

Incidence, Prevalence, Mortality

This chapter presents information on the incidence, prevalence, and mortality of the KHC ESRD population. **Incidence** is defined as the rate at which new cases of disease occur in a population during a specific period of time, or the rate of occurrence of a disease over a given period of time. For KHC data, incidence refers to the number of new applicants approved for benefits in the fiscal year being reported. This number does not include all of the new cases of ESRD in the state, but only those patients who apply for and are approved for KHC benefits. Incidence can be used as a population measure of the rate of occurrence of kidney disease.

Prevalence is defined as the number of individuals (per million) in a population who are affected with a particular disease during a given time period (period prevalence), and can be used as a population measure of disease burden and resource requirements. In the KHC Annual Report, prevalence rates are calculated using the number of recipients who were eligible at any time during the fiscal year being reported. This number does not include all of those affected with ESRD in the state, but only those KHC recipients who were eligible to receive benefits from KHC during the fiscal year being reported. Prevalence rates are affected by the number of new patients who come into the program and by the number of patients leaving the program.

Tables 17 and 18 in this chapter show the distribution of incidence and prevalence rates for FY94 and FY04 KHC applicants and recipients by age, gender, and ethnicity. The overall incidence rate for the KHC population (195 per million) continues to grow. Incidence rates increase as age increases, until age 75. The rates of new ESRD cases are higher for males than females, with rates at 218 and 172 per million, respectively.

Figure 20: Incidence per Million by Ethnic Group, FY94 & FY04

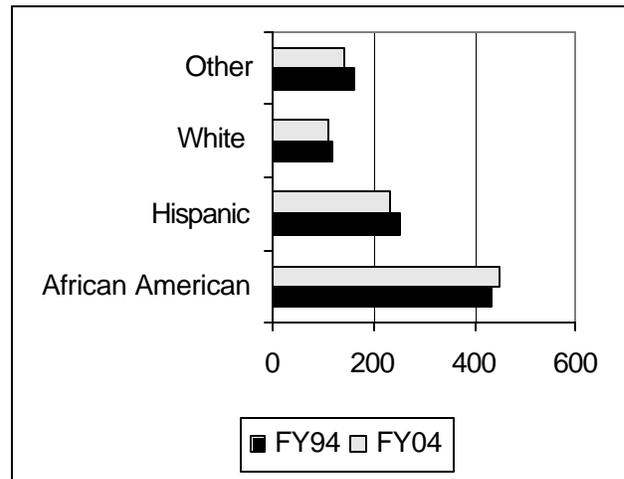


Figure 20 shows that the greatest disparity in KHC incidence rates exists between ethnic groups. The incidence rate for African Americans (565 per million) is the highest by race -- in fact, the rate for African Americans is more than twice the rate for the general population and almost four times higher than that of the White group.

Much like incidence, prevalence rates increase as age increases, until age 75. The rate of prevalent ESRD patients in FY04 is higher for males than females, with rates at 1,169 and 1,019 per million, respectively (Table 19, page 33).

For the KHC program, the greatest disparity in prevalence rates exists between ethnic groups. The prevalence rate for African Americans (2,741 per million) is more than five times larger than the prevalence rate of the White group (544 per million), and almost twice the rate of the Hispanic group (1,394). The overall prevalence rate for the KHC population continues to grow, at 1,094 cases per million, as compared to 711 per million in FY94.

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Table 17: Incidence by Age, Gender and Ethnicity, Per Million

Age Group	1994			2004		
	Applicants	Incidence	1994 Population	Applicants	Incidence	2004 Population
0-20	67	11	6,197,957	40	6	7,094,450
21-34	327	79	4,131,080	307	66	4,637,672
35-44	436	152	2,877,614	493	148	3,329,756
45-54	615	311	1,978,003	955	322	2,962,828
55-64	837	631	1,326,398	1,110	572	1,940,510
65-74	831	775	1,071,658	870	728	1,194,624
75 & Over	411	517	795,475	548	549	998,286
Gender						
Female	1,713	184	9,303,428	1,913	172	11,122,060
Male	1,811	200	9,074,757	2,410	218	11,036,066
Ethnic Group						
African American	925	432	2,141,275	1,145	449	2,548,851
Hispanic	1,257	252	4,978,510	1,778	235	7,553,619
White	1,274	118	10,831,359	1,290	114	11,267,243
Other	68	159	427,041	110	140	788,413
KHC Incidence	3,524	192	18,378,185	4,323	195	22,158,126

As of 10/06/04, ASKIT.

Table 18: Incidence by Public Health Region, Per Million

REGION	1994			2004		
	Applicants	Incidence	1994 Population	Applicants	Incidence	2004 Population
1	141	186	757,048	174	216	804,954
2	87	163	535,051	94	169	557,715
3	703	153	4,608,625	955	162	5,896,629
4	237	252	939,037	215	206	1,041,550
5	145	207	699,662	143	189	757,560
6	629	148	4,259,662	947	183	5,183,638
7	339	177	1,913,485	401	162	2,478,614
8	508	262	1,938,807	571	254	2,252,457
9	96	181	529,480	110	204	539,272
10	234	347	675,087	260	346	751,824
11	405	266	1,522,241	453	239	1,893,913
Totals	3,524	192	18,378,185	4,323	195	22,158,126

As of 10/06/04, ASKIT.

Table 19: Prevalence by Age, Gender and Ethnicity, Per Million

Age Group	1994		2004			
	Eligible Recipients	Prevalence	1994 Population	Eligible Recipients	Prevalence	2004 Population
0-20	Data unavailable due to changes in age groupings.		6,197,957	58	8	7,094,450
21-34			4,131,080	1,803	389	4,637,672
35-44			2,877,614	3,265	981	3,329,756
45-54			1,978,003	5,336	1,801	2,962,828
55-64			1,326,398	6,140	3,164	1,940,510
65-74			1,071,658	4,921	4,119	1,194,624
75 & Over			795,475	2,716	2,721	998,286
Gender						
Female	6,290	676	9,303,428	11,335	1,019	11,122,060
Male	6,769	746	9,074,757	12,904	1,169	11,036,066
Ethnic Group						
African American	3,877	1,811	2,141,275	6,987	2,741	2,548,851
Hispanic	4,518	908	4,978,510	10,529	1,394	7,553,619
White	4,429	409	10,831,359	6,127	544	11,267,243
Other	235	550	427,041	596	756	788,413
KHC Prevalence	*13,059	711	18,378,185	24,239	1,094	22,158,126

As of 10/06/04, ASKIT.

Table 20: Prevalence by Public Health Region, Per Million

REGION	1994		2004			
	Eligible Recipients	Prevalence	1994 Population	Eligible Recipients	Prevalence	2004 Population
1	621	820	757,048	864	1,073	804,954
2	320	598	535,051	518	929	557,715
3	2,678	581	4,608,625	5,152	874	5,896,629
4	846	901	939,037	1,189	1,142	1,041,550
5	600	858	699,662	822	1,085	757,560
6	2,439	573	4,259,662	5,078	980	5,183,638
7	1,215	635	1,913,485	2,289	923	2,478,614
8	1,863	961	1,938,807	3,380	1,501	2,252,457
9	350	661	529,480	537	996	539,272
10	690	1,022	675,087	1,269	1,688	751,824
11	1,444	949	1,522,241	3,141	1,658	1,893,913
Totals	*13,066	711	18,378,185	24,239	1,094	22,158,126

As of 10/06/04, ASKIT.

* The disparity between these two numbers exists because of different dates of data sources. The number 13,059 is from the most current data source.

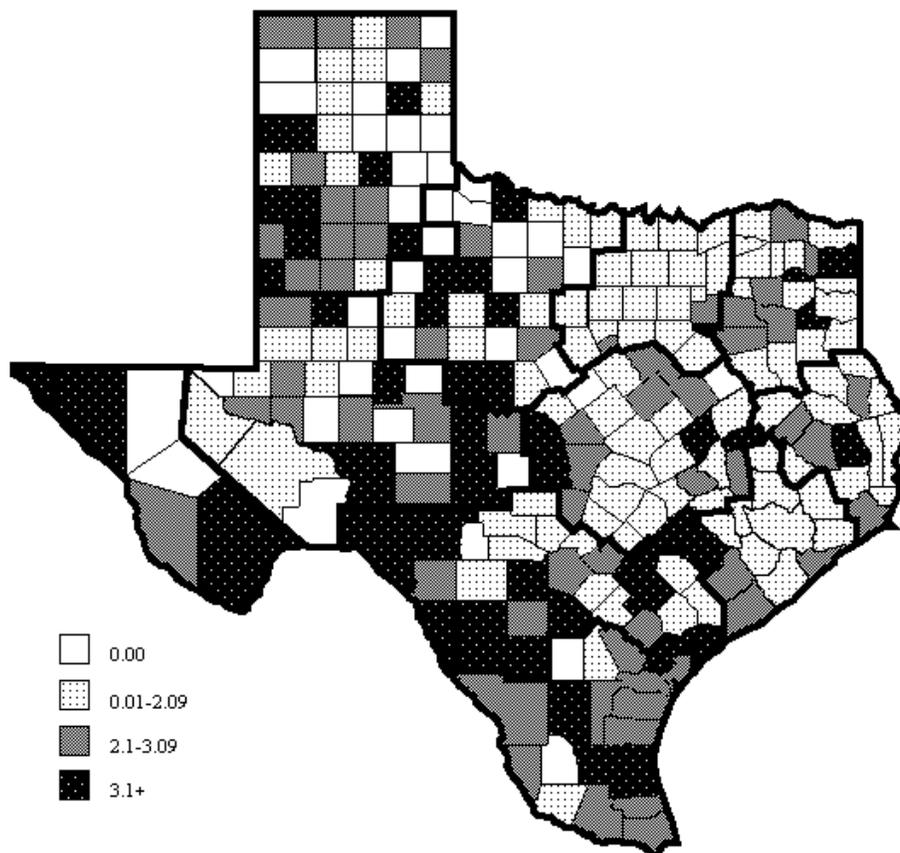
Incidence by County

As previously mentioned, incidence is the number of individuals who applied for KHC benefits in a given fiscal year per 1,000,000 people in the general population. For the purpose of this report, incidence by county is reported as the number of new KHC applicants per 10,000 in the population. For example, the incidence rate for the state as a whole in FY04 was 1.95 per 10,000 residents. Using this figure, incidence by counties can be compared. For example, Dimmit County has a population of 10,525, so the number of applicants for that county, if typical, would be between two and three. However, in this example, the incidence rate is actually 4.75, as there were five KHC applicants from this county in FY04.

When the incidence rate is examined on a county by county basis, there is a wide range of variation.

In FY04, 38 counties had no applicants approved for KHC benefits, or zero incidence. Alternatively, 129 counties had an incidence rate at or above the state rate of 1.95. The highest incidence rate for any county was in Kenedy, at 22.83 per 10,000. This number however, is misleading, because Kenedy county has a population of 438, therefore, one applicant in FY04 inflates the rate for that county.

When comparing incidence rates with counties of similar population numbers, one can see there is great disparity. For example, the incidence rate of Bexar County is almost twice as high as that of Tarrant County. Similarly, the incidence rate of El Paso County is more than two times greater than that of Travis County. This may be due to the higher number of Hispanics in Bexar and El Paso counties and the high incidence of diabetes within this population.



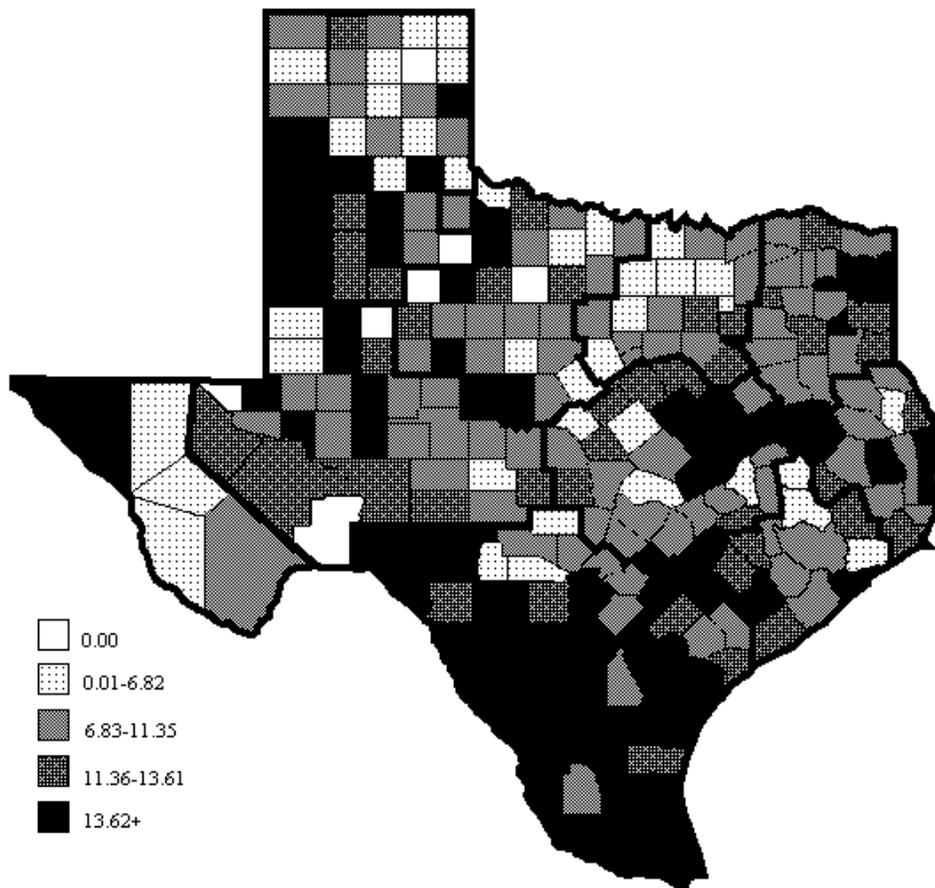
Prevalence by County

Prevalence is defined as the number of individuals in a population (per million) who are affected with a particular disease over a given period of time (period prevalence). Despite the close interrelationship between incidence and prevalence, prevalence is perhaps a more useful measure of disease association for health care providers because prevalence measures can be used to assess the public health impact of a specific disease within a community. While incidence rates show the number of new applicants over a specific period of time, prevalence rates indicate the long-term accumulation of KHC recipients. For the purpose of this report, prevalence by county is reported as the number of KHC active recipients per 10,000 in the population. In many ways, the prevalence map presents a much clearer picture, because it shows where KHC active

recipients currently reside and where the need for benefits is the greatest.

The prevalence rate for the state as a whole in FY04 was 10.94 per 10,000 residents. However, when prevalence rates are examined on a county by county basis, we find that six counties had no active KHC recipients, or zero prevalence. Alternatively, 248 counties had active program recipients during FY04.

Much like incidence, when comparing prevalence rates with counties of similar population numbers, one can see that disparities exist. For example, the prevalence rate of Nueces County is three times as high as that of Montgomery County. Again, this is probably due to the higher number of Hispanics in Nueces County and the high prevalence of diabetes within this population.



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Table 21: Region 1 Incidence, Prevalence, and Expenditures by County

COUNTY	2004 County Population	FY04 Applicants	Incidence per 10,000	Eligible FY04 Recipients	Prevalence per 10,000	KHC FY04 Expenditures*
Armstrong	2,153	0	0.00	2	9.29	\$ 2,120
Bailey	6,752	3	4.44	14	20.73	29,062
Briscoe	1,807	1	5.53	1	5.53	450
Carson	6,510	0	0.00	4	6.14	5,050
Castro	8,591	2	2.33	13	15.13	11,898
Childress	7,731	0	0.00	5	6.47	18,439
Cochran	3,847	1	2.60	7	18.20	10,226
Collingsworth	3,162	0	0.00	3	9.49	4,026
Crosby	7,305	2	2.74	14	19.16	7,400
Dallam	6,466	2	3.09	5	7.73	2,406
Deaf Smith	19,309	10	5.18	50	25.89	42,458
Dickens	2,730	3	10.99	2	7.33	456
Donley	3,798	0	0.00	2	5.27	7,599
Floyd	7,888	2	2.54	18	22.82	26,164
Garza	4,952	1	2.02	6	12.12	1,736
Gray	22,436	7	3.12	19	8.47	9,399
Hale	37,700	10	2.65	47	12.47	31,568
Hall	3,748	0	0.00	7	18.68	9,293
Hansford	5,466	1	1.83	5	9.15	19,317
Hartley	5,607	0	0.00	1	1.78	3,155
Hemphill	3,391	1	2.95	2	5.90	3,829
Hockley	23,427	8	3.41	38	16.22	85,346
Hutchinson	23,979	3	1.25	15	6.26	16,867
King	363	0	0.00	0	0.00	78
Lamb	14,956	5	3.34	28	18.72	34,653
Lipscomb	3,044	0	0.00	2	6.57	1,561
Lubbock	249,818	68	2.72	286	11.45	190,359
Lynn	6,701	2	2.98	9	13.43	5,496
Moore	21,232	4	1.88	15	7.06	27,366
Motley	1,413	0	0.00	1	7.08	881
Ochiltree	9,272	2	2.16	3	3.24	1,199
Oldham	2,254	0	0.00	2	8.87	2,220
Parmer	10,204	1	0.98	14	13.72	37,339
Potter	119,167	17	1.43	115	9.65	87,992
Randall	109,154	9	0.82	51	4.67	37,178
Roberts	894	0	0.00	0	0.00	0
Sherman	3,297	1	3.03	4	12.13	4,373
Swisher	8,502	1	1.18	12	14.11	27,578
Terry	13,163	3	2.28	19	14.43	21,646
Wheeler	5,148	1	1.94	8	15.54	4,986
Yoakum	7,617	3	3.94	15	19.69	28,630
Region 1 Totals	804,954	174	2.16	864	10.73	\$ 861,800

* As of 11/05/04, ASKIT.

Table 22: Region 2 Incidence, Prevalence, and Expenditures by County

COUNTY	2004 County Population	FY04 Applicants	Incidence per 10,000	Eligible FY04 Recipients	Prevalence per 10,000	KHC FY04 Expenditures*
Archer	9,182	0	0.00	2	2.18	\$ 128
Baylor	3,976	0	0.00	4	10.06	5,335
Brown	38,271	8	2.09	35	9.15	17,451
Callahan	13,082	0	0.00	8	6.12	28,153
Clay	11,133	1	0.90	6	5.39	4,290
Coleman	9,143	5	5.47	13	14.22	6,284
Comanche	14,066	0	0.00	5	3.55	981
Cottle	1,864	0	0.00	2	10.73	4,687
Eastland	18,256	4	2.19	17	9.31	24,253
Fisher	4,296	2	4.66	4	9.31	10,381
Foard	1,605	0	0.00	3	18.69	2,971
Hardeman	4,669	0	0.00	3	6.43	1,988
Haskell	5,934	2	3.37	7	11.80	18,610
Jack	8,858	0	0.00	7	7.90	3,544
Jones	20,930	2	0.96	23	10.99	17,977
Kent	841	0	0.00	0	0.00	0
Knox	4,197	1	2.38	7	16.68	7,965
Mitchell	9,693	0	0.00	11	11.35	8,878
Montague	19,357	4	2.07	15	7.75	8,829
Nolan	16,089	4	2.49	24	14.92	32,167
Runnels	11,581	6	5.18	16	13.82	15,188
Scurry	16,529	3	1.81	21	12.70	44,558
Shackelford	3,330	3	9.01	3	9.01	2,464
Stephens	9,706	2	2.06	11	11.33	16,443
Stonewall	1,680	1	5.95	4	23.81	6,003
Taylor	130,536	18	1.38	112	8.58	86,822
Throckmorton	1,848	0	0.00	0	0.00	0
Wichita	134,262	18	1.34	116	8.64	57,438
Wilbarger	14,853	5	3.37	17	11.45	14,578
Young	17,948	5	2.79	22	12.26	28,913
Region 2 Totals	557,715	94	1.69	518	9.29	\$ 477,277

* As of 11/05/04, ASKIT.

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Table 23: Region 3 Incidence, Prevalence, and Expenditures by County

COUNTY	2004 County Population	FY04 Applicants	Incidence per 10,000	Eligible FY04 Recipients	Prevalence per 10,000	KHC FY04 Expenditures*
Collin	560,454	40	0.71	197	3.52	\$ 216,988
Cooke	37,215	7	1.88	19	5.11	31,008
Dallas	2,355,204	481	2.04	2,739	11.63	2,154,846
Denton	496,427	44	0.89	204	4.11	164,738
Ellis	120,342	22	1.83	116	9.64	93,869
Erath	34,369	4	1.16	21	6.11	32,627
Fannin	31,949	6	1.88	27	8.45	22,827
Grayson	113,372	18	1.59	99	8.73	103,204
Hood	43,939	7	1.59	31	7.06	26,139
Hunt	81,722	10	1.22	76	9.30	52,407
Johnson	136,201	28	2.06	98	7.20	114,048
Kaufman	77,905	20	2.57	92	11.81	97,448
Navarro	46,677	3	0.64	54	11.57	36,625
Palo Pinto	27,718	5	1.80	19	6.85	24,257
Parker	94,880	7	0.74	53	5.59	50,168
Rockwall	47,973	10	2.08	25	5.21	25,296
Somervell	7,075	2	2.83	6	8.48	10,437
Tarrant	1,530,647	230	1.50	1,245	8.13	891,478
Wise	52,560	11	2.09	31	5.90	27,424
Region 3 Totals	5,896,629	955	1.62	5,152	8.74	\$ 4,175,833

* As of 11/05/04, ASKIT.

Table 24: Region 4 Incidence, Prevalence, and Expenditures by County

COUNTY	2004 County Population	FY04 Applicants	Incidence per 10,000	Eligible FY04 Recipients	Prevalence per 10,000	KHC FY04 Expenditures*
Anderson	56,185	10	1.78	57	10.15	\$ 60,245
Bowie	90,199	13	1.44	74	8.20	39,687
Camp	11,953	4	3.35	24	20.08	41,143
Cass	30,273	11	3.63	44	14.53	55,189
Cherokee	47,941	5	1.04	44	9.18	43,962
Delta	5,285	1	1.89	6	11.35	1,571
Franklin	9,481	1	1.05	10	10.55	15,418
Gregg	114,303	43	3.76	171	14.96	113,485
Harrison	64,218	11	1.71	79	12.30	89,038
Henderson	77,511	19	2.45	87	11.22	82,678
Hopkins	32,494	4	1.23	25	7.69	26,505
Lamar	48,874	3	0.61	51	10.43	26,599
Marion	11,086	2	1.80	17	15.33	15,804
Morris	13,036	4	3.07	19	14.58	17,122
Panola	22,991	3	1.30	27	11.74	15,150
Rains	9,632	1	1.04	13	13.50	16,926
Red River	14,259	3	2.10	19	13.32	17,816
Rusk	47,843	4	0.84	46	9.61	49,473
Smith	180,003	41	2.28	221	12.28	202,184
Titus	29,270	4	1.37	33	11.27	40,170
Upshur	36,456	5	1.37	35	9.60	25,977
Van Zandt	50,193	15	2.99	49	9.76	61,594
Wood	38,064	8	2.10	38	9.98	42,786
Region 4 Totals	1,041,550	215	2.06	1,189	11.42	\$ 1,100,522

* As of 11/05/04, ASKIT.

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Table 25: Region 5 Incidence, Prevalence, and Expenditures by County

COUNTY	2004 County Population	FY04 Applicants	Incidence per 10,000	Eligible FY04 Recipients	Prevalence per 10,000	KHC FY04 Expenditures*
Angelina	82,562	7	0.85	82	9.93	\$ 104,894
Hardin	49,857	8	1.60	48	9.63	57,482
Houston	23,143	3	1.30	32	13.83	25,175
Jasper	36,712	6	1.63	37	10.08	38,213
Jefferson	255,215	62	2.43	305	11.95	271,872
Nacogdoches	60,683	9	1.48	58	9.56	83,542
Newton	15,435	3	1.94	27	17.49	24,009
Orange	86,858	9	1.04	67	7.71	58,583
Polk	42,884	12	2.80	37	8.63	36,486
Sabine	10,453	1	0.96	13	12.44	16,627
San Augustine	8,988	2	2.23	5	5.56	10,772
San Jacinto	23,536	4	1.70	28	11.90	21,247
Shelby	25,728	5	1.94	26	10.11	29,072
Trinity	13,923	3	2.15	26	18.67	32,804
Tyler	21,583	9	4.17	31	14.36	37,656
Region 5 Totals	757,560	143	1.89	822	10.85	\$ 848,434

* As of 11/05/04, ASKIT.

Table 26: Region 6 Incidence, Prevalence, and Expenditures by County

COUNTY	2004 County Population	FY04 Applicants	Incidence per 10,000	Eligible FY04 Recipients	Prevalence per 10,000	KHC FY04 Expenditures*
Austin	24,355	5	2.05	31	12.73	\$ 62,512
Brazoria	259,250	46	1.77	221	8.52	223,869
Chambers	28,090	2	0.71	8	2.85	14,384
Colorado	20,588	7	3.40	28	13.60	40,446
Fort Bend	392,202	53	1.35	276	7.04	282,172
Galveston	258,004	64	2.48	355	13.76	295,377
Harris	3,618,746	679	1.88	3,701	10.23	3,005,039
Liberty	74,696	15	2.01	87	11.65	79,191
Matagorda	38,889	10	2.57	50	12.86	40,512
Montgomery	326,694	39	1.19	183	5.60	175,128
Walker	64,226	10	1.56	43	6.70	33,278
Waller	35,850	7	1.95	33	9.21	47,004
Wharton	42,048	10	2.38	62	14.75	55,803
Region 6 Totals	5,183,638	947	1.83	5,078	9.80	\$ 4,354,716

* As of 11/05/04, ASKIT.

Table 27: Region 7 Incidence, Prevalence, and Expenditures by County

COUNTY	2004 County Population	FY04 Applicants	Incidence per 10,000	Eligible FY04 Recipients	Prevalence per 10,000	KHC FY04 Expenditures*
Bastrop	64,329	13	2.02	67	10.42	\$ 107,590
Bell	255,365	33	1.29	224	8.77	124,050
Blanco	8,953	2	2.23	6	6.70	6,997
Bosque	17,556	3	1.71	21	11.96	35,433
Brazos	159,004	26	1.64	95	5.97	56,593
Burleson	17,181	4	2.33	17	9.89	20,724
Burnet	37,061	11	2.97	36	9.71	37,671
Caldwell	35,063	5	1.43	60	17.11	98,380
Coryell	80,755	12	1.49	47	5.82	37,263
Falls	18,895	2	1.06	37	19.58	38,879
Fayette	22,110	8	3.62	34	15.38	33,551
Freestone	18,118	0	0.00	18	9.93	20,783
Grimes	24,693	6	2.43	27	10.93	16,984
Hamilton	8,207	0	0.00	11	13.40	14,889
Hays	111,712	20	1.79	126	11.28	110,850
Hill	33,596	9	2.68	42	12.50	56,761
Lampasas	18,620	5	2.69	24	12.89	32,786
Lee	16,413	2	1.22	15	9.14	18,836
Leon	15,797	3	1.90	23	14.56	27,856
Limestone	22,508	5	2.22	32	14.22	36,489
Llano	16,610	6	3.61	21	12.64	24,179
Madison	219,295	5	3.75	11	8.26	9,943
McLennan	13,318	47	2.14	302	13.77	214,893
Milam	24,674	4	1.62	41	16.62	45,817
Mills	5,100	1	1.96	3	5.88	3,602
Robertson	16,387	6	3.66	36	21.97	30,194
San Saba	6,214	2	3.22	7	11.26	7,666
Travis	874,737	115	1.31	680	7.77	565,064
Washington	31,109	5	1.61	39	12.54	17,244
Williamson	285,234	41	1.44	187	6.56	152,272
Region 7 Totals	2,478,614	401	1.62	2,289	9.23	\$ 2,004,240

* As of 11/05/04, ASKIT.

Kidney Health Care

Table 28: Region 8 Incidence, Prevalence, and Expenditures by County

COUNTY	2004 County Population	FY04 Applicants	Incidence per 10,000	Eligible FY04 Recipients	Prevalence per 10,000	KHC FY04 Expenditures*
Atascosa	41,296	16	3.87	67	16.22	\$ 58,699
Bandera	19,064	3	1.57	12	6.29	13,271
Bexar	1,457,847	356	2.44	2,290	15.71	1,358,503
Calhoun	21,370	10	4.68	25	11.70	15,959
Comal	85,504	17	1.99	97	11.34	66,319
DeWitt	20,142	8	3.97	24	11.92	43,333
Dimmit	10,525	5	4.75	24	22.80	9,973
Edwards	2,227	1	4.49	6	26.94	13,210
Frio	17,010	5	2.94	39	22.93	32,886
Gillespie	21,016	1	0.48	10	4.76	9,040
Goliad	7,055	2	2.83	10	14.17	16,076
Gonzales	19,051	8	4.20	41	21.52	37,317
Guadalupe	95,974	28	2.92	103	10.73	65,932
Jackson	14,754	3	2.03	12	8.13	15,337
Karnes	16,016	1	0.62	26	16.23	25,051
Kendall	25,829	4	1.55	19	7.36	18,033
Kerr	44,081	7	1.59	37	8.39	34,132
Kinney	3,374	1	2.96	4	11.86	6,524
La Salle	6,142	3	4.88	13	21.17	13,546
Lavaca	18,971	4	2.11	31	16.34	33,656
Maverick	50,649	24	4.74	132	26.06	72,259
Medina	42,123	14	3.32	56	13.29	39,091
Real	3,037	0	0.00	2	6.59	776
Uvalde	26,914	5	1.86	45	16.72	24,891
Val Verde	47,486	17	3.58	92	19.37	62,866
Victoria	87,527	15	1.71	88	10.05	98,788
Wilson	35,461	5	1.41	36	10.15	40,739
Zavala	12,012	8	6.66	39	32.47	21,617
Region 8 Totals	2,252,457	571	2.54	3,380	15.01	\$ 2,247,826

* As of 11/05/04, ASKIT.

Table 29: Region 9 Incidence, Prevalence, and Expenditures by County

COUNTY	2004 County Population	FY04 Applicants	Incidence per 10,000	Eligible FY04 Recipients	Prevalence per 10,000	KHC FY04 Expenditures*
Andrews	13,374	2	1.50	8	5.98	\$ 12,999
Borden	746	0	0.00	0	0.00	0
Coke	3,798	0	0.00	3	7.90	5,174
Concho	4,056	2	4.93	4	9.86	5,019
Crane	4,161	1	2.40	6	14.42	5,213
Crockett	4,241	2	4.72	5	11.79	9,723
Dawson	15,165	5	3.30	27	17.80	41,131
Ector	125,558	28	2.23	135	10.75	88,042
Gaines	15,081	4	2.65	10	6.63	9,688
Glasscock	1,461	0	0.00	2	13.69	1,480
Howard	33,923	3	0.88	41	12.09	27,200
Irion	1,817	0	0.00	2	11.01	1,893
Kimble	4,461	2	4.48	5	11.21	11,048
Loving	67	0	0.00	0	0.00	0
Martin	8,177	1	2.04	9	18.38	13,228
Mason	4,897	0	0.00	5	13.56	9,134
McCulloch	3,688	2	2.45	8	9.78	6,320
Menard	2,350	1	4.26	1	4.26	172
Midland	119,143	13	1.09	101	8.48	96,259
Pecos	17,167	3	1.75	21	12.23	35,500
Reagan	3,490	1	2.87	5	14.33	3,770
Reeves	13,486	2	1.48	16	11.86	40,530
Schleicher	3,004	0	0.00	3	9.99	7,207
Sterling	1,435	1	6.97	1	6.97	1,141
Sutton	4,253	1	2.35	5	11.76	8,469
Terrell	1,109	0	0.00	0	0.00	0
Tom Green	107,255	32	2.98	84	7.83	90,587
Upton	3,518	0	0.00	3	8.53	3,521
Ward	11,098	3	2.70	9	8.11	16,635
Winkler	7,293	1	1.37	18	24.68	42,539
Region 9 Totals	539,272	110	2.04	537	9.96	\$ 593,621

* As of 11/05/04, ASKIT.

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Table 30: Region 10 Incidence, Prevalence, and Expenditures by County

COUNTY	2004 County Population	FY04 Applicants	Incidence per 10,000	Eligible FY04 Recipients	Prevalence per 10,000	KHC FY04 Expenditures*
Brewster	9,121	4	4.39	7	7.67	\$ 2,079
Culberson	3,133	0	0.00	2	6.38	3,517
El Paso	726,081	251	3.46	1,250	17.22	1,041,411
Hudspeth	3,534	3	8.49	6	16.98	9,908
Jeff Davis	2,256	0	0.00	1	4.43	2,117
Presidio	7,699	2	2.60	3	3.90	3,034
Region 10 Totals	751,824	260	3.46	1,269	16.88	\$ 1,062,066

* As of 11/05/04, ASKIT.

Table 31: Region 11 Incidence, Prevalence, and Expenditures by County

COUNTY	2004 County Population	FY04 Applicants	Incidence per 10,000	Eligible FY04 Recipients	Prevalence per 10,000	KHC FY04 Expenditures*
Aransas	23,230	5	2.15	35	15.07	\$ 29,514
Bee	33,136	8	2.41	54	16.30	42,168
Brooks	8,201	3	3.66	18	21.95	11,764
Cameron	366,569	80	2.18	606	16.53	411,734
Duval	13,411	8	5.97	35	26.10	20,897
Hidalgo	636,492	141	2.22	1,048	16.47	701,703
Jim Hogg	5,387	0	0.00	5	9.28	9,135
Jim Wells	40,552	12	2.96	85	20.96	67,372
Kenedy	438	1	22.83	1	22.83	574
Kleberg	33,621	8	2.38	45	13.38	23,898
Live Oak	12,509	2	1.60	11	8.79	17,696
McMullen	870	0	0.00	2	22.99	2,331
Nueces	328,969	96	2.92	545	16.57	319,089
Refugio	7,969	3	3.76	16	20.08	15,962
San Patricio	72,434	20	2.76	111	15.32	82,933
Starr	58,498	5	0.85	101	17.27	47,967
Webb	217,741	53	2.43	362	16.63	219,039
Willacy	21,023	5	2.38	41	19.50	21,297
Zapata	12,863	3	2.33	20	15.55	29,223
Region 11 Totals	1,893,913	453	2.39	3,141	16.58	\$ 2,074,295

* As of 11/05/04, ASKIT.

Table 32: Regional Incidence, Prevalence, and Expenditures

Region	2004 County Population	FY04 Applicants	Incidence per Million	Eligible FY04 Recipients	Prevalence per Million	KHC FY04 Expenditures*
1	804,954	174	216	864	1,073	\$ 861,800
2	557,715	94	169	518	929	477,277
3	5,896,629	955	162	5,152	874	4,175,833
4	1,041,550	215	206	1,189	1,142	1,100,522
5	757,560	143	189	822	1,085	848,434
6	5,183,638	947	183	5,078	980	4,354,716
7	2,478,614	401	162	2,289	923	2,004,240
8	2,252,457	571	254	3,380	1,501	2,247,826
9	539,272	110	204	537	996	593,621
10	751,824	260	346	1,269	1,688	1,062,066
11	1,893,913	453	239	3,141	1,658	2,074,295
Totals	22,158,126	4,323	195	24,239	1,094	\$ 19,800,630

* As of 11/05/04, ASKIT.

Kidney Health Care

Facility Information by Region

The Kidney Health Care Act of 1973 authorized the Kidney Health Care Program to enter into agreements and contracts to provide for payment of services to carry out the intent of the Act (Texas Health and Safety Code, Chapter 42, Section 3-12).

To be a KHC approved provider, the facility must be licensed by DSHS, be approved by Medicare and Medicaid, and agree to the KHC agreement terms.

The table below reflects the number of KHC outpatient dialysis facilities and transplant centers, along with the number of dialysis stations available per Public Health Region, and if CAPD and CCPD are provided. Additionally, the number of applicants and eligible program recipients as reported by facility patient census is reflected.

KHC has agreements with approximately 660 providers, including outpatient dialysis facilities, hospitals, transplant hospitals, and physicians. KHC only accepts patient applications from outpatient facilities and hospital providers.

Regional Provider Information

Region Totals	Facility Count	Out-pt. Dialysis Stations	Trans-plant Center	CAPD* Available	CCPD† Available	FY04 Applicants	KHC Eligible Recipients
Region 1	11	335	1	5	5	174	864
Region 2	5	129	0	1	0	94	491
Region 3	63	1,683	9	12	11	955	5,152
Region 4	21	448	1	3	2	215	1,189
Region 5	18	383	0	4	3	143	822
Region 6	78	1,963	5	22	26	947	5,078
Region 7	29	923	2	6	4	401	2,289
Region 8	52	1,094	3	6	4	571	3,380
Region 9	6	187	0	0	0	110	537
Region 10	11	367	1	6	6	260	1,269
Region 11	39	958	0	11	10	453	3,141
Out of State	2	104	1	0	0	0	27
Total	335	8,574	23	76	71	4,323	24,239

* Continuous Ambulatory Peritoneal Dialysis

† Continuous Cycling Peritoneal Dialysis

‡ Data reflects actual patient census per facility and not by patient county or region of residence as indicated on regional maps.

KHC Mortality Data

This section focuses on mortality data for the KHC incident dialysis population (hemodialysis, CAPD, and CCPD) by age, ethnicity, and primary diagnosis. In FY01, the methodology for calculating mortality data was changed. Dialytic applicants are now categorized by the calendar year of first dialysis treatment and by year of reported death for years one through three. Years two and three are cumulative numbers. No adjustments for age, race, sex, diagnosis characteristics, co-morbid conditions, and disease severity were made to this data.

As Table 33 shows, 1,094 African American applicants were approved for benefits in calendar year 1999. Of this number, 100 deaths were reported to KHC within the first year of treatment - a crude mortality rate of 9.1%. By the end of year two, the mortality rate had more than doubled, to 19.8%, and by the end of year three, the mortality rate increased to 30.4%.

For KHC, it is important to note that while the number of applicants is higher in the Hispanic group for all years being reported, the mortality rate for the White group is highest for all three years being reported. As noted in the United States Renal Data System 2004 Annual Data Report, White patients are least likely to survive five years after initiating ESRD therapy, as compared to Hispanics and patients of other ethnicities, which for KHC, could be due to the later age of onset within the White group.

Lower mortality rates for the newest ESRD patients are consistent with improvements in patient survival, while the increased rate for patients who have been on the program longer shows the need for greater attention to factors that develop over time, such as abnormalities in mineral calcification, lipid disorders, and diabetic and cardiovascular complications (United States Renal Data System, 2003 Annual Data Report).

Table 33: Mortality by Ethnic Group & 1st Date of Dialysis

Ethnic Group	1st Date of Dialysis Calendar Year	# Applicants	# Deaths by End of 1st Year	Mortality Rate	# Deaths by End of 2nd Year	Mortality Rate	# Deaths by End of 3rd Year	Mortality Rate
African American	1999	1,094	100	9.1%	217	19.8%	333	30.4%
	2000	1,021	110	10.8%	246	24.1%	335	32.8%
	2001	1,120	105	9.4%	230	20.5%	320	28.6%
	2002	1,117	106	9.5%	200	17.9%		
	2003	988	97	9.8%				
Hispanic	1999	1,638	186	11.4%	374	22.8%	550	33.6%
	2000	1,740	170	9.8%	346	19.9%	535	30.7%
	2001	1,770	206	11.6%	404	22.8%	572	32.3%
	2002	1,815	184	10.1%	357	19.7%		
	2003	1,736	171	9.9%				
White	1999	1,157	221	19.1%	420	36.3%	561	48.5%
	2000	1,052	174	16.5%	337	32.0%	465	44.2%
	2001	1,151	202	17.5%	385	33.4%	522	45.4%
	2002	1,133	204	18.0%	358	31.6%		
	2003	1,006	159	15.8%				
Other	1999	73	8	11.0%	16	21.9%	22	30.1%
	2000	92	12	13.0%	23	25.0%	33	35.9%
	2001	74	3	4.1%	11	14.9%	17	23.0%
	2002	57	7	12.3%	11	19.3%		
	2003	91	9	9.9%				

As of 11/12/04, ASKIT.

Table 34: Mortality by Primary Diagnosis & 1st Date of Dialysis

Primary Diagnosis	1 st Date of Dialysis Calendar Year	# Applicants	# Deaths by End of 1 st Year	Mortality Rate	# Deaths by End of 2 nd Year	Mortality Rate	# Deaths by End of 3 rd Year	Mortality Rate
Diabetes	1999	2,254	278	12.3%	579	25.7%	848	37.6%
	2000	2,302	263	11.4%	555	24.1%	823	35.8%
	2001	2,350	295	12.6%	596	25.4%	823	35.0%
	2002	2,350	239	10.2%	506	21.5%		
	2003	2,160	227	10.5%				
Hypertension	1999	912	117	12.8%	232	25.4%	341	37.4%
	2000	922	113	12.3%	228	24.7%	310	33.6%
	2001	996	122	12.2%	247	24.8%	343	34.4%
	2002	954	145	15.2%	228	23.9%		
	2003	931	93	10.0%				
Glomerulonephritis	1999	304	41	13.5%	72	23.7%	97	31.9%
	2000	246	28	11.4%	46	18.7%	72	29.3%
	2001	242	26	10.7%	50	20.7%	67	27.7%
	2002	261	25	9.6%	44	16.9%		
	2003	254	32	12.6%				
Other	1999	492	79	16.1%	144	29.3%	180	36.6%
	2000	435	61	14.0%	122	28.0%	161	37.0%
	2001	527	73	13.9%	137	26.0%	186	35.3%
	2002	557	92	16.5%	144	25.9%		
	2003	476	65	13.7%				

As of 11/12/04, ASKIT.

Table 34 reports on KHC mortality by primary diagnosis. Of those diabetic applicants who entered the program in calendar year 1999, 12.3% had died within the first year of treatment; however, by the end of the second year of treatment, the mortality rate had more than doubled, and by the end of the third year of treatment, the mortality rate had increased to 37.6%.

For all years being reported, the diabetic group has the highest number of patient deaths. It is likely that the high mortality seen in this group of applicants is due to the long-term and serious complications associated with the burden of diabetes, particularly, the burden of cardiovascular disease within the KHC patient population.

When comparing applicants with a primary diagnosis of diabetes to those with a primary diagnosis of hypertension, mortality rates are fairly similar in the first and second years of treatment; however, when looking at third year death rates for these two groups, the mortality rate for diabetics surpasses the rate of those patients with hypertension.

Mortality rates for any group can be affected by multiple factors, such as age of entry into the program, primary diagnosis, disease severity, and other co-morbid conditions.

Table 35: Mortality by Age Group & 1st Date of Dialysis

Age Group	1 st Date of Dialysis Calendar Year	# Applicants	# Deaths by End of 1 st Year	Mortality Rate	# Deaths by End of 2 nd Year	Mortality Rate	# Deaths by End of 3 rd Year	Mortality Rate
0-20	1999	26	3	11.5%	4	15.4%	5	19.2%
	2000	28	0	0.0%	0	0.0%	0	0.0%
	2001	25	0	0.0%	0	0.0%	0	0.0%
	2002	12	0	0.0%	0	0.0%		
	2003	25	0	0.0%				
21-34	1999	179	12	6.7%	31	17.3%	38	21.2%
	2000	201	14	7.0%	28	13.9%	39	19.4%
	2001	231	12	5.2%	31	13.4%	46	19.9%
	2002	244	14	5.7%	23	9.4%		
	2003	227	16	7.0%				
35-44	1999	379	30	7.9%	62	16.4%	99	26.1%
	2000	358	22	6.1%	55	15.4%	77	21.5%
	2001	388	28	7.2%	51	13.1%	78	20.1%
	2002	412	29	7.0%	57	13.8%		
	2003	400	22	5.5%				
45-54	1999	738	68	9.2%	137	18.6%	215	29.1%
	2000	790	57	7.2%	139	17.6%	201	25.4%
	2001	805	63	7.8%	138	17.1%	205	25.5%
	2002	825	63	7.6%	126	15.3%		
	2003	820	64	7.8%				
55-64	1999	977	108	11.1%	211	21.6%	312	31.9%
	2000	960	104	10.8%	201	20.9%	304	31.7%
	2001	1045	128	12.2%	240	23.0%	347	33.2%
	2002	1037	103	9.9%	215	20.7%		
	2003	1009	95	9.4%				
65-74	1999	1052	152	14.4%	317	30.1%	449	42.7%
	2000	941	139	14.8%	265	28.2%	393	41.8%
	2001	1022	151	14.8%	317	31.0%	429	42.0%
	2002	930	141	15.2%	238	25.6%		
	2003	817	119	14.6%				
75+	1999	611	142	23.2%	265	43.4%	348	57.0%
	2000	627	130	20.7%	264	42.1%	354	56.5%
	2001	599	134	22.4%	253	42.2%	326	54.4%
	2002	662	151	22.8%	267	40.3%		
	2003	523	120	22.9%				

As of 11/12/04, ASKIT.

Table 35 shows that as age increases, so does mortality, and for KHC applicants, the 75+ age group has the highest mortality rate for all years being reported. Increasing age is usually associated with higher mortality, regardless of gender, ethnicity,

or primary diagnosis. The burden of cardiovascular disease seen in older patients is possibly one of many contributing factors to the high mortality rates seen in this patient population.