



Epi Data Tables

New York City Department of Health and Mental Hygiene

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Psychiatric Hospitalizations among Children and Adolescents in New York City

Data Tables

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Data Sources

Statewide Planning and Research Collaborative System (SPARCS) 2000-2013: SPARCS is an administrative database of all hospital discharges reported by New York State (NYS) hospitals to the NYS Department of Health.

Diagnoses are coded according to the International Statistical Classification of Diseases and Related Health Problems-9th Revision framework. All data presented in this report are limited to NYC residents ages 3 to 17 years old who had a hospitalization for a psychiatric condition (ICD-9 codes 290-316).

NYC DOHMH population estimates 2000-2013, modified from US Census Bureau interpolated intercensal population estimates, updated August 8, 2014.

To access the related Epi Data Brief, go to www1.nyc.gov/assets/doh/downloads/pdf/epi/databrief70.pdf



Table 1. Number and rate¹ of psychiatric hospitalizations among children and adolescents by age group, New York City, 2000-2013

Source: Statewide Planning and Research Collaborative System, 2000-2013; Rates calculated using NYC Health Department population estimates, modified from US Census Bureau intercensal population estimates, 2010-2013. Updated August 2014.

Year	Children, 3-12 years		Adolescents, 13-17 years	
	Rate (n)	Joinpoint trends ²	Rate (n)	Joinpoint trends ²
2000	151.8 (1672)	2000-2006 APC ³ = 3.54	541.7 (2773)	2000-2013 APC ³ = 1.21
2001	153.0 (1659)		551.4 (2820)	
2002	172.3 (1840)		547.5 (2808)	
2003	179.1 (1871)		615.6 (3167)	
2004	178.9 (1820)		634.8 (3267)	
2005	169.7 (1678)		584.1 (3009)	
2006	201.4 (1950)	579.8 (2980)		
2007	188.9 (1803)	575.3 (2943)		
2008	169.3 (1611)	576.2 (2937)		
2009	157.6 (1506)	579.5 (2937)		
2010	156.5 (1499)	2007-2013 APC ³ = -3.92	605.0 (3041)	
2011	152.9 (1466)		641.4 (3097)	
2012	153.0 (1478)		665.6 (3151)	
2013	148.2 (1440)		661.7 (3085)	

1. Age-specific rates per 100,000 New Yorkers.

2. Joinpoint regression identifies time periods with distinct rate trends.

3. The annual percent change (APC) is significantly different from zero ($p < 0.05$).

Table 2. Characteristics of children and adolescents with psychiatric hospitalization, overall and by age group, New York City, 2013

Source: Statewide Planning and Research Collaborative System, 2013

	Overall		Children (3-12 years)		Adolescents (13-17 years)		P-value ¹
	Number	Percent	Number	Percent	Number	Percent	
Total individuals hospitalized	3,766	100.0	1,182	100.0	2,584	100.0	
Sex							
Male	1,732	46.0	750	63.5	982	38.0	<.0001
Female	2,034	54.0	432	36.5	1,602	62.0	<.0001
Insurance type²							
Public	2,677	71.1	911	77.1	1,766	68.3	<.0001
Private	975	25.9	242	20.5	733	28.4	<.0001
Other	114	3.0	29	2.5	85	3.3	0.1647
Neighborhood poverty³							
Low	489	13.0	110	9.3	379	14.7	<.0001
Medium	876	23.3	212	18.0	664	25.7	<.0001
High	1,202	32.0	398	33.7	804	31.2	0.1196
Very high	1,195	31.8	462	39.0	734	28.4	<.0001

1. Chi-square p-value represents within group differences between children and adolescents. A p-value is a measure of statistical significance. A bold P-value, less than .05, signifies a significant difference between groups.

2. Insurance type defined by expected payee of claim. Public insurance includes Medicaid and other government insurance; private includes commercial and employer-offered insurance; and, other insurance includes uninsured and additional unique insurance situations.

3. Neighborhood poverty (based on zip code) was defined as the percentage of residents with incomes below 100% of the Federal Poverty Level, per American Community Survey 2009-2013, separated into four groups: low (<10%), medium (10 %-< 20%), high (20 %-< 30%), and very high (>=30%). Responses in this group will not equal the overall total due to missing zip codes for some hospitalization records.

Table 3. Rate of psychiatric hospitalization by neighborhood poverty level by age group, New York City, 2013*Source: Statewide Planning and Research Collaborative System, 2013; US Census Bureau*

All hospitalizations	Children (3-12 years) Rate (n)	Adolescents (13-17 years) Rate (n)
Total	148.2 (1440)	661.7 (3085)
Neighborhood poverty¹		
Low	93.7 (140)	650.0 (452)
Medium	93.0 (255)	597.0 (798)
High	162.3 (482)	667.6 (962)
Very high	224.0 (562)	731.5 (870)

1. Neighborhood poverty (based on zip code) was defined as the percentage of residents with incomes below 100% of the Federal Poverty Level, per American Community Survey 2009-2013, separated into four groups: low (<10%), medium (10 %-< 20%), high (20 %-< 30%), and very high (>=30%). Responses in this group will not equal the overall total due to missing zip codes for some hospitalization records.

Table 4. Clinical characteristics of psychiatric hospitalizations among children and adolescents, overall and by age group, New York City, 2013

Source: Statewide Planning and Research Collaborative System, 2013

	Overall		Children (3-12 y)		Adolescents (13-17 y)		P-value ¹
	Number	Percent	Number	Percent	Number	Percent	
Total hospitalizations	4,525	100.0	1,440	100.0	3,085	100.0	
Average length of stay (median)	12.3 days	(8)	12.5 days	(9)	12.2 days	(8)	0.63
Primary diagnosis²							
Depressive disorders	2,254	49.1	611	42.4	1,643	53.3	<.0001
Disruptive behavior disorders	435	9.6	210	14.6	225	7.3	<.0001
Bipolar disorder	432	9.6	54	3.8	378	12.3	<.0001
Schizophrenia; psychotic disorder	393	8.7	74	5.1	319	10.3	<.0001
Attention-deficit/hyperactivity disorder (ADHD)	379	8.4	282	19.6	97	3.1	<.0001
Anxiety disorders	169	3.7	50	3.5	119	3.9	0.5245
Adjustment disorder	166	3.7	45	3.1	121	3.9	0.1839
Autistic spectrum	100	2.2	55	3.8	45	1.5	<.0001
Substance abuse	50	1.1	3	0.2	47	1.5	<.0001
Other	147	3.3	56	3.9	91	3.0	0.097
>1 psychiatric diagnosis at hospitalization	3,183	70.3	1,128	78.3	2,055	66.6	<.0001

1. T-test and chi-square p-value represents within group differences between children and adolescents. A p-value is a measure of statistical significance. A bold P-value, less than .05, signifies a significant difference between groups.

2. Diagnosis was determined based on ICD-9 code of primary diagnosis at discharge and categorized as follows: depressive disorders includes 296.2, 296.3, 296.9 and 311; disruptive behavior disorders includes 312, 313.0-313.7 and 313.80-313.82; bipolar disorder includes 296.0, 296.1 and 296.4-296.8; schizophrenia and psychotic disorders includes 290-295, 297 and 298; ADHD includes 314; anxiety disorders includes 300.0-300.3, 300.5-300.9, 308, 309.21 and 309.81; adjustment disorder includes 309.0-309.1, 309.20, 309.22-309.309.29, 309.3-309.7, 309.80, 309.82-309.89 and 309.9; autism spectrum included 299; substance abuse includes 303-305; and other includes all remaining diagnoses with codes between 290-316.