

Tables

Table 1. Demographic Characteristics of New Orleans Planning Districts (n = 13) With Patients Hospitalized for Substance Abuse Disorders, 2004 and 2008



Planning District	Number of Substance Abuse Disorders		Population		Average Age		Average Percentage White		Average Percentage Living in Poverty*		Substance Abuse Disorders, Rate Per 1,000 Population	
	2004	2008	2004	2008	2004	2008	2004	2008	2004	2008	2004	2008
Algiers	71	61	50,022	48,222	38	36	30.3	21	34.7	31.1	0.6	0.6
Bywater	81	81	33,738	22,375	36	40	18.6	12.9	34.1	33.7	1	1.8
Garden District	90	105	30,800	32,636	42	43	31.6	20.6	43.4	44.6	1.3	1.6
French Quarter/ Central Business District	49	34	15,873	8,269	40	40	69	74.3	72.5	71.4	1.3	2.1
Gentilly	47	34	23,620	8,896	39	38	14.2	15.2	35.5	36.2	1	1.9
Lakeview	36	16	16,893	5,281	43	37	67.1	80.5	46.6	43.2	1.1	1.5
Lower 9th Ward	34	14	13,250	1,209	38	42	4	1.5	36.7	32.7	1.2	5.8
Mid-City	150	127	100,140	37,006	38	41	12.6	14	34.1	39	0.7	1.7
New Aurora/English Turn	5	10	6,230	10,076	33	37	23.5	4.6	28.1	23.3	0.4	0.5
New Orleans East	83	44	100,850	33,666	38	39	2.6	3.7	33.4	33	0.4	0.7
Uptown	96	86	36,750	27,533	38	39	46	34.7	38.1	38.5	1.3	1.6
Venetian Isles	2	0	1,822	0	24	0	43.6	0	50.1	0	0.5	0
Village De L'Est	3	1	7,201	483	39	34	1.8	0	38.5	50.9	0.2	1
No address provided	41	—	50,022	—	—	—	—	—	—	—	—	—
Total	788	613	487,211	235,652	—	—	—	—	—	—	—	—

Abbreviation: —, not applicable.

* Number of residents with annual income below the federal poverty level.

Table 2. US Census Block Group Variables Associated With 1,401 Hospitalizations for Substance Abuse Disorders, New Orleans, 2004 and 2008



Variable	Estimate	Standard Error	z Value	Exponential	P Value
2004					
Intercept	-6.448	0.272	-23.680	0.002	<.001
Housing units, 2000 ^a	-0.000	0.000	-1.472	1.000	.14
Population below FPL, % ^b	0.010	0.004	2.678	1.010	.007
White race, %	0.000	0.002	0.133	1.000	.89
Flood depth ^c	-0.053	0.029	-1.851	0.948	.06
Blighted buildings, %	0.016	0.016	0.989	1.016	.32
Building demolitions ^d , %	-0.008	0.014	-0.593	0.992	.55
2008					
Time 2008 ^e	-0.419	0.313	-1.337	0.658	.18
Housing units, 2000 ^a	0.001	0.000	2.402	1.001	.02
Population below FPL, % ^b	0.014	0.004	3.270	1.014	<.001
Population white race, %	-0.011	0.002	-5.072	0.989	<.001
Flood depth ^c	-0.128	0.031	-4.117	0.880	<.001
Imminent health threat	0.092	0.017	5.267	1.096	<.001
Building demolitions ^d , %	-0.052	0.023	-2.285	0.949	.02
Houses receiving mail ^f , %	0.003	0.001	2.544	1.0027	.01

Abbreviation: FPL, federal poverty level.

^a Number of housing units obtained from the 2000 US Census.

^b Percentage of people living below federal poverty level.

^c Water depth as measured by the flood depth map obtained on August 29, 2005.

^d Percentage of completed building demolitions from 2006 through 2009.

^e The time variable, which differentiates the 2 years, indicating whether hospitalization rates were different in 2004 versus 2008.

^f Households receiving mail by June 2008 per the US Postal Service.

Table 3. Clusters of US Census Block Groups With Substance Abuse Disorders Measured by Using the Discrete Poisson Model, New Orleans, 2004 and 2008



Cluster	Observed Hospitalizations	Expected Hospitalizations	RR	LLR	P Value
2004					
Most likely cluster, (New Orleans East)	114	272.4	0.36	71.0	<.001
Secondary cluster 1, (Algiers, Bywater, Garden District, French Quarter, CBD)	655	477.0	1.77	51.1	<.001
2008					
Most likely cluster, (Eastern corner of Mid-City)	820.47	0.01	831.23	40.0	<.001
Secondary cluster 1, (Lower 9th Ward)	11.60	1.29	11.91	23.2	<.001
Secondary cluster 2, (Algiers)	0.44	96.86	0.40	22.1	<.001
Secondary cluster 3, (Southeast corner of Mid-City)	23.14	0.26	23.38	13.1	<.001

Abbreviations: RR, relative risk; LLR, log-likelihood ratio; CBD, Central Business District

Appendix: ICD-Codes Used in Spatial Analysis of Hospitalizations for Substance Abuse Disorders, New Orleans, 2004 and 2008



SLCCS Code	SLCCS Description ^a	ICD-9 Code
66	Alcohol-related mental disorders	2910, 2911, 2912, 2913, 2914, 2915, 2918, 29181, 29189, 2919, 30300, 30301, 30302, 30303, 30390, 30391, 30392, 30393, 30500, 30501
67	Substance-related mental disorders	2920, 29211, 29212, 2922, 29281, 29282, 29283, 29284, 29289, 2929, 30400, 30401, 30402, 30403, 30410, 30411, 30412, 30413, 30420, 30421, 30422, 30423, 30430, 30431, 30432, 30433, 30440, 30441, 30442, 30443, 30450, 30451, 30452, 30453, 30460, 30461, 30462, 30463, 30470, 30471, 30472, 30473, 30480, 30481, 30482, 30483, 30490, 30491, 30492, 30493, 3051, 30520, 30521, 30522, 30523, 30530, 30531, 30532, 30533, 30540, 30541, 30542, 30543, 30550, 30551, 30552, 30553, 30560, 30561, 30562, 30563, 30570, 30571, 30572, 30573, 30580, 30581, 30582, 30583, 30590, 30591, 30592, 30593, V1582

Abbreviation: ICD-9, International Classification of Diseases, 9th Revision; SLCCS, single layer clinical classification system.

^a Disease definitions are based on the SLCCS, which is used to group the different ICD-9-Clinical Modification codes to map a particular disease (<https://www.hcup-us.ahrq.gov>).