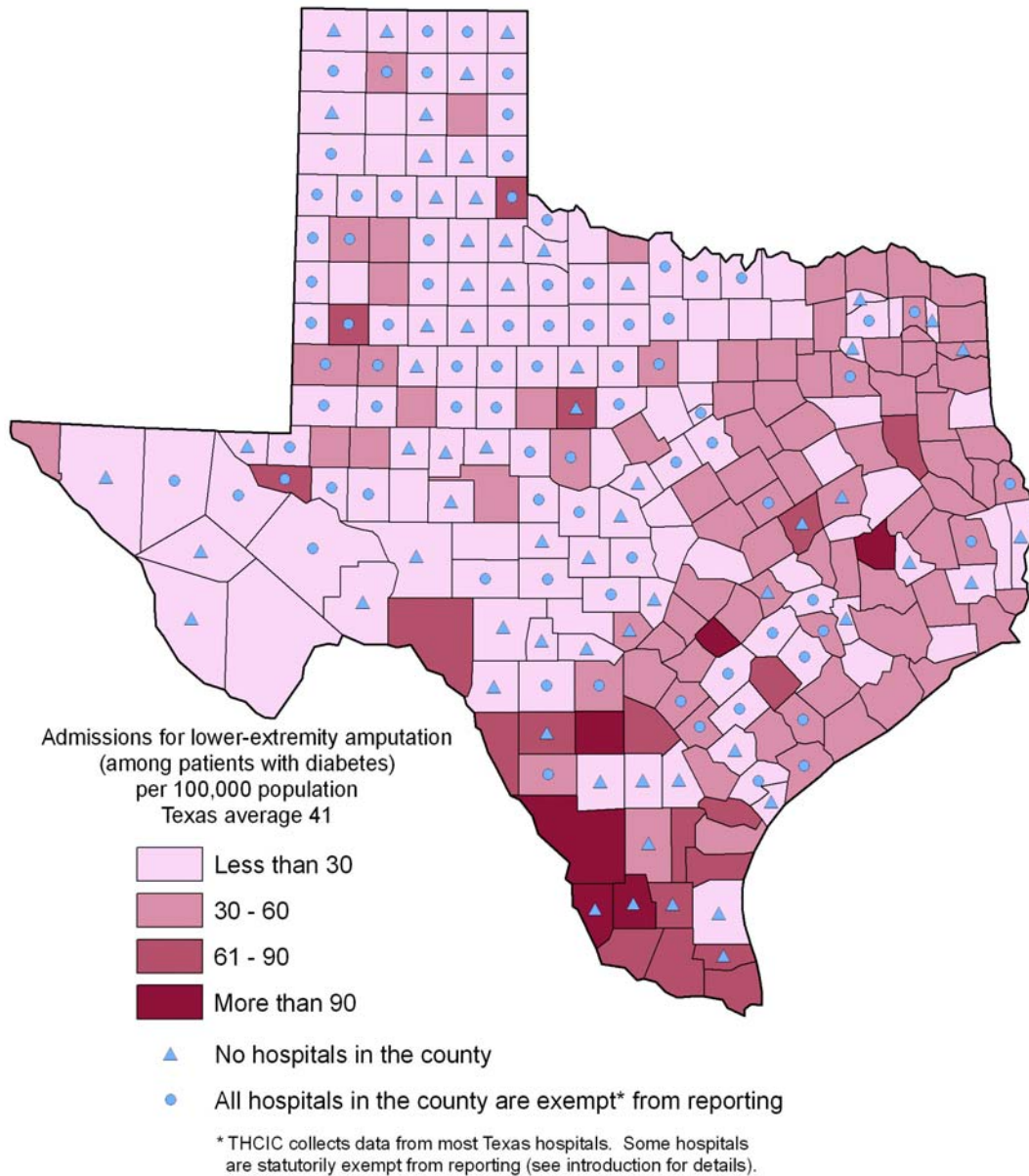


14. Lower-Extremity Amputation Among Patients with Diabetes

Lower extremity amputation (LEA) is a costly and disabling procedure. According to the American Diabetes Association, about 60-70% of people with diabetes have mild to severe forms of diabetic nerve damage, which in severe forms, can lead to the need for lower limb amputations. In fact, diabetes is the most frequent cause of lower limb amputations that were not made necessary by an injury. The risk of a leg amputation is 15-40 times greater for a person with diabetes than for a non-diabetic. Each year, 56,200 people lose a foot or leg to diabetes.



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

Table 14. Lower-Extremity Amputation Among Patients With Diabetes 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	6,873	16,501,931	41.65	33.40	41.29	
Anderson	19	45,261		33.81	41.10	(24.52, 57.68)
Andrews	Less Than 5					
Angelina	37	60,254	61.41	38.73	52.49	(39.06, 65.92)
Aransas	6	19,078	31.45	51.53	20.21*	(0.00, 40.89)
Archer	Less Than 5					
Armstrong	Less Than 5					
Atascosa	22	30,686	71.69	36.05	65.84	(46.34, 85.34)
Austin	10	19,570	51.10	42.09	40.20	(17.60, 62.80)
Bailey	Less Than 5					
Bandera	Less Than 5					
Bastrop	17	51,151	33.23	34.49	31.90	(16.46, 47.34)
Baylor	Less Than 5					
Bee	13	26,360	49.32	29.92	54.57	(31.48, 77.67)
Bell	54	175,017	30.85	31.09	32.86	(24.06, 41.65)
Bexar	563	1,092,266		33.74	50.57**	(47.19, 53.95)
Blanco	Less Than 5					
Borden	Less Than 5					
Bosque	Less Than 5					
Bowie	27	69,675	38.75	38.63	33.21	(20.71, 45.71)
Brazoria	76	199,288	38.14	32.78	38.51	(30.49, 46.54)
Brazos	40	124,256	32.19	22.18	48.04	(35.69, 60.40)
Brewster	Less Than 5					
Briscoe	Less Than 5					
Brooks	5	5,509	90.76	44.40	67.68	(26.21, 109.2)
Brown	10	29,107	34.36	43.11	26.39	(8.08, 44.70)
Burleson	Less Than 5					
Burnet	8	31,775	25.18	48.44	17.21*	(0.68, 33.74)
Caldwell	32	26,939	118.79	35.43	111.00**	(90.01, 132.0)
Calhoun	7	15,022	46.60	43.20	35.71	(10.25, 61.17)
Callahan	9	10,446	86.16	46.12	61.84	(32.30, 91.39)
Cameron	184	249,884	73.63	34.75	70.16**	(63.20, 77.12)
Camp	5	8,877	56.33	44.49	41.92	(9.28, 74.55)
Carson	Less Than 5					
Cass	13	23,437	55.47	47.13	38.97	(19.45, 58.48)
Castro	Less Than 5					
Chambers	Less Than 5					
Cherokee	27	36,027	74.94	40.79	60.83*	(43.91, 77.74)
Childress	5	6,061	82.49	37.64	72.56**	(29.62, 115.5)
Clay	Less Than 5					
Cochran	Less Than 5					
Coke	Less Than 5					
Coleman	5	6,904	72.42	53.42	44.88	(11.11, 78.66)
Collin	73	460,207	15.86	27.51	19.09*	(13.32, 24.85)
Collingsworth	Less Than 5					
Colorado	Less Than 5					
Comal	27	71,006	38.02	40.97	30.73	(18.70, 42.75)

* 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 14. Lower-Extremity Amputation Among Patients With Diabetes 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	6,873	16,501,931	41.65	33.40	41.29	
Comanche	8	10,508	76.13	50.46	49.95	(21.79, 78.12)
Concho	Less Than 5					
Cooke	6	29,069	20.64	41.39	16.51*	(0.00, 35.21)
Coryell	12	56,205	21.35	22.51	31.41	(13.17, 49.64)
Cottle	Less Than 5					
Crane	Less Than 5					
Crockett	Less Than 5					
Crosby	Less Than 5					
Culberson	Less Than 5					
Dallam	Less Than 5					
Dallas	702	1,666,566	42.12	30.26	46.09**	(43.20, 48.98)
Dawson	6	11,076	54.17	39.73	45.14	(14.22, 76.06)
Deaf Smith	Less Than 5					
Delta	Less Than 5					
Denton	69	391,729	17.61	25.25	23.09*	(16.57, 29.61)
De Witt	Less Than 5					
Dickens	Less Than 5					
Dimmit	5	7,162	69.81	39.03	59.22	(20.43, 98.02)
Donley	Less Than 5					
Duval	6	9,317	64.40	41.15	51.82	(18.69, 84.94)
Eastland	Less Than 5					
Ector	29	89,041	32.57	35.79	30.13	(18.64, 41.62)
Edwards	Less Than 5					
Ellis	35	94,353	37.09	32.92	37.30	(25.67, 48.94)
El Paso	225	496,822	45.29	33.63	44.59	(39.57, 49.60)
Erath	Less Than 5					
Falls	6	13,251	45.28	43.31	34.61	(7.54, 61.69)
Fannin	11	25,857	42.54	42.33	33.27	(13.67, 52.88)
Fayette	7	17,871	39.17	50.06	25.90	(4.22, 47.59)
Fisher	Less Than 5					
Floyd	Less Than 5					
Foard	Less Than 5					
Fort Bend	74	323,125	22.90	28.59	26.52*	(19.77, 33.27)
Franklin	Less Than 5					
Freestone	5	14,739	33.92	41.20	27.26	(0.94, 53.58)
Frio	17	12,097	140.53	35.30	131.79**	(100.4, 163.2)
Gaines	6	9,973	60.16	36.22	55.00	(20.87, 89.13)
Galveston	130	204,871	63.45	36.37	57.76**	(50.24, 65.27)
Garza	Less Than 5					
Gillespie	Less Than 5					
Glasscock	Less Than 5					
Goliad	Less Than 5					
Gonzales	Less Than 5					
Gray	8	16,764	47.72	45.50	34.72	(11.24, 58.21)
Grayson	24	89,043	26.95	41.13	21.70*	(10.98, 32.42)
Gregg	56	85,788	65.28	38.39	56.30**	(45.00, 67.60)

* 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 14. Lower-Extremity Amputation Among Patients With Diabetes 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	6,873	16,501,931	41.65	33.40	41.29	
Grimes	14	19,655	71.23	40.48	58.26	(35.27, 81.26)
Guadalupe	50	74,721	66.92	36.94	59.97**	(47.63, 72.32)
Hale	13	25,744	50.50	38.39	43.55	(22.92, 64.19)
Hall	Less Than 5					
Hamilton	Less Than 5					
Hansford	Less Than 5					
Hardeman	Less Than 5					
Hardin	12	38,176	31.43	38.90	26.76	(9.92, 43.59)
Harris	997	2,632,813	37.87	30.17	41.56	(39.26, 43.86)
Harrison	17	47,735	35.61	39.11	30.15	(15.13, 45.16)
Hartley	Less Than 5					
Haskell	Less Than 5					
Hays	42	92,698	45.31	27.00	55.56**	(42.59, 68.52)
Hemphill	Less Than 5					
Henderson	20	61,565	32.49	45.33	23.72*	(11.45, 36.00)
Hidalgo	307	433,294	70.85	31.77	73.83**	(68.30, 79.36)
Hill	11	26,862	40.95	44.38	30.55	(11.77, 49.34)
Hockley	5	16,910	29.57	37.39	26.19	(0.39, 51.98)
Hood	6	36,742	16.33	47.22	11.45*	(0.00, 27.02)
Hopkins	6	25,281	23.73	41.28	19.04*	(0.00, 39.11)
Houston	7	18,513	37.81	45.80	27.33	(5.06, 49.60)
Howard	16	25,582	62.54	39.82	52.00	(31.68, 72.32)
Hudspeth	Less Than 5					
Hunt	22	62,074	35.44	37.76	31.07	(17.68, 44.47)
Hutchinson	6	17,004	35.29	44.06	26.52	(2.82, 50.21)
Irion	Less Than 5					
Jack	Less Than 5					
Jackson	7	10,866	64.42	42.73	49.92	(19.82, 80.02)
Jasper	7	26,996	25.93	42.91	20.01*	(0.95, 39.06)
Jeff Davis	Less Than 5					
Jefferson	103	188,775	54.56	38.57	46.83	(39.23, 54.43)
Jim Hogg	8	3,654	218.94	45.12	160.67**	(110.2, 211.2)
Jim Wells	26	29,243	88.91	37.70	78.07**	(58.54, 97.61)
Johnson	40	106,780	37.46	34.10	36.37	(25.62, 47.12)
Jones	Less Than 5					
Karnes	5	12,461	40.13	36.08	36.81	(6.23, 67.40)
Kaufman	25	63,271	39.51	33.92	38.56	(24.56, 52.56)
Kendall	8	20,816	38.43	41.79	30.45	(8.46, 52.44)
Kenedy	Less Than 5					
Kent	Less Than 5					
Kerr	6	36,392	16.49	54.19	10.07*	(0.00, 24.68)
Kimble	Less Than 5					
King	Less Than 5					
Kinney	Less Than 5					
Kleberg	18	23,524	76.52	33.34	75.98**	(52.82, 99.14)
Knox	Less Than 5					

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

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Table 14. Lower-Extremity Amputation Among Patients With Diabetes 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	6,873	16,501,931	41.65	33.40	41.29	
Lamar	25	37,728	66.26	42.90	51.14	(35.02, 67.26)
Lamb	6	10,634	56.42	44.52	41.96	(12.15, 71.77)
Lampasas	Less Than 5					
La Salle	Less Than 5					
Lavaca	16	14,852	107.73	50.94	70.02**	(46.44, 93.60)
Lee	5	12,291	40.68	41.56	32.41	(3.71, 61.10)
Leon	11	12,690	86.68	49.48	58.00	(32.11, 83.88)
Liberty	21	55,891	37.57	34.21	36.36	(21.53, 51.20)
Limestone	7	17,400	40.23	41.46	32.12	(7.98, 56.27)
Lipscomb	Less Than 5					
Live Oak	Less Than 5					
Llano	Less Than 5					
Loving	Less Than 5					
Lubbock	77	190,605	40.40	33.07	40.44	(32.28, 48.61)
Lynn	Less Than 5					
McCulloch	Less Than 5					
McClennan	56	167,237	33.49	35.73	31.03*	(22.64, 39.42)
McMullen	Less Than 5					
Madison	Less Than 5					
Marion	5	8,869	56.38	50.36	37.06	(6.37, 67.75)
Martin	Less Than 5					
Mason	Less Than 5					
Matagorda	15	27,739	54.08	39.75	45.04	(25.51, 64.58)
Maverick	31	33,257	93.21	34.44	89.60**	(70.43, 108.8)
Medina	20	31,593	63.31	38.30	54.72	(36.07, 73.36)
Menard	Less Than 5					
Midland	34	87,632	38.80	37.30	34.44	(23.10, 45.79)
Milam	14	18,833	74.34	44.70	55.06	(32.71, 77.42)
Mills	Less Than 5					
Mitchell	Less Than 5					
Montague	Less Than 5					
Montgomery	87	267,434	32.53	33.04	32.59*	(25.69, 39.49)
Moore	7	13,806	50.70	35.30	47.55	(18.17, 76.93)
Morris	Less Than 5					
Motley	Less Than 5					
Nacogdoches	21	46,556	45.11	34.17	43.70	(27.44, 59.96)
Navarro	19	35,982	52.80	38.76	45.11	(27.74, 62.48)
Newton	Less Than 5					
Nolan	Less Than 5					
Nueces	148	233,894	63.28	36.49	57.41**	(50.39, 64.43)
Ochiltree	Less Than 5					
Oldham	Less Than 5					
Orange	31	64,242	48.26	40.07	39.87	(27.09, 52.66)
Palo Pinto	9	20,846	43.17	44.35	32.23	(10.90, 53.56)
Panola	Less Than 5					
Parker	25	76,555	32.66	36.40	29.70	(17.42, 41.99)

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

Table 14. Lower-Extremity Amputation Among Patients With Diabetes 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	6,873	16,501,931	41.65	33.40	41.29	
Parmer	Less Than 5					
Pecos	Less Than 5					
Polk	18	36,956	48.71	46.86	34.41	(18.82, 49.99)
Potter	25	85,892	29.11	35.11	27.44*	(15.63, 39.25)
Presidio	Less Than 5					
Rains	Less Than 5					
Randall	12	83,576	14.36	36.31	13.09*	(1.32, 24.87)
Reagan	Less Than 5					
Real	Less Than 5					
Red River	7	10,730	65.24	48.57	44.47	(16.06, 72.88)
Reeves	Less Than 5					
Refugio	Less Than 5					
Roberts	Less Than 5					
Robertson	12	11,902	100.82	45.66	73.10**	(45.28, 100.9)
Rockwall	13	43,146	30.13	32.39	30.80	(13.45, 48.15)
Runnels	Less Than 5					
Rusk	24	37,363	64.23	41.91	50.75	(34.36, 67.14)
Sabine	7	8,437	82.97	58.07	47.30	(18.00, 76.60)
San Augustine	6	7,035	85.29	52.61	53.68	(19.96, 87.39)
San Jacinto	6	19,192	31.26	44.75	23.13	(1.00, 45.26)
San Patricio	34	48,607	69.95	36.44	63.55**	(48.14, 78.96)
San Saba	Less Than 5					
Schleicher	Less Than 5					
Scurry	Less Than 5					
Shackelford	Less Than 5					
Shelby	9	19,651	45.80	42.28	35.86	(13.36, 58.36)
Sherman	Less Than 5	2,225				(0.00, 105.7)
Smith	82	140,371	58.42	39.67	48.76	(40.06, 57.45)
Somervell	Less Than 5					
Starr	28	38,568	72.60	32.74	73.43**	(55.17, 91.68)
Stephens	Less Than 5					
Sterling	Less Than 5					
Stonewall	Less Than 5					
Sutton	Less Than 5					
Swisher	Less Than 5					
Tarrant	383	1,160,170	33.01	31.16	35.08*	(31.67, 38.49)
Taylor	33	93,623	35.25	36.49	31.98	(20.88, 43.08)
Terrell	Less Than 5					
Terry	8	9,336	85.69	41.60	68.20	(35.29, 101.1)
Throckmorton	Less Than 5					
Titus	7	20,654	33.89	36.98	30.35	(6.88, 53.82)
Tom Green	31	78,631	39.42	38.59	33.83	(22.05, 45.60)
Travis	203	665,736	30.49	26.67	37.85	(32.98, 42.72)
Trinity	8	11,378	70.31	52.68	44.19	(17.70, 70.68)
Tyler	7	16,610	42.14	45.63	30.58	(7.02, 54.14)
Upshur	15	28,614	52.42	42.58	40.76	(22.18, 59.35)

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

Table 14. Lower-Extremity Amputation Among Patients With Diabetes 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	6,873	16,501,931	41.65	33.40	41.29	
Upton	Less Than 5					
Uvalde	5	18,912	26.44	40.24	21.75	(0.00, 45.26)
Val Verde	24	33,245	72.19	39.71	60.19**	(42.34, 78.05)
Van Zandt	22	40,144	54.80	44.97	40.35	(25.08, 55.61)
Victoria	41	62,976	65.10	38.86	55.46**	(42.35, 68.58)
Walker	64	52,064	122.93	28.74	141.62	(124.9, 158.4)
Waller	6	26,459	22.68	31.79	23.62**	(1.25, 45.98)
Ward	8	7,542	106.07	44.50	78.91**	(43.51, 114.3)
Washington	6	24,315	24.68	42.23	19.34*	(0.00, 39.58)
Webb	114	140,556	81.11	29.01	92.55**	(82.39, 102.7)
Wharton	22	30,753	71.54	40.39	58.63	(40.23, 77.03)
Wheeler	Less Than 5					
Wichita	47	96,651	48.63	36.66	43.91	(33.02, 54.81)
Wilbarger	Less Than 5					
Willacy	11	14,289	76.98	36.30	70.22**	(41.74, 98.70)
Williamson	59	230,561	25.59	29.08	29.13*	(21.21, 37.05)
Wilson	15	27,537	54.47	37.28	48.38	(28.13, 68.62)
Winkler	Less Than 5					
Wise	Less Than 5					
Wood	21	32,512	64.59	49.29	43.39	(27.19, 59.59)
Yoakum	Less Than 5					
Young	Less Than 5					
Zapata	10	9,081	110.12	39.76	91.68**	(57.55, 125.8)
Zavala	7	8,036	87.11	36.17	79.73**	(41.69, 117.8)

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.