
Estimates of Prevalence of Mental Health Conditions among Children and Adolescents in Texas

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THE MEADOWS MENTAL HEALTH
POLICY INSTITUTE FOR TEXAS

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Methodology

- Drawing on the work of Dr. Charles Holzer, a leading psychiatric epidemiologist and Galveston resident, we are able to apply algorithms based on findings from the best national epidemiological studies to Texas' population data, in order to estimate the number of children and adolescents who have severe emotional disturbances in a given year.
- In 2011, data were published from the first ever national epidemiological study of behavioral disorders among adolescents, the National Comorbidity Survey Replication – Adolescent Version. We have applied these national level data to Texas, in order to examine the prevalence of specific types of disorders, as well as the severity of mental health conditions among adolescents.¹

Finding Highlights

- Half of all mental health conditions begin by age 14.
- In a 12-month period there are more than a half-million children and adolescents with **severe emotional disturbances (SED) in Texas**. SED includes mental health conditions, such as attention deficit disorders, conduct disorders and depression, along with impaired ability to function at school and at home. There are over 300,000 children/youth with SED living at or below 200% of the federal poverty level.
- Each year, more than 150,000 adolescents alone (ages 13-17) cope with serious disorders.
- Among youth with SED, 30,000 are estimated to remain in the “school to prison pipeline,” if nothing is done to help them.

¹ Epidemiological data on diagnoses for younger children are very limited.

Prevalence of Selected Mental Health Conditions among Children and Adolescents in Texas²

Mental Health Condition	Age Group	TX 12-month Prevalence
Severe Emotional Disturbance³	0-17	545,453
Children/Adolescents at/below 200% FPL	0-17	304,429
Serious Disorders – Adolescents only ⁴	13-17	157,126
At-Risk for “School to Prison Pipeline” ⁵	0-17	30,000
Schizophrenia		
Childhood Onset (before age 13) ⁶	0-12	127
Adolescent Onset (ages 13-17) ⁷	13-18	4,512
Depression⁴	13-17	160,877
Bipolar Disorder ⁴	13-17	41,200
Post-Traumatic Stress Disorder ⁴	13-17	76,515
Conduct Disorder ⁴	13-17	105,944
Substance Use Disorders ⁴	13-17	162,839
Self-Injury/Harming Behaviors ⁸	13-17	186,382

² All prevalence estimates are based on either specific algorithms applied to Texas (Holzer et al., 2015, cited below), or estimates from the research literature. These estimates are applied to population estimates from the American Community Survey, 2013. Unless where otherwise indicated, age of onset estimates come Kessler, R.C. et al. (2005). Lifetime prevalence and age of onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62, 593-768.

³ Holzer, C., Nguyen, H., Holzer, J. (2015). Texas county-level estimates of the prevalence of severe mental health need in 2012. Dallas, TX: Meadows Mental Health Policy Institute. Twenty percent are substance use disorders.

⁴ Kessler, R.C., et al. (2011). Prevalence, persistence and sociodemographic correlates of DSM-IV disorders in the National Comorbidity Survey Replication Adolescent Supplement. *Archives of General Psychiatry*, E1-E-9. Kessler, R.C., et al. (2012). Severity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication Adolescent Supplement. *Archives of General Psychiatry*, 69(4), 381-389. (The estimate for depression includes major depression and dysthymia)

⁵ Fabelo, T., et al. (2011, July). Breaking school rules: A statewide study of how school discipline relates to students' success and juvenile justice involvement. New York: The Council of State Governments Justice Center.

⁶ Childhood onset schizophrenia has been estimated to have a prevalence of one in 40,000 children under the age of 13. See Gochman, P., Miller, R., & Rapoport, J.L. (2011). Childhood-onset schizophrenia: The challenge of diagnosis. *Curr Psychiatry Rep*, 13(5), 321-322.

⁷ Androustos, C. (2012). Schizophrenia in children and adolescents: relevance and differentiation from adult schizophrenia. *Psychiatriki*, 23(Supl), 82-93. (Original article in Greek). The estimate is that among adolescents ages 13-18, 0.23% meet criteria for the diagnosis of schizophrenia. Another study from Sweden reported that 0.54% of adolescents were treated for psychotic disorders at least once during the ages of 13-19: Gillberg, C. et al. (2006). Teenage psychoses-epidemiology, classification and reduced optimality in the pre-, per-, and neonatal periods. *Journal of Child Psychology and Psychiatry*, 27(1), 87-98.

⁸ Muehlenkamp, J.J., et al. (2012). International prevalence of adolescent non-suicidal self-injury and deliberate self-harm, *Child and Adolescent Psychiatry and Mental Health*, doi: 10.1186/1753-2000-6-10

Ages of Onset of Selected Mental Health Conditions⁹

Mental Health Condition	50% have onset by age:	25% have onset by age:
All Conditions	14	7
Mood Disorders	30	18
Major Depressive Disorder	32	19
Dysthymia (mild/moderate depression)	31	17
Bipolar Disorder	25	17
Schizophrenia¹⁰	22	(no data)
Childhood Onset (before age 13) ¹¹	(Childhood)	
Adolescent Onset (ages 13-17) ¹²	(Adolescence)	
Anxiety Disorders (selected conditions)	11	6
Post-Traumatic Stress Disorder	23	15
Separation Anxiety Disorder	7	6
Social Phobia	13	8
Behavioral Disorders (selected conditions)	11	6
Conduct Disorder	13	10
Attention Deficit Hyperactivity Disorder	7	7
Self-Injury/Harm (adolescents only) ¹³	Adolescence	
Drug Abuse	19	17

⁹ Unless where otherwise indicated, age of onset estimates come Kessler, R.C. et al. (2005). Lifetime prevalence and age of onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62, 593-768.

¹⁰ Kessler, R.C. et al. (2007). Age of onset of mental disorders: A review of recent literature. *Curr Opin Psychiatry*, 20(4), 359-364.

¹¹ Childhood onset schizophrenia has been estimated to have a prevalence of one in 40,000 children under the age of 13. See Gochman, P., Miller, R., & Rapoport, J.L. (2011). Childhood-onset schizophrenia: The challenge of diagnosis. *Curr Psychiatry Rep*, 13(5), 321-322.

¹² Androustos, C. (2012). Schizophrenia in children and adolescents: relevance and differentiation from adult schizophrenia. *Psychiatriki*, 23(Supl), 82-93. (Original article in Greek). The estimate is that among adolescents ages 13-18, 0.23% meet criteria for the diagnosis of schizophrenia. Another study from Sweden reported that 0.54% of adolescents were treated for psychotic disorders at least once during the ages of 13-19: Gillberg, C. et al. (2006). Teenage psychoses-epidemiology, classification and reduced optimality in the pre-, per-, and neonatal periods. *Journal of Child Psychology and Psychiatry*, 27(1), 87-98.

¹³ Muehlenkamp, J.J., et al. (2012). International prevalence of adolescent non-suicidal self-injury and deliberate self-harm, *Child and Adolescent Psychiatry and Mental Health*, doi: 10.1186/1753-2000-6-10

Twelve-Month Prevalence and Severity of Selected Mental Health Conditions among Texas Adolescents, Ages 13-17¹⁴

Mental Health Conditions ¹⁵	Serious	Mild/ Moderate	All Severity Levels
All Disorders (some not listed below)¹⁶	157,126	677,815	834,941
Depression	57,272	103,605	160,877
Bipolar Disorder	12,566	28,634	41,200
Post-Traumatic Stress Disorder	21,195	55,320	76,515
Conduct Disorder	63,354	42,589	105,944
Substance Use Disorders	47,386	115,453	162,839
Schizophrenia ¹⁷	4,512	N/A	4,512
<i>Experience Psychotic Symptoms¹⁸</i>		196,192	196,192
Self-Injury/Harming Behaviors ¹⁹		186,382	186,382

¹⁴ Most of the data are drawn from the National Comorbidity Survey Replication – Adolescent Version, which focuses on ages 13-17. However, we note where data are drawn from other sources. Please note that conditions overlap (are “comorbid”).

¹⁵ Disorders include all mental health and substance use disorders. All severity estimates (“serious” vs. “mild and moderate”) are taken from: Kessler, R.C., et al. (2012). Severity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication Adolescent Supplement. *Archives of General Psychiatry*, 69(4), 381-389. We have not included all diagnoses. Diagnoses can overlap (can be “comorbid”).

¹⁶ All disorders include some not listed below, but do not include “Experience Psychotic Symptoms” and “Self-Injury/Harming Behaviors” which are not disorders.

¹⁷ Androutsos, C. (2012). Schizophrenia in children and adolescents: relevance and differentiation from adult schizophrenia. *Psychiatriki*, 23(Supl), 82-93. (Original article in Greek). The estimate is that among adolescents ages 13-18, 0.23% meet criteria for the diagnosis of schizophrenia. Another study from Sweden reported that 0.54% of adolescents were treated for psychotic disorders (a broader but overlapping set of conditions) at least once during the ages of 13-19: Gillberg, C. et al. (2006). Teenage psychoses-epidemiology, classification and reduced optimality in the pre-, per-, and neonatal periods. *Journal of Child Psychology and Psychiatry*, 27(1), 87-98. We are considering all schizophrenia cases to be serious.

¹⁸ Stevens, J.R. et al. (2014, March). Psychotic disorders in children and adolescents: A primer on contemporary evaluation and management. *Prim Care Companion*, 16(2), doi: [10.4088/PCC.13f01514](https://doi.org/10.4088/PCC.13f01514) Stevens et al cite studies that find anywhere from 9% to 14% of adolescents indicate they have experienced psychotic symptoms. We conservatively applied the 10% figure to the Texas population of 13 to 17 year olds. Stevens et al. also noted that while psychotic symptoms do not indicate a person meets criteria for a diagnosable psychotic disorder, they are strongly correlated with suicide attempts.

¹⁹ Muehlenkamp, J.J., et al. (2012). International prevalence of adolescent non-suicidal self-injury and deliberate self-harm, *Child and Adolescent Psychiatry and Mental Health*, doi: 10.1186/1753-2000-6-10. While we are defining all self-harming and self-injury behaviors as “serious,” these behaviors alone do not constitute a disorder, and thus would not be included in the NCSR-A estimate of “serious disorders.” Note that we used an average 12-month prevalence estimate of 9.5% across the studies reported by Muehlenkamp et al.

Incidence and Prevalence of Serious Mental Illness and Serious Emotional Disturbances in Three Large Texas Counties²⁰

Mental Health Condition	Age Group	Harris	Dallas	Bexar
12-Month Prevalence				
Severe Emotional Disturbance (SED)	0-17	92,006	53,482	37,523
Any Serious Disorder	13-17	25,179	13,945	10,744
12-Month Incidence (new cases)				
<i>First Episode of Psychosis (not a diagnosis)</i>	15-34	678	381	280

²⁰ All estimates are based on the comparable statewide figures provided in previous tables.