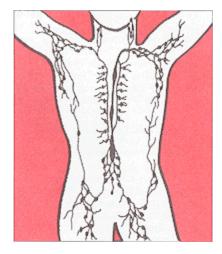
# NON-HODGKIN'S LYMPHOMA

#### 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, 14.7, to the age-adjusted mortality rate, 7.1 (per 100,000 2000 US Standard population), for Non-Hodgkin's Lymphoma was 2.01 during the 1997 to 2001 period, which means that for every 2.07 Non-Hodgkin's Lymphoma cases during this period, there was one death due to Non-Hodgkin's Lymphoma in Nevada.
- Nevadan females had a higher ratio than males when the age-adjusted incidence and ageadjusted mortality rates for Non-Hodgkin's Lymphoma were compared. For every female death due to Non-Hodgkin's Lymphoma, there was 2.38 female cases. There were 2.07 male cases for every male Non-Hodgkin's Lymphoma death in Nevada from 1997 to 2001.
- The median age at diagnosis of Non-Hodgkin's Lymphoma was 65 years of age for Nevada residents from 1997 to 2001; the median age at time of death was 72 years.

#### **INCIDENCE**

- There were 1,316 cases of Non-Hodgkin's Lymphoma in Nevada from 1997 to 2001. Nevada's lower incidence rate, 14.7 (1.9-15.5), for Non-Hodgkin's Lymphoma showed statistical significance when compared to the National rate, 19.1 (18.9-19.3), per 100,000 – 2000 US Standard population.
- While regional comparisons showed that Washoe County's age-adjusted incidence rate, 16.9, was higher than the rate for All Other Counties (14.8) and Clark County (14.1) from 1997 to 2001, these differences were not statistically significant (adjusted to the 2000 US Standard Population).
- Males had a higher, and statistically significant, age-adjusted incidence rate, 17.4 (16.1-18.8), than females who had a rate of 12.4 (11.4-13.5), per 100,000 2000 US Standard population.
- Whites had the highest age-adjusted incidence rate, 16.3, for Non-Hodgkin's Lymphoma of all racial/ethnic groups and were followed by Blacks, Hispanics, and Asians with rates of 8.7, 8.1 and 8.10 (per 100,000 2000 US Standard population), respectively, during this period.

#### INPATIENT HOSPITAL DISCHARGES

There were 988 Inpatient Discharges for Non-Hodgkin's Lymphoma to Nevada residents from 1997 to 2001. Regional comparisons showed little difference between the ageadjusted inpatient discharge rates and average length of stay between Clark County, Washoe County and All Other Counties, as a region.

- Total billed charges for hospital inpatient discharges from Non-Hodgkin's Lymphoma in Nevada totaled just over 38.7 million dollars from 1997 to 2001. Clark County had the highest median total billed charge (\$41,132) once regional comparisons were made.
- The overall average billed charge per day for an inpatient hospital discharge for Non-Hodgkin's Lymphoma was approximately <sup>\$</sup>4,309 in Nevada from 1997 to 2001.

#### MORTALITY

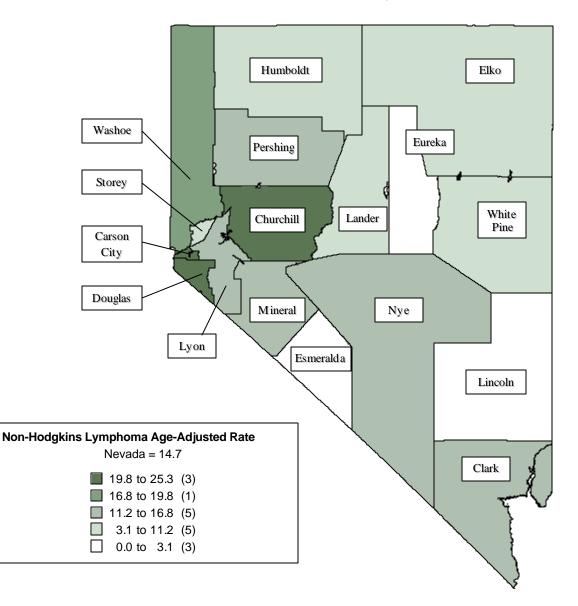
- There were 599 deaths in Nevada due to Non-Hodgkin's Lymphoma from 1997 to 2001. Regional comparisons showed little difference between the age-adjusted mortality rates for Washoe County, Clark County, and All Other Counties, as a region, with rates of 7.5, 7.1 and 6.6 (per 100,000 – 2000 US Standard population), respectively.
- While racial/ethnic comparisons showed that Whites had highest age-adjusted mortality rate (7.6) for Non-Hodgkin's Lymphoma, and were followed by Asians, Hispanics and Blacks with rates of 5.8, 4.7 and 4.0 (per 100,000 2001 US Standard population), respectively; statistical analysis does not show any statistical significance between any of the racial/ethnic groups during the 1997 to 2001 period.

#### SURVIVAL RATE

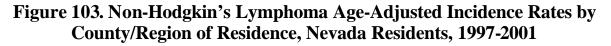
- Females in Nevada had a slightly higher one-year survival rate (78.4%) than males (74.4%) for Non-Hodgkin's Lymphoma during the 1997 to 2001 period. By the five-year survival period females had a survival rate of 53.4% and males had a rate of 51.3%.
- The Non-Hodgkin's Lymphoma survival rate varies 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 88.1% and 60.4%, respectively. This was followed by those with regional and then distant diagnoses with rates of 72.3% and 46.3% for the one-year period and 72.6% and 53.7% for the five-year period.

#### **INCIDENCE**

#### Figure 102. Non-Hodgkin's Lymphoma Age-Adjusted (2001) Incidence Rates, Nevada Residents, 1997-2001



Note: Rates are per 100,000 population and age-adjusted to 2001 US Standard population. Caution should be used when interpreting rates based upon small numbers. See Technical notes for more information.



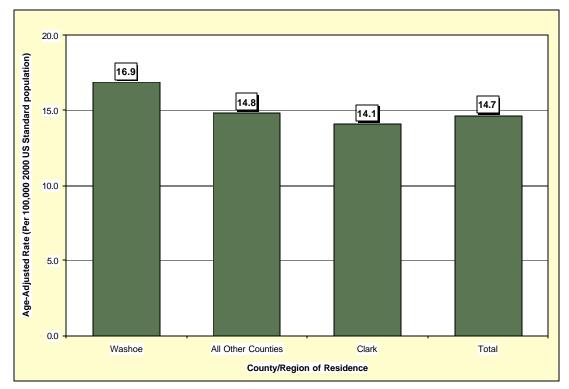
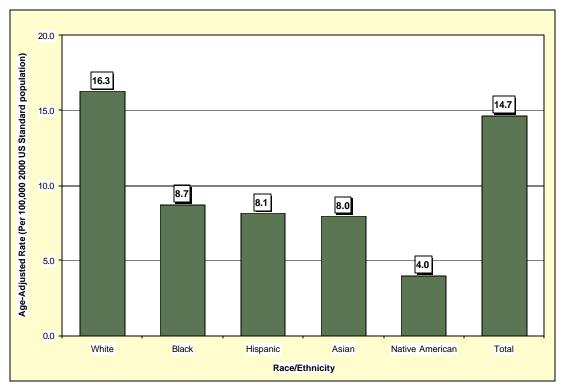


Figure 104. Non-Hodgkin's Lymphoma Age-Adjusted Incidence Rates by Race/Ethnicity, Nevada Residents, 1997-2001



#### Table 150. Non-Hodgkin's Lymphoma Cases by Gender, Race/Ethnicity and County/Region of Residence at Diagnosis, Nevada Residents (1997-2001) and SEER-11 (1997-2001)

		County/Region of Residence							
Category	Nevada Total	Clark	Washoe	All Other Counties	Unknown	SEER 11 (1997-2001)			
Total									
Cases	1,316	839	259	217	1	33,470			
Rate*	14.7	14.1	16.9	14.8		19.1			
95% C.I.	(13.9-15.5)	(13.1-15.1)	(14.8-19.1)	(12.9-17.0)		(18.9-19.3)			
Gender									
Male	737	468	144	125	0	18,156			
Rate*	17.4	16.8	20.2	17.3		23.3			
95% C.I.	(16.1-18.8)	(15.1-18.6)	(16.8-24.2)	(14.3-21.0)		(22.9-23.6)			
Female	579	371	115	92	1	15,314			
Rate*	12.4	12.0	14.3	12.5		15.7			
95% C.I.	(11.4-13.5)	(10.8-13.3)	(11.8-17.3)	(10.0-15.3)		(15.5-16.0)			
Other/Unknown	0	0	0	0	0	0			
Race/Ethnicity									
White	1,177	751	225	200	1	28,196			
Rate*	16.3	16.3	17.2	15.2		20.1			
95% C.I.	(15.3-17.2)	(15.2-17.6)	(15.0-19.7)	(13.2-17.6)		(19.8-20.3)			
Black	44	29	11	4	0	2,353			
Rate*	8.7	6.0	41.2			14.6			
95% C.I.	(6.2-12.4)	(3.9-9.4)	(19.7-79.7)			(14.0-15.2)			
Native American	5	2	2	1	0	150			
Rate*						8.7			
95% C.I.						(7.2-7.2)			
Asian	29	20	7	2	0	2,422			
Rate*	8.0	7.1				13.7			
95% C.I.	(4.7-14.3)	(3.5-15.2)				(13.2-14.3)			
Hispanic	55	32	13	10	0	2,989			
Rate*	8.1	6.1	13.9	14.7		15.6			
95% C.I.	(5.6-11.8)	(3.7-10.2)	(5.7-31.7)	(6.0-33.1)		(15.0-16.2)			
Other/Unknown	6	5	1	0	0	349			

\* Rates are per 100,000 population and are age-adjusted to the 2001 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 ofResidence at Diagnosis, Nevada Residents (1997-2001) and SEER-11 (1997-2001)

		County/Region of Residence							
Category	Nevada Total	Clark	Washoe	All Other Counties	Unknown	SEER 11 (1997-2001)			
Total									
Cases	1,316	839	259	217	1	33,470			
Rate*	13.5	12.6	15.4	15.5		18.1			
95% C.I.	(12.8-14.2)	(11.7-13.4)	(13.6-17.3)	(13.5-17.6)		(17.9-18.3)			
Age Group									
<1	0	0	0	0	0				
Rate*									
95% C.I.									
1-4	5	2	2	1	0	67			
Rate*						0.6			
95% C.I.						(0.5-0.7)			
5-14	12	4	6	2	0	293			
Rate*	0.9					1.1			
95% C.I.	(0.4-1.4)					(1.0-1.2)			
15-24	17	13	3	1	0	510			
Rate*	1.3	1.4				2.0			
95% C.I.	(0.7-1.9)	(0.6-2.2)				(1.8-2.1)			
25-34	63	42	11	10	0	1,392			
Rate*	4.3	4.0	4.3	6.4		4.8			
95% C.I.	(3.2-5.3)	(2.8-5.1)	(1.8-6.9)	(2.4-10.3)		(4.5-5.0)			
35-44	90	53	25	12	0	3,000			
Rate*	5.8	5.1	8.8	5.3		9.6			
95% C.I.	(4.6-7.0)	(3.7-6.4)	(5.4-12.3)	(2.3-8.3)		(9.3-9.9)			
45-54	199	130	35	34	0	4,604			
Rate*	15.5	15.4	14.8	16.9		20.1			
95% C.I.	(13.3-17.7)	(12.7-18.0)	(9.9-19.7)	(11.2-22.6)		(19.5-20.7)			
55-64	243	149	52	42	0	5,600			
Rate*	26.5	24.0	34.6	29.1		40.0			
95% C.I.	(23.2-29.9)	(20.1-27.8)	(25.2-44.1)	(20.3-37.9)		(38.9-41.0)			
65-74	342	215	63	64	0	7,803			
Rate*	53.3	49.7	61.5	59.7		67.6			
95% C.I.	(47.6-58.9)	(43.1-56.4)	(46.3-76.6)	(45.1-74.3)		(66.1-69.1)			
75-84	282	190	48	43	1	7,607			
Rate*	80.3	81.4	83.0	71.8		104.7			
95% C.I.	(70.9-89.6)	(69.8-92.9)	(59.5-106.5)	(50.3-93.2)		(102.3-107.0)			
85+	61	41	13	7	0	2,590			
Rate*	80.0	87.8	83.8			104.4			
95% C.I.	(59.9-100.1)	(60.9-114.7)	(38.3-129.4)			(100.4-108.5)			
Unknown	2	0	1	1	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, 1997-2001

County of	1997-2001 Incidence						
Residence	Cases	Rat	te*	Age-Adjusted Rate**			
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.		
Carson City	70	28.1	(21.5-34.7)	25.3	(19.7-32.1)		
Churchill	24	19.9	(11.9-27.9)	20.1	(12.9-30.5)		
Clark	839	12.6	(11.7-13.4)	14.1	(13.1-15.1)		
Douglas	48	23.4	(16.8-30.0)	19.9	(14.5-27.2)		
Elko	9						
Esmeralda	0						
Eureka	0						
Humboldt	6						
Lander	1						
Lincoln	0						
Lyon	22	12.9	(7.5-18.3)	11.4	(7.1-17.9)		
Mineral	4						
Nye	27	17.2	(10.7-23.7)	13.4	(8.5-21.0)		
Pershing	3						
Storey	1						
Washoe	259	15.4	(13.6-17.3)	16.9	(14.8-19.1)		
White Pine	2						
Unknown	1						
Total	1,316	13.5	(12.8-14.2)	14.7	(13.9-15.5)		

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 2001 US Standard population.

### Table 153. Non-Hodgkin's Lymphoma Cases by Race/Ethnicity and Gender,<br/>Nevada Residents, 1997-2001

			Ger	nder	
Rac	e/Ethnicity	Male	Female	Other/ Unknown	Total
White	Incidence	647	530	0	1,177
	Rate* 95% C.I.	18.8 (17.3-20.4)	14.2 (13.0-15.5)		16.3 (15.3-17.2)
Black	Incidence	29	15	0	44
	Rate*	11.6	6.0		8.7
	95% C.I.	(7.5-19.9)	(3.3-10.7)		(6.2-12.4)
Native	Incidence	3	2	0	5
American	Rate*				
	95% C.I.				
Asian	Incidence	18	11	0	29
	Rate*	10.1	6.3		8.0
	95% C.I.	(5.7-22.0)	(2.2-17.0)		(4.7-14.3)
Hispanic	Incidence	36	19	0	55
	Rate*	12.5	5.2		8.1
	95% C.I.	(7.2-21.6)	(2.8-9.4)		(5.6-11.8)
Other/Unkr	nown	4	2	0	6
Total	Incidence	737	579	0	1,316
	Rate*	17.4	12.4		14.7
	95% C.I.	(16.1-18.8)	(11.4-13.5)		(13.9-15.5)

Note: The "---" is used for rates calculated on numbers less than ten. \*Rates are per 100,000 population and are agadjusted to the 2001 US Standard population.

# Table 154. Non-Hodgkin's Lymphoma Cases by Age Group and Gender, NevadaResidents, 1997-2001

<b>A</b> #0		Ger	nder	
Age Group	Male	Female	Other/ Unknown	Total
<1	0	0	0	0
Rate*				
95% C.I.				
1-4	2	3	0	5
Rate*				
95% C.I.				
5-14	8	4	0	12
Rate*				0.9
95% C.I.				(0.4-1.4)
15-24	8	9	0	17
Rate*				1.3
95% C.I.				(0.7-1.9)
25-34	38	25	0	63
Rate*	4.9	3.5		4.3
95% C.I.	(3.4-6.5)	(2.1-4.9)		(3.2-5.3)
35-44	57	33	0	90
Rate*	7.1	4.4		5.8
95% C.I.	(5.2-8.9)	(2.9-5.9)		(4.6-7.0)
45-54	120	79	0	199
Rate*	18.5	12.5		15.5
95% C.I.	(15.2-21.8)	(9.7-15.2)		(13.3-17.7)
55-64	144	99	0	243
Rate*	31.6	21.5		26.5
95% C.I.	(26.5-36.8)	(17.2-25.7)		(23.2-29.9)
65-74	187	155	0	342
Rate*	59.0	47.7		53.3
95% C.I.	(50.5-67.5)	(40.1-55.2)		(47.6-58.9)
75-84	137	145	0	282
Rate*	86.4	75.2		80.3
95% C.I.	(71.9-100.9)	(63.0-87.5)		(70.9-89.6)
85+	34	27	0	61
Rate*	137.4	52.4		80.0
95% C.I.	(91.2-183.6)	(32.7-72.2)		(59.9-100.1)
Unknown	2	0	0	2
Total	737	579	0	1,316
Rate*	14.9	12.1		13.5
95% C.I.	(13.8-16.0)	(11.1-13.1)		(12.8-14.2)

\* 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, NevadaResidents, 1997-2001

<b>A</b>	<b>C 1 1 1</b>	Stage					
Age	Group	In situ	Localized	Regional	Distant	Unstaged	Total
<1	Number	0	0	0	0	0	0
	Percent						
1-4	Number	0	1	0	2	2	5
	Percent		20.0%		40.0%	40.0%	100.0%
5-14	Number	0	1	0	5	6	12
	Percent		8.3%		41.7%	50.0%	100.0%
15-24	Number	0	6	0	6	5	17
	Percent		35.3%		35.3%	29.4%	100.0%
25-34	Number	0	17	8	19	19	63
	Percent		27.0%	12.7%	30.2%	30.2%	100.0%
35-44	Number	0	28	5	32	25	90
	Percent		31.1%	5.6%	35.6%	27.8%	100.0%
45-54	Number	0	58	15	70	56	199
	Percent		29.1%	7.5%	35.2%	28.1%	100.0%
55-64	Number	0	70	25	84	64	243
	Percent		28.8%	10.3%	34.6%	26.3%	100.0%
65-74	Number	0	101	26	105	110	342
	Percent		29.5%	7.6%	30.7%	32.2%	100.0%
75-84	Number	0	64	28	82	108	282
	Percent		22.7%	9.9%	29.1%	38.3%	100.0%
85+	Number	0	13	4	20	24	61
	Percent		21.3%	6.6%	32.8%	39.3%	100.0%
Unknown	Number	0	0	1	1	0	2
<u></u>	Percent		<u> </u>	50.0%	50.0%		100.0%
Total	Number Percent	0	359 27.3%	112 8.5%	426 32.4%	419 31.8%	1,316 100.0%

#### Table 156. Non-Hodgkin's Lymphoma Cases by Stage and Race/Ethnicity, Nevada Residents, 1997-2001

			Race/Ethnicity								
Stage		White	Black	Native American	Asian	Hispanic	Other/ Unknown	Total			
In situ	Number	0	0	0	0	0	0	0			
	Percent										
Localized	Number	317	12	2	8	16	4	359			
	Percent	26.9%	27.3%	40.0%	27.6%	29.1%	66.7%	27.3%			
Regional	Number	101	1	0	4	5	1	112			
	Percent	8.6%	2.3%		13.8%	9.1%	16.7%	8.5%			
Distant	Number	378	21	2	10	14	1	426			
	Percent	32.1%	47.7%	40.0%	34.5%	25.5%	16.7%	32.4%			
Unstaged	Number	381	10	1	7	20	0	419			
	Percent	32.4%	22.7%	20.0%	24.1%	36.4%		31.8%			
Total	Number	1,177	44	5	29	55	6	1,316			
	Percent	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%			

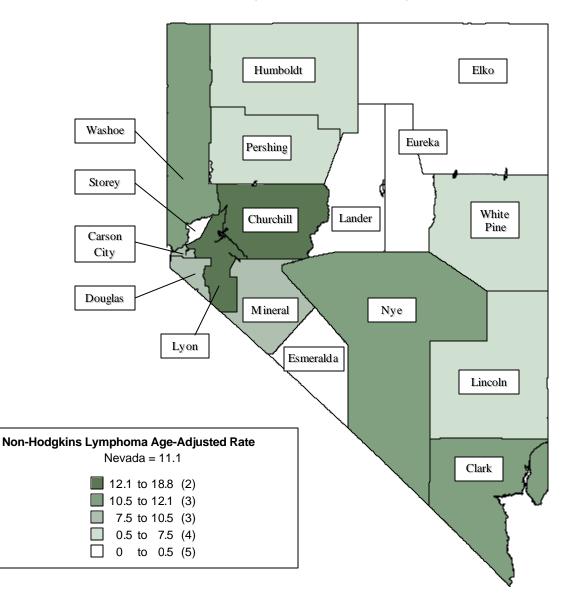
## Table 157. Median Age at Diagnosis of Non-Hodgkin's Lymphoma byRace/Ethnicity and Gender, Nevada Residents, 1997-2001

		Gender								
Race/Ethnicity	Male		Fem	ale	Total					
	Incidence	Median Age	Incidence	Median Age	Incidence	Median Age				
White	645	65.0	530	67.0	1,175	66.0				
Black	29	51.0	15	59.0	44	54.0				
Native American	3		2		5	41.0				
Asian	18	60.5	11	64.0	29	63.0				
Hispanic	36	59.0	19	59.0	55	59.0				
Other/Unknown	4		2		6	75.0				
Total	735	64.0	579	66.0	1,314	65.0				

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

#### **INPATIENT HOSPITAL DISCHARGES**

#### Figure 105. Non-Hodgkin's Lymphoma Age-Adjusted (2001) Inpatient Discharge Rates, Nevada Residents, 1997-2001



Note: Rates are per 100,000 population and age-adjusted to 2001 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.



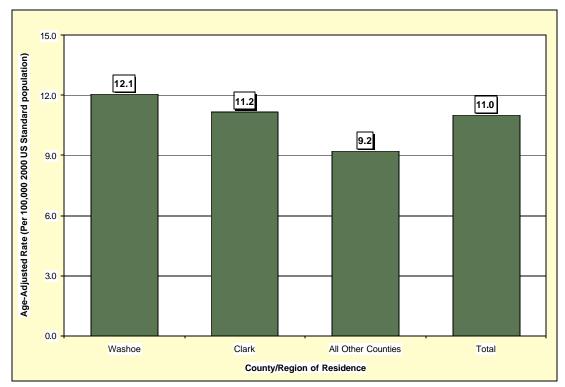
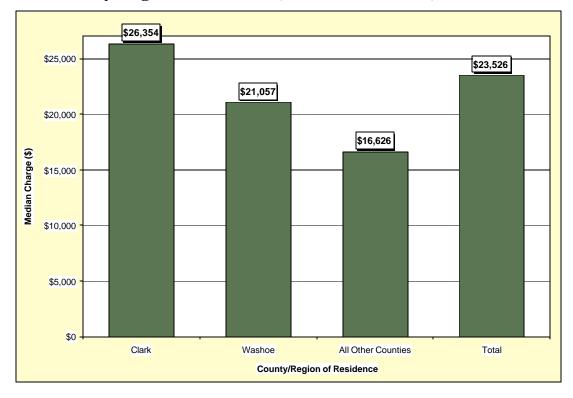
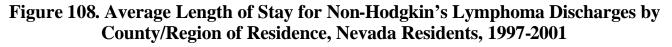
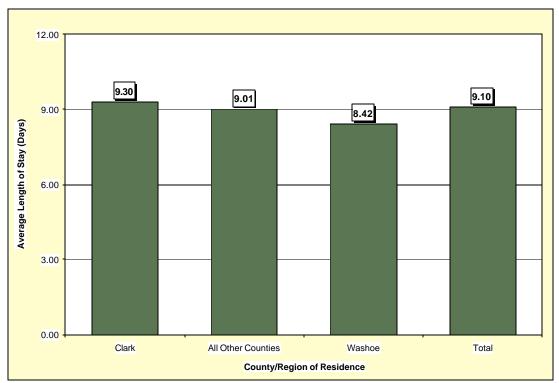


Figure 107. Median Charges for Non-Hodgkin's Lymphoma Discharges by County/Region of Residence, Nevada Residents, 1997-2001







# Table 158. Non-Hodgkin's Lymphoma Discharges by Gender, Charges, Length of Stay, and County/Region of Residence, Nevada Residents, 1997-2001

		Coun	ty/Region of Reside	ence	
Category	Nevada Total	Clark	Washoe	All Other Counties	Unknown
Total					
Discharges	988	673	182	133	0
Rate*	11.0	11.2	12.1	9.2	
95% C.I.	(10.3-11.7)	(10.3-12.1)	(10.3-14.0)	(7.7-11.0)	
Gender					
Male	550	382	93	75	0
Rate*	12.8	13.5	13.1	10.1	
95% C.I.	(11.7-14.1)	(12.0-15.1)	(10.5-16.5)	(7.9-13.0)	
Female	438	291	89	58	0
Rate*	9.4	9.3	11.2	8.0	
95% C.I.	(8.6-10.4)	(8.3-10.5)	(9.0-13.8)	(6.1-10.5)	
Other/Unknown	0	0	0	0	0
Inpatient Discharge Ch	narges (\$)				
Total Charges	\$38,747,537	\$27,682,072	\$6,420,369	\$4,645,096	
Average Charges	\$39,218	\$41,132	\$35,277	\$34,926	
Median Charges	\$23,526	\$26,354	\$21,057	\$16,626	
Discharge Length of S	tay (LOS) (Days)				
Total LOS	8,990	6,259	1,533	1,198	
Average LOS	9.1	9.3	8.4	9.0	
Median LOS * Rates are per 100 000 p	6.0	7.0	6.0	6.0	

\* Rates are per 100,000 population and are age-adjusted to the 2001 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<br/>County/Region of Residence, Nevada Residents, 1997-2001

	County/Region of Residence					
Category	Nevada Total	Clark	Washoe	All Other Counties	Unknown	
Total						
Discharges	988	673	182	133	0	
Rate*	10.1	10.1	10.8	9.5		
95% C.I.	(9.5-10.8)	(9.3-10.9)	(9.3-12.4)	(7.9-11.1)		
Age Group						
<1	1	1	0	0	0	
Rate*						
95% C.I.						
1-4	4	2	0	2	0	
Rate*						
95% C.I.						
5-14	13	10	2	1	0	
Rate*	0.9	1.1				
95% C.I.	(0.4-1.5)	(0.4-1.7)				
15-24	21	17	2	2	0	
Rate*	1.6	1.8				
95% C.I.	(0.9-2.2)	(1.0-2.7)				
25-34	54	39	10	5	0	
Rate*	3.7	3.7	3.9			
95% C.I.	(2.7-4.6)	(2.5-4.8)	(1.5-6.4)			
35-44	49	40	7	2	0	
Rate*	3.1	3.8				
95% C.I.	(2.3-4.0)	(2.6-5.0)				
45-54	135	98	22	15	0	
Rate*	10.5	11.6	9.3	6.3		
95% C.I.	(8.7-12.3)	(9.3-13.9)	(5.4-13.2)	(3.1-9.6)		
55-64	188	118	44	26	0	
Rate*	20.5	19.0	29.3	17.3		
95% C.I.	(17.6-23.5)	(15.6-22.4)	(20.6-38.0)	(10.7-24.0)		
65-74	263	169	44	50	0	
Rate*	41.0	39.1	42.9	48.8		
95% C.I.	(36.0-45.9)	(33.2-45.0)	(30.2-55.6)	(35.3-62.3)		
75-84	211	152	39	20	0	
Rate*	60.1	65.1	67.4	34.6		
95% C.I.	(52.0-68.2)	(54.7-75.4)	(46.3-88.6)	(19.4-49.7)		
85+	49	27	12	10	0	
Rate*	64.3	57.8	77.4	64.5		
95% C.I.	(46.3-82.3)	(36.0-79.6)	(33.6-121.2)	(24.5-104.4)		
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 160. Non-Hodgkin's Lymphoma Discharges by Age Group and Gender,<br/>Nevada Residents, 1997-2001

Age		Gender	
Group	Male	Female	Total
<1	0	1	1
Rate*			
95% C.I.			
1-4	3	1	4
Rate*			
95% C.I.			
5-14	4	9	13
Rate*			0.9
95% C.I.			(0.4-1.5)
15-24	12	9	21
Rate*	1.7		1.6
95% C.I.	(0.7-2.7)		(0.9-2.2)
25-34	36	18	54
Rate*	4.7	2.5	3.7
95% C.I.	(3.2-6.2)	(1.4-3.7)	(2.7-4.6)
35-44	37	12	49
Rate*	4.6	1.6	3.1
95% C.I.	(3.1-6.1)	(0.7-2.5)	(2.3-4.0)
45-54	76	59	135
Rate*	11.7	9.3	10.5
95% C.I.	(9.1-14.3)	(6.9-11.7)	(8.7-12.3)
55-64	109	79	188
Rate*	24.0	17.1	20.5
95% C.I.	(19.5-28.5)	(13.4-20.9)	(17.6-23.5)
65-74	152	111	263
Rate*	48.0	34.1	41.0
95% C.I.	(40.3-55.6)	(27.8-40.5)	(36.0-45.9)
75-84	97	114	211
Rate*	61.2	59.1	60.1
<u>95% C.I.</u>	(49.0-73.4)	(48.3-70.0)	(52.0-68.2)
85+ Data*	24	25	49
Rate*	97.0 (58.2.125.8)	48.6	64.3
<u>95% C.I.</u> Unknown	<u>(58.2-135.8)</u> 0	<u>(29.5-67.6)</u>	(46.3-82.3)
Total	550	438	988
Rate*	550 11.1	438 9.1	900 10.1
95% C.I.	(10.2-12.0)	(8.3-10.0)	(9.5-10.8)
100,000			(0.0 10.0)

\* 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 161. Non-Hodgkin's Lymphoma Discharges by County/Region of Residence,<br/>Nevada Residents, 1997-2001

O sum tax of		1997-2001 Inpatient Hospital Discharges						
County of Residence	Number	Ra	te*	Age-Adjusted Rate**				
	Number	Rate	95% C.I.	Rate	95% C.I.			
Carson City	30	12.0	(7.7-16.4)	10.5	(7.0-15.2)			
Churchill	22	18.2	(10.6-25.9)	18.7	(11.7-29.0)			
Clark	673	10.1	(9.3-10.9)	11.2	(10.3-12.1)			
Douglas	21	10.2	(5.9-14.6)	9.1	(5.5-14.9)			
Elko	1							
Esmeralda	0							
Eureka	0							
Humboldt	6							
Lander	0							
Lincoln	1							
Lyon	24	14.1	(8.5-19.8)	13.2	(8.3-20.3)			
Mineral	3							
Nye	22	14.0	(8.1-19.8)	11.1	(6.7-18.3)			
Pershing	2							
Storey	0							
Washoe	182	10.8	(9.3-12.4)	12.1	(10.3-14.0)			
White Pine	1							
Unknown	0							
Total	988	10.1	(9.5-10.8)	11.0	(10.3-11.7)			

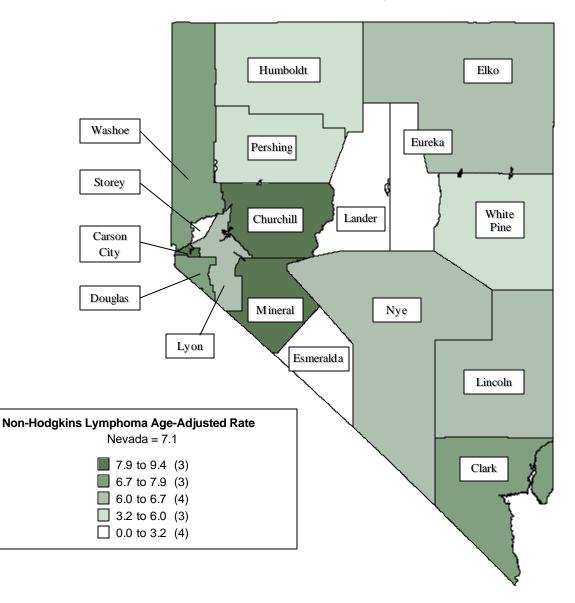
Note: The "---" is used for rates calculated on numbers less than ten. \*Rates are per 100,000 population. \*\*Rates are per 100,000 population and are age-adjusted to the 2001 US Standard population.

## Table 162. Non-Hodgkin's Lymphoma Discharges by Age Group, Charges and<br/>Length of Stay, Nevada Residents, 1997-2001

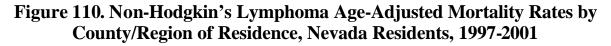
Age Discharges		Charges (\$)			Length of Stay (Days)		
Group	Discharges	Total	Average	Median	Total	Average	Median
<1	1						
1-4	4						
5-14	13	535,164	41,166	37,868	105	8.1	8.0
15-24	21	2,216,272	105,537	62,882	357	17.0	12.0
25-34	54	2,423,345	44,877	33,358	639	11.8	7.0
35-44	49	2,562,859	52,303	24,214	523	10.7	6.0
45-54	135	4,957,572	36,723	24,622	1,118	8.3	6.0
55-64	188	7,088,232	37,703	24,707	1,637	8.7	6.0
65-74	263	10,143,639	38,569	22,365	2,396	9.1	6.0
75-84	211	6,998,059	33,166	21,401	1,746	8.3	7.0
85+	49	1,485,744	30,321	23,552	408	8.3	6.0
Unknown	0						
Total	988	501,834	966	36,539	81	966.0	9.1

#### **MORTALITY**

#### Figure 109. Non-Hodgkin's Lymphoma Age-Adjusted (2001) Mortality Rates, Nevada Residents, 1997-2001



Note: Rates are per 100,000 population and age-adjusted to 2001 US Standard population. Caution should be used when interpreting rates based upon small numbers. See Technical notes for more information.



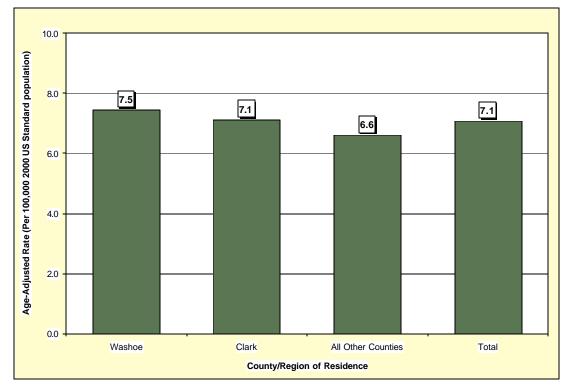
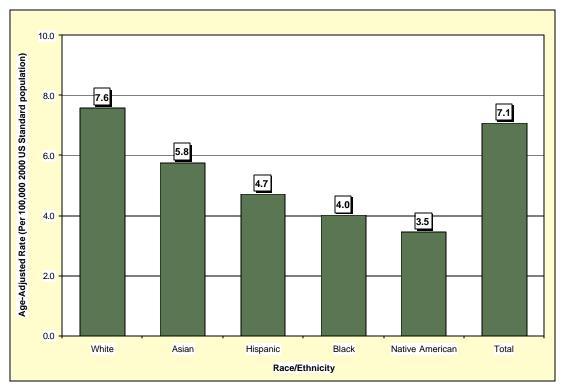


Figure 111. Non-Hodgkin's Lymphoma Age-Adjusted Mortality Rates by Race/Ethnicity, Nevada Residents, 1997-2001



### Table 163. Non-Hodgkin's Lymphoma Mortality by Gender, Race/Ethnicity and<br/>County/Region of Residence, Nevada Residents, 1997-2001

	County/Region of Residence						
Category	Nevada Total	Clark	Washoe	All Other Counties			
Total							
Mortality	599	398	108	93			
Rate*	7.1	7.1	7.5	6.6			
95% C.I.	(6.5-7.7)	(6.4-7.9)	(6.1-9.1)	(5.3-8.2)			
Gender							
Male	356	233	60	63			
Rate*	9.4	9.5	9.4	9.4			
95% C.I.	(8.4-10.6)	(8.2-11.0)	(7.0-12.5)	(7.1-12.4)			
Female	243	165	48	30			
Rate*	5.3	5.5	6.1	4.1			
95% C.I.	(4.7-6.1)	(4.6-6.4)	(4.5-8.2)	(2.7-5.9)			
Other/Unknown	0	0	0	0			
Race/Ethnicity							
White	535	350	99	86			
Rate*	7.6	7.8	7.7	6.7			
95% C.I.	(6.9-8.3)	(7.0-8.7)	(6.3-9.5)	(5.3-8.3)			
Black	17	16	1	0			
Rate*	4.0	4.1					
95% C.I.	(2.3-7.1)	(2.3-7.4)					
Native American	3	0	1	2			
Rate*							
95% C.I.							
Asian	20	17	2	1			
Rate*	5.8	6.0					
95% C.I.	(3.4-11.3)	(3.3-13.0)					
Hispanic	24	15	5	4			
Rate*	4.7	4.0					
95% C.I.	(2.8-7.8)	(2.0-7.8)					
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 2001 US Standard population.

# Table 164. Non-Hodgkin's Lymphoma Mortality by Age Group and<br/>County/Region of Residence, Nevada Residents, 1997-2001

	County/Region of Residence							
Category	Nevada Total	Clark	Washoe	All Other Counties				
Total								
Mortality	599	398	108	93				
Rate*	6.2	6.0	6.4	6.7				
95% C.I.	(5.7-6.6)	(5.4-6.6)	(5.2-7.6)	(5.3-8.0)				
Age Group								
<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	10	7	2	1				
Rate*	0.7							
95% C.I.	(0.3-1.1)							
35-44	20	12	5	3				
Rate*	1.3	1.1						
95% C.I.	(0.7-1.8)	(0.5-1.8)						
45-54	54	37	8	9				
Rate*	4.2	4.4						
95% C.I.	(3.1-5.3)	(3.0-5.8)						
55-64	97	60	18	19				
Rate*	10.6	9.7	12.0	13.1				
95% C.I.	(8.5-12.7)	(7.2-12.1)	(6.5-17.5)	(7.2-19.1)				
65-74	174	109	37	28				
Rate*	27.1	25.2	36.1	26.1				
95% C.I.	(23.1-31.1)	(20.5-29.9)	(24.5-47.7)	(16.4-35.8)				
75-84	187	136	28	23				
Rate*	53.2	58.2	48.4	38.4				
95% C.I.	(45.6-60.9)	(48.4-68.0)	(30.5-66.4)	(22.7-54.1)				
85+	52	32	10	10				
Rate*	68.2	68.5	64.5	71.3				
95% C.I.	(49.7-86.7)	(44.8-92.3)	(24.5-104.4)	(27.1-115.4)				
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, NevadaResidents, 1997-2001

	1997-2001 Mortality						
County of Residence	Casaa	Rate	<b>)</b> *	Age-Adjusted Rate**			
	Cases	Rate	95% C.I.	Rate	95% C.I.		
Carson City	26	10.4	(6.4-14.4)	9.4	(6.1-14.0)		
Churchill	9						
Clark	398	6.0	(5.4-6.6)	7.1	(6.4-7.9)		
Douglas	14	6.8	(3.3-10.4)	6.7	(3.5-12.2)		
Elko	9						
Esmeralda	0						
Eureka	0						
Humboldt	3						
Lander	0						
Lincoln	1						
Lyon	12	7.1	(3.1-11.0)	6.0	(3.1-11.1)		
Mineral	3						
Nye	13	8.3	(3.8-12.8)	6.3	(3.1-12.2)		
Pershing	1						
Storey	0						
Washoe	108	6.4	(5.2-7.6)	7.5	(6.1-9.1)		
White Pine	2						
Unknown	0		<u> </u>				
Total	599	6.2	(5.7-6.6)	7.1	(6.5-7.7)		

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 2001 US Standard population.

#### Table 166. Non-Hodgkin's Lymphoma Mortality by Race/Ethnicity and Gender,Nevada Residents, 1997-2001

			Gender					
Race/Ethnicity		Male	Female	Total				
White	Mortality	319	216	535				
	Rate*	10.1	5.7	7.6				
	95% C.I.	(8.9-11.4)	(5.0-6.5)	(6.9-8.3)				
Black	Mortality	10	7	17				
	Rate*	5.5		4.0				
	95% C.I.	(2.5-13.3)		(2.3-7.1)				
Native	Mortality	1	2	3				
American	Rate*							
	95% C.I.							
Asian	Mortality	12	8	20				
	Rate*	7.6		5.8				
	95% C.I.	(3.7-19.5)		(3.4-11.3)				
Hispanic	Mortality	14	10	24				
	Rate*	4.5	4.5	4.7				
	95% C.I.	(2.2-10.8)	(2.0-9.0)	(2.8-7.8)				
Other/Unkr	nown	0	0	0				
Total	Mortality	356	243	599				
	Rate*	9.4	5.3	7.1				
	95% C.I.	(8.4-10.6)	(4.7-6.1)	(6.5-7.7)				

Note: The "---" is used for rates calculated on numbers less than ten. \*Rates are per 100,000 population and are agadjusted to the 2001 US Standard population.

# Table 167. Non-Hodgkin's Lymphoma Mortality by Age Group and Gender,<br/>Nevada Residents, 1997-2001

Age	Gender						
Group	Male	Female	Total				
<1	0	0	0				
Rate*							
95% C.I.							
1-4	0	0	0				
Rate*							
95% C.I.							
5-14	1	0	1				
Rate*							
95% C.I.							
15-24	3	1	4				
Rate*							
95% C.I.							
25-34	8	2	10				
Rate*			0.7				
95% C.I.			(0.3-1.1)				
35-44	13	7	20				
Rate*	1.6		1.3				
95% C.I.	(0.7-2.5)		(0.7-1.8)				
45-54 Doto*	36 5 5	18	54				
Rate* 95% C.I.	5.5 (3.7-7.3)	2.8 (1.5-4.2)	4.2 (3.1-5.3)				
<u>95 % C.1.</u> 55-64	58	39	97				
Rate*	12.7	8.5	10.6				
95% C.I.	(9.5-16.0)	(5.8-11.1)	(8.5-12.7)				
65-74	100	74	174				
Rate*	31.6	22.7	27.1				
95% C.I.	(25.4-37.7)	(17.6-27.9)	(23.1-31.1)				
75-84	105	82	187				
Rate*	66.2	42.5	53.2				
95% C.I.	(53.6-78.9)	(33.3-51.7)	(45.6-60.9)				
85+	32	20	52				
Rate*	129.3	38.8	68.2				
95% C.I.	(84.5-174.1)	(21.8-55.9)	(49.7-86.7)				
Unknown	0	0	0				
Total	356	243	599				
Rate*	7.2	5.1	6.2				
95% C.I.	(6.4-7.9)	(4.4-5.7)	(5.7-6.6)				

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

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

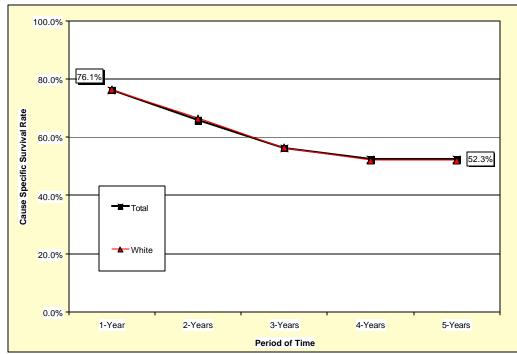
## Table 168. Median Age at Death from Non-Hodgkin's Lymphoma by<br/>Race/Ethnicity and Gender, Nevada Residents, 1997-2001

	Gender								
Race/Ethnicity	Ма	le	Fem	ale	Total				
	Deaths	Median Age	Deaths	Median Age	Deaths	Median Age			
White	319	71.0	216	73.0	535	72.0			
Black	10	70.0	7	64.0	17	66.0			
Native American	1		2		3				
Asian	12	66.5	8	73.0	20	72.0			
Hispanic	14	63.0	10	76.5	24	69.0			
Other/Unknown	0		0		0				
Total	356	70.0	243	73.0	599	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.

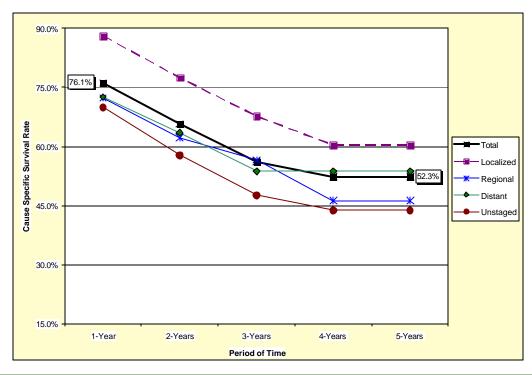
#### SURVIVAL RATE





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, 1997-2001



# Table 169. Cause-Specific Survival Rates for Non-Hodgkin's Lymphoma byRace/Ethnicity and Gender, Nevada Residents, 1997-2001

Race/		Cause Specific Survival Rate					Median
	Number of Cases	One Year	Two Years	Three Years	Four Years	Five Years	Survival Time (years)
Total	1,042	76.1%	65.7%	56.1%	52.3%	52.3%	>5 years
Male	586	74.4%	61.7%	52.9%	51.3%	51.3%	>5 years
Female	456	78.4%	71.2%	60.5%	53.4%	53.4%	>5 years
Race/Ethnicity							
White	924	76.3%	66.5%	56.5%	52.0%	52.0%	>5 years
Male	508	75.5%	63.0%	53.7%	51.8%	51.8%	>5 years
Female	416	77.3%	71.2%	60.1%	51.9%	51.9%	>5 years
Black	35						
Male	25						
Female	10						
Native American	4						
Male	3						
Female	1						
Asian	24						
Male	15						
Female	9						
Hispanic	49						
Male	31						
Female	18						

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, 1997-2001

Survival Rate of Stage at Diagnosis		Gender					
		Total	Male	Female			
Total	Cases	1,042	586	456			
	One Year	76.1%	74.4%	78.4%			
	5 Years	52.3%	51.3%	53.4%			
	Median Survival	>5 years	>5 years	>5 years			
Stage at D	iagnosis						
In situ	Cases	0	0	0			
	One Year						
	5 Years						
	Median Survival						
Localized	Cases	303	160	143			
	One Year	88.1%	89.7%	86.4%			
	5 Years	60.4%	69.5%	51.9%			
	Median Survival	>5 years	>5 years	>5 years			
Regional	Cases	85	53	32			
	One Year	72.3%	69.0%				
	5 Years	46.3%	52.5%				
	Median Survival	3.64	>5 years				
Distant	Cases	331	187	144			
	One Year	72.6%	70.6%	75.2%			
	5 Years	53.7%	49.4%	59.6%			
	Median Survival	>5 years	2.93	>5 years			
Unstaged	Cases	323	186	137			
	One Year	69.9%	67.5%	73.4%			
	5 Years	43.8%	37.8%				
	Median Survival	2.76	2.37				

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.