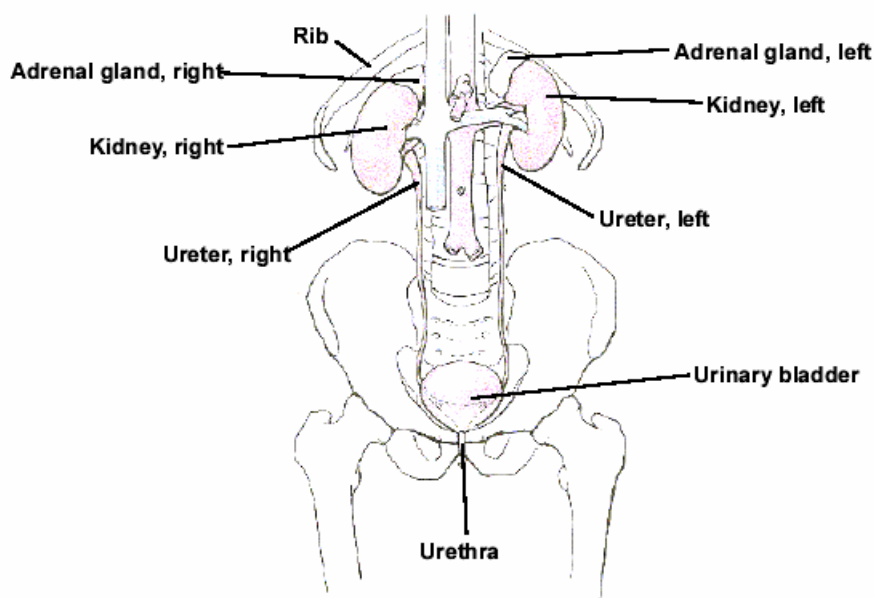


# **KIDNEY AND RENAL PELVIS CANCER**

## 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, 12.3, to the age-adjusted mortality rate, 3.9 (per 100,000 – 2000 US Standard population), for Kidney and Renal Pelvis Cancer was 3.1 during the 2000 to 2004 period, which means that for every 312 Kidney and Renal Pelvis Cancer cases there was 100 deaths due to Kidney and Renal Pelvis Cancer in Nevada during this period.
- Nevadan females had a higher ratio (3.35) than males (2.96) when the incidence and mortality age-adjusted rates for Kidney and Renal Pelvis Cancer were compared. For every female death due to this type of cancer there were 3.35 female cases while there were 2.96 male cases for every male Kidney and Renal Pelvis Cancer death in Nevada from 2000 to 2004.
- The median age at diagnosis of Kidney and Renal Pelvis Cancer for Nevada residents was 64 years of age from 2000 to 2004. For females and males both, the median age was 64 years. The median age at time of death due to Kidney and Renal Pelvis Cancer was 68 years for Nevada overall, 66 years of age for males and 72 years of age for females.

## **INCIDENCE**

- There were 1,310 cases of Kidney and Renal Pelvis Cancer in Nevada from 2000 to 2004. Nevada's Incidence rate for Kidney and Renal Pelvis Cancer (12.3) was only slightly higher than the national rate of 12.8 (per 100,000 – 2000 US Standard population). Regional comparisons showed little variation between Washoe County (13.4), Clark County (12.4) and All Other Counties (10.8) from 2000 to 2004.
- The higher age-adjusted incidence rate for male Kidney and Renal Pelvis Cancer, 16.6 (15.5-17.9), was statistically significant over the female rate of 8.5 (7.8-9.3), per 100,000 – 2000 US Standard population, during the 2000 to 2004 period.
- Blacks had the highest age-adjusted incidence rate, 12.9, for Kidney and Renal Pelvis Cancer of all racial/ethnic groups and were followed by Whites, Hispanics and Asians with rates of 12.9, 9.7 and 5.7 (per 100,000 – 2000 US Standard population), respectively, during the 2000 to 2004 period.
- The median age at diagnosis for Asians (58 years) was the lowest of any specific racial/ethnic group and was considerably lower than the statewide median age of 65 years for the 2000 to 2004 period.

## **INPATIENT HOSPITAL DISCHARGES**

- There were 1,070 hospital inpatient discharges for a primary diagnosis of Kidney and Renal Pelvis Cancer to Nevada residents from 2000 to 2004. Regional comparisons showed little difference between the age-adjusted inpatient discharge rates between

Washoe County (10.3), Clark County (10.1) and All Other Counties (8.7 per 100,000 – 2000 US Standard population).

- Total billed charges for Kidney and Renal Pelvis Cancer inpatient hospital discharges in Nevada totaled 41.6 million dollars from 2000 to 2004. The overall average billed charge per day for a hospital inpatient discharge due to Kidney and Renal Pelvis Cancer was approximately \$6,481 in Nevada during this period.
- Washoe County had the highest median total billed amount (\$36,764), while the statewide median billed amount was \$28,622 from 2000 to 2004; with Clark County and All Other Counties with median billed amounts of \$27,771 and \$21,419, respectively.

### **MORTALITY**

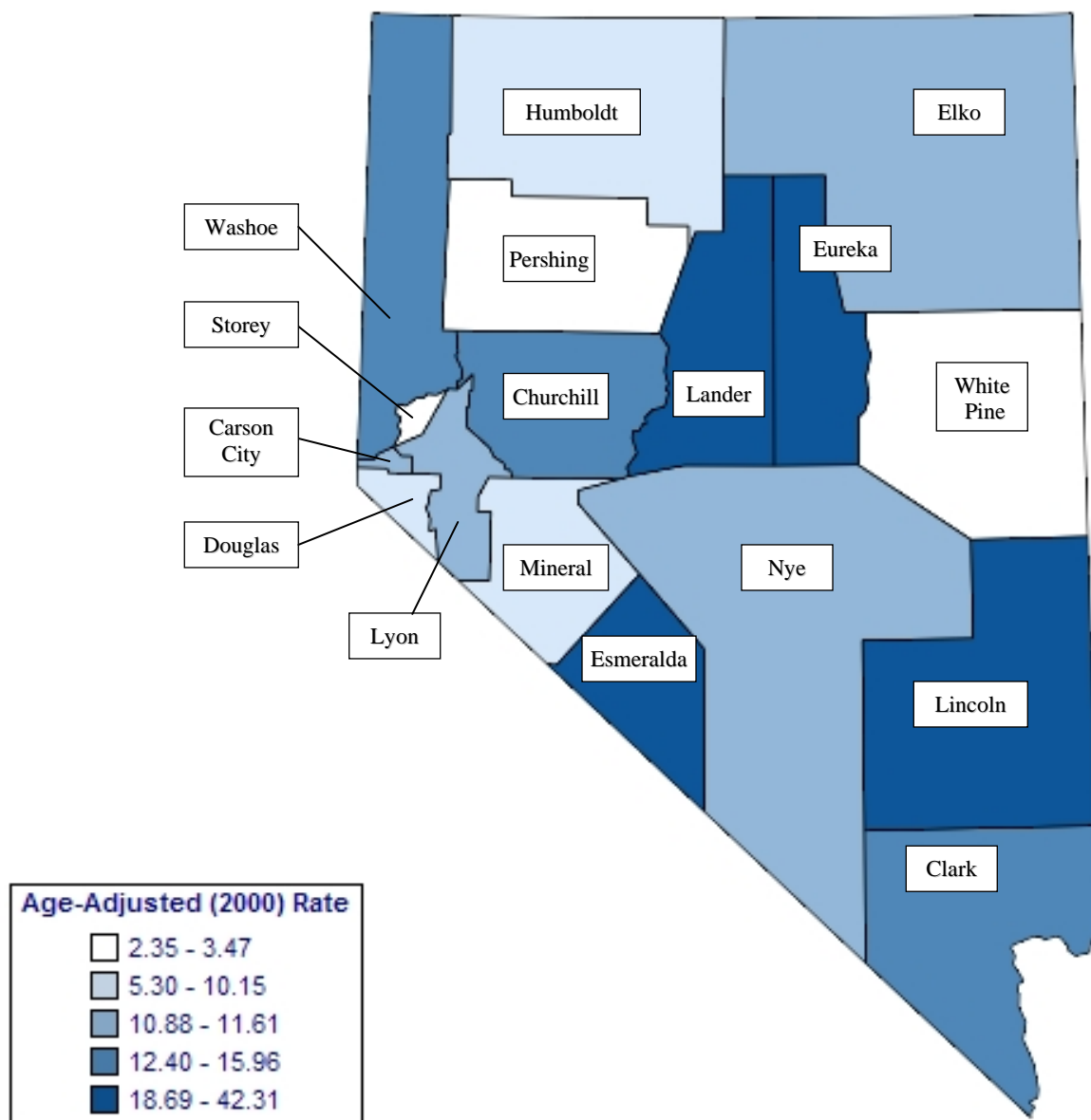
- There were 400 resident deaths due to Kidney and Renal Pelvis Cancer from 2000 to 2004. Males had a statistically significant age-adjusted mortality rate, 5.6 (4.9-6.4), more than double the female rate of 2.5 (2.1-3.0), per 100,000 – 2000 US Standard population, during this period.
- Blacks, as a racial/ethnic group, had the highest age-adjusted mortality rate for Kidney and Renal Pelvis Cancer of any racial/ethnic group, 4.3, and were followed by Whites, Hispanics and Asians with rates of 4.1, 2.8 and 2.5, (per 100,000 – 2000 US Standard population) respectively, from 2000 to 2004.
- Males had a median age at death from Kidney and Renal Pelvis Cancer six years earlier than females in Nevada from 2000 to 2004 with a median age at death of 66 and 72 years, respectively.

### **SURVIVAL RATE**

- The one-year survival rate for Kidney and Renal Pelvis Cancer in Nevada was 77.9% during the 2000 to 2004 period, while the five-year survival rate was 61.7% during this same time. The median survival rate in Nevada was greater than five years for Kidney and Renal Pelvis Cancer for this period.
- Females in Nevada had a slightly higher one-year survival rate (79.9%) than males (76.8%) for Kidney and Renal Pelvis Cancer during the 2000 to 2004 period and this difference remained approximately the same for the five-year survival rate with females and males at 62.6% and 61.1%, respectively.
- 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 97.3% and 82.7%, respectively. This was followed by those with Regional and then Distant diagnoses with rates of 77.4% and 32.5% for the one year period and 55.8% and 14.1% for the five year period.

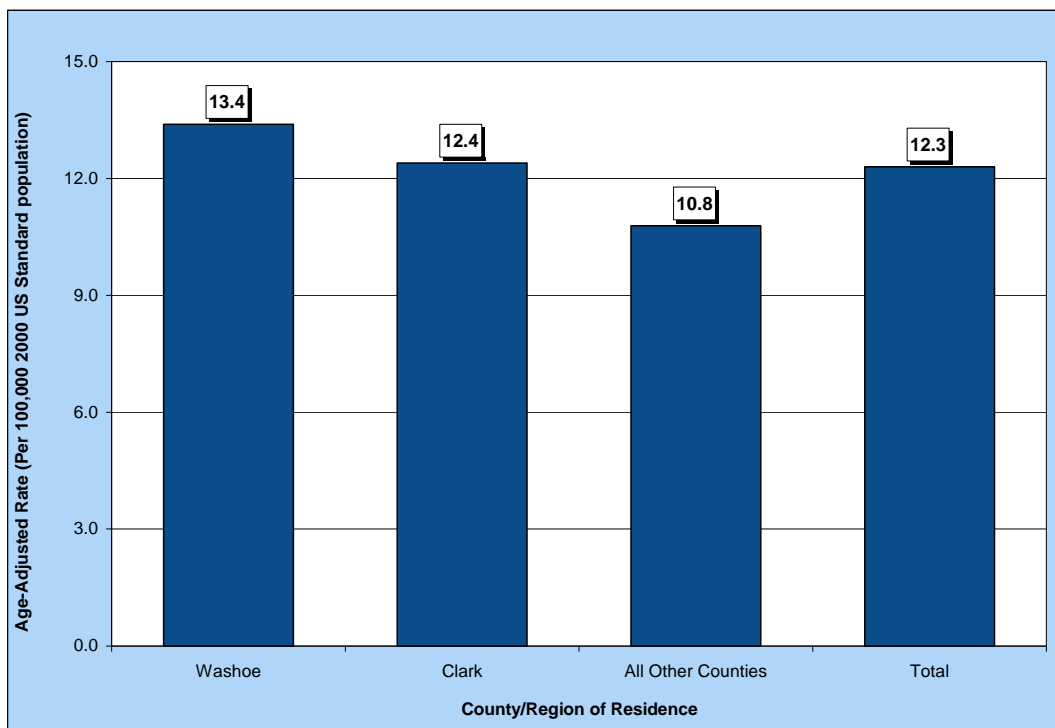
## INCIDENCE

**Figure 115. Kidney and Renal Pelvis Cancer Age-Adjusted (2000) Incidence Rates, Nevada Residents, 2000-2004**

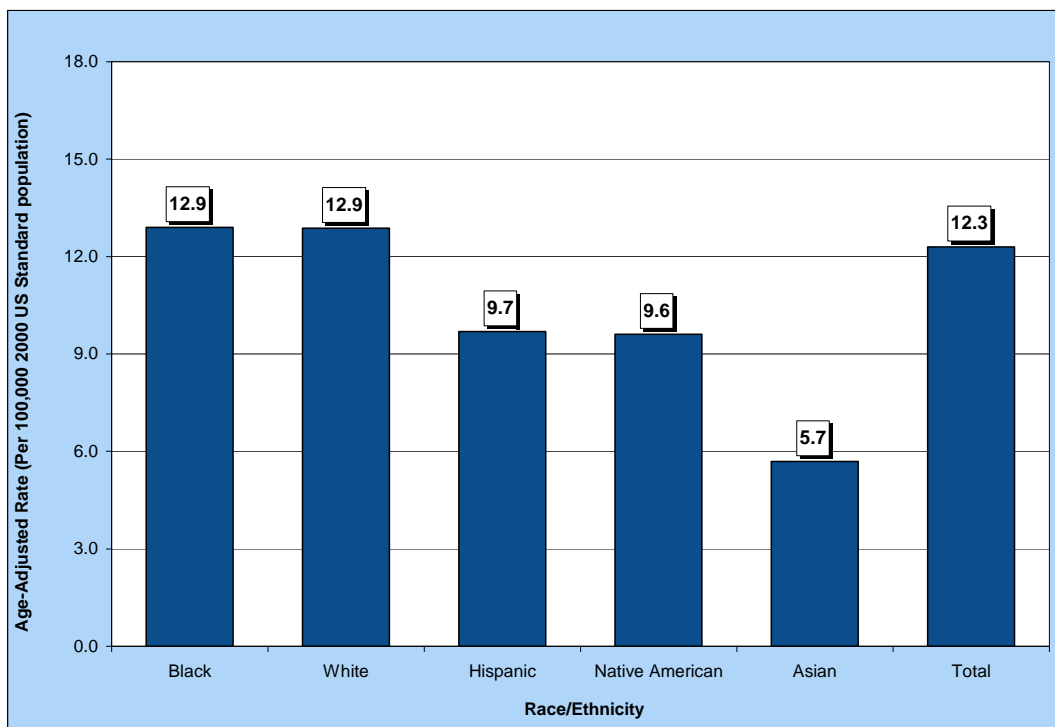


Note: Rates are per 100,000 population and age-adjusted to 2000 US Standard population. Caution should be used when interpreting rates based upon small numbers. See Technical Notes for more information.

**Figure 116. Kidney and Renal Pelvis Cancer Age-Adjusted Incidence Rates by County/Region of Residence, Nevada Residents, 2000-2004**



**Figure 117. Kidney and Renal Pelvis Cancer Age-Adjusted Incidence Rates by Race/Ethnicity, Nevada Residents, 2000-2004**



**Table 171. Kidney and Renal Pelvis Cancer Cases by Gender, Race/Ethnicity and County/Region of Residence at Diagnosis, Nevada Residents (2000-2004) and SEER-17 (2000-2004)**

Category	County/Region of Residence					SEER 17 (2000-2004)
	Nevada Total	Clark	Washoe	All Other Counties	Unknown	
<b>Total</b>						
Cases	1,310	909	225	176	0	45,784
Rate*	12.3	12.4	13.4	10.8	---	12.8
95% C.I.	(11.6-13.0)	(11.6-13.3)	(11.7-15.3)	(9.2-12.6)	---	(12.7-12.9)
<b>Gender</b>						
Male	843	570	142	131	0	28,447
Rate*	16.6	16.4	17.7	16.6	---	17.8
95% C.I.	(15.5-17.9)	(15.0-17.9)	(14.8-21.2)	(13.8-20.0)	---	(17.6-18.0)
Female	467	339	83	45	0	17,337
Rate*	8.5	9.0	9.6	5.4	---	8.9
95% C.I.	(7.8-9.3)	(8.0-10.0)	(7.6-11.9)	(3.9-7.4)	---	(8.7-9.0)
Other/Unknown	0	0	0	0	0	0
<b>Race/Ethnicity</b>						
White	1,088	727	204	157	0	38,859
Rate*	12.9	13.1	14.3	10.7	---	13.3
95% C.I.	(12.1-13.7)	(12.2-14.1)	(12.3-16.4)	(9.1-12.6)	---	(13.1-13.4)
Black	76	71	5	0	0	4,506
Rate*	12.9	12.9	---	---	---	14.3
95% C.I.	(10.1-16.6)	(10.0-16.9)	---	---	---	(13.8-14.7)
Native American	10	2	2	6	0	316
Rate*	9.6	---	---	---	---	9.8
95% C.I.	(4.4-18.8)	---	---	---	---	(8.7-8.7)
Asian	30	25	3	2	0	1,840
Rate*	5.7	5.9	---	---	---	6.3
95% C.I.	(3.5-9.8)	(3.3-11.2)	---	---	---	(6.1-6.6)
Hispanic	85	66	11	8	0	4,856
Rate*	9.7	9.6	10.2	---	---	12.4
95% C.I.	(7.4-12.8)	(7.1-13.2)	(3.8-25.1)	---	---	(12.0-12.8)
Other/Unknown	21	18	0	3	0	263

\* 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 (2000-2004) and SEER-17 (2000-2004)**

Category	County/Region of Residence					SEER 17 (2000-2004)
	Nevada Total	Clark	Washoe	All Other Counties	Unknown	
<b>Total</b>						
<b>Cases</b>	1,310	909	225	176	0	45,784
<b>Rate*</b>	12.3	12.4	13.4	10.8	---	12.8
<b>95% C.I.</b>	(11.6-13.0)	(11.6-13.3)	(11.7-15.3)	(9.2-12.6)	---	(12.7-12.9)
<b>Age Group</b>						
<1	0	0	0	0	0	92
Rate*	---	---	---	---	---	1.7
95% C.I.	---	---	---	---	---	(1.4-2.1)
1-4	10	8	2	0	0	383
Rate*	1.6	---	---	---	---	1.8
95% C.I.	(0.60-2.56)	---	---	---	---	(1.6-2.0)
5-14	8	4	3	1	0	158
Rate*	---	---	---	---	---	0.3
95% C.I.	---	---	---	---	---	(0.2-0.3)
15-24	1	1	0	0	0	115
Rate*	---	---	---	---	---	0.2
95% C.I.	---	---	---	---	---	(0.2-0.3)
25-34	11	9	1	1	0	622
Rate*	0.7	---	---	---	---	1.2
95% C.I.	(0.28-1.08)	---	---	---	---	(1.1-1.2)
35-44	81	51	17	13	0	2,913
Rate*	4.8	4.3	6.0	6.0	---	4.9
95% C.I.	(3.72-5.79)	(3.08-5.41)	(3.13-8.79)	(2.72-9.19)	---	(4.7-5.1)
45-54	200	137	35	28	0	7,445
Rate*	13.4	13.6	13.4	12.5	---	14.4
95% C.I.	(11.54-15.25)	(11.32-15.87)	(8.93-17.77)	(7.89-17.17)	---	(14.1-14.7)
55-64	362	257	57	48	0	10,765
Rate*	33.2	34.2	32.8	28.8	---	32.6
95% C.I.	(29.74-36.58)	(30.01-38.38)	(24.30-41.34)	(20.68-37.00)	---	(32.0-33.2)
65-74	366	265	56	45	0	11,503
Rate*	51.1	53.6	52.6	38.9	---	52.7
95% C.I.	(45.83-56.29)	(47.12-60.01)	(38.80-66.33)	(27.56-50.31)	---	(51.7-53.7)
75-84	228	150	47	31	0	9,294
Rate*	55.5	53.6	74.2	45.7	---	60.6
95% C.I.	(48.27-62.68)	(45.03-62.19)	(53.00-95.44)	(29.60-61.76)	---	(59.4-61.9)
85+	43	27	7	9	0	2,494
Rate*	45.3	44.4	---	---	---	45.1
95% C.I.	(31.73-58.78)	(27.62-61.08)	---	---	---	(43.4-46.9)
Unknown	0	0	0	0	0	0

\* 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, 2000-2004**

County of Residence at Diagnosis	2000-2004 Incidence				
	Cases	Rate*		Age-Adjusted Rate**	
		Rate	95% C.I.	Rate	95% C.I.
Carson City	34	13.3	(8.8-17.8)	10.9	(7.5-15.3)
Churchill	20	16.0	(9.0-23.0)	16.0	(9.7-25.2)
Clark	909	11.8	(11.0-12.6)	12.4	(11.6-13.3)
Douglas	30	13.5	(8.7-18.4)	10.1	(6.8-14.7)
Elko	17	7.4	(3.9-11.0)	11.6	(6.2-20.8)
Esmeralda	1	---	---	---	---
Eureka	3	---	---	---	---
Humboldt	8	---	---	---	---
Lander	3	---	---	---	---
Lincoln	3	---	---	---	---
Lyon	25	12.8	(7.8-17.8)	11.0	(7.1-16.5)
Mineral	2	---	---	---	---
Nye	27	15.3	(9.5-21.1)	11.1	(7.1-17.4)
Pershing	1	---	---	---	---
Storey	1	---	---	---	---
Washoe	225	12.5	(10.9-14.2)	13.4	(11.7-15.3)
White Pine	1	---	---	---	---
Unknown	0	---	---	---	---
<b>Total</b>	<b>1,310</b>	<b>12.0</b>	<b>(11.3-12.6)</b>	<b>12.3</b>	<b>(11.6-13.0)</b>

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, 2000-2004**

Race/Ethnicity	Gender				
	Male	Female	Other/Unknown	Total	
White	Incidence	706	382	0	1,088
	Rate*	17.3	8.9	---	12.9
	95% C.I.	(16.0-18.7)	(8.0-9.9)	---	(12.1-13.7)
Black	Incidence	47	29	0	76
	Rate*	16.2	9.7	---	12.9
	95% C.I.	(11.8-22.0)	(6.4-14.4)	---	(10.1-16.6)
Native American	Incidence	7	3	0	10
	Rate*	---	---	---	9.6
	95% C.I.	---	---	---	(4.4-18.8)
Asian	Incidence	19	11	0	30
	Rate*	9.5	3.1	---	5.7
	95% C.I.	(4.9-19.3)	(1.5-5.6)	---	(3.5-9.8)
Hispanic	Incidence	55	30	0	85
	Rate*	15.5	5.4	---	9.7
	95% C.I.	(10.6-23.1)	(3.5-8.2)	---	(7.4-12.8)
Other/Unknown	9	12	0	21	
Total	Incidence	843	467	0	1,310
	Rate*	16.6	8.5	---	12.3
	95% C.I.	(15.5-17.9)	(7.8-9.3)	---	(11.6-13.0)

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, 2000-2004**

Age Group	Gender			
	Male	Female	Unknown	Total
<1	0	0	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
1-4	7	3	0	10
Rate*	---	---	---	1.58
95% C.I.	---	---	---	(0.60-2.56)
5-14	4	4	0	8
Rate*	---	---	---	---
95% C.I.	---	---	---	---
15-24	0	1	0	1
Rate*	---	---	---	---
95% C.I.	---	---	---	---
25-34	7	4	0	11
Rate*	---	---	---	0.68
95% C.I.	---	---	---	(0.28-1.08)
35-44	44	37	0	81
Rate*	4.97	4.51	---	4.75
95% C.I.	(3.50-6.44)	(3.06-5.97)	---	(3.72-5.79)
45-54	129	71	0	200
Rate*	17.04	9.64	---	13.39
95% C.I.	(14.10-19.98)	(7.40-11.88)	---	(11.54-15.25)
55-64	246	116	0	362
Rate*	45.71	20.96	---	33.16
95% C.I.	(40.00-51.42)	(17.14-24.77)	---	(29.74-36.58)
65-74	230	136	0	366
Rate*	65.10	37.41	---	51.06
95% C.I.	(56.68-73.51)	(31.12-43.70)	---	(45.83-56.29)
75-84	149	79	0	228
Rate*	80.25	35.06	---	55.48
95% C.I.	(67.37-93.14)	(27.33-42.79)	---	(48.27-62.68)
85+	27	16	0	43
Rate*	84.99	25.30	---	45.26
95% C.I.	(52.93-117.05)	(12.90-37.69)	---	(31.73-58.78)
Unknown	0	0	0	0
Total	843	467	0	1,310
Rate*	15.17	8.68	---	11.97
95% C.I.	(14.1-16.2)	(7.9-9.5)	---	(11.3-12.6)

\* 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, 2000-2004**

Age Group		Stage					Total
		In situ	Localized	Regional	Distant	Unstaged	
<1	Number	---	0	0	0	0	0
	Percent	---	---	---	---	---	---
1-4	Number	---	4	1	3	2	10
	Percent	---	40.0%	10.0%	30.0%	20.0%	100.0%
5-14	Number	---	2	2	1	3	8
	Percent	---	25.0%	25.0%	12.5%	37.5%	100.0%
15-24	Number	---	1	0	0	0	1
	Percent	---	100.0%	---	---	---	100.0%
25-34	Number	---	9	0	2	0	11
	Percent	---	81.8%	---	18.2%	---	100.0%
35-44	Number	---	54	6	7	14	81
	Percent	---	66.7%	7.4%	8.6%	17.3%	100.0%
45-54	Number	---	108	33	17	42	200
	Percent	---	54.0%	16.5%	8.5%	21.0%	100.0%
55-64	Number	---	177	48	61	76	362
	Percent	---	48.9%	13.3%	16.9%	21.0%	100.0%
65-74	Number	---	176	53	53	84	366
	Percent	---	48.1%	14.5%	14.5%	23.0%	100.0%
75-84	Number	---	84	31	39	74	228
	Percent	---	36.8%	13.6%	17.1%	32.5%	100.0%
85+	Number	---	9	4	11	19	43
	Percent	---	20.9%	9.3%	25.6%	44.2%	100.0%
Unknown	Number	---	0	0	0	0	0
	Percent	---	---	---	---	---	---
Total	Number	---	624	178	194	314	1,310
	Percent	---	47.6%	13.6%	14.8%	24.0%	100.0%

**Table 177. Kidney and Renal Pelvis Cancer Cases by Stage and Race/Ethnicity, Nevada Residents, 2000-2004**

Stage	Race/Ethnicity							
	White	Black	Native American	Asian	Hispanic	Other/Unknown	Total	
In situ	Number	---	---	---	---	---	---	
	Percent	---	---	---	---	---	---	
Localized	Number	505	50	3	12	48	6	624
	Percent	46.4%	65.8%	30.0%	40.0%	56.5%	28.6%	47.6%
Regional	Number	158	4	0	9	6	0	178
	Percent	14.5%	5.3%	---	30.0%	7.1%	---	13.6%
Distant	Number	172	6	0	3	12	1	194
	Percent	15.8%	7.9%	---	10.0%	14.1%	4.8%	14.8%
Unstaged	Number	253	16	7	6	19	14	314
	Percent	23.3%	21.1%	70.0%	20.0%	22.4%	66.7%	24.0%
Total	Number	1,088	76	10	30	85	21	1,310
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

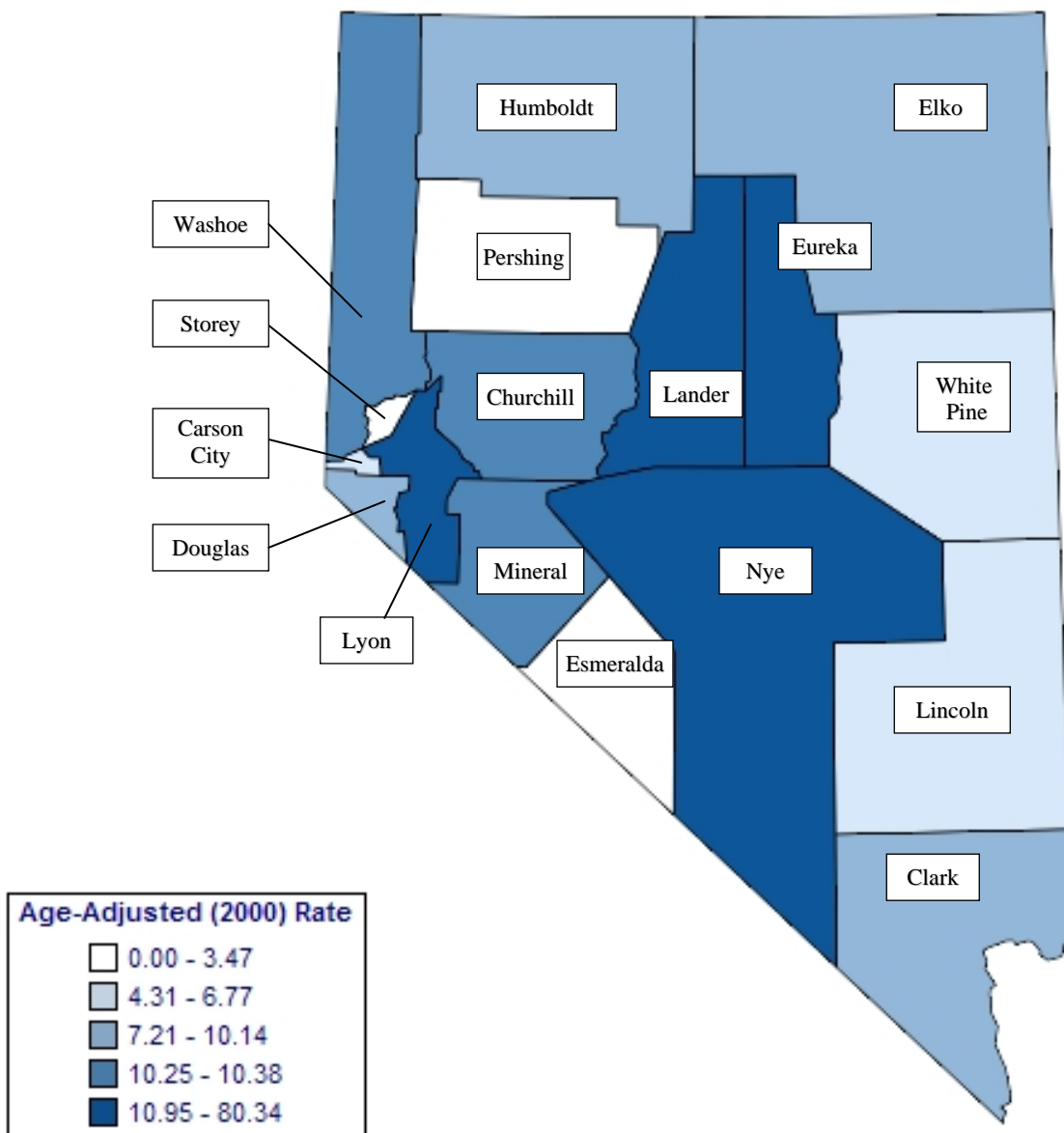
**Table 178. Median Age at Diagnosis of Kidney and Renal Pelvis Cancer by Race/Ethnicity and Gender, Nevada Residents, 2000-2004**

Race/Ethnicity	Gender					
	Male		Female		Total	
	Cases	Median Age	Cases	Median Age	Cases	Median Age
White	706	64.0	382	65.0	1,088	65.0
Black	47	60.0	29	64.0	76	61.0
Native American	7	71.0	3	---	10	70.0
Asian	19	60.0	11	57.0	30	58.0
Hispanic	55	64.0	30	53.0	85	60.0
Other/Unknown	9	65.0	12	64.0	21	65.0
Total	843	64.0	467	64.0	1,310	64.0

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.

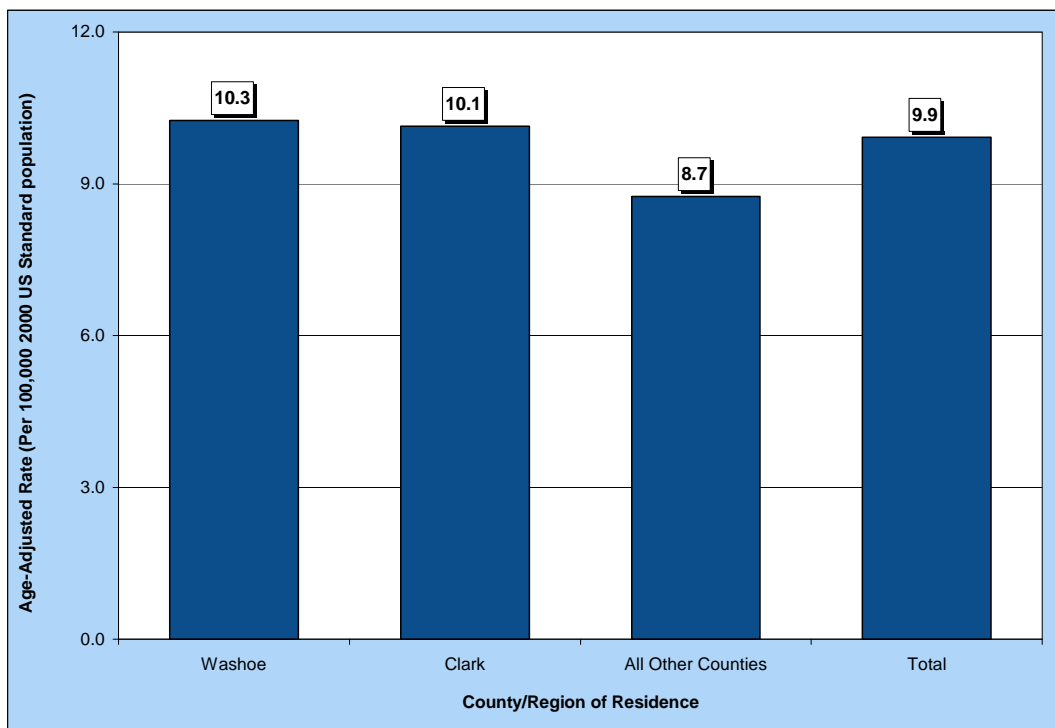
## INPATIENT HOSPITAL DISCHARGES

**Figure 118. Kidney and Renal Pelvis Cancer Age-Adjusted (2000) Inpatient Discharge Rates, Nevada Residents, 2000-2004**

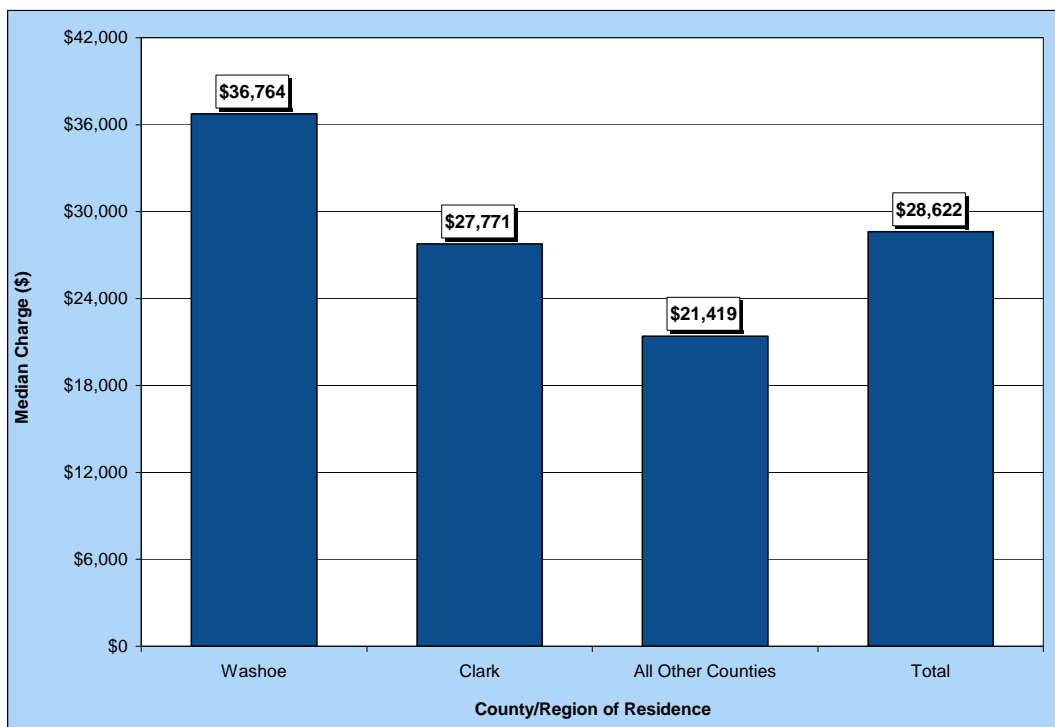


Note: Rates are per 100,000 population and age-adjusted to 2000 US Standard population. Caution should be used when interpreting rates based upon small numbers and comparing inpatient hospital discharge rates to other data sources, because it is occurrence based data. See Technical Notes for more information.

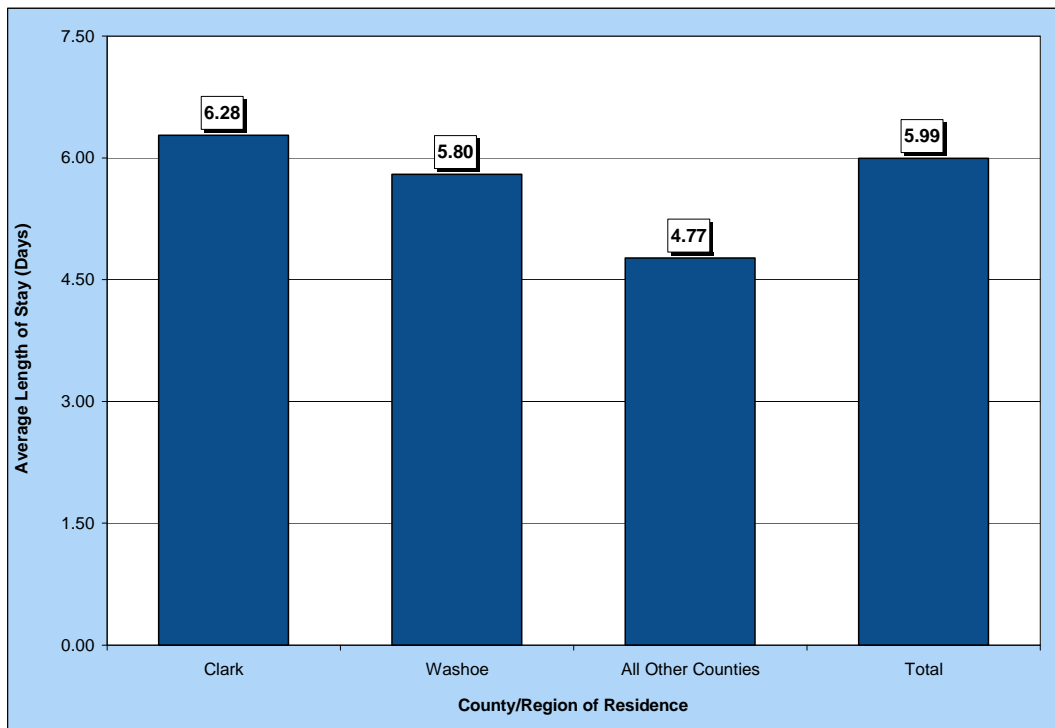
**Figure 119. Kidney and Renal Pelvis Cancer Age-Adjusted Inpatient Discharge Rates by County/Region of Residence, Nevada Residents, 2000-2004**



**Figure 120. Median Charges for Kidney and Renal Pelvis Cancer Inpatient Discharges by County/Region of Residence, Nevada Residents, 2000-2004**



**Figure 121. Average Length of Stay for Kidney and Renal Pelvis Cancer Inpatient Discharges by County/Region of Residence, Nevada Residents, 2000-2004**



**Table 179. Kidney and Renal Pelvis Cancer Inpatient Discharges by Gender, Charges, Length of Stay, and County/Region of Residence, Nevada Residents, 2000-2004**

Category	County/Region of Residence				
	Nevada Total	Clark	Washoe	All Other Counties	Unknown
<b>Total</b>					
Discharges	1,070	749	176	145	0
Rate*	9.9	10.1	10.3	8.7	---
95% C.I.	(9.3-10.5)	(9.4-10.9)	(8.8-11.9)	(7.4-10.3)	---
<b>Gender</b>					
Male	694	471	115	108	0
Rate*	13.3	13.1	14.0	13.4	---
95% C.I.	(12.3-14.4)	(11.9-14.5)	(11.4-17.1)	(11.0-16.4)	---
Female	376	278	61	37	0
Rate*	6.8	7.4	6.9	4.4	---
95% C.I.	(6.1-7.6)	(6.5-8.3)	(5.3-8.9)	(3.1-6.1)	---
Other/Unknown	0	0	0	0	0
<b>Inpatient Discharge Charges (\$)</b>					
Total Charges	\$41,562,878	\$29,908,136	\$7,508,010	\$4,146,732	\$0
Average Charges	\$38,844	\$39,931	\$42,659	\$28,598	\$0
Median Charges	\$28,622	\$27,771	\$36,764	\$21,419	\$0
<b>Discharge Length of Stay (LOS) (Days)</b>					
Total LOS	6,413	4,702	1,020	691	0
Average LOS	6.0	6.3	5.8	4.8	0.0
Median LOS	4.0	5.0	5.0	4.0	0.0

\* 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, 2000-2004**

Category	County/Region of Residence			
	Nevada Total	Clark	Washoe	All Other Counties
<b>Total</b>				
<b>Discharges</b>	1,070	749	176	145
<b>Rate*</b>	9.8	9.7	9.8	10.0
<b>95% C.I.</b>	(9.2-10.4)	(9.0-10.4)	(8.4-11.3)	(8.4-11.6)
<b>Age Group</b>				
<1	0	0	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
1-4	13	12	1	0
Rate*	2.1	2.6	---	---
95% C.I.	(0.94-3.18)	(1.13-4.08)	---	---
5-14	7	7	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
15-24	1	1	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
25-34	9	7	1	1
Rate*	---	---	---	---
95% C.I.	---	---	---	---
35-44	66	41	13	12
Rate*	3.9	3.4	4.6	5.5
95% C.I.	(2.94-4.80)	(2.37-4.46)	(2.08-7.03)	(2.39-8.60)
45-54	173	124	27	22
Rate*	11.6	12.3	10.3	9.9
95% C.I.	(9.86-13.31)	(10.14-14.47)	(6.41-14.18)	(5.73-13.96)
55-64	305	211	51	43
Rate*	27.9	28.1	29.4	25.8
95% C.I.	(24.80-31.07)	(24.29-31.86)	(21.30-37.42)	(18.11-33.56)
65-74	303	216	54	33
Rate*	42.3	43.7	50.7	28.6
95% C.I.	(37.51-47.03)	(37.84-49.48)	(37.17-64.20)	(18.81-38.30)
75-84	169	111	26	32
Rate*	41.1	39.7	41.1	47.2
95% C.I.	(34.92-47.32)	(32.29-47.05)	(25.28-56.84)	(30.82-63.49)
85+	24	19	3	2
Rate*	25.3	31.2	---	---
95% C.I.	(15.15-35.37)	(17.18-45.24)	---	---
Unknown	0	0	0	0

\* 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, 2000-2004**

Age Group	Gender		
	Male	Female	Total
<1	0	0	0
Rate*	---	---	---
95% C.I.	---	---	---
1-4	12	1	13
Rate*	3.71	---	2.06
95% C.I.	(1.61-5.81)	---	(0.94-3.18)
5-14	6	1	7
Rate*	---	---	---
95% C.I.	---	---	---
15-24	0	1	1
Rate*	---	---	---
95% C.I.	---	---	---
25-34	5	4	9
Rate*	---	---	---
95% C.I.	---	---	---
35-44	38	28	66
Rate*	4.29	3.42	3.87
95% C.I.	(2.93-5.66)	(2.15-4.68)	(2.94-4.80)
45-54	108	65	173
Rate*	14.27	8.83	11.58
95% C.I.	(11.58-16.96)	(6.68-10.97)	(9.86-13.31)
55-64	205	100	305
Rate*	38.09	18.07	27.94
95% C.I.	(32.88-43.30)	(14.53-21.61)	(24.80-31.07)
65-74	198	105	303
Rate*	56.04	28.88	42.27
95% C.I.	(48.23-63.85)	(23.36-34.41)	(37.51-47.03)
75-84	109	60	169
Rate*	58.71	26.63	41.12
95% C.I.	(47.69-69.73)	(19.89-33.37)	(34.92-47.32)
85+	13	11	24
Rate*	40.92	17.39	25.26
95% C.I.	(18.68-63.17)	(7.11-27.67)	(15.15-35.37)
Unknown	0	0	0
Total	694	376	1,070
Rate*	12.49	6.99	9.78
95% C.I.	(11.6-13.4)	(6.3-7.7)	(9.2-10.4)

\* 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, 2000-2004**

County of Residence	2000-2004 Inpatient Hospital Discharges				
	Cases	Rate*		Age-Adjusted Rate**	
		Rate	95% C.I.	Rate	95% C.I.
Carson City	21	8.2	(4.7-11.7)	6.8	(4.2-10.5)
Churchill	13	10.4	(4.8-16.1)	10.4	(5.5-18.4)
Clark	749	9.7	(9.0-10.4)	10.1	(9.4-10.9)
Douglas	23	10.4	(6.1-14.6)	7.8	(4.9-12.0)
Elko	13	5.7	(2.6-8.8)	8.2	(4.0-15.7)
Esmeralda	0	---	---	---	---
Eureka	5	---	---	---	---
Humboldt	6	---	---	---	---
Lander	2	---	---	---	---
Lincoln	1	---	---	---	---
Lyon	27	13.8	(8.6-19.0)	11.9	(7.8-17.5)
Mineral	3	---	---	---	---
Nye	27	15.3	(9.5-21.1)	11.1	(7.0-17.3)
Pershing	1	---	---	---	---
Storey	1	---	---	---	---
Washoe	176	9.8	(8.4-11.3)	10.3	(8.8-11.9)
White Pine	2	---	---	---	---
Unknown	0	---	---	---	---
<b>Total</b>	<b>1,070</b>	<b>9.8</b>	<b>(9.2-10.4)</b>	<b>9.9</b>	<b>(9.3-10.5)</b>

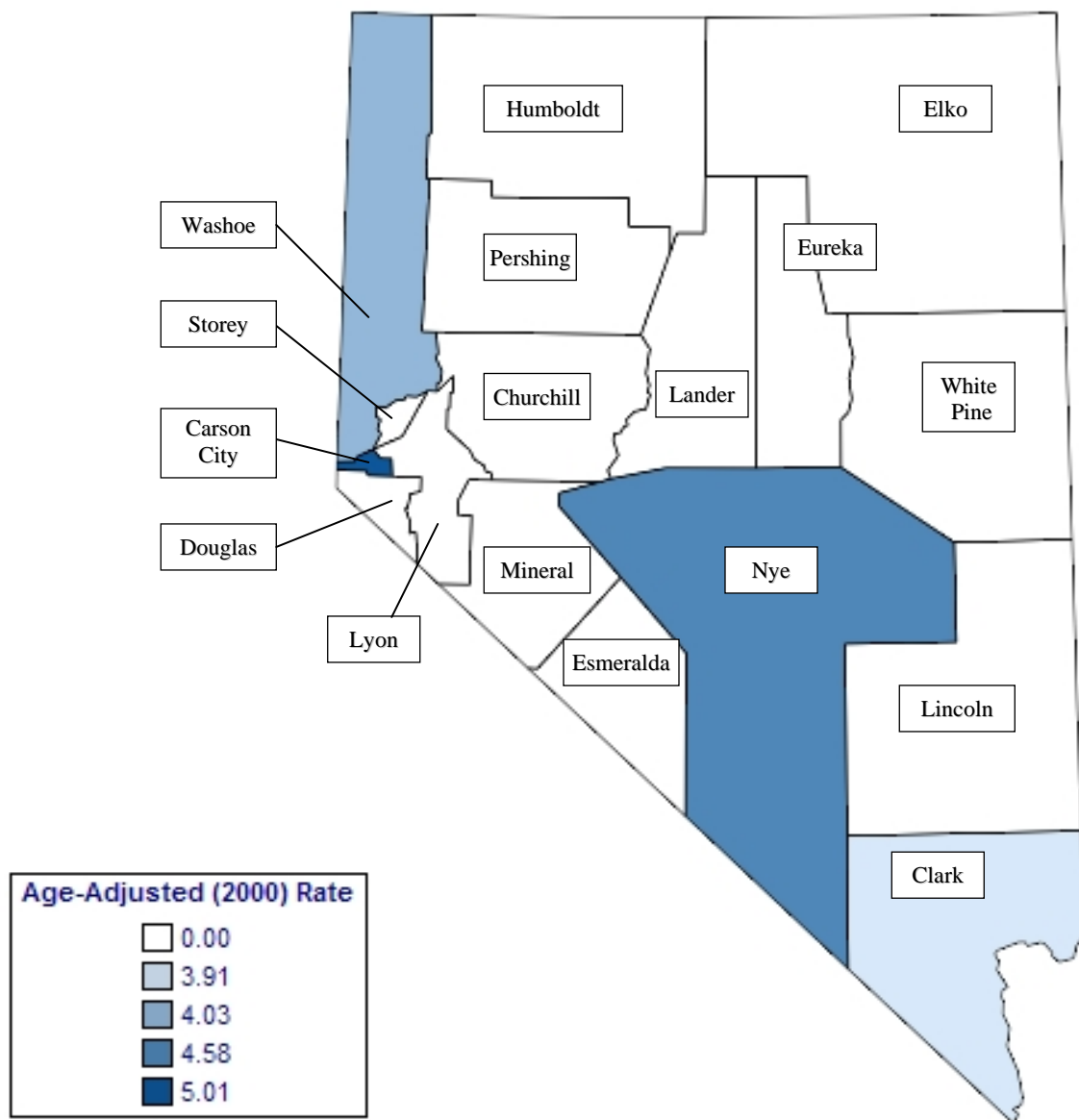
Note: The "---" is used for rates calculated on numbers less than ten. \*Rates are per 100,000 population. \*\*Rates are per 100,000 population and are age-adjusted to the 2000 US Standard population.

**Table 183. Kidney and Renal Pelvis Cancer Inpatient Discharges by Age Group, Charges and Length of Stay, Nevada Residents, 2000-2004**

Age Group	Discharges	Charges (\$)			Length of Stay (Days)		
		Total	Average	Median	Total	Average	Median
<1	0	---	---	---	---	---	---
1-4	13	647,468	49,805	47,229	112	8.6	8.0
5-14	7	---	---	---	---	---	---
15-24	1	---	---	---	---	---	---
25-34	9	---	---	---	---	---	---
35-44	66	2,423,214	36,715	28,566	364	5.5	4.0
45-54	173	6,331,049	36,596	25,821	951	5.5	4.0
55-64	305	11,685,632	38,314	29,255	1,832	6.0	4.0
65-74	303	11,036,935	36,426	28,006	1,707	5.6	4.0
75-84	169	7,724,349	45,706	29,919	1,154	6.8	5.0
85+	24	944,353	39,348	26,908	182	7.6	5.5
Unknown	0	---	---	---	---	---	---
<b>Total</b>	<b>1,070</b>	<b>41,562,878</b>	<b>38,844</b>	<b>28,622</b>	<b>6,413</b>	<b>6.0</b>	<b>4.0</b>

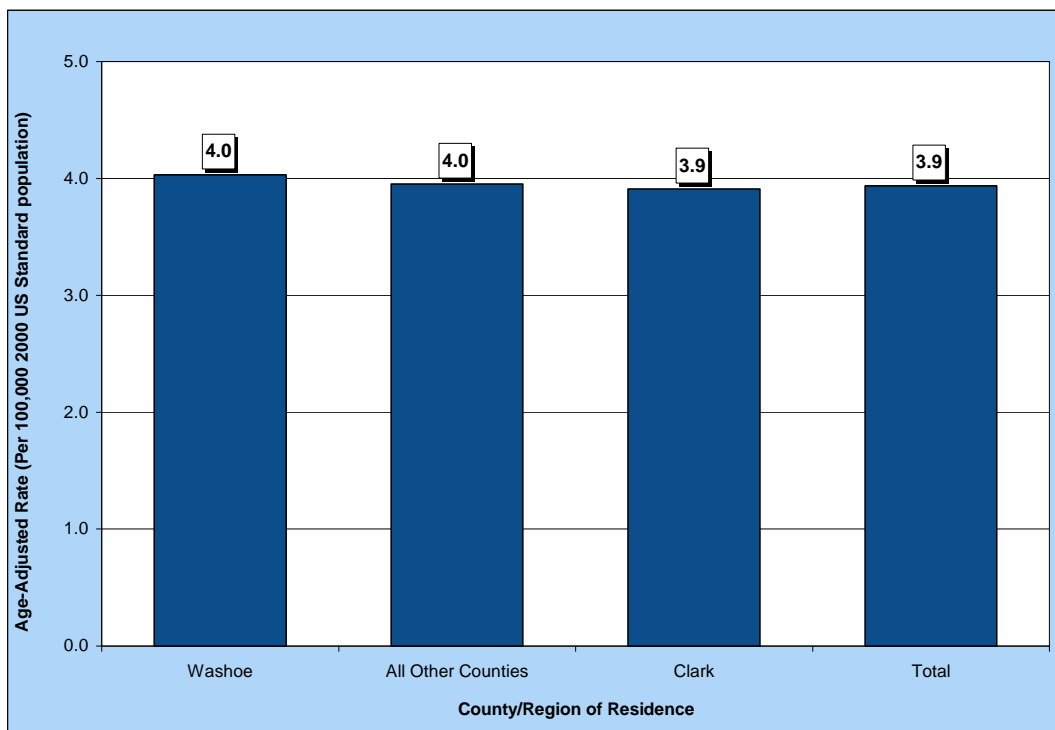
## MORTALITY

**Figure 122. Kidney and Renal Pelvis Cancer Age-Adjusted (2000) Mortality Rates, Nevada Residents, 2000-2004**

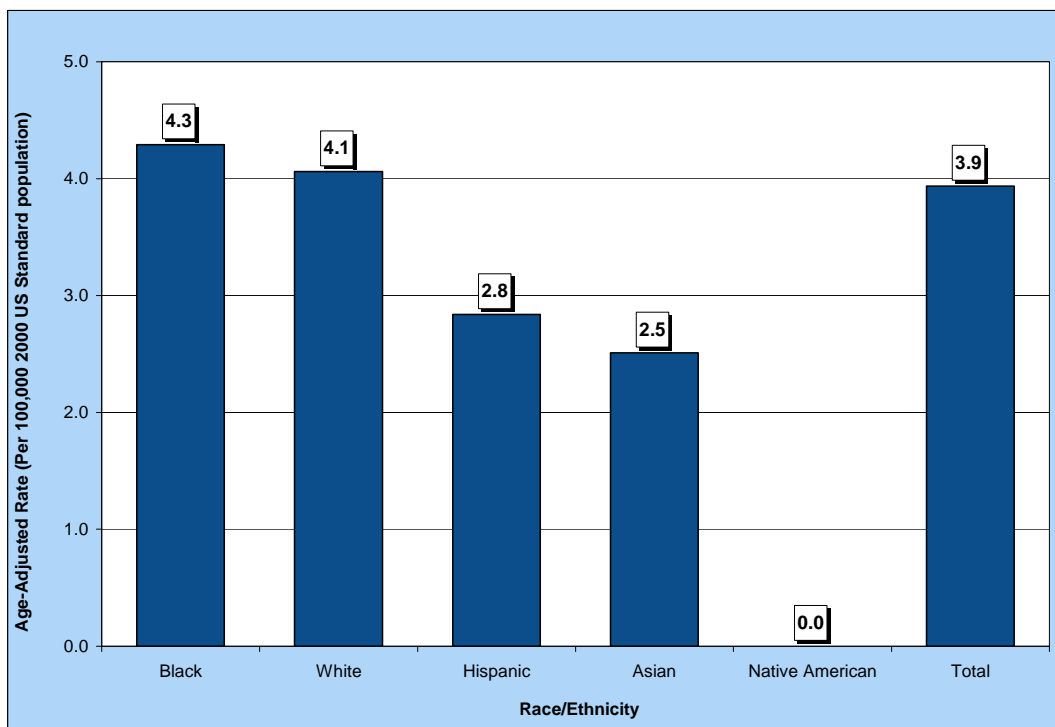


Note: Rates are per 100,000 population and age-adjusted to 2000 US Standard population. Caution should be used when interpreting rates based upon small numbers. See Technical Notes for more information.

**Figure 123. Kidney and Renal Pelvis Cancer Age-Adjusted Mortality Rates by County/Region of Residence, Nevada Residents, 2000-2004**



**Figure 124. Kidney and Renal Pelvis Cancer Age-Adjusted Mortality Rates by Race/Ethnicity, Nevada Residents, 2000-2004**



**Table 184. Kidney and Renal Pelvis Cancer Mortality by Gender, Race/Ethnicity and County/Region of Residence, Nevada Residents, 2000-2004**

Category	County/Region of Residence			
	Nevada Total	Clark	Washoe	All Other Counties
<b>Total</b>				
<b>Mortality</b>	400	272	63	65
<b>Rate*</b>	3.9	3.9	4.0	4.0
<b>95% C.I.</b>	(3.6-4.4)	(3.4-4.4)	(3.1-5.2)	(3.0-5.1)
<b>Gender</b>				
Male	265	179	42	44
Rate*	5.6	5.5	6.1	5.6
95% C.I.	(4.9-6.4)	(4.7-6.5)	(4.3-8.6)	(4.0-7.8)
Female	135	93	21	21
Rate*	2.5	2.6	2.5	2.5
95% C.I.	(2.1-3.0)	(2.1-3.2)	(1.6-3.9)	(1.5-3.8)
Other/Unknown	0	0	0	0
<b>Race/Ethnicity</b>				
White	338	224	56	58
Rate*	4.1	4.1	4.1	3.9
95% C.I.	(3.6-4.5)	(3.6-4.7)	(3.1-5.3)	(2.9-5.1)
Black	23	21	2	0
Rate*	4.3	4.3	---	---
95% C.I.	(2.6-7.0)	(2.5-7.1)	---	---
Native American	6	0	2	4
Rate*	---	---	---	---
95% C.I.	---	---	---	---
Asian	10	10	0	0
Rate*	2.5	3.2	---	---
95% C.I.	(0.9-6.4)	(1.1-8.4)	---	---
Hispanic	22	16	3	3
Rate*	2.8	2.2	---	---
95% C.I.	(1.6-5.1)	(1.2-3.9)	---	---
Other/Unknown	1	1	0	0

\*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, 2000-2004**

Category	County/Region of Residence			
	Nevada Total	Clark	Washoe	All Other Counties
<b>Total</b>				
Deaths	400	272	63	65
Rate*	3.9	3.9	4.0	4.0
95% C.I.	(3.6-4.4)	(3.4-4.4)	(3.1-5.2)	(3.0-5.1)
<b>Age Group</b>				
<1	0	0	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
1-4	0	0	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
5-14	1	0	1	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
15-24	0	0	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
25-34	1	1	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
35-44	8	6	0	2
Rate*	---	---	---	---
95% C.I.	---	---	---	---
45-54	37	26	6	5
Rate*	2.5	2.6	---	---
95% C.I.	(1.68-3.28)	(1.59-3.57)	---	---
55-64	113	76	16	21
Rate*	10.4	10.1	9.2	12.6
95% C.I.	(8.44-12.26)	(7.84-12.39)	(4.70-13.73)	(7.22-18.01)
65-74	109	76	13	20
Rate*	15.2	15.4	12.2	17.3
95% C.I.	(12.35-18.06)	(11.91-18.82)	(5.57-18.84)	(9.72-24.89)
75-84	99	68	19	12
Rate*	24.1	24.3	30.0	17.7
95% C.I.	(19.34-28.83)	(18.53-30.08)	(16.51-43.50)	(7.68-27.69)
85+	32	19	8	5
Rate*	33.7	31.2	---	---
95% C.I.	(22.01-45.35)	(17.18-45.24)	---	---
Unknown	0	0	0	0

\* 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, 2000-2004**

County of Residence at Diagnosis	2000-2004 Mortality				
	Cases	Rate*		Age-Adjusted Rate**	
		Rate	95% C.I.	Rate	95% C.I.
Carson City	15	5.9	(2.9-8.8)	5.0	(2.8-8.4)
Churchill	7	---	---	---	---
Clark	272	3.5	(3.1-4.0)	3.9	(3.4-4.4)
Douglas	9	---	---	---	---
Elko	4	---	---	---	---
Esmeralda	0	---	---	---	---
Eureka	1	---	---	---	---
Humboldt	4	---	---	---	---
Lander	2	---	---	---	---
Lincoln	0	---	---	---	---
Lyon	9	---	---	---	---
Mineral	1	---	---	---	---
Nye	12	6.8	(3.0-10.7)	4.6	(2.2-9.0)
Pershing	0	---	---	---	---
Storey	0	---	---	---	---
Washoe	63	3.5	(2.6-4.4)	4.0	(3.1-5.2)
White Pine	1	---	---	---	---
Unknown	0	---	---	---	---
<b>Total</b>	<b>400</b>	<b>3.7</b>	<b>(3.3-4.0)</b>	<b>3.9</b>	<b>(3.6-4.4)</b>

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, 2000-2004**

Race/Ethnicity	Gender				
	Male	Female	Other/Unknown	Total	
White	Incidence	222	116	0	338
	Rate*	5.7	2.7	---	4.1
	95% C.I.	(4.9-6.6)	(2.2-3.2)	---	(3.6-4.5)
Black	Incidence	12	11	0	23
	Rate*	4.0	4.2	---	4.3
	95% C.I.	(2.1-7.1)	(2.1-8.1)	---	(2.6-7.0)
Native American	Incidence	3	3	0	6
	Rate*	---	---	---	---
	95% C.I.	---	---	---	---
Asian	Incidence	9	1	0	10
	Rate*	---	---	---	2.5
	95% C.I.	---	---	---	(0.9-6.4)
Hispanic	Incidence	19	3	0	22
	Rate*	5.9	---	---	2.8
	95% C.I.	(2.9-12.0)	---	---	(1.6-5.1)
Other/Unknown	Incidence	0	1	0	1
	Rate*	---	---	---	---
	95% C.I.	---	---	---	---
Total	Incidence	265	135	0	400
	Rate*	5.6	2.5	---	3.9
	95% C.I.	(4.9-6.4)	(2.1-3.0)	---	(3.6-4.4)

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, 2000-2004**

Age Group	Gender		
	Male	Female	Total
<1	0	0	0
Rate*	---	---	---
95% C.I.	---	---	---
1-4	0	0	0
Rate*	---	---	---
95% C.I.	---	---	---
5-14	0	1	1
Rate*	---	---	---
95% C.I.	---	---	---
15-24	0	0	0
Rate*	---	---	---
95% C.I.	---	---	---
25-34	1	0	1
Rate*	---	---	---
95% C.I.	---	---	---
35-44	6	2	8
Rate*	---	---	---
95% C.I.	---	---	---
45-54	28	9	37
Rate*	3.70	---	2.48
95% C.I.	(2.33-5.07)	---	(1.68-3.28)
55-64	85	28	113
Rate*	15.79	5.06	10.35
95% C.I.	(12.44-19.15)	(3.19-6.93)	(8.44-12.26)
65-74	67	42	109
Rate*	18.96	11.55	15.21
95% C.I.	(14.42-23.50)	(8.06-15.05)	(12.35-18.06)
75-84	59	40	99
Rate*	31.78	17.75	24.09
95% C.I.	(23.67-39.89)	(12.25-23.25)	(19.34-28.83)
85+	19	13	32
Rate*	59.81	20.55	33.68
95% C.I.	(32.92-86.70)	(9.38-31.73)	(22.01-45.35)
Unknown	0	0	0
Total	265	135	400
Rate*	4.77	2.51	3.66
95% C.I.	(4.2-5.3)	(2.1-2.9)	(3.3-4.0)

\* Rates are per 100,000 age-specific population.

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

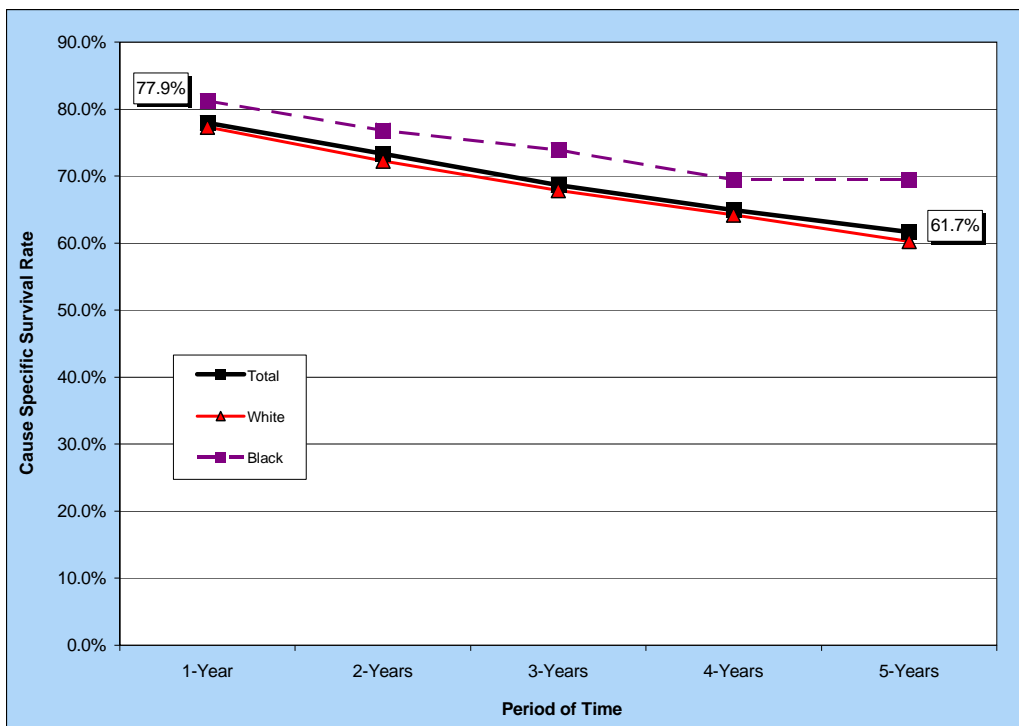
**Table 189. Median Age at Death from Kidney and Renal Pelvis Cancer by Race/Ethnicity and Gender, Nevada Residents, 2000-2004**

Race/Ethnicity	Gender					
	Male		Female		Total	
	Cases	Median Age	Cases	Median Age	Cases	Median Age
White	222	66.0	116	72.0	338	69.0
Black	12	62.0	11	67.0	23	64.0
Native American	3	---	3	---	6	69.5
Asian	9	70.0	1	---	10	71.0
Hispanic	19	63.0	3	---	22	60.5
Other/Unknown	0	---	1	---	1	---
<b>Total</b>	<b>265</b>	<b>66.0</b>	<b>135</b>	<b>72.0</b>	<b>400</b>	<b>68.0</b>

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.

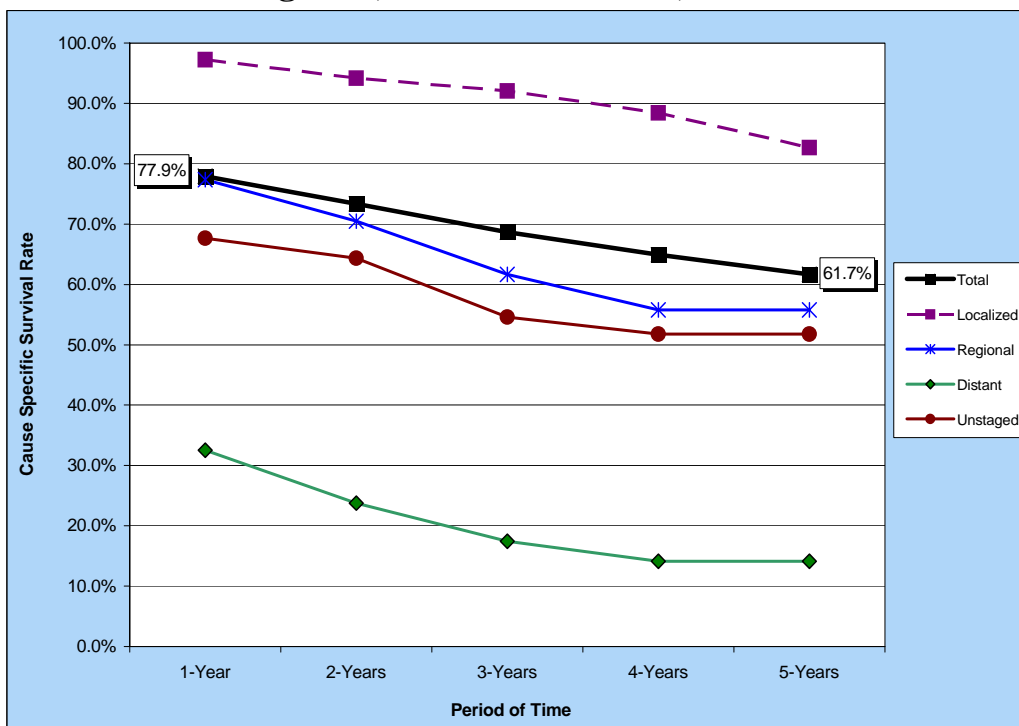
## SURVIVAL RATE

**Figure 125. Survival Rates for Kidney and Renal Pelvis Cancer by Race/Ethnicity, Nevada Residents, 2000-2004**



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, 2000-2004**



**Table 190. Cause-Specific Survival Rates for Kidney and Renal Pelvis Cancer by Race/Ethnicity and Gender, Nevada Residents, 2000-2004**

Race/ Ethnicity and Gender	Number of Cases	Cause Specific Survival Rate					Median Survival Time (years)
		One Year	Two Years	Three Years	Four Years	Five Years	
Total	1,046	77.9%	73.3%	68.6%	64.9%	61.7%	> 5 YEARS
Male	660	76.8%	72.2%	67.1%	64.5%	61.1%	> 5 YEARS
Female	386	79.9%	75.3%	71.3%	65.6%	62.6%	> 5 YEARS
<b>Race/Ethnicity</b>							
White	861	77.3%	72.3%	67.8%	64.2%	60.3%	> 5 YEARS
Male	546	76.8%	71.6%	66.9%	65.0%	60.7%	> 5 YEARS
Female	315	78.2%	73.5%	69.5%	63.1%	59.7%	> 5 YEARS
Black	65	81.2%	76.8%	73.9%	69.4%	69.4%	> 5 YEARS
Male	40	---	---	---	---	---	.
Female	25	---	---	---	---	---	.
Native American	3	---	---	---	---	---	.
Male	2	---	---	---	---	---	.
Female	1	---	---	---	---	---	.
Asian	25	---	---	---	---	---	.
Male	16	---	---	---	---	---	.
Female	9	---	---	---	---	---	.
Hispanic	73	79.4%	79.4%	70.1%	64.2%	64.2%	> 5 YEARS
Male	47	---	---	---	---	---	.
Female	26	---	---	---	---	---	.

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, 2000-2004**

Survival Rate of Stage at Diagnosis		Gender		
		Total	Male	Female
Total	Cases	1,046	660	386
	One Year	77.9%	76.8%	79.9%
	5 Years	61.7%	61.1%	62.6%
	Median Survival	> 5 YEARS	> 5 YEARS	> 5 YEARS
<b>Stage at Diagnosis</b>				
In situ	Cases	---	---	---
	One Year	---	---	---
	5 Years	---	---	---
	Median Survival	---	---	---
Localized	Cases	503	306	197
	One Year	97.3%	96.9%	97.8%
	5 Years	82.7%	82.0%	83.7%
	Median Survival	> 5 YEARS	> 5 YEARS	> 5 YEARS
Regional	Cases	143	92	51
	One Year	77.4%	77.9%	76.3%
	5 Years	55.8%	57.1%	54.7%
	Median Survival	> 5 YEARS	> 5 YEARS	> 5 YEARS
Distant	Cases	164	110	54
	One Year	32.5%	32.7%	32.1%
	5 Years	14.1%	18.6%	8.6%
	Median Survival	0.74	0.74	0.74
Unstaged	Cases	236	152	84
	One Year	67.7%	66.0%	70.8%
	5 Years	51.8%	50.5%	54.2%
	Median Survival	> 5 YEARS	> 5 YEARS	> 5 YEARS

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.