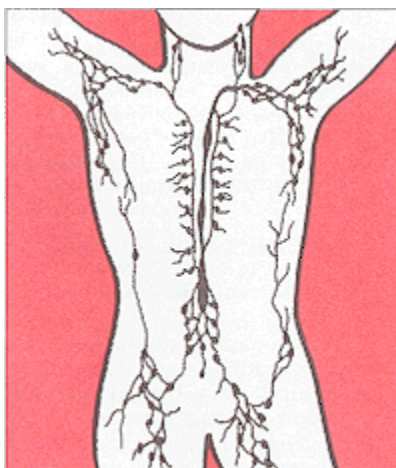


# **NON-HODGKIN'S LYMPHOMA**

# NON-HODGKIN'S LYMPHOMA

## GENERAL PROFILE<sup>4</sup>

**Figure 101. Anatomy of the Lymphatic System**



**General Anatomy:** Lymphoma is a general term for cancers that develop in the lymphatic system. The lymphatic system is part of the body's immune system that helps the body fight disease and infection and includes a network of thin tubes (lymphatic vessels) that branch, like blood vessels, into tissues throughout the body. Lymphatic vessels carry lymph, a colorless, watery fluid that contains infection-fighting cells called lymphocytes. Along this network of vessels are small organs called lymph nodes that are found in the underarms, groin, neck, chest, and abdomen. Other parts of the lymphatic system are the spleen, thymus, tonsils, and bone marrow. Lymphatic tissue is also found in other parts of the body, including the stomach, intestines, and skin.

In Non-Hodgkin's Lymphoma, cells in the lymphatic system become abnormal. They divide and grow without any order or control, or old cells do not die as cells normally do. Non-Hodgkin's lymphoma can start almost anywhere in the body and may occur in a single lymph node, a group of lymph nodes, or in another organ. This type of cancer can spread to almost any part of the body, including the liver, bone marrow, and spleen.

**Risk Factors:** Age, male gender, weakened immune system, viruses (Human T-lymphotropic virus type I (HTLV-1) and Epstein-Barr virus), and environment (chemical exposure).

**Signs and Symptoms:** Unexplained fever, night sweats, constant fatigue, unexplained weight loss, itchy skin, and reddened patches on the skin.

**Diagnosing the Cancer:** X-rays, computed tomography (CAT) scan, magnetic resonance imaging (MRI), and lymphangiogram.

**Treatment:** Treatment options include: chemotherapy, radiation therapy, bone marrow transplantation (BMT), biological therapy, surgery, and clinical trials.

## **HIGHLIGHTS**

- The ratio of the age-adjusted incidence rate, 17.1, to the age-adjusted mortality rate, 6.7 (per 100,000 – 2000 US Standard population), for Non-Hodgkin's Lymphoma was 2.55 during the 1999 to 2003 period, which means that for every 255 Non-Hodgkin's Lymphoma cases during this period, there was 100 deaths due to Non-Hodgkin's Lymphoma in Nevada.
- Nevadan females had a higher ratio than males when the age-adjusted incidence and age-adjusted mortality rates for Non-Hodgkin's Lymphoma were compared. For every 100 female deaths due to Non-Hodgkin's Lymphoma there was 256 female cases while there were 247 male cases for every 100 male Non-Hodgkin's Lymphoma death in Nevada from 1999 to 2003.
- The median age at diagnosis of Non-Hodgkin's Lymphoma was 66 years of age for Nevada residents from 1999 to 2003; the median age at time of death was 73 years.

## **INCIDENCE**

- There were 1,679 cases of Non-Hodgkin's Lymphoma in Nevada from 1999 to 2003. Nevada's lower incidence rate, 17.1 (16.3-18.0), for Non-Hodgkin's Lymphoma showed statistical significance when compared to the national rate, 19.2 (19.0-19.4), per 100,000 – 2000 US Standard population.
- Regional comparisons showed that Clark County's age-adjusted incidence rate, 17.7, was higher than the rate for Washoe County and All Other Counties who had rates of 16.8 and 15.3 (per 100,000 – 2000 US Standard population) from 1999 to 2003.
- Males had a statistically significant higher age-adjusted incidence rate, 20.7 (19.3-22.2), than females from 1999 to 2003 who had a rate of 14.1 (13.1-15.2), (per 100,000 – 2000 US Standard population).
- Whites had the highest age-adjusted incidence rate, 18.4, for Non-Hodgkin's Lymphoma of all racial/ethnic groups and were followed by Blacks, Asians, Hispanics and Native Americans with rates of 12.1, 11.5, 9.0, and 2.2 (per 100,000 – 2000 US Standard population), respectively, during this period.

## **INPATIENT HOSPITAL DISCHARGES**

- Statistical regional comparisons indicate that Washoe County had the highest age-adjusted inpatient discharge rate for Non-Hodgkin's Lymphoma, 11.3 (9.7-13.2), and was followed by Clark County, 10.7 (9.9-11.5), and All Other Counties, 8.3 (6.9-10.0), per 100,000 – 2000 US Standard population) from 1999 to 2003.

- Clark County had the highest median total charge (\$31,702) for Non-Hodgkin's Lymphoma inpatient hospital discharges during the 1999 to 2003 period and was followed by Washoe County (\$22,969) and All Other Counties (\$21,392).
- Total billed charges for hospital inpatient discharges from Non-Hodgkin's Lymphoma in Nevada totaled nearly 50.7 million dollars from 1999 to 2003. The overall average billed charge per day for an inpatient hospital discharge for Non-Hodgkin's Lymphoma was approximately \$5,336 in Nevada during this time.

## **MORTALITY**

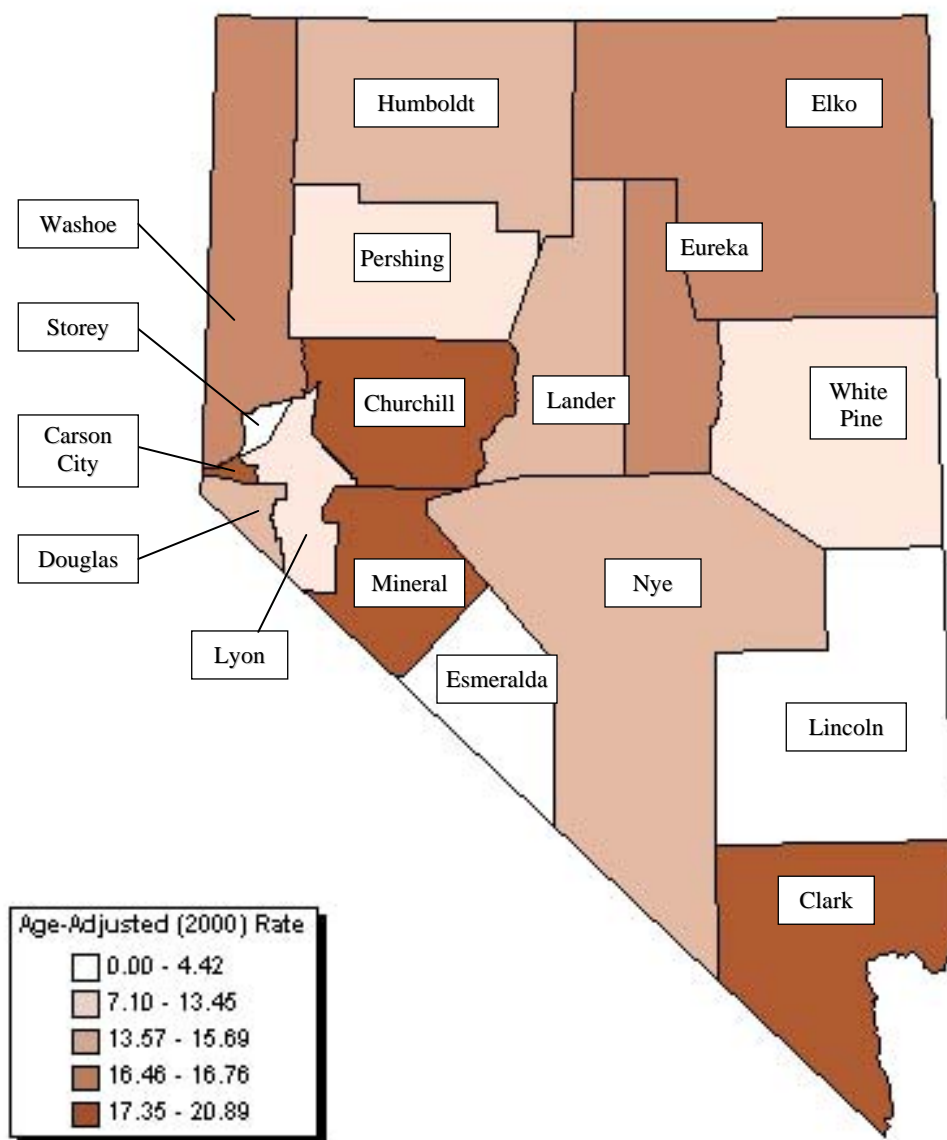
- There were 617 deaths in Nevada due to Non-Hodgkin's Lymphoma from 1999 to 2003. Regional comparisons showed little difference between the age-adjusted mortality rates for Washoe County, All Other Counties as a region, and Clark County with rates of 7.9, 7.1 and 6.3 (per 100,000 – 2000 US Standard population), respectively.
- While racial/ethnic comparisons showed that Whites had highest age-adjusted mortality rate (7.0) for Non-Hodgkin's Lymphoma, and were followed by Hispanics, Blacks, and Asians with rates of 5.6, 5.2 and 4.7 (per 100,000 – 2000 US Standard population), respectively; statistical analysis does not show any statistical significance between any of the racial/ethnic groups during the 1999 to 2003 period.

## **SURVIVAL RATE**

- Females in Nevada had a slightly higher one-year survival rate (76.7%) than males (75.8%) for Non-Hodgkin's Lymphoma during the 1999 to 2003 period. However, this difference reversed by the five-year survival period where females had a survival rate of 57.3% and males had a rate of 59.1%.
- The Non-Hodgkin's Lymphoma 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 85.6% and 71.2%, respectively. This was followed by those with regional and then distant diagnoses with rates of 80.0% and 70.0% for the one year period and 66.6% and 51.6% for the five year period.

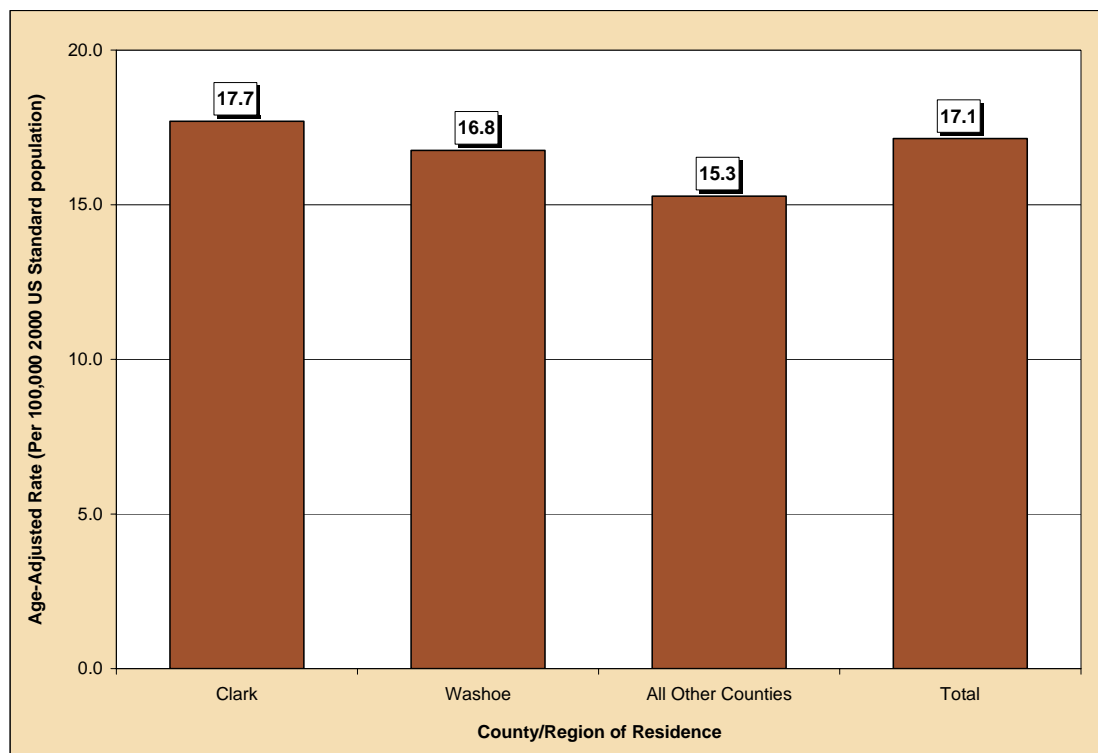
## INCIDENCE

**Figure 102. Non-Hodgkin's Lymphoma Age-Adjusted (2000) Incidence Rates,  
Nevada Residents, 1999-2003**

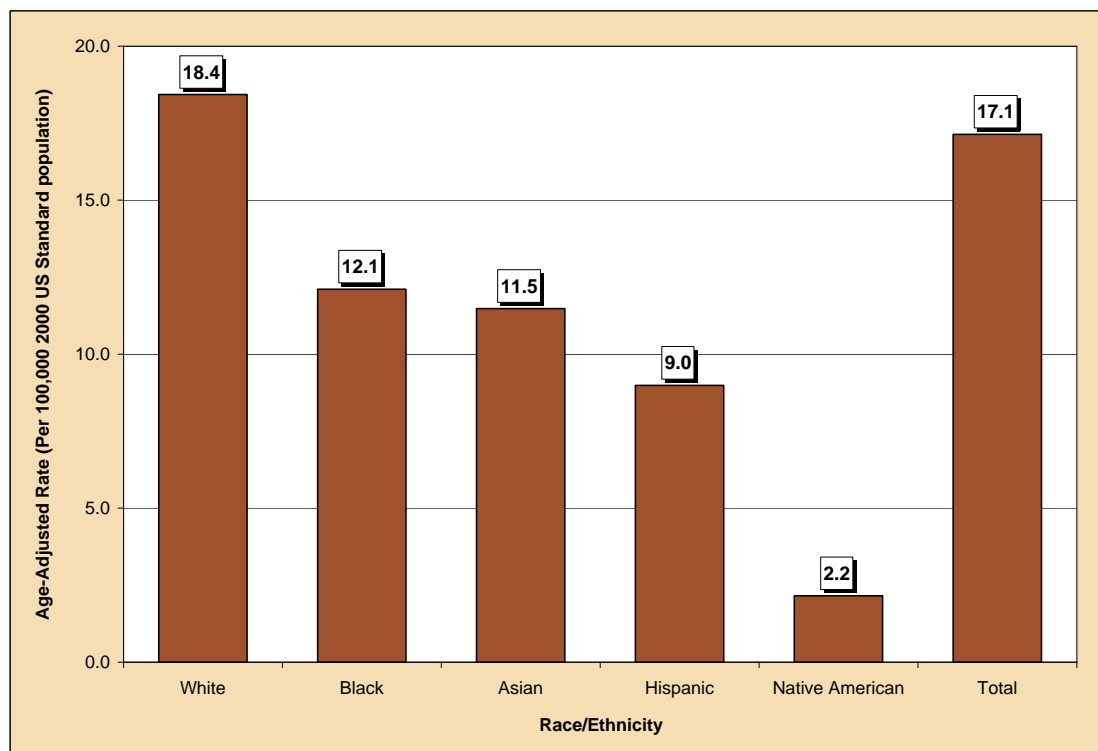


Note: Rates are per 100,000 population and age-adjusted to 2000 US Standard population. Caution should be used when interpreting rates based upon small numbers. See Technical Notes for more information.

**Figure 103. Non-Hodgkin's Lymphoma Age-Adjusted Incidence Rates by County/Region of Residence, Nevada Residents, 1999-2003**



**Figure 104. Non-Hodgkin's Lymphoma Age-Adjusted Incidence Rates by Race/Ethnicity, Nevada Residents, 1999-2003**



**Table 150. Non-Hodgkin's Lymphoma Cases by Gender, Race/Ethnicity and County/Region of Residence at Diagnosis, Nevada Residents (1999-2003) and SEER-13 (1998-2002)**

Category	County/Region of Residence					
	Nevada Total	Clark	Washoe	All Other Counties	Unknown	SEER 13 (1998-2002)
<b>Total</b>						
<b>Cases</b>	1,679	1,174	271	234	0	34,190
<b>Rate*</b>	17.1	17.7	16.8	15.3	---	19.2
<b>95% C.I.</b>	(16.3-18.0)	(16.7-18.8)	(14.8-18.9)	(13.4-17.4)	---	(19.0-19.4)
<b>Age Group</b>						
<b>&lt;1</b>	1	1	0	0	0	4
Rate*	---	---	---	---	---	0.1
95% C.I.	---	---	---	---	---	(0.0-0.4)
<b>1-4</b>	2	1	1	0	0	64
Rate*	---	---	---	---	---	0.6
95% C.I.	---	---	---	---	---	(0.5-0.7)
<b>5-14</b>	13	8	3	2	0	309
Rate*	0.9	---	---	---	---	1.1
95% C.I.	(0.40-1.34)	---	---	---	---	(1.0-1.2)
<b>15-24</b>	25	20	4	1	0	534
Rate*	1.7	1.9	---	---	---	2.0
95% C.I.	(1.02-2.34)	(1.08-2.78)	---	---	---	(1.8-2.2)
<b>25-34</b>	63	42	11	10	0	1,311
Rate*	4.0	3.7	4.3	6.4	---	4.4
95% C.I.	(3.04-5.03)	(2.55-4.77)	(1.76-6.85)	(2.42-10.30)	---	(4.2-4.6)
<b>35-44</b>	122	84	24	14	0	2,946
Rate*	7.4	7.3	8.5	6.3	---	9.3
95% C.I.	(6.06-8.68)	(5.74-8.87)	(5.07-11.84)	(3.01-9.63)	---	(9.0-9.7)
<b>45-54</b>	214	151	36	27	0	4,780
Rate*	15.1	15.9	14.2	12.5	---	18.5
95% C.I.	(13.04-17.08)	(13.33-18.39)	(9.58-18.87)	(7.79-17.24)	---	(18.0-19.0)
<b>55-64</b>	354	241	68	45	0	5,884
Rate*	34.4	34.2	41.4	28.3	---	37.3
95% C.I.	(30.83-38.00)	(29.85-38.48)	(31.54-51.20)	(20.06-36.62)	---	(36.3-38.3)
<b>65-74</b>	417	296	59	62	0	7,788
Rate*	60.6	62.8	56.5	55.3	---	70.3
95% C.I.	(54.81-66.44)	(55.66-69.97)	(42.08-70.91)	(41.51-69.03)	---	(68.8-71.9)
<b>75-84</b>	370	261	48	61	0	7,871
Rate*	94.3	98.3	78.1	93.3	---	103.0
95% C.I.	(84.72-103.94)	(86.41-110.28)	(55.98-100.15)	(69.91-116.75)	---	(100.7-105.3)
<b>85+</b>	98	69	17	12	0	2,699
Rate*	111.4	124.1	102.3	76.2	---	100.8
95% C.I.	(89.33-133.44)	(94.78-153.33)	(53.68-150.96)	(33.09-119.32)	---	(97.0-104.6)
<b>Unknown</b>	0	0	0	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 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 151. Non-Hodgkin's Lymphoma Cases by Age Group and County/Region of Residence at Diagnosis, Nevada Residents (1999-2003) and SEER-13 (1998-2002)**

Category	County/Region of Residence					
	Nevada Total	Clark	Washoe	All Other Counties	Unknown	SEER 13 (1998-2002)
<b>Total</b>						
<b>Cases</b>	1,679	1,174	271	234	0	34,190
<b>Rate*</b>	17.1	17.7	16.8	15.3	---	19.2
<b>95% C.I.</b>	(16.3-18.0)	(16.7-18.8)	(14.8-18.9)	(13.4-17.4)	---	(19.0-19.4)
<b>Age Group</b>						
<1	1	1	0	0	0	4
Rate*	---	---	---	---	---	0.1
95% C.I.	---	---	---	---	---	(0.0-0.4)
1-4	2	1	1	0	0	64
Rate*	---	---	---	---	---	0.6
95% C.I.	---	---	---	---	---	(0.5-0.7)
5-14	13	8	3	2	0	309
Rate*	0.9	---	---	---	---	1.1
95% C.I.	(0.40-1.34)	---	---	---	---	(1.0-1.2)
15-24	25	20	4	1	0	534
Rate*	1.7	1.9	---	---	---	2.0
95% C.I.	(1.02-2.34)	(1.08-2.78)	---	---	---	(1.8-2.2)
25-34	63	42	11	10	0	1,311
Rate*	4.0	3.7	4.3	6.4	---	4.4
95% C.I.	(3.04-5.03)	(2.55-4.77)	(1.76-6.85)	(2.42-10.30)	---	(4.2-4.6)
35-44	122	84	24	14	0	2,946
Rate*	7.4	7.3	8.5	6.3	---	9.3
95% C.I.	(6.06-8.68)	(5.74-8.87)	(5.07-11.84)	(3.01-9.63)	---	(9.0-9.7)
45-54	214	151	36	27	0	4,780
Rate*	15.1	15.9	14.2	12.5	---	18.5
95% C.I.	(13.04-17.08)	(13.33-18.39)	(9.58-18.87)	(7.79-17.24)	---	(18.0-19.0)
55-64	354	241	68	45	0	5,884
Rate*	34.4	34.2	41.4	28.3	---	37.3
95% C.I.	(30.83-38.00)	(29.85-38.48)	(31.54-51.20)	(20.06-36.62)	---	(36.3-38.3)
65-74	417	296	59	62	0	7,788
Rate*	60.6	62.8	56.5	55.3	---	70.3
95% C.I.	(54.81-66.44)	(55.66-69.97)	(42.08-70.91)	(41.51-69.03)	---	(68.8-71.9)
75-84	370	261	48	61	0	7,871
Rate*	94.3	98.3	78.1	93.3	---	103.0
95% C.I.	(84.72-103.94)	(86.41-110.28)	(55.98-100.15)	(69.91-116.75)	---	(100.7-105.3)
85+	98	69	17	12	0	2,699
Rate*	111.4	124.1	102.3	76.2	---	100.8
95% C.I.	(89.33-133.44)	(94.78-153.33)	(53.68-150.96)	(33.09-119.32)	---	(97.0-104.6)
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 152. Non-Hodgkin's Lymphoma Cases by County of Residence at Diagnosis, Nevada Residents, 1999-2003**

County of Residence at Diagnosis	1999-2003 Incidence				
	Cases	Rate*		Age-Adjusted Rate**	
		Rate	95% C.I.	Rate	95% C.I.
Carson City	59	23.3	(17.37-29.27)	20.9	(15.9-27.2)
Churchill	24	19.5	(11.72-27.34)	20.0	(12.8-30.4)
Clark	1,174	16.0	(15.10-16.94)	17.7	(16.7-18.8)
Douglas	43	20.1	(14.07-26.06)	15.7	(11.3-21.7)
Elko	20	8.8	(4.94-12.64)	16.5	(9.5-27.2)
Esmeralda	0	---	---	---	---
Eureka	1	---	---	---	---
Humboldt	8	---	---	---	---
Lander	2	---	---	---	---
Lincoln	1	---	---	---	---
Lyon	29	15.6	(9.95-21.34)	13.5	(9.0-19.5)
Mineral	6	---	---	---	---
Nye	32	18.9	(12.34-25.42)	14.3	(9.5-21.3)
Pershing	2	---	---	---	---
Storey	1	---	---	---	---
Washoe	271	15.5	(13.66-17.36)	16.8	(14.8-18.9)
White Pine	6	---	---	---	---
Unknown	0	---	---	---	---
<b>Total</b>	<b>1,679</b>	<b>16.0</b>	<b>(15.23-16.76)</b>	<b>17.1</b>	<b>(16.3-18.0)</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 153. Non-Hodgkin's Lymphoma Cases by Race/Ethnicity and Gender, Nevada Residents, 1999-2003**

Race/Ethnicity		Gender			
		Male	Female	Other/Unknown	Total
White	Incidence	812	625	0	1,437
	Rate*	22.0	15.4	---	18.4
	95% C.I.	(20.4-23.6)	(14.2-16.7)	---	(17.5-19.4)
Black	Incidence	39	25	0	64
	Rate*	14.0	9.7	---	12.1
	95% C.I.	(9.8-19.8)	(6.2-15.0)	---	(9.2-16.1)
Native American	Incidence	1	1	0	2
	Rate*	---	---	---	---
	95% C.I.	---	---	---	---
Asian	Incidence	26	24	0	50
	Rate*	13.4	10.0	---	11.5
	95% C.I.	(7.7-24.7)	(5.8-17.8)	---	(7.9-17.1)
Hispanic	Incidence	51	34	0	85
	Rate*	11.6	6.8	---	9.0
	95% C.I.	(8.0-16.6)	(4.4-10.2)	---	(6.8-11.7)
Other/Unknown		31	10	0	41
Total	Incidence	960	719	0	1,679
	Rate*	20.7	14.1	---	17.1
	95% C.I.	(19.3-22.2)	(13.1-15.2)	---	(16.3-18.0)

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 154. Non-Hodgkin's Lymphoma Cases by Age Group and Gender, Nevada Residents, 1999-2003**

Age Group	Gender			
	Male	Female	Unknown	Total
<1	1	0	0	1
Rate*	---	---	---	---
95% C.I.	---	---	---	---
1-4	1	1	0	2
Rate*	---	---	---	---
95% C.I.	---	---	---	---
5-14	11	2	0	13
Rate*	1.43	---	---	0.87
95% C.I.	(0.59-2.28)	---	---	(0.40-1.34)
15-24	14	11	0	25
Rate*	1.82	1.54	---	1.68
95% C.I.	(0.86-2.77)	(0.63-2.45)	---	(1.02-2.34)
25-34	40	23	0	63
Rate*	4.92	3.08	---	4.04
95% C.I.	(3.40-6.44)	(1.82-4.33)	---	(3.04-5.03)
35-44	77	45	0	122
Rate*	8.97	5.65	---	7.37
95% C.I.	(6.97-10.97)	(4.00-7.30)	---	(6.06-8.68)
45-54	127	87	0	214
Rate*	17.64	12.41	---	15.06
95% C.I.	(14.57-20.70)	(9.80-15.02)	---	(13.04-17.08)
55-64	222	132	0	354
Rate*	43.70	25.36	---	34.42
95% C.I.	(37.95-49.45)	(21.04-29.69)	---	(30.83-38.00)
65-74	231	186	0	417
Rate*	68.07	53.37	---	60.62
95% C.I.	(59.29-76.85)	(45.70-61.05)	---	(54.81-66.44)
75-84	186	184	0	370
Rate*	104.93	85.59	---	94.33
95% C.I.	(89.85-120.01)	(73.22-97.96)	---	(84.72-103.94)
85+	50	48	0	98
Rate*	171.91	81.50	---	111.39
95% C.I.	(124.26-219.57)	(58.44-104.55)	---	(89.33-133.44)
Unknown	0	0	0	0
Total	960	719	0	1,679
Rate*	18.00	13.93	---	15.99
95% C.I.	(16.86-19.13)	(12.91-14.94)	---	(15.23-16.76)

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

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

**Table 155. Non-Hodgkin's Lymphoma Cases by Age Group and Stage, Nevada Residents, 1999-2003**

Age Group		Stage					
		In situ	Localized	Regional	Distant	Unstaged	Total
<1	Number	---	0	0	0	1	1
	Percent	---	---	---	---	100.0%	100.0%
1-4	Number	---	0	0	1	1	2
	Percent	---	---	---	50.0%	50.0%	100.0%
5-14	Number	---	3	2	4	4	13
	Percent	---	23.1%	15.4%	30.8%	30.8%	100.0%
15-24	Number	---	9	2	10	4	25
	Percent	---	36.0%	8.0%	40.0%	16.0%	100.0%
25-34	Number	---	18	10	16	19	63
	Percent	---	28.6%	15.9%	25.4%	30.2%	100.0%
35-44	Number	---	39	6	44	33	122
	Percent	---	32.0%	4.9%	36.1%	27.0%	100.0%
45-54	Number	---	60	18	76	60	214
	Percent	---	28.0%	8.4%	35.5%	28.0%	100.0%
55-64	Number	---	92	36	127	99	354
	Percent	---	26.0%	10.2%	35.9%	28.0%	100.0%
65-74	Number	---	107	28	141	141	417
	Percent	---	25.7%	6.7%	33.8%	33.8%	100.0%
75-84	Number	---	77	33	128	132	370
	Percent	---	20.8%	8.9%	34.6%	35.7%	100.0%
85+	Number	---	20	6	29	43	98
	Percent	---	20.4%	6.1%	29.6%	43.9%	100.0%
Unknown	Number	---	0	0	0	0	0
	Percent	---	---	---	---	---	---
Total	Number	---	425	141	576	537	1,679
	Percent	---	25.3%	8.4%	34.3%	32.0%	100.0%

**Table 156. Non-Hodgkin's Lymphoma Cases by Stage and Race/Ethnicity, Nevada Residents, 1999-2003**

Stage		Race/Ethnicity					
		White	Black	Native American	Asian	Hispanic	Other/Unknown
In situ	Number	---	---	---	---	---	---
	Percent	---	---	---	---	---	---
Localized	Number	357	25	1	12	21	9
	Percent	24.8%	39.1%	50.0%	24.0%	24.7%	22.0%
Regional	Number	125	4	0	3	7	2
	Percent	8.7%	6.3%	---	6.0%	8.2%	4.9%
Distant	Number	488	23	1	19	32	13
	Percent	34.0%	35.9%	50.0%	38.0%	37.6%	31.7%
Unstaged	Number	467	12	0	16	25	17
	Percent	32.5%	18.8%	---	32.0%	29.4%	41.5%
Total	Number	1,437	64	2	50	85	41
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

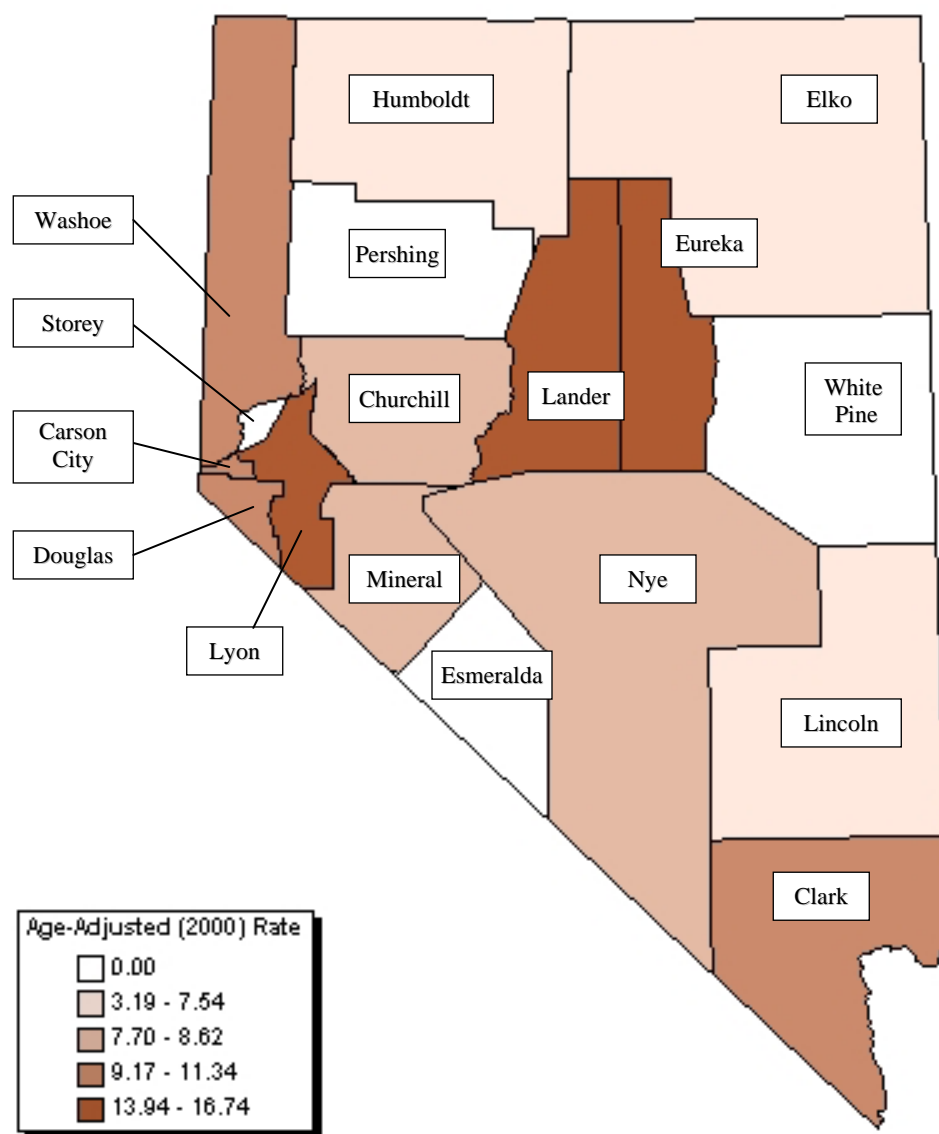
**Table 157. Median Age at Diagnosis of Non-Hodgkin's Lymphoma by Race/Ethnicity and Gender, Nevada Residents, 1999-2003**

Race/Ethnicity	Gender					
	Male		Female		Total	
	Cases	Median Age	Cases	Median Age	Cases	Median Age
White	812	65.0	625	69.0	1,437	66.0
Black	39	54.0	25	58.0	64	56.5
Native American	1	---	1	---	2	---
Asian	26	61.0	24	63.0	50	62.0
Hispanic	51	54.0	34	54.5	85	54.0
Other/Unknown	31	62.0	10	62.0	41	62.0
Total	960	64.0	719	68.0	1,679	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.

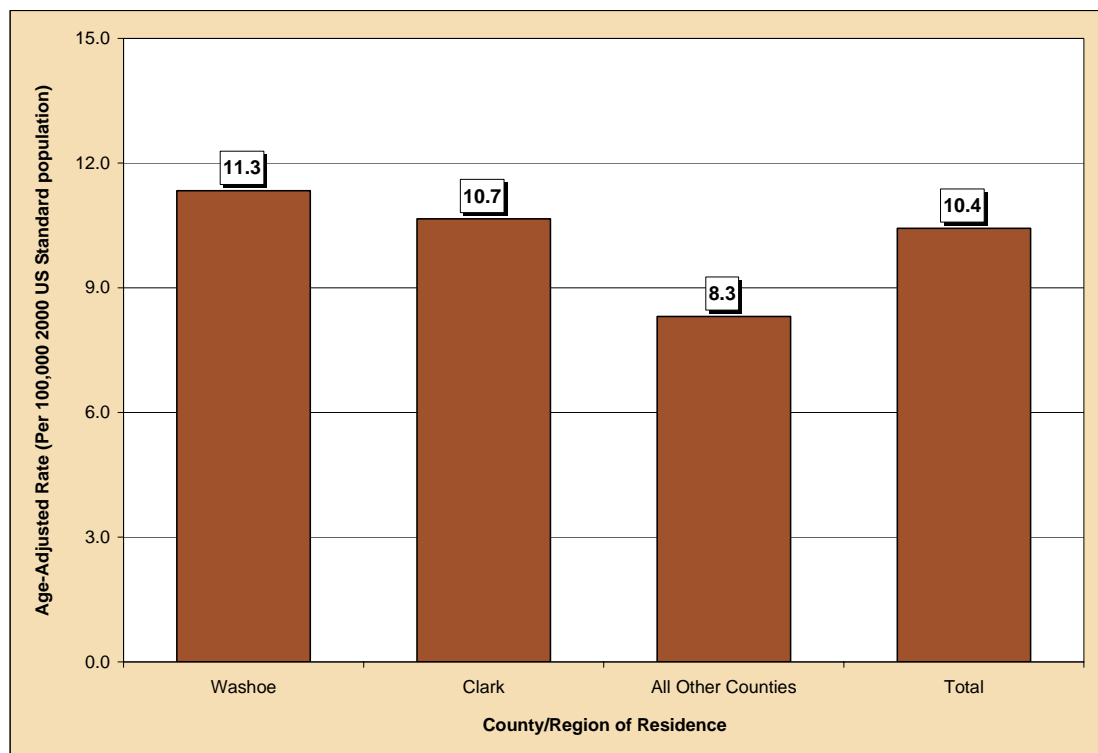
## INPATIENT HOSPITAL DISCHARGES

**Figure 105. Non-Hodgkin's Lymphoma Age-Adjusted (2000) Inpatient Discharge Rates, Nevada Residents, 1999-2003**

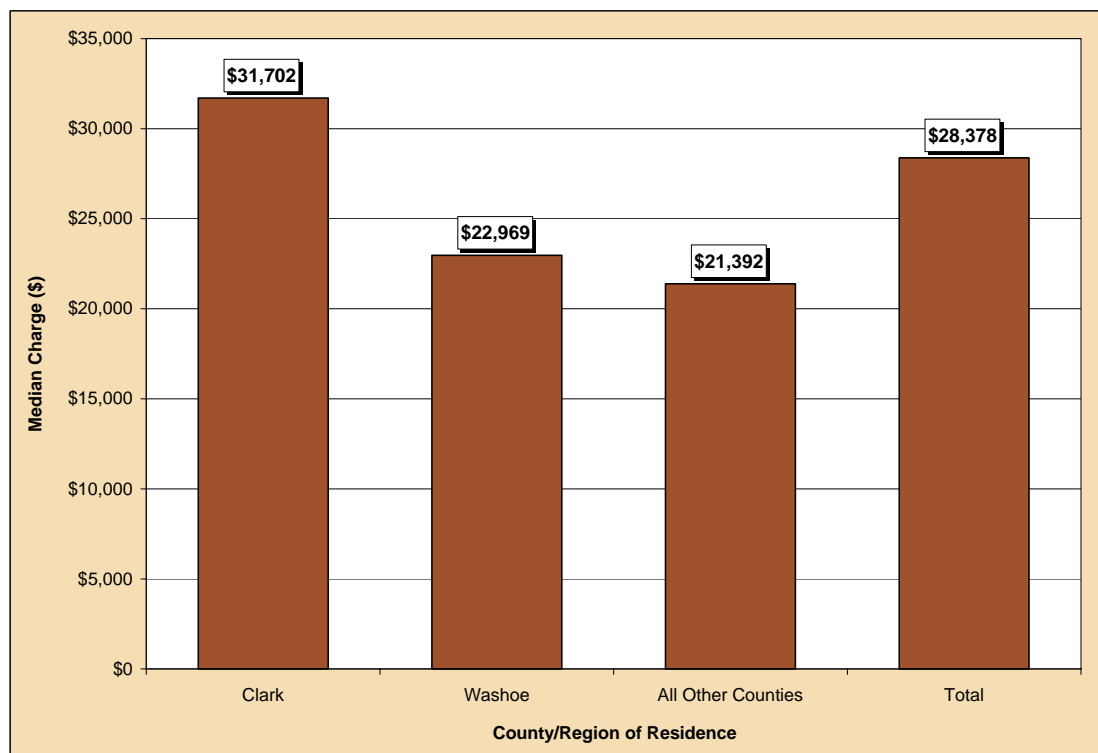


Note: Rates are per 100,000 population and age-adjusted to 2000 US Standard population. Caution should be used when interpreting rates based upon small numbers and comparing inpatient hospital discharge rates to other data sources, because it is occurrence based data. See Technical Notes for more information.

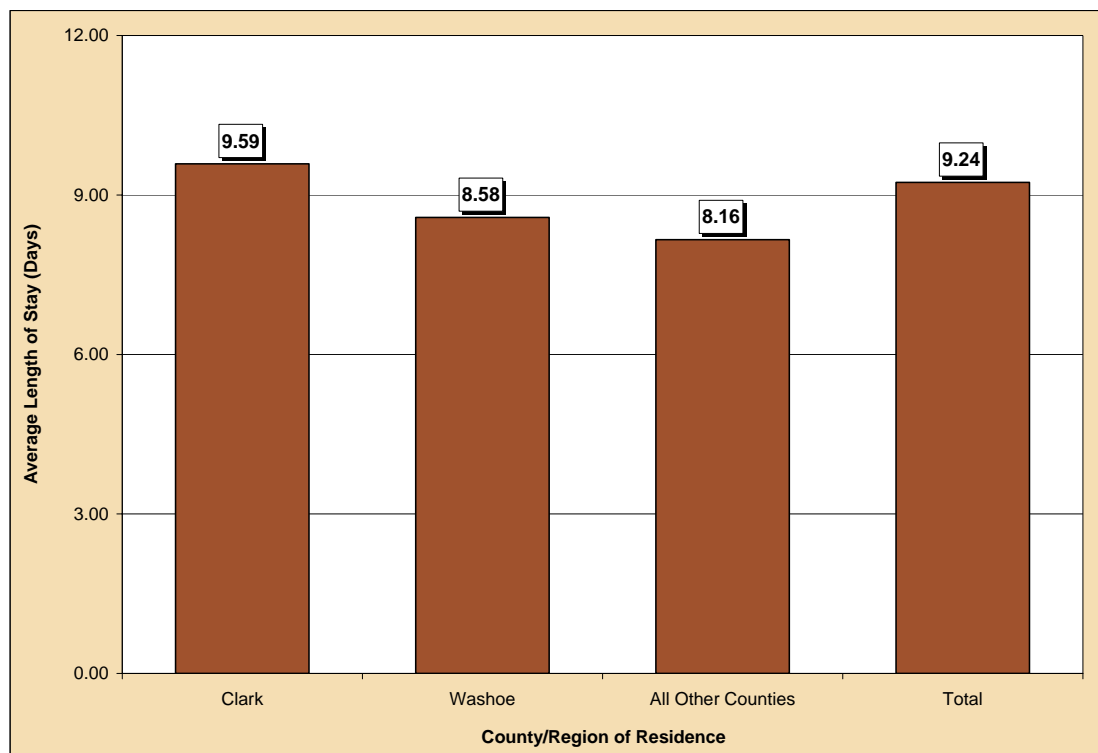
**Figure 106. Non-Hodgkin's Lymphoma Age-Adjusted Inpatient Discharge Rates by County/Region of Residence, Nevada Residents, 1999-2003**



**Figure 107. Median Charges for Non-Hodgkin's Lymphoma Discharges by County/Region of Residence, Nevada Residents, 1999-2003**



**Figure 108. Average Length of Stay for Non-Hodgkin's Lymphoma Discharges by County/Region of Residence, Nevada Residents, 1999-2003**



**Table 158. Non-Hodgkin's Lymphoma Discharges by Gender, Charges, Length of Stay, and County/Region of Residence, Nevada Residents, 1999-2003**

Category	County/Region of Residence				
	Nevada Total	Clark	Washoe	All Other Counties	Unknown
<b>Total</b>					
Discharges	1,029	724	180	125	0
Rate*	10.4	10.7	11.3	8.3	---
95% C.I.	(9.8-11.1)	(9.9-11.5)	(9.7-13.2)	(6.9-10.0)	---
<b>Gender</b>					
Male	555	418	81	56	0
Rate*	11.7	12.8	10.8	7.7	---
95% C.I.	(10.7-12.8)	(11.6-14.3)	(8.5-13.8)	(5.7-10.2)	---
Female	474	306	99	69	0
Rate*	9.3	8.8	11.8	8.9	---
95% C.I.	(8.5-10.2)	(7.8-9.8)	(9.6-14.4)	(6.9-11.3)	---
Other/Unknown	0	0	0	0	0
<b>Inpatient Discharge Charges (\$)</b>					
Total Charges	\$50,718,945	\$38,557,530	\$7,467,997	\$4,693,418	---
Average Charges	\$49,290	\$53,256	\$41,489	\$37,547	---
Median Charges	\$28,378	\$31,702	\$22,969	\$21,392	---
<b>Discharge Length of Stay (LOS) (Days)</b>					
Total LOS	9,505	6,941	1,544	1,020	---
Average LOS	9.2	9.6	8.6	8.2	---
Median LOS	6.0	7.0	6.0	5.0	---

\* 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 159. Non-Hodgkin's Lymphoma Discharges by Age Group and County/Region of Residence, Nevada Residents, 1999-2003**

Category	County/Region of Residence			
	Nevada Total	Clark	Washoe	All Other Counties
<b>Total</b>				
Discharges	1,029	724	180	125
Rate*	9.8	9.9	10.3	8.8
95% C.I.	(9.20-10.40)	(9.16-10.60)	(8.80-11.81)	(7.25-10.33)
<b>Age Group</b>				
<1	1	1	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
1-4	1	1	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
5-14	19	17	1	1
Rate*	1.3	1.6	---	---
95% C.I.	(0.70-1.84)	(0.86-2.41)	---	---
15-24	29	25	3	1
Rate*	2.0	2.4	---	---
95% C.I.	(1.24-2.66)	(1.47-3.36)	---	---
25-34	51	42	4	5
Rate*	3.3	3.7	---	---
95% C.I.	(2.37-4.16)	(2.55-4.77)	---	---
35-44	70	54	10	6
Rate*	4.2	4.7	3.5	---
95% C.I.	(3.24-5.22)	(3.44-5.95)	(1.34-5.71)	---
45-54	145	109	25	11
Rate*	10.2	11.5	9.9	5.1
95% C.I.	(8.54-11.86)	(9.30-13.60)	(6.01-13.75)	(2.09-8.11)
55-64	193	131	41	21
Rate*	18.8	18.6	24.9	13.2
95% C.I.	(16.12-21.41)	(15.39-21.75)	(17.31-32.58)	(7.57-18.88)
65-74	257	174	46	37
Rate*	37.4	36.9	44.1	33.0
95% C.I.	(32.80-41.93)	(31.44-42.41)	(31.32-56.77)	(22.36-43.61)
75-84	210	141	37	32
Rate*	53.5	53.1	60.2	49.0
95% C.I.	(46.30-60.78)	(44.36-61.90)	(40.78-79.56)	(32.00-65.92)
85+	53	29	13	11
Rate*	60.2	52.1	78.3	69.9
95% C.I.	(44.02-76.46)	(33.16-71.12)	(35.71-120.78)	(28.57-111.13)
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 160. Non-Hodgkin's Lymphoma Discharges by Age Group and Gender, Nevada Residents, 1999-2003**

Age Group	Gender		
	Male	Female	Total
<1	0	1	1
Rate*	---	---	---
95% C.I.	---	---	---
1-4	1	0	1
Rate*	---	---	---
95% C.I.	---	---	---
5-14	13	6	19
Rate*	1.69	---	1.27
95% C.I.	(0.77-2.61)	---	(0.70-1.84)
15-24	17	12	29
Rate*	2.21	1.68	1.95
95% C.I.	(1.16-3.25)	(0.73-2.63)	(1.24-2.66)
25-34	29	22	51
Rate*	3.57	2.94	3.27
95% C.I.	(2.27-4.87)	(1.71-4.17)	(2.37-4.16)
35-44	53	17	70
Rate*	6.17	2.13	4.23
95% C.I.	(4.51-7.84)	(1.12-3.15)	(3.24-5.22)
45-54	76	69	145
Rate*	10.55	9.84	10.20
95% C.I.	(8.18-12.93)	(7.52-12.17)	(8.54-11.86)
55-64	119	74	193
Rate*	23.42	14.22	18.77
95% C.I.	(19.22-27.63)	(10.98-17.46)	(16.12-21.41)
65-74	132	125	257
Rate*	38.90	35.87	37.36
95% C.I.	(32.26-45.53)	(29.58-42.16)	(32.80-41.93)
75-84	90	120	210
Rate*	50.77	55.82	53.54
95% C.I.	(40.28-61.26)	(45.83-65.81)	(46.30-60.78)
85+	25	28	53
Rate*	85.96	47.54	60.24
95% C.I.	(52.26-119.65)	(29.93-65.15)	(44.02-76.46)
Unknown	0	0	0
Total	555	474	1,029
Rate*	10.40	9.18	9.80
95% C.I.	(9.54-11.27)	(8.35-10.01)	(9.20-10.40)

\* 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 161. Non-Hodgkin's Lymphoma Discharges by County/Region of Residence, Nevada Residents, 1999-2003**

County of Residence	1999-2003 Inpatient Hospital Discharges				
	Cases	Rate*		Age-Adjusted Rate**	
		Rate	95% C.I.	Rate	95% C.I.
Carson City	28	11.1	(6.97-15.16)	9.6	(6.4-14.2)
Churchill	10	8.1	(3.09-13.18)	8.4	(4.0-16.1)
Clark	724	9.9	(9.16-10.60)	10.7	(9.9-11.5)
Douglas	24	11.2	(6.72-15.68)	9.2	(5.7-14.4)
Elko	3	---	---	---	---
Esmeralda	0	---	---	---	---
Eureka	1	---	---	---	---
Humboldt	3	---	---	---	---
Lander	2	---	---	---	---
Lincoln	1	---	---	---	---
Lyon	31	16.7	(10.84-22.61)	15.2	(10.3-21.9)
Mineral	3	---	---	---	---
Nye	19	11.2	(6.17-16.25)	8.6	(5.0-14.6)
Pershing	0	---	---	---	---
Storey	0	---	---	---	---
Washoe	180	10.3	(8.80-11.81)	11.3	(9.7-13.2)
White Pine	0	---	---	---	---
Unknown	0	---	---	---	---
Total	1,029	9.8	(9.20-10.40)	10.4	(9.8-11.1)

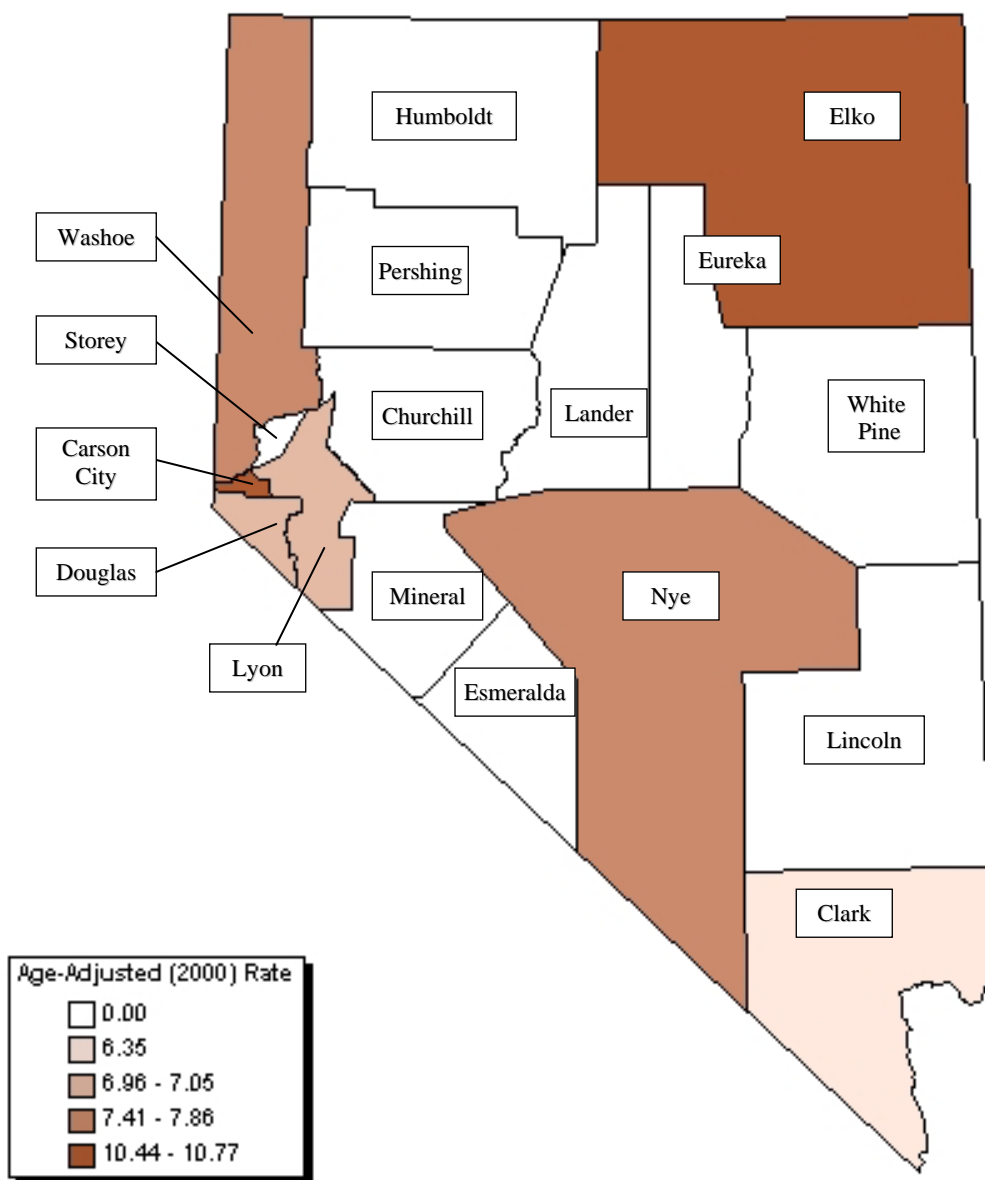
Note: The "---" is used for rates calculated on numbers less than ten. \*Rates are per 100,000 population. \*\*Rates are per 100,000 population and are age-adjusted to the 2000 US Standard population.

**Table 162. Non-Hodgkin's Lymphoma Discharges by Age Group, Charges and Length of Stay, Nevada Residents, 1999-2003**

Age Group	Discharges	Charges (\$)			Length of Stay (Days)		
		Total	Average	Median	Total	Average	Median
<1	1	---	---	---	---	---	---
1-4	1	---	---	---	---	---	---
5-14	19	1,071,385	56,389	37,868	154	8.1	7.0
15-24	29	2,703,786	93,234	39,057	392	13.5	9.0
25-34	51	2,359,182	46,258	32,847	579	11.4	7.0
35-44	70	4,098,081	58,544	32,090	671	9.6	6.0
45-54	145	7,157,757	49,364	28,779	1,307	9.0	6.0
55-64	193	9,033,750	46,807	26,952	1,777	9.2	6.0
65-74	257	13,119,442	51,048	29,324	2,363	9.2	7.0
75-84	210	9,094,216	43,306	26,108	1,775	8.5	7.0
85+	53	2,007,026	37,868	28,125	474	8.9	7.0
Unknown	0	---	---	---	---	---	---
Total	1,029	50,718,945	49,290	28,378	9,505	9.2	6.0

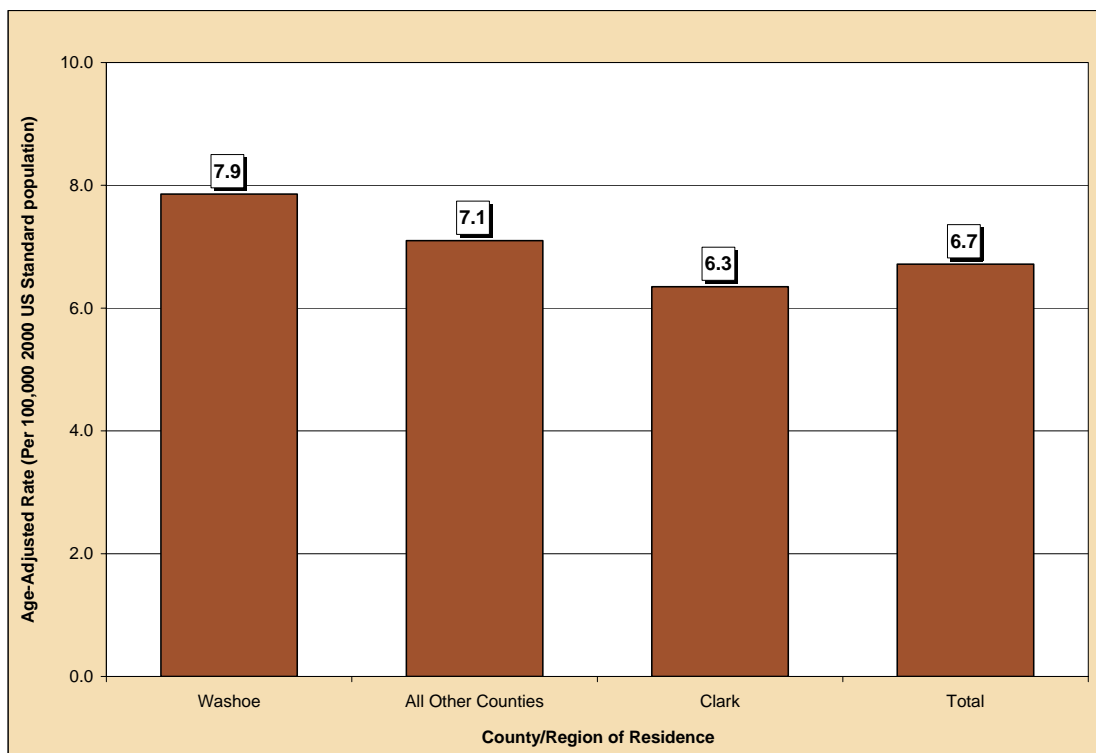
## MORTALITY

**Figure 109. Non-Hodgkin's Lymphoma Age-Adjusted (2000) Mortality Rates, Nevada Residents, 1999-2003**

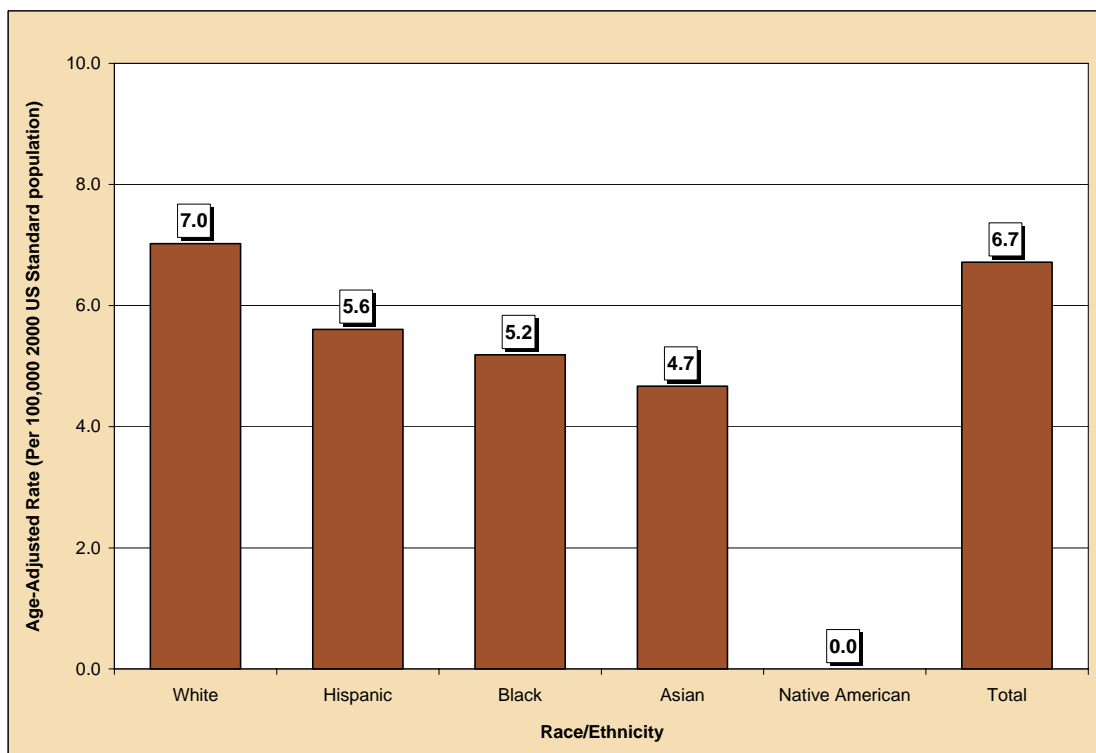


Note: Rates are per 100,000 population and age-adjusted to 2000 US Standard population. Caution should be used when interpreting rates based upon small numbers. See Technical Notes for more information.

**Figure 110. Non-Hodgkin's Lymphoma Age-Adjusted Mortality Rates by County/Region of Residence, Nevada Residents, 1999-2003**



**Figure 111. Non-Hodgkin's Lymphoma Age-Adjusted Mortality Rates by Race/Ethnicity, Nevada Residents, 1999-2003**



**Table 163. Non-Hodgkin's Lymphoma Mortality by Gender, Race/Ethnicity and County/Region of Residence, Nevada Residents, 1999-2003**

Category	County/Region of Residence			
	Nevada Total	Clark	Washoe	All Other Counties
<b>Total</b>				
<b>Mortality</b>	617	396	117	104
<b>Rate*</b>	6.7	6.3	7.9	7.1
<b>95% C.I.</b>	(6.2-7.3)	(5.7-7.0)	(6.5-9.5)	(5.8-8.7)
<b>Gender</b>				
Male	344	344	344	344
Rate*	8.4	8.4	9.5	7.7
95% C.I.	(7.4-9.4)	(7.2-9.7)	(7.1-12.6)	(5.7-10.3)
Female	273	273	273	273
Rate*	5.5	5.0	6.8	6.4
95% C.I.	(4.9-6.2)	(4.2-5.8)	(5.1-8.8)	(4.7-8.4)
Other/Unknown	0	0	0	0
<b>Race/Ethnicity</b>				
White	535	331	108	96
Rate*	7.0	6.7	8.2	7.2
95% C.I.	(6.4-7.7)	(6.0-7.5)	(6.7-10.0)	(5.8-8.8)
Black	23	20	2	1
Rate*	5.2	4.9	---	---
95% C.I.	(3.2-8.4)	(2.8-8.2)	---	---
Native American	4	0	1	3
Rate*	---	---	---	---
95% C.I.	---	---	---	---
Asian	21	19	2	0
Rate*	4.7	5.0	---	---
95% C.I.	(2.8-7.4)	(2.9-8.2)	---	---
Hispanic	34	26	4	4
Rate*	5.6	6.0	---	---
95% C.I.	(3.6-8.7)	(3.5-10.0)	---	---
Other/Unknown	0	0	0	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 164. Non-Hodgkin's Lymphoma Mortality by Age Group and County/Region of Residence, Nevada Residents, 1999-2003**

Category	County/Region of Residence			
	Nevada Total	Clark	Washoe	All Other Counties
<b>Total</b>				
Deaths	617	396	117	104
Rate*	6.7	6.3	7.9	7.1
95% C.I.	(6.2-7.3)	(5.7-7.0)	(6.5-9.5)	(5.8-8.7)
<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	1	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
15-24	4	4	0	0
Rate*	---	---	---	---
95% C.I.	---	---	---	---
25-34	7	6	0	1
Rate*	---	---	---	---
95% C.I.	---	---	---	---
35-44	23	14	5	4
Rate*	1.4	1.2	---	---
95% C.I.	(0.82-1.96)	(0.58-1.86)	---	---
45-54	41	27	6	8
Rate*	2.9	2.8	---	---
95% C.I.	(2.00-3.77)	(1.77-3.91)	---	---
55-64	102	69	22	11
Rate*	9.9	9.8	13.4	6.9
95% C.I.	(7.99-11.84)	(7.47-12.09)	(7.79-18.98)	(2.83-11.02)
65-74	177	111	36	30
Rate*	25.7	23.6	34.5	26.8
95% C.I.	(21.94-29.52)	(19.17-27.94)	(23.21-45.73)	(17.17-36.32)
75-84	192	123	33	36
Rate*	49.0	46.4	53.7	55.1
95% C.I.	(42.03-55.87)	(38.16-54.54)	(35.36-71.98)	(37.09-73.07)
85+	70	41	15	14
Rate*	79.6	73.7	90.3	88.9
95% C.I.	(60.92-98.20)	(51.15-96.28)	(44.59-135.98)	(42.33-135.47)
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 165. Non-Hodgkin's Lymphoma Mortality by County of Residence, Nevada Residents, 1999-2003**

County of Residence at Diagnosis	1999-2003 Mortality				
	Cases	Rate*		Age-Adjusted Rate**	
		Rate	95% C.I.	Rate	95% C.I.
Carson City	31	12.3	(7.94-16.56)	10.8	(7.3-15.5)
Churchill	3	---	---	---	---
Clark	396	5.4	(4.87-5.94)	6.3	(5.7-7.0)
Douglas	17	7.9	(4.16-11.70)	7.0	(4.0-12.0)
Elko	11	4.8	(1.98-7.69)	10.4	(4.9-20.1)
Esmeralda	0	---	---	---	---
Eureka	0	---	---	---	---
Humboldt	5	---	---	---	---
Lander	1	---	---	---	---
Lincoln	1	---	---	---	---
Lyon	14	7.6	(3.60-11.51)	7.0	(3.8-12.0)
Mineral	3	---	---	---	---
Nye	16	9.4	(4.81-14.07)	7.4	(4.0-13.2)
Pershing	0	---	---	---	---
Storey	0	---	---	---	---
Washoe	117	6.7	(5.48-7.91)	7.9	(6.5-9.5)
White Pine	2	---	---	---	---
Unknown	0	---	---	---	---
Total	617	5.9	(5.41-6.34)	6.7	(6.2-7.3)

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 166. Non-Hodgkin's Lymphoma Mortality by Race/Ethnicity and Gender, Nevada Residents, 1999-2003**

Race/Ethnicity		Gender			
		Male	Female	Other/Unknown	Total
White	Incidence	304	231	0	535
	Rate*	8.9	5.6	---	7.0
	95% C.I.	(7.8-10.1)	(4.9-6.4)	---	(6.4-7.7)
Black	Incidence	11	12	0	23
	Rate*	4.9	5.1	---	5.2
	95% C.I.	(2.3-9.2)	(2.5-9.5)	---	(3.2-8.4)
Native American	Incidence	2	2	0	4
	Rate*	---	---	---	---
	95% C.I.	---	---	---	---
Asian	Incidence	9	12	0	21
	Rate*	---	4.9	---	4.7
	95% C.I.	---	(2.4-9.1)	---	(2.8-7.4)
Hispanic	Incidence	18	16	0	34
	Rate*	7.1	4.8	---	5.6
	95% C.I.	(3.3-14.5)	(2.5-8.7)	---	(3.6-8.7)
Other/Unknown		0	0	0	0
Total	Incidence	344	273	0	617
	Rate*	8.4	5.5	---	6.7
	95% C.I.	(7.4-9.4)	(4.9-6.2)	---	(6.2-7.3)

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 167. Non-Hodgkin's Lymphoma Mortality by Age Group and Gender, Nevada Residents, 1999-2003**

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	1	0	1
Rate*	---	---	---
95% C.I.	---	---	---
15-24	3	1	4
Rate*	---	---	---
95% C.I.	---	---	---
25-34	4	3	7
Rate*	---	---	---
95% C.I.	---	---	---
35-44	14	9	23
Rate*	1.63	---	1.39
95% C.I.	(0.78-2.49)	---	(0.82-1.96)
45-54	24	17	41
Rate*	3.33	2.43	2.89
95% C.I.	(2.00-4.67)	(1.27-3.58)	(2.00-3.77)
55-64	65	37	102
Rate*	12.79	7.11	9.92
95% C.I.	(9.68-15.91)	(4.82-9.40)	(7.99-11.84)
65-74	90	87	177
Rate*	26.52	24.97	25.73
95% C.I.	(21.04-32.00)	(19.72-30.21)	(21.94-29.52)
75-84	106	86	192
Rate*	59.80	40.00	48.95
95% C.I.	(48.41-71.18)	(31.55-48.46)	(42.03-55.87)
85+	37	33	70
Rate*	127.22	56.03	79.56
95% C.I.	(86.22-168.21)	(36.91-75.15)	(60.92-98.20)
Unknown	0	0	0
Total	344	273	617
Rate*	6.45	5.29	5.88
95% C.I.	(5.77-7.13)	(4.66-5.91)	(5.41-6.34)

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

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

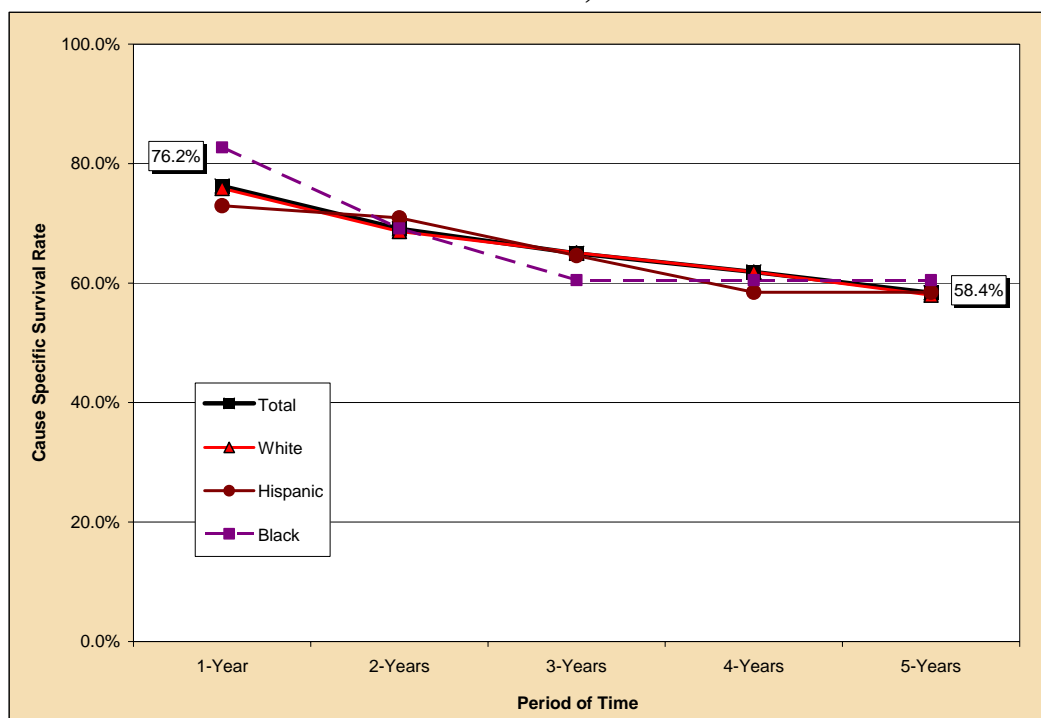
**Table 168. Median Age at Death from Non-Hodgkin's Lymphoma by Race/Ethnicity and Gender, Nevada Residents, 1999-2003**

Race/Ethnicity	Gender					
	Male		Female		Total	
	Cases	Median Age	Cases	Median Age	Cases	Median Age
White	304	72.0	231	74.0	535	73.0
Black	11	66.0	12	67.0	23	66.0
Native American	2	---	2	---	4	---
Asian	9	63.0	12	73.0	21	70.0
Hispanic	18	63.5	16	70.5	34	67.0
Other/Unknown	0	---	0	---	0	---
Total	344	71.0	273	73.0	617	73.0

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.

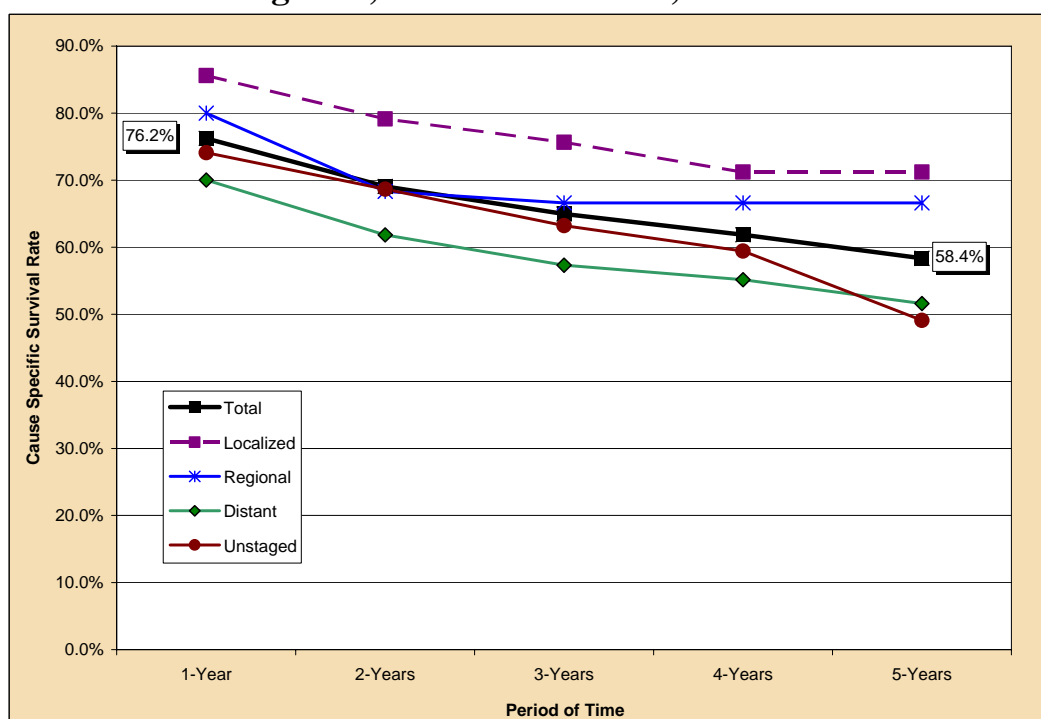
## SURVIVAL RATE

**Figure 112. Survival Rates for Non-Hodgkin's Lymphoma by Race/Ethnicity, Nevada Residents, 1999-2003**



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

**Figure 113. Survival Rates for Non-Hodgkin's Lymphoma by Stage of Cancer at Diagnosis, Nevada Residents, 1999-2003**



**Table 169. Cause-Specific Survival Rates for Non-Hodgkin's Lymphoma by Race/Ethnicity and Gender, Nevada Residents, 1999-2003**

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	1,387	76.2%	69.1%	65.0%	61.9%	58.4%	> 5 YEARS
Male	787	75.8%	68.4%	63.9%	61.1%	59.1%	> 5 YEARS
Female	600	76.7%	70.0%	66.3%	62.8%	57.3%	> 5 YEARS
<b>Race/Ethnicity</b>							
White	1,180	75.8%	68.6%	65.1%	61.9%	58.0%	> 5 YEARS
Male	659	74.5%	66.9%	63.1%	60.5%	58.2%	> 5 YEARS
Female	521	77.4%	70.8%	67.4%	63.5%	57.6%	> 5 YEARS
Black	57	82.7%	69.1%	60.5%	60.5%	60.5%	> 5 YEARS
Male	34	---	---	---	---	---	.
Female	23	---	---	---	---	---	.
Native American	1	---	---	---	---	---	.
Male	0	---	---	---	---	---	---
Female	1	---	---	---	---	---	.
Asian	42	---	---	---	---	---	.
Male	23	---	---	---	---	---	.
Female	19	---	---	---	---	---	.
Hispanic	72	72.9%	70.9%	64.6%	58.5%	58.5%	> 5 YEARS
Male	44	---	---	---	---	---	.
Female	28	---	---	---	---	---	.

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 170. Cause-Specific Survival Rates for Non-Hodgkin's Lymphoma by Stage of Cancer at Diagnosis and Gender, Nevada Residents, 1999-2003**

Survival Rate of Stage at Diagnosis		Gender		
		Total	Male	Female
Total	Cases	1,387	787	600
	One Year	76.2%	75.8%	76.7%
	5 Years	58.4%	59.1%	57.3%
	Median Survival	> 5 YEARS	> 5 YEARS	> 5 YEARS
<b>Stage at Diagnosis</b>				
In situ	Cases	---	---	---
	One Year	---	---	---
	5 Years	---	---	---
	Median Survival	---	---	---
Localized	Cases	359	202	157
	One Year	85.6%	85.1%	86.2%
	5 Years	71.2%	70.4%	72.1%
	Median Survival	> 5 YEARS	> 5 YEARS	> 5 YEARS
Regional	Cases	120	71	49
	One Year	80.0%	79.8%	---
	5 Years	66.6%	62.3%	---
	Median Survival	> 5 YEARS	> 5 YEARS	.
Distant	Cases	469	276	193
	One Year	70.0%	68.2%	72.6%
	5 Years	51.6%	50.6%	54.0%
	Median Survival	> 5 YEARS	> 5 YEARS	> 5 YEARS
Unstaged	Cases	439	238	201
	One Year	74.1%	75.6%	72.4%
	5 Years	49.1%	57.8%	43.9%
	Median Survival	4.91	> 5 YEARS	4.65

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.