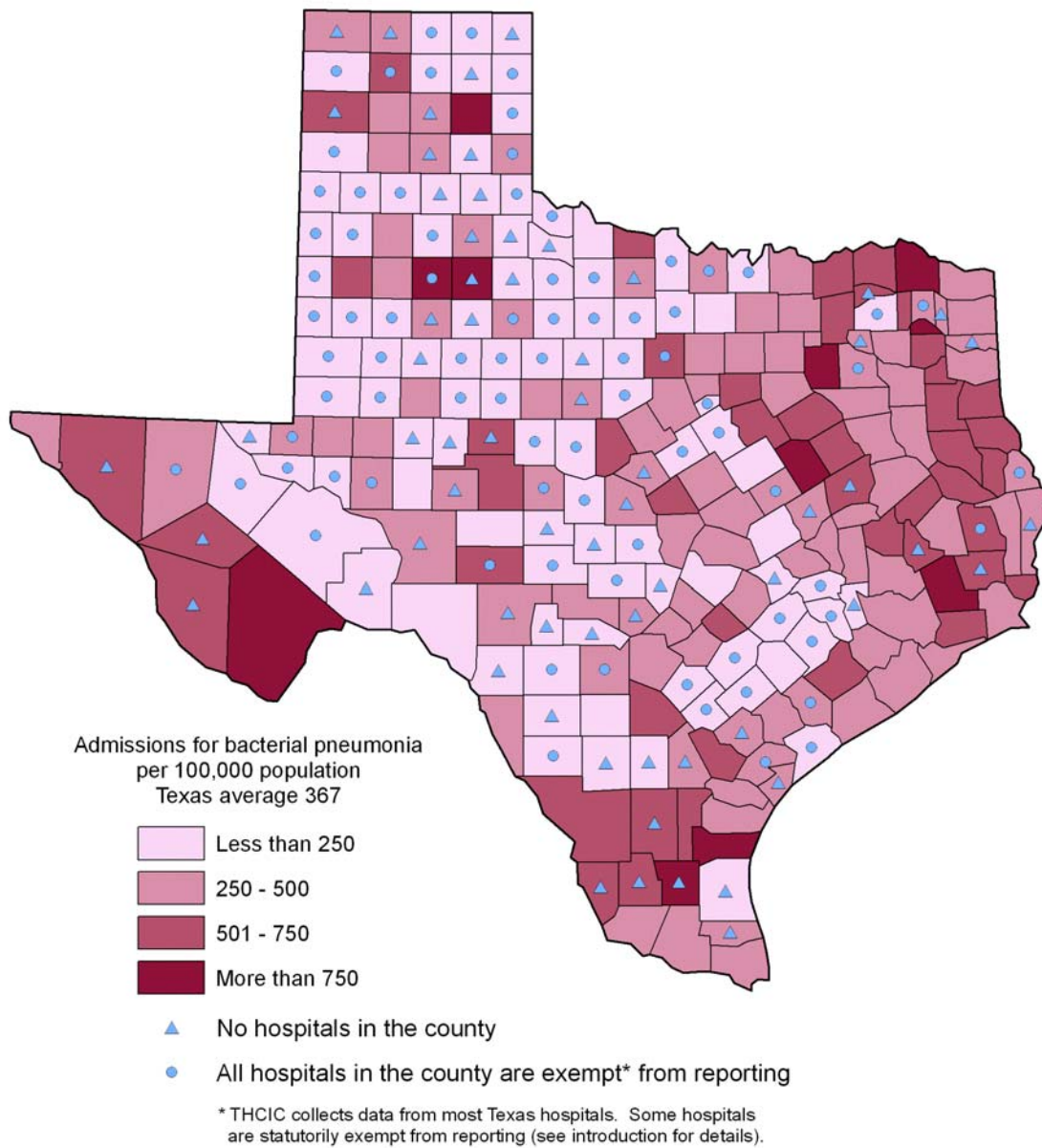


# 1. Bacterial Pneumonia

Pneumonia is a serious inflammation of the lungs caused by an infection. It is a common, often serious illness that affects about 3-4 million people a year in the United States. Many different organisms can cause pneumonia, including bacteria, viruses and fungi. Bacterial pneumonias tend to be the most serious. In adults, *Streptococcus pneumoniae* (pneumococcus) bacteria are the most common cause of pneumonia. Pneumonia that is caused by pneumococcus or other bacteria must be treated with antibiotics. Hospital admission for pneumonia is relatively common, even though there is a vaccine to help prevent pneumococcal pneumonia.



Source: Department of State Health Services, Center for Health Statistics. *Texas Hospital Inpatient Discharge Public Use Data File, 2005.*

## Table 1. Bacterial Pneumonia Admission Rate

Includes data from most Texas hospitals. Some hospitals are statutorily exempt from reporting to Department of State Health Services.

County	Admissions	Population	Observed Admissions per 100,000 Population	Expected Admissions per 100,000 Population	Risk-Adjusted Admissions per 100,000 Population	99% Confidence Interval for Risk-Adjusted Admissions
State Total	58,061	16,501,931	351.84	359.97	366.83	
Anderson	164	45,261	362.34	378.09	359.67	(303.9, 415.4)
Andrews	6	9,300	64.52	417.14	58.04*	(0.00, 175.3)
Angelina	425	60,254	705.35	430.92	614.30	(569.0, 659.6)
Aransas	111	19,078	581.82	573.16	380.97	(311.2, 450.7)
Archer	35	7,091	493.58	435.21	425.64	(294.3, 557.0)
Armstrong	11	1,688	651.66	635.16	385.05	(162.7, 607.4)
Atascosa	231	30,686	752.79	388.45	727.30**	(660.4, 794.2)
Austin	55	19,570	281.04	478.47	220.44*	(145.1, 295.8)
Bailey	5	4,758	105.09	490.88	80.34*	(0.00, 231.2)
Bandera	42	15,486	271.21	480.27	211.94	(127.3, 296.6)
Bastrop	217	51,151	424.23	356.77	446.27**	(392.2, 500.3)
Baylor	Less Than 5					
Bee	132	26,360	500.76	339.19	554.06**	(476.9, 631.2)
Bell	634	175,017	362.25	350.55	387.82	(358.4, 417.3)
Bexar	3,385	1,092,266	309.91	373.39	311.49*	(300.1, 322.9)
Blanco	15	7,051	212.74	455.79	175.17*	(46.53, 303.8)
Borden	Less Than 5					
Bosque	30	14,055	213.45	588.12	136.21*	(56.07, 216.3)
Bowie	238	69,675	341.59	437.34	293.13*	(251.3, 334.9)
Brazoria	709	199,288	355.77	328.48	406.48*	(377.9, 435.0)
Brazos	285	124,256	229.37	263.11	327.16	(286.8, 367.5)
Brewster	71	7,357	965.07	429.76	842.77**	(713.0, 972.5)
Briscoe	Less Than 5					
Brooks	58	5,509	1052.82	487.97	809.74**	(669.0, 950.5)
Brown	252	29,107	865.77	500.39	649.34**	(588.9, 709.8)
Burleson	79	13,003	607.55	504.75	451.73	(361.7, 541.7)
Burnet	136	31,775	428.01	568.77	282.42*	(228.2, 336.6)
Caldwell	156	26,939	579.09	401.27	541.61**	(471.4, 611.8)
Calhoun	29	15,022	193.05	448.48	161.55*	(72.61, 250.5)
Callahan	42	10,446	402.07	511.77	294.85	(195.1, 394.6)
Cameron	966	249,884	386.58	399.97	362.74	(339.7, 385.8)
Camp	120	8,877	1351.81	494.55	1025.86**	(915.8, 1136)
Carson	24	4,904	489.40	504.41	364.13	(217.5, 510.7)
Cass	87	23,437	371.21	546.37	254.98*	(190.6, 319.4)
Castro	5	5,364	93.21	446.72	78.31*	(0.00, 227.4)
Chambers	116	21,167	548.02	328.09	626.89**	(539.2, 714.6)
Cherokee	170	36,027	471.87	471.24	375.80	(319.8, 431.8)
Childress	Less Than 5					
Clay	22	8,887	247.55	458.40	202.67*	(88.31, 317.0)
Cochran	8	2,392	334.45	507.14	247.50	(38.12, 456.9)
Coke	30	2,946	1018.33	675.94	565.40**	(402.2, 728.6)
Coleman	23	6,904	333.14	666.82	187.50*	(80.17, 294.8)
Collin	983	460,207	213.60	263.93	303.73*	(282.7, 324.7)
Collingsworth	15	2,340	641.03	646.38	372.19	(185.0, 559.4)
Colorado	5	16,002	31.25	556.87	21.06*	(0.00, 98.24)
Comal	216	71,006	304.20	450.45	253.45*	(212.7, 294.2)

\* Risk adjusted admission rate is significantly LOWER (based on 99% confidence interval) than Texas average.

\*\* Risk adjusted admission rate is significantly HIGHER (based on 99% confidence interval) than Texas average.

**Table 1. Bacterial Pneumonia Admission (cont'd)**

County	Admissions	Population	Observed Admissions per 100,000 Population	Expected Admissions per 100,000 Population	Risk-Adjusted Admissions per 100,000 Population	99% Confidence Interval for Risk-Adjusted Admissions
State Total	58,061	16,501,931	351.84	359.97	366.83	
Comanche	70	10,508	666.16	604.26	413.74	(322.3, 505.2)
Concho	9	3,261	275.99	396.94	260.94	(58.20, 463.7)
Cooke	82	29,069	282.09	470.59	224.97*	(162.6, 287.3)
Coryell	142	56,205	252.65	255.70	370.81	(309.9, 431.8)
Cottle	Less Than 5					
Crane	Less Than 5					
Crockett	13	2,972	437.42	467.47	351.18	(155.5, 546.9)
Crosby	65	4,815	1349.95	532.95	950.62**	(806.7, 1095)
Culberson	9	1,953	460.83	427.31	404.74	(152.0, 657.5)
Dallam	18	4,342	414.56	389.31	399.64	(222.1, 577.2)
Dallas	4,674	1,666,566	280.46	320.85	328.05*	(318.1, 338.0)
Dawson	27	11,076	243.77	459.45	199.12*	(96.93, 301.3)
Deaf Smith	9	12,689	70.93	434.81	61.22*	(0.00, 159.4)
Delta	31	4,279	724.47	504.73	538.69	(381.8, 695.6)
Denton	1,071	391,729	273.40	244.03	420.47**	(396.8, 444.1)
De Witt	19	16,112	117.92	543.31	81.46*	(3.58, 159.3)
Dickens	36	2,253	1597.87	521.68	1149.51**	(937.1, 1362)
Dimmit	10	7,162	139.63	441.95	118.57*	(0.00, 248.2)
Donley	10	3,169	315.56	591.11	200.35	(32.01, 368.7)
Duval	67	9,317	719.12	473.59	569.87**	(460.1, 679.6)
Eastland	38	14,523	261.65	581.08	168.99*	(89.66, 248.3)
Ector	452	89,041	507.63	386.67	492.71**	(453.4, 532.1)
Edwards	6	1,485	404.04	413.76	366.49	(71.77, 661.2)
Ellis	381	94,353	403.80	344.91	439.39**	(398.9, 479.9)
El Paso	1,831	496,822	368.54	370.46	373.36	(356.3, 390.4)
Erath	129	26,212	492.14	435.59	424.02	(355.8, 492.2)
Falls	68	13,251	513.17	529.41	363.79	(276.8, 450.8)
Fannin	215	25,857	831.50	487.60	640.00**	(575.1, 704.9)
Fayette	5	17,871	27.98	633.31	16.58*	(0.00, 85.02)
Fisher	8	3,268	244.80	677.77	135.55*	(0.00, 290.3)
Floyd	15	5,215	287.63	541.35	199.40*	(62.23, 336.6)
Foard	Less Than 5					
Fort Bend	636	323,125	196.83	271.13	272.45*	(247.7, 297.2)
Franklin	59	7,985	738.89	525.38	527.82**	(415.2, 640.4)
Freestone	135	14,739	915.94	470.38	730.80**	(643.2, 818.4)
Frio	25	12,097	206.66	391.51	198.11*	(92.08, 304.1)
Gaines	10	9,973	100.27	386.40	97.39*	(0.00, 215.0)
Galveston	961	204,871	469.08	379.41	464.00**	(437.8, 490.2)
Garza	15	3,689	406.61	443.47	344.11	(163.8, 524.5)
Gillespie	51	18,299	278.70	693.52	150.82*	(86.17, 215.5)
Glasscock	Less Than 5					
Goliad	31	5,559	557.65	527.35	396.87	(262.2, 531.5)
Gonzales	17	14,299	118.89	514.64	86.70*	(1.73, 171.7)
Gray	212	16,764	1264.61	553.73	857.12**	(781.5, 932.7)
Grayson	537	89,043	603.08	472.38	479.14**	(443.6, 514.7)
Gregg	654	85,788	762.34	432.27	661.88**	(624.0, 699.8)

\* Risk adjusted admission rate is significantly LOWER (based on 99% confidence interval) than Texas average.

\*\* Risk adjusted admission rate is significantly HIGHER (based on 99% confidence interval) than Texas average.

**Table 1. Bacterial Pneumonia Admission Rate (cont'd)**

County	Admissions	Population	Observed Admissions per 100,000 Population	Expected Admissions per 100,000 Population	Risk-Adjusted Admissions per 100,000 Population	99% Confidence Interval for Risk-Adjusted Admissions
State Total	15,963	16,501,931	351.84	359.97	366.83	
Grimes	98	19,655	498.60	430.12	435.06	(355.7, 514.4)
Guadalupe	207	74,721	277.03	396.66	262.11*	(219.7, 304.5)
Hale	118	25,744	458.36	442.32	388.91	(320.6, 457.3)
Hall	8	2,786	287.15	633.86	170.02*	(0.00, 343.3)
Hamilton	18	6,388	281.78	665.62	158.88*	(47.23, 270.5)
Hansford	Less Than 5					
Hardeman	Less Than 5					
Hardin	273	38,176	715.11	409.55	655.31**	(596.9, 713.7)
Harris	7,052	2,632,813	267.85	305.68	328.86*	(320.7, 337.0)
Harrison	159	47,735	333.09	425.61	293.72*	(242.5, 344.9)
Hartley	Less Than 5					
Haskell	Less Than 5					
Hays	196	92,698	211.44	288.18	275.36*	(230.7, 320.1)
Hemphill	Less Than 5					
Henderson	372	61,565	604.24	505.07	448.99**	(407.6, 490.4)
Hidalgo	1,269	433,294	292.87	368.13	298.58*	(280.3, 316.8)
Hill	194	26,862	722.21	508.43	533.10**	(470.7, 595.5)
Hockley	102	16,910	603.19	419.80	539.25**	(452.7, 625.8)
Hood	205	36,742	557.94	508.62	411.69	(358.3, 465.1)
Hopkins	29	25,281	114.71	468.60	91.87*	(24.86, 158.9)
Houston	123	18,513	664.40	539.82	461.91**	(389.0, 534.8)
Howard	116	25,582	453.44	449.38	378.70	(310.7, 446.7)
Hudspeth	15	2,254	665.48	378.96	659.06**	(409.1, 909.1)
Hunt	339	62,074	546.12	405.38	505.60**	(459.6, 551.6)
Hutchinson	38	17,004	223.48	496.48	168.93*	(89.56, 248.3)
Irion	8	1,374	582.24	494.87	441.56	(162.0, 721.1)
Jack	14	7,157	195.61	442.38	165.95*	(36.34, 295.6)
Jackson	38	10,866	349.71	493.67	265.86*	(166.3, 365.4)
Jasper	160	26,996	592.68	464.35	479.02**	(413.8, 544.2)
Jeff Davis	13	1,791	725.85	540.64	503.87	(269.6, 738.1)
Jefferson	1,045	188,775	553.57	443.09	468.88**	(443.7, 494.1)
Jim Hogg	33	3,654	903.12	524.24	646.54**	(480.0, 813.1)
Jim Wells	177	29,243	605.27	417.59	543.97**	(477.9, 610.0)
Johnson	577	106,780	540.36	347.07	584.32**	(546.4, 622.3)
Jones	21	16,216	129.50	415.61	116.94*	(28.08, 205.8)
Karnes	11	12,461	88.28	435.05	76.15*	(0.00, 175.2)
Kaufman	459	63,271	725.45	353.50	770.18**	(721.3, 819.0)
Kendall	62	20,816	297.85	439.41	254.39*	(178.1, 330.7)
Kenedy	Less Than 5					
Kent	Less Than 5					
Kerr	206	36,392	566.06	692.42	306.81*	(260.9, 352.7)
Kimble	6	3,616	165.93	567.25	109.78*	(0.00, 270.8)
King	Less Than 5					
Kinney	8	2,609	306.63	692.26	166.24*	(0.00, 337.7)
Kleberg	222	23,524	943.72	375.60	942.97**	(865.3, 1021)
Knox	5	2,895	172.71	690.90	93.82*	(0.00, 256.6)

\* Risk adjusted admission rate is significantly LOWER (based on 99% confidence interval) than Texas average.

\*\* Risk adjusted admission rate is significantly HIGHER (based on 99% confidence interval) than Texas average.

**Table 1. Bacterial Pneumonia Admission (cont'd)**

County	Admissions	Population	Observed Admissions per 100,000 Population	Expected Admissions per 100,000 Population	Risk-Adjusted Admissions per 100,000 Population	99% Confidence Interval for Risk-Adjusted Admissions
State Total	15,963	16,501,931	351.84	359.97	366.83	
Lamar	263	37,728	697.09	510.56	512.42**	(459.9, 564.9)
Lamb	32	10,634	300.92	545.25	207.13*	(111.5, 302.8)
Lampasas	136	15,662	868.34	438.47	743.24**	(655.2, 831.2)
La Salle	11	4,355	252.58	398.09	238.12	(62.76, 413.5)
Lavaca	52	14,852	350.12	646.03	203.40*	(129.1, 277.7)
Lee	32	12,291	260.35	479.95	203.58*	(108.7, 298.5)
Leon	97	12,690	764.38	559.36	512.86**	(426.3, 599.4)
Liberty	426	55,891	762.20	359.61	795.45	(743.9, 847.0)
Limestone	244	17,400	1402.30	475.42	1107.00**	(1027, 1187)
Lipscomb	Less Than 5					
Live Oak	50	9,489	526.93	503.49	392.77	(287.3, 498.2)
Llano	76	15,496	490.45	758.61	242.64*	(175.4, 309.8)
Loving	Less Than 5					
Lubbock	866	190,605	454.34	376.88	452.43**	(425.2, 479.7)
Lynn	11	4,441	247.69	475.70	195.42*	(36.73, 354.1)
McCulloch	22	6,165	356.85	573.70	233.45*	(110.9, 356.0)
McClellan	465	167,237	278.05	419.96	248.48*	(221.0, 276.0)
McMullen	Less Than 5					
Madison	43	10,658	403.45	426.12	355.34	(247.2, 463.5)
Marion	41	8,869	462.28	550.47	315.18	(210.8, 419.6)
Martin	9	3,086	291.64	478.37	228.80	(39.05, 418.6)
Mason	11	3,149	349.32	645.44	203.12*	(41.45, 364.8)
Matagorda	125	27,739	450.63	428.09	395.06	(328.1, 462.0)
Maverick	119	33,257	357.82	382.51	351.08	(286.4, 415.8)
Medina	99	31,593	313.36	424.01	277.36*	(214.3, 340.4)
Menard	5	1,862	268.53	661.73	152.29*	(0.00, 359.7)
Midland	267	87,632	304.68	411.14	278.13*	(239.7, 316.6)
Milam	62	18,833	329.21	524.09	235.75*	(162.4, 309.1)
Mills	27	4,025	670.81	678.48	371.06	(231.7, 510.4)
Mitchell	20	7,780	257.07	416.83	231.46*	(103.3, 359.6)
Montague	113	15,260	740.50	568.06	489.22**	(410.9, 567.5)
Montgomery	924	267,434	345.51	327.79	395.58**	(370.9, 420.3)
Moore	85	13,806	615.67	378.78	610.02**	(509.1, 711.0)
Morris	72	10,212	705.05	544.62	485.86**	(388.1, 583.6)
Motley	6	1,037	578.59	707.28	307.02	(38.07, 576.0)
Nacogdoches	307	46,556	659.42	398.62	620.85**	(567.3, 674.4)
Navarro	233	35,982	647.55	451.77	537.94**	(480.8, 595.1)
Newton	61	11,138	547.67	445.51	461.37	(357.7, 565.0)
Nolan	17	11,298	150.47	533.02	105.95*	(12.02, 199.9)
Nueces	970	233,894	414.72	396.71	392.34**	(368.4, 416.3)
Ochiltree	5	6,566	76.15	393.85	72.56*	(0.00, 216.2)
Oldham	9	1,457	617.71	432.42	536.11	(245.3, 826.9)
Orange	424	64,242	660.00	423.85	584.41**	(540.2, 628.6)
Palo Pinto	163	20,846	781.92	502.49	584.01**	(512.8, 655.3)
Panola	120	17,781	674.88	497.77	508.83**	(431.3, 586.3)
Parker	322	76,555	420.61	367.06	430.06**	(386.5, 473.6)

\* Risk adjusted admission rate is significantly LOWER (based on 99% confidence interval) than Texas average.

\*\* Risk adjusted admission rate is significantly HIGHER (based on 99% confidence interval) than Texas average.

**Table 1. Bacterial Pneumonia Admission Rate (cont'd)**

County	Admissions	Population	Observed Admissions per 100,000 Population	Expected Admissions per 100,000 Population	Risk-Adjusted Admissions per 100,000 Population	99% Confidence Interval for Risk-Adjusted Admissions
State Total	15,963	16,501,931	351.84	359.97	366.83	
Parmer	7	6,881	101.73	470.69	81.11*	(0.00, 209.2)
Pecos	7	12,212	57.32	378.81	56.79*	(0.00, 164.1)
Polk	248	36,956	671.07	540.33	466.11**	(414.5, 517.7)
Potter	433	85,892	504.12	405.07	467.07**	(428.0, 506.2)
Presidio	51	5,325	957.75	527.02	682.02**	(544.4, 819.6)
Rains	35	8,875	394.37	481.69	307.27	(195.7, 418.9)
Randall	363	83,576	434.34	385.23	423.14**	(382.4, 463.8)
Reagan	Less Than 5					
Real	8	2,398	333.61	597.07	209.70	(17.05, 402.3)
Red River	153	10,730	1425.91	587.12	911.48**	(819.7, 1003)
Reeves	6	8,676	69.16	461.76	56.21*	(0.00, 171.4)
Refugio	20	5,871	340.66	509.75	250.81	(117.5, 384.1)
Roberts	Less Than 5					
Robertson	78	11,902	655.35	528.53	465.35**	(373.4, 557.3)
Rockwall	166	43,146	384.74	321.05	449.75**	(387.6, 511.8)
Runnels	32	8,273	386.80	604.71	240.06*	(137.1, 343.1)
Rusk	241	37,363	645.02	480.21	504.11**	(449.7, 558.5)
Sabine	50	8,437	592.63	653.22	340.49	(242.3, 438.7)
San Augustine	70	7,035	995.02	643.23	580.56**	(472.3, 688.9)
San Jacinto	135	19,192	703.42	462.59	570.68**	(493.2, 648.1)
San Patricio	216	48,607	444.38	387.25	430.66**	(377.4, 483.9)
San Saba	22	4,590	479.30	584.26	307.88	(167.2, 448.6)
Schleicher	Less Than 5					
Scurry	22	12,423	177.09	454.25	146.31*	(49.21, 243.4)
Shackelford	8	2,521	317.33	551.79	215.84	(20.37, 411.3)
Shelby	171	19,651	870.18	489.58	667.07**	(592.7, 741.4)
Sherman	9	2,225	404.49	441.15	344.12	(111.2, 577.0)
Smith	535	140,371	381.13	452.84	315.87*	(286.9, 344.8)
Somervell	Less Than 5					
Starr	154	38,568	399.29	366.15	409.28	(347.8, 470.7)
Stephens	10	7,501	133.32	526.75	94.99*	(0.00, 211.0)
Sterling	Less Than 5					
Stonewall	7	1,156	605.54	745.32	304.91	(56.98, 552.8)
Sutton	17	3,043	558.66	412.63	508.12	(302.1, 714.2)
Swisher	18	5,825	309.01	517.96	223.90*	(91.19, 356.6)
Tarrant	3,584	1,160,170	308.92	323.21	358.71	(346.8, 370.6)
Taylor	432	93,623	461.43	425.12	407.35**	(370.8, 443.9)
Terrell	Less Than 5					
Terry	20	9,336	214.22	486.50	165.26*	(57.08, 273.4)
Throckmorton	Less Than 5					
Titus	96	20,654	464.80	427.00	408.52	(330.9, 486.2)
Tom Green	558	78,631	709.64	453.27	587.57**	(548.9, 626.2)
Travis	1,233	665,736	185.21	278.44	249.63*	(232.7, 266.6)
Trinity	101	11,378	887.68	609.14	546.91**	(459.4, 634.5)
Tyler	149	16,610	897.05	511.35	658.39**	(579.3, 737.5)
Upshur	248	28,614	866.71	459.98	707.15**	(643.5, 770.8)

\* Risk adjusted admission rate is significantly LOWER (based on 99% confidence interval) than Texas average.

\*\* Risk adjusted admission rate is significantly HIGHER (based on 99% confidence interval) than Texas average.

**Table 1. Bacterial Pneumonia Admission (cont'd)**

County	Admissions	Population	Observed Admissions per 100,000 Population	Expected Admissions per 100,000 Population	Risk-Adjusted Admissions per 100,000 Population	99% Confidence Interval for Risk-Adjusted Admissions
State Total	15,963	16,501,931	351.84	359.97	366.83	
Upton	8	2,356	339.56	478.04	266.58	(49.10, 484.1)
Uvalde	Less Than 5					
Val Verde	69	33,245	207.55	445.80	174.73*	(114.8, 234.7)
Van Zandt	211	40,144	525.61	499.61	394.83	(343.3, 446.3)
Victoria	334	62,976	530.36	428.60	464.40**	(420.0, 508.8)
Walker	255	52,064	489.78	306.02	600.67**	(542.8, 658.5)
Waller	46	26,459	173.85	336.35	193.99*	(116.6, 271.4)
Ward	21	7,542	278.44	495.84	210.75*	(91.47, 330.0)
Washington	20	24,315	82.25	510.04	60.52*	(0.00, 126.0)
Webb	661	140,556	470.28	324.21	544.39**	(510.2, 578.6)
Wharton	206	30,753	669.85	457.72	549.24**	(487.8, 610.7)
Wheeler	9	3,724	241.68	591.16	153.43*	(0.00, 308.8)
Wichita	664	96,651	687.01	419.10	615.21**	(579.0, 651.5)
Wilbarger	13	10,467	124.20	507.93	91.77*	(0.00, 191.7)
Willacy	63	14,289	440.90	415.91	397.84	(303.2, 492.5)
Williamson	509	230,561	220.77	305.49	271.21*	(243.7, 298.7)
Wilson	69	27,537	250.57	389.27	241.58*	(171.1, 312.1)
Winkler	20	4,993	400.56	493.38	304.70	(157.8, 451.5)
Wise	49	41,790	117.25	362.10	121.53*	(62.14, 180.9)
Wood	234	32,512	719.73	556.35	485.52**	(431.3, 539.7)
Yoakum	Less Than 5					
Young	39	13,926	280.05	571.37	183.95	(102.2, 265.7)
Zapata	60	9,081	660.72	472.76	524.51**	(413.3, 635.8)
Zavala	7	8,036	87.11	408.87	79.96*	(0.00, 207.2)

Source: *Texas Hospital Inpatient Discharge Public Use Data File, 2005*. Texas Department of State Health Services, Center for Health Statistics, Austin, Texas. 2006.

\* Risk adjusted admission rate is significantly LOWER (based on 99% confidence interval) than Texas average.

\*\* Risk adjusted admission rate is significantly HIGHER (based on 99% confidence interval) than Texas average.