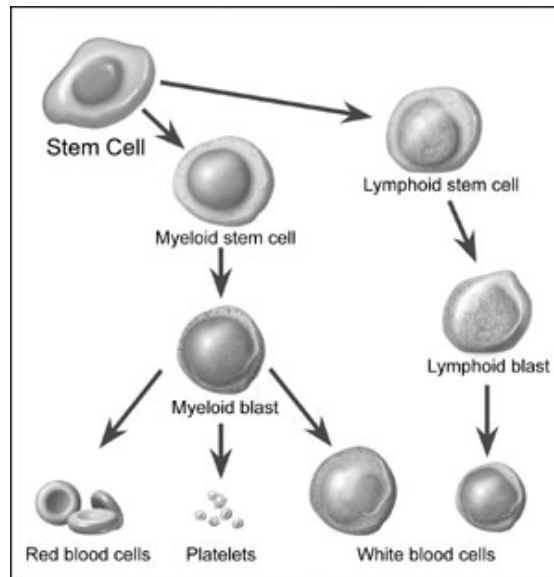


LEUKEMIA

LEUKEMIA

GENERAL PROFILE⁴

Figure 127. 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, 11.7, to the age-adjusted mortality rate, 7.2 (per 100,000 – 2000 US Standard population), for Leukemia was 1.63 during the 1996 to 2000 period, which means that for every 1.63 Leukemia cases during this period, there was one Leukemia death in Nevada.
- Nevadan females had a slightly higher ratio than males when the age-adjusted incidence and age-adjusted mortality rates for Leukemia were compared. For every female death due to Leukemia there were 1.65 female cases while only 1.59 male cases for every male Leukemia death in Nevada from 1996 to 2000.
- The median age at diagnosis of Leukemia was 66 years of age for Nevada residents from 1996 to 2000; the median age at time of death was 71 years.

INCIDENCE

- There were 973 cases of Leukemia in Nevada from 1996 to 2000. Regional comparisons showed little variation between All Other Counties (11.8), Clark County (11.7) and Washoe County (11.5) from 1996 to 2000. While the age-adjusted incidence rates were slightly lower than the National rate of 12.1 (per 100,000 – 2000 US Standard population) statistical analysis does not show a significant difference between any of the areas.
- While regional comparisons showed that Washoe County's age-adjusted incidence rate, 17.0, was higher than the rate for All Other Counties and Clark County who had rates of 16.3 and 13.9 (per 100,000 – 2000 US Standard population) from 1996 to 2000, these differences were not statistically significant.
- The age-adjusted incidence rate for male Leukemia, 14.2 (13.0-15.5), was statistically significant over the rate for females, 9.4 (8.5-10.4), during the 1996 to 2000 period.
- Whites, as a racial/ethnic group, had the highest age-adjusted incidence rate from Leukemia during the 1996 to 2000 period. They were followed by Blacks, Hispanics and Asians, who had rates of 10.5, 7.8 and 6.4, (per 100,000 – 2000 US Standard population), respectively.

INPATIENT HOSPITAL DISCHARGES

- Statistical regional comparisons indicate that Clark County had the highest age-adjusted inpatient discharge rate for Leukemia, 13.3 (12.4-14.3), and was followed by All Other Counties, 10.1 (8.4-12.0), and Washoe County, 8.7 (7.3-10.4), per 100,000 – 2000 US Standard population) from 1996 to 2000.

- Clark County had the highest median total charge (\$30,364) that was nearly double that of Washoe County (\$16,087) and All Other Counties (\$15,159), as a region, during the 1996 to 2000 period.
- Total billed charges for hospital inpatient discharges from Leukemia in Nevada totaled approximately 55.4 million dollars from 1996 to 2000. The overall average billed charge per day for an inpatient hospital discharge for Leukemia was approximately \$4,300 in Nevada during this time.

MORTALITY

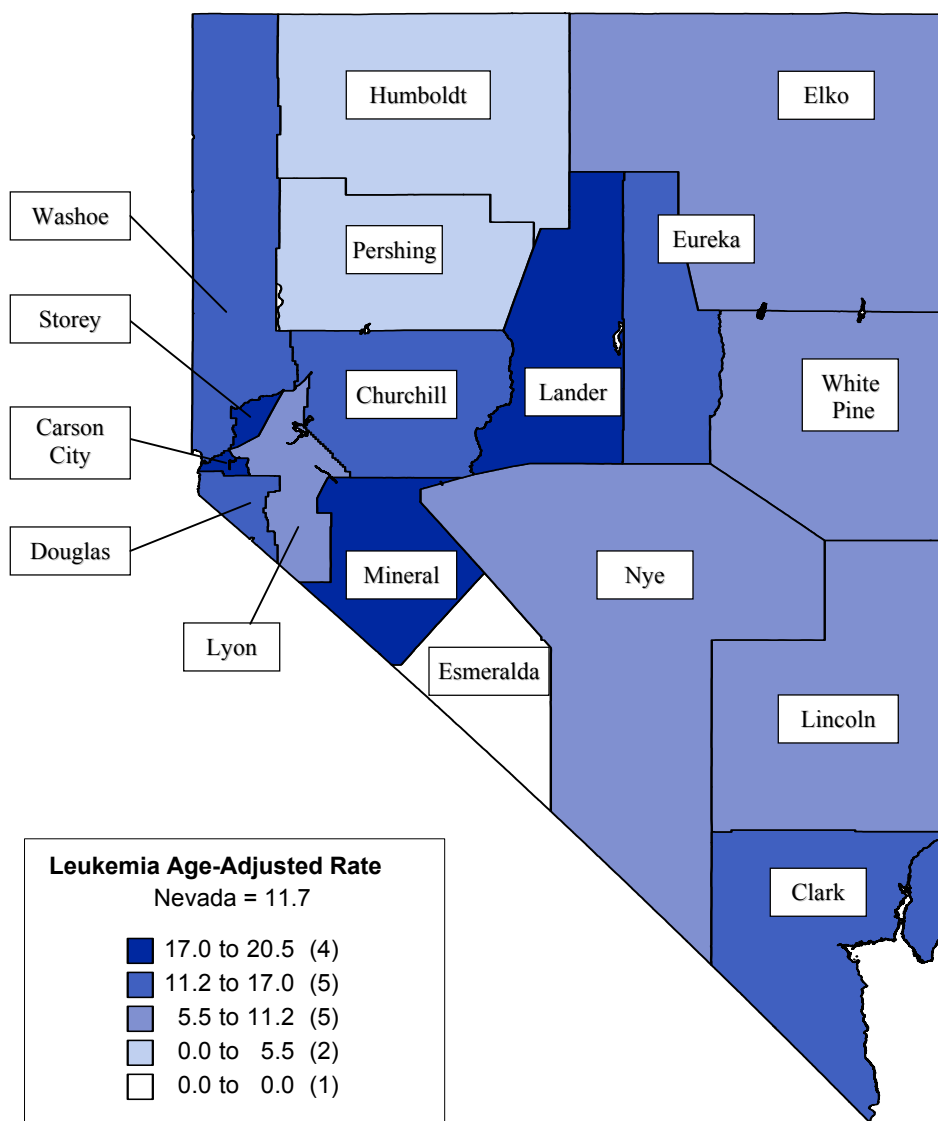
- There were 568 Leukemia deaths from 1996 to 2000. While All Other Counties, as a region, had a higher age-adjusted mortality rate, 7.5, than Clark County, 7.2 and Washoe County, 7.1 (per 100,000 – 2000 US Standard population), none of the rates show that any statistically significant difference exists between the three regions.
- Males had a statistically higher age-adjusted mortality rate due to Leukemia, 8.9 (7.9-10.0), than their Female counterparts' rate, 5.7 (5.0-6.5), in Nevada from 1996 to 2000.

SURVIVAL RATE

- The one-year survival rate for Leukemia in Nevada was 55.9% during the 1996 to 2000 period, while the five-year survival rate was 30.5% during this same time. The median survival rate in Nevada for Leukemia was 1.60 years.
- While Females in Nevada diagnosed with Leukemia had a higher one-year survival rate (57.1%) than males (55.2%), their five-year survival rate (27.3%) was lower than the rate for males (33.3%) during the 1996 to 2000 period.
- Nevadan females had a slightly higher median survival time than their male counterparts with median survival times of 1.65 and 1.58 years, respectively, during the 1996 to 2000 period.

INCIDENCE

Figure 128. Leukemia 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 129. Leukemia Age-Adjusted Incidence Rates by County/Region of Residence, Nevada Residents, 1996-2000

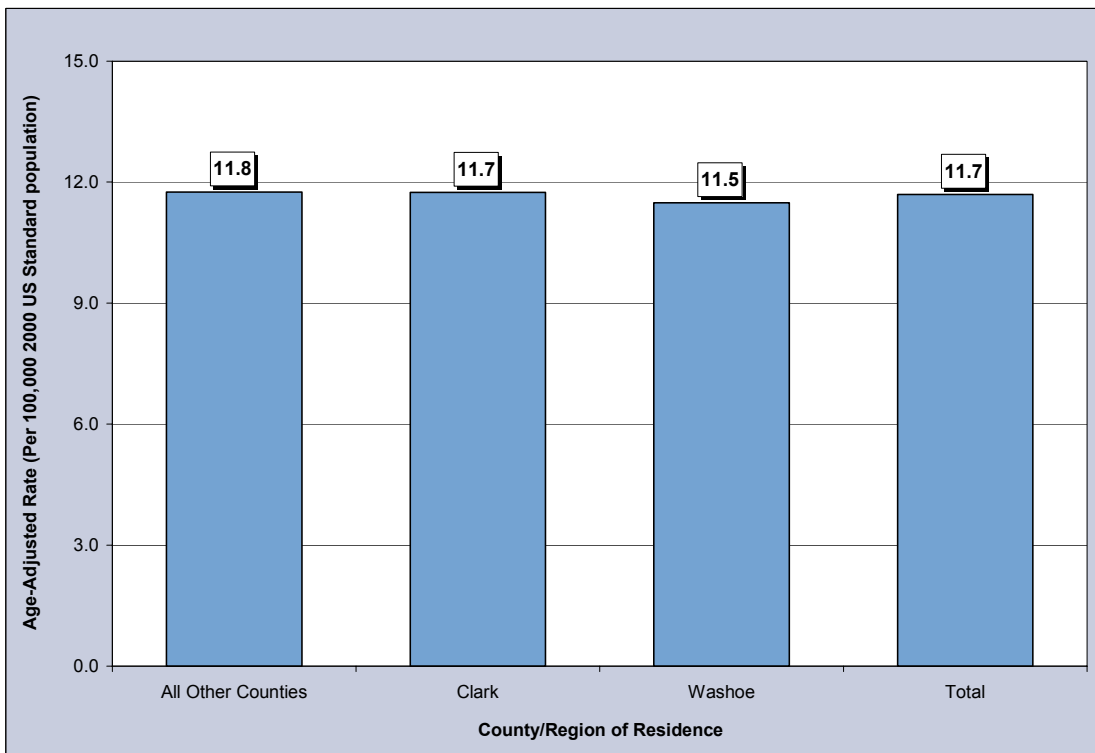


Figure 130. Leukemia Age-Adjusted Incidence Rates by Race/Ethnicity, Nevada Residents, 1996-2000

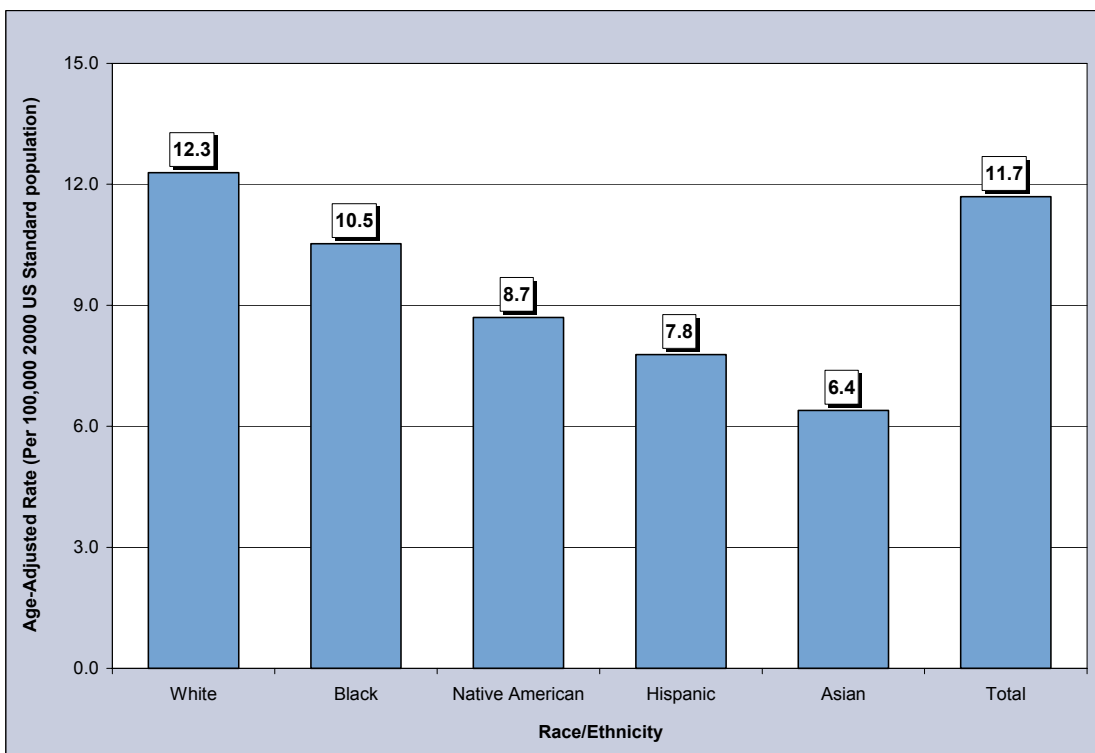


Table 192. Leukemia Cases by Gender, Race/Ethnicity and County/Region of Residence at Diagnosis, Nevada Residents (1996-2000) and SEER-11 (1995-1999)

Category	County/Region of Residence					
	Nevada Total	Clark	Washoe	All Other Counties	Unknown	SEER 11 (1995-1999)
Total						
Cases	973	649	165	158	1	20,646
Rate*	11.7	11.7	11.5	11.8	---	12.1
95% C.I.	(11.0-12.5)	(10.8-12.7)	(9.8-13.5)	(10.0-13.8)	---	(11.9-12.2)
Gender						
Male	568	392	86	89	1	11,811
Rate*	14.2	15.1	12.3	13.2	---	15.8
95% C.I.	(13.0-15.5)	(13.5-16.9)	(9.8-15.6)	(10.5-16.5)	---	(15.5-16.1)
Female	405	257	79	69	0	8,835
Rate*	9.4	9.0	10.4	10.0	---	9.3
95% C.I.	(8.5-10.4)	(7.9-10.2)	(8.2-13.0)	(7.8-12.8)	---	(9.1-9.5)
Other/Unknown	0	0	0	0	0	0
Race/Ethnicity						
White	818	532	145	141	0	17,549
Rate*	12.3	12.7	11.8	11.6	---	12.6
95% C.I.	(11.4-13.2)	(11.6-13.8)	(10.0-14.0)	(9.7-13.8)	---	(12.4-12.8)
Black	40	35	4	1	0	1,438
Rate*	10.5	10.3	---	---	---	9.6
95% C.I.	(7.2-15.3)	(6.8-15.4)	---	---	---	(9.1-10.2)
Native American	9	2	2	5	0	56
Rate*	---	---	---	---	---	4.0
95% C.I.	---	---	---	---	---	(2.9-2.9)
Asian	27	20	4	3	0	1,335
Rate*	6.4	6.1	---	---	---	8.1
95% C.I.	(4.1-12.3)	(3.6-13.7)	---	---	---	(7.6-8.6)
Hispanic	75	58	9	7	1	2,161
Rate*	7.8	7.4	---	---	---	8.7
95% C.I.	(5.6-11.0)	(5.1-11.3)	---	---	---	(8.3-9.2)
Other/Unknown	4	2	1	1	0	268

* 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 193. Leukemia Cases by Age Group and County/Region of Residence at Diagnosis, Nevada Residents (1996-2000) and SEER-11 (1995-1999)

Category	County/Region of Residence					SEER 11 (1995-1999)
	Nevada Total	Clark	Washoe	All Other Counties	Unknown	
Total						
Cases	973	649	165	158	1	20,646
Rate*	10.5	10.3	10.1	11.5	---	11.1
95% C.I.	(9.8-11.1)	(9.5-11.1)	(8.5-11.6)	(9.7-13.3)	---	(11.0-11.3)
Age Group						
<1	7	5	1	1	0	104
Rate*	---	---	---	---	---	3.8
95% C.I.	---	---	---	---	---	(3.0-4.5)
1-4	34	24	3	7	0	983
Rate*	6.2	6.3	---	---	---	8.8
95% C.I.	(4.1-8.3)	(3.8-8.8)	---	---	---	(8.3-9.4)
5-14	53	38	7	8	0	958
Rate*	4.0	4.3	---	---	---	3.6
95% C.I.	(2.9-5.1)	(2.9-5.6)	---	---	---	(3.4-3.8)
15-24	30	24	2	4	0	651
Rate*	2.3	2.8	---	---	---	2.5
95% C.I.	(1.5-3.2)	(1.7-3.9)	---	---	---	(2.3-2.7)
25-34	37	28	7	1	1	801
Rate*	2.6	2.7	---	---	---	2.7
95% C.I.	(1.8-3.4)	(1.7-3.8)	---	---	---	(2.5-2.9)
35-44	48	31	13	4	0	1,264
Rate*	3.2	3.1	4.7	---	---	4.0
95% C.I.	(2.3-4.1)	(2.0-4.2)	(2.1-7.2)	---	---	(3.8-4.3)
45-54	92	65	12	15	0	2,006
Rate*	7.6	8.2	5.3	7.8	---	8.8
95% C.I.	(6.1-9.2)	(6.2-10.2)	(2.3-8.4)	(3.9-11.7)	---	(8.4-9.1)
55-64	147	99	25	23	0	2,707
Rate*	17.1	17.0	17.7	16.7	---	19.3
95% C.I.	(14.3-19.8)	(13.7-20.4)	(10.7-24.6)	(9.9-23.5)	---	(18.6-20.1)
65-74	251	165	42	44	0	4,567
Rate*	40.5	39.8	41.6	42.1	---	39.6
95% C.I.	(35.5-45.5)	(33.7-45.9)	(29.0-54.2)	(29.7-54.6)	---	(38.4-40.7)
75-84	205	124	45	36	0	4,603
Rate*	62.5	57.3	81.8	63.7	---	63.3
95% C.I.	(54.0-71.1)	(47.2-67.4)	(57.9-105.7)	(42.9-84.6)	---	(61.5-65.2)
85+	68	45	8	15	0	2,002
Rate*	96.5	105.0	---	113.7	---	80.7
95% C.I.	(73.6-119.5)	(74.4-135.7)	---	(56.2-171.2)	---	(77.2-84.3)
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 194. Leukemia Cases by County of Residence at Diagnosis, Nevada Residents, 1996-2000

County of Residence at Diagnosis	1996-2000 Incidence				
	Cases	Rate*		Age-Adjusted Rate**	
		Rate	95% C.I.	Rate	95% C.I.
Carson City	47	19.2	(13.7-24.7)	17.0	(12.5-22.9)
Churchill	19	16.1	(8.9-23.3)	16.1	(9.6-25.9)
Clark	649	10.3	(9.5-11.1)	11.7	(10.8-12.7)
Douglas	25	12.5	(7.6-17.4)	11.6	(7.3-18.1)
Elko	12	5.2	(2.3-8.2)	10.3	(5.0-19.6)
Esmeralda	0	---	---	---	---
Eureka	1	---	---	---	---
Humboldt	2	---	---	---	---
Lander	4	---	---	---	---
Lincoln	2	---	---	---	---
Lyon	16	9.9	(5.0-14.7)	8.6	(4.9-14.7)
Mineral	6	---	---	---	---
Nye	18	12.1	(6.5-17.7)	9.9	(5.6-17.5)
Pershing	1	---	---	---	---
Storey	2	---	---	---	---
Washoe	165	10.1	(8.5-11.6)	11.5	(9.8-13.5)
White Pine	3	---	---	---	---
Unknown	1	---	---	---	---
Total	973	10.5	(9.8-11.1)	11.7	(11.0-12.5)

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 195. Leukemia Cases by Race/Ethnicity and Gender, Nevada Residents, 1996-2000

Race/Ethnicity		Gender			
		Male	Female	Other/Unknown	Total
White	Incidence	485	333	0	818
	Rate*	15.0	9.7	---	12.3
	95% C.I.	(13.6-16.5)	(8.7-10.8)	---	(11.4-13.2)
Black	Incidence	21	19	0	40
	Rate*	14.3	8.9	---	10.5
	95% C.I.	(7.4-26.4)	(5.2-14.8)	---	(7.2-15.3)
Native American	Incidence	3	6	0	9
	Rate*	---	---	---	---
	95% C.I.	---	---	---	---
Asian	Incidence	13	14	0	27
	Rate*	7.2	5.8	---	6.4
	95% C.I.	(3.6-20.2)	(3.1-15.8)	---	(4.1-12.3)
Hispanic	Incidence	44	31	0	75
	Rate*	8.8	6.8	---	7.8
	95% C.I.	(5.5-15.9)	(4.2-11.3)	---	(5.6-11.0)
Other/Unknown	Incidence	2	2	0	4
	Rate*	---	---	---	---
	95% C.I.	---	---	---	---
Total	Incidence	568	405	0	973
	Rate*	14.2	9.4	---	11.7
	95% C.I.	(13.0-15.5)	(8.5-10.4)	---	(11.0-12.5)

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 196. Leukemia Cases by Age Group and Gender, Nevada Residents, 1996-2000

Age Group	Gender			
	Male	Female	Other/ Unknown	Total
<1	5	2	0	7
Rate*	---	---	---	---
95% C.I.	---	---	---	---
1-4	19	15	0	34
Rate*	6.8	5.6	---	6.2
95% C.I.	(3.7-9.9)	(2.8-8.4)	---	(4.1-8.3)
5-14	34	19	0	53
Rate*	5.0	3.0	---	4.0
95% C.I.	(3.3-6.7)	(1.6-4.3)	---	(2.9-5.1)
15-24	16	14	0	30
Rate*	2.4	2.3	---	2.3
95% C.I.	(1.2-3.6)	(1.1-3.5)	---	(1.5-3.2)
25-34	19	18	0	37
Rate*	2.6	2.6	---	2.6
95% C.I.	(1.4-3.7)	(1.4-3.8)	---	(1.8-3.4)
35-44	29	19	0	48
Rate*	3.8	2.6	---	3.2
95% C.I.	(2.4-5.1)	(1.4-3.8)	---	(2.3-4.1)
45-54	56	36	0	92
Rate*	9.1	6.0	---	7.6
95% C.I.	(6.7-11.5)	(4.1-8.0)	---	(6.1-9.2)
55-64	91	56	0	147
Rate*	21.2	13.0	---	17.1
95% C.I.	(16.9-25.6)	(9.6-16.4)	---	(14.3-19.8)
65-74	153	98	0	251
Rate*	50.0	31.2	---	40.5
95% C.I.	(42.1-58.0)	(25.0-37.4)	---	(35.5-45.5)
75-84	122	83	0	205
Rate*	82.7	46.0	---	62.5
95% C.I.	(68.0-97.4)	(36.1-55.9)	---	(54.0-71.1)
85+	23	45	0	68
Rate*	101.4	94.2	---	96.5
95% C.I.	(60.0-142.9)	(66.7-121.7)	---	(73.6-119.5)
Unknown	1	0	0	1
Total	568	405	0	973
Rate*	12.0	8.9	---	10.5
95% C.I.	(11.0-13.0)	(8.0-9.7)	---	(9.8-11.1)

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

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

Table 197. Leukemia Incidence by Age Group and Stage, Nevada Residents, 1996-2000

Age Group		Stage					
		In situ	Localized	Regional	Distant	Unstaged	Total
<1	Number	0	0	0	6	1	7
	Percent	---	---	---	85.7%	14.3%	100.0%
1-4	Number	0	0	0	34	0	34
	Percent	---	---	---	100.0%	---	100.0%
5-14	Number	0	0	0	52	1	53
	Percent	---	---	---	98.1%	1.9%	100.0%
15-24	Number	0	0	0	29	1	30
	Percent	---	---	---	96.7%	3.3%	100.0%
25-34	Number	0	0	0	36	1	37
	Percent	---	---	---	97.3%	2.7%	100.0%
35-44	Number	0	0	0	44	4	48
	Percent	---	---	---	91.7%	8.3%	100.0%
45-54	Number	0	0	0	82	10	92
	Percent	---	---	---	89.1%	10.9%	100.0%
55-64	Number	0	0	0	138	9	147
	Percent	---	---	---	93.9%	6.1%	100.0%
65-74	Number	0	0	0	218	33	251
	Percent	---	---	---	86.9%	13.1%	100.0%
75-84	Number	0	0	0	169	36	205
	Percent	---	---	---	82.4%	17.6%	100.0%
85+	Number	0	0	0	49	19	68
	Percent	---	---	---	72.1%	27.9%	100.0%
Unknown	Number	0	0	0	1	0	1
	Percent	---	---	---	100.0%	---	100.0%
Total	Number	0	0	0	858	115	973
	Percent	---	---	---	88.2%	11.8%	100.0%

Table 198. Leukemia Cases by Stage and Race/Ethnicity, Nevada Residents, 1996-2000

Stage		Race/Ethnicity						Total
		White	Black	Native American	Asian	Hispanic	Other/Unknown	
In situ	Number	0	0	0	0	0	0	0
	Percent	---	---	---	---	---	---	---
Localized	Number	0	0	0	0	0	0	0
	Percent	---	---	---	---	---	---	---
Regional	Number	0	0	0	0	0	0	0
	Percent	---	---	---	---	---	---	---
Distant	Number	722	31	6	25	70	4	858
	Percent	88.3%	77.5%	66.7%	92.6%	93.3%	100.0%	88.2%
Unstaged	Number	96	9	3	2	5	0	115
	Percent	11.7%	22.5%	33.3%	7.4%	6.7%	---	11.8%
Total	Number	818	40	9	27	75	4	973
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

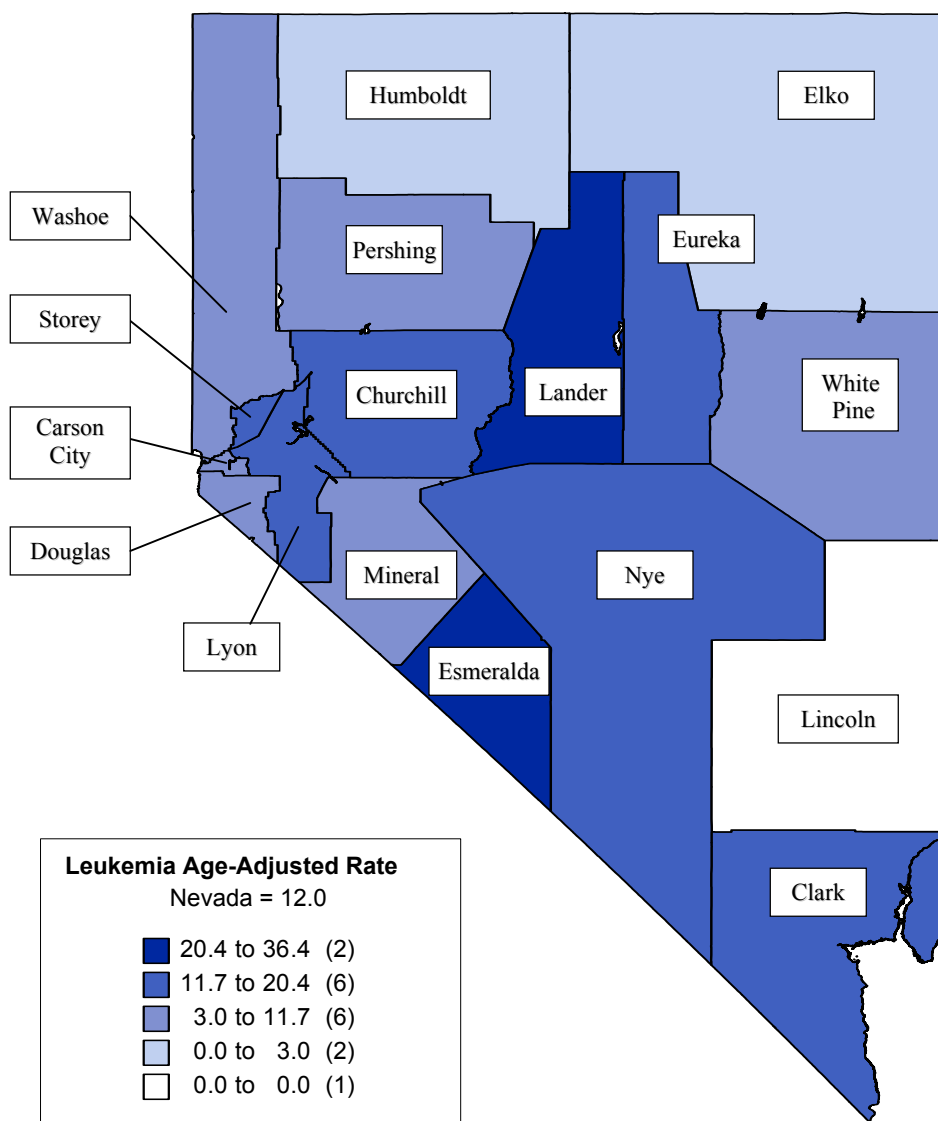
Table 199. Median Age at Diagnosis of Leukemia by Race/Ethnicity and Gender, Nevada Residents, 1996-2000

Race/Ethnicity	Gender					
	Male		Female		Total	
	Incidence	Median Age	Incidence	Median Age	Incidence	Median Age
White	484	68.0	333	70.0	817	68.0
Black	21	65.0	19	68.0	40	66.5
Native American	3	---	6	43.0	9	42.0
Asian	13	33.0	14	11.5	27	15.0
Hispanic	44	25.0	31	41.0	75	35.0
Other/Unknown	2	---	2	---	4	---
Total	567	66.0	405	67.0	972	66.0

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 131. Leukemia 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 132. Leukemia Age-Adjusted Inpatient Discharge Rates by County/Region of Residence, Nevada Residents, 1996-2000

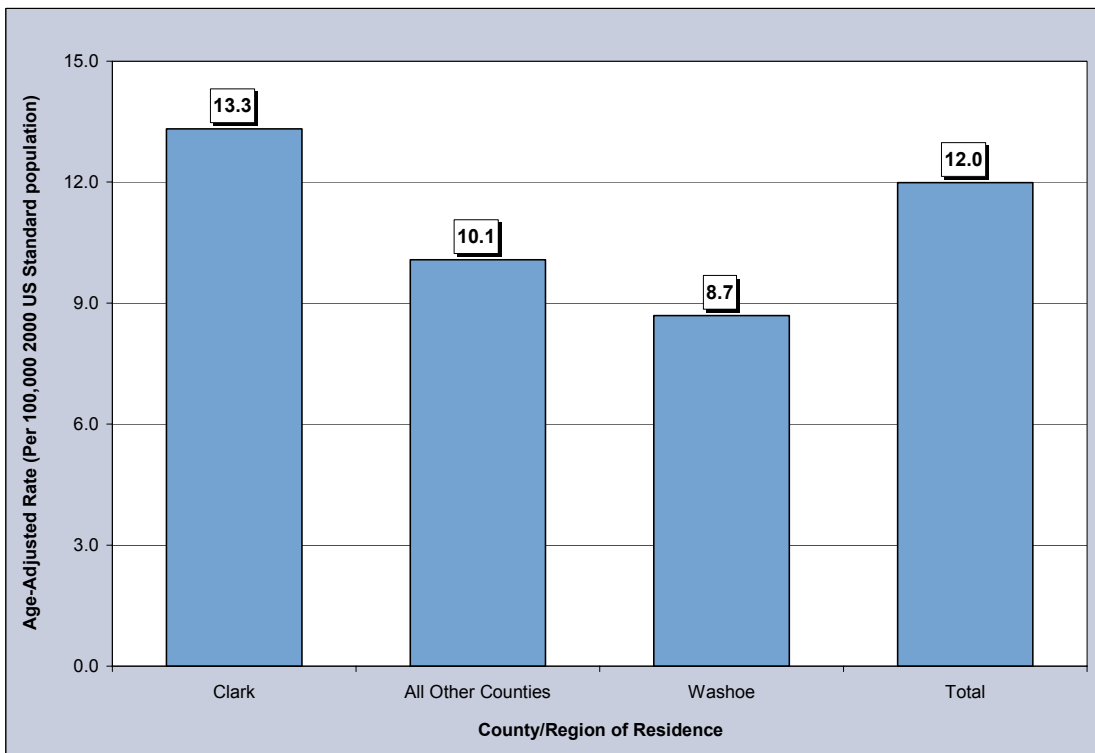


Figure 133. Median Charges for Leukemia Inpatient Discharges by County/Region of Residence, Nevada Residents, 1996-2000

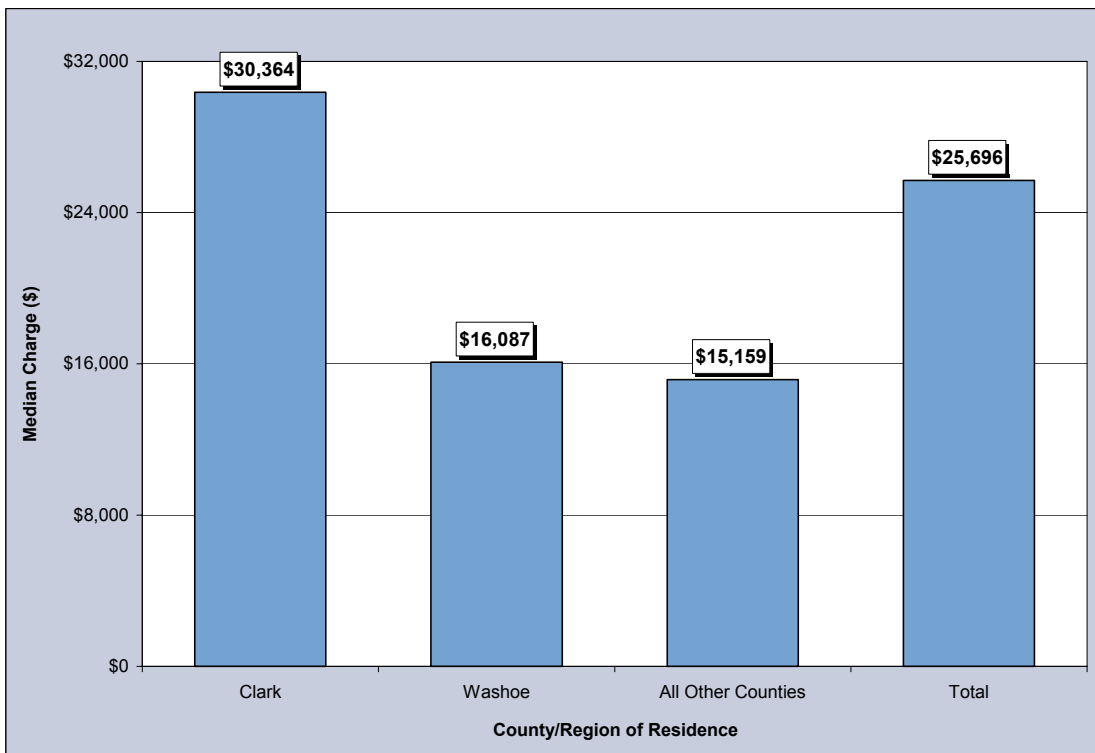


Figure 134. Average Length of Stay for Leukemia Inpatient Discharges by County/Region of Residence, Nevada Residents, 1996-2000

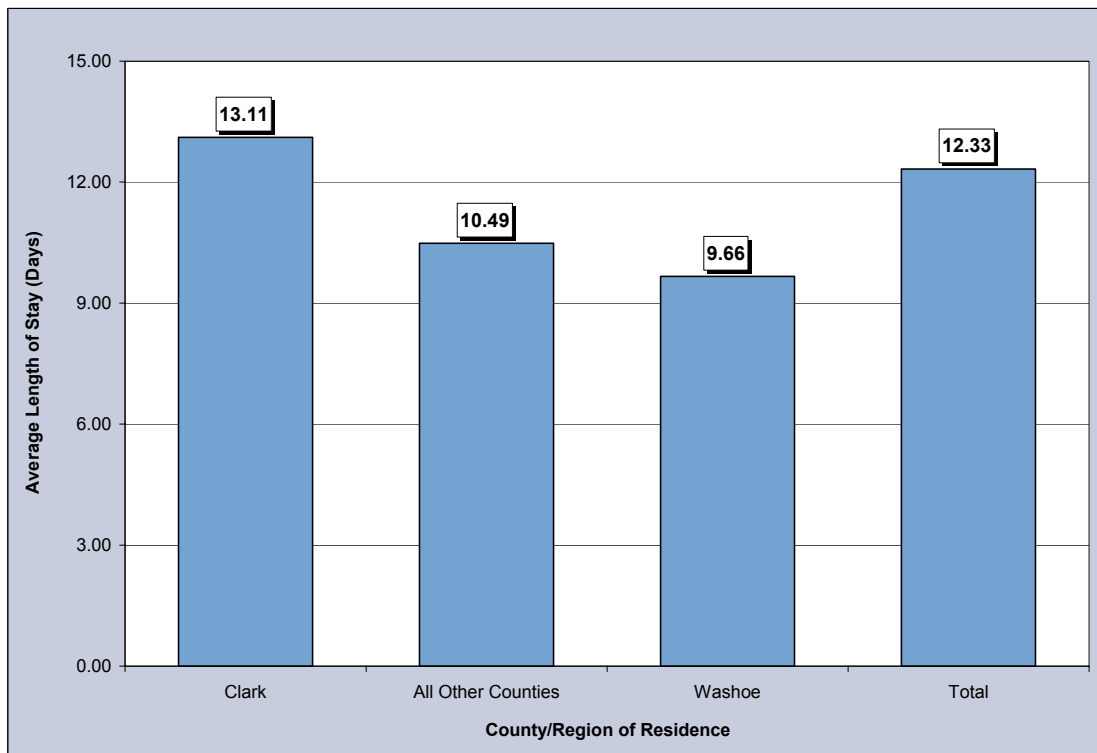


Table 200. Leukemia Inpatient Discharges by Gender, Charges, Length of Stay, and County/Region of Residence, Nevada Residents, 1996-2000

Category	County/Region of Residence				
	Nevada Total	Clark	Washoe	All Other Counties	Unknown
Total					
Discharges	1,040	771	132	136	1
Rate*	12.0	13.3	8.7	10.1	---
95% C.I.	(11.3-12.8)	(12.4-14.3)	(7.3-10.4)	(8.4-12.0)	---
Gender					
Male	609	463	69	76	1
Rate*	14.7	16.9	9.4	11.3	---
95% C.I.	(13.5-16.0)	(15.3-18.8)	(7.2-12.2)	(8.8-14.5)	---
Female	431	308	63	60	0
Rate*	9.7	10.3	8.1	8.8	---
95% C.I.	(8.8-10.6)	(9.2-11.6)	(6.2-10.4)	(6.7-11.4)	---
Other/Unknown	0	0	0	0	0
Inpatient Discharge Charges (\$)					
Total Charges	\$55,395,907	\$44,450,955	\$5,231,348	\$5,668,727	\$44,877
Average Charges	\$53,265	\$57,654	\$39,631	\$41,682	\$44,877
Median Charges	\$25,696	\$30,364	\$16,087	\$15,159	\$44,877
Discharge Length of Stay (LOS) (Days)					
Total LOS	12,818	10,108	1,275	1,426	9
Average LOS	12.3	13.1	9.7	10.5	9.0
Median LOS	7.0	8.0	6.0	5.5	9.0

* 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 201. Leukemia Inpatient Discharges by Age Group and County/Region of Residence, Nevada Residents, 1996-2000

Category	County/Region of Residence				
	Nevada Total	Clark	Washoe	All Other Counties	Unknown
Total					
Discharges	1,040	771	132	136	1
Rate*	11.2	12.2	8.1	9.9	---
95% C.I.	(10.5-11.9)	(11.4-13.1)	(6.7-9.4)	(8.3-11.6)	---
Age Group					
<1	6	6	0	0	0
Rate*	---	---	---	---	---
95% C.I.	---	---	---	---	---
1-4	57	47	2	8	0
Rate*	10.4	12.4	---	---	---
95% C.I.	(7.7-13.1)	(8.8-15.9)	---	---	---
5-14	131	117	7	7	0
Rate*	9.9	13.2	---	---	---
95% C.I.	(8.2-11.6)	(10.8-15.5)	---	---	---
15-24	58	42	9	7	0
Rate*	4.5	4.8	---	---	---
95% C.I.	(3.4-5.7)	(3.4-6.3)	---	---	---
25-34	57	40	8	9	0
Rate*	4.0	3.9	---	---	---
95% C.I.	(2.9-5.0)	(2.7-5.1)	---	---	---
35-44	54	40	9	5	0
Rate*	3.6	4.0	---	---	---
95% C.I.	(2.7-4.6)	(2.8-5.3)	---	---	---
45-54	91	63	17	11	0
Rate*	7.5	8.0	7.6	4.9	---
95% C.I.	(6.0-9.1)	(6.0-9.9)	(4.0-11.2)	(2.0-7.8)	---
55-64	171	124	24	22	1
Rate*	19.9	21.3	17.0	15.6	---
95% C.I.	(16.9-22.8)	(17.6-25.1)	(10.2-23.8)	(9.1-22.1)	---
65-74	213	146	31	36	0
Rate*	34.4	35.2	30.7	35.7	---
95% C.I.	(29.7-39.0)	(29.5-40.9)	(19.9-41.6)	(24.0-47.4)	---
75-84	157	114	23	20	0
Rate*	47.9	52.7	41.8	36.3	---
95% C.I.	(40.4-55.4)	(43.0-62.4)	(24.7-58.9)	(20.4-52.3)	---
85+	45	32	2	11	0
Rate*	63.9	74.7	---	76.3	---
95% C.I.	(45.2-82.5)	(48.8-100.6)	---	(31.2-121.4)	---
Unknown	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. 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 202. Leukemia Inpatient Discharges by Age Group and Gender, Nevada Residents, 1996-2000

Age Group	Gender		
	Male	Female	Total
<1	4	2	6
Rate*	---	---	---
95% C.I.	---	---	---
1-4	31	26	57
Rate*	11.1	9.7	10.4
95% C.I.	(7.2-15.0)	(6.0-13.4)	(7.7-13.1)
5-14	80	51	131
Rate*	11.7	8.0	9.9
95% C.I.	(9.2-14.3)	(5.8-10.1)	(8.2-11.6)
15-24	34	24	58
Rate*	5.1	3.9	4.5
95% C.I.	(3.4-6.8)	(2.3-5.5)	(3.4-5.7)
25-34	27	30	57
Rate*	3.6	4.4	4.0
95% C.I.	(2.3-5.0)	(2.8-5.9)	(2.9-5.0)
35-44	41	13	54
Rate*	5.3	1.8	3.6
95% C.I.	(3.7-6.9)	(0.8-2.8)	(2.7-4.6)
45-54	51	40	91
Rate*	8.3	6.7	7.5
95% C.I.	(6.0-10.6)	(4.6-8.8)	(6.0-9.1)
55-64	104	67	171
Rate*	24.3	15.5	19.9
95% C.I.	(19.6-28.9)	(11.8-19.2)	(16.9-22.8)
65-74	117	96	213
Rate*	38.3	30.6	34.4
95% C.I.	(31.3-45.2)	(24.4-36.7)	(29.7-39.0)
75-84	99	58	157
Rate*	67.1	32.2	47.9
95% C.I.	(53.9-80.4)	(23.9-40.5)	(40.4-55.4)
85+	21	24	45
Rate*	92.6	50.2	63.9
95% C.I.	(53.0-132.2)	(30.1-70.3)	(45.2-82.5)
Unknown	0	0	0
Total	609	431	1,040
Rate*	12.9	9.4	11.2
95% C.I.	(11.9-13.9)	(8.5-10.3)	(10.5-11.9)

* 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 203. Leukemia Inpatient Discharges by County/Region of Residence, Nevada Residents, 1996-2000

County of Residence	1996-2000 Inpatient Hospital Discharges				
	Number	Rate*		Age-Adjusted Rate**	
		Rate	95% C.I.	Rate	95% C.I.
Carson City	18	7.3	(4.0-10.7)	7.0	(4.1-11.2)
Churchill	17	14.4	(7.6-21.3)	14.2	(8.2-23.6)
Clark	771	12.2	(11.4-13.1)	13.3	(12.4-14.3)
Douglas	21	10.5	(6.0-15.0)	11.0	(6.7-17.5)
Elko	5	---	---	---	---
Esmeralda	3	---	---	---	---
Eureka	1	---	---	---	---
Humboldt	1	---	---	---	---
Lander	4	---	---	---	---
Lincoln	0	---	---	---	---
Lyon	30	18.5	(11.9-25.2)	17.4	(11.6-25.7)
Mineral	3	---	---	---	---
Nye	27	18.2	(11.3-25.1)	14.8	(9.4-23.2)
Pershing	1	---	---	---	---
Storey	1	---	---	---	---
Washoe	132	8.1	(6.7-9.4)	8.7	(7.3-10.4)
White Pine	4	---	---	---	---
Unknown	1	---	---	---	---
Total	1,040	11.2	(10.5-11.9)	12.0	(11.3-12.8)

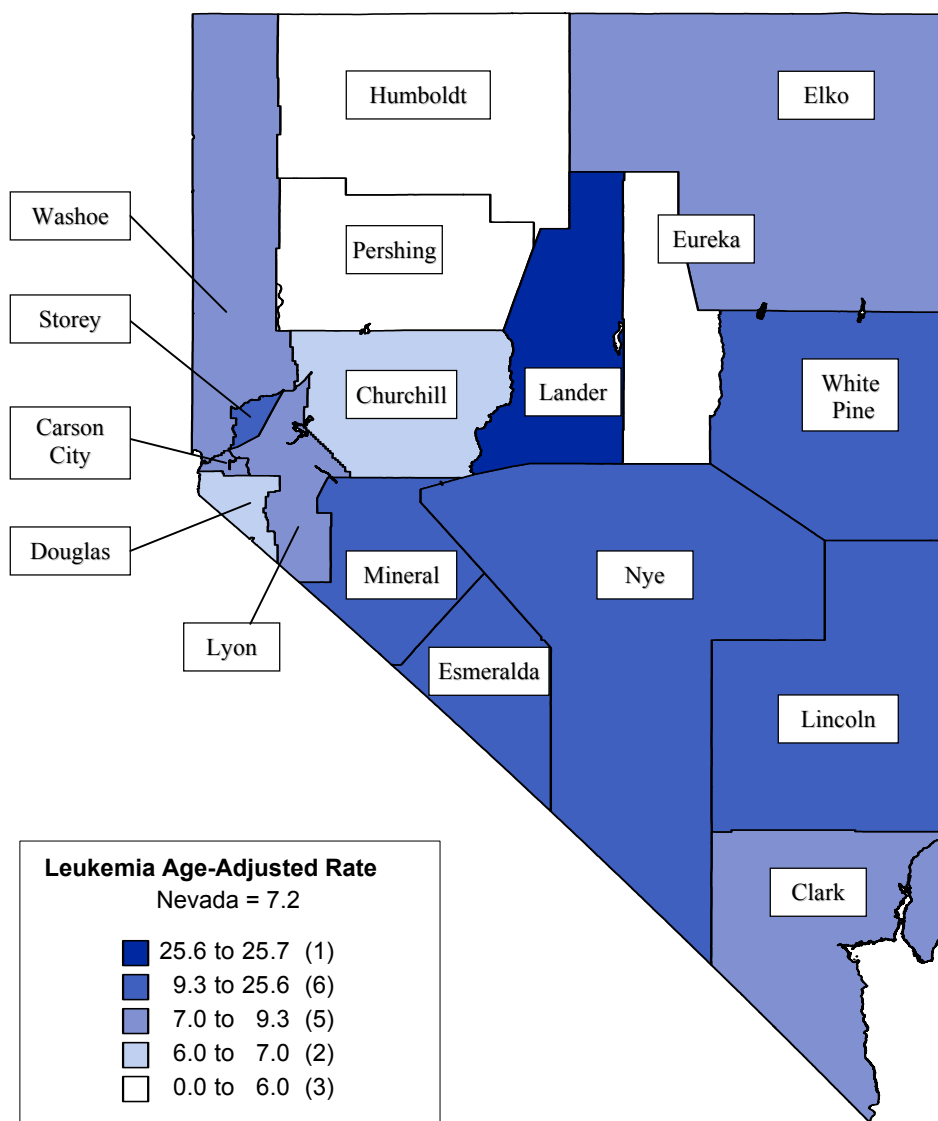
Note: The “---“ is used for rates calculated on numbers less than ten. *Rates are per 100,000 population. **Rates are per 100,000 population and are age-adjusted to the 2000 US Standard population.

Table 204. Leukemia Inpatient Discharges by Age Group, Charges and Length of Stay, Nevada Residents, 1996-2000

Age Group	Discharges	Charges (\$)			Length of Stay (Days)		
		Total	Average	Median	Total	Average	Median
<1	6	462,625	77,104	52,804	107	17.8	17.0
1-4	57	2,115,287	37,110	32,614	524	9.2	8.0
5-14	131	6,112,104	46,657	35,211	1,219	9.3	7.0
15-24	58	3,301,419	56,921	29,708	811	14.0	7.0
25-34	57	4,217,996	74,000	50,516	908	15.9	10.0
35-44	54	3,602,168	66,707	37,395	932	17.3	14.5
45-54	91	6,650,048	73,077	33,212	1,465	16.1	10.0
55-64	171	10,282,850	60,134	27,660	2,348	13.7	8.0
65-74	213	12,258,013	57,549	27,986	2,767	13.0	7.0
75-84	157	5,621,392	35,805	15,479	1,451	9.2	6.0
85+	45	772,005	17,156	15,154	286	6.4	5.0
Unknown	0	---	---	---	---	---	---
Total	1,040	55,395,907	53,265	25,696	12,818	12.3	7.0

MORTALITY

Figure 135. Leukemia 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 136. Leukemia Age-Adjusted Mortality Rates by County/Region of Residence, Nevada Residents, 1996-2000

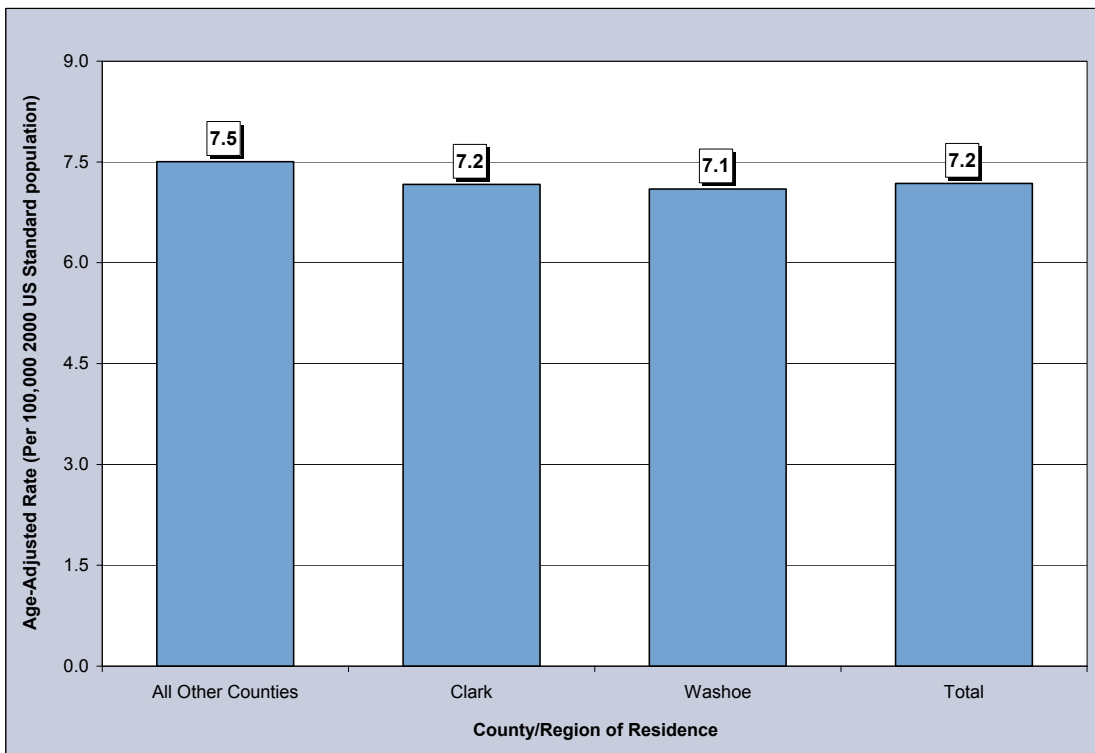


Figure 137. Leukemia Age-Adjusted Mortality Rates by Race/Ethnicity, Nevada Residents, 1996-2000

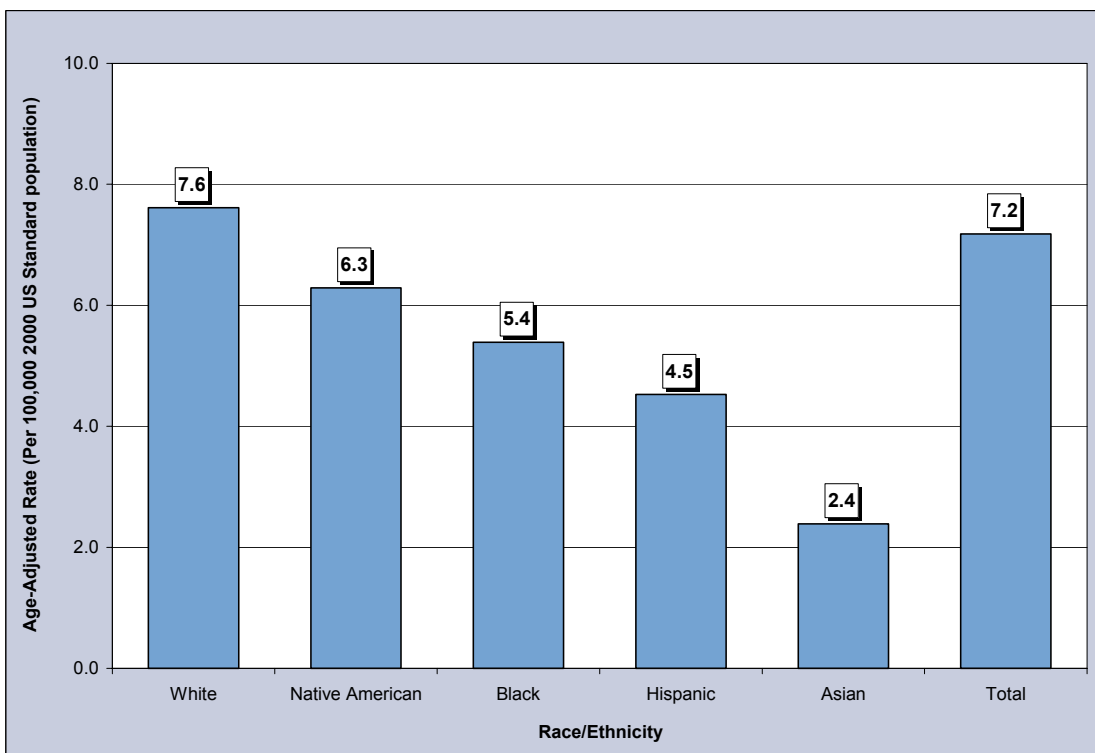


Table 205. Leukemia Mortality by Gender, Race/Ethnicity and County/Region of Residence, Nevada Residents, 1996-2000

Category	County/Region of Residence			
	Nevada Total	Clark	Washoe	All Other Counties
Total				
Mortality	568	372	100	96
Rate*	7.2	7.2	7.1	7.5
95% C.I.	(6.6-7.8)	(6.4-8.0)	(5.8-8.7)	(6.0-9.3)
Gender				
Male	330	224	57	49
Rate*	8.9	9.4	8.6	7.8
95% C.I.	(7.9-10.0)	(8.1-10.9)	(6.4-11.5)	(5.7-10.7)
Female	238	148	43	47
Rate*	5.7	5.4	5.7	7.0
95% C.I.	(5.0-6.5)	(4.5-6.3)	(4.1-7.7)	(5.1-9.4)
Other/Unknown	0	0	0	0
Race/Ethnicity				
White	502	323	92	87
Rate*	7.6	7.8	7.4	7.5
95% C.I.	(6.9-8.3)	(6.9-8.7)	(6.0-9.2)	(5.9-9.3)
Black	19	19	0	0
Rate*	5.4	5.9	---	---
95% C.I.	(3.1-9.2)	(3.3-10.2)	---	---
Native American	6	2	0	4
Rate*	---	---	---	---
95% C.I.	---	---	---	---
Asian	9	8	1	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
Hispanic	30	20	5	5
Rate*	4.5	4.0	---	---
95% C.I.	(2.8-7.5)	(2.2-7.6)	---	---
Other/Unknown	2	0	2	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 206. Leukemia Mortality by Age Group and County/Region of Residence, Nevada Residents, 1996-2000

Category	County/Region of Residence			
	Nevada Total	Clark	Washoe	All Other Counties
Total				
Mortality	568	372	100	96
Rate*	6.1	5.9	6.1	7.0
95% C.I.	(5.6-6.6)	(5.3-6.5)	(4.9-7.3)	(5.6-8.4)
Age Group				
<1	1	0	0	1
Rate*	---	---	---	---
95% C.I.	---	---	---	---
1-4	3	1	1	1
Rate*	---	---	---	---
95% C.I.	---	---	---	---
5-14	7	7	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
15-24	15	11	1	3
Rate*	1.2	1.3	---	---
95% C.I.	(0.6-1.8)	(0.5-2.0)	---	---
25-34	6	4	0	2
Rate*	---	---	---	---
95% C.I.	---	---	---	---
35-44	21	13	6	2
Rate*	1.4	1.3	---	---
95% C.I.	(0.8-2.0)	(0.6-2.0)	---	---
45-54	48	34	8	6
Rate*	4.0	4.3	---	---
95% C.I.	(2.8-5.1)	(2.8-5.7)	---	---
55-64	86	57	15	14
Rate*	10.0	9.8	10.6	10.1
95% C.I.	(7.9-12.1)	(7.3-12.3)	(5.2-16.0)	(4.8-15.5)
65-74	155	96	35	24
Rate*	25.0	23.2	34.7	23.0
95% C.I.	(21.1-28.9)	(18.5-27.8)	(23.2-46.2)	(13.8-32.2)
75-84	170	114	28	28
Rate*	51.9	52.7	50.9	49.6
95% C.I.	(44.1-59.7)	(43.0-62.4)	(32.0-69.7)	(31.2-67.9)
85+	56	35	6	15
Rate*	79.5	81.7	---	113.7
95% C.I.	(58.7-100.3)	(54.6-108.8)	---	(56.2-171.2)
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 207. Leukemia Mortality by County of Residence, Nevada Residents, 1996-2000

County of Residence	1996-2000 Mortality				
	Cases	Rate*		Age-Adjusted Rate**	
		Rate	95% C.I.	Rate	95% C.I.
Carson City	20	8.2	(4.6-11.7)	7.2	(4.3-11.3)
Churchill	7	---	---	---	---
Clark	372	5.9	(5.3-6.5)	7.2	(6.4-8.0)
Douglas	14	7.0	(3.3-10.7)	6.2	(3.3-11.3)
Elko	9	---	---	---	---
Esmeralda	1	---	---	---	---
Eureka	0	---	---	---	---
Humboldt	1	---	---	---	---
Lander	5	---	---	---	---
Lincoln	3	---	---	---	---
Lyon	12	7.4	(3.2-11.6)	7.3	(3.7-13.5)
Mineral	3	---	---	---	---
Nye	15	10.1	(5.0-15.2)	9.3	(4.8-17.3)
Pershing	0	---	---	---	---
Storey	1	---	---	---	---
Washoe	100	6.1	(4.9-7.3)	7.1	(5.8-8.7)
White Pine	5	---	---	---	---
Unknown	0	---	---	---	---
Total	568	6.1	(5.6-6.6)	7.2	(6.6-7.8)

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 208. Leukemia Mortality by Race/Ethnicity and Gender, Nevada Residents, 1996-2000

Race/Ethnicity	Gender			
	Male	Female	Total	
White	Mortality	293	209	502
	Rate*	9.4	6.0	7.6
	95% C.I.	(8.3-10.7)	(5.2-6.9)	(6.9-8.3)
Black	Mortality	10	9	19
	Rate*	6.6	---	5.4
	95% C.I.	(2.5-16.1)	---	(3.1-9.2)
Native American	Mortality	2	4	6
	Rate*	---	---	---
	95% C.I.	---	---	---
Asian	Mortality	7	2	9
	Rate*	---	---	---
	95% C.I.	---	---	---
Hispanic	Mortality	16	14	30
	Rate*	5.2	4.0	4.5
	95% C.I.	(2.6-12.0)	(2.0-8.0)	(2.8-7.5)
Other/Unknown	Mortality	2	0	2
	Rate*	---	---	---
	95% C.I.	---	---	---
Total	Mortality	330	238	568
	Rate*	8.9	5.7	7.2
	95% C.I.	(7.9-10.0)	(5.0-6.5)	(6.6-7.8)

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 209. Leukemia Mortality by Age Group and Gender, Nevada Residents, 1996-2000

Age Group	Gender		
	Male	Female	Total
<1	1	0	1
Rate*	---	---	---
95% C.I.	---	---	---
1-4	1	2	3
Rate*	---	---	---
95% C.I.	---	---	---
5-14	4	3	7
Rate*	---	---	---
95% C.I.	---	---	---
15-24	10	5	15
Rate*	1.5	---	1.2
95% C.I.	(0.6-2.4)	---	(0.6-1.8)
25-34	1	5	6
Rate*	---	---	---
95% C.I.	---	---	---
35-44	12	9	21
Rate*	1.6	---	1.4
95% C.I.	(0.7-2.4)	---	(0.8-2.0)
45-54	31	17	48
Rate*	5.1	2.8	4.0
95% C.I.	(3.3-6.8)	(1.5-4.2)	(2.8-5.1)
55-64	58	28	86
Rate*	13.5	6.5	10.0
95% C.I.	(10.0-17.0)	(4.1-8.9)	(7.9-12.1)
65-74	88	67	155
Rate*	28.8	21.3	25.0
95% C.I.	(22.8-34.8)	(16.2-26.4)	(21.1-28.9)
75-84	104	66	170
Rate*	70.5	36.6	51.9
95% C.I.	(57.0-84.1)	(27.8-45.4)	(44.1-59.7)
85+	20	36	56
Rate*	88.2	75.4	79.5
95% C.I.	(49.5-126.9)	(50.7-100.0)	(58.7-100.3)
Unknown	0	0	0
Total	330	238	568
Rate*	7.0	5.2	6.1
95% C.I.	(6.2-7.7)	(4.5-5.9)	(5.6-6.6)

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

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

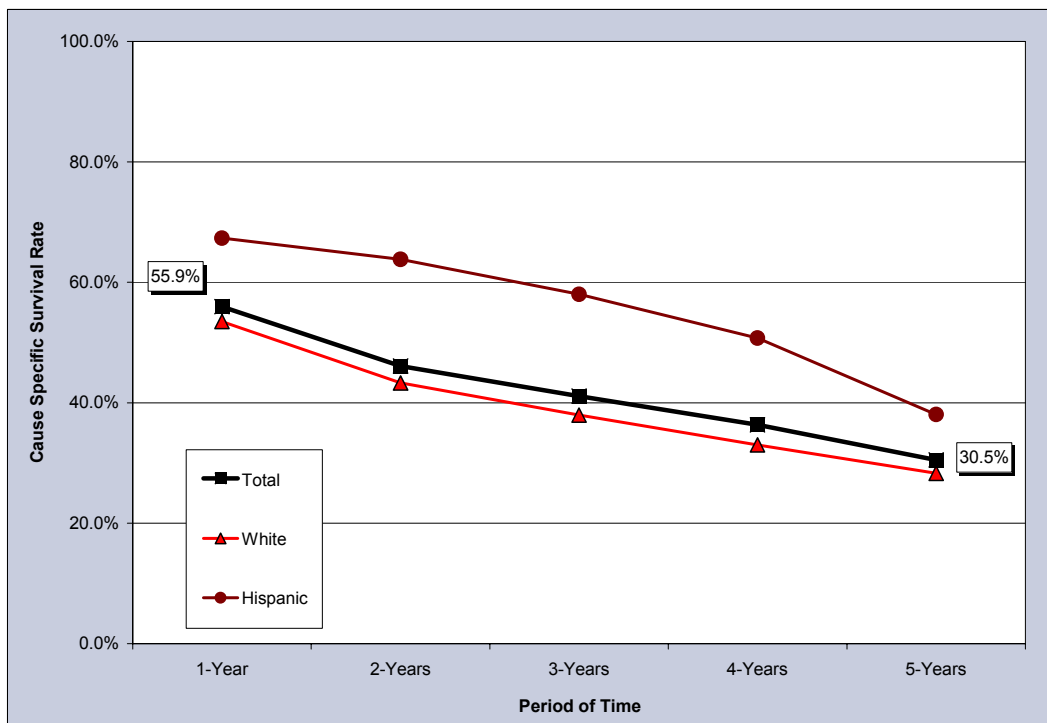
Table 210. Median Age at Death from Leukemia by Race/Ethnicity and Gender, Nevada Residents, 1996-2000

Race/Ethnicity	Gender					
	Male		Female		Total	
	Deaths	Median Age	Deaths	Median Age	Deaths	Median Age
White	293	71.0	209	73.0	502	72.0
Black	10	72.5	9	73.0	19	73.0
Native American	2	---	4	---	6	46.5
Asian	7	63.0	2	---	9	63.0
Hispanic	16	62.0	14	60.5	30	61.0
Other/Unknown	2	---	0	---	2	---
Total	330	71.0	238	73.0	568	71.0

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 138. Survival Rates for Leukemia 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 139. Survival Rates for Leukemia by Stage of Cancer at Diagnosis, Nevada Residents, 1996-2000

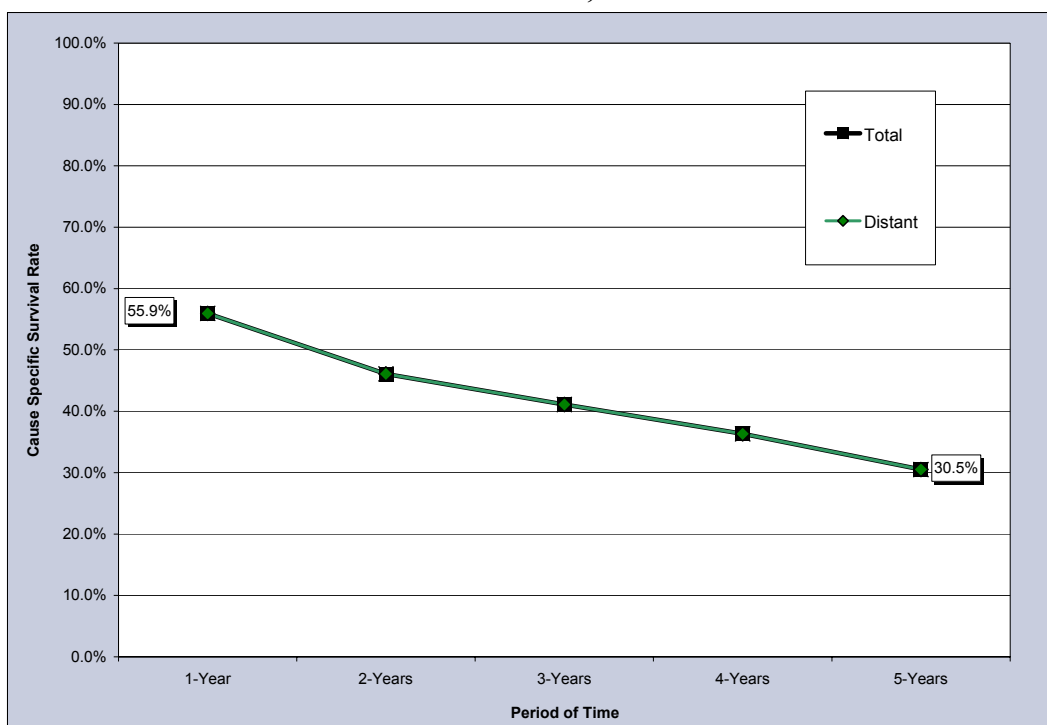


Table 211. Cause-Specific Survival Rates for Leukemia by Race/Ethnicity and Gender, Nevada Residents, 1996-2000

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	560	55.9%	46.1%	41.1%	36.3%	30.5%	1.60
Male	338	55.2%	46.2%	41.0%	38.8%	33.3%	1.58
Female	222	57.1%	46.1%	41.4%	33.4%	27.3%	1.65
Race/Ethnicity							
White	461	53.5%	43.3%	37.9%	33.0%	28.3%	1.34
Male	282	52.9%	44.9%	38.7%	35.7%	35.7%	1.36
Female	179	54.4%	41.3%	37.1%	29.7%	21.2%	1.34
Black	15	---	---	---	---	---	---
Male	9	---	---	---	---	---	---
Female	6	---	---	---	---	---	---
Native American	5	---	---	---	---	---	---
Male	1	---	---	---	---	---	---
Female	4	---	---	---	---	---	---
Asian	18	---	---	---	---	---	---
Male	9	---	---	---	---	---	---
Female	9	---	---	---	---	---	---
Hispanic	58	67.3%	63.8%	58.0%	50.8%	38.1%	4.06
Male	36	---	---	---	---	---	---
Female	22	---	---	---	---	---	---

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 212. Cause-Specific Survival Rates for Leukemia by Stage of Cancer at Diagnosis and Gender, Nevada Residents, 1996-2000

Survival Rate of Stage at Diagnosis		Gender		
		Total	Male	Female
Total	Cases	560	338	222
	One Year	55.9%	55.2%	57.1%
	5 Years	30.5%	33.3%	27.3%
	Median Survival	1.60	1.58	1.65
Stage at Diagnosis				
In situ	Cases	0	0	0
	One Year	---	---	---
	5 Years	---	---	---
	Median Survival	---	---	---
Localized	Cases	0	0	0
	One Year	---	---	---
	5 Years	---	---	---
	Median Survival	---	---	---
Regional	Cases	0	0	0
	One Year	---	---	---
	5 Years	---	---	---
	Median Survival	---	---	---
Distant	Cases	560	338	222
	One Year	55.9%	55.2%	57.1%
	5 Years	30.5%	33.3%	27.3%
	Median Survival	1.60	1.58	1.65
Unstaged	Cases	0	0	0
	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.