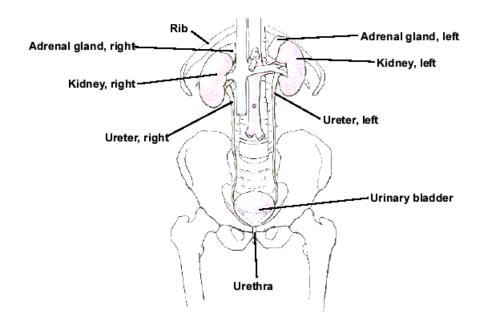
# KIDNEY AND RENAL PELVIS CANCER

# KIDNEY AND RENAL PELVIS CANCER GENERAL PROFILE<sup>4</sup>

Figure 114. Anatomy of the Urinary System<sup>5</sup>



**General Anatomy:** The kidneys are two reddish-brown, bean-shaped organs located just above the waist, one on each side of the spine. They are part of the urinary system. Their main function is to filter blood and produce urine to rid the body of waste. As blood flows through the kidneys, they remove waste products and unneeded water. The resulting liquid, urine, collects in the middle of each kidney in an area called the renal pelvis. Urine drains from each kidney through a long tube, the ureter, into the bladder, where it is stored. Urine leaves the body through another tube, called the urethra. The kidneys also produce substances that help control blood pressure and regulate the formation of red blood cells.

**Risk Factors:** Tobacco use, obesity, occupational exposure, radiation, phenacetin (prolonged heavy use of this painkiller), dialysis, and Von Hippel-Lindau (VHL) disease.

**Signs and Symptoms:** Blood in the urine, a lump or mass in the kidney area, and other less common symptoms may include: fatigue, loss of appetite, weight loss, recurrent fevers, a pain in the side that doesn't go away, or a general feeling of poor health.

**Diagnosing the Cancer:** Health exams, intravenous pyelogram (IVP), arteriography, computed tomography (CAT) scan, magnetic resonance imaging (MRI), and ultrasonography.

**Treatment:** Surgery (Simple or Radical Nephrectomy), arterial embolization, radiation therapy, biological therapy, chemotherapy, and hormone therapy.

### **HIGHLIGHTS**

- ➤ The ratio of the age-adjusted incidence rate, 11.4, to the age-adjusted mortality rate, 3.9 (per 100,000 2000 US Standard population), for Kidney and Renal Pelvis Cancer was 2.90 during the 1996 to 2000 period, which means that for every 2.90 Kidney and Renal Pelvis Cancer cases during this period, there was one death caused by this type of cancer in Nevada.
- Nevadan females had a higher ratio than males when the age-adjusted incidence and age-adjusted mortality rates for Kidney and Renal Pelvis Cancer were compared. For every female death due to this type of cancer there was 3.43 female cases while there were 2.64 male cases for every male Kidney and Renal Pelvis Cancer death in Nevada from 1996 to 2000.
- The median age at diagnosis of Kidney and Renal Pelvis Cancer for Nevada residents and females was 65 years of age from 1996 to 2000 while the median age for males was 64 years. The median age at time of death due to Kidney and Renal Pelvis Cancer was 70 years for Nevada overall, 68 years of age for males and 73 years of age for females.

#### **INCIDENCE**

- ➤ There were 995 cases of Kidney and Renal Pelvis Cancer in Nevada from 1996 to 2000. Nevada's Incidence rate for Kidney and Renal Pelvis Cancer (11.4) was only slightly higher than the National rate of 10.8 (per 100,000 2000 US Standard population) from 1996 to 2000. Regional comparisons showed little variation between Washoe County (12.3), All Other Counties (12.1) and Clark County (11.0) from 1996 to 2000. None of these differences were found to be statistically significant different from the National rate of 10.8 (per 100,000 2000 US Standard population).
- The higher age-adjusted incidence rate for male Kidney and Renal Pelvis Cancer, 15.1 (13.9-16.5), was statistically significant over the female rate of 8.0 (7.1-8.8), per 100,000 2000 US Standard population, during the 1996 to 2000 period.
- ➤ Blacks had the highest age-adjusted incidence rate, 13.0, for Kidney and Renal Pelvis Cancer of all racial/ethnic groups and were followed by Whites, Hispanics and Asians with rates of 12.1, 7.4 and 3.8 (per 100,000 2000 US Standard population), respectively, during the 1996 to 2000 period.
- ➤ The median age at diagnosis for Hispanics (56 years) was the lowest of any racial/ethnic group and was significantly lower than the statewide median age of 65 years for the 1996 to 2000 period.

#### **INPATIENT HOSPITAL DISCHARGES**

➤ There were 842 hospital inpatient discharges for a primary diagnosis of Kidney and Renal Pelvis Cancer to Nevada Residents from 1996 to 2000. Regional comparisons

- showed little difference between the age-adjusted inpatient discharge rates between All Other Counties (9.8), Clark County (9.7) and Washoe County (8.7, per 100,000 2000 US Standard population).
- ➤ Total billed charges for Kidney and Renal Pelvis Cancer inpatient hospital discharges in Nevada totaled nearly 24 million dollars from 1996 to 2000. The overall average billed charge per day for a hospital inpatient discharge due to this type of cancer was approximately \$4,300 in Nevada from 1996 to 2000.
- ➤ Washoe County had the highest median total billed amount (\$26,792), while the statewide median billed amount was \$21,442 from 1996 to 2000; with Clark County and All Other Counties with median billed amounts of \$21,482 and \$17,839.

#### **MORTALITY**

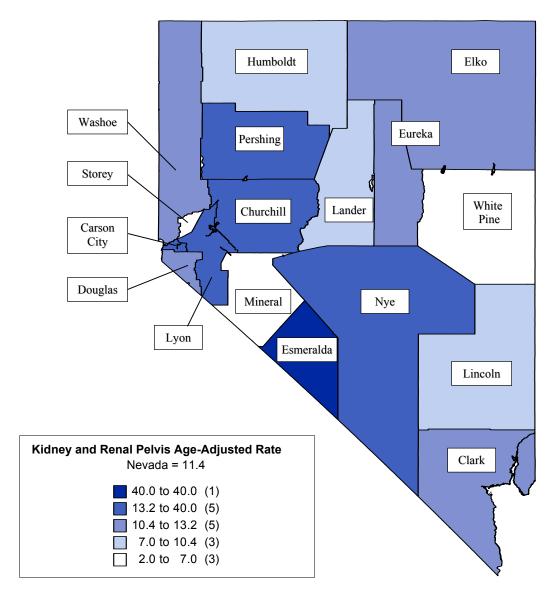
- ➤ There were 326 resident deaths due to Kidney and Renal Pelvis Cancer from 1996 to 2000. Males had a statistically significant age-adjusted mortality rate, 5.7 (5.0-6.6), more than double the female rate of 2.3 (1.9-2.8), per 100,000 2000 US Standard population, during this period.
- ➤ Blacks, as a racial/ethnic group, had the highest age-adjusted mortality rate for Kidney and Renal Pelvis Cancer of any racial/ethnic group, 30.0, and were followed by Whites, Asians, Native Americans, and Hispanics with rates of 23.7, 12.5, 12.0, and 11.3, (per 100,000 2000 US Standard population) respectively, from 1996 to 2000.
- ➤ Males had a median age at death from Kidney and Renal Pelvis Cancer five years earlier than females in Nevada from 1996 to 2000 with a median age at death of 68 and 73 years, respectively.

#### **SURVIVAL RATE**

- ➤ The one-year survival rate for Kidney and Renal Pelvis Cancer in Nevada was 71.4% during the 1996 to 2000 period, while the five-year survival rate was 51.3% during this same time. The median survival rate in Nevada was greater than five years for Kidney and Renal Pelvis Cancer.
- Females in Nevada had a slightly higher one-year survival rate (73.5%) than males (70.3%) for Kidney and Renal Pelvis Cancer during the 1996 to 2000 period. This trend continued for the five-year survival rate with females and males at 55.0% and 50.0%, respectively. Both males and females had median survival times of over five years.
- The Kidney and Renal Pelvis Cancer Survival rate varies greatly by the stage of the cancer at time of diagnosis. Those diagnosed at the localized stage had the highest one-and five-year survival rates with 95.3% and 86.8%, respectively. This was followed by those with regional and then distant diagnoses with rates of 66.7% and 24.9% for the one year period and 25.3% and 5.2% for the five year period.

# **INCIDENCE**

Figure 115. Kidney and Renal Pelvis Cancer Age-Adjusted (2000) Incidence Rates, Nevada Residents, 1996-2000



Note: Rates are per 100,000 population and age-adjusted to 2000 US Standard population. Caution should be used when interpreting rates based upon small numbers. See Technical notes for more information.

Figure 116. Kidney and Renal Pelvis Cancer Age-Adjusted Incidence Rates by County/Region of Residence, Nevada Residents, 1996-2000

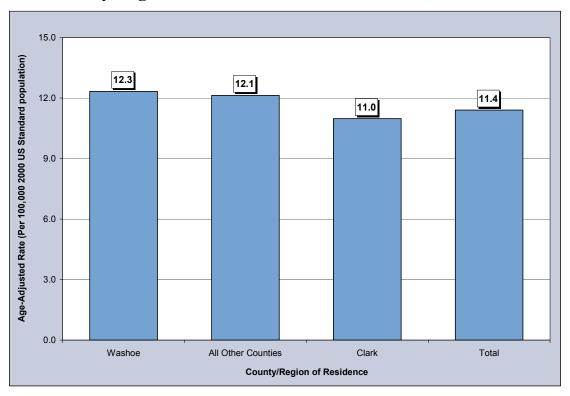


Figure 117. Kidney and Renal Pelvis Cancer Age-Adjusted Incidence Rates by Race/Ethnicity, Nevada Residents, 1996-2000

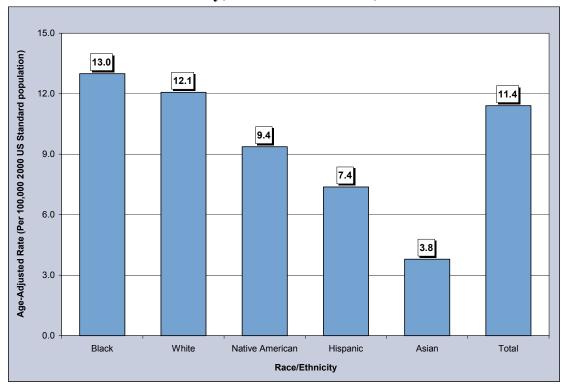


Table 171. Kidney and Renal Pelvis Cancer Cases by Gender, Race/Ethnicity and County/Region of Residence at Diagnosis, Nevada Residents (1996-2000) and SEER-11 (1995-1999)

		County/Region of Residence							
Category	Nevada Total	Clark	Washoe	All Other Counties	Unknown	SEER 11 (1995-1999)			
Total									
Cases	995	637	182	175	1	18,150			
Rate*	11.4	11.0	12.3	12.1		10.8			
95% C.I.	(10.7-12.2)	(10.1-11.9)	(10.6-14.3)	(10.4-14.1)		(10.6-10.9)			
Gender									
Male	641	408	117	115	1	11,142			
Rate*	15.1	14.4	16.9	15.9		14.9			
95% C.I.	(13.9-16.5)	(13.0-16.0)	(13.8-20.8)	(13.1-19.4)		(14.7-15.2)			
Female	354	229	65	60	0	7,008			
Rate*	8.0	7.8	8.5	8.3		7.5			
95% C.I.	(7.1-8.8)	(6.8-8.9)	(6.6-10.9)	(6.4-10.8)		(7.3-7.7)			
Other/Unknown	0	0	0	0	0	0			
Race/Ethnicity									
White	862	529	171	161	1	15,107			
Rate*	12.1	11.6	13.3	12.3		11.0			
95% C.I.	(11.3-12.9)	(10.6-12.7)	(11.4-15.5)	(10.5-14.5)		(10.9-11.2)			
Black	59	55	2	2	0	1,838			
Rate*	13.0	13.2				12.6			
95% C.I.	(9.7-17.5)	(9.7-18.0)				(12.0-13.2)			
Native American	8	1	3	4	0	92			
Rate*						7.9			
95% C.I.						(6.3-6.3)			
Asian	15	13	2	0	0	1,017			
Rate*	3.8	4.1				6.5			
95% C.I.	(2.0-9.6)	(2.1-11.6)				(6.1-6.9)			
Hispanic	49	37	4	8	0	1,717			
Rate*	7.4	8.0				9.7			
95% C.I.	(5.2-10.7)	(5.3-12.5)				(9.2-10.2)			
Other/Unknown	2	2	0	0	0	96			

<sup>\*</sup> Rates are per 100,000 population and are age-adjusted to the 2000 US Standard population.

Note: The "---" is used for rates calculated on numbers less than ten and SEER numbers less than five. Caution should be used when comparing rates for racial/ethnic groups to the National (SEER) rates. See Technical Notes for more information.

Table 172. Kidney and Renal Pelvis Cancer Cases by Age Group and County/Region of Residence at Diagnosis, Nevada Residents (1996-2000) and SEER-11 (1995-1999)

			County/Region	of Residence		
Category	Nevada Total	Clark	Washoe	All Other Counties	Unknown	SEER 11 (1995-1999)
Total						
Cases	995	637	182	175	1	18,150
Rate*	10.7	10.1	11.1	12.8		9.8
95% C.I.	(10.0-11.4)	(9.3-10.9)	(9.5-12.7)	(10.9-14.7)		(9.7-9.9)
Age Group						
<1	0	0	0	0	0	52
Rate*						1.9
95% C.I.						(1.4-2.4)
1-4	9	7	2	0	0	227
Rate*						2.0
95% C.I.						(1.8-2.3)
5-14	2	1	1	0	0	84
Rate*						0.3
95% C.I.						(0.2-0.4)
15-24	3	2	0	0	1	47
Rate*						0.2
95% C.I.						(0.1-0.2)
25-34	11	9	0	2	0	225
Rate*	0.8					0.8
95% C.I.	(0.3-1.2)					(0.7-0.9)
35-44	56	32	13	11	0	1,115
Rate*	3.7	3.2	4.7	4.9		3.6
95% C.I.	(2.8-4.7)	(2.1-4.4)	(2.1-7.2)	(2.0-7.8)		(3.4-3.8)
45-54	156	91	35	30	0	2,709
Rate*	12.9	11.5	15.6	15.6		11.8
95% C.I.	(10.9-14.9)	(9.1-13.8)	(10.4-20.7)	(10.0-21.2)		(11.4-12.3)
55-64	260	173	36	51	0	3,939
Rate*	30.2	29.8	25.4	37.0		28.1
95% C.I.	(26.5-33.9)	(25.3-34.2)	(17.1-33.8)	(26.8-47.1)		(27.3-29.0)
65-74	292	194	52	46	0	5,032
Rate*	47.1	46.8	51.6	44.0		43.6
95% C.I.	(41.7-52.5)	(40.2-53.4)	(37.5-65.6)	(31.3-56.7)		(42.4-44.8)
75-84	177	109	37	31	0	3,687
Rate*	54.0	50.4	67.2	54.9		50.7
95% C.I.	(46.0-62.0)	(40.9-59.9)	(45.6-88.9)	(35.6-74.2)		(49.1-52.4)
85+	29	19	6	4	0	1,033
Rate*	41.2	44.4				41.7
95% C.I.	(26.2-56.1)	(24.4-64.3)				(39.1-44.2)
Unknown	0	0	0	0	0	0

<sup>\*</sup> Rates are per 100,000 age-specific population.

Note: The "---" is used for rates calculated on numbers less than ten and SEER numbers less than five. See Technical Notes for more information.

Table 173. Kidney and Renal Pelvis Cancer Cases by County of Residence at Diagnosis, Nevada Residents, 1996-2000

County of	1996-2000 Incidence						
Residence	Casas	Rat	te*	Age-Adjus	Age-Adjusted Rate**		
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.		
Carson City	37	15.1	(10.2-20.0)	13.3	(9.3-18.5)		
Churchill	18	15.3	(8.2-22.3)	15.9	(9.4-25.7)		
Clark	637	10.1	(9.3-10.9)	11.0	(10.1-11.9)		
Douglas	26	13.0	(8.0-18.0)	10.4	(6.8-16.2)		
Elko	16	7.0	(3.6-10.4)	11.8	(6.4-20.9)		
Esmeralda	3						
Eureka	1						
Humboldt	5						
Lander	3						
Lincoln	2						
Lyon	28	17.3	(10.9-23.7)	15.4	(10.2-22.9)		
Mineral	1						
Nye	29	19.5	(12.4-26.6)	13.7	(9.0-21.4)		
Pershing	4						
Storey	1						
Washoe	182	11.1	(9.5-12.7)	12.3	(10.6-14.3)		
White Pine	1						
Unknown	1						
Total	995	10.7	(10.0-11.4)	11.4	(10.7-12.2)		

Note: The "---" is used for rates calculated on numbers less than ten. \*Rates are per 100,000 population. \*\*Rates are per 100,000 population and are age-adjusted to the 2000 US Standard population.

Table 174. Kidney and Renal Pelvis Cancer Cases by Race/Ethnicity and Gender, Nevada Residents, 1996-2000

			Ger	nder	
Rac	Race/Ethnicity		Female	Other/ Unknown	Total
White	Incidence	556	306	0	862
	Rate*	15.9	8.5		12.1
	95% C.I.	(14.5-17.4)	(7.5-9.5)		(11.3-12.9)
Black	Incidence	40	19	0	59
	Rate*	18.0	8.2		13.0
	95% C.I.	(12.6-27.6)	(4.8-13.6)		(9.7-17.5)
Native	Incidence	2	6	0	8
American	Rate*				
	95% C.I.				
Asian	Incidence	8	7	0	15
	Rate*				3.8
	95% C.I.				(2.0-9.6)
Hispanic	Incidence	33	16	0	49
	Rate*	9.9	4.8		7.4
	95% C.I.	(6.5-17.0)	(2.4-9.2)		(5.2-10.7)
Other/Unkn	iown	2	0	0	2
Total	Incidence	641	354	0	995
	Rate*	15.1	8.0		11.4
	95% C.I.	(13.9-16.5)	(7.1-8.8)		(10.7-12.2)
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Note: The "---" is used for rates calculated on numbers less than ten. \*Rates are per 100,000 population and are age-adjusted to the 2000 US Standard population.

Table 175. Kidney and Renal Pelvis Cancer Cases by Age Group and Gender, Nevada Residents, 1996-2000

Age		Gen	der	
Group	Male	Female	Other/ Unknown	Total
<1	0	0	0	0
Rate*				
95% C.I.				
1-4	4	5	0	9
Rate*				
95% C.I.				
5-14	0	2	0	2
Rate*				
95% C.I.				
15-24	2	1	0	3
Rate*				
95% C.I.				
25-34	6	5	0	11
Rate*				0.8
95% C.I.				(0.3-1.2)
35-44	35	21	0	56
Rate*	4.5	2.9		3.7
95% C.I.	(3.0-6.0)	(1.7-4.2)		(2.8-4.7)
45-54	104	52	0	156
Rate*	17.0	8.7		12.9
95% C.I.	(13.7-20.2)	(6.3-11.1)		(10.9-14.9)
55-64	174	86	0	260
Rate*	40.6	19.9		30.2
95% C.I.	(34.6-46.6)	(15.7-24.1)		(26.5-33.9)
65-74	201	91	0	292
Rate*	65.7	29.0		47.1
95% C.I.	(56.7-74.8)	(23.0-34.9)		(41.7-52.5)
75-84	102	75	0	177
Rate*	69.2	41.6		54.0
95% C.I.	(55.7-82.6)	(32.2-51.0)		(46.0-62.0)
85+	13	16	0	29
Rate*	57.3	33.5		41.2
95% C.I.	(26.2-88.5)	(17.1-49.9)		(26.2-56.1)
Unknown	0	0	0	0
Total	641	354	0	995
Rate*	13.6	7.7		10.7
95% C.I.	(12.5-14.6)	(6.9-8.5)		(10.0-11.4)

\* Rates are per 100,000 age-specific population. Note: The "---" is used for rates calculated on numbers less than ten.

Table 176. Kidney and Renal Pelvis Cancer Cases by Age Group and Stage, Nevada Residents, 1996-2000

				Si	tage		
Age	Group	In situ	Localized	Regional	Distant	Unstaged	Total
<1	Number	0	0	0	0	0	0
	Percent						
1-4	Number	0	6	1	0	2	9
	Percent		66.7%	11.1%		22.2%	100.0%
5-14	Number	0	1	0	1	0	2
	Percent		50.0%		50.0%		100.0%
15-24	Number	0	1	1	0	1	3
	Percent		33.3%	33.3%		33.3%	100.0%
25-34	Number	0	9	0	1	1	11
	Percent		81.8%		9.1%	9.1%	100.0%
35-44	Number	0	39	3	7	7	56
	Percent		69.6%	5.4%	12.5%	12.5%	100.0%
45-54	Number	0	91	22	26	17	156
	Percent		58.3%	14.1%	16.7%	10.9%	100.0%
55-64	Number	0	138	39	49	34	260
	Percent		53.1%	15.0%	18.8%	13.1%	100.0%
65-74	Number	0	162	30	52	48	292
	Percent		55.5%	10.3%	17.8%	16.4%	100.0%
75-84	Number	0	76	20	33	48	177
	Percent		42.9%	11.3%	18.6%	27.1%	100.0%
85+	Number	0	7	3	4	15	29
	Percent		24.1%	10.3%	13.8%	51.7%	100.0%
Unknown	Number	0	0	0	0	0	0
	Percent						
Total	Number	0	530	119	173	173	995
	Percent		53.3%	12.0%	17.4%	17.4%	100.0%

Table 177. Kidney and Renal Pelvis Cancer Cases by Stage and Race/Ethnicity, Nevada Residents, 1996-2000

		Race/Ethnicity						
Stage		White	Black	Native American	Asian	Hispanic	Other/ Unknown	Total
In situ	Number	0	0	0	0	0	0	0
	Percent							
Localized	Number	455	36	2	6	30	1	530
	Percent	52.8%	61.0%	25.0%	40.0%	61.2%	50.0%	53.3%
Regional	Number	107	5	1	4	1	1	119
	Percent	12.4%	8.5%	12.5%	26.7%	2.0%	50.0%	12.0%
Distant	Number	152	5	1	4	11	0	173
	Percent	17.6%	8.5%	12.5%	26.7%	22.4%		17.4%
Unstaged	Number	148	13	4	1	7	0	173
	Percent	17.2%	22.0%	50.0%	6.7%	14.3%		17.4%
Total	Number	862	59	8	15	49	2	995
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

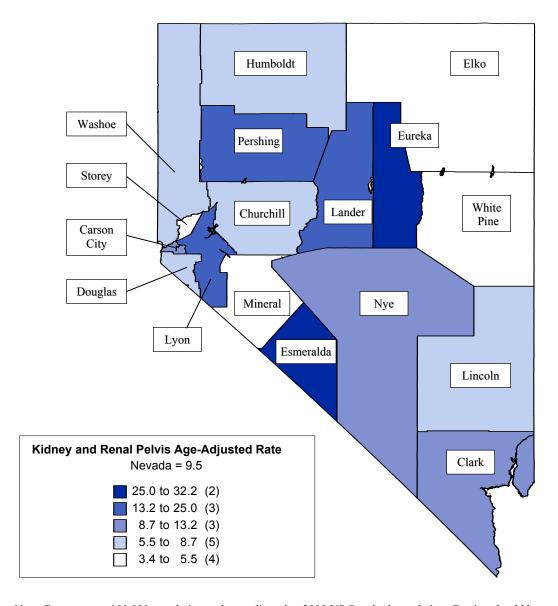
Table 178. Median Age at Diagnosis of Kidney and Renal Pelvis Cancer by Race/Ethnicity and Gender, Nevada Residents, 1996-2000

	Gender								
Race/Ethnicity	Male		Fem	nale	Total				
	Incidence	Median Age	Incidence	Median Age	Incidence	Median Age			
White	556	65.0	306	66.0	862	65.0			
Black	40	62.5	19	61.0	59	62.0			
Native American	2		6	70.5	8	68.5			
Asian	8	60.0	7	47.0	15	60.0			
Hispanic	33	57.0	16	50.0	49	56.0			
Other/Unknown	2		0		2				
Total	641	64.0	354	65.0	995	65.0			

Note: Those cases of other/unknown gender and/or unknown ages are not included in this table. The median age was not calculated for those numbers less than five.

# **INPATIENT HOSPITAL DISCHARGES**

Figure 118. Kidney and Renal Pelvis Cancer Age-Adjusted (2000) Inpatient Discharge Rates, Nevada Residents, 1996-2000



Note: Rates are per 100,000 population and age-adjusted to 2000 US Standard population. Caution should be used when interpreting rates based upon small numbers and comparing inpatient hospital discharge rates to other data sources, because it is occurrence based data. See Technical notes for more information.

Figure 119. Kidney and Renal Pelvis Cancer Age-Adjusted Inpatient Discharge Rates by County/Region of Residence, Nevada Residents, 1996-2000

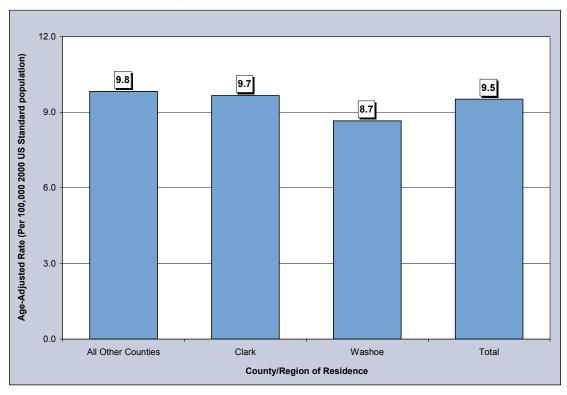


Figure 120. Median Charges for Kidney and Renal Pelvis Cancer Inpatient Discharges by County/Region of Residence, Nevada Residents, 1996-2000

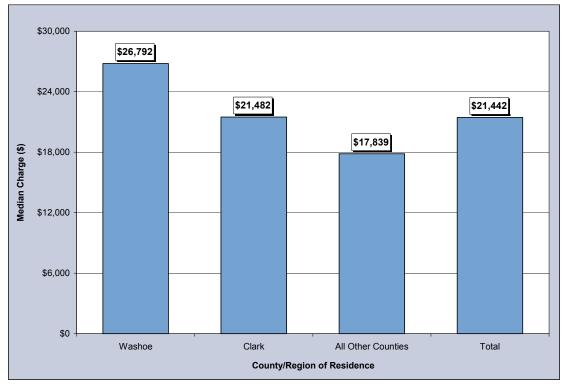


Figure 121. Average Length of Stay for Kidney and Renal Pelvis Cancer Inpatient Discharges by County/Region of Residence, Nevada Residents, 1996-2000

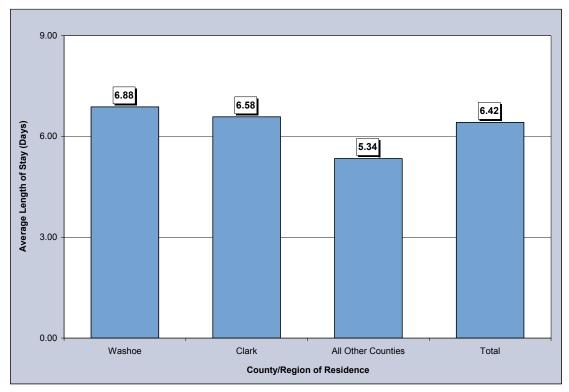


Table 179. Kidney and Renal Pelvis Cancer Inpatient Discharges by Gender, Charges, Length of Stay, and County/Region of Residence, Nevada Residents, 1996-2000

		Coun	ty/Region of Resid	lence	
Category	Nevada Total	Clark	Washoe	All Other Counties	Unknown
Total					
Discharges	842	569	129	144	0
Rate*	9.5	9.7	8.7	9.8	
95% C.I.	(8.9-10.2)	(8.9-10.5)	(7.2-10.4)	(8.3-11.6)	
Gender					
Male	540	358	82	100	0
Rate*	12.5	12.4	11.6	13.7	
95% C.I.	(11.5-13.7)	(11.1-13.9)	(9.1-14.8)	(11.1-17.0)	
Female	302	211	47	44	0
Rate*	6.7	7.0	6.1	6.0	
95% C.I.	(6.0-7.5)	(6.1-8.1)	(4.5-8.2)	(4.4-8.2)	
Other/Unknown	0	0	0	0	0
Inpatient Discharge Cl	harges (\$)				
Total Charges	\$23,358,873	\$16,428,706	\$3,976,738	\$2,953,429	
Average Charges	\$27,742	\$28,873	\$30,827	\$20,510	
Median Charges	\$21,442	\$21,482	\$26,792	\$17,839	
Discharge Length of S	stay (LOS) (Days)				
Total LOS	5,402	3,746	887	769	
Average LOS	6.4	6.6	6.9	5.3	
Median LOS	5.0	5.0	6.0	4.0	

<sup>\*</sup> Rates are per 100,000 population and are age-adjusted to the 2000 US Standard population.

Note: The "---" is used for rates calculated on numbers less than ten. Caution should be used when comparing inpatient hospital discharge data to other data sources, since it is occurrence-based data. Please see Technical Notes for more information.

Table 180. Kidney and Renal Pelvis Cancer Inpatient Discharges by Age Group and County/Region of Residence, Nevada Residents, 1996-2000

		Cour	nty/Region of Resid	ence	
Category	Nevada Total	Clark	Washoe	All Other Counties	Unknown
Total					
Discharges	842	569	129	144	0
Rate*	9.1	9.0	7.9	10.5	
95% C.I.	(8.4-9.7)	(8.3-9.8)	(6.5-9.2)	(8.8-12.2)	
Age Group					
<1	2	1	0	1	0
Rate*					
95% C.I.					
1-4	11	11	0	0	0
Rate*	2.0	2.9			
95% C.I.	(0.8-3.2)	(1.2-4.6)			
5-14	8	8	0	0	0
Rate*					
95% C.I.					
15-24	3	2	1	0	0
Rate*					
95% C.I.					
25-34	9	8	0	1	0
Rate*					
95% C.I.					
35-44	46	32	9	5	0
Rate*	3.1	3.2			
95% C.I.	(2.2-4.0)	(2.1-4.4)			
45-54	131	84	25	22	0
Rate*	10.8	10.6	11.1	9.8	
95% C.I.	(9.0-12.7)	(8.3-12.9)	(6.8-15.5)	(5.7-13.9)	
55-64	224	149	26	49	0
Rate*	26.0	25.6	18.4	34.6	
95% C.I.	(22.6-29.4)	(21.5-29.7)	(11.3-25.4)	(24.9-44.3)	
65-74	262	178	41	43	0
Rate*	42.3	42.9	40.7	42.6	
95% C.I.	(37.1-47.4)	(36.6-49.2)	(28.2-53.1)	(29.9-55.4)	
75-84	127	83	24	20	0
Rate*	38.7	38.4	43.6	36.3	
95% C.I.	(32.0-45.5)	(30.1-46.6)	(26.2-61.1)	(20.4-52.3)	
85+	19	13	3	3	0
Rate*	27.0	30.3			
95% C.I.	(14.8-39.1)	(13.8-46.8)			
Unknown	0	0	0	0	0

<sup>\*</sup> Rates are per 100,000 age-specific population.

Note: The "---" is used for rates calculated on numbers less than ten. Caution should be used when comparing inpatient hospital discharge data to other data sources, since it is occurrence-based data. Please see Technical Notes for more information.

Table 181. Kidney and Renal Pelvis Cancer Inpatient Discharges by Age Group and Gender, Nevada Residents, 1996-2000

Age		Gender	
Group	Male	Female	Total
<1 =	0	2	2
Rate*			
95% C.I.	<u></u>		
1-4	8	3	11
Rate*			2.0
95% C.I.			(0.8-3.2)
5-14	2	6	8
Rate*			
95% C.I.			
15-24	2	1	3
Rate*			
95% C.I.	<del></del> -		
25-34 Rate*	5	4	9
95% C.I.			<del></del>
35-44	31	15	46
Rate*	4.0	2.1	3.1
95% C.I.	(2.6-5.4)	(1.0-3.1)	(2.2-4.0)
45-54	86	45	131
Rate*	14.0	7.5	10.8
95% C.I.	(11.1-17.0)	(5.3-9.7)	(9.0-12.7)
55-64	148	76	224
Rate*	34.5	17.6	26.0
95% C.I.	(29.0-40.1)	(13.6-21.5)	(22.6-29.4)
65-74	172	90	262
Rate*	56.3	28.6	42.3
95% C.I.	(47.8-64.7)	(22.7-34.6)	(37.1-47.4)
75-84	78	49	127
Rate*	52.9	27.2	38.7
95% C.I.	(41.2-64.6)	(19.6-34.8)	(32.0-45.5)
85+	8	11	19
Rate*		23.0	27.0
95% C.I. Unknown		(9.4-36.6)	(14.8-39.1)
Total	540	302	842
Rate*	11.4	6.6	9.1
95% C.I.	(10.5-12.4)	(5.9-7.3)	(8.4-9.7)
1370 0	(10.0 12.1)	(5.5 7.6)	(3.1 3.1)

<sup>\*</sup> Rates are per 100,000 age-specific population.

Note: The "---" is used for rates calculated on numbers less than ten. Caution should be used when comparing inpatient hospital discharge data to other data sources, since it is occurrence-based data. Please see Technical Notes for more information.

Table 182. Kidney and Renal Pelvis Cancer Inpatient Discharges by County/Region of Residence, Nevada Residents, 1996-2000

O sure transfer	1996-2000 Inpatient Hospital Discharges						
County of Residence	Number	Rat	te*	Age-Adjus	ted Rate**		
	Number	Rate	95% C.I.	Rate	95% C.I.		
Carson City	25	10.2	(6.2-14.2)	9.0	(5.8-13.4)		
Churchill	9						
Clark	569	9.0	(8.3-9.8)	9.7	(8.9-10.5)		
Douglas	14	7.0	(3.3-10.7)	5.5	(3.0-10.3)		
Elko	7						
Esmeralda	2						
Eureka	2						
Humboldt	5						
Lander	6						
Lincoln	2						
Lyon	36	22.2	(15.0-29.5)	19.6	(13.7-27.8)		
Mineral	1						
Nye	28	18.9	(11.9-25.8)	13.2	(8.6-20.7)		
Pershing	4						
Storey	1						
Washoe	129	7.9	(6.5-9.2)	8.7	(7.2-10.4)		
White Pine	2						
Unknown	0						
Total	842	9.1	(8.4-9.7)	9.5	(8.9-10.2)		

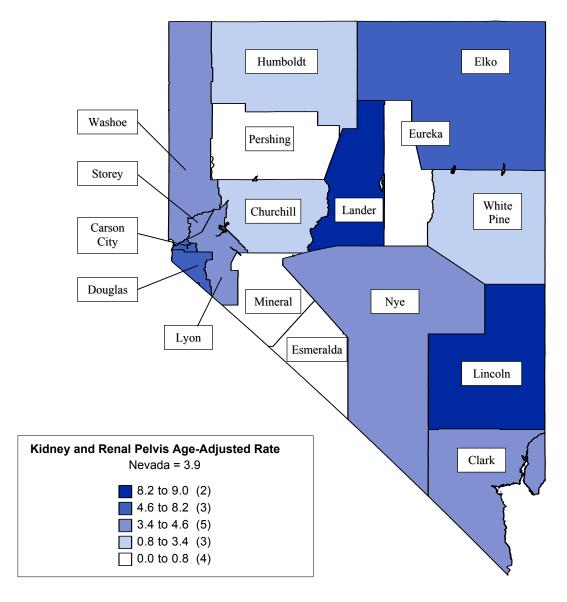
Note: The "---" is used for rates calculated on numbers less than ten. \*Rates are per 100,000 population. \*\*Rates are per 100,000 population and are age-adjusted to the 2000 US Standard population.

Table 183. Kidney and Renal Pelvis Cancer Inpatient Discharges by Age Group, Charges and Length of Stay, Nevada Residents, 1996-2000

Age	Diocharges	(	Charges (\$)	Length of Stay (Days)			
Group	Discharges	Total	Total Average M		Total	Average	Median
<1	2						
1-4	11	358,191	32,563	39,144	87	7.9	10.0
5-14	8	922,920	115,365	61,678	148	18.5	10.5
15-24	3						
25-34	9	167,246	18,583	18,502	42	4.7	4.0
35-44	46	1,198,213	26,048	18,662	258	5.6	4.5
45-54	131	3,023,520	23,080	19,739	683	5.2	4.0
55-64	224	6,161,874	27,508	21,953	1,466	6.5	5.0
65-74	262	6,513,425	24,860	21,544	1,500	5.7	5.0
75-84	127	4,350,314	34,254	23,399	1,026	8.1	6.0
85+	19	537,180	28,273	20,081	156	8.2	7.0
Unknown	0						
Total	842	23,358,873	27,742	21,442	5,402	6.4	5.0

# **MORTALITY**

Figure 122. Kidney and Renal Pelvis Cancer Age-Adjusted (2000) Mortality Rates, Nevada Residents, 1996-2000



Note: Rates are per 100,000 population and age-adjusted to 2000 US Standard population. Caution should be used when interpreting rates based upon small numbers. See Technical notes for more information.

Figure 123. Kidney and Renal Pelvis Cancer Age-Adjusted Mortality Rates by County/Region of Residence, Nevada Residents, 1996-2000

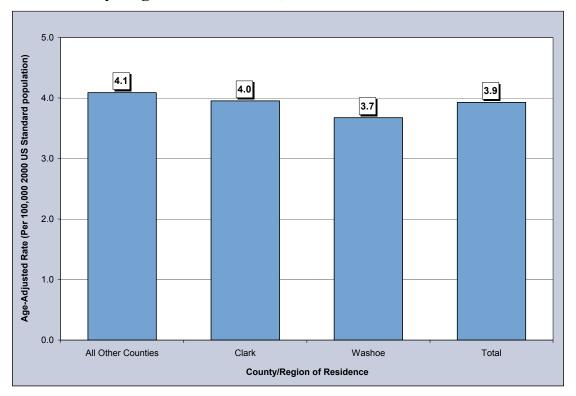


Figure 124. Kidney and Renal Pelvis Cancer Age-Adjusted Mortality Rates by Race/Ethnicity, Nevada Residents, 1996-2000

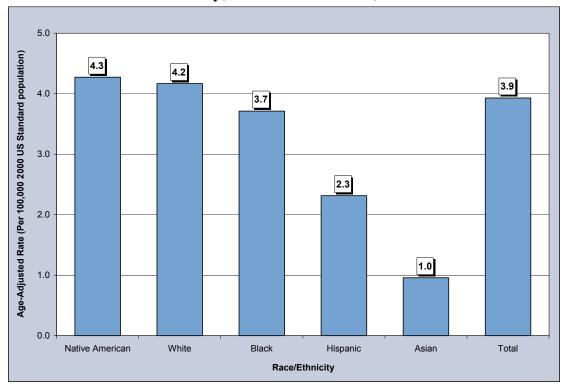


Table 184. Kidney and Renal Pelvis Cancer Mortality by Gender, Race/Ethnicity and County/Region of Residence, Nevada Residents, 1996-2000

	County/Region of Residence							
Category	Nevada Total	Clark	Washoe	All Other Counties				
Total								
Mortality	326	217	52	57				
Rate*	3.9	4.0	3.7	4.1				
95% C.I.	(3.5-4.4)	(3.4-4.6)	(2.7-4.9)	(3.1-5.4)				
Gender								
Male	227	151	36	40				
Rate*	5.7	5.8	5.6	5.7				
95% C.I.	(5.0-6.6)	(4.8-7.0)	(3.8-8.2)	(4.0-8.1)				
Female	99	66	16	17				
Rate*	2.3	2.3	2.1	2.4				
95% C.I.	(1.9-2.8)	(1.8-3.0)	(1.2-3.5)	(1.4-4.0)				
Other/Unknown	0	0	0	0				
Race/Ethnicity								
White	292	193	48	51				
Rate*	4.2	4.3	3.8	4.0				
95% C.I.	(3.7-4.7)	(3.7-5.0)	(2.8-5.1)	(3.0-5.4)				
Black	13	12	1	0				
Rate*	3.7	3.8						
95% C.I.	(1.9-7.1)	(1.8-7.5)						
Native American	3	0	2	1				
Rate*								
95% C.I.								
Asian	4	3	1	0				
Rate*								
95% C.I.								
Hispanic	12	8	0	4				
Rate*	2.3							
95% C.I.	(1.0-5.0)							
Other/Unknown	2	1	0	1				

<sup>\*</sup>Rates are per 100,000 population and are age-adjusted to the 2000 US Standard population.

Note: The "---" is used for rates calculated on numbers less than ten.

Table 185. Kidney and Renal Pelvis Cancer Mortality by Age Group and County/Region of Residence, Nevada Residents, 1996-2000

	County/Region of Residence							
Category	Nevada Total	Clark	Washoe	All Other Counties				
Total								
Mortality	326	217	52	57				
Rate*	3.5	3.4	3.2	4.2				
95% C.I.	(3.1-3.9)	(3.0-3.9)	(2.3-4.0)	(3.1-5.2)				
Age Group								
<1	0	0	0	0				
Rate*								
95% C.I.								
1-4	0	0	0	0				
Rate*								
95% C.I.								
5-14	0	0	0	0				
Rate*								
95% C.I.								
15-24	0	0	0	0				
Rate*								
95% C.I.								
25-34	0	0	0	0				
Rate*								
95% C.I.								
35-44	5	5	0	0				
Rate*								
95% C.I.								
45-54	28	19	6	3				
Rate*	2.3	2.4						
95% C.I.	(1.5-3.2)	(1.3-3.5)						
55-64	81	56	8	17				
Rate*	9.4	9.6		12.3				
95% C.I.	(7.4-11.5)	(7.1-12.2)		(6.5-18.2)				
65-74	105	63	22	20				
Rate*	16.9	15.2	21.8	19.1				
95% C.I.	(13.7-20.2)	(11.4-18.9)	(12.7-30.9)	(10.8-27.5)				
75-84	88	63	13	12				
Rate*	26.8	29.1	23.6	21.2				
95% C.I.	(21.2-32.5)	(21.9-36.3)	(10.8-36.5)	(9.2-33.3)				
85+	19	11	3	5				
Rate*	27.0	25.7						
95% C.I.	(14.8-39.1)	(10.5-40.9)						
Unknown	0	0	0	0				

<sup>\*</sup> Rates are per 100,000 age-specific population.

Note: The "---" is used for rates calculated on numbers less than ten.

Table 186. Kidney and Renal Pelvis Cancer Mortality by County of Residence, Nevada Residents, 1996-2000

	1996-2000 Mortality						
County of Residence	Rate*			Age-Adjusted Rate**			
	Cases	Rate	95% C.I.	Rate	95% C.I.		
Carson City	14	5.7	(2.7-8.7)	5.0	(2.7-8.7)		
Churchill	1						
Clark	217	3.4	(3.0-3.9)	4.0	(3.4-4.6)		
Douglas	14	7.0	(3.3-10.7)	5.6	(3.1-10.5)		
Elko	5						
Esmeralda	0						
Eureka	0						
Humboldt	1						
Lander	2						
Lincoln	2						
Lyon	8						
Mineral	0						
Nye	8						
Pershing	0						
Storey	1						
Washoe	52	3.2	(2.3-4.0)	3.7	(2.7-4.9)		
White Pine	1						
Unknown	0						
Total	326	3.5	(3.1-3.9)	3.9	(3.5-4.4)		

Note: The "---" is used for rates calculated on numbers less than ten. \*Rates are per 100,000 population. \*\*Rates are per 100,000 population and are age-adjusted to the 2000 US Standard population.

Table 187. Kidney and Renal Pelvis Cancer Mortality by Race/Ethnicity and Gender, Nevada Residents, 1996-2000

		Gender						
Race/Ethnicity		Male	Female	Total				
White	Mortality	207	85	292				
	Rate*	6.2	2.3	4.2				
	95% C.I.	(5.3-7.2)	(1.9-2.9)	(3.7-4.7)				
Black	Mortality	8	5	13				
	Rate*			3.7				
	95% C.I.			(1.9-7.1)				
Native	Mortality	0	3	3				
American	Rate*							
	95% C.I.							
Asian	Mortality	4	0	4				
	Rate*							
	95% C.I.							
Hispanic	Mortality	7	5	12				
	Rate*			2.3				
	95% C.I.			(1.0-5.0)				
Other/Unkr	nown	1	1	2				
Total	Mortality	227	99	326				
	Rate*	5.7	2.3	3.9				
	95% C.I.	(5.0-6.6)	(1.9-2.8)	(3.5-4.4)				

Note: The "---" is used for rates calculated on numbers less than ten. \*Rates are per 100,000 population and are age-adjusted to the 2000 US Standard population.

Table 188. Kidney and Renal Pelvis Cancer Mortality by Age Group and Gender, Nevada Residents, 1996-2000

Age	Gender					
Group	Male	Female	Total			
<1	0	0	0			
Rate*						
95% C.I.						
1-4	0	0	0			
Rate*						
95% C.I.						
5-14	0	0	0			
Rate*						
95% C.I.						
15-24	0	0	0			
Rate*						
95% C.I.						
25-34	0	0	0			
Rate*						
95% C.I.						
35-44	4	1	5			
Rate*						
95% C.I.						
45-54	23	5	28			
Rate*	3.8		2.3			
95% C.I.	(2.2-5.3)		(1.5-3.2)			
55-64	62	19	81			
Rate*	14.5	4.4	9.4			
95% C.I.	(10.9-18.1)	(2.4-6.4)	(7.4-11.5)			
65-74 Rate*	74 24.2	31 9.9	105 16.9			
95% C.I.	(18.7-29.7)	(6.4-13.3)	(13.7-20.2)			
75-84	55	33	88			
Rate*	37.3	18.3	26.8			
95% C.I.	(27.4-47.2)	(12.1-24.5)	(21.2-32.5)			
85+	9	10	19			
Rate*		20.9	27.0			
95% C.I.		(8.0-33.9)	(14.8-39.1)			
Unknown	0	0	0			
Total	227	99	326			
Rate*	4.8	2.2	3.5			
95% C.I.	(4.2-5.4)	(1.7-2.6)	(3.1-3.9)			

<sup>\*</sup> Rates are per 100,000 age-specific population.

Note: The "---" is used for rates calculated on numbers less than ten.

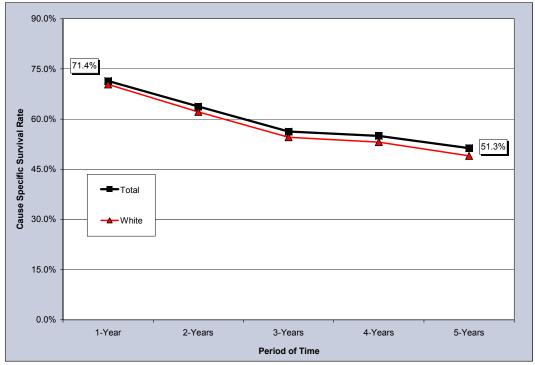
Table 189. Median Age at Death from Kidney and Renal Pelvis Cancer by Race/Ethnicity and Gender, Nevada Residents, 1996-2000

	Gender								
Race/Ethnicity	Ma	ile	Fem	nale	Total				
	Deaths	Median Age	Deaths	Median Age	Deaths	Median Age			
White	207	68.0	85	73.0	292	70.0			
Black	8	70.0	5	74.0	13	72.0			
Native American	0		3		3				
Asian	4		0		4				
Hispanic	7	65.0	5	67.0	12	65.5			
Other/Unknown	1		1		2				
Total	227	68.0	99	73.0	326	70.0			

Note: Those cases of other/unknown gender and/or unknown ages are not included in this table. The median age was not calculated for those numbers less than five.

# **SURVIVAL RATE**

Figure 125. Survival Rates for Kidney and Renal Pelvis Cancer by Race/Ethnicity, Nevada Residents, 1996-2000



Notes: The survival rate for those racial/ethnic groups not included in this chart could not be calculated due to small cell size.

Figure 126. Survival Rates for Kidney and Renal Pelvis Cancer by Stage of Cancer at Diagnosis, Nevada Residents, 1996-2000

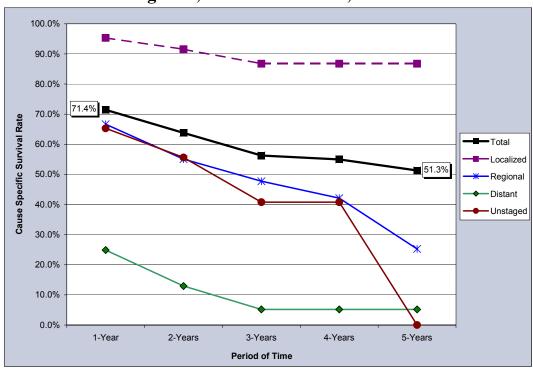


Table 190. Cause-Specific Survival Rates for Kidney and Renal Pelvis Cancer by Race/Ethnicity and Gender, Nevada Residents, 1996-2000

Race/			Cause Specific Survival Rate				
Ethnicity and Gender	Number of Cases	One Year	Two Years	Three Years	Four Years	Five Years	Survival Time (years)
Total	667	71.4%	63.8%	56.3%	55.0%	51.3%	>5 years
Male	430	70.3%	61.5%	56.9%	55.0%	50.0%	>5 years
Female	237	73.5%	68.0%	55.0%	55.0%	55.0%	>5 years
Race/Ethnicity							
White	575	70.4%	62.1%	54.6%	53.1%	49.0%	4.76
Male	370	68.2%	58.2%	54.3%	52.1%	46.3%	4.37
Female	205	74.4%	69.6%	55.2%	55.2%	55.2%	>5 years
Black	36						
Male	23						
Female	13						
Native American	4						
Male	2						
Female	2						
Asian	12						
Male	8						
Female	4						
Hispanic	39						
Male	26						
Female	13						

Notes: 1) The "---" indicates that survival rate could not be calculated due to small cell size. Caution should be used when interpreting survival rates based upon categories with a small number of cases. 2) Those cases where the gender and/or race/ethnicity were other/unknown, are not shown separately, but are included in the category totals. 3) These rates may not be directly comparable to National rates because of different methodologies. Caution should be used when trying to compare rates for Nevada and the Nation. For more information on the calculation of survival rates, please refer to Technical Notes section.

Table 191. Cause-Specific Survival Rates for Kidney and Renal Pelvis Cancer by Stage of Cancer at Diagnosis and Gender, Nevada Residents, 1996-2000

Survival Rate of Stage at Diagnosis			Gender				
		Total	Male	Female			
Total	Cases	667	430	237			
	One Year	71.4%	70.3%	73.5%			
	5 Years	51.3%	50.0%	55.0%			
	Median Survival	>5 years	>5 years	>5 years			
Stage at D	iagnosis						
In situ	Cases	0	0	0			
	One Year						
	5 Years						
	Median Survival						
Localized	Cases	378	237	141			
	One Year	95.3%	95.6%	94.8%			
	5 Years	86.8%	92.5%	77.7%			
	Median Survival	>5 years	>5 years	>5 years			
Regional	Cases	89	56	33			
	One Year	66.7%	67.4%	65.4%			
	5 Years	25.3%	13.1%	47.2%			
	Median Survival	2.69	2.62	2.73			
Distant	Cases	135	96	39			
	One Year	24.9%	25.9%	22.4%			
	5 Years	5.2%	4.8%	0.0%			
	Median Survival	0.67	0.67	0.64			
Unstaged	Cases	65	41	24			
	One Year	65.3%	65.6%	64.7%			
	5 Years	0.0%	0.0%	0.0%			
	Median Survival	2.38	2.74	1.91			

Notes: 1) The "---" indicates that survival rate could not be calculated due to small cell size. Caution should be used when interpreting survival rates based upon categories with a small number of cases. 2) These rates may not be directly comparable to National rates because of different methodologies. Caution should be used when trying to compare rates for Nevada and the Nation. For more information on the calculation of survival rates, please refer to Technical Notes section.