

Serious Mental Illness and Its Co-Occurrence with Substance Use Disorders, 2002

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Highlights

This report presents information on the prevalence and treatment of serious mental illness (SMI) and their association with substance use and co-occurring substance use disorders based on the 2002 National Survey on Drug Use and Health (NSDUH). The survey, formerly known as the National Household Survey on Drug Abuse (NHSDA), is a project of the Substance Abuse and Mental Health Services Administration (SAMHSA). For this report, a substance use disorder is defined as dependence on or abuse of alcohol or illicit drugs.

NSDUH is an annual survey of the civilian, noninstitutionalized population of the United States aged 12 years old or older. Conducted by the Federal Government since 1971, it is the primary source of statistical information on the use of illegal drugs by the U.S. population. Estimates in this report are based on data from the 2002 survey for adults aged 18 or older. Because of changes to the 2002 survey, this report's estimates should not be compared with estimates from previous survey years.

National estimates for the prevalence and treatment of SMI are presented. The prevalence of treatment for substance use and mental health disorders among persons with SMI and co-occurring substance use disorders also is examined by demographic, socioeconomic, substance use, and substance dependence or abuse characteristics.

Serious Mental Illness

- In 2002, there were 17.5 million adults aged 18 or older with SMI during the 12 months prior to being interviewed. This represents 8.3 percent of all adults in the United States. On average, adults with SMI were younger, less educated, and more likely to be female than adults without SMI (Table B.1a).
- Adults with SMI were more likely to be either unemployed or not in the labor force (36.4 percent) than were persons without SMI (31.2 percent) (Table B.1b).
- Of the three age groups considered in this report, adults aged 18 to 25 had the highest rate of SMI (13.2 percent), followed by adults aged 26 to 49 (9.5 percent) and adults aged 50 or older (4.9 percent) (Table B.3b).
- Overall, the rate of SMI was almost twice as high among females (10.5 percent) as it was among males (6.0 percent) (Table B.3b).
- The two racial/ethnic groups with the highest prevalence of SMI were those reporting more than one race (13.6 percent) and American Indians and Alaska Natives (12.5 percent) (Table B.3b).
- In 2002, there were 5 million adults aged 18 or older who had SMI and used an illicit drug in the past year. This represented 28.9 percent of all persons with SMI (Table B.6a).

- The prevalence of SMI was more than twice as high among those who used an illicit drug during the past year than it was among those who did not (17.1 vs. 6.9 percent). This relationship was observed across most demographic and socioeconomic subgroups and across most types of illicit drugs used (Table B.9b).
- Although the rate of SMI did not vary by past year alcohol use (8.5 percent for users vs. 8.0 percent for nonusers), adults who were heavy alcohol users in the past month were more likely to have SMI than those without heavy alcohol use in the past month (11.1 vs. 8.1 percent) (Table B.11b).

Co-Occurrence of Serious Mental Illness and Substance Use Disorder

- In 2002, there were 33.2 million adults aged 18 or older with SMI or a substance use disorder. Of these adults, 13.4 million (40.4 percent) had only SMI, 15.7 million (47.4 percent) had only a substance use disorder, and 4.0 million (12.2 percent) had SMI and a substance use disorder (Table B.12b).
- The 4.0 million adults with SMI and a substance use disorder represented 23.2 percent of all adults with SMI and 20.4 percent of all adults with a substance use disorder in 2002 (Tables B.12a and B.16b).
- Rates of SMI were relatively low among adults who did not have a substance use disorder. The rate of SMI was 7.0 percent among adults with no substance use disorder. The rate was much higher among those with alcohol dependence or abuse (19.0 percent) and was even higher among those with illicit drug dependence or abuse (29.1 percent). The rate of SMI was highest among adults who met the criteria for both drug and alcohol dependence or abuse (30.1 percent) (Table B.17b).
- Adults with illicit drug dependence or abuse in the past year were more likely to have SMI in the past year than adults who used illicit drugs but did not have dependence or abuse (Table B.M1).
- Adults with past year illicit drug use who were not dependent on or abusing illicit drugs were more likely to have SMI in the past year than adults with no illicit drug use (OR = 1.4) (Table B.M1).
- Adults with alcohol dependence or abuse were more likely to have SMI than adults who had used alcohol but did not have dependence or abuse (OR = 2.0) (Table B.M1).
- Adults with nicotine (cigarette) dependence in the past year had higher odds of having SMI than those without nicotine (cigarette) dependence (OR = 1.5) (Table B.M1).

Treatment for Mental Health and Substance Use Problems

- In 2002, an estimated 8.4 million, or 48 percent, of the 17.5 million adults with SMI received treatment in the 12 months prior to the interview. When compared with adults with SMI who did not receive treatment, these adults were more likely to belong to the following sociodemographic groups: aged 26 or older, female, non-Hispanic whites, or college graduates (Tables B.18a and B.18b).
- Among adults with SMI but no substance use disorder, almost half (48.4 percent) received treatment for their mental health problem in the past year (Table B.25b).
- There was very little difference in the prevalence of treatment for a mental health problem in the past 12 months among adults with SMI by whether they did or did not have a substance use disorder. However, the prevalence of past year specialty substance use treatment was higher among adults with SMI and a substance use disorder than among adults with only a substance use disorder (13.7 vs. 5.4 percent, respectively) (Table B.23b).
- The rate of treatment for a mental health problem among adults with SMI but no substance use disorder was roughly 9 times higher than the rate of specialty substance use treatment among adults with a substance use disorder but no SMI (48.4 vs. 5.4 percent) (Figure 21). Although 48.0 percent of the adults with both a mental health and substance use disorder received some type of treatment, only 11.8 percent of these adults received both types of services (Tables B.23a and B.23b).
- Among adults with SMI, adults aged 26 to 49 were more likely to receive treatment for their mental health problem than those aged 50 or older (OR = 1.7) (Table B.M2).
- Females with SMI were more likely to receive treatment for their mental health problem than men with SMI, and non-Hispanic whites were more likely to receive treatment for their mental health problem than any other racial/ethnic group (Table B.M2).
- The results of modeling showed that when controlling for confounding variables, illicit drug or alcohol dependence or abuse was not associated with receipt of treatment for a mental health problem among adults with SMI (Table B.M2).

1. Introduction

1.1. Purpose of This Report

Estimates of the prevalence of serious mental illness (SMI) provide a measure of the population with the most severe mental health problems and indicate those persons who are most in need of treatment. SMI is defined in this report as having at some time in the past year a diagnosable mental, behavioral, or emotional disorder that met the criteria specified in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV) (American Psychiatric Association [APA], 1994), that resulted in functional impairment that substantially interfered with or limited one or more major activities. Studies have shown that mental disorders co-occurring with substance use disorders are more chronic than mental disorders alone and that the co-occurrence between a mental disorder and a substance use disorder can create serious complications for treatment (Kranzler & Liebowitz, 1988). Adults with SMI and a co-occurring substance use disorder may have a greater need for treatment than adults with a less severe mental disorder co-occurring with a substance use disorder.

This report presents national estimates from the 2002 National Survey on Drug Use and Health (NSDUH)¹ of the prevalence and treatment of SMI and of co-occurring SMI and substance use disorders (dependence on or abuse of illicit drugs or alcohol) among adults aged 18 or older. The prevalence of treatment for substance use and mental health problems among persons with co-occurring SMI and substance use disorders also is examined by socioeconomic and demographic characteristics. The following is a list of the major research questions addressed by this report.

- What are the characteristics of adults with SMI, and how do they differ from those without SMI?
- What are the characteristics of adults with SMI who use illicit drugs, and how do they differ from those who do not use illicit drugs?
- Does the prevalence of SMI vary by the use of specific substances, including the use of specific illicit drugs?
- What are the characteristics of persons with SMI and a co-occurring substance use disorder, and how are they different from adults with SMI who do not have a substance use disorder?
- What are the characteristics of adults with SMI who received mental health treatment in the past year, and how are they different from adults with SMI who did not receive treatment in the past year?
- Are adults with SMI who also used illicit drugs more likely to receive mental health treatment than those with SMI who did not use illicit drugs?

¹ Prior to 2002, NSDUH was named the National Household Survey on Drug Abuse (NHSDA).

- Are adults with SMI and a co-occurring substance use disorder more likely to receive mental health treatment than adults with only SMI?
- Are adults with SMI and a co-occurring substance use disorder more likely to receive specialty substance abuse treatment than those with only a substance use disorder?

1.2. Background on the Definition of Serious Mental Illness

Public Law (P.L.) 102-321, the Alcohol, Drug Abuse, and Mental Health Administration (ADAMHA) Reorganization Act, established a block grant for States to fund community mental health services for adults with SMI. The law required States to include incidence and prevalence estimates in their annual applications for block grant funds. The law also required SAMHSA to develop an operational definition of SMI and to establish an advisory group of technical experts to develop an estimation methodology based on this definition for use by the States. The definition of SMI stipulated in P.L. 102-321 requires the person to have at least one 12-month disorder, other than a substance use disorder, that met DSM-IV criteria (APA, 1994) and to have "serious impairment." A SAMHSA advisory group suggested that the term "serious impairment" be defined as impairment equivalent to a Global Assessment of Functioning (GAF) score of less than 60 (Endicott, Spitzer, Fleiss, & Cohen, 1976).

1.3. Prior Estimates of Serious Mental Illness and Its Co-Occurrence with a Substance Use Disorder and Treatment

Based on the definition presented in Section 1.2, a group of technical experts developed a methodology for estimating SMI (Kessler et al., 1996a) that used data from the National Comorbidity Survey (NCS) and the Baltimore Epidemiologic Catchment Area (ECA) survey. Using this methodology, they estimated that 10.0 million adults aged 18 or older had SMI in 1990 (5.4 percent of adults). Furthermore, they estimated that 1.1 percent of adults had both SMI and a substance use disorder. This represents 14.7 percent of all adults with SMI and 17.2 percent of all adults with a substance use disorder. They also estimated that 46.6 percent of the persons with SMI used professional services for a mental health problem in the 12 months prior to the interview.

Questions to measure SMI were added by SAMHSA to the NSDUH for the first time in 2001 (Office of Applied Studies [OAS], 2002). These questions, which asked respondents how frequently they experienced symptoms of psychological distress, were based on a methodological study designed to evaluate several screening scales for measuring SMI in the NSDUH. Based on this study, which included clinical assessments on survey respondents, these questions were shown to be a valid indicator of SMI (Kessler et al., 2003). Although estimates of SMI were produced for 2001, due to changes in the study, the 2001 estimates cannot be compared with estimates from 2002, which are presented in this report. (See Section 2.1 for further details on the reasons why they cannot be compared.)

1.4. Prior Estimates of Co-Occurring Disorders

Although this report focuses on the population with the most severe mental problems, there also is interest in the larger population with any mental disorder and the co-occurrence of

substance use disorders among its members. According to a U.S. Surgeon General's report, co-occurring disorders have been estimated to affect from 7 million to 10 million adult Americans in any year (U.S. Department of Health and Human Services [DHHS], 1999; see also SAMHSA National Advisory Council, 1998). An estimated 41 to 65 percent of persons with a lifetime substance use disorder have a lifetime history of at least one mental disorder, and about 51 percent of those with one or more lifetime mental disorders also have a lifetime history of at least one substance use disorder (U.S. DHHS, 1999). Studies in both clinical samples (Ross, Glaser, & Germanson, 1988; Rounsaville et al., 1991; Wolf et al., 1988) and general population studies (Boyd et al., 1984; Helzer & Pryzbeck, 1988; Kessler et al., 1994; Regier et al., 1990) show that comorbidity is highly prevalent among individuals with mental disorders.

Data on co-occurring disorders can be obtained from the NCS, the ECA, and the NHSDA. These surveys define mental disorders and substance use disorders based on meeting specific DSM-IV criteria (APA, 1994). The NCS, carried out between 1990 and 1992, surveyed a nationally representative sample of persons aged 15 to 54. It found that 42.7 percent of individuals with a 12-month addictive disorder had at least one mental disorder, and 14.7 percent of individuals with a mental disorder had at least one 12-month addictive disorder (Kessler et al., 1996b). The ECA was carried out between 1980 and 1984 in five geographic areas and included adults aged 18 or older living in the community and various institutional settings. It reported that 47 percent of persons with schizophrenia also had a substance use disorder in their lifetime and 61 percent of individuals with a bipolar disorder also had a substance use disorder in their lifetime (Regier et al., 1990). The 1994 through 1997 NHSDAs included questions on four mental disorders in addition to questions to measure dependence on alcohol or illicit drugs. The 1994 survey found that 19 million adults in the population had dependence on illicit drugs or alcohol, and among these individuals, 13 percent had a major depressive episode disorder, 5.9 percent had a panic attack, 3.8 percent had a generalized anxiety disorder, and 3.7 percent had agoraphobia in the past year (OAS, 1996).

1.5. Organization of This Report

This report is divided into five chapters. NSDUH measures and statistical methods are described in Chapter 2. Chapter 3 presents findings on the prevalence and correlates of SMI among adults, including substance use and substance use disorders. Chapter 4 presents findings on the prevalence of mental health treatment and substance use treatment among adults with SMI and a substance use disorder. A summary and conclusions are presented in Chapter 5. Appendices provide technical details on the survey methodology and selected tables.

2. Data and Methods

2.1. Summary of National Survey on Drug Use and Health

This report uses data on adults aged 18 or older from the 2002 National Survey on Drug Use and Health (NSDUH). NSDUH is an annual survey of the civilian, noninstitutionalized population of the United States aged 12 or older. Prior to 2002, the survey was called the National Household Survey on Drug Abuse (NHSDA).

NSDUH is the primary source of statistical information on the use of illegal drugs by the U.S. population. Conducted by the Federal Government since 1971, the survey collects data by administering questionnaires to a representative sample of the population through face-to-face interviews at the respondents' places of residence. The survey is sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA) and is planned and managed by SAMHSA's Office of Applied Studies (OAS). The data collection is conducted by RTI International. This section briefly describes the survey methodology. A more complete description is provided in Appendix A.

NSDUH collects information from residents of households, noninstitutional group quarters (e.g., shelters, rooming houses, dormitories), and civilians living on military bases. Persons excluded from the survey include homeless persons who do not use shelters, military personnel on active duty, and residents of institutional group quarters, such as jails and hospitals.

Since 1999, the NSDUH interview has been carried out using computer-assisted interviewing (CAI). The survey uses a combination of computer-assisted personal interviewing (CAPI) conducted by an interviewer and audio computer-assisted self-interviewing (ACASI). Use of ACASI is designed to provide a respondent with a highly private and confidential means of responding to questions and to increase the level of honest reporting of illicit drug use and other sensitive behaviors.

Consistent with the 1999 through 2001 surveys, the 2002 NSDUH employed a 50-State sample design with an independent, multistage area probability sample for each of the 50 States and the District of Columbia. The eight States with the largest population (which together account for 48 percent of the total U.S. population aged 12 or older) were designated as large sample States (California, Florida, Illinois, Michigan, New York, Ohio, Pennsylvania, and Texas). For these States, the design provided a sample sufficient to support direct State estimates. For the remaining 42 States and the District of Columbia, smaller, but adequate, samples were selected to support State estimates using small area estimation (SAE) techniques. The design also oversampled youths and young adults, so that each State's sample was approximately equally distributed among three major age groups: 12 to 17 years, 18 to 25 years, and 26 years or older.

Nationally, 136,349 addresses were screened for the 2002 survey, and 68,126 completed interviews were obtained. Among adults aged 18 or older, 54,351 persons were selected, with 44,467 interviews completed. The survey was conducted from January through December 2002. Weighted response rates for household screening and for interviewing were 90.7 and 78.9

percent, respectively; the weighted interview response rate for adults aged 18 or older was 77.2 percent.

Although the design of the 2002 NSDUH is similar to the design of the 1999 through 2001 surveys, important methodological differences in the 2002 survey affect the 2002 estimates. Besides the name change, each NSDUH respondent was given an incentive payment of \$30. These changes, both implemented in 2002, resulted in a substantial improvement in the survey response rate. The changes also affected respondents' reporting of many critical items that are the basis of prevalence measures reported by the survey each year. Further, the 2002 data could have been affected by improved data collection quality control procedures that were introduced in the survey beginning in 2001. In addition, new population data from the 2000 decennial census recently became available for use in NSDUH sample weighting procedures, resulting in another discontinuity between the 2001 and 2002 estimates. Analyses of the effects of each of these factors on NSDUH estimates have shown that 2002 data should not be compared with 2001 and earlier NHSDA data to assess changes over time.

2.2. Limitations of the Data

All data from NSDUH are based on retrospective reports by survey respondents and are subject to recall and reporting biases. First, some degree of underreporting on drug use, mental health problems, and mental health treatment measures might occur because of the social unacceptability of drug use and the stigma of mental health problems and treatment. Self-reported data also are influenced by memory and recall errors, including recall decay (tendency to forget events occurring long ago) and forward telescoping (tendency to report that an event occurred more recently than it actually did).

Second, the NSDUH target population focuses on civilian, noninstitutionalized household residents. Although it includes almost 98 percent of the U.S. population aged 12 or older, some population subgroups that may have different drug-using patterns are excluded, such as active military personnel, people living in institutional group quarters, and homeless persons not living in identifiable shelters. Thus, generalization of the findings to the excluded subgroups is limited. Further, the estimates for drug use should be considered conservative.

See Appendix A for additional discussion of data limitations, including the effect of nonresponse on analyses presented in this report.

2.3. Measures and Statistical Methods

2.3.1 Definition and Measurement of Serious Mental Illness

Serious mental illness, or SMI, is defined in this report according to the definition stipulated in Public Law (P.L.) 102-321, that is, having at some time during the past year a diagnosable mental, behavioral, or emotional disorder that met the criteria in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th edition (DSM-IV) (American Psychiatric Association [APA], 1994) and resulted in functional impairment that substantially interfered with or limited one or more major life activities.

SMI was assessed in the 2002 NSDUH using the six-item K6 scale (Kessler et al., 2003) that was used for the first time in 2001. These six questions ask respondents how frequently they experienced symptoms of psychological distress during the 1 month in the past year when they were at their worst emotionally. This scale has been shown to be a valid indicator of SMI, based on clinical assessments done on survey respondents (Kessler et al., 2003). The six questions and a discussion of the scale are given in Appendix A.

2.3.2 Definition of Substance Use Disorder and Nicotine (Cigarette) Dependence

In this study, an adult is defined as having a substance use disorder in the past year if he or she was dependent on or abused alcohol or an illicit drug in the past year. The 2002 NSDUH included a series of questions to assess dependence on or abuse of an illicit drug or alcohol based on DSM-IV criteria (APA, 1994). The seven substance dependence criteria are (1) tolerance; (2) withdrawal or avoidance of withdrawal; (3) persistent desire or unsuccessful attempts to cut down or stop substance use; (4) spending a lot of time using the substance, obtaining the substance, or recovering from its effects; (5) reducing or giving up occupational, social, or recreational activities in favor of substance use; (6) impaired control over substance use; and (7) continuing to use the substance despite physical or psychological problems. A respondent was considered to be dependent on a substance when he or she reported having at least three of the dependence criteria.

The four substance abuse criteria are (1) having serious problems due to substance use at home, work, or school; (2) the use of that substance putting the respondent in physical danger; (3) substance use causing the respondent to be in trouble with the law; and (4) continuing to use the substance despite having substance use-related problems with family and friends. A respondent was classified with abuse when he or she reported having at least one of the four abuse criteria.

The 2002 NSDUH included a series of questions to assess nicotine (cigarette) dependence based on the Nicotine Dependence Syndrome Scale (NDSS) (Shiffman, Hickcox, Gnys, Paty, & Kassel, 1995; Shiffman, Paty, Kassel, Gnys, & Zettler-Segal, 1994; Shiffman, Waters, & Hickcox, 2003) and the Fagerstrom Test of Nicotine Dependence (FTND) (Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991). A respondent was classified with nicotine (cigarette) dependence based on criteria derived from the NDSS and the FTND.

2.3.3 Definitions of Mental Health Treatment and Substance Use Treatment

Mental health treatment is defined as treatment or counseling for problems with emotions, nerves, or mental health in any inpatient or outpatient setting or use of prescription medication to treat a mental or emotional condition in the 12 months prior to the interview.

Specialty substance use treatment (for alcohol or illicit drug use) is treatment received at a specialty substance abuse facility to reduce or stop drug or alcohol use, or for medical problems associated with the use of drugs or alcohol in the past 12 months. "Specialty" substance abuse facilities include rehabilitation facilities (inpatient or outpatient), hospitals (inpatient services only), or mental health centers. "Any treatment" refers to treatment received to reduce or stop drug or alcohol use, or for medical problems associated with the use of drugs or alcohol in

the past 12 months at any location, including specialty facilities and emergency rooms, private doctor's offices, self-help groups, or prison/jails.

2.3.4 Social and Demographic Variables

The following set of social and demographic variables were included in both the descriptive analyses and the logistic regression models. The categories of the variable are in italics:

- age of the respondent (at the time of the interview);
- gender: *male and female*;
- Hispanic origin and race: *non-Hispanic whites, non-Hispanic blacks, Hispanics, and "other"* ("other" race/ethnicity includes American Indian, Alaska Native, Native Hawaiian or Other Pacific Islander, Asian, and two or more races);
- education (last grade completed): *less than high school, high school graduate, some college, or college graduate*;
- family income (reported total family income for the previous calendar year): *less than \$20,000, \$20,000 to \$49,999, \$50,000 to \$74,999, or \$75,000 or more*;
- health insurance (currently): *private, Medicaid/Children's Health Insurance Plan (CHIP),¹ "other," no coverage* ("other" includes Medicare, CHAMPUS, TRICARE, CHAMPVA, the VA, military health care, or any other type of health insurance);
- marital status: *widowed, divorced or separated, never married, and married*;
- employment (currently): *unemployed, currently employed, or "other"* ("other" includes persons who are not in the labor force, defined as not having a job or business and making no specific effort to find work in the past 30 days, such as those who are retired, homemakers, students, and others not looking for work);
- geographic region: *Northeast, Midwest, South, and West*;
- overall health (perceived health): *fair/poor, good, very good, and excellent*;
- county type: *large metropolitan statistical areas (MSAs) with a population of 1 million or more, small MSAs with a population of less than 1 million, and nonmetropolitan areas outside of MSAs*; and

¹ CHIP is only available for persons aged 19 or younger; therefore, the term "Medicaid" is used in this report to refer to health insurance for those aged 20 or older, but "Medicaid/CHIP" is used for those aged 19 or younger.

- social support, which was based on three questions inquiring how many friends, not including family members, a person had for three different categories of friends (a person was defined as having social support if he or she reported having two or more friends for at least one of the following three categories: friends with whom they shared personal issues and concerns, friends they spent time with on shared interests and activities, and friends they really liked and cared about).

2.3.5 Use of Alcohol, Cigarettes, Tobacco, and Illicit Drugs

Use of alcohol refers to any use of alcohol in the past 12 months. Binge alcohol use is defined as drinking five or more drinks on the same occasion on at least 1 day in the past 30 days. Heavy alcohol use is defined as drinking five or more drinks on the same occasion on at least 5 days in the past 30 days.

Cigarette use refers to the use of cigarettes on at least 1 day in the 12 months preceding the interview date.

Illicit drug use is defined as any use in the past year of the following drugs: marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any nonmedical use of a prescription-type psychotherapeutic. Psychotherapeutics includes pain relievers, tranquilizers, stimulants, or sedatives and does not include any over-the-counter drugs.

2.4. Statistical Methods

The statistical analysis used descriptive statistics to characterize the prevalence and distribution of SMI and of treatment for SMI, and logistic regression models were used to predict SMI and treatment for SMI. The descriptive analysis produced prevalence rates and percent distributions by various explanatory variables, while the logistic regression modeling produced odds ratios (ORs) in the prevalence rates for each of the explanatory variables. All estimates were weighted, and all standard errors (SEs) were calculated using Taylor series linearization for nonlinear statistics and an approach that recognized the sample structure. The software package used was SUDAAN[®] (RTI, 2001). In the modeling, an explanatory variable was identified as a statistically significant predictor of SMI if the associated Chi-square test was significant at the 0.05 level. In the descriptive analyses, log-linear Chi-square tests of independence of the explanatory variables and SMI were conducted first to control the error level for multiple comparisons. If the Chi-square test indicated overall significant differences, comparisons between specific levels of the classification variables then were made using *t* tests.

2.4.1 Descriptive Analysis

Demographic and socioeconomic characteristics were compared for the following groups of adults: (1) those with and without SMI in the past year; (2) those who did and did not use illicit drugs among adults with SMI; (3) those with and without a substance use disorder among adults with SMI; and (4) those who received and did not receive mental health treatment in the past year among adults with SMI.

To examine how the prevalence of SMI in the past year varied among subgroups of adults, prevalence rates of SMI by demographic and socioeconomic characteristics are presented. To examine how the prevalence of SMI in the past year varied by use of substances, as well as by substance use disorders, prevalence rates of SMI are compared for use of alcohol, tobacco, any illicit drugs, and specific illicit drugs; dependence on or abuse of alcohol and/or illicit drugs; and cigarette dependence. Significant differences in rates among subgroups of persons also were identified with Chi-square tests and *t* tests.

To examine how the prevalence of mental health treatment in the past year varied among subgroups of adults with SMI, prevalence rates of mental health treatment in the past year among adults with SMI by demographic and socioeconomic characteristics are presented. To examine how the prevalence of mental health treatment varied by illicit drug use and by a substance use disorder among adults with SMI, rates of mental health treatment among adults with past year SMI were compared for those using and not using illicit drugs and for those with and without a substance use disorder. Rates of specialty substance use treatment among adults with a substance use disorder were compared for those with and without SMI to examine how the prevalence of substance use treatment among adults with a substance use disorder varied by SMI.

2.4.2 Model-Based Analysis

Two logistic regression models were run using the SUDAAN LOGISTIC procedure. The first model was developed for all adults aged 18 or older to examine the ORs for each of the characteristics believed to be associated with SMI after controlling for confounding variables. For the first model, past year SMI was the dependent variable, and the independent variables included each of the characteristics believed to be associated with SMI. The second model was developed for all adults with past year SMI to determine the odds of receiving mental health treatment for characteristics believed to be associated with the receipt of treatment and controlling for potential confounding variables. For this model, receipt of mental health treatment was the dependent variable.

3. Serious Mental Illness

This chapter presents national estimates from the 2002 National Survey on Drug Use and Health (NSDUH) of the prevalence of past year serious mental illness (SMI) by demographic and socioeconomic characteristics among adults aged 18 or older in 2002, and it examines the relationship of SMI to substance use and substance use disorders. Characteristics of adults with and without SMI in the past year are compared. Estimates of the past year prevalence of SMI are presented among demographic and socioeconomic subgroups, as well as by the type of substance used in the past year. Among adults with SMI, the characteristics of those using and not using illicit drugs are compared, and the characteristics of those with and without a substance use disorder are compared.

3.1. Characteristics of Adults With and Without Serious Mental Illness

In 2002, there were 17.5 million adults aged 18 or older with SMI during the 12 months prior to being interviewed. This represents 8.3 percent of all adults in the United States. On average, adults with SMI were younger, less educated, and more likely to be female than adults without SMI. The percentage of young adults aged 18 to 25 was higher among persons with SMI (23.4 percent) than among those without SMI (14.0 percent). In contrast, the percentage of older adults (aged 50 or older) was lower among those with SMI (22.1 percent) than among those without SMI (39.0 percent) (Table B.1b).

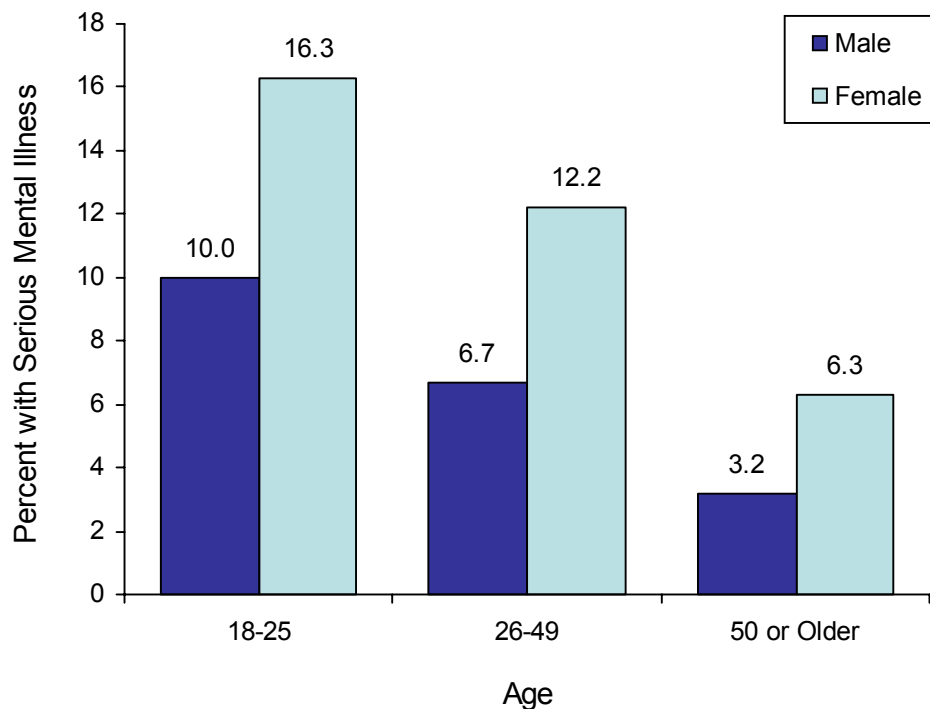
Among those with SMI, 65.4 percent were female, which was higher than the percentage of females among those without SMI (50.8 percent). Adults with SMI were more likely to have not completed high school (20.5 percent) than those without SMI (17.4 percent) and less likely to have graduated from college (17.5 percent) than those without SMI (25.7 percent). Although a similar proportion of adults with and without SMI were employed full or part time, persons with SMI were more likely to be unemployed or not in the labor force (36.4 percent) than were persons without SMI (31.2 percent).

Adults with SMI were less likely to be from large metropolitan areas (45.7 percent) than adults who did not have SMI (50.2 percent) (Table B.2b). There were no differences observed by geographic region.

3.2. Prevalence of Serious Mental Illness among Demographic and Socioeconomic Subgroups

Rates of SMI in the adult U.S. population varied by age and gender. Of the three age groups considered here, adults aged 18 to 25 had the highest rate of SMI (13.2 percent), followed by adults aged 26 to 49 (9.5 percent) and adults aged 50 or older (4.9 percent) (Table B.3b). Overall, the rate of SMI was almost twice as high among females (10.5 percent) as it was among males (6.0 percent). The rate of SMI by age and gender was highest for females aged 18 to 25 (16.3 percent) (Figure 1).

Figure 1. Serious Mental Illness among Adults Aged 18 or Older, by Age and Gender: 2002



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

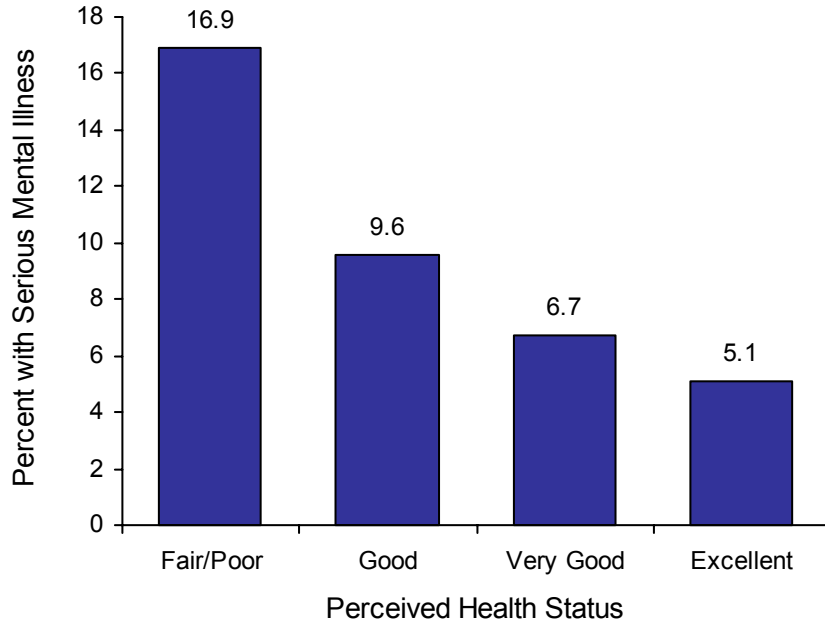
Among racial and ethnic groups, adults reporting more than one race and American Indians and Alaska Natives had the highest prevalence of SMI (13.6 and 12.5 percent, respectively) (Table B.3b).

Prevalence rates of SMI did not vary significantly by geographic region. The rate was 8.5 percent in the Northeast and Midwest, 8.4 percent in the South, and 7.8 percent in the West (Table B.4b).

The prevalence of SMI varied by perceived health status and social support (Table B.5b). Adults who perceived their overall health as fair or poor were more than 3 times as likely to have SMI (16.9 percent) than those who perceived their health to be excellent (5.1 percent) (Figure 2). Likewise, those who reported no social support were about twice as likely to have SMI as those who reported social support (15.2 vs. 7.6 percent, respectively) (Figure 3).

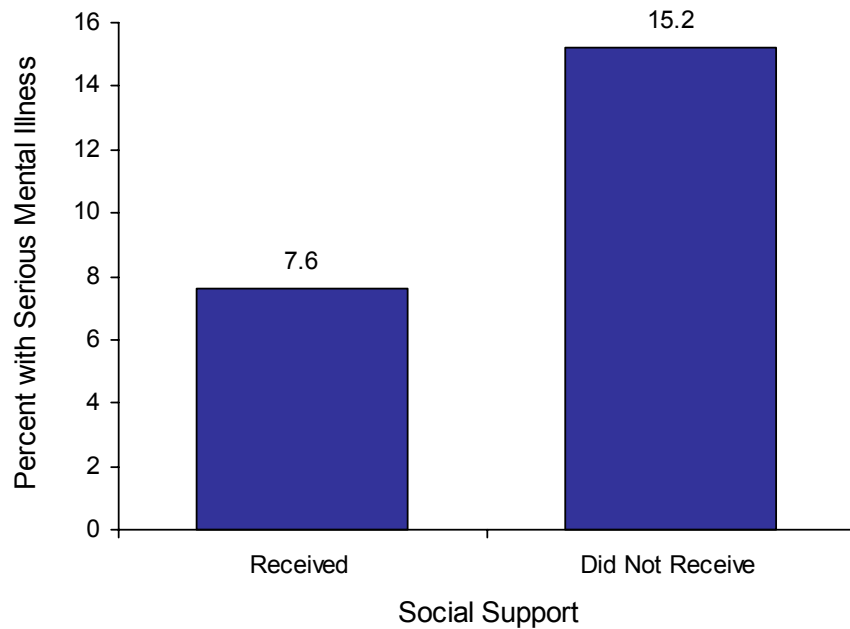
Estimates of SMI by health insurance, marital status, and family income are only presented for persons aged 26 to 49. Among adults aged 26 to 49, divorced or separated adults were more than twice as likely to have SMI in the past year (16.0 percent) as married adults (7.1 percent) (Table B.5b, Figure 4).

Figure 2. Serious Mental Illness among Adults Aged 18 or Older, by Perceived Health Status: 2002



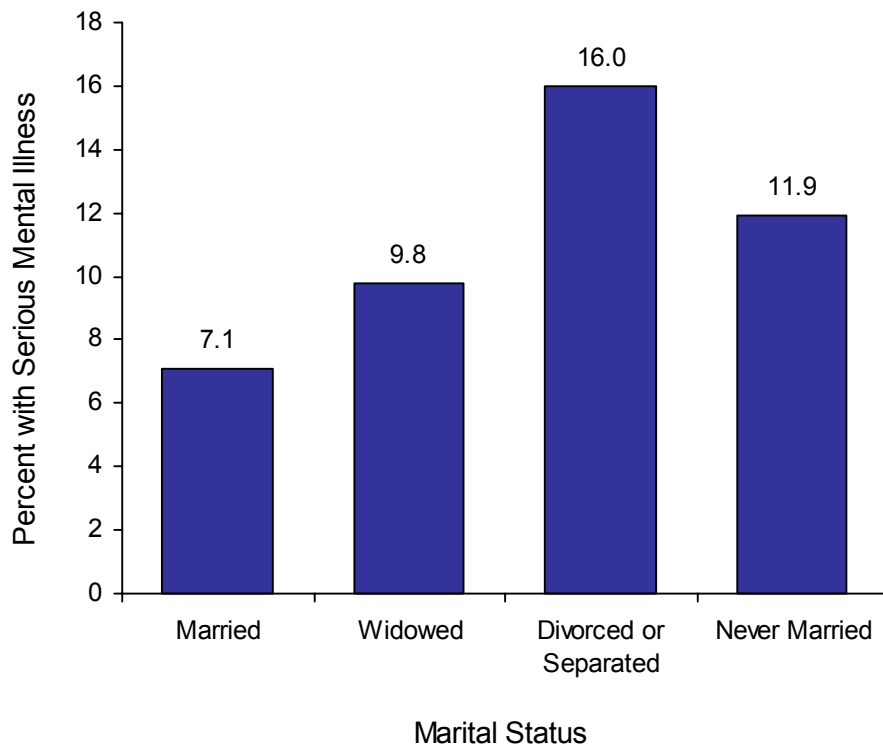
Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002.

Figure 3. Serious Mental Illness among Adults Aged 18 or Older, by Social Support: 2002



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

Figure 4. Serious Mental Illness among Adults Aged 26 to 49, by Marital Status: 2002



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

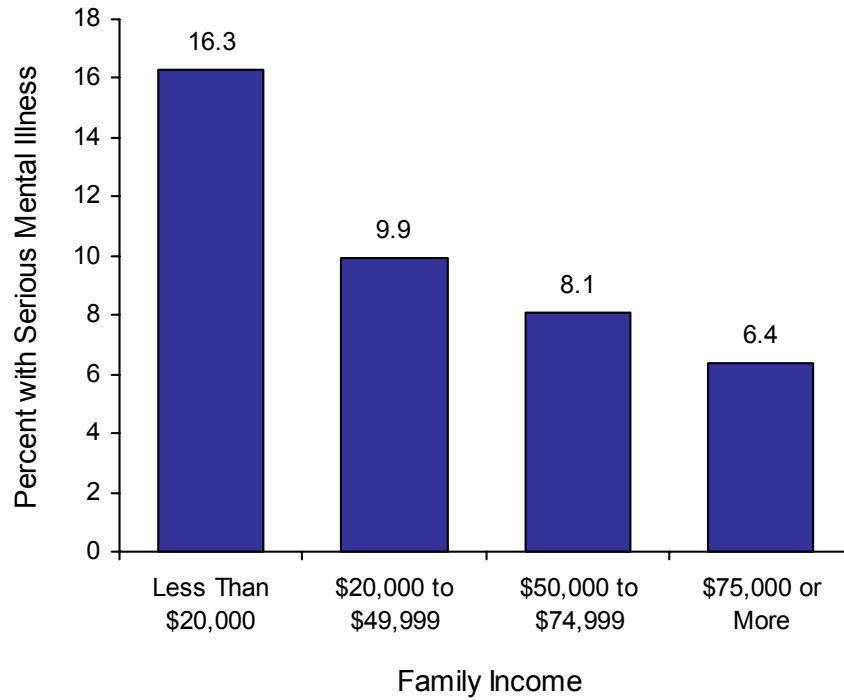
SMI also varied with socioeconomic status (SES) among adults aged 26 to 49. In this age group, adults with lower SES were more likely to have SMI than those with higher SES (Table B.5b). The prevalence of SMI was highest among those with the lowest family income level (less than \$20,000) at 16.3 percent and lowest among those with the highest income level (\$75,000 or more) at 6.4 percent (Figure 5). Also, among adults aged 26 to 49, the prevalence of SMI was higher among persons with Medicaid coverage (20.7 percent) and lower among persons with private health insurance (8.1 percent) (Figure 6). Similarly, the SMI rate was higher among persons who were unemployed or had "other" employment status (i.e., not in the labor force)¹ (14.2 and 15.5 percent, respectively) than among persons who worked full time (7.9 percent) (Table B.3b, Figure 7).

3.3. Serious Mental Illness and Substance Use

In this section, the characteristics of persons with SMI who used and did not use illicit drugs are compared. In addition, the prevalence rates of SMI are presented for persons using specific types of illicit drugs, heavy alcohol users, and cigarette users.

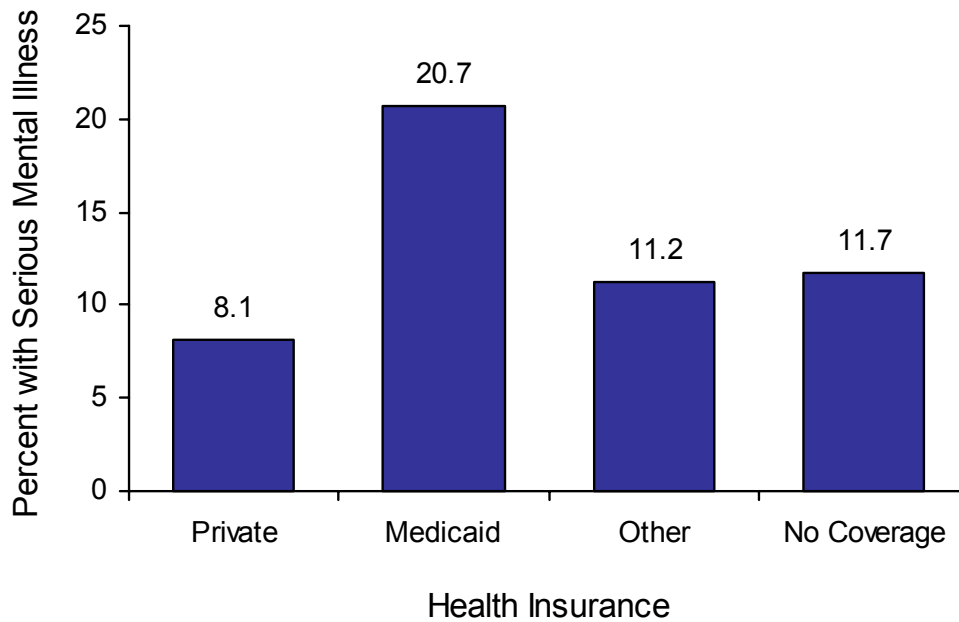
¹ "Other" includes retired persons, disabled persons, homemakers, students, or other persons not in the labor force.

Figure 5. Serious Mental Illness among Adults Aged 26 to 49, by Family Income: 2002



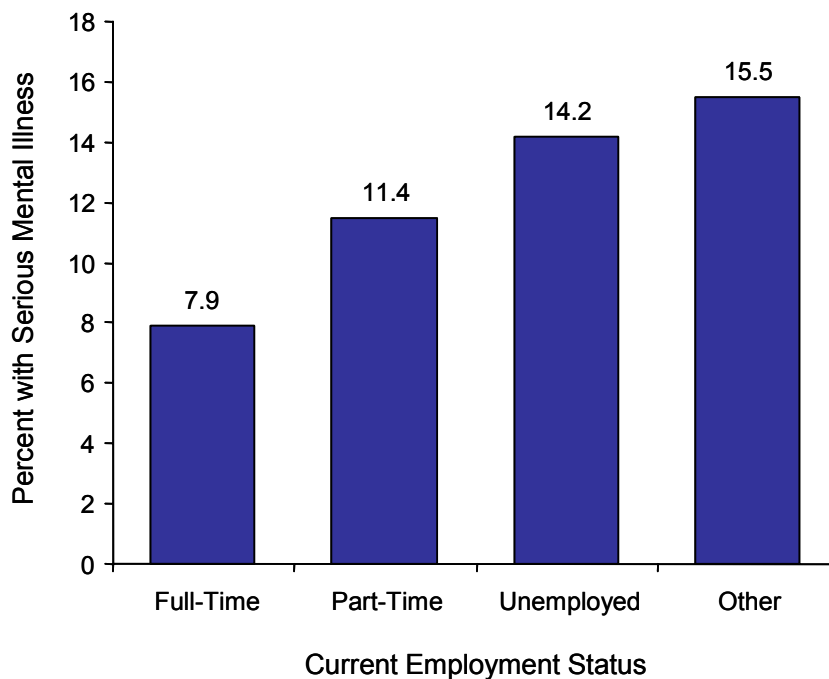
Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002.

Figure 6. Serious Mental Illness among Adults Aged 26 to 49, by Health Insurance Status: 2002



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

Figure 7. Serious Mental Illness among Adults Aged 26 to 49, by Current Employment Status: 2002



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

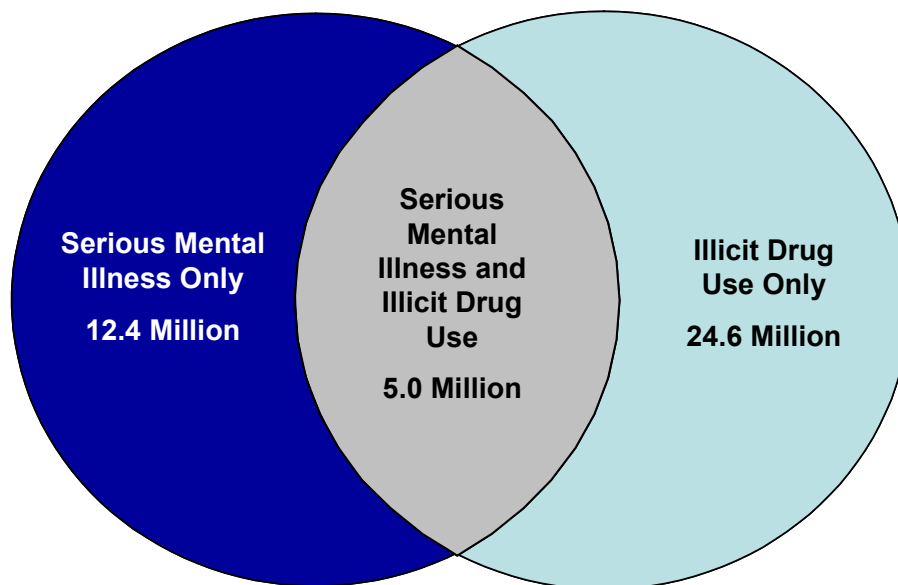
3.3.1 Serious Mental Illness and Illicit Drug Use

3.3.1.1 Characteristics of Adults with Serious Mental Illness and Illicit Drug Use

In 2002, there were 5 million adults aged 18 or older who had SMI and used an illicit drug in the past year (Table B.6a, Figure 8). This represented 28.9 percent of all persons with SMI. Adults with SMI who used illicit drugs were younger than those with SMI who did not use illicit drugs. Among adults with SMI and illicit drug use, 38.8 percent were 18 to 25 years old compared with 17.1 percent of persons with SMI but no illicit drug use; also, 7.2 percent of adults with SMI and illicit drug use were aged 50 or older compared with 28.2 percent with SMI but no illicit drug use (Table B.6b).

Adults with SMI who used illicit drugs in the past year were more likely to be male than those with SMI who did not use illicit drugs (45.1 vs. 30.3 percent). They also were more likely to be in the labor force than those with SMI but no illicit drug use: 67.0 percent of adults with SMI and past year illicit drug use were employed full or part time compared with 62.2 percent of those with SMI only, and 10.8 percent were unemployed compared with 4.3 percent of adults with SMI only. Consequently, adults with SMI only were more likely to be out of the labor force (33.5 percent) than those who had SMI and used an illicit drug in the past year (22.2 percent).

Figure 8. Serious Mental Illness and Past Year Illicit Drug Use among Adults Aged 18 or Older: 2002



Note: Circles are not drawn to scale.

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

3.3.1.2 Prevalence of Serious Mental Illness among Illicit Drug Users

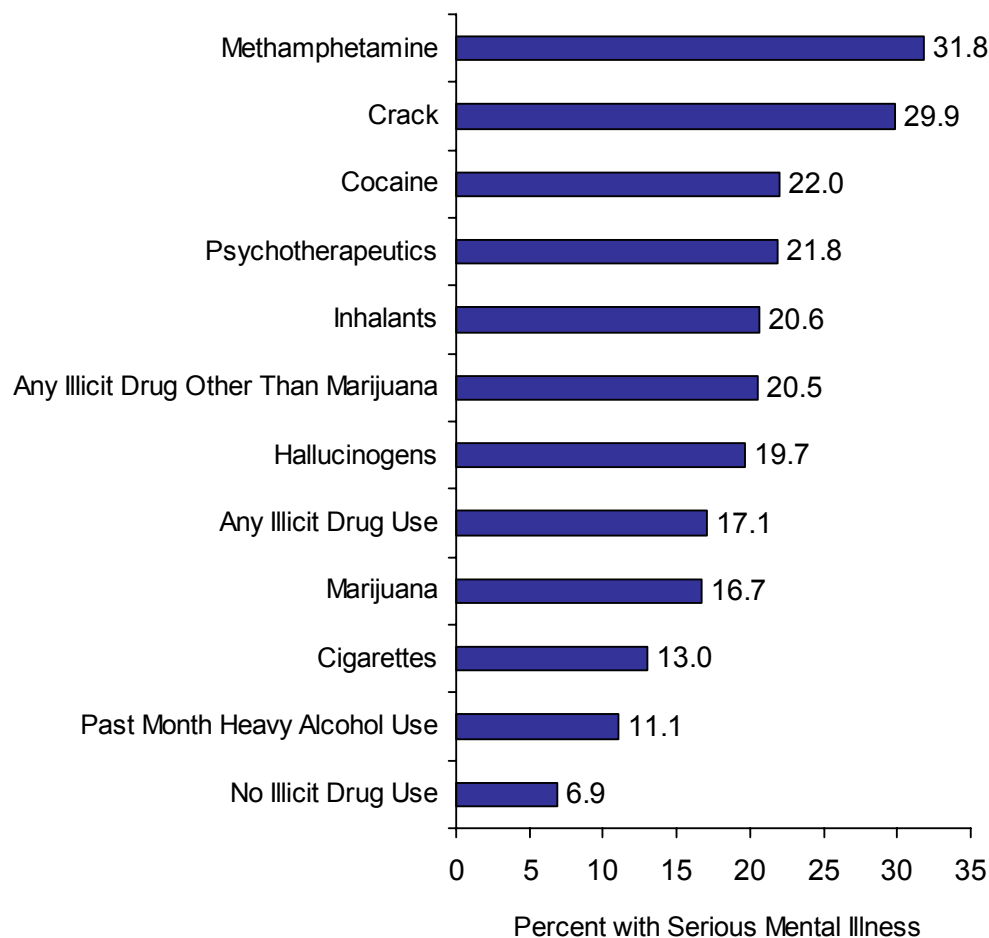
SMI is correlated with illicit drug use. The prevalence of SMI was more than twice as high among those who used an illicit drug during the past year than it was among those who did not (17.1 vs. 6.9 percent). This relationship was observed across most demographic and socioeconomic subgroups (Tables B.8b and B.9b).

The prevalence of SMI varied by the type of substance used. The rate of SMI was 16.7 percent among those who used marijuana, 20.5 percent among those who used any illicit drug other than marijuana, 22.0 percent among those who used cocaine, and 29.9 percent among those who used crack cocaine (Table B.10b, Figure 9). For those who used hallucinogens, the SMI rate was 19.7 percent, and for inhalants, it was 20.6 percent. For all nonmedical use of psychotherapeutics, the rate of SMI was 21.8 percent; the rate of SMI was 33.6 percent for those who used sedatives, 28.8 percent for those who used stimulants, 26.5 percent for those who used tranquilizers, and 22.4 for those who used pain relievers. The rate for those who used methamphetamine was 31.8 percent.

3.3.2 Serious Mental Illness among Cigarette and Alcohol Users

The prevalence of SMI varied between past year cigarette smokers and nonsmokers, but no differences were observed between past year alcohol users and nonusers. The rate of SMI was 13.0 percent among adults who smoked cigarettes in the past year and 6.1 percent among those who did not smoke (Table B.11b, Figure 9). Although the rate of SMI did not vary by past year alcohol use (8.5 percent for users vs. 8.0 percent for nonusers), adults who were heavy alcohol

Figure 9. Serious Mental Illness, by Type of Substance Used among Adults Aged 18 or Older: 2002



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

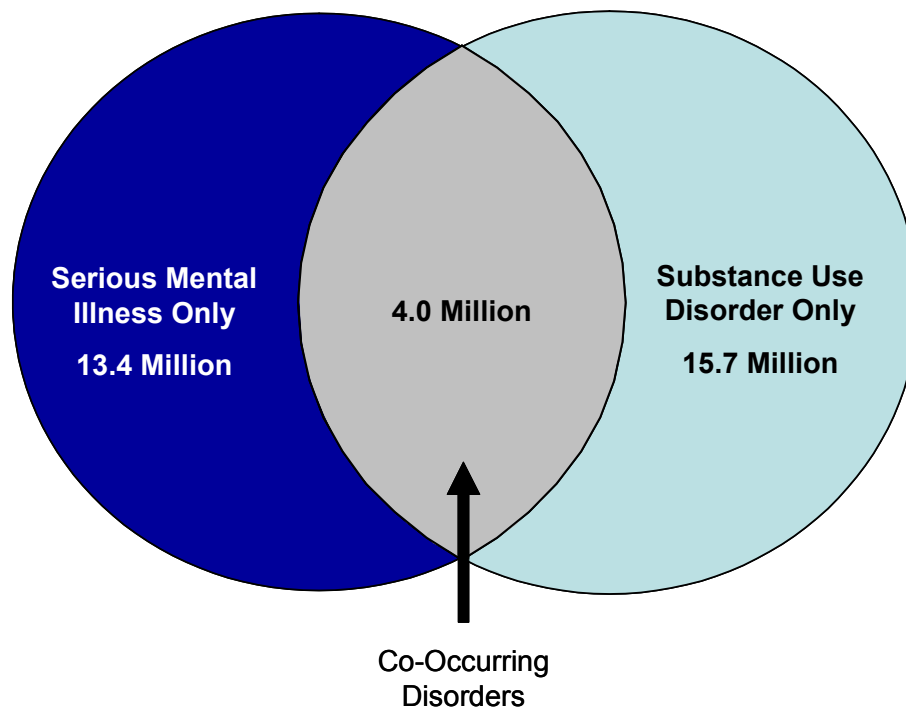
users in the past month were more likely to have SMI than those who were not heavy alcohol users in the past month (11.1 vs. 8.1 percent).

3.4. Serious Mental Illness and a Co-Occurring Substance Use Disorder

In this section, adults with SMI are classified by whether or not they had a substance use disorder, that is, whether they were dependent on or abused alcohol or illicit drugs. Those with SMI and a substance use disorder are further classified by whether they were dependent on or abused alcohol only, illicit drugs only, or both illicit drugs and alcohol.

In 2002, there were 33.2 million adults aged 18 or older with SMI or a substance use disorder (Table B.12a). Of these adults, 13.4 million (40.4 percent) had SMI but no substance use disorder (SMI only), 15.7 million (47.4 percent) had a substance use disorder but no SMI (substance use disorder only), and 4.0 million (12.2 percent) had both SMI and a substance use disorder (i.e., co-occurring disorders) (Table B.12b, Figure 10).

Figure 10. Co-Occurrence of Serious Mental Illness and Substance Use Disorders among Adults Aged 18 or Older: 2002



Note: Circles are not drawn to scale.

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

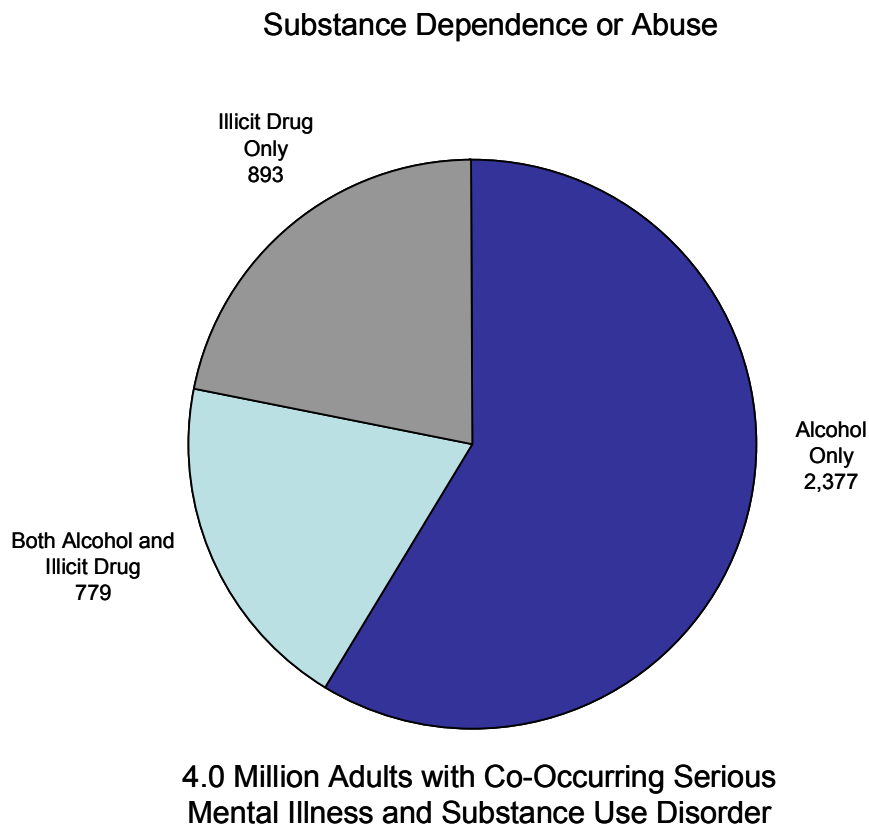
The 4.0 million adults with SMI and a co-occurring substance use disorder represented 23.2 percent of all adults with SMI (Table B.13b) and 20.4 percent of all adults with a substance use disorder in 2002 (Table B.16b). Among these adults with SMI and a substance use disorder, 0.9 million were dependent on or abused illicit drugs only, 2.4 million were dependent on or abused alcohol only, and 0.8 million were dependent on or abused alcohol and illicit drugs (Table B.13a, B.13b, and B.16b, Figure 11).

The 17.5 million adults with SMI in 2002 can be examined as to whether they had a substance use disorder in the past year and by whether they used illicit drugs. As previously mentioned, there were 4.0 million adults with SMI who had a substance use disorder. Thus, 13.4 million adults with SMI (76.8 percent) did not have a substance use disorder. Among these adults with SMI but without a substance use disorder, 2.3 million used an illicit drug in the past 12 months and 11.1 million did not (Figure 12).

3.4.1 Characteristics of Adults with Co-Occurring Serious Mental Illness and a Substance Use Disorder

In 2002, adults with SMI and a substance use disorder were more likely to be younger and more likely to be male than adults with SMI but no substance use disorder. Among adults with SMI and a substance use disorder, 36.3 percent were aged 18 to 25 compared with 19.5 percent among adults with SMI but no substance use disorder. The percentage of males among

Figure 11. Type of Substance Use Disorder among Adults Aged 18 or Older with Both Serious Mental Illness and a Co-Occurring Substance Use Disorder: Numbers in Thousands, 2002



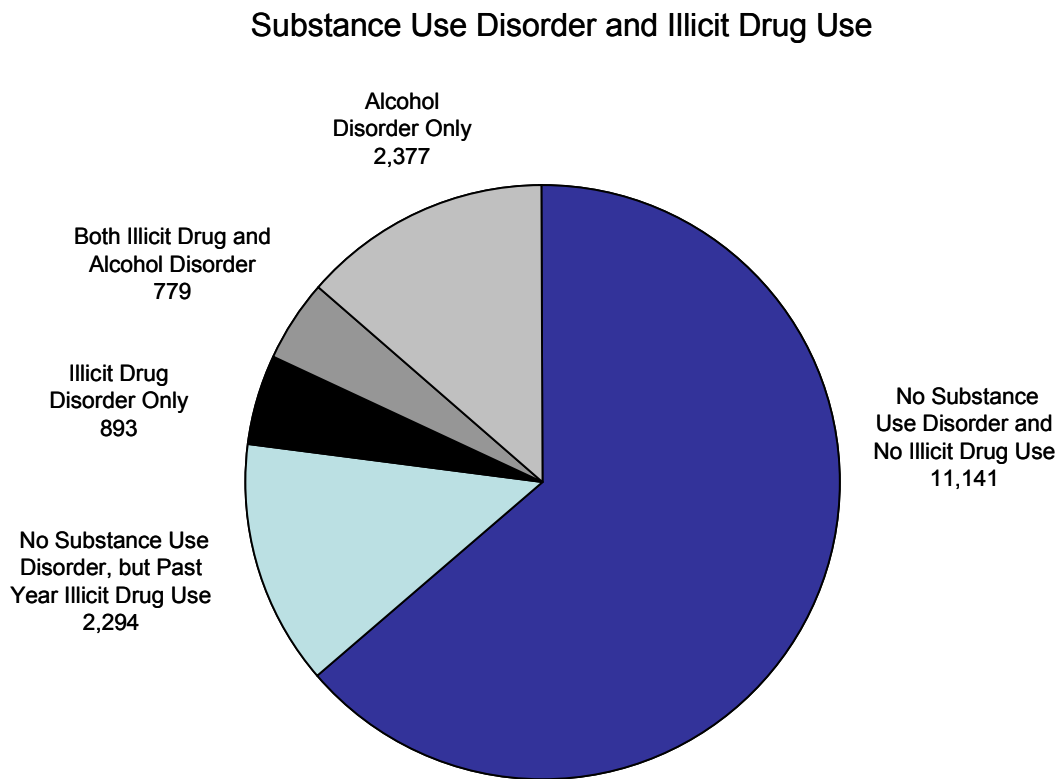
Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002.

adults with SMI and a substance use disorder was higher than the corresponding percentage among adults with SMI but no substance use disorder (52.1 vs. 29.3 percent) (Table B.14b).

Adults with SMI and a substance use disorder were more likely to be in the labor force than those with SMI only: 69.0 percent of adults with SMI and a substance use disorder were employed full or part time compared with 62.0 percent of those with SMI but no substance use disorder, and 10.1 percent were unemployed compared with 5.0 percent of adults with SMI but no substance disorder. Thus, adults with SMI but no substance disorder were more likely to be out of the labor force (33.1 percent) than adults with SMI and a substance use disorder (20.9 percent) (Table B.14b).

Among adults with SMI, the comparison of the socioeconomic and demographic characteristics between those with and without a substance use disorder is strikingly similar to the comparison in Section 3.3.1.1 between those who used and did not use illicit drugs (Table B.6b).

Figure 12. Substance Use Disorders and Illicit Drug Use among Adults Aged 18 or Older with Serious Mental Illness: Numbers in Thousands, 2002



17.5 Million Adults with Serious Mental Illness

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

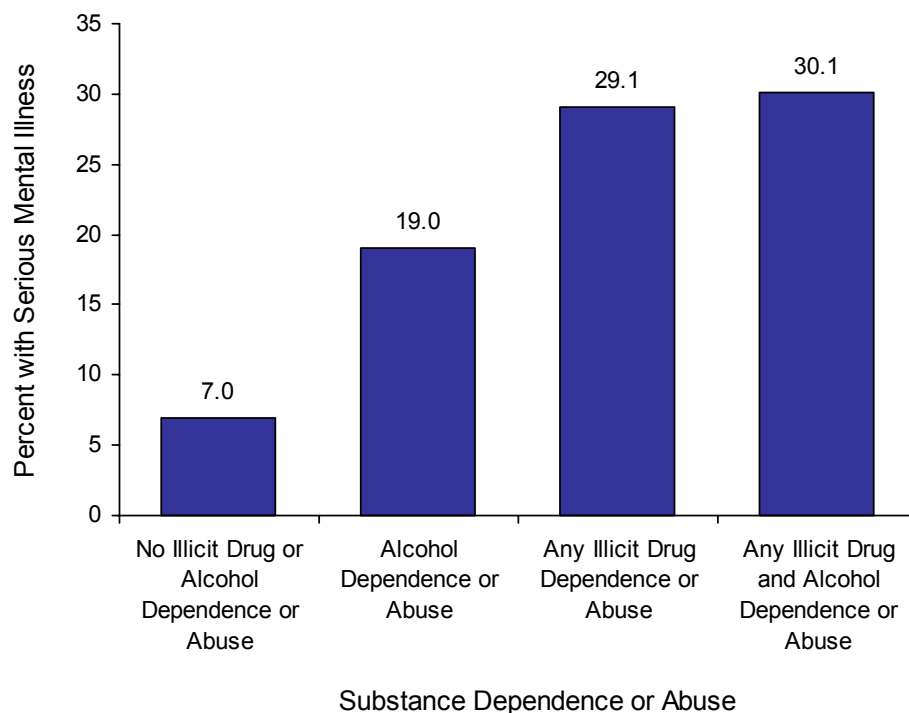
3.4.2 Prevalence of Serious Mental Illness among Adults with a Substance Use Disorder

The prevalence of SMI among adults with a substance use disorder varied by age and gender. Among persons with any illicit drug or alcohol dependence or abuse, women had a higher prevalence of SMI than men (30.3 vs. 15.7 percent), and women aged 26 to 49 had the highest rate of SMI (32.2 percent) (Table B.16b).

Rates of SMI were relatively low (7.0 percent) among adults who did not have a substance use disorder (Table B.17b, Figure 13). The rate was much higher among those with alcohol dependence or abuse (19.0 percent) and was even higher among those with illicit drug dependence or abuse (29.1 percent). The rate of SMI was highest among adults who met the criteria for both drug and alcohol dependence or abuse (30.1 percent).

The rate of SMI among adults with dependence on or abuse of an illicit drug other than marijuana (33.4 percent) was higher than the rate for those with illicit drug dependence or abuse (29.1 percent) and the rate for those with marijuana dependence or abuse (27.3 percent) (Table B.17b).

Figure 13. Serious Mental Illness among Adults Aged 18 or Older, by Substance Dependence or Abuse: 2002



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

3.5. Multiple Logistic Regression Models for Serious Mental Illness

The estimated strength of the associations between past year SMI with past year use of illicit drugs, illicit drug dependence or abuse, alcohol dependence or abuse, and socioeconomic and demographic characteristics was determined via a multiple logistic regression model. SMI was the dependent variable, and the other characteristics were the independent variables.

Possible confounding variables are variables in the model other than the independent variable of interest that are believed to be associated with both the dependent variable and the independent variables of interest. Adjusted odds ratios (ORs) denote the estimated association between SMI and a particular category of a variable while controlling for possible confounding variables. This section discusses the associations between SMI and characteristics believed to be associated with SMI in terms of their ORs. (See Appendix A, Section A.5.4, for a discussion of logistic modeling and the interpretation of adjusted ORs.)

Several sociodemographic variables were associated with SMI according to the descriptive analyses that also were associated with SMI based on their adjusted ORs. These variables included age, gender, race/ethnicity, marital status, perceived overall health, and social support. The ORs indicated that compared with adults aged 50 or older, adults aged 18 to 25 and adults aged 26 to 49 were more likely to have SMI in the past year (OR = 2.5 and 2.3, respectively) (Table B.M1). Females were more than twice as likely as males to have SMI.

Compared with non-Hispanic whites, non-Hispanic blacks (OR = 0.7) and Hispanics (OR = 0.6) were less likely to have had SMI (Table B.M1).

The ORs for the levels of perceived health demonstrate that the more poorly persons perceived their health to be, the more likely they were to have had SMI. Compared with adults who perceived their health as excellent, adults who perceived their health as fair or poor (OR = 4.1), those who perceived their health as good (OR = 1.9), and those who perceived their health as very good (OR = 1.3) were more likely to have had SMI (Table B.M1).

SMI was highly correlated with illicit drug dependence or abuse and with alcohol dependence or abuse. It also was significantly associated with nicotine (cigarette) dependence. The ORs for use and for dependence on or abuse of illicit drugs show that adults with any illicit drug dependence or abuse in the past year were more likely to have SMI than adults with no illicit drug use in the past year (OR = 2.8) and than adults with illicit drug use but no dependence or abuse (OR = 1.9 calculated by dividing 2.75 by 1.43) (Table B.M1). Adults with past year illicit drug use who were not dependent on or abusing illicit drugs were more likely to have SMI in the past year than adults with no illicit drug use (OR = 1.4). The ORs for alcohol use and for dependence on or abuse of alcohol show that adults with alcohol dependence or abuse were more likely to have SMI than adults with no alcohol use (OR = 1.8) and more likely to have SMI than adults who used alcohol but who had no dependence or abuse (OR = 2.0 calculated by dividing 1.77 by 0.89). Adults with nicotine (cigarette) dependence in the past year had higher odds of having SMI than those without nicotine (cigarette) dependence (OR = 1.5).

4. Mental Health Treatment and Substance Use Treatment

This chapter presents national estimates from the 2002 National Survey on Drug Use and Health (NSDUH) of the past year prevalence of mental health treatment and substance use treatment among adults with serious mental illness (SMI) and a substance use disorder. The social and demographic characteristics of adults with SMI who received mental health treatment are compared with those who did not receive mental health treatment. Prevalence rates of mental health treatment among adults with SMI by social and demographic characteristics also are presented. Estimates of mental health treatment are given for adults with SMI according to whether they used illicit drugs. Estimates of the prevalence of mental health treatment and/or specialty substance use treatment in 2002 also are presented for adults aged 18 or older with SMI and a substance use disorder, with SMI but no substance use disorder, and with a substance use disorder but no SMI. The prevalence of mental health treatment for those with SMI co-occurring with a substance use disorder is compared with the prevalence among those with SMI but no substance use disorder. Similarly, the prevalence of specialty substance use treatment for those with SMI co-occurring with a substance use disorder is compared with those having a substance use disorder but no SMI.

4.1. Mental Health Treatment among Adults with Serious Mental Illness

4.1.1 Characteristics of Adults with Serious Mental Illness, by Receipt of Mental Health Treatment in the Past Year

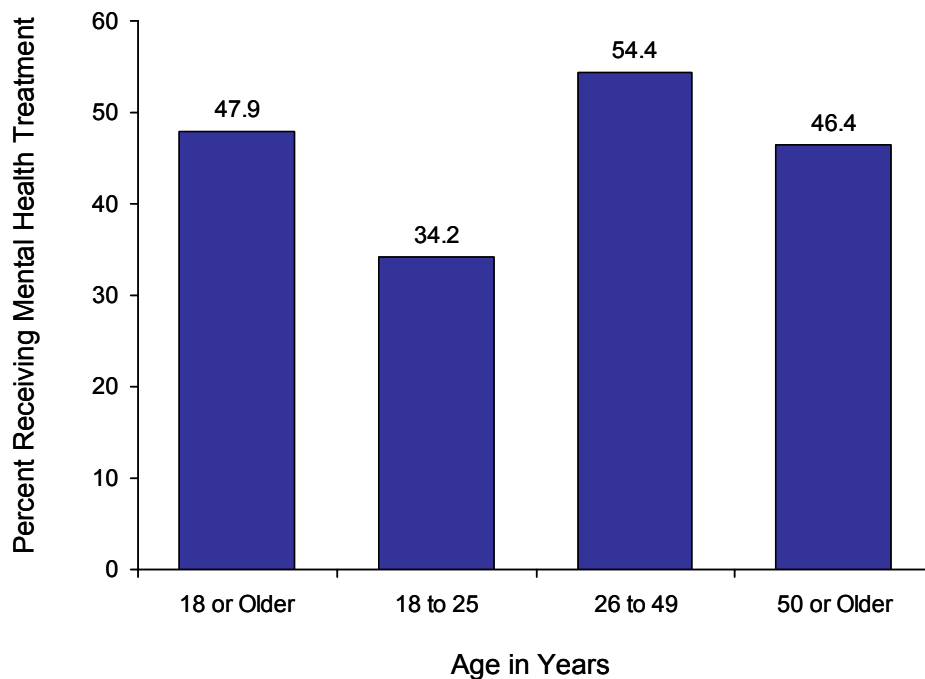
In 2002, an estimated 8.4 million of the 17.5 million adults with SMI received mental health treatment in the 12 months prior to their interview (Table B.18a). When compared with adults with SMI who did not receive treatment, those who did receive treatment were more likely to belong to the following sociodemographic groups: aged 26 or older, female, non-Hispanic whites, and college graduates. About 62 percent of adults with SMI who received treatment were 26 to 49 years of age compared with about 48 percent of those who did not receive treatment. Females accounted for 71.6 percent of those who received treatment and 59.9 percent of those who did not receive treatment. Non-Hispanic whites made up 78.4 percent of those who received treatment and 66.6 percent of those who did not (Table B.18b). An estimated 21 percent of adults with SMI who received treatment were college graduates compared with 14 percent of those who had not received treatment. Adults with SMI who received treatment were more likely than those who did not to be from small metropolitan counties (34.5 vs. 29.3 percent, respectively), but there were no significant differences by geographic region.

4.1.2 Rates of Mental Health Treatment among Adults with Serious Mental Illness, by Sociodemographic Characteristics

In 2002, an estimated 47.9 percent of adults with SMI received mental health treatment in the 12 months prior to their interview (Table B.19b). The prevalence of mental health treatment among adults with SMI varied by demographic, social, and health characteristics. Among adults with SMI, those aged 26 to 49 had the highest rate of mental health treatment of any age group

(54.4 percent) (Figure 14). The rates of mental health treatment among adults with SMI were 46.4 percent for adults aged 50 or older and 34.2 percent for those aged 18 to 25. Females with SMI were more likely than males with SMI to receive mental health treatment (52.3 vs. 39.5 percent, respectively) (Figure 15). More than half of white non-Hispanics with SMI received mental health treatment (51.9 percent) (Figure 16). In comparison, fewer than 40 percent of black non-Hispanics and Hispanics with SMI received mental health treatment (36.9 and 37.8 percent, respectively).

Figure 14. Mental Health Treatment among Adults Aged 18 or Older with Serious Mental Illness, by Age: 2002

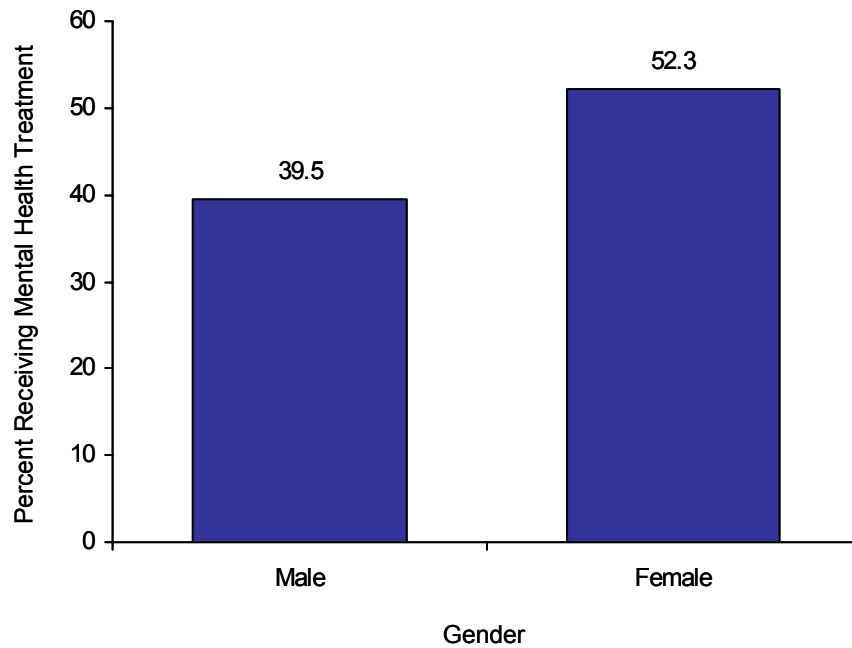


Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002.

In 2002, the prevalence of mental health treatment was 48.7 percent for adults with SMI who received social support and 44.0 percent for adults with SMI who did not receive social support (Table B.20b). Adults with SMI who perceived their health as poorer had higher rates of mental health treatment than those who perceived their health to be better. The rate of mental health treatment was highest at 56.0 percent for those with SMI who perceived their health as fair/poor and lowest at 38.7 percent for those who perceived their health as excellent (Figure 17).

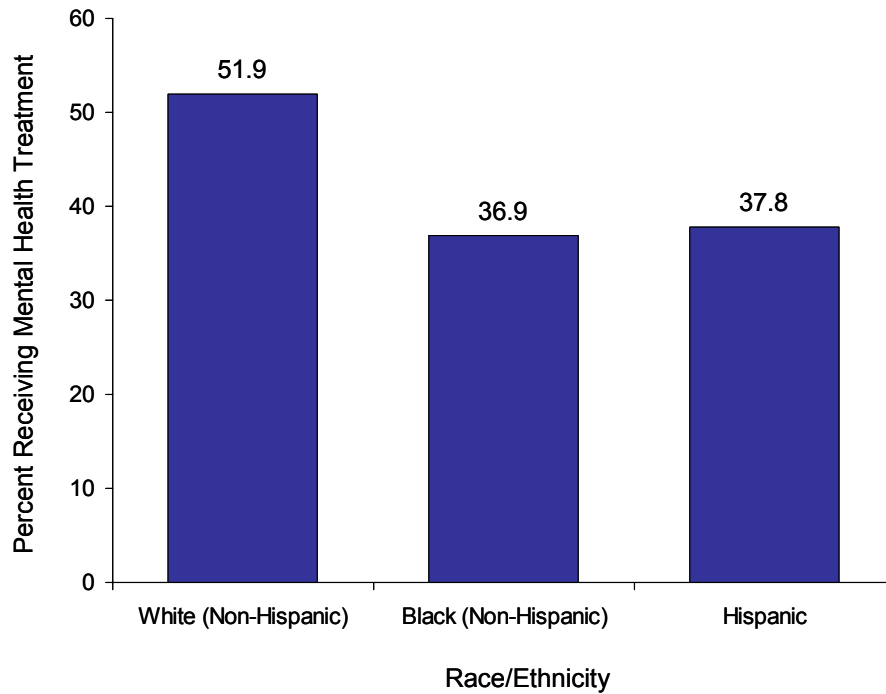
Estimates of treatment by health insurance and marital status are presented for persons aged 26 to 49. Among adults aged 26 to 49 years of age with SMI in the past 12 months, rates of mental health treatment varied by health insurance and by marital status (Table B.20b). Those who received Medicaid were more likely to have received mental health treatment in the past 12 months (65.1 percent) than those who had no insurance coverage (37.1 percent) (Figure 18).

Figure 15. Mental Health Treatment among Adults Aged 18 or Older with Serious Mental Illness, by Gender: 2002



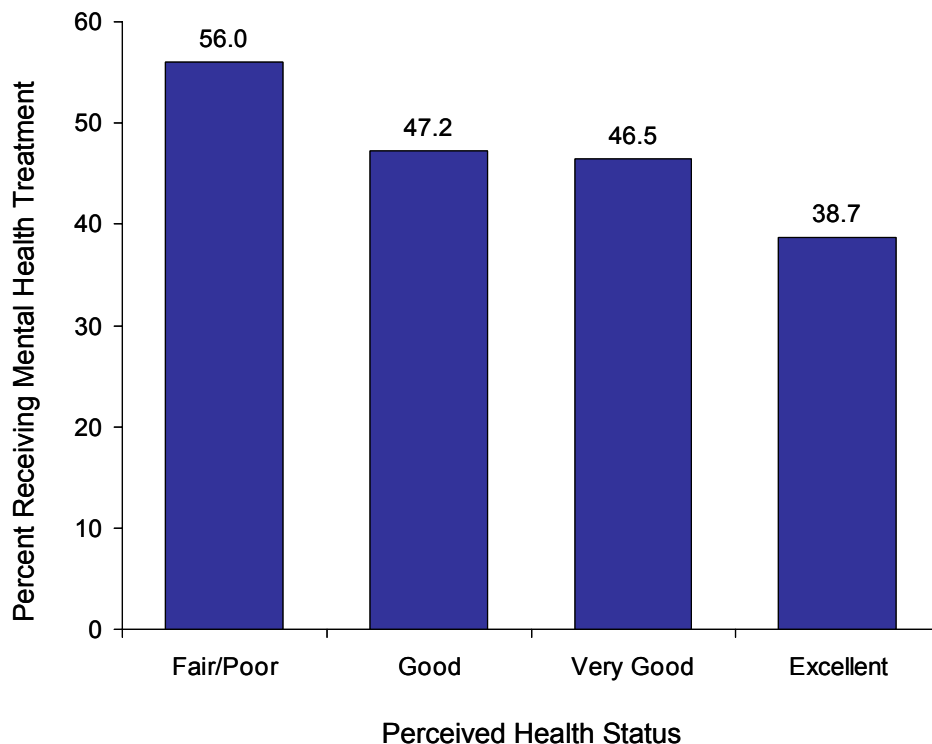
Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002.

Figure 16. Mental Health Treatment among Adults Aged 18 or Older with Serious Mental Illness, by Race/Ethnicity: 2002



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

Figure 17. Mental Health Treatment among Adults Aged 18 or Older with Serious Mental Illness, by Perceived Health Status: 2002



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

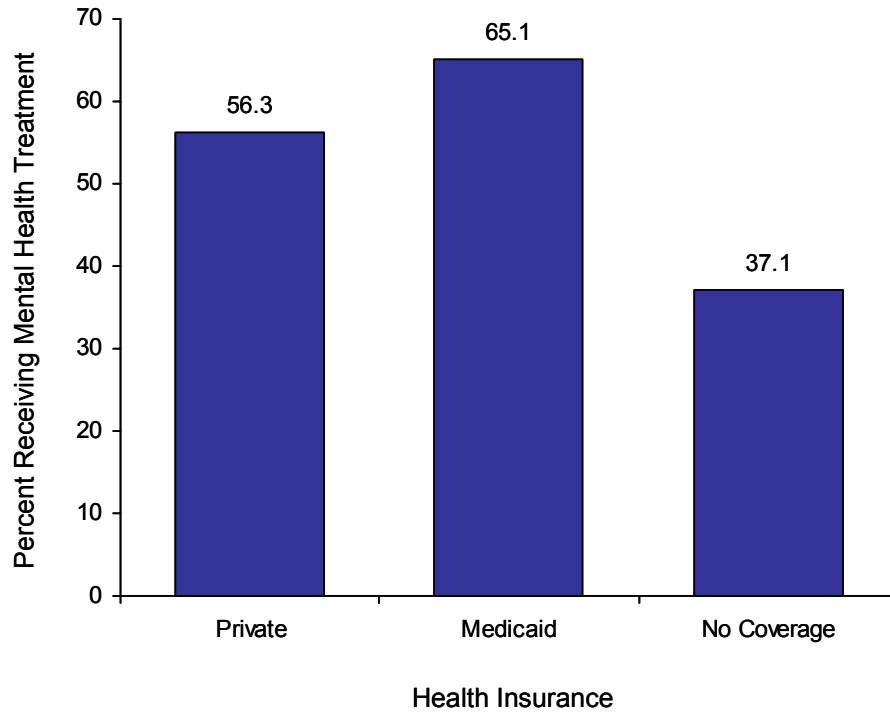
The rate of mental health treatment among persons aged 26 to 49 who were divorced or separated (61.9 percent) was higher than the rate among those who were never married (42.9 percent) (Figure 19).

There was very little regional variation in the prevalence of mental health treatment among adults aged 18 or older with SMI. Rates by geographic region were 50.7 percent in the Northeast, 47.5 percent in the Midwest and South, and 46.3 percent in the West (Table B.21b). By county type, rates of treatment were highest among persons from small metropolitan areas (52.0 percent); rates were similar for large metropolitan areas and nonmetropolitan areas (46.1 and 45.7 percent, respectively) (Figure 20).

4.1.3 Mental Health Treatment among Adults with Serious Mental Illness Who Did and Did Not Use Illicit Drugs

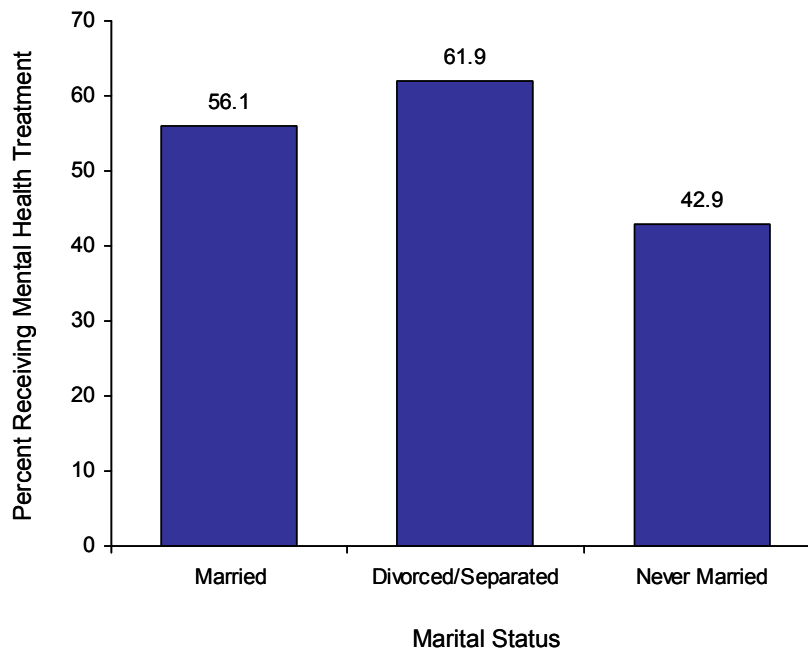
Among adults with SMI in 2002, the prevalence of mental health treatment did not differ significantly by illicit drug use in the past 12 months. Among the 17.5 million adults who had SMI, 46.0 percent of those using an illicit drug and 48.7 percent of those not using an illicit drug received mental health treatment in the past 12 months (Tables B.22a and B.22b).

Figure 18. Mental Health Treatment among Adults Aged 26 to 49 with Serious Mental Illness, by Health Insurance Status: 2002



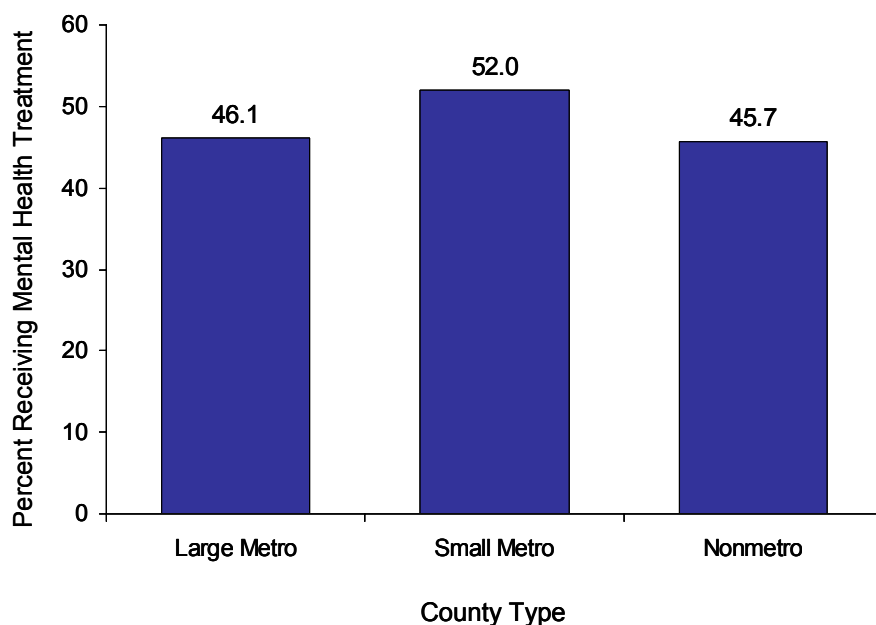
Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002.

Figure 19. Mental Health Treatment among Adults Aged 26 to 49 with Serious Mental Illness, by Marital Status: 2002



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

Figure 20. Mental Health Treatment among Adults Aged 18 or Older with Serious Mental Illness, by County Type: 2002



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

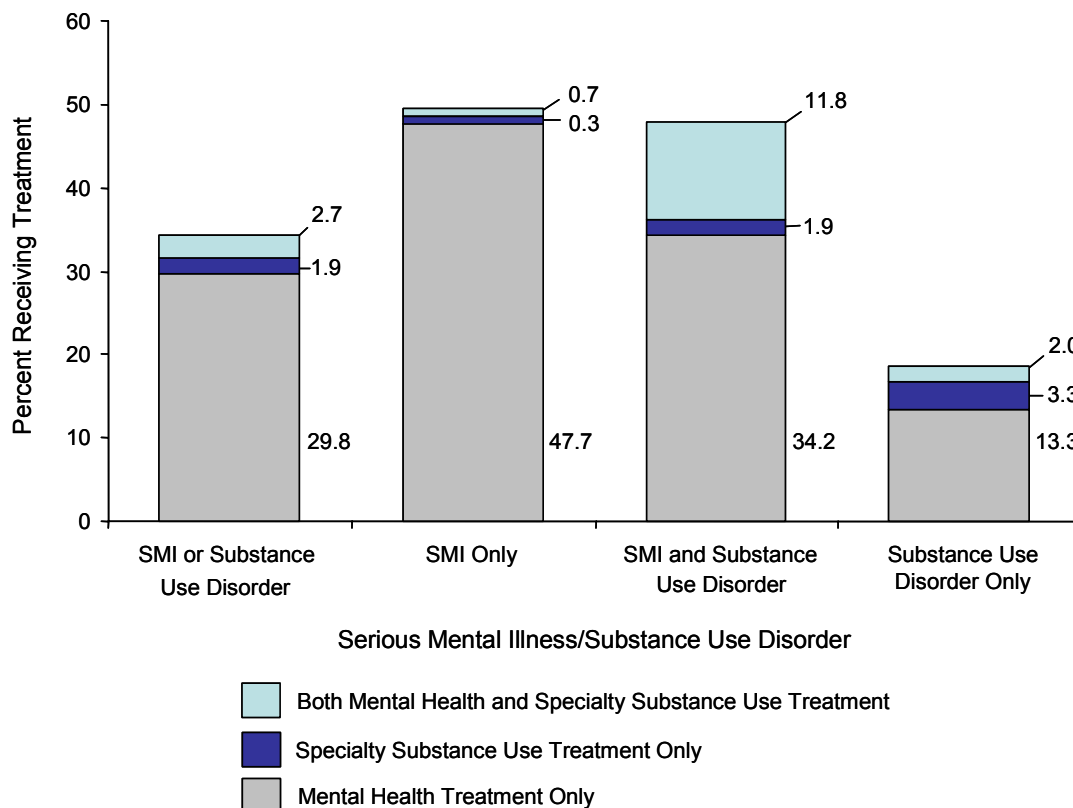
4.2. Use of Treatment Services among Adults with Serious Mental Illness and/or a Co-Occurring Substance Use Disorder

This section discusses the prevalence of mental health treatment and specialty substance use treatment received in the past 12 months by three groups: adults who had SMI but no substance use disorder (SMI only), adults who had a substance use disorder but no SMI (substance use disorder only), and adults who had both SMI and a substance use disorder in 2002. Persons with a substance use disorder are those classified as dependent on or abusing alcohol and/or illicit drugs. Mental health treatment for adults with only SMI is described first. Specialty substance use treatment for adults with only a substance use disorder is described next, followed by mental health and specialty substance use treatment for those with both SMI and a substance use disorder. Comparisons of the rates of mental health treatment are made between those with only SMI and those with both SMI and a substance use disorder. Similar comparisons are made for receipt of specialty substance use treatment between adults with only a substance use disorder and with both SMI and a substance use disorder.

As previously noted in Section 3.4, there were 33.2 million adults with either SMI or a substance use disorder in 2002. This includes 13.4 million adults who had only SMI, 4.0 million adults with both SMI and a substance use disorder, and 15.7 million adults who had only a substance use disorder (Figure 10). Among adults with only SMI, almost half (48.4 percent) received mental health treatment in the past year (mental health treatment only, or both mental health and substance use treatment) (Tables B.23a and B.23b). Among adults with SMI and a substance use disorder, 46.0 percent (1.9 million) received mental health treatment, and 13.7

percent (0.6 million) received specialty substance use treatment. An estimated 11.8 percent of adults with SMI and a substance use disorder (0.5 million) received both types of treatment (Figure 21). The prevalence of specialty substance use treatment among adults with only a substance use disorder was 5.3 percent.

Figure 21. Mental Health Treatment and Substance Use Treatment at a Specialty Facility among Adults Aged 18 or Older with Serious Mental Illness and/or a Substance Use Disorder: 2002



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

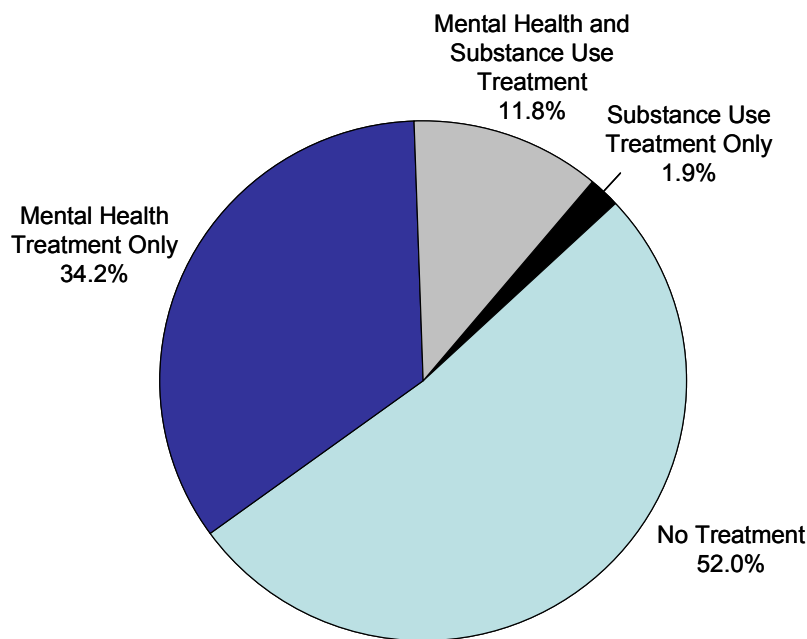
As previously described in Section 3.4 and Figure 11, among the 4.0 million adults with SMI and a substance use disorder, there were 0.9 million adults who were dependent on or abused illicit drugs only, 2.4 million who were dependent on or abused alcohol only, and 0.8 million who were dependent on or abused alcohol and illicit drugs. The prevalence of mental health treatment was 53.6 percent among those adults who had both SMI and were dependent on or abused only illicit drugs, but not alcohol (Table B.25b). This was higher than the prevalence of mental health treatment among those with SMI and dependence on or abuse of alcohol only (42.6 percent), but it was not significantly different from the prevalence of mental health treatment among adults with SMI and no substance use disorder (48.4 percent).

There was very little difference in the prevalence of mental health treatment in the past 12 months among adults with SMI who did or did not have a substance use disorder. Although

not significant, the prevalence of mental health treatment was lower among adults with SMI and any substance use disorder than among those with only SMI (46.0 vs. 48.4 percent, respectively) (Table B.25b). However, the prevalence of past year specialty substance use treatment was higher among adults with SMI and a substance use disorder than among adults with only a substance use disorder (13.7 vs. 5.3 percent, respectively) (Figure 21).

The results also indicate that the rate of mental health treatment among adults with only SMI was roughly 9 times higher than the rate of specialty substance use treatment among adults with only a substance use disorder (48.4 vs. 5.4 percent) (Figure 21). Although about 48 percent of adults with both disorders received some type of treatment (mental health or specialty substance use treatment), only 11.8 percent of adults with both disorders received both types of services (Figures 21 and 22, Tables B.23a and B.23b). These results highlight the importance of treating more people who have co-occurring substance use and mental health disorders for both disorders. Similar results were obtained when the analysis was performed using any substance use treatment instead of specialty substance use treatment (Tables B.24a and B.24b).

Figure 22. Mental Health and Specialty Substance Use Treatment among Adults Aged 18 or Older with Both Serious Mental Illness and a Substance Use Disorder: 2002



4.0 Million Adults with Co-Occurring Serious Mental Illness and Substance Use Disorder

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

4.3. Multiple Logistic Regression Models

The estimated strength of the association between the receipt of mental health treatment among adults with SMI in the past year and various characteristics believed to influence receipt of mental health treatment was determined via multiple logistic regression procedures. Past year

receipt of mental health treatment was the dependent variable in the model; any illicit drug or alcohol dependence or abuse, cigarette (nicotine) dependence, and various sociodemographic characteristics were among the independent variables in the model. Adjusted odds ratios (ORs) are presented. (See Appendix A, Section A.5.4, for a discussion of logistic modeling and the interpretation of adjusted ORs.)

The adjusted ORs from the logistic regression models, which controlled for confounding variables, confirmed that, among adults with SMI, the odds of receiving mental health treatment varied by age, gender, Hispanic origin and race, education, employment status, marital status, health insurance coverage, and perception of overall health. However, the odds of receiving mental health treatment among this group did not vary significantly based on geographic region, county type, family income, receipt of social support, nicotine dependence, or any illicit drug/alcohol dependence or abuse.

Examining the adjusted ORs from these models of receiving mental health treatment demonstrates that among adults with SMI, adults aged 26 to 49 were more likely to receive treatment than those aged 50 or older (OR = 1.7) (Table B.M2). No other age groups showed significant differences. With regard to gender and race/ethnicity, females were more likely to receive mental health treatment than men, with an OR of 1.6, and non-Hispanic whites were more likely to receive mental health treatment than any other category of Hispanic origin and race. (The ORs for each of these groups compared with whites are as follows: black or African American, 0.5; Hispanic or Latino, 0.7; and other or more than two races, 0.6.)

When comparisons were made with adults with SMI who graduated from college, those with SMI who did not graduate from high school were less likely to receive mental health treatment (OR = 0.44), as were those with SMI who were high school graduates but had no further education (OR = 0.55). However, the odds of receiving treatment did not vary significantly between adults with SMI who had some college and those who graduated from college.

Among adults with SMI, these models indicate that employment status had an effect on the odds of receiving mental health treatment. Those who were either employed part time or not in the labor force were more likely than those working full time to receive mental health treatment (ORs = 1.6 and 1.5, respectively). However, the odds of receiving treatment for those who were unemployed were not significantly different from those who were employed full time. Adults with SMI who were either divorced or separated were more likely to receive mental health treatment than those who were married (OR = 1.6) and those who had never married (OR = 2.0 calculated by dividing 1.60 by 0.81).

Among adults with SMI, those with private health insurance had twice the odds of receiving mental health treatment as those with no insurance. Similar results were obtained when comparing adults who received Medicaid or adults in the Children's Health Insurance Program (CHIP) with adults having no insurance.

These models also indicated that the perception of overall health status affected the odds of receiving mental health treatment for adults with SMI. When comparisons were made with adults with SMI who perceived their overall health as excellent, all other persons with SMI were

more likely to receive mental health treatment. Those who perceived their health as fair or poor had an OR of 2.6, whereas those who perceived their overall health as either good or very good had ORs of 1.6 and 1.4, respectively.

The results of the modeling also showed that when controlling for confounding variables, illicit drug or alcohol dependence or abuse was not associated with receipt of mental health treatment among adults with SMI ($\chi^2 = 6.0$).

4.4. Discussion

Results from the 2002 NSDUH signifying that individuals with a substance use disorder are more likely to receive specialty substance use treatment if they have a co-occurring SMI are consistent with results from the National Comorbidity Survey-Replication (NCS-R) and Communities Survey (U.S. Department of Health and Human Services, 1999).

5. Summary and Conclusions

According to the 2002 National Survey on Drug Use and Health (NSDUH), there were 17.5 million adults estimated to have a serious mental illness (SMI) in 2002, representing 8.3 percent of all adults in the United States. Adults with SMI were more likely to have each of the following demographic characteristics when compared with adults without SMI: they were younger, female, less educated, non-Hispanic white, unemployed, and not in the labor force. The prevalence of SMI was shown to vary by age, gender, race, education, and employment, as well as by perceived health, social support, marital status, and the use of specific substances. SMI was correlated with illicit drug use, and the prevalence of SMI varied by the type of illicit drug used.

Among adults with SMI, almost 30 percent (5.0 million adults) used illicit drugs. Adults with SMI who used illicit drugs in the past year were more likely than those not using illicit drugs to have each of the following characteristics: male, some college, and employed full or part time. Among adults with SMI who used illicit drugs in the past year, 2.3 million had no substance use disorder.

An estimated 4 million adults had SMI and a substance use disorder in 2002. There were 13.4 million adults with only SMI and 15.7 million adults with only a substance use disorder. The characteristics of adults with SMI and a substance use disorder were similar to the characteristics of adults with SMI and illicit drug use.

The adjusted odds ratios (ORs) from the modeling also showed that SMI is correlated with past year alcohol dependence or abuse, past year illicit drug dependence or abuse, and past year illicit drug use with no substance use disorder. The Chi-square tests of association from the modeling indicated that SMI also is associated with the following characteristics: age, gender, race/ethnicity, education, marital status, health insurance, perceived health, social support, and nicotine (cigarette) dependence.

Almost 50 percent of adults with SMI received mental health treatment. When compared with adults with SMI who did not receive treatment, adults with SMI who received treatment were more likely to belong to each of the following demographic subgroups: aged 26 to 49, female, non-Hispanic white, and college graduates. The past year prevalence of mental health treatment among adults with SMI was highest in each of the following subgroups: aged 26 to 49, female, non-Hispanic white, college graduates, and perceived health fair or poor. For adults aged 26 to 49 with SMI, the prevalence of mental health treatment was highest among those who received Medicaid and among those who were divorced or separated.

The prevalence of mental health treatment in the past year among adults with SMI but no substance use disorder was shown to be much higher than the prevalence of substance use treatment among adults with a substance use disorder but no SMI. In addition, adults with SMI but no substance use disorder were just as likely to receive mental health treatment as those with both SMI and a substance use disorder. However, adults with a substance use disorder and SMI were more likely to receive specialty substance use treatment than adults with a substance use disorder but no SMI. Only a small proportion of persons with SMI and a substance use disorder received both specialty substance use treatment and mental health treatment.

The modeling showed that, among adults with SMI, mental health treatment is associated with each of the following characteristics: age, gender, race, education, current employment, marital status, health insurance, and perceived health, after controlling for possible confounding variables.

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Appendix A: Description of the Survey, Limitations of the Data, and Statistical Methods

A.1. Sample Design

The 2002 National Survey on Drug Use and Health (NSDUH) sample design was part of a coordinated 5-year sample design that will provide estimates for all 50 States plus the District of Columbia for the years 1999 through 2003. The coordinated design facilitates 50 percent overlap in first-stage units (area segments) between each 2 successive years.

For the 5-year 50-State design, 8 States were designated as large sample States (California, Florida, Illinois, Michigan, New York, Ohio, Pennsylvania, and Texas) with samples large enough to support direct State estimates. Sample sizes in these States ranged from 3,554 to 3,792. For the remaining 42 States and the District of Columbia, smaller, but adequate, samples were selected to support State estimates using small area estimation (SAE)¹ techniques. Sample sizes in these States ranged from 674² to 977 in 2002.

States were first stratified into a total of 900 field interviewer (FI) regions (48 regions in each large sample State and 12 regions in each small sample State). These regions were contiguous geographic areas designed to yield the same number of interviews on average. Within FI regions, adjacent census blocks were combined to form the first-stage sampling units, called area segments. A total of 96 segments per FI region were selected with probability proportional to population size in order to support the 5-year sample and any supplemental studies that the Substance Abuse and Mental Health Services Administration (SAMHSA) may choose to field.³ Eight sample segments per FI region were fielded during the 2002 survey year.

These sampled segments were allocated equally into four separate samples, one for each 3-month period during the year, so that the survey was essentially continuous in the field. In each of these area segments, a listing of all addresses was made, from which a sample of 178,013 addresses was selected. Of the selected addresses, 150,162 were determined to be eligible sample units. In these sample units (which could be either households or units within group quarters), sample persons were randomly selected using an automated screening procedure programmed in a handheld computer carried by the interviewers. The number of sample units completing the screening was 136,349. Youths (aged 12 to 17 years) and young adults (aged 18 to 25 years)

¹ Small area estimation (SAE) is a hierarchical Bayes modeling technique used to make State-level estimates for approximately 20 substance use-related measures. See the *State Estimates of Substance Use from the 2001 National Household Survey on Drug Abuse* (Wright, 2003a, 2003b) for more details.

² This small sample size was achieved in New Mexico following the decision to drop cases conducted by several interviewers in this State, Nevada, and Mississippi who were accused of completing fraudulent work. The next two smallest sample sizes were achieved in Mississippi and New Jersey with 839 and 854 completed cases, respectively.

³ For more details on the 5-year sample, see the sample design report in the *2001 NHSDA Methodological Resource Book* (Bowman, Chromy, Odom, & Penne, 2003).

were oversampled at this stage. Because of the large sample size associated with this sample, there was no need to oversample racial/ethnic groups, as was done on surveys⁴ prior to 1999. A total of 80,581 persons were selected nationwide. Consistent with previous surveys, the final respondent sample of 68,126 persons was representative of the U.S. general population (since 1991, the civilian, noninstitutionalized population) aged 12 or older. In addition, State samples were representative of their respective State populations. More detailed information on these topics can be found in the appendices of the 2002 NSDUH results report (Office of Applied Studies [OAS], 2003) as follows: (a) additional information on the disposition of the national screening and interview sample can be found in Appendix B, and (b) additional tables showing sample sizes and estimated population counts for various demographic and geographic subgroups are presented in Appendix G.

The survey covered residents of households (living in houses/townhouses, apartments, condominiums, etc.), noninstitutional group quarters (e.g., shelters, rooming/boarding houses, college dormitories, migratory workers' camps, halfway houses), and civilians living on military bases. Although the survey covered these types of units (they were given a nonzero probability of selection), sample sizes of most specific groups were too small to provide separate estimates. Persons excluded from the survey included homeless people who did not use shelters, active military personnel, and residents of institutional group quarters, such as correctional facilities, nursing homes, mental institutions, and long-term hospitals.

A.2. Data Collection Methodology

The data collection method used in NSDUH involved in-person interviews with sample persons, incorporating procedures that would be likely to increase respondents' cooperation and willingness to report honestly about their illicit drug use behavior. Confidentiality was stressed in all written and oral communications with potential respondents, respondents' names were not collected with the data, and computer-assisted interviewing (CAI) methods, including audio computer-assisted self-interviewing (ACASI), were used to provide a private and confidential setting to complete the interview.

Introductory letters were sent to sampled addresses, followed by an interviewer visit. A 5-minute screening procedure conducted using a handheld computer involved listing all household members along with their basic demographic data. The computer used the demographic data in a preprogrammed selection algorithm to select zero to two sample person(s), depending on the composition of the household. This selection process was designed to provide the necessary sample sizes for the specified population age groupings.

Interviewers attempted to immediately conduct the NSDUH interview with each selected person in the household. The interviewer requested the selected respondent to identify a private area in the home away from other household members to conduct the interview. The interview averaged about an hour and included a combination of CAPI (computer-assisted personal interviewing) and ACASI. The interview began in CAPI mode with the FI reading the questions from the computer screen and entering the respondent's replies into the computer. The interview then transitioned to the ACASI mode for the sensitive questions. In this mode, the respondent

⁴ Prior to 2002, the survey was known as the National Household Survey on Drug Abuse (NHSDA).

could read the questions silently on the computer screen and/or listen to the questions read through headphones and enter his or her responses directly into the computer. At the conclusion of the ACASI section, the interview returned to the CAPI mode with the interviewer completing the questionnaire. Each respondent who completed a full interview was given a \$30 cash payment as a token of appreciation for his or her time.

No personal identifying information was captured in the CAI record for the respondent. At the end of the day when an interviewer had completed one or more interviews, he or she transmitted the data to RTI in Research Triangle Park, North Carolina, via home telephone lines.

A.3. Data Processing

Interviewers initiated nightly data transmissions of interview data and call records on days when they worked. Computers at RTI directed the information to a raw data file that consisted of one record for each completed interview. Even though editing and consistency checks were done by the CAI program during the interview, additional, more complex edits and consistency checks were completed at RTI. Cases were retained only if respondents provided data on lifetime use of cigarettes and at least nine other substances. An important aspect of subsequent editing routines involved assignment of codes when respondents legitimately skipped out of questions that definitely did not apply to them (e.g., if respondents never used a drug of interest). For key drug use measures, the editing procedures identified inconsistencies between related variables. Inconsistencies in variables pertaining to the most recent period that respondents used a drug were edited by assigning an "indefinite" period of use (e.g., use at some point in the lifetime, which could mean use in the past 30 days or past 12 months). Inconsistencies in other key drug use variables were edited by assigning missing data codes. These inconsistencies then were resolved through statistical imputation procedures, as discussed below.

A.3.1 Statistical Imputation

For some key variables that still had missing or ambiguous values after editing, statistical imputation was used to replace ambiguous or missing data with appropriate response codes. For example, the response was ambiguous if the editing procedures assigned a respondent's most recent use of a drug to "use at some point in the lifetime," with no definite period within the lifetime. In this case, the imputation procedures assigned a definite value for when the respondent last used the drug (e.g., in the past 30 days, more than 30 days ago but within the past 12 months, more than 12 months ago). Similarly, if the response was completely missing, the imputation procedures replaced missing values with nonmissing ones.

Missing or ambiguous values were imputed using a methodology called predictive mean neighborhoods (PMN), which was developed specifically for the survey in 1999. PMN is a combination of a model-assisted imputation methodology and a random nearest neighbor hot-deck procedure. Whenever feasible, the imputation of variables using PMN is multivariate, in which imputation is accomplished on several response variables at once. Variables requiring imputation were the core demographic variables, core drug use variables (recency of use, frequency of use, and age at first use), income, health insurance, and a variety of roster-derived

variables. Variables such as treatment, dependence, abuse, and serious mental illness (SMI) were not imputed.

In the modeling stage of PMN, the model chosen depends on the nature of the response variable *Y*. In the 2002 NSDUH, the models included binomial logistic regression, multinomial logistic regression, Poisson regression, and ordinary linear regression, where the models incorporate the design weights.

In general, hot-deck imputation replaces a missing or ambiguous value taken from a "similar" respondent who has complete data. For random nearest neighbor hot-deck imputation, the missing or ambiguous value is replaced by a responding value from a donor randomly selected from a set of potential donors. Potential donors are those defined to be "close" to the unit with the missing or ambiguous value, according to a predefined function, called a distance metric. In the hot-deck stage of PMN, the set of candidate donors (the "neighborhood") consists of respondents with complete data who have a predicted mean close to that of the item nonrespondent. In particular, the neighborhood consists of either the set of the closest 30 respondents, or the set of respondents with a predicted mean (or means) within 5 percent of the predicted mean(s) of the item nonrespondent, whichever set is smaller. If no respondents are available who have a predicted mean (or means) within 5 percent of the item nonrespondent, the respondent with the predicted mean(s) closest to that of the item nonrespondent is selected as the donor.

In the univariate case, the neighborhood of potential donors is determined by calculating the relative distance between the predicted mean for an item nonrespondent and the predicted mean for each potential donor, then choosing those means defined by the distance metric. The pool of donors is further restricted to satisfy logical constraints whenever necessary (e.g., age at first crack use must not be younger than age at first cocaine use).

Whenever possible, missing or ambiguous values for more than one response variable are considered at a time. In this (multivariate) case, the distance metric is a Mahalanobis distance (Manly, 1986) rather than a relative Euclidean distance. Whether the imputation is univariate or multivariate, only missing or ambiguous values are replaced, and donors are restricted to be logically consistent with the response variables that are not missing. Furthermore, donors are restricted to satisfy "likeness constraints" whenever possible. That is, donors are required to have the same values for variables highly correlated with the response. If no donors are available that meet these conditions, these likeness constraints can be loosened. For example, donors for the age at first use variable are required to be of the same age as recipients, if at all possible. Further details on the PMN methodology are provided in RTI (2003) and Singh, Grau, and Folsom (2001, 2002).

Although statistical imputation could not proceed separately within each State due to insufficient pools of donors, information about each respondent's State of residence was incorporated in the modeling and hot-deck steps. For most drugs, respondents were separated into three "State usage" categories as follows: respondents from States with high usage of a given drug were placed in one category, respondents from States with medium usage into another, and the remainder into a third category. This categorical "State rank" variable was used as one set of covariates in the imputation models. In addition, eligible donors for each item

nonrespondent were restricted to be of the same State usage category (i.e., the same "State rank") as the nonrespondent.

A.3.2 Development of Analysis Weights

The general approach to developing and calibrating analysis weights involved developing design-based weights, d_k , as the inverse of the selection probabilities of the households and persons. Adjustment factors, $a_k(\lambda)$, then were applied to the design-based weights to adjust for nonresponse, to poststratify to known population control totals, and to control for extreme weights when necessary. In view of the importance of State-level estimates with the 50-State design, it was necessary to control for a much larger number of known population totals. Several other modifications to the general weight adjustment strategy that had been used in past surveys also were implemented for the first time beginning with the 1999 CAI sample.

Weight adjustments were based on a generalization of Deville and Särndal's (1992) logit model. This generalized exponential model (GEM) (Folsom & Singh, 2000) incorporates unit-specific bounds (ℓ_k, u_k) , $k \in S$, for the adjustment factor $a_k(\lambda)$ as follows:

$$a_k(\lambda) = \frac{\ell_k(u_k - c_k) + u_k(c_k - \ell_k) \exp(A_k x_k' \lambda)}{(u_k - c_k) + (c_k - \ell_k) \exp(A_k x_k' \lambda)},$$

where c_k are prespecified centering constants, such that $\ell_k < c_k < u_k$ and $A_k = (u_k - \ell_k) / (u_k - c_k)(c_k - \ell_k)$. The variables ℓ_k , c_k , and u_k are user-specified bounds, and λ is the column vector of p model parameters corresponding to the p covariates x . The λ -parameters are estimated by solving

$$\sum_s x_k d_k a_k(\lambda) - \tilde{T}_x = 0,$$

where \tilde{T}_x denotes control totals that could be either nonrandom, as is generally the case with poststratification, or random, as is generally the case for nonresponse adjustment.

The final weights $w_k = d_k a_k(\lambda)$ minimized the distance function $\Delta(w, d)$ defined as

$$\Delta(w, d) = \sum_{k \in S} \frac{d_k}{A_k} \left\{ (a_k - \ell_k) \log \frac{a_k - \ell_k}{c_k - \ell_k} + (u_k - a_k) \log \frac{u_k - a_k}{u_k - c_k} \right\}.$$

This general approach was used at several stages of the weight adjustment process, including (1) adjustment of household weights for nonresponse at the screener level, (2) poststratification of household weights to meet population controls for various demographic groups by State, (3) adjustment of household weights for extremes, (4) poststratification of selected person weights, (5) adjustment of person weights for nonresponse at the questionnaire level, (6) poststratification of person weights, and (7) adjustment of person weights for extremes.

Every effort was made to include as many relevant State-specific covariates (typically defined by demographic domains within States) as possible in the multivariate models used to calibrate the weights (nonresponse adjustment and poststratification steps). Because further subdivision of State samples by demographic covariates often produced small cell sample sizes,

it was not possible to retain all State-specific covariates (even after meaningful collapsing of covariate categories) and still estimate the necessary model parameters with reasonable precision. Therefore, a hierarchical structure was used in grouping States with covariates defined at the national level, at the census division level within the Nation, at the State-group within census division, and, whenever possible, at the State level. In every case, the controls for total population within State and the six age groups (12-17, 18-25, 26-34, 35-49, 50-64, 65+) within State were maintained. Census control totals by age, race, gender, and Hispanicity were required for the civilian, noninstitutionalized population of each State. The Population Estimates Branch of the U.S. Bureau of the Census produced the necessary population estimates in response to a special request based on the 2000 census. Because of the additional multiple race category in the 2000 census, it was possible to include an extra level for the race variable used in weight calibration both at the household and person levels.

Consistent with the surveys from 1999 onward, control of extreme weights through separate bounds for adjustment factors was incorporated into the GEM calibration processes for both nonresponse and poststratification. This is unlike the traditional method of winsorization in which extreme weights are truncated at prespecified levels and the trimmed portions of weights are distributed to the nontruncated cases. In GEM, it is possible to set bounds around the prespecified levels for extreme weights, and then the calibration process provides an objective way of deciding the extent of adjustment (or truncation) within the specified bounds. A step was added to poststratify the household-level weights to obtain census-consistent estimates based on the household rosters from all screened households; these household roster-based estimates then provided the control totals needed to calibrate the respondent pair weights for subsequent planned analyses. An additional step poststratified the selected person sample to conform to the adjusted roster estimates. This additional step took advantage of the inherent two-phase nature of the NSDUH design. The final step poststratified the respondent person sample to external census data (defined within State whenever possible as discussed above). For more detailed information, see the *2001 NHSDA Methodological Resource Book* (RTI, 2003).

A.4. Target Population

An important limitation of estimates of drug use prevalence from NSDUH was that they were only designed to describe the target population of the survey—the civilian, noninstitutionalized population aged 12 or older. Although this population included almost 98 percent of the total U.S. population aged 12 or older, it excluded some important and unique subpopulations that may have very different drug use patterns. For example, the survey excluded active military personnel, who have been shown to have significantly lower rates of illicit drug use. Persons living in institutional group quarters, such as prisons and residential drug treatment centers, were not included in NSDUH and have been shown in other surveys to have higher rates of illicit drug use. Also excluded were homeless persons not living in a shelter on the survey date, another population shown to have higher than average rates of illicit drug use.

A.5. Sampling Error and Statistical Significance

The national estimates, along with the associated variance components, were computed using a multiprocedure package, SURvey DATA ANalysis (SUDAAN[®]) Software for Statistical Analysis of Correlated Data, which was designed for the statistical analysis of sample survey

data from stratified, multistage cluster samples (RTI, 2001). The final, nonresponse-adjusted, and poststratified analysis weights were used to compute unbiased design-based drug use estimates.

The sampling error (i.e., the standard error [SE]) of an estimate is the error caused by the selection of a sample instead of conducting a census of the population. Sampling error is reduced by selecting a large sample and by using efficient sample design and estimation strategies, such as stratification, optimal allocation, and ratio estimation.

With the use of probability sampling methods in NSDUH, it was possible to develop estimates of sampling error from the survey data. These estimates were calculated in SUDAAN for all estimates presented in this report using a Taylor series linearization approach that takes into account the effects of the complex NSDUH design features. The sampling errors were used to identify unreliable estimates and to test for the statistical significance of differences between estimates.

A.5.1 Variance Estimation for Totals

Estimates of proportions, \hat{p}_d , such as prevalence rates for serious mental illness (SMI), take the form of nonlinear statistics where the variances cannot be expressed in closed form. Variance estimation for nonlinear statistics in SUDAAN is performed using a first-order Taylor series approximation of the deviations of estimates from their expected values.

Corresponding to proportion estimates, \hat{p}_d , the number of persons with SMI, \hat{Y}_d , could be estimated as

$$\hat{Y}_d = \hat{N}_d \hat{p}_d,$$

where \hat{N}_d is the estimated population total for domain d , and \hat{p}_d is the estimated proportion for domain d . The SE for the total estimate was obtained by multiplying the SE of the proportion by \hat{N}_d , that is,

$$SE(\hat{Y}_d) = \hat{N}_d SE(\hat{p}_d).$$

This approach is theoretically correct when the domain size estimates, \hat{N}_d , are among those forced to U.S. Bureau of the Census population projections through the weight calibration process. In these cases, \hat{N}_d is clearly not subject to sampling error. For a more detailed explanation of the weight calibration process, see Section A.3.2.

For domain totals, \hat{Y}_d , where \hat{N}_d is not fixed, this formulation may still provide a good approximation if it can be reasonably assumed that the sampling variation in \hat{N}_d is negligible relative to the sampling variation in \hat{p}_d . This is a reasonable assumption in most cases.

For a subset of the tables produced from the 2002 data, it was clear that the above approach yielded an underestimate of the variance of a total because \hat{N}_d was subject to

considerable variation. In these cases, a different method was used to estimate variances. SUDAAN provides an option to directly estimate the variance of the linear statistic that estimates a population total. Using this option did not affect the SE estimates for the corresponding proportions presented in the same sets of tables.

A.5.2 Suppression Criteria for Unreliable Estimates

As has been done in past reports from the survey, direct survey estimates from the 2002 NSDUH considered to be unreliable due to unacceptably large sampling errors are not shown in this report and are noted by asterisks (*) in the tables containing such estimates. The criteria used for suppressing all direct survey estimates were based on the relative standard error (RSE), which is defined as the ratio of the standard error (SE) over the estimate, as well as on nominal sample size and on effective sample size.

Proportion estimates (\hat{p}) within the range $[0 < \hat{p} < 1]$, rates, and corresponding estimated number of users were suppressed if

$$\text{RSE}[-\ln(\hat{p})] > 0.175 \text{ when } \hat{p} \leq 0.5$$

or

$$\text{RSE}[-\ln(1 - \hat{p})] > 0.175 \text{ when } \hat{p} > 0.5.$$

Using a first-order Taylor series approximation to estimate $\text{RSE}[-\ln(\hat{p})]$ and $\text{RSE}[-\ln(1 - \hat{p})]$, the following was obtained and used for computational purposes:

$$\frac{SE(\hat{p})/\hat{p}}{-\ln(\hat{p})} > 0.175 \text{ when } \hat{p} \leq 0.5$$

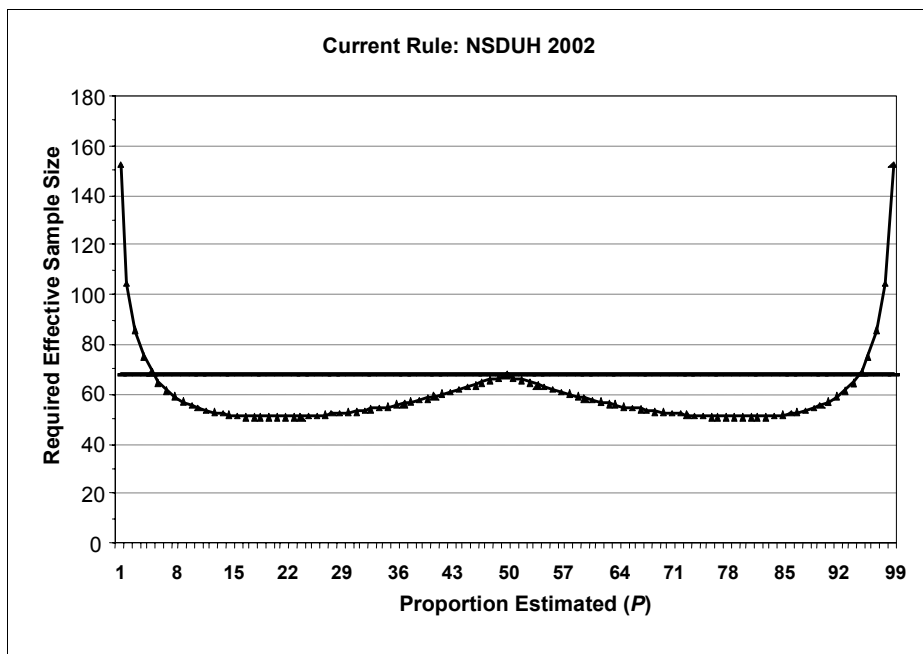
or

$$\frac{SE(\hat{p})/(1 - \hat{p})}{-\ln(1 - \hat{p})} > 0.175 \text{ when } \hat{p} > 0.5.$$

The separate formulas for $\hat{p} \leq 0.5$ and $\hat{p} > 0.5$ produce a symmetric suppression rule (i.e., if \hat{p} is suppressed, then $1 - \hat{p}$ will be as well). This ad hoc rule requires an effective sample size in excess of 50. When $0.05 < \hat{p} < 0.95$, the symmetric property of the rule produces a local maximum effective sample size of 68 at $\hat{p} = 0.5$. Thus, estimates with these values of \hat{p} along with effective sample sizes falling below 68 were suppressed. See Figure A.1 for a graphical representation of the required minimum effective sample sizes as a function of the proportion estimated.

A minimum nominal sample size suppression criterion ($n = 100$) that protects against unreliable estimates caused by small design effects and small nominal sample sizes was employed. Prevalence estimates also were suppressed if they were close to 0 or 100 percent (i.e., if $\hat{p} < .00005$ or if $\hat{p} \geq .99995$).

Figure A.1 Required Effective Sample as a Function of the Proportion Estimated



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

The suppression criteria for NSDUH estimates used in this report are summarized in Table A.1 at the end of this appendix.

A.5.3 Statistical Significance of Differences

This section describes the methods used to compare prevalence estimates in this report. Customarily, the observed difference between estimates is evaluated in terms of its statistical significance. "Statistical significance" refers to the probability that a difference as large as that observed would occur due to random error in the estimates if there were no difference in the prevalence rates for the population groups being compared. The significance of observed differences in this report was generally reported at the 0.05 and 0.01 levels. When comparing prevalence estimates, the null hypothesis (no difference between prevalence rates) was tested against the alternative hypothesis (there is a difference in prevalence rates) using the standard difference in proportions test expressed as follows:

$$Z = \frac{\hat{p}_1 - \hat{p}_2}{\sqrt{\text{var}(\hat{p}_1) + \text{var}(\hat{p}_2) - 2 \text{cov}(\hat{p}_1, \hat{p}_2)}}$$

where \hat{p}_1 = first prevalence estimate, \hat{p}_2 = second prevalence estimate, $\text{var}(\hat{p}_1)$ = variance of first prevalence estimate, $\text{var}(\hat{p}_2)$ = variance of second prevalence estimate, and $\text{cov}(\hat{p}_1, \hat{p}_2)$ = covariance between \hat{p}_1 and \hat{p}_2 .

Under the null hypothesis, Z is asymptotically distributed as a normal random variable. Calculated values of Z can therefore be referred to as the unit normal distribution to determine

the corresponding probability level (i.e., p value). The covariance term in the formula for Z will not always be 0. Estimates of Z , along with its p value, were calculated in SUDAAN, using the analysis weights and accounting for the sample design as described in Section A.1. A similar procedure and formula for Z were used for estimated totals.

When comparing prevalence measures between population subgroups, a χ^2 test of independence of the subgroup and the prevalence variable was conducted first to control the error level for multiple comparisons. If the χ^2 test indicated some significant differences, the significance of each particular subgroup comparison discussed in the report was tested using SUDAAN. Using the published estimates and SEs to perform independent t tests for the difference of proportions will usually provide the same results as tests performed in SUDAAN. However, where the significance level is borderline, results may differ for two reasons: (1) the covariance term is included in SUDAAN tests whereas it is not included in independent t tests, and (2) the reduced number of significant digits shown in the published estimates may cause rounding errors in the independent t tests.

A.5.4 Logistic Regression Models and Statistical Significance of Odds Ratios

Because SMI is a binary response variable, one approach to investigate the relationship between SMI and several potential predictor variables (e.g., age, race) is through a logistic regression model. Consider an example where Y is a binary response variable (i.e., coded as 0 or 1) and there are two predictor variables, one continuous and one categorical (consisting of $k + 1$ groups). Then a logistic regression model expressing the relationship between Y (specifically, the proportion of times that $Y = 1$) and the two predictor variables can be written as

$$p(\mathbf{x}) = \frac{\exp(\alpha + \beta x_1 + \gamma_1 x_{21} + \dots + \gamma_k x_{2k})}{1 + \exp(\alpha + \beta x_1 + \gamma_1 x_{21} + \dots + \gamma_k x_{2k})},$$

where $p(\mathbf{x})$ represents the probability that $Y = 1$, given $\mathbf{x} = (x_1, x_{21}, \dots, x_{2k})'$, x_1 represents the continuous predictor variable with its corresponding parameter β , and x_{21}, \dots, x_{2k} represent the k contrasts of the categorical predictor variable with their corresponding parameters $\gamma_1, \dots, \gamma_k$.

A simple transformation of the response variable changes this model to the more convenient form of a linear model, as follows:

$$\text{logit}(p(\mathbf{x})) \equiv \log\left(\frac{p(\mathbf{x})}{1 - p(\mathbf{x})}\right) = \alpha + \beta x_1 + \gamma_1 x_{21} + \dots + \gamma_k x_{2k}.$$

Thus, in the transformed (or logit) scale, this model has many of the properties associated with linear models, although the interpretation of the parameters is not as straightforward. The "intercept" parameter α , is typically not of much interest. The "slope" parameter β , corresponding to the continuous predictor variable x_1 , represents the change in $\text{logit}(p(\mathbf{x}))$ for a unit increase in x_1 (with x_{21}, \dots, x_{2k} held constant), but this does not have immediate intuitive appeal. However, it can be shown that

$$\exp(\beta) = \left(\frac{p(x_1 + 1, x_{21}, \dots, x_{2k})}{1 - p(x_1 + 1, x_{21}, \dots, x_{2k})} \bigg/ \frac{p(x_1, x_{21}, \dots, x_{2k})}{1 - p(x_1, x_{21}, \dots, x_{2k})} \right),$$

which is a ratio of the odds that $Y = 1$, given $x_1 + 1, x_{21}, \dots, x_{2k}$, over the odds that $Y = 1$, given $x_1, x_{21}, \dots, x_{2k}$. So, for example, if Y represents SMI and x_1 represents the continuous variable age, then the odds of SMI occurring are increased/decreased by the odds ratio, $\exp(\beta)$, for each year of increase in age (with all other variables held constant). The odds are increased if $\beta > 0$ (i.e., $\exp(\beta) > 1$) and are decreased if $\beta < 0$ (i.e., $\exp(\beta) < 1$).

The categorical contrast parameters $\gamma_1, \dots, \gamma_k$, require a slightly different interpretation. The contrast variables, x_{21}, \dots, x_{2k} , are first constructed as follows: A reference group is specified from among the $k + 1$ groups of the categorical predictor variable. Then k contrast variables are created so that the i th contrast variable represents a contrast between the i th nonreference group and the reference group, for $i = 1, \dots, k$. The odds ratio, $\exp(\gamma_i)$, then represents the increase or decrease in the odds that $Y = 1$ given nonreference group i , over the odds that $Y = 1$ given the reference group (with all other variables held constant). In addition, for any categorical predictor variable for which $k \geq 2$, a Wald F -statistic (with k degrees of freedom) is also used to test the overall effect of this predictor variable. For example, if Y represents SMI, the predictor variable race is categorized into four groups (i.e., $k = 3$), and whites are specified as the reference group, then the model will have three contrast variables representing contrasts between the three nonwhite race groups and whites. And, the odds of SMI occurring are increased or decreased by the odds ratio, $\exp(\gamma_i)$, as the i th nonwhite race group is compared against the white race group (with all other variables held constant). Because $k = 3$, a Wald F -statistic (with three degrees of freedom) also will be used to test the overall effect of the race predictor variable.

Several of the logistic regression models fitted with SMI as a response variable included multiple predictor variables, most of them categorical. For categorical predictor variables with two or more contrasts, individual contrasts were reported only if the overall Wald F -test of that predictor variable was significant at the 0.05 level. The purpose of this was to attempt to keep the Type I (i.e., false positive) error rate as close as possible to the nominal level of $\alpha = 0.05$.

A.6. Nonsampling Error

Nonsampling errors can occur from nonresponse, coding errors, computer processing errors, errors in the sampling frame, reporting errors, and other errors not due to sampling. Nonsampling errors are reduced through data editing, statistical adjustments for nonresponse, close monitoring and periodic retraining of interviewers, and improvement in various quality control procedures.

Although nonsampling errors often can be much larger than sampling errors, measurement of most nonsampling errors is difficult or impossible. However, some indication of the effects of some types of nonsampling errors can be obtained through proxy measures, such as response rates and from other research studies.

A.6.1 Screening and Interview Response Rate Patterns

In 2002, response rates were improved over prior years by providing respondents with a \$30 incentive. Of the 150,162 eligible households sampled for the 2002 NSDUH main study, 136,349 were successfully screened, for a weighted screening response rate of 90.7 percent (Table A.2). In these screened households, a total of 80,581 sample persons were selected, and completed interviews were obtained from 68,126 of these sample persons, for a weighted interview response rate of 78.6 percent (Table A.3). A total of 7,583 (13.3 percent) sample persons were classified as refusals or parental refusals, 3,252 (4.5 percent) were not available or never at home, and 1,620 (3.7 percent) did not participate for various other reasons, such as physical or mental incompetence or language barrier (see Table A.3, which also shows the distribution of the selected sample by interview code and age group). The weighted interview response rate was highest among 12 to 17 year olds (90.0 percent), females (80.0 percent), blacks and Hispanics (82.2 and 80.9 percent, respectively), in nonmetropolitan areas (81.4 percent), and among persons residing in the Midwest and the South (both at 80.0 percent) (Table A.4).

The overall weighted response rate, defined as the product of the weighted screening response rate and weighted interview response rate, was 71.3 percent in 2002. Nonresponse bias can be expressed as the product of the nonresponse rate ($1-R$) and the difference between the characteristic of interest between respondents and nonrespondents in the population ($P_r - P_{nr}$). Thus, assuming the quantity ($P_r - P_{nr}$) is fixed over time, the improvement in response rates in 2002 over prior years will result in estimates with lower nonresponse bias.

A.6.2 Inconsistent Responses and Item Nonresponse

Among survey participants, item response rates were above 99 percent for most questionnaire items. However, inconsistent responses for some items, including the drug use items, were common. Estimates of substance use from NSDUH are based on responses to multiple questions by respondents, so that the maximum amount of information is used in determining whether a respondent is classified as a drug user. Inconsistencies in responses were resolved through a logical editing process that involved some judgment on the part of survey analysts and can be a potential source of nonsampling error.

A.6.3 Validity of Self-Reported Use

NSDUH estimates are based on self-reports of drug use, and their value depends on respondents' truthfulness and memory. Although many studies have generally established the validity of self-report data and the NSDUH procedures were designed to encourage honesty and recall, some degree of underreporting is assumed (Harrell, 1997; Harrison & Hughes, 1997; Rouse, Kozel, & Richards, 1985). No adjustment to NSDUH data is made to correct for this. The methodology used in NSDUH has been shown to produce more valid results than other self-report methods (e.g., by telephone) (Aquilino, 1994; Turner, Lessler, & Gfroerer, 1992). However, comparisons of NSDUH data with data from surveys conducted in classrooms suggest that underreporting of drug use by youths in their homes may be substantial (Gfroerer, 1993; Gfroerer, Wright, & Kopstein, 1997).

A.7. Serious Mental Illness Estimates

For the 2002 survey, mental health among adults was measured using a scale to ascertain serious mental illness (SMI). This scale consisted of six questions that ask respondents how frequently they experienced symptoms of psychological distress during the 1 month in the past year when they were at their worst emotionally. The use of this scale is based on a methodological study designed to evaluate several screening scales for measuring SMI in NSDUH. These scales consisted of a truncated version of the World Health Organization (WHO) Composite International Diagnostic Interview Short Form (CIDI-SF) scale (Kessler, Andrews, Mroczek, Üstün, & Wittchen, 1998), the K10/K6 scale of nonspecific psychological distress (Furukawa, Kessler, Slade, & Andrews, 2003), and the WHO Disability Assessment Schedule (WHO-DAS) (Rehm et al., 1999).

The methodological study to evaluate the scales consisted of 155 respondents selected from a first-stage sample of 1,000 adults aged 18 or older. First-stage respondents were selected from the Boston metropolitan area and screened on the telephone to determine whether they had any emotional problems. Respondents reporting emotional problems at the first stage were oversampled when selecting the 155 respondents at the second stage. The selected respondents were interviewed by trained clinicians in respondents' homes using both the NSDUH methodology and a structured clinical interview. The first interview included the three scales described above using audio computer-assisted self-interviewing (ACASI). Respondents completed the ACASI portion of the interview without discussing their answers with the clinician. After completing the ACASI interview, respondents then were interviewed using the 12-month nonpatient version of the Structured Clinical Interview for DSM-IV (SCID) (First, Spitzer, Gibbon, & Williams, 1997) and the Global Assessment of Functioning (GAF) (Endicott, Spitzer, Fleiss, & Cohen, 1976) to classify respondents as either having or not having SMI.

The data from the 155 respondents were analyzed using logistic regression analysis to predict SMI from the scores on the screening questions. Analysis of the model fit indicated that each of the scales alone and in combination were significant predictors of SMI and the best fitting models contained either the CIDI-SF or the K10/K6 alone. Receiver operating characteristic (ROC) curve analysis was used to evaluate the precision of the scales to discriminate between respondents with and without SMI. This analysis indicated that the K6 was the best predictor. The results of the methodological study are described in more detail in a paper describing the K10/K6 scale of nonspecific psychological distress (Kessler et al., 2003).

To score the items on the K6 scales, they were first coded from 0 to 4 and summed to yield a number between 0 and 24. This involved transforming response categories for the six questions (DSNERV1, DSHOPE, DSFIDG, DSNOCHR, DSEFFORT, and DSDOWN) given below so that "all of the time" was coded 4, "most of the time" was coded 3, "some of the time" 2, "a little of the time" 1, and "none of the time" 0, with "don't know" and "refuse" also coded 0. Summing across the transformed responses resulted in a score with a range from 0 to 24. Respondents with a total score of 13 or greater were classified as having a past year SMI. This cutpoint was chosen to equalize false positives and false negatives.

The questions comprising the K6 scale are given as follows:

DSNERV1 Most people have periods when they are not at their best emotionally. Think of one month in the past 12 months when you were the most depressed, anxious, or emotionally stressed. If there was no month like this, think of a typical month.

During that month, how often did you feel nervous?

- 1 All of the time
 - 2 Most of the time
 - 3 Some of the time
 - 4 A little of the time
 - 5 None of the time
- DK/REF

Response categories are the same for the following questions:

DSHOPE During that same month when you were at your worst emotionally . . . how often did you feel hopeless?

DSFIDG During that same month when you were at your worst emotionally . . . how often did you feel restless or fidgety?

DSNOCHR During that same month when you were at your worst emotionally . . . how often did you feel so sad or depressed that nothing could cheer you up?

DSEFFORT During that same month when you were at your worst emotionally . . . how often did you feel that everything was an effort?

DSDOWN During that same month when you were at your worst emotionally . . . how often did you feel down on yourself, no good, or worthless?

Table A.1 Summary of 2002 NSDUH Suppression Rules

Estimate	Suppress if:
Prevalence rate, \hat{p} , with nominal sample size, n , and design effect, $deff$	<p>(1) The estimated prevalence rate, \hat{p}, is < 0.00005 or ≥ 0.99995, or</p> <p>(2) $\frac{SE(\hat{p}) / \hat{p}}{-\ln(\hat{p})} > 0.175$ when $\hat{p} \leq 0.5$, or</p> <p style="text-align: center;">$\frac{SE(\hat{p}) / (1 - \hat{p})}{-\ln(1 - \hat{p})} > 0.175$ when $\hat{p} > 0.5$, or</p> <p>(3) Effective $n < 68$, where Effective $n = \frac{n}{deff}$, or</p> <p>(4) $n < 100$.</p> <p style="text-align: center;">Note: The rounding portion of this suppression rule for prevalence rates will produce some estimates that round at one decimal place to 0.0 or 100.0 percent but are not suppressed from the tables.</p>
Estimated number (numerator of \hat{p})	<p>The estimated prevalence rate, \hat{p}, is suppressed.</p> <p style="text-align: center;">Note: In some instances when \hat{p} is not suppressed, the estimated number may appear as a 0 in the tables; this means that the estimate is > 0 but < 500 (estimated numbers are shown in thousands).</p>

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

Table A.2 Weighted Percentages and Sample Sizes for 2002 NSDUH, by Screening Result Code

	Sample Size	Weighted Percentage
Total Sample of Dwelling Units	178,013	100.00
Ineligible cases	27,851	15.27
Eligible cases	150,162	84.73
Ineligibles	27,851	15.27
Vacant	14,417	51.55
Not a primary residence	4,580	17.36
Not a dwelling unit	2,403	8.16
Resident < 1/2 of quarter	0	0.00
All military personnel	289	1.08
Other, ineligible	6,162	21.86
Eligible Cases	150,162	84.73
Screening complete	136,349	90.72
No one selected	80,557	53.14
One selected	30,738	20.58
Two selected	25,054	17.00
Screening not complete	13,813	9.28
No one home	3,031	2.02
Respondent unavailable	411	0.26
Physically or mentally incompetent	307	0.20
Language barrier—Hispanic	66	0.05
Language barrier—other	461	0.35
Refusal	8,556	5.86
Other, access denied	471	0.30
Other, eligible	12	0.01
Segment not accessible	0	0.00
Screener not returned	15	0.01
Fraudulent case	479	0.21
Electronic screening problem	4	0.00

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

Table A.3 Weighted Percentages and Sample Sizes for 2002 NSDUH, by Final Interview Code

Final Interview Code	Persons Aged 12 or Older		Persons Aged 12 to 17		Persons Aged 18 or Older	
	Sample Size	Weighted Percentage	Sample Size	Weighted Percentage	Sample Size	Weighted Percentage
Total	80,581	100.00	26,230	100.00	54,351	100.00
Interview Complete	68,126	78.56	23,659	89.99	44,467	77.20
No One at Dwelling Unit	1,359	1.81	182	0.70	1,177	1.94
Respondent Unavailable	1,893	2.71	329	1.20	1,564	2.89
Break-Off	48	0.10	9	0.04	39	0.11
Physically/Mentally Incompetent	692	1.75	161	0.57	531	1.89
Language Barrier - Spanish	138	0.19	9	0.04	129	0.21
Language Barrier - Other	327	1.09	24	0.13	303	1.21
Refusal	6,276	12.73	464	1.81	5,812	14.03
Parental Refusal	1,307	0.55	1,307	5.15	0	0.00
Other	415	0.52	86	0.38	329	0.53

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

Table A.4 Response Rates and Sample Sizes for 2002 NSDUH, by Demographic Characteristics

	Selected Persons	Completed Interviews	Weighted Response Rate
Total	80,581	68,126	78.56%
Age in Years			
12-17	26,230	23,659	89.99%
18-25	27,216	23,271	85.16%
26 or older	27,135	21,196	75.81%
Gender			
Male	39,453	32,766	77.06%
Female	41,128	35,360	79.99%
Race/Ethnicity			
Hispanic	10,250	8,692	80.93%
White	55,594	46,834	78.23%
Black	9,385	8,143	82.24%
All other races	5,352	4,457	70.50%
Region			
Northeast	16,490	13,706	75.57%
Midwest	22,588	19,180	80.01%
South	24,530	20,900	79.99%
West	16,973	14,340	77.33%
County Type			
Large metropolitan	32,294	26,792	76.85%
Small metropolitan	28,121	23,944	79.50%
Nonmetropolitan	20,166	17,390	81.38%

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

Appendix B: Selected Tables

Table B.1a Persons Aged 18 or Older, by Past Year Serious Mental Illness and Demographic Characteristics: Numbers in Thousands, 2002

Demographic Characteristic	Total	SERIOUS MENTAL ILLNESS ¹	
		Yes	No
TOTAL	210,390	17,483	192,906
AGE			
18-25	31,024	4,085	26,939
26-49	100,287	9,534	90,753
50 or Older	79,079	3,865	75,214
GENDER			
Male	100,955	6,041	94,914
Female	109,435	11,442	97,992
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	185,241	15,760	169,481
White	149,860	12,639	137,221
Black or African American	23,191	2,032	21,159
American Indian or Alaska Native	1,290	161	1,129
Native Hawaiian or Other Pacific Islander	731	40	692
Asian	8,048	600	7,448
Two or More Races	2,120	289	1,832
Hispanic or Latino	25,149	1,724	23,425
EDUCATION			
< High School	37,226	3,591	33,634
High School Graduate	67,985	5,839	62,147
Some College	52,574	4,991	47,583
College Graduate	52,605	3,062	49,543
CURRENT EMPLOYMENT			
Full-Time	116,508	8,453	108,055
Part-Time	27,442	2,664	24,778
Unemployed	7,585	1,078	6,507
Other ²	58,854	5,289	53,566

*Low precision; no estimate reported.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.1b Persons Aged 18 or Older, by Past Year Serious Mental Illness and Demographic Characteristics: Percentage Distributions, 2002

Demographic Characteristic	Total	SERIOUS MENTAL ILLNESS ¹	
		Yes	No
TOTAL	100.0	100.0	100.0
AGE			
18-25	14.7	23.4	14.0
26-49	47.7	54.5	47.0
50 or Older	37.6	22.1	39.0
GENDER			
Male	48.0	34.6	49.2
Female	52.0	65.4	50.8
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	88.0	90.1	87.9
White	71.2	72.3	71.1
Black or African American	11.0	11.6	11.0
American Indian or Alaska Native	0.6	0.9	0.6
Native Hawaiian or Other Pacific Islander	0.3	0.2	0.4
Asian	3.8	3.4	3.9
Two or More Races	1.0	1.7	0.9
Hispanic or Latino	12.0	9.9	12.1
EDUCATION			
< High School	17.7	20.5	17.4
High School Graduate	32.3	33.4	32.2
Some College	25.0	28.5	24.7
College Graduate	25.0	17.5	25.7
CURRENT EMPLOYMENT			
Full-Time	55.4	48.4	56.0
Part-Time	13.0	15.2	12.8
Unemployed	3.6	6.2	3.4
Other ²	28.0	30.2	27.8

*Low precision; no estimate reported.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.2a Persons Aged 18 or Older, by Past Year Serious Mental Illness and Geographic Characteristics: Numbers in Thousands, 2002

Geographic Characteristic	Total	SERIOUS MENTAL ILLNESS ¹	
		Yes	No
TOTAL	210,390	17,483	192,906
GEOGRAPHIC DIVISION			
Northeast	40,604	3,441	37,163
New England	10,649	1,007	9,642
Middle Atlantic	29,955	2,434	27,521
Midwest	47,737	4,048	43,689
East North Central	33,428	2,831	30,597
West North Central	14,309	1,217	13,092
South	74,996	6,325	68,671
South Atlantic	39,364	3,353	36,011
East South Central	12,729	1,195	11,535
West South Central	22,903	1,777	21,126
West	47,052	3,669	43,383
Mountain	13,607	1,117	12,490
Pacific	33,445	2,552	30,893
COUNTY TYPE			
Large Metro	104,867	7,995	96,872
Small Metro	63,448	5,554	57,894
250K - 1 Mil. Pop.	46,216	3,983	42,233
< 250K Pop.	17,232	1,571	15,661
Nonmetro	42,075	3,934	38,140
Urbanized	13,311	1,117	12,194
Less Urbanized	24,110	2,408	21,702
Completely Rural	4,654	410	4,244

*Low precision; no estimate reported.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

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

Table B.2b Persons Aged 18 or Older, by Past Year Serious Mental Illness and Geographic Characteristics: Percentage Distributions, 2002

Geographic Characteristic	Total	SERIOUS MENTAL ILLNESS ¹	
		Yes	No
TOTAL	100.0	100.0	100.0
GEOGRAPHIC DIVISION			
Northeast	19.3	19.7	19.3
New England	5.1	5.8	5.0
Middle Atlantic	14.2	13.9	14.3
Midwest	22.7	23.2	22.6
East North Central	15.9	16.2	15.9
West North Central	6.8	7.0	6.8
South	35.6	36.2	35.6
South Atlantic	18.7	19.2	18.7
East South Central	6.1	6.8	6.0
West South Central	10.9	10.2	11.0
West	22.4	21.0	22.5
Mountain	6.5	6.4	6.5
Pacific	15.9	14.6	16.0
COUNTY TYPE			
Large Metro	49.8	45.7	50.2
Small Metro	30.2	31.8	30.0
250K - 1 Mil. Pop.	22.0	22.8	21.9
< 250K Pop.	8.2	9.0	8.1
Nonmetro	20.0	22.5	19.8
Urbanized	6.3	6.4	6.3
Less Urbanized	11.5	13.8	11.2
Completely Rural	2.2	2.3	2.2

*Low precision; no estimate reported.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

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

Table B.3a Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Age Group and Demographic Characteristics: Numbers in Thousands, 2002

Demographic Characteristic	Total	AGE GROUP (Years)		
		18-25	26-49	50 or Older
TOTAL	17,483	4,085	9,534	3,865
GENDER				
Male	6,041	1,560	3,322	1,159
Female	11,442	2,525	6,211	2,706
HISPANIC ORIGIN AND RACE				
Not Hispanic or Latino	15,760	3,486	8,667	3,607
White	12,639	2,744	7,010	2,885
Black or African American	2,032	466	1,089	477
American Indian or Alaska Native	161	35	69	*
Native Hawaiian or Other Pacific Islander	40	*	*	*
Asian	600	154	344	*
Two or More Races	289	63	139	*
Hispanic or Latino	1,724	599	867	258
EDUCATION				
< High School	3,591	944	1,506	1,142
High School Graduate	5,839	1,363	3,027	1,449
Some College	4,991	1,362	2,751	878
College Graduate	3,062	416	2,250	396
CURRENT EMPLOYMENT				
Full-Time	8,453	1,795	5,733	925
Part-Time	2,664	1,042	1,210	412
Unemployed	1,078	395	557	*
Other ¹	5,289	853	2,033	2,402

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.3b Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Age Group and Demographic Characteristics: Percentages, 2002

Demographic Characteristic	Total	AGE GROUP (Years)		
		18-25	26-49	50 or Older
TOTAL	8.3	13.2	9.5	4.9
GENDER				
Male	6.0	10.0	6.7	3.2
Female	10.5	16.3	12.2	6.3
HISPANIC ORIGIN AND RACE				
Not Hispanic or Latino	8.5	13.7	10.1	4.9
White	8.4	14.2	10.4	4.6
Black or African American	8.8	11.5	9.2	6.6
American Indian or Alaska Native	12.5	16.1	11.1	*
Native Hawaiian or Other Pacific Islander	5.4	*	*	*
Asian	7.5	11.2	7.5	*
Two or More Races	13.6	15.7	13.8	*
Hispanic or Latino	6.9	10.9	6.1	4.8
EDUCATION				
< High School	9.6	13.7	10.9	6.9
High School Graduate	8.6	12.9	9.8	5.5
Some College	9.5	13.9	10.6	5.2
College Graduate	5.8	11.0	7.6	2.0
CURRENT EMPLOYMENT				
Full-Time	7.3	12.4	7.9	3.1
Part-Time	9.7	13.2	11.4	4.6
Unemployed	14.2	16.1	14.2	*
Other ¹	9.0	13.8	15.5	6.1

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.4a Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Age Group and Geographic Characteristics: Numbers in Thousands, 2002

Geographic Characteristic	Total	AGE GROUP (Years)		
		18-25	26-49	50 or Older
TOTAL	17,483	4,085	9,534	3,865
GEOGRAPHIC DIVISION				
Northeast	3,441	784	1,943	714
New England	1,007	215	524	268
Middle Atlantic	2,434	569	1,419	446
Midwest	4,048	926	2,209	913
East North Central	2,831	619	1,588	624
West North Central	1,217	307	621	289
South	6,325	1,375	3,357	1,593
South Atlantic	3,353	647	1,763	943
East South Central	1,195	255	695	245
West South Central	1,777	473	900	405
West	3,669	1,000	2,024	645
Mountain	1,117	317	578	222
Pacific	2,552	683	1,446	423
COUNTY TYPE				
Large Metro	7,995	1,869	4,656	1,470
Small Metro	5,554	1,453	2,977	1,124
250K - 1 Mil. Pop.	3,983	979	2,151	853
<250K Pop.	1,571	474	827	271
Nonmetro	3,934	763	1,900	1,271
Urbanized	1,117	276	546	294
Less Urbanized	2,408	423	1,138	847
Completely Rural	410	63	216	130

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

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

Table B.4b Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Age Group and Geographic Characteristics: Percentages, 2002

Geographic Characteristic	Total	AGE GROUP (Years)		
		18-25	26-49	50 or Older
TOTAL	8.3	13.2	9.5	4.9
GEOGRAPHIC DIVISION				
Northeast	8.5	14.2	10.1	4.5
New England	9.5	15.0	10.3	6.5
Middle Atlantic	8.1	14.0	10.1	3.8
Midwest	8.5	12.9	9.8	5.1
East North Central	8.5	12.4	10.0	4.9
West North Central	8.5	13.8	9.4	5.3
South	8.4	12.5	9.5	5.6
South Atlantic	8.5	12.0	9.5	6.1
East South Central	9.4	13.4	11.7	5.0
West South Central	7.8	12.7	8.1	5.0
West	7.8	13.7	8.8	3.9
Mountain	8.2	14.5	8.9	4.5
Pacific	7.6	13.4	8.7	3.6
COUNTY TYPE				
Large Metro	7.6	12.7	8.8	4.0
Small Metro	8.8	13.9	10.2	4.7
250K - 1 Mil. Pop.	8.6	13.2	10.0	4.9
<250K Pop.	9.1	15.6	10.6	4.2
Nonmetro	9.4	13.1	10.6	7.0
Urbanized	8.4	13.0	9.0	5.7
Less Urbanized	10.0	13.4	11.4	7.7
Completely Rural	8.8	12.2	11.3	5.9

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

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

Table B.5a Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Age Group and by Socioeconomic and Health Characteristics: Numbers in Thousands, 2002

Socioeconomic/Health Characteristic	Total	AGE GROUP (Years)		
		18-25	26-49	50 or Older
MARITAL STATUS				
Married	6,681	562	4,449	1,670
Widowed	842	*	107	729
Divorced or Separated	3,716	173	2,560	984
Never Married	6,244	3,343	2,419	482
FAMILY INCOME				
Less Than \$20,000	5,415	1,467	2,405	1,544
\$20,000 to \$49,999	6,767	1,537	3,707	1,523
\$50,000 to \$74,999	2,612	530	1,684	397
\$75,000 or More	2,689	551	1,738	400
HEALTH INSURANCE¹				
Private	10,562	2,317	6,071	2,173
Medicaid/CHIP ²	2,356	477	1,242	637
Other ³	1,176	181	396	599
No Coverage	3,389	1,110	1,824	455
OVERALL HEALTH				
Excellent	2,664	762	1,632	271
Very Good	5,183	1,675	2,985	524
Good	5,303	1,275	2,919	1,109
Fair/Poor	4,331	373	1,996	1,962
SOCIAL SUPPORT⁴				
Yes	14,299	3,491	7,905	2,903
No	3,172	590	1,621	961

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Response categories are mutually exclusive. Respondents who reported both Private Health Insurance and Medicaid/CHIP are included in the Private category only.

² Children's Health Insurance Plan. Individuals aged 20 or older are not eligible for this plan.

³ Medicare, CHAMPUS, TRICARE, CHAMPVA, the VA, military health care, or any other type of health insurance.

⁴ Respondents are defined as receiving social support if they reported having two or more friends with whom they share personal issues and concerns, spend time on shared interests and activities, or who really like and care about them.

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

Table B.5b Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Age Group and by Socioeconomic and Health Characteristics: Percentages, 2002

Socioeconomic/Health Characteristic	Total	AGE GROUP (Years)		
		18-25	26-49	50 or Older
MARITAL STATUS				
Married	5.6	11.4	7.1	3.3
Widowed	6.2	*	9.8	5.8
Divorced or Separated	13.0	25.5	16.0	8.3
Never Married	12.7	13.2	11.9	13.9
FAMILY INCOME				
Less Than \$20,000	13.1	14.3	16.3	9.5
\$20,000 to \$49,999	8.4	13.0	9.9	4.8
\$50,000 to \$74,999	6.9	12.3	8.1	3.1
\$75,000 or More	5.4	12.0	6.4	2.2
HEALTH INSURANCE¹				
Private	6.8	12.2	8.1	3.6
Medicaid/CHIP ²	17.2	15.5	20.7	13.7
Other ³	8.1	16.3	11.2	6.1
No Coverage	12.2	14.3	11.7	10.2
OVERALL HEALTH				
Excellent	5.1	8.0	5.8	1.9
Very Good	6.7	13.4	7.7	2.1
Good	9.6	17.1	11.7	4.8
Fair/Poor	16.9	23.6	24.6	12.3
SOCIAL SUPPORT⁴				
Yes	7.6	12.5	8.8	4.1
No	15.2	19.6	15.6	12.9

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Response categories are mutually exclusive. Respondents who reported both Private Health Insurance and Medicaid/CHIP are included in the Private category only.

² Children's Health Insurance Plan. Individuals aged 20 or older are not eligible for this plan.

³ Medicare, CHAMPUS, TRICARE, CHAMPVA, the VA, military health care, or any other type of health insurance.

⁴ Respondents are defined as receiving social support if they reported having two or more friends with whom they share personal issues and concerns, spend time on shared interests and activities, or who really like and care about them.

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

Table B.6a Persons Aged 18 or Older with Serious Mental Illness in the Past Year, by Past Year Any Illicit Drug Use and Demographic Characteristics: Numbers in Thousands, 2002

Demographic Characteristic	Total	ANY ILLICIT DRUG USE ¹	
		Yes	No
TOTAL	17,483	5,061	12,423
AGE			
18-25	4,085	1,965	2,120
26-49	9,534	2,730	6,804
50 or Older	3,865	366	3,499
GENDER			
Male	6,041	2,282	3,759
Female	11,442	2,779	8,663
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	15,760	4,492	11,268
White	12,639	3,751	8,888
Black or African American	2,032	547	1,485
American Indian or Alaska Native	161	39	122
Native Hawaiian or Other Pacific Islander	40	16	23
Asian	600	53	546
Two or More Races	289	86	203
Hispanic	1,724	569	1,155
EDUCATION			
< High School	3,591	1,115	2,476
High School Graduate	5,839	1,516	4,323
Some College	4,991	1,724	3,267
College Graduate	3,062	705	2,357
CURRENT EMPLOYMENT			
Full-Time	8,453	2,562	5,891
Part-Time	2,664	829	1,834
Unemployed	1,078	548	530
Other ²	5,289	1,122	4,167

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.6b Persons Aged 18 or Older with Serious Mental Illness in the Past Year, by Past Year Any Illicit Drug Use and Demographic Characteristics: Percentage Distributions, 2002

Demographic Characteristic	Total	ANY ILLICIT DRUG USE ¹	
		Yes	No
TOTAL	100.0	100.0	100.0
AGE			
18-25	23.4	38.8	17.1
26-49	54.5	53.9	54.8
50 or Older	22.1	7.2	28.2
GENDER			
Male	34.6	45.1	30.3
Female	65.4	54.9	69.7
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	90.1	88.8	90.7
White	72.3	74.1	71.5
Black or African American	11.6	10.8	12.0
American Indian or Alaska Native	0.9	0.8	1.0
Native Hawaiian or Other Pacific Islander	0.2	0.3	0.2
Asian	3.4	1.1	4.4
Two or More Races	1.7	1.7	1.6
Hispanic	9.9	11.2	9.3
EDUCATION			
< High School	20.5	22.0	19.9
High School Graduate	33.4	30.0	34.8
Some College	28.5	34.1	26.3
College Graduate	17.5	13.9	19.0
CURRENT EMPLOYMENT			
Full-Time	48.4	50.6	47.4
Part-Time	15.2	16.4	14.8
Unemployed	6.2	10.8	4.3
Other ²	30.2	22.2	33.5

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.7a Persons Aged 18 or Older with Serious Mental Illness in the Past Year, by Past Year Any Illicit Drug Use and Geographic Characteristics: Numbers in Thousands, 2002

Geographic Characteristic	Total	ANY ILLICIT DRUG USE ¹	
		Yes	No
TOTAL	17,483	5,061	12,423
GEOGRAPHIC DIVISION			
Northeast	3,441	1,093	2,348
New England	1,007	326	681
Middle Atlantic	2,434	767	1,667
Midwest	4,048	1,054	2,994
East North Central	2,831	757	2,074
West North Central	1,217	297	920
South	6,325	1,662	4,664
South Atlantic	3,353	847	2,506
East South Central	1,195	288	907
West South Central	1,777	527	1,251
West	3,669	1,252	2,417
Mountain	1,117	329	787
Pacific	2,552	923	1,629
COUNTY TYPE			
Large Metro	7,995	2,474	5,521
Small Metro	5,554	1,759	3,795
250K - 1 Mil. Pop.	3,983	1,226	2,757
< 250K Pop.	1,571	534	1,038
Nonmetro	3,934	828	3,107
Urbanized	1,117	266	851
Less Urbanized	2,408	500	1,908
Completely Rural	410	62	348

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

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

Table B.7b Persons Aged 18 or Older with Serious Mental Illness in the Past Year, by Past Year Any Illicit Drug Use and Geographic Characteristics: Percentage Distributions, 2002

Geographic Characteristic	Total	ANY ILLICIT DRUG USE ¹	
		Yes	No
TOTAL	100.0	100.0	100.0
GEOGRAPHIC DIVISION			
Northeast	19.7	21.6	18.9
New England	5.8	6.4	5.5
Middle Atlantic	13.9	15.1	13.4
Midwest	23.2	20.8	24.1
East North Central	16.2	15.0	16.7
West North Central	7.0	5.9	7.4
South	36.2	32.8	37.5
South Atlantic	19.2	16.7	20.2
East South Central	6.8	5.7	7.3
West South Central	10.2	10.4	10.1
West	21.0	24.7	19.5
Mountain	6.4	6.5	6.3
Pacific	14.6	18.2	13.1
COUNTY TYPE			
Large Metro	45.7	48.9	44.4
Small Metro	31.8	34.8	30.5
250K - 1 Mil. Pop.	22.8	24.2	22.2
< 250K Pop.	9.0	10.5	8.4
Nonmetro	22.5	16.4	25.0
Urbanized	6.4	5.2	6.9
Less Urbanized	13.8	9.9	15.4
Completely Rural	2.3	1.2	2.8

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

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

Table B.8a Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Past Year Any Illicit Drug Use and by Socioeconomic and Health Characteristics: Numbers in Thousands, 2002

Socioeconomic/Health Characteristic	Total	ANY ILLICIT DRUG USE ¹	
		Yes	No
MARITAL STATUS			
Married	6,681	1,258	5,423
Widowed	842	*	806
Divorced or Separated	3,716	1,180	2,537
Never Married	6,244	2,586	3,658
FAMILY INCOME			
Less Than \$20,000	5,415	1,683	3,732
\$20,000 to \$49,999	6,767	2,036	4,731
\$50,000 to \$74,999	2,612	651	1,961
\$75,000 or More	2,689	691	1,998
HEALTH INSURANCE²			
Private	10,562	2,714	7,848
Medicaid/CHIP ³	2,356	595	1,761
Other ⁴	1,176	268	908
No Coverage	3,389	1,483	1,905
OVERALL HEALTH			
Excellent	2,664	757	1,907
Very Good	5,183	1,679	3,504
Good	5,303	1,573	3,730
Fair/Poor	4,331	1,051	3,279
SOCIAL SUPPORT⁵			
Yes	14,299	4,174	10,125
No	3,172	883	2,290

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

² Response categories are mutually exclusive. Respondents who reported both Private Health Insurance and Medicaid/CHIP are included in the Private category only.

³ Children's Health Insurance Plan. Individuals aged 20 or older are not eligible for this plan.

⁴ Medicare, CHAMPUS, TRICARE, CHAMPVA, the VA, military health care, or any other type of health insurance.

⁵ Respondents are defined as receiving social support if they reported having two or more friends with whom they share personal issues and concerns, spend time on shared interests and activities, or who really like and care about them.

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

Table B.8b Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Past Year Any Illicit Drug Use and by Socioeconomic and Health Characteristics: Percentages, 2002

Socioeconomic/Health Characteristic	Total	ANY ILLICIT DRUG USE ¹	
		Yes	No
MARITAL STATUS			
Married	5.6	13.6	4.9
Widowed	6.2	*	6.1
Divorced or Separated	13.0	24.9	10.7
Never Married	12.7	16.9	10.8
FAMILY INCOME			
Less Than \$20,000	13.1	21.5	11.1
\$20,000 to \$49,999	8.4	18.0	6.8
\$50,000 to \$74,999	6.9	13.6	5.9
\$75,000 or More	5.4	12.1	4.5
HEALTH INSURANCE²			
Private	6.8	14.5	5.8
Medicaid/CHIP ³	17.2	23.5	15.7
Other ⁴	8.1	23.8	6.8
No Coverage	12.2	20.6	9.2
OVERALL HEALTH			
Excellent	5.1	11.4	4.2
Very Good	6.7	14.6	5.4
Good	9.6	19.1	7.9
Fair/Poor	16.9	32.4	14.7
SOCIAL SUPPORT⁵			
Yes	7.6	15.6	6.3
No	15.2	30.4	12.7

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

² Response categories are mutually exclusive. Respondents who reported both Private Health Insurance and Medicaid/CHIP are included in the Private category only.

³ Children's Health Insurance Plan. Individuals aged 20 or older are not eligible for this plan.

⁴ Medicare, CHAMPUS, TRICARE, CHAMPVA, the VA, military health care, or any other type of health insurance.

⁵ Respondents are defined as receiving social support if they reported having two or more friends with whom they share personal issues and concerns, spend time on shared interests and activities, or who really like and care about them.

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

Table B.9a Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Past Year Any Illicit Drug Use and Demographic Characteristics: Numbers in Thousands, 2002

Demographic Characteristic	Total	ANY ILLICIT DRUG USE ¹	
		Yes	No
TOTAL	17,483	5,061	12,423
AGE			
18-25	4,085	1,965	2,120
26-49	9,534	2,730	6,804
50 or Older	3,865	366	3,499
GENDER			
Male	6,041	2,282	3,759
Female	11,442	2,779	8,663
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	15,760	4,492	11,268
White	12,639	3,751	8,888
Black or African American	2,032	547	1,485
American Indian or Alaska Native	161	*	122
Native Hawaiian or Other Pacific Islander	40	*	23
Asian	600	53	546
Two or More Races	289	*	203
Hispanic or Latino	1,724	569	1,155
EDUCATION			
< High School	3,591	1,115	2,476
High School Graduate	5,839	1,516	4,323
Some College	4,991	1,724	3,267
College Graduate	3,062	705	2,357
CURRENT EMPLOYMENT			
Full-Time	8,453	2,562	5,891
Part-Time	2,664	829	1,834
Unemployed	1,078	548	530
Other ²	5,289	1,122	4,167

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.9b Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Past Year Any Illicit Drug Use and Demographic Characteristics: Percentages, 2002

Demographic Characteristic	Total	ANY ILLICIT DRUG USE ¹	
		Yes	No
TOTAL	8.3	17.1	6.9
AGE			
18-25	13.2	17.9	10.6
26-49	9.5	17.0	8.1
50 or Older	4.9	14.0	4.6
GENDER			
Male	6.0	13.3	4.5
Female	10.5	22.2	8.9
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	8.5	17.2	7.1
White	8.4	17.9	6.9
Black or African American	8.8	14.3	7.7
American Indian or Alaska Native	12.5	*	11.4
Native Hawaiian or Other Pacific Islander	5.4	*	3.9
Asian	7.5	9.3	7.3
Two or More Races	13.6	*	12.0
Hispanic or Latino	6.9	16.0	5.3
EDUCATION			
< High School	9.6	19.8	7.8
High School Graduate	8.6	16.0	7.4
Some College	9.5	19.9	7.4
College Graduate	5.8	11.9	5.0
CURRENT EMPLOYMENT			
Full-Time	7.3	14.6	6.0
Part-Time	9.7	16.2	8.2
Unemployed	14.2	24.7	9.9
Other ²	9.0	23.3	7.7

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.10a Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Past Year Use of Illicit Drugs: Numbers in Thousands, 2002

Drug	ILLCIT DRUG USE	
	Yes	No
Any Illicit Drug ¹	5,061	12,423
Marijuana and Hashish	3,653	13,830
Cocaine	1,187	16,296
Crack	435	17,049
Heroin	*	17,389
Hallucinogens	751	16,732
LSD	127	17,356
PCP	*	17,447
Ecstasy	540	16,943
Inhalants	207	17,276
Nonmedical Use of Any Psychotherapeutic ²	2,707	14,777
Pain Relievers	2,040	15,444
Tranquilizers	1,136	16,347
Stimulants	730	16,753
Methamphetamine	418	17,066
Sedatives	283	17,200
Any Illicit Drug Other Than Marijuana ¹	3,500	13,983

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically. Any Illicit Drug Other Than Marijuana includes cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

² Nonmedical use of any prescription-type pain reliever, tranquilizer, stimulant, or sedative; does not include over-the-counter drugs.

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

Table B.10b Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Past Year Use of Illicit Drugs: Percentages, 2002

Drug	ILLCIT DRUG USE	
	Yes	No
Any Illicit Drug ¹	17.1	6.9
Marijuana and Hashish	16.7	7.3
Cocaine	22.0	7.9
Crack	29.9	8.2
Heroin	*	8.3
Hallucinogens	19.7	8.1
LSD	18.6	8.3
PCP	*	8.3
Ecstasy	20.6	8.2
Inhalants	20.6	8.3
Nonmedical Use of Any Psychotherapeutic ²	21.8	7.5
Pain Relievers	22.4	7.7
Tranquilizers	26.5	7.9
Stimulants	28.8	8.1
Methamphetamine	31.8	8.2
Sedatives	33.6	8.2
Any Illicit Drug Other Than Marijuana ¹	20.5	7.2

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically. Any Illicit Drug Other Than Marijuana includes cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

² Nonmedical use of any prescription-type pain reliever, tranquilizer, stimulant, or sedative; does not include over-the-counter drugs.

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

Table B.11a Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Past Year and Past Month Tobacco and Alcohol Use: Numbers in Thousands, 2002

Drug	TOBACCO/ALCOHOL USE	
	Yes	No
PAST YEAR		
Any Tobacco ¹	9,357	8,127
Cigarettes	8,628	8,856
Smokeless Tobacco	825	16,658
Cigars	2,604	14,880
Pipes	--	--
Alcohol	12,428	5,055
Binge Alcohol Use ²	--	--
Heavy Alcohol Use ²	--	--
PAST MONTH		
Any Tobacco ¹	8,428	9,055
Cigarettes	7,886	9,598
Smokeless Tobacco	575	16,908
Cigars	1,287	16,196
Pipes	219	17,265
Alcohol	9,234	8,250
Binge Alcohol Use ²	5,037	12,446
Heavy Alcohol Use ²	1,696	15,788

*Low precision; no estimate reported.

-- Not available.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Tobacco product includes cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco. Any Tobacco use in the past year excludes past year pipe tobacco use, but includes past month pipe tobacco use.

² Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all Heavy Alcohol Users are also Binge Alcohol Users.

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

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Table B.11b Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Past Year and Past Month Tobacco and Alcohol Use: Percentages, 2002

Drug	TOBACCO/ALCOHOL USE	
	Yes	No
PAST YEAR		
Any Tobacco ¹	11.9	6.2
Cigarettes	13.0	6.1
Smokeless Tobacco	8.7	8.3
Cigars	11.1	8.0
Pipes	--	--
Alcohol	8.5	8.0
Binge Alcohol Use ²	--	--
Heavy Alcohol Use ²	--	--
PAST MONTH		
Any Tobacco ¹	12.4	6.3
Cigarettes	13.6	6.3
Smokeless Tobacco	7.9	8.3
Cigars	11.1	8.1
Pipes	13.0	8.3
Alcohol	8.0	8.7
Binge Alcohol Use ²	9.8	7.8
Heavy Alcohol Use ²	11.1	8.1

*Low precision; no estimate reported.

-- Not available.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Tobacco product includes cigarettes, smokeless tobacco (i.e., chewing tobacco or snuff), cigars, or pipe tobacco. Any Tobacco use in the past year excludes past year pipe tobacco use, but includes past month pipe tobacco use.

² Binge Alcohol Use is defined as drinking five or more drinks on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least 1 day in the past 30 days. Heavy Alcohol Use is defined as drinking five or more drinks on the same occasion on each of 5 or more days in the past 30 days; all Heavy Alcohol Users are also Binge Alcohol Users.

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

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Table B.12a Serious Mental Illness and/or a Substance Use Disorder among Persons Aged 18 or Older with a Serious Mental Illness or a Substance Use Disorder in the Past Year: Numbers in Thousands, 2002

Serious Mental Illness/Substance Use Disorder	Number
Serious Mental Illness or Substance Use Disorder ^{1,2}	33,232
Serious Mental Illness Only ¹	13,435
Substance Use Disorder Only ²	15,749
Serious Mental Illness and Substance Use Disorder ^{1,2}	4,048

*Low precision; no estimate reported.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

² Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

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

Table B.12b Serious Mental Illness and/or a Substance Use Disorder among Persons Aged 18 or Older with a Serious Mental Illness or a Substance Use Disorder in the Past Year: Percentage Distributions, 2002

Serious Mental Illness/Substance Use Disorder	Percentage
Serious Mental Illness or Substance Use Disorder ^{1,2}	100.0
Serious Mental Illness Only ¹	40.4
Substance Use Disorder Only ²	47.4
Serious Mental Illness and Substance Use Disorder ^{1,2}	12.2

*Low precision; no estimate reported.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

² Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

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

Table B.13a Substance Dependence or Abuse in the Past Year among Persons Aged 18 or Older, by Past Year Serious Mental Illness: Numbers in Thousands, 2002

Dependence/Abuse	Total	SERIOUS MENTAL ILLNESS ¹	
		Yes	No
DEPENDENCE OR ABUSE²			
Any Illicit Drug ³	5,740	1,671	4,069
Marijuana	3,239	883	2,356
Any Illicit Drug Other Than Marijuana ³	3,146	1,050	2,097
Alcohol	16,647	3,155	13,491
Any Illicit Drug or Alcohol ³	19,797	4,048	15,749
Any Illicit Drug and Alcohol ³	2,590	779	1,811
DEPENDENCE²			
Any Illicit Drug ³	3,855	1,260	2,594
Marijuana	2,006	573	1,433
Any Illicit Drug Other Than Marijuana ³	2,052	790	1,261
Alcohol	7,695	2,013	5,682
Any Illicit Drug or Alcohol ³	10,425	2,836	7,589
Any Illicit Drug and Alcohol ³	1,125	438	687

*Low precision; no estimate reported.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

² Dependence or Abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

³ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically. Any Illicit Drug Other Than Marijuana includes cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

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

Table B.13b Substance Dependence or Abuse in the Past Year among Persons Aged 18 or Older, by Past Year Serious Mental Illness: Percentages, 2002

Dependence/Abuse	Total	SERIOUS MENTAL ILLNESS ¹	
		Yes	No
DEPENDENCE OR ABUSE²			
Any Illicit Drug ³	2.7	9.6	2.1
Marijuana	1.5	5.1	1.2
Any Illicit Drug Other Than Marijuana ³	1.5	6.0	1.1
Alcohol	7.9	18.0	7.0
Any Illicit Drug or Alcohol ³	9.4	23.2	8.2
Any Illicit Drug and Alcohol ³	1.2	4.5	0.9
DEPENDENCE²			
Any Illicit Drug ³	1.8	7.2	1.3
Marijuana	1.0	3.3	0.7
Any Illicit Drug Other Than Marijuana ³	1.0	4.5	0.7
Alcohol	3.7	11.5	2.9
Any Illicit Drug or Alcohol ³	5.0	16.2	3.9
Any Illicit Drug and Alcohol ³	0.5	2.5	0.4

*Low precision; no estimate reported.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

² Dependence or Abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

³ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically. Any Illicit Drug Other Than Marijuana includes cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

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

Table B.14a Persons Aged 18 or Older with Serious Mental Illness in the Past Year, by Past Year Substance Use Disorder and Demographic Characteristics: Numbers in Thousands, 2002

Demographic Characteristic	Total	Substance Use Disorder ¹	
		Yes	No
TOTAL	17,483	4,048	13,435
AGE			
18-25	4,085	1,471	2,614
26-49	9,534	2,220	7,313
50 or Older	3,865	357	3,508
GENDER			
Male	6,041	2,109	3,932
Female	11,442	1,939	9,503
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	15,760	3,613	12,146
White	12,639	2,922	9,717
Black or African American	2,032	516	1,515
American Indian or Alaska Native	161	31	129
Native Hawaiian or Other Pacific Islander	40	7	33
Asian	600	69	531
Two or More Races	289	68	221
Hispanic or Latino	1,724	435	1,289
EDUCATION			
< High School	3,591	910	2,681
High School Graduate	5,839	1,349	4,490
Some College	4,991	1,176	3,815
College Graduate	3,062	613	2,449
CURRENT EMPLOYMENT			
Full-Time	8,453	2,114	6,340
Part-Time	2,664	679	1,985
Unemployed	1,078	410	668
Other ²	5,289	845	4,444

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.
¹ Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.14b Persons Aged 18 or Older with Serious Mental Illness in the Past Year, by Past Year Substance Use Disorder and Demographic Characteristics: Percentage Distributions, 2002

Demographic Characteristic	Total	Substance Use Disorder ¹	
		Yes	No
TOTAL	100.0	100.0	100.0
AGE			
18-25	23.4	36.3	19.5
26-49	54.5	54.8	54.4
50 or Older	22.1	8.8	26.1
GENDER			
Male	34.6	52.1	29.3
Female	65.4	47.9	70.7
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	90.1	89.3	90.4
White	72.3	72.2	72.3
Black or African American	11.6	12.8	11.3
American Indian or Alaska Native	0.9	0.8	1.0
Native Hawaiian or Other Pacific Islander	0.2	0.2	0.2
Asian	3.4	1.7	4.0
Two or More Races	1.7	1.7	1.6
Hispanic or Latino	9.9	10.7	9.6
EDUCATION			
< High School	20.5	22.5	20.0
High School Graduate	33.4	33.3	33.4
Some College	28.5	29.1	28.4
College Graduate	17.5	15.1	18.2
CURRENT EMPLOYMENT			
Full-Time	48.4	52.2	47.2
Part-Time	15.2	16.8	14.8
Unemployed	6.2	10.1	5.0
Other ²	30.2	20.9	33.1

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

¹ Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.15a Persons Aged 18 or Older with Serious Mental Illness in the Past Year, by Past Year Substance Use Disorder and Geographic Characteristics: Numbers in Thousands, 2002

Geographic Characteristic	Total	Substance Use Disorder ¹	
		Yes	No
TOTAL	17,483	4,048	13,435
GEOGRAPHIC DIVISION			
Northeast	3,441	905	2,535
New England	1,007	291	716
Middle Atlantic	2,434	614	1,819
Midwest	4,048	878	3,170
East North Central	2,831	632	2,199
West North Central	1,217	246	971
South	6,325	1,487	4,838
South Atlantic	3,353	718	2,636
East South Central	1,195	286	909
West South Central	1,777	484	1,294
West	3,669	777	2,892
Mountain	1,117	261	855
Pacific	2,552	516	2,036
COUNTY TYPE			
Large Metro	7,995	1,859	6,136
Small Metro	5,554	1,369	4,185
250K - 1 Mil. Pop.	3,983	940	3,043
< 250K Pop.	1,571	429	1,142
Nonmetro	3,934	820	3,114
Urbanized	1,117	240	877
Less Urbanized	2,408	528	1,879
Completely Rural	410	52	358

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.
¹ Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

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

Table B.15b Persons Aged 18 or Older with Serious Mental Illness in the Past Year, by Past Year Substance Use Disorder and Geographic Characteristics: Percentage Distributions, 2002

Geographic Characteristic	Total	Substance Use Disorder ¹	
		Yes	No
TOTAL	100.0	100.0	100.0
GEOGRAPHIC DIVISION			
Northeast	19.7	22.4	18.9
New England	5.8	7.2	5.3
Middle Atlantic	13.9	15.2	13.5
Midwest	23.2	21.7	23.6
East North Central	16.2	15.6	16.4
West North Central	7.0	6.1	7.2
South	36.2	36.7	36.0
South Atlantic	19.2	17.7	19.6
East South Central	6.8	7.1	6.8
West South Central	10.2	12.0	9.6
West	21.0	19.2	21.5
Mountain	6.4	6.5	6.4
Pacific	14.6	12.7	15.2
COUNTY TYPE			
Large Metro	45.7	45.9	45.7
Small Metro	31.8	33.8	31.1
250K - 1 Mil. Pop.	22.8	23.2	22.6
< 250K Pop.	9.0	10.6	8.5
Nonmetro	22.5	20.3	23.2
Urbanized	6.4	5.9	6.5
Less Urbanized	13.8	13.1	14.0
Completely Rural	2.3	1.3	2.7

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.
¹ Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

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

Table B.16a Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Past Year Substance Use Disorder, Gender, and Age Group: Numbers in Thousands, 2002

Gender/Age	Total	Substance Use Disorder ¹	
		Yes	No
TOTAL	17,483	4,048	13,435
18-25	4,085	1,471	2,614
26-49	9,534	2,220	7,313
50 or Older	3,865	357	3,508
MALE	6,041	2,109	3,932
18-25	1,560	700	860
26-49	3,322	1,138	2,184
50 or Older	1,159	270	888
FEMALE	11,442	1,939	9,503
18-25	2,525	770	1,754
26-49	6,211	1,082	5,129
50 or Older	2,706	*	2,619

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

¹ Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

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

Table B.16b Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Past Year Substance Use Disorder, Gender, and Age Group: Percentages, 2002

Gender/Age	Total	Substance Use Disorder ¹	
		Yes	No
TOTAL	8.3	20.4	7.0
18-25	13.2	21.8	10.8
26-49	9.5	21.2	8.1
50 or Older	4.9	13.8	4.6
MALE	6.0	15.7	4.5
18-25	10.0	16.3	7.7
26-49	6.7	16.0	5.2
50 or Older	3.2	13.6	2.6
FEMALE	10.5	30.3	9.2
18-25	16.3	31.7	13.4
26-49	12.2	32.2	10.8
50 or Older	6.3	*	6.2

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

¹ Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

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

Table B.17a Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Past Year Substance Dependence or Abuse: Numbers in Thousands, 2002

Dependence/Abuse	Total	DEPENDENCE ¹		DEPENDENCE OR ABUSE ¹	
		Yes	No	Yes	No
Any Illicit Drug ²	17,483	1,260	16,223	1,671	15,812
Marijuana	17,483	573	16,910	883	16,600
Any Illicit Drug Other Than Marijuana ²	17,483	790	16,693	1,050	16,433
Alcohol	17,483	2,013	15,471	3,155	14,328
Any Illicit Drug or Alcohol ²	17,483	2,836	14,648	4,048	13,435
Any Illicit Drug and Alcohol ²	17,483	438	17,046	779	16,705

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Dependence or Abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

² Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically. Any Illicit Drug Other Than Marijuana includes cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

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

Table B.17b Serious Mental Illness in the Past Year among Persons Aged 18 or Older, by Past Year Substance Dependence or Abuse: Percentages, 2002

Dependence/Abuse	Total	DEPENDENCE ¹		DEPENDENCE OR ABUSE ¹	
		Yes	No	Yes	No
Any Illicit Drug ²	8.3	32.7	7.9	29.1	7.7
Marijuana	8.3	28.6	8.1	27.3	8.0
Any Illicit Drug Other Than Marijuana ²	8.3	38.5	8.0	33.4	7.9
Alcohol	8.3	26.2	7.6	19.0	7.4
Any Illicit Drug or Alcohol ²	8.3	27.2	7.3	20.4	7.0
Any Illicit Drug and Alcohol ²	8.3	38.9	8.1	30.1	8.0

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Dependence or Abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

² Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically. Any Illicit Drug Other Than Marijuana includes cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

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

Table B.18a Persons Aged 18 or Older with Serious Mental Illness, by Receipt of Mental Health Treatment/Counseling and Demographic or Geographic Characteristics: Numbers in Thousands, 2002

Demographic/Geographic Characteristic	MENTAL HEALTH TREATMENT/COUNSELING ¹	
	Received	Not Received
TOTAL	8,355	9,091
AGE		
18-25	1,394	2,685
26-49	5,173	4,340
50 or Older	1,787	2,065
GENDER		
Male	2,376	3,647
Female	5,978	5,444
HISPANIC ORIGIN AND RACE		
Not Hispanic or Latino	7,703	8,019
White	6,547	6,057
Black or African American	750	1,281
Hispanic or Latino	651	1,072
EDUCATION		
< High School	1,404	2,172
High School Graduate	2,631	3,199
Some College	2,576	2,410
College Graduate	1,743	1,309
CURRENT EMPLOYMENT		
Full-Time	3,796	4,641
Part-Time	1,346	1,310
Unemployed	457	621
Other ²	2,756	2,519
GEOGRAPHIC DIVISION		
Northeast	1,745	1,695
Midwest	1,912	2,112
South	2,999	3,315
West	1,699	1,969
COUNTY TYPE		
Large Metro	3,681	4,299
Small Metro	2,879	2,660
Nonmetro	1,795	2,132

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.18b Persons Aged 18 or Older with Serious Mental Illness, by Receipt of Mental Health Treatment/Counseling and Demographic or Geographic Characteristics: Percentage Distributions, 2002

Demographic/Geographic Characteristic	MENTAL HEALTH TREATMENT/COUNSELING ¹	
	Received	Not Received
TOTAL	100.0	100.0
AGE		
18-25	16.7	29.5
26-49	61.9	47.7
50 or Older	21.4	22.7
GENDER		
Male	28.4	40.1
Female	71.6	59.9
HISPANIC ORIGIN AND RACE		
Not Hispanic or Latino	92.2	88.2
White	78.4	66.6
Black or African American	9.0	14.1
Hispanic or Latino	7.8	11.8
EDUCATION		
< High School	16.8	23.9
High School Graduate	31.5	35.2
Some College	30.8	26.5
College Graduate	20.9	14.4
CURRENT EMPLOYMENT		
Full-Time	45.4	51.0
Part-Time	16.1	14.4
Unemployed	5.5	6.8
Other ²	33.0	27.7
GEOGRAPHIC DIVISION		
Northeast	20.9	18.6
Midwest	22.9	23.2
South	35.9	36.5
West	20.3	21.7
COUNTY TYPE		
Large Metro	44.1	47.3
Small Metro	34.5	29.3
Nonmetro	21.5	23.5

*Low precision; no estimate reported.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.19a Received Mental Health Treatment/Counseling in the Past Year among Persons Aged 18 or Older, by Past Year Serious Mental Illness and Demographic Characteristics: Numbers in Thousands, 2002

Demographic Characteristic	Total	SERIOUS MENTAL ILLNESS ¹	
		Yes	No
TOTAL	27,322	8,355	18,968
AGE			
18-25	3,283	1,394	1,888
26-49	14,556	5,173	9,383
50 or Older	9,483	1,787	7,696
GENDER			
Male	8,784	2,376	6,408
Female	18,538	5,978	12,560
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	25,277	7,703	17,574
White	22,014	6,547	15,467
Black or African American	1,973	750	1,223
American Indian or Alaska Native	228	*	134
Native Hawaiian or Other Pacific Islander	29	*	24
Asian	682	*	486
Two or More Races	352	*	240
Hispanic or Latino	2,045	651	1,394
EDUCATION			
< High School	4,311	1,404	2,907
High School Graduate	7,912	2,631	5,281
Some College	7,528	2,576	4,952
College Graduate	7,571	1,743	5,828
CURRENT EMPLOYMENT			
Full-Time	13,090	3,796	9,295
Part-Time	3,901	1,346	2,554
Unemployed	1,077	457	620
Other ²	9,255	2,756	6,499

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.19b Received Mental Health Treatment/Counseling in the Past Year among Persons Aged 18 or Older, by Past Year Serious Mental Illness and Demographic Characteristics: Percentages, 2002

Demographic Characteristic	Total	SERIOUS MENTAL ILLNESS ¹	
		Yes	No
TOTAL	13.0	47.9	9.9
AGE			
18-25	10.6	34.2	7.0
26-49	14.6	54.4	10.4
50 or Older	12.0	46.4	10.3
GENDER			
Male	8.7	39.5	6.8
Female	17.0	52.3	12.8
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	13.7	49.0	10.4
White	14.7	51.9	11.3
Black or African American	8.5	36.9	5.8
American Indian or Alaska Native	17.8	*	11.9
Native Hawaiian or Other Pacific Islander	3.9	*	3.5
Asian	8.5	*	6.6
Two or More Races	16.6	*	13.1
Hispanic or Latino	8.2	37.8	6.0
EDUCATION			
< High School	11.7	39.3	8.7
High School Graduate	11.7	45.1	8.5
Some College	14.3	51.7	10.4
College Graduate	14.4	57.1	11.8
CURRENT EMPLOYMENT			
Full-Time	11.3	45.0	8.6
Part-Time	14.2	50.7	10.3
Unemployed	14.2	42.4	9.6
Other ²	15.8	52.2	12.2

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.20a Received Mental Health Treatment/Counseling in the Past Year among Persons Aged 18 or Older with Past Year Serious Mental Illness, by Age Group and by Socioeconomic and Health Characteristics: Numbers in Thousands, 2002

Socioeconomic/Health Characteristic	Total	AGE GROUP (Years)		
		18-25	26-49	50 or Older
MARITAL STATUS				
Married	3,371	208	2,486	677
Widowed	*	*	*	*
Divorced or Separated	2,272	*	1,583	*
Never Married	2,404	1,090	1,037	*
FAMILY INCOME				
Less Than \$20,000	2,457	496	1,310	*
\$20,000 to \$49,999	3,270	520	1,970	*
\$50,000 to \$74,999	1,345	162	950	*
\$75,000 or More	1,283	217	943	*
HEALTH INSURANCE¹				
Private	5,354	875	3,408	1,071
Medicaid/CHIP ²	1,297	191	808	*
Other ³	598	69	*	*
No Coverage	1,105	258	674	*
OVERALL HEALTH				
Excellent	1,026	240	685	*
Very Good	2,408	576	1,606	*
Good	2,502	426	1,690	*
Fair/Poor	2,416	152	1,191	1,073
SOCIAL SUPPORT⁴				
Received Social Support	6,960	1,211	4,393	1,356
Did Not Receive Social Support	1,386	183	772	*

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Response categories are mutually exclusive. Respondents who reported both Private Health Insurance and Medicaid/CHIP are included in the Private category only.

² Children's Health Insurance Plan. Individuals aged 20 or older are not eligible for this plan.

³ Medicare, CHAMPUS, TRICARE, CHAMPVA, the VA, military health care, or any other type of health insurance.

⁴ Respondents are defined as receiving social support if they reported having two or more friends with whom they share personal issues and concerns, spend time on shared interests and activities, or who really like and care about them.

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

Table B.20b Received Mental Health Treatment/Counseling in the Past Year among Persons Aged 18 or Older with Past Year Serious Mental Illness, by Age Group and by Socioeconomic and Health Characteristics: Percentages, 2002

Socioeconomic/Health Characteristic	Total	AGE GROUP (Years)		
		18-25	26-49	50 or Older
MARITAL STATUS				
Married	50.6	37.0	56.1	40.6
Widowed	*	*	*	*
Divorced or Separated	61.1	*	61.9	*
Never Married	38.5	32.7	42.9	*
FAMILY INCOME				
Less Than \$20,000	45.4	33.8	54.5	*
\$20,000 to \$49,999	48.5	33.9	53.3	*
\$50,000 to \$74,999	51.5	30.5	56.4	*
\$75,000 or More	47.8	39.4	54.5	*
HEALTH INSURANCE¹				
Private	50.8	37.8	56.3	49.5
Medicaid/CHIP ²	55.1	40.1	65.1	*
Other ³	50.8	38.4	*	*
No Coverage	32.7	23.3	37.1	*
OVERALL HEALTH				
Excellent	38.7	31.5	42.3	*
Very Good	46.5	34.4	54.0	*
Good	47.2	33.4	57.9	*
Fair/Poor	56.0	41.2	59.7	55.0
SOCIAL SUPPORT⁴				
Received Social Support	48.7	34.7	55.7	46.7
Did Not Receive Social Support	44.0	31.0	47.8	*

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Response categories are mutually exclusive. Respondents who reported both Private Health Insurance and Medicaid/CHIP are included in the Private category only.

² Children's Health Insurance Plan. Individuals aged 20 or older are not eligible for this plan.

³ Medicare, CHAMPUS, TRICARE, CHAMPVA, the VA, military health care, or any other type of health insurance.

⁴ Respondents are defined as receiving social support if they reported having two or more friends with whom they share personal issues and concerns, spend time on shared interests and activities, or who really like and care about them.

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

Table B.21a Received Mental Health Treatment/Counseling in the Past Year among Persons Aged 18 or Older, by Past Year Serious Mental Illness and Geographic Characteristics: Numbers in Thousands, 2002

Geographic Characteristic	Total	SERIOUS MENTAL ILLNESS ¹	
		Yes	No
TOTAL	27,322	8,355	18,968
GEOGRAPHIC DIVISION			
Northeast	5,597	1,745	3,852
New England	1,828	653	1,175
Middle Atlantic	3,769	1,092	2,677
Midwest	6,208	1,912	4,297
East North Central	4,192	1,330	2,861
West North Central	2,017	581	1,435
South	9,239	2,999	6,239
South Atlantic	4,846	1,594	3,252
East South Central	1,747	636	1,110
West South Central	2,646	769	1,877
West	6,278	1,699	4,580
Mountain	1,810	507	1,303
Pacific	4,468	1,191	3,276
COUNTY TYPE			
Large Metro	12,885	3,681	9,204
Small Metro	8,953	2,879	6,074
250K - 1 Mil. Pop.	6,628	2,027	4,601
<250K Pop.	2,325	852	1,473
Nonmetro	5,485	1,795	3,690
Urbanized	2,051	625	1,426
Less Urbanized	2,990	1,045	1,945
Completely Rural	443	*	319

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

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

Table B.21b Received Mental Health Treatment/Counseling in the Past Year among Persons Aged 18 or Older, by Past Year Serious Mental Illness and Geographic Characteristics: Percentages, 2002

Geographic Characteristic	Total	SERIOUS MENTAL ILLNESS ¹	
		Yes	No
TOTAL	13.0	47.9	9.9
GEOGRAPHIC DIVISION			
Northeast	13.8	50.7	10.4
New England	17.2	64.9	12.2
Middle Atlantic	12.6	44.9	9.8
Midwest	13.0	47.5	9.9
East North Central	12.6	47.4	9.4
West North Central	14.1	47.8	11.0
South	12.3	47.5	9.1
South Atlantic	12.3	47.6	9.0
East South Central	13.8	53.3	9.7
West South Central	11.6	43.5	8.9
West	13.4	46.3	10.6
Mountain	13.3	45.4	10.4
Pacific	13.4	46.7	10.6
COUNTY TYPE			
Large Metro	12.3	46.1	9.5
Small Metro	14.1	52.0	10.5
250K - 1 Mil. Pop.	14.4	51.1	10.9
<250K Pop.	13.5	54.2	9.4
Nonmetro	13.1	45.7	9.7
Urbanized	15.4	56.1	11.7
Less Urbanized	12.4	43.5	9.0
Completely Rural	9.6	*	7.5

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

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

Table B.22a Received Mental Health Treatment/Counseling in the Past Year among Persons Aged 18 or Older with Past Year Serious Mental Illness, by Past Year Any Illicit Drug Use and Demographic Characteristics: Numbers in Thousands, 2002

Demographic Characteristic	Total	ANY ILLICIT DRUG USE ¹	
		Yes	No
TOTAL	8,355	2,323	6,032
AGE			
18-25	1,394	668	726
26-49	5,173	1,442	3,731
50 or Older	1,787	*	1,575
GENDER			
Male	2,376	917	1,459
Female	5,978	1,406	4,572
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	7,703	2,116	5,587
White	6,547	1,813	4,734
Black or African American	750	*	515
American Indian or Alaska Native	*	*	*
Native Hawaiian or Other Pacific Islander	*	*	*
Asian	*	*	*
Two or More Races	*	*	*
Hispanic or Latino	651	*	445
EDUCATION			
< High School	1,404	454	950
High School Graduate	2,631	651	1,981
Some College	2,576	819	1,757
College Graduate	1,743	400	1,344
CURRENT EMPLOYMENT			
Full-Time	3,796	1,045	2,751
Part-Time	1,346	422	925
Unemployed	457	*	*
Other ²	2,756	601	2,155

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.22b Received Mental Health Treatment/Counseling in the Past Year among Persons Aged 18 or Older with Past Year Serious Mental Illness, by Past Year Any Illicit Drug Use and Demographic Characteristics: Percentages, 2002

Demographic Characteristic	Total	ANY ILLICIT DRUG USE ¹	
		Yes	No
TOTAL	47.9	46.0	48.7
AGE			
18-25	34.2	34.1	34.2
26-49	54.4	52.8	55.0
50 or Older	46.4	*	45.2
GENDER			
Male	39.5	40.3	39.0
Female	52.3	50.6	52.9
HISPANIC ORIGIN AND RACE			
Not Hispanic or Latino	49.0	47.2	49.7
White	51.9	48.4	53.5
Black or African American	36.9	*	34.7
American Indian or Alaska Native	*	*	*
Native Hawaiian or Other Pacific Islander	*	*	*
Asian	*	*	*
Two or More Races	*	*	*
Hispanic or Latino	37.8	*	38.5
EDUCATION			
< High School	39.3	40.8	38.6
High School Graduate	45.1	43.0	45.9
Some College	51.7	47.5	53.9
College Graduate	57.1	56.7	57.2
CURRENT EMPLOYMENT			
Full-Time	45.0	40.8	46.8
Part-Time	50.7	50.9	50.6
Unemployed	42.4	*	*
Other ²	52.2	53.7	51.9

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

² Retired person, disabled person, homemaker, student, or other person not in the labor force.

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

Table B.23a Receipt of Mental Health Treatment/Counseling and/or Substance Use Treatment at a Specialty Facility in the Past Year among Persons Aged 18 or Older with Past Year Serious Mental Illness and/or a Substance Use Disorder in the Past Year: Numbers in Thousands, 2002

Treatment	DISORDER			
	SMI or Substance Use Disorder ^{1,2}	SMI Only ¹	Substance Use Disorder Only ²	SMI and Substance Use Disorder ^{1,2}
Mental Health or Specialty Substance Treatment ³	11,416	6,534	2,945	1,937
Mental Health Treatment Only	9,879	6,399	2,097	1,383
Specialty Substance Treatment Only ³	641	39	525	78
Mental Health and Specialty Substance Treatment ³	892	96	320	476
No Treatment	21,739	6,872	12,765	2,102

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing mental health treatment/counseling information are excluded, except when information can be gained from responses regarding substance treatment.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

² Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

³ Received Substance Use Treatment at a Specialty Facility refers to treatment received at a hospital (inpatient), a rehabilitation facility (inpatient or outpatient), or mental health center in order to reduce or stop drug or alcohol use, or for medical problems associated with drug or alcohol use.

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

Table B.23b Receipt of Mental Health Treatment/Counseling and/or Substance Use Treatment at a Specialty Facility in the Past Year among Persons Aged 18 or Older with Past Year Serious Mental Illness and/or a Substance Use Disorder in the Past Year: Percentages, 2002

Treatment	DISORDER			
	SMI or Substance Use Disorder ^{1,2}	SMI Only ¹	Substance Use Disorder Only ²	SMI and Substance Use Disorder ^{1,2}
Mental Health or Specialty Substance Treatment ³	34.4	48.7	18.7	48.0
Mental Health Treatment Only	29.8	47.7	13.3	34.2
Specialty Substance Treatment Only ³	1.9	0.3	3.3	1.9
Mental Health and Specialty Substance Treatment ³	2.7	0.7	2.0	11.8
No Treatment	65.6	51.3	81.3	52.0

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing mental health treatment/counseling information are excluded, except when information can be gained from responses regarding substance treatment.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

² Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

³ Received Substance Use Treatment at a Specialty Facility refers to treatment received at a hospital (inpatient), a rehabilitation facility (inpatient or outpatient), or mental health center in order to reduce or stop drug or alcohol use, or for medical problems associated with drug or alcohol use.

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

Table B.24a Receipt of Mental Health Treatment/Counseling and/or Substance Use Treatment in the Past Year among Persons Aged 18 or Older with Past Year Serious Mental Illness and/or a Substance Use Disorder in the Past Year: Numbers in Thousands, 2002

Treatment	DISORDER			
	SMI or Substance Use Disorder ^{1,2}	SMI Only ¹	Substance Use Disorder Only ²	SMI and Substance Use Disorder ^{1,2}
Mental Health or Substance Treatment ³	11,842	6,560	3,306	1,976
Mental Health Treatment Only	9,722	6,386	2,024	1,311
Substance Treatment Only ³	1,067	65	886	117
Mental Health and Substance Treatment ³	1,049	109	392	548
No Treatment	21,313	6,846	12,404	2,063

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing mental health treatment/counseling information are excluded, except when information can be gained from responses regarding substance treatment.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

² Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

³ Received Substance Use Treatment refers to treatment received in order to reduce or stop drug or alcohol use, or for medical problems associated with drug or alcohol use. It includes treatment received at any location, such as a hospital, a rehabilitation facility (inpatient or outpatient), mental health center, emergency room, private doctor's office, self-help group, or prison/jail.

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

Table B.24b Receipt of Mental Health Treatment/Counseling and/or Substance Use Treatment in the Past Year among Persons Aged 18 or Older with Past Year Serious Mental Illness and/or a Substance Use Disorder in the Past Year: Percentages, 2002

Treatment	DISORDER			
	SMI or Substance Use Disorder ^{1,2}	SMI Only ¹	Substance Use Disorder Only ²	SMI and Substance Use Disorder ^{1,2}
Mental Health or Substance Treatment ³	35.7	48.9	21.0	48.9
Mental Health Treatment Only	29.3	47.6	12.9	32.5
Substance Treatment Only ³	3.2	0.5	5.6	2.9
Mental Health and Substance Treatment ³	3.2	0.8	2.5	13.5
No Treatment	64.3	51.1	79.0	51.1

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing mental health treatment/counseling information are excluded, except when information can be gained from responses regarding substance treatment.

NOTE: Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

¹ Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

² Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

³ Received Substance Use Treatment refers to treatment received in order to reduce or stop drug or alcohol use, or for medical problems associated with drug or alcohol use. It includes treatment received at any location, such as a hospital, a rehabilitation facility (inpatient or outpatient), mental health center, emergency room, private doctor's office, self-help group, or prison/jail.

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

Table B.25a Receipt of Mental Health Treatment/Counseling in the Past Year among Persons Aged 18 or Older with Past Year Serious Mental Illness, by Type of Past Year Substance Use Disorder: Numbers in Thousands, 2002

Type of Substance Use Disorder	SUBSTANCE USE DISORDER ¹	
	Yes	No
Any Illicit Drug or Alcohol ²	1,859	6,495
Alcohol Only	1,009	7,346
Any Illicit Drug Only ²	477	7,877
Any Illicit Drug and Alcohol ²	373	7,981

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

² Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

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

Table B.25b Receipt of Mental Health Treatment/Counseling in the Past Year among Persons Aged 18 or Older with Past Year Serious Mental Illness, by Type of Past Year Substance Use Disorder: Percentages, 2002

Type of Substance Use Disorder	SUBSTANCE USE DISORDER ¹	
	Yes	No
Any Illicit Drug or Alcohol ²	46.0	48.4
Alcohol Only	42.6	48.7
Any Illicit Drug Only ²	53.6	47.6
Any Illicit Drug and Alcohol ²	48.0	47.9

*Low precision; no estimate reported.

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

¹ Substance Use Disorder is defined as illicit drug or alcohol dependence or abuse and is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

² Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

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

Table B.M1 Adjusted Odds Ratios from Logistic Regression Models for Past Year Serious Mental Illness among Adults Aged 18 or Older, by Sociodemographic and Substance Use Characteristics: 2002

Sociodemographic and Substance Use Characteristic	Beta	SE Beta	P Value	Odds Ratio	95% CI
Age ($\chi^2 = 83.0$)†					
18-25	0.9034	0.1166	< 0.0001	2.47	(1.96, 3.10)
26-49	0.8368	0.0920	< 0.0001	2.31	(1.93, 2.77)
50 or Older	0.0000	0.0000	.	1.00	(1.00, 1.00)
Gender ($\chi^2 = 156.0$)†					
Female	0.7643	0.0612	< 0.0001	2.15	(1.90, 2.42)
Male	0.0000	0.0000	.	1.00	(1.00, 1.00)
Hispanic Origin and Race ($\chi^2 = 32.0$)†					
Black or African American	-0.4218	0.1035	< 0.0001	0.66	(0.54, 0.80)
Hispanic or Latino	-0.5189	0.1127	< 0.0001	0.60	(0.48, 0.74)
Other or Two or More Races	-0.0581	0.1507	0.6999	0.94	(0.70, 1.27)
White	0.0000	0.0000	.	1.00	(1.00, 1.00)
Education ($\chi^2 = 12.9$)†					
< High School	-0.2018	0.0973	0.0383	0.82	(0.68, 0.99)
High School Graduate	-0.0777	0.0794	0.3279	0.93	(0.79, 1.08)
Some College	0.1037	0.0793	0.1911	1.11	(0.95, 1.30)
College Graduate	0.0000	0.0000	.	1.00	(1.00, 1.00)
Current Employment ($\chi^2 = 5.0$)					
Part-Time	0.0987	0.0792	0.2126	1.10	(0.94, 1.29)
Unemployed	0.1878	0.1156	0.1047	1.21	(0.96, 1.51)
Other ¹	0.1342	0.0760	0.0779	1.14	(0.99, 1.33)
Full-Time	0.0000	0.0000	.	1.00	(1.00, 1.00)
Geographic Region ($\chi^2 = 3.3$)					
Northeast	0.1545	0.0912	0.0905	1.17	(0.98, 1.40)
Midwest	0.0398	0.0790	0.6150	1.04	(0.89, 1.22)
South	0.0369	0.0769	0.6319	1.04	(0.89, 1.21)
West	0.0000	0.0000	.	1.00	(1.00, 1.00)
County Type ($\chi^2 = 5.2$)					
Large Metro	-0.1700	0.0768	0.0272	0.84	(0.73, 0.98)
Small Metro	-0.0838	0.0771	0.2777	0.92	(0.79, 1.07)
Nonmetro	0.0000	0.0000	.	1.00	(1.00, 1.00)
Marital Status ($\chi^2 = 61.9$)†					
Widowed	0.0147	0.2038	0.9426	1.01	(0.68, 1.51)
Divorced or Separated	0.5694	0.0854	< 0.0001	1.77	(1.49, 2.09)
Never Married	0.4667	0.0825	< 0.0001	1.59	(1.36, 1.88)
Married	0.0000	0.0000	.	1.00	(1.00, 1.00)
Family Income ($\chi^2 = 2.6$)					
Less Than \$20,000	0.1695	0.1052	0.1076	1.18	(0.96, 1.46)
\$20,000 to \$49,999	0.1041	0.0862	0.2273	1.11	(0.94, 1.31)
\$50,000 to \$74,999	0.0808	0.1002	0.4202	1.08	(0.89, 1.32)
\$75,000 or More	0.0000	0.0000	.	1.00	(1.00, 1.00)
Health Insurance ($\chi^2 = 4.2$)					
Medicaid/CHIP ²	0.1908	0.1003	0.0575	1.21	(0.99, 1.47)
Other ³	0.1112	0.1413	0.4317	1.12	(0.85, 1.47)
No Coverage	0.0927	0.0810	0.2526	1.10	(0.94, 1.29)
Private	0.0000	0.0000	.	1.00	(1.00, 1.00)

(continued)

Table B.M1 Adjusted Odds Ratios from Logistic Regression Models for Past Year Serious Mental Illness among Adults Aged 18 or Older, by Sociodemographic and Substance Use Characteristics: 2002 (continued)

Sociodemographic and Substance Use Characteristic	Beta	SE Beta	P Value	Odds Ratio	95% CI
Overall Health ($\chi^2 = 216.6$)†					
Fair/Poor	1.4213	0.1087	< 0.0001	4.14	(3.35, 5.13)
Good	0.6468	0.0783	< 0.0001	1.91	(1.64, 2.23)
Very Good	0.2425	0.0771	0.0017	1.27	(1.10, 1.48)
Excellent	0.0000	0.0000	.	1.00	(1.00, 1.00)
Social Support ⁴ ($\chi^2 = 62.1$)†					
Not Received	0.6834	0.0868	< 0.0001	1.98	(1.67, 2.35)
Received	0.0000	0.0000	.	1.00	(1.00, 1.00)
Nicotine Dependence ⁵ ($\chi^2 = 31.2$)†					
Yes	0.4206	0.0754	< 0.0001	1.52	(1.31, 1.77)
No	0.0000	0.0000	.	1.00	(1.00, 1.00)
Any Illicit Drug Use/Dependence or Abuse ^{6,7} ($\chi^2 = 88.7$)†					
Any Illicit Drug Dependence or Abuse	1.0112	0.1097	< 0.0001	2.75	(2.22, 3.41)
Any Illicit Drug Use and No Dependence or Abuse	0.3555	0.0721	< 0.0001	1.43	(1.24, 1.64)
No Illicit Drug Use	0.0000	0.0000	.	1.00	(1.00, 1.00)
Alcohol Use/Dependence or Abuse ⁷ ($\chi^2 = 76.4$)†					
Alcohol Dependence or Abuse	0.5735	0.0995	< 0.0001	1.77	(1.46, 2.16)
Alcohol Use and No Dependence or Abuse	-0.1116	0.0709	0.1158	0.89	(0.78, 1.03)
No Alcohol Use	0.0000	0.0000	.	1.00	(1.00, 1.00)

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

NOTE: The number of degrees of freedom for a Wald χ^2 statistic is equal to the number of levels of the associated characteristic minus one.

¹ Retired person, disabled person, homemaker, student, or other person not in the labor force.

² Children's Health Insurance Plan. Individuals aged 20 or older are not eligible for this plan.

³ Medicare, CHAMPUS, TRICARE, CHAMPVA, the VA, military health care, or any other type of health insurance.

⁴ Respondents are defined as receiving social support if they reported having two or more friends with whom they share personal issues and concerns, spend time on shared interests and activities, or who really like and care about them (SEN11a, SEN11b, and SEN11c, respectively).

⁵ Nicotine (Cigarette) Dependence is based on criteria derived from the Nicotine Dependence Syndrome Scale (NDSS) or the Fagerstrom Test of Nicotine Dependence (FTND). See Section 2.3.2 of Chapter 2 of this report.

⁶ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

⁷ Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-IV).

† Significant at the .05 level.

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

Table B.M2 Adjusted Odds Ratios from Logistic Regression Models for Receipt of Mental Health Treatment/Counseling in the Past Year among Adults Aged 18 or Older with Past Year Serious Mental Illness, by Sociodemographic and Substance Use Characteristics: 2002

Sociodemographic and Substance Use Characteristic	Beta	SE Beta	P Value	Odds Ratio	95% CI
Age ($\chi^2 = 24.9$)†					
18-25	-0.0063	0.2165	0.9768	0.99	(0.65, 1.52)
26-49	0.5360	0.1964	0.0065	1.71	(1.16, 2.51)
50 or Older	0.0000	0.0000	.	1.00	(1.00, 1.00)
Gender ($\chi^2 = 14.0$)†					
Female	0.4557	0.1218	0.0002	1.58	(1.24, 2.00)
Male	0.0000	0.0000	.	1.00	(1.00, 1.00)
Hispanic Origin and Race ($\chi^2 = 17.9$)†					
Black or African American	-0.6484	0.1937	0.0008	0.52	(0.36, 0.76)
Hispanic or Latino	-0.4066	0.1897	0.0324	0.67	(0.46, 0.97)
Other or Two or More Races	-0.5198	0.2513	0.0389	0.59	(0.36, 0.97)
White	0.0000	0.0000	.	1.00	(1.00, 1.00)
Education ($\chi^2 = 21.9$)†					
< High School	-0.8235	0.2029	< 0.0001	0.44	(0.29, 0.65)
High School Graduate	-0.6000	0.1637	0.0003	0.55	(0.40, 0.76)
Some College	-0.2755	0.1541	0.0741	0.76	(0.56, 1.03)
College Graduate	0.0000	0.0000	.	1.00	(1.00, 1.00)
Current Employment ($\chi^2 = 11.3$)†					
Part-Time	0.4461	0.1517	0.0034	1.56	(1.16, 2.10)
Unemployed	0.2099	0.2183	0.3366	1.23	(0.80, 1.89)
Other ¹	0.4040	0.1605	0.0120	1.50	(1.09, 2.05)
Full-Time	0.0000	0.0000	.	1.00	(1.00, 1.00)
Geographic Region ($\chi^2 = 1.5$)					
Northeast	0.1363	0.1670	0.4145	1.15	(0.83, 1.59)
Midwest	-0.0416	0.1626	0.7979	0.96	(0.70, 1.32)
South	0.0077	0.1523	0.9599	1.01	(0.75, 1.36)
West	0.0000	0.0000	.	1.00	(1.00, 1.00)
County Type ($\chi^2 = 4.9$)					
Large Metro	0.1275	0.1458	0.3821	1.14	(0.85, 1.51)
Small Metro	0.3000	0.1441	0.0377	1.35	(1.02, 1.79)
Nonmetro	0.0000	0.0000	.	1.00	(1.00, 1.00)
Marital Status ($\chi^2 = 19.7$)†					
Widowed	-0.4640	0.4315	0.2825	0.63	(0.27, 1.47)
Divorced or Separated	0.4705	0.1556	0.0026	1.60	(1.18, 2.17)
Never Married	-0.2068	0.1502	0.1689	0.81	(0.61, 1.09)
Married	0.0000	0.0000	.	1.00	(1.00, 1.00)
Family Income ($\chi^2 = 2.9$)					
Less Than \$20,000	0.0285	0.2005	0.8869	1.03	(0.69, 1.53)
\$20,000 to \$49,999	0.1851	0.1732	0.2855	1.20	(0.86, 1.69)
\$50,000 to \$74,999	0.2493	0.1875	0.1838	1.28	(0.89, 1.85)
\$75,000 or More	0.0000	0.0000	.	1.00	(1.00, 1.00)
Health Insurance ($\chi^2 = 22.8$)†					
Medicaid/CHIP ²	0.1264	0.1908	0.5079	1.13	(0.78, 1.65)
Other ³	0.0901	0.2608	0.7298	1.09	(0.66, 1.83)
No Coverage	-0.7094	0.1548	< 0.0001	0.49	(0.36, 0.67)
Private	0.0000	0.0000	.	1.00	(1.00, 1.00)

(continued)

Table B.M2 Adjusted Odds Ratios from Logistic Regression Models for Receipt of Mental Health Treatment/Counseling in the Past Year among Adults Aged 18 or Older with Past Year Serious Mental Illness, by Sociodemographic and Substance Use Characteristics: 2002 (continued)

Sociodemographic and Substance Use Characteristic	Beta	SE Beta	P Value	Odds Ratio	95% CI
Overall Health ($\chi^2 = 18.9$)†					
Fair/Poor	0.9401	0.2246	< 0.0001	2.56	(1.65, 3.98)
Good	0.4781	0.1823	0.0089	1.61	(1.13, 2.31)
Very Good	0.3569	0.1723	0.0387	1.43	(1.02, 2.00)
Excellent	0.0000	0.0000	.	1.00	(1.00, 1.00)
Social Support ⁴ ($\chi^2 = 0.2$)					
Not Received	-0.0793	0.1770	0.6540	0.92	(0.65, 1.31)
Received	0.0000	0.0000	.	1.00	(1.00, 1.00)
Nicotine Dependence ⁵ ($\chi^2 = 0.0$)					
Yes	-0.0004	0.1205	1.0000	1.00	(0.79, 1.27)
No	0.0000	0.0000	.	1.00	(1.00, 1.00)
Any Illicit Drug/Alcohol Dependence or Abuse ^{6,7} ($\chi^2 = 6.0$)					
Alcohol Dependence or Abuse Only	-0.0347	0.1356	0.7980	0.97	(0.74, 1.26)
Any Illicit Drug Dependence or Abuse Only	0.5147	0.2547	0.0436	1.67	(1.01, 2.76)
Any Illicit Drug and Alcohol Dependence or Abuse	0.3057	0.2138	0.1530	1.36	(0.89, 2.07)
No Dependence or Abuse	0.0000	0.0000	.	1.00	(1.00, 1.00)

NOTE: Mental Health Treatment/Counseling is defined as having received inpatient care, outpatient care, or using prescription medication for problems with emotions, nerves, or mental health. Respondents were not to include treatment for alcohol or drug use. Respondents with missing treatment/counseling information are excluded.

NOTE: Serious Mental Illness (SMI) is defined as having a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* and resulted in functional impairment that substantially interfered with or limited one or more major life activities. See Section A.7 of Appendix A of this report.

NOTE: The number of degrees of freedom for a Wald χ^2 statistic is equal to the number of levels of the associated characteristic minus one.

¹ Retired person, disabled person, homemaker, student, or other person not in the labor force.

² Children's Health Insurance Plan. Individuals aged 20 or older are not eligible for this plan.

³ Medicare, CHAMPUS, TRICARE, CHAMPVA, the VA, military health care, or any other type of health insurance.

⁴ Respondents are defined as receiving social support if they reported having two or more friends with whom they share personal issues and concerns, spend time on shared interests and activities, or who really like and care about them (SEN11a, SEN11b, and SEN11c, respectively).

⁵ Nicotine (Cigarette) Dependence is based on criteria derived from the Nicotine Dependence Syndrome Scale (NDSS) or the Fagerstrom Test of Nicotine Dependence (FTND). See Section 2.3.2 of Chapter 2 of this report.

⁶ Any Illicit Drug includes marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used nonmedically.

⁷ Dependence or abuse is based on definitions found in the 4th edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)*.

† Significant at the .05 level.

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

