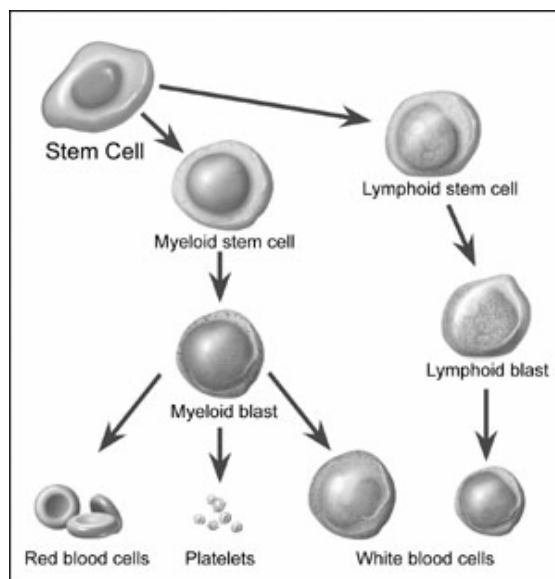


LEUKEMIA

LEUKEMIA

GENERAL PROFILE⁴

Figure 140. Anatomy of Stem Cell Maturation



General Anatomy: Blood cells form in the bone marrow, which is the soft material in the center of most bones. Immature blood cells are called stem cells and blasts. Most blood cells mature in the bone marrow and then move into the blood vessels. The bone marrow makes different types of blood cells; each with a special function: White blood cells fight infection, red blood cells carry oxygen to body tissues, and platelets help form blood clots to speed healing. In people with leukemia, the bone marrow produces abnormal white blood cells. At first, leukemia cells function almost normally. In time, they may crowd out normal white blood cells, red blood cells, and platelets.

Risk Factors: Very high levels of radiation, working with certain chemicals (e.g. Benzene, Formaldehyde), chemotherapy, down syndrome, human T-cell leukemia virus-I (HTLV-I), and myelodysplastic syndrome.

Signs and Symptoms: Fevers or night sweats, frequent infections, feeling weak or tired, headache, bleeding and bruising easily (bleeding gums, purplish patches in the skin, or tiny red spots under the skin), pain in the bones or joints, swelling or discomfort in the abdomen (from an enlarged spleen), swollen lymph nodes, especially in the neck or armpit, and weight loss.

Diagnosing the Cancer: Health exams, blood tests (High level of white blood cells, low levels of red blood cells and platelets), bone marrow aspiration, bone marrow biopsy, cytogenetics, spinal tap, and chest x-ray.

Treatment: chemotherapy (intrathecal), biological therapy, radiation therapy, or stem cell transplantation (Bone Marrow, Peripheral stem cell and Umbilical cord blood transplantations).

HIGHLIGHTS

- The ratio of the age-adjusted incidence rate, 12.0, to the age-adjusted mortality rate, 7.3 (per 100,000 – 2000 US Standard population), for Leukemia in Nevada was 1.6 during the 2000 to 2004 period, which means that for every 164 Leukemia cases there was 100 deaths due to Leukemia in Nevada during this period.
- Nevadan females had a higher ratio (1.76) than males (1.57) when the incidence and mortality age-adjusted rates for Leukemia were compared. This means that for every 100 deaths due to Leukemia there was 176 female cases while only 157 cases for every male death during the 2000 to 2004 period.
- The median age at diagnosis of Leukemia for Nevadans was 67 years of age from 2000 to 2004. The median age at time of death due to Leukemia during this period was 72 years.

INCIDENCE

- There were 1,201 cases of Leukemia in Nevada from 2000 to 2004. While regional comparisons showed Clark County (13.3) as having a higher incidence rate than All Other Counties (10.0), Washoe County (8.4) and the national incidence rate 12.3 (per 100,000 – 2000 US Standard population) from 2000 to 2004, statistical analysis shows a significant difference only for the Washoe County region.
- The age-adjusted incidence rate for male Leukemia, 14.9 (13.8-16.2), was statistically significant over the rate for females, 9.6 (8.7-10.5), during the 2000 to 2004 period.
- Whites, as a racial/ethnic group had the highest age-adjusted incidence rate, (12.5), from Leukemia of all racial/ethnic groups during the 2000 to 2004 period. They were followed by Blacks, Asians and Hispanics with rates of 9.0, 7.7, and 6.7 (per 100,000 – 2000 US Standard population), respectively, during this period.

INPATIENT HOSPITAL DISCHARGES

- Statistical regional comparisons indicate that Clark County had the highest age-adjusted inpatient discharge rate for Leukemia, 10.8 (10.0-11.6), and was followed by All Other Counties, 8.5 (7.1-10.1), and Washoe County, 8.0 (6.7-9.5), (per 100,000 – 2000 US Standard population) from 2000 to 2004.
- Clark County had by far the highest median total charge (\$47,611) for Leukemia inpatient hospital discharges during the 2000 to 2004 period and was followed by Washoe County (\$22,628) and All Other Counties (\$22,518). This was similar to the average length of stay (days) where Clark County had a value of 14.7 days, while All Other Counties, as a region, and Washoe County had average values of 11.6 and 10.4 days, respectively.

- Total billed charges for Leukemia inpatient hospital discharges in Nevada totaled 91.9 million dollars from 2000 to 2004. The overall average billed charge per day for a hospital inpatient discharge due to Leukemia was approximately \$6,421 in Nevada during this period.

MORTALITY

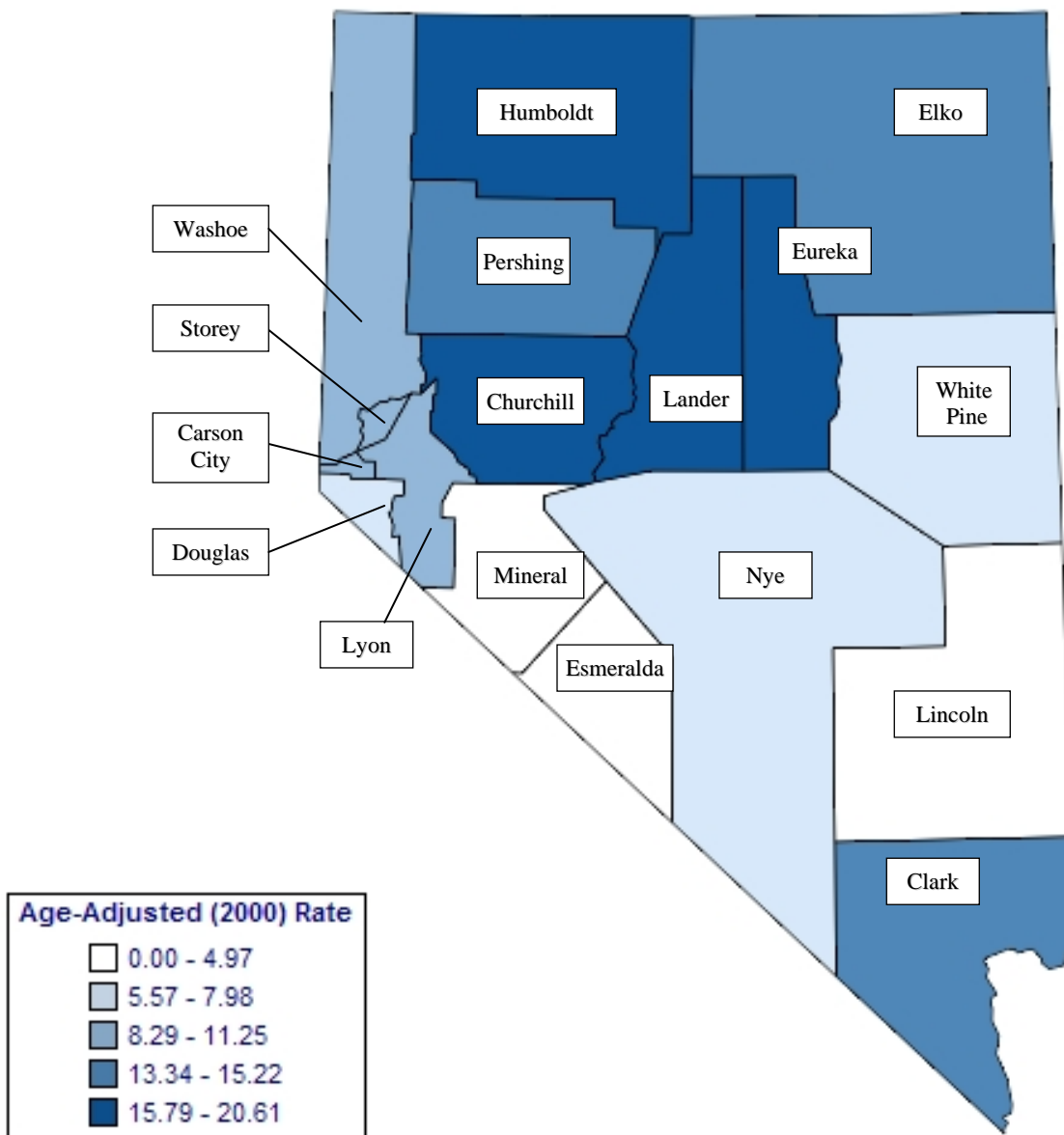
- There were 699 resident deaths due to Leukemia from 2000 to 2004. Regional comparisons were fairly similar between All Other Counties, Washoe County and Clark County with rates of 8.1, 7.4 and 7.2 (per 100,000 – 2000 US Standard population), respectively.
- Males had a statistically significant higher age-adjusted mortality rate due to Leukemia, 9.5 (8.6-10.6), than their female counterparts who had an age-adjusted mortality rate of 5.4 (4.8-6.1) (per 100,000 – 2000 US Standard population) during the 2000 to 2004 period.

SURVIVAL RATE

- The one-year survival rate for Leukemia in Nevada was 62.3% during the 2000 to 2004 period, while the five-year survival rate was 43.4% during this same time. The median survival rate in Nevada was 3.20 years for Leukemia for this period.
- Females had a slightly higher one-year survival rate (63.7%) than males (61.4%) for Leukemia in Nevada from 2000 to 2004. This difference increased at the five-year survival rate where females had a higher rate at 46.5% and males with a rate of 42.3% during this period.
- Nevadan males' median survival time for Leukemia was 3.09 years versus 3.32 years for their female counterparts during the 2000 to 2004 period.

INCIDENCE

Figure 141. Leukemia 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 142. Leukemia Age-Adjusted Incidence Rates by County/Region of Residence, Nevada Residents, 2000-2004

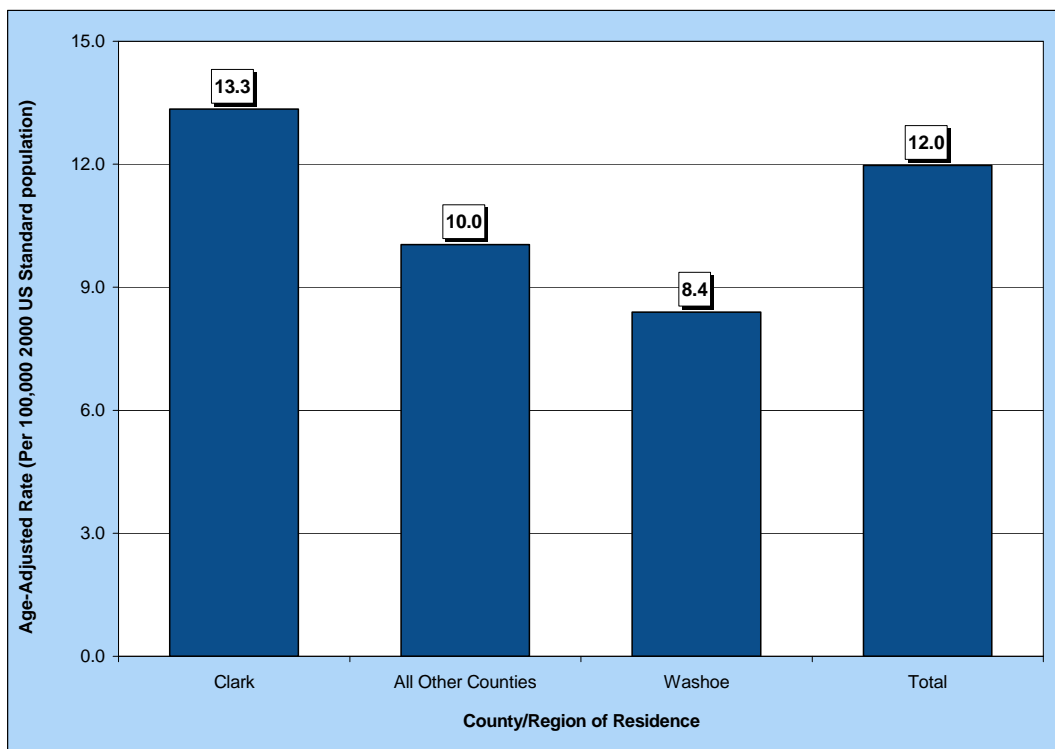


Figure 143. Leukemia Age-Adjusted Incidence Rates by Race/Ethnicity, Nevada Residents, 2000-2004

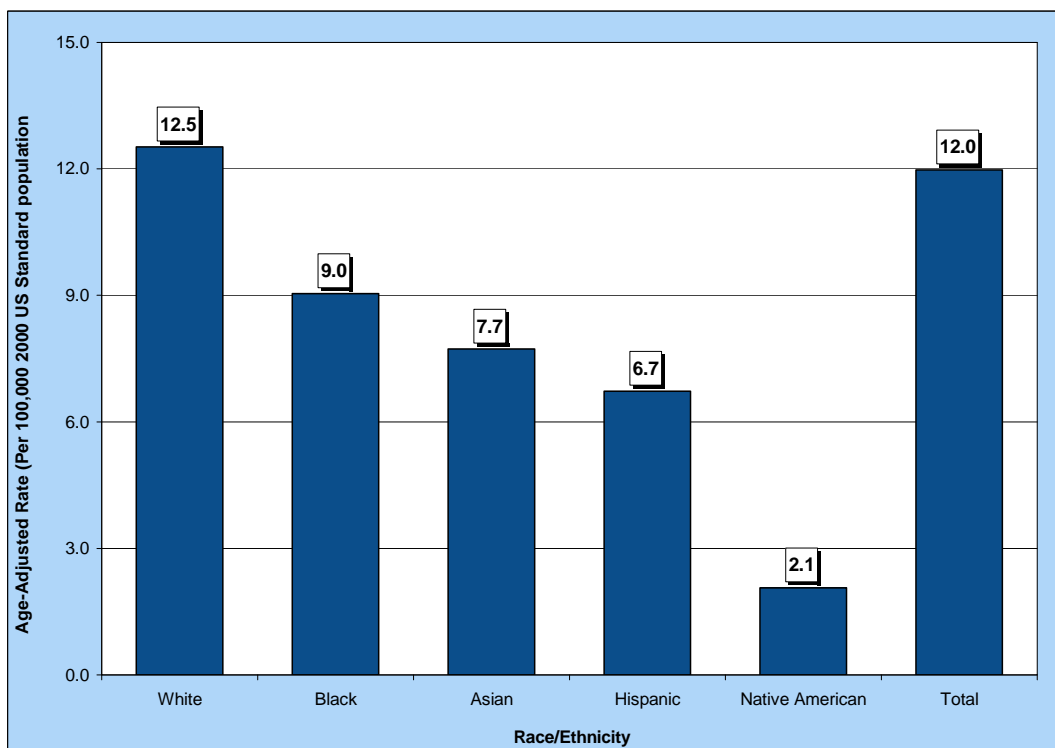


Table 213. Leukemia Cases by Gender, Race/Ethnicity and County/Region of Residence at Diagnosis, Nevada Residents (2000-2004) and SEER-17 (2000-2004)

Category	County/Region of Residence					
	Nevada Total	Clark	Washoe	All Other Counties	Unknown	SEER 17 (2000-2004)
Total						
Cases	1,201	910	136	153	2	44,045
Rate*	12.0	13.3	8.4	10.0	---	12.3
95% C.I.	(11.3-12.7)	(12.5-14.3)	(7.0-10.0)	(8.4-12.5)	---	(12.2-12.4)
Gender						
Male	700	528	70	100	2	25,145
Rate*	14.9	16.8	9.2	13.3	---	16.0
95% C.I.	(13.8-16.2)	(15.3-18.5)	(7.1-11.9)	(10.5-17.7)	---	(15.8-16.2)
Female	500	382	66	52	0	18,900
Rate*	9.6	10.6	7.8	6.7	---	9.5
95% C.I.	(8.7-10.5)	(9.6-11.8)	(6.0-10.2)	(5.0-8.8)	---	(9.4-9.7)
Other/Unknown	1	0	0	1	0	0
Race/Ethnicity						
White	978	714	121	142	1	37,581
Rate*	12.5	14.0	9.1	10.1	---	12.8
95% C.I.	(11.7-13.4)	(13.0-15.2)	(7.5-11.0)	(8.5-12.0)	---	(12.7-12.9)
Black	55	51	2	2	0	3,249
Rate*	9.0	9.0	---	---	---	10.2
95% C.I.	(6.7-12.4)	(6.6-12.6)	---	---	---	(9.8-10.6)
Native American	2	1	0	1	0	180
Rate*	---	---	---	---	---	4.6
95% C.I.	---	---	---	---	---	(3.9-3.9)
Asian	35	30	5	0	0	2,205
Rate*	7.7	7.5	---	---	---	7.4
95% C.I.	(4.9-12.5)	(4.6-13.1)	---	---	---	(7.1-7.7)
Hispanic	89	75	7	6	1	5,011
Rate*	6.7	7.5	---	---	---	9.7
95% C.I.	(4.9-9.4)	(5.2-11.0)	---	---	---	(9.4-10.0)
Other/Unknown	42	39	1	2	0	830

* 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 214. Leukemia 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	
Total						
Cases	1,201	910	136	153	2	44,045
Rate*	12.0	13.3	8.4	10.0	---	12.3
95% C.I.	(11.3-12.7)	(12.5-14.3)	(7.0-10.0)	(8.4-12.5)	---	(12.2-12.4)
Age Group						
<1	6	4	1	1	0	242
Rate*	---	---	---	---	---	4.5
95% C.I.	---	---	---	---	---	(3.9-5.1)
1-4	46	34	6	6	0	1,876
Rate*	7.3	7.4	---	---	---	8.9
95% C.I.	(5.18-9.39)	(4.90-9.87)	---	---	---	(8.5-9.3)
5-14	46	31	9	6	0	1,889
Rate*	3.0	2.8	---	---	---	3.4
95% C.I.	(2.11-3.82)	(1.83-3.83)	---	---	---	(3.2-3.6)
15-24	29	21	3	5	0	1,400
Rate*	1.9	1.9	---	---	---	2.6
95% C.I.	(1.18-2.53)	(1.10-2.73)	---	---	---	(2.5-2.8)
25-34	37	28	5	3	1	1,490
Rate*	2.3	2.3	---	---	---	2.8
95% C.I.	(1.55-3.02)	(1.47-3.20)	---	---	---	(2.6-2.9)
35-44	67	55	7	5	0	2,490
Rate*	3.9	4.6	---	---	---	4.2
95% C.I.	(2.99-4.87)	(3.37-5.79)	---	---	---	(4.0-4.3)
45-54	104	70	18	16	0	4,356
Rate*	7.0	7.0	6.9	7.2	---	8.4
95% C.I.	(5.63-8.30)	(5.32-8.57)	(3.69-10.04)	(3.65-10.67)	---	(8.2-8.7)
55-64	212	164	21	26	1	6,405
Rate*	19.4	21.8	12.1	15.6	---	19.4
95% C.I.	(16.81-22.03)	(18.48-25.16)	(6.92-17.26)	(9.62-21.63)	---	(18.9-19.9)
65-74	281	215	26	40	0	8,967
Rate*	39.2	43.5	24.4	34.6	---	41.1
95% C.I.	(34.62-43.78)	(37.65-49.27)	(15.02-33.78)	(23.89-45.34)	---	(40.3-42.0)
75-84	275	205	31	39	0	10,452
Rate*	66.9	73.3	49.0	57.5	---	67.9
95% C.I.	(59.00-74.82)	(63.23-83.29)	(31.72-66.19)	(39.43-75.51)	---	(66.6-69.2)
85+	97	82	9	6	0	4,478
Rate*	102.1	134.7	---	---	---	81.0
95% C.I.	(81.77-122.41)	(105.54-163.85)	---	---	---	(78.7-83.5)
Unknown	1	1	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 215. Leukemia 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	33	12.9	(8.5-17.3)	11.2	(7.7-16.0)
Churchill	21	16.8	(9.6-24.0)	16.7	(10.3-26.2)
Clark	910	11.8	(11.1-12.6)	13.3	(12.5-14.3)
Douglas	15	6.8	(3.3-10.2)	5.6	(3.0-9.9)
Elko	17	7.4	(3.9-11.0)	15.2	(5.7-39.7)
Esmeralda	0	---	---	---	---
Eureka	1	---	---	---	---
Humboldt	10	12.4	(4.7-20.0)	15.8	(7.4-30.5)
Lander	4	---	---	---	---
Lincoln	1	---	---	---	---
Lyon	18	9.2	(4.9-13.4)	8.3	(4.9-13.4)
Mineral	2	---	---	---	---
Nye	22	12.5	(7.3-17.7)	8.0	(4.9-12.7)
Pershing	4	---	---	---	---
Storey	2	---	---	---	---
Washoe	136	7.6	(6.3-8.8)	8.4	(7.0-10.0)
White Pine	3	---	---	---	---
Unknown	2	---	---	---	---
Total	1,201	11.0	(10.4-11.6)	12.0	(11.3-12.7)

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 216. Leukemia Cases by Race/Ethnicity and Gender, Nevada Residents, 2000-2004

Race/Ethnicity		Gender			
		Male	Female	Other/Unknown	Total
White	Incidence	582	395	1	978
	Rate*	15.7	9.8	---	12.5
	95% C.I.	(14.4-17.1)	(8.9-10.9)	---	(11.7-13.4)
Black	Incidence	28	27	0	55
	Rate*	10.6	8.0	---	9.0
	95% C.I.	(6.5-17.8)	(5.1-12.3)	---	(6.7-12.4)
Native American	Incidence	0	2	0	2
	Rate*	---	---	---	---
	95% C.I.	---	---	---	---
Asian	Incidence	12	23	0	35
	Rate*	4.7	9.9	---	7.7
	95% C.I.	(2.3-8.9)	(5.5-17.6)	---	(4.9-12.5)
Hispanic	Incidence	52	37	0	89
	Rate*	9.9	4.6	---	6.7
	95% C.I.	(5.9-16.8)	(3.0-7.2)	---	(4.9-9.4)
Other/Unknown		26	16	0	42
Total	Incidence	700	500	1	1,201
	Rate*	14.9	9.6	---	12.0
	95% C.I.	(13.8-16.2)	(8.7-10.5)	---	(11.3-12.7)

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 217. Leukemia Cases by Age Group and Gender, Nevada Residents, 2000-2004

Age Group	Gender			
	Male	Female	Unknown	Total
<1	2	4	0	6
Rate*	---	---	---	---
95% C.I.	---	---	---	---
1-4	27	19	0	46
Rate*	8.35	6.16	---	7.28
95% C.I.	(5.20-11.51)	(3.39-8.93)	---	(5.18-9.39)
5-14	22	24	0	46
Rate*	2.76	3.18	---	2.96
95% C.I.	(1.61-3.91)	(1.91-4.45)	---	(2.11-3.82)
15-24	15	14	0	29
Rate*	1.85	1.86	---	1.86
95% C.I.	(0.91-2.79)	(0.89-2.84)	---	(1.18-2.53)
25-34	16	21	0	37
Rate*	1.90	2.71	---	2.29
95% C.I.	(0.97-2.83)	(1.55-3.87)	---	(1.55-3.02)
35-44	36	31	0	67
Rate*	4.07	3.78	---	3.93
95% C.I.	(2.74-5.40)	(2.45-5.11)	---	(2.99-4.87)
45-54	64	40	0	104
Rate*	8.46	5.43	---	6.96
95% C.I.	(6.38-10.53)	(3.75-7.12)	---	(5.63-8.30)
55-64	124	87	1	212
Rate*	23.04	15.72	---	19.42
95% C.I.	(18.98-27.09)	(12.42-19.02)	---	(16.81-22.03)
65-74	185	96	0	281
Rate*	52.36	26.41	---	39.20
95% C.I.	(44.82-59.91)	(21.13-31.69)	---	(34.62-43.78)
75-84	161	114	0	275
Rate*	86.72	50.59	---	66.91
95% C.I.	(73.32-100.11)	(41.31-59.88)	---	(59.00-74.82)
85+	47	50	0	97
Rate*	147.95	79.06	---	102.09
95% C.I.	(105.65-190.25)	(57.14-100.97)	---	(81.77-122.41)
Unknown	1	0	0	1
Total	700	500	1	1,201
Rate*	12.59	9.29	---	10.98
95% C.I.	(11.7-13.5)	(8.5-10.1)	---	(10.4-11.6)

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

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

Table 218. Leukemia Incidence by Age Group and Stage, Nevada Residents, 2000-2004

Age Group		Stage					
		In situ	Localized	Regional	Distant	Unstaged	Total
<1	Number	---	0	0	5	1	6
	Percent	---	---	---	83.3%	16.7%	100.0%
1-4	Number	---	0	0	45	1	46
	Percent	---	---	---	97.8%	2.2%	100.0%
5-14	Number	---	0	0	46	0	46
	Percent	---	---	---	100.0%	---	100.0%
15-24	Number	---	0	0	28	1	29
	Percent	---	---	---	96.6%	3.4%	100.0%
25-34	Number	---	0	0	35	2	37
	Percent	---	---	---	94.6%	5.4%	100.0%
35-44	Number	---	0	0	64	3	67
	Percent	---	---	---	95.5%	4.5%	100.0%
45-54	Number	---	0	0	101	3	104
	Percent	---	---	---	97.1%	2.9%	100.0%
55-64	Number	---	0	0	202	10	212
	Percent	---	---	---	95.3%	4.7%	100.0%
65-74	Number	---	0	0	256	25	281
	Percent	---	---	---	91.1%	8.9%	100.0%
75-84	Number	---	0	0	254	21	275
	Percent	---	---	---	92.4%	7.6%	100.0%
85+	Number	---	0	0	86	11	97
	Percent	---	---	---	88.7%	11.3%	100.0%
Unknown	Number	---	0	0	1	0	1
	Percent	---	---	---	100.0%	---	100.0%
Total	Number	---	0	0	1,123	78	1,201
	Percent	---	---	---	93.5%	6.5%	100.0%

Table 219. Leukemia Cases by Stage and Race/Ethnicity, Nevada Residents, 2000-2004

Stage		Race/Ethnicity						Total
		White	Black	Native American	Asian	Hispanic	Other/Unknown	
In situ	Number	---	---	---	---	---	---	---
	Percent	---	---	---	---	---	---	---
Localized	Number	---	---	---	---	---	---	---
	Percent	---	---	---	---	---	---	---
Regional	Number	---	---	---	---	---	---	---
	Percent	---	---	---	---	---	---	---
Distant	Number	915	53	2	32	86	35	1,123
	Percent	93.6%	96.4%	100.0%	91.4%	96.6%	83.3%	93.5%
Unstaged	Number	63	2	0	3	3	7	78
	Percent	6.4%	3.6%	---	8.6%	3.4%	16.7%	6.5%
Total	Number	978	55	2	35	89	42	1,201
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

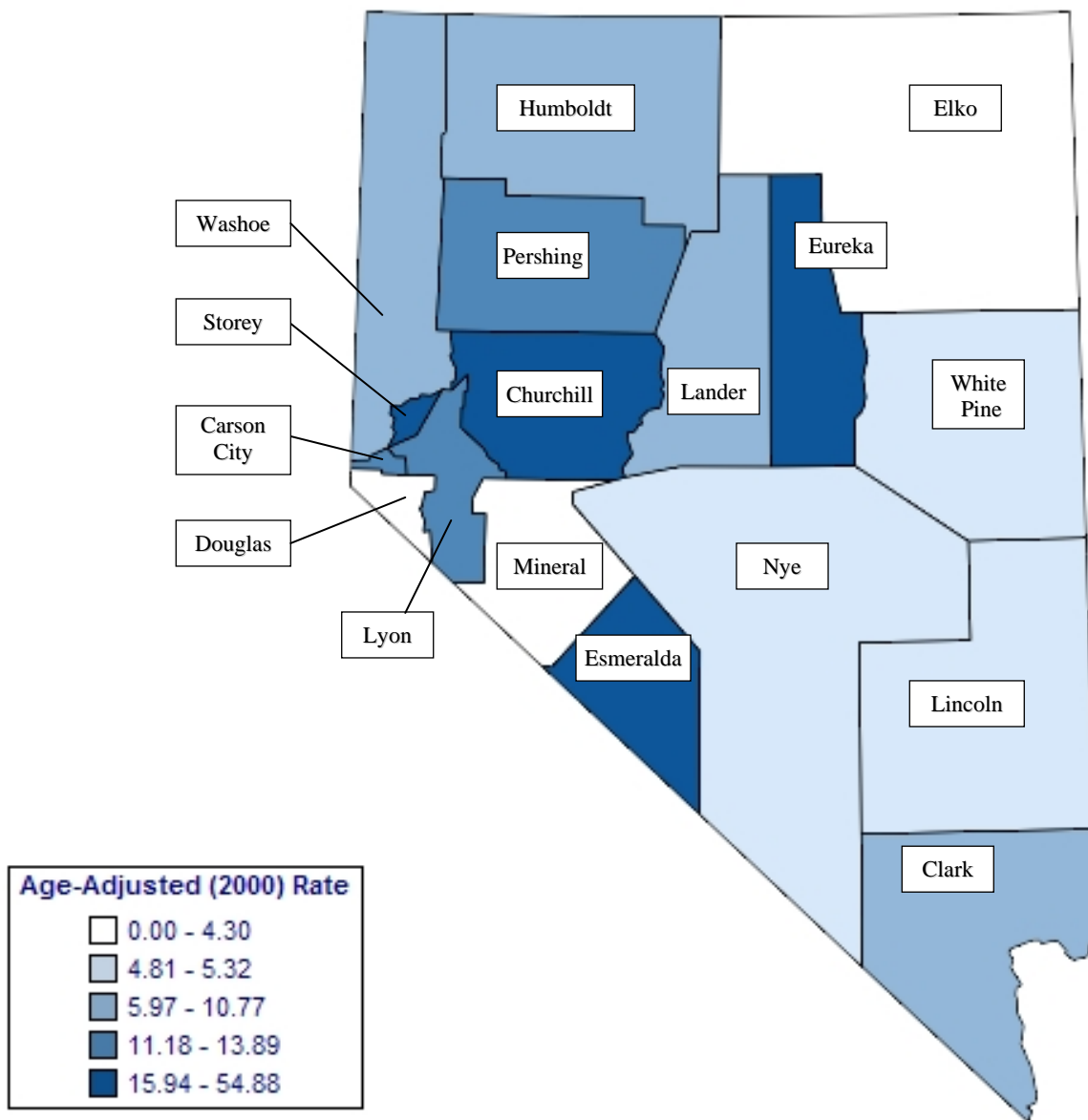
Table 220. Median Age at Diagnosis of Leukemia by Race/Ethnicity and Gender, Nevada Residents, 2000-2004

Race/Ethnicity	Gender					
	Male		Female		Total	
	Cases	Median Age	Cases	Median Age	Cases	Median Age
White	582	69.0	395	69.0	977	69.0
Black	28	57.0	27	43.0	55	53.0
Native American	---	---	2	---	2	---
Asian	12	48.0	23	62.0	35	58.0
Hispanic	52	32.0	37	24.0	89	28.0
Other/Unknown	25	69.0	16	63.0	41	65.0
Total	699	67.0	500	66.0	1,199	67.0

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 144. Leukemia 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 145. Leukemia Age-Adjusted Inpatient Discharge Rates by County/Region of Residence, Nevada Residents, 2000-2004

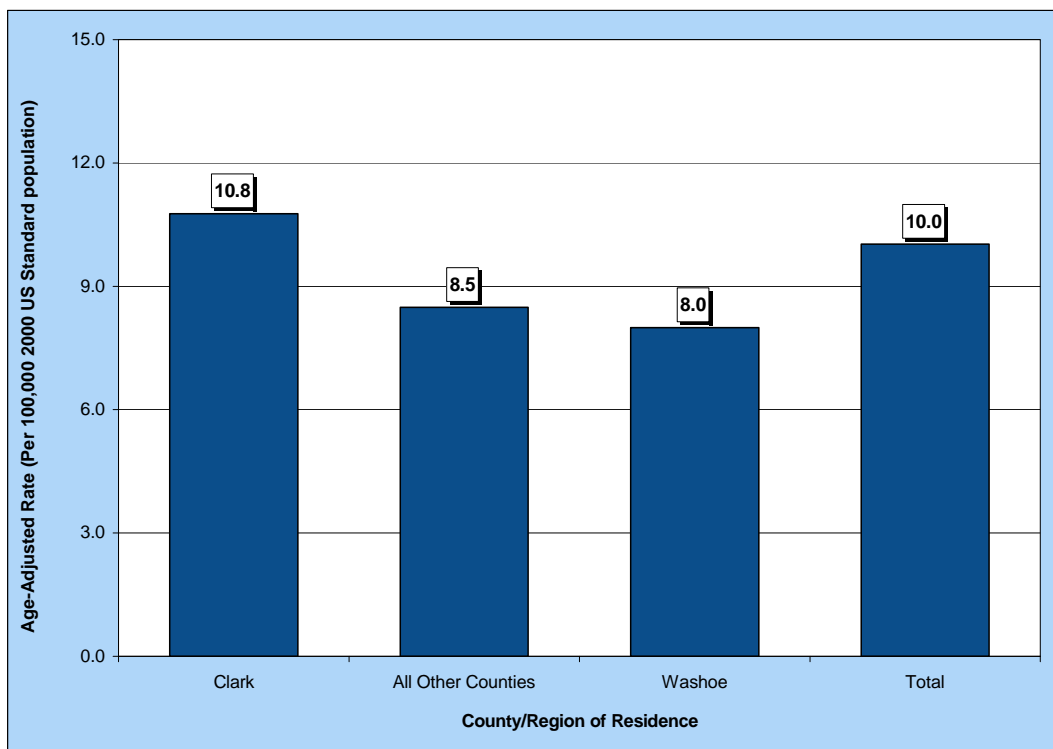


Figure 146. Median Charges for Leukemia Inpatient Discharges by County/Region of Residence, Nevada Residents, 2000-2004

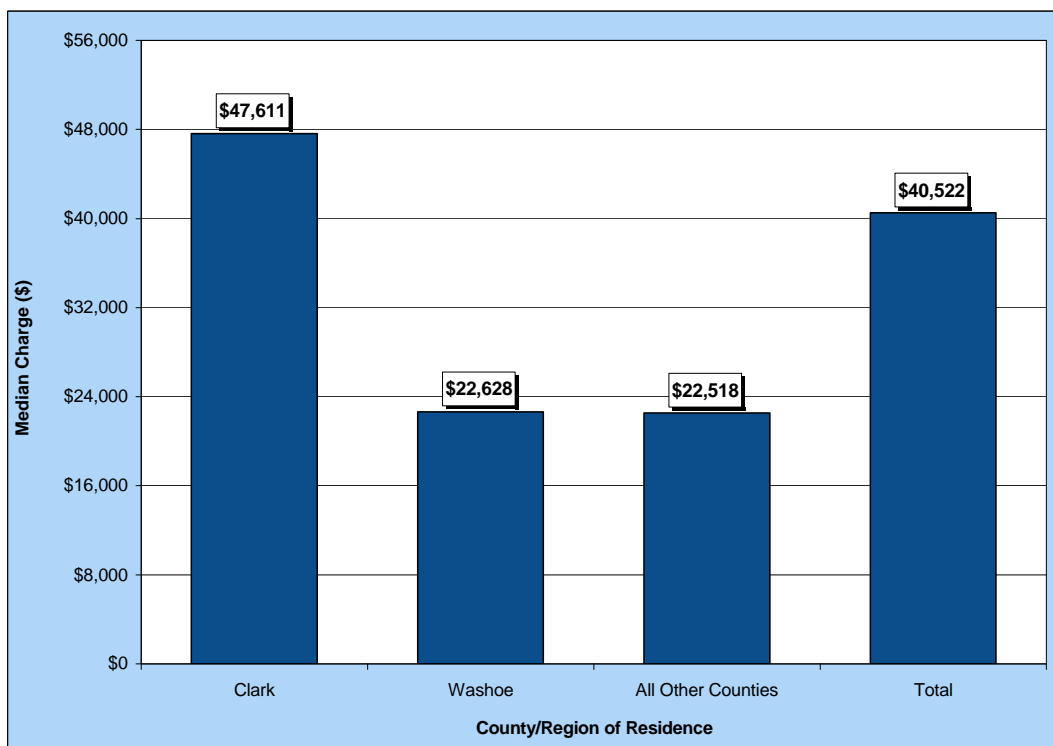


Figure 147. Average Length of Stay for Leukemia Inpatient Discharges by County/Region of Residence, Nevada Residents, 2000-2004

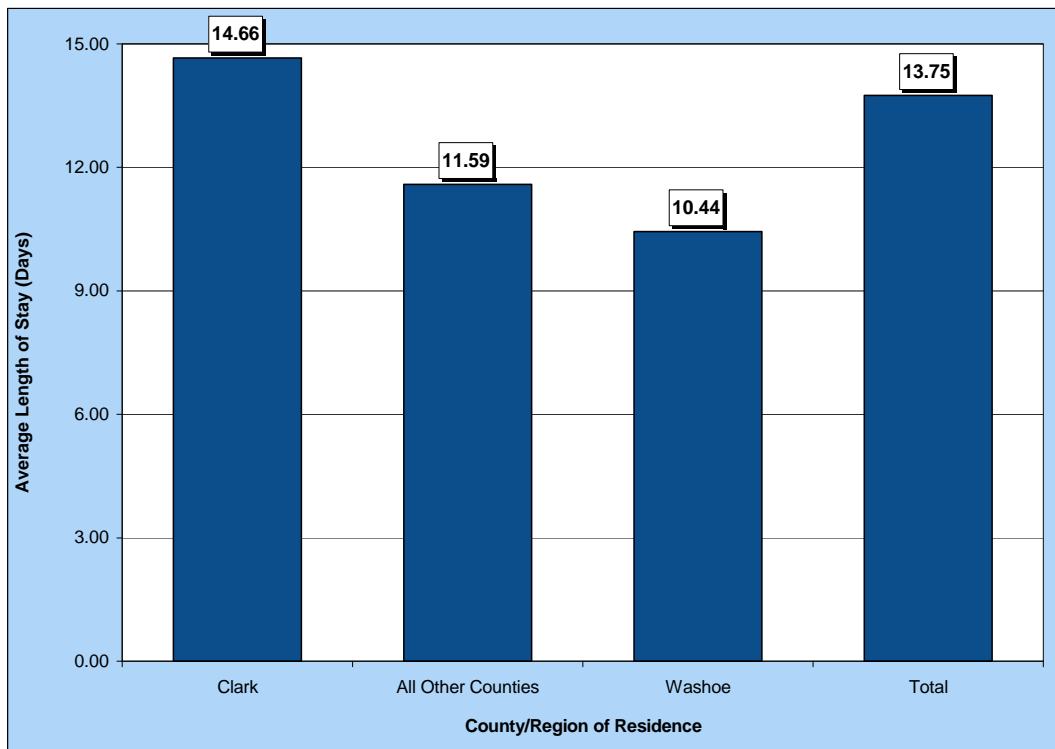


Table 221. Leukemia Inpatient Discharges by Gender, Charges, Length of Stay, and County/Region of Residence, Nevada Residents, 2000-2004

Category	County/Region of Residence				
	Nevada Total	Clark	Washoe	All Other Counties	Unknown
Total					
Discharges	1,041	780	130	131	0
Rate*	10.0	10.8	8.0	8.5	---
95% C.I.	(9.4-10.7)	(10.0-11.6)	(6.7-9.5)	(7.1-10.1)	---
Gender					
Male	597	447	66	84	0
Rate*	11.8	12.7	8.8	10.7	---
95% C.I.	(10.9-12.9)	(11.5-14.1)	(6.7-11.5)	(8.5-13.4)	---
Female	443	332	64	47	0
Rate*	8.4	9.0	7.5	6.2	---
95% C.I.	(7.6-9.2)	(8.1-10.1)	(5.7-9.6)	(4.6-8.4)	---
Other/Unknown	1	1	0	0	0
Inpatient Discharge Charges (\$)					
Total Charges	\$91,884,609	\$76,079,829	\$7,579,182	\$8,225,598	\$0
Average Charges	\$88,266	\$97,538	\$58,301	\$62,791	\$0
Median Charges	\$40,522	\$47,611	\$22,628	\$22,518	\$0
Discharge Length of Stay (LOS) (Days)					
Total LOS	14,309	11,434	1,357	1,518	0
Average LOS	13.7	14.7	10.4	11.6	0.0
Median LOS	7.0	8.0	6.0	5.0	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 222. Leukemia 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
Total				
Discharges	1,041	780	130	131
Rate*	9.5	10.1	7.2	9.0
95% C.I.	(8.9-10.1)	(9.4-10.8)	(6.0-8.5)	(7.5-10.6)
Age Group				
<1	4	4	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
1-4	83	68	5	10
Rate*	13.1	14.8	---	14.2
95% C.I.	(10.31-15.97)	(11.26-18.29)	---	(5.38-22.94)
5-14	118	104	11	3
Rate*	7.6	9.5	4.4	---
95% C.I.	(6.23-8.97)	(7.67-11.32)	(1.79-6.97)	---
15-24	55	38	4	13
Rate*	3.5	3.5	---	6.5
95% C.I.	(2.59-4.45)	(2.36-4.57)	---	(2.97-10.06)
25-34	66	58	6	2
Rate*	4.1	4.8	---	---
95% C.I.	(3.09-5.06)	(3.59-6.08)	---	---
35-44	59	51	5	3
Rate*	3.5	4.3	---	---
95% C.I.	(2.58-4.34)	(3.08-5.41)	---	---
45-54	104	68	12	24
Rate*	7.0	6.8	4.6	10.7
95% C.I.	(5.63-8.30)	(5.14-8.35)	(1.99-7.17)	(6.44-15.04)
55-64	142	99	23	20
Rate*	13.0	13.2	13.2	12.0
95% C.I.	(10.87-15.15)	(10.58-15.77)	(7.83-18.65)	(6.75-17.28)
65-74	192	144	24	24
Rate*	26.8	29.1	22.5	20.8
95% C.I.	(23.00-30.57)	(24.35-33.86)	(13.51-31.54)	(12.46-29.08)
75-84	167	113	30	24
Rate*	40.6	40.4	47.4	35.4
95% C.I.	(34.47-46.80)	(32.94-47.83)	(30.42-64.33)	(21.22-49.52)
85+	51	33	10	8
Rate*	53.7	54.2	57.3	---
95% C.I.	(38.95-68.41)	(35.71-72.70)	(21.78-92.78)	---
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 223. Leukemia Inpatient Discharges by Age Group and Gender, Nevada Residents, 2000-2004

Age Group	Gender		
	Male	Female	Total
<1	1	3	4
Rate*	---	---	---
95% C.I.	---	---	---
1-4	47	36	83
Rate*	14.54	11.67	13.14
95% C.I.	(10.38-18.70)	(7.86-15.49)	(10.31-15.97)
5-14	65	52	118
Rate*	8.15	6.89	7.60
95% C.I.	(6.17-10.13)	(5.01-8.76)	(6.23-8.97)
15-24	32	23	55
Rate*	3.95	3.06	3.52
95% C.I.	(2.58-5.32)	(1.81-4.31)	(2.59-4.45)
25-34	29	37	66
Rate*	3.44	4.77	4.08
95% C.I.	(2.19-4.69)	(3.23-6.31)	(3.09-5.06)
35-44	28	31	59
Rate*	3.16	3.78	3.46
95% C.I.	(1.99-4.33)	(2.45-5.11)	(2.58-4.34)
45-54	82	22	104
Rate*	10.83	2.99	6.96
95% C.I.	(8.49-13.18)	(1.74-4.24)	(5.63-8.30)
55-64	78	64	142
Rate*	14.49	11.56	13.01
95% C.I.	(11.28-17.71)	(8.73-14.40)	(10.87-15.15)
65-74	115	77	192
Rate*	32.55	21.18	26.78
95% C.I.	(26.60-38.50)	(16.45-25.91)	(23.00-30.57)
75-84	100	67	167
Rate*	53.86	29.73	40.63
95% C.I.	(43.30-64.42)	(22.61-36.85)	(34.47-46.80)
85+	20	31	51
Rate*	62.96	49.02	53.68
95% C.I.	(35.37-90.55)	(31.76-66.27)	(38.95-68.41)
Unknown	0	0	0
Total	597	443	1,041
Rate*	10.74	8.23	9.51
95% C.I.	(9.9-11.6)	(7.5-9.0)	(8.9-10.1)

* 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 224. Leukemia 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	31	12.1	(7.9-16.4)	11.2	(7.6-16.0)
Churchill	20	16.0	(9.0-23.0)	15.9	(9.7-25.2)
Clark	780	10.1	(9.4-10.8)	10.8	(10.0-11.6)
Douglas	12	5.4	(2.4-8.5)	4.3	(2.2-7.8)
Elko	3	---	---	---	---
Esmeralda	2	---	---	---	---
Eureka	3	---	---	---	---
Humboldt	6	---	---	---	---
Lander	2	---	---	---	---
Lincoln	1	---	---	---	---
Lyon	30	15.3	(9.8-20.8)	13.9	(9.3-20.2)
Mineral	0	---	---	---	---
Nye	14	7.9	(3.8-12.1)	5.3	(2.8-9.6)
Pershing	3	---	---	---	---
Storey	1	---	---	---	---
Washoe	130	7.2	(6.0-8.5)	8.0	(6.7-9.5)
White Pine	3	---	---	---	---
Unknown	0	---	---	---	---
Total	1,041	9.5	(8.9-10.1)	10.0	(9.4-10.7)

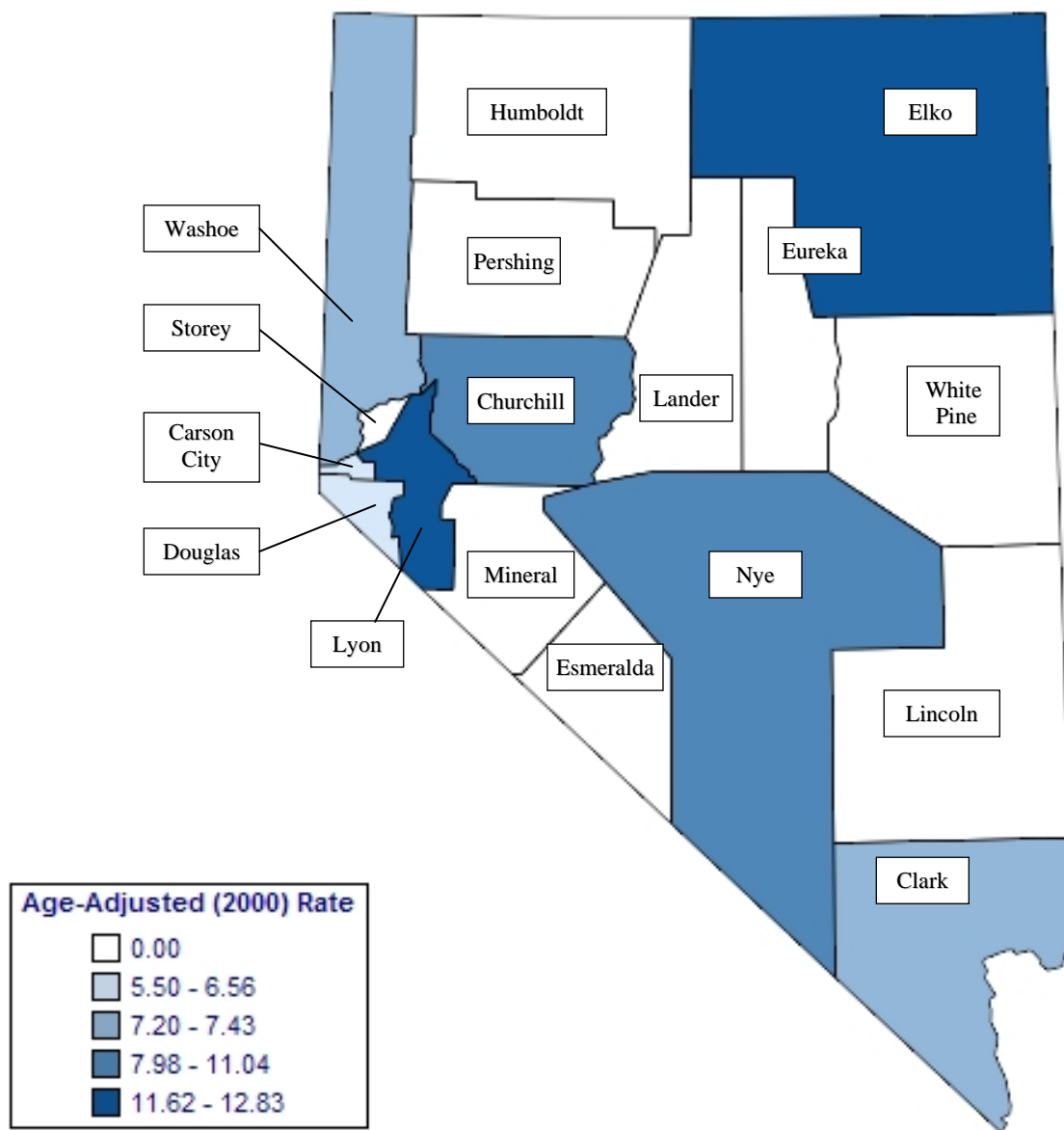
Note: The "---" is used for rates calculated on numbers less than ten. *Rates are per 100,000 population. **Rates are per 100,000 population and are age-adjusted to the 2000 US Standard population.

Table 225. Leukemia 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	4	---	---	---	---	---	---
1-4	83	4,759,863	57,348	35,711	889	10.7	8.0
5-14	118	8,032,471	68,072	29,058	1,104	9.4	6.0
15-24	55	6,397,266	116,314	73,885	1,008	18.3	14.0
25-34	66	9,856,674	149,344	85,359	1,331	20.2	14.5
35-44	59	6,520,287	110,513	97,058	1,106	18.8	11.0
45-54	104	10,101,303	97,128	56,685	1,760	16.9	10.0
55-64	142	16,961,814	119,449	77,707	2,539	17.9	10.5
65-74	192	16,865,519	87,841	41,407	2,549	13.3	7.0
75-84	167	10,257,697	61,423	28,326	1,639	9.8	7.0
85+	51	1,473,849	28,899	23,927	335	6.6	6.0
Unknown	0	---	---	---	---	---	---
Total	1,041	91,884,609	88,266	40,522	14,309	13.7	7.0

MORTALITY

Figure 148. Leukemia 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 149. Leukemia Age-Adjusted Mortality Rates by County/Region of Residence, Nevada Residents, 2000-2004

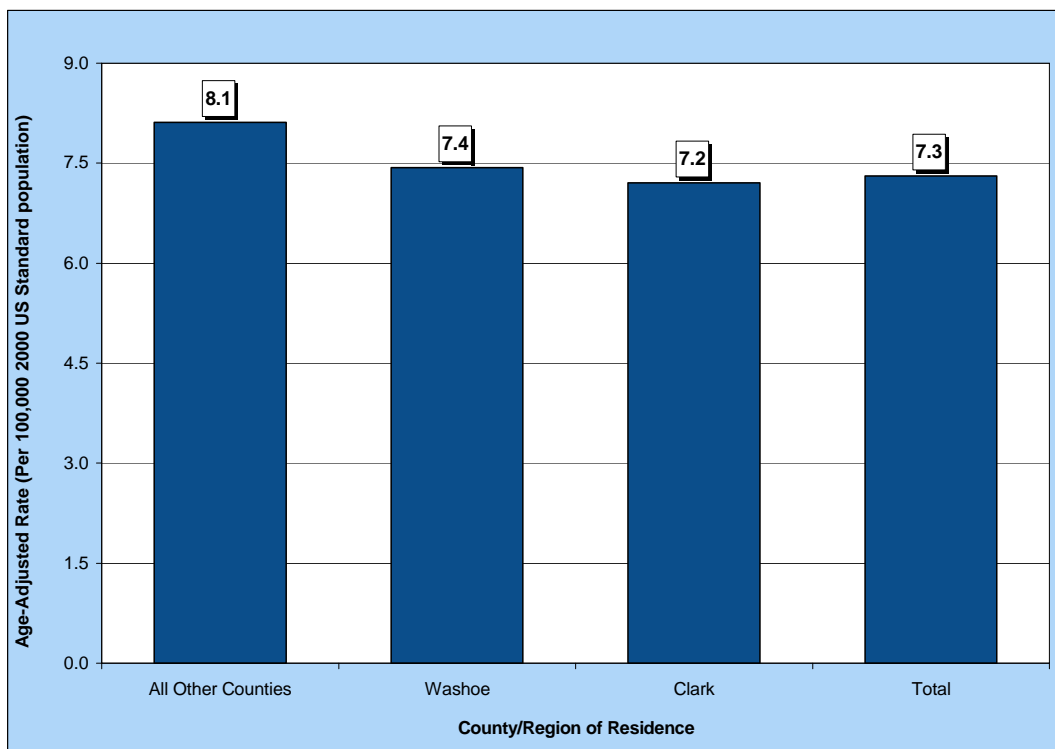


Figure 150. Leukemia Age-Adjusted Mortality Rates by Race/Ethnicity, Nevada Residents, 2000-2004

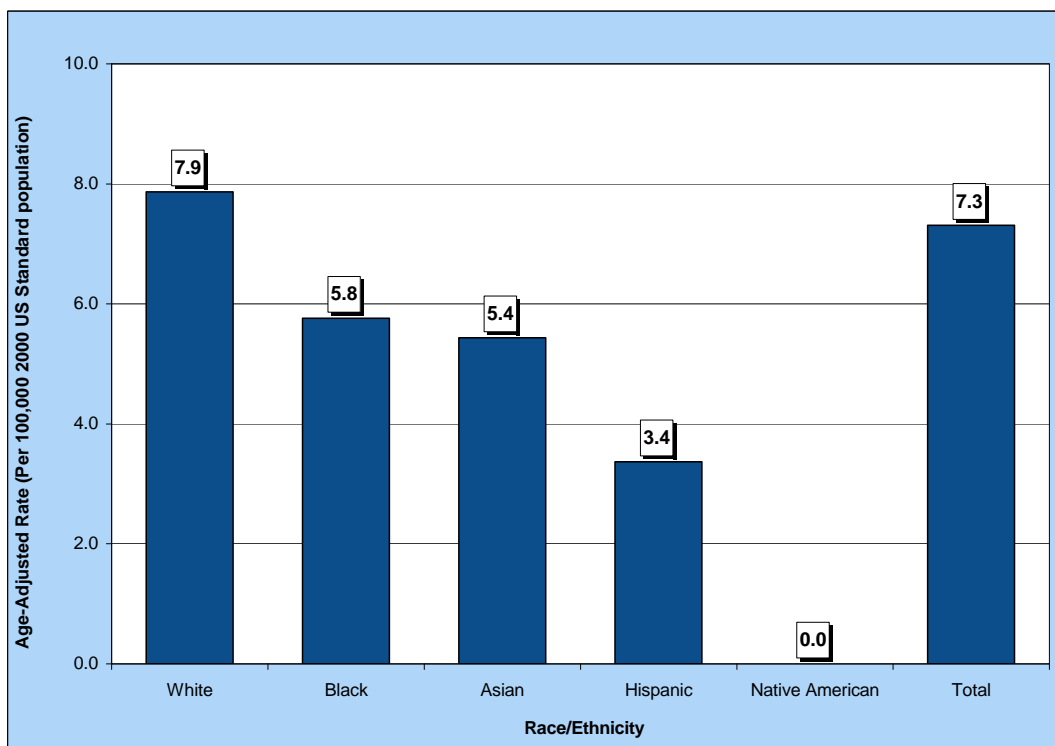


Table 226. Leukemia Mortality by Gender, Race/Ethnicity and County/Region of Residence, Nevada Residents, 2000-2004

Category	County/Region of Residence			
	Nevada Total	Clark	Washoe	All Other Counties
Total				
Mortality	699	471	112	116
Rate*	7.3	7.2	7.4	8.1
95% C.I.	(6.8-7.9)	(6.5-7.9)	(6.1-9.0)	(6.4-10.6)
Gender				
Male	421	289	56	76
Rate*	9.5	9.8	7.9	11.3
95% C.I.	(8.6-10.6)	(8.6-11.1)	(5.8-10.5)	(8.3-15.9)
Female	278	182	56	40
Rate*	5.4	5.2	6.8	5.0
95% C.I.	(4.8-6.1)	(4.4-6.0)	(5.1-8.9)	(3.6-6.9)
Other/Unknown	0	0	0	0
Race/Ethnicity				
White	609	397	102	110
Rate*	7.9	7.9	7.8	8.1
95% C.I.	(7.2-8.6)	(7.1-8.8)	(6.3-9.5)	(6.4-10.8)
Black	32	28	3	1
Rate*	5.8	5.3	---	---
95% C.I.	(3.8-8.7)	(3.4-8.4)	---	---
Native American	1	1	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
Asian	24	21	3	0
Rate*	5.4	5.0	---	---
95% C.I.	(3.2-9.6)	(3.0-8.0)	---	---
Hispanic	32	23	4	5
Rate*	3.4	3.0	---	---
95% C.I.	(2.1-5.2)	(1.7-5.0)	---	---
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 227. Leukemia 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
Total				
Deaths	699	471	112	116
Rate*	7.3	7.2	7.4	8.1
95% C.I.	(6.8-7.9)	(6.5-7.9)	(6.1-9.0)	(6.4-10.6)
Age Group				
<1	3	1	0	2
Rate*	---	---	---	---
95% C.I.	---	---	---	---
1-4	5	3	1	1
Rate*	---	---	---	---
95% C.I.	---	---	---	---
5-14	11	9	2	0
Rate*	0.7	---	---	---
95% C.I.	(0.29-1.13)	---	---	---
15-24	10	8	1	1
Rate*	0.6	---	---	---
95% C.I.	(0.24-1.04)	---	---	---
25-34	19	15	3	1
Rate*	1.2	1.3	---	---
95% C.I.	(0.65-1.70)	(0.62-1.88)	---	---
35-44	23	22	1	0
Rate*	1.4	1.8	---	---
95% C.I.	(0.80-1.90)	(1.07-2.60)	---	---
45-54	48	31	9	8
Rate*	3.2	3.1	---	---
95% C.I.	(2.30-4.12)	(1.99-4.16)	---	---
55-64	101	63	17	21
Rate*	9.3	8.4	9.8	12.6
95% C.I.	(7.45-11.06)	(6.31-10.45)	(5.13-14.44)	(7.22-18.01)
65-74	175	126	19	30
Rate*	24.4	25.5	17.8	26.0
95% C.I.	(20.80-28.03)	(21.02-29.92)	(9.81-25.85)	(16.67-35.25)
75-84	219	137	41	41
Rate*	53.3	49.0	64.8	60.4
95% C.I.	(46.23-60.34)	(40.76-57.16)	(44.93-84.57)	(41.92-78.91)
85+	85	56	18	11
Rate*	89.5	92.0	103.1	66.0
95% C.I.	(70.44-108.48)	(67.89-116.08)	(55.47-150.74)	(26.98-104.94)
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 228. Leukemia 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	20	7.8	(4.4-11.3)	6.6	(4.0-10.3)
Churchill	13	10.4	(4.8-16.1)	11.0	(5.8-19.5)
Clark	471	6.1	(5.6-6.7)	7.2	(6.5-7.9)
Douglas	14	6.3	(3.0-9.6)	5.5	(2.9-9.8)
Elko	10	4.4	(1.7-7.1)	12.8	(3.8-37.6)
Esmeralda	0	---	---	---	---
Eureka	0	---	---	---	---
Humboldt	6	---	---	---	---
Lander	2	---	---	---	---
Lincoln	3	---	---	---	---
Lyon	21	10.7	(6.1-15.3)	11.6	(5.9-24.1)
Mineral	1	---	---	---	---
Nye	21	11.9	(6.8-17.0)	8.0	(4.8-13.1)
Pershing	1	---	---	---	---
Storey	2	---	---	---	---
Washoe	112	6.2	(5.1-7.4)	7.4	(6.1-9.0)
White Pine	2	---	---	---	---
Unknown	0	---	---	---	---
Total	699	6.4	(5.9-6.9)	7.3	(6.8-7.9)

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 229. Leukemia Mortality by Race/Ethnicity and Gender, Nevada Residents, 2000-2004

Race/Ethnicity	Gender				
	Male	Female	Other/Unknown	Total	
White	Incidence	364	245	0	609
	Rate*	10.1	6.0	---	7.9
	95% C.I.	(9.0-11.3)	(5.2-6.8)	---	(7.2-8.6)
Black	Incidence	22	10	0	32
	Rate*	9.2	3.1	---	5.8
	95% C.I.	(5.3-16.5)	(1.5-6.1)	---	(3.8-8.7)
Native American	Incidence	0	1	0	1
	Rate*	---	---	---	---
	95% C.I.	---	---	---	---
Asian	Incidence	11	13	0	24
	Rate*	5.1	5.6	---	5.4
	95% C.I.	(2.4-9.8)	(2.5-12.2)	---	(3.2-9.6)
Hispanic	Incidence	23	9	0	32
	Rate*	5.3	---	---	3.4
	95% C.I.	(3.0-8.8)	---	---	(2.1-5.2)
Other/Unknown	1	0	0	1	
Total	Incidence	421	278	0	699
	Rate*	9.5	5.4	---	7.3
	95% C.I.	(8.6-10.6)	(4.8-6.1)	---	(6.8-7.9)

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 230. Leukemia Mortality by Age Group and Gender, Nevada Residents, 2000-2004

Age Group	Gender		
	Male	Female	Total
<1	3	0	3
Rate*	---	---	---
95% C.I.	---	---	---
1-4	2	3	5
Rate*	---	---	---
95% C.I.	---	---	---
5-14	2	9	11
Rate*	---	---	0.71
95% C.I.	---	---	(0.29-1.13)
15-24	8	2	10
Rate*	---	---	0.64
95% C.I.	---	---	(0.24-1.04)
25-34	12	7	19
Rate*	1.42	---	1.17
95% C.I.	(0.62-2.23)	---	(0.65-1.70)
35-44	9	14	23
Rate*	---	1.71	1.35
95% C.I.	---	(0.81-2.60)	(0.80-1.90)
45-54	38	10	48
Rate*	5.02	1.36	3.21
95% C.I.	(3.42-6.62)	(0.52-2.20)	(2.30-4.12)
55-64	60	41	101
Rate*	11.15	7.41	9.25
95% C.I.	(8.33-13.97)	(5.14-9.68)	(7.45-11.06)
65-74	114	61	175
Rate*	32.27	16.78	24.41
95% C.I.	(26.34-38.19)	(12.57-20.99)	(20.80-28.03)
75-84	138	81	219
Rate*	74.33	35.95	53.29
95% C.I.	(61.93-86.73)	(28.12-43.78)	(46.23-60.34)
85+	35	50	85
Rate*	110.18	79.06	89.46
95% C.I.	(73.68-146.68)	(57.14-100.97)	(70.44-108.48)
Unknown	0	0	0
Total	421	278	699
Rate*	7.57	5.17	6.39
95% C.I.	(6.9-8.3)	(4.6-5.8)	(5.9-6.9)

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

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

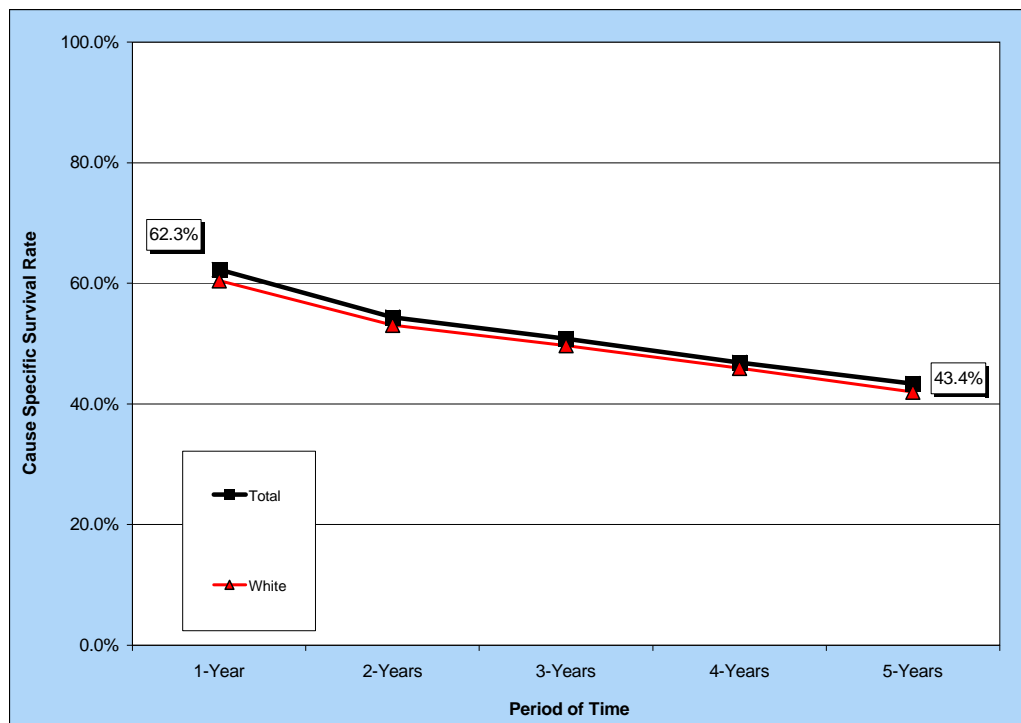
Table 231. Median Age at Death from Leukemia by Race/Ethnicity and Gender, Nevada Residents, 2000-2004

Race/Ethnicity	Gender					
	Male		Female		Total	
	Cases	Median Age	Cases	Median Age	Cases	Median Age
White	364	72.0	245	75.0	609	73.0
Black	22	62.5	10	59.5	32	62.5
Native American	0	---	1	---	1	---
Asian	11	66.0	13	67.0	24	66.5
Hispanic	23	61.0	9	59.0	32	60.0
Other/Unknown	1	---	0	---	1	---
Total	421	71.0	278	73.0	699	72.0

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 151. Survival Rates for Leukemia 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 152. Survival Rates for Leukemia by Stage of Cancer at Diagnosis, Nevada Residents, 2000-2004

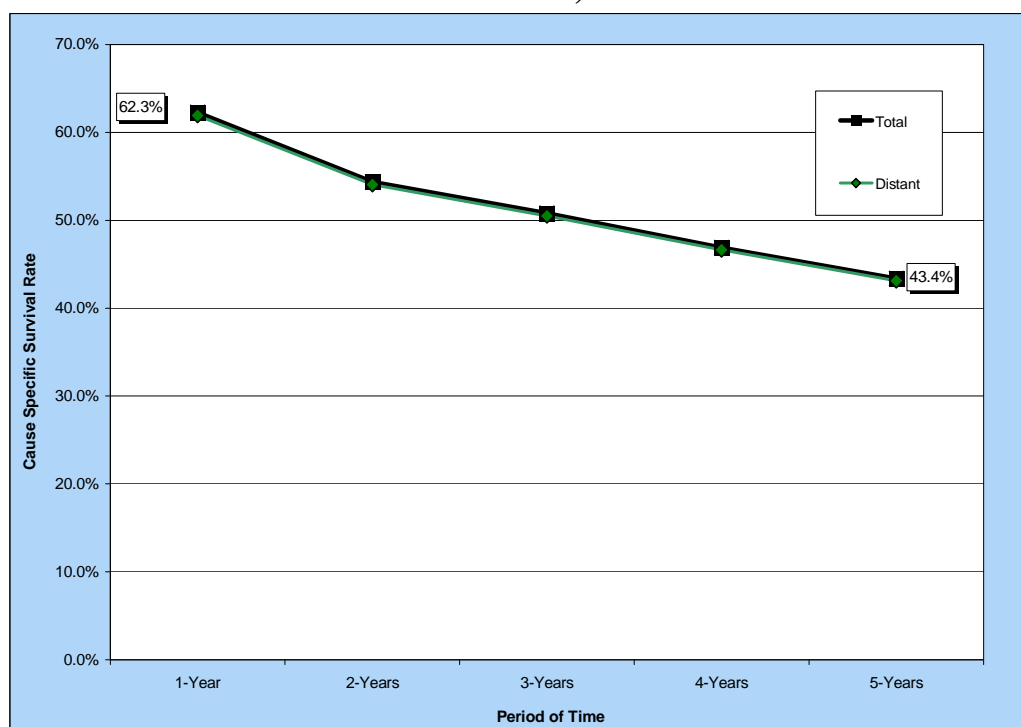


Table 232. Cause-Specific Survival Rates for Leukemia by Race/Ethnicity and Gender, Nevada Residents, 2000-2004

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	951	62.3%	54.4%	50.8%	46.9%	43.4%	3.20
Male	565	61.4%	53.0%	50.3%	47.1%	42.3%	3.09
Female	385	63.7%	56.6%	51.7%	46.5%	46.5%	3.32
Race/Ethnicity							
White	759	60.5%	53.1%	49.7%	45.9%	42.0%	2.90
Male	460	59.7%	52.1%	49.7%	46.5%	41.1%	2.86
Female	298	62.0%	54.9%	49.8%	45.1%	45.1%	2.97
Black	47	---	---	---	---	---	.
Male	24	---	---	---	---	---	.
Female	23	---	---	---	---	---	.
Native American	1	---	---	---	---	---	.
Male	0	---	---	---	---	---	---
Female	1	---	---	---	---	---	.
Asian	33	---	---	---	---	---	.
Male	13	---	---	---	---	---	.
Female	20	---	---	---	---	---	.
Hispanic	79	69.3%	58.7%	58.7%	58.7%	58.7%	> 5 YEARS
Male	50	68.5%	56.6%	56.6%	56.6%	56.6%	> 5 YEARS
Female	29	---	---	---	---	---	.

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 233. Cause-Specific Survival Rates for Leukemia by Stage of Cancer at Diagnosis and Gender, Nevada Residents, 2000-2004

Survival Rate of Stage at Diagnosis		Gender		
		Total	Male	Female
Total	Cases	951	565	385
	One Year	62.3%	61.4%	63.7%
	5 Years	43.4%	42.3%	46.5%
	Median Survival	3.20	3.09	3.32
Stage at Diagnosis				
In situ	Cases	---	---	---
	One Year	---	---	---
	5 Years	---	---	---
	Median Survival	---	---	---
Localized	Cases	---	---	---
	One Year	---	---	---
	5 Years	---	---	---
	Median Survival	---	---	---
Regional	Cases	---	---	---
	One Year	---	---	---
	5 Years	---	---	---
	Median Survival	---	---	---
Distant	Cases	903	544	358
	One Year	61.9%	61.1%	63.4%
	5 Years	43.1%	42.0%	46.2%
	Median Survival	3.13	3.01	3.26
Unstaged	Cases	47	21	26
	One Year	---	---	---
	5 Years	---	---	---
	Median Survival	.	.	.

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.