
- ! In 1997, the West reported the lowest rates of heavy drinking in the past month use (4.6 percent).
- ! From 1994 to 1997, the North Central region had the highest prevalence of heavy drinking in the past month.

Past-Month Heavy Alcohol Use* by Region U.S. Population, Age 12 and Older, 1994-1997

Region	1994	1995	1996	1997
Total	6.2%	5.5%	5.4%	5.4%
Northeast	5.7	4.9	4.5	5.3
North Central	7.1	7.0	6.4	6.2
South	6.6	4.8	5.5	5.4
West	5.2	5.6	5.1	4.6

* Past-month heavy alcohol use is defined as drinking 5 or more drinks per occasion on each of 5 or more days in the last 30 days.

Source: SAMHSA, Office of Applied Studies. *Preliminary Results from the 1997 National Household Survey on Drug Abuse* (NHSDA), Table 24. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997, and incorporates an over-sampling of Blacks, Hispanics, and young people. The following States were in each region: Northeast consisted of Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania; North Central consisted of Ohio, Michigan, Indiana, Illinois, Missouri, Kansas, Nebraska, South Dakota, North Dakota, Minnesota, Iowa, and Wisconsin; South consisted of Maryland, Delaware, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Texas, Oklahoma, Arkansas, Tennessee, and Kentucky; West consisted of California, Oregon, Washington, Montana, Idaho, Wyoming, Colorado, Arizona, New Mexico, Utah, Nevada, Hawaii, and Alaska.

CURRENT DRUG USE BY REGION

- ! The trends for current illicit drug use between 1994 and 1996 differs by region; rates have decreased in the Northeast and South but increased in the West and North Central regions. Between 1996 and 1997, the rates increased in all regions but the Northeast..
- ! Between 1994 and 1997, the West has continued to have the highest prevalence of current illicit drug use in the U.S. population age 12 and older.
- ! In 1997, about 8 percent of persons age 12 and older in the West were current illicit drug users.
- ! In the Northeast, the prevalence rates of current illicit drug use have remained steady at about 5 percent, the lowest of the four regions.

Illicit Drug Use in the Past Month by Region U.S. Population, Age 12 and Older, 1994-1997

Region	1994	1995	1996	1997
Total	6.1%	6.1%	6.1%	6.4%
Northeast	5.1	4.9	4.8	4.7
North Central	5.8	6.3	6.9	7.3
South	6.3	5.5	5.5	5.8
West	6.6	7.8	7.3	8.1

Source: **Data for 1995, 1996, and 1997:** SAMHSA, Office of Applied Studies. *Preliminary Results from the 1997 National Household Survey on Drug Abuse (NHSDA)*, Table 19. **Data for 1994:** SAMHSA, Office of Applied Studies. 1996. *Preliminary Estimates from the 1995 NHSDA*, p. 62. The 1997 survey employed a multistage area probability sample of 24,505 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1997, and incorporates an over-sampling of Blacks, Hispanics, and young people. The following States were in each region: Northeast consisted of Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, and Pennsylvania; North Central consisted of Ohio, Michigan, Indiana, Illinois, Missouri, Kansas, Nebraska, South Dakota, North Dakota, Minnesota, Iowa, and Wisconsin; South consisted of Maryland, Delaware, District of Columbia, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, Texas, Oklahoma, Arkansas, Tennessee, and Kentucky; West consisted of California, Oregon, Washington, Montana, Idaho, Wyoming, Colorado, Arizona, New Mexico, Utah, Nevada, Hawaii, and Alaska.

CURRENT HEAVY ALCOHOL USE BY POPULATION DENSITY

- ! The prevalence of heavy drinking in the past month does not differ significantly among the three metropolitan population density areas.
- ! Between 1994 and 1997, heavy drinking in the past month decreased in all the metropolitan population density areas.

Heavy Alcohol Use* in the Past Month by Population Density U.S. Population, Age 12 and Older, 1994-1997

Population Density	1994	1995	1996	1997
Total	6.2%	5.5%	5.4%	5.4%
Large metropolitan	6.1	5.6	5.1	5.6
Small metropolitan	6.7	5.9	6.0	5.2
Nonmetropolitan	5.9	4.9	5.1	5.3

* Heavy alcohol use in the past month is defined as drinking 5 or more drinks per occasion on each of 5 or more days in the last 30 days.

Source: **Data for 1995, 1996, and 1997:** SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 National Household Survey on Drug Abuse (NHSDA)*, Table 24. **Data for 1994:** SAMHSA, Office of Applied Studies. 1996. *Preliminary Estimates from the 1995 NHSDA*, p. 87. The survey employs a multistage area probability sample of about 24,000 persons in the U.S. civilian noninstitutionalized population. Population density is based on 1990 metropolitan statistical area (MSA) classifications and 1990 census population counts: Large metropolitan areas are defined as MSAs with a population of 1 million or more, small metropolitan areas are MSAs with fewer than 1 million people, and nonmetropolitan areas are areas outside MSAs.

CURRENT DRUG USE BY POPULATION DENSITY

- ! Between 1994 and 1997, nonmetropolitan areas had lower prevalence rates of illicit drug use in the past month than other population density areas.
- ! Between 1996 and 1997, illicit drug use in the past month increased in nonmetropolitan areas.
- ! In 1997, the prevalence of illicit drug use in the past month in small metropolitan areas slightly surpassed that of large metropolitan areas.

Illicit Drug Use in the Past Month by Population Density U.S. Population, Age 12 and Older, 1994-1997

Population Density	1994	1995	1996	1997
Total	6.1%	6.1%	6.1%	6.4%
Large Metropolitan	6.1	6.1	6.8	6.5
Small Metropolitan	6.6	6.6	6.7	7.1
Nonmetropolitan	4.8	5.3	3.7	5.2

Source: **Data for 1996, and 1997:** SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1996 National Household Survey on Drug Abuse (NHSDA)*, Table 19, p.82. **Data for 1994 and 1995:** SAMHSA, Office of Applied Studies. 1997. *Preliminary Estimates from the 1996 NHSDA*, p. 62. The survey employs a multistage area probability sample of about 18,000 persons in the U.S. civilian noninstitutionalized population. Population density is based on 1990 metropolitan statistical area (MSA) classifications and the 1990 census population counts: Large metropolitan areas are defined as MSAs with a population of 1 million or more, small metropolitan areas are MSAs with fewer than 1 million people, and nonmetropolitan areas are areas outside MSAs.

SUBSTANCE USE - ARIZONA STUDENTS

- ! In Arizona, alcohol use in the past 30 days increased from 1991 to 1995 for students in grades 3-6; but it decreased for students in high school.
- ! From 1991 to 1995, the percent of Arizona students using an illicit drug in the past month increased at all school levels.

Trends in Percent of Arizona Students in Grades 3 to 12 Reporting Substance Use in the Past 30 Days, 1991-1995

Substance	Year	Elementary Grades 3-6	Junior* High Grades 7-8	High School Grades 9-12
Alcohol	1991	3.5%	21.4%	42.8%
	1993	10.4	19.9	34.5
	1995	10.6	20.2	37.7
Marijuana	1991	0.3	5.0	12.7
	1993	1.8	9.4	17.1
	1995	3.2	9.0	21.8
Cocaine	1991	0.2	1.8	3.3
	1993	0.4	2.6	3.1
	1995	1.6	3.0	4.5
Amphetamine/ Methamphetamine	1991	0.1	2.3	3.5
	1993	0.8	2.4	3.7
	1995	1.6	3.7	5.8
Hallucinogens	1991	0.3	2.5	5.2
	1993	0.9	3.6	3.7
	1995	1.0	3.8	6.7

*Some junior high schools include 6th graders.

Source: Arizona Criminal Justice Commission. 1995. *Substance Abuse and Public School Students: Survey of Elementary, Middle and Secondary Public School Students in Arizona*. Arizona has conducted statewide surveys in 1991, 1993 and 1995. Comparable methods were used for each. The surveys covered students in all grades from grade 3 to grade 12. In 1995, there were 15,605 public school students participating. Schools were stratified by grade level (elementary, middle/junior high, and high school) and by rural/urban status. Any school in or within 10 miles of the Phoenix or Tucson metropolitan area was defined as urban. The demographic characteristics of the sample of students were compared with school census data and with statewide demographics and were found to be representative.

DRUG EDUCATION -- IMPACT ON ARIZONA STUDENT USE

- ! In 1995, Arizona high school students who had drug education were less likely to report current illicit drug use than those with no drug education.
- ! Cocaine seemed to be the most affected by drug education. The Arizona students without drug education were about 3 times more likely to use cocaine than students with drug education.
- ! Arizona high school students with no drug education were about twice as likely to use hallucinogens, amphetamines, and inhalants than students with drug education.

Percent of Arizona High School Students Reporting Substance Use in the Past 30 Days by Drug Education Status

	Drug Education	No Drug Education
Alcohol	36.9%	38.9%
Marijuana	19.6	28.4
Cocaine	3.2	9.6
Hallucinogens	5.5	10.4
Amphetamine/Methamphetamine	4.6	9.8
Inhalants	5.2	9.6
Cigarettes	26.1	30.8
Smokeless Tobacco	8.3	14.2

Source: Arizona Criminal Justice Commission. 1995. *Substance Abuse and Public School Students: Survey of Elementary, Middle and Secondary Public School Students in Arizona*. Arizona has conducted statewide surveys in 1991, 1993 and 1995. Comparable methods were used for each. The surveys covered students in all grades from grade 3 to grade 12. In 1995, there were 15,605 public school students participating. The study sample consisted of a representative sample of students in attendance on the survey from a structured random sample of public schools from around the State. Schools were stratified by grade level (elementary, middle/junior high, and high school) and by rural/urban status. Any school in or within 10 miles of the Phoenix or Tucson metropolitan area was defined as urban. The demographic characteristics of the sample of students were compared with school census data and with statewide demographics and were found to be representative. Most of the students with drug education had received such education more than 2 years ago.

HEAVY DRINKING -- CALIFORNIA STUDENTS

- ! Between 1991 and 1996, the percent of California students in grades 7, 9, and 11 who drank 5 or more drinks in a row in the past 2 weeks decreased.
- ! The decline in heavy drinking was greatest among 7th graders: in 1991/92, about 13 percent reported drinking 5 or more in a row compared to 8 percent in 1995/96.
- ! The percent of students in grades 9 and 11 who liked to drink alcohol “enough to feel it a lot” or until they got really drunk increased.

Trends in Percent of California Students Reporting Indicators of Heavy Drinking by Grade and Survey Year, 1991/92 - 1995/96

	1991/92	1993/94	1995/96
Had 5 or more drinks in a row in the past two weeks:			
Grade 7	12.9%	9.5%	8.2%
Grade 9	18.8	19.4	17.4
Grade 11	25.6	21.6	21.8
Ever been very drunk:			
Grade 7	11.7	11.6	9.4
Grade 9	23.4	26.8	25.4
Grade 11	40.0	40.9	41.6
Like to drink alcohol enough to feel it a lot or until get really drunk:			
Grade 7	5.3	5.5	3.9
Grade 9	12.6	16.0	19.1
Grade 11	18.6	21.3	25.8

Source: Skager R & Austin G, 1997. *Sixth Biennial California Student Substance Use Survey: Grades 7, 9 and 11 Preliminary Findings*. WestEd-Southwest Regional Laboratory, Los Alamitos, CA. The California state-wide sample consisted of 128 public and private middle and senior high schools and 5,775 respondents in grades 7, 9, and 11. Schools were randomly selected for the sample proportionally to the number of schools in each of six geographic regions of the state. About half of the schools in each region were retained from the 1993-94 survey; the other half was newly selected. For the first year in the survey series, intact classrooms were sampled, rather than individual students, and active rather than passive parental consent was used.

SUBSTANCE USE -- CALIFORNIA STUDENTS

- ! Over half of the California students in grades 7, 9, and 11 had used alcohol in the past six months and by grade 11 nearly 75 percent were currently drinking.
- ! Between 1991/92 and 1995/96, the rate of drinking any alcohol in the past six months remained stable for California students in grades 7, 9, and 11; however, marijuana use in the past six months increased between 1991/92 and 1993/94.

Trends in Percent of California Students Reporting Substance Use in the Past 6 Months by Grade and Survey Year

Grade and Survey Year	Any Alcohol	Marijuana	Inhalants	Amphet- amines*	Cocaine
Grade 7:					
1991/92	53.2%	7.7%	12.5%	2.0%	2.9%
1993/94	53.1	11.1	16.5	2.9	2.8
1995/96	50.3	10.9	15.6	2.5	1.8
Grade 9:					
1991/92	67.4	19.4	11.8	3.3	3.6
1993/94	68.6	30.4	21.5	7.5	6.1
1995/96	67.2	34.2	21.9	10.8	6.4
Grade 11:					
1991/92	76.5	29.4	10.3	6.8	6.6
1993/94	74.3	40.0	13.1	10.1	4.9
1995/96	75.3	42.8	14.7	10.4	7.2

*Includes methamphetamines.

Source: Skager R & Austin G. 1997. *Sixth Biennial California Student Substance Use Survey: Grades 7, 9 and 11 Preliminary Findings*. West-Ed-Southwest Regional Laboratory, Los Alamitos, CA. The California state-wide sample consisted of 128 public and private middle and senior high schools and 5,775 respondents in grades 7, 9, and 11. Schools were randomly selected for the sample proportionally to the number of schools in each of six geographic regions of the state. About half of the schools in each region were retained from the 1993-94 survey; the other half was newly selected. For the first year in the survey series, intact classrooms were sampled, rather than individual students, and active rather than passive parental consent was used.

DRUG USE - MALE YOUTH IN THE SOUTHWEST BY ACADEMIC STANDING AND RACE/ETHNICITY

- ! Male youth in the Southwestern U.S. who dropped out of school were more likely to be involved in heavy illicit drug use than students who stayed in school.
- ! Rates of heavy drug involvement among dropouts were comparable for American Indian, Mexican American, and white male adolescents.
- ! Male students who were in poor academic standing at school were comparable to dropouts in their rates of moderate drug involvement.

Percent of Male Youth in the Southwest Reporting Drug Involvement in Lifetime* By Academic Standing and Race/Ethnicity

	Heavy Drug Involvement			Moderate Drug Involvement		
	Good Academic Standing	Poor Academic Standing	Dropouts	Good Academic Standing	Poor Academic Standing	Dropouts
American Indians	6.1%	20.6%	32.4%	19.7%	32.4%	33.8%
Mexican Americans	13.6%	27.6%	34.3%	17.6%	33.8%	34.3%
Whites	10.0%	27.5%	36.3%	22.5%	27.5%	23.8%

*Heavy drug involvement included either multiple drugs or one drug several times a week, or getting drunk essentially every weekend and often during the week as well. Substance use is usually an important part of most of their peer social interactions. Adolescents with moderate drug involvement used drugs or got drunk at least once a month and did not meet other criteria for heavy drug involvement.

Source: Beauvais F, Chavez EL, Oetting ER, Deffenbacher JL and Cornell GR. 1996. Drug Use, Violence, and Victimization Among White American, Mexican American, and American Indian Dropouts, Students With Academic Problems, and Students in Good Academic Standing. *Journal of Counselling Psychology* 43(3): 292-299. Data were collected between 1989 and 1993 from 2,015 adolescents living in a range of communities and environments in the Southwest. Dropouts were randomly selected from those identified from school records as students in grades 6-12 who had not attended school for at least 30 days, had not officially transferred to another school, and were not in contact with school authorities seeking readmission. The adolescent groups compared in grades 6 to 12 were: (1) students in good academic standing, (2) students in poor academic standing, and (3) school dropouts. The three groups were matched on age, ethnicity, gender, grade in school, and school site. Each participant completed a confidential questionnaire individually which was sealed by the respondent before mailing or collected by the research staff. The combined parental and student refusal rates were: 5.3% of the Mexican Americans, 7.8% of White Americans, and 2.8% of the American Indians. The drugs assessed were: alcohol, cocaine, heroin, heroin, inhalants, uppers, downers, and hallucinogens.

DRUG USE - FEMALE YOUTH IN THE SOUTHWEST BY ACADEMIC STANDING AND RACE/ETHNICITY

- ! Female students in the Southwestern U.S. who were in good academic standing were less likely to be involved in heavy illicit drug use than youth who dropped out or were in poor academic standing in school.
- ! The better their academic standing at school, the less likely American Indian female students were to be involved in heavy drug involvement.
- ! Mexican American female students who were in poor academic standing at school were comparable to dropouts in their rates of drug involvement.

Percent of Female Youth in the Southwest Reporting Drug Involvement in Lifetime* By Academic Standing and Race/Ethnicity

	Heavy Drug Involvement			Moderate Drug Involvement		
	Good Academic Standing	Poor Academic Standing	Dropouts	Good Academic Standing	Poor Academic Standing	Dropouts
American Indians	5.1%	13.9%	20.6%	31.3%	44.6%	48.0%
Mexican Americans	9.0%	20.3%	21.2%	25.6%	30.1%	32.6%
Whites	10.8%	18.9%	26.8%	16.2%	37.8%	35.2%

*Heavy drug involvement included either multiple drugs or one drug several times a week, or getting drunk essentially every weekend and often during the week as well. Substance use is usually an important part of most of their peer social interactions. Adolescents with moderate drug involvement used drugs or got drunk at least once a month and did not meet other criteria for heavy drug involvement.

Source: Beauvais F, Chavez EL, Oetting ER, Deffenbacher JL and Cornell GR. 1996. Drug Use, Violence, and Victimization Among White American, Mexican American, and American Indian Dropouts, Students With Academic Problems, and Students in Good Academic Standing. *Journal of Counselling Psychology* 43(3): 292-299. Data were collected between 1989 and 1993 from 2,015 adolescents living in a range of communities and environments in the Southwest. Dropouts were randomly selected from those identified from school records as students in grades 6-12 who had not attended school for at least 30 days, had not officially transferred to another school, and were not in contact with school authorities seeking readmission. The adolescent groups compared in grades 6 to 12 were: (1) students in good academic standing, (2) students in academic poor standing (APS) and (3) school dropouts (DO). The three groups were matched on age, ethnicity, gender, grade in school, and school site. Each participant completed a confidential questionnaire individually which was sealed by the respondent before mailing or collected by the research staff. The combined parental and student refusal rates were: 5.3% of the Mexican Americans, 7.8% of White Americans, and 2.8% of the American Indians. The drugs assessed were: alcohol, cocaine, heroin, inhalants, uppers, downers, and hallucinogens.

**PAST-MONTH HEAVY ALCOHOL AND ILLICIT DRUG USE
BY EMPLOYMENT STATUS**

- ! From 1985 to 1993, past-month illicit drug use decreased among the U.S. population age 18 to 49.
- ! There was a slight decrease from 1985 to 1993 in past-month heavy alcohol use among U.S. workers age 18 to 49 who were employed full time.
- ! From 1985 to 1993, among the population age 18 to 49, past-month heavy alcohol use increased among the unemployed but remained relatively steady for the population as a whole.

**Past-Month Illicit Drug and Heavy Alcohol Use* by Employment Status
U.S. Population, Age 18 to 49, 1985-1993**

Employment Status	1985	1988	1990	1991	1992	1993
Total Population						
Illicit drug use	16.5%	10.2%	8.9%	8.9%	8.0%	8.1%
Heavy alcohol use	8.5	6.5	6.8	7.6	7.0	7.0
Employed Full Time						
Illicit drug use	16.7	9.9	8.2	7.5	7.0	7.3
Heavy alcohol use	9.7	7.0	7.5	7.4	6.8	7.4
Employed Part Time						
Illicit drug use	15.3	11.7	10.3	10.5	8.4	10.3
Heavy alcohol use	6.8	6.7	6.2	6.3	7.4	5.9
Unemployed						
Illicit drug use	27.9	20.7	15.7	18.9	16.8	14.1
Heavy alcohol use	8.2	9.3	7.6	13.1	12.7	13.7
Not in Labor Force**						
Illicit drug use	11.7	6.7	7.2	8.4	7.1	7.0
Heavy alcohol use	4.6	3.5	3.1	6.8	4.9	3.5

* Current illicit drug use refers to any use in the past 30 days; heavy alcohol use is defined as drinking 5 or more drinks on 5 or more occasions during the previous 30 days.

** Retired, disabled, homemaker, student, and "other."

Source: SAMHSA, Office of Applied Studies. 1996. *Drug Use Among U.S. Workers: Prevalence and Trends by Occupation and Industry Categories*, p. 9. This report contains national estimates of the prevalence of substance use among persons working in specific occupation and industry categories. The estimates are derived from the 1991 to 1993 National Household Surveys on Drug Abuse, a cross-sectional survey of the civilian noninstitutionalized U.S. population ages 12 and older. No attempt was made in this report to control for potentially confounding factors (e.g., age, sex) that might explain observed associations.

CURRENT DRUG USE BY EMPLOYMENT STATUS

- ! Unemployed adults, age 18 and older, were more likely to be current illicit drug users than those in any other employment status.
- ! Adults who were least likely to be illicit drug users were those who were not in the labor force, that is, they were retired, disabled, etc.
- ! In 1997, 13.8 percent of the unemployed adults used at least one illicit drug in the past month. Among the employed, 6.5 percent of full-time workers and 7.7 percent of part-time workers were current illicit drug users.
- ! While those who were unemployed were more likely to be illicit drug users, over half (59.1 percent) of the total group of drug users were employed.

Illicit Drug Use in the Past Month by Employment Status U.S. Population, Age 18 and Older, 1997

Employment Status*	Number Who Used (1,000s)	Percent of Employment Group Who Used	Percent of Total Drug Users	Percent of U.S. Population
Total	11,323	6.4%	100.0%	100.0%
Full-time	6,689	6.5	59.1	53.5
Part-time	1,621	7.7	14.3	10.8
Unemployed	1,184	13.8	10.4	3.4
Not in Labor Force	1,829	3.0	16.2	32.3

* "Part time" is defined as working less than 35 hours a week. "Not in labor force" includes retired, disabled, homemaker, student, and "other" statuses.

Source: **Drug use:** SAMHSA, Office of Applied Studies. 1998. *Preliminary Results from the 1997 National Household Survey on Drug Abuse* (NHSDA), Tables 19 and unpublished 35A. In 1997, the NHSDA employed a multistage area probability sample of 24,505 persons in the U.S. civilian noninstitutionalized population. **Estimated data for the U.S. civilian, noninstitutionalized population 18 years and older:** Bureau of Labor Statistics. January 1997. *Employment and Earnings*, Household Data Annual Averages, Tables 2 and 8.

CURRENT ILLICIT DRUG USE BY OCCUPATION

- ! Between 1991 and 1993, the highest rates of current illicit drug use were reported by workers in construction, food preparation staff, and restaurant waitstaff.
- ! The lowest rates of current illicit drug use were found among police officers and detectives, administrative support staff, teachers, and child care workers.

Occupation Categories with the Highest and Lowest Rates of Current Illicit Drug Use* Full-Time Workers, Age 18 to 49, 1991-1993

Highest Rates of Use			Lowest Rates of Use		
Occupation Category	Standard Occupation Code**	Percent Current Drug Use	Occupation Category	Standard Occupation Code**	Percent Current Drug Use
Other construction	563-566, 573, 588-599	17.3	Police and detectives	418-424	1.0
Construction supervisors	553-558	17.2	Administrative support	389	2.2
Food prep	436-444	16.3	Teachers	113-159	2.3
Waitstaff	435	15.4	Child care	406, 468	2.6
Helpers and laborers	864-873	13.1	Dental and health aides	445, 446	2.8
Writers, designers, artists, and athletes	183, 185- 188, 193, 194, 199	13.1	Data clerks	384-386	3.2
Janitors	453	13.0	Records processing clerks	326-336	3.5
Purchasing agents/buyers	028-033	12.9	Computer programmers and operators	229, 308, 309	3.6
Auto mechanics	505	12.8	Engineers	044-059	3.9
Construction laborers	865, 869	12.8	Therapists	098-106	4.0

* Refers to any use of an illicit drug in the past 30 days.

** U.S. Department of Labor Standard Occupation and Industry Codes.

Source: SAMHSA, Office of Applied Studies. 1996. *Drug Use Among U.S. Workers: Prevalence and Trends by Occupation and Industry Categories*, p. 17. This report contains national estimates of the prevalence of substance use among persons working in specific occupation and industry categories. The estimates are derived from the 1991 to 1993 National Household Surveys on Drug Abuse, a cross-sectional survey of the civilian noninstitutionalized U.S. population ages 12 and older. The sample used to obtain the above estimates comprised a total of 33,505 full-time workers between the ages of 18 and 49. No attempt was made in this report to control for potentially confounding factors (e.g., age, sex) that might explain observed associations.

WORKPLACE DRUG TESTING - TRENDS

- ! The percent of positive drug tests among workers has decreased significantly from 18.1% in 1987 to 5.8% in 1996, as measured by the SmithKline Beecham Drug Testing Index.
- ! The decline in positive drug tests among American workers has continued into the first six months of 1997, when the rate of positive drug tests was 5.4%.

Trends in Percent of Positive Drug Tests Among American Workers January 1, 1987 - June 30, 1997

Year	Percent Testing Positive
1987	18.1%
1988	13.6%
1989	12.7%
1990	11.0%
1991	8.8%
1992	8.8%
1993	8.4%
1994	7.5%
1995	6.7%
1996	5.8%
January- June 30, 1997	5.4%

Source: SmithKline Beecham Clinical Laboratories (SBCL). 1997. *SmithKline Beecham Drug Testing Index 1996 Report*. Collegeville, Pennsylvania. SBCL conducts the drug testing for the data reported here in accordance with the Mandatory Guidelines for Federal Workplace Drug Testing Programs, *Federal Register*, 59(110),29908-29931; June 9, 1994. SBCL is accredited by the College of American Pathologists and seven of its laboratories are certified by DHHS to provide substance abuse testing for federally mandated programs. Laboratory certification requires that drug testing labs have a quality assurance program involving all aspects of the testing from specimen collection, chain of custody, security, initial and confirmatory testing, validation of analytic procedures, and reporting the results. SBCL has maintained a national database of the drug tests it performs since 1987. In the first 6 months of 1997, SBCL performed a total of 2.2 million drug tests; 5.4 percent of these were positive. During the same period, over 400,000 tests were conducted on the safety sensitive transportation workforce; 3.5 percent of these were positive.

WORKPLACE DRUG TESTING - DRUGS DETECTED

- ! Marijuana and cocaine are the most frequently detected drugs among those tested in the total U.S. workforce (includes the federally mandated testing for substance abuse among members of the safety sensitive transportation workforce).
- ! The percent of drug tests conducted in the workplace that were positive for marijuana has remained about 3.5 percent since 1993; while the positive rate for cocaine has gone from 2.4 percent to 1 percent, as measured by the SmithKline Beecham Drug Testing Index.
- ! The percent of workplace drug tests that were positive for heroin and other opiates has remained less than 1 percent since 1993.

Trends in Percent of Positive Drug Tests by Drug Type Among American Workers* January 1, 1993 - June 30, 1997

Drug Type	1993	1994	1995	1996	January 1, to June 30, 1997
Marijuana	3.40%	3.50%	3.70%	3.40%	3.5%
Cocaine	2.40%	1.80%	1.40%	1.20%	1.0%
Benzodiazepines	--	0.80%	0.50%	0.38%	0.32%
Opiates	0.80%	0.50%	0.50%	0.46%	0.48%
Barbiturates	0.38%	0.33%	0.26%	0.19%	0.20%

*Includes all workplace drug tests whether federally mandated or not.

Source: SmithKline Beecham Clinical Laboratories (SBCL). 1997. *SmithKline Beecham Drug Testing Index 1996 Report*. Collegeville, Pennsylvania. SBCL conducts the drug testing for the data reported here in accordance with the Mandatory Guidelines for Federal Workplace Drug Testing Programs, *Federal Register*, 59(110),29908-29931; June 9, 1994. SBCL is accredited by the College of American Pathologists and seven of its laboratories are certified by DHHS to provide substance abuse testing for federally mandated programs. Laboratory certification requires that drug testing labs have a quality assurance program involving all aspects of the testing from specimen collection, chain of custody, security, initial and confirmatory testing, validation of analytic procedures, and reporting the results. SBCL has maintained a national database of the drug tests it performs since 1987. In the first 6 months of 1997, SBCL performed a total of 2.2 million drug tests; 5.4 percent of these were positive. During the same period, over 400,000 tests were conducted on the safety sensitive transportation workforce; 3.5 percent of these were positive.

WORKPLACE DRUG TESTING - POSITIVE RATES BY TEST REASONS

- ! Drug testing for safety-sensitive transportation workforce members is federally mandated. This workforce includes persons in commercial transportation, such as airline pilots, whose alcohol or drug use directly impacts on public safety.
- ! The highest rate of positive drug tests in the safety-sensitive transportation workforce was among workers tested for cause. Since 1993, about 10 - 11 percent of the workers tested for cause had positive drug test results, as measured by the SmithKline Beecham Drug Testing Index.
- ! Since 1993, about 2 - 3 percent of the drug tests were positive among workers tested periodically or randomly in the safety-sensitive transportation workforce.

Trends in Percent of Positive Drug Tests by Reason for Drug Testing Among American Workers in the Safety-Sensitive Transportation Workforce January 1, 1993 - June 30, 1997

Testing Reason	1993	1994	1995	1996	January 1, to June 30, 1997
Pre-Employment	3.4%	4.1%	4.1%	4.3%	3.9%
Periodic	1.5%	1.7%	1.7%	1.6%	1.6%
Random	2.4%	2.7%	3.0%	2.9%	2.8%
Post-Accident	3.3%	3.4%	6.0%	3.3%	3.3%
For Cause	9.9%	9.5%	10.8%	11.0%	9.7%
Returned to Duty	2.3%	2.8%	3.7%	3.8%	6.0%

Source: SmithKline Beecham Clinical Laboratories (SBCL). 1997. *SmithKline Beecham Drug Testing Index 1996 Report*. Collegeville, Pennsylvania. SBCL conducts the drug testing for the data reported here in accordance with the Mandatory Guidelines for Federal Workplace Drug Testing Programs, *Federal Register*, 59(110),29908-29931; June 9, 1994. SBCL is accredited by the College of American Pathologists and seven of its laboratories are certified by DHHS to provide substance abuse testing for federally mandated programs. Laboratory certification requires that drug testing labs have a quality assurance program involving all aspects of the testing from specimen collection, chain of custody, security, initial and confirmatory testing, validation of analytic procedures, and reporting the results. SBCL has maintained a national database of the drug tests it performs since 1987. In the first 6 months of 1997, SBCL performed a total of 2.2 million drug tests; 5.4 percent of these were positive. During the same period, over 400,000 tests were conducted on the safety sensitive transportation workforce; 3.5 percent of these were positive.

WORKPLACE DRUG TESTING - POSITIVE RATES BY WORKFORCE CATEGORY

- ! The safety-sensitive transportation workforce continues to have a lower rate of positive drug tests than the rest of the workforce since 1993, as measured by the SmithKline Beecham Drug Testing Index.
- ! The percent of positive drug tests among the general workforce (not including the safety-sensitive transportation workers) continued to decline from 9.8 percent in 1993 to 6.4 percent in 1996 and in the first 6 months of 1997.

Trends in Percent of Positive Drug Tests by Workforce Category January 1, 1993 - June 30, 1997

Workforce Category	1993	1994	1995	1996	January 1- June 30, 1997
Safety-Sensitive* Transportation Workforce	2.8%	3.5%	3.4%	3.6%	3.5%
General Workforce	9.8%	8.6%	7.5%	6.4%	6.4%
TOTAL	8.4%	7.5%	6.7%	5.8%	5.4%

*Safety-sensitive workers, as defined by DOT regulations, are workers in the commercial transportation industry whose alcohol or drug use directly impacts on public safety. The safety sensitive workforce includes air traffic controllers, pilots, mechanics, crew members operating a commercial vessel, dispatchers, and mass transit vehicle operators. The Omnibus Transportation Employee Testing Act of 1991 requires that safety sensitive employees in the aviation, motor carrier, railroad, pipeline, maritime, and mass transit industries be tested for alcohol and other drug use. In January, 1995, all vehicle drivers required to have a commercial drivers license were included.

Source: SmithKline Beecham Clinical Laboratories (SBCL), 1997. *SmithKline Beecham Drug Testing Index 1996 Report*. Collegeville, Pennsylvania. SBCL conducts the drug testing for the data reported here in accordance with the Mandatory Guidelines for Federal Workplace Drug Testing Programs, *Federal Register*, 59(110),29908-29931; June 9, 1994. SBCL is accredited by the College of American Pathologists. Seven of its laboratories are certified by DHHS to provide substance abuse testing for federally mandated programs. Laboratory certification requires that drug testing labs have a quality assurance program involving all aspects of the testing from specimen collection, chain of custody, security, initial and confirmatory testing, validation of analytic procedures, and reporting the results. SBCL has maintained a national database of the drug tests it performs since 1987. In the first 6 months of 1997, SBCL performed over 400,000 tests on the safety sensitive transportation workforce; 3.5 percent of these were positive.

WORKPLACE DRUG TESTING - DRUGS DETECTED

- ! In the first six months of 1997, the SmithKline Beecham Clinical Laboratories performed more than 22 million drug tests; 5.4 percent of these were positive for one of the drugs tested.
- ! Of all the workplace drug tests that were positive, 59.1 percent were positive for marijuana, 17.8 percent for cocaine, 7.9 percent for opiates, and 5.3 percent for benzodiazepines, as measured by the SmithKline Beecham Drug Testing Index.

Drug Type as Percent of Positive Drug Tests Among American Workers January 1, 1997 - June 30, 1997

Drug Type	Percent of All Positives
Marijuana	59.1%
Cocaine	17.8%
Opiates	7.9%
Benzodiazepines	5.3%
Amphetamines	3.8%
Barbiturates	3.3%
Propoxyphene	1.6%
Methadone	0.7%
PCP	0.4%
Methaqualone	0.01%

Source: SmithKline Beecham Clinical Laboratories (SBCL), 1997. *SmithKline Beecham Drug Testing Index 1996 Report*. Collegeville, Pennsylvania. SBCL conducts the drug testing for the data reported here in accordance with the Mandatory Guidelines for Federal Workplace Drug Testing Programs, *Federal Register*, 59(110),29908-29931; June 9, 1994. SBCL is accredited by the College of American Pathologists and seven of its laboratories are certified by DHHS to provide substance abuse testing for federally mandated programs. Laboratory certification requires that drug testing labs have a quality assurance program involving all aspects of the testing from specimen collection, chain of custody, security, initial and confirmatory testing, validation of analytic procedures, and reporting the results. SBCL has maintained a national database of the drug tests it performs since 1987. In the first 6 months of 1997, SBCL performed a total of 2.2 million drug tests; 5.4 percent of these were positive. During the same period, over 400,000 tests were conducted on the safety sensitive transportation workforce; 3.5 percent of these were positive.

MENTAL HEALTH TREATMENT AND GENDER

- ! Over 3.9 million persons were on the rolls of mental health organizations and general hospital psychiatric services at the end of 1994; 52 percent were male and 48 percent were female.
- ! Among those who received care in a 24-hour hospital or residential care settings, proportionately more were males than females; there were about equal proportions of males and females among those who received care in a less than 24-hour setting.

**Number and Percent of Clients Receiving Mental Health Treatment
By Organizational Setting and Gender, 1994**

Gender	TOTAL Number (Percent)	24 hr. Hospital Number (Percent)	24 hr. Residential Number (Percent)	Less than 24 hr. Number (Percent)
Male	2,033,142 (52%)	87,430 (60%)	56,589 (62%)	1,889,123 (51%)
Female	1,883,916 (48%)	58,034 (40%)	35,104 (38%)	1,790,778 (49%)
TOTAL	3,917,058 (100%)	145,464 (100%)	91,693 (100%)	3,679,901 (100%)

Source: SAMHSA, Center for Mental Health Services. 1998. Unpublished data from the 1994 Inventory for Mental Health Organizations/General Hospital Mental Health Services. The survey collected information from specialty mental health organizations and general hospitals with separate psychiatric services.

MENTAL HEALTH TREATMENT AND AGE GROUP

- ! Proportionately, the largest age group receiving mental health treatment in any setting in 1994 were persons age 35-64.
- ! Clients age 17 and younger comprised a smaller proportion of those who received care in a 24-hour hospital than in any other setting.
- ! Proportionately more clients who received care in a 24-hour hospital setting were middle aged; 49 percent were age 35-64

Number and Percent of Clients Receiving Mental Health Treatment By Organizational Setting and Age Group, 1994

Age Group	24 hr. Hospital Number (%)	24 hr. Residential Number (%)	Less than 24 hr. Number (%)
Younger Than 13 Years	5,434 (4%)	10,656 (12%)	435,339 (12%)
13-17 Years	10,829 (7%)	26,459 (29%)	388,201 (11%)
18-34 Years	34,854 (24%)	19,611 (21%)	1,005,444 (27%)
35-64 Years	71,627 (49%)	29,590 (32%)	1,503,570 (41%)
65-74 Years	13,892 (10%)	4,182 (5%)	248,035 (7%)
75 Years and Older	8,828 (6%)	1,195 (1%)	99,312 (2%)
TOTAL	145,464 (100%)	91,693 (100%)	3,679,901 (100%)

Source: SAMHSA, Center for Mental Health Services. 1998. Unpublished data from the 1994 Inventory for Mental Health Organizations/General Hospital Mental Health Services. The survey collected information from specialty mental health organizations and general hospitals with separate psychiatric services.

MENTAL HEALTH TREATMENT AND HISPANICS

- ! In 1994, more Hispanics, like non-Hispanics, received mental health treatment in settings providing less than 24 hour care than in hospitals or residential settings.
- ! About 9 percent of those receiving treatment in a 24 hour care hospital or residential setting were Hispanic.

Number and Percent of Clients Receiving Mental Health Treatment By Organizational Setting and Hispanic Status, 1994

Hispanic Status	24 hr. Hospital		24 hr. Residential		Less than 24 hr.	
	Number	(%)	Number	(%)	Number	(%)
Hispanic	13,283	(9%)	7,894	(9%)	429,886	(12%)
Non-Hispanic	132,181	(91%)	83,799	(91%)	3,250,015	(88%)
TOTAL	145,464	(100%)	91,693	(100%)	3,679,901	(100%)

Source: SAMHSA, Center for Mental Health Services. 1998. Unpublished data from the 1994 Inventory for Mental Health Organizations/General Hospital Mental Health Services. The survey collected information from specialty mental health organizations and general hospitals with separate psychiatric services.

MENTAL HEALTH TREATMENT AND RACIAL GROUP

- ! Most racial groups received their mental health treatment in less than 24 hour settings.
- ! There were proportionately more blacks among persons receiving mental health treatment in a 24 hour setting than among persons receiving care in less than 24 hour settings.
- ! Asian/Pacific Islanders and American Indians/Alaska Natives each comprised about 1 percent of those who received mental health treatment in a 24 hour hospital setting.

Number and Percent of Clients Receiving Mental Health Treatment By Organizational Setting and Racial Group, 1994

Racial Group	24 hr. Hospital		24 hr. Residential		Less than 24 hr.	
	Number	(%)	Number	(%)	Number	(%)
White	106,081	(73%)	67,024	(73%)	2,893,136	(79%)
Black	36,277	(25%)	22,206	(24%)	676,346	(18%)
American Indian/ Alaska Native	1,265	(1%)	1,569	(2%)	50,409	(1%)
Asian/ Pacific Islander	1,841	(1%)	894	(1%)	60,010	(2%)
TOTAL	145,464	(100%)	91,693	(100%)	3,679,901	(100%)

Source: SAMHSA, Center for Mental Health Services. 1998. Unpublished data from the 1994 Inventory for Mental Health Organizations/General Hospital Mental Health Services. The survey collected information from specialty mental health organizations and general hospitals with separate psychiatric services.

MENTAL HEALTH TREATMENT AND DIAGNOSIS

- ! In 1994, proportionately fewer persons who received mental health treatment in less than 24 hour settings had a diagnosis of major mental disorders (such as schizophrenia and other psychoses) than other mental health diagnoses.
- ! Proportionately more persons who were treated in 24 hour care settings had a diagnosis of schizophrenia and other psychosis than any other mental health diagnoses.

Number and Percent of Clients Receiving Mental Health Treatment By Organizational Setting and Major Diagnostic Groups, 1994

Major Diagnostic Group	24 hr. Hospital		24 hr. Residential		Less than 24 hr.	
	Number	(%)	Number	(%)	Number	(%)
Schizophrenia and Other Psychoses*	63,769	(49%)	29,496	(39%)	786,550	(26%)
Mood Disorders **	39,836	(31%)	18,738	(25%)	1,038,809	(34%)
Other Mental Health Diagnoses***	25,920	(20%)	27,366	(36%)	1,250,793	(40%)
TOTAL	129,525	(100%)	75,600	100%)	3,076,152	(100%)

* DSM 295, 297, and 298

** DSM 296, 300.4, and 301.13

*** DSM 290, 293, 294, 300 (except 300.4), 301 (except 301.1), 302, 306, 307, 309-314, 316, 780.5, and v71.09.

Source: SAMHSA, Center for Mental Health Services. 1998. Unpublished data from the 1994 Inventory for Mental Health Organizations/General Hospital Mental Health Services. The survey collected information from specialty mental health organizations and general hospitals with separate psychiatric services.

LIFETIME AND PAST-YEAR PREVALENCE OF MENTAL DISORDER

- ! In 1991, among persons age 15 to 54 years, 11 percent had past-year affective disorder, 17 percent had past-year anxiety disorder, and less than 1 percent experienced past-year schizophrenia or other nonaffective disorder.
- ! Major depression was the most common affective disorder in 1991; more than 10 percent of the population experienced a past-year episode.
- ! During their lifetimes, about 25 percent of the population have had an anxiety disorder, and 19 percent have had an affective disorder.

Persons With Lifetime and Past-Year Mental Disorder, U.S. Population, Age 15 to 54, 1991

Type of Disorder	Lifetime	Past-Year
Any Affective Disorder	19.3%	11.3%
Major depressive episode	17.1	10.3
Manic episode	1.6	1.3
Dysthymia ^a	6.4	2.5
Any Anxiety Disorder^b	24.9	17.2
Panic disorder	3.5	2.3
Agoraphobia w/o panic disorder	5.3	2.8
Social phobia	13.3	7.9
Simple phobia	11.3	8.8
Generalized anxiety disorder	5.1	3.1
Antisocial Personality^c	3.5	-
Nonaffective Psychosis^d	0.7	0.5

^a Characterized by chronic, less severe depressive symptoms than major depression; symptoms must be present at least 2 years for this diagnosis. ^b Involves fear, anxiety, and/or avoidance of places and situations such as crowds, traveling, or places outside home. Anxiety is about places or situations where panic attacks/symptoms may occur and the person feels help is unavailable or escape is difficult. ^c Assessed only on a lifetime basis. ^d Includes schizophrenia, schizophreniform disorder, delusional disorder, and atypical psychosis.

Source: Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Dendler KS. 1994. "Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States." *Archives of General Psychiatry* 51:8-19, Table 2. These estimates are from the National Comorbidity Survey (NCS). The survey was based on interviews administered to a probability sample of the noninstitutionalized U.S. civilian population. The NCS sample consisted of 8,098 respondents, age 15 to 54 years. This survey was conducted from September 1990 to February 1992. DSM-III-R criteria were used as the basis for assessing disorders in the general population. A random sample of initial nonrespondents was contacted further and received a financial incentive to participate. A nonresponse weight was used to adjust for the higher rates of alcohol, drug abuse, and mental disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation.

PAST-YEAR MENTAL DISORDER BY AGE

- ! The population age 15 to 24 years is more likely to suffer a past-year mental disorder than any other age group among persons age 15 to 54.
- ! About 27 percent of persons 15 to 24 years of age had some type of mental disorder during the past year.
- ! During the past year, about 21 percent of persons age 15 to 24 years experienced some type of anxiety disorder, and 14 percent experienced some type of affective disorder.

Past-Year Mental Disorders by Age U.S. Population, Age 15 to 54, 1991

Type of Disorder	15-24 Years	25-34 Years	35-44 Years	45-54 Years
Any mental disorder*	27%	23%	21%	20%
Anxiety disorder	21	17	15	16
Affective disorder	14	11	11	9

* In this table, “any mental disorder” refers to the following categories of disorders: affective, anxiety, nonaffective psychosis, and antisocial personality; substance abuse/dependence has been excluded.

Source: Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Dendler KS. 1994. Unpublished data from the National Comorbidity Survey (NCS). The survey was based on interviews administered to a probability sample of the noninstitutionalized U.S. civilian population. The NCS sample consisted of 8,098 respondents, age 15 to 54 years. DSM-III-R criteria were used as the basis for assessing disorders in the general population. A nonresponse weight was used to adjust for the higher rates of alcohol, drug abuse, and mental disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation. Anxiety disorders include panic disorder, agoraphobia, social phobia, simple phobia, and generalized anxiety disorder. Affective disorders include major depressive episode, manic episode, and dysthymia. Nonaffective psychoses include schizophrenias, delusional disorder, and atypical psychoses.

MENTAL SYNDROMES BY AGE

- ! In 1996, persons age 50 and older were less likely to experience a major depressive episode than persons age 18 to 49.
- ! About 8 percent of people between the ages of 18 and 49 had a major depressive episode during the year.
- ! Generalized anxiety disorder, agoraphobia, and panic attack each occurred in 1.6 to 2.9 percent of adults.

Prevalence of Four Mental Syndromes by Age U.S. Population, Age 18 and Older, 1996

Type of Disorder	Total	18-25 yrs	26-34 yrs	35-49 yrs	50+ yrs
Major depressive episode	6.3%	7.6%	7.2%	7.5%	4.2%
Generalized anxiety disorder	2.0	1.5	1.8	2.4	1.8
Agoraphobia	1.6	1.7	1.5	1.8	1.5
Panic attack	2.9	3.4	3.1	2.8	2.8

Source: SAMHSA, Office of Applied Studies. 1997. Unpublished data from the 1996 National Household Survey on Drug Abuse. The 1996 survey employed a multistage area probability sample of 18,269 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1996, and incorporates an over-sampling of Blacks, Hispanics, and young people. The survey also included a module of questions asking adults about their mental health status during the past year. The adult mental health screening scale developed by the Institute for Social Research at the University of Michigan was used to estimate the presence of four clinical mental syndromes defined in the DSM-III-R (Revised Third Edition) published by the American Psychiatric Association (1987).

PREVALENCE OF MENTAL SYNDROMES BY AGE AND GENDER

- ! Of the four syndromes, major depressive episode was more prevalent in both women and men than generalized anxiety disorder, agoraphobia, and panic attack.
- ! Major depressive episode occurred in 8 percent of women and 5 percent of men.
- ! Major depressive episode was less prevalent among persons age 50 years and older than among younger age groups.

**Prevalence of Past-Year Mental Syndromes by Age and Gender
U.S. Population, Age 18 and Older, 1996**

Type of disorder	Males					Females				
	18+	18-25	26-34	35-49	50+	18+	18-25	26-34	35-49	50+
Major depressive episode	4.8%	6.4%	5.0%	5.3%	3.4%	7.7%	8.8%	9.3%	9.7%	4.8%
Generalized anxiety disorder	1.6	1.2	1.2	1.9	1.8	2.3	1.8	2.2	3.0	1.9
Agoraphobia	0.8	0.9	0.8	1.2	0.3	2.4	2.5	2.2	2.3	2.5
Panic attack	1.6	2.1	1.9	1.5	1.2	4.2	4.7	4.2	4.1	4.2

Source: SAMHSA, Office of Applied Studies. 1997. Unpublished data from the 1996 National Household Survey on Drug Abuse. The 1996 survey employed a multistage area probability sample of 18,269 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1996, and incorporates an over-sampling of Blacks, Hispanics, and young people. The survey also included a module of questions asking adults about their mental health status during the past year. The adult mental health screening scale developed by the Institute for Social Research at the University of Michigan was used to estimate the presence of four clinical mental syndromes defined in the DSM-III-R (Revised Third Edition) published by the American Psychiatric Association (1987).

PREVALENCE OF MENTAL SYNDROMES BY RACE/ETHNICITY

- ! In the past year, a higher percentage of the White population experienced a major depressive episode, generalized anxiety disorder, and panic attack than either Blacks or Hispanics.
- ! About 6.8 percent of the White and 5.3 percent of the Hispanic population had a major depressive episode. Of the Black population, 5.4 percent experienced this syndrome.
- ! Agoraphobia occurred in 1.5 percent of the White population, 2.8 percent of the Black population, and 1.7 percent of the Hispanic population.
- ! Generalized anxiety disorder was experienced by 2.1 percent of Whites, 1.6 percent of Blacks, and 1.5 percent of Hispanics.

Past-Year Mental Syndromes by Race/Ethnicity U.S. Population, Age 18 and Older, 1996

Type of Disorder	Total	Non- Hispanic Whites	Non- Hispanic Blacks	Hispanics
Major depressive episode	6.3%	6.8%	5.4%	5.3%
Generalized anxiety disorder	2.0	2.1	1.6	1.5
Agoraphobia	1.6	1.5	2.8	1.7
Panic attack	2.9	3.3	2.4	1.7

Source: SAMHSA, Office of Applied Studies. 1997. Unpublished data from the 1996 National Household Survey on Drug Abuse. The 1996 survey employed a multistage area probability sample of 18,269 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1996, and incorporates an over-sampling of Blacks, Hispanics, and young people. The survey also included a module of questions asking adults about their mental health status during the past year. The adult mental health screening scale developed by the Institute for Social Research at the University of Michigan was used to estimate the presence of four clinical mental syndromes defined in the DSM-III-R (Revised Third Edition) published by the American Psychiatric Association (1987).

PREVALENCE OF MAJOR DEPRESSIVE EPISODE

- ! In 1991, 5 percent of the U.S. population age 15 to 54 had experienced a past-month prevalence, and 17 percent a lifetime prevalence, of major depression.
- ! In 1991, 8 percent of Hispanics had a major depressive episode within the past month.
- ! Blacks were least likely to experience a major depressive episode both within their lifetimes (11.9 percent) and in the past month (3.8 percent).
- ! Women had higher past-month (5.9 percent) and lifetime (21.3 percent) prevalences of major depression.

Major Depressive Episode by Race/Ethnicity and Gender U.S. Population, Age 15 to 54, 1991

Race/Ethnicity	Lifetime			Past Month		
	Total	Men	Women	Total	Men	Women
Total	17.1%	12.7%	21.3%	4.9%	3.8%	5.9%
White	17.9	13.5	22.3	4.7	4.0	5.4
Black	11.9	7.2	15.5	3.8	1.2	5.7
Hispanic	17.7	11.7	23.9	8.1	5.3	11.1

Source: Blazer D, Kessler RC, McGonagle KA, Swartz MS. 1994. "The Prevalence and Distribution of Major Depression in a National Community Sample: The National Comorbidity Survey." *American Journal of Psychiatry* 151(7):979-986, Table 2. A national probability sample of persons age 15-54 years in the noninstitutionalized civilian population was administered a structured psychiatric interview. Hawaii and Alaska were not included. A supplemental sample of students living in campus group housing was used. The response rate was 83 percent, and 8,098 respondents participated. A random sample of initial nonrespondents was contacted further and received a financial incentive to participate. A nonresponse weight was used to adjust for the higher rates of alcohol, drug abuse, or mental disorders found in the sample of initial nonrespondents. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation.

**PREVALENCE OF MAJOR DEPRESSIVE EPISODE
BY RACE/ETHNICITY AND GENDER**

- ! In 1996, about 7 percent of Whites, 5 percent of Blacks, and 5 percent of Hispanics experienced a major depressive episode.
- ! In 1996, of men age 18 and older, about 5 percent of Whites, 3 percent of Blacks, and 4 percent of Hispanics experienced a major depressive episode.
- ! About 8 percent of White and Black women and 7 percent of Hispanic women age 18 and older had a major depressive episode in 1996.

**Prevalence of Major Depressive Episode by Gender and Race/Ethnicity,
U.S. Population, Age 18 and Older, 1996**

Race/Ethnicity	Total	Males	Females
White	6.8%	5.4%	8.1%
Black	5.4	2.5	7.7
Hispanic	5.3	3.8	6.9
Other	1.8	1.2	2.3

Source: SAMHSA, Office of Applied Studies. 1997. Unpublished data from the 1996 National Household Survey on Drug Abuse. The 1996 survey employed a multistage area probability sample of 18,269 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1996, and incorporates an over-sampling of Blacks, Hispanics, and young people. It also included a module of questions asking adults about their mental health status during the past year. The adult mental health screening scale developed by the Institute for Social Research at the University of Michigan was used to estimate the presence of four clinical mental syndromes defined in the DSM-III-R (Revised Third Edition) published by the American Psychiatric Association (1987).

PREVALENCE OF ANXIETY DISORDER BY GENDER

- ! About 25 percent of persons between the ages of 15 and 54 experience an anxiety disorder at some point in their lives.
- ! Among persons age 15 to 54, lifetime anxiety disorders are more prevalent among females (31 percent) than males (19 percent).
- ! About 17 percent of persons age 15 to 54 suffer from a past-year anxiety disorder.
- ! Among females, simple phobia is more prevalent than social phobia in the past year (13 percent versus 9 percent, respectively).
- ! Among males, simple phobia is less prevalent than social phobia in the past year (4 percent versus 7 percent, respectively).

**Prevalence of Anxiety Disorders by Gender
U.S. Population, Age 15 to 54, 1991**

Type of Disorder	Lifetime			Past Year		
	Total	Male	Female	Total	Male	Female
Any Anxiety Disorder*	24.9%	19.2%	30.5%	17.2%	11.8%	22.6%
Social Phobia	13.3	11.1	15.5	7.9	6.6	9.1
Simple Phobia	11.3	6.7	15.7	8.8	4.4	13.2

* “Any anxiety disorder” includes the following: panic disorder, agoraphobia without panic disorder, social phobia, simple phobia, and generalized anxiety disorder.

Source: Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Dendler KS. 1994. “Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States.” *Archives of General Psychiatry* 51:8-19, Table 2. These estimates are from the National Comorbidity Survey (NCS). The survey was based on interviews administered to a probability sample of the noninstitutionalized U.S. civilian population. The NCS sample consisted of 8,098 respondents, age 15 to 54 years. This survey was conducted from September 1990 to February 1992. DSM-III-R criteria were used as the basis for assessing disorders in the general population. A random sample of initial nonrespondents was contacted further and received a financial incentive to participate. A nonresponse weight was used to adjust for the higher rates of alcohol, drug abuse, and mental disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation.

CO-EXISTING MENTAL DISORDERS WITH GENERALIZED ANXIETY DISORDER

- ! Major depression is the most common co-existing condition for persons with generalized anxiety disorder.
- ! Almost 90 percent of persons with generalized anxiety disorder at some point in their lifetime have a co-existing substance abuse or mental disorder.
- ! Only 2 percent of the population age 15 to 54 years have a current diagnosis of generalized anxiety disorder, but it affects about 5 percent of the population at some point in their lives.

Comorbidity With Generalized Anxiety Disorder U.S. Population, Age 15 to 54, 1991

Co-existing Disorder	Lifetime	Past 30 Days
Any Disorder*	90.4%	66.3%
Major Depression	62.4	38.6
Agoraphobia	25.7	26.7
Panic Disorder	23.5	22.6

* Includes affective disorder, anxiety disorder, nonaffective psychosis, antisocial personality, and substance abuse.

Source: Wittchen H-U, Zhao S, Kessler RC, Eaton WW. 1994. "DSM-III-R Generalized Anxiety Disorder in the National Comorbidity Survey." *Archives of General Psychiatry* 51:355-364, Table 3. A national probability sample of persons age 15 to 54 years in the noninstitutionalized civilian population was administered a structured psychiatric interview. Hawaii and Alaska were not included; a supplemental sample of students living in campus group housing was included. The response rate was 83 percent and 8,098 respondents participated. A random sample of initial nonrespondents was contacted further and received a financial incentive to participate. A nonresponse weight was used to adjust for the higher rates of alcohol, drug abuse, or mental disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation.

CURRENT POST-TRAUMATIC STRESS DISORDER BY STRESSFUL EVENTS

- ! Among the entire population exposed to a potentially traumatic event, about 7 percent exhibited post-traumatic stress disorder (PTSD).
- ! Among people who experienced severely stressful events, greater proportions of persons age 40 to 59, females, and Blacks met diagnostic criteria for PTSD.
- ! Older persons exposed to severely stressful events were the least likely to have current PTSD.

Persons with Current Post-Traumatic Stress Disorder by Gender, Race, and Age, 1992

	Crime ^a	Hazard ^b	Accident ^c	Any Event ^d
Total	8.5%	5.8%	8.6%	7.3%
Gender:				
Male	5.5	5.0	7.3	6.1
Female	11.5*	6.5	10.0	8.5
Race:				
White	7.2	5.1	8.2	7.5
Black	10.4	6.9	9.2	7.1
Age Group:				
18 to 39	7.8	6.6	9.5	9.0
40 to 59	13.6	6.4	11.7	8.8
60+	3.3*	4.1	3.9*	4.0*

^a“Crime” includes the experience of robbery, physical assault, or sexual assault, ever ($n=328$).

^b“Hazard” includes the experience of a fire, disaster, or hazards such as hurricanes or tornadoes, ever ($n=671$).

^c“Accidents” include injury-causing motor vehicle accidents or tragic deaths of relatives or close friends, ever ($n=439$).

^d“Any event” includes experiences of events such as crime, hazard, accidents, and natural disasters, ever ($n=842$).

* $p < 0.05$.

Source: Norris FH. 1992. “Epidemiology of Trauma: Frequency and Impact of Different Potentially Traumatic Events on Different Demographic Groups.” *Journal of Clinical and Consulting Psychology* 60(3):409-418, Table 3. Frequencies of post-traumatic stress disorder (PTSD) were based on a total sample of 1,000 persons from 12 neighborhoods across 4 southeastern cities: Charleston, SC; Greenville, SC; Charlotte, NC; and Savannah, GA. A diagnosis of PTSD was based on criteria set by the American Psychiatric Association (1987), DSM-III-R. To establish a diagnosis of PTSD, the following sources were used: Norris FH. 1990. “Screening for Traumatic Stress: A Scale for Use in the General Population.” *Journal of Applied Social Psychology* 20:1704-1718. Also used was Derogatis L and Spencer P. 1982. *The Brief Symptom Inventory: Administration, Scoring, and Procedures Manual*. Baltimore, MD. Selected items from each scale were combined to address all symptom criteria for a diagnosis of PTSD.

MENTAL HEALTH - AMERICAN INDIAN/ALASKA NATIVE STUDENTS

- C American Indian and Alaska Native students at high suicide risk are almost twice as likely as those at low risk to use marijuana regularly and to be heavy drinkers.
- C Students at high suicide risk are about twice as likely as those at low suicide risk to have a friend or family member who had attempted or completed suicide.

Percent of American Indian and Alaska Native Students Reporting Risky Behaviors by Suicide Risk Status*

<u>Behaviors</u>	<u>High Suicide Risk</u>	<u>Low Suicide Risk</u>
Heavy drinking	31%	17%
Regular marijuana use**	20%	10%
Had sexual intercourse	44%	28%
Believe family doesn't understand	33%	21%
Believe adults don't care	27%	15%
Been physically abused	26%	11%
Family member tried suicide	36%	19%
Friend completed suicide	19%	8%

*High suicide risk was defined as a suicide attempt in the past year and current thoughts of suicide or multiple suicide attempts even if last attempt was over a year ago.

**Regular marijuana use was defined as use at least once a week.

Source: Blum RW, Harmon B, Harris L, Bergeisen L, & Resnick MD. 1992. American Indian - Alaska Native Youth Health. *JAMA*, 267:(12), 1637-1644. The American Indian and Alaska Native Youth Health Study was conducted with students in non-urban schools from eight Indian Health Service Areas. The sample of 13,454 respondents consisted of students in grades 7 through 12 in 33 states attending reservation or Bureau of Indian Affairs schools. Schools with less than 50 percent American Indian/Alaska Native students were not included. Parental or guardian consent was obtained. The response rate was 70 percent. About 46 percent of the students lived in two-parent homes, 37 percent with a single parent, 10 percent with another relative as head of household, and 7 percent in a household with no relatives. The data were collected with the Indian Adolescent Health Survey, a self-administered anonymous questionnaire with a fifth grade reading level. The instrument consisted of 162 items on physical and mental health, health care history, and health care utilization and took about one hour to complete.

MENTAL HEALTH - AMERICAN INDIAN/ALASKA NATIVE STUDENTS

- ! About 6 percent of the American Indian and Alaska Native students on reservations in grades 7 to 12 experienced severe emotional distress in the past month.
- ! Students experiencing severe emotional distress were more likely than those without such distress to report having been physically or sexually abused.
- ! Severely distressed students not only felt disenfranchised and alienated from family but were over three times more likely than students without severe stress to have attempted suicide.

Percent of American Indian and Alaska Native Students Reporting Stressors by Stress Status in Past Month*

	Severe Stress (n=750)	No Severe Stress (n=12,704)
Feel disenfranchised from family	44%	31%
Feel family doesn't understand them	44%	22%
Been physically abused	32%	11%
Been sexually abused	22%	9%
Attempted suicide	45%	13%

*Severe emotional distress was defined as endorsing two or more of the following in the past month: being bothered by "nerves" or nervousness; feeling so sad, discouraged, or hopeless, or having so many problems that you wondered if anything was worthwhile; feeling under strain, stress or pressure; worrying about losing your mind or losing control over the way you act, talk, think or feel; or losing control of your memory.

Source: Blum RW, Harmon B, Harris L, Bergeisen L. & Resnick MD. 1992. American Indian - Alaska Native Youth Health. *JAMA*, 267:(12), 1637-1644. The American Indian and Alaska Native Youth Health Study was conducted with students in non-urban schools from eight Indian Health Service Areas. The sample of 13,454 respondents consisted of students in grades 7 through 12 in 33 states attending reservation or Bureau of Indian Affairs schools. Schools with less than 50 percent American Indian/Alaska Native students were not included. Parental or guardian consent was obtained. The response rate was 70 percent. About 46 percent of the students lived in two-parent homes, 37 percent with a single parent, 10 percent with another relative as head of household, and 7 percent in a household with no relatives. The data were collected with the Indian Adolescent Health Survey, a self administered anonymous questionnaire with a fifth grade reading level. The instrument consisted of 162 items on physical and mental health, health care history, and health care utilization and took about one hour to complete.

BEHAVIORAL DISORDERS - CHILDREN IN GREAT SMOKY MOUNTAIN STUDY

- ! Mental disorders usually first diagnosed in children include behavioral disorder, such as attention deficit hyperactivity, conduct disorder, and oppositional (defiant) disorder.
- ! Among white children in the Great Smoky Mountain Study, recent substance users were more likely to have behavioral disorders than children not recently using such substances as alcohol, tobacco, or other drugs.
- ! Rates of behavioral disorders were higher in substance users for both white boys and girls, age 13-16.

Percent of Behavioral Disorders in Past 3 Months in White Children by Age, Sex, and Recent Substance Use (Great Smoky Mountain Study)

Age	Boys		Girls	
	<u>Substance Use in Past 3 Months</u>		<u>Substance Use in Past 3 Months</u>	
	Yes	No	Yes	No
13 years	22.0%	5.0%	18.7%	0.1%
14 years	8.9	4.8	20.2	1.1
15 years	26.7	0	8.8	0
16 years	46.1	0.6	40.6	0

Behavioral Disorders included were conduct, oppositional (defiant), and attention deficit hyperactivity disorders.

Source: Federman EB, Costello EJ, Angold A, Farmer EMZ, & Erkanli A, 1997. Development of Substance Abuse and Psychiatric Comorbidity in an Epidemiologic Study of White and American Indian Young Adolescents: The Great Smoky Mountains Study, *Drug and Alcohol Dependence*, 44:69-78. (Unpublished data on age 16 were provided by Dr. Jane Costello.) A representative sample of children age 9, 11, and 13 living in rural Southern Appalachia was selected between 1992 and 1993. Substance use, behavioral, and emotional disorders were assessed using the Child and Adolescent Psychiatric Assessment (CAPA) interview. This analysis is based on a weighted sample with oversampling of children with behavioral problems and included 985 white and 431 American Indian children.

**BEHAVIORAL DISORDERS - AMERICAN INDIAN CHILDREN
IN GREAT SMOKY MOUNTAIN STUDY**

- ! Mental disorders usually first diagnosed in children include behavioral disorder, such as attention deficit hyperactivity, conduct disorder, and oppositional (defiant) disorder.
- ! Behavioral disorders such as attention deficit hyperactivity, conduct disorder, and oppositional (defiant) disorder are among the mental disorders usually first diagnosed in children.
- ! Among American Indian children in the Great Smoky Mountain Study, recent users of substances such as alcohol, tobacco, and other drugs were more likely to have behavioral disorders than children not recently using such substances.
- ! Rates of behavioral disorders were much higher in substance using American Indian girls, age 13 to 16, and somewhat higher in substance using boys.

Percent of Behavioral Disorders in Past 3 Months in American Indian Children by Age, Sex, and Recent Substance Use (Great Smoky Mountain Study)

Age	Boys		Girls	
	<u>Substance Use in Past 3 Months</u>		<u>Substance Use in Past 3 Months</u>	
	Yes	No	Yes	No
13 years	15.0%	4.4%	33.3%	16.7%
14 years	32.0	6.0	39.1	0
15 years	31.6	3.0	36.8	0
16 years	7.1	0	10.0	0

Behavioral Disorders included were conduct, oppositional (defiant), and attention deficit hyperactivity disorders.

Source: Federman EB, Costello EJ, Angold A, Farmer EMZ, & Erkanli A. 1997. Development of Substance Abuse and Psychiatric Comorbidity in an Epidemiologic Study of White and American Indian Young Adolescents: The Great Smoky Mountains Study, *Drug and Alcohol Dependence*, 44:69-78. (Unpublished data on age 16 were provided by Dr. Jane Costello.) A representative sample of children age 9, 11, and 13 living in rural Southern Appalachia was selected between 1992 and 1993. Substance use, behavioral, and emotional disorders were assessed using the Child and Adolescent Psychiatric Assessment (CAPA) interview. This analysis is based on a weighted sample with oversampling of children with behavioral problems and included 985 white and 431 American Indian children.

EMOTIONAL DISORDERS - CHILDREN IN GREAT SMOKY MOUNTAIN STUDY

- ! Emotional disorders such as anxiety and depression are among the mental disorders usually first diagnosed in children.
- ! The rate of emotional disorders for the white boys and girls, age 13-16, was comparable for both substance users and nonusers.

Percent of Emotional Disorders in Past 3 Months in White Children by Age, Sex, and Recent Substance Use (Great Smoky Mountain Study)

Age	Boys Substance Use in Past 3 Months		Girls Substance Use in Past 3 Months	
	Yes	No	Yes	No
13 years	3.7%	3.3%	16.2%	6.9%
14 years	2.7	4.4	27.8	4.6
15 years	3.2	3.2	3.5	6.2
16 years	10.6	0.6	4.2	5.7

The emotional disorders included were anxiety and depression.

Source: Federman EB, Costello EJ, Angold A, Farmer EMZ, & Erkanli A. 1997. Development of Substance Abuse and Psychiatric Comorbidity in an Epidemiologic Study of White and American Indian Young Adolescents: The Great Smoky Mountains Study, *Drug and Alcohol Dependence*, 44:69-78. (Unpublished data on age 16 were provided by Dr. Jane Costello.) A representative sample of children age 9, 11, and 13 living in rural Southern Appalachia was selected between 1992 and 1993. Substance use, behavioral, and emotional disorders were assessed using the Child and Adolescent Psychiatric Assessment (CAPA) interview. This analysis is based on a weighted sample with oversampling of children with behavioral problems and included 985 white and 431 American Indian children.

EMOTIONAL DISORDERS - AMERICAN INDIAN CHILDREN IN GREAT SMOKY MOUNTAIN STUDY

- ! Mental disorders usually first diagnosed in children include emotional disorders such as anxiety and depression.
- ! American Indian girls in the Great Smoky Mountain Study (both substance users and nonusers) had more emotional disorders than the boys.
- ! Any differences in the rates of emotional disorders among the substance using and nonusing American Indian boys and girls, age 13-16, were not statistically significant.

Percent of Emotional Disorders in Past 3 Months in American Indian Children by Age, Sex, and Recent Substance Use (Great Smoky Mountain Study)

Age	Boys		Girls	
	<u>Substance Use in Past 3 Months</u>		<u>Substance Use in Past 3 Months</u>	
	Yes	No	Yes	No
13 years	5.0%	2.2%	6.7%	4.3%
14 years	0	0	4.4	3.2
15 years	0	0	15.8	3.1
16 years	0	0	10.0	6.7

The emotional disorders included were anxiety and depression.

Source: Federman EB, Costello EJ, Angold A, Farmer EMZ, & Erkanli A. 1997. Development of Substance Abuse and Psychiatric Comorbidity in an Epidemiologic Study of White and American Indian Young Adolescents: The Great Smoky Mountains Study, *Drug and Alcohol Dependence*, 44:69-78. (Unpublished data on age 16 were provided by Dr. Jane Costello.) A representative sample of children age 9, 11, and 13 living in rural Southern Appalachia was selected between 1992 and 1993. Substance use, behavioral, and emotional disorders were assessed using the Child and Adolescent Psychiatric Assessment (CAPA) interview. This analysis is based on a weighted sample with oversampling of children with behavioral problems and included 985 white and 431 American Indian children. Children were classified as American Indian if they were the enrolled member or the first or second generation descendant of an enrolled member of a recognized tribe or band. All but 25 were Cherokee, most were living on a reservation and attending schools on the reservation. About 20 percent were in public schools in the surrounding community.

EMPLOYMENT CHARACTERISTICS BY MENTAL SYNDROME

- ! In 1996, about 59 percent of those who experienced a major depressive episode during the year were employed full time or part time.
- ! About 6 percent of those who had a major depressive episode, 5 percent of those with generalized anxiety disorder, 6 percent with agoraphobia, and 8 percent with panic attack were unemployed in 1996.
- ! About 10 percent of those who experienced panic attack, 15 percent with major depressive episode, and 12 percent with generalized anxiety disorder were employed part time.

Employment Characteristics by Mental Syndrome U.S. Population, Age 18 and Older, 1996

Employment Status	Major Depressive Episode	Generalized Anxiety Disorder	Agoraphobia	Panic Attack
Total*	100.0%	100.1%	100.1%	100.1%
Full-time	44.9	37.3	32.3	39.1
Part-time	14.5	11.8	7.6	10.0
Unemployed	6.3	5.0	6.3	8.0
Not in labor force**	34.3	46.0	53.9	43.0

* Totals may not sum to 100 due to rounding.

** Retired, disabled, homemaker, student, or "other."

Source: SAMHSA, Office of Applied Studies. 1997. Unpublished data from the 1996 National Household Survey on Drug Abuse. The 1996 survey employed a multistage area probability sample of 18,269 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1996, and incorporates an oversampling of Blacks, Hispanics, and young people. The survey also included a module of questions asking adults about their mental health status during the past year. The adult mental health screening scale developed by the Institute for Social Research at the University of Michigan was used to estimate the presence of four clinical mental syndromes defined in the DSM-III-R (Revised Third Edition) published by the American Psychiatric Association (1987).

MENTAL HEALTH AND SUBSTANCE ABUSE BY EMPLOYMENT STATUS

- ! In a national household survey, persons who were unemployed were more likely than others to have a major mental health diagnosis or to be alcohol or drug dependent in the past year.
- ! More persons in the general population age 18-64 reported a major depressive episode than panic attack, general anxiety disorder or agoraphobia, regardless of employment status.
- ! Employed workers were about three times more likely to be dependent on alcohol than on illicit drugs.

Percent Reporting Mental Health Diagnoses and Substance Dependence in the Past Year by Current Employment Status, U.S. Population, Age 18-64, 1994-1996

Diagnosis	Total	Full Time	Part Time	Unemployed	Not in Labor Force
Major Depressive Episode	7.5%	5.9%	7.7%	11.1%	11.4%
Panic Attack	2.9	2.1	2.9	6.2	4.6
General Anxiety Disorder	2.2	1.6	2.1	2.9	3.9
Agoraphobia	1.8	1.1	1.8	3.0	3.6
Alcohol Dependence	4.7	4.7	4.6	8.6	3.9
Illicit Drug Dependence	1.6	1.3	1.9	4.6	1.6

Source: SAMHSA, Office of Applied Studies. 1998. *Substance Use and Mental Health Characteristics by Employment Status* Table 3.4a. Data from the 1994 to 1996 National Household Survey on Drug Abuse (NHSDA) were pooled to examine alcohol, drug abuse, and mental diagnosis among adults in the general population by their current employment status. Those not in the labor force included the disabled, homemakers, and students. This survey series employs a multistage area probability sample of persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December. The sample size in each of these years was about 18,000. Blacks, Hispanics, and young people were oversampled. The analyses presented here are based on the weighted sample of adults age 18 to 64..

FAMILY STRUCTURE AND ADOLESCENT ILLICIT DRUG USE

- ! Within each family type, the percentage of adolescents using illicit drugs increases with age.
- ! Adolescents in families with both biological parents present are the least likely to report illicit drug use (10 percent for parents only, 12 percent for parents and other relative).
- ! Among male adolescents, the highest prevalence of illicit drug use occurs between the ages of 16 and 17 in father-only families (48 percent).
- ! The highest prevalence of illicit drug use in female adolescents occurs between the ages of 16 and 17 among those who are married and whose spouse is present (37 percent).

Past-Year Illicit Drug Use* Among Adolescents, Age 12 to 17 by Family Structure, Gender, and Age, 1991-1993

Family Structure	Total	Males			Females		
		age 12-13	age 14-15	age 16-17	age 12-13	age 14-15	age 16-17
All types	13.4%	4.5%	13.3%	23.1%	5.5%	12.6%	22.1%
Both biological parents present:							
Mother and father	10.4	4.5	8.9	20.4	3.6	9.1	18.1
Mother, father, and other relative	12.1	3.7	12.7	18.3	-	11.7	21.2
Stepparent families:							
Mother and stepfather	16.0	5.8	16.0	19.3	8.0	16.3	30.3
Father and stepmother	20.9	5.9	31.9	34.8	5.9	23.9	-
One-parent families:							
Mother only	15.2	2.9	17.1	22.4	6.9	16.6	26.2
Mother and other relative	15.7	2.4	12.3	34.1	-	13.0	21.1
Mother and nonrelative	21.7	-	-	-	-	-	-
Father only	22.4	6.9	21.4	48.4	-	-	-
Other family types:							
Other relative only	21.0	6.4	-	-	5.3	17.6	24.8
Spouse present	31.5	-	-	-	-	34.3	37.0

* Illicit drugs include marijuana, nonmedical use of psychotherapeutics (tranquilizers, sedatives, analgesics, and stimulants), hallucinogens, heroin, cocaine, and inhalants.

- Low precision; no estimate reported.

Source: SAMHSA, Office of Applied Studies. 1996. *The Relationship Between Family Structure and Adolescent Substance Use*. Rockville, MD: U.S. Public Health Service. The 1991, 1992, and 1993 National Household Surveys on Drug Abuse were combined to get a total sample of 22,237 adolescents. These surveys employed a multistage area probability sample of noninstitutionalized civilian respondents age 12 and older and incorporated an oversampling of Blacks, Hispanics, and young people.

FAMILY STRUCTURE AND ADOLESCENT MARIJUANA USE

- ! About 9 percent of adolescents age 12 to 17 years used marijuana in the past year.
- ! Adolescents in families with both biological parents present were the least likely to report past-year marijuana use (7 percent).
- ! About 12 percent of adolescents in families in which only the mother was present reported past-year marijuana use, and 17 percent of adolescents in families in which only the father was present reported past-year marijuana use.

Past-Year Marijuana Use Among Adolescents, Age 12 to 17 by Family Structure, 1991-1993

Family Structure	Percent Using
Total	9.4%
<i>Both biological parents present:</i>	
Mother and father	6.9
Mother, father, and other relative	8.4
<i>Stepparent families</i>	
Mother and stepfather	10.0
Father and stepmother	16.8
<i>One-parent families</i>	
Mother only	11.5
Mother and other relative	12.4
Mother and nonrelative	18.3
Father only	17.1
<i>Other family types</i>	
Other relative only	15.1
Spouse present	25.1

Source: SAMHSA, Office of Applied Studies. 1996. *The Relationship Between Family Structure and Adolescent Substance Use*. Rockville, MD: U.S. Public Health Service. The 1991, 1992, and 1993 National Household Surveys on Drug Abuse were combined to get a total sample of 22,237 adolescents. These surveys employed a multistage area probability sample of noninstitutionalized civilian respondents age 12 and older and incorporated an oversampling of Blacks, Hispanics, and young people.

MENTAL DISORDER, SUBSTANCE ABUSE, AND TEENAGE CHILDBEARING

- ! In the National Adolescent and Child Treatment Study, mental disorder and substance abuse were found to be associated with teenage childbearing. Adolescent females with both mental disorder and substance abuse were the most likely to be parents.
- ! Emotionally disturbed adolescents with children were more than 2½ times as likely to have been diagnosed with conduct disorder and substance abuse than emotionally disturbed adolescents with no children.
- ! Emotionally disturbed adolescents with children were five times as likely to have been diagnosed with anxiety and substance abuse than emotionally disturbed adolescents with no children.

Emotionally Disturbed Adolescent Females with Mental Disorder and Substance Abuse Diagnoses in 1984, by Childbearing Status in 1989

Diagnosis in 1985	Had children in 1989 (n=27)	Had no children in 1989 (n=107)
Conduct disorder and substance abuse	37.0%	14.0%
Anxiety and substance abuse	18.5	3.7
Depression and substance abuse	14.8	4.7

Source: Silver SE, Greenbaum PE, Friedman RM, Greer S, Prange M, Brown E. 1989. "Substance Dependence, Psychiatric Disorders, and Teen Motherhood in Youth with Serious Disturbances: Data from the National Adolescent and Child Treatment Study" (NACTS). Paper presented at the Conference on the Treatment of Adolescents with Alcohol, Drug Abuse, and Mental Health Problems; Alcohol, Drug Abuse and Mental Health Administration; Alexandria, VA; October. NACTS is a 7-year longitudinal study that began in 1985. It examined the psychiatric and social functioning of a sample of 812 children and youth with serious emotional disturbance. Half the sample (53 percent) was drawn from special education classrooms in public schools. The remainder was drawn from residential mental health settings that were supported at least in part by public funds. The sample originally resided in six States. Mental disorders and substance abuse diagnoses (DSM-III-R) were assessed with the Diagnostic Interview Schedule for Children. This analysis is based on the 134 adolescents who in 1985 were age 13 to 17 and had no children. Between 1986 and 1989, 27 of them had given birth to 39 children. Further information on the methodology and initial NACTS findings are available from Silver SE, et al. 1992. "A Comparison of Children with Serious Emotional Disturbance Served in Residential and School Settings." *Journal of Child and Family Studies* 1(1):43-59.

ALCOHOL AND DRUG ABUSE AND PREGNANCY STATUS

- ! Women, in general, are less likely to drink or use an illicit drug while pregnant.
- ! A national survey found that 14.1 percent of the women age 15-44 drank and 2.5 percent used an illicit drug in the past month while pregnant.
- ! Hispanic women were less likely than any other racial and ethnic group to drink or use an illicit drug during pregnancy..
- ! Women who were less likely to use an illicit drug while pregnant were age 26 to 44, married, and had other children.

Percent of Women Using Any Alcohol or Illicit Drug in the Past Month by Demographic Characteristics and Current Pregnancy Status, U.S. Population, Age 15 - 44, 1997

Characteristics	Alcohol		Illicit Drug Use*	
	Pregnant	Not Pregnant	Pregnant	Not Pregnant
TOTAL	14.1%	52.5%	2.5%	7.0%
Age				
15-25 years	12.9	47.1	4.4	11.9
26-44 years	15.0	55.2	1.2	4.7
Race/Ethnicity				
White, non-Hispanic	15.5	58.5	2.4	7.3
Black, non-Hispanic	16.7	41.7	5.4	8.0
Hispanic	7.1	38.2	1.2	4.7
Marital Status				
Married	9.4	53.2	0.7	3.2
Not Married	26.3	51.9	7.2	11.2
Never Married	26.8	49.4	6.4	12.0
Divorced, Separated	***	60.3	***	8.5
Parental Status				
No Children	15.1	53.3	3.5	10.4
Has Child Aged <2**	***	46.6	1.9	5.5
All Children Aged 2+**	13.4	53.5	2.0	4.1

*Illicit Drug Use indicates use at least once in the past year of marijuana or hashish, cocaine (including crack), Inhalants, hallucinogens (including PCP and LSD), heroin, or any prescription-type psychotherapeutic used nonmedically.

** The respondent and the child(ren) both (all) reside in the same household.

***Low precision; no estimate reported.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 1998. Unpublished Tables 18B and 21B data providing annual average percentages based on analysis of combined data from the 1996 to 1997 surveys.

**TOBACCO, ALCOHOL, MARIJUANA, AND ANY ILLICIT DRUG ABUSE
BY PREGNANCY TRIMESTER**

- ! Fewer pregnant women drank, or used an illicit drug in their third trimester than earlier in their pregnancy.
- ! Pregnant women in their third trimester were more likely to stop drinking than stop smoking.
- ! About 3.8 percent of the pregnant women in their first trimester and 2.1 percent in their third trimester of pregnancy used an illicit drug in the past month..

**Percent of Pregnant Women Reporting Alcohol, Marijuana, or Any Illicit Drug
Use in the Past Month by Trimester of Pregnancy,
U.S. Population, Age 15-44, 1997**

Trimester of Pregnancy	Cigarettes	Alcohol	Any Illicit Drugs*	Marijuana
First	20.7%	16.2%	3.8%	3.0%
Second	17.8	11.7	2.0	1.6
Third	19.1	9.4	2.1	0.5

*Any Illicit Drug indicates use at least once of marijuana or hashish, cocaine (including crack), Inhalants, hallucinogens (including PCP and LSD), heroin, or any prescription-type psychotherapeutic used nonmedically.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 1998. Unpublished Tables 18B, 20B, 22B, and 23B providing annual average percentages based on analysis of combined data from the 1996 to 1997 surveys.

MENTAL DISORDERS AMONG FEMALE VICTIMS OF CHILDHOOD SEXUAL ASSAULT

- ! Child molestation and rape were significant risk factors for mental disorders in a community sample of women from Charleston County, South Carolina.
- ! The rate of major depression among victims of childhood molestation and rape was almost double that of nonvictims.
- ! Nearly one-third of molestation victims and two-thirds of child rape victims suffered from post-traumatic stress disorder at some point in their lives.

Child Sexual Assault Groups With a Lifetime History of Mental Health Disorders

Type of Disorder	Victim			Nonvictim ^d
	Noncontact ^a	Molestation ^b	Rape ^c	
Agoraphobia	5.7%	7.0%	17.9%*	3.5%
Depression	34.3	45.6	48.7*	27.7
Obsessive compulsive disorder	2.9	10.5	15.4*	2.3
Panic disorder	5.7	3.5	10.3	3.8
Post-traumatic stress	11.4	33.3	64.1*	NA
Psychosis	2.9	1.8	5.1	1.9
Sexual disorder	54.3	63.2	66.7*	44.2
Simple phobia	17.1	29.8	20.5	17.3
Social phobia	8.6	8.8	23.1	5.4
Suicide attempt	2.9	15.8*	17.9	5.8
Suicide ideation	31.4	31.6*	35.9	19.6

^a Noncontact includes sexual threats, forced exposure to the perpetrator's genitals, and voyeurism.

^b Molestation refers to sexual assault without penetration of the victim.

^c Rape refers to sexual assault with penetration of the victim.

^d Nonvictim refers to no incidents of sexual assault before the age of 18.

* The difference between this group and the nonvictim group is statistically significant at the 0.05 level.

Source: Saunders BE, Villeponteaux LA, Lipovsky JA, Kilpatrick DG, Veronen LJ. 1992. "Child Sexual Assault as a Risk Factor for Mental Disorders Among Women, A Community Survey." *Journal of Interpersonal Violence*, 7(2):189-204, Table 3. Data are based on a sample of women who reside in Charleston County, South Carolina. Respondents were screened for a history of sexual assault during childhood. They were assessed for lifetime and current mental disorders using the Incident Classification Interview developed by the project team for this study and the National Institute of Mental Health Diagnostic Interview Schedule. A current disorder was defined as a disorder that was active at the time of the interview. Of the 391 women in the sample, 131 were victims of sexual assault during their childhood. Nonvictims, by definition, could not have post-traumatic stress disorder (PTSD) related to childhood assault. Therefore, the rape and molestation groups were compared with the noncontact group on PTSD.

MENTAL HEALTH - IMPACT OF VIOLENCE

- ! A national survey found that women age 18 and older who reported having been seriously physically assaulted during childhood were more likely than women without this childhood trauma to have a current major depressive episode, post-traumatic stress disorder, and substance abuse.
- ! While 63.5 percent of the women with the serious assault had a major depressive episode during their lifetime, only 44.3 percent had any mental health treatment during their lifetime.

Percent of Women With Lifetime or Current Mental Disorder, Substance Abuse, Related Problems, and Lifetime Treatment by Childhood Physical Assault Status*

Type of Disorder	Assaulted	Not Assaulted
Major Depressive Episode		
During lifetime	63.5%	28.4%
Past 6 months	14.4	3.6
Post Traumatic Stress Disorder (PTSD)		
During lifetime	53.8	11.2
Past 6 months	32.7	3.8
Lifetime Substance Abuse		
Prescription misused	18.8	5.0
Marijuana	66.3	23.5
Current Substance Abuse		
Marijuana	15.9	3.4
Cocaine	3.6	0.7
Drug Related Problems		
Driving While Intoxicated (DWI)	40.4	25.8
Alcohol-related accidents***	9.2	1.9
Legal Problems	8.4	1.8
Work problems	11.2	1.4
Family and Friends	25.1	9.9
Treatment in Lifetime		
Mental Health	44.3	18.2
Substance Abuse	7.4	1.2

*Serious assaults were defined as (1) attacks with a weapon or (2) attacks without a weapon but the victims believed the assailant's intent was to seriously injure or kill them. All differences between the assaulted and not assaulted groups are significant.

**Includes alcohol related accidents at home and driving.

Source: Duncan RD, Saunders BE, Kilpatrick DG, Hanson RF and Resnick HS, 1996. Childhood Physical Assault as a Risk Factor for PTSD, Depression, and Substance Abuse: Findings From a National Survey. *American Journal of Orthopsychiatry*, 66 (3) 437-448. The total weighted sample was 4,008.

**VIOLENCE - MALE YOUTH IN THE SOUTHWEST
BY ACADEMIC STANDING AND RACE/ETHNICITY**

- ! Male youth in the Southwestern U.S. reported high rates of being beaten and robbed regardless of academic standing or race/ethnicity.
- ! Male youth who had dropped out of school were more likely to report being shot in their lifetime than those who stayed in school.
- ! The better their academic standing at school, the less likely male youth reported having been stabbed in their lifetime.

Percent of Male Youth in the Southwest Reporting Victimization by Violence in Lifetime By Academic Standing and Race/Ethnicity

	American Indian			Mexican American			White American		
	Good Academic Standing	Poor Academic Standing	Drop Outs	Good Academic Standing	Poor Academic Standing	Drop Outs	Good Academic Standing	Poor Academic Standing	Drop Outs
Beaten By:									
Parents	24.2	27.1	25.7	12.9	18.3	20.1	17.5	23.8	20.0
Sibling	13.6	30.4	21.4	19.4	15.6	17.1	23.8	25.0	25.0
Friend	15.4	26.1	30.0	12.0	16.1	18.1	20.3	15.0	18.8
Other	36.4	34.8	39.1	28.8	39.7	41.2	32.5	43.8	58.2
Raped or Sexually Assaulted	4.5	2.9	2.9	2.8	2.3	3.7	3.8	5.0	6.3
Robbed	19.7	24.5	27.5	23.9	26.1	20.3	25.3	28.8	27.8
Stabbed	9.1	18.8	20.0	7.3	14.7	20.3	5.0	12.5	21.3
Shot	6.1	7.2	14.3	4.1	4.1	9.6	2.5	2.5	13.8

Source: Beauvais F, Chavez EL, Oetting ER, Deffenbacher JL and Cornell GR (1996): Drug Use, Violence, and Victimization Among White American, Mexican American, and American Indian Dropouts, Students With Academic Problems, and Students in Good Academic Standing. *Journal of Counselling Psychology* 43(3): 292-299. Data were collected between 1989 and 1993 from 2,015 adolescents living in a range of communities and environments in the Southwest. Dropouts were randomly selected from those identified from school records as students in grades 6-12 who had not attended school for at least 30 days, had not officially transferred to another school, and were not in contact with school authorities seeking readmission. The adolescent groups compared in grades 6 to 12 were: (1) students in good academic standing, (2) students in poor academic standing, and (3) school dropouts. The three groups were matched on age, ethnicity, gender, grade in school, and school site. Each participant completed a confidential questionnaire individually which was sealed by the respondent before mailing or collected by the research staff. The combined parental and student refusal rates were: 5.3% of the Mexican Americans, 7.8% of White Americans, and 2.8% of the American Indians. The drugs assessed were: alcohol, cocaine, heroin, inhalants, uppers, downers, and hallucinogens.

VIOLENCE - FEMALE YOUTH IN THE SOUTHWEST BY ACADEMIC STANDING AND RACE/ETHNICITY

- ! More whites than American Indian or Mexican American female youth in the Southwestern U.S. report being raped or sexually assaulted.
- ! Female youth who dropped out of school were more likely to report being beaten by parents or others than those who stayed in school.

Percent of Female Youth in the Southwest Reporting Victimization by Violence in Lifetime By Academic Standing and Race/Ethnicity

	American Indian			Mexican American			White American		
	Good Academic Standing	Poor Academic Standing	Drop Outs	Good Academic Standing	Poor Academic Standing	Drop Outs	Good Academic Standing	Poor Academic Standing	Drop Outs
Beaten By:									
Parents	25.5	35.3	35.3	12.8	13.5	21.5	23.0	23.0	33.8
Sibling	21.6	25.2	32.0	16.5	23.5	19.2	24.3	32.4	33.8
Friend	12.7	13.7	14.7	6.0	9.1	15.0	6.8	8.1	15.1
Other	13.7	21.6	27.7	18.8	20.3	28.7	16.2	19.4	40.5
Raped or Sexually Assaulted	14.7	15.7	20.6	11.3	19.5	22.3	28.4	35.6	57.5
Robbed	10.8	5.9	9.8	15.0	21.8	11.6	20.3	13.7	12.3
Stabbed	2.0	2.9	2.9	2.3	6.1	9.2	4.1	1.4	9.5
Shot	1.0	0.0	1.0	1.5	1.5	0.8	2.7	2.7	0.0

Source: Beauvais F, Chavez EL, Oetting ER, Deffenbacher JL and Cornell GR (1996): Drug Use, Violence, and Victimization Among White American, Mexican American, and American Indian Dropouts, Students With Academic Problems, and Students in Good Academic Standing. *Journal of Counselling Psychology* 43(3): 292-299. Data were collected between 1989 and 1993 from 2,015 adolescents living in a range of communities and environments in the Southwest. Dropouts were randomly selected from those identified from school records as students in grades 6-12 who had not attended school for at least 30 days, had not officially transferred to another school, and were not in contact with school authorities seeking readmission. The adolescent groups compared in grades 6 to 12 were: (1) students in good academic standing, (2) students in poor academic standing, and (3) school dropouts. The three groups were matched on age, ethnicity, gender, grade in school, and school site. Each participant completed a confidential questionnaire individually which was sealed by the respondent before mailing or collected by the research staff. The combined parental and student refusal rates were: 5.3% of the Mexican Americans, 7.8% of White Americans, and 2.8% of the American Indians. The drugs assessed were: alcohol, cocaine, heroin, inhalants, uppers, downers, and hallucinogens.

ADOLESCENT SUBSTANCE USE

- ! Adolescents with high behavioral problem scores were more likely to use substances than those with lower problem scores.
- ! Boys with high problem scores were twice as likely to use cigarettes and three times as likely to use marijuana and binge on alcohol in the past 30 days than boys with lower scores.
- ! Girls with high problem scores were five times more likely to use marijuana and binge on alcohol, and three times more likely to use cigarettes, than girls with lower scores.

Past-Month Substance Use* Among Males and Females, Age 12-17 by Behavioral Problem Score, 1996

Substance	Males		Females	
	High Problem Score	Low Problem Score	High Problem Score	Low Problem Score
Any illicit drug use	22.4%	7.0%	24.2%	5.1%
Hallucinogens	6.6	1.4	7.3	0.7
Psychotherapeutics (nonmedical use)	5.8	1.4	5.5	0.9
Inhalants	6.3	1.2	5.2	0.7
Marijuana	16.8	6.0	17.6	3.8
Cigarettes	38.0	14.8	42.0	12.7
Alcohol (binge use)	21.1	6.6	14.8	3.0

* “Any illicit drug use” includes use at least once in the past 30 days of marijuana or hashish, cocaine (including crack), inhalants, hallucinogens (including PCP), and heroin, and the nonmedical use of psychotherapeutics. Past-month alcohol binge use is defined as drinking five or more drinks on at least one occasion in the past 30 days.

Source: SAMHSA, Office of Applied Studies. 1997. Unpublished data from the 1996 National Household Survey on Drug Abuse. The 1996 survey employed a multistage area probability sample of 18,269 persons 12 years of age and older in the U.S. civilian noninstitutionalized population, interviewed from January through December 1996, and incorporates an oversampling of Blacks, Hispanics, and young people. The Youth Self-Report (YAR) was used to identify adolescent psychosocial problems. The YAR’s externalizing subscale determines behavioral problems by measuring aggressive and delinquent behavior. A “high” score refers to those scores falling within the clinical range; a “lower” score refers to all others. Because males had characteristically different profiles than females seen in clinical settings, the clinical range cutoff score differs by gender; hence, males and females are reported separately.

SUBSTANCE ABUSE - - COSTS TO SOCIETY

- ! In a study of the national costs of alcohol and drug abuse to society, the total costs were estimated to be \$245.7 billions in 1992, and increased to \$276.3 billion in 1995.

- ! The largest impact of alcohol and drug abuse was on lost productivity due to premature death, illness, and criminal victimization.

- ! The health care costs for alcohol abuse were about twice that for drug abuse.

Trends in Estimated Costs to Society of Alcohol and Drug Abuse, 1992-1995* (Billions of Dollars)

	Total		Alcohol		Drugs	
	1992	1995	1992	1995	1992	1995
Health Care Costs	\$28.7	\$34.4	\$18.8	\$22.5	\$9.9	\$11.9
Specialty alcohol and drug services	10.0	12.0	5.6	6.7	4.4	5.3
Medical consequences	18.7	22.4	13.2	15.8	5.5	6.6
Productivity Impacts**	176.5	196.8	107.0	119.3	69.5	77.5
Lost earnings-premature death	45.9	51.1	31.3	34.9	14.6	16.2
Lost earnings-illness	84.9	94.7	69.2	77.2	15.7	17.5
Lost earnings-crime/victims****	45.7	51.0	6.5	7.2	39.2	43.8
Other Impacts*****	40.5	45.2	22.2	24.8	18.3	20.4
TOTAL***	\$245.7	\$276.3	\$148.0	\$166.5	\$97.7	\$109.8

*Estimates are adjusted for inflation and population changes.

**Does not include estimates of the burden of alcohol and drug problems on work sites of employers.

***Totals may not add due to rounding.

****Includes costs of drug users' reduced income due to incarceration and victims' medical expenses, lost work, damaged/destroyed property as well as projected lost lifetime earnings of homicide victims.

*****Includes crashes, social welfare, criminal justice, costs of drug interdiction, etc. Social welfare costs estimates that about 3.3% of the social welfare beneficiaries received benefits because of drug or alcohol-related impairment.

Source: Harwood H, Fountain D, Livermore G et al (1998). *The Economic Costs of Alcohol and Drug Abuse in the United States, 1992*. (Table 1.4). NIH: National Institute on Drug Abuse and National Institute on Alcohol Abuse and Alcoholism. This report relies primarily on estimates of the value of goods and services and lost productivity and does not include estimates of the value of pain and suffering. The increase in estimates from this study compared with prior studies of the costs to society from substance abuse is generally attributed to the increases in HIV/AIDS, crimes and medical conditions attributed to drugs, incarceration rates for drugs, inflation, and population growth.

COSTS OF ALCOHOL, DRUG ABUSE, AND MENTAL DISORDERS

- ! In 1990, the total costs of alcohol, drug abuse, and mental (ADM) disorders were estimated to be \$313.6 billion.
- ! The greatest portion of these costs comes from the loss of productivity due to injury or illness (\$107.7 billion, or 34.3 percent).
- ! About \$80.8 billion, or 25.8 percent of costs, are due to health care costs such as the treatment of ADM disorders and their medical consequences.
- ! About \$67.8 billion (21.6 percent) are due to crime, criminal justice costs, and property damage.

Total Dollars (in Billions) Spent and Lost Due to ADM Disorders, 1990

Type of Cost	Total ADM	Percent of Total	Mental Health	Alcohol	Drugs
Total dollars spent or lost	\$313.6	100.0%	\$147.9	\$98.7	\$66.9
AIDS/Fetal Alcohol Syndrome	8.4	2.7	0.0	2.1	6.3
Crime, criminal justice, property loss	67.8	21.6	6.0	15.8	46.0
Loss of productivity due to premature death	48.9	15.6	11.8	33.6	3.4
Loss of productivity due to injury or illness	107.7	34.3	63.1	36.6	8.0
Health care costs	80.8	25.8	67.0	10.6	3.2

Sources: Rice DP, Miller LS. 1992. "Costs of Mental Illness." In: Hu T-W, Rupp A, eds. *Advances in Health Economics and Health Services Research: Research in the Economics of Mental Health, Vol 14*. Costs of substance abuse in: Robert Wood Johnson Foundation. 1993. *Substance Abuse: The Nation's Number One Health Problem: Key Indicators for Policy*. Above estimates are projections from basic conceptual and analytic work done under contract with the Alcohol, Drug Abuse and Mental Health Administration and presented in Rice DP, Kelman S, Miller LS, Dunmeyer S. 1990. *The Economic Costs of Alcohol and Drug Abuse, and Mental Illness: 1985*. DHHS Publication No. (ADM) 90-1964. Subsequent analysis of the alcohol data by Miller TR, Blincoe LJ. 1994. "Incidence and Cost of Alcohol-Involved Crashes in the United States." *Accident Analysis and Prevention* 26(5):583-591, which estimated the total dollars spent or lost due to alcohol to be \$116.5 billion.

MENTAL ILLNESS—COSTS TO SOCIETY

- ! The total estimated economic cost to society of mental illness in 1994 was about \$204.4 billion.
- ! About \$91.7 billion (44.9%) of the total economic societal costs of mental illness were due to the costs of treatment and other direct costs for medical care.
- ! The rest of the total costs were morbidity and mortality costs, that is, the costs associated with loss of productivity due to illness (43.2%) and with premature death (8.1%).

Total Estimated Economic Costs of Mental Disorders, 1994 (Billions of Dollars)

Type of Cost	Dollars (in Billions)	Percent
Total	\$204.4	100%
Treatment/Healthcare Services Costs	91.7	44.9
Mental Health Organizations	25.8	(12.6)
Short-Stay Hospitals	17.7	(8.6)
Office-Based Physicians	4.7	(2.3)
Other Professional Services	9.4	(4.6)
Nursing Homes	23.4	(11.4)
Drugs	2.9	(1.4)
Support Costs	7.9	(3.8)
Morbidity Costs (Productivity loss due to illness)*	88.3	43.2
Mortality Costs (Productivity loss due to premature death or suicide)**	16.5	8.1
Other Related Costs***	7.8	3.8

***Morbidity Costs** primarily include lost or reduced productivity and is measured by the estimated lifetime effect on current income for those persons affected by the mental disorders included in this study: anxiety disorders, schizophrenia, affective disorders and other disorders such as psychosis and cognitive disorders.

****Mortality costs** are discounted (at 6%) lifetime productivity losses for persons who died as a result of a mental disorder. The cost is the number of deaths multiplied by the expected value of future earnings, with gender and age taken into account.

*****Other Related Costs** included those associated with crime and incarceration, social welfare administration, and family care giving.

Source: Rice DP (1997): Costs of Mental Illness (Unpublished Data). The 1994 estimates above are projections from basis conceptual and analytic work done under contract with the Alcohol, Drug Abuse and Mental health Administration and presented in Rice DP, Kelman S, Miller LS, Dunmeyer S (1990): *The Economic Costs of Alcohol and Drug Abuse, and Mental Illness*: 1985, DHHS Publication No. (ADM) 90-1964. The 1994 costs were based on socioeconomic indexes applied to the 1985 cost estimates by Dorothy Rice.

MENTAL ILLNESS—COSTS BY DISORDER

- ! Substantial health care costs for medical treatment and other services are associated with such mental illnesses as anxiety disorders, schizophrenia, and affective disorders.
- ! Affective disorders, such as depression, have greater mortality costs due to premature deaths (mainly suicides) than any of the other major mental health disorders.
- ! Anxiety disorders (such as panic disorder, phobias, and generalized anxiety disorder) have greater morbidity costs (such as reduced or lost productivity) than other major disorders.

Estimated Economic Costs of Mental Illness by Type of Disorder, 1994 (Billions of Dollars)

Type of Cost	Anxiety Disorders	Schizo- phrenia	Affective Disorders	Other disorders
TOTAL	\$65.0	\$44.9	\$41.8	\$52.7
Treatment/Health Care Service	14.9	23.7	26.3	26.8
Mental Health	2.6	8.6	6.4	8.1
Short-Stay Hospitals	0.5	3.4	6.1	7.5
Office-Based Physicians	0.5	0.5	1.5	2.2
Other Professional	0.9	1.0	2.9	4.6
Nursing Homes	7.7	7.5	6.4	1.6
Drugs	1.5	0.5	0.5	0.3
Support Costs	1.1	2.0	2.2	2.4
Morbidity Costs*	47.8	15.0	3.1	22.4
Mortality Costs**	1.8	1.8	10.7	2.2
Other Related Costs***	0.5	4.4	1.9	1.3

***Morbidity Costs** primarily include lost or reduced productivity and is measured by the estimated lifetime effect on current income for those persons affected by the mental disorders included in this study: anxiety disorders, schizophrenia, affective disorders and other disorders such as psychosis and cognitive disorders.

****Mortality costs** are discounted (at 6%) lifetime productivity losses for persons who died as a result of a mental disorder. The cost is the number of deaths multiplied by the expected value of future earnings, with gender and age taken into account.

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MENTAL HEALTH COSTS FOR CRIME VICTIMS

- ! Victims of violent crimes suffer both physical and psychological injury as well as reduced or lost productivity and decreased quality of life.
- ! The estimated per crime costs for both physical and psychological medical care were higher for rape victims than for victims of robbery, other assault, or arson.

Estimated Victim Costs* of Violent Crimes and Resulting Physical and Psychological Injuries by Type of Crime (in 1995 Dollars)

Cost Category	Rape	Robbery	Assault	Arson
Total Monetary	\$3,871	\$2,831	\$2,655	\$8,424
Medical	720	255	318	403
Emergency Services	64	33	22	32
Productivity	3,027	2,504	2,224	7,898
Administrative	59	38	90	90
Total Mental Health	46,449	13,175	7,324	1,537
Medical	7,712	1,657	757	155
Mental Health Productivity	1,814	412	250	59
Quality of life lost to psychological injury	36,923	11,106	6,316	1,323
Quality of Life	10,090	8,507	8,488	20,759
Non-Fatal	7,394	5,096	4,797	6,246
Fatal	2,696	3,411	3,691	14,513
TOTAL COST	\$60,410	\$24,513	\$18,467	\$30,719

*Excludes property damage, legal costs, and employer costs; includes attempted rapes and robberies that resulted in physical injury.

Source: The 1995 estimates are based on the conceptual and analytic work reported in Miller TR et al., *Victim Costs of Violent Crime and Resulting Injuries*, *Health Affairs* 12(4):186-197, 1993. The following data sources were used: The National Crime Survey (NCS) and the FBI's Uniform Crime Reports were used to determine the frequency and outcomes of rape, robbery, and assault. The National Fire Incident Reporting System provided the data for arson. Average medical costs for fatal injury was derived from D Rice & E MacKenzie and Associates in *Costs of Injury in the United States: A Report to Congress*, San Francisco: U of C Institute for Health and Aging & Baltimore: Johns Hopkins University Injury Prevention Center, 1989. Short term medical costs were available in the NCS. Long term medical costs were based on the Detailed Claims Information database of the National Council on Compensation Insurance. Mental health care costs were estimated based on the following sources: M Cohen, Pain, Suffering, and Jury Awards: A Study of the Cost of Crime to Victims, *Law and Society Review*, 22: 537-555, 1988; M Cohen, Some Evidence on the Seriousness of Crime, *Criminology*, 26:343-353, 1988; and D Kilpatrick et al., Criminal Victimization Lifetime Prevalence, Reporting to Police, and Psychological Impact, *Crime and Delinquency*, 33:479-489, 1987.

ALCOHOL-ATTRIBUTABLE CRASH COSTS

- ! Crashes attributable to alcohol result in an estimated \$98 billion in total costs, about a quarter of the estimated annual highway crash costs.
- ! External costs are the costs the drinking driver imposes on other people. These costs are about \$2.90 per mile driven at BACs above 0.10% and \$0.80 per mile driven between BACs 0.08-0.099. Sober driving results in \$0.04 in crash costs per mile driven.

Number of Victims by Injury Severity and Drivers' Blood Alcohol Content (BAC) and Cost Per Year (in Millions of 1995 Dollars) by Cost Category and Drivers' BAC

<u>Number of Victims by Injury Severity</u>	<u>Blood Alcohol Content (BAC)</u>			<u>Total</u>
	<u>.01-.079</u>	<u>.08- .099</u>	<u>0.1+</u>	
Fatal	588	292	12,897	13,777
Non-Fatal	22,000	18,000	842,000	882,000
None	44,000	49,000	859,000	4,952,000
<u>Cost Per Year (in Millions of 1995 Dollars) by Cost Category*</u>				
Medical	\$ 230	\$ 58	\$ 4,772	\$ 5,100
Monetary	\$1,329	\$ 836	\$37,140	\$39,000
Comprehensive	\$3,847	\$2,143	\$91,516	\$98,000
<u>Percent of Total Crash Costs</u>	<u>1.0%</u>	<u>0.6%</u>	<u>24.9%</u>	<u>26.6%</u>
<u>Cost Per Mile Driven at each BAC</u>	<u>\$0.30</u>	<u>\$0.80</u>	<u>\$2.90</u>	<u>\$1.93</u>

Medical spending includes hospital, physician, rehabilitation, prescription, and related payments. Also included are coroner and premature burial costs for fatalities, and the costs of medically-related loss compensation through insurance and the courts. **Monetary costs** include medical spending, emergency services, lost productivity from both wage work and housework, disruption in the workplace, property damage, and travel delay. **Comprehensive costs** add the cost of lost quality of life to the costs of tangible goods and services and other monetary costs. Notes: Cost per mile driven with no blood alcohol content (BAC) is 4 cents. In most States, a BAC of 0.10% is grounds for a charge of driving under the influence. "Alcohol-attributable" crashes are crashes that would not have occurred if alcohol were absent and are estimated to be: 91.4% of the crashes with driver BACs exceeding 0.10%, 43.5% of crashes with driver BACs of .08-.099% and 24.2% of crashes with lower positive driver BACs.

Source: Miller TR, Lestina DC, Spicer RS, 1998. Highway Crash Costs in the United States by Driver Age, Blood Alcohol Level, Victim Age, and Restraint Use. *Accident Analysis and Prevention*, In Press. National costs of alcohol-involved crashes were calculated by severity level and computed by multiplying the per case costs by the incidence. Incidence estimates included property damage only, injury, and fatality crashes. Incidence of fatalities were obtained from the 1993 Fatal Accident Reporting System. Incidence estimates of nonfatal injuries were based on a combination of databases, including the National Accident Sampling System for 1984-1986, the Crashworthiness Data System for 1988-1991, and the General Estimates System for 1992-1993. Severity levels were classified by the Maximum Abbreviated Injury Scale.

ALCOHOL RELATED TRAFFIC FATALITIES

- ! Overall, the number of alcohol-related traffic fatalities declined over the past decade, from 25,165 in 1982 to 17,126 in 1996.
- ! The proportion of all traffic fatalities that were alcohol related dropped from 57 percent in 1982 to about 41 percent in 1994.
- ! The proportion of alcohol-related traffic fatalities remained stable between 1994 and 1996.

Number and Percentage of Alcohol-Related Traffic Fatalities, 1982-1996

Year	Total Number Fatalities	Number Alcohol Related	Percent Alcohol Related
1982	43,945	25,165	57.3%
1983	42,589	23,646	55.5
1984	44,257	23,758	53.7
1985	43,825	22,715	51.8
1986	46,087	24,045	52.2
1987	46,390	23,641	51.0
1988	47,087	23,626	50.2
1989	45,582	22,404	49.2
1990	44,599	22,084	49.5
1991	41,508	19,887	47.9
1992	39,250	17,859	45.5
1993	40,150	17,473	43.5
1994	40,716	16,580	40.7
1995	41,817	17,247	41.2
1996	41,907	17,126	40.9

Source: National Highway Traffic Safety Administration, Fatal Accident Reporting System (FARS), 1996. Washington, DC: National Center for Statistics and Analysis, 800-934-8517. Data for 1994 and 1995 are final; data for 1996 are preliminary. A variety of indicators are used to determine alcohol-related accidents. These include blood alcohol content (BAC) results and driving while intoxicated (DWI) citations. FARS contains data on a census of fatal traffic crashes within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a trafficway customarily open to the public and result in the death of a person (occupant of a vehicle or a nonmotorist) within 30 days of the crash. The FARS file contains descriptions, in a standard format, of each fatal crash reported. Each crash has more than 100 different coded data elements that characterize the crash, the vehicles, and the people involved. The specific data elements may be modified slightly each year to conform to changing user needs, vehicle characteristics, and highway safety emphasis areas.

ALCOHOL-RELATED TRAFFIC FATALITIES BY AGE

- ! Between 1984 and 1994, the percentage of traffic fatalities that were alcohol related decreased for drivers between 15 and 24 years of age.
- ! The largest decline in alcohol-related traffic fatalities between 1984 and 1994 was in the 18-to-20 age group; the percentage of alcohol-related fatalities fell from 64 to 44 percent.
- ! The highest percentage of alcohol-related fatal crashes was in the 21-to-24 age group. In 1994, about 56 percent of the fatal crashes for this group involved alcohol.

Alcohol-Related Traffic Fatalities* by Age Group, 1984-1994

Year	15-17 Years			18-20 Years			21-24 Years		
	Total Deaths	Alcohol Related	Percent Alcohol Related	Total Deaths	Alcohol Related	Percent Alcohol Related	Total Deaths	Alcohol Related	Percent Alcohol Related
1984	2,869	1,354	47.1%	5,232	3,364	64.3%	6,293	4,398	69.9%
1985	2,834	1,270	44.8	4,829	2,914	60.3	6,187	4,182	67.6
1986	3,399	1,515	44.6	5,154	3,127	60.6	6,262	4,308	68.8
1987	3,322	1,400	42.1	4,891	2,811	57.4	5,917	3,937	66.5
1988	3,082	1,240	40.2	5,200	2,947	56.7	5,866	3,936	67.1
1989	2,797	1,028	36.8	4,706	2,511	53.4	5,184	3,454	66.6
1990	2,744	1,027	37.4	4,564	2,532	55.5	5,049	3,298	65.3
1991	2,468	833	33.8	4,175	2,273	54.4	4,782	3,138	65.6
1992	2,405	750	31.2	3,445	1,727	50.1	4,298	2,655	61.8
1993	2,416	708	29.4	3,495	1,649	47.2	4,400	2,612	59.4
1994	2,610	752	28.8	3,616	1,590	44.0	4,229	2,351	55.6

*Alcohol-related traffic fatalities are crash-related deaths in which either the driver or nonoccupant had a blood alcohol concentration ≥ 0.01 g/dL in a police-reported crash.

Source: Wright JB. 1995. "Update: Alcohol-Related Traffic Crashes and Fatalities Among Youth and Young Adults—United States, 1982-1994." *Morbidity and Mortality Weekly Report* 44(47):869-874, December 1. The report was based on data from the Fatal Accident Reporting System (FARS), National Highway Traffic Safety Administration. The Fatal Accident Reporting System (FARS) contains data on a census of fatal traffic crashes within the 50 States, the District of Columbia, and Puerto Rico. To be included in FARS, a crash must involve a motor vehicle traveling on a trafficway customarily open to the public and result in the death of a person (occupant of a vehicle or a nonmotorist) within 30 days of the crash. The FARS file contains descriptions, in a standard format, of each fatal crash reported. Each crash has more than 100 different coded data elements that characterize the crash, the vehicles, and the people involved. The specific data elements may be modified slightly each year to conform to changing user needs, vehicle characteristics, and highway safety emphasis areas.

DRIVING UNDER THE INFLUENCE OF ALCOHOL AND ILLICIT DRUGS

- ! In 1996, 11.1 percent of the population age 16 and older reported driving under the influence of alcohol or illicit drugs. This corresponds to 18.3 million people.
- ! Males were much more likely to report driving under the influence overall and within each age group.
- ! Of the three age groups, people age 35 and older were the least likely to report driving under the influence.

Driving Under the Influence of Alcohol or Illicit Drugs Within the Past Year, by Age and Gender U.S. Population, Age 16 and Older, 1996

Demographic Categories	Number (millions)	Percent
Total	18.3	11.1%
Sex		
Male	12.6	15.3
Female	5.7	7.0
Age		
16-20	2.5	18.8
21-34	8.4	18.6
35+	7.4	7.0
Male		
16-20	1.6	22.8
21-34	5.7	25.0
35+	5.4	10.1
Female		
16-20	0.9	14.1
21-34	2.8	12.2
35+	2.1	4.0

Source: SAMHSA, Office of Applied Studies. Unpublished data from the 1996 National Household Survey on Drug Abuse. The 1996 survey employed a multistage area probability sample of 18,269 persons in the U.S. civilian noninstitutionalized population interviewed from January through December 1996.

DRINKING AND DRIVING - CALIFORNIA STUDENTS

- ! California students in grades 7, 9, and 11 not only report high rates of ever being in a car when either they or a friend had been drinking and driving but also that this occurs repeatedly.
- ! The percent of 7th graders reporting that they had ever been in a car with someone who was drinking and driving decreased from 45 percent in 1991/92 to 36.8 percent in 1995/96.

Trends in Percent of California Students Reporting Ever Involved in Drinking and Driving* by Grade and Year of Study (1991-1996)

Number of Times	Grade 7			Grade 9			Grade 11		
	91/92	93/94	95/96	91/92	93/94	95/96	91/92	93/94	95/96
1-2	28.2%	23.1%	24.3%	15.7%	14.9%	14.9%	22.7%	20.8%	20.1%
3-6	5.1	6.3	4.2	3.8	5.7	4.0	6.7	7.6	7.1
7+	11.7	10.4	8.4	5.1	7.8	7.0	9.4	12.2	10.4
Total ever	45.0	39.8	36.8	24.6	28.3	25.9	38.8	40.6	37.5

*The grade 7 version of this item asks “Ever been in a car with someone who was drinking and driving?” The grades 9-11 version asks “Ever driven a car when you were drinking or been in a car when a friend was drinking and driving?”

Source: Skager R & Austin G, 1997. *Sixth Biennial California Student Substance Use Survey: Grades 7, 9 and 11 Preliminary Findings*. WestEd-Southwest Regional Laboratory, Los Alamitos, CA. The California state-wide sample consisted of 128 public and private middle and senior high schools and 5,775 respondents in grades 7, 9, and 11. Schools were randomly selected for the sample proportionally to the number of schools in each of six geographic regions of the state. About half of the schools in each region were retained from the 1993-94 survey; the other half was newly selected. For the first year in the survey series, intact classrooms were sampled, rather than individual students, and active rather than passive parental consent was used.

HIV AND INJECTING DRUG USE BY GENDER - - ADULTS

- ! As of 1997, 27 states have confidential HIV infection reporting for adults; some states started their reporting as early as 1985. As of the end of December, 1997, about 90,430 adults have been reported with HIV who have not developed AIDS.
- ! Of the known adults with HIV infection only, about 27 percent were associated with injecting drug use.
- ! Injecting drug use was associated with more women (36%) than men (24%) reported with HIV infection only.

HIV Cases In the U.S. Adult/Adolescent (≥ 13 Years) Population by Exposure Category and Gender, Cumulative Totals Through December, 1997 From States with Confidential HIV Infection Reporting

Exposure Category	Total*		Men		Women	
	Number	%	Number	%	Number	%
Injection Drug Use (IDU)	24,136	27%	15,835	24%	8,301	36%
Own IDU	15,887	18	10,432	15	5,455	24
Own IDU + Sex with same gender	4,393	5	4,393	7	--	--
Sex with IDU of opposite gender	3,856	4	1,010	1	2,846	12
Non-IDU Sexual Contact:**	39,168	43%	33,250	49%	5,918	26%
With same gender	30,315	33	30,315	45	--	--
With opposite gender	8,853	10	2,935	4	5,918	26
Other:	27,126	30%	18,287	27%	8,839	38%
Hemophilia/Blood transfusions	1,149	1	768	1	381	1
Other/Unknown***	25,977	29	17,519	26	8,458	37
TOTAL	90,430	100%	67,372	100%	23,058	100%

*Data are from the 27 States with confidential HIV infection reporting for adults and include only persons reported with HIV infection who have not developed AIDS. By 1990, 20 of the States had initiated HIV reporting; 3 States have been reporting as early as 1985 and one as late as 1997. The percentages are subject to rounding errors.

** Includes persons who had sexual contact with persons with hemophilia, transfusion recipients with HIV infection, and other HIV-infected persons.

***Includes "risk not reported or identified" which for HIV infection cases refers primarily to persons whose mode of exposure was not reported and who have not been followed up to determine their mode of exposures, and to a smaller number of persons who are not reported with one of the exposures listed above after followup.

Source: Centers for Disease Control and Prevention. 1998. *HIV/AIDS Surveillance Report* 9(2): 33. (Tables 28 and 29). Estimates are adjusted for delays in the reporting of AIDS cases, but not for incomplete reporting of cases.

AIDS BY RACE/ETHNICITY AND AGE GROUP

- ! In 1997, there was an average of 22.3 persons with AIDS for every 100,000 children and adults in the population.
- ! The annual rate of AIDS cases in 1997 was higher among blacks than for any other racial/ethnic group for both children and adults and for both males and females.

Number of AIDS Cases and Annual Rate per 100,000 Population Reported in the U.S. in 1997 For Children and for Adults by Race/Ethnicity and Gender

	Total*	White, Non Hispanic	Black, Non Hispanic	Hispanic	Asian/ Pacific Islander	American Indian/ Alaskan Native
	Number (Rate)	Number (Rate)	Number (Rate)	Number (Rate)	Number (Rate)	Number (Rate)
TOTAL	60,634 (22.3)	20,197 (10.4)	27,075 (83.7)	12,466 (37.7)	448 (4.5)	206 (10.4)
Children, age < 13 yrs.	473 (0.9)	63 (0.2)	292 (4.0)	110 (1.3)	3 (0.1)	2 (0.4)
Adults, age ≥ 13 yrs.	60,161 (27.3)	20,134 (12.4)	26,783 (107.2)	12,356 (50.6)	445 (5.6)	204 (13.6)
Males, age ≥ 13 yrs.	47,056 (44.0)	17,649 (22.5)	18,903 (163.4)	9,778 (78.5)	381 (10.2)	168 (23.0)
Females, age ≥ 13 yrs.	13,105 (11.5)	2,485 (3.0)	7,880 (58.8)	2,578 (21.5)	64 (1.5)	36 (4.7)

*Includes 242 persons whose race/ethnicity is unknown.

Source: Centers for Disease Control and Prevention. 1998. *HIV/AIDS Surveillance Report* 9(2): 17. (Table 10). Estimates are adjusted for delays in the reporting of AIDS cases, but not for incomplete reporting of cases.

AIDS AND INJECTING DRUG USE BY RACE/ETHNICITY - - CHILDREN

- ! Except for Asian/ Pacific Islanders, almost all of the AIDS cases among children less than 13 years of age are associated with their mothers' HIV infection or risk.
- ! About a third of the pediatric AIDS cases among Whites, Blacks, and Hispanics are related to the mother's own injecting drug use compared with only 9 percent among Asian/Pacific Islanders.
- ! Among Hispanics and American Indians/Alaskan Natives, a greater percentage of pediatric AIDS cases are associated with the mother's having sex with an injecting drug user than among any other racial/ethnic group.

Pediatric (<13 Years) AIDS Cases by Exposure Category and Race/Ethnicity Cumulative U.S. Totals Through December 1997

Exposure Category	Total*		White, Not Hispanic		Black, Not Hispanic		Hispanic		Asian/Pacific Islander		American Indian/Alaskan Native	
	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)	Number	(%)
Mother's HIV infection/risk:	7,335	91%	1,061	74%	4,478	95%	1,725	92%	30	68%	26	96%
Injecting Drug Use (IDU)	2,936	36	445	31	1,768	38	700	37	4	9	12	44
Sex with injecting drug user	1,340	17	207	14	662	14	459	24	4	9	7	26
Other sexual contact	1,244	15	214	15	737	16	277	15	11	25	3	11
Blood transfusion**	154	2	43	3	77	2	33	2	1	2	-	-
HIV+, unspecified risk	1,661	21	152	11	1,234	26	256	14	10	23	4	15
Child's risk**	751	9%	365	26%	219	5%	151	8%	14	32%	1	4%
TOTAL	8,086	100%	1,426	100%	4,697	100%	1,876	100%	44	100%	27	100%

*Includes 16 children whose race/ethnicity is unknown.

** Includes hemophilia/blood transfusions (including receipt of blood transfusions, blood components, and tissue transplants) as well as risks not reported or identified.

Source: Centers for Disease Control and Prevention. 1998. *HIV/AIDS Surveillance Report* 9(2):13 (Table 6). Estimates are adjusted for delays in the reporting of AIDS cases, but not for incomplete reporting of cases.

AIDS AND INJECTING DRUG USE IN ADULTS - - TRENDS BY GENDER

- ! Between 1991 and 1996, the number of new AIDS cases associated only with the person's own injecting drug use peaked in 1995 for both men and women.
- ! The number of men with AIDS associated with their own injecting drug use peaked in 1992 and has decreased to a low in 1996.

Trends in Estimated Number of New Cases of AIDS-Opportunistic Illness Associated With Injecting Drug Use by Gender and Year of Diagnosis Adult/Adolescent (≥13 Years) U.S. Population (1991- 1996)

Year	Total	Males		Females
	Injecting Drug Use (IDU) Associated	Own Injecting Drug Use Only	Own IDU + Men Who Have Sex with Men	Own Injecting Drug use
1991	17,350	10,000	3,650	3,700
1992	20,300	12,000	3,950	4,350
1993	20,750	12,500	3,650	4,600
1994	21,500	13,000	3,700	4,800
1995	21,600	13,000	3,650	4,950
1996	20,400	12,500	3,100	4,800

Source: Centers for Disease Control and Prevention. 1998. *HIV/AIDS Surveillance Report* 9(2):28 (Table 20). Estimates are adjusted for delays in the reporting of AIDS cases, but not for incomplete reporting of cases. Estimates are adjusted for delays in the reporting of AIDS cases and anticipated redistribution of cases initially reported with no identified risk, but not for incomplete reporting of cases. Estimates of less than 1000, 1000-2499, 2500-4999, 5000-9999, and 10000+ are rounded to the nearest 10, 25, 50, 100, and 500 respectively. Opportunistic illness refers to AIDS-defining opportunistic illnesses included in the 1993 AIDS surveillance case definition. Annual estimates are through the most recent year for which reliable estimates are available. Because there is uncertainty in AIDS-Opportunistic Illness incidence, changes over time in AIDS-Opportunistic Illness incidence should not be computed from these rounded estimates.

AIDS AND INJECTING DRUG USE BY GENDER - - ADULTS

- ! About 226,534 (36%) of the cumulative number of AIDS cases since reporting began were associated with either their own or their sexual partner's injecting drug use.
- ! Injecting drug related AIDS cases were twice as likely among women (61%) than men (31%).
- ! AIDS cases among women were more likely associated with their own injecting drug use (44%) than with the injecting drug use of their sexual partner (17%).

AIDS Cases In the U.S. Adult/Adolescent (≥13 Years) Population by Exposure Category and Gender, Cumulative Totals Through December, 1997

Exposure Category	Total*		Men		Women	
	Number	%	Number	%	Number	%
Injection Drug Use (IDU)	226,534	36%	166,520	31%	60,014	61%
Own IDU	161,872	26	118,658	22	43,214	44
Own IDU + Sex with same gender	40,534	6	40,534	8	--	--
Sex with IDU of opposite gender	24,128	4	7,328	1	16,800	17
Non-IDU Sexual Contact:**	344,003	54%	322,412	60%	21,591	22%
With same gender	309,247	49	309,247	58	--	C
With opposite gender	34,756	5	13,165	2	21,591	22
Other:	62,463	10%	45,600	9%	16,863	17%
Hemophilia/Blood transfusions	12,903	2	9,188	2	3,715	4
Other/Unknown	49,560	8	36,412	7	13,148	13
TOTAL	633,000	100%	534,532	100%	98,468	100%

* The total includes 12 people known to be infected with HIV-2.

** Includes persons who had heterosexual contact with persons with hemophilia, transfusion recipients with HIV infection, and other HIV-infected persons.

Source: Centers for Disease Control and Prevention. 1998. *HIV/AIDS Surveillance Report* 9 (2); 11-12. (Tables 4 and 5). Estimates are adjusted for delays in the reporting of AIDS cases, but not for incomplete reporting of cases.

AIDS AND INJECTING DRUG USE BY RACE/ETHNICITY - - ADULT MALES

- ! About 166,520 (31%) of all AIDS cases in males are associated with either their own or a sexual partner's injecting drug use.
- ! Almost half of all AIDS cases in non-Hispanic black males and Hispanic males are associated with injecting drug use.
- ! Asian/Pacific Islander males have the lowest percentage (9%) of injecting drug use related AIDS cases of any of the racial/ethnic groups.

Male Adult/Adolescent (>13 Years) AIDS Cases by Exposure Category and Race/Ethnicity Cumulative U.S. Totals Through December 1997

	Total*	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian/ Pacific Islander	American Indian/ Alaskan Native
Exposure Category	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)
Injecting Drug Use (IDU)	166,520 (31%)	46,570 (18%)	77,212 (45%)	41,723 (45%)	383 (9%)	479 (32%)
Own IDU	118,658 (22)	23,905 (9)	60,118 (35)	34,063 (36)	214 (5)	224 (15)
Own IDU + Sex with same gender	40,534 (8)	21,066 (8)	12,842 (8)	6,230 (7)	138 (3)	242 (16)
Sex with IDU of opposite gender	7,328 (1)	1,599 (1)	4,252 (2)	1,430 (2)	31 (1)	13 (1)
Non-IDU Sexual Contact:**	322,412 (60%)	202,355 (76%)	72,091 (43%)	43,643 (46%)	3,108 (77%)	892 (61%)
Other:***	45,600 (9%)	15,727 (6%)	20,838 (12%)	8,218 (9%)	546 (14%)	106 (7%)
TOTAL	534,532 (100%)	264,652 (100%)	170,141 (100%)	93,584 (100%)	4,037 (100%)	1,477 (100%)

* The total includes 641 men whose race/ethnicity is unknown.

** Includes persons who had same sex or heterosexual contact with persons with hemophilia, transfusion recipients with HIV infection, and other HIV-infected persons.

***Includes persons with hemophilia or blood transfusion recipients and those with risk not reported or identified.

Source: Centers for Disease Control and Prevention. 1998. *HIV/AIDS Surveillance Report* 9(2): 11. (Table 4). Estimates are adjusted for delays in the reporting of AIDS cases, but not for incomplete reporting of cases.

AIDS AND INJECTING DRUG USE BY RACE/ETHNICITY- - ADULT FEMALES

- ! About 60,014 (61%) of all AIDS cases in females are associated with either their own or a sexual partner's injecting drug use.
- ! AIDS cases among Asian/Pacific Islander females are less likely than any other racial/ethnic group to be associated with their own injecting drug use.

Female Adult/Adolescent (≥13 Years) AIDS Cases by Exposure Category and Race/Ethnicity Cumulative U.S. Totals Through December 1997

Exposure Category	Total*	White, Not Hispanic	Black, Not Hispanic	Hispanic	Asian/ Pacific Islander	American Indian/ Alaskan Native
Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)	Number (%)
Injecting Drug Use (IDU)	60,014 (61%)	13,348 (59%)	33,383 (60%)	12,890 (65%)	156 (31%)	182 (65%)
Own IDU	43,214 (44)	9,614 (43)	24,981 (45)	8,359 (42)	87 (17)	128 (46)
Sex with IDU of opposite gender	16,800 (17)	3,734 (17)	8,402 (15)	4,531 (23)	69 (14)	54 (19)
Non-IDU Sexual Contact**	21,591 (22%)	5,104 (23%)	11,579 (21%)	4,662 (23%)	170 (33%)	51 (18%)
Other***	16,863 (17%)	4,011 (18%)	10,229 (19%)	2,342 (12%)	182 (36%)	46 (16%)
Total	98,468 (100%)	22,463 (100%)	55,191 (100%)	19,894 (100%)	508 (100%)	279 (100%)

* The total includes 133 women whose race/ethnicity is unknown.

** Includes persons who had same sex or heterosexual contact with persons with hemophilia, transfusion recipients with HIV infection, or other HIV-infected persons.

***Includes persons with hemophilia or blood transfusion recipients and those with risk not reported or identified.

Source: Centers for Disease Control and Prevention. 1998. *HIV/AIDS Surveillance Report* 9(2): 12. (Table 5). Estimates are adjusted for delays in the reporting of AIDS cases, but not for incomplete reporting of cases.

DRUG-RELATED EMERGENCY EPISODES

- ! Overall, the rate of drug-related episodes per 100,000 emergency department visits has increased from 451 in 1990 to 604 in 1995.
- ! This increase was also observed among cocaine- and heroin-related visits, although the rate of heroin-related emergency department visits remained stable between 1993 and 1994.
- ! In 1994, there were about 518,500 drug-related emergency department episodes, the highest whole-year number in the history of SAMHSA's Drug Abuse Warning Network.

Number and Rate (per 100,000) of Drug-Related Emergency Department Visits, 1988 to 1996

Year	Number*			Rate per 100,000 Visits		
	All Drug-Related Episodes	Cocaine Mentions	Heroin Mentions	All Drug-Related Episodes	Cocaine Mentions	Heroin Mentions
1988	403,600	101,600	38,100	525	132	50
1989	425,900	110,000	41,700	535	138	52
1990	371,200	80,400	33,900	451	98	41
1991	394,000	101,200	35,900	468	120	43
1992	433,500	119,800	48,000	504	139	56
1993	460,900	123,400	63,200	526	141	72
1994	518,500	142,900	64,000	578	159	71
1995**	517,800	138,000	72,200	604	162	86
1996	487,600	144,200	70,500			

* A person having a drug-related emergency room episode may use two or more drugs in combination; therefore, mentions of individual drugs are not additive.

** Preliminary estimate.

Source: SAMHSA, Office of Applied Studies. 1997. *Mid-Year Preliminary Estimates from the 1996 Drug Abuse Warning Network (DAWN)*, DAWN Series D-2 (rates were calculated separately from data provided in report). Hospitals eligible for DAWN are non-Federal short-stay general hospitals that have a 24-hour emergency department. Since 1988, the DAWN emergency department data have been collected from a representative sample of these hospitals located throughout the coterminous United States, including 21 oversampled metropolitan areas. Cases eligible for DAWN must be at least 6 years of age, treated in the emergency department, and involve the nonmedical use of a legal drug (including suicide attempts) or any use of an illegal drug. Episodes are not counted if they related solely to the use of alcohol.

COCAINE- AND HEROIN-RELATED EMERGENCY EPISODES

- ! An overall rise was seen in the number of cocaine- and heroin-related emergency department episodes between 1978 and 1995.
- ! The sharpest increase in the number of cocaine-related emergency department episodes occurred between 1985 and 1989 (from 28,800 to 110,000). After a drop in 1990, increases continued with intermittent leveling off through the mid-1990s.
- ! No change was seen in the number of heroin-related emergency department episodes between 1993 (63,200) and 1994 (64,000), but between 1994 and 1995 a 13-percent increase (from 64,000 to 72,200) took place.

Estimated Number* of Cocaine and Heroin Emergency Department Mentions, 1978 to 1995

Year	Cocaine	Heroin	Year	Cocaine	Heroin
1978	3,400	11,700	1987	91,800	32,700
1979	5,300	11,900	1988	101,600	38,100
1980	7,700	14,700	1989	110,000	41,700
1981	9,800	17,100	1990	80,400	33,900
1982	12,400	23,000	1991	101,200	35,900
1983	15,200	25,100	1992	119,800	48,000
1984	24,400	26,400	1993	123,400	63,200
1985	28,800	28,900	1994	142,900	64,000
1986	51,700	28,600	1995**	138,000	72,200

* A person having a drug-related emergency room episode may use two or more drugs in combination; therefore, mentions of individual drugs are not additive.

** Estimates for 1995 are preliminary.

Source: SAMHSA, Office of Applied Studies. 1997. 1978-1987 estimates in *Historical Estimates from the Drug Abuse Warning Network, Advance Report Number 16*. 1988-1995 estimates are from *Mid-Year Preliminary Estimates from the 1996 Drug Abuse Warning Network (DAWN)*. DHHS Publication No. (SMA)97-3144. Drug Abuse Warning Network Series D-2, p. 27. Hospitals eligible for DAWN are non-Federal short-stay general hospitals that have a 24-hour emergency department. Since 1988, the DAWN emergency department data have been collected from a representative sample of these hospitals located throughout the coterminous United States, including 21 oversampled metropolitan areas. Cases eligible for DAWN must be at least 6 years of age, treated in the emergency department, and involve the nonmedical use of a legal drug (including suicide attempts) or any use of an illegal drug.

COCAINE USE AND RELATED EMERGENCY EPISODES

- ! The proportion of persons age 35 and older among past-year cocaine users and cocaine-related emergency department (ED) episodes both increased between 1979 and 1996.
- ! Between 1979 and 1995, the proportion of persons age 35 and older among cocaine-related ED episodes was always higher than the proportion of this age group who used cocaine during the past year.
- ! In 1995, 43 percent of cocaine-related ED episodes occurred among persons 35 and older.
- ! In 1996, 28 percent of past-year cocaine users were at least 35 years old.

Persons Age 35 and Older Among Past-Year Cocaine Users and Cocaine-Related Emergency Department (ED) Episodes, 1979 to 1996*

Year	Percent Age 35 and Older	
	Among ED Episodes	Among Past Year Users
1979	12.0%	4.6%
1980	14.5	NA
1981	14.9	NA
1982	18.2	NA
1983	20.4	NA
1984	17.3	NA
1985	19.1	9.9
1986	18.0	NA
1987	20.1	NA
1988	21.3	11.5
1989	23.3	NA
1990	28.7	16.0
1991	30.2	26.7
1992	34.5	22.3
1993	37.8	28.9
1994	38.0	31.2
1995	42.3	26.8
1996	45.0	28.8

* 1995 and 1996 ED estimates are preliminary; 1996 ED estimates represent episodes from January to July 1996.

NA -- Data are not available.

Source: Data on ED episodes: 1979 to 1994: SAMHSA, Office of Applied Studies. 1996. *Historical Estimates from the Drug Abuse Warning Network*, p. 48. 1995 to 1996: SAMHSA, Office of Applied Studies. 1997. *Mid-Year Preliminary Estimates from the Drug Abuse Warning Network*, pp. 52-53. Data on cocaine users: SAMHSA, Office of Applied Studies. 1997. Unpublished data from the National Household Survey on Drug Abuse.

HEROIN INJECTION EMERGENCY VISITS BY AGE

- ! The proportion of injecting users among heroin-related emergency department visits increases with age.
- ! In 1995, 60 percent of heroin-related emergency department visits among persons age 35 and older were injection related.
- ! In 1995, among persons age 12 to 17, 22 percent of heroin-related emergency department visits were injection related.

Heroin Injection Among Heroin-Related Emergency Department Visits by Age, 1995

Age	Percent Injected
12-17	22%
18-25	37
26-34	52
35+	60

Source: SAMHSA, Office of Applied Studies. 1996. Unpublished estimates from the 1995 Drug Abuse Warning Network (DAWN); data are from the first half of 1995. Hospitals eligible for DAWN are non-Federal short-stay general hospitals that have a 24-hour emergency department; 489 hospitals participated in the 1995 DAWN. Since 1988, DAWN emergency department data have been collected from a representative sample of these hospitals located throughout the coterminous United States, including 21 oversampled metropolitan areas. Cases eligible for DAWN must be at least 6 years of age, treated in the emergency department, and involve the nonmedical use of a legal drug (including suicide attempts) or any use of an illegal drug. Episodes are not counted if they related solely to the use of alcohol.

METHAMPHETAMINE EMERGENCY EPISODES

- ! The number and rate of methamphetamine-related emergency room episodes in the United States increased 64 percent between 1992 and 1996.
- ! The greatest numbers of episodes occurred in metropolitan areas in the West and Midwest.

Methamphetamine-Related Emergency Department Episodes Among Selected U.S. Metropolitan Areas, 1992 to 1996

Metropolitan Area	1992		1993		1994		1995		1996*		1992-96 % Change
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	
Total U.S.	6,563	2.9	9,926	4.3	17,665	7.7	16,184	7.0	10,787	4.6	+64%
Phoenix, AZ	279	14.5	481	24.7	813	41.5	760	38.4	689	34.5	+147
Denver, CO	31	2.1	55	3.7	145	9.6	193	12.6	106	6.9	+242
Minneapolis/ St. Paul, MN	42	1.9	42	1.9	64	2.8	80	3.5	90	3.9	+114
Seattle, WA	99	5.5	177	9.6	299	16.2	265	14.2	191	10.1	+93
Los Angeles/ Long Beach, CA	828	10.3	1,226	15.2	1,400	17.2	1,288	15.7	1,248	15.1	+51
Atlanta, GA	21	0.8	55	2.1	101	3.8	144	5.4	118	4.4	+462
St. Louis, MO	15	0.7	29	1.3	52	2.3	79	3.4	38	1.6	+153
San Diego, CA	931	41.1	929	40.6	913	39.7	679	29.3	614	26.3	-55
Dallas, TX	68	2.9	79	3.4	154	6.6	197	8.3	111	4.6	+63
San Francisco, CA	688	45.8	992	65.3	1,258	82.4	1,225	79.4	1,031	66.1	+50
Philadelphia, PA/NJ	142	3.2	110	2.4	92	2.0	87	1.9	58	1.3	-59

* 1996 data are preliminary.

Source: SAMHSA, Office of Applied Studies. 1998. *Year-End Preliminary Estimates from the 1996 Drug Abuse Warning Network (DAWN)*. DHHS Publication No. (SMA)98-3175. DAWN Series D-3, pp. 41, 69. Hospitals eligible for DAWN are non-Federal short-stay general hospitals that have a 24-hour emergency department. Since 1988, DAWN data have been collected from a representative sample of these hospitals located in the coterminous United States, including 21 oversampled metropolitan areas. Cases eligible for DAWN must be at least 6 years of age, treated in the emergency department, and involve the nonmedical use of a legal drug (including suicide attempts) or any use of an illegal drug. Episodes are not counted if they related solely to the use of alcohol.

METHAMPHETAMINE- AND AMPHETAMINE-RELATED EMERGENCY EPISODES

- ! The number of methamphetamine-related emergency room episodes increased from 3,102 in 1978 to 11,002 in 1996.
- ! The number of amphetamine-related emergency room episodes increased from 2,577 in 1978 to 9,309 in 1996.
- ! The sharpest increase occurred between 1991 and 1994 for both drugs.
- ! The pattern of change over time in the number of emergency room episodes related to these two drugs was fairly parallel, with the number of methamphetamine episodes always higher than the number of amphetamine episodes.

**Estimated Number* of Methamphetamine and Amphetamine
Emergency Department Mentions, 1978 to 1996**

Year	Meth- amphetamine	Amphetamine	Year	Meth- amphetamine	Amphetamine
1978	3,102	2,577	1987	7,707	3,100
1979	3,845	3,371	1988	8,992	3,832
1980	5,092	4,457	1989	8,722	3,437
1981	6,469	4,845	1990	5,236	3,362
1982	6,596	4,223	1991	4,887	2,296
1983	6,278	4,351	1992	6,563	3,713
1984	7,487	3,603	1993	9,926	5,538
1985	6,135	3,388	1994	17,665	9,664
1986	6,023	3,058	1995**	15,936	9,380
			1996	11,002	9,309

* A person having a drug-related emergency room episode may use two or more drugs in combination; therefore, mentions of individual drugs are not additive.

** Estimates for 1996 are preliminary.

Source: SAMHSA, Office of Applied Studies. 1997. 1978-1987 estimates in *Historical Estimates from the Drug Abuse Warning Network, Advance Report Number 16*. 1988-1996 estimates are from *Mid-Year Preliminary Estimates from the 1996 Drug Abuse Warning Network (DAWN)*. DHHS Publication No. (SMA)98-3252. Drug Abuse Warning Network Series D-5, p. 31-44. Hospitals eligible for DAWN are non-Federal short-stay general hospitals that have a 24-hour emergency department. Since 1988, the DAWN emergency department data have been collected from a representative sample of these hospitals located throughout the coterminous United States, including 21 oversampled metropolitan areas. Cases eligible for DAWN must be at least 6 years of age, treated in the emergency department, and involve the nonmedical use of a legal drug (including suicide attempts) or any use of an illegal drug.

MENTAL DISORDERS - CAUSE OF DEATH

- ! Of the 2.18 million deaths recorded in the U.S. in 1992, a mental disorder was listed as a contributing cause of death on 7.6 percent of the death certificates.
- ! Organic mental disorders were the most frequently listed cause of death, followed by substance abuse and psychotic disorders.
- ! The mean age of death was youngest for those persons with mental retardation (age 50.8) and for substance abuse (age 59) as a contributing cause.

Mental Disorders Listed as Cause of Death on Death Certificate, U.S., 1992

Type of Disorder	TOTAL Any Contributing Cause		Underlying Cause Only		Mean Age
	Number	Percent	Number	Percent	(Years)
Any mental disorder	165,612	7.60%	44,565	2.05%	76.5
Organic disorder	97,187	4.46	30,302	1.39	83.8
Substance abuse*	42,682	1.96	7,732	0.35	81.7
Psychotic disorder	21,157	0.97	5,429	0.25	69.9
Schizophrenia	2,934	0.13	292	0.01	72.2
Nonpsychotic	8,778	0.40	706	0.03	59.0
Mental retardation	2,208	0.10	396	0.02	50.8

*Substance abuse included acute alcohol intoxication, tobacco, and drug abuse.

Source: Dembling, B. 1997. Mental Disorder as a Contributing Cause of Death in the U.S. in 1992. *Psychiatric Services*, 48 (1):45. This study used the annual automated files on multiple causes of death maintained by the National Center for Health Statistics (NCHS). All states have produced these automated files since 1989, based on the revised Standard U.S. Certificate of Death. The State nosologist records a single underlying cause of death and any contributing causes from the death certificates using ICD-9 codes. In 1992, there were an average of 2.7 conditions per death record. The TRANSAX computer program (developed by NCHS) eliminates duplicate or invalid conditions. Based on the available valid codes, the ACME computer program (developed by NCHS) assigns the underlying cause of death. ICD-9 codes used for this study were codes 209x through 319x (DSM-III-R mental disorders) and code 331x (includes Alzheimer's disease). In 1992, there were 2.18 million deaths recorded in the U.S. The mean age of death for the population was 70 years.

CONTRIBUTIONS TO PREVENTABLE DEATHS

- ! In 1990, alcohol and illegal drugs accounted for 11 percent of preventable deaths.
- ! According to a special study of causes of death in 1990, tobacco accounted for 38 percent, the greatest proportion of preventable deaths.

Actual Causes of Preventable Deaths in the United States, 1990

Cause	Estimated Number	Percentage of Total
Total	1,060,000	100.0%
Tobacco	400,000	37.7
Diet/activity patterns	300,000	28.3
Alcohol	100,000	9.4
Toxic agents	90,000	8.5
Microbial agents	60,000	5.7
Firearms	35,000	3.3
Sexual behavior	30,000	2.8
Motor vehicles	25,000	2.4
Illicit use of drugs	20,000	1.9

Source: McGinnis & Foege. 1993. "Actual Causes of Death in the United States." *Journal of the American Medical Association* 270(18):2207-2212. A meta-analysis was conducted of government reports, vital statistics, and articles published between 1977 and 1993 to identify and quantify the major nongenetic causes of death. Data from those meeting methodological criteria were synthesized to provide first approximations of the estimated number of deaths in 1990 by the major factors identified. Various limitations in both approach and available data for this analysis can be found in the original article; these include differences in study methodologies, variations in estimated deaths attributed to each cause, paucity of data, and types of assumptions used.

METHAMPHETAMINE-RELATED DEATHS

- ! The number of deaths associated with methamphetamine increased between 1992 and 1995.
- ! Metropolitan areas in the West, particularly in California (e.g., Los Angeles, San Diego, and San Francisco), report the largest numbers of methamphetamine-related deaths.

Number of Deaths Associated with Methamphetamine Among Selected U.S. Metropolitan Areas, 1992 to 1995

Metropolitan Area	Total	1992	1993	1994	1995
Total	1,599	224	380	508	487
Los Angeles, CA	456	55	126	134	141
San Diego, CA	362	71	77	115	99
San Francisco, CA	204	31	54	66	53
Phoenix, AZ	159	16	37	76	30
Las Vegas, NV	108	6	22	33	47
Philadelphia, PA-NJ	74	18	25	18	13
Oklahoma City, OK	63	7	7	17	32
Portland, OR	45	3	12	17	13
Dallas, TX	34	8	6	9	11
St. Louis, IL-MO	20	1	5	7	7
Other*	74	8	9	16	41

* These metropolitan areas each reported fewer than 15 methamphetamine deaths from 1992 to 1995: Anchorage (AK), Atlanta (GA), Baltimore (MD), Birmingham (AL), Buffalo (NY), Casper (WY), Chicago (IL), Cleveland (OH), Denver (CO), Detroit (MI), Fargo (ND-MN), Indianapolis (IN), Kansas City (KS-MO), Louisville (KY), Miami (FL), Minneapolis (MN-WI), Nashua (NH), New Orleans (LA), New York (NY), Newark (NJ), Norfolk (VA), Omaha (NE), Salt Lake City (UT), San Antonio (TX), Seattle (WA), Sioux Falls (SD), and Washington (DC-MD-VA).

Source: SAMHSA, Office of Applied Studies. 1997. *Drug Abuse Warning Network (DAWN) Annual Medical Examiner Data 1995*. DHHS Publication No. (SMA)97-3126. DAWN Series D-1, Table 4.03, p. 58, and Table 4.06, pp. 62-80. DAWN collects information on drug abuse deaths reported to participating medical examiners, excluding deaths in which AIDS was reported, "drug unknown" or alcohol was the only substance mentioned, and homicides. The trend data come from a consistent panel of 124 medical examiner facilities from 37 metropolitan areas that reported data to DAWN at least 10 months of each year examined. Drug abuse deaths include both deaths that are drug induced (i.e., a drug "overdose," where a toxic level is found or suspected) and drug related (i.e., drug usage is a contributory factor but not the sole cause). Most drug abuse deaths (76 percent) include mentions of several drugs. The medical examiners participating in DAWN are not a representative sample.

DRUG ABUSE DEATHS BY SELECTED DRUG

- ! The three most frequently reported drugs associated with deaths in the SAMHSA Drug Abuse Warning Network (DAWN) are cocaine, heroin, and alcohol in combination with other drugs.
- ! Between 1994 and 1995, the number of total drug deaths reported by DAWN medical examiners increased 4.3 percent.
- ! Between 1992 and 1995, cocaine was identified in the more deaths per year than heroin.

Total Drug Mentions in Drug-Related Deaths Reported to DAWN Medical Examiners by Selected Drug, 1992-1995

Substance	1992	1993	1994	1995
Total drug abuse deaths	7,355	8,175	8,423	8,788
Cocaine	3,424	3,802	4,020	4,066
Heroin	2,868	3,663	3,494	3,976
Alcohol with drug	2,885	3,299	3,140	3,448
Methamphetamine	224	380	508	487

Source: SAMHSA, Office of Applied Studies. 1997. *Drug Abuse Warning Network (DAWN) Annual Medical Examiner Data 1995*. DHHS Publication No. (SMA)97-3126. DAWN Series D-1, Table 4.03, p. 58. DAWN collects information on drug abuse deaths reported to participating medical examiners, excluding deaths in which AIDS was reported, "drug unknown" or alcohol was the only substance mentioned, and homicides. The trend data come from a consistent panel of 124 medical examiner facilities from 37 metropolitan areas that reported data to DAWN at least 10 months of each year examined. Drug abuse deaths include both deaths that are drug induced (i.e., a drug "overdose," where a toxic level is found or suspected) and drug related (i.e., drug usage is a contributory factor but not the sole cause). Most drug abuse deaths (76 percent) include mentions of several drugs. The medical examiners participating in DAWN are not a representative sample.

ALCOHOLISM TREATMENT - IMPACT ON MORTALITY

- ! The Department of Veterans Affairs (VA) maintains a Patient Treatment File to help evaluate and improve its treatment services.
- ! A national study of male veterans treated for alcoholism found that those who completed their inpatient treatment had a significantly lower risk of dying in the three years following hospitalization than those not completing treatment or those having only short detoxification.

Number of Deaths Among VA Patients with Crude and Adjusted Mortality Rates for 3-year Period After Index Hospitalization for Alcoholism Treatment

Length of Alcoholism Treatment	Number of Patients	Number of Deaths	Crude* Mortality Rate	Adjusted** Mortality Rate
Complete treatment	28,060	1,982	24.35	23.23
Incomplete treatment	10,922	1,030	32.96	29.30
Short detoxification	9,434	1,057	39.60	35.12

*Deaths per 1,000 person-years. Since all the patients did not start their index treatment at the same point in time, person-years were calculated to standardize for the different lengths of treatment and followup.

**Deaths per 1,000 person-years adjusted for age and race.

Source: Bunn JY, Booth BM, Cook CA, Blow FC and Fortney JC. (1994): The Relationship Between Mortality and Intensity of Inpatient Alcoholism Treatment. *American Journal of Public Health*, 84:211-214. This study used the Patient Treatment File, the VA's national hospital discharge database. It contains data on over a million hospital discharges yearly for veterans in VA Medical Centers. The treatment status groups of alcoholics were: (1) Complete treatment -- patients who completed extended formal inpatient alcoholism treatment, (2) Incomplete treatment -- patients who had at least 6 days of extended formal inpatient alcoholism treatment but did not complete treatment, and (3) Short detoxification -- patients admitted for detoxification lasting 5 days or perhaps less. This treatment was considered the "index hospitalization." Alcoholics with a primary diagnosis of drug dependence and those coded as "in remission" were not included. Because of insufficient numbers of women sampled, only male veterans were analyzed for this study. Mortality rates were calculated for a 3-year period after the index hospitalization. Deaths were identified through either the VA files or by matching identifying information on the NCHS National Death Index. Persons not identified through these records were assumed to be alive at the end of the 3-year followup period. Age and race adjusted mortality rates were computed using the 1990 census as the standard population.

MORTALITY - - VIRGIN ISLANDS

- ! Several leading causes of death have been associated with substance abuse or mental illness; these include accidents, homicide, AIDS, and cirrhosis of the liver.
- ! Accidents, homicide, AIDS, and cirrhosis of the liver were among the top ranked causes of death in the Virgin Islands in 1996; but the exact role of substance abuse and/or mental illness in these deaths in the Virgin Islands is unknown.
- ! In the Virgin Islands in 1996, males had higher death rates than females for accidents, homicide, and cirrhosis of the liver.
- ! In the Virgin Islands in 1996, females had higher death rates than males for AIDS.

Selected Causes of Death: Rate per 100,000 Population U. S. Virgin Islands, 1996

Cause of Death	Rank	Total	Males	Females
		Rate per 100,000 Population	Rate per 100,000 Population	Rate per 100,000 Population
Accidents	5	27.4	46.7	10.3
Homicide	6	24.6	46.7	5.1
AIDS	7	17.3	15.6	18.9
Liver Cirrhosis	13	9.1	11.7	6.9

Source: Bureau of Health Statistics, U.S. Virgin Islands, 1998. Unpublished Data.

SUICIDE, HOMICIDE, AND TOTAL DEATH RATES BY RACE/ETHNICITY

- ! The average age-adjusted suicide rates between 1993 and 1995 were higher among White and American Indian/Alaskan Native males than any other race/ethnic or gender group.
- ! The homicide death rate among black males was 64.8 per 100,000 and over twice that of Hispanic males who had the second highest rate among the males (26.9 per 100,000).
- ! Among the females, black females had the highest homicide rate of any race/ethnic group.

Suicide, Homicide, and Death From All Causes by Race/Ethnicity: Average Annual Age-Adjusted Death Rates per 100,000 Persons U.S. Population , 1993-1995

Population Group	Suicide	Homicide	All Causes
Total U.S. Population	11.2	10.1	508.2
Male	18.7	16.0	655.2
White	19.7	8.6	618.6
Black	12.7	64.8	1,032.8
Hispanic*	12.5	26.9	515.9
American Indian/ Alaskan Native	20.9	17.8	585.0
Asian/Pacific Islander	9.5	8.9	384.2
Female	4.2	4.2	386.3
White	4.5	2.8	365.8
Black	2.1	12.3	573.9
Hispanic*	2.0	4.5	271.3
American Indian/ Alaskan Native	4.7	5.4	361.0
Asian/ Pacific Islander	3.8	2.6	229.3

*Excludes data from States lacking an Hispanic origin item on their death certificates. Hispanics may be persons of any race and therefore may be included in all of the racial groups above.

Source: National Center for Health Statistics. 1997. *Health United States, 1996-97 and Injury Chartbook*. (Tables 48, 47, and 37.). Data were compiled by the Division of Vital Statistics based on death certificates.

SUICIDE DEATHS BY RACE/ETHNICITY-MALES

- ! In 1995, among males in the U.S. population, the overall rate of suicide deaths for males age 15-25 was 22.5 per 100,000 population.
- ! Between 1992 and 1995, Whites and American Indians/Alaskan Natives consistently had the highest rate of suicide deaths compared with any other racial/ethnic group of males age 15-25.
- ! Asian/Pacific Islander males consistently had the lowest rate of suicide deaths between 1992 and 1995 compared with any other racial/ethnic group of males age 15-24.

Trends in Suicide Deaths in Males Age 15-24 Years by Race/Ethnicity: Age-Adjusted Death Rates Per 100,000 Persons, U.S. Population, 1992-1995

Race/Ethnicity	1992	1993	1994	1995
Total	21.9	22.4	23.4	22.5
White	22.7	23.1	24.1	23.5
Black	18.0	20.1	20.6	18.0
Hispanic*	16.3	18.2	18.7	18.3
American Indian/ Alaskan Native	40.6	31.6	45.8	34.2
Asian/Pacific Islander	13.7	12.7	15.1	16.0

*Excludes data from States lacking an Hispanic origin item on their death certificates. Hispanics may be persons of any race and therefore may be included in all the racial groups above.

Source: National Center for Health Statistics. 1997. *Health United States, 1996-97* and Injury Chartbook (Table 48). DHSS Pub. No. (PHS) 97-1232. Data were compiled by the Division of Vital Statistics based on death certificates. Persons identified as American Indian or Asian in a methodological study were found to be misreported as white on the death certificate, causing underestimated death rates for American Indians and Asians (see Sorlie PD, et al. 1993. "Validity of Demographic Characteristics on the Death Certificate." *Epidemiology* 3(2):181-184).

SUICIDE DEATHS - - FEMALES, AGE 15-24, BY RACE/ETHNICITY

- ! The overall rate of suicide deaths among females age 15-24 in the U.S. in 1995 was 3.7 per 100,000 population.
- ! Between 1992 and 1995, suicide deaths among Asian/Pacific Islander women age 15-24 was consistently higher than for any other racial/ethnic group.
- ! The rates of suicide deaths for black and Hispanic women age 15-24 were lower than any other racial/ethnic groups.

Trends in Suicide Deaths in Females Age 15-24 Years by Race/Ethnicity: Age-Adjusted Death Rates Per 100,000 Persons, U.S. Population, 1992-1995

Race/Ethnicity	1992	1993	1994	1995
Total	3.7	4.1	3.7	3.7
White	3.8	4.3	3.8	3.9
Black	3.8	4.3	3.8	3.9
Hispanic*	2.2	2.9	2.8	2.6
American Indian/ Alaskan Native	**	10.9	**	**
Asian/Pacific Islander	5.5	5.0	5.7	5.2

*Excludes data from States lacking an Hispanic origin item on their death certificates. Hispanics may be persons of any race and therefore may be included in all of the racial groups above.

**Not available

Source: National Center for Health Statistics. 1997. *Health United States, 1996-97* and Injury Chartbook (Table 48). DHHS Pub. No. (PHS) 97-1232. Data were compiled by the Division of Vital Statistics based on death certificates. Persons identified as American Indian or Asian in a methodological study were found to be misreported as white on the death certificate, causing underestimated death rates for American Indians and Asians (see Sorlie PD, et al. 1993. "Validity of Demographic Characteristics on the Death Certificate." *Epidemiology* 3(2):181-184).

SUICIDE DEATHS - - TOTAL MALES BY RACE/ETHNICITY

- ! Between 1980 and 1995, the suicide death rates for most racial/ethnic groups of males. increased.
- ! Among the males, American Indians/Alaskan Natives consistently had the highest suicide death rates than any other racial/ethnic group between 1980 and 1995.

Trends Suicide Deaths Rates For Total Males by Race/Ethnicity: Age-Adjusted Death Rates Per 100,000 Persons U.S. Population, 1980-1995

Race/Ethnicity	1980	1985	1990	1995
Total	18.0	18.8	19.0	18.6
White	18.9	19.9	20.1	19.7
Black	11.1	11.5	12.4	12.4
Hispanic*	**	10.4	12.4	12.3
American Indian/ Alaskan Native	20.8	19.9	21.0	20.1
Asian/Pacific Islander	9.0	8.5	8.8	9.7

*Excludes data from States lacking an Hispanic origin item on their death certificates. Hispanics may be persons of any race and therefore may be included in all the racial groups above.

**Not available.

Source: National Center for Health Statistics. 1997. *Health United States, 1996-97* and Injury Chartbook (Table 48). DHHS Pub. No. (PHS) 97-1232. Data were compiled by the Division of Vital Statistics based on death certificates. Persons identified as American Indian or Asian in a methodological study were founded to be misreported as white on the death certificate, causing underestimated death rates for American Indians and Asians (see Sorlie PD, et al. 1993. "Validity of Demographic Characteristics on the Death Certificate." *Epidemiology* 3(2):181-184).

SUICIDE DEATHS - - TOTAL FEMALES BY RACE/ETHNICITY

- ! Between 1980 and 1995, the suicide death rates for most racial/ethnic groups of females decreased.
- ! Among the females, Whites had consistently the highest rate of suicide deaths than any other racial/ethnic group between 1980 and 1990; in 1995 both White and American Indian/Alaskan Native women had the highest rates.

Trends in Suicide Deaths For Total Females by Race/Ethnicity: Age-Adjusted Death Rates Per 100,000 Persons U.S. Population, 1980-1995

Race/Ethnicity	1980	1985	1990	1995
Total	5.4	4.9	4.5	4.1
White	5.7	5.3	4.8	4.4
Black	2.2	2.1	2.3	2.0
Hispanic*	**	1.8	2.3	2.0
American Indian/ Alaskan Native	5.0	4.4	3.8	4.4
Asian/Pacific Islander	4.7	4.4	3.4	3.7

*Excludes data from States lacking an Hispanic origin item on their death certificates. Hispanics may be persons of any race and therefore may be included in all the racial groups above.

**Not available

Source: National Center for Health Statistics. 1997. *Health United States, 1996-97* and Injury Chartbook (Table 48). DHHS Pub. No. (PHS) 97-1232. Data were compiled by the Division of Vital Statistics based on death certificates. Persons identified as American Indian or Asian in a methodological study were found to be misreported as white on the death certificate, causing underestimated death rates for American Indians and Asians (see Sorlie PD, et al. 1993. "Validity of Demographic Characteristics on the Death Certificate." *Epidemiology* 3(2):181-184).

**SUICIDE AND ALCOHOL-RELATED DEATHS - -
MICRONESIA AND MARSHALL ISLANDS**

- ! The rate of suicide deaths was higher in Micronesia (27.5 per 100,000 population) than in the Marshall Islands (19.8 per 100,000 population).
- ! About 45 percent of the total suicides in Micronesia were considered alcohol-related compared with 68 percent in the Marshall Islands.
- ! The rate of total deaths from all causes that are alcohol-related was higher in Micronesia than in the Marshall Islands.

**Alcohol-Related Suicides and Deaths From All Causes:
Average Annual Rate per 100,000 Population in the Federated States of Micronesia
and the Republic of the Marshall Islands (1991-1995)**

	Micronesia	Marshall Islands
Total Suicide Death Rate	27.5 per 100,000	19.8 per 100,000
Alcohol-Related Suicide Rate	12.3 per 100,000	14.4 per 100,000
Alcohol-Related Percent of Total	45%	68%
Total Death Rate from All Causes	423.6 per 100,000	507.4 per 100,000
Alcohol-Related Death Rate	19.9 per 100,000	18.0 per 100,000
Alcohol-Related Percent of Total	5.9%	3.5%

Source: Micronesian Seminar, 1997. *Alcohol and Drug Use in the Federated States of Micronesia: An Assessment of the Problem with Implications for Prevention and Treatment*, (Tables 2.3 and 2.4). *Alcohol and Drug Use in the Republic of the Marshall Islands: An Assessment of the Problem with Implications for Prevention and Treatment*, (Tables 2.2 and 2.3). These reports were prepared under contract with SAMHSA's Center for Substance Abuse Treatment. For the analysis presented here, data from 1991 to 1995 on suicides were pooled; the number for the 5-year period for Micronesia was 148 total suicides (67 alcohol-related) and for the Marshall Islands there were 56 total suicides (38 alcohol-related). The data on deaths from all causes were from the hospital death certificates. Data from the same 5-year period were pooled to examine the average annual rate of alcohol-related deaths. Included in the alcohol-related deaths were such conditions as cirrhosis, gastritis, hepatitis, liver disease, and alcohol-related homicide, drowning, suicide, and motor vehicle accidents.

SUICIDE AMONG PERSONS WITH MENTAL DISORDER

- ! During early phases of illness, suicide deaths were significantly higher among psychotic patients than non-psychotic patients in a study of patients admitted to two hospitals in the greater Chicago area.
- ! Among male patients, those with any psychotic disorder (including schizophrenia) were about two times more likely to commit suicide than males with nonpsychotic disorders.
- ! Among female patients, those with schizophrenia had a higher rate of suicide deaths than patients with a nonpsychotic disorder.

Suicide Deaths Among Young Patients With Schizophrenia, Other Psychotic Disorders, and Nonpsychotic Disorders

Diagnosis	Males				Females				Total			
	Suicides		Non-suicides		Suicides		Non-suicides		Suicides		Non-suicides	
	N	%	N	%	N	%	N	%	N	%	N	%
Schizophrenia*,*	10	10.6	84	89.4	3	4.7	51	95.3	13	8.8	135	91.2
Other psychotic disorder**	10	10.6	84	89.4	3	3.4	84	96.6	13	7.2	168	92.8
Nonpsychotic disorder*,**	4	4.0	97	96.0	6	3.8	150	96.2	10	3.9	247	96.1

* Schizophrenics vs. nonpsychotics: $P^2 = 4.21$, 1 *df*, $p < 0.05$.

** Schizophrenics and other psychotics vs. nonpsychotics: $P^2 = 4.05$, 1 *df*, $p < 0.05$.

Notes: Schizophrenia includes paranoid and nonparanoid disorders. Other psychotic disorders include schizoaffective and other psychotic affective disorders. Nonpsychotic disorders include primary major depressive disorder.

Source: Westermeyer JF, Harrow M, Marengo JT. 1991. "Risk for Suicide in Schizophrenia and Other Psychotic and Nonpsychotic Disorders." *The Journal of Nervous and Mental Disease* 179(5):259-266, Table 1. The study sample comprised 586 patients in 2 psychiatric hospitals in the greater Chicago area who had participated in 2 prospective followup studies designed to analyze prognoses and outcomes in schizophrenia and other types of major psychotic and nonpsychotic disorders. Patient diagnoses were based on Spitzer R, et al. 1978. "Research Diagnostic Criteria." *Archives of General Psychiatry* 43:577-582. The mean age of patients was 21.5 years at initial hospitalization and 23 years at index hospitalization. The mean length of time between first hospitalization and followup for suicide was 13 years.

DRUG SELLING - CALIFORNIA STUDENTS

- ! In the total sample of California students in 1995/96, 16.2 percent of 9th graders and 20.5 percent of the 11th graders reported selling an illicit drug in the past year.
- ! Between 1991/92 and 1995/96, the percent of both 9th and 11th grade students reporting that they sold drugs in the past year doubled.
- ! Drug users were about twice as likely as the total sample to sell drugs in the past year.

Trends in Percent of California Students Reporting Selling Illicit Drugs in the Past Year

Frequency of Drug Selling	Grade 9			Grade 11		
	91/92	93/94	95/96	91/92	93/94	95/96
Total Sample	6.2%	13.9%	16.2%	10.7%	17.7%	20.5%
Once twice	3.1	7.6	9.7	5.6	10.0	10.2
3 or more times	3.1	6.3	6.4	5.1	7.7	10.3
Drug Users	--	30.8	36.5	--	35.9	37.7
Once or twice	--	16.2	21.3	--	19.8	18.2
3 or more times	--	14.9	15.2	--	16.1	19.6

Source: Skager R & Austin G, 1997. *Sixth Biennial California Student Substance Use Survey: Grades 7, 9 and 11 Preliminary Findings*. WestEd-Southwest Regional Laboratory, Los Alamitos, CA. The California state-wide sample consisted of 128 public and private middle and senior high schools and 5,775 respondents in grades 7, 9, and 11. Schools were randomly selected for the sample proportionally to the number of schools in each of six geographic regions of the state. About half of the schools in each region were retained from the 1993-94 survey; the other half was newly selected. For the first year in the survey series, intact classrooms were sampled, rather than individual students, and active rather than passive parental consent was used.

CRIME COMMITTED FOR DRUG MONEY

- ! According to a 1991 national survey of persons in jail, 17 percent of convicted jail inmates committed their crimes to get money for drugs.
- ! About 30 to 31 percent of those convicted of burglary or larceny committed the crime to obtain money for drugs.
- ! Slightly more than one-quarter of those convicted of robbery and one quarter of those convicted of drug trafficking committed their offenses for drug money.

Convicted Jail Inmates Who Committed Their Crimes for Money for Drugs^a by Most Serious Offense, 1991

Offense	Percent
All Offenses	17%
Violent Offenses	12
Homicide ^b	5
Sexual assault ^c	2
Robbery	27
Assault	6
Property Offenses^d	26
Burglary	30
Larceny	31
Drug Offenses	22
Possession	16
Trafficking	25
Public-Order Offenses^e	5

^a Drugs included were marijuana or hashish, cocaine, crack, heroin, other opiates, methadone, barbiturates, quaaludes or downers, amphetamines, methamphetamine, LSD, and PCP and other hallucinogens, alone or in combination with alcohol.

^b Includes murder, non-negligent manslaughter, and negligent manslaughter.

^c Includes rape.

^d Includes theft.

^e Includes driving while intoxicated and other public-order offenses.

Source: Office of Justice Programs, Bureau of Justice Statistics. 1993. *Survey of State Prison Inmates, 1991*. U.S. Department of Justice Pub. No. NCJ-136949. The sample for the 1991 survey was selected from a universe of 1,239 State prisons enumerated in the 1990 Census of State and Federal Adult Correctional Facilities. A total of 277 prisons were selected in the first stage of a stratified two-stage sample design. In the second stage, 13,986 inmates were selected for face-to-face interviews, a representative sample of more than 711,000 adults held in State correctional facilities during the summer of 1991. All together, 94 percent of the selected inmates were interviewed. Both males and females are included in this table.

CRIME COMMITTED UNDER THE INFLUENCE

- ! In a 1991 national survey of persons in jail, 31 percent of convicted jail inmates reported being under the influence of illicit drugs at the time of their offense.
- ! Of those convicted, burglars were the most likely to be under the influence of drugs (40 percent), followed by robbers, larcenists, and drug possessors (38 percent each), and drug traffickers (36 percent).

Convicted Jail Inmates Who Were Under the Influence of Drugs^a at the Time of Their Current Offense, 1991

Offense	Percent
All Offenses	31%
Violent Offenses	28
Homicide ^b	28
Sexual assault ^c	20
Robbery	38
Assault	23
Property Offenses^d	35
Burglary	40
Larceny	38
Drug Offenses	37
Possession	38
Trafficking	36
Public-Order Offenses^e	18

^a Drugs included were marijuana or hashish, cocaine, crack, heroin, other opiates, methadone, barbiturates, quaaludes or downers, amphetamines, methamphetamine, LSD, and PCP and other hallucinogens, alone or in combination with alcohol.

^b Includes murder, non-negligent manslaughter, and negligent manslaughter.

^c Includes rape.

^d Includes theft.

^e Includes driving while intoxicated and other public-order offenses.

Source: Office of Justice Programs, Bureau of Justice Statistics. 1993. *Survey of State Prison Inmates, 1991*. U.S. Department of Justice Pub. No. NCJ-136949. The sample for the 1991 survey was selected from a universe of 1,239 State prisons enumerated in the 1990 Census of State and Federal Adult Correctional Facilities. A total of 277 prisons were selected in the first stage of a stratified two-stage sample design. In the second stage, 13,986 inmates were selected for face-to-face interviews, a representative sample of more than 711,000 adults held in State correctional facilities during the summer of 1991. All together, 94 percent of the selected inmates were interviewed. Both males and females are included in this table.

SUBSTANCES ABUSED BY CONVICTED JAIL INMATES

- ! According to a national survey of persons in jail, 49 percent of jail inmates committed their most serious offense under the influence of alcohol and/or illicit drugs.
- ! Inmates convicted of violent or public-order offenses were more likely to be under the influence of alcohol than illicit drugs at the time of their offenses.
- ! Inmates whose most serious offense was drug related or a property crime were more likely to be under the influence of illicit drugs than alcohol at the time they committed their crimes.

Type of Substance Convicted Jail Inmates Report Using at the Time of Offense, 1991

Most serious current offense	Any Substance ^a	Alcohol Only	Illicit Drugs Only	Both
All offenses	49%	18%	17%	14%
Violent offenses^b	49	21	12	16
Property offenses^c	53	18	21	14
Drug offenses^d	44	8	26	10
Public-order offenses^e	50	31	10	9

^a Includes alcohol and other drugs, including marijuana or hashish, cocaine, crack, heroin, other opiates, methadone, barbiturates, quaaludes or downers, amphetamines, methamphetamine, LSD, and PCP and other hallucinogens.

^b Includes homicide, robbery, and assault.

^c Includes burglary, larceny, and theft.

^d Includes possession and trafficking.

^e Includes driving while intoxicated and other public-order offenses.

Source: Office of Justice Programs, Bureau of Justice Statistics. 1993. *Survey of State Prison Inmates, 1991*. U.S. Department of Justice Pub. No. NCJ-136949. The sample for the 1991 survey was selected from a universe of 1,239 State prisons enumerated in the 1990 Census of State and Federal Adult Correctional Facilities. A total of 277 prisons were selected in the first stage of a stratified two-stage sample design. In the second stage, 13,986 inmates were selected for face-to-face interviews, a representative sample of more than 711,000 adults held in State correctional facilities during the summer of 1991. All together, 94 percent of the selected inmates were interviewed. Both males and females are included in this table.

CRIMINAL CHARGE BY CURRENT DIAGNOSIS FOR MEN

- ! Men detained in a Cook County Correction Department with a drug abuse disorder were less likely than men with no alcohol, drug abuse, or mental (ADM) disorder were more likely than drug abusers to be arrested for violent crimes.
- ! Men who had a drug abuse disorder were half as likely as men who with no ADM disorder to be arrested for violent felony crimes (10% vs. 19%) and violent misdemeanors (4% vs. 9%).

Current Arrest Charge for Violent and Nonviolent Felonies and Misdemeanors by Current Diagnosis Among Men in the Cook County Department of Corrections Jail, 1984

Current Alcohol, Drug Abuse, or Mental (ADM) Disorder	Felony		Misdemeanor	
	Violent	Non-violent	Violent	Non-violent
Total Sample (n=726)	17%	41%	9%	33%
No ADM disorder (n=504)	19	39	9	34
Major depressive episode (n=26)**	19	46	15	19
Substance use disorder				
Alcohol abuse/dependence (n=128)	14	37	12	38
Drug abuse/dependence (n=116)*	10	55	4	30
Both alcohol and drug abuse/dependence (n=32)**	13	44	9	34
Schizophrenia/Manic episode (n=26)**	15	46	4	35

* $p \leq 0.01$

**The sample sizes in these diagnostic categories were too small for statistical testing.

Source: Teplin LA. 1994. "Psychiatric and Substance Abuse Disorders Among Male Urban Jail Detainees." *American Journal of Public Health* 84(2):290-293, Table 4. The study sample was an all-male, stratified random sample of about one-half misdemeanant and one-half felons who entered Cook County Department of Corrections in Chicago, Illinois, directly from pretrial arraignment between November 1983 and November 1984. The researchers interviewed 728 respondents. The racial composition of the sample was as follows: 81 percent Black, 6 percent Hispanic, 12 percent other White, and 1 percent Asian or American Indian. Their age range was 16 to 68 years; and educational levels ranged from 2 to 16 years of schooling. The following source was used by Teplin for the psychiatric and substance abuse diagnoses: Robins LN et al. 1981. *The National Institutes of Health Diagnostic Interview Schedule (DIS), Version III*. Rockville, MD: National Institute of Mental Health, Division of Biometry and Epidemiology. In this study, disorders were counted as present only if they met the "severe" or "definite" criteria of the DIS, Version III; possible or moderate cases were not counted as a disorder. Respondents may meet criteria for more than one disorder. A current diagnosis is one within the 2 weeks prior to the diagnostic interview.

CRIMINAL CHARGE BY CURRENT DIAGNOSIS FOR WOMEN

- ! Most of the women detained in a Cook County Correction Department who had a mental disorder (such as major depression episode or schizophrenia) were arrested for a non-violent crime rather than a violent crime.
- ! In the Cook County study, there were no significant associations between type of mental disorder and the percent of women with violent or nonviolent offenses for either felony or misdemeanor charges.

Current Arrest Charge for Violent and Nonviolent Felonies and Misdemeanors by Current Diagnosis Among Women in the Cook County Department of Corrections Jail (1991-1993)

Current Alcohol, Drug Abuse or Mental (ADM) Disorder	Felony		Misdemeanor	
	Violent	Non- violent	Violen t	Non- violent
Total Sample (n=1,267)	11%	40%	7%	43%
No ADM disorder (n=540)	12	38	7	43
Major depressive episode (n=134)	17	43	3	38
Substance use disorder				
Alcohol abuse/dependence (n=279)	12	36	11	41
Drug abuse/dependence (n=554)	9	43	5	43
Both alcohol and drug abuse/ dependence (n=157)	11	41	8	41
Schizophrenia/ Manic episode (n=38)*	35	36	7	23

*The sample size in this diagnostic category was too small for statistical testing.

Source: Teplin LA, Abram KM, McClelland GM. 1996. Prevalence of Disorders Among Incarcerated Women. *Archives of General Psychiatry*, 53: 505-512, 1996, Table 6. The study sample of women was a stratified random sample of about one-half charged with a misdemeanor and one-half with a felony who entered Cook County Department of Corrections in Chicago, Illinois, directly from pretrial arraignment between 1991 and 1993. The researchers interviewed 1,272 respondents. The racial composition of the sample was as follows: 40 percent Black, 25 percent Hispanic, 34 percent non-Hispanic White, and 1 percent Asian or American Indian. Their age range was 17 to 67 years; and educational levels ranged from 2 to 16 years of schooling. The following source was used by Teplin for the psychiatric and substance abuse diagnoses: Robins LN et al. 1981. *The National Institutes of Health Diagnostic Interview Schedule (DIS), Version III*. Rockville, MD: National Institute of Mental Health, Division of Biometry and Epidemiology. In this study, disorders were counted as present only if they met the "severe" or "definite" criteria of the DIS, Version III. Possible or moderate cases were not counted as disorder in this study. Respondents may meet criteria for more than one disorder. A current diagnosis is one within the 2 weeks prior to the diagnostic interview.

ALCOHOL USE AND FAMILY STRESS - - MILITARY

- ! In general, the military reported low levels of stress in family life or a serious personal relationship in the past 12 months.
- ! Current drinkers were slightly more likely to report experiencing a great deal of family stress than abstainers.
- ! About 19 percent of the abstainers reported a great deal of family stress compared with 26 percent of the heavy drinkers.

Percent of Military Reporting Family Stress* by Alcohol Use in the Past 30 Days

Stress in Family in Past 12 Months	Alcohol Use in Past 30 Days			
	Total	None	Any	Heavy
Great deal/large amount	22.4%	19.3%	23.2%	26.5%
Some/a little	57.3	56.4	57.5	51.4
None	20.3	24.3	19.2	22.1

*Stress in family life or in a relationship with a person you live with or date seriously.

Source: DOD Survey of Health Related Behaviors Among Military personnel, 1995. Bray, RM et al. 1995 Department of Defense Survey of Health Related Behaviors Among Military Personnel, Research Triangle Institute December 1995. This series of studies examines trends in substance use among active duty military personnel. The 1995 survey is the sixth survey in the series which began in 1980. It is the most comprehensive and includes assessments of mental health, stress and coping, cardiovascular disease risk factor, injury, sexually transmitted diseases, and special health needs of military women. In 1995, the sample consisted of 16,193 active duty military.

ALCOHOL USE AND WORK STRESS - - MILITARY

- ! In 1995, heavy drinkers in the military were more likely than either other drinkers or abstainers to report experiencing a great deal of stress at work or while carrying out their military duties.
- ! Of those in the military classified as heavy drinkers in the past month, about half (46 percent) reported a great deal of work stress in the past 12 months compared with 40 percent of drinkers in general and 36 percent of abstainers.
- ! Abstainers were more likely than drinkers to report experiencing no stress at work.

Percent of Military Reporting Work Stress* in Past 12 Months by Alcohol Use in Past 30 Days.

Stress at Work in Past 12 Months	Alcohol Use in Past 30 Days			
	Total	None	Any	Heavy
Great deal/large amount	39.3	36.1	40.1	46.3
Some/a little	50.7	50.3	50.8	45.1
None	10.0	13.6	9.1	8.6

*Stress experienced at work or while carrying out our military duties

Source: DOD Survey of Health Related Behaviors Among Military personnel, 1995. Bray, RM et al. 1995 Department of Defense Survey of Health Related Behaviors Among Military Personnel, Research Triangle Institute December 1995. This series of studies examines trends in substance use among active duty military personnel. The 1995 survey is the sixth survey in the series which began in 1980. It is the most comprehensive and includes assessments of mental health, stress and coping, cardiovascular disease risk factor, injury, sexually transmitted diseases, and special health needs of military women. In 1995, the sample consisted of 16,193 active duty military.

ALCOHOL ABUSE IMPACT ON JOB PERFORMANCE

- ! Workers with alcohol problems are more likely to have problems in the workplace than other clients of an employee assistance program (EAP).
- ! Most of alcohol abuse-related workplace problems deal with absenteeism or lateness to the job.
- ! Workers with alcohol abuse problems are more likely to have accidents off the job than on the job.

Problems Reported by EAP Clients With and Without Alcohol Problems

Type of Problem	Alcohol Problems	No Alcohol Problems
On-the-Job		
Accidents	6.9%	5.8%
Attendance problems	33.5	18.8
Off-the-Job		
Accidents	11.2	7.5

Source: Blum T, Roman P. 1992. "A Description of Clients Using Employee Assistance Programs (EAP)." *Alcohol Health & Research World* 16(2):120-128. Data are collected on 6,400 employees who used an EAP from 84 worksites between 1990 and mid-1992. Eleven percent of the women and 36 percent of the men had alcohol problems. Alcohol problems were assessed using the CAGE screening instrument. The average tenure with the company was 12.5 years, and the average age of the employees was 37 years. The worksites varied by type of industry, number of employees, and location.

RESTRICTED DAILY ACTIVITIES BY DRUG USE AND GENDER

- ! Young adults who used marijuana were more likely to have restricted daily activities due to illness or injury than those who did not use marijuana.
- ! Those who used marijuana only were at less risk of experiencing restricted daily activities due to injury or illness than those who used marijuana and cocaine.
- ! Young adults age 18 to 44 years who used both marijuana and cocaine in the past year were the most likely to lose work days, be bedridden, or otherwise have restricted activity due to illness or injury.

Restricted Activity Days in the Past 2 Weeks Due to Illness and Injury, by Drug Use and Gender Adults, Age 18-44, 1991

Type of Drug Use	Total	Men	Women
Never used marijuana or cocaine	8.7%	6.9%	10.1%
Past-year marijuana/never cocaine	10.5	9.5	11.9
Past-year marijuana/prior cocaine	14.7	13.2	19.8
Past-year marijuana and cocaine	16.2	15.8	17.2

Source: Keer D, et al. 1994. *Restricted Activity and Other Problems Associated with the Use of Marijuana or Cocaine Among Persons 18 to 44 Years of Age: United States, 1991 NCHS Advance Data, No. 246, April 8, 1994*. A drug and alcohol use (DAU) supplement was included as part of the 1991 National Health Interview Survey (NHIS). The NHIS is a national household survey of the U.S. civilian noninstitutionalized population conducted by the National Center for Health Statistics. The DAU sample consisted of 21,174 persons who completed the substance abuse questionnaire. The overall DAU response rate was 76 percent.

BINGE DRINKING - IMPACT ON COLLEGE DRINKERS

- ! Binge drinking is defined for men as five or more drinks in a row at least once during a two-week period. Women who drink four or more drinks during the same time period are at the same risk as men who drink five or more.
- ! Binge drinking is associated with alcohol-related social, academic, and health problems.
- ! Frequent binge drinkers were 10 times more likely than non-binge drinkers to have severe problems, such as getting hurt or injured, damaging property, and getting into trouble with campus or local police.

Percent of College Drinkers Reporting Problems as a Result of Their Own Drinking

Alcohol-Related Problem	Non-Binge Drinkers	Bingers	Frequent Bingers
Forgot where they were or what they did	8%	26%	54%
Got behind in school work	6%	21%	46%
Argued with friends	8%	22%	42%
Engaged in unplanned sexual activity	8%	20%	41%
Had unprotected sex	4%	10%	22%
Got hurt or injured	2%	9%	23%
Damaged property	2%	8%	22%
Got into trouble with campus/local police	1%	4%	11%

Source: Wechsler H, et al., 1994. Health and Behavioral Consequences of Binge Drinking in College. *Journal of the American Medical Association*, 272(21):1672-1677. The study is part of the Harvard School of Public Health College Alcohol Study. It consisted of a random sample of undergraduates from a representative national sample of 140 four-year private and public colleges and universities. The college response rate was 72 percent. The students were asked to complete the mailed survey on drinking; the overall student response rate was 69 percent and 17,592 students returned the mailed questionnaire. Heavy drinking was defined for men as drinking five or more drinks in a row and for women as four or more in a row.

HEAVY DRINKING-IMPACT ON OTHERS AT COLLEGE

- ! Students who live on campus but do not drink or are not heavy drinkers themselves experience adverse consequences due to other students heavy drinking.
- ! The higher the general level of heavy drinking at college, the more adverse consequences experienced by the nonheavy drinking students.
- ! Nonheavy drinking students at schools with high levels of heavy drinking are about twice as likely to be victims of assault and property damage than students at schools with low levels of heavy drinking.

Percent of Nonheavy Drinking College Students Experiencing Adverse Consequences from Heavy Drinkers During the School Year By Level of Heavy Drinking Among the College Student Body

<u>Adverse consequence</u>	Level of Heavy Drinking at College		
	<u>Low</u>	<u>Mid</u>	<u>High</u>
Pushed, hit or assaulted	7%	10%	13%
Property damaged	6	13	15
Had serious argument	13	18	20
Insulted/humiliated	21	30	34
At least one of the problems	62	82	87

Source: Wechsler H et al., 1995. The Adverse Impact of Heavy Episodic Drinkers on Other College Students, *J. Studies on Alcohol*, 56(6):628-634. The study was part of the Harvard School of Public Health College Alcohol Study. It consisted of a random sample of undergraduates from a representative national sample of 140 four-year private and public colleges and universities. The college response rate was 72 percent and the overall student response rate was 69 percent with 17,592 students returning the mailed questionnaire. Heavy drinking was defined for men as drinking five or more drinks in a row and for women as four or more in a row. Nonheavy drinkers were those who did not report heavy drinking in the previous two weeks. This study consisted of 2,980 nonheavy drinkers who lived on campus -- in dormitories, fraternities, or sororities. The college drinking levels were divided into three about similar size groups: (1) High level of heavy college drinking had 50 percent or more of the students reporting heavy drinking in the past two weeks, (2) Mid level of heavy drinking had 36 to 49 percent of the students reporting heavy drinking and (3) Low drinking level had 35 percent or less of the students reporting heavy drinking in the past two weeks.

DRUG PROBLEMS - CALIFORNIA STUDENTS

- ! The most prevalent problems ever caused by marijuana and other drug use that 9th and 11th grade students in California reported were: "having a bad trip," hurting school work, money problems, and fighting with parents.
- ! About a third of the 11th grade students who used marijuana at least once a week reported they never had any problems caused by their drug use.
- ! Students in the 11th grade who used marijuana at least once a week reported more problems than the total sample for the 11th grade.

Trends in Percent of California Students Reporting Problems Ever Caused by Marijuana or Other Drug Use (1993-1996)

Problem Caused by Drug	Grade 9		Grade 11			
	Total Sample		Total Sample		Weekly Marijuana Users**	
	93/94	95/96	93/94	95/96	93/94	95/96
Get a traffic ticket	1.5	0.5*	0.9	0.8*	2.9	2.2*
Have a car accident	1.1	--	1.1	--	4.2	--
Get arrested	1.3	1.5	1.4	1.9	5.9	6.7
Have money problems	3.6	4.0	5.0	7.5	19.1	30.5
Trouble at school	2.7	2.9	2.8	3.7	8.3	12.1
Hurt your school work	4.0	5.4	6.0	10.0	21.8	30.0
Fight with other kids	2.1	3.8	3.4	3.0	10.6	10.4
Fight with your parents	3.0	5.3	4.5	6.4	12.6	18.1
Damage a friendship	2.7	3.0	3.8	3.9	8.2	11.0
Have a "bad trip"	6.4	6.5	8.6	8.9	25.1	25.2
Used drugs but never had any problems	--	16.8	--	23.6	--	34.9

*In 1995/96, the question combined "get a traffic ticket" and "have a car accident."**Weekly marijuana use was defined as use as least once a week.

Source: Skager R & Austin G, 1997. *Sixth Biennial California Student Substance Use Survey: Grades 7, 9 and 11 Preliminary Findings*. WestEd-Southwest Regional Laboratory, Los Alamitos, CA. The California state-wide sample consisted of 128 public and private middle and senior high schools and 5,775 respondents in grades 7, 9, and 11. Schools were randomly selected for the sample proportionally to the number of schools in each of six geographic regions of the state. About half of the schools in each region were retained from the 1993-94 survey; the other half was newly selected. For the first year in the survey series, intact classrooms were sampled, rather than individual students, and active rather than passive parental consent was used.

ADM TREATMENT BY SOURCE OF FUNDS

- ! In 1990, the Nation spent \$54 billion in direct costs for alcohol, drug abuse, and mental health (ADM) treatment.
- ! Combined public payers provided more funding for ADM treatment than did private sources.
- ! Of all funding sources, Medicaid and Medicare spend the smallest proportions of their total ADM budgets on drug abuse treatment and the largest on mental health treatment.
- ! Of all public sources, State and local governments provide the greatest proportion of funding for each type of treatment.

Expenditures for Alcohol, Drug Abuse, and Mental Health (MH) Treatment by Payment Source, 1990^a

Sources	Funding (billions)				Percent by Payer				Percent by ADM			
	Total 1	MH	Alc	Drug	Total	MH	Alc	Drug	Total	MH	Alc	Drug
All Sources	\$54. 0	\$42.4	\$8.5	\$3.0	100%	79%	16%	6%	100%	100%	100%	100%
Private Sources	22.2	18.8	2.5	0.9	100	85	11	4	41	44	29	30
Public Sources	31.8	23.6	6.0	2.2	100	74	19	7	59	56	71	70
Medicaid	9.5	8.1	1.0	0.3	100	85	11	3	18	19	12	10
State & Local^b	15.9	11.7	3.1	1.1	100	74	20	7	29	28	37	37
VA	2.3	1.5	0.6	0.2	100	65	26	9	4	4	7	7
Medicare	2.2	1.5	0.7	0.0	100	68	32	0	4	4	8	0
Other Federal^c	1.9	0.8	0.6	0.6	100	42	32	32	4	2	7	20

^a Numbers may not sum to totals due to rounding. MH is mental health, Alc is alcohol, VA is Veterans Administration.

^b This category includes admissions with no charge because State and local government payers are the ultimate payers.

^c Includes block grant funding but does not include prevention and data development under the block grant.

Source: Frank RG, et al. 1994. "Paying for Mental Health and Substance Abuse Care." *Health Affairs* 13:337-342. Does not include ADM costs for administration, treatment for those age 65 and older in nursing homes, or for forensic care in State mental hospitals. Excludes costs for co-existing physical conditions. Client fees are included largely under private insurance and, for public facilities, under State and local sources. Private sources include private insurance, out-of-pocket payments, and philanthropy.

ADM COSTS AND TOTAL HEALTH INSURANCE EXPENDITURES

- ! From 1988 to 1992, the portion of total health insurance expenditures accounted for by alcohol, drug, and mental health (ADM) spending declined.
- ! In 1988, about 10 percent of total health insurance expenditures were for mental health and substance abuse coverage.
- ! In 1992, about 8 percent of total health insurance expenditures were for mental health and substance abuse coverage.

Alcohol, Drug Abuse, and Mental Health Costs as a Percentage of Total Health Insurance Expenditures 1988-1992

Year	Percent
1988	9.6%
1989	9.4
1990	8.2
1991	8.5
1992	7.8

Source: Foster Higgins. 1993. *1992 Health Care Benefits Survey, Report I, Medical Plans*. Princeton, NJ: Foster Higgins. Foster Higgins is a national employee benefits company with offices throughout the United States and Canada. The report is based on 2,448 employers participating in the survey, whose plans cover a total of 12 million employees and their dependents. Although this annual survey, which dates back to 1986, is not representative of all firms in the country, it includes private and public employers of all types and employment sizes, from all 50 States. Nearly half the Fortune 500 companies participated, as well as 47 State governments.

**SUBSTANCE ABUSE AND MENTAL HEALTH TREATMENT
BY INSURANCE COVERAGE**

- ! The average cost to cover the expenditures for alcohol, drug abuse, and mental health (ADM) treatment in 1990 was estimated to be \$217 per person in the U.S. population.
- ! The per capita cost was estimated to be \$138 for the privately insured compared with \$430 for persons using Medicaid.
- ! In 1990, the per capita public coverage for ADM treatment for those not covered by Medicaid or Medicare who had a severe mental illness was \$3,205.

**Estimated Per Capita Coverage for Alcohol, Drug Abuse,
and Mental Health Treatment by Payment Source, 1990**

Payment Source	Population Covered (Millions)	Mental Health	Alcohol	Drug	Per Person Total
Total	248.7	\$171	\$34	\$12	\$217
Private sources^a	160.4	117	16	5	138
Medicare	31.2	49	22	0	71
Medicaid	22.1	368	46	16	430
Other public sources^b	35.0	399	123	53	575
Other (SMI)^c	5.6	-	-	-	3,205
Other (non-SMI)	29.4	-	-	-	75

^a Private sources include private insurance, out-of-pocket payments, and philanthropy.

^b Includes uninsured clients and costs paid by the Veterans Administration, State and local governments, and other Federal sources.

^c SMI = severely mentally ill.

Source: Frank RG, et al. 1994. "Paying for Mental Health and Substance Abuse Care." *Health Affairs* 13:337-342. Does not include ADM costs for administration, treatment for those age 65 and older in nursing homes, or for forensic care in State mental hospitals. Excludes costs for co-existing physical conditions. Client fees are included largely under private insurance and, for public facilities, under State and local sources. The per person (per capita) spending is calculated by dividing the total amount for ADM treatment from each payment source by the total number of people covered by that payment source, whether or not they actually received treatment. In general, the greater the proportion who need treatment in a population covered by that payment source, the higher the per capita cost.

**SUBSTANCE ABUSE AND MENTAL HEALTH TREATMENT
BY INSURANCE COVERAGE**

- ! In a national household survey of persons age 12 and older, about 58 percent of those treated for mental illness, 48 percent of those treated for alcohol abuse, and 46 percent of those treated for drug abuse reported that they were covered by private insurance.
- ! About 35 percent of those who received drug abuse treatment and 33 percent of those who received alcohol abuse treatment reported they had no health insurance.
- ! Medicaid enrollment was reported by 12 percent of the people who were treated for mental illness, 9 percent of those who were treated for alcohol abuse and 15 percent of those treated for drug abuse.
- !

Substance Abuse and Mental Health Treatment by Insurance Coverage, 1996

Insurance Type	Mental Health	Alcohol	Drug
Total	100.0%	100.0%	100.0%
No insurance	14.2	33.2	35.0
Private insurance	58.8	48.3	45.6
Medicare	12.1	8.2	3.9
Medicaid	12.3	9.3	15.0
CHAMPUS	2.5	1.1	0.5

Source: SAMHSA, Office of Applied Studies. 1997. Unpublished data from the 1996 National Household Survey on Drug Abuse. The 1996 survey employed a multistage area probability sample of 18,269 U.S. civilian noninstitutionalized persons 12 years and older interviewed from January through December 1996. The survey incorporated an oversampling of Blacks, Hispanics, and young people.

**EMPLOYER-BASED, NON-HEALTH MAINTENANCE
ORGANIZATION ALCOHOL, DRUG ABUSE, AND MENTAL HEALTH COVERAGE**

- ! In 1993, the majority of full-time employees with non-health maintenance organization (HMO) health benefits were subject to some type of limit on their coverage.
- ! Non-HMO alcohol, drug abuse, and mental health benefits for full-time employees were most often limited to major medical.

**Medical Care Benefits for Full-Time Employees
With Non-Health Maintenance Organization Coverage, 1993**

Coverage	Covered in Full	Separate Limits ^a	Major Medical Limits ^b	Separate and Major Medical Limits
Other Health				
Hospital ^c	5%	3%	34%	58%
Physician ^d	1	8	15	76
Alcohol Abuse				
Inpatient detox ^e	3	15	82	1
Inpatient rehab ^f	1	18	81	-
Outpatient rehab	-	14	78	7
Drug Abuse				
Inpatient detox ^e	2	13	73	12
Inpatient rehab ^f	1	17	76	6
Outpatient rehab	-	13	79	7
Mental Health Care				
Inpatient	1	9	81	9
Outpatient	-	9	87	4

^a Separate limits apply to individual categories of care (e.g., separate limits or benefits for hospitalization). Limits may be set in terms of dollar or day ceilings on benefits, a requirement that the participant pay a percentage of costs (coinsurance), or a requirement that the participant pay a specific amount (deductible or copayment) before reimbursement begins or services are rendered.

^b Major medical limits are expressed only in terms of total benefits payable under the plan, rather than for individual categories of care. Limits are set as deductibles, coinsurance percentages, and overall dollar limits on plan benefits.

^c Does not include physician visits.

^d Includes only office physician visits.

^e Detoxification is the systematic use of medication and other methods under medical supervision to reduce or eliminate the effects of substance abuse.

^f Rehabilitation is designed to alter abusive behavior in patients once they are free of acute physical and mental complications.

Source: U.S. Department of Labor, Bureau of Labor Statistics. 1994. *Employee Benefits in Medium and Large Private Establishments, 1993*. Bulletin 2456, Tables 55 and 57.

**EMPLOYER-BASED HEALTH INSURANCE COVERAGE FOR
MENTAL HEALTH AND SUBSTANCE ABUSE**

- ! In 1993, of the full-time employees in medium and large private establishments who have substance abuse or mental health coverage, about 30 percent have no limit on inpatient detoxification for alcohol abuse, 31 percent have no limit for inpatient detoxification for drug abuse, and 16 percent have no limit on inpatient mental health treatment.
- ! About 55 percent of full-time employees with mental health benefits have day limits on inpatient services, while 66 percent have dollar limits on outpatient services.
- ! Less than 10 percent of full-time employees with substance abuse benefits have copayments.

**Percentage of Full-Time Employees with Substance Abuse
and Mental Health Medical Benefits by Extent of Coverage, 1993***

Type of Coverage	Alcohol Abuse			Drug Abuse			Mental Health	
	Inpatient		Out-Patient	Inpatient		Out-Patient	In-Patient	Out-Patient
	Detoxi- fication	Rehabi- litation		Detoxi- fication	Rehabi- litation			
No limits	30%	10%	11%	31%	10%	11%	16%	4%
Subject to separate limits	70	90	89	69	90	89	84	96
Days	50	66	47	48	65	46	55	43
Dollars	36	46	55	36	47	55	47	66
Coinsurance	12	16	37	12	16	38	15	53
Copayment	3	5	9	3	5	9	4	18

* Detoxification is the systematic use of medication and other methods under medical supervision to reduce or eliminate the effects of substance abuse. Rehabilitation is designed to alter abusive behavior in patients once they are free of acute physical and mental complications. Inpt is inpatient, Outpt is outpatient.

Source: U.S. Department of Labor, Bureau of Labor Statistics. 1994. *Employee Benefits in Medium and Large Private Establishments, 1993*. Bulletin 2456, Tables 90, 94, and 95.

CLIENTS IN MENTAL HEALTH AND SUBSTANCE ABUSE TREATMENT

- ! According to the latest 1-day census of mental health treatment providers (1990), about 3.5 million clients were in specialty mental health treatment on a given day.
- ! In 1994, there were almost 1 million clients in substance abuse treatment on a given day, according to the 1-day census of substance abuse treatment providers.

One-Day Census of Clients (in 1,000s) in Specialty Mental Health and Substance Abuse Treatment Facilities

Specialty Treatment Facility	Number of Clients
Mental health (1990)	3,465
Substance abuse (1994)	944

Source: SAMHSA, Center for Mental Health Services and Office of Applied Studies. SAMHSA treatment services data are collected separately for specialty mental health (MH) and specialty substance abuse (SA) treatment providers. Some providers report to both systems, and some clients may be reported twice. Reporting providers can be central administrative agencies, treatment locations, or different units at the same location. MH client data come from Center for Mental Health Services. 1996. *Mental Health, United States, 1996*. Manderscheid RW, Sonnenschein MA, eds. DHHS Publ. No. (SMA)96-3098. Washington, DC: U.S. Government Printing Office. About 5,300 organizations reported to the 1990 inventory. Data are reported or imputed for all providers specializing in MH treatment that can be identified by the States and by provider associations. The 1-day census of SA providers is based on the National Drug and Alcoholism Treatment Unit Survey. Estimates represent the number of clients in treatment on a single day (October 1, 1994) and are adjusted to account for provider- and item-level nonresponse. About 11,700 public and private SA specialty treatment providers were identified by the States and Federal agencies in 1994.

**MENTAL HEALTH AND SUBSTANCE ABUSE TREATMENT
ANNUAL ADMISSIONS AND ONE-DAY CLIENT CENSUS BY TYPE OF CARE**

- ! More admissions were to ambulatory treatment than 24-hour care in facilities specializing in mental health and substance abuse treatment, whether measured by annual admissions or one-day census.
- ! In 1990 and 1992, there were over 3 million admissions to ambulatory mental health treatment facilities.
- ! In 1995, there were over 800,000 admissions to ambulatory substance abuse treatment facilities.

**Annual Admissions and One-Day Client Census in Specialty Mental Health
and Substance Abuse Treatment Facilities, by Type of Care**

Type of Care ^c	Annual Admissions ^a (in 1,000s)		One-Day Census ^b (in 1,000s)	
	Mental Health (1992)	Substance Abuse (1995)	Mental Health (1990)	Substance Abuse (1995)
Total	5,256	1,327	3,284	1,009
24-hour	2,092	489	228	145
Ambulatory	3,164	838	3,056	864

^a A client can be counted more than once if he or she is admitted more than once in a year.

^b One-day census clients are counted only once.

^c 24-hour care includes inpatient and residential care; ambulatory includes outpatient and partial care.

Source: SAMHSA, Center for Mental Health Services (CMHS) and Office of Applied Studies (OAS). SAMHSA treatment services data are collected separately for specialty mental health (MH) and specialty substance abuse (SA) treatment providers. Some providers report to both systems, and some clients may be reported twice. Reporting providers can be central administrative agencies, treatment locations, or different units at the same location. MH client data are from CMHS. 1996. *Mental Health, United States, 1996*. The 1990 inventory includes data from 5,300 providers; the 1992, about 5,500 (1992 data are preliminary). Data are reported or imputed for all providers that can be identified by States and provider associations. SA treatment annual admissions data are from OAS. 1997. *National Admissions to Substance Abuse Treatment Services: The Treatment Episode Data Set (TEDS) 1992-95*, Table 11. This report includes data reported through November 5, 1996. TEDS collects data on admissions to SA treatment providers that receive public funds; about 90 percent of TEDS administrative-eligible admissions are reported, representing about 75 percent of admissions to all known SA treatment centers. Data are included for all States and jurisdictions reporting in 1995. Admissions for which no primary substance was reported, transfer admissions, and codependents are excluded. The one-day census of SA providers is from OAS. 1997. *Uniform Facility Data Set (UFDS): Data for 1995 and 1980-1995*, Table 7. Estimates of clients represent the number of clients in treatment on a single day, October 2, 1995. Surveys were mailed to 12,674 specialty SA treatment providers that were identified by States and Federal agencies. Private and public providers were included, and about 83 percent received public funds. The response rate was 87 percent (10,746 providers); estimates are adjusted to account for item-level nonresponse. Data for individual jurisdictions exclude treatment providers operated by or under contract to Federal agencies or tribal governments.

USE OF PROFESSIONAL SERVICES BY CLIENTS WITH SUBSTANCE ABUSE AND MENTAL DISORDERS

- ! About 21 percent of people diagnosed with a substance abuse or mental disorder received professional care during the past year in 1991.
- ! About 7 percent of the people who used professional help did not have conditions severe enough to receive a mental health or substance abuse diagnosis.
- ! A higher percentage of people who have three or more diagnoses use professional help than those who have fewer than three.

Clients' Use of Treatment Services During a 12-Month Period by Number of Substance Abuse and Mental Disorders, 1991

Provider Specialty	No Disorder	Any Disorder	3 or More Disorders
Any professional help ^a	7.0%	20.9%	34.2%
Mental health specialty ^b	2.7	11.5	22.5
Substance abuse facility ^c	0.1	4.0	8.6

^a Any professional help indicates any professional hospitalization or outpatient treatment by a mental health specialist, physician, social worker, counselor, nurse, or other health professional, including treatment in a substance abuse facility.

^b Mental health specialty indicates hospitalization or outpatient treatment by a psychiatrist or psychologist or treatment in a mental health facility.

^c Substance abuse facility indicates hospitalization for drug or alcohol problems, treatment in a drug or alcohol outpatient clinic or drop-in center, or a program for people with emotional problems with alcohol or drugs.

Source: Kessler RC, McGonagle KA, Zhao S, Nelson CB, Hughes M, Eshleman S, Wittchen H-U, Dendler KS. 1994. "Lifetime and 12-Month Prevalence of DSM-III-R Psychiatric Disorders in the United States." *Archives of General Psychiatry* 51:8-19, Table 4. These estimates are from the National Comorbidity Survey (NCS). The survey was based on interviews administered to a probability sample of the noninstitutionalized U.S. civilian population. The NCS sample consisted of 8,098 respondents, age 15 to 54 years. This survey was conducted from September 1990 to February 1992. DSM-III-R criteria were used as the basis for assessing disorders in the general population. A random sample of initial nonrespondents was contacted further and received a financial incentive to participate. A nonresponse weight was used to adjust for the higher rates of substance abuse and mental disorders found in the sample of initial nonresponders. The Composite International Diagnostic Interview was modified to eliminate rare diagnoses in the age group studied and to add probes to improve understanding and motivation.

ILLICIT DRUG USE TREATMENT NEED BY STATE

- ! An estimated 3 percent of Americans age 12 and older needed treatment for illicit drug use between 1991 and 1993. Across 26 selected States, rates ranged from 2 to 4 percent.
- ! Among the 26 States for which estimates were produced, the States with the highest rates of treatment need for illicit drugs from 1991 to 1993 were California, Georgia, and Oklahoma (4 percent each).
- ! The States with the lowest rates of treatment need for illicit drugs from 1991 to 1993 were Indiana, New Jersey, Tennessee, and South Carolina (2 percent each).

Estimated Population, Age 12 and Older Needing Treatment for Illicit Drug Use in the Past Year in Selected States, 1991-1993

State	Number	Percent	State	Number	Percent
Total U.S.	5,877	2.9%			
North East Region			North Central Region		
New Jersey	131	2.0	Illinois	218	2.3%
New York	367	2.5	Indiana	91	2.0
Pennsylvania	217	2.2	Kansas	55	2.7
South Region			Michigan	232	3.1
Florida	277	2.5	Minnesota	78	2.2
Georgia	206	2.8	Missouri	138	3.3
Kentucky	69	2.3	Ohio	229	2.6
Louisiana	94	2.8	Wisconsin	97	2.4
North Carolina	136	2.4	West Region		
Oklahoma	97	3.8	California	1,029	4.2
South Carolina	63	2.1	New Mexico	40	3.3
Tennessee	86	2.1	Oregon	53	2.2
Texas	421	3.1	Washington	145	3.6
Virginia	152	2.9			
West Virginia	32	2.2			

Source: SAMHSA, Office of Applied Studies. 1996. *Substance Abuse in States and Metropolitan Areas: Model Based Estimates from the 1991-93 National Household Survey on Drug Abuse, Summary Report*, pp. 87, 90. The estimates were developed from data collected in the National Household Survey on Drug Abuse (NHSDA) for the years 1991-93 combined with local area indicators that were found to be associated with substance abuse. The local area indicators include variables such as drug-related arrests, alcohol-related death rates, and block-group level characteristics from the 1990 census. The estimates use a consistent methodology across States and MSAs and are constructed so that they sum to national estimates produced by the NHSDA. The small area estimation methodology used employs logistic regression models that combine the NHSDA data with local area indicators. In general, estimates for the larger States and MSAs are better than those for smaller places.

**ILLICIT DRUG USE TREATMENT NEED
BY METROPOLITAN STATISTICAL AREA**

- ! From 1991 to 1993, the rate of Americans age 12 and older who needed treatment for illicit drug use ranged from 2 to 5 percent across 25 metropolitan statistical areas.
- ! The metropolitan statistical areas with the highest rates of treatment need for illicit drugs from 1991 to 1993 were Oakland (5 percent), Atlanta (5 percent), and Anaheim-Santa Ana (4 percent).
- ! The metropolitan statistical areas with the lowest rates of treatment need for illicit drugs from 1991 to 1993 were Nassau-Suffolk, Newark, and Tampa - St. Petersburg (2 percent each).

**Estimated Population, Age 12 and Older Needing Treatment
for Illicit Drug Use in the Past Year by Metropolitan Statistical Area, 1991-1993**

Metropolitan Statistical Area	Number (1,000s)	Percent	Metropolitan Statistical Area	Number (1,000s)	Percent
Anaheim-Santa Ana, CA	89	4.5%	Nassau-Suffolk, NY	41	1.9%
Atlanta, GA	117	4.8	Newark, NJ	28	1.9
Baltimore, MD	45	2.3	New York, NY	177	2.5
Boston, MA	122	3.9	Oakland, CA	90	5.2
Chicago, IL	137	2.8	Philadelphia, PA-NJ	121	3.0
Dallas, TX	52	2.5	Phoenix, AZ	56	3.1
Denver, CO	52	3.8	San Antonio, TX	30	2.9
Detroit, MI	129	3.6	San Bernardino, CA	81	3.8
El Paso, TX	11	2.5	San Diego, CA	67	3.2
Houston, TX	103	3.9	St. Louis, MO-IL	55	2.8
Los Angeles, CA	288	4.0	Tampa- St. Petersburg, FL	38	2.1
Miami-Hialeah, FL	35	2.2	Washington, DC	89	2.7
Minneapolis- St. Paul, MN	49	2.4			

Source: SAMHSA, Office of Applied Studies. 1996. *Substance Abuse in States and Metropolitan Areas: Model Based Estimates from the 1991-93 National Household Survey on Drug Abuse, Summary Report*, pp. 87, 90. The estimates were developed from data collected in the National Household Survey on Drug Abuse (NHSDA) for the years 1991-93 combined with local area indicators that were found to be associated with substance abuse. The local area indicators include variables such as drug-related arrests, alcohol-related death rates, and block-group level characteristics from the 1990 census. The estimates use a consistent methodology across States and MSAs and are constructed so that they sum to national estimates produced by NHSDA sample sizes. The small area estimation methodology used employs logistic regression models that combine the NHSDA data with local area indicators. In general, estimates for the larger States and MSAs are better than those for smaller places.

PRIMARY PREVENTION FUNDING SOURCES

- ! Single State Agency (SSA) substance abuse primary prevention initiatives are supported primarily by Federal and State dollars.
- ! In Fiscal Year (FY) 1994, total national funding for SSA primary prevention activities was \$445.2 million.
- ! Fiscal data provided by States indicate that the Federal Substance Abuse Prevention and Treatment (SAPT) Block Grant set-aside comprises over 50 percent of public funds allocated for primary prevention.

Single State Agency Substance Abuse Primary Prevention* Funding by Source, Fiscal Year 1994

Funding Source	Dollar Amount	Percent
Total	\$445,225,599	100.0%
SAPT Block Grant**	236,952,898	53.2
State	146,543,382	32.9
Other Federal	61,003,856	13.7
Local and Other	725,463	0.2

*The allocation for Primary Prevention is defined by Congress for the Substance Abuse Prevention and Treatment (SAPT) Block Grant as follows: Block Grant recipients "will expend not less than 20% for programs for individuals who do not require treatment for substance abuse...." The previous Block Grant allowed early intervention activities to count against the prevention set-aside, while the current one in effect states that early intervention (treatment) activities should not be charged to the primary prevention set-aside.

**The total funding is greater than the expenditures presented for the Substance Abuse Prevention and Treatment (SAPT) Block Grant Primary Prevention Strategies due to two States not providing the information on the six strategies and some other States not reconciling the totals on Form 4 with the Primary Prevention Expenditures Checklist.

Source: SAMHSA's Center for Substance Abuse Prevention and Center for Substance Abuse Treatment, Performance Partnership Program Branch. Uniform Block Grant Application System (FY 1994) National Aggregate Data, Expenditures on Primary Prevention by Strategy, Form 04. In FY 1994, all 60 States and territories reported that were eligible to report. Alabama, American Samoa, Florida, Hawaii, Louisiana, Micronesia, Mississippi, Montana, and West Virginia reported no Other Federal, State, or Local and Other funding/expenditures for FY 1994.

PRIMARY PREVENTION EXPENDITURES

- ! In Fiscal Year 1994, Single State Agencies (SSAs) allocated their prevention dollars across six major categories of primary prevention strategies and for Section 1926 Tobacco (Synar Amendment) implementation
- ! Most of the primary prevention dollars from the Substance Abuse Prevention and Treatment (SAPT) Block Grant were allocated for education and information dissemination programs.

Single State Agencies' SAPT Block Grant Expenditures by Primary Prevention* Strategy, Fiscal Year 1994

Primary Prevention Strategy***	Dollar Amount	Percent
Total Expenditures**	\$220,804,731	100.0%
Education	72,729,233	32.9
Information Dissemination	44,534,262	20.2
Problem Identification and Referral	33,420,174	15.1
Community-Based Process Alternatives	30,974,639	14.0
Environmental	19,206,728	8.7
Other	11,769,851	5.3
Section 1926B Tobacco	7,975,790	3.6
	194,054	0.1

*Primary prevention does not include early intervention (treatment) activities.

**Percentages do not sum to 100 due to rounding. The total expenditures presented for the Substance Abuse Prevention and Treatment (SAPT) Block Grant Primary Prevention Strategies are less than the total funding due to two States not providing the information on the six strategies and some other States not reconciling the totals on Form 4 with the Primary Prevention Expenditures Checklist.

*** **Education strategy** builds skills through structured learning processes; **Information Dissemination strategy** provides knowledge, increases awareness of the nature of substance abuse, and increases awareness of available prevention and treatment programs and services; **Problem Identification and Referral strategy** aims at identifying first users of illicit drugs to assess whether their drug using behavior can be reversed through education; **Community-Based Process strategy** provides ongoing networking activities and technical assistance to community groups or agencies; **Alternatives strategy** provides participation in activities that exclude alcohol and other drugs; **Environmental strategy** establishes or changes written and unwritten community standards, codes, and attitudes, thereby influencing alcohol and other drug use by the general population; and **Other strategy** includes any other strategies not described above. Section 1926–Tobacco is for costs associated with the development and conduct of random, unannounced tobacco inspections. Source: SAMHSA's Center for Substance Abuse Prevention and Center for Substance Abuse Treatment, Performance Partnership Program Branch. Uniform Block Grant Application System (FY 1994) National Aggregate Data, Expenditures on Primary Prevention by Strategy, Form 04. In FY 1994, all 60 States and territories reported that were eligible to report. Arizona and Michigan did not report SAPT Block Grant expenditures for FY 1994.

PRIMARY PREVENTION PLANNED EXPENDITURES

- ! In FY 1997, Single State Agencies (SSAs) planned to continue allocating the largest proportion of their Substance Abuse Prevention and Treatment (SAPT) Block Grant prevention dollars to education initiatives (35 percent) and information dissemination (20 percent).
- ! About 14 percent of the FY 1997 expenditures were intended for strategies that focused on community-based process, which includes the community's delivery of primary prevention services for alcohol and drug problems.

Single State Agencies' Projected SAPT Block Grant Expenditures by Primary Prevention Strategy* and for Section 1926 Tobacco (Synar Amendment) Implementation, Fiscal Year 1997

Primary Prevention Strategy**	Dollar Amount	Percent
Total	\$244,462,874	100.0%
Education	84,263,910	34.5
Information Dissemination	49,882,535	20.4
Community-Based Process	34,041,548	13.9
Problem Identification and Referral	32,321,503	13.2
Alternatives	24,578,975	10.1
Environmental	13,779,516	5.6
Other	4,203,746	1.7
Section 1926—Tobacco	1,391,141	0.6

*Primary prevention does not include early intervention (treatment) activities.

****Education strategy** builds skills through structured learning processes; **Information Dissemination strategy** provides knowledge, increases awareness of the nature of substance abuse, and increases awareness of available prevention and treatment programs and services; **Problem Identification and Referral strategy** aims at identifying first users of illicit drugs to assess whether their drug using behavior can be reversed through education; **Community-Based Process strategy** provides ongoing networking activities and technical assistance to community groups or agencies; **Alternatives strategy** provides participation in activities that exclude alcohol and other drugs; **Environmental strategy** establishes or changes written and unwritten community standards, codes, and attitudes, thereby influencing alcohol and other drug use by the general population; and **Other strategy** includes any other strategies not described above. Section 1926—Tobacco is for costs associated with the development and conduct of random, unannounced tobacco inspections. Source: SAMHSA's Center for Substance Abuse Prevention and Center for Substance Abuse Treatment, Performance Partnership Program Branch. Uniform Block Grant Application System (FY 1997) National Aggregate Data, Projected Expenditures on Primary Prevention by Strategy, Form 11. In FY 1997, all 60 States and territories reported that were eligible to report. Arizona did not report any projected SAPT Block Grant expenditures for FY 1997.

FEDERAL SPENDING FOR DRUG CONTROL

- ! Since 1981, the amount of Federal spending on drug control has steadily increased.
- ! Resources for domestic law enforcement have comprised the largest proportion of the national drug control budget since 1985.
- ! In 1997, the budget for domestic law enforcement (7.8 billion dollars) comprised 52 percent of the requested total National Drug Control Budget.

Federal Spending for Drug Control (in Millions) by Function Fiscal Years 1981 to 1997*

Fiscal Year	Total	Demand Reduction	Domestic Law Enforcement	Inter- national Efforts	Interdiction
1981	\$1,532	\$677	\$416	\$90	\$350
1982	1,719	672	475	113	458
1983	1,997	748	663	113	474
1984	2,363	792	738	127	707
1985	2,751	865	934	145	807
1986	2,881	880	1,074	183	744
1987	4,792	1,429	1,745	268	1,351
1988	4,708	1,505	1,993	262	948
1989	6,664	2,104	2,761	357	1,441
1990	9,759	3,205	4,238	565	1,752
1991	10,958	3,807	4,386	738	2,028
1992	11,910	4,248	4,943	759	1,960
1993	12,171	4,306	5,680	674	1,511
1994	12,184	4,516	5,735	621	1,312
1995	13,251	4,793	6,545	632	1,280
1996	13,784	4,679	7,105	660	1,339
1997	15,064	5,060	7,791	776	1,437

* 1996 figures are estimated, and 1997 amounts were the President's request. Demand Reduction includes resources for drug treatment, prevention, education, and research; Domestic Law Enforcement includes resources for investigations, prosecutions, corrections, State and local law enforcement assistance, regulatory and compliance programs, and other law enforcement efforts related to drug control; International includes resources for intelligence activities in addition to international drug programs; and Interdiction includes resources to stop the flow of drugs in source and transit nations and along the U.S. border. Numbers may not sum to totals due to rounding.

Source: Executive Office of the President, Office of National Drug Control Policy (ONDCP). 1996. *The National Drug Control Strategy, 1996: Program, Resources and Evaluation*. Washington, DC: ONDCP, pp. 312-19.

COST-EFFECTIVENESS OF COCAINE CONTROL POLICIES

- ! An analysis of alternative cocaine control programs to reduce either consumption or the number of users by one percent found that the most cost-effective alternative was treatment of heavy users.
- ! To reduce the total U.S. cocaine consumption by one percent, increasing domestic enforcement would cost seven times as much as treatment; increasing interdiction would cost ten times as much as treatment, and increasing source country control would cost over 20 times as much as treatment.
- ! Thus, a more cost-effective cocaine control policy would be to reduce the budget for supply reduction efforts by 25 percent and to use part of that savings to treat more of the heavy users.

Comparison of Alternative Composite Cocaine-Control Strategies**

Intervention Strategy	Evaluation Criterion					
	Total Control (billions per year)	Number of Users (millions)	Consumption (metric tons per year)	Social Costs* (billion per year)	Social Cost* Plus Control Costs (billion per year)	Savings over Current Policy (billion per year)
Current policy	\$13.0	7.06	314	\$29.0	\$42.0	—
Strategy A: Reduce supply control by 25%	10.0	7.28	344	30.0	40.0	\$2.0
Strategy B: Double treatment budget	10.9	7.06	294	25.8	36.7	5.3
Strategy C: 100% treatment	12.7	6.67	211	19.0	31.7	10.3
Strategy D: Restore supply control	15.6	6.42	188	18.3	39.9	8.1

*Social costs include the estimated cost of crime and lost productivity due to cocaine use.

**Strategy A cuts all three supply-control program budgets by 25 percent. Strategy B spends one third of the supply-control savings on doubling the current treatment budget. Strategy C spends nearly all the supply control savings to treat 100 percent of the heavy users each year. Strategy D treats 100 percent of the heavy users each year with no cut in the supply-control budget. Estimates are annualized values over 15 projection years using a 4 percent real discount rate.

Source: Rydell CP & Everingham SS (1994): *Controlling Cocaine: Supply Versus Demand Programs*. RAND Drug Policy Research Center. This model-based policy analysis of alternative methods of controlling U.S. cocaine use examined the relative cost-effectiveness of four types of interventions: (1) source-country control, (2) interdiction, (3) domestic enforcement of laws prohibiting drug dealing, and (4) treatment of heavy users. When producing the effectiveness estimates for the supply control programs, the study assumed that a one percent increase in price results in a 0.5 percent decrease in cocaine consumption. Cost effectiveness estimates of treatment are based on studies of treatment effectiveness that show that 80 percent of the users do not use the drug while in treatment and about 13 percent of the users do not return to heavy use after treatment.

DRUG PREVENTION PROGRAM - IMPACT ON DRUG USE

- ! A recent national evaluation of a youth gang drug prevention program found that participants not only reduced their drug use but also their involvement in selling drugs.
- ! After program participation, the high risk youth's use of alcohol or other drugs was cut in half while their comparison group of nonparticipants showed little change.
- ! The percent of participants who sold drugs was cut drastically after the program participation from 17 percent to 3 percent.

Percent of Prevention Program Participants and NonParticipants Reporting Drug Use Behaviors

Substance Abuse Behavior	Time 1		Time 2	
	Participants (N=258)	Non Participants (N=262)	Participants (N=255)	Non Participants (N=260)
Any Alcohol/drugs	43%	39%	21%	36%
Used 3 or more Drugs	14	13	4	13
Beer or Wine	42	36	18	33
Hard Liquor	18	16	7	16
Marijuana/Hashish	23	20	8	19
LSD/Hallucinogens	4	5	1	7
Sold Drugs	17	10	3	9

Time 1: for participants was prior to program participation; for nonparticipants was one year prior to interview.

Time 2: for participants was after program participation; for nonparticipants was current period.

Source: Cohen M, Williams K, and Bekelman A, & Crosse S. 1994. *National Evaluation of the Youth Gang Drug Prevention Program*. Development Services Group, Bethesda, MD. The evaluation was conducted for the Administration on Children, Youth and Families, Department of Health and Human Services. Both prevention program participants and the comparison groups were composed of adolescents age 10-18 and considered high risk for gang and drug involvement because of school problems, low income and/or single parent families, lack of a support system and delinquency. Participants had been actively involved in long-term community based consortium program activities for 6 months or more or had completed 75 percent or more of shorter, fixed length program projects. Nonparticipants had either not participated in the program or had participated less than a month or less than 25 percent of the shorter projects. Self reported data were collected by interview with 261 participants in 13 different consortium prevention programs and with 267 nonparticipants.

SUBSTANCE ABUSE PREVENTION -- ALCOHOL

- ! Prevention programs focus on reducing or eliminating the risk factors that promote substance use and on adding, increasing or enhancing the protective factors that prevent or delay substance use.
- ! A Six-State Consortium Prevention Study found that the greater the number of risk factors, the more likely that students drank in the past 30 days.
- ! Within each level of risk exposure, the more *protective* factors students had, however, the less likely they were to drink in the past 30 days. Among the students with 4 to 5 risk factors that predispose them to substance use, for example, 51 percent of those with no more than one protective factor drank in the past 30 days compared with only 28 percent of those with 4 to 5 protective factors.

Percent of Students Who Drank Alcohol in the Past 30 Days by the Number of Both Protective and Risk Factors for Substance Abuse Six-State Consortium Prevention Study

Number of Protective Factors	<u>Number of Risk Factors for Substance Abuse</u>					
	0-1	2-3	4-5	6-7	8-9	9+
0 - 1	17%	33%	51%	62%	72%	83%
2 - 3	8	20	37	53	64	77
4 - 5	4	13	28			
6 - 7	4	10				
8 - 9	2					

Source: Hawkins JD, Arthur MW, Catalano RF. 1997. *Six State Consortium for Prevention Needs Assessment Studies: Alcohol and Other Drugs -- Final Report*. Submitted to SAMHSA's Center for Substance Abuse Prevention (CSAP). The analysis provided here is based on a stratified random sample of public and private schools in Kansas, Maine, Oregon, South Carolina, and Washington State. Classrooms of students in grades 6 to 12 were selected; 89,698 students completed the questionnaire. The major risk factors studied that predict or predispose persons to drug abuse included availability of drugs and handguns; favorable drug attitudes by family, friends, and the community; and the student's feelings of alienation and rebelliousness. The protective factors studied included social skills, pro-social beliefs, as well as opportunities and rewards for conventional involvement in school, family, and community activities.

SUBSTANCE ABUSE PREVENTION -- MARIJUANA

- ! A Six-State Consortium Prevention Study found that risk factors that predict or predispose persons to drug abuse (such as availability of drugs and handguns; favorable drug attitudes by family, friends, and the community; feelings of alienation and rebelliousness) are also risk factors for such related problems as violence, delinquency, and school failure.
- ! The more risk factors students have, the more likely the students used marijuana in the last 30 days and had related problems.
- ! Within each level of risk exposure, students with more protective factors had lower rates of marijuana use in the past 30 days.

Percent of Students Who Used Marijuana in the Past 30 Days by the Number of Both Protective and Risk Factors for Substance Abuse Six-State Consortium Prevention Study

Number of Protective Factors	<u>Number of Risk Factors for Substance Abuse</u>					
	0-1	2-3	4-5	6-7	8-9	9+
0 - 1	1%	4%	11%	22%	33%	53%
2 - 3	*	2	8	17	29	47
4 - 5	*	1	5			
6 - 7	*					
8 - 9	*					

*Less than 0.02%

Source: Hawkins JD, Arthur MW, Catalano RF. 1997. *Six State Consortium for Prevention Needs Assessment Studies: Alcohol and Other Drugs -- Final Report*. Submitted to SAMHSA's Center for Substance Abuse Prevention (CSAP). The analysis provided here is based on a stratified random sample of public and private schools in Kansas, Maine, Oregon, South Carolina, and Washington State. Classrooms of students in grades 6 to 12 were selected; 89,698 students completed the questionnaire. The major risk factors studied that predict or predispose persons to drug abuse included availability of drugs and handguns; favorable drug attitudes by family, friends, and the community; and the student's feelings of alienation and rebelliousness. The protective factors studied included social skills, pro-social beliefs, as well as opportunities and rewards for conventional involvement in school, family, and community activities.

SUBSTANCE ABUSE PREVENTION -- OTHER ILLICIT DRUGS

- ! A Six-State Consortium Prevention Study documented the importance of protective factors in delaying or preventing substance use. Such protective factors included social skills, pro-social beliefs, as well as opportunities and rewards for conventional involvement in school, family, and community activities.
- ! At all levels of risk factors except the very highest, the more protective factors students had, the less likely they were to use other illicit drugs in the last 30 days and have related problems.

Percent of Students Who Used Drugs Other Than Alcohol or Marijuana in the Past 30 Days by the Number of Both Protective and Risk Factors for Substance Abuse Six-State Consortium Prevention Study

Number of Protective Factors	<u>Number of Risk Factors for Substance Abuse</u>				
	0-1	2-3	4-5	6-8	9+
0 - 1	2%	5%	11%	18%	38%
2 - 3	1	3	7	13	33
4 - 5	1	2	6	6	35
6 - 8	1	1	4		

Source: Hawkins JD, Arthur MW, Catalano RF. 1997. *Six State Consortium for Prevention Needs Assessment Studies: Alcohol and Other Drugs -- Final Report*. Submitted to SAMHSA's Center for Substance Abuse Prevention (CSAP). The analysis provided here is based on a stratified random sample of public and private schools in Kansas, Maine, Oregon, South Carolina, and Washington State. Classrooms of students in grades 6 to 12 were selected; 89,698 students completed the questionnaire. The major risk factors studied that predict or predispose persons to drug abuse included availability of drugs and handguns; favorable drug attitudes by family, friends, and the community; and the student's feelings of alienation and rebelliousness. The protective factors studied included social skills, pro-social beliefs, as well as opportunities and rewards for conventional involvement in school, family, and community activities.

MARIJUANA USE -- RISK FACTORS

- ! When youth are exposed to a drug user, they are more likely to use an illicit drug, especially if the drug user is an adult they know or a best friend.
- ! A Six-State Consortium Prevention Study found that the risk of being a current marijuana user increased three times with knowing just one adult who is a drug user and increased seven times with having just one drug using best friend.
- ! Among Oregon 8th graders, almost half of the students were current marijuana users who had four or more drug using best friends or who knew five or more drug using adults

Percent of Oregon Students in Grade 8 Who Report Using Marijuana in the Past 30 Days by Number of Drug Using Best Friends and Drug Using Adults Known

Number of Drug Users Known	Adults	Best Friends
None	3%	1%
One	10%	7%
Two	17%	19%
Three	--	39%
3 - 4	29%	--
Four	--	57%
Five	47%	--

Source: Hawkins JD, Arthur MW, Catalano RF. 1997. *Six State Consortium for Prevention Needs Assessment Studies: Alcohol and Other Drugs -- Final Report*. Submitted to SAMHSA's Center for Substance Abuse Prevention (CSAP). The analysis provided here are from a statewide probability sample of Oregon public school students in grades 6, 8 and 11. There were 131 participating schools and 11,564 participating students. The response rate was 86%. Data were collected during a 50 minute class period in the Spring, 1994. A school based self report instrument was developed and extensively evaluated to measure a comprehensive range of risk and protective factors and related problem behaviors. The major risk factors studied that predict or predispose persons to drug abuse included availability of drugs and handguns; favorable drug attitudes by family, friends, and the community; and the student's feelings of alienation and rebelliousness. The protective factors studied included social skills, pro-social beliefs, as well as opportunities and rewards for conventional involvement in school, family, and community activities.

MARIJUANA USE -- RISK FACTORS

- ! Students who reporting that their parents thought drug use for their age group was very wrong were less likely to use marijuana currently than those whose parents did not think drug use was wrong.
- ! Among Oregon 8th graders, students whose parents thought drug use was not wrong were 9 times more likely to be current marijuana users than students whose parents thought drug use was very wrong.
- ! Strong parental opposition was more important in deterring drug use than just considering drug use wrong; students whose parents thought drug use was wrong were 4 times more likely to be current marijuana users than students whose parents thought drug use was very wrong.

Percent of Oregon Students in Grade 8 Who Report Using Marijuana in the Past 30 Days by Parental Attitudes About Drug Use by Someone Their Child's Age

How Wrong Their Parents Think Drug Use is When Used by Someone the Age Of Student	Percent of Students Using Marijuana In Past 30 Days
Very Wrong	9%
Wrong	35%
Little Bit Wrong	56%
Not Wrong	75%

Source: Hawkins JD, Arthur MW, Catalano RF. 1997. *Six State Consortium for Prevention Needs Assessment Studies: Alcohol and Other Drugs -- Final Report*. Submitted to SAMHSA's Center for Substance Abuse Prevention (CSAP). The analysis provided here are from a statewide probability sample of Oregon public school students in grades 6, 8 and 11. There were 131 participating schools and 11,564 participating students. The response rate was 86%. Data were collected during a 50 minute class period in the Spring, 1994. A school based self report instrument was developed and extensively evaluated to measure a comprehensive range of risk and protective factors and related problem behaviors. The major risk factors studied that predict or predispose persons to drug abuse included availability of drugs and handguns; favorable drug attitudes by family, friends, and the community; and the student's feelings of alienation and rebelliousness. The protective factors studied included social skills, pro-social beliefs, as well as opportunities and rewards for conventional involvement in school, family, and community activities.

FUNDING SOURCES FOR DRUG TREATMENT FACILITIES

- ! Public subsidies account for 40 percent of revenues for facilities specializing in drug abuse treatment.
- ! All public sources, including Medicaid and Medicare, account for over 50 percent of treatment funds.
- ! Private insurance, including health maintenance organizations, provides 30 percent of revenues, while client fees make up another 11 percent.

Payment Sources for Drug Abuse Treatment Facilities, 1990

Funding Source	Percent of Total Revenue
Total	100%
Public subsidy	40
Private insurance (not including HMOs*)	26
Client fees	11
Medicaid	9
HMO* payments	4
Public third party (includes Medicare)	4
Other	6

* HMOs are health maintenance organizations.

Source: Drug Services Research Survey (DSRS), Phase I. DSRS is a representative sample of over 1,125 drug treatment providers. Facilities were drawn from a universe of providers identified by States and Federal agencies. Data were derived from interviews with facility directors in 1990. The sample was stratified by four treatment modalities: hospital inpatient, residential, outpatient drug free, and outpatient detoxification/drug maintenance. The overall response rate to the DSRS was 82 percent. The data were weighted and adjusted for nonresponse by strata. The analysis used here was based on the 801 facilities that provided full information on funding sources.

PRIMARY SOURCE OF PAYMENT FOR SUBSTANCE ABUSE TREATMENT

- ! In 1990, methadone treatment clients were the least likely to have private insurance as the primary payor for substance abuse treatment (6.3 percent), and hospital inpatients were the most likely to have treatment paid by private insurance (47.9 percent).
- ! About 10 percent of substance abuse clients in residential care had private insurance as the primary source of payment for treatment.
- ! About 22 percent of clients in specialty substance abuse treatment facilities had public sources as the primary payor for treatment, about 23 percent had private insurance as the primary payor, and 23 percent were primarily self-pay.

Primary Source of Payment for Substance Abuse Treatment by Treatment Type, 1990

Primary Source*	All clients**	Alcohol only	Hospital inpatient	Residen- tial	Out- patient drug-free	Methadone
Total***	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Public payments	22.3	25.0	27.4	15.5	21.8	35.8
Self-pay	22.8	26.6	3.5	26.0	30.3	30.8
Private insurance	22.9	18.9	47.9	9.7	27.3	6.3
Other/unknown	31.8	29.5	21.4	48.9	20.5	27.1

* Public payments include public subsidy, Medicaid, Medicare, other Federal sources, and Social Services. Private insurance includes private health insurance and Health Maintenance Organizations or other prepaid plans.

** Total includes clients in all the other categories plus clients for which the treatment type was unknown and those having a combination of treatment types.

*** Total includes clients with other or unspecified payment categories.

Source: SAMHSA, Office of Applied Studies. 1992. *Drug Services Research Survey (DSRS) Final Report: Phase II*, Table 36. DSRS Phase II is a representative sample of 2,200 drug abuse clients discharged from treatment during the 12-month period ending August 31, 1990. Clients were drawn from a representative sample of 120 specialty substance abuse facilities identified by States and Federal agencies. Data are derived from client record abstracts.

MEDICAID INPATIENT SUBSTANCE ABUSE COSTS

- ! In 1991, substance abuse directly or indirectly accounted for \$4.2 billion of Medicaid spending for hospital care.
- ! About 19 percent of total Medicaid inpatient costs are for the direct treatment of substance abuse. The bulk of the expenditures are for treating diseases and other health conditions related to the use of alcohol, tobacco, and other drugs.
- ! About 8 percent of Medicaid costs are for additional days of hospitalization for substance abusers receiving treatment for other health conditions.

Medicaid Hospital Costs Related to Substance Abuse, 1991

Source of Costs	Total Charges (\$1,000s)	Percent of Total
Substance Abuse Total	\$4,157,445	100.0%
Direct treatment for Substance Abuse	776,305	18.7
General hospitals - inpatient	538,607	13.0
Psychiatric hospitals	237,698	5.7
Medical treatment for diseases or	3,044,572	73.2
Directly due to Substance Abuse	112,014	2.7
Substance Abuse is major risk factor	2,932,558	70.5
Additional days required for patients with secondary diagnosis of Substance Abuse	336,558	8.1

Source: Merrill J, Fox K, Chang H. 1993. "Report 1: Medicaid Hospital Costs, July." *The Cost of Substance Abuse to America's Health Care System*. Data are from the National Hospital Discharge Survey, 1991; Health Care Financing Administration, Office of the Actuary, 1993 Medicaid Statistics.

**HEALTH INSURANCE, SUBSTANCE ABUSE TREATMENT,
AND FAMILY INCOME**

- ! In 1996, persons receiving substance abuse treatment were less likely to be insured than persons who had not received treatment.
- ! In 1996, more than four-fifths of persons in substance abuse treatment who had family incomes of at least \$40,000 had health insurance of some kind.
- ! About 58 percent of persons who received alcohol abuse treatment and who had family incomes between \$10,000 and \$19,999 had health insurance of some kind.

**General Health Insurance Coverage by Yearly Family Income
and Substance Abuse Treatment Status, 1996**

Family Income	In Alcohol Treatment		Not in Alcohol Treatment		In Drug Treatment		Not in Drug Treatment	
	Insured	Not Insured	Insured	Not Insured	Insured	Not Insured	Insured	Not Insured
\$0-\$9,999	46.0%	54.0%	72.2%	27.8%	53.6%	46.5%	72.0%	28.0%
\$10,000-\$19,999	58.4	41.7	73.2	26.8	41.3	58.7	73.2	26.8
\$20,000-\$29,999	68.5	31.5	79.0	21.0	71.9	28.1	79.0	21.0
\$30,000-\$39,999	66.5	33.5	87.3	12.7	66.0	34.0	87.4	12.6
\$40,000-\$49,999	80.9	19.1	89.4	10.6	80.9	19.1	89.4	10.6
\$50,000-\$74,999	86.0	14.0	94.8	5.2	83.0	17.0	94.8	5.2
\$75,000+	87.3	12.7	95.1	4.9	88.1	12.0	95.1	4.9

Source: SAMHSA, Office of Applied Studies. 1997. Unpublished data from the 1996 National Household Survey on Drug Abuse. The 1996 survey employed a multistage area probability sample of 18,269 U.S. civilian noninstitutionalized persons 12 years and older interviewed from January through December 1996. The survey incorporated an oversampling of Blacks, Hispanics, and young people.

HEALTH INSURANCE COVERAGE FOR SUBSTANCE ABUSE DETOXIFICATION TREATMENT

- ! From 1982 to 1991, employers expanded their private health insurance coverage for inpatient substance abuse detoxification treatment.
- ! The percentage of employees covered for alcohol and drug abuse inpatient detoxification increased from 50 percent or less of employees to over 95 percent of employees in medium and large companies.

Percentage of Full-Time Employees in Medium- and Large-Establishment Medical Care Plans Receiving Coverage for Inpatient Detoxification, 1982-1991

Year	Alcohol Abuse	Drug Abuse
1982	50%	37%
1983	53	43
1984	61	52
1985	68	61
1986	70	66
1988	80	74
1989	97	96
1991	97	96

Source: Kronson ME. 1991. "Substance Abuse Coverage Provided by Employer Medical Plans." *Monthly Labor Review*, 4-10. This article is based on data from the following source: U.S. Department of Labor, Bureau of Labor Statistics. 1991. *Employee Benefits in Medium and Large Private Establishments, 1991*. Bulletin 2422, Table 39. Data are based on a 1991 survey of medium and large establishments (more than 100 employees) in private industry. The survey provides representative data for 36 million employees in the Nation's private, nonagricultural industries. There were 3,246 establishments in the survey. Four-fifths of full-time employees participated in medical care plans. The statistics on full-time participants above refer to full-time employees whose establishments responded to the survey.

SUBSTANCE ABUSE STAFFING BY PROFESSION

- ! In 1992, of the about 185,400 substance abuse treatment staff, about 59,000 were full-time employees, and 126,300 were part-time employees.
- ! About 62,200 of all substance abuse treatment staff were counselors.
- ! Of the 36,100 physicians employed in these facilities, about 2,000 were full time and 34,100 were part time.

Specialty Substance Abuse Facility Staff (in Thousands) by Profession, 1992

Staff	Total	Full Time	Part Time
Total direct care staff	185.4	59.0	126.3
Physicians	36.1	2.0	34.1
Nurses	28.2	5.8	22.5
Other medical staff	5.2	3.2	2.0
Psychologists	8.0	2.6	5.4
Social workers	13.3	4.9	8.4
Counselors	62.2	30.8	31.5
Other direct care staff	32.3	9.8	22.5

Source: SAMHSA, Office of Applied Studies. 1992 National Drug and Alcoholism Treatment Unit Survey. These unpublished data reflect paid direct care staff who worked at any time during September 1992. Surveys were mailed to about 12,000 specialty substance abuse treatment providers in the United States that were identified by the States and Federal agencies. Both private and public providers were included. About 80 percent received public funds. Reporting providers can be central administrative agencies, treatment locations, or different treatment units at the same location. The response rate was 82 percent, with 9,307 providers completing the survey. A representative sample of the 2,009 nonrespondents was surveyed in order to make unbiased national estimates.

SPECIALTY SUBSTANCE ABUSE TREATMENT BY TYPE OF CARE

- ! An estimated 90 percent of clients in treatment for alcohol only or for drugs only received treatment in an ambulatory care facility.
- ! An estimated 17 percent of clients in treatment for a combined alcohol and drug problem received treatment in a 24-hour care residential/rehabilitation center.

One-Day Client Census in Specialty Substance Abuse Treatment by Type of Care, 1995

	Number (in thousands)				Percent by Substance				Percent by Setting			
	Total	Alc Only	Drugs Only	Both	Total	Alc Only	Drugs Only	Both	Total	Alc Only	Drugs Only	Both
Total	1,009	308	236	465	100	31	23	46	100	100	100	100
Ambulatory	864	278	212	374	100	32	25	43	86	90	90	80
Outpatient	730	243	183	304	100	33	25	42	72	79	77	65
Intensive outpatient	115	31	19	64	100	27	17	56	11	10	8	14
Detoxification	20	4	10	5	100	23	51	27	2	1	4	1
Detoxification (24-hour care)	23	7	4	12	100	29	17	54	2	2	2	3
Free-standing residential	13	3	2	7	100	26	19	56	1	1	1	2
Hospital inpatient	10	3	2	5	100	32	16	52	1	1	1	1
Residential/rehab. (24-hour care)	122	23	20	79	100	19	17	64	12	7	9	17
Long term (30+ days)	87	13	15	58	100	16	18	67	9	4	7	12
Short term (<30 days)	21	6	3	13	100	26	15	59	2	2	1	3
Hospital, nondetox	14	4	2	8	100	28	12	59	1	1	1	2
Methadone	118	-	-	-	-	-	-	-	12	-	-	-
Drug-free	891	-	-	-	-	-	-	-	88	-	-	-

Source: SAMHSA, Office of Applied Studies. 1997. *Uniform Facility Data Set (UFDS): Data for 1995 and 1980-1995*, Table 10. Estimates represent the number of clients in treatment on a single day, October 2, 1995. Surveys were mailed to 12,674 specialty substance abuse treatment providers in the United States that were identified by the States and Federal agencies. Both private and public providers were included. About 83 percent received public funds. Reporting providers can be central administrative agencies, treatment locations, or different treatment units at the same location. The response rate was 87 percent, with 10,746 providers completing the UFDS survey. Estimates are adjusted to account for item-level nonresponse. Data for individual jurisdictions exclude treatment providers operated by or under contract to Federal agencies or tribal governments. Numbers may not sum to totals due to rounding.

SUBSTANCE ABUSE TREATMENT BY FACILITY AND TYPE OF CARE

- ! Mental health and physical health services facilities had the largest proportion of ambulatory care admissions for substance abuse treatment (about 90 and 88 percent, respectively), as compared to other types of facilities.
- ! Criminal justice facilities had the largest proportion of 24-hour admissions compared with other types of facilities (25 percent).

One-Day Client Census in Specialty Substance Abuse Treatment by Facility and Type of Care, 1995

Setting/ Service Orientation	Number (in 1,000s)			Percent by Facility Type			Percent by Type of Care		
	Total	24-hr Care	Ambu- latory	Total	24-hr Care	Ambu- latory	Total	24- hr Care	Ambu- latory
Total	1,009	145	864	100	100	100	100	14	86
Freestanding substance abuse treatment	460	71	388	46	49	45	100	16	84
Mental health services	255	26	230	25	18	27	100	10	90
Physical health services	171	21	150	17	15	17	100	12	88
Criminal justice system	92	23	68	9	16	8	100	25	75
Other community settings and services	32	3	28	3	2	3	100	10	90

Notes: Freestanding substance abuse treatment includes facilities that provide no medical or mental health services other than substance abuse treatment. Mental health settings and services include psychiatric and behavioral hospitals, community mental health centers, and psychiatric and mental health counselors that directly provide a range of mental health services in addition to substance abuse treatment. Physical health settings and services include hospitals, medical centers, clinics, and HMOs that directly provide medical services in addition to substance abuse treatment. These facilities may also provide mental health services. Criminal justice system includes correctional facilities; juvenile residential facilities; community corrections facilities; probation, parole, and TASC programs; and DUI/DWI/DDP and domestic violence programs. Other community settings and services include facilities that provide social services in addition to substance abuse treatment. These include community, family, and human services and resources organizations; youth centers; schools; Employee Assistance Programs; and charitable organizations.

Source: SAMHSA, Office of Applied Studies. 1997. *Uniform Facility Data Set (UFDS): Data for 1995 and 1980-1995*. Estimates of clients represent the number of clients in treatment on a single day, October 2, 1995. Surveys were mailed to 12,674 specialty substance abuse treatment providers in the United States that were identified by the States and Federal agencies. Both private and public providers were included. About 83 percent received public funds. Reporting providers can be central administrative agencies, treatment locations, or different treatment units at the same location. The response rate was 87 percent, with 10,746 providers completing the UFDS survey. Estimates are adjusted to account for item-level nonresponse. Data for individual jurisdictions exclude treatment providers operated by or under contract to Federal agencies or tribal governments. U.S. population data are based on the U.S. Bureau of the Census public use files consistent with estimates published in *Current Population Reports*, Series P-25, No. 1127. Numbers may not sum to totals due to rounding.

**RATE OF INPATIENT AND RESIDENTIAL SUBSTANCE ABUSE
TREATMENT BY STATE**

! States with the highest rates include the District of Columbia, Alaska, Delaware, New Hampshire, and New York. States with the lowest rates include Vermont, Indiana, and Idaho.

**Inpatient and Residential One-Day Client Census
in Substance Abuse Treatment Facilities, Age 12 and Older, 1995**

<u>State</u>	<u>Clients</u>	<u>Rate per 100,000</u>	<u>State</u>	<u>Clients</u>	<u>Rate per 100,000</u>
Total	139,983	64.7	Missouri	2,637	59.7
Alabama	1,502	42.4	Montana	222	30.8
Alaska	615	129.8	Nebraska	1,033	76.6
Arizona	1,977	58.2	Nevada	608	48.5
Arkansas	832	40.4	New Hampshire	1,095	115.2
California	15,698	61.9	New Jersey	3,387	51.4
Colorado	1,452	47.0	New Mexico	1,043	77.1
Connecticut	1,862	68.4	New York	17,182	114.5
Delaware	743	124.8	North Carolina	1,680	28.1
D.C.	958	203.7	North Dakota	283	53.1
Florida	14,685	123.9	Ohio	5,474	59.1
Georgia	2,322	39.3	Oklahoma	1,951	72.1
Hawaii	427	43.9	Oregon	1,502	57.4
Idaho	238	25.3	Pennsylvania	7,742	76.4
Illinois	5,180	53.3	Rhode Island	502	60.7
Indiana	1,191	24.7	South Carolina	1,207	39.6
Iowa	1,028	43.2	South Dakota	591	99.1
Kansas	898	42.6	Tennessee	1,543	35.2
Kentucky	1,333	41.2	Texas	12,231	81.2
Louisiana	2,421	68.5	Utah	1,265	83.4
Maine	1,079	103.4	Vermont	96	19.7
Maryland	1,878	45.1	Virginia	3,872	70.1
Massachusetts	3,317	65.2	Washington	2,286	51.0
Michigan	3,264	41.5	West Virginia	652	41.6
Minnesota	2,049	54.0	Wisconsin	1,577	37.2
Mississippi	1,170	53.1	Wyoming	203	51.3

Source: SAMHSA, Office of Applied Studies. 1997. *Uniform Facility Data Set (UFDS): Data for 1995 and 1980-1995*, Table 10. Estimates of clients represent the number of clients in treatment on a single day, October 2, 1995. Surveys were mailed to 12,674 specialty substance abuse treatment providers in the United States that were identified by the States and Federal agencies. Both private and public providers were included. About 83 percent received public funds. Reporting providers can be central administrative agencies, treatment locations, or different treatment units at the same location. The response rate was 87 percent, with 10,746 providers completing the UFDS survey. Estimates are adjusted to account for item-level nonresponse. Data for individual jurisdictions exclude treatment providers operated by or under contract to Federal agencies or tribal governments. U.S. population data are based on the U.S. Bureau of the Census public use files consistent with estimates published in *Current Population Reports*, Series P-25, No. 1127.

LENGTH OF STAY IN SUBSTANCE ABUSE TREATMENT

- ! In 1995, the overall average length of stay for an episode of substance abuse treatment was 5.4 months.
- ! In general, the average length of stay for a substance abuse treatment episode was relatively shorter in hospital inpatient facilities (6 weeks) than in outpatient drug-free facilities (7.2 months).
- ! The average length of stay in methadone maintenance treatment facilities was almost 14 months.

**Average Length of Stay (in Months) in Substance Abuse Treatment
by Facility Type and Primary Substance, 1995**

Facility Type	Total		Alcohol Only		Illicit Drug*	
	Avg.	95% CI**	Avg.	95% CI	Avg.	95% CI
Total	5.4	(5.3 - 5.6)	4.8	(4.6 - 5.1)	5.3	(5.1 - 5.5)
Hospital inpatient	1.2	(0.9 - 1.5)	0.8	(0.6 - 1.2)	1.2	(0.9 - 1.6)
Residential	3.0	(2.8 - 3.1)	2.5	(2.3 - 2.8)	2.7	(2.5 - 2.9)
Outpatient	7.2	(6.9 - 7.4)	6.3	(6.0 - 6.6)	6.9	(6.6 - 7.1)
Drug-free	6.8	(6.6 - 7.0)	NA***	NA	NA	NA
Methadone maintenance	13.6	(12.1 - 15.3)	NA	NA	NA	NA

* Includes “drug only” as well as “both alcohol and drug.”

** “CI” is the confidence interval; it presents the lower and upper bounds that are expected to include the true population value for 95 percent of repeated samples.

*** “NA” = not applicable.

Source: SAMHSA, Office of Applied Studies. 1997. 1995 Uniform Facility Data Set (UFDS) Survey, and Treatment Episode Data Set (TEDS), reported through 11/05/96. UFDS estimates represent the number of clients in treatment on a single day, October 2, 1995, and are adjusted for item nonresponse. TEDS represents admissions to treatment in specialty substance abuse facilities that receive public funds. Lengths of stay were estimated based on 5,664 providers that reported to both UFDS and TEDS. Lengths of stay for each facility were calculated as the daily prevalence (UFDS census) divided by the daily incidence (TEDS annual admissions divided by 365). For each subcategory in the table above, the average length of stay, with a 95-percent confidence interval for the average, was computed. To eliminate outlying observations, length of stay was limited to a maximum of 5 years. Parameter estimates were based on the log of the length of stay, in order to approximate a normal distribution. Facilities that did not report to both TEDS and UFDS for each subcategory were excluded; thus the number of facilities used for each subcategory varies, from 86 facilities reporting persons in treatment for alcohol abuse in hospital inpatient facilities, to 5,174 facilities reporting persons in treatment for substance abuse in any type of facility.

**LENGTH OF STAY IN SUBSTANCE ABUSE TREATMENT
BY FACILITY TYPE**

- ! Overall, half of all clients in substance abuse treatment stay in treatment for 7 weeks or less, and 75 percent stay in treatment for 5 months or less.
- ! In outpatient drug-free treatment, the average length of stay (LOS) is 6 months, with 75 percent of clients remaining 8 months or less.
- ! The average length of stay is shortest in hospital inpatient facilities, averaging 3 weeks.
- ! In residential treatment, the average length of stay is 1.7 months, with 75 percent of clients remaining 3 months or less.
- ! In methadone maintenance, the average length of stay is 10.7 months.
- ! The variation in length of stay is greatest in methadone maintenance and least in hospital inpatient care.

Length of Stay in Treatment (in Months) in Substance Abuse Specialty Facilities, 1990

Modality	Average	25th Percentile	Median	75th Percentile
All modalities	3.3	0.7	1.7	5.0
Outpatient drug-free	6.0	2.3	4.3	7.7
Residential	1.7	0.7	1.3	3.0
Hospital inpatient	0.7	0.3	0.7	1.0
Methadone maintenance	10.7	1.0	4.3	12.7

Source: National Institute on Drug Abuse. Drug Services Research Survey (DSRS) Phase II, unpublished data. DSRS is a representative sample of about 2,200 drug abuse clients discharged from treatment between September 1, 1989, and August 31, 1990. Clients were drawn from a nationally representative sample of 120 specialty substance abuse facilities stratified by the following modalities: outpatient drug-free, residential, hospital inpatient, and methadone maintenance. Data are derived from client record abstracts.

SUBSTANCE ABUSE TREATMENT - - GENDER

- ! The relative percentage of males and females among admissions to publicly funded substance abuse treatment facilities remained relatively stable between 1992 and 1996.
- ! In 1996, 70.3 percent of the admissions were males and 29.7 percent were females.

Gender of Admissions to Substance Abuse Treatment Trends in Number (in Thousands) and Percent of Admissions** TEDS Panel of 47 States, 1992-1996

Gender	1992 Number (%)	1993 Number (%)	1994 Number (%)	1995 Number (%)	1996 Number (%)
TOTAL*	1,480 (100%)	1,524 (100%)	1,558 (100%)	1,557 (100%)	1,534 (100%)
Males	1,055 (71.7)	1,080 (71.3)	1,101 (71.1)	1,090 (70.4)	1,073 (70.3)
Females	416 (28.3)	435 (28.7)	448 (28.9)	459 (29.6)	453 (29.7)

*Total includes admissions with unknown gender.

Source: SAMHSA, Office of Applied Studies. 1998. *National Admissions to Substance Abuse Treatment Services: The Treatment Episode Data set (TEDS) 1992-1996*, Rockville, MD. Table (2.4). TEDS collects data on admissions to substance abuse treatment providers that receive public funds. The national trends for 1992-1996 were based on a panel of the 47 States and jurisdictions that reported for 1996. The panel consisted of 78 percent of all TEDS administrative-eligible facilities. Transfer admissions and admissions for co-dependents were excluded. The States not included were Arizona, Mississippi, Nebraska, Pennsylvania, and Wyoming.

SUBSTANCE ABUSE TREATMENT - - AGE GROUPS

- ! Between 1992 and 1995, the distribution of age groups among the admissions to publicly funded substance abuse treatment facilities remained stable.
- ! During this period, the largest age group among admissions reported to SAMHSA's Treatment Episode Data Sets (TEDS) was age 25-44. Furthermore, the percent of admissions age 25-44 was 65%, twice the size of that age group in the general population (32%).

**Age Groups of Admissions to Substance Abuse Treatment
Trends in Number (in Thousands) and Percent of Admissions
TEDS Panel of 47 States, 1992-1996**

Age at Admission	1992 Number (%)	1993 Number (%)	1994 Number (%)	1995 Number (%)	1996 Number (%)	U.S. Populatio n (%)
TOTAL*	1,480 (100%)	1,524 (100%)	1,558 (100%)	1,557 (100%)	1,534 (100%)	(100%)
<15 yrs.	25 (1.7)	24 (1.6)	26 (1.7)	28 (1.8)	29 (1.9)	21.9%
15-24 yrs.	301 (20.5)	293 (19.3)	302 (19.4)	311 (20.0)	309 (20.2)	13.5%
25-34 yrs.	589 (40.0)	597 (39.3)	588 (37.9)	560 (36.1)	519 (33.9)	15.2%
35-44 yrs.	386 (26.2)	423 (27.9)	449 (28.9)	461 (29.7)	469 (30.7)	16.3%
45-54 yrs.	121 (8.2)	131 (8.6)	139 (8.9)	145 (9.3)	154 (10.1)	12.2%
55-64 yrs.	38 (2.6)	38 (2.5)	38 (2.4)	37 (2.4)	38 (2.5)	8.1%
65+ yrs.	13 (0.9)	12 (0.8)	12 (0.8)	11 (0.7)	13 (0.8)	12.8%

*Total includes admissions with unknown age.

Source: SAMHSA, Office of Applied Studies. 1998. National Admissions to Substance Abuse Treatment Services: The Treatment Episode Data set (TEDS) 1992-1996, Rockville, MD. Table (2.4). TEDS collects data on admissions to substance abuse treatment providers that receive public funds. The national trends for 1992-1996 were based on a panel of the 47 States and jurisdictions that reported for 1996. The panel consisted of 78 percent of all TEDS administrative-eligible facilities. Transfer admissions and admissions for co-dependents were excluded. The States not included were Arizona, Mississippi, Nebraska, Pennsylvania, and Wyoming. Data on the U.S. residential population: U.S. Bureau of the Census. *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin, 1995 to 2050*. Population Electronic Product #45.

SUBSTANCE ABUSE TREATMENT - - RACE/ETHNICITY

- ! In 1996, as in prior years, the percentage of blacks among substance abuse treatment admissions was more and of whites was less than in the general population. In 1996, 24.9 percent of the treatment admissions were blacks compared with 12.1 percent of the population; and, 60.3 percent of the admissions were white compared with 73.3 percent of the general population.
- ! Hispanics, were found among admissions to publicly funded substance abuse treatment facilities in the same proportion that they were in the general population.

Race/Ethnicity of Admissions to Substance Treatment Abuse Trends in Number (in Thousands) and Percent of Admissions TEDS Panel of 47 States, 1992-1996

Race/Ethnicity	1992 Number (%)	1993 Number (%)	1994 Number (%)	1995 Number (%)	1996 Number (%)	U.S. Populatio n
TOTAL*	1,480 (100%)	1,524 (100%)	1,558 (100%)	1,557 (100%)	1,534 (100%)	100%
White, non-Hispanic	870 (59.2)	880 (58.2)	899 (58.1)	914 (60.3)	919 (60.3)	73.3%
Black, non-Hispanic	385 (26.2)	404 (26.7)	410 (26.5)	402 (26.5)	379 (24.9)	12.1%
Hispanic	162 (11.0)	172 (11.4)	180 (11.6)	144 (9.5)	164 (10.8)	10.1%
American Indian/Alaska Native	35 (2.4)	37 (2.4)	36 (2.3)	35 (2.3)	37 (2.4)	0.7%
Asian/Pacific Islander	8 (0.5)	9 (0.6)	10 (0.6)	10 (0.6)	10 (0.6)	3.4%
Other	9 (0.6)	11 (0.7)	12 (0.8)	12 (0.8)	15 (1.0)	0.3%

*Total includes admissions with unknown race/ethnicity.

Source: SAMHSA, Office of Applied Studies. 1998. National Admissions to Substance Abuse Treatment Services: The Treatment Episode Data set (TEDS) 1992-1996, Rockville, MD. (Table 2.4). TEDS collects data on admissions to substance abuse treatment providers that receive public funds. The national trends for 1992-1996 were based on a panel of the 47 States and jurisdictions that reported for 1996. The panel consisted of 78 percent of all TEDS administrative-eligible facilities. Transfer admissions and admissions for co-dependents were excluded. The States not included were Arizona, Mississippi, Nebraska, Pennsylvania, and Wyoming. Data on the U.S. residential population: U.S. Bureau of the Census. *Population Projections of the United States by Age, Sex, Race, and Hispanic Origin, 1995 to 2050*. Population Electronic Product #45.

SUBSTANCE ABUSE TREATMENT - - EDUCATIONAL LEVEL

- ! In 1996, the educational level of admissions to publicly funded substance abuse facilities was lower than in the general population; about 34 percent of the admissions had not completed high school compared with 18.9 percent of the general population.
- ! Between 1992 and 1996, the educational level of the admissions to publicly funded substance abuse facilities remained relatively stable. In 1992, 64.1 percent of the admissions completed high school or post high school education compared with 66.5 percent in 1996.

Highest School Grade Completed by Admissions to Substance Abuse Treatment Trends in Percent of Admissions, Age 18 and Older TEDS Panel of 47 States, 1992-1996

Highest Grade Completed	TEDS Admissions**					U.S. Population Age 18+
	1992	1993	1994	1995	1996	
TOTAL						
Thousands*	1,480	1,524	1,558	1,557	1,534	
Percent	(100%)	(100%)	(100%)	(100%)	(100%)	100%
0-8th Grade	11.1%	10.6%	10.3%	9.7%	9.3%	7.5%
9-11th Grade	24.8%	24.7%	24.3%	24.4%	24.2%	11.4%
High school/GED)	40.2%	40.2%	40.7%	41.1%	41.7%	33.2%
Post High school	23.9%	24.4%	24.8%	24.9%	24.8%	47.9%

*Total includes admissions with highest school grade unknown.

**Percentages were adjusted for sex, race/ethnicity and age to the U.S. population.

Source: SAMHSA, Office of Applied Studies. 1998. National Admissions to Substance Abuse Treatment Services: The Treatment Episode Data set (TEDS) 1992-1996, Rockville, MD. (Table 2.5). TEDS collects data on admissions to substance abuse treatment providers that receive public funds. The national trends for 1992-1996 were based on a panel of the 47 States and jurisdictions that reported for 1996. The panel consisted of 78 percent of all TEDS administrative-eligible facilities. Transfer admissions and admissions for co-dependents were excluded. The States not included were Arizona, Mississippi, Nebraska, Pennsylvania, and Wyoming. Data on education in the U.S. residential population: U.S. Bureau of the Census. Current Population Survey. *Educational Attainment in the United States*, March, 1996 (Table 1).

SUBSTANCE ABUSE TREATMENT - - EMPLOYMENT STATUS

- ! The percentages of employed and unemployed admissions age 18 and older to publicly funded substance abuse treatment facilities remained relatively stable from 1992 to 1996.
- ! Between 1992 and 1996, a greater percentage of admissions were not in the labor force than employed or unemployed. In 1996, 49.2 percent were not in the labor force, 29.9 percent were employed, and 20.9 percent were unemployed.
- ! The employment rate in the U.S. general population, age 18 and older, was about twice as high (64.3%) as that of the substance abuse treatment admissions (29.9%) in 1996.

Employment Status of Admissions to Substance Abuse Treatment Trends in Percent of Admissions, Age 18 and Older ** (TEDS Panel of 47 States) and the U.S. Population, 1992-1996

Employment Status	TEDS Admissions*					U.S. Population Age 18 and Older
	1992	1993	1994	1995	1996	
Total Admissions*						
Age 18 and Older						
Thousands	1,378	1,425	1,446	1,432	1,403	
Percent	(100%)	(100%)	(100%)	(100%)	(100%)	100%
Employed	30.1%	29.3%	28.9%	29.0%	29.9%	64.3%
Full-time	23.3%	22.4%	22.2%	22.2%	22.8%	53.5%
Part-time	6.9%	6.9%	6.8%	6.8%	7.1%	10.8%
Unemployed	22.7%	22.1%	21.4%	20.6%	20.9%	3.4%
Not in Labor Force	47.2%	48.6%	49.7%	50.4%	49.2%	32.3%

*Total includes admissions with unknown employment status.

**Percentages were adjusted for sex, race/ethnicity and age to the U.S. population.

Source: SAMHSA, Office of Applied Studies. 1998. *National Admissions to Substance Abuse Treatment Services: The Treatment Episode Data set (TEDS) 1992-1996*, Rockville, MD. Table (2.5). TEDS collects data on admissions to substance abuse treatment providers that receive public funds. The national trends for 1992-1996 were based on a panel of the 47 States and jurisdictions that reported for 1996. The panel consisted of 78 percent of all TEDS administrative-eligible facilities. Transfer admissions and admissions for co-dependents were excluded. The States not included were Arizona, Mississippi, Nebraska, Pennsylvania, and Wyoming. Data on employment in the U.S. residential population: Bureau of Labor Statistics, U.S. Department of Labor. *Current Population Survey, 1996* (Tables 3 and 8).

SUBSTANCE ABUSE TREATMENT - - PRIMARY SUBSTANCE OF ABUSE

- ! The primary substance of abuse consistently reported between 1992-1996 by admissions to publicly funded substance abuse facilities was alcohol — either alone or with another drug.
- ! Between 1992 and 1996, the percent reporting marijuana as their primary substance of abuse at admission to publicly funded substance abuse facilities doubled from 6.0 percent to 12.8 percent; In 1996, the number of admissions reporting marijuana as their primary substance of abuse was 196,000.

**Primary Substance of Abuse Among Admissions to Substance Abuse Treatment
Trends in Number (In Thousands) and Percent of Admissions Age 12 and Older,
TEDS Panel of 47 States, 1992-1996**

Primary Substance	Number in Thousands					Percent				
	1992	1993	1994	1995	1996	1992	1993	1994	1995	1996
TOTAL	1,480	1,524	1,558	1,557	1,534	100%	100%	100%	100%	100%
Alcohol Only	535	511	473	441	433	36.2	33.5	30.3	28.3	28.2
Alcohol & Another Drug	322	336	335	324	325	21.8	22.0	21.5	20.8	21.2
Cocaine	263	268	277	253	240	17.8	17.6	17.8	16.3	15.7
Heroin & Opiates	182	211	225	209	214	12.3	13.8	14.4	13.4	14.0
Marijuana / Hashish	89	107	137	182	196	6.0	7.0	8.8	11.7	12.8
Stimulants	22	28	44	63	54	1.5	1.9	2.8	4.0	3.5
Other Drugs	21	20	20	19	18	1.4	1.3	1.3	1.2	1.1
None Reported	45	43	48	65	54	3.1	2.8	3.1	4.2	3.5

*Total includes admissions with unknown race/ethnicity.

Source: SAMHSA, Office of Applied Studies. 1998. National Admissions to Substance Abuse Treatment Services: The Treatment Episode Data set (TEDS) 1992-1996, Rockville, MD. Table (2.3). TEDS collects data on admissions to substance abuse treatment providers that receive public funds. The national trends for 1992-1996 were based on a panel of the 47 States and jurisdictions that reported for 1996. The panel consisted of 78 percent of all TEDS administrative-eligible facilities. Transfer admissions and admissions for co-dependents were excluded. The States not included were Arizona, Mississippi, Nebraska, Pennsylvania, and Wyoming.

**SUBSTANCE ABUSE TREATMENT - - RACE/ETHNICITY
BY PRIMARY SUBSTANCE OF ABUSE**

- ! In 1996, almost half of the Alaskan Natives and American Indian admissions to publicly funded substance abuse treatment facilities reported only alcohol as their primary substance of abuse
- ! The primary substance of abuse at admission was heroin for about a third of the Hispanic admissions in general and for Mexicans and Puerto Ricans in particular.
- ! Smoked cocaine was the primary substance of abuse for a larger proportion of black admissions than any other racial/ethnic group.

Primary Substances of Abuse Reported by Racial/Ethnic Groups: Percent of Admissions to Substance Abuse Treatment, TEDS Panel of 47 States, 1996

Race/ Ethnicity	Total Admissions (Thousands)		Primary Substance at Admission					Other*
			Alcohol Only	Alcohol+ Other Drug	Smoked Cocaine	Non- Smoked Cocaine	Heroin	
Total**	1,534	(100%)	28.2%	21.2%	11.6%	4.1%	12.9%	22.0%
White, non-Hispanic	919	(100%)	34.1%	22.6%	6.1%	3.2%	9.9%	24.1%
Black, non-Hispanic	379	(100%)	14.7%	20.8%	28.7%	6.0%	12.6%	17.2%
Hispanic	164	(100%)	22.8%	14.2%	5.6%	5.0%	32.0%	20.4%
Mexican	69	(100%)	27.9%	13.3%	3.5%	3.2%	33.8%	18.3%
Puerto Rican	58	(100%)	10.0%	13.0%	6.7%	6.2%	41.2%	22.9%
Cuban	4	(100%)	30.9%	13.2%	13.9%	12.3%	6.6%	23.1%
Other Hispanics	33	(100%)	33.8%	18.4%	6.7%	5.4%	15.8%	19.9%
Alaskan Native	6	(100%)	47.2%	28.8%	3.9%	1.8%	5.3%	13.0%
American Indian	31	(100%)	42.0%	27.9%	3.4%	2.2%	5.3%	19.2%
Asian/Pacific Islander	10	(100%)	19.9%	17.0%	8.5%	2.5%	11.6%	40.5%
Other	15	(100%)	19.4%	16.5%	7.6%	3.5%	24.8%	28.2%

*Other drugs include marijuana, amphetamines and other stimulants, opiates other than heroin, tranquilizers, sedatives, PCP and other hallucinogens, and inhalants.

**Total includes admissions with unknown race/ethnicity.

Source: SAMHSA, Office of Applied Studies. 1998. National Admissions to Substance Abuse Treatment Services: The Treatment Episode Data set (TEDS) 1992-1996, Rockville, MD. (Table 3.2). TEDS collects data on admissions to substance abuse treatment providers that receive public funds. The national trends for 1992-1996 were based on a panel of the 47 States and jurisdictions that reported for 1996. The panel consisted of 78 percent of all TEDS administrative-

eligible facilities. Transfer admissions and admissions for co-dependents were excluded. The States not included were Arizona, Mississippi, Nebraska, Pennsylvania, and Wyoming.

SUBSTANCE ABUSE TREATMENT - - REFERRAL SOURCES

- ! In 1996, about a third of the substance abuse treatment admissions to publicly funded facilities were referred by individuals, and about a third by the criminal justice system.
- ! The primary source of referral for admissions to substance abuse treatment for heroin was by individuals (67.5%).
- ! The criminal justice/driving under the influence (DUI) system was the primary source of referral for 46.1 percent of those treated for only alcohol.

Source of Referral For Substance Abuse Treatment Admissions by Selected Primary Substances of Abuse, 1996

Referral Source	All** Admissions (Thousands)	Alcohol Only	Cocaine	Heroin
Total	1,534	433	240	196
Thousands*	(100%)	(100%)	(100%)	(100%)
Percent				
Individual	33.9%	26.4%	36.4%	67.5%
Criminal justice/DUI	35.3	46.1	25.7	10.5
Substance abuse provider	12.4	10.2	17.2	12.7
Other health care provider	7.3	8.1	8.1	4.5
School (Educational)	1.5	0.9	0.4	0.1
Employer/EAP	1.4	1.5	1.5	0.4
Other community referral***	8.2	6.9	10.7	4.2

*Total includes admissions with unknown referral source.

**Percentages calculated on admissions with known referral source.

***Includes community and religious organizations or any Federal, State, or local agency that provides aid in the areas of poverty relief, unemployment, shelter, or social welfare. Self help groups such as Alcoholics Anonymous (AA), Al-Anon, and Narcotic Anonymous are included in this category. Also includes defense attorneys.

Source: SAMHSA, Office of Applied Studies. 1998. National Admissions to Substance Abuse Treatment Services: The Treatment Episode Data set (TEDS) 1992-1996, Rockville, MD. (Table 3.7). TEDS collects data on admissions to substance abuse treatment providers that receive public funds. The national trends for 1992-1996 were based on a panel of the 47 States and jurisdictions that reported for 1996. The panel consisted of 78 percent of all TEDS administrative-eligible facilities. Transfer admissions and admissions for co-dependents were excluded. The States not included were Arizona, Mississippi, Nebraska, Pennsylvania, and Wyoming.

SUBSTANCE ABUSE TREATMENT - - INSURANCE

- ! In 1996, about 65.5 percent of the total admissions to publicly funded substance abuse treatment facilities in 1996 had no health insurance.
- ! Medicaid (11.1%) was the main type of health insurance among the total admissions.
- ! More heroin admissions had Medicaid (18%) than admissions for any other primary substance of abuse

Type of Health Insurance For Admissions to Substance Abuse Treatment by Selected Primary Substances of Abuse, 1996

Health Insurance*	All** Admissions (Thousands)	Alcohol Only	Smoked Cocaine	Non- Smoked Cocaine	Heroin
TOTAL					
Thousands**	732	231	84	30	81
Percent	(100%)	(100%)	(100%)	(100%)	(100%)
None	65.5%	64.5%	69.2%	61.5%	63.1%
Medicaid	11.1	7.9	14.2	11.5	18.8
Private Insurance	7.6	10.0	4.4	6.4	4.3
Blue Cross/ Blue Shield	3.0	3.8	1.8	2.2	1.7
HMO	3.6	4.3	3.0	3.6	2.8
Medicare	2.0	2.7	1.5	1.5	1.8
Other***	7.1	6.8	5.8	13.4	7.5

*Type of client's health insurance (if any). The insurance may or may not cover alcohol or drug treatment

**Data on insurance were reported by 731,595 (48%) out of 1,534,045 admissions

*** The "Other" category includes CHAMPUS.

Source: SAMHSA, Office of Applied Studies. 1998. National Admissions to Substance Abuse Treatment Services: The Treatment Episode Data set (TEDS) 1992-1996, Rockville, MD. (Table 3.10). TEDS collects data on admissions to substance abuse treatment providers that receive public funds. The national trends for 1992-1996 were based on a panel of the 47 States and jurisdictions that reported for 1996. The panel consisted of 78 percent of all TEDS administrative-eligible facilities. Transfer admissions and admissions for co-dependents were excluded. The States not included were Arizona, Mississippi, Nebraska, Pennsylvania, and Wyoming.

RATE OF SUBSTANCE ABUSE TREATMENT BY STATE

! States vary widely in their rates of substance abuse treatment. States with the highest rates include the District of Columbia, Utah, Alaska, New York, and Oregon. States with the lowest rates include Tennessee, Arkansas, Minnesota, and Georgia.

One-Day Client Census in Substance Abuse Treatment Facilities, Age 12 and Older by State, 1995

State	Clients	Rate per 100,000	State	Clients	Rate per 100,000
Total	989,781	457.4	Missouri	11,628	263.4
Alabama	9,860	278.3	Montana	1,620	224.9
Alaska	4,311	910.1	Nebraska	5,794	429.6
Arizona	9,212	271.1	Nevada	4,870	388.5
Arkansas	3,430	166.4	New Hampshire	3,376	355.3
California	143,803	566.7	New Jersey	23,385	354.6
Colorado	19,004	615.1	New Mexico	9,201	680.2
Connecticut	11,924	437.7	New York	129,584	863.5
Delaware	3,665	615.8	North Carolina	17,210	287.9
D.C.	4,520	961.0	North Dakota	1,331	249.9
Florida	64,353	542.7	Ohio	41,225	445.1
Georgia	10,575	179.1	Oklahoma	7,225	267.0
Hawaii	2,920	300.1	Oregon	22,010	840.5
Idaho	2,808	298.1	Pennsylvania	36,268	357.8
Illinois	47,224	486.4	Rhode Island	5,940	717.7
Indiana	14,343	297.1	South Carolina	12,852	422.0
Iowa	6,045	254.1	South Dakota	2,033	341.1
Kansas	8,689	411.8	Tennessee	6,475	147.5
Kentucky	18,876	584.1	Texas	38,318	254.3
Louisiana	11,135	315.2	Utah	14,244	939.5
Maine	5,570	533.8	Vermont	2,704	553.9
Maryland	27,826	668.2	Virginia	18,206	329.6
Massachusetts	26,691	525.0	Washington	36,624	816.7
Michigan	47,287	600.7	West Virginia	4,435	283.2
Minnesota	6,788	179.1	Wisconsin	15,567	367.0
Mississippi	5,056	229.5	Wyoming	1,741	440.4

Source: SAMHSA, Office of Applied Studies. 1997. *Uniform Facility Data Set (UFDS): Data for 1995 and 1980-1995*. Estimates of clients represent the number of clients in treatment on a single day, October 2, 1995. Surveys were mailed to 12,674 specialty substance abuse treatment providers in the United States that were identified by the States and Federal agencies. Both private and public providers were included. About 83 percent received public funds. Reporting providers can be central administrative agencies, treatment locations, or different treatment units at the same location. The response rate was 87 percent, with 10,746 providers completing the UFDS survey. Estimates are adjusted to account for item-level nonresponse. Data for individual jurisdictions exclude treatment providers operated by or under contract to Federal agencies or tribal governments. U.S. population data are based on the U.S. Bureau of the Census public use files consistent with estimates published in *Current Population Reports*, Series P-25, No. 1127. Numbers may not sum to totals due to rounding.

SUBSTANCE ABUSE TREATMENT - SERVICE NEEDS

- ! Over a third of the clients in the National Treatment Improvement Evaluation Study (NTIES) reported the need for ancillary services, such as educational, legal, and housing services.
- ! While the need for ancillary services was great, very few received such ancillary services while in treatment.
- ! Almost half of the clients were involved in the criminal justice system or had other legal problems, yet only 6 percent reported receiving legal services.

Percent of Clients in the National Treatment Improvement Evaluation Study Reporting Ancillary Services Needed and Received

Services Needed/Received	Number	Percent
Education		
Lacked High School Degree/Diploma	2023	38
Attended school	509	10
Vocational Training		
Rated very important	2177	41
Received services	1053	20
Legal		
Needed services	2050	39
Received services	382	6
Benefits		
Rated very important	2322	44
Received services	531	10
Housing		
Rated very important	2513	48
Received services	505	10

Source: Gerstein et al. 1997. National Treatment Improvement Evaluation Study (NTIES) Final Report. Center for Substance Abuse Treatment. Rockville, MD. (Table 4.4) NTIES is a five year evaluation of the clinical outcomes of clients in CSAT funded substance abuse treatment demonstration programs. CSAT programs focus on underserved and other populations of great need. The initial sample was 6,593 clients and the followup rate was 82 percent. Data were collected at intake, discharge, and one-year followup. A pre/post comparison design was used to measure the impact of the publicly funded programs on its high risk clients.

SUBSTANCE ABUSE TREATMENT-LENGTH OF STAY

- ! Females were more likely than males to stay longer in outpatient and correctional treatment, while males stayed longer than females in residential treatment.
- ! Whites had the longest length of stay in all the treatment modalities except correctional treatment facilities where Hispanics stayed longer.
- ! Youth under age 18 stayed longer than any other age group in all the treatment modalities except methadone treatment.

Average Length of Stay (Weeks) Clients Spent in Substance Abuse Treatment National Treatment Improvement Evaluation Study (NTIES)

	Methadone	Out-patient	Residential		Correctional
			Short term	Long term	
Gender					
Males	28	17	9	15	11
Females	27	20	8	14	13
Race/ethnicity					
Hispanic	20	17	9	12	14
Black (Non-Hispanic)	29	18	5	13	12
White (Non-Hispanic)	32	19	13	18	10
Age					
Under 18 years	---	21	27	14	19
18 to 29 years	23	18	11	14	13
30 to 39 years	28	17	7	14	10
Over 40 years	29	19	5	13	10

Source: Gerstein et al. 1997. National Treatment Improvement Evaluation Study (NTIES) Final Report. Center for Substance Abuse Treatment. Rockville, MD. (Table 4.1). NTIES is a five year evaluation of the clinical outcomes of clients in CSAT funded substance abuse treatment demonstration programs. CSAT programs focus on under-served and other populations of great need. The initial sample was 6,593 clients and the followup rate was 82 percent. Data were collected at intake, discharge, and one-year followup. A pre/post comparison design was used to measure the impact of the publicly funded programs on its high risk clients.

SUBSTANCE ABUSE TREATMENT - IMPACT (NTIES)

- ! Clients served by SAMHSA's Center for Substance Abuse Treatment funded substance abuse programs in the National Treatment Improvement Evaluation Study reduced their drug use by almost a half in the year after treatment.
- ! While 50.4 percent of the clients had used crack prior to treatment, only 24.8 percent reported crack use in the year following treatment.
- ! The percent of clients using heroin decreased from 23.6 percent prior to treatment to 12.6 percent in the year following treatment.

Percent Clients Reporting Drug and Alcohol Use Before and After Substance Abuse Treatment (N=4,411) National Treatment Improvement Evaluation Study (NTIES)

Use of Drug in Past 12 Months	Before	After	Difference	Percentage Change
Marijuana	55.6	27.8	-27.8*	-50.0%
Crack	50.4	24.8	-25.5*	-50.7%
Cocaine	39.5	17.8	-21.7*	-55.0%
Heroin	23.6	12.6	-11.0*	-46.5%
Any Drug	85.7	50.5	-35.2*	-41.1%
Primary Drug	72.8	37.7	-35.1*	-48.3%
Primary Substance (alcohol or other drugs)	90.3	57.1	-33.1*	-36.7%

* Pre/Post difference is significant at $p < .05$.

Source: Gerstein et al. 1997. National Treatment Improvement Evaluation Study (NTIES) Final Report. Center for Substance Abuse Treatment. Rockville, MD. (Table 6.1) NTIES is a five year evaluation of the clinical outcomes of clients in CSAT funded substance abuse treatment demonstration programs. CSAT programs focus on under-served and other populations of great need. The initial sample was 6,593 clients and the followup rate was 82 percent. Data were collected at intake, discharge, and one-year followup. A pre/post comparison design was used to measure the impact of the publicly funded programs on its high risk clients.

SUBSTANCE ABUSE TREATMENT - IMPACT ON HOMELESSNESS (NTIES)

- ! The percent of clients served by SAMHSA's Center for Substance Abuse Treatment programs in the National Treatment Improvement Evaluation Study reporting being homeless at some point in the past 12 months decreased after substance abuse treatment.
- ! More clients in residential substance abuse treatment reported being homeless prior to treatment than in any other treatment modality.
- ! The greatest decrease in clients being homeless after treatment occurred among clients in correctional and short term residential treatment.

Percent of Clients Reporting Being Homeless at Any Time in Past 12 Months Before and After Substance Abuse Treatment by Treatment Modality National Treatment Improvement Evaluation Study (NTIES)

	Before	After	Difference	Percentage Change
Total	19.2	11.0	-8.1*	-42.5%
Methadone Maintenance	6.9	4.1	-1.8	-40.4
Methadone Detoxification	8.6	10.7	+2.1	+24.4
Non Methadone Outpatient	18.8	11.3	-7.5*	-39.8
Residential				
Short term	22.1	10.1	-12.0*	-54.3
Long term	27.2	16.7	-10.5*	-38.5
Correctional	13.4	6.2	-7.2*	-53.4

* Pre/Post difference is significant at $p < .05$.

Source: Gerstein et al. 1997. National Treatment Improvement Evaluation Study (NTIES) Final Report. Center for Substance Abuse Treatment. Rockville, MD. (Tables 6.37-6.42) NTIES is a five year evaluation of the clinical outcomes of clients in CSAT funded substance abuse treatment demonstration programs. CSAT programs focus on under-served and other populations of great need. The initial sample was 6,593 clients and the followup rate was 82 percent. Data were collected at intake, discharge, and one-year followup. A pre/post comparison design was used to measure the impact of the publicly funded programs on its high risk clients.

SUBSTANCE ABUSE TREATMENT - IMPACT ON EMPLOYMENT

- ! Clients served by SAMHSA’s Center for Substance Abuse Treatment programs in the National Treatment Improvement Evaluation Study were less likely to be on welfare and more likely to have a paying job after substance abuse treatment.
- ! Those clients who worked prior to substance abuse treatment increased their average annual income after treatment by 10.2 percent.

Employment and Income of Clients Before and After Substance Abuse Treatment National Treatment Improvement Evaluation Study (NTIES)

	Before	After	Difference	Percent Change
Percent Receiving Job Income in Past 12 Months (N=4,411)	50.8%	60.3%	9.5%*	18.7%
Average Annual Job Income(\$) of Those Receiving Job Income Before and After (N=1609)	\$8812.40	\$9713.30	\$901.00*	10.2%
Percent Receiving Welfare Income in Past 12 Months (N=4411)	39.7%	35.4%	-4.3%*	-10.7%

* Pre/Post difference is significant at $p < .05$.

Source: Gerstein et al. 1997. National Treatment Improvement Evaluation Study (NTIES) Final Report. Center for Substance Abuse Treatment. Rockville, MD. (Table 6.15) NTIES is a five year evaluation of the clinical outcomes of clients in CSAT funded substance abuse treatment demonstration programs. CSAT programs focus on under-served and other populations of great need. The initial sample was 6,593 clients and the followup rate was 82 percent. Data were collected at intake, discharge, and one-year followup. A pre/post comparison design was used to measure the impact of the publicly funded programs on its high risk clients.

SUBSTANCE ABUSE TREATMENT - IMPACT ON CRIMINAL BEHAVIOR

- ! Clients in the SAMHSA's Center for Substance Abuse Treatment funded National Treatment Improvement Evaluation Study significantly reduced their criminal activities after substance abuse treatment.
- ! Over 75 percent of the clients who sold drugs, shoplifted, or beat someone up in the year prior to treatment no longer did so in the year after treatment.

Percent Clients Reporting Criminal Activity Before and After Substance Abuse Treatment (N=4,411) National Treatment Improvement Evaluation Study (NTIES)

Behavior in Past 12 months	Percentage or Quantity			Percentage Change
	Before	After	Difference	
Selling Drugs	64.0	13.9	-50.0*	-78.2%
Shoplifting	63.7	11.7	-52.0*	-81.6%
Beating Someone Up	49.3	11.0	-38.3*	-77.6%
Arrested				
for Drug Possession	14.6	7.2	-7.4*	-50.7%
on Any Charge	48.2	17.2	-30.9*	-64.2%
Mostly Supported by Illegal Activities in Past 12 months	17.4	9.0	-8.5*	-48.6%

* Pre/Post difference is significant at $p < .05$.

Source: Gerstein et al. 1997. National Treatment Improvement Evaluation Study (NTIES) Final Report. Center for Substance Abuse Treatment. Rockville, MD. (Table 6.8) NTIES is a five year evaluation of the clinical outcomes of clients in CSAT funded substance abuse treatment demonstration programs. CSAT programs focus on under-served and other populations of great need. The initial sample was 6,593 clients and the followup rate was 82 percent. Data were collected at intake, discharge, and one-year followup. A pre/post comparison design was used to measure the impact of the publicly funded programs on its high risk clients.

SUBSTANCE ABUSE TREATMENT - IMPACT ON MENTAL HEALTH

- ! Clients served by SAMHSA's Center for Substance Abuse Treatment programs in the National Treatment Improvement Evaluation Study (NTIES) reported significant decreases in mental health problems and fewer had inpatient mental health visits after substance abuse treatment.
- ! Both suicidal attempts related to alcohol or drug use and those not related to substance use decreased after substance abuse treatment.

Percent of Clients Reporting Mental Health Measures Before and After Substance Abuse Treatment (N=4,411) National Treatment Improvement Evaluation Study (NTIES)

Behavior	Before	After
Suicide Attempts:		
Related to Alcohol or Drug Use	4.3%	2.6%*
Unrelated to Alcohol or Drug Use	2.8	1.5*
Panic Disorder**		
Related to Alcohol or Drug Use	3.5	0.2*
Unrelated to Alcohol or Drug Use	5.1	3.9*
Very Bothered by Mental Health Problems	16.9	7.3*
Somewhat Bothered by Mental Health Problems	53.9	35.3*
Inpatient Mental Health Visits	6.5	4.7*

* Pre/Post difference is significant at $p < .05$.

**Panic disorder measures included (1) sudden attacks of anxiety when unrelated to being the center of attention or in danger and when most people would not be afraid, and (2) having at 3 of 4 anxiety related physiological symptoms, such as, heart pounding.

***Stayed overnight or longer at a hospital or clinic for an emotional or mental health problem.

Source: Gerstein et al. 1997. National Treatment Improvement Evaluation Study (NTIES) Final Report. Center for Substance Abuse Treatment. Rockville, MD. (Table 6.22) NTIES is a five year evaluation of the clinical outcomes of clients in CSAT funded substance abuse treatment demonstration programs. CSAT programs focus on under-served and other populations of great need. The initial sample was 6,593 clients and the followup rate was 82 percent. Data were collected at intake, discharge, and one-year followup. A pre/post comparison design was used to measure the impact of the publicly funded programs on its high risk clients.

SUBSTANCE ABUSE TREATMENT - COSTS AND LENGTH OF STAY

! Substance abuse treatment costs and lengths of stay vary greatly by type of treatment modality.

Average Costs and Length of Stay in Publicly Funded Substance Abuse Treatment Programs by Modality

Treatment Modality	Average Cost/Day	Average Cost/Client	Average Length of Stay
Inpatient Methadone	\$13	\$3,900	300 days
Outpatient (non-methadone)	\$15	\$1,800	120 days
Correctional facility*	\$24	\$1,800	75 days
Residential			
Long-term	\$49	\$6,800	140 days
Short-term	\$130	\$3,900	30 days

*Provides costs for treatment only, does not include costs of incarceration

**Based on a subset of 286 substance abuse treatment units that had complete data on costs, revenues, admissions and average daily caseload for the two reference years (June 1992 through May 1993, and June 1993 through May 1994).

Source: Gerstein et al. 1997. National Treatment Improvement Evaluation Study (NTIES) Final Report. Center for Substance Abuse Treatment. Rockville, MD. (Table 6.22) NTIES is a five year evaluation of the clinical outcomes of clients in CSAT funded substance abuse treatment demonstration programs. CSAT programs focus on under-served and other populations of great need. The initial sample was 6,593 clients and the followup rate was 82 percent. Data were collected at intake, discharge, and one-year followup. A pre/post comparison design was used to measure the impact of the publicly funded programs on its high risk clients.

OUTREACH SERVICES - SUBSTANCE ABUSE TREATMENT

- ! Among persons reached by SAMHSA's Center for Substance Abuse Treatment (CSAT) outreach services, female clients are more likely than males to receive outpatient substance abuse treatment.
- ! Over a third of the outreach clients in substance abuse treatment received residential/inpatient care.

Percent of Treated Outreach Clients* Receiving Substance Abuse Services by Sex

Type of Service Received	Males (n=365)	Females (n=216)
Detoxification	40%	34%
Outpatient treatment	22%	34%
Residential/inpatient	40%	31%
Methadone maintenance	10%	19%
Support groups**	33%	35%
Other	4%	3%

*Received substance abuse treatment in last 6 months as result of Outreach contact.

**Such as Alcoholics Anonymous and Narcotics Anonymous.

Source: SAMHSA's CSAT National Evaluation Data and Technical Assistance Center (August 1995): Outreach for Substance Abusers Report on the Client Outreach Services Assessment. HIV Outreach Program Information on 1,399 clients was examined to determine substance abuse treatment status and change in risk behaviors as a result of an Outreach contact. An Outreach client was defined as a user of the Outreach Project services with a documented face-to-face encounter recorded in the client record or who has been assigned an identification number.

SUBSTANCE ABUSE OUTREACH SERVICES - IMPACT

- ! The majority of outreach clients reduced their high risk needle behavior and almost all did so who received substance abuse treatment.
- ! Outreach clients who received substance abuse treatment were more likely than the non-treated to stop their drug use.

Percent of Outreach Clients Reporting Reduction in High-Risk Behaviors by Outreach Services Status

	Outreach and Treated* n=285	Outreach Only n=264
Decreased sharing needle works	90%	69%
Decreased needle use	80%	60%
Stopped drug use	42%	14%

*Received substance treatment in last 6 months as result of Outreach contact

Source: SAMHSA's CSAT National Evaluation Data and Technical Assistance Center (August 1995): Outreach for Substance Abusers Report on the Client Outreach Services Assessment. HIV Outreach Program Information on 1,399 clients was examined to determine substance abuse treatment status and change in risk behaviors as a result of an Outreach contact. An Outreach client was defined as a user of the Outreach Project services with a documented face-to-face encounter recorded in the client record or who has been assigned an identification number.

SUBSTANCE ABUSE OUTREACH SERVICES

- ! Outreach workers target “hard core” and high-risk substance abusers to facilitate their access to substance abuse treatment.

- ! Outreach clients who receive substance abuse treatment were more likely than those without such treatment to receive ancillary medical services and tests for infectious diseases.

Percent of Outreach Clients Reporting Primary Drug Used and Medical Services Received by Outreach Services Status

Primary Drug Used	Outreach and Treatment*	Outreach Only
Heroin	43%	25%
Crack	21%	25%
Cocaine	14%	10%
Speed	8%	5%
Alcohol	16%	30%
Marijuana	9%	14%

Medical and Diagnostic Services Received	Outreach and Treatment*	Outreach Only
HIV/AIDS	55%	49%
STDs	33%	29%
TB	32%	25%
Medical	26%	19%
Other	40%	29%

*Received substance abuse treatment in the last 6 months as a result of the Outreach contact.

Source: SAMHSA’s CSAT National Evaluation Data and Technical Assistance Center (August 1995): Outreach for Substance Abusers Report on the Client Outreach Services Assessment. HIV Outreach Program Information on 1,399 clients was examined to determine substance abuse treatment status and change in risk behaviors as a result of an Outreach contact. An Outreach client was defined as a user of the Outreach Project services with a documented face-to-face encounter recorded in the client record or who has been assigned an identification number.

SUBSTANCE ABUSE OUTREACH SERVICES-IMPACT

- ! A study of clients in SAMHSA's Center for Substance Abuse Treatment (CSAT) outreach program found that a majority of the outreach clients shared the information and skills learned from with others not in the program.
- ! Female outreach clients were more likely than males to share information on protective sex with condoms or dental dams.
- ! Outreach clients who received substance abuse treatment were more likely than the nontreated to share information on cleaning needles for injecting drug users.

Percent of Outreach Clients Reporting They shared Information and Skills Learned From Outreach Contacts

Types of information/ Skills Shared	Male		Female	
	Outreach + Treatment (n=362)	Outreach Only (N=363)	Outreach + Treatment (N=213)	Outreach Only (n=241)
Total	81%	71%	86%	80%
On HIV/AIDS	78%	82%	86%	84%
On Cleaning needles	54%	42%	60%	35%
On Condoms/dental dams	67%	73%	77%	81%
Other	20%	14%	14%	15%

*Received substance abuse treatment in the last 6 months as a result of the Outreach contact.

Source: SAMHSA's CSAT National Evaluation Data and Technical Assistance Center (August 1995): Outreach for Substance Abusers Report on the Client Outreach Services Assessment. HIV Outreach Program Information on 1,399 clients was examined to determine substance abuse treatment status and change in risk behaviors as a result of an Outreach contact. An Outreach client was defined as a user of the Outreach Project services with a documented face-to-face encounter recorded in the client record or who has been assigned an identification number.

FUNDING SOURCES FOR SPECIALTY MENTAL HEALTH FACILITIES

- ! In 1992, specialty mental health (MH) facilities collected \$25.5 billion in total revenues.
- ! In 1992, specialty mental health facilities received \$10.4 billion from State government and \$2.1 billion from local government.
- ! In 1992, specialty mental health facilities received \$4 billion from Medicaid and \$4.1 billion from client fees.

Major Funding Sources for Specialty Mental Health Facilities by Facility Type, 1992 (in thousands of dollars)

Facility	Total ^a	State Govt.	Client Fees	Medicaid ^b	Medicare	Other Federal ^c	Local Govt.
All	\$25,477,387	\$10,424,904	\$4,124,589	\$4,024,542	\$1,628,259	\$2,308,521	\$2,150,403
Public Psychiatric Hospital	8,096,881	6,149,152	121,227	1,356,140	297,957	37,725	106,184
Private Psychiatric Hospital	6,055,016	136,679	3,234,789	949,466	1,192,043	361,132	94,650
VA Medical Center^d	1,537,624	-	-	-	-	1,537,455	-
RTC for EDC^e	2,152,681	822,524	157,264	238,469	11,423	34,031	636,180
Psychiatric Partial Care Organization^f	123,018	48,994	1,521	15,712	3,425	2,014	33,907
Psychiatric Outpatient Clinic^f	820,239	219,372	135,927	151,015	9,990	21,913	165,901
Multiservice Mental Health Organization	6,691,928	3,048,183	473,861	1,313,740	113,419	314,251	1,113,581

^aTotal includes other funding sources not listed, including block grant funds, foundation requests, individual trusts, gifts, contributions of cash or liquid assets, United Funds, and Mental Health Association and other charitable campaigns, as well as investments in nonmental health enterprises (e.g., vending machines, gift shops, interest and dividend revenue).

^b Medicaid includes Federal, State, and local shares.

^c Other Federal funds does not include block grant funds.

^d Veterans Administration Medical Centers includes VA neuropsychiatric hospitals, general hospital psychiatric services, and psychiatric outpatient clinics.

^e An RTC for EDC is a residential treatment center for emotionally disturbed children.

^f Free standing.

Source: Redlick RW, Witkin MJ, Atay JE, Manderscheid RW. 1996. "Highlights of Organized Mental Health Services in 1992 and Major National and State Trends." In SAMHSA, Center for Mental Health Services. *Mental Health, United States, 1996*. Manderscheid RW, Sonnenschein MA, eds. DHHS Publ. No. (SMA)96-3098. Washington, DC: U.S. Government Printing Office, Table 7.10, and Atay J, personal communication, July 22, 1997.

SPECIALTY MENTAL HEALTH FUNDING SOURCES

- ! In 1992, 41 percent of all specialty mental health (MH) facility revenues came from State government.
- ! In 1992, 53 percent of private psychiatric hospital revenues were from client fees, 20 percent from Medicare, and 16 percent from Medicaid.
- ! In 1992, 76 percent of public psychiatric hospital revenues came from State government, 17 percent from Medicaid, 4 percent from Medicare, and 2 percent from client fees.

Percent Distribution of Funding Sources for Specialty Mental Health Facilities, 1992

Organization	Total Revenues	State Govt.	Client Fees	Medicaid ^a	Medicare	Other Federal ^b	Local Govt.	Other
All	100%	41.0%	16.1%	15.8%	6.4%	9.1%	8.4%	3.2%
Public Psychiatric Hospital	100	76.0	1.5	16.7	3.7	0.5	1.3	0.3
Private Psychiatric Hospital	100	2.3	53.3	15.7	19.7	6.0	1.6	1.4
VA Medical Center^c	100	-	-	-	-	100	-	-
RTC for EDC^d	100	38.2	7.3	11.1	0.5	1.6	29.5	11.8
Freestanding Psychiatric Partial Care Organization	100	39.8	1.2	12.8	2.8	1.6	27.6	14.2
Freestanding Psychiatric Outpatient Clinic	100	26.7	16.6	18.4	1.2	2.7	20.3	14.1
Multiservice Mental Health Organization	100	45.6	7.1	19.6	1.7	4.7	16.6	4.7

^a Medicaid includes Federal, State, and local shares.

^b Other Federal funds does not include block grant funds.

^c Veterans Administration Medical Centers includes VA neuropsychiatric hospitals, general hospital psychiatric services, and psychiatric outpatient clinics.

^d An RTC for EDC is a residential treatment center for emotionally disturbed children.

Source: SAMHSA, Center for Mental Health Services. 1996. *Mental Health, United States, 1996*. Manderscheid RW, Sonnenschein MA, eds. DHHS Publ. No. (SMA)96-3098. Washington, DC: U.S. Government Printing Office, Table 7.10.

**SPECIALTY MENTAL HEALTH INPATIENT ADMISSIONS
BY DIAGNOSIS AND PAYMENT SOURCE**

- ! In 1986, 48 percent of all specialty mental health inpatient admissions relied on public funds.
- ! Public funds more often paid for clients diagnosed with schizophrenia (58 percent) and personality disorders (54 percent).
- ! Private insurance more often paid for those diagnosed with affective disorders (46 percent) and adjustment disorders (41 percent).

**Diagnoses of Specialty Mental Health Inpatient Facility Admissions
by Payment Source,* 1986**

Disorder	Total Admissions		Public Insurance		Self-Pay		No Charge		Private Insurance	
	Number (1,000s)	%	Number (1,000s)	%	Number (1,000s)	%	Number (1,000s)	%	Number (1,000s)	%
Total	1,688	100	801	47.5%	126	7.4%	263	15.6%	498	29.5%
Substance abuse disorder	351	100	171	48.6	48	13.8	68	19.4	63	18.1
Affective disorder	536	100	222	41.4	29	5.4	41	7.6	244	45.5
Schizophrenia	389	100	226	58.2	23	5.8	89	23.0	51	13.0
Personality disorder	31	100	17	54.2	1	4.3	6	19.4	7	22.1
Adjustment disorder	125	100	45	36.2	10	7.7	19	14.9	51	41.2
Other	257	100	121	47.0	14	5.6	40	15.6	82	31.8

* Payment source includes expected or actual principal source of payment.

Source: SAMHSA, Center for Mental Health Services (CMHS). 1986 Client/Patient Sample Survey (CPSS). CPSS is a sample of clients/patients within all specialty mental health organizations that offer inpatient, outpatient, or partial care services as identified in the CMHS biennial Inventory of Mental Health Organizations/General Hospital Mental Health Services. This inventory comprises all specialty treatment providers that can be identified by the States and by national mental health provider associations. Clients admitted to specialty mental health treatment facilities include some substance abusers. Inpatient care includes the mental health services of State and county mental hospitals, private psychiatric hospitals, multiservice mental health organizations, Veterans Administration medical centers, and non-Federal general hospitals; residential treatment was excluded.

**EXPECTED SOURCE OF PAYMENT
FOR INPATIENT MENTAL HEALTH ADMISSIONS**

- ! In 1986, the expected payment source differed by race/ethnicity for admissions to inpatient facilities specializing in mental health treatment.
- ! A greater proportion of non-Hispanic Whites (34 percent) were expected to use private insurance than any other racial/ethnic group.
- ! Over half of the non-Hispanic Blacks and Native Americans were expected to use public insurance to pay for their inpatient mental health treatment.

**Specialty Inpatient Mental Health Treatment Admissions
by Expected Source of Payment* and Race/Ethnicity, 1986**

Race/Ethnicity	Number of Admissions	Total	Public Insurance	Self-Pay	No Charge	Private Insurance
Total	1,688,000	100.0%	47.5%	7.4%	15.6%	29.5%
Non-Hispanic White	1,191,000	100.0	45.2	8.3	12.6	33.9
Non-Hispanic Black	372,000	100.0	54.2	3.7	24.0	18.0
Hispanic	101,000	100.0	47.6	10.4	18.6	23.4
Native American	12,000	100.0	60.2	11.2	15.7	12.9
Asian/Pacific Islander	12,000	100.0	46.5	13.2	18.0	22.4

* Expected source of payment is the payment source that the facility expected the client to use to pay the bill.

Source: SAMHSA, Center for Mental Health Services (CMHS). 1986 Client/Patient Sample Survey (CPSS). CPSS is a sample of clients/patients within all specialty mental health organizations that offer inpatient, outpatient, or partial care services as identified in the CMHS biennial Inventory of Mental Health Organizations/General Hospital Mental Health Services. This inventory comprises all specialty treatment providers that can be identified by the States and by national mental health provider associations. Clients admitted to specialty mental health treatment facilities include some substance abusers. Inpatient care includes the outpatient and partial care mental health services of State and county mental hospitals, private psychiatric hospitals, multiservice mental health organizations, Veterans Administration medical centers, and non-Federal general hospitals; residential treatment was excluded.

**SPECIALTY AMBULATORY MENTAL HEALTH ADMISSIONS
BY DIAGNOSIS AND PAYMENT SOURCE**

- ! In 1986, 35 percent of specialty ambulatory mental health admissions relied on public funds.
- ! Public funds more often paid for clients diagnosed with schizophrenia (63 percent) and affective disorder (40 percent).
- ! Private insurance more often paid for those diagnosed with adjustment disorder (30 percent).
- ! Clients with a diagnosis of substance abuse disorder were more likely to pay out of pocket (42 percent) or receive coverage from public insurance (29 percent).

**Diagnoses of Specialty Ambulatory Mental Health Facility Admissions
by Payment Source,* 1986**

Disorder	Total Admissions		Public Insurance		Self-Pay		No Charge		Private Insurance	
	Number (1,000s)	%	Number (1,000s)	%	Number (1,000s)	%	Number (1,000s)	%	Number (1,000s)	%
Total	2,337	100.0%	820	35.1%	703	30.1%	330	14.1%	485	20.8%
Substance Abuse Disorders	290	100.0	83	28.6	122	42.2	46	15.7	39	13.5
Affective Disorders	347	100.0	140	40.2	88	25.2	50	14.3	71	20.4
Schizophrenia	218	100.0	138	63.3	31	14.1	32	14.9	17	7.7
Personality Disorders	151	100.0	54	35.5	50	33.2	20	13.4	27	17.9
Adjustment Disorders	520	100.0	166	31.9	147	28.4	53	10.2	154	29.5
Other	811	100.0	240	29.6	265	32.6	129	15.9	178	21.9

* Payment source includes expected or actual principal source of payment.

Source: SAMHSA, Center for Mental Health Services (CMHS). 1986 Client/Patient Sample Survey (CPSS). CPSS is a sample of clients/patients within all specialty mental health organizations that offer inpatient, outpatient, or partial care services as identified in the CMHS biennial Inventory of Mental Health Organizations/General Hospital Mental Health Services. This inventory comprises all specialty treatment providers that can be identified by the States and by national mental health provider associations. Clients admitted to specialty mental health treatment facilities include some substance abusers. Ambulatory care includes the outpatient and partial care mental health services of State and county mental hospitals, private psychiatric hospitals, multiservice mental health organizations, Veterans Administration medical centers, nonFederal general hospitals, residential treatment centers for emotionally disturbed children, free-standing outpatient clinics, and freestanding partial care programs.

**EXPECTED SOURCE OF PAYMENT
FOR AMBULATORY MENTAL HEALTH ADMISSIONS**

- ! In 1986, the expected payment source differed by race/ethnicity for admissions to ambulatory facilities specializing in mental health treatment.
- ! A greater proportion of Native Americans (43 percent) and non-Hispanic Whites (32 percent) paid for their treatment out of pocket than other racial and ethnic groups.
- ! At least one-third of each racial and ethnic group used public insurance.

**Specialty Ambulatory Mental Health Treatment Admissions
by Expected Source of Payment* and Race/Ethnicity, 1986**

Race/Ethnicity	Number of Admissions	Total	Public Insurance	Self-Pay	No Charge	Private Insurance
Total	2,337,000	100%	35.1%	30.1%	14.1%	20.8%
Non-Hispanic White	1,833,000	100	32.4	32.4	12.2	23.1
Non-Hispanic Black	312,000	100	47.4	22.0	19.4	11.2
Hispanic	160,000	100	37.3	20.2	26.0	16.4
Native American	16,000	100	46.4	43.1	10.5	-
Asian/Pacific Islander	16,000	100	72.7	7.8**	13.8	5.7**

* Expected source of payment is the payment source that the facility expected the client to use to pay the bill.

** Small number of cases in sample; interpret with caution.

Source: SAMHSA, Center for Mental Health Services (CMHS). 1986 Client/Patient Sample Survey (CPSS). CPSS is a sample of clients/patients within all specialty mental health organizations that offer inpatient, outpatient, or partial care services as identified in the CMHS biennial Inventory of Mental Health Organizations/General Hospital Mental Health Services. This inventory comprises all specialty treatment providers that can be identified by the States and by national mental health provider associations. Clients admitted to specialty mental health treatment facilities include some substance abusers. Ambulatory care includes the outpatient and partial care mental health services of State and county mental hospitals, private psychiatric hospitals, multiservice mental health organizations, Veterans Administration medical centers, non-Federal general hospitals, residential treatment centers for emotionally disturbed children, free-standing outpatient clinics, and free-standing partial care programs.

MENTAL HEALTH FACILITIES BY YEAR

- ! The number of specialty mental health facilities has steadily increased, from about 3,000 in 1970 to about 5,500 in 1992.
- ! The largest increase occurred in the number of “other” organizations, which includes freestanding psychiatric partial care and multiservice mental health facilities (from 67 in 1970 to 1,613 in 1992).
- ! The number of nonFederal general hospitals with separate psychiatric services doubled in that period (from 797 to 1,616), while the number of freestanding psychiatric outpatient clinics declined from 1,109 in 1970 to 862 in 1992.

Number of Mental Health Facilities,^a 1970-1992

Facility Type	1970	1976	1980	1986	1990	1992
All facilities	3,005	3,480	3,727	4,747	5,284	5,498
State/county mental hospitals	310	303	280	285	273	273
Private psychiatric hospitals	150	182	184	314	462	475
NonFederal general hospitals	797	870	923	1,351	1,674	1,616
VA medical centers ^b	115	126	136	139	141	162
Community mental health centers	196	517	691	-	-	-
Residential treatment centers ^c	261	331	368	437	501	497
Freestanding psychiatric clinics ^d	1,109	1,076	1,053	773	743	862
Other ^e	67	75	92	1,448	1,490	1,613

^a Some organizations (e.g., community mental health centers) were reclassified as a result of changes in reporting procedures and definitions. From 1979 to 1980, comparable data were not available for certain organization types, and data for either an earlier or a later period were substituted. These factors influence the comparability of 1980, 1986, 1990, and 1992 data from those of earlier years.

^b Includes Department of Veterans Affairs (formerly Veterans Administration) (VA) neuropsychiatric hospitals, VA general hospital psychiatric services, and VA psychiatric outpatient clinics.

^c For emotionally disturbed children.

^d Outpatient.

^e Includes freestanding psychiatric partial care organizations and, in 1986, 1990, and 1992, multiservice mental health organizations.

Source: SAMHSA, Center for Mental Health Services. 1996. *Mental Health, United States, 1996*. Manderscheid RW, Sonnenschein MA, eds. DHHS Publ. No. (SMA)96-3098. Washington, DC: U.S. Government Printing Office, Table 7.1.

MENTAL HEALTH STAFFING BY PROFESSION

- ! In 1992, about 432,900 people were employed as patient care staff in specialty mental health facilities.
- ! About 27,000 of these patient care staff were physicians, 25,000 were psychologists, about 57,000 were social workers, and about 79,000 were registered nurses.
- ! The majority of patient care staff—in addition to physicians, psychologists, social workers, and registered nurses—were professionals with at least a bachelor’s degree

Staff in Specialty Mental Health (MH) Facilities by Profession, 1992

Full-Time Staff	All Facilities	Hospitals ^a	VA Medical Centers ^b	RTC ^c for EDC ^c	Partial Care & Multi-service MH Orgs ^d	Psychiatric Outpatient Clinics ^d
All patient care staff	432,866	240,631	20,834	42,801	114,672	13,177
Physicians ^e	26,752	15,324	3,889	874	5,635	991
Psychologists	25,000	9,458	2,479	1,641	8,785	2,567
Social workers	57,136	19,950	2,244	6,506	23,102	5,160
Registered nurses	78,588	64,560	5,485	1,367	6,636	488
Other Mental Health professionals ^f	102,162	37,642	1,266	18,970	41,033	2,940
Physical health workers	16,350	12,769	911	849	1,651	167
Other Mental Health workers ^g	126,878	80,928	4,560	12,594	27,830	864

^a Includes State and county mental hospitals, private psychiatric hospitals, and non-Federal general hospitals.

^b Includes Department of Veterans Affairs neuropsychiatric hospitals, general hospital psychiatric services, and psychiatric outpatient clinics.

^c RTCs for EDC are residential treatment centers for emotionally disturbed children.

^d Freestanding.

^e Includes psychiatrists and other physicians.

^f Includes staff with bachelor’s degrees and above.

^g Includes staff with less than a bachelor’s degree.

Source: SAMHSA, Center for Mental Health Services (CMHS). Preliminary data from the Inventory for Mental Health Organizations/General Hospital Mental Health Services. The surveys collected information from specialty mental health organizations, general hospitals with separate psychiatric services, and general hospitals without separate psychiatric services.

ANNUAL ADMISSIONS TO MENTAL HEALTH FACILITIES

- ! Of the 5.3 million admissions to mental health facilities in 1992, 27 percent were to nonFederal general hospitals, and 13 percent to private psychiatric hospitals.
- ! More than 45 percent of 24-hour care admissions were to nonFederal general hospitals.
- ! About 47 percent of Veterans Administration medical center, 31 percent of private psychiatric hospital, and 34 percent of nonFederal general hospital admissions were for ambulatory care.

Annual Admissions to Mental Health Facilities by Type of Care, 1992

Type of Facility	Number (in 1,000s)			Percent by Facility Type			Percent by Type of Care		
	Total	24-hr care	Ambu l- atory ^a	Total %	24-hr care %	Ambu l- atory ^a %	Total %	24-hr care %	Ambu l- atory ^a %
All facilities	5,256	2,092	3,164	100.0 %	100.0 %	100.0 %	100.0 %	39.8%	60.2%
State/county mental hospitals	325	275	50	6.2	13.1	1.6	100.0	84.6	15.4
Private psychiatric hospitals	676	470	206	12.9	22.5	6.5	100.0	69.5	30.5
NonFederal general hospitals	1,431	951	480	27.2	45.5	15.2	100.0	66.5	33.5
VA medical centers^b	340	181	159	6.5	8.6	5.0	100.0	53.2	46.8
All other facilities^c	2,485	215	2,270	47.3	10.3	71.7	100.0	8.7	91.3

^a Includes outpatient and partial care.

^b Includes Veterans Administration neuropsychiatric hospitals, general hospital psychiatric services, and psychiatric outpatient clinics.

^c Includes federally funded community mental health centers, residential treatment centers for emotionally disturbed children, freestanding psychiatric outpatient clinics, freestanding psychiatric partial care organizations, and multiservice mental health organizations.

Source: SAMHSA, Center for Mental Health Services. 1996. *Mental Health, United States, 1996*. Manderscheid RW, Sonnenschein MA, eds. DHHS Publ. No. (SMA)96-3098. Washington, DC: U.S. Government Printing Office, Tables 7.3, 7.5, 7.6.

TRENDS IN ADMISSIONS TO MENTAL HEALTH FACILITIES

! Between 1975 and 1992, there was a 24 percent increase in total admissions to all mental health facilities. The largest increases took place in admissions to private psychiatric hospitals and nonFederal general hospitals.

Trends in Annual Admissions to Mental Health Facilities by Facility Type, 1975-1992

Facility Type ^a	Number (in 1,000s)					Percent ^b				
	1975	1979	1986	1990	1992	1975	1979	1986	1990	1992
All facilities	4,011	4,349	4,775	5,333	5,257	100%	100%	100%	100%	100%
State/county mental hospitals	594	475	401	324	325	14.8	10.9	8.4	6.1	6.2
Private psychiatric hospitals	162	174	367	570	676	4.0	4.0	7.7	10.7	12.9
NonFederal general hospitals	813	788	1,382	1,618	1,431	20.3	18.1	28.9	30.3	27.2
VA medical centers ^d	282	308	313	382	340	7.0	7.1	6.6	7.2	6.5
All other facilities ^e	2,160	2,604	2,312	2,439	2,485	53.9	59.9	48.4	45.7	47.3
24-hour care	1,558	1,541	1,819	2,035	2,092	100%	100%	100%	100%	100%
State/county mental hospitals	434	383	333	276	275	27.9	24.9	18.3	13.6	13.1
Private psychiatric hospitals	126	141	235	407	470	8.1	9.1	12.9	20.0	22.5
NonFederal general hospitals	544	551	849	960	951	34.9	35.8	46.7	47.2	45.5
VA medical centers ^d	181	180	180	198	181	11.6	11.7	9.9	9.7	8.7
All other facilities ^e	273	286	222	194	215	17.5	18.6	12.2	9.5	10.3
Ambulatory care^c	2,453	2,807	2,956	3,299	3,165	100%	100%	100%	100%	100%
State/county mental hospitals	160	92	68	48	50	6.5	3.3	2.3	1.5	1.6
Private psychiatric hospitals	36	33	132	163	206	1.5	1.2	4.5	4.9	6.5
NonFederal general hospitals	269	237	533	659	480	11.0	8.4	18.0	20.0	15.2
VA medical centers ^d	102	127	133	184	159	4.2	4.5	4.5	5.6	5.0
All other facilities ^e	1,886	2,318	2,090	2,245	2,270	76.9	82.6	70.7	68.1	71.7

^a Some organizations (e.g., community mental health centers) were reclassified as a result of changes in reporting procedures and definitions. From 1979 to 1980, comparable data were not available for certain organization types, and data for either an earlier or a later period were substituted. These factors influence the comparability of 1980, 1986, 1990, and 1992 data from those of earlier years.

^b Totals may not sum to 100 percent due to rounding. ^c Includes outpatient and partial care.

^d Includes Department of Veterans Affairs (VA) neuropsychiatric hospitals, VA general hospital psychiatric services, and VA psychiatric outpatient clinics.

^e Includes federally funded community mental health centers, residential treatment centers for emotionally disturbed children, freestanding psychiatric outpatient clinics, freestanding psychiatric partial care organizations, and multiservice mental health organizations.

Source: SAMHSA, Center for Mental Health Services. 1996. *Mental Health, United States, 1996*. Manderscheid RW, Sonnenschein MA, eds. DHHS Publ. No. (SMA)96-3098. Washington, DC: U.S. Government Printing Office, Tables 7.3, 7.5, 7.6.

**SPECIALTY MENTAL HEALTH FACILITY ADMISSIONS
BY TYPE OF CARE**

- ! Admissions to facilities specializing in mental health treatment steadily increased between 1975 and 1990.
- ! Between 1990 and 1992, admissions to specialty mental health facilities decreased.
- ! The decrease between 1990 and 1992 in specialty mental health facilities' admissions was associated with a decrease in outpatient admissions.

Annual Admissions to Specialty Mental Health Facilities^a by Type of Care, 1975-1992

Year	Admissions (in 1,000s)			Percent		
	All Facilities	Ambulatory ^b	24-Hour Care ^c	All Facilities	Ambulatory ^b	24-Hour Care ^c
1975	4,010	2,453	1,557	100.0%	61.2%	38.8%
1979	4,349	2,807	1,542	100.0	64.5	35.5
1983	4,477	2,843	1,633	100.0	63.5	36.5
1986	4,775	2,955	1,819	100.0	61.9	38.1
1988	5,263	3,264	1,999	100.0	62.0	38.0
1990	5,335	3,299	2,036	100.0	61.8	38.2
1992	5,256	3,164	2,092	100.0	60.2	39.8

^a Some organizations (e.g., community mental health centers) were reclassified as a result of changes in reporting procedures and definitions. From 1979 to 1980, comparable data were not available for certain organization types, and data for either an earlier or a later period were substituted. These factors influence the comparability of 1980, 1986, 1990, and 1992 data from those of earlier years.

^b Includes outpatient and partial care.

^c Includes inpatient and residential care.

Source: SAMHSA, Center for Mental Health Services. 1996. *Mental Health, United States, 1996*. Manderscheid RW, Sonnenschein MA, eds. DHHS Publ. No. (SMA)96-3098. Washington, DC: U.S. Government Printing Office, Tables 7.3, 7.5, 7.6.

INPATIENT AND RESIDENTIAL CLIENTS IN MENTAL HEALTH FACILITIES

- ! At the end of 1992, there were 215,000 inpatient and residential treatment clients in U.S. mental health facilities.
- ! The largest proportion of 1-day census inpatient clients (39 percent) was in State and county mental health hospitals.
- ! The smallest proportion of inpatient clients (9 percent) was in VA medical centers.

One-Day Census of Inpatient and Residential Clients in Mental Health Facilities, 1992

Type of Facility	Number of Clients	Percent
All Facilities	214,714	100.0%
State/county mental hospitals	83,180	38.8
Private psychiatric hospitals	24,053	11.2
NonFederal general hospitals	35,611	16.6
VA medical centers ^a	18,531	8.6
Residential treatment centers ^b	27,751	12.9
Other ^c	25,588	11.9

^a Includes Department of Veterans Affairs (formerly Veterans Administration) (VA) neuropsychiatric hospitals, VA general hospital psychiatric services, and VA psychiatric outpatient clinics.

^b For emotionally disturbed children.

^c Includes freestanding psychiatric partial care organizations and multiservice mental health organizations.

Source: SAMHSA, Center for Mental Health Services. 1996. *Mental Health, United States, 1996*. Manderscheid RW, Sonnenschein MA, eds. DHHS Publ. No. (SMA)96-3098. Washington, DC: U.S. Government Printing Office, Table 7.4.

INPATIENT CLIENTS IN STATE AND COUNTY MENTAL HEALTH HOSPITALS

- ! The five States with the highest State and county mental hospital inpatient rates per 100,000 population were the District of Columbia (191.9), Delaware (76.6), New York (61.2), Nevada (51.5), and Mississippi (47.6).
- ! The five States with the lowest State and county mental hospital inpatient rates per 100,000 population were Rhode Island (6.4), Arkansas (7.9), Vermont (10.7), Arizona (11.7), and New Hampshire (11.8).

Inpatient Clients per 100,000 Population in State and County Mental Hospitals, 1994

State	Number	Rate per 100,000	State	Number	Rate per 100,000
Total	72,238	27.9	Missouri	1,109	21.4
Alabama	1,647	39.2	Montana	197	23.6
Alaska	101	17.4	Nebraska	599	38.3
Arizona	462	11.7	Nevada	760	51.5
Arkansas	183	7.9	New Hampshire	137	11.8
California	3,814	12.0	New Jersey	3,405	42.5
Colorado	775	21.2	New Mexico	209	13.3
Connecticut	958	28.6	New York	11,316	61.2
Delaware	546	76.6	North Carolina	2,203	31.5
D.C.	1,148	191.9	North Dakota	213	34.3
Florida	2,766	20.0	Ohio	1,849	16.8
Georgia	3,239	47.1	Oklahoma	675	21.6
Hawaii	200	17.8	Oregon	855	27.7
Idaho	138	12.9	Pennsylvania	4,787	39.5
Illinois	2,860	24.3	Rhode Island	63	6.4
Indiana	1,320	23.0	South Carolina	1,089	30.5
Iowa	513	18.6	South Dakota	317	45.2
Kansas	883	35.5	Tennessee	1,142	22.0
Kentucky	645	16.9	Texas	2,930	16.4
Louisiana	1,091	25.6	Utah	326	18.5
Maine	450	34.9	Vermont	63	10.7
Maryland	1,820	35.5	Virginia	2,540	40.0
Massachusetts	793	12.8	Washington	1,330	25.3
Michigan	3,711	39.3	West Virginia	224	12.2
Minnesota	1,593	35.1	Wisconsin	NA	NA
Mississippi	1,208	47.6	Wyoming	147	31.9

Source: Center for Mental Health Services. *Additions and Resident Patients at End of Year, State and County Mental Hospitals, by Age and Diagnosis, by State, United States, 1994*. Rockville, MD: Center for Mental Health Services, 1995, pp. 54-105. Data are not available for Wisconsin. Data used to determine rates for the U.S. population are based on estimates of the civilian population for July 1994 by the U.S. Bureau of the Census. Rates are age adjusted.

LENGTH OF STAY IN SPECIALTY MENTAL HEALTH INPATIENT TREATMENT BY FACILITY TYPE

- ! In 1986, the length of stay for a mental health inpatient treatment episode varied, but was less than 2 months for the majority of inpatient clients.
- ! The length of stay for clients in State/county mental hospitals was longest compared with private psychiatric and nonFederal general hospitals, multiservice mental health facilities, and Veterans Administration medical centers.
- ! Clients in nonFederal general hospitals had the shortest stays and the least variation in length of stay compared with other facility types.

Length of Stay (in Weeks) in Specialty Mental Health Inpatient Treatment by Facility Type, 1986

Facility Type	Mean	25th Percentile	Median	75th Percentile
State/county mental hospitals	14.5	1.6	4.0	8.4
Private psychiatric hospitals	5.1	1.6	3.4	5.1
Multiservice mental health facilities	3.2	0.6	1.6	4.0
Veterans Administration medical centers	5.3	1.7	3.3	5.1
NonFederal general hospitals	2.2	0.7	1.6	2.7

Source: SAMHSA, Center for Mental Health Services (CMHS), 1986 Client/Patient Sample Survey (CPSS). CPSS is a sample of clients/patients within all specialty mental health organizations that offer inpatient, outpatient, or partial care services as identified in the CMHS biennial Inventory of Mental Health Organizations/General Hospital Mental Health Services. This inventory comprises all specialty treatment providers that can be identified by the States and by national mental health provider associations. Clients admitted to specialty mental health treatment facilities include some substance abusers. Residential treatment was excluded.

LENGTH OF STAY IN SPECIALTY MENTAL HEALTH INPATIENT TREATMENT BY FACILITY TYPE AND DIAGNOSIS

- ! In 1986, the length of stay for each major diagnosis differed by the type of facility.
- ! Persons with a diagnosis of schizophrenia had the longest median length of stay for an inpatient episode.
- ! Half of all persons diagnosed with schizophrenia stayed no more than 19 days for an episode of inpatient treatment.
- ! Persons diagnosed with alcohol-related disorders had the shortest median length of stay; half stayed no more than 8 days.

Median* Length of Stay (in Days) in Specialty Mental Health Inpatient Treatment by Facility Type and Diagnosis, 1986

Facility Type	Alcohol- Related Disorders	Drug- Related Disorders	Affective Disorders	Schizo- phrenia
Total	8	16	16	19
State/county mental hospitals	15	27	33	37
Private psychiatric hospitals	24	27	24	18
Multiservice mental health facilities	6	6	13	17
Veterans Administration medical centers	22	21	24	23
NonFederal general hospitals	5	8	13	13

* Excludes deaths. The median is the midpoint having an equal number with shorter and longer stays. The median length of stay is generally shorter than the mean length of stay because a few clients remain in treatment for extremely long periods of time.

Source: SAMHSA, Center for Mental Health Services (CMHS), 1986 Client/Patient Sample Survey (CPSS). CPSS is a sample of clients/patients within all specialty mental health organizations that offer inpatient, outpatient, or partial care services as identified in the CMHS biennial Inventory of Mental Health Organizations/General Hospital Mental Health Services. The inventory comprises all specialty treatment providers that can be identified by the States and by national mental health provider associations. Clients admitted to specialty mental health treatment facilities include some substance abusers. Residential treatment was excluded. Affective disorders include major depression and manic episodes.

MENTAL SYNDROME BY SPECIALTY MENTAL HEALTH TREATMENT

- ! In 1996, less than 30 percent of those who experienced major depressive episode during the year received either inpatient or outpatient treatment in a specialty mental health facility.
- ! Of the four major diagnoses measured by the National Household Survey on Drug Abuse, persons with agoraphobia were the least likely to be treated in specialty mental health inpatient or outpatient facilities in the past year. Agoraphobia involves fear of places or situations in which the person feels help would be unavailable or escape difficult.

Past-Year Specialty Mental Health Treatment by Selected Mental Syndrome, 1996 U.S. Population, Age 18 and Older

Mental Syndrome	Total	Inpatient Treatment Only	Outpatient Treatment Only*	Inpatient & Outpatient Treatment	No Inpatient or Outpatient Treatment
Major depressive episode	100.0%	0.3%	26.0%	2.0%	71.8%
Generalized anxiety disorder	100.0	0.5	31.5	3.0	65.0
Agoraphobia	100.0	0.1	15.4	3.4	81.1
Panic attack	100.0	0.3	24.0	2.4	73.3

* Outpatient mental health treatment includes treatment for psychological problems and emotional difficulties at a mental health clinic or by a mental health professional on an outpatient basis.

Source: SAMHSA, Office of Applied Studies. 1997. Unpublished data from the 1996 National Household Survey on Drug Abuse. The 1996 survey employed a multistage area probability sample of about 18,000 noninstitutionalized civilian respondents 12 years and older and incorporates an oversampling of Blacks, Hispanics, and young people. The survey also included a module of questions asking adults about their mental health status during the past year. The adult mental health screening scale developed by the Institute for Social Research at the University of Michigan was used to estimate the presence of four clinical mental syndromes defined in the DSM-III-R (Revised Third Edition) published by the American Psychiatric Association (1987).

**LENGTH OF STAY IN SPECIALTY MENTAL HEALTH
OUTPATIENT TREATMENT BY FACILITY TYPE**

- ! In 1986, the average length of stay for an episode of care in specialty mental health outpatient treatment varied by type of facility.
- ! In 1986, persons in State/county mental hospital outpatient treatment experienced greater variation in length of stay than in any other facility type.

**Length of Stay (in Months) in Specialty Mental Health
Outpatient Treatment by Facility Type, 1986**

Facility Type	Mean	25th Percentile	Median	75th Percentile
State/county mental hospitals	13.2	1.5	7.9	10.6
Private psychiatric hospitals	7.1	2.5	5.7	10.6
Multiservice mental health facilities	10.4	1.6	5.5	9.6
Veterans Administration medical centers	8.5	0.5	3.3	7.3
NonFederal general hospitals	7.1	0.9	4.4	10.4
Outpatient psychiatric clinics	8.7	1.8	5.7	9.3

Source: SAMHSA, Center for Mental Health Services (CMHS), 1986 Client/Patient Sample Survey (CPSS). CPSS is a sample of clients/patients within all specialty mental health organizations that offer inpatient, outpatient, or partial care services as identified in the CMHS biennial Inventory of Mental Health Organizations/General Hospital Mental Health Services. The inventory comprises all specialty treatment providers that can be identified by the States and by national mental health provider associations. The median length of stay for outpatient clients was calculated from the time of admission until termination. Although measuring length of stay by this method neither indicates that a client received active treatment throughout an entire period nor measures the number of visits received by a client, it does tend to point out differences among clients that could be indicative of differences in factors such as length of actual treatment, termination policies, and client dropout rates. Clients admitted to specialty mental health treatment facilities include some substance abusers. Deaths are excluded.

MENTAL HEALTH TREATMENT BY DIAGNOSIS AND TYPE OF CARE

- ! Of 4 million clients in mental health treatment facilities in 1986, the largest proportion (22 percent) was admitted for affective disorders (major depression and manic episodes).
- ! Persons with diagnoses of personality disorder or adjustment disorder were more likely to be admitted to ambulatory than inpatient care.
- ! Persons with diagnoses of affective disorder or schizophrenia were more likely to be admitted to inpatient than ambulatory care.

Client Admissions to Mental Health Facilities by Diagnosis and Type of Care,* 1986

Diagnosis	Number** (1,000s)			% by Diagnosis			% by Type of Care		
	Total	Inpatient	Ambulatory	Total	Inpatient	Ambulatory	Total	Inpatient	Ambulatory
Total	4,025	1,687	2,337	100.0%	100.0%	100.0%	100.0%	41.9%	58.1%
Substance abuse disorders	641	351	290	15.9	20.8	12.4	100.0	54.7	45.3
Affective disorders	883	536	347	21.9	31.7	14.9	100.0	60.7	39.3
Schizophrenia	607	389	218	15.1	23.0	9.3	100.0	64.1	35.9
Personality disorders	182	31	151	4.5	1.8	6.5	100.0	16.9	83.1
Adjustment disorders	644	125	520	16.0	7.4	22.2	100.0	19.3	80.7
Other	1,068	257	811	26.5	15.2	34.7	100.0	24.1	75.9

* Inpatient care includes the mental health services of State and county mental hospitals, private psychiatric hospitals, multiservice mental health organizations, Veterans Administration medical centers, and non-Federal general hospitals; residential care is excluded. Ambulatory care includes the outpatient and partial care mental health services of State and county hospitals, private psychiatric hospitals, multiservice mental health organizations, Veterans Administration medical centers, non-Federal general hospitals, residential treatment centers for emotionally disturbed children, free-standing outpatient clinics, and free-standing partial care programs. Clients may be admitted to both inpatient and ambulatory care during the year and may be counted more than once. Substance abuse disorders include diagnosis of either abuse or dependence for alcohol and other drugs.

** Numbers may not sum to totals due to rounding.

Source: SAMHSA, Center for Mental Health Services (CMHS), 1986 Client/Patient Sample Survey (CPSS). CPSS is a sample of clients/patients within all specialty mental health organizations that offer inpatient, outpatient, or partial care services identified in the CMHS biennial Inventory for mental Health Organizations and General Hospital Mental Health Services. The inventory comprises all specialty treatment providers that can be identified by the States and by national mental health provider associations. Clients admitted to specialty mental health treatment facilities include some substance abusers.

SPECIALTY MENTAL HEALTH FACILITIES BY METROPOLITAN STATUS

- ! Metropolitan counties (96%) are more likely than non metropolitan counties (79%) to have any specialty mental health treatment facilities.
- ! In 1990, few rural counties had overnight or inpatient mental health treatment facilities.

Percent of Counties With Specialty Mental Health Facilities in 1990 by Metropolitan Status* and Type of Mental Health Facility

Mental Health Facility Type	Total (n=3,102)	Metropolitan (n=813)	Non-metropolitan (n=2,289)
Any Mental Health	83%	96%	79%
Ambulatory	83	96	78
Overnight	36	73	22
Inpatient**	30	67	16
Other overnight***	22	48	12

*Counties with populations of 50,000 or more were considered metropolitan. Counties with populations less than 50,000 were considered non metropolitan

**24 hour care in a hospital setting

***Overnight care in a setting other than a hospital (includes residential treatment care and residential supportive care).

Source: Goldsmith HF, Wagenfeld MO, Mandersheid RW, Stiles DJ, Windle C, Witkin MJ. 1994. The Ecology of Mental Health Facilities in Metropolitan and Non-Metropolitan Counties. *CMHS Mental Health United States*, (Table 7.1). DHHS Pub. No. (SMA) 94-3000. The psychiatric facility data are from CMHS's 1990 Inventory of Mental Health Organizations, the 1990 Inventory of General Hospital Facilities, and the 1990 Mental Health Directory (a list of specialty mental health facilities by address and type of services provided).

CLIENTS IN MENTAL HEALTH TREATMENT BY GENDER AND AGE

- ! In 1990, mental health facilities had over 3 million clients, or 1.4 percent of the U.S. population.
- ! The distribution of mental health clients by gender and age was similar to the general U.S. population.

Distribution of Clients in Mental Health Treatment and the U.S. Population by Gender and Age, 1990

Demographic Characteristics	Mental Health Treatment	U.S. Population
Gender		
Male	52.7%	48.8%
Female	47.3	51.2
Age		
Less than 18	21.4	25.8
18 to 34	29.9	28.3
35 to 64	38.7	33.4
65 and older	10.0	12.5

Source: SAMHSA, Center for Mental Health Service. 1996. *Mental Health, United States, 1996*. Manderscheid RW, Sonnenschein MA, eds. DHHS Publ. No. (SMA)96-3098. Washington, DC: U.S. Government Printing Office. U.S. Bureau of the Census. 1994. *Statistical Abstract of the United States: 1993* (113th edition). Washington, DC. The 1990 mental health inventory includes data from 5,300 providers. Data are reported or imputed for all providers specializing in mental health treatment that can be identified by the States and by provider associations.

MENTAL HEALTH TREATMENT BY RACE/ETHNICITY

- ! In 1990, over- and underrepresentation existed for some racial/ethnic minorities in mental health treatment facilities.
- ! Although Blacks represented only 12 percent of the U.S. population in 1990, they represented 20 percent of clients in specialty mental health treatment that year.
- ! In 1990, 1 percent of clients in mental health treatment was Asian, but this group represented 3 percent of the U.S. population.

Distribution of Clients in Mental Health Treatment and the U.S. Population by Race/Ethnicity, 1990

Race/Ethnicity*	Mental Health Treatment	U.S. Population
Total	100.0%	100.0%
White	77.7	83.9
Black	20.1	12.3
Asian	1.3	3.0
Native American	0.9	0.8
Hispanic	7.3	9.0

* Hispanics are included in the racial groupings.

Source: SAMHSA, Center for Mental Health Service. 1996. *Mental Health, United States, 1996*. Manderscheid RW, Sonnenschein MA, eds. DHHS Publ. No. (SMA)96-3098. Washington, DC: U.S. Government Printing Office. U.S. Bureau of the Census. 1994. *Statistical Abstract of the United States: 1993* (113th edition). Washington, D.C. The 1990 mental health inventory includes data from 5,300 providers. Data are reported or imputed for all providers specializing in mental health treatment that can be identified by the States and by provider associations.

MENTAL HEALTH EPISODES BY YEAR AND TYPE OF CARE

- ! The total number of mental health episodes increased from about 3.7 million in 1969 to 8.8 million in 1992; this increase occurred primarily among outpatient and partial care episodes.
- ! The rate of outpatient and partial care episodes per 100,000 population increased from 992 in 1969 to 2,664 in 1992.
- ! The rate of inpatient care episodes has been fairly stable during this time period, with 800 to just more than 900 episodes per 100,000 population each year.

Mental Health Episodes* by Year and Type of Care, 1969-1992

Year	Number of Episodes	Episodes per 100,000 Population		
		All Episodes	Inpatient Care	Outpatient Care**
1969	3,682,454	1,853	861	992
1971	4,190,913	2,052	860	1,192
1975	6,857,597	3,245	860	2,385
1983	7,194,038	3,084	799	2,285
1986	7,885,618	3,295	859	2,436
1990	8,620,628	3,491	917	2,574
1992	8,824,701	3,580	916	2,664

* Episodes are defined as the number of persons receiving services at the beginning of the year plus the number of additions to these services throughout the year.

** Includes partial care episodes.

Source: SAMHSA, Center for Mental Health Services. 1996. Preliminary data from the Inventory for Mental Health Organizations/General Hospital Mental Health Services. The surveys collected information from specialty mental health organizations, general hospitals with separate psychiatric services, and general hospitals without separate psychiatric services.

MENTAL DIAGNOSES AMONG ASIAN/PACIFIC ISLANDER PATIENTS

- ! Compared with the overall patient population in the Los Angeles County public mental health system in 1988-1989, a greater proportion of major depression, schizophrenia, and anxiety disorder diagnoses were present among the Asian/Pacific Islander population.
- ! Of all the Asian/Pacific Islander groups, the highest proportion of major depression and the lowest proportion of schizophrenia were observed in the Indochinese patient group.
- ! The highest percentage of schizophrenia was found in the Japanese group.

**Percentage of Total and Asian/ Pacific Islander Mental Health Patients
in Los Angeles County by Mental Diagnosis, 1988-1989**

Race/Ethnicity	Major Depression	Schizo- phrenia	Adjust- ment Disorder	Psychoti c Disorder	Bipolar Disorder	Anxiety Disorder	Other
Total patients (n=83,682)	20.2%	18.6%	14.4%	11.0%	6.7%	4.4%	24.7%
Total API patients (n=3,324)	24.1	23.6	12.6	9.8	5.7	5.3	18.9
Indochinese (n=665)	37.5	14.2	9.7	6.4	3.3	9.8	19.1
Chinese (n=598)	25.4	25.1	14.2	9.5	4.7	4.9	16.2
Japanese (n=532)	18.3	30.4	14.1	8.0	6.3	3.1	19.8
Filipino (n=432)	18.6	25.4	13.2	11.3	7.9	4.1	19.5
Korean (n=399)	23.7	23.4	7.4	11.2	7.1	5.1	22.1
Other (n=698)	18.6	24.9	15.3	12.7	6.2	3.7	18.6

Source: Kim-Goh M, Yamamoto J, Suh C. 1994. "Characteristics of Asian/Pacific Islander Psychiatric Patients in a Public Mental Health System." *Asian American and Pacific Islander Journal of Health* 2(2):125-132, Tables 1 and 2. The study population consisted of all Asian and Pacific Islander (API) patients seen in all Los Angeles County mental health facilities between 1988 and 1989. Data were abstracted from the Los Angeles County Department of Mental Health's Automated Information System. API comprise about 11 percent of the Los Angeles County population and about 4 percent of the county mental health patients. Los Angeles County mental health staff include ethnic therapists who are bilingual and bicultural. The analysis was based on 3,324 API patients (47 percent male and 53 percent female). The largest group of API patients (20 percent) were Indochinese (e.g., Cambodian, Hmong, Laotian, and Vietnamese). Other large API groups were Chinese (18 percent), Japanese (16 percent), Filipinos (13 percent), and Koreans (12 percent). The primary language for 64 percent of the API patients was an Asian language. Almost half (44 percent) of the API patients were age 30 or younger.

**INPATIENT MENTAL HEALTH TREATMENT
BY DIAGNOSIS AND RACE/ETHNICITY**

- ! In 1986, a higher percentage of Whites (36 percent) were admitted to specialty mental health inpatient facilities with affective disorders than were Blacks (19 percent).
- ! Blacks (34 percent) who were admitted to specialty mental health inpatient facilities were more likely to have a diagnosis of schizophrenia than Whites (20 percent).

**Specialty Mental Health Care Inpatient Admissions
by Diagnosis and Race/Ethnicity, 1986**

Diagnosis	White*	Black*	Hispanic*
Total	100.0%	100.0%	100.0%
Affective disorders**	35.8	18.7	27.6
Schizophrenia	19.6	34.2	21.3
Alcohol disorders	12.9	19.2	13.0
Drug disorders	5.5	9.7	17.3
Other disorders	26.2	18.2	20.8

* Whites and Blacks may also be Hispanic; Hispanics may be of any race.

** Affective disorders include major depression and manic episodes.

Source: SAMHSA, Center for Mental Health Services (CMHS), 1986 Client/Patient Sample Survey (CPSS). CPSS is a sample of clients/patients within all specialty mental health organizations that offer inpatient, outpatient, or partial care services as identified in the CMHS biennial Inventory of Mental Health Organizations/General Hospital Mental Health Services. The inventory comprises all specialty treatment providers that can be identified by the States and by national mental health provider associations. Clients admitted to specialty mental health treatment facilities include some substance abusers. Inpatient care includes the mental health services of State and county mental hospitals, private psychiatric hospitals, multiservice mental health organizations, Veterans Administration medical centers, and non-Federal general hospitals; residential treatment was excluded.

**AMBULATORY MENTAL HEALTH TREATMENT
BY DIAGNOSIS AND RACE/ETHNICITY**

- ! In 1986, 24 percent of Whites and 12 percent of Blacks who were admitted into specialty mental health ambulatory care had an adjustment disorder diagnosis.
- ! There was a higher percentage of Whites (16 percent) who were admitted into specialty mental health ambulatory care with an affective disorder than there were Blacks (10 percent) who were admitted with this diagnosis.
- ! There were three times more Blacks (22 percent) in specialty mental health ambulatory care with a schizophrenia diagnosis than there were Whites or Hispanics (7 percent each) with this diagnosis.

**Specialty Mental Health Care Ambulatory Admissions
by Diagnosis and Race/Ethnicity, 1986**

<u>Diagnosis</u>	<u>White*</u>	<u>Black*</u>	<u>Hispanic*</u>
Total	100.0%	100.0%	100.0%
Adjustment disorder	24.1	12.0	19.3
Affective disorders**	15.5	9.8	17.7
Alcohol disorders	9.6	8.1	8.3
Schizophrenia	6.8	22.0	6.8
Drug disorders	2.6	6.0	3.9
Other disorders	41.4	42.1	44.0

* Whites and Blacks may also be Hispanic; Hispanics may be of any race.

** Affective disorders include major depression and manic episodes.

Source: SAMHSA, Center for Mental Health Services (CMHS), 1986 Client/Patient Sample Survey (CPSS). CPSS is a sample of clients/patients within all specialty mental health organizations that offer inpatient, outpatient, or partial care services as identified in the CMHS biennial Inventory of Mental Health Organizations/General Hospital Mental Health Services. The inventory comprises all specialty treatment providers that can be identified by the States and by national mental health provider associations. Clients admitted to specialty mental health treatment facilities include some substance abusers. Ambulatory care includes the outpatient and partial care mental health services of State and county mental hospitals, private psychiatric hospitals, multiservice mental health organizations, Veterans Administration medical centers, non-Federal general hospitals, residential treatment centers for emotionally disturbed children, free-standing outpatient clinics, and freestanding partial care programs.

MENTAL HEALTH HOSPITAL CARE - MICHIGAN CHILDREN IN MEDICAID PROGRAM

- ! In Michigan, the mean age of nondisabled Medicaid children under age 19 who were hospitalized for psychiatric treatment in 1990 was 13.7 years.
- ! The mean length of stay for the five most frequent inpatient psychiatric diagnoses varied from 40.7 days for adjustment reaction (ICD Code 309) to 116.8 days for a diagnosis of conduct disturbance not elsewhere classified (ICD-9 Code 313).
- ! About 23 percent of the hospital stays by nondisabled Medicaid children and adolescents were for a diagnosis of affective psychosis (ICD-9 Code 296).

Characteristics of Hospital Stay for Nondisabled Children Under Age 19 in Michigan Medicaid Population by Psychiatric Diagnosis*, 1990

Psychiatric Diagnosis	Mean Age (Yrs)	Percent of Total Stays	Mean Cost** per Stay	Mean Length of Stay (Days)
All psychiatric diagnosis	13.7	100.0	\$14,740	59.7
Affective psychoses	14.8	23.1	12,509	49.5
Neurotic disorders	14.1	16.0	13,484	56.2
Adjustment reaction	13.8	19.0	11,186	40.7
Emotional disturbance specific to childhood and adolescence	13.4	8.3	20,854	90.0
Conduct disturbance not elsewhere classified	13.1	10.3	26,352	116.8

*These 5 diagnoses accounted for 77 percent of inpatient psychiatric stays in Michigan. **Includes payment by other third-party sources.

Source: Buck JA. 1997. Utilization of Medicaid Mental Health Services by Nondisabled Children and Adolescents. *Psychiatric Services*, 48(1):65-70. This study used the 1990 data from the Medicaid Analysis Project for Four States sponsored by HCFA. Michigan and Tennessee were chosen for the analysis because of their high quality data, demographic diversity, and relatively low rates of Medicaid managed care in 1990. The eligible study population consisted of nondisabled mental health services claimants under age 19 who were continuously enrolled in Medicaid throughout 1990. Medicaid mental health services included alcohol and drug abuse treatment. About 75 percent of the study population in each state qualified for Medicaid through AFDC. Excluded were those who qualified for Medicaid through Supplemental Security Income. About 5 percent of the general nondisabled Medicaid population under age 19 received mental health services in Michigan and 7 percent in Tennessee.

MENTAL HEALTH OUTPATIENT CARE - MICHIGAN CHILDREN IN MEDICAID PROGRAM

- ! In Michigan, 95 percent of the outpatient clinic visits, 33 percent of the outpatient hospital visits, and 18 percent of the outpatient physician visits by nondisabled Medicaid children and adolescents in 1990 were for psychiatric treatment.
- ! The percent of outpatient visits by Medicaid nondisabled children and adolescents in 1990 for psychiatric treatment increased with age for all service types until the 10-14 age group and then declined.

Percent of Outpatient Visits for Mental Disorders* by Nondisabled Children Under Age 19 Michigan Medicaid Population by Age Group and Service Type, 1990

Outpatient Service Type	Age 1-4 Years	Age 5-9 Years	Age 10-14 Years	Age 15-18 Years	Total**
Clinic	76%	97%	98%	90%	95%
Outpatient hospital	12	29	46	35	33
Physician	9	19	23	16	18

*Percent of visits for which a diagnosis of mental disorder (other than dementia or retardation) was given.**Includes children less than one year of age.

Source: Buck JA. 1997. Utilization of Medicaid Mental Health Services by Nondisabled Children and Adolescents. *Psychiatric Services*, 48(1):65-70. This study used the 1990 data from the Medicaid Analysis Project for Four States sponsored by HCFA. Michigan and Tennessee were chosen for the analysis because of their high quality data, demographic diversity, and relatively low rates of Medicaid managed care in 1990. The eligible study population consisted of nondisabled mental health services claimants under age 19 who were continuously enrolled in Medicaid throughout 1990. Medicaid mental health services included alcohol and drug abuse treatment. About 75 percent of the study population in each state qualified for Medicaid through AFDC. Excluded were those who qualified for Medicaid through Supplemental Security Income. About 5 percent of the general nondisabled Medicaid population under age 19 received mental health services in Michigan and 7 percent in Tennessee.

MENTAL HEALTH HOSPITAL CARE - TENNESSEECHILDREN IN MEDICAID PROGRAM

- ! In Tennessee, the mean age of nondisabled Medicaid children under age 19 who were hospitalized for psychiatric treatment in 1990 was 14.2 years.
- ! The mean length of stay for the five most frequent inpatient psychiatric diagnoses varied from 35.6 days for adjustment reaction (ICD-9 Code 309) to 50.6 days for conduct disturbance not elsewhere classified (ICD-9 Code 312).

Characteristics of Hospital Stays for Nondisabled Children Under Age 19 in Tennessee Medicaid Population, by Psychiatric Diagnosis*, 1990

Psychiatric Diagnosis	Mean Age (Yrs)	Percent of Total Stays	Mean Cost** per Stay	Mean Length of Stay (Days)
All psychiatric diagnosis	14.2	100	\$9,288	43.5
Affective psychoses	14.7	16.5	10,696	45.2
Neurotic disorders	14.3	11.4	8,870	41.1
Adjustment reaction	14.3	12.9	7,367	35.6
Emotional disturbance specific to childhood and adolescence	13.9	19.9	9,161	46.4
Conduct disturbance not elsewhere classified	13.5	11.7	9,876	50.6

*These 5 diagnoses accounted for 77 percent of inpatient psychiatric stays in Michigan.**Includes payment by other third-party sources.

Source: Buck JA. 1997. Utilization of Medicaid Mental Health Services by Nondisabled Children and Adolescents. *Psychiatric Services*, 48(1):65-70. This study used the 1990 data from the Medicaid Analysis Project for Four States sponsored by HCFA. Michigan and Tennessee were chosen for the analysis because of their high quality data, demographic diversity, and relatively low rates of Medicaid managed care in 1990. The eligible study population consisted of nondisabled mental health services claimants under age 19 who were continuously enrolled in Medicaid throughout 1990. Medicaid mental health services included alcohol and drug abuse treatment. About 75 percent of the study population in each state qualified for Medicaid through AFDC. Excluded were those who qualified for Medicaid through Supplemental Security Income. About 5 percent of the general nondisabled Medicaid population under age 19 received mental health services in Michigan and 7 percent in Tennessee.

MENTAL HEALTH OUTPATIENT CARE - TENNESSEECHILDREN MEDICAID PROGRAM

- ! In Tennessee, 93 percent of the outpatient clinic visits, 35 percent of the physician visits, and 8 percent of the outpatient hospital visits by nondisabled Medicaid children and adolescents in 1990 were for psychiatric treatment.
- ! Most of the outpatient clinic visits by nondisabled Medicaid children and adolescents at all ages (except those under age one year) were for psychiatric treatment.
- ! The percent of outpatient visits to a physician for mental health care by the nondisabled Medicaid children and adolescents increased with age.

Percent of Outpatient Visits for Mental Disorders* by Nondisabled Children Under Age 19, in Tennessee Medicaid Population by Age Group and Service Type, 1990

Outpatient Service Type	Age 1-4 Years	Age 5-9 Years	Age 10-14 Years	Age 15-18 Years	Total**
Clinic	93%	96%	94%	89%	93%
Outpatient\ hospital	3	4	12	12	8
Physician	16	31	47	43	35

*Percent of visits for which a diagnosis of mental disorder (other than dementia or retardation) was given. **Includes children less than one year of age.

Source: Buck JA. 1997. Utilization of Medicaid Mental Health Services by Nondisabled Children and Adolescents. *Psychiatric Services*, 48(1):65-70. This study used the 1990 data from the Medicaid Analysis Project for Four States sponsored by HCFA. Michigan and Tennessee were chosen for the analysis because of their high quality data, demographic diversity, and relatively low rates of Medicaid managed care in 1990. The eligible study population consisted of nondisabled mental health services claimants under age 19 who were continuously enrolled in Medicaid throughout 1990. Medicaid mental health services included alcohol and drug abuse treatment. About 75 percent of the study population in each state qualified for Medicaid through AFDC. Excluded were those who qualified for Medicaid through Supplemental Security Income. About 5 percent of the general nondisabled Medicaid population under age 19 received mental health services in Michigan and 7 percent in Tennessee.

by Grade	76, 80, 82
by Marital Status	156
by Mental Disorder	8
by Parental Status	156
by Population Density	72
by Race/Ethnicity	42, 44, 156
by Region	68
Crime	248
Deaths	182, 184, 218
Deaths by BAC	180
Family Stress	254
Heavy Drinking	80, 262, 264
Incidence (New Users)	28
Intoxication	50, 80
Pregnancy	156, 158
Problems	188, 262, 264, 266
Traffic Fatalities	180, 182, 184
Treatment	344, 346, 348, 350
Trends	28, 50, 54, 72, 76, 80, 82, 88
Use	20
Work Stress	256
Alcohol Abuse Disorder	
by Gender	224, 250, 252
Costs	172
Crime	250, 252
Outcomes	258
Alcohol Abuse Treatment	
Admissions	324
Ambulatory Care	426
by Coverage Limits	278
by Facility	324, 330
by Family Income	318
by Insurance	274, 314, 318
by Payer	268, 272
Coverage Limits	276
Detoxification	224
Impact	224
Inpatient Care	424
Length of Stay (LOS)	330
Alcohol, Drug and Mental Health (ADM)	
Costs	172, 174, 176, 270
Ambulatory Care	
Admissions	386, 398, 412
Alcohol Abuse Treatment	426
by Disorder	386, 412, 426
by Facility	326, 394, 396, 410
by Insurance	386, 388
by Mental Disorder	408
by Race/Ethnicity	388, 426
Coverage Limits	276, 278
Drug Abuse Treatment	426
Episodes	420
Length of Stay (LOS)	410
Mental Health	110, 112
Mental Health Treatment	104, 106, 108, 110, 112, 276, 278,
282, 386, 388, 394, 396, 398, 408, 410, 412, 414, 420, 426	
One-Day Census	326
Substance Abuse Treatment	282, 326, 426
Trends	398, 420
American Indian	346
Alcohol Trends	50, 164, 166
Behavioral Disorders	140
Children	50, 52, 84, 86, 134, 136, 140, 144, 164, 166
Comorbidity	140, 144
Drug Use Trends	52, 164, 166

Emotional Disorders									144
National Survey				50, 52, 84, 86, 164,					166
Substance Use	50, 52, 84, 86, 134,	136, 140, 144,							166
American Indian/Alaska Native								338,	346
Deaths				228, 230, 232,					234, 236
Stress									136
Suicide				228, 230, 232,					234, 236
Amphetamine								76,	374
by Drug Education									78
Trends							76, 82,		214
Amphetamine/Methamphetamine							76, 78, 82,		102
Antisocial Personality Disorder									114
by Gender									6
Anxiety Disorder									4
Agoraphobia	8, 114, 118, 120,	122, 130, 146,							160, 408
by Age									116
by Gender							6, 128,		154
by Race/Ethnicity									422
Generalized Anxiety	8, 114, 118, 120,	122, 146,							408
Obsessive-Compulsive									160
Panic	8, 114, 118, 120,	122, 130, 146,							160, 408
Simple Phobia							114, 128,		160
Social Phobia							114, 128,		160
Arizona							328, 352,		402
Phoenix				62, 66, 212,					220, 288
Arkansas							328, 352,		402
Asian/Pacific Islander								338,	346
Chinese									422
Deaths				228, 230, 232,					234, 236, 238
Filipino									422
Indochinese									422
Japanese									422
Korean									422
Suicide				228, 230, 232,					234, 236, 238
Assault						136, 162,			164, 166, 178
by College Drinking Level									262, 264
Physical Abuse								134,	136
Barbiturates									96, 102
Behavioral Disorders									138, 140
by Age, Sex, and Recent Substance Use									138, 140
Benzodiazepines									96, 102
Births									
to Teenagers									154
Black							56, 338,		346
California	60, 64, 286,						328, 352,		402
Anaheim-Santa Ana							62, 66,		288
Los Angeles	62, 66, 212,								220, 288, 422
Oakland							62, 66,		288
San Bernardino							62, 66,		288
San Diego	62, 66, 212,								220, 288
San Francisco								212,	220
CHAMPUS									
Alcohol Abuse Treatment									274
Drug Abuse Treatment									274
Mental Health Treatment									274
Children									
AIDS/HIV									192
Behavioral Problems									168
Emergency Room Episodes									210
Family Structure								150,	152
Substance Use	36, 46, 48, 150,								152, 168
Cigarettes							76, 78,		158
Adolescents									168
by Behavioral Problems									168
by Mental Disorder									8

by Metropolitan Statistical Area (MSA)	62
by Pregnancy Trimester	158
by State	60
Incidence (New Users)	24, 26
Trends	24, 26
Use	20
Client/Patient Sample Survey (CPSS)	382, 384, 386, 388, 404, 406, 410, 412, 424, 426
Co-existing Disorders	2, 10, 12, 14, 16, 17, 130
by Age	18, 246
by Facility	284
by Gender	154
Cocaine	76, 78, 96, 102, 162, 358, 374
Adolescents	48
by Disability Status and Age Group	58
by Drug Education	78
by Grade	76, 82
by Mental Disorder	8
Deaths	222
Emergency Room Episodes	204, 206, 208
Incidence (New Users)	34
Productivity	260
Treatment	344, 346, 348, 350
Trends	34, 48, 52, 76, 82, 208
Use	20, 22
Codeine	
Deaths	222
Colorado	328, 352, 402
Denver	62, 66, 212, 288
Community Mental Health Center (CMHC)	
Ambulatory Care	326
Inpatient Care	326
One-Day Census	326
Substance Abuse Treatment	326
Trends	390
Comorbidity	138, 140, 142, 144
Conduct Disorder	
by Gender	154
Connecticut	328, 352, 402
Correctional Facility	
Ambulatory Care	326
Inpatient Care	326
One-Day Census	326
Substance Abuse Treatment	326
Costs	
AIDS/HIV	172
Alcohol Abuse Disorder	170, 172
Alcohol, Drug and Mental Health (ADM)	270
by Mental Disorder	176
Cocaine Control	298
Crime	172, 174, 176
Drug Abuse Disorder	170, 172
Health Care	170, 178
Injuries by BAC	180
Mental Disorder	172, 174, 176
Per Capita	272
Productivity Loss	170, 172, 174, 176
Substance Abuse Disorder	170, 316
Trends	170, 270
Counselors	
Substance Abuse Treatment	322
Crime	132, 160, 162, 170, 172, 174, 176, 178
Assault	244, 246
Burglary	244, 246
Costs	170, 172, 174, 176

Driving While Intoxicated (DWI)	162, 244, 246
Drug Offenses	244, 246, 248, 364
Drug Possession	244, 246
Drug Trafficking	244, 246
Felony	250, 252
Fraud	244, 246
Homicide	226, 228, 244, 246
Larceny/Theft	244, 246
Misdemeanor	250, 252
Motor Vehicle Theft	244, 246
Property Offenses	244, 246, 248
Public-Order Offenses	244, 246, 248
Robbery	244, 246
Sexual Assault	244, 246
Stolen Property	244, 246
Violent Offenses	244, 246, 248, 364
Deaths	
Accidents	226
Alcohol Abuse	238
Alcohol-Related	180, 182, 184, 218, 224, 226, 238
All Causes	228, 238
by Alcohol Abuse Treatment Completion	224
Cocaine-Related	222
Codeine-Related	222
Costs by Mental Disorder	172, 176
Diet/Activity-Related	218
Drug Abuse	222
Firearms-Related	218
Heroin-Related	222
Mean Age	216
Mental Disorder-Related	216, 226, 228, 230, 232, 234, 236, 238
Methamphetamine	220
Microbial Agents-Related	218
Organic Mental Disorders-Related	216
Preventable	218
Psychotic Disorder-Related	216
Sexual Behavior-Related	218
Substance Abuse-Related	216, 218, 226, 238
Suicide	228, 230, 232, 234, 236, 238
Tobacco-Related	218
Toxic Agents-Related	218
Traffic Fatalities	182, 184, 218
Trends	222
Veterans	224
Delaware	328, 352, 402
Depression	114
Ambulatory Care	408
by Age	118, 120
by Crime	160, 162
by Employment Status	146
by Gender	120, 124, 126, 154, 250, 252
by Illicit Drug	8
by Race/Ethnicity	122, 124, 422
Crime	250, 252
Detoxification Facility	
Admissions	324
by Type	324
Substance Abuse Treatment	324
Disability Status	
Drug Use by Age Group	58
Disorder	
Adjustment	382, 412, 422, 426, 428, 432, 434
Affective	4, 6, 114, 116, 382, 386, 406, 412, 424, 426, 428, 432, 434
Agoraphobia	8, 114, 118, 120, 122, 130, 146, 160, 408
Alcohol Abuse	238, 250, 252, 258, 406, 424, 426

Antisocial Personality	6, 114
Anxiety	4, 6, 114, 116, 128, 154, 422
Attention Deficit Hyperactivity	138, 140
Co-existing	2, 10, 12, 14, 16-18, 130, 154, 246, 284
Conduct	154
Conduct Disorder	138, 140
Depression	8, 114, 118, 120, 122, 124, 126, 130, 146, 154, 160, 162, 238, 250, 252, 408, 422
Drug Abuse	250, 252, 406, 424, 426
Dysthymia	114
Generalized Anxiety	8, 114, 118, 120, 122, 146, 408
Mood Disorders	112
Neurotic	428, 432, 434
Non Affective Psychosis	6, 114
Oppositional (defiant) Disorder	138, 140
Panic	8, 114, 118, 120, 122, 130, 146, 160, 366, 408
Personality	382, 386, 412
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