# PROJECT TRANSFORM
### A MENTAL HEALTH TRANSFORMATION INITIATIVE
### FOR THE SEVEN-COUNTY NORTHSTAR REGION

# EPIDEMIOLOGIC PROFILE:
## ASSESSMENT OF MENTAL HEALTH IN DALLAS COUNTY

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# TABLE OF CONTENTS

# EXECUTIVE SUMMARY

To successfully move into the new millennium, President George W. Bush has commissioned healthcare providers and advocates as well as law and policy makers to transform the current delivery of mental health services in the United States. This technical document addresses the need to assess the number of individuals who experience mental illness, and their demographic characteristics, in Dallas County and in Texas.

In 2003, the President's New Freedom Commission outlined the President's concern and his proposal to renovate the mental health service delivery and consumer knowledge and satisfaction. The Texas Mental Health Transformation Project is the avenue by which the President's vision is being implemented in Texas. Texas is the only state to implement local initiatives for mental health transformation. The North Texas Behavioral Health Authority is the recipient of one of eight state grants administered by the Texas Health Institute to develop local prototypes for transformation that can be disseminated in the state. In an effort to inform the actions of the NorthSTAR region's Project Transform, we compiled available mental health data to describe the prevalence of mental illness in Dallas County and in Texas, with comparisons to national prevalence rates.

Psychiatric epidemiology, the study of distribution and risk factors of mental health and illness in the population, is a developing field. As a result, mental health and illness indicators are not inclusive or comparable across agencies. Population-based surveys generally use three summary indicators of mental health: mental illness (MI), serious mental illness (SMI), and severe and persistent mental illness (SPMI). These indicators are employed by both the President's New Freedom Commission and the 1999 Surgeon General's Report on mental health. This report presents these indicators for the United States, Texas, and Dallas County by age, race/ethnicity, education, and poverty level, where available. MI is the diagnosis of any mental illness, as defined by the Diagnostic and Statistical Manual of Mental Disorders, fourth version (DSM-IV). The 12-month prevalence rate of MI in the United States is approximately 19% to 23% for any given year. This statistic varies by gender, race/ethnicity, education, and poverty level status. For example, women had a higher prevalence of any mental illness in 2006 than men. Serious Mental Illness (SMI) is defined as "[having] at least one 12-month disorder, other than a substance use disorder, that [meets] DSM-IV criteria and [having] a serious impairment…defined as impairment equivalent to a Global Assessment of Functioning (GAF)

score of less than 60."[1]  Figure 1 displays the relationship between these three indicators.  If an individual is diagnosed and included in the population of those individuals diagnosed for a

**FIGURE 1**
Graphical representation of relationship of
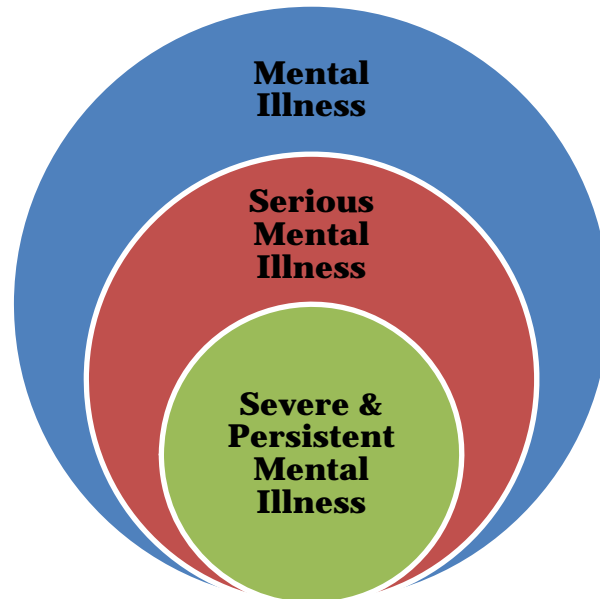U.S. Mental Illness Indicators



Figure adapted from "Mental Illness in Hawai'i: Prevalence Estimates Based on Year 2000 Census"[2]

SPMI, this same individual is also included in the population of those individuals with SMI and MI.

These indicators are also used by the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMSHA).  Prevalence rates for these indicators are available for state and local (Dallas County) level, except MI.  Because the methods for collecting the data were different, comparisons of state and local data with the national level data should be made with caution.

Annual Dallas County-level data were available for 2000 to 2006 and are also presented in this document.  NorthSTAR data were grouped by mental illness in Dallas County.  Each grouping has prevalence rates by race, gender, and age.  This comprehensive document is the beginning of a process of responding to mental health and illness in North Texas to better serve affected individuals and their families.

## I.  INTRODUCTION

In 2007 the North Texas Behavioral Health Authority (NTBHA) was one of eight recipients of a competitive grant through the Texas Department of State Health Services and administered by the Texas Health Institute to develop local prototypes for mental health transformation.  The local initiatives are an implementation strategy set forth in the Comprehensive Mental Health Plan for Texas and a part of the national transformation effort.  The Dallas area project is called Project Transform and is focused on the total mental health service delivery system in the seven-county NorthSTAR region of North Texas.  To inform the project and to establish a baseline for transformation, Project Transform has contracted with the J. McDonald Williams Institute to conduct a comprehensive mental health needs assessment to identify the current mental health needs and service gaps in the area.  This epidemiologic profile is the first step in that needs assessment.  The report provides a brief overview of recent developments in mental health services in America; presents estimated prevalence rates, numbers, and proportions of mental health disorders in Dallas County; and compares these local statistics to those of the United States and Texas using the most up-to-date data available.  Statistics are presented in graphical and tabular form and are broken down by age, race/ethnicity, gender, and other relevant characteristics when appropriate data are available.  Several data sources were compiled to produce this document:

### A.  BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM, 1993–2006

The Centers for Disease Control and Prevention (CDC) established the Behavioral Risk Factor Surveillance System (BRFSS) in 1984.  The BRFSS collects information on health and screening behaviors, quality of life, and demographics.  In this report, we analyzed responses to the BRFSS question:

> "Now, thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?"[3]

### B.  NATIONAL COMORBIDITY SURVEY—REPLICATION (NCS-R), 2001–2003

NCS-R is a nationally-representative, community-based household survey that was conducted to ascertain the prevalence and correlates of mental health disorders in the United States.  Based on the national prevalence estimates calculated with the NCS-R, the University of Texas Medical Branch (UTMB) at Galveston used data from the U.S, Census Bureau to calculate state- and county-level estimates by age, race/ethnicity, gender, marital status, and poverty level.[4]  UTMB

provided these indirect estimates for this project.  Below is a more detailed description of the demographic categories created by UTMB to calculate the state- and county-level indirect prevalence estimates.

- **Age**.  The UTMB assessment project divided age into 10 categories: 0–5 years, 6–11 years, 12–17 years, 18–20 years, 21–24 years, 25–34 years, 35–44 years, 45–54 years, 55–64 years, and 65+ years.

- **Race and ethnicity**.  The UTMB assessment project combined race and ethnicity into eight categories based on the 2000 U.S. Census data: White, Black, Hispanic, Asian, Pacific Islander, Native American/Alaskan Native, other races, and multiple races.

- **Marital status**.  Marital status is defined for persons 15 years of age and older. UTMB combined the U.S. Census marital status categories to create three categories: married; separated, widowed, or divorced; and single.

- **Education**.  UTMB classified education into three categories for individuals 18 years of age and older: less than high school graduate, high school graduate through some college, and college graduate.

- **Poverty**.  Poverty status is defined by the federal poverty guidelines.  Categories include "poor" (families with incomes below the federal poverty level), "near-poor" (families with incomes between 100 and 199% of the federal poverty level), and "non-poor" (families with incomes at 200% or more above the federal poverty level).

- **Residential setting**.  The NCS survey included only persons in residential households, but UTMB maintained residences, institutions, and group quarters as separate strata.  Mental illness prevalence estimates for populations living in institutional and group quarters residences are based on combinations of the residential rates and Census data.  Institutional facilities include correctional institutions; nursing homes; hospitals, wards, and hospices for the chronically ill; psychiatric hospitals or wards; and juvenile institutions.  Group quarters include hostel facilities; convents; residential vocational training facilities; and shelters for the homeless, abused women, and neglected youth.

## C.    NORTHSTAR DALLAS COUNTY—MENTAL HEALTH ESTIMATES, 2000–2007

NorthSTAR is a behavioral health managed care program that provides public behavioral health care to consumers with specified mental illness/substance abuse problems and who meet certain income-eligibility criteria.  (See section II.C for more information on the NorthSTAR

population.)  The NorthSTAR and Special Initiatives Unit, Department of State Health Services, at Austin, Texas provided data on the prevalence of mental illness among NorthSTAR clients for this project.

## II.    BACKGROUND

The World Health Organization (WHO) defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."[5]  This definition was developed to indicate the importance of not only good physical health, but also good mental and social health.  For example, in the United States, mental health disorders accounted for more than 15% of the disease burden in 1999, highlighting the need for mental health, as well as physical health, promotion.[6]

Though mental health is sometimes defined as the "absence of a mental disorder"[7], most scientists, researchers, and public health professionals recognize there is more to mental health.  In 2001, WHO's *World Health Report* devoted a full chapter to mental health and illness.  As stated in the report, mental health is virtually impossible to comprehensively define due to cultural diversities and differing professional theories.  Nevertheless, WHO offered the following as a broad definition:

> "…mental health include[s] subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self-actualization of one's intellectual and emotional potential."[8]

In the United States, policymakers, practitioners, and academicians are increasingly recognizing the importance of mental health.  In 1999, the U.S. Surgeon General released a report dedicated to the issue of mental health in America.  In it, he reviewed the incredible improvements America has seen in the understanding of mental disorders and their associated pathologic mechanisms over the last 50 years.[6]  However, the report also recognized the many gaps remaining in our mental health care system:

- Despite the identification of barriers that limit the availability and accessibility of mental health services for some Americans, disparities in mental health persist.
- There is still much we do not understand about the etiology, management, and prevention of some mental health disorders.  This lack of knowledge hinders our efforts to promote mental health within the community.

- There is an urgent need to develop effective procedures for the treatment and prevention of mental health disorders, and continuous mental health evaluation is critical to the creation and maintenance of effective mental health interventions.[6]

Since the report was published, further steps have been taken to increase awareness about mental health issues. On April 29, 2002, President Bush announced the creation of the New Freedom Commission on Mental Health. The Commission's primary objectives are to carefully examine the current delivery processes of mental health services and to advise the President of possible improvements. This includes evaluating the quality and efficiency of the current delivery system, private as well as public, and identifying unmet needs and barriers to treatment for those individuals with serious mental illnesses (SMI) and children and adolescents with serious emotional disturbances (SED).

The New Freedom Commission's 2003 report, "Achieving the Promise: Transforming Mental Health Care in America"[9], describes the national prevalence of mental illness, details the unmet needs of the mentally ill, and provides recommendations to achieve the transformation of mental health services in the U.S. In the report, a broad concept of mental health service needs is suggested, which includes substance abuse treatment and attention to housing, employment, and social support issues. The report also outlines six goals for the mental health transformation plan:

- Understand that mental health is a crucial component to overall health;
- Create a mental health care system that is consumer and family driven;
- Eliminate disparities in mental health services;
- Make mental health screening, assessment, and referral to services common practice;
- Deliver excellent mental health care and accelerate research; and
- Harness new technology to access mental health care and information.

A.   **TEXAS MENTAL HEALTH TRANSFORMATION PROJECT**

In response to the goals of the New Freedom Commission, SAMSHA awarded seven states, including Texas, federal funding to implement, at the state level, the mental health transformation commissioned by the President. In 2006 the Texas Department of State Health Services contracted with Texas Health Institute to implement transformation strategies at the local level. The Institute established the Mental Health Transformation Community Collaborative Project, and funded community collaboration in eight areas of Texas, with the

objective of developing prototypes for statewide mental health transformation. The Dallas County Unified Public Mental Health Initiative has been awarded one of these competitive grants. The Mental Health Transformation Workgroup, composed of consumers and representatives from a broad range of state agencies, was also created to provide leadership for more broad-based mental health transformation in Texas. The Workgroup has published three documents: 1) an analysis of the current state of mental health service delivery in Texas[10], 2) the *Comprehensive Mental Health Plan for the State of Texas*[11], and 3) implementation recommendations to the Texas Senate Committee on Health and Human Services.[12] These documents clarify, for those in the state of Texas, the problems with current mental health service delivery system, the vision for the future of mental health service delivery, and the immediate implementation approach.

The Comprehensive Mental Health Plan for Texas is bold, radical, and long-term, and seeks to initiate an evolving process that will achieve a major shift in the organizational culture across agencies at local, state, and federal levels. An essential aspect of the initiative is the development of a transformation partnership culture, which builds on new technologies, collaboration among agencies, and a strong and vibrant consumer and family-member voice. It is to be an evidence-based transformation, drawing on the latest evidence-based research. The goals include reducing fragmentation, building a solid foundation for delivering and sustaining mental health and related services, addressing stigma and the role of consumers and family members, reducing disparities, and focusing on the quality and efficiency of care. The ultimate objective is "to build a mental health system that promotes wellness, resilience, and recovery."

**B.    NORTH TEXAS MENTAL HEALTH TRANSFORMATION INITIATIVE: PROJECT TRANSFORM**

Project Transform is focused on the seven-county area of North Texas served by NorthSTAR, but is not limited to persons receiving services funded by NorthSTAR. The project seeks to move the system of mental health service delivery toward a unified public health model serving the needs of all persons in North Texas. All adults who have or are at risk for having mental illness, and all children and adolescents who have or are at risk for having emotional or behavioral disturbances, are included in the scope of this project, consistent with the definition of "priority populations" in the Texas Comprehensive Mental Health Plan. The corollary definition of "mental health services" is broad, encompassing not only mental health and substance abuse services, but also other services essential to meeting the needs of persons with mental illness,

including medical care, housing, employment, social support, and other issues that must be addressed to respond adequately to mental health problems. Within the broad-focus population is the entire range of socioeconomic, racial/ethnic, and age groups, as well as all levels of vulnerability and severity of illness. The project will strive to transform the delivery of mental health services in North Texas using a model that is evidence-based, consumer-driven, culturally congruent, and recovery-focused, and that achieves integration and coordination of services across the current system characterized by funding and service-delivery silos.

## C.    NORTHSTAR PROGRAM

NorthSTAR is a behavioral health managed care program, created by the Texas Health and Human Services Commission (HHSC) in response to a Texas Legislature directive to comprehensively restructure Medicaid in Texas.[13]  The program's service area includes Collin, Dallas, Ellis, Hunt, Kaufman, Navarro, and Rockwall Counties.  The NorthSTAR program aims to resolve several problems with public behavioral health care, such as access to services, lack of provider choice and lack of accountability.  NorthSTAR has changed the behavioral health services in its service area in order to create a public behavioral health care system that is completely consumer-oriented.

NorthSTAR's target population includes consumers who meet specific DSM IV clinical diagnostic criteria, who demonstrate eligibility in the included Medicaid groups, whose income is below or equal to 200% of the poverty level, and who lack any other insurance.[13]  For example, recipients of Temporary Assistance to Needy Families (TANF), the Supplemental Security Income program, and some other income-eligible programs are eligible for NorthSTAR. However, Medicaid-eligible persons who reside in nursing homes or community facilities for the mentally retarded, who are in child protective foster care, or whose Medicaid eligibility is for an emergency situation only are not covered by NorthSTAR.  They receive services under other state Medicaid programs.

NorthSTAR also serves the large group of indigent consumers identified as the priority populations, including children and adolescents who have a diagnosis of mental illness, and who exhibit severe emotional or social disabilities that require crisis intervention or prolonged treatment.  The adult priority population includes individuals with serious mental illness. Generally this population consists of adults with the diagnoses of schizophrenia, major

depression, manic-depressive disorder, or other severely disabling mental disorders which require crisis resolution or ongoing and long-term support and treatment.

NorthSTAR covers an array of mental health and substance abuse services, including the following: assessment and treatment planning; crisis services; inpatient hospitalization; pharmacological management and maintenance therapy; medication training and support; counseling; skills training and development; case management; rehabilitative services; parent and family education; assertive community treatment; specialty wraparound services for children; 24-hour residential detoxification and/or rehabilitation; partial hospital rehabilitation; intensive outpatient rehabilitation; outpatient programs, services, and detoxification; dual diagnosis services; and specialized female services.

## III.    MENTAL HEALTH INDICATORS

The 1999 Surgeon General's report identified three prevalence indicators to measure adult mental health disorders: mental illness (MI), serious mental illness (SMI), and severe and persistent mental illness (SPMI).[6]  These indicators were developed to address differences in samples, methodology, and differing criteria used to define mental illnesses.  Additional indicators, including frequent mental distress (FMD), serious emotional distress (SED), and mental illnesses defined by the Diagnostic and Statistical Manual IV of Mental Disorders (DSM IV) were collected as well.  Table III presents all the mental health indicators used in this report and shows the geographic units of analysis for which the data are available.  All the indicators are described in the ensuing text.

**Table III**
**Mental Health Indicators Reported**
**Across Geographic Locations**

| Mental Health Indicators | Geographic Units of Analysis | | |
|---|---|---|---|
| | USA | Texas | Dallas County |
| **Mental Illness** | * | | |
| **Frequent Mental Distress** | * | * | |
| **Serious Mental Illness** | | * | * |
| **Severe & Persistent Mental Illness** | | * | * |
| **Serious Emotional Distress** | | * | * |
| **DSM IV among NorthSTAR clients** | | | * |

## A. MENTAL ILLNESS (MI)

Most Americans have been touched by mental illness, either their own or that of a family member, friend, or coworker. Mental illness prevalence estimates in the United States range from 19% to 23% (see Figure III.A.1). This translates to approximately 44 million Americans, including 2.3 million Texans. On average, in a single year, 19% of the adult U.S. population has a mental disorder alone, while 3% has both mental and addictive disorders. According to two national mental health surveys, the Epidemiologic Catchment Area Study (ECA) and the National Comorbidity Study (NCS), between 28 and 30% of the U.S. population has either a mental or addictive disorder.[6]

**Figure III.A.1.**
Comparison of Mental Illness Prevalence Estimates
Epidemiologic Catchment Area Study (ECA),
National Comorbidity Study (NCS),
and Surgeon General's Report (SGR)
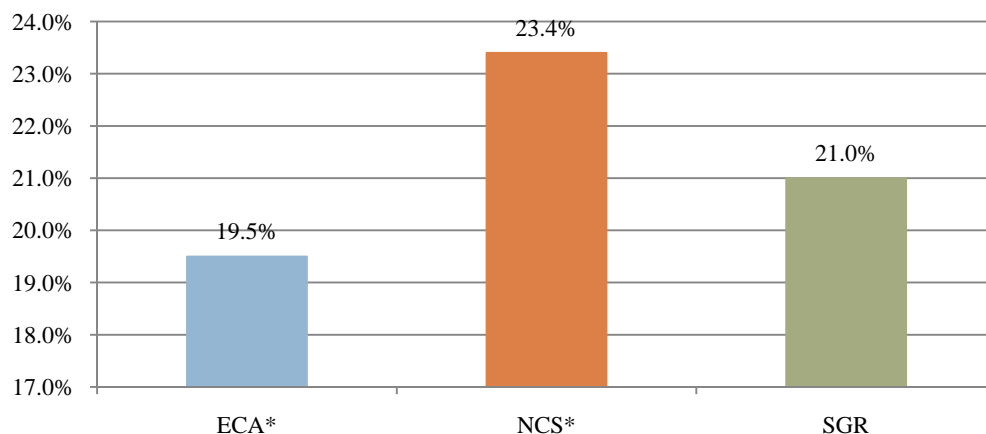


**Source:** U.S. Department of Health and Human Services. Mental Health: A Report of the Surgeon General–Executive Summary. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999, http://www.surgeongeneral.gov/library/mentalhealth/home.html.
* For a review of the methodologies used in these surveys, see Andrews, 1995.[14]
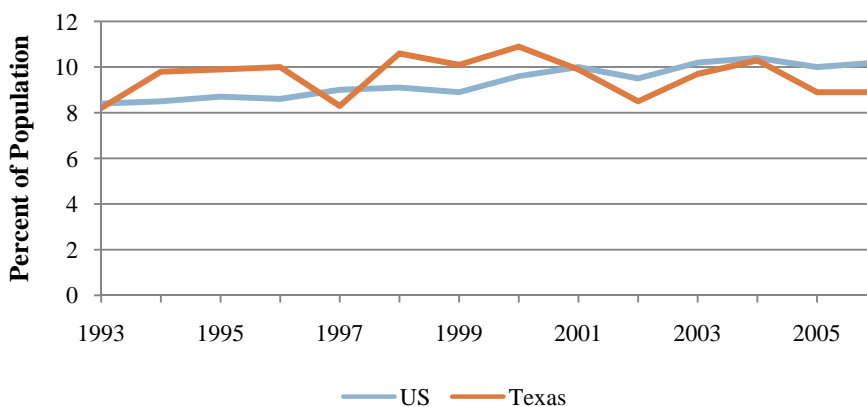
## B. FREQUENT MENTAL DISTRESS (FMD)

The Centers for Disease Control and Prevention's (CDC's) Behavioral Risk Factor Surveillance System (BRFSS) measures the number of "bad mental days" a respondent has had in the past 30 days. Those respondents who report more than 14 "bad mental days" are defined as having Frequent Mental Distress (FMD).[15] Figure III.B.1 displays the trend of FMD for Texas and the United States from 1993 to 2006. Since 1993, the prevalence of FMD in the United States has increased. Texas has also experienced an increase in the prevalence of FMD, though these

estimates do not appear stable. When considering FMD for subpopulations within Texas and the United States, we observe the following:

- **Gender.** In Texas, regardless of year, females experience higher prevalence rates of FMD compared to men (see Figure III.B.2). [15]

- **Race/ethnicity.** In the United States, Hispanics, Black non-Hispanics, Native Americans/Alaska Natives, and Other non-Hispanics report a higher prevalence of FMD compared to Asians/Pacific Islanders and White non-Hispanics. Native Americans/Alaska Natives reported the highest prevalence of FMD nearly every year, while Asians/Pacific Islanders reported the lowest prevalence estimates (see Figure III.B.3). In Texas, Black non-Hispanics reported higher prevalence of FMD as compared to Hispanics and White non-Hispanics (see Figure III.B.4). The estimates for Asians/Pacific Islanders, Native Americans/Alaska Natives, and Other non-Hispanics are either not reported or are considered unstable due to low numbers of FMD; therefore these data should not be relied upon for the purpose of comparison.[15]

- **Age.** In both the United States and Texas, the 18- to 24-year-old age group reported the highest prevalence of FMD, while the 65- to 74-year-old and 75+-year-old age reported the lowest overall prevalence of FMD (see Tables III.B.1 and III.B.2).[15]
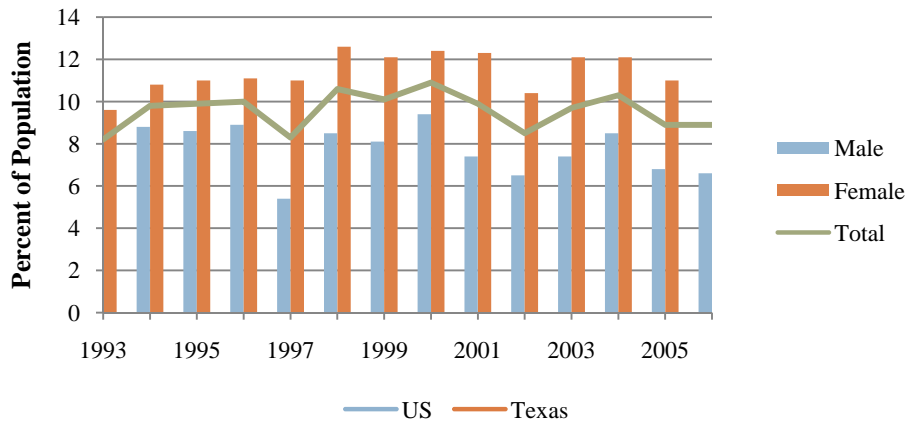
**Figure III.B.1**
Percentage of Population with Frequent Mental Distress$^\pm$
US and Texas, 1993–2006



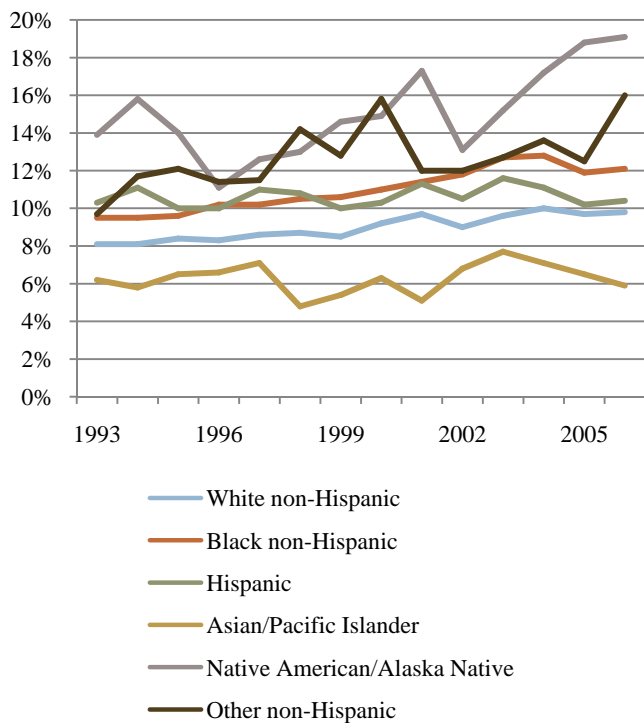**Source:** Data are from the 1993–2006 Behavioral Risk Factor Surveillance System (BRFSS).
$\pm$ Respondents who report more than 14 "bad mental days" are defined as having Frequent Mental Distress (FMD).

**Figure III.B.2**
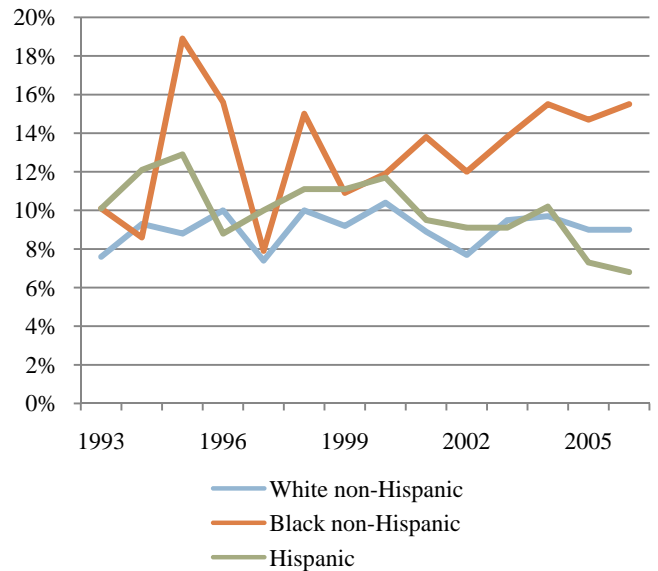Percent of Population with Frequent Mental Distress± by
Gender
Texas, 1993–2006



**Source:** Data are from the 1993–2006 Behavioral Risk Factor Surveillance System (BRFSS).
± Respondents who report more than 14 "bad mental days" are defined as having Frequent Mental Distress (FMD).

**Figure III.B.3**
Percentage of Individuals with Frequent
Mental Distress (FMD)± by
Race/Ethnicity
United States, 1993–2006



**Figure III.B.4**
Percentage of Individuals with Frequent
Mental Distress (FMD)± by
Race/Ethnicity
Texas, 1993–2006



**Source:** Data are from the 1993–2006 Behavioral Risk Factor Surveillance System (BRFSS).
± Respondents who report more than 14 "bad mental days" are defined as having Frequent Mental Distress (FMD).

**TABLE III.B.1**
**Percentage of Individuals with Frequent Mental Distress (FMD)[+] by Age**
**United States, 1993–2006**

| Year | | 18–24 | 25–34 | 35–44 | 45–54 | 55–64 | 65–74 | 75+ |
|---|---|---|---|---|---|---|---|---|
| 1993 | n (%) | 9,858 (9.4) | 21,912 (8.5) | 22,395 (9.5) | 15,073 (8.9) | 10,966 (7.7) | 11,300 (6.1) | 7,115 (5.8) |
| | CI | (8.3–10.4) | (7.9–9.1) | (8.8–10.1) | (8.2–9.7) | (6.9–8.5) | (5.3–6.8) | (5.1–6.6) |
| 1994 | n (%) | 10,122 (10.4) | 21,472 (8.4) | 23,508 (9.0) | 16,033 (8.7) | 11,367 (8.3) | 12,399 (5.7) | 7,795 (7.2) |
| | CI | (9.3–11.5) | (7.8–9.0) | (8.4–9.6) | (8.0–9.4) | (7.4–9.1) | (5.0–6.4) | (6.2–8.1) |
| 1995 | n (%) | 10,125 (10.3) | 22,948 (8.8) | 25,443 (9.8) | 17,941 (9.1) | 12,242 (7.2) | 12,991 (6.8) | 8,665 (6.3) |
| | CI | (9.1–11.4) | (8.2–9.5) | (9.1–10.5) | (8.3–9.8) | (6.5–8.0) | (6.0–7.5) | (5.5–7.1) |
| 1996 | n (%) | 10,725 (9.6) | 23,713 (9.2) | 27,678 (9.4) | 20,152 (9.5) | 13,281 (7.7) | 13,487 (5.7) | 9,273 (6.4) |
| | CI | (8.7–10.5) | (8.6–9.9) | (8.8–10.0) | (8.9–10.2) | (7.0–8.5) | (5.1–6.4) | (5.6–7.2) |
| 1997 | n (%) | 11,351 (10.4) | 24,989 (9.2) | 29,838 (10.1) | 22,461 (9.8) | 14,994 (8.3) | 14,473 (5.7) | 10,434 (6.5) |
| | CI | (9.5–11.4) | (8.6–9.9) | (9.5–10.7) | (9.2–10.5) | (7.5–9.0) | (5.1–6.3) | (5.8–7.3) |
| 1998 | n (%) | 12,682 (11.1) | 27,029 (9.2) | 32,547 (9.9) | 25,662 (9.6) | 16,990 (8.1) | 15,298 (6.2) | 11,536 (6.8) |
| | CI | (10.2–12.1) | (8.6–9.8) | (9.3–10.5) | (9.0–10.2) | (7.4–8.8) | (5.6–6.9) | (6.0–7.5) |
| 1999 | n (%) | 13,922 (9.4) | 28,138 (9.3) | 34,210 (10.3) | 27,914 (10.1) | 18,675 (8) | 16,116 (5.4) | 11,982 (6.2) |
| | CI | (8.5–10.2) | (8.7–9.9) | (9.7–10.9) | (9.4–10.7) | (7.3–8.6) | (4.9–6.0) | (5.5–7.0) |
| 2000 | n (%) | 15,653 (11.8) | 31,731 (9.8) | 39,088 (10.5) | 33,283 (10.6) | 22,224 (8.4) | 17,953 (6.2) | 13,028 (6.4) |
| | CI | (10.9–12.8) | (9.2–10.3) | (9.9–11.1) | (10.0–11.3) | (7.8–9.1) | (5.5–6.9) | (5.6–7.1) |
| 2001 | n (%) | 17,240 (12) | 34,892 (10.3) | 42,459 (10.5) | 38,817 (11.6) | 25,377 (9.7) | 20,186 (6.6) | 15,500 (5.9) |
| | CI | (10.9–13.0) | (9.8–10.9) | (10.0–11.1) | (11.0–12.2) | (9.0–10.4) | (6.0–7.3) | (5.2–6.5) |
| 2002 | n (%) | 17,925 (11.6) | 38,173 (9.7) | 48,197 (9.8) | 47,473 (10.9) | 34,173 (8.4) | 27,156 (6) | 21,639 (5.9) |
| | CI | (10.2–13.1) | (8.8–10.5) | (9.0–10.7) | (9.9–11.9) | (7.3–9.5) | (4.9–7.0) | (4.4–7.4) |
| 2003 | n (%) | 17,394 (12) | 38,149 (10.8) | 49,324 (10.7) | 51,262 (11.4) | 38,981 (9.7) | 28,768 (7.2) | 21,986 (6.3) |
| | CI | (11.1–13.0) | (10.2–11.4) | (10.2–11.3) | (10.8–12.0) | (9.1–10.3) | (6.5–7.8) | (5.6–7.0) |
| 2004 | n (%) | 17,770 (12.6) | 42,223 (10.8) | 54,225 (10.9) | 58,708 (11.6) | 47,549 (10) | 34,811 (6.6) | 27,093 (6.7) |
| | CI | (11.6–13.5) | (10.2–11.4) | (10.4–11.4) | (11.1–12.2) | (9.5–10.6) | (6.0–7.2) | (6.0–7.3) |
| 2005 | n (%) | 17,162 (12.2) | 44,505 (9.8) | 60,474 (10.7) | 69,590 (11.4) | 60,476 (10.1) | 43,925 (6.3) | 35,384 (6) |
| | CI | (11.2–13.1) | (9.3–10.4) | (10.2–11.2) | (10.8–11.9) | (9.6–10.7) | (5.8–6.8) | (5.5–6.4) |
| 2006 | n (%) | 14,559 (12.3) | 39,437 (10.8) | 57,580 (9.8) | 69,824 (11.4) | 65,032 (10.7) | 46,450 (6.6) | 38,662 (6.3) |
| | CI | (11.2–13.3) | (10.2–11.5) | (9.3–10.3) | (10.9–11.9) | (10.2–11.3) | (6.1–7.2) | (5.7–6.9) |

± Respondents who report more than 14 "bad mental days" are defined as having Frequent Mental Distress (FMD).

**\*** A confidence interval (CI) includes zero when either: 1) the product of the mean's standard error and its corresponding t-statistic exceeds the value of the mean (resulting in the lower bound 95% CI being below zero), so that the lower CI is truncated at zero; 2) the lower bound 95% CI is < 0.05, so that the lower CI is rounded to 0.0.

**TABLE III.B.2**
**Percentage of Individuals with Frequent Mental Distress (FMD)[+] by Age**
**Texas, 1993-2006**

| Year | | 18–24 | 25–34 | 35–44 | 45–54 | 55–64 | 65–74 | 75+ |
|---|---|---|---|---|---|---|---|---|
| 1993 | n (%) | 321 (6.7) | 588 (9.6) | 530 (9) | 339 (7.2) | 216 (8.4) | 209 (6.7) | 117 (6.9) |
| | CI | (3.4–10.0) | (6.9–12.3) | (6.1–11.9) | (4.1–10.3) | (4.4–12.3) | (2.3–11.1) | (2.0–11.8) |
| 1994 | n (%) | 189 (21) | 347 (7.7) | 338 (9) | 215 (9.8) | 156 (8.7) | 107 (4.1) | 75 (I2.9) |
| | CI | (12.6–29.4) | (4.4–11.1) | (5.4–12.5) | (5.4–14.2) | (3.9–13.5) | (0.2–8.0) | (0.0–6.0)* |
| 1995 | n (%) | 188 (13.4) | 396 (7.6) | 376 (11.3) | 246 (8.8) | 174 (10.6) | 142 (9.8) | 95 (5.6) |
| | CI | (7.8–19.1) | (4.7–10.5) | (7.5–15.1) | (5.1–12.6) | (5.8–15.4) | (4.2–15.4) | (0.3–10.9) |
| 1996 | n (%) | 162 (6.5) | 358 (13) | 379 (10.7) | 317 (9.3) | 156 (11.3) | 155 (7.8) | 85 (6.8) |
| | CI | (2.1–10.9) | (9.1–16.8) | (7.3–14.1) | (6.0–12.6) | (5.4–17.3) | (2.5–13.1) | (0.0–14.1)* |
| 1997 | n (%) | 274 (8.7) | 540 (10.4) | 580 (8.3) | 394 (7.7) | 269 (6.7) | 203 (5.3) | 130 (8.4) |
| | CI | (4.8–12.6) | (7.5–13.2) | (5.7–10.9) | (4.8–10.7) | (3.5–10.0) | (2.3–8.4) | (3.6–13.1) |
| 1998 | n (%) | 608 (13.8) | 1,195 (9.2) | 1,463 (11.6) | 1,073 (11.1) | 671 (9.2) | 533 (8.6) | 297 (9.5) |
| | CI | (10.3–17.3) | (6.7–11.8) | (8.9–14.2) | (9.0–13.2) | (5.8–12.6) | (4.9–12.4) | (5.7–13.4) |
| 1999 | n (%) | 523 (10.7) | 1,012 (10.5) | 1,164 (11.5) | 894 (12.5) | 569 (9.4) | 382 (4.6) | 268 (6) |
| | CI | (7.7–13.7) | (7.8–13.1) | (9.0–14.0) | (10.0–14.9) | (6.7–12.2) | (2.4–6.8) | (2.5–9.5) |
| 2000 | n (%) | 543 (13.7) | 1,038 (12.1) | 1,089 (11.9) | 905 (10.5) | 545 (8.8) | 402 (8.6) | 253 (5.5) |
| | CI | (10.3–17.1) | (9.8–14.4) | (9.7–14.1) | (8.2–12.8) | (6.2–11.4) | (5.5–11.6) | (2.5–8.5) |
| 2001 | n (%) | 551 (13.3) | 1,147 (9.7) | 1,304 (9.8) | 1,022 (11) | 700 (8.8) | 545 (7) | 377 (5.2) |
| | CI | (9.9–16.8) | (7.7–11.8) | (8.1–11.6) | (8.6–13.5) | (6.4–11.1) | (4.6–9.4) | (2.7–7.7) |
| 2002 | n (%) | 577 (10.1) | 1,209 (8.8) | 1,290 (8.8) | 1,108 (9.2) | 752 (7.5) | 589 (6.2) | 413 (5.2) |
| | CI | (7.3–12.9) | (7.0–10.5) | (6.9–10.6) | (6.4–12.0) | (4.8–10.3) | (3.0–9.3) | (2.5–7.8) |
| 2003 | n (%) | 497 (12) | 1,129 (8.5) | 1,182 (10.3) | 1,095 (11.1) | 830 (9.3) | 593 (6.8) | 378 (7.3) |
| | CI | (8.9–15.2) | (6.7–10.2) | (8.2–12.4) | (9.0–13.2) | (6.9–11.7) | (4.5–9.0) | (4.3–10.3) |
| 2004 | n (%) | 515 (12.6) | 1,131 (10) | 1,184 (11.8) | 1,142 (10.6) | 943 (9.5) | 628 (6.6) | 410 (6.1) |
| | CI | (9.2–16.0) | (7.8–12.1) | (9.5–14.1) | (8.6–12.7) | (7.3–11.6) | (4.1–9.1) | (3.5–8.8) |
| 2005 | n (%) | 402 (6.8) | 979 (8) | 1,173 (9.6) | 1,185 (11.1) | 1,052 (10.3) | 772 (9.3) | 604 (5.3) |
| | CI | (4.2–9.4) | (5.9–10.0) | (7.2–12.1) | (8.9–13.2) | (8.2–12.4) | (6.6–12.0) | (3.5–7.2) |
| 2006 | n (%) | 308 (9.7) | 928 (6.2) | 1,122 (8.8) | 1,296 (11.7) | 1,245 (12) | 871 (5.8) | 766 (5.9) |
| | CI | (5.4–14.0) | (4.3–8.1) | (6.0–11.6) | (9.1–14.4) | (8.8–15.2) | (3.7–7.8) | (3.4–8.4) |

± Respondents who report more than 14 "bad mental days" are defined as having Frequent Mental Distress (FMD).

\* A confidence interval (CI) includes zero when either: 1) the product of the mean's standard error and its corresponding t-statistic exceeds the value of the mean (resulting in the lower bound 95% CI being below zero), so that the lower CI is truncated at zero; 2) the lower bound 95% CI is < 0.05, so that the lower CI is rounded to 0.0.

## C.    SERIOUS MENTAL ILLNESS (SMI)

SMI is defined as "[having] at least one 12-month disorder, other than a substance use disorder, that [meets] DSM-IV criteria and [having] a serious impairment…defined as impairment

equivalent to a Global Assessment of Functioning (GAF) score of less than 60."[1] The National Survey on Drug Abuse (NHSDA) was the first to measure this comprehensive event.[16] The 2001 United States prevalence estimate of SMI was approximately 8.3% for all persons 18 years and older, as reported by the Office of Applied Studies (OAS) in 2002.[17] In this OAS study, it was discovered that SMI is statistically associated with certain characteristics, namely education and employment status.[1]

Prevalence of SMI varies by state within the United States as well (see Figure III.C.1). In 2001, Texas had the 17th lowest SMI prevalence rate in the nation.[16] As with measures of FMD, estimates of state SMI prevalence vary greatly when explored by age. Individuals between the ages of 18 and 25 experienced the highest prevalence of SMI, regardless of state, with prevalence estimates ranging from 9.7% in California to 14.6% in Maine. Texas ranks 13th in the United States in terms of prevalence of SMI in individuals 18 to 25 years of age. Individuals 26 years of age and older experience a lower prevalence of SMI, with estimates ranging from 4.2% (Hawaii) to 9.6% (Oklahoma). The distribution of prevalence rates for adults over 25 is similar to that of the total population.[16]

**FIGURE III.C.1**
12-Month Prevalence Estimates[1]
Serious Mental Illness in Population 18 Years and Older
United States, 2001
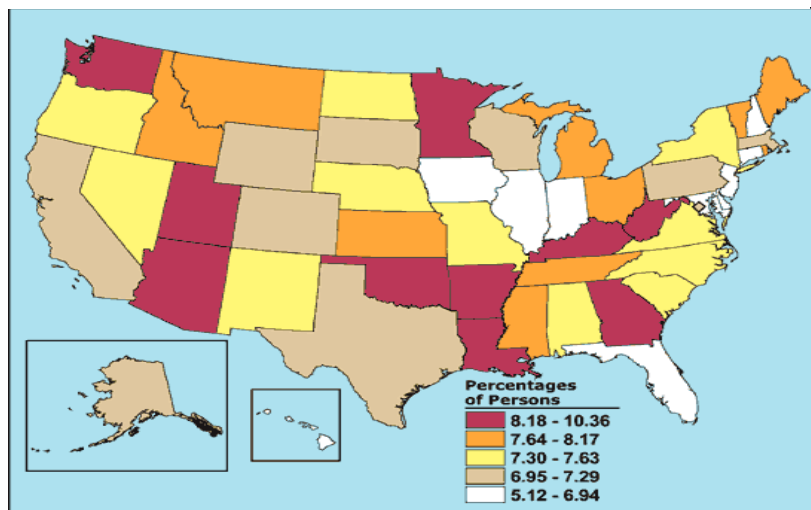


**Source**: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse, 2001.
[1] Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.

Using data from both the National Comorbidity Study and the U.S. Census Bureau, UTMB Galveston calculated state- and county-level prevalence estimates of SMI (see Introduction).

Based on these estimates, SMI prevalence comparisons were made between Dallas County and Texas and between various subpopulations within Dallas and Texas. The following observations were made:

- **Geography.** The 12-month SMI prevalence estimate for Dallas County (6.6%) was very similar to that of Texas (6.8%) in 2001.[4]

- **Age Group.** The 18- to 20-year-old population had the highest prevalence of SMI in both Dallas County and Texas, while the 45- to 64-year-old population had the lowest prevalence of SMI (see Figure III.C.2).[4]

- **Gender.** The 12-month SMI prevalence estimate for adult females was more than 1.5 times higher than that for adult males in both Dallas County and Texas (see Figure III.C.3).[4]

- **Race.** Pacific Islanders, Hispanics, and multiracial individuals had higher 12-month SMI prevalence than Native Americans, Whites, Blacks, and Asians. Native Americans reported the lowest prevalence of SMI for both Dallas County and Texas (see Figure III.C.4).[4]

- **Residence.** The majority of Dallas County residents with SMI live in a household (93.2%), while 6.1% live in institutions and 0.7% live in group quarters (see Figure III.C.5).[4]

- **Income.** There is a significantly higher prevalence of SMI among those living below the poverty level compared to those living 200% or more above the poverty level in both Dallas County and Texas (see Figure III.C.6).[4]

- **Education.** The 12-month prevalence of SMI is 3 times higher among those without a high school diploma compared to those with a college education in both Dallas County and Texas (see Figure III.C.7).[4]

- **Marital Status.** Individuals who are separated, widowed, or divorced have a higher likelihood of having an SMI compared to those who are married, in both Dallas County and Texas (see Figure III.C.8).[4]

**Figure III.C.2**
12-month Prevalence Estimates[1]
Serious Mental Illness by Age Group
Population 18 Years and Older
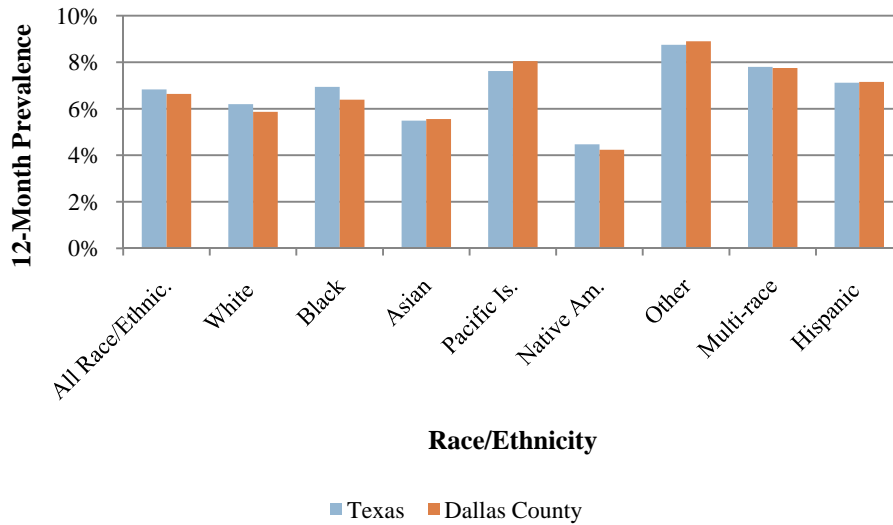Texas and Dallas County, 2001
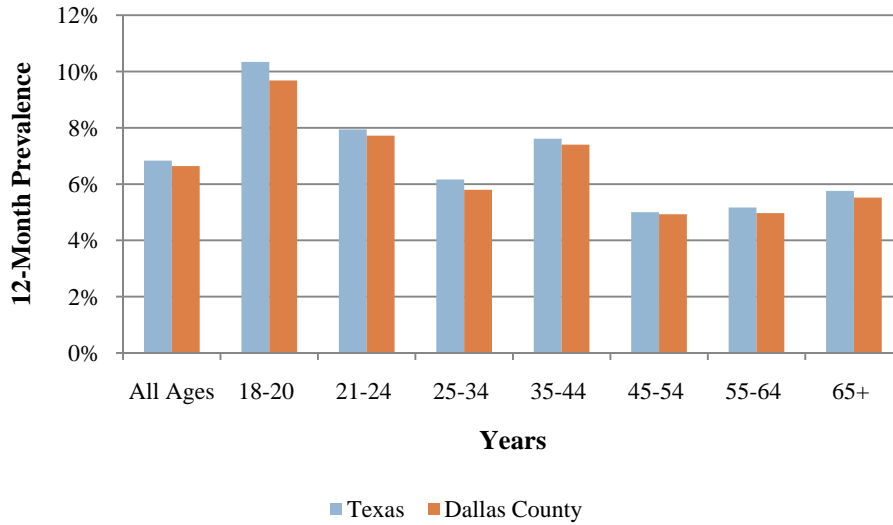


[1]Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.

**Figure III.C.3**
12-month Prevalence Estimates[1]
Serious Mental Illness (SMI) by Gender
Population 18 Years and Older
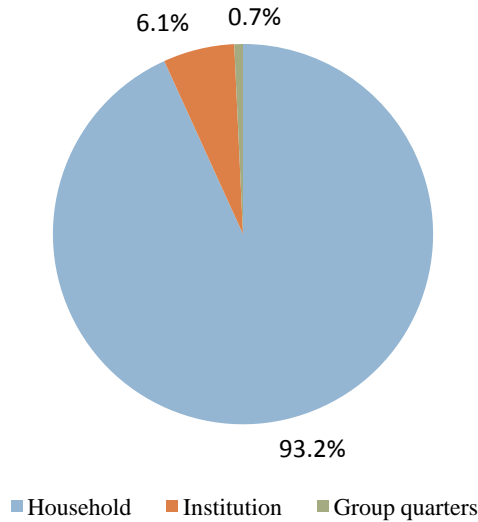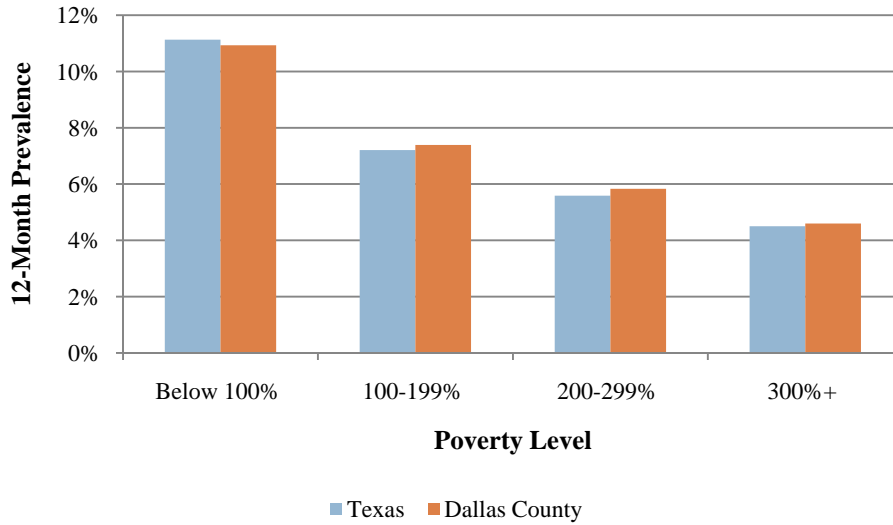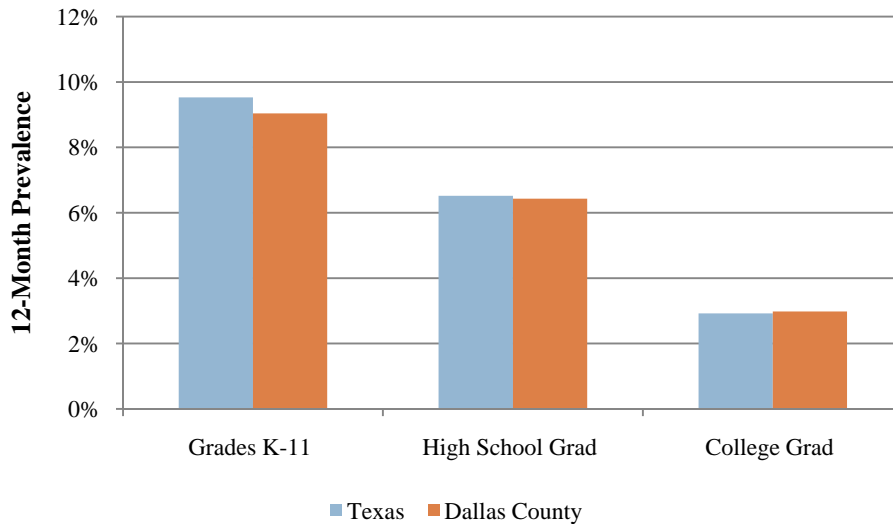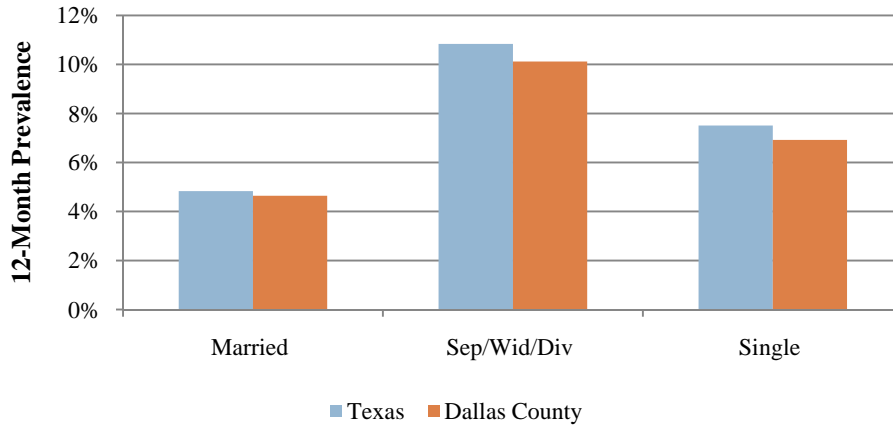Texas and Dallas County, 2001
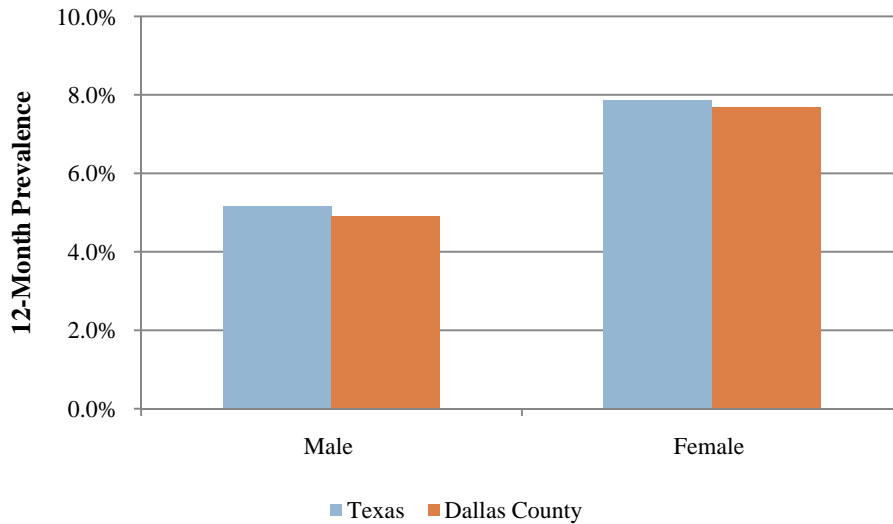


[1]Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.

15

**Figure III.C.5**
12-month prevalence estimates[1]
Serious Mental Illness (SMI) by Race/Ethnicity
18 years and older
Texas and Dallas County, 2001



[1]Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.

**Figure III.C.5**
Proportion of Individuals with Serious Mental Illness
Residing in Households, Institutions, or Group Quarters
Population 18 Years and Older
Dallas County, 2001

**Figure III.C.6**
12-month Prevalence Estimates[1]
Serious Mental Illness by Income
Population 18 Years and Older
Texas and Dallas County, 2001



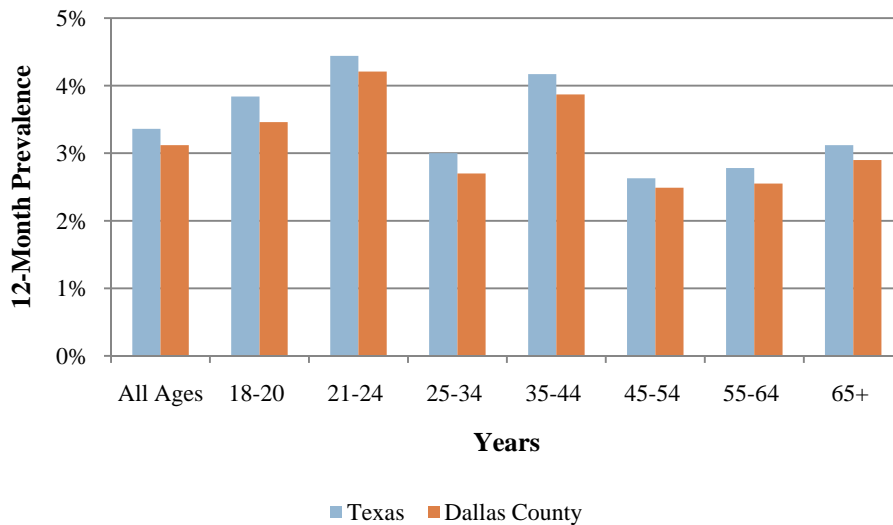[1]Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.

**Figure III.C.7**
12-month Prevalence Estimates[1]
Serious Mental Illness by Education Level
Population 18 Years and Older
Texas and Dallas County, 2001



[1]Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.

**Figure III.C.8**
12-month Prevalence Estimates[1]
Serious Mental Illness by Marital Status
Population 18 Years and Older
Texas and Dallas County, 2001



[1]Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.

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## D.   SEVERE & PERSISITENT MENTAL ILLNESS (SPMI)

Severe and persistent mental illness (SPMI) includes a subset of the SMI diagnoses, including bipolar disorder, schizophrenia, and other nonaffective disorders.  About half of the adults who suffer from SMI are estimated to have diagnoses that qualify as SPMIs.  Using UTMB Galveston estimates, we identified the following trends in SPMI in Dallas County and Texas:

- **Geography.**   The 12-month prevalence estimates for SPMI among adults are very similar in Dallas County (5.1%) compared to Texas (5.4%).[4]

- **Age Group.**  The 21- to 24-year-old population had the highest prevalence of SPMI in both Dallas County and Texas, while the 45- to 54-year-old population had the lowest prevalence of SPMI (see Figure III.D.1).  The difference between the highest and lowest SPMI prevalence populations was less distinct, though, than the difference between the highest and lowest SMI prevalence populations.  This may be due to the persistent nature of SPMI.[4]

- **Gender.**  As was seen in the SMI prevalence rates, female adults had a higher prevalence of SPMI than did male adults (see Figure III.D.2). [4]

- **Race.** Whites, Hispanics, multiracial individuals, and individuals of "other" races reported higher 12-month SPMI prevalence rates compared to Native Americans, Blacks, Pacific Islanders, and Asians (see Figure III.D.3).[4]

- **Income.** There is a step-wise pattern in SPMI prevalence, such that those living below the federal poverty line have the highest prevalence of SPMI and those living 300% above the poverty line have the lowest SPMI prevalence (see Figure III.D.4).[4]

- **Education.** As was seen with SMI prevalence rates, the SPMI prevalence was 3 times higher among those without a high school diploma compared to those with a college education (see Figure III.D.5).[4]

- **Marital Status.** Also similar to the SMI statistics, the SPMI prevalence was considerably higher among those who were separated, widowed, or divorced compared to those who were married (see Figure III.D.6).[4]

**Figure III.D.1**
12-Month Prevalence Estimates[1]
Severe & Persistent Mental Illness by Age Group
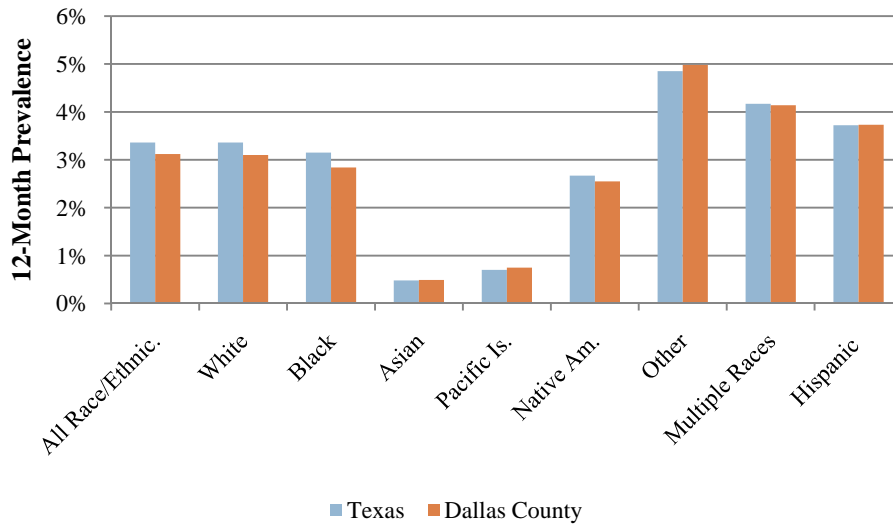Population 18 Years and Older
Texas and Dallas County, 2001



[1]Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.

**Figure III.D.2**

12-Month Prevalence Estimates[1]
Severe & Persistent Mental Illness by Gender
Population 18 Years and Older
Texas and Dallas County, 2001
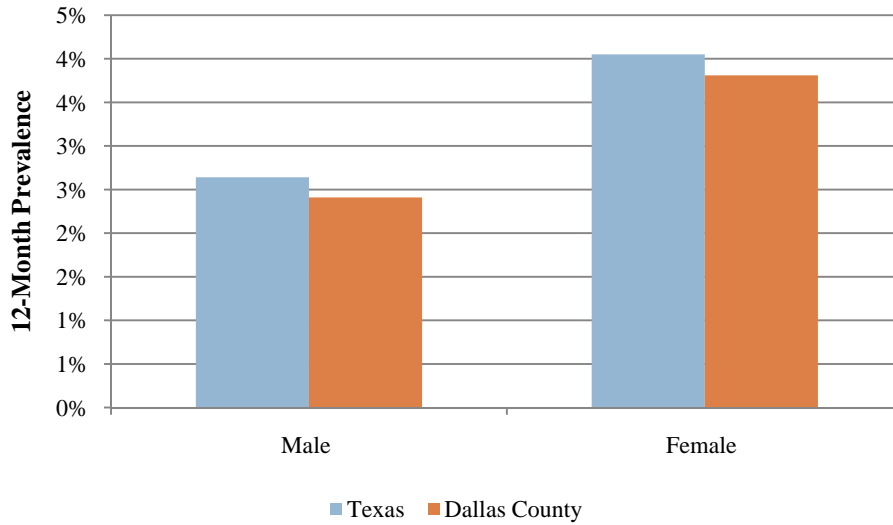


[1]Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.
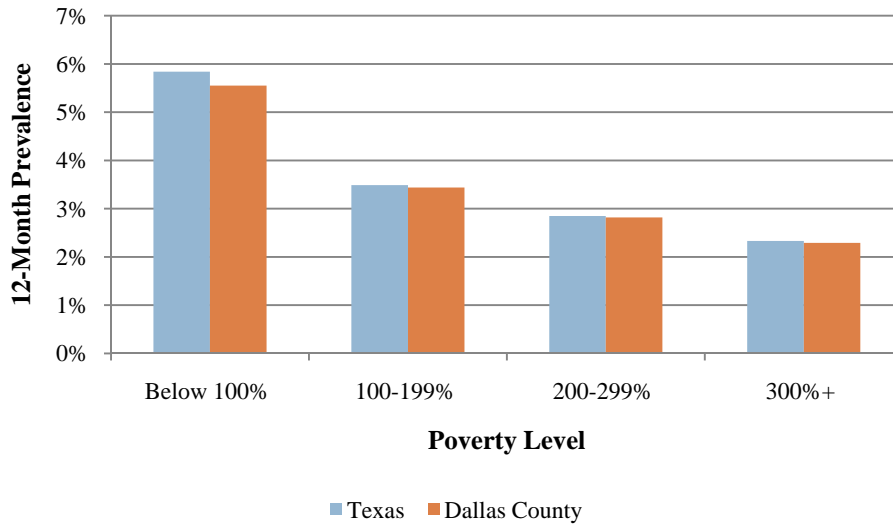
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**Figure III.D.3**

12-Month Prevalence Estimates[1]
Severe & Persistent Mental Illness by Race/Ethnicity
Population 18 Years and Older
Texas and Dallas County, 2001



[1]Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.
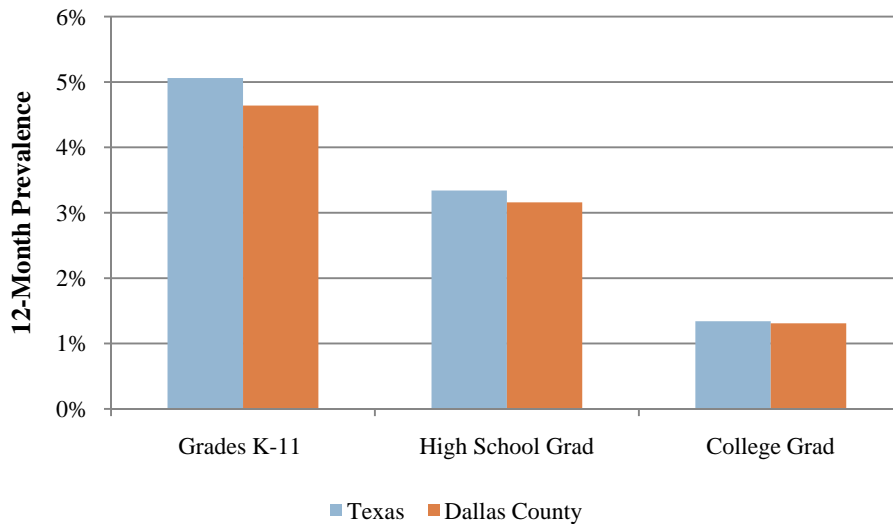
20

**Figure III.D.4**
12-Month Prevalence Estimates[1]
Severe & Persistent Mental Illness by Income
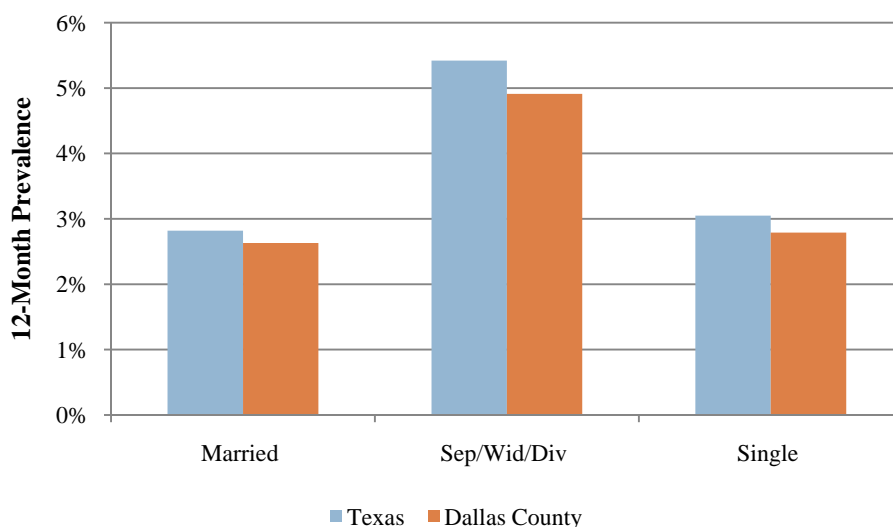Population 18 Years and Older
Texas and Dallas County, 2001



[1]Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.

**Figure III.D.5**
12-Month Prevalence Estimates[1]
Severe & Persistent Mental Illness by Education Level
Population 18 Years and Older
Texas and Dallas County, 2001



[1]Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.

**Figure III.D.6**
12-Month Prevalence Estimates[1]
Severe & Persistent Mental Illness by Marital Status
Population 18 Years and Older
Texas and Dallas County, 2001



[1]Estimates are weighted using a survey-weighted hierarchical Bayes estimate approach.

### E.    SERIOUS EMOTIONAL DISTURBANCE (SED)

Serious Emotional Disturbance (SED) is defined as a mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified in the DSM-IV that results in functional impairment that substantially interferes with or limits one or more major life activities in an individual up to 18 years of age.

The prevalence estimates for SED were provided by the UTMB estimation project. The prevalence of SED is higher among children and adolescents than is the prevalence of SMI among adults for both Dallas County and Texas. The prevalence estimates across gender and all age groups are similar. Children and adolescents of Hispanics, Pacific Islander and African American descent report higher prevalence of SED compared to other race categories. The prevalence of SED is noticeably higher for children and adolescents living below the poverty line compared to those living 300% above the poverty line. Children and adolescents living in institutions report a higher SED prevalence compared to those living in a household, although this largely reflects the juvenile detention and mental hospitalization populations.[4] (See Table III.E.)

Table III.E
**Number and Proportion of Cases of Serious Emotional Disturbance**
**Children & Adolescents**
**Texas and Dallas County, 2000**

| | Texas | | | Dallas County | | |
|---|---|---|---|---|---|---|
| **Youth** | **Cases** | **Pop** | **Percent** | **Cases** | **Pop** | **Percent** |
| Youth total | 446,427 | 5,886,759 | 7.6 | 46,462 | 619,031 | 7.5 |
| **Age** | **Cases** | **Pop** | **Percent** | **Cases** | **Pop** | **Percent** |
| 00-05 | 149,284 | 1,948,297 | 7.7 | 16,555 | 217,162 | 7.6 |
| 6 to 11 | 150,203 | 1,990,311 | 7.5 | 15,550 | 208,378 | 7.5 |
| 12 to 17 | 146,940 | 1,948,151 | 7.5 | 14,357 | 193,491 | 7.4 |
| **Gender** | **Cases** | **Pop** | **Percent** | **Cases** | **Pop** | **Percent** |
| Male | 229,044 | 3,014,733 | 7.6 | 23,780 | 316,491 | 7.5 |
| Female | 217,384 | 2,872,026 | 7.6 | 22,682 | 302,540 | 7.5 |
| **Ethnicity** | **Cases** | **Pop** | **Percent** | **Cases** | **Pop** | **Percent** |
| White | 173,115 | 2,507,147 | 6.9 | 13,357 | 199,648 | 6.7 |
| Black | 58,962 | 732,807 | 8.0 | 11,204 | 142,749 | 7.8 |
| Asian | 9,750 | 139,226 | 7.0 | 1,572 | 21,887 | 7.2 |
| Pacific Islander | 265 | 3,182 | 8.3 | 22 | 246 | 8.9 |
| Native | 1,357 | 17,319 | 7.8 | 153 | 1,987 | 7.7 |
| Other | 660 | 8,461 | 7.8 | 74 | 992 | 7.5 |
| Multi | 6,931 | 91,852 | 7.5 | 811 | 10,693 | 7.6 |
| Hispanic | 195,387 | 2,386,765 | 8.2 | 19,269 | 240,829 | 8.0 |
| **Poverty level** | **Cases** | **Pop** | **Percent** | **Cases** | **Pop** | **Percent** |
| Below 100% | 119,324 | 1,193,255 | 10.0 | 11,244 | 112,441 | 10.0 |
| 100%-199% | 118,284 | 1,478,546 | 8.0 | 12,433 | 155,410 | 8.0 |
| 200%-299% | 75,321 | 1,076,016 | 7.0 | 8,706 | 124,376 | 7.0 |
| 300%+ | 123,662 | 2,061,029 | 6.0 | 13,076 | 217,932 | 6.0 |
| Undefined | 9,836 | 77,914 | 12.6 | 1,003 | 8,873 | 11.3 |
| **Residence** | **Cases** | **Pop** | **Percent** | **Cases** | **Pop** | **Percent** |
| Household | 441,917 | 5,862,085 | 7.5 | 46,145 | 617,013 | 7.5 |
| Institution | 3,773 | 17,130 | 22.0 | 227 | 1,111 | 20.4 |
| Group | 737 | 7,544 | 9.8 | 90 | 908 | 9.9 |

## F.    NORTHSTAR-SPECIFIC MENTAL ILLNESSES

Among NorthSTAR clients, we observe the following prevalence of specific mental illnesses.[13]

It should be noted that NorthSTAR clients do not represent the entire Dallas County population.

(See Section II.C for more details on the NorthSTAR target population.)

**Schizophrenia.** Schizophrenia and related disorders have accounted for a major proportion (26-40%) of all Dallas County NorthSTAR clients over the past 7 years. Among these NorthSTAR clients, males consistently account for more than half of all cases (see Figure III.F.1). When cases are considered by race/ethnicity, we find that African Americans account for the majority of cases of Schizophrenia and related disorders among NorthSTAR clients, followed by Whites (see Figure III.F.2).[13]

**Figure III.F.1**
Cases of Schizophrenia & Related Disorders by Gender
Dallas County NorthSTAR Clients, 2000-2007



**Figure III.F.2**
Cases of Schizophrenia & Related Disorders by
Race/Ethnicity
Dallas County NorthSTAR Clients, 2000-2007
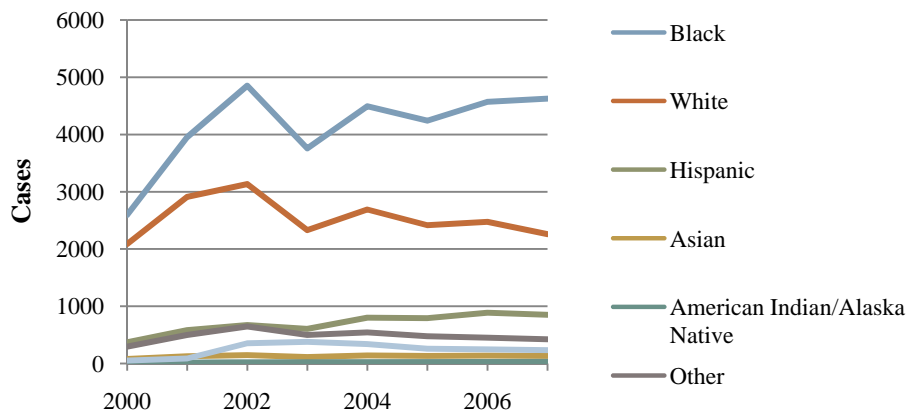
**Anxiety.**  Anxiety/Somatoform/Dissociative Disorders account for 1.2–3.3% of NorthSTAR clients over the past 7 years. The distribution of these disorders among NorthSTAR clients is quite different from that for Schizophrenia.  Whites make up the majority of NorthSTAR clients with Anxiety/Somatoform/Dissociative Disorders. From the year 2000 to 2003 female clients outnumbered male clients while from the year 2004 to 2007 male clients made up the majority of the clients. (see Figures III.F.3 and III.F.4).[13]

**Figure III.F.3**
Cases of Anxiety/Somatoform/Dissociative Disorders by
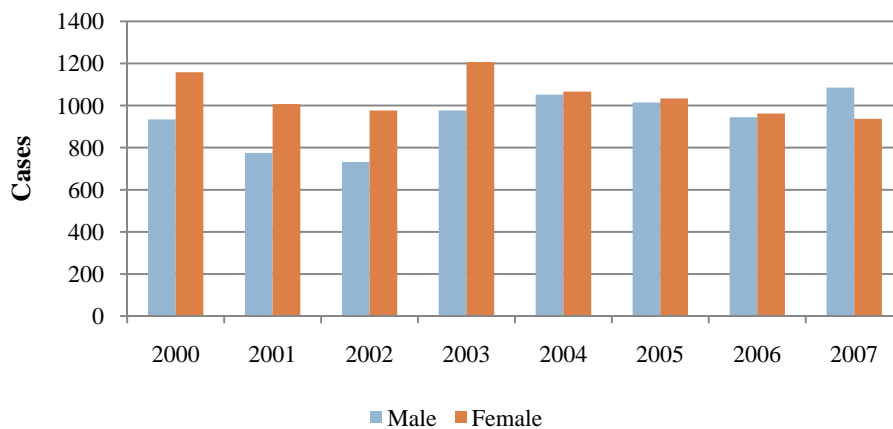Gender
Dallas County NorthSTAR Clients, 2000-2007



**Figure III.F.4**
Cases of Anxiety/Somatoform/Dissociative Disorder by
Race/Ethnicity
Dallas County NorthSTAR Clients, 2000-2007
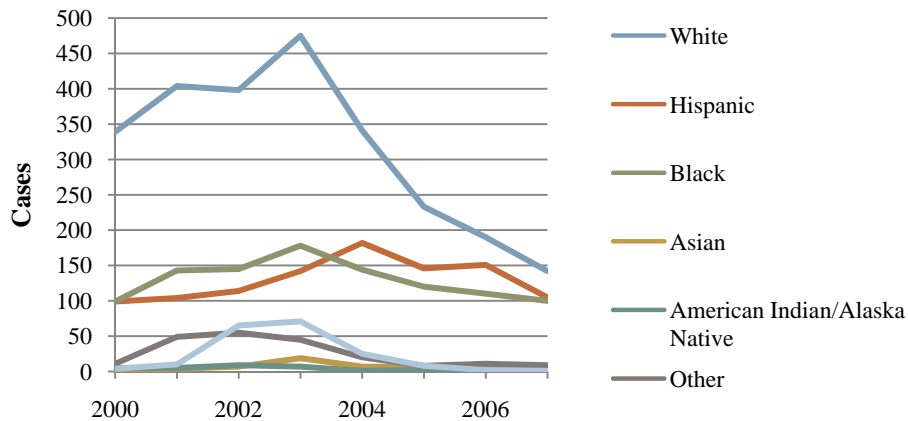
**Adjustment Disorders.** Adjustment and other non-psychotic disorders accounted for 6.0–10.2% of all the NorthSTAR clients. Although females accounted for the majority of these clients in 2000, the difference between the number of cases among men and women has steadily decreased since 2003 and reversed in 2007 (see Figure III.F.5). There have also been major changes in the distribution of adjustment disorders by race/ethnicity. While Whites and Blacks accounted for most of the cases in 2000, today Hispanics and Blacks account for the majority of cases (see Figure III.F.6).[13]

**Figure III.F.5**
Cases of Adjustment & Other non-Psychotic Disorders by
Gender
Dallas County NorthSTAR Clients, 2000–2007



**Figure III.F.6**
Cases of Adjustment & Other non-Psychotic Disorders by
Race/Ethnicity
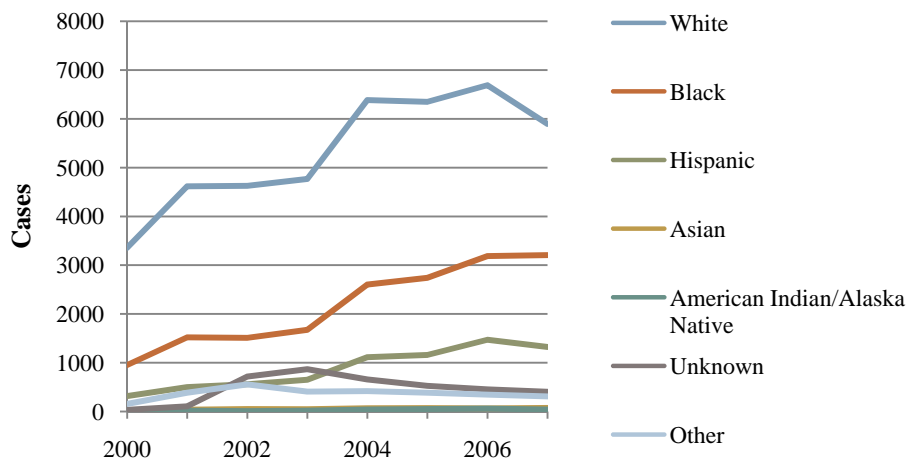Dallas County NorthSTAR Clients, 2000–2007



26
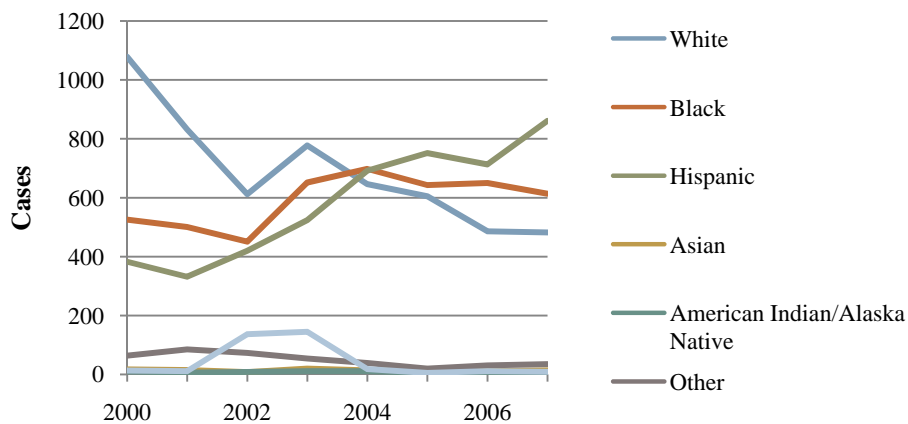
**Bipolar Disorder.** Bipolar Disorder accounted for 23.7–38.4% of NorthSTAR clients over the past 7 years. Females, Whites, and Blacks consistently accounted for the majority of these cases (see Figures III.F. 7 and III.F.8).[13]

**Figure III.F.7**
Cases of Bipolar Disorder by Gender
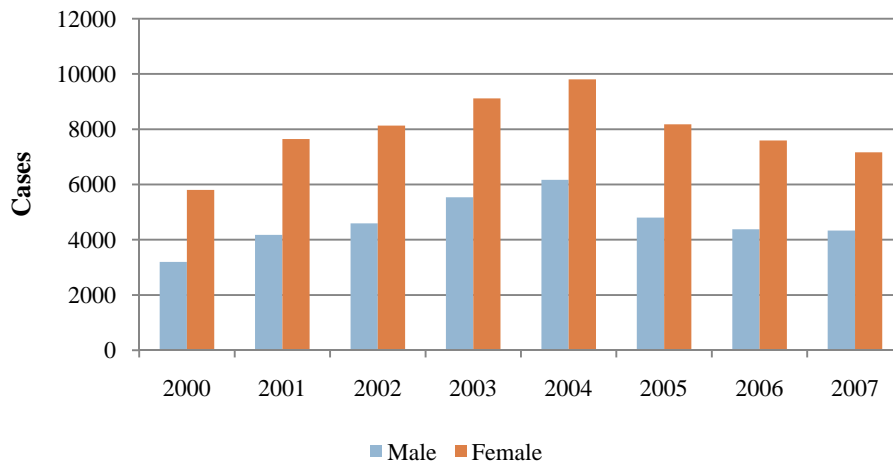Dallas County NorthSTAR Clients, 2000-2007



**Figure III.F.8**
Cases of Bipolar Affective Disorder by Race/Ethnicity
Dallas County NorthSTAR Clients, 2000–2007

**Major Depression.**  Major Depression Disorder accounted for 36.4–52.7% of all NorthSTAR clients over the past 7 years.  Again, females, Whites, and Blacks made up the majority of NorthSTAR clients suffering from the disorder (see Figures III.F.9 and III.F.10).[13]

**Figure III.F.9**
Cases of Major Depression by Gender
Dallas County NorthSTAR Clients, 2000-2007



**Figure III.F.10**
Cases of Major Depression by Race/Ethnicity
Dallas County NorthSTAR Clients, 2000-2007
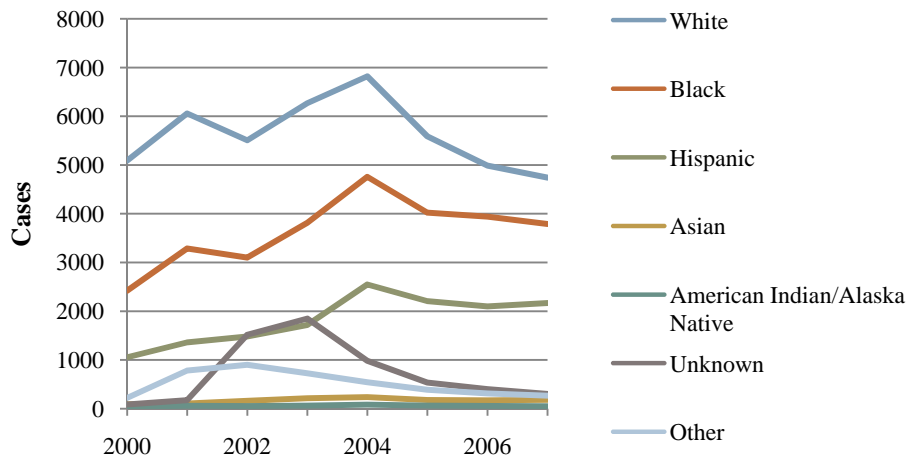
## G. DALLAS COUNTY JAIL SPECIFIC MENTAL ILLNESS

Dallas County Jail mental health data were generously provided by the Parkland Health and Hospital system in Dallas. Approximately 19% of total Dallas County Jail inmates are diagnosed with some kind of mental health disorder. Substance Abuse is the most prevalent mental illness diagnosis among Dallas County Jail inmates. Mood disorders are also widely prevalent in the jail population. Parkland is still in the process of streamlining the data collection procedures for the Dallas County Jail; therefore, right now we are unable to provide detailed information on the mental health status of the jail inmates.

**Table III.G**
**Mental Health and Substance Abuse Statistics**
**Dallas County Jail, 2007**

| Mental Illness | Percent |
|---|---|
| **MOOD DISORDERS** | |
| **Major Depression** | 9.00% |
| **Dysthymia** | 3.60% |
| **Bipolar** | 5.00% |
| **PSYCHOTIC DISORDERS** | |
| **Schizophrenia** | 2.00% |
| **Brief Psychosis** | 0.03% |
| **Schizophreniform** | 0.04% |
| **ANXIETY DISORDERS** | |
| **Any** | 13.00% |
| **EATING DISORDERS** | |
| **Any** | 0.10% |
| **SUBSTANCE ABUSE** | |
| **Any** | 35.00% |
| **OVERALL** | 18.93% |

## IV. GAPS IN KNOWLEDGE

It is widely believed among the U.S. public health community that mental health is an essential element of overall health. **There is still a lack of consistency in the measurement of mental health and mental illness.** The Surgeon General's report on Mental Health and the President's New Freedom Commission make use of SMI, SPMI, and SED as the favored indicators of mental health.[6, 9] The BRFSS employs FMD and mean mentally unhealthy days as the means to measure mental health status for an individual.[18] At the Dallas County level, the NorthSTAR

health care delivery system makes use of DSM IV diagnoses as the favored way of measuring mental health and mental illnesses.

As shown in Table III, various national, state, and local agencies make use of different mental health indicators, using different geographic units of analysis and thus making population comparisons practically impossible. For the purpose of making valid comparisons across different geographical units, **a uniform set of mental health indicators should be adopted all across the board**. There is a need to develop a mechanism to consistently measure mental health status, as well as the functional status of individuals. SMI, SPMI, and SED utilize the DSM IV criterion in conjunction with the level of functional impairment. Therefore it is vital that all the survey instruments that are implemented in future also utilize both these variable categories in order to make valid comparisons with the national and the state level data.

Gaps in service delivery also cannot be accurately measured with the current data elements. The Dallas County population prevalence data on mental illnesses are based on the mental health indicators that were made available by the UTMB estimation project. The mental health services for Dallas County are determined by using NorthSTAR Dallas County estimates that were generously provided by the Department of State Health Services of Texas. These estimates are not representative of the whole Dallas County population, as the NorthSTAR's target population includes individuals from specific income and Medicaid categories. Therefore, despite the fact that the two variables are available, they cannot be compared because these two variables measure different constructs.

There are also no data at the local Dallas County level for people who are in need of mental health services but were unable to access the services for various reasons. The NorthSTAR system is dependent upon clinical diagnostic criteria for individuals who have access to health care services; therefore it potentially overlooks a large section of the population that needs services but does not qualify. A constant population-level monitoring of mental health disorders can help in measuring the burden of mental health disorders in this segment of the population.

A well-developed surveillance system has the potential to guide emergency response at the time of disaster.[19] In order to have a high-quality surveillance system working at maximal capacity, specific outcomes need to be acknowledged for both nondisaster times as well as times of disaster. Current literature acknowledges the rise in various mental health disorders such as

depression, anxiety, adjustment, and many others during times of disaster.[20] There is no existing mental health surveillance system for the North Texas region, which makes it very difficult to monitor mental health trends across the region. In the case of a natural disaster or some other tragic event, an existing system could be of great utility by directing public health policy in taking appropriate measures to address the most pertinent issues at the time of need. A need for such a system was experienced in the region at the time of Hurricane Katrina recovery efforts, when a huge influx of evacuees from New Orleans arrived in Dallas and no existing mechanism was in place to address their mental health and substance abuse recovery needs.

In order to ensure uniformity, a set of predetermined specific mental health indicators should be used for diagnosis, and they should be adequately defined to account for relaxing case definitions in times of disaster. Community hospitals and clinicians should be actively involved in the case definition process as they address the needs of population in times of disaster. Mental health care delivery is highly fragmented with multiple types of provider agencies at the local level. To be successful, the surveillance effort should be comprehensive and involve all the providers who deal with mentally ill patients in community. Therefore, this effort should be initiated at the level of the Texas Department of State Health Services. The proposed mental health surveillance system should be rooted in the existing model of the American Red Cross and CDC's Health Impact Surveillance System for Disasters.[19] The incidence of mental health disorders is expected to rise following a disaster due to the expected collapse of the existing public health programs, mass migration of the population, and the psychological impact of the disaster on an individual.[19] The North Texas area is particularly vulnerable to natural disasters such as floods, tornadoes, and hurricanes, and in this age of continued threat from terrorism, a mental health surveillance system would be of great assistance to North Texans if there is a public health emergency.

The incarcerated population presents a unique challenge in terms of measuring the burden of mental health disorders. At present, the data on the mental health disorders among those who are incarcerated are sparse and there is a need to implement a uniform system of diagnosis and treatment in the Dallas County jail population.

## V.    CONCLUSION

This report recognizes the multitude of factors that shape the mental health status of individuals and the community. Identifying the demographic characteristics of individuals with mental

illness assists the public health system in devising more age, gender, race, cultural, and socioeconomic status-specific strategies in Dallas County. In order to be viable, the treatment strategies should be specific to the needs of an individual. A service delivery system that is sensitive to the cultural factors affecting an individual's health is more likely to assure a sustainable recovery process.

Females share a disproportionate burden of mental health disorders across all geographic dimensions analyzed in this report. BRFSS reports a higher prevalence of FMD among females at the national and state level. Females also account for a higher prevalence of SMI and SPMI, according to the NCS estimates. Female NorthSTAR clients in Dallas County have a relative preponderance of depression, bipolar, adjustment, anxiety, somatoform, and dissociative disorders relative to their male counterparts. Racial/ethnic minorities are rapidly comprising a greater proportion of individuals living in Dallas County, with individuals of Hispanic ethnicity accounting for the greatest increase in numbers. As evidenced from the data presented in this profile, mental health disorders are as prevalent in minority groups as in their White counterparts. Schizophrenia and Related Disorders and adjustment disorders affect African Americans and Hispanics disproportionately among Dallas County NorthSTAR clients. Children and adolescents as a group share a greater burden of mental health disorders, with individuals of Hispanic, Pacific Islander, and African American descent reporting a disproportionately higher prevalence of SED. Institutionalized individuals and those who live below the federal poverty level also share a disproportionate burden of mental health disorders.

The findings discussed in this report are based on different mental health indicators, and each measures a different construct of the mental health disorder spectrum. There is need for consistent mental health indicators in order to make valid comparisons and draw scientifically robust, valid conclusions.

The Surgeon General's report identified stigma as one the most significant factors that dissuades people from seeking treatment for mental health disorders.[6] In order to reduce the burden of mental health disorders in Dallas County, there needs to be a sustained effort at the community level to dispel myths about mental health disorders and to educate the public about the true nature of mental health disorders. Informed consumers and their families should play an important role in alleviating the stigma that surrounds mental health disorders.

This report is intended to assist researchers, policymakers, and service providers in employing a consistent measure of mental health disorders that will allow comparisons at the local, state, and national levels. The primary purpose of this report is to inform Project Transform in order to develop a robust needs assessment instrument to be employed in the North Texas region among consumers, family members of consumers, providers, and the general population. A well-designed mental health surveillance system has the potential to provide the necessary data to inform public health programmers, health system leaders, and community providers to respond not only to emergency events, but also to design a responsive, high-quality mental health service delivery system.

**VI.   ACKNOWLEDGMENTS**

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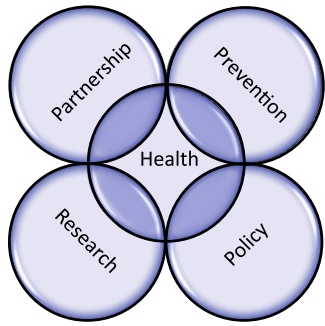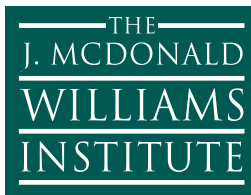
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# Center for

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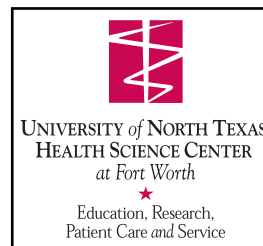
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