Report on Cancer Incidence in Nevada, 2001-2005

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PREFACE

This report presents cancer incidence in Nevada for the 2001-2005 diagnosis years and is based on 51,742 newly diagnosed cancer cases among Nevada residents. Nationwide data are also presented for comparison purposes only. The American Cancer Society estimates that 12,230 people in Nevada will be diagnosed with Cancer in 2010 (excluding basal and squamous cell skin cancers and in situ carcinomas except for urinary bladder). The cost of cancer nationwide in 2010 is estimated to be \$263.8 billion overall, including \$102.8 billion in direct medical costs, 20.9 billion due to morbidity and \$140.1 billion due to mortality.

Cancer incidence for all types of cancers is covered in general as well as the highlights of the top ten leading cancers in Nevada. The top ten most prevalent malignancies in Nevada include: lung and bronchus, prostate, breast, colorectal, urinary bladder, non-Hodgkin lymphoma, melanomas of the skin, kidney and renal pelvis, leukemia and thyroid.

The report includes age, gender, race/ethnicity and county/region information in order to highlight potential areas for cancer control programs, which will go a long way in reducing the risk and impact of cancer in Nevada.

This publication and other publications are available from the Nevada State Health Division website at:

http://health.nv.gov/FP Publications.htm

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iii
PREFACE	
LIST OF TABLES	vi
LIST OF FIGURES	viii
TECHNICAL NOTES	X
HIGHLIGHTS	1
BACKGROUND	3
ALL CANCERS	4
LUNG AND BRONCHUS CANCER	23
PROSTATE CANCER	30
BREAST CANCER	37
COLORECTAL CANCER	44
URINARY BLADDER CANCER	
NON-HODGKIN LYMPHOMA	58
MELANOMAS OF THE SKIN	65
KIDNEY AND RENAL PELVIS CANCER	72
LEUKEMIA	79
THYROID CANCER	
REFERENCES	93
APPENDICES	
Appendix A: ICD-O-3 CODES USED	
Appendix B: NEVADA POPULATION ESTIMATES, 2001-2005	
Nevada Population Estimates by Age Groups, Race/Ethnicity, Gender, and	
Region, 2001-2005	
Nevada Population Estimates by Age Groups, County and Gender, 2001-2005	
Appendix C: FORMULAS	
Appendix D: FEEDBACK AND SUGGESTIONS	106

LIST OF TABLES

Table 1: Percentage Distribution of All Types of Cancer by Site and Gender, Nevada Residents,	, _
2001-2005	
Table 2: All Types of Cancer by Cancer Stage, Nevada Residents, 2001-2005	
Table 3: All Cancer Cases by County of Residence at Diagnosis, Nevada Residents, 2001-2005	
Table 4: All Cancer Cases by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-200	
Table 5: All Cancer Cases by Race/Ethnicity and Gender, Nevada Residents, 2001-2005	
Table 6: All Cancer Cases by Age Group and Gender, Nevada Residents, 2001-2005	17
Table 7: Top Ten Types of Cancer by County/Region of Residence, Nevada Residents, 2001-20)05
	20
Table 8: Top Ten Types of Cancer by Race/Ethnicity, Nevada Residents, 2001-2005	
Table 9: Top Ten Types of Cancer by Gender, Nevada Residents, 2001-2005	22
Table 10: Lung and Bronchus Cancer by County of Residence at Diagnosis, Nevada Residents,	
2001-2005	24
Table 11: Lung and Bronchus Cancer by Gender, Race/Ethnicity and Region, Nevada Residents	3,
2001-2005	25
Table 12: Lung and Bronchus Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2	2005
	28
Table 13: Lung and Bronchus Cancer by Age Group and Gender, Nevada Residents, 2001-2005	529
Table 14: Prostate Cancer by County of Residence at Diagnosis, Nevada Residents, 2001-2005.	31
Table 15: Prostate Cancer by Race/Ethnicity and Region, Nevada Residents, 2001-2005	32
Table 16: Prostate Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005	35
Table 17: Prostate Cancer by Age Group, Nevada Residents, 2001-2005	36
Table 18: Female Breast Cancer by County of Residence at Diagnosis, Nevada Residents, 2001	-
2005	38
Table 19: Female Breast Cancer by Race/Ethnicity and Region, Nevada Residents, 2001-2005	39
Table 20: Breast Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005	42
Table 21: Breast Cancer by Age group and Gender, Nevada Residents, 2001-2005	43
Table 22: Colorectal Cancer by County of Residence at Diagnosis, Nevada Residents, 2001-200)5 45
Table 23: Colorectal Cancer by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-20	
	46
Table 24: Colorectal Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005	49
Table 25: Colorectal Cancer by Age Group and Gender, Nevada Residents, 2001-2005	50
Table 26: Urinary Bladder Cancer by County of Residence at Diagnosis, Nevada Residents, 200)1-
2005	
Table 27: Urinary Bladder Cancer Gender, by Race/Ethnicity and Region, Nevada Residents, 20	001-
2005	
Table 28: Urinary Bladder Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005	5.56
Table 29: Urinary Bladder Cancer by Age Group and Gender, Nevada Residents, 2001-2005	
Table 30: Non-Hodgkin Lymphoma by County of Residence at Diagnosis, Nevada Residents, 2	
2005	
Table 31: Non-Hodgkin Lymphoma by Gender, Race/Ethnicity and Region, Nevada Residents,	
2001-2005	
Table 32: Non-Hodgkin Lymphoma by Race/Ethnicity and Gender, Nevada Residents, 2001-20	

Table 33: Non-Hodgkin Lymphoma by Age Group and Gender, Nevada Residents, 2001-2005	
Table 34: Melanomas of the Skin by County of Residence at Diagnosis, Nevada Residents, 2001-2005	66
Table 35: Melanomas of the Skin by Gender, Race/Ethnicity and Region, Nevada Residents, 2001	
 Table 36: Melanomas of the Skin by Race/Ethnicity and Gender, Nevada Residents, 2001-2005 Table 37: Melanomas of the Skin by Age Group and Gender, Nevada Residents, 2001-2005 Table 38: Kidney and Renal Pelvis Cancer by County of Residence at Diagnosis, Nevada Resider 2001-2005 	71
Table 39: Kidney and Renal Pelvis Cancer by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-2005	.74
Table 40: Kidney and Renal Pelvis Cancer by Race/Ethnicity and Gender, Nevada Residents, 200 2005)1- .77
Table 41: Kidney and Renal Pelvis Cancer by Age Group and Gender, Nevada Residents, 2001-2005	. 78
Table 42: Leukemia by County of Residence at Diagnosis, Nevada Residents, 2001-2005	80
Table 43: Leukemia by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-2005	81
Table 44: Leukemia by Race/Ethnicity and Gender, Nevada Residents, 2001-2005	84
Table 45: Leukemia by Age Group and Gender, Nevada Residents, 2001-2005	85
Table 46: Thyroid Cancer by County of Residence at Diagnosis, Nevada Residents, 2001-2005	87
Table 47: Thyroid Cancer by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-2005.	88
Table 48: Thyroid Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005	91
Table 49: Thyroid Cancer by Age Group and Gender, Nevada Residents, 2001-2005	92
Table 50: ICD-O-3 Codes Used for Cancer Groupings in This Report	97

LIST OF FIGURES

Figure 1: Percentage Distribution of All Cancer Cases by Age Group, Nevada Residents, 2001-2005
Figure 2: All Cancer Cases Age-Adjusted Rates by County/Region of Residence, Nevada Residents 2001-2005 vs. U.S. 2001-2005
Figure 3: All Cancer Cases by Race/Ethnicity, Nevada Residents, 2001-2005
Figure 4: All Cancer Cases by Race/Ethnicity and Gender, Nevada Residents, 2001-2005
Figure 5: All Cancer Cases by Gender and Year of Diagnosis, Nevada Residents, 2001-2005 15
Figure 6: Leading Types of Cancer by Percentage, Nevada Residents, 2001-2005
Figure 7: Top Ten Types of Cancer by Age-Adjusted Rates and Region, Nevada Residents, 2001-2005
Figure 8: Lung and Bronchus Cancer Age-Adjusted Rates by County/Region of Residence, Nevada
Residents, 2001-2005 vs. U.S. 2001-2005
Figure 9: Lung and Bronchus Cancer by Race/Ethnicity, Nevada Residents, 2001-2005
Figure 10: Lung and Bronchus Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005
Figure 11: Lung and Bronchus Cancer by Gender and Year of Diagnosis, Nevada Residents, 2001-
2005
Figure 12: Prostate Cancer Age-Adjusted Rates by County/Region of Residence, Nevada Residents,
2001-2005 vs. U.S. 2001-2005
Figure 13: Prostate Cancer by Race/Ethnicity, Nevada Residents, 2001-2005
Figure 14: Prostate Cancer by Year of Diagnosis, Nevada Residents, 2001-2005
Figure 15: Female Breast Cancer Age-Adjusted Rates by County/Region of Residence, Nevada
Residents, 2001-2005 vs. U.S. 2001-2005
Figure 16: Female Breast Cancer by Race/Ethnicity, Nevada Residents, 2001-2005
Figure 17: Female Breast Cancer by Year of Diagnosis, Nevada Residents, 2001-2005
Figure 18: Colorectal Cancer Age-Adjusted Rates by County/Region of Residence, Nevada
Residents, 2001-2005 vs. U.S. 2001-2005
Figure 19: Colorectal Cancer by Race/Ethnicity, Nevada Residents, 2001-2005
Figure 20: Colorectal Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005
Figure 21: Colorectal Cancer by Gender and Year of Diagnosis, Nevada Residents, 2001-2005 48
Figure 22: Urinary Bladder Cancer Age-Adjusted Rates by County/Region of Residence, Nevada
Residents, 2001-2005 vs. U.S. 2001-2005
Figure 23: Urinary Bladder Cancer by Race/Ethnicity, Nevada Residents, 2001-2005
Figure 24: Urinary Bladder Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005 55
Figure 25: Urinary Bladder Cancer by Gender and Year of Diagnosis, Nevada Residents, 2001-2005
Figure 26: Non-Hodgkin Lymphoma Age-Adjusted Rates by County/Region of Residence, Nevada
Residents, 2001-2005 vs. U.S. 2001-2005
Figure 27: Non-Hodgkin Lymphoma by Race/Ethnicity, Nevada Residents, 2001-2005
Figure 28: Non-Hodgkin Lymphoma by Race/Ethnicity and Gender, Nevada Residents, 2001-2005
Figure 29: Non-Hodgkin Lymphoma by Gender and Year of Diagnosis, Nevada Residents, 2001-
2005

Figure 30: Melanomas of the Skin Age-Adjusted Rates by County/Region of Residence, Nevada	a
Residents, 2001-2005 vs. U.S. 2001-2005	68
Figure 31: Melanomas of the Skin by Race/Ethnicity, Nevada Residents, 2001-2005	68
Figure 32: Melanomas of the Skin by Race/Ethnicity and Gender, Nevada Residents, 2001-2005	5.69
Figure 33: Melanomas of the Skin by Gender and Year of Diagnosis, Nevada Residents, 2001-2	.005
	69
Figure 34: Kidney and Renal Pelvis Cancer Age-Adjusted Rates by County/Region of Residence	-
Nevada Residents, 2001-2005 vs. U.S. 2001-2005	75
Figure 35: Kidney and Renal Pelvis Cancer by Race/Ethnicity, Nevada Residents, 2001-2005	75
Figure 36: Kidney and Renal Pelvis Cancer by Race/Ethnicity and Gender, Nevada Residents,	
2001-2005	76
Figure 37: Kidney and Renal Pelvis Cancer by Gender and Year of Diagnosis, Nevada Resident	S,
2001-2005	76
Figure 38: Leukemia Age-Adjusted Rates by County/Region of Residence, Nevada Residents,	
2001-2005 vs. U.S. 2001-2005	82
Figure 39: Leukemia by Race/Ethnicity, Nevada Residents, 2001-2005	82
Figure 40: Leukemia by Race/Ethnicity and Gender, Nevada Residents, 2001-2005	83
Figure 41: Leukemia by Gender and Year of Diagnosis, Nevada Residents, 2001-2005	83
Figure 42: Thyroid Cancer Age-Adjusted Rates by County/Region of Residence, Nevada R	ents,
2001-2005 vs. U.S. 2001-2005	89
Figure 43: Thyroid Cancer by Race/Ethnicity, Nevada Residents, 2001-2005	89
Figure 44: Thyroid Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005	90
Figure 45: Thyroid Cancer by Gender and Year of Diagnosis, Nevada Residents, 2001-2005	90

TECHNICAL NOTES

This report contains information from the Nevada Central Cancer Registry (NCCR) within the Bureau of Health Statistics, Planning and Emergency Response.

Data inclusion and exclusion criteria

National Program of Cancer Registries (NPCR) 2009 data submission specifications were used for this report. The following are the specifications as outlined by NPCR:

Diagnosis Years: Include cases diagnosed in all residents of your catchment area beginning with your NPCR reference year (e.g., 1995) through **December 31, 2007**. For guidance on residency, refer to Chapter III of *NAACCR Standards for Cancer Registries*, Volume II.

Reportable Diagnoses: All histologies with a behavior code of /2 or /3 (or in some cases behavior code of /0 [see 3h] or behavior code of /1 [see 3g]) in the *International Classification of Diseases for Oncology,* Third Edition (ICD–O–3) are reportable with the following exceptions or restrictions:

a. Exclude neoplasms of the skin (C44.0–C44.9) with the following histologies *UNLESS* they occur at the mucoepidermoid sites [vagina (C52.9), clitoris (C51.2), vulva (C51.0–51.9), prepuce (C60.0), penis (C60.9), and scrotum (C63.2)]:

8000-8005	Neoplasms, malignant, NOS
8010-8046	Epithelial carcinomas
8050-8084	Papillary and squamous cell carcinomas

- 8090–8110 Basal cell carcinomas
- b. Exclude carcinoma *in situ* of the cervix (C53.0-C53.9, any morphology and /2) after January 1, 1996.
- c. Exclude prostate intraepithelial neoplasia, grade III (PIN III) (C61.9, 8148/2) after January 1, 2001.
- d. Exclude squamous intraepithelial neoplasia, grade III (8077/2) of the following sites: anus (C21.1, AIN III), cervix (C53, CIN III), vagina (C52.9, VAIN III), and vulvar (C51, VIN III).
- e. If a pathologist reports a case as invasive (/3) and the histology is usually associated with a benign (/0) or borderline (/1) behavior code, the case is reportable. Include any appropriate override codes.
- f. Include all pilocytic astrocytomas. If necessary, convert behavior code to /3 before submitting cases.
- g. Include all cases as reportable in the year they were diagnosed. For example, those cases reportable in ICD-O-2 but not ICD-O-3 would be included for diagnosis years 1995-2000 only. However, as noted above, all ICD-O-2 codes should be converted to the corresponding ICD-O-3 codes prior to submission.

The following histologies should be reported for all cases diagnosed prior to January 1, 2001. These histologies are generally coded to ovary (C56.9), but are not limited to this primary site.

Descriptive Terms and Topography codes	ICD-O-3	ICD-O-2
Serous cystadenoma, borderline malignancy (C56.9)	8442/1	8442/3
Serous tumor, NOS, of low malignant potential (C56.9)	8442/1	8442/3
Papillary cystadenoma, borderline malignancy (C56.9)	8451/1	8451/3
Serous papillary cystic tumor of borderline malignancy (C56.9)	8462/1	8462/3
Papillary serous cystadenoma, borderline malignancy (C56.9)	8462/1	8462/3
Papillary serous tumor of low malignant potential (C56.9)	8462/1	8462/3
Atypical proliferative papillary serous tumor (C56.9)	8462/1	8462/3
Mucinous cystic tumor of borderline malignancy (C56.9)	8462/1	8462/3
Mucinous cystadenoma, borline malignancy (C56.9)	8462/1	8462/3
Pseudomucinous cystadenoma, borderline malignancy (C56.9)	8472/1	8472/3
Mucinous tumor, NOS, of low malignant potential (C56.9)	8472/1	8472/3
Papillary mucinous cystadenoma, borderline malignancy	8473/1	8473/3
(C56.9)		
Papillary pseudomucinous cystadenoma, borderline malignancy	8473/1	8473/3
(C56.9)		
Papillary mucinous tumor of low malignant potential (C56.9)	8473/1	8473/3

h. Beginning January 1, 2004, all nonmalignant primary intracranial and central nervous system tumors (see following table) with a benign (/0) or borderline (/1) behavior code are reportable, and are to be included in the data submission. However, exclude benign and borderline tumors of the cranial bones (C41.0). For further guidance, please refer to the following table.

Required Sites for Benign and Borderline Primary Intracranial and Central Nervous System Tumors							
General Term Specific Sites ICD-O-3 Topography							
Meninges	Cerebral Meninges	C70.0					
	Spinal Meninges	C70.1					
	Meninges, NOS	C70.9					
Brain	Cerebrum	C71.0					
	Frontal lobe	C71.1					
	Temporal lobe	C71.2					
	Parietal lobe	C71.3					
	Occipital lobe	C71.4					
	Ventricle, NOS	C71.5					
	Cerebellum, NOS	C71.6					
	Brain stem	C71.7					
	Overlapping lesion of brain	C71.8					
	Brain, NOS	C71.9					
Spinal cord, cranial	Spinal cord	C72.0					
nerves, and other							
parts of the central							
nervous system							
	Cauda equine	C72.1					
	Olfactory nerve	C72.2					
	Optic nerve	C72.3					
	Acoustic nerve	C72.4					
	Cranial nerve, NOS	C72.5					
	Overlapping lesion of brain and	C72.8					
	central nervous system						
	Nervous system, NOS	C72.9					
Pituitary,	Pituitary gland	C75.1					
craniopharyngeal							
duct, and pineal							
gland							
	Craniopharyngeal duct	C75.2					
	Pineal gland	C75.3					

General considerations for this report include:

Updated Data

The NCCR is constantly being updated with new information, so the numbers published in this report may not match, or be directly comparable, with previously published data. The data that are presented in this report are from the NCCR as of January 2009 NPCR submission

Cancer cases reported

The numbers of cases included in this report are those reported as having invasive cancer, except for urinary bladder cancer, which includes cases diagnosed with *in situ* cancer. Both melanomas of the skin and non-epithelial skin cancers exclude basal and squamous cancers.

Suppression of data

For all tables in this report, rates and 95% confidence intervals for categories with a count of less than ten have been suppressed (indicated by "--"), because when the number of cases in a cell is very small, the calculated rate is unstable.³ In addition, counts of less than five have been suppressed for privacy and confidentiality (indicated by "^").

Cancer Classification

NCCR uses the International Classification of Diseases for Oncology coding structure (ICD-O-3) which includes topography (primary site) and morphology (tumor type). A detailed list of the actual groupings used for cancer incidence data, using both topography and morphology codes, can be found in appendix A.

Place of Residence

Cancer cases in this report are for persons who were recorded as Nevada residents at the time of diagnosis. Individuals who were listed as out of state residents have been excluded in the report.

County/Region of Residence

County/region of residence in this report has been categorized as: Clark County, Washoe County and 'All Other Counties.' Aggregation of the other 15 counties in Nevada to 'All Other Counties' was done, so as to address the small population sizes in these counties. This aggregation minimizes any extraneous fluctuations in the rates presented in this report that may occur due to the variance in the number of cancer cases for each of these 15 counties and their small populations. Counties included in the 'All Other Counties' category are: Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Lyon, Mineral, Nye, Pershing, Storey, and White Pine.

Gender Specific Cancer Rates

For gender specific cancers, such as prostate and female breast, the rates listed in this report are per 100,000 gender-specific population, unless otherwise noted.

Race/Ethnicity Groups

Race/ethnicity groups used in this report include: White, Black, Native American, Asian, and Hispanic and were calculated to be mutually exclusive.

Other/Unknown Groups

The number of cases in the "other/unknown" category has not been shown separately but has been included in totals of the tables. In addition, rates and confidence intervals for these cases have not been calculated.

Stage of Cancer

Cancer stage measures the degree to which the cancer has spread or progressed. Summary staging, which is also used by Surveillance Epidemiology End Results (SEER), describes cancer in the following stages⁴:

In situ is early cancer that is present only in the layer of cells in which it began.

Localized is cancer that is limited to the organ in which it began, without evidence of spread.

Regional is cancer that has spread beyond the original (primary) site to nearby lymph nodes or organs and tissues.

Distant is cancer that has spread from the primary site to distant organs or distant lymph nodes

Unknown is used to describe cases for which there is not enough information to indicate a stage.

Population Estimates

Nevada population data for the denominators of incidence rates presented in this report are provided by the Nevada State Demographer and are race-specific (all races, White, Black, Native American, Asian and Hispanic) and sex-specific (both sexes, males and females). Population estimates are aggregated at the county level and are based on single years, which are summed up to form the five-year aggregate period (See appendix B). Therefore, slight variations may occur when comparing age-adjusted rates in this report with other sources that use United States Census population estimates.

Definitions

- Crude incidence rate: A crude rate is the number of newly diagnosed cases occurring in a defined population during a given time period.

 Crude rates do not account for the age distribution of the population, therefore, crude
 - rates are unsuitable for comparison purposes.⁵
- **Age-specific crude rate**: Age-specific crude rate is the number of cause-specific events occurring in each specified age group by the corresponding population in the same age group.⁵

- **Age-adjusted incidence rate (direct method)**: These are observed age-specific crude rates which are applied to the 2000 U.S. standard population 11 age groups to allow for comparison among populations with different age distributions.⁵
- **95% Confidence Interval (CI)**: This is a range of values for a rate that will include the true value of the rate 95% of the time.⁶

• Standard population

This is the standard population or weights that are used in the calculation of age-adjusted rates to serve as an index. The 2000 U.S. standard population has been used in this report and it is also used as the standard population by many national agencies.

HIGHLIGHTS

- In Nevada, 51,742 (28,009 males, 23,728 females and 5 other gender) cancer cases were reported among Nevada residents during the 2001-2005 period. Nevada's incidence rate (473.8 per 100,000) for all cancers combined was almost identical to the national rate (473.7)⁸ during the same period. Males had a higher age-adjusted incidence rate (544.5) for all cancers combined compared to females (417.5). Washoe County had the highest incidence rate (483.9) compared to Clark County (475.0) and All Other Counties^T (456.5). Other counties with high incidence rates were Lincoln (696.2) and Mineral (559.4). Whites had the highest incidence rate (502.5) compared to Blacks (473.4), Hispanics (371.2), Asians (298.3), and Native Americans (232.0).
- Compared to the national rates, Nevada had higher rates for the following malignancies: lung and bronchus, urinary bladder, leukemia, and thyroid gland. Lower rates were observed for the following types of cancer: female breast, prostate, colorectal, melanomas of the skin, non-Hodgkin lymphoma, and kidney and renal pelvis.
- Lung and bronchus cancer was the most common reportable malignancy among Nevada residents, accounting for 15.8% of all invasive cases during 2001-2005 period.
- Prostate cancer was the second most common reportable malignancy among Nevada residents, accounting for 15.0 % of all invasive cases during 2001-2005 period. Prostate cancer was the leading type of malignancy among males, followed by lung and bronchus, colorectal, urinary bladder, and melanomas of the skin.
- Breast cancer was the third most common malignancy among Nevada residents, accounting for 13.0% of all invasive cases during the 2001-2005 period. Breast cancer was also the leading type of malignancy among females, followed by lung and bronchus, colorectal, corpus uteri and uterus not otherwise specified, and thyroid.
- Compared to females, males had higher incidence rates for the following malignancies: lung and bronchus, colorectal, melanomas of the skin, urinary bladder, non-Hodgkin lymphoma, leukemia, and kidney and renal pelvis.
- Clark County had the highest incidence rates for the following malignancies: lung and bronchus, colorectal, non-Hodgkin lymphoma, leukemia, and thyroid compared to Washoe County and All Other Counties.
- Washoe County had the highest incidence rates for female breast, melanomas of the skin, and kidney and renal pelvis types of cancer, compared to Clark County and All Other Counties.

[†] "All Other Counties" consist of the following Nevada counties: Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Lyon, Mineral, Nye, Pershing, Storey, and White Pine.

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- All Other Counties had the highest age-adjusted rates for prostate and urinary bladder cancers compared to Clark and Washoe Counties. In contrast, All Other Counties had the lowest age-adjusted rates for seven of the top ten leading types of cancer.
- The following racial and ethnic disparities were found:
 - Whites had the highest incidence rates for the following malignancies: lung and bronchus, female breast, urinary bladder, melanomas of the skin, non-Hodgkin lymphoma, and leukemia compared to Blacks, Native Americans, Asians, and Hispanics.
 - Blacks had the highest incidence rates for prostate and colorectal malignancies compared to Whites, Native Americans, Asians, and Hispanics.
 - Hispanics had the highest incidence rates for kidney and renal pelvis cancer compared to Whites, Blacks, Native Americans, and Asians.
 - Asians had the highest incidence rates for thyroid cancer compared to Whites, Blacks, Native Americans, and Hispanics.
 - Native Americans had the lowest incidence rates for the following malignancies: lung
 and bronchus, female breast, colorectal, and non-Hodgkin lymphoma. In addition,
 Native Americans had less than ten cases for urinary bladder, melanomas of the skin,
 leukemia, and thyroid cancers, therefore, the incidence rates for these malignancies
 were not calculated.

BACKGROUND

The Cancer Registries Amendment Act, Public Law 102-515, was enacted in 1992. Through this Act, Congress established the NPCR within the Centers for Disease Control and Prevention (CDC). NPCR was established to fund and support the operation of population-based, statewide cancer registries, in order to collect cancer data.

NCCR is a statewide registry, which is regulated by both Nevada Revised Statute(s) (NRS) 457.230-457.280 and related regulations adopted by the State Board of Health. These statutes mandate the reporting of cancer in the state of Nevada. The Nevada Administrative Codes (NAC) 457.045-457.150 requires hospitals, pathology laboratories, free-standing cancer clinics, long-term care facilities, ambulatory surgery centers, and physicians to report cancer cases diagnosed and treated in Nevada to NCCR.

NCCR is a population-based registry that maintains data on all cancer patients within the state of Nevada. The registry began collecting cancer incidence data in 1989. In 1995, the NCCR began receiving funding from the NPCR through the CDC. The registry receives data from cancer reporting facilities throughout the state of Nevada.

The NCCR also operates under the standards set by NPCR and the North American Association of Central Cancer Registries (NAACCR). In accordance with NPCR and NAACCR standards, NCCR strives to achieve and maintain 95% complete case ascertainment within 24 months of diagnosis date. The data is compiled, aggregated, and submitted to both NPCR and NAACCR annually. Once submitted, the NCCR data is reviewed by each diagnosis year for completeness, accuracy and timeliness. Through NAACCR, registries are recognized for meeting the highest standards of data quality with gold or silver standard certifications for each year cancer data is submitted. The NCCR has achieved gold standard certification for the diagnosis years 2000 to 2006. With over five consecutive years of data qualifying for gold standard certification, NCCR data has been included in the United States Cancer Statistics (USCS) and the Cancer in North America (CINA) publications.

ALL CANCERS

Incidence

During the 2001-2005 period, a total of 51,742 cancer cases were reported among Nevada residents. Nevada's incidence rate (473.8 per 100,000) for all cancers combined was almost identical to the national rate (473.7)⁸ during the same period. Males had a higher age-adjusted incidence rate (544.5) for all cancers combined compared to females (417.5). Washoe County had the highest incidence rate (483.9) compared to Clark County (475.0) and All Other Counties (456.5). Other counties with high incidence rates were Lincoln (696.2) and Mineral (559.4). Whites had the highest incidence rate (502.5) compared to Blacks (473.4), Hispanics (371.2), Asians (298.3), and Native Americans (232.0).

The top ten types of cancer in Nevada during the 2001-2005 period were: lung and bronchus, prostate, breast, colorectal, urinary bladder, non-Hodgkin lymphoma, melanomas of the skin, kidney and renal pelvis, leukemia, and thyroid.

Table 1: Percentage Distribution of All Types of Cancer by Site and Gender, Nevada Residents, 2001-2005

Time of Octoor			emale Other*		er*			
Type of Cancer	Cases	%	Cases	%	Cases	Cases %		%
Total	51,742	100%	28,009	54.13%	23,728	45.86%	5	0.01%
Lip, Oral Cavity and Pharynx	1,242	2.40%	889	1.72%	353	0.68%		
Lip	63	0.12%	53	0.10%	10	0.02%		
Base of Tongue	200	0.39%	158	0.31%	42	0.08%		
Other & Unspecified Parts of the Tongue	179	0.35%	124	0.24%	55	0.11%		
Parotid Gland	117	0.23%	72	0.14%	45	0.09%		
Other & Unspecified Major Salivary glands	32	0.06%	21	0.04%	11	0.02%		
Floor of mouth	92	0.18%	62	0.12%	30	0.06%		
Gum	34	0.07%	19	0.04%	15	0.03%		
Palate	41	0.08%	23	0.04%	18	0.03%		
Other & Unspecified Parts of the mouth	67	0.13%	38	0.07%	29	0.06%		
Nasopharynx	75	0.14%	58	0.11%	17	0.03%		
Tonsil	173	0.33%	135	0.26%	38	0.07%		
Oropharynx	49	0.09%	38	0.07%	11	0.02%		
Pyriform Sinus	45	0.09%	36	0.07%	9	0.02%		
Hypopharynx	47	0.09%	33	0.06%	14	0.03%		
Other & Unspecified Oral Cavity & Pharynx	28	0.05%	19	0.04%	9	0.02%		
Digestive System	8,937	17.27%	5,119	9.89%	3,817	7.38%		
Esophagus	572	1.11%	450	0.87%	122	0.24%		
Stomach	674	1.30%	427	0.83%	247	0.48%		
Small Intestine	144	0.28%	83	0.16%	61	0.12%		
Colon (excluding Rectum)								
Cecum	838	1.62%	423	0.82%	415	0.80%		
Appendix	59	0.11%	32	0.06%	27	0.05%		
Ascending Colon	589	1.14%	275	0.53%	314	0.61%		
Hepatic Flexure	161	0.31%	71	0.14%	90	0.17%		
Transverse Colon	284	0.55%	144	0.28%	140	0.27%		
Splenic Flexure	84	0.16%	41	0.08%	43	0.08%		
Descending Colon	194	0.37%	124	0.24%	70	0.14%		
Sigmoid Colon	1,077	2.08%	606	1.17%	471	0.91%		
Large Intestine, NOS	496	0.96%	275	0.53%	221	0.43%		
Rectum	1,007	1.95%	621	1.20%	386	0.75%		
Rectosigmoid Junction	453	0.88%	255	0.49%	198	0.38%		
Anus, Anal Canal and Anorectum	152	0.29%	56	0.11%	96	0.19%		
Liver	563	1.09%	404	0.78%	159	0.31%		
Intrahepatic Bile Ducts	39	0.08%	18	0.03%	21	0.04%		
Gallbladder	88	0.17%	39	0.08%	49	0.09%		
Other & Unspecified Biliary Tract	176	0.34%	103	0.20%	73	0.14%		
Pancreas	1,184	2.29%	632	1.22%	551	1.06%		
Rectroperitoneum	41	0.08%	21	0.04%	20	0.03%		

...continued

Table 1: Percentage Distribution of All Types of Cancer by Site and Gender, Nevada Residents, 2001-2005 (continued)

Type of Canaar		Total		Male		Female		
Type of Cancer	Cases	%	Cases	%	Cases	%		
Peritoneum, Omentum and Mesentery	37	0.07%	6	0.01%	31	0.06%		
Other Digestive Organs	25	0.05%	13	0.03%	12	0.02%		
Respiratory System	8,672	16.76%	4,652	8.99%	4,020	7.77%		
Nose, Nasal Cavity & Middle Ear	43	0.08%	28	0.05%	15	0.03%		
Accessory Sinuses	35	0.06%	26	0.05%	9	0.02%		
Larynx	385	0.74%	304	0.59%	81	0.16%		
Lung and Bronchus	8,190	15.83%	4,280	8.27%	3,910	7.56%		
Pleura	6	0.01%	5	0.01%	٨	0.00%		
Trachea	٨	0.01%	٨	0.00%	٨	0.00%		
Mediastinum & Other Respiratory Organs	9	0.02%	6	0.01%	٨	0.01%		
Bones, Joints and Articular Cartilage	84	0.16%	55	0.11%	29	0.06%		
Bones, Joints & Articular Cartilage of Limbs	37	0.07%	23	0.04%	14	0.03%		
Bones, Joints & Articular Cartilage of Other &								
Unspecified sites	47	0.09%	32	0.06%	15	0.03%		
Soft Tissue Including Heart	306	0.59%	174	0.34%	132	0.26%		
Heart	٨	0.00%	0	0.00%	۸	0.00%		
Peripheral Nerves & Autonomic Nervous System	10	0.02%	7	0.01%	۸	0.01%		
Connective, Subcutaneous & Other Soft Tissues	294	0.57%	167	0.32%	127	0.25%		
Skin (excluding Basal and Squamous)	2,124	4.10%	1,299	2.51%	824	1.59%		
Melanomas of the skin	1,936	3.74%	1,178	2.28%	757	1.46%		
Other Non-Epithelial Skin	188	0.36%	121	0.23%	67	0.13%		
Breast	6,731	13.01%	78	0.15%	6,652	12.86%		
Female Genital System	2,543	4.91%	0		2,543	4.91%		
Cervix Uteri	515	1.00%	0		515	1.00%		
Corpus Uteri	1,039	2.01%	0		1,039	2.01%		
Uterus, NOS	44	0.09%	0		44	0.09%		
Ovary	738	1.43%	0		738	1.43%		
Vagina	33	0.06%	0		33	0.06%		
Vulva	132	0.26%	0		132	0.26%		
Placenta	6	0.01%	0		6	0.01%		
Other Female Genital Organs	36	0.07%	0		36	0.07%		
Male Genital System	8,066	15.59%	8,066	15.59%	0			
Prostate	7,733	14.95%	7,733	15.41%	0			
Testis	291	0.56%	291	0.56%	0			
Penis	27	0.05%	27	0.05%	0			
Other Male Genital Organs	15	0.03%	15	0.03%	0			
Urinary System	4,223	8.16%	3,080	5.95%	1,143	2.21%		
Urinary Bladder	2,708	5.23%	2,092	4.04%	616	1.19%		
Kidney	1,305	2.52%	858	1.66%	447	0.86%		
Renal Pelvis	82	0.16%	43	0.08%	39	0.08%		

...continued

Table 1: Percentage Distribution of All Types of Cancer by Site and Gender, Nevada Residents, 2001-2005 (continued)

Type of Cancer		Total		le	Female		
туре от сапсет	Cases	cases % Cases			Cases	%	
Ureter	59	0.11%	37	0.07%	22	0.04%	
Other Urinary Organs	69	0.13%	50	0.10%	19	0.04%	
Eye and Orbit	65	0.13%	39	0.08%	26	0.05%	
Brain and Other Central Nervous System	1,048	2.03%	514	0.99%	534	1.03%	
Brain	697	1.35%	403	0.78%	294	0.57%	
Meninges	299	0.58%	85	0.16%	214	0.41%	
Spinal Cord, Cranial Nerves & Other Parts of CNS	52	0.10%	26	0.05%	26	0.05%	
Endocrine System	1,405	2.72%	381	0.74%	1,024	1.98%	
Thyroid gland	1,250	2.42%	295	0.57%	955	1.85%	
Adrenal gland	26	0.05%	19	0.04%	7	0.01%	
Other Endocrine (including Thymus)	129	0.25%	67	0.13%	62	0.12%	
Hodgkin Lymphoma	289	0.56%	157	0.30%	132	0.26%	
Non-Hodgkin Lymphoma	1,975	3.82%	1,136	2.20%	839	1.62%	
Myeloma	521	1.01%	308	0.60%	213	0.41%	
Leukemia	1,335	2.58%	798	1.54%	536	1.04%	
Lymphotic							
Acute Lymphocytic	176	0.34%	93	0.18%	83	0.16%	
Chronic Lymphocytic	395	0.76%	254	0.49%	141	0.27%	
Other Lymphocytic	46	0.09%	37	0.07%	9	0.02%	
Myeloid and Monocytic							
Acute Myeloid	420	0.81%	247	0.48%	172	0.33%	
Acute Monocytic	24	0.05%	11	0.02%	13	0.03%	
Chronic Myeloid	139	0.27%	78	0.15%	61	0.12%	
Other Myeloid/Monocytic	18	0.03%	8	0.02%	10	0.02%	
Other							
Other, Acute	51	0.10%	30	0.06%	21	0.04%	
Aleukemic, Subleukemic and NOS	66	0.13%	40	0.08%	26	0.05%	
Mesothelioma	105	0.20%	82	0.16%	23	0.04%	
Kaposi Sarcoma	57	0.11%	53	0.10%	٨	0.01%	
Other, III-defined and Unspecified Sites	2,014	3.89%	1,129	2.18%	884	1.71%	

Note:

NOS - not otherwise specified.

CNS - central nervous system.

^{*} Only the total for other gender has been reported.

[^] Cases less than five have been suppressed.

Table 2: All Types of Cancer by Cancer Stage, Nevada Residents, 2001-2005

Type of Cancer	Total	In situ*	Localized	Regional	Distant	Unstaged
Total	51,742	1,256	16,587	7,512	8,187	18,200
Lip, Oral Cavity and Pharynx	1,242		314	375	78	475
Lip	63		35	٨	0	24
Base of Tongue	200		37	78	15	70
Other & Unspecified Parts of the Tongue	179		73	35	6	65
Parotid Gland	117		32	24	8	53
Other & Unspecified Major Salivary glands	32		5	10	0	17
Floor of mouth	92		27	27	7	31
Gum	34		5	12	6	11
Palate	41		11	8	٨	20
Other & Unspecified Parts of the mouth	67		22	10	8	27
Nasopharynx	75		5	27	10	33
Tonsil	173	-	35	80	٨	55
Oropharynx	49		8	18	5	18
Pyriform Sinus	45		7	23	٨	12
Hypopharynx	47	-	11	18	٨	16
Other & Unspecified Oral Cavity & Pharynx	28		٨	٨	٨	23
Digestive System	8,937		1,872	2,191	1,497	3,377
Esophagus	572		88	82	118	284
Stomach	674	-	106	162	125	281
Small Intestine	144	-	28	44	24	48
Colon (excluding Rectum)						
Cecum	838		206	313	135	184
Appendix	59		19	17	8	15
Ascending Colon	589		146	221	65	157
Hepatic Flexure	161		42	47	22	50
Transverse Colon	284		73	99	33	79
Splenic Flexure	84		21	31	10	22
Descending Colon	194		55	69	20	50
Sigmoid Colon	1,077		330	315	169	263
Large Intestine, NOS	496		43	56	87	310
Rectum	1,007		299	236	99	373
Rectosigmoid Junction	453		121	147	72	113
Anus, Anal Canal and Anorectum	152		55	22	10	65
Liver	563		125	40	68	330
Intrahepatic Bile Ducts	39		6	7	٨	24
Gallbladder	88		13	24	20	31
Other & Unspecified Biliary Tract	176		19	38	16	103
Pancreas	1,184		64	208	364	548
Rectroperitoneum	41		10	6	7	18

...continued

Table 2: All Types of Cancer by Cancer Stage, Nevada Residents, 2001-2005 (continued)

Type of Cancer						
7	Total	In situ*	Localized	Regional	Distant	Unstaged
Peritoneum, Omentum and Mesentery	37		٨	5	14	15
Other Digestive Organs	25		0	٨	9	14
Respiratory System	8,672		1,235	1,362	2,423	3,652
Nose, Nasal Cavity & Middle Ear	43		17	٨	٨	21
Accessory Sinuses	35		٨	11	٨	18
Larynx	385		132	52	23	178
Lung and Bronchus	8,190		1,081	1,291	2,393	3,425
Pleura	6		0	٨	٨	٨
Trachea	٨		٨	٨	0	٨
Mediastinum & Other Respiratory Organs	9		0	٨	٨	6
Bones, Joints and Articular Cartilage	84		21	10	11	42
Bones, Joints & Articular Cartilage of Limbs	37		12	٨	٨	19
Bones, Joints & Articular Cartilage of Other &						
Unspecified sites	47		9	7	8	23
Soft Tissue Including Heart	306		99	28	30	149
Heart	٨		0	٨	0	٨
Peripheral Nerves & Autonomic Nervous System	10		٨	٨	٨	5
Connective, Subcutaneous & Other Soft Tissues	294		97	25	29	143
Skin (excluding Basal and Squamous)	2,124		1,127	151	74	772
Melanomas of the skin	1,936		1,064	142	72	658
Other Non-Epithelial Skin	188		63	9	٨	114
Breast	6,731		3,005	1,565	288	1,873
Female Genital System	2,543		985	447	382	729
Cervix Uteri	515		219	126	36	134
Corpus Uteri	1,039		579	148	47	265
Uterus, NOS	44		٨	5	11	25
Ovary	738		96	138	275	229
Vagina	33		9	7	٨	14
Vulva	132		72	14	٨	42
Placenta	6		٨	٨	٨	٨
Other Female Genital Organs	36		6	8	5	17
Male Genital System	8,066		5,036	564	232	2,234
Prostate	7,733		4,871	524	205	2,133
Testis	291		151	35	26	79
Penis	27		8	5	٨	13
Other Male Genital Organs	15		6	0	0	9
Urinary System	4,223	1,256	1,334	390	253	990
Urinary Bladder	2,708	1,256	689	188	76	499
Kidney	1,305	,	575	163	167	400
Renal Pelvis	82		27	24	5	26

...continued

Table 2: All Types of Cancer by Cancer Stage, Nevada Residents, 2001-2005 (continued)

Type of Cancer	Total	In situ*	Localized	Regional	Distant	Unstaged
Ureter	59		31	10	٨	14
Other Urinary Organs	69		12	5	٨	51
Eye and Orbit	65		17	٨	٨	45
Brain and Other Central Nervous System	1,048		384	14	7	643
Brain	697		360	13	7	317
Meninges	299		18	٨	0	280
Spinal Cord, Cranial Nerves & Other Parts of CNS	52		6	0	0	46
Endocrine System	1,405		719	205	38	443
Thyroid gland	1,250		702	200	30	318
Adrenal gland	26		٨	٨	7	13
Other Endocrine (including Thymus)	129		14	٨	٨	112
Hodgkin Lymphoma	289		61	51	50	127
Non-Hodgkin Lymphoma	1,975		335	141	566	933
Myeloma	521		6	0	473	42
Leukemia	1,335		٨	0	1,307	27
Lymphotic						
Acute Lymphocytic	176		0	0	176	0
Chronic Lymphocytic	395		0	0	392	٨
Other Lymphocytic	46		0	0	45	٨
Myeloid and Monocytic						
Acute Myeloid	420		0	0	414	6
Acute Monocytic	24		0	0	24	0
Chronic Myeloid	139		0	0	138	٨
Other Myeloid/Monocytic	18		٨	0	15	٨
Other						
Other, Acute	51		0	0	49	٨
Aleukemic, Subleukemic and NOS	66		0	0	54	12
Mesothelioma	105		13	15	23	54
Kaposi Sarcoma	57		23	٨	٨	32
Other, III-defined and Unspecified Sites	2,014		0	0	453	1,561

Note:

NOS - not otherwise specified.

CNS - central nervous system.

^{*} Noninvasive cancers have not been reported except for urinary bladder which includes in situ cases.

[^] Cases less than five have been suppressed.

Figure 1: Percentage Distribution of All Cancer Cases by Age Group, Nevada Residents, 2001-2005

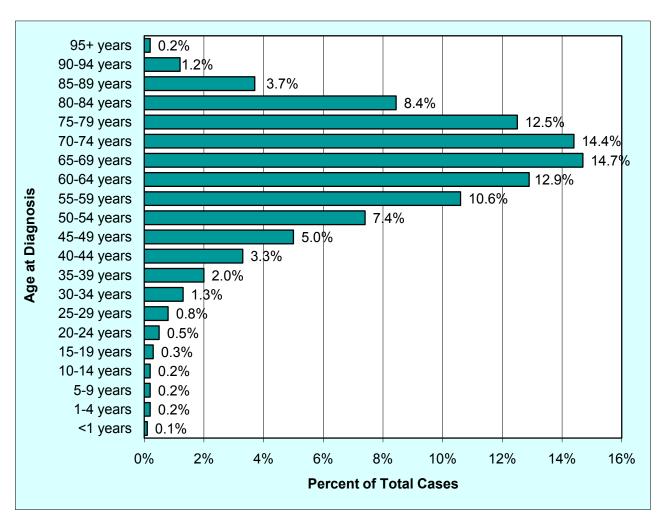


Table 3: All Cancer Cases by County of Residence at Diagnosis, Nevada Residents, 2001-2005

County of	2001-2005 Incidence						
Residence	Cana	Cru	de Rate*	Age-Adjı	usted Rate**		
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.		
Carson City	1,651	627.3	(597.1-657.6)	538.0	(512.1-563.9)		
Churchill	622	483.9	(445.9-521.9)	498.4	(459.3-537.5)		
Clark	35,815	438.5	(433.9-443.0)	475.0	(470.1-480.0)		
Douglas	1,232	532.9	(503.2-562.7)	412.4	(388.9-435.8)		
Elko	649	278.4	(257.0-299.8)	418.3	(382.4-454.1)		
Esmeralda	31	541.0	(350.6-731.4)	419.4	(269.7-569.1)		
Eureka	26	357.2	(219.9-494.5)	333.8	(201.4-466.2)		
Humboldt	280	337.7	(298.1-377.3)	392.2	(344.9-439.4)		
Lander	114	415.3	(339.1-491.5)	501.8	(403.2-600.3)		
Lincoln	150	854.9	(718.1-991.7)	696.2	(582.5-810.0)		
Lyon	1,151	555.2	(523.1-587.3)	476.6	(448.9-504.3)		
Mineral	191	815.3	(699.7-930.9)	559.4	(477.9-640.9)		
Nye	1,212	653.2	(616.4-689.9)	441.0	(415.0-467.0)		
Pershing	97	359.9	(288.2-431.5)	359.2	(287.4-431.0)		
Storey	74	391.6	(302.4-480.8)	317.8	(240.5-395.0)		
Washoe	8,253	442.2	(432.7-451.8)	483.9	(473.4-494.4)		
White Pine	193	501.5	(430.7-572.2)	380.0	(325.6-434.5)		
Unknown‡							
Total	51,742	448.7	(444.8-452.6)	473.8	(469.7-477.9)		

^{*} Rates are per 100,000 population.

^{**} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population. ^ Cases less than five have been suppressed.

[‡] Cases of unreported county are listed as unknown

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 4: All Cancer Cases by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-2005

	County/Region of Residence							
Category	Total	Clark	Washoe	All Other Counties	Unknown‡			
Total								
Cases	51,742	35,815	8,253	7,673	^			
Rate*	473.8	475.0	483.9	456.5				
95% C.I.	(469.7-477.9)	(470.1-480.0)	(473.4-494.4)	(446.3-466.8)				
Gender								
Male	28,009	19,235	4,385	4,389	0			
Rate*	544.5	542.9	557.0	539.4				
95% C.I.	(537.9-551.2)	(534.9-550.9)	(539.9-574.0)	(523.1-555.6)				
Female	23,728	16,578	3,867	3,282	^			
Rate*	417.5	422.2	429.2	382.9				
95% C.I.	(412.2-422.9)	(415.7-442.7)	(415.7-442.7	(369.7-396.0)				
Other	5							
Race/Ethnicity								
White	42,793	28,376	7,310	7,106	^			
Rate*	502.5	508.6	509.2	471.5				
95% C.I.	(497.7-507.2)	(502.8-514.5)	(497.5-520.8)	(460.5-482.5)				
Black	2,709	2527	149	33	0			
Rate*	473.4	474.6	553.0	339.6				
95% C.I.	(455.0-491.8)	(455.5-493.7)	(461.5-644.5)	(223.3-455.9)				
Native American	274	75	72	127	0			
Rate*	232.0	148.4	256.3	300.9				
95% C.I.	(203.2-260.8)	(118.8-185.0)	(194.3-318.3)	(247.6-354.3)				
Asian	1,584	1297	228	59	0			
Rate*	298.3	296.5	314.0	295.1				
95% C.I.	(281.1-315.6)	(277.5-315.5)	(266.5-361.6)	(210.7-379.6)				
Hispanic	3,431	2725	422	284	0			
Rate*	371.2	380.2	336	350.4				
95% C.I.	(356.4-386.1)	(363.0-397.4)	(297.8-374.2)	(304.4-396.3)				
Unknown	951	815	72	64	0			

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

[‡] Cases of unreported county are listed as unknown.

Rates were adjusted for cases where race/ethnicity was listed as other/unknown. The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Figure 2: All Cancer Cases Age-Adjusted Rates by County/Region of Residence, Nevada Residents, 2001-2005 vs. U.S. 2001-2005

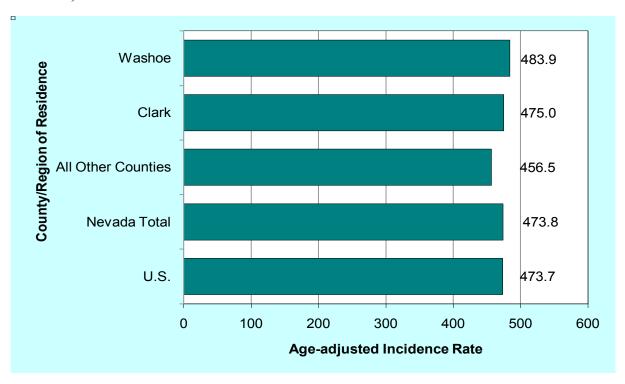
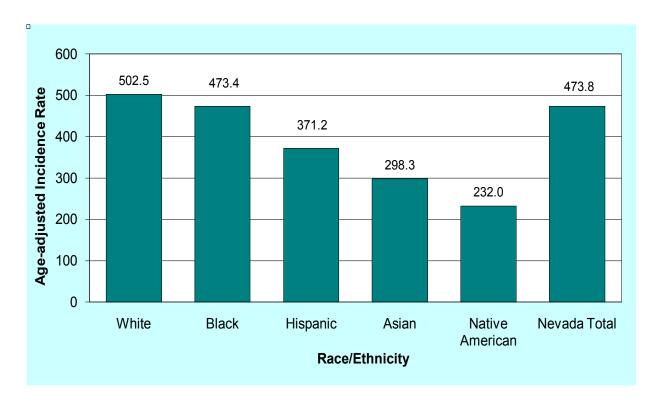


Figure 3: All Cancer Cases by Race/Ethnicity, Nevada Residents, 2001-2005



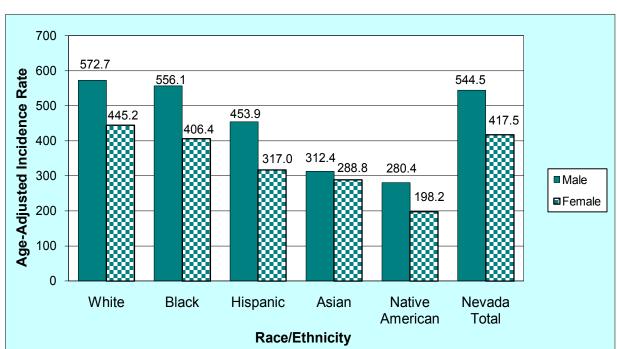
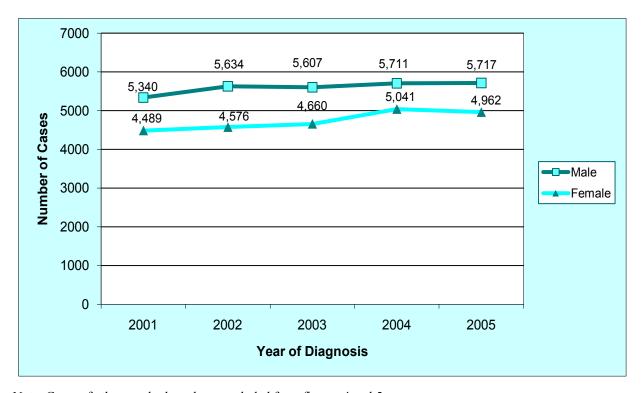


Figure 4: All Cancer Cases by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

Figure 5: All Cancer Cases by Gender and Year of Diagnosis, Nevada Residents, 2001-2005



Note: Cases of other gender have been excluded from figures 4 and 5.

Table 5: All Cancer Cases by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

D//	74la .a. i a. i.4	Gender							
Race/Ethnicity		Total	Male	Female	Other				
	Incidence	51,742	28,009	23,728	5				
Total	Rate*	473.8	544.5	417.5					
	95% C.I.	(469.7-477.9)	(537.9-551.2)	(412.2-422.9)					
	Incidence	42,793	23,322	19,466	5				
White	Rate*	502.5	572.7	445.2					
	95% C.I.	(497.7-507.2)	(565.2-580.1)	(438.9-451.4)					
	Incidence	2,709	1,466	1,243	0				
Black	Rate*	473.4	556.1	406.4					
	95% C.I.	(455.0-491.8)	(525.6-586.6)	(383.4-429.5)					
Nietice	Incidence	274	140	134	0				
Native American	Rate*	232.0	280.4	198.2					
American	95% C.I.	(203.2-260.8)	(230.0-330.8)	(163.5-232.9)					
	Incidence	1,584	667	917	0				
Asian	Rate*	298.3	312.4	288.8					
	95% C.I.	(281.1-315.6)	(284.6-340.1)	(266.9-310.8)	<u></u>				
	Incidence	3,431	1,756	1,675	0				
Hispanic	Rate*	371.2	453.9	317.0					
	95% C.I.	(356.4-386.1)	(426.8-481.0)	(299.6-310.8)					
Unknown		951	658	293	0				

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population. Rates were adjusted for cases where race/ethnicity was listed as other/unknown.

The "--" denotes suppressed rates, and confidence intervals for cases less than ten.

Table 6: All Cancer Cases by Age Group and Gender, Nevada Residents, 2001-2005

Age	Gender						
Group	Total	Male	Female	Other			
Total	51,742	28,009	23,728	5			
Rate*	448.7	478.1	418.2				
95% C.I.	(444.8-452.6)	(472.5-483.7)	(412.9-423.5)				
<1	43	28	15	0			
Rate*	25.3	32.1	18.1				
95% C.I.	(17.7-32.8)	(20.2-44.1)	(8.9-27.2)				
1-4	122	70	52	0			
Rate*	18.6	20.8	16.2				
95% C.I.	(15.3-21.9)	(15.9-25.7)	(11.8-20.6)				
5-14	192	110	82	0			
Rate*	11.9	13.3	10.4				
95% C.I.	(10.2-13.6)	(10.8-15.8)	(8.2-12.7)				
15-24	409	220	189	0			
Rate*	24.9	25.8	23.9				
95% C.I.	(22.5-27.3)	(22.4-29.2)	(20.5-27.4)				
25-34	1,086	421	665	0			
Rate*	64.4	47.9	82.4				
95% C.I.	(60.6-68.2)	(43.3-52.5)	(76.1-88.6)				
35-44	2,730	993	1,737	0			
Rate*	155.4	108.9	205.8				
95% C.I.	(149.6-161.3)	(102.1-115.6)	(196.1-215.5)				
45-54	6,421	2,882	3,539	0			
Rate*	409.9	362.9	458.4				
95% C.I.	(399.9-420.0)	(349.6-376.1)	(443.2-473.4)				
55-64	12,152	6,761	5,388	٨			
Rate*	1,048.1	1,184.4	915.4				
95% C.I.	(1029.5-1066.7)	(1156.2-1212.6)	(891.0-939.8)				
65-74	15,090	9,219	5,869	۸			
Rate*	2,012.7	2,498.9	1,541.2				
95% C.I.	(1980.5-2044.8)	(2447.9-2549.9)	(1501.7-1580.5)				
75-84	10,836	6,070	4,766	0			
Rate*	2,529.0	3,137.4	2,028.2				
95% C.I.	(2481.4-2576.6)	(3058.4-3216.3)	(1970.5-2085.7)				
85+	2,660	1,235	1,425	0			
Rate*	2,593.0	3,564.5	2,097.5				
95% C.I.	(2494.4-2691.5)	(3365.7-3763.3)	(1988.5-2206.3)				
Unknown‡	٨	0	٨	0			

Note:

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

[^] Cases less than five have been suppressed.

[‡] Cases of unreported age are listed as unknown.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

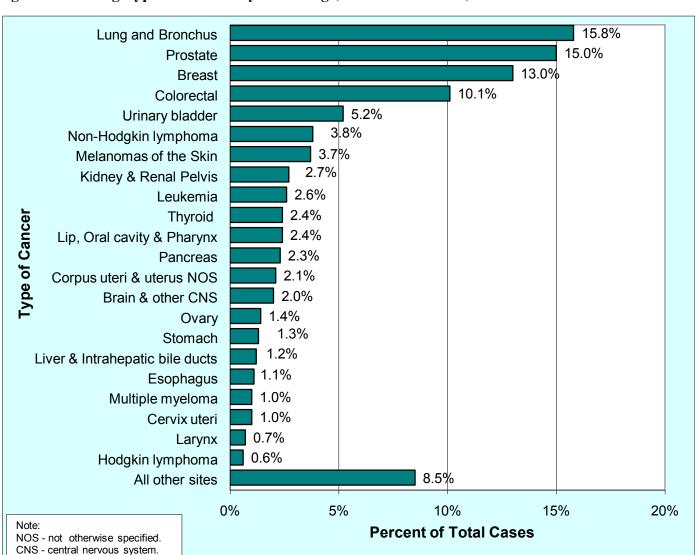
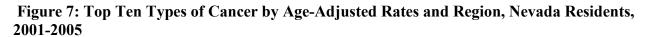


Figure 6: Leading Types of Cancer by Percentage, Nevada Residents, 2001-2005



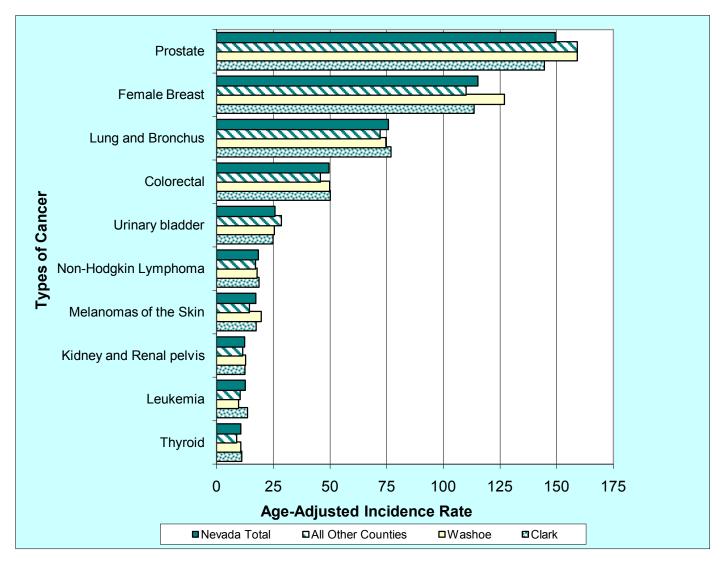


Table 7: Top Ten Types of Cancer by County/Region of Residence, Nevada Residents, 2001-2005

		County/Region of Residence							
Rank	Type of Cancer	Total	Clark	Washoe	All Other Counties	Unknown‡			
1.	Lung and Bronchus	8,190	5,702	1,242	1,246	0			
	Rate*	75.8	76.9	74.7	72.2				
	95% C.I.	(74.1-77.4)	(74.9-78.9)	(70.5-78.9)	(68.2-76.2)				
2.	Prostate	7,733	5,171	1,250	1,312	0			
	Rate**	149.3	144.6	159.1	159.2				
	95% C.I.	(145.8-152.7)	(140.5-148.7)	(149.9-168.2)	(150.3-168.1)				
3.	Female Breast	6,652	4,531	1,168	953	0			
	Rate**	115.2	113.6	126.9	110.1				
	95% C.I.	(112.5-118.0)	(110.2-116.9)	(119.6-134.2)	(103.0-117.1)				
4.	Colorectal	5,242	3,663	817	761	^			
	Rate*	49.5	50.2	49.8	45.8				
	95% C.I.	(48.2-50.9)	(48.6-51.9)	(46.4-53.3)	(42.5-49.1)				
5.	Urinary Bladder	2,708	1,826	411	471	0			
	Rate*	25.7	25.0	25.4	28.6				
	95% C.I.	(24.7-26.7)	(23.9-26.2)	(22.9-27.9)	(26.0-31.2)				
6.	Non-Hodgkin Lymphoma	1,975	1,386	306	283	0			
	Rate*	18.4	18.7	17.9	17.2				
	95% C.I.	(17.5-19.2)	(17.7-19.7)	(15.9-20.0)	(15.2-19.3)				
7.	Melanomas of the Skin	1,936	1,349	351	236	0			
	Rate*	17.3	17.5	19.6	14.5				
	95% C.I.	(16.6-18.1)	(16.5-18.4)	(17.5-21.7)	(12.6-16.4)				
8.	Kidney and Renal Pelvis	1,387	971	223	193	0			
	Rate*	12.4	12.5	12.8	11.5				
	95% C.I.	(11.7-13.1)	(11.7-13.3)	(11.1-14.5)	(9.8-13.1)				
9.	Leukemia	1,335	1,001	161	173	0			
	Rate*	12.6	13.7	9.6	10.5				
	95% C.I.	(11.9-13.2)	(12.9-14.6)	(8.1-11.1)	(8.9-12.1)				
10.	Thyroid	1,250	907	201	142	0			
	Rate*	10.7	11.2	10.6	8.9				
	95% C.I.	(10.1-11.3)	(10.4-11.9)	(9.1-12.1)	(7.4-10.3)				

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

^{**} Rates are per 100,000 gender-specific population and age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

[‡]Cases of unreported county are listed as unknown.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 8: Top Ten Types of Cancer by Race/Ethnicity, Nevada Residents, 2001-2005

Race/Ethnicity								
Type of Cancer	Total	White	Black	Native American	Asian	Hispanic	Unknown‡	
Lung and Bronchus	8,190	7,174	393	39	206	331	47	
Rate*	75.8	81.4	70.8	33.9	38.6	46.8		
95% C.I.	(74.1-77.4)	(79.5-83.3)	(63.5-78.0)	(22.6-45.2)	(32.7-44.6)	(40.9-52.6)		
Prostate	7,733	6,223	517	42	137	464	350	
Rate**	149.3	151.7	203.2	95.2	67.0	151.4		
95% C.I.	(145.8-152.7)	(147.9-155.5)	(184.7-221.8)	(63.9-126.6)	(54.7-79.4)	(135.0-167.8)		
Female Breast	6,652	5,397	363	43	250	491	108	
Rate**	115.2	122.8	113.7	59.5	74.6	84.7		
95% C.I.	(112.5-118.0)	(119.6-126.1)	(101.8-125.6)	(41.4-77.7)	(63.8-85.3)	(76.4-93.0		
Colorectal	5,242	4,299	319	30	194	347	53	
Rate*	49.5	50.5	57.5	23.6	42.1	44.3		
95% C.I.	(48.2-50.9)	(49.0-52.0)	(50.9-64.2)	(14.7-32.5)	(34.8-49.5)	(38.7-49.8)	_	
Urinary Bladder	2,708	2,429	73	6	41	88	71	
Rate*	25.7	28.8	14.3		8.8	12.6		
95% C.I.	(24.7-26.7)	(27.6-29.9)	(10.9-17.8)		(5.6-12.0)	(9.6-15.6)	_	
Non-Hodgkin Lymphoma	1,975	1,614	87	11	54	153	56	
Rate*	18.4	19.6	14.4	10.3	11.0	15.1	_	
95% C.I.	(17.5-19.2)	(18.6-20.5)	(11.3-17.6)	(3.9-16.7)	(7.4-14.6)	(12.3-18.0)		
Melanomas of the Skin	1,936	1,874	7	^	٨	37	13	
Rate*	17.3	22.5				3.2		
95% C.I.	(16.6-18.1)	(21.5-23.5)				(2.0-4.3)		
Kidney and Renal Pelvis	1,387	1,098	86	14	38	132	19	
Rate*	12.4	12.6	13.8	13.1	7.5	14.2		
95% C.I.	(11.7-13.1)	(11.8-13.3)	(10.9-16.8)	(5.9-20.3)	(4.5-10.4)	(11.4-17.1)		
Leukemia	1,335	1,062	66	٨	35	131	38	
Rate*	12.6	13.4	10.2		7.6	10.0		
95% C.I.	(11.9-13.2)	(12.6-14.2)	(7.7-12.7)		(4.5-10.6)	(7.7-12.3)		
Thyroid	1,250	938	50	7	95	141	19	
Rate*	10.7	11.9	7.3		14.0	8.4		
95% C.I.	(10.1-11.3)	(11.1-12.6)	(5.2-9.3)		(10.9-17.0)	(6.9-10.0)		

Note:

Rates were adjusted for cases where race/ethnicity was listed as other/unknown.

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

^{**} Rates are per 100,000 gender-specific population and age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

[‡] Cases of other and unknown race/ethnicity are listed as unknown.

The "--" denotes suppressed rates and confidence intervals for unknown and cases less than ten.

Table 9: Top Ten Types of Cancer by Gender, Nevada Residents, 2001-2005

Rank	Male		Rank	Female	
	Type of Cancer			Type of Cancer	
1.	Prostate	7733	1.	Female Breast	6,652
	Rate*	149.3		Rate*	115.2
	95% C.I.	(145.8-152.7)		95% C.I.	(112.5-118.0)
2.	Lung and Bronchus	4,280	2.	Lung and Bronchus	3,910
	Rate*	84.1		Rate*	68.7
	95% C.I.	(81.5-86.7)		95% C.I.	(66.6-70.9)
3.	Colorectal	2,867	3.	Colorectal	2,375
	Rate*	57.1		Rate*	42.8
	95% C.I.	(54.9-59.3)		95% C.I.	(41.1-44.6)
4.	Urinary Bladder	2,092	4.	Corpus Uteri	1,083
	Rate*	43.2		Rate*	18.7
	95% C.I.	(41.3-45.2)		95% C.I.	(17.6-19.8)
5.	Melanomas of the Skin	1,178	5.	Thyroid	955
	Rate*	22.2		Rate*	16.6
	95% C.I.	(20.9-23.5)		95% C.I.	(15.6-17.7)
6.	Non-Hodgkin Lymphoma	1,136	6.	Non-Hodgkin Lymphoma	839
	Rate*	22.1		Rate*	15.0
	95% C.I.	(20.7-23.5)		95% C.I.	(14.0-16.0)
7.	Kidney and Renal Pelvis	901	7.	Melanomas of the Skin	757
	Rate*	16.9		Rate*	13.2
	95% C.I.	(15.8-18.1)		95% C.I.	(12.3-14.2)
8.	Lip, Oral Cavity and		8.	Ovary	738
	Pharynx	889			
	Rate*	16.2		Rate*	12.9
	95% C.I.	(15.1-17.3)		95% C.I.	(12.0-13.8)
9.	Leukemia	798	9.	Urinary Bladder	616
	Rate*	16.1		Rate*	13.1
	95% C.I.	(14.9-17.2)		95% C.I.	(12.0-14.2)
10.	Pancreas	632	10.	Pancreas	551
	Rate*	12.5		Rate*	9.9
	95% C.I.	(11.5-13.5)		95% C.I.	(9.1-10.8)

 $[\]ast$ Rates are per 100,000 gender specific population and are age-adjusted to the 2000 U.S. Standard Population. NOS – not otherwise specified.

LUNG AND BRONCHUS CANCER

Incidence

Lung and bronchus cancer was the leading type of cancer in Nevada with 8,190 cases (4,280 males and 3,910 females) reported during the 2001-2005 period. Nevada had a higher incidence rate (75.8 per 100,000) compared to the national rate (68.9)⁸ Males had a higher incidence rate (84.1) compared to females (68.7). Clark County had the highest incidence rate (76.9) compared to Washoe County (74.7) and All Other Counties (72.2). Other counties with high incidence rates were Lincoln (97.6) and Nye (85.2). Whites had the highest incidence rate (81.4), compared to Blacks (70.8), Hispanics (46.8), Asians (38.6), and Native Americans (33.9) who had the lowest incidence rate.

Risk Factors

Cigarette smoking is a major risk factor for lung and bronchus cancer. The risk increases with the quantity and duration of cigarette smoking. Other risk factors include: second hand smoke, family history, exposure to benzene, radon, asbestos, and certain metals (chromium, cadmium, arsenic), air pollution, radiation, and, a history of tuberculosis.¹⁰

Signs and Symptoms

Lung and bronchus cancer may not have any symptoms. Some signs and symptoms include: persistent cough, bloody sputum, chest pain, loss of appetite, shortness of breath, weight loss, wheezing, and recurring pneumonia or bronchitis. ¹⁰

Diagnosis

Lung and bronchus cancer may be diagnosed by sputum cytology, fine needle aspiration (FNA) biopsy, thoracentesis, thoracoscopy, light and electron microscopy, immunohistochemistry study, chest x-ray, bronchoscopy, computed tomography (CT), or positron emission tomography (PET). 10,11

Treatment

Treatment depends on the type of cell (small or non-small) and stage of cancer. Surgery, radiation therapy, chemotherapy or targeted biological therapy are possible treatment options. ¹⁰

Table 10: Lung and Bronchus Cancer by County of Residence at Diagnosis, Nevada Residents, 2001-2005

County of	2001-2005 Incidence					
Residence	Coose	Cru	ıde Rate*	Age-Ad	Age-Adjusted Rate**	
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.	
Carson City	245	93.1	(81.4-104.7)	76.7	(67.1-86.3)	
Churchill	104	80.9	(65.4-96.5)	84.0	(67.8-100.3)	
Clark	5,702	69.8	(68.0-71.6)	76.9	(74.9-78.9)	
Douglas	204	88.2	(76.1-100.4)	66.7	(57.4-76.0)	
Elko	80	34.3	(26.8-41.8)	59.8	(45.5-74.2)	
Esmeralda	5					
Eureka	5					
Humboldt	46	55.5	(39.4-71.5)	67.3	(47.2-87.4)	
Lander	13	47.4	(21.6-73.1)	51.7	(21.0-82.4)	
Lincoln	22	125.4	(73.0-177.8)	97.6	(56.6-138.7)	
Lyon	194	93.6	(80.4-106.7)	76.4	(65.6-87.2)	
Mineral	29	123.8	(78.7-168.8)	79.1	(50.1-108.2)	
Nye	249	134.2	(117.5-150.9)	85.2	(74.3-96.1)	
Pershing	17	63.1	(33.1-93.0)	63.6	(33.2-94.1)	
Storey	8					
Washoe	1,242	66.6	(62.9-70.3)	74.7	(70.5-78.9)	
White Pine	25	65.0	(39.5-90.4)	48.5	(29.5-67.5)	
Total	8,190	71.0	(69.5-72.6)	75.8	(74.1-77.4)	

^{*} Rates are per 100,000 population.

^{**} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 11: Lung and Bronchus Cancer by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-2005

	County/Region of Residence					
Category	Total	Clark	Washoe	All Other Counties		
Total						
Cases	8,190	5,702	1,242	1,246		
Rate*	75.8	76.9	74.7	72.2		
95% C.I.	(74.1-77.4)	(74.9-78.9)	(70.5-78.9)	(68.2-76.2)		
Gender						
Male	4,280	2,947	663	670		
Rate*	84.1	84.4	86.7	80.6		
95% C.I.	(81.5-86.7)	(81.2-87.6)	(79.8-93.6)	(74.3-86.8)		
Female	3,910	2,755	579	576		
Rate*	68.7	70.5	65.4	64.8		
95% C.I.	(66.6-70.9)	(67.9-73.2)	(60.1-70.8)	(59.5-70.1)		
Race/Ethnicity						
White	7,174	4,851	1,144	1,179		
Rate*	81.4	83.8	79.5	74.7		
95% C.I.	(79.5-83.3)	(81.4-86.1)	(74.9-84.1)	(70.4-79.0)		
Black	393	363	25	5		
Rate*	70.8	70.2	92.2			
95% C.I.	(63.5-78.0)	(62.7-77.8)	(54.6-129.8)			
Native American	39	20	10	9		
Rate*	33.9	41.3	39.2			
95% C.I.	(22.6-45.2)	(21.6-61.0)	(13.4-65.1)			
Asian	206	167	31	8		
Rate*	38.6	38.1	44.0			
95% C.I.	(32.7-44.6)	(31.7-44.6)	(26.1-61.8)			
Hispanic	331	261	29	41		
Rate*	46.8	48.7	25.8	60.6		
95% C.I.	(40.9-52.6)	(41.8-55.7)	(14.8-36.7)	(40.7-80.5)		
Unknown	47	40	٨	۸		

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Figure 8: Lung and Bronchus Cancer Age-Adjusted Rates by County/Region of Residence, Nevada Residents, 2001-2005 vs. U.S. 2001-2005

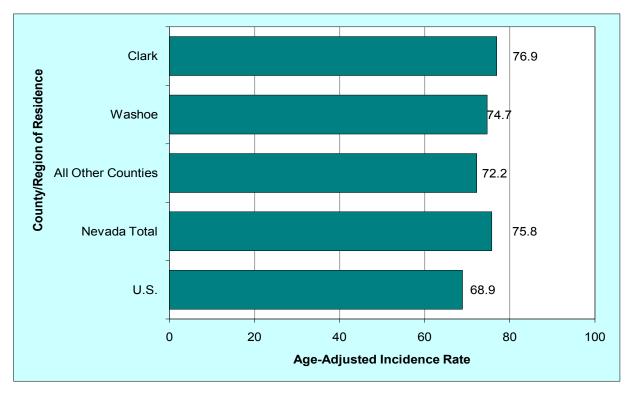


Figure 9: Lung and Bronchus Cancer by Race/Ethnicity, Nevada Residents, 2001-2005

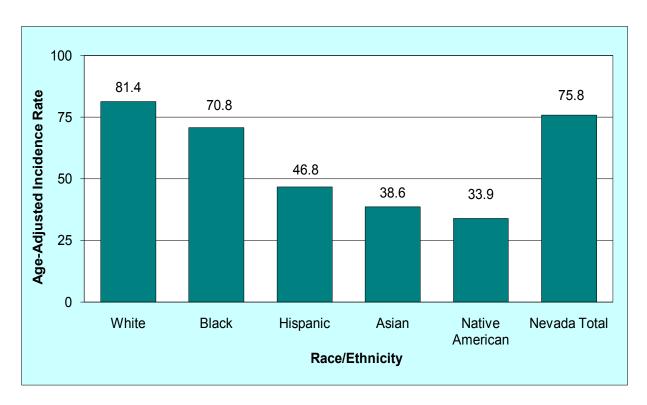


Figure 10: Lung and Bronchus Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

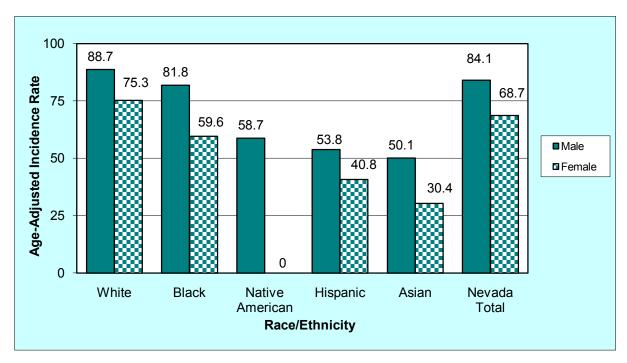


Figure 11: Lung and Bronchus Cancer by Gender and Year of Diagnosis, Nevada Residents, 2001-2005

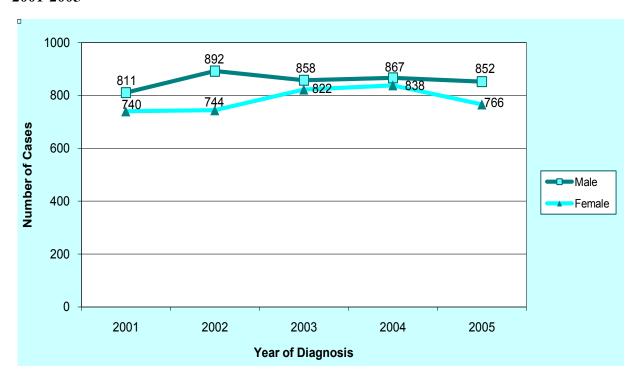


Table 12: Lung and Bronchus Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

Race/Ethnicity		Gender					
Race/i	Ethnicity	Total	Male	Female	Other		
	Incidence	8,190	4,280	3,910	0		
Total	Rate*	75.8	84.1	68.7			
	95% C.I.	(74.1-77.4)	(81.5-86.7)	(66.6-70.9)			
	Incidence	7,174	3,709	3,465	0		
White	Rate*	81.4	88.7	75.3			
	95% C.I.	(79.5-83.3)	(85.7-91.6)	(72.8-77.9)			
	Incidence	393	221	172	0		
Black	Rate*	70.8	81.8	59.6			
	95% C.I.	(63.5-78.0)	(70.6-92.9)	(50.4-68.8)			
NI-4i	Incidence	39	30	9	0		
Native American	Rate*	33.9	58.7				
American	95% C.I.	(22.6-45.2)	(35.8-81.5)		<u></u>		
	Incidence	206	108	98	0		
Asian	Rate*	38.6	50.1	30.4			
	95% C.I.	(32.7-44.6)	(39.5-60.6)	(23.7-37.2)	<u></u>		
	Incidence	331	181	150	0		
Hispanic	Rate*	46.8	53.8	40.8			
	95% C.I.	(40.9-52.6)	(44.0-63.6)	(33.5-48.0)			
Unknown		47	31	16	0		

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 13: Lung and Bronchus Cancer by Age Group and Gender, Nevada Residents, 2001-2005

Age	Gender					
Group	Total	Male	Female	Other		
Total	8,190	4,280	3,910	0		
Rate*	71.0	73.1	68.9			
95% C.I.	(69.5-72.6)	(70.9-75.3)	(66.8-71.1)			
<1	0	0	0	0		
Rate*			-			
95% C.I.						
1-4	0	0	0	0		
Rate*						
95% C.I.						
5-14	٨	٨	٨	0		
Rate*						
95% C.I.						
15-24	٨	٨	٨	0		
Rate*						
95% C.I.						
25-34	9	٨	6	0		
Rate*						
95% C.I.						
35-44	97	50	47	0		
Rate*	5.5	5.5	5.6			
95% C.I.	(4.4-6.6)	(4.0-7.0)	(4.0-7.2)			
45-54	611	336	275	0		
Rate*	39.0	42.3	35.6			
95% C.I.	(35.9-42.1)	(37.8-46.8)	(31.4-39.8)			
55-64	1,944	997	947	0		
Rate*	167.7	174.7	160.9			
95% C.I.	(160.2-175.1)	(163.8-185.5)	(150.6-171.1)			
65-74	2,940	1,634	1,306	0		
Rate*	392.1	442.9	342.9			
95% C.I.	(378.0-406.3)	(421.4-464.4)	(324.3-361.5)			
75-84	2,171	1,082	1,089	0		
Rate*	506.7	559.2	463.4			
95% C.I.	(485.4-528.0)	(525.9-592.6)	(435.9-490.9)			
85+	413	175	238	0		
Rate*	402.6	505.1	350.3			
95% C.I.	(363.8-441.4)	(430.3-579.9)	(305.8-394.8)			

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

[^] Cases less than five have been suppressed.
The "--" denotes suppressed rates and confidence intervals for cases less than ten.

PROSTATE CANCER

Incidence

Prostate cancer was the second leading type of cancer in Nevada and the leading type of cancer among males with 7,733 cases reported during the 2001-2005 period. Nevada had a lower incidence rate (149.3 per 100,000) of prostate cancer compared to the national rate (158.2) during the same period. All Other Counties had the highest incidence rate (159.2) compared to Washoe County (159.1) and Clark County (144.6). Other counties with high incidence rates were Lincoln (240.0) and Mineral (223.1). Blacks accounted for only 6.7% of all reported cases of prostate cancer and yet Blacks had the highest incidence rate (203.2) compared to Whites (151.7), Hispanics (151.4), Native Americans (95.2), and Asians (67.0), who had the lowest incidence rate.

Risk Factors

The risk of prostate cancer is highest for African-Americans and older men. Other risk factors include: family history, exposure to cadmium, and a diet high in fat. ^{10,12}

Signs and Symptoms

Early prostate cancer has no symptoms. However, with advanced disease, symptoms may include the following although they are not specific to prostate cancer: delayed or slowed start of urinary stream, urinary retention, pain or burning with urination, pain with ejaculation, lower back pain, and pain with bowel movement. In addition, excessive urination at night, incontinence, bone pain or tenderness, blood streaked urine, abdominal pain, lethargy, and unintentional weight loss are other symptoms of prostate cancer. ^{10,12}

Diagnosis

Prostate cancer may be diagnosed by digital rectal exam, prostate-specific antigen (PSA) test, transrectal ultrasound, and/or biopsy (transrectal and transperineal).¹³

Treatment

Treatment options depend on the age, stage of cancer, and other medical conditions. They include; surgery, external beam radiation, and branchytherapy for early stage disease. Careful observation ("watchful waiting"), hormonal therapy, chemotherapy or a combination of these treatments may be used for late stage disease. ¹⁰

Table 14: Prostate Cancer by County of Residence at Diagnosis, Nevada Residents, 2001-2005

County of	2001-2005 Incidence					
Residence	0	Cru	de Rate*	Age-Adj	Age-Adjusted Rate**	
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.	
Carson City	289	223.3	(197.6-249.0)	208.3	(184.2-232.4)	
Churchill	127	197.5	(163.2-231.9)	210.7	(173.5-248.0)	
Clark	5,171	124.5	(121.1-127.9)	144.6	(140.5-148.7)	
Douglas	258	221.8	(194.8-248.9)	176.1	(153.6-198.5)	
Elko	81	66.8	(52.3-81.4)	126.4	(90.7-162.1)	
Esmeralda	9					
Eureka	5					
Humboldt	41	93.9	(65.2-122.6)	111.1	(75.9-146.2)	
Lander	14	99.3	(47.3-151.3)	109.1	(46.9-171.3)	
Lincoln	26	301.2	(185.4-416.9)	240.0	(147.1-333.0)	
Lyon	190	181.6	(155.7-207.4)	153.4	(131.4-175.4)	
Mineral	40	340.2	(234.7-445.6)	223.1	(152.0-294.2)	
Nye	165	175.1	(148.4-201.9)	109.0	(91.8-126.3)	
Pershing	13	94.3	(43.0-145.6)	112.5	(48.9-176.0)	
Storey	14	142.1	(67.7-216.6)	94.1	(42.4-145.7)	
Washoe	1,250	132.0	(124.7-139.3)	159.1	(149.9-168.2)	
White Pine	40	212.5	(146.6-278.3)	167.3	(115.3-219.3)	
Total	7,733	132.0	(129.1-135.0)	149.3	(145.8-152.7)	

^{*} Rates are per 100,000 male population.

^{**} Rates are per 100,000 male population and are age-adjusted to the 2000 U.S. Standard Population.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 15: Prostate Cancer by Race/Ethnicity and Region, Nevada Residents, 2001-2005

	County/Region of Residence					
Category	Total	Clark	Washoe	All Other Counties		
Total						
Cases	7,733	5,171	1,250	1,312		
Rate*	149.3	144.6	159.1	159.2		
95% C.I.	(145.8-152.7)	(140.5-148.7)	(149.9-168.2)	(150.3-168.1)		
Gender						
Male	7,733	5,171	1,250	1,312		
Rate*	149.3	144.6	159.1	159.2		
95% C.I.	(145.8-152.7)	(140.5-148.7)	(149.9-168.2)	(150.3-168.1)		
Female	0	0	0	0		
Rate*						
95% C.I.						
Race/Ethnicity						
White	6,223	3,934	1,097	1,192		
Rate*	151.7	146.1	163.1	161.5		
95% C.I.	(147.9-155.5)	(141.5-150.7)	(153.2-173.0)	(152.2-170.8)		
Black	517	481	29	7		
Rate*	203.2	206.2	228.0			
95% C.I.	(184.7-221.8)	(186.7-225.8)	(139.0-317.0)			
Native American	42	^	13	25		
Rate*	95.2		112.7	147.6		
95% C.I.	(63.9-126.6)		(44.0-181.4)	(87.3-207.8)		
Asian	137	106	25	6		
Rate*	67.0	65.2	74.6			
95% C.I.	(54.7-79.4)	(51.1-79.4)	(45.0-104.2)			
Hispanic	464	352	63	49		
Rate*	151.4	157.0	141.7	143.1		
95% C.I.	(135.0-167.8)	(136.7-177.2)	(100.7-182.6)	(100.0-186.2)		
Unknown	350	294	23	33		

Note:

^{*} Rates are per 100,000 male population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Figure 12: Prostate Cancer Age-Adjusted Rates by County/Region of Residence, Nevada Residents, 2001-2005 vs. U.S. 2001-2005

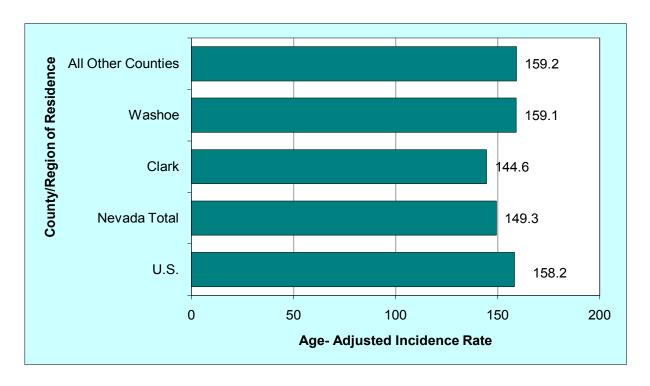
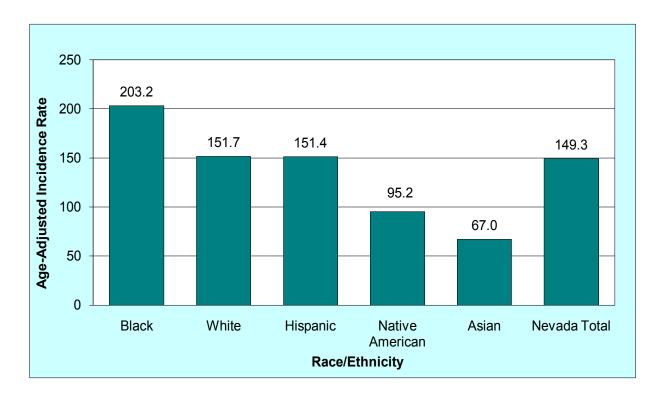


Figure 13: Prostate Cancer by Race/Ethnicity, Nevada Residents, 2001-2005





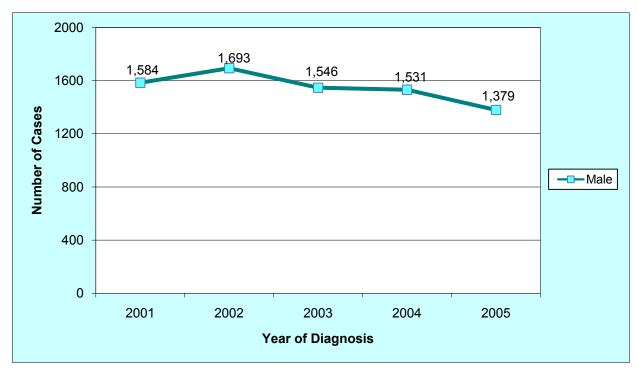


Table 16: Prostate Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

Race/Ethnicity		Gender					
		Total	Male	Female	Other		
	Incidence	7,733	7,733	0	0		
Total	Rate*	149.3	149.3				
	95% C.I.	(145.8-152.7)	(145.8-152.7)				
	Incidence	6,223	6,223	0	0		
White	Rate*	151.7	151.7				
	95% C.I.	(147.9-155.5)	(147.9-155.5)				
	Incidence	517	517	0	0		
Black	Rate*	203.2	203.2				
	95% C.I.	(184.7-221.8)	(184.7-221.8)				
Nation	Incidence	42	42	0	0		
Native American	Rate*	95.2	95.2				
7 tillellean	95% C.I.	(63.9-126.6)	(63.9-126.6)	<u></u>	<u></u>		
	Incidence	137	137	0	0		
Asian	Rate*	67.0	67.0				
	95% C.I.	(54.7-79.4)	(54.7-79.4)				
	Incidence	464	464	0	0		
Hispanic	Rate*	151.4	151.4				
	95% C.I.	(135.0-167.8)	(135.0-167.8)				
Unknown		350	350	0	0		

^{*} Rates are per 100,000 male population and are age-adjusted to the 2000 U.S. Standard Population. Rates were adjusted for cases where race/ethnicity was listed as other/unknown.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 17: Prostate Cancer by Age Group, Nevada Residents, 2001-2005

Age	Gender						
Group	Total	Male	Female	Other			
Total	7,733	7,733	0	0			
Rate*	132.0	132.0					
95% C.I.	(129.1-135.0)	(129.1-135.0)					
<1	0	0	0	0			
Rate*							
95% C.I.							
1-4	0	0	0	0			
Rate*							
95% C.I.				<u></u>			
5-14	0	0	0	0			
Rate*							
95% C.I.				<u></u>			
15-24	0	0	0	0			
Rate*							
95% C.I.							
25-34	٨	۸	0	0			
Rate*							
95% C.I.							
35-44	28	28	0	0			
Rate*	3.1	3.1					
95% C.I.	(1.9-4.2)	(1.9-4.2)					
45-54	556	556	0	0			
Rate*	70.0	70.0					
95% C.I.	(64.2-75.8)	(64.2-75.8)					
55-64	2,111	2,111	0	0			
Rate*	369.8	369.8					
95% C.I.	(354.0-385.6)	(354.0-385.6)					
65-74	3,107	3,107	0	0			
Rate*	842.2	842.2					
95% C.I.	(812.6-871.8)	(812.6-871.8)					
75-84	1,618	1,618	0	0			
Rate*	836.3	836.3					
95% C.I.	(795.5-877.0)	(795.5-877.0)					
85+	311	311	0	0			
Rate*	897.6	897.6					
95% C.I.	(797.9-997.4)	(797.9-997.4)	<u></u>				

^{*} Rates are per 100,000 male population.
^ Cases less than five have been suppressed.
The "--" denotes suppressed rates and confidence intervals for cases less than ten.

BREAST CANCER

Incidence

Breast cancer was the third leading type of cancer in Nevada with 6,731 cases (78 males and 6,652 females) reported during the 2001-2005 period. Breast cancer was the leading type of cancer among females in Nevada. Nevada had a lower incidence rate (115.2 per 100,000) of female breast cancer compared to the national rate (123.5) during the same period. Washoe County had the highest incidence rate (126.9) of female breast cancer compared to Clark County (113.6) and All Other Counties (110.1). Other counties with high incidence rates of female breast cancer were Lander (147.4) and Carson City (137.6). Whites had the highest incidence rate of female breast cancer (122.8) compared to Blacks (113.7), Hispanics (84.7), Asians (74.6), and Native Americans (59.5), who had the lowest incidence rate.

Risk Factors

The risk of breast cancer is highest for Whites, and older women. Other risk factors include: family history, dense breast tissue, biopsy-confirmed hyperplasia, radiation therapy to the chest/breast, recent use of oral contraceptives, hormone replacement therapy, being obese or overweight, and heavy alcohol consumption. In addition, reproductive factors that increase the risk of breast cancer include; early age at menarche, older age at first birth, or never having children. In 10,14,15

Signs and Symptoms

Early breast cancer does not usually have symptoms. Breast cancer symptoms include: lump in the armpit with uneven edges, which does not hurt, change in size, shape or feel of the breast or nipple, and discharge from the nipple. ^{10,14,15} Symptoms of advanced breast cancer include: bone pain, breast pain or discomfort, skin ulcers, swelling of the arm next to the breast with cancer, weight loss and, a larger tumor may present as a painless mass. ^{1, 10,14,15}

Diagnosis

Common tests and procedures for breast cancer diagnosis include: self and clinical breast exam, mammogram, breast ultrasound, magnetic resonance imaging (MRI), and/or biopsy (excisional, incisional, core, fine-needle aspiration). 10,14,15

Treatment

Treatment options depend on tumor size, stage and the person's preference. Treatment may involve radiation, lumpectomy, mastectomy, chemotherapy, hormone therapy, or targeted biologic therapy. A combination of two or more methods is often used. 10,14

Table 18: Female Breast Cancer by County of Residence at Diagnosis, Nevada Residents, 2001-2005

County of	2001-2005 Incidence					
Residence	Cases	Cru	de Rate*	ate* Age-Adjusted Rate**		
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.	
Carson City	229	171.2	(149.0-193.4)	137.6	(119.5-155.6)	
Churchill	70	109.0	(83.4-134.5)	105.6	(80.8-130.4)	
Clark	4,531	112.9	(109.6-116.1)	113.6	(110.2-116.9)	
Douglas	155	134.9	(113.7-156.2)	100.4	(84.4-116.5)	
Elko	83	74.2	(58.2-90.1)	93.0	(71.6-114.4)	
Esmeralda	5					
Eureka	٨					
Humboldt	32	81.5	(53.3-109.8)	84.6	(54.2-114.9)	
Lander	17	127.4	(66.8-187.9)	147.4	(74.7-220.1)	
Lincoln	15	168.3	(83.1-253.4)	127.4	(62.0-192.8)	
Lyon	163	158.8	(134.4-183.1)	132.8	(112.2-153.4)	
Mineral	15	128.6	(63.5-193.6)	98.7	(45.9-151.5)	
Nye	126	137.9	(113.9-162.0)	94.0	(76.9-111.0)	
Pershing	13	98.7	(45.0-152.3)	88.0	(39.8-136.1)	
Storey	10	110.5	(42.0-179.0)	83.8	(30.2-137.4)	
Washoe	1,168	127.1	(119.8-134.3)	126.9	(119.6-134.2)	
White Pine	19	96.6	(53.2-140.1)	65.1	(35.3-94.9)	
Total	6,652	117.2	(114.4-120.1)	115.2	(112.5-118.0)	

^{*} Rates are per 100,000 female population.

** Rates are per 100,000 female population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 19: Female Breast Cancer by Race/Ethnicity and Region, Nevada Residents, 2001-2005

	County/Region of Residence					
Category	Total	Clark	Washoe	All Other Counties		
Total						
Cases	6,652	4,531	1,168	953		
Rate*	115.2	113.6	126.9	110.1		
95% C.I.	(112.5-118.0)	(110.2-116.9)	(119.6-134.2)	(103.0-117.1)		
Gender						
Male	0	0	0	0		
Rate*				_		
95% C.I.						
Female	6,652	4,531	1,168	953		
Rate*	115.2	113.6	126.9	110.1		
95% C.I.	(112.5-118.0)	(110.2-116.9)	(119.6-134.2)	(103.0-117.1)		
Race/Ethnicity						
White	5,397	3,500	1,025	872		
Rate*	122.8	122.3	134.2	112.9		
95% C.I.	(119.6-126.1)	(118.3-126.4)	(126.0-142.4)	(105.4-120.5)		
Black	363	339	18	6		
Rate*	113.7	112.7	133.3			
95% C.I.	(101.8-125.6)	(100.5-124.9)	(70.9-195.7)			
Native American	43	16	11	16		
Rate*	59.5	50.5	67.3	62.7		
95% C.I.	(41.4-77.7)	(25.0-76.1)	(27.3-107.2)	(31.6-93.9)		
Asian	250	207	31	12		
Rate*	74.6	73.5	67.8	135.2		
95% C.I.	(63.8-85.3)	(62.0-85.0)	(42.4-93.1)	(29.5-240.9)		
Hispanic	491	379	71	41		
Rate*	84.7	83.1	95.7	85.4		
95% C.I.	(76.4-93.0)	(73.8-92.3)	(70.7-120.8)	(56.0-114.8)		
Unknown	108	90	12	6		

^{*} Rates are per 100,000 female population and are age-adjusted to the 2000 U.S. Standard Population. Rates were adjusted for cases where race/ethnicity was listed as other/unknown.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Figure 15: Female Breast Cancer Age-Adjusted Rates by County/Region of Residence, Nevada Residents, 2001-2005 vs. U.S. 2001-2005

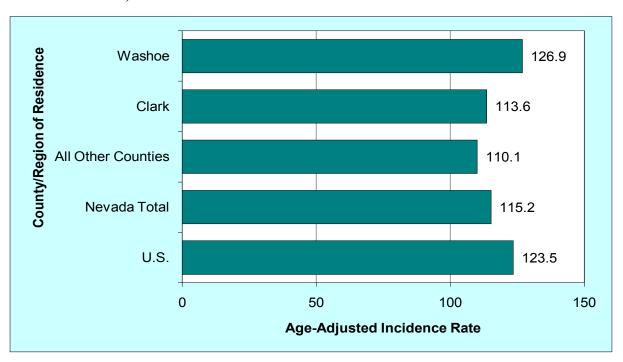
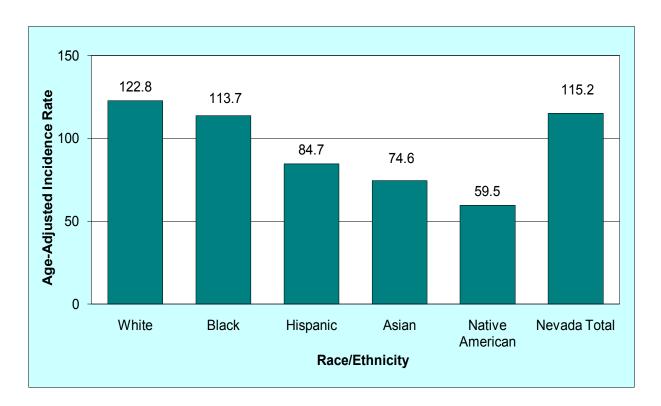
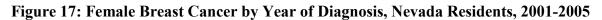


Figure 16: Female Breast Cancer by Race/Ethnicity, Nevada Residents, 2001-2005





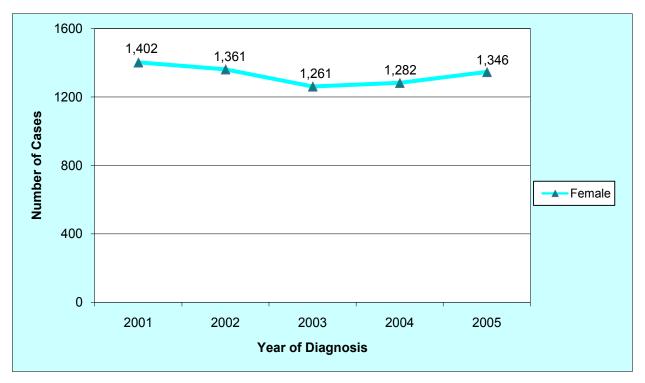


Table 20: Breast Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

Race/Ethnicity		Gender					
Race/E	etnnicity .	Total	Male	Female	Other		
	Incidence	6,731	78	6,652	٨		
Total	Rate*	60.2	1.5	115.2			
	95% C.I.	(58.8-61.7)	(1.2-1.9)	(112.5-118.0)	<u></u>		
	Incidence	5,469	71	5397	^		
White	Rate*	63.6	1.7	122.8			
	95% C.I.	(61.9-65.3)	(1.3-2.1)	(119.6-126.1)			
	Incidence	365	۸	363	^		
Black	Rate*	60.4		113.7			
	95% C.I.	(53.9-66.8)		(101.8-125.6)			
Nation	Incidence	43	0	43	0		
Native American	Rate*	31.9		59.5			
American	95% C.I.	(22.0-41.7)		(41.4-77.7)			
	Incidence	253	۸	250	٨		
Asian	Rate*	43.6		74.6			
	95% C.I.	(37.3-49.9)		(63.8-85.3)			
	Incidence	493	۸	491	٨		
Hispanic	Rate*	43.5		84.7			
	95% C.I.	(39.0-48.0)		(76.4-93.0)			
Unknown		108	0	108	0		

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 21: Breast Cancer by Age group and Gender, Nevada Residents, 2001-2005

Age	Gender						
Group	Total	Male	Female	Other			
Total	6,731	78	6,652	۸			
Rate*	58.4	1.3	117.2				
95% C.I.	(57.0-59.8)	(1.0-1.6)	(114.4-120.1)				
<1	0	0	0	0			
Rate*							
95% C.I.							
1-4	0	0	0	0			
Rate*							
95% C.I.							
5-14	۸	0	٨	0			
Rate*							
95% C.I.	<u></u>						
15-24	5	0	5	0			
Rate*							
95% C.I.							
25-34	118	٨	117	0			
Rate*	7.0		14.5				
95% C.I.	(5.7-8.3)		(11.9-17.1)				
35-44	626	6	620	0			
Rate*	35.6		73.5				
95% C.I.	(32.9-38.4)		(67.7-79.2)				
45-54	1,354	5	1,349	0			
Rate*	86.4		174.7				
95% C.I.	(81.8-91.0)		(165.4-184.0)				
55-64	1,827	15	1,811	^			
Rate*	157.6	2.6	307.7				
95% C.I.	(150.4-164.8)	(1.3-4.0)	(293.5-321.9)				
65-74	1,553	26	1,527	0			
Rate*	207.1	7.0	401.0				
95% C.I.	(196.8-217.4)	(4.3-9.8)	(380.9-421.1)				
75-84	967	22	945	0			
Rate*	225.7	11.4	402.1				
95% C.I.	(211.5-239.9	(6.6-16.1)	(376.5-427.8)				
85+	280	٨	277	٨			
Rate*	272.9		407.7				
95% C.I.	(241.0-304.9)		(359.7-455.7)				

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

[^] Cases less than five have been suppressed.
The "--" denotes suppressed rates and confidence intervals for cases less than ten.

COLORECTAL CANCER

Incidence

Colorectal cancer was the fourth leading cancer in Nevada with 5,242 cases (2,867 males and 2,375 females) reported during the 2001-2005 period. Nevada had a lower incidence rate (49.5 per 100,000) of colorectal cancer compared to the national rate (51.6) during the same period. Males had a higher incidence rate (57.1) compared to females (42.8). Clark County had the highest incidence rate (50.2) compared to Washoe County (49.8) and All Other Counties (45.8). Other counties with high incidence rates were Lincoln (109.1) and Mineral (84.5). Blacks had the highest incidence rate (57.5) compared to Whites (50.5), Hispanics (44.3), Asians (42.1), and Native Americans (23.6), who had the lowest incidence rate.

Risk Factors

The risk of colorectal cancer is highest for African Americans and older people. Other risk factors include: family history, personal history of colorectal, breast, ovary and endometrium cancers, colorectal polyps, inflammatory bowel disease (ulcerative colitis or Crohn's disease) and certain hereditary conditions such as Lynch syndrome. Modifiable factors associated with the risk of colorectal cancer include: a diet high in red or processed meat, smoking, physical inactivity, being obese or overweight, and heavy alcohol consumption. 16,17,18

Signs and Symptoms

Many cases of colon cancer have no symptoms. The following symptoms may be indicative of colon cancer: bloody stool, diarrhea, constipation or a change in bowel habits, narrow stools, unintended weight loss, vomiting, and lethargy. 16,17,18

Diagnosis

Colorectal cancer may be diagnosed by physical exam and history, fecal occult blood test (FOBT), digital rectal exam, barium enema, sigmoidoscopy, colonoscopy, biopsy, and/or virtual colonoscopy. ¹⁷

Treatment

Treatment depends on the stage of cancer, patient's health, and whether the cancer has recurred. Surgery, chemotherapy, radiation, targeted therapy, and clinical trials are some of the treatment options.¹⁸

Table 22: Colorectal Cancer by County of Residence at Diagnosis, Nevada Residents, 2001-2005

County of	2001-2005 Incidence					
Residence	0	Cru	de Rate*	Age-Adju	Age-Adjusted Rate**	
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.	
Carson City	163	61.9	(52.4-71.4)	53.2	(45.0-61.5)	
Churchill	54	42.0	(30.8-53.2)	45.0	(32.9-57.1)	
Clark	3,663	44.8	(43.4-46.3)	50.2	(48.6-51.9)	
Douglas	116	50.2	(41.0-59.3)	39.3	(32.0-46.6)	
Elko	69	29.6	(22.6-36.6)	44.9	(33.0-56.7)	
Esmeralda	٨					
Eureka	٨					
Humboldt	29	35.0	(22.2-47.7)	41.0	(25.5-56.5)	
Lander	12	43.7	(19.0-68.4)	51.6	(20.3-83.0)	
Lincoln	23	131.1	(77.5-184.7)	109.1	(63.5-154.6)	
Lyon	109	52.6	(42.7-62.4)	45.9	(37.1-54.6)	
Mineral	27	115.3	(71.8-158.7)	84.5	(51.6-117.3)	
Nye	120	64.7	(53.1-76.2)	42.3	(34.3-50.2)	
Pershing	6					
Storey	9					
Washoe	817	43.8	(40.8-46.8)	49.8	(46.4-53.3)	
White Pine	20	52.0	(29.2-74.7)	38.6	(21.4-55.9)	
Unknown	^					
Total	5,242	45.5	(44.2-46.7)	49.5	(48.2-50.9)	

^{*} Rates are per 100,000 population.

** Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 23: Colorectal Cancer by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-2005

	County/Region of Residence						
Category	Total	Clark	Washoe	All Other Counties	Unknown‡		
Total							
Cases	5,242	3,663	817	761	٨		
Rate*	49.5	50.2	49.8	45.8			
95% C.I.	(48.2-50.9)	(48.6-51.9)	(46.4-53.3)	(42.5-49.1)			
Gender							
Male	2,867	1,994	435	438	0		
Rate*	57.1	57.9	57.4	53.7			
95% C.I.	(54.9-59.3)	(55.2-60.6)	(51.7-63.1)	(48.5-58.9)			
Female	2,375	1,669	382	323	^		
Rate*	42.8	43.7	43.5	37.8			
95% C.I.	(41.1-44.6)	(41.6-45.9)	(39.1-47.8)	(33.7-42.0)			
Race/Ethnicity							
White	4,299	2,867	729	702	٨		
Rate*	50.5	51.1	52.1	46.5			
95% C.I.	(49.0-52.0)	(49.2-52.9)	(48.3-55.9)	(43.1-50.0)			
Black	319	302	15	٨	0		
Rate*	57.5	58.8	52.6				
95% C.I.	(50.9-64.2)	(51.8-65.8)	(25.2-80.1)				
Native American	30	5	8	17	0		
Rate*	23.6			37.6			
95% C.I.	(14.7-32.5)	-		(19.4-55.9)			
Asian	194	161	28	5	0		
Rate*	42.1	42.7	44.8				
95% C.I.	(34.8-49.5)	(34.4-51.0)	(24.9-64.7)				
Hispanic	347	289	28	30	0		
Rate*	44.3	47.8	24.8	42.1			
95% C.I.	(38.7-49.8)	(41.2-54.5)	(15.0-34.6)	(24.9-59.4)			
Unknown	53	39	9	5	0		

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

[‡] Cases of unreported county are listed as unknown

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Figure 18: Colorectal Cancer Age-Adjusted Rates by County/Region of Residence, Nevada Residents, 2001-2005 vs. U.S. 2001-2005

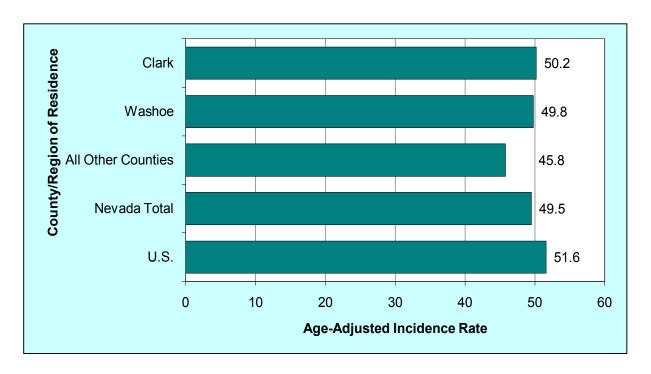


Figure 19: Colorectal Cancer by Race/Ethnicity, Nevada Residents, 2001-2005

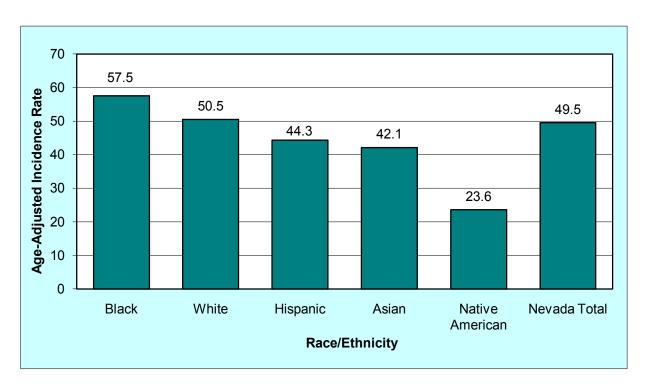


Figure 20: Colorectal Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

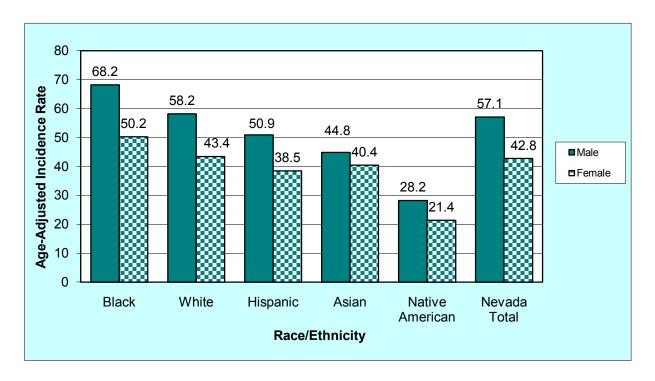


Figure 21: Colorectal Cancer by Gender and Year of Diagnosis, Nevada Residents, 2001-2005

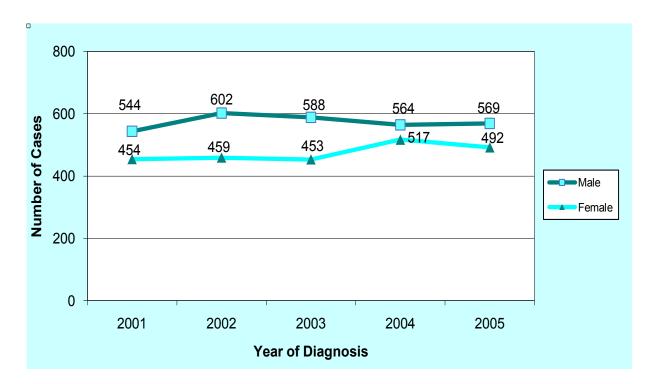


Table 24: Colorectal Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

D/	-41114	Gender					
Race/Ethnicity		Total	Male	Female	Other		
	Incidence	5,242	2,867	2,375	0		
Total	Rate*	49.5	57.1	42.8			
	95% C.I.	(48.2-50.9)	(54.9-59.3)	(41.1-44.6)			
	Incidence	4,299	2,371	1,928	0		
White	Rate*	50.5	58.2	43.4			
	95% C.I.	(49.0-52.0)	(55.8-60.6)	(41.5-45.4)			
	Incidence	319	171	148	0		
Black	Rate*	57.5	68.2	50.2			
	95% C.I.	(50.9-64.2)	(56.6-79.8	(41.9-58.4)			
NI-4ii in	Incidence	30	14	16	0		
Native American	Rate*	23.6	28.2	21.4			
- Tillelleall	95% C.I.	(14.7-32.5)	(11.7-44.6)	(10.7-32.1)	<u> </u>		
-	Incidence	194	84	110	0		
Asian	Rate*	42.1	44.8	40.4			
	95% C.I.	(34.8-49.5)	(32.5-57.1)	(31.2-49.6)			
	Incidence	347	189	158	0		
Hispanic	Rate*	44.3	50.9	38.5			
	95% C.I.	(38.7-49.8)	(41.7-60.0)	(31.7-45.4)			
Unknown		53	38	15	0		

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population. Rates were adjusted for cases where race/ethnicity was listed as other/unknown.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 25: Colorectal Cancer by Age Group and Gender, Nevada Residents, 2001-2005

Age	Gender						
Group	Total	Male	Female	Other			
Total	5,242	2,867	2,375	0			
Rate*	45.5	48.9	41.8				
95% C.I.	(44.2-46.7)	(47.2-50.7)	(40.2-43.5)				
<1	0	0	0	0			
Rate*							
95% C.I.							
1-4	0	0	0	0			
Rate*							
95% C.I.							
5-14	0	0	0	0			
Rate*							
95% C.I.	<u></u>						
15-24	8	٨	٨	0			
Rate*							
95% C.I.							
25-34	41	17	24	0			
Rate*	2.4	1.9	3.0				
95% C.I.	(1.7-3.2)	(1.0-2.9)	(1.8-4.2)				
35-44	159	78	81	0			
Rate*	9.1	8.6	9.6				
95% C.I.	(7.6-10.5)	(6.7-10.4)	(7.5-11.7)				
45-54	567	302	265	0			
Rate*	36.2	38.0	34.3				
95% C.I.	(33.2-39.2)	(33.7-42.3)	(30.2-38.5)				
55-64	1,118	691	427	0			
Rate*	96.4	121.1	72.5				
95% C.I.	(90.8-102.1)	(112.0-130.1)	(65.7-79.4)				
65-74	1,561	921	640	0			
Rate*	208.2	249.6	168.1				
95% C.I.	(197.9-218.5)	(233.5-265.8)	(155.0-181.1)				
75-84	1,381	697	684	0			
Rate*	322.3	360.3	291.1				
95% C.I.	(305.3-339.3)	(333.5-387.0)	(269.3-312.9)				
85+	407	157	250	0			
Rate*	396.7	453.1	368.0				
95% C.I.	(358.2-435.3)	(382.3-524.0)	(322.4-413.6)				

^{*} Rates are per 100,000 age-specific population. ^ Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

URINARY BLADDER CANCER

Incidence

During the 2001-2005 period, 2,708 cases (2,092 males and 616 females) of urinary bladder cancer were reported in Nevada. Nevada had a higher incidence rate (25.7 per 100,000) of urinary bladder cancer than the national rate (21.9) during the same period. Males had a higher incidence rate (43.2) compared to females (11.1). All Other Counties had the highest incidence rate (28.6) compared to Washoe County (25.4) and Clark County (25.0). Other counties with high incidence rates were Carson City (36.5) and Mineral (33.2). Whites had the highest incidence rate (28.8) compared to Blacks (14.3), Hispanics (12.6), and Asians (8.8). The rate for Native Americans was not calculated due to extremely low numbers.

Risk Factors

Smoking is a major risk factor for urinary bladder cancer. Other risk factors include: being older, male, White, exposure to certain dyes, rubber, leather, paint, and hairdressing supplies, arsenic in drinking water, and a diet high in fat and fried meats. ^{10,19}

Signs and Symptoms

The commonest symptom of urinary bladder is blood in the urine. Other signs and symptoms include: frequent urination, an urgency to urinate, painful urination, urinary incontinence, and lower back pain. ^{10,19}

Diagnosis

Urinary bladder cancer may be diagnosed by computerized tomography (CT) scan, urinalysis, internal rectal or vaginal exam, intravenous pyelogram (IVP), cystoscopy, biopsy, or urine cytology.¹⁹

Treatment

Treatment options for urinary bladder cancer include: surgery, radical cystectomy, chemotherapy, immunotherapy, or radiation. ¹⁰

Table 26: Urinary Bladder Cancer by County of Residence at Diagnosis, Nevada Residents, 2001-2005

County of	2001-2005 Incidence				
Residence	Crude Rate*		Age-Ad	Age-Adjusted Rate**	
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.
Carson City	114	43.3	(35.4-51.3)	36.5	(29.7-43.2)
Churchill	36	28.0	(18.9-37.2)	29.4	(19.7-39.1)
Clark	1,826	22.4	(21.3-23.4)	25.0	(23.9-26.2)
Douglas	74	32.0	(24.7-39.3)	25.9	(19.8-31.9)
Elko	31	13.3	(8.6-18.0)	26.3	(16.2-36.5)
Esmeralda	٨				
Eureka	٨				
Humboldt	12	14.5	(6.3-22.7)	16.7	(6.9-26.5)
Lander	9				
Lincoln	9				
Lyon	69	33.3	(25.4-41.1)	29.7	(22.6-36.9)
Mineral	11	47.0	(19.2-74.7)	33.2	(12.4-54.0)
Nye	74	39.9	(30.8-49.0)	27.0	(20.6-33.3)
Pershing	9				
Storey	6				
Washoe	411	22.0	(19.9-24.2)	25.4	(22.9-27.9)
White Pine	14	36.4	(17.3-55.4)	25.7	(12.2-39.1)
Total	2,708	23.5	(22.6-24.4)	25.7	(24.7-26.7)

^{*} Rates are per 100,000 population.

** Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 27: Urinary Bladder Cancer Gender, by Race/Ethnicity and Region, Nevada Residents, 2001-2005

	County/Region of Residence					
Category	Total Clark		Washoe	All Other Counties		
Total						
Cases	2,708	1,826	411	471		
Rate*	25.7	25.0	25.4	28.6		
95% C.I.	(24.7-26.7)	(23.9-26.2)	(22.9-27.9)	(26.0-31.2)		
Gender						
Male	2,092	1,398	311	383		
Rate*	43.2	41.7	42.8	49.8		
95% C.I.	(41.3-45.2)	(39.3-44.0)	(37.7-47.8)	(44.7-55.0)		
Female	616	428	100	88		
Rate*	11.1	11.1	11.6	10.1		
95% C.I.	(10.2-11.9)	(10.0-12.2)	(9.3-13.8)	(8.0-12.3)		
Race/Ethnicity						
White	2,429	1,588	385	456		
Rate*	28.8	28.6	27.5	30.4		
95% C.I.	(27.6-29.9)	(27.2-30.0)	(24.7-30.2)	(27.5-33.2)		
Black	73	69	٨	^		
Rate*	14.3	14.8				
95% C.I.	(10.9-17.8)	(11.1-18.5)				
Native American	6	٨	٨	۸		
Rate*						
95% C.I.						
Asian	41	38	٨	0		
Rate*	8.8	9.3				
95% C.I.	(5.6-12.0)	(6.0-12.7)				
Hispanic	88	63	16	9		
Rate*	12.6	12.0	18.0			
95% C.I.	(9.6-15.6)	(8.7-15.4)	(7.1-28.9)			
Unknown	71	66	٨	^		

Note:

Rates were adjusted for cases where race/ethnicity was listed as other/unknown.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

Figure 22: Urinary Bladder Cancer Age-Adjusted Rates by County/Region of Residence, Nevada Residents, 2001-2005 vs. U.S. 2001-2005

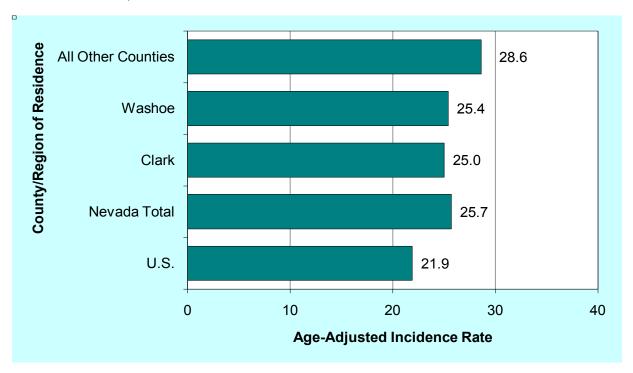


Figure 23: Urinary Bladder Cancer by Race/Ethnicity, Nevada Residents, 2001-2005

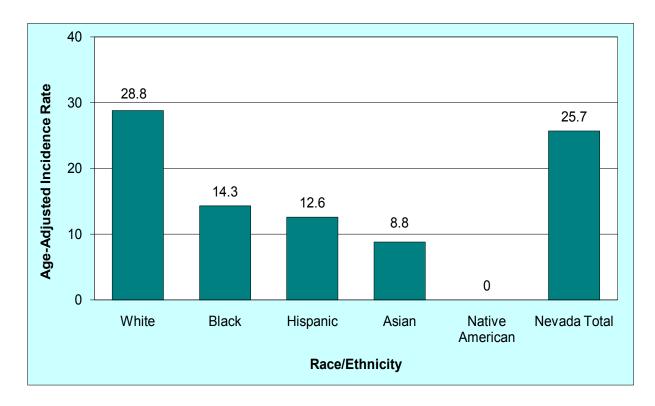


Figure 24: Urinary Bladder Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

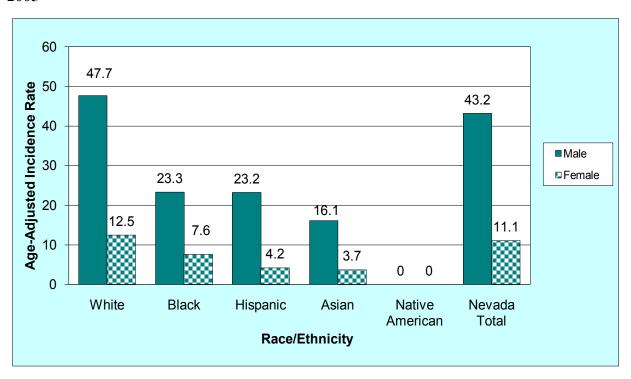


Figure 25: Urinary Bladder Cancer by Gender and Year of Diagnosis, Nevada Residents, 2001-2005

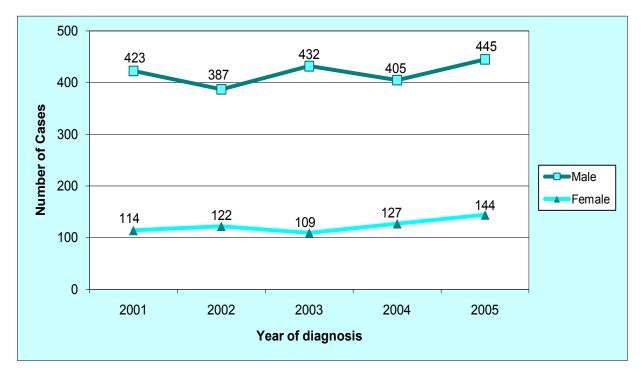


Table 28: Urinary Bladder Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

Race/Ethnicity		Gender					
		Total	Male	Female	Other		
	Incidence	2,708	2,092	616	0		
Total	Rate*	25.7	43.2	11.1			
	95% C.I.	(24.7-26.7)	(41.3-45.2)	(10.2-11.9)			
	Incidence	2,429	1,880	549	0		
White	Rate*	28.8	47.7	12.5			
	95% C.I.	(27.6-29.9)	(45.5-49.9)	(11.5-13.5)			
	Incidence	73	52	21	0		
Black	Rate*	14.3	23.3	7.6			
	95% C.I.	(10.9-17.8)	(16.1-30.6)	(4.3-10.9)			
Native	Incidence	6	5	٨	0		
American	Rate*						
American	95% C.I.	-					
	Incidence	41	29	12	0		
Asian	Rate*	8.8	16.1	3.7			
	95% C.I.	(5.6-12.0)	(9.0-23.3)	(1.5-5.8)			
	Incidence	88	72	16	0		
Hispanic	Rate*	12.6	23.2	4.2			
	95% C.I.	(9.6-15.6)	(16.7-29.8)	(2.0-6.5)			
Unknown		71	54	17	0		

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 29: Urinary Bladder Cancer by Age Group and Gender, Nevada Residents, 2001-2005

Age	Gender						
Group	Total	Male	Female	Other			
Total	2,708	2,092	616	0			
Rate*	23.5	35.7	10.9				
95% C.I.	(22.6-24.4)	(34.2-37.2)	(10.0-11.7)				
<1	0	0	0	0			
Rate*							
95% C.I.							
1-4	0	0	0	0			
Rate*							
95% C.I.							
5-14	0	0	0	0			
Rate*							
95% C.I.							
15-24	٨	0	۸	0			
Rate*							
95% C.I.							
25-34	11	8	۸	0			
Rate*	0.7						
95% C.I.	(0.3-1.0)						
35-44	61	46	15	0			
Rate*	3.5	5.0	1.8				
95% C.I.	(2.6-4.3)	(3.6-6.5)	(0.9-2.7)				
45-54	185	132	53	0			
Rate*	11.8	16.6	6.9				
95% C.I.	(10.1-13.5)	(13.8-19.5)	(5.0-8.7)				
55-64	537	437	100	0			
Rate*	46.3	76.6	17.0				
95% C.I.	(42.4-50.2)	(69.4-83.7)	(13.7-20.3)				
65-74	905	689	216	0			
Rate*	120.7	186.8	56.7				
95% C.I.	(112.8-128.6)	(172.8-200.7)	(49.2-64.3)				
75-84	814	643	171	0			
Rate*	190.0	332.3	72.8				
95% C.I.	(176.9-203.0)	(306.7-358.0)	(61.9-83.7)				
85+	192	137	55	0			
Rate*	187.2	395.4	81.0				
95% C.I.	(160.7-213.6)	(329.2-461.6)	(59.6-102.3)				

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

[^] Cases less than five have been suppressed.
The "--" denotes suppressed rates and confidence intervals for cases less than ten.

NON-HODGKIN LYMPHOMA

Incidence

During the 2001-2005 period, 1,975 cases (1,136 males and 839 females) of non-Hodgkin lymphoma were reported in Nevada. Nevada had a lower incidence rate (18.4 per 100,000) of non-Hodgkin lymphoma compared to the national rate (19.4) during the same period. Males had a higher incidence rate (22.1) compared to females (15.0). Clark County had the highest incidence rate (18.7) compared to Washoe County (17.9) and All Other Counties (17.2). Other counties that had high incidence rates include Elko (23.0) and Carson City (20.9). Whites had the highest incidence rate (19.6), compared to Hispanics (15.1), Blacks (14.4), Asians (11.0), and Native Americans (10.3).

Risk Factors

The risk of developing non-Hodgkin lymphoma increases with age. However, the risk of non-Hodgkin lymphoma is greatest during adolescence and early childhood. Other risk factors include: being male, White, weakened immune system, having autoimmune diseases (for example: lupus), certain infections (for example: Epstein-Barr virus) exposure to benzene, pesticides and radiation, and a diet high in meat and fat. ^{20,21}

Signs and Symptoms

Signs and symptoms for non-Hodgkin lymphoma include: swollen lymph nodes in neck, underarm, groin, stomach or other areas, unintentional weight loss, drenching night sweats, fatigue, skin rash or itchy skin, and chest pain. 20,21,22

Diagnosis

Non-Hodgkin lymphoma may be diagnosed by physical exam and history, complete blood count (CBC) with white blood cell differential, blood chemistry studies, lymph node biopsy (excisional, incisional, and core), bone marrow aspiration, and/or biopsy and liver function tests. ^{20,21}

Treatment

Treatment for non-Hodgkin lymphoma may include: chemotherapy, immunotherapy, radioimmunotherapy, stem cell, or bone marrow transplant.²²

Table 30: Non-Hodgkin Lymphoma by County of Residence at Diagnosis, Nevada Residents, 2001-2005

County of	2001-2005 Incidence					
Residence	Coose	Crı	ıde Rate*	Age-Ad	justed Rate**	
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.	
Carson City	61	23.2	(17.4-29.0)	20.9	(15.6-26.2)	
Churchill	26	20.2	(12.5-28.0)	20.6	(12.6-28.5)	
Clark	1,386	17.0	(16.1-17.9)	18.7	(17.7-19.7)	
Douglas	39	16.9	(11.6-22.2)	12.4	(8.5-16.3)	
Elko	35	15.0	(10.0-20.0)	23.0	(14.4-31.5)	
Esmeralda	0					
Eureka	٨					
Humboldt	11	13.3	(5.4-21.1)	17.7	(6.9-28.4)	
Lander	6					
Lincoln	5					
Lyon	38	18.3	(12.5-24.2)	16.6	(11.3-22.0)	
Mineral	7					
Nye	41	22.1	(15.3-28.9)	15.1	(10.3-20.0)	
Pershing	٨					
Storey	0					
Washoe	306	16.4	(14.6-18.2)	17.9	(15.9-20.0)	
White Pine	9					
Total	1,975	17.1	(16.4-17.9)	18.4	(17.5-19.2)	

^{*} Rates are per 100,000 population.

^{**} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 31: Non-Hodgkin Lymphoma by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-2005

	County/Region of Residence					
Category	Total	Clark	Washoe	All Other Counties		
Total						
Cases	1,975	1,386	306	283		
Rate*	18.4	18.7	17.9	17.2		
95% C.I.	(17.5-19.2)	(17.7-19.7)	(15.9-20.0)	(15.2-19.3)		
Gender						
Male	1,136	800	189	147		
Rate*	22.1	22.8	23.2	18.2		
95% C.I.	(20.7-23.5)	(21.1-24.5)	(19.7-26.6)	(15.2-21.2)		
Female	839	586	117	136		
Rate*	15.0	15.2	13.2	16.0		
95% C.I.	(14.0-16.0)	(14.0-16.5)	(10.8-15.6)	(13.3-18.8)		
Race/Ethnicity						
White	1,614	1,090	265	259		
Rate*	19.6	20.4	18.6	17.6		
95% C.I.	(18.6-20.5)	(19.2-21.6)	(16.3-20.8)	(15.4-19.8)		
Black	87	83	^	^		
Rate*	14.4	14.9				
95% C.I.	(11.3-17.6)	(11.6-18.2)				
Native American	11	5	^	^		
Rate*	10.3					
95% C.I.	(3.9-16.7)					
Asian	54	37	13	^		
Rate*	11.0	8.9	19.9			
95% C.I.	(7.4-14.6)	(5.4-12.5)	(6.5-33.4)			
Hispanic	153	120	19	14		
Rate*	15.1	15.7	12.2	14.8		
95% C.I.	(12.3-18.0)	(12.4-19.1)	(5.4-19.1)	(6.0-23.6)		
Unknown	56	51	۸	^		

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Figure 26: Non-Hodgkin Lymphoma Age-Adjusted Rates by County/Region of Residence, Nevada Residents, 2001-2005 vs. U.S. 2001-2005

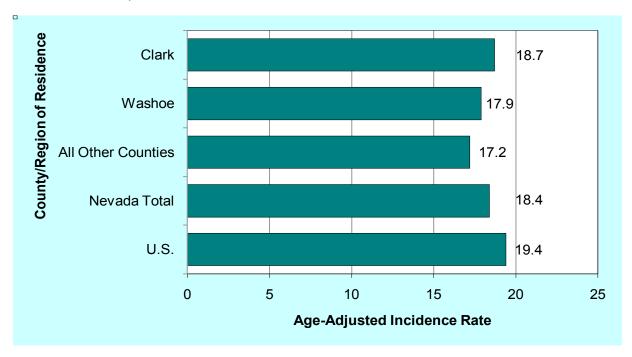


Figure 27: Non-Hodgkin Lymphoma by Race/Ethnicity, Nevada Residents, 2001-2005

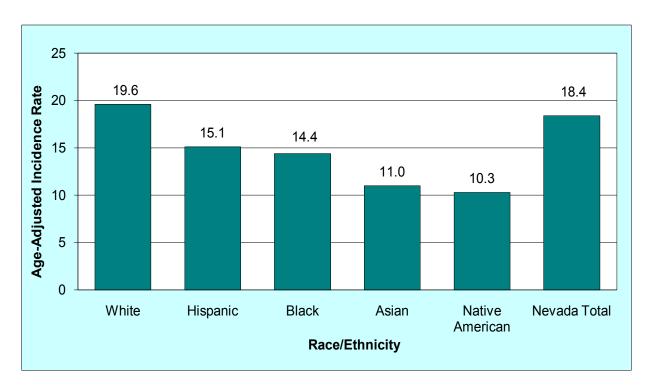


Figure 28: Non-Hodgkin Lymphoma by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

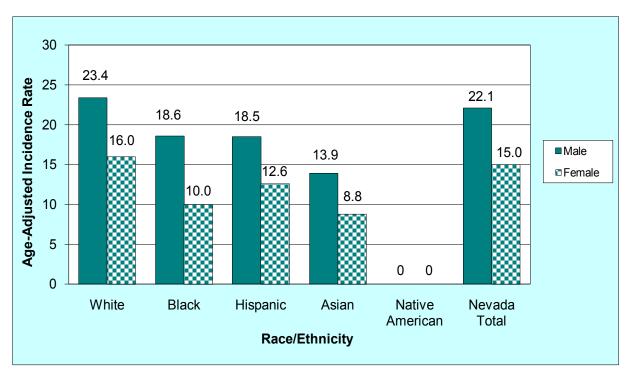


Figure 29: Non-Hodgkin Lymphoma by Gender and Year of Diagnosis, Nevada Residents, 2001-2005

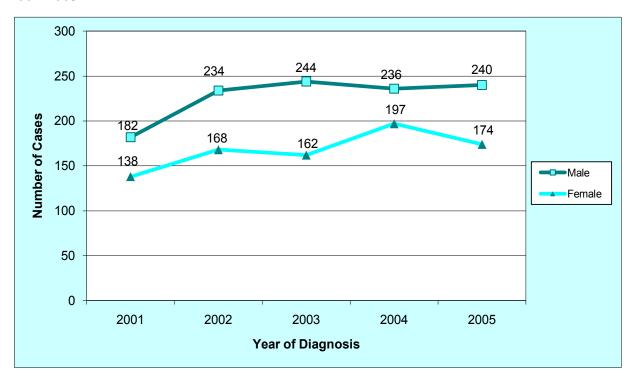


Table 32: Non-Hodgkin Lymphoma by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

De co//		Gender					
Race/i	Ethnicity	Total	Male	Female	Other		
	Incidence	1,975	1,136	839	0		
Total	Rate*	18.4	22.1	15.0			
	95% C.I.	(17.5-19.2)	(20.7-23.5)	(14.0-16.0)			
	Incidence	1,614	918	696	0		
White	Rate*	19.6	23.4	16.0			
	95% C.I.	(18.6-20.5)	(21.9-25.0)	(14.9-17.2)			
	Incidence	87	57	30	0		
Black	Rate*	14.4	18.6	10.0			
	95% C.I.	(11.3-17.6)	(13.7-23.5)	(6.3-13.6)			
Native	Incidence	11	6	5	0		
American	Rate*	10.3					
- Tillelloan	95% C.I.	(3.9-16.7)					
	Incidence	54	27	27	0		
Asian	Rate*	11.0	13.9	8.8			
	95% C.I.	(7.4-14.6)	(7.2-20.7)	(4.9-12.7)			
Hispanic	Incidence	153	90	63	0		
	Rate*	15.1	18.5	12.6			
	95% C.I.	(12.3-18.0)	(13.2-23.8)	(9.2-16.1)			
Unknown		56	38	18	0		

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 33: Non-Hodgkin Lymphoma by Age Group and Gender, Nevada Residents, 2001-2005

Age	Gender						
Group	Total	Male	Female	Other			
Total	1,975	1,136	839	0			
Rate*	17.1	19.4	14.8				
95% C.I.	(16.4-17.9)	(18.3-20.5)	(13.8-15.8)				
<1	۸	٨	0	0			
Rate*							
95% C.I.							
1-4	۸	۸	٨	0			
Rate*							
95% C.I.	_						
5-14	20	16	٨	0			
Rate*	1.2	1.9					
95% C.I.	(0.7-1.8)	(1.0-2.9)					
15-24	20	14	6	0			
Rate*	1.2	1.6					
95% C.I.	(0.7-1.8)	(0.8-2.5)					
25-34	53	39	14	0			
Rate*	3.1	4.4	1.7				
95% C.I.	(2.3-4.0)	(3.0-5.8)	(0.8-2.6)				
35-44	160	106	54	0			
Rate*	9.1	11.6	6.4				
95% C.I.	(7.7-10.5)	(9.4-13.8)	(4.7-8.1)				
45-54	224	132	92	0			
Rate*	14.3	16.6	11.9				
95% C.I.	(12.4-16.2)	(13.8-19.5)	(9.5-14.3)				
55-64	420	262	158	0			
Rate*	36.2	45.9	26.8				
95% C.I.	(32.8-39.7)	(40.3-51.5)	(22.7-31.0)				
65-74	519	291	228	0			
Rate*	69.2	78.9	59.9				
95% C.I.	(63.3-75.2)	(69.8-87.9)	(52.1-67.6)				
75-84	425	214	211	0			
Rate*	99.2	110.6	89.8				
95% C.I.	(89.8-108.6)	(95.8-125.4)	(77.7-101.9)				
85+	130	59	71	0			
Rate*	126.7	170.3	104.5				
95% C.I.	(104.9-148.5)	(126.8-213.7)	(80.2-128.8)				

^{*} Rates are per 100,000 age-specific population. ^ Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

MELANOMAS OF THE SKIN

Incidence

In Nevada, 1,936 cases (1,178 males, 757 females) of melanomas of the skin cancer were reported during the 2001-2005 period. Nevada had a lower incidence rate (17.3 per 100,000) of skin cancer compared to the national rate (19.0) during the same period. Males had a higher incidence rate (22.2) compared to females (13.2). Washoe County had the highest incidence rate (19.6) compared to Clark County (17.5) and All Other Counties (14.5). Other counties with high incidence rates were Humboldt (18.5) and Churchill (17.7). Whites had the highest incidence rate (22.5), compared to Hispanics (3.2). Rates for Blacks, Native Americans, and Asians were not calculated due to extremely low numbers.

Risk Factors

Whites are at an increased risk of melanomas of the skin compared to other racial and ethnic groups. Other risk factors include: personal or family history, multiple or atypical moles, a large quantity of moles (greater than 50), exposure to sunlight or other ultra violet radiation, sunburn, fair complexion, older age, illnesses that suppress the immune system, and exposure to coal tar, pitch, creosote, radium, or arsenic compounds. ^{10, 23,24}

Signs and Symptoms

Melanomas of the skin may have different appearances. The following simple ABCD rule outlines warning signs: A stands for asymmetry (one half of the abnormal skin area is different than the other half), B for border irregularity, C for color variation on the skin area, and D for a diameter of more than 6mm (usually, but not always). ^{10, 23,24}

Diagnosis

Tests that may be used to diagnose melanomas of the skin are biopsy (shave and punch) or excisional biopsy.²³

Treatment

Treatment for melanomas of the skin include: surgery, excision cuts, electrodessication and curettage, cryosurgery, radiation therapy, and certain topical medications. For advanced cases, palliative surgery, immunotherapy, and chemotherapy are some of the treatment options. ^{10,24}

Table 34: Melanomas of the Skin by County of Residence at Diagnosis, Nevada Residents, 2001-2005

County of	2001-2005 Incidence					
Residence	0	Crı	ıde Rate*	Age-Ad	Age-Adjusted Rate**	
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.	
Carson City	46	17.5	(12.4-22.5)	16.3	(11.5-21.1)	
Churchill	23	17.9	(10.6-25.2)	17.7	(10.5-25.0)	
Clark	1,349	16.5	(15.6-17.4)	17.5	(16.5-18.4)	
Douglas	37	16.0	(10.8-21.2)	12.9	(8.6-17.3)	
Elko	21	9.0	(5.2-12.9)	13.1	(6.8-19.5)	
Esmeralda	٨					
Eureka	0					
Humboldt	13	15.7	(7.2-24.2)	18.5	(8.0-28.9)	
Lander	٨					
Lincoln	6					
Lyon	36	17.4	(11.7-23.0)	15.3	(10.2-20.3)	
Mineral	5					
Nye	34	18.3	(12.2-24.5)	13.5	(8.6-18.4)	
Pershing	5					
Storey	5					
Washoe	351	18.8	(16.8-20.8)	19.6	(17.5-21.7)	
White Pine	^					
Total	1,936	16.8	(16.0-17.5)	17.3	(16.6-18.1)	

^{*} Rates are per 100,000 population.

^{**} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 35: Melanomas of the Skin by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-2005

	County/Region of Residence					
Category	Total	Total Clark		All Other Counties		
Total						
Cases	1,936	1,349	351	236		
Rate*	17.3	17.5	19.6	14.5		
95% C.I.	(16.6-18.1)	(16.5-18.4)	(17.5-21.7)	(12.6-16.4)		
Gender						
Male	1,178	826	200	152		
Rate*	22.2	22.5	23.9	19.2		
95% C.I.	(20.9-23.5)	(20.9-24.1)	(20.4-27.4)	(16.1-22.4)		
Female	757	522	151	84		
Rate*	13.2	13.2	16.2	10.3		
95% C.I.	(12.3-14.2)	(12.0-14.3)	(13.6-18.8)	(8.1-12.6)		
Other	٨					
Race/Ethnicity						
White	1,874	1,300	340	234		
Rate*	22.5	23.8	23.4	16.6		
95% C.I.	(21.5-23.5)	(22.5-25.1)	(20.9-25.9)	(14.4-18.8)		
Black	7	6	0	٨		
Rate*						
95% C.I.						
Native American	٨	٨	٨	0		
Rate*						
95% C.I.						
Asian	٨	٨	0	0		
Rate*						
95% C.I.						
Hispanic	37	31	5	٨		
Rate*	3.2	3.4				
95% C.I.	(2.0-4.3)	(2.0-4.8)				
Unknown	13	9	۸	0		

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Figure 30: Melanomas of the Skin Age-Adjusted Rates by County/Region of Residence, Nevada Residents, 2001-2005 vs. U.S. 2001-2005

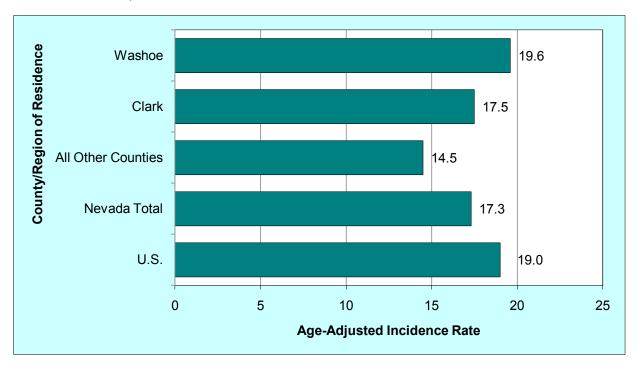


Figure 31: Melanomas of the Skin by Race/Ethnicity, Nevada Residents, 2001-2005

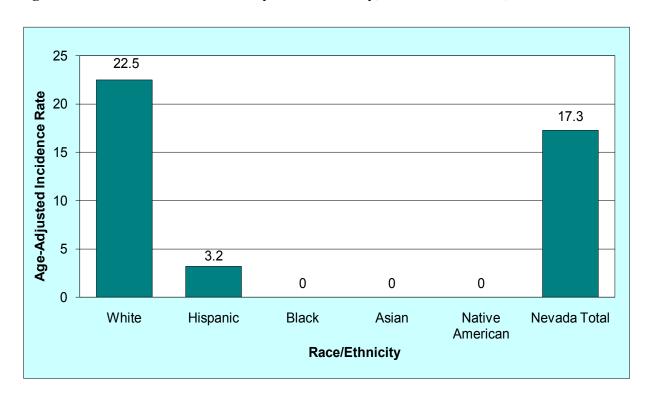


Figure 32: Melanomas of the Skin by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

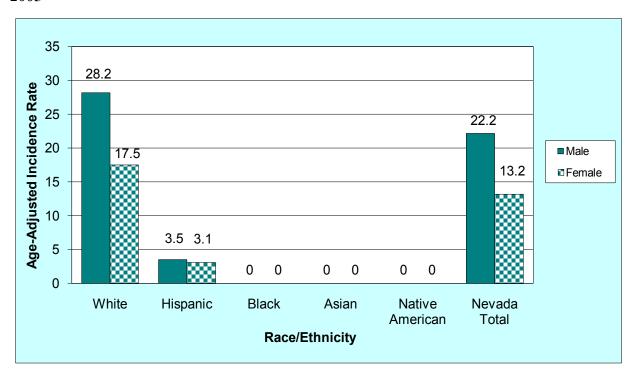


Figure 33: Melanomas of the Skin by Gender and Year of Diagnosis, Nevada Residents, 2001-2005

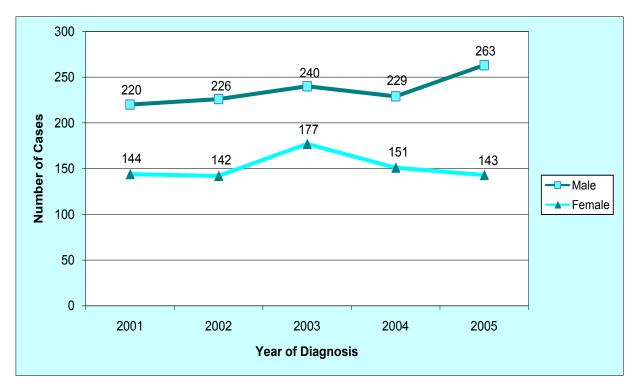


Table 36: Melanomas of the Skin by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

De co//		Gender					
Race/i	Ethnicity	Total	Male	Female	Other		
	Incidence	1,936	1,178	757	٨		
Total	Rate*	17.3	22.2	13.2			
	95% C.I.	(16.6-18.1)	(20.9-23.5)	(12.3-14.2)	<u></u>		
	Incidence	1,874	1,148	725	^		
White	Rate*	22.5	28.2	17.5			
	95% C.I.	(21.5-23.5)	(26.5-29.8)	(16.2-18.8)			
	Incidence	7	۸	6	0		
Black	Rate*						
	95% C.I.						
Native	Incidence	۸	۸	٨	0		
American	Rate*						
American	95% C.I.						
	Incidence	۸	۸	0	0		
Asian	Rate*						
	95% C.I.						
	Incidence	37	16	21	0		
Hispanic	Rate*	3.2	3.5	3.1			
	95% C.I.	(2.0-4.3)	(1.5-5.5)	(1.6-4.5)			
Unknown		13	10	۸	0		

Note:

Rates were adjusted for cases where race/ethnicity was listed as other/unknown.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

Table 37: Melanomas of the Skin by Age Group and Gender, Nevada Residents, 2001-2005

Age		Gende	r	
Group	Total	Male	Female	Other
Total	1,936	1,178	757	۸
Rate*	16.8	20.1	13.3	
95% C.I.	(16.0-17.5)	(19.0-21.3)	(12.4-14.3)	
<1	8	6	٨	0
Rate*	-			
95% C.I.	-			
1-4	0	0	0	0
Rate*				
95% C.I.	<u></u>	<u></u>		
5-14	۸	٨	٨	0
Rate*				
95% C.I.				
15-24	36	19	17	0
Rate*	2.2	2.2	2.2	
95% C.I.	(1.5-2.9)	(1.2-3.2)	(1.1-3.2)	
25-34	130	55	75	0
Rate*	7.7	6.3	9.3	
95% C.I.	(6.4-9.0)	(4.6-7.9)	(7.2-11.4)	
35-44	233	128	105	0
Rate*	13.3	14.0	12.4	
95% C.I.	(11.6-15.0)	(11.6-16.5)	(10.1-14.8)	
45-54	353	183	170	0
Rate*	22.5	23.0	22.0	
95% C.I.	(20.2-24.9)	(19.7-26.4)	(18.7-25.3)	
55-64	406	252	154	0
Rate*	35.0	44.1	26.2	
95% C.I.	(31.6-38.4)	(38.7-49.6)	(22.0-30.3)	
65-74	424	304	119	۸
Rate*	56.6	82.4	31.2	
95% C.I.	(51.2-61.9)	(73.1-91.7)	(25.6-36.9)	
75-84	274	187	87	0
Rate*	63.9	96.7	37.0	
95% C.I.	(56.4-71.5)	(82.8-110.5)	(29.2-44.8)	
85+	69	42	27	0
Rate*	67.3	121.2	39.7	
95% C.I.	(51.4-83.1)	(84.6-157.9)	(24.8-54.7)	

^{*} Rates are per 100,000 age-specific population
^ Cases less than five have been suppressed.
The "--" denotes suppressed rates and confidence intervals for cases less than ten.

KIDNEY AND RENAL PELVIS CANCER

Incidence

During the 2001-2005 period, 1,387 cases (901 males and 486 females) of kidney and renal pelvis cancer were reported in Nevada. Nevada had a lower incidence rate (12.4 per 100,000) of kidney and renal pelvis cancer compared to the national rate (13.9) during the same period. Males had a higher incidence rate (16.9) compared to females (8.4). Washoe County had the highest incidence rate (12.8) compared to Clark County (12.5) and All Other Counties (11.5). Other counties with high incidence rates were Nye (14.4) and Elko (13.4). Hispanics had the highest incidence rate (14.2) compared to Blacks (13.8), Native Americans (13.1), Whites (12.6), and Asians (7.5).

Risk Factors

Smoking is a strong risk factor for kidney and renal pelvis cancer. Additional risk factors include: family history, hereditary conditions (for example: Von Hippel-Lindau disease), obesity, high blood pressure, dialysis treatment, and misuse of some pain medications (Phenacetin). 1,25,26

Signs and Symptoms

Early kidney and renal pelvis cancer usually has no symptoms. Signs and symptoms that may be present as the tumor progresses include: a lump in the abdomen or lower back, abdominal pain, flank pain, back pain, abnormal urine color (dark, rusty or brown), blood in the urine, varicocele (in men), emaciated appearance, unintentional weight loss, and anemia. 1,25,26

Diagnosis

Diagnosis of kidney and renal pelvis cancer may be made by physical exam and history, blood chemistry studies, urinalysis, urine cytology, liver function tests, intravenous pyelogram (IVP), renal arteriography, serum calcium, abdomen and kidney ultrasound, and/or abdominal computed tomography (CT) scan. ^{25,26}

Treatment

Treatment options for kidney and renal pelvis cancer include: surgery, nephrectomy, chemotherapy, biologic treatment, or hormone treatment. ^{25,26}

Table 38: Kidney and Renal Pelvis Cancer by County of Residence at Diagnosis, Nevada **Residents, 2001-2005**

County of	2001-2005 Incidence					
Residence	Cana	Crı	ıde Rate*	Age-Ad	Age-Adjusted Rate**	
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.	
Carson City	36	13.7	(9.2-18.1)	11.1	(7.5-14.8)	
Churchill	13	10.1	(4.6-15.6)	10.4	(4.7-16.1)	
Clark	971	11.9	(11.1-12.6)	12.5	(11.7-13.3)	
Douglas	33	14.3	(9.4-19.1)	10.8	(7.1-14.6)	
Elko	18	7.7	(4.2-11.3)	13.4	(6.3-20.4)	
Esmeralda	٨					
Eureka	٨					
Humboldt	8					
Lander	٨					
Lincoln	٨					
Lyon	29	14.0	(8.9-19.1)	11.9	(7.5-16.3)	
Mineral	٨					
Nye	38	20.5	(14.0-27.0)	14.4	(9.6-19.3)	
Pershing	0					
Storey	٨					
Washoe	223	11.9	(10.4-13.5)	12.8	(11.1-14.5)	
White Pine	^					
Total	1,387	12.0	(11.4-12.7)	12.4	(11.7-13.1)	

^{*} Rates are per 100,000 population.

** Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 39: Kidney and Renal Pelvis Cancer by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-2005

	County/Region of Residence					
Category	Total	Clark	Washoe	All Other Counties		
Total						
Cases	1,387	971	223	193		
Rate*	12.4	12.5	12.8	11.5		
95% C.I.	(11.7-13.1)	(11.7-13.3)	(11.1-14.5)	(9.8-13.1)		
Gender						
Male	901	621	142	138		
Rate*	16.9	16.9	17.1	17.1		
95% C.I.	(15.8-18.1)	(15.5-18.3)	(14.2-20.0)	(14.2-20.0)		
Female	486	350	81	55		
Rate*	8.4	8.8	8.9	6.4		
95% C.I.	(7.7-9.2)	(7.8-9.7)	(7.0-10.9)	(4.7-8.1)		
Race/Ethnicity						
White	1,098	737	195	166		
Rate*	12.6	12.9	13.2	11.0		
95% C.I.	(11.8-13.3)	(11.9-13.8)	(11.4-15.1)	(9.3-12.7)		
Black	86	80	6	0		
Rate*	13.8	13.9				
95% C.I.	(10.9-16.8)	(10.8-16.9)				
Native American	14	^	٨	10		
Rate*	13.1			25.1		
95% C.I.	(5.9-20.3)			(9.1-41.1)		
Asian	38	29	٨	5		
Rate*	7.5	7.2				
95% C.I.	(4.5-10.4)	(3.9-10.6)				
Hispanic	132	105	16	11		
Rate*	14.2	14.2	11.8	16.4		
95% C.I.	(11.4-17.1)	(11.1-17.4)	(4.0-19.6)	(5.8-27.0)		
Unknown	19	18	0	^		

Note:

^{*}Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Figure 34: Kidney and Renal Pelvis Cancer Age-Adjusted Rates by County/Region of Residence, Nevada Residents, 2001-2005 vs. U.S. 2001-2005

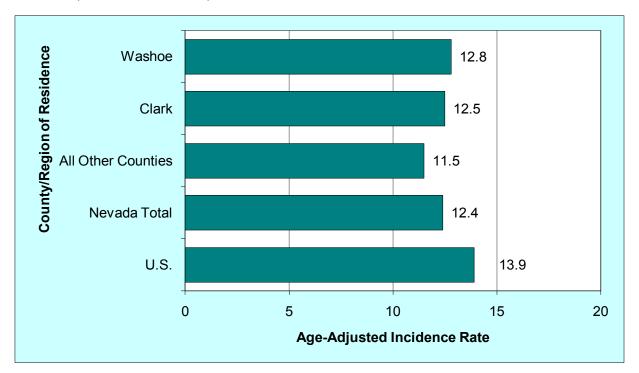


Figure 35: Kidney and Renal Pelvis Cancer by Race/Ethnicity, Nevada Residents, 2001-2005

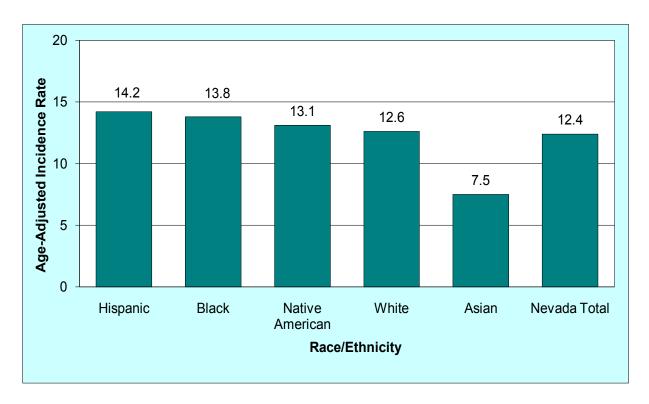


Figure 36: Kidney and Renal Pelvis Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

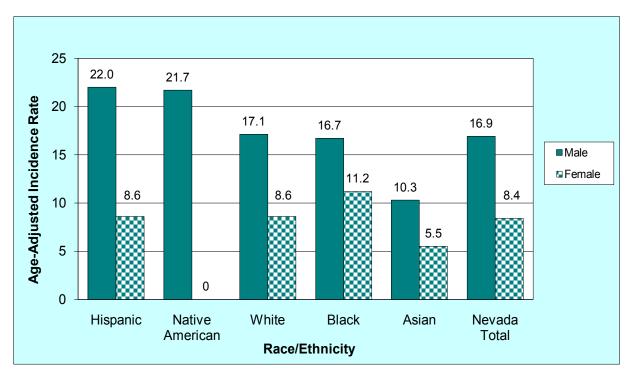


Figure 37: Kidney and Renal Pelvis Cancer by Gender and Year of Diagnosis, Nevada Residents, 2001-2005

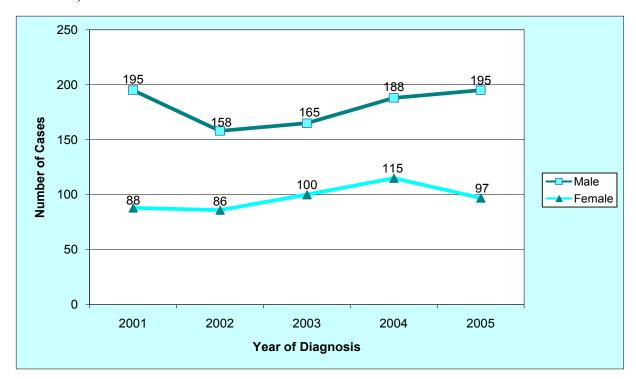


Table 40: Kidney and Renal Pelvis Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

D/	-41a ! a !4	Gender						
Race/i	Ethnicity	Total	Male	Female	Other			
	Incidence	1,387	901	486	0			
Total	Rate*	12.4	16.9	8.4				
	95% C.I.	(11.7-13.1)	(15.8-18.1)	(7.7-9.2)				
	Incidence	1,098	721	377	0			
White	Rate*	12.6	17.1	8.6				
	95% C.I.	(11.8-13.3)	(15.8-18.4)	(7.7-9.4)	<u></u>			
	Incidence	86	50	36	0			
Black	Rate*	13.8	16.7	11.2				
	95% C.I.	(10.9-16.8)	(12.0-21.4)	(7.6-14.9)	<u></u>			
Native	Incidence	14	11	٨	0			
American	Rate*	13.1	21.7					
	95% C.I.	(5.9-20.3)	(8.1-35.3)		<u> </u>			
	Incidence	38	22	16	0			
Asian	Rate*	7.5	10.3	5.5				
	95% C.I.	(4.5-10.4)	(5.0-15.5)	(2.2-8.9)	<u> </u>			
	Incidence	132	85	47	0			
Hispanic	Rate*	14.2	22.0	8.6				
	95% C.I.	(11.4-17.1)	(15.7-28.3)	(5.9-11.3)				
Unknown		19	12	7	0			

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 41: Kidney and Renal Pelvis Cancer by Age Group and Gender, Nevada Residents, 2001-2005

Age	Gender						
Group	Total	Male	Female	Other			
Total	1,387	901	486	0			
Rate*	12.0	15.4	8.6				
95% C.I.	(11.4-12.7)	(14.4-16.4)	(7.8-9.3)				
<1	0	0	0	0			
Rate*							
95% C.I.		-		<u> </u>			
1-4	9	6	٨	0			
Rate*		-					
95% C.I.							
5-14	7	۸	٨	0			
Rate*		-					
95% C.I.							
15-24	3	0	٨	0			
Rate*							
95% C.I.							
25-34	7	۸	٨	0			
Rate*							
95% C.I.							
35-44	83	45	38	0			
Rate*	4.7	4.9	4.5				
95% C.I.	(3.7-5.7)	(3.5-6.4)	(3.1-5.9)				
45-54	205	138	67	0			
Rate*	13.1	17.4	8.7				
95% C.I.	(11.3-14.9)	(14.5-20.3)	(6.6-10.8)				
55-64	386	269	117	0			
Rate*	33.3	47.1	19.9				
95% C.I.	(30.0-36.6)	(41.5-52.8)	(16.3-23.5)				
65-74	408	251	157	0			
Rate*	54.4	68.0	41.2				
95% C.I.	(49.1-59.7)	(59.6-76.5)	(34.8-47.7)				
75-84	232	153	79	0			
Rate*	54.1	79.1	33.6				
95% C.I.	(47.2-61.1)	(66.5-91.6)	(26.2-41.0)				
85+	47	31	16	0			
Rate*	45.8	89.5	23.6				
95% C.I.	(32.7-58.9)	(58.0-121.0)	(12.0-35.1)				

^{*} Rates are per 100,000 age-specific population.
^ Cases less than five have been suppressed.
The "--" denotes suppressed rates and confidence intervals for cases less than ten.

LEUKEMIA

Incidence

During the 2001-2005 period, 1,335 cases (798 males, 536 females) of leukemia were reported in Nevada. Nevada had a slightly higher incidence rate of leukemia (12.6 per 100,000) compared to the national rate (12.5) during the same period. Males had a higher incidence rate (16.1) compared to females (9.6). Clark County had the highest incidence rate (13.7) compared to Washoe County (9.6) and All Other Counties (10.5). Other counties with high incidence rates were Humboldt (15.1) and Carson City (12.1). Whites had the highest incidence rate (13.4) compared to Blacks (10.2), Hispanics (10.0) and Asians (7.6). The rate for Native Americans was not calculated due to extremely low numbers.

Risk Factors

Being White and male are strong risk factors for leukemia. Other risk factors include: older age, smoking, past treatment with chemotherapy or radiation therapy, exposure to benzene, or atomic bomb radiation, pain in the bones or stomach, lumps in the neck, underarm or groin, and genetic conditions like Down's syndrome. ^{10,27}

Signs and Symptoms

Signs and symptoms for leukemia may include: fever, petechiaes (a small red or purple spot on the body as a result of slight hemorrhage), shortness of breath, bruising easily or bleeding, fatigue, weight loss, and/or loss of appetite. ²⁷

Diagnosis

Leukemia may be diagnosed by physical exam and history, complete blood count, blood chemistry studies, peripheral blood smear, bone marrow aspiration and biopsy, cytogenetic analysis, immunophenotyping, or reverse transcription–polymerase chain reaction test (RT-PCR). ²⁷

Treatment

Chemotherapy is the most effective treatment for leukemia. However, in some instances, a bone marrow transplant may be necessary. 10

Table 42: Leukemia by County of Residence at Diagnosis, Nevada Residents, 2001-2005

County of	2001-2005 Incidence				
Residence	Crude Rate*		Age-Ad	Age-Adjusted Rate**	
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.
Carson City	36	13.7	(9.2-18.1)	12.1	(8.1-16.1
Churchill	15	11.7	(5.8-17.6)	11.9	(5.8-17.9)
Clark	1,001	12.3	(11.5-13.0)	13.7	(12.9-14.6)
Douglas	20	8.7	(4.9-12.4)	6.6	(3.6-9.5)
Elko	21	9.0	(5.2-12.9)	11.8	(6.3-17.2)
Esmeralda	0				
Eureka	0				
Humboldt	10	12.1	(4.6-19.5)	15.1	(5.5-24.8)
Lander	٨				
Lincoln	٨				
Lyon	21	10.1	(5.8-14.5)	9.0	(5.1-12.9)
Mineral	٨				
Nye	30	16.2	(10.4-22.0)	11.0	(6.8-15.2)
Pershing	5				
Storey	٨				
Washoe	161	8.6	(7.3-10.0)	9.6	(8.1-11.1)
White Pine	5				
Total	1,335	11.6	(11.0-12.2)	12.6	(11.9-13.2)

^{*} Rates are per 100,000 population.

^{**} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 43: Leukemia by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-2005

		County/Region	of Residence	County/Region of Residence				
Category	Total	Clark	Washoe	All Other Counties				
Total								
Cases	1,335	1,001	161	173				
Rate*	12.6	13.7	9.6	10.5				
95% C.I.	(11.9-11.6)	(12.9-14.6)	(8.1-11.1)	(8.9-12.1)				
Gender								
Male	798	596	86	116				
Rate*	16.1	17.7	11.1	14.3				
95% C.I.	(14.9-17.2)	(16.2-19.2)	(8.6-13.5)	(11.7-17.0)				
Female	536	405	75	56				
Rate*	9.6	10.5	8.5	6.8				
95% C.I.	(8.8-10.4)	(9.5-11.6)	(6.6-10.4)	(5.0-8.6)				
Other	۸			٨				
Race/Ethnicity								
White	1,062	759	141	162				
Rate*	13.4	14.7	10.4	11.3				
95% C.I.	(12.6-14.2)	(13.7-15.8)	(8.6-12.1)	(9.5-13.1)				
Black	66	61	^	٨				
Rate*	10.2	10.0						
95% C.I.	(7.7-12.7)	(7.5-12.6)						
Native American	^	٨	0	٨				
Rate*								
95% C.I.								
Asian	35	31	٨	0				
Rate*	7.6	7.4						
95% C.I.	(4.5-10.6)	(4.4-10.4)						
Hispanic	131	113	12	6				
Rate*	10.0	11.5	6.9					
95% C.I.	(7.7-12.3)	(8.5-14.4)	(2.2-11.6)					
Unknown	38	35	0	٨				

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Figure 38: Leukemia Age-Adjusted Rates by County/Region of Residence, Nevada Residents, 2001-2005 vs. U.S. 2001-2005

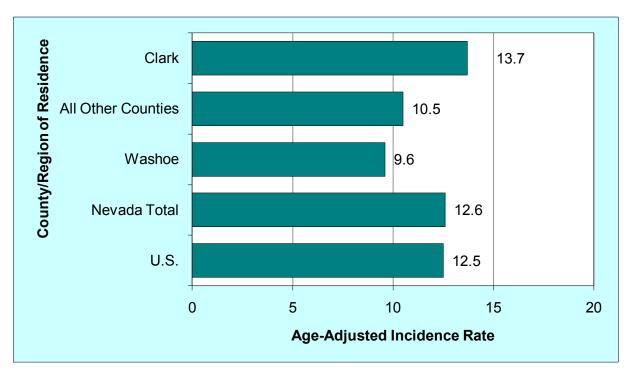
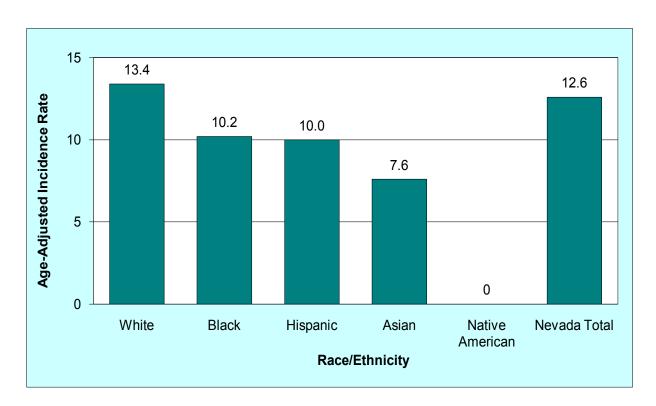


Figure 39: Leukemia by Race/Ethnicity, Nevada Residents, 2001-2005



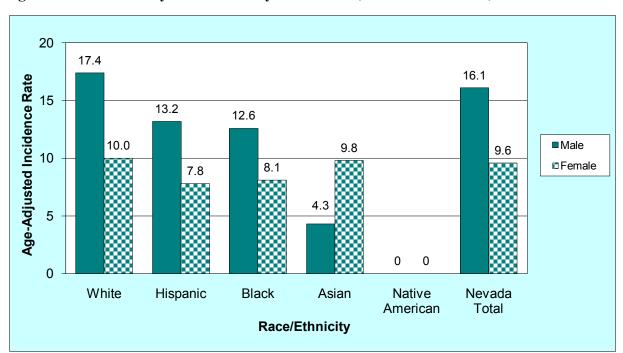


Figure 40: Leukemia by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

Figure 41: Leukemia by Gender and Year of Diagnosis, Nevada Residents, 2001-2005

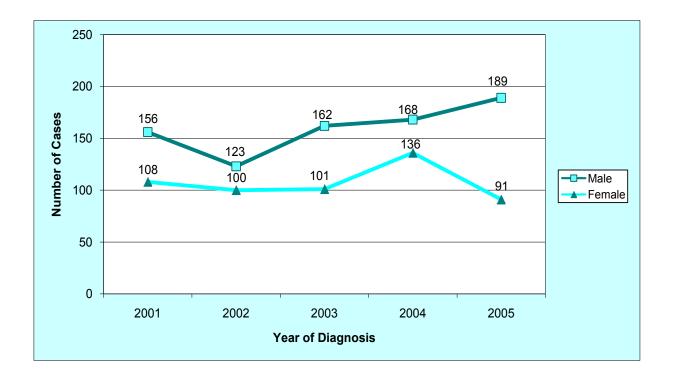


Table 44: Leukemia by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

Da (1		Gender					
Race/i	Ethnicity	Total	Male	Female	Other		
	Incidence	1,335	798	536	٨		
Total	Rate*	12.6	16.1	9.6			
	95% C.I.	(11.9-13.2)	(14.9-17.2)	(8.8-10.4)	<u></u>		
	Incidence	1,062	648	413	٨		
White	Rate*	13.4	17.4	10.0			
	95% C.I.	(12.6-14.2)	(16.0-18.7)	(9.1-11.1)	<u></u>		
	Incidence	66	38	28	0		
Black	Rate*	10.2	12.6	8.1			
	95% C.I.	(7.7-12.7)	(8.5-16.7)	(5.0-11.1)	<u></u>		
Nietice	Incidence	۸	0	٨	0		
Native American	Rate*						
American	95% C.I.				<u></u>		
	Incidence	35	12	23	0		
Asian	Rate*	7.6	4.3	9.8			
	95% C.I.	(4.5-10.6)	(1.8-6.8)	(5.0-14.6)			
	Incidence	131	75	56	0		
Hispanic	Rate*	10.0	13.2	7.8			
	95% C.I.	(7.7-12.3)	(8.5-17.9)	(5.3-10.3)			
Unknown		38	25	13	0		

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 45: Leukemia by Age Group and Gender, Nevada Residents, 2001-2005

Age	Gender						
Group	Total	Male	Female	Other			
Total	1,335	798	536	۸			
Rate*	11.6	13.6	9.4				
95% C.I.	(11.0-12.2)	(12.7-14.6)	(8.6-10.2)				
<1	5	۸	۸	0			
Rate*							
95% C.I.	-						
1-4	64	39	25	0			
Rate*	9.7	11.6	7.8				
95% C.I.	(7.4-12.1)	(8.0-15.2)	(4.7-10.9)				
5-14	48	26	22	0			
Rate*	3.0	3.1	2.8				
95% C.I.	(2.1-3.8)	(1.9-4.3)	(1.6-4.0)				
15-24	40	26	14	0			
Rate*	2.4	3.0	1.8				
95% C.I.	(1.7-3.2)	(1.9-4.2)	(0.8-2.7)				
25-34	45	22	23	0			
Rate*	2.7	2.5	2.8				
95% C.I.	(1.9-3.4)	(1.5-3.5)	(1.7-4.0)				
35-44	73	39	34	0			
Rate*	4.2	4.3	4.0				
95% C.I.	(3.2-5.1)	(2.9-5.6)	(2.7-5.4)				
45-54	121	73	48	0			
Rate*	7.7	9.2	6.2				
95% C.I.	(6.3-9.1)	(7.1-11.3)	(4.5-8.0)				
55-64	220	129	90	۸			
Rate*	19.0	22.6	15.3				
95% C.I.	(16.5-21.5)	(18.7-26.5)	(12.1-18.4)				
65-74	301	196	105	0			
Rate*	40.1	53.1	27.6				
95% C.I.	(35.6-44.7)	(45.7-60.6)	(22.3-32.8)				
75-84	322	199	123	0			
Rate*	75.2	102.9	52.3				
95% C.I.	(66.9-83.4)	(88.6-117.1)	(43.1-61.6)				
85+	96	48	48	0			
Rate*	93.6	138.5	70.7				
95% C.I.	(74.9-112.3)	(99.3-177.7)	(50.7-90.6)				

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

[^] Cases less than five have been suppressed.
The "--" denotes suppressed rates and confidence intervals for cases less than ten.

THYROID CANCER

Incidence

In Nevada, 1,250 cases (295 males and 955 females) of thyroid cancer were reported during the 2001-2005 period. Nevada had a higher incidence rate (10.7 per 100,000) of thyroid cancer compared to the national rate (8.9) during the same period. ⁹ Females had a higher incidence rate (16.6) compared to males (5.1). Clark County had the highest incidence rate (11.2) compared to Washoe County (10.6) and All Other Counties (8.9). Other counties with high incidence rates were Carson City (12.2) and Lyon (10.9). Asians had the highest incidence rate (14.0) compared to Whites (11.9), Hispanics (8.4) and Blacks (7.3). The rate for Native Americans was not calculated due to extremely low numbers.

Risk Factors

The risk of thyroid cancer is highest for females and Asians. Other risk factors include: goiter history, family history of thyroid disease or thyroid cancer, being 25-65 years old, exposure to radiation of the head or neck during childhood, exposure to atomic bomb radiation, and genetic conditions like multiple endocrine neoplasia. ²⁸

Signs and Symptoms

The commonest symptom for thyroid cancer is a lump or swelling in the neck. Other signs and symptoms may include: difficulty in breathing and swallowing, hoarseness of voice, a persistent cough that is not caused by a cold, and enlargement of the thyroid gland. ^{28, 29}

Diagnosis

Diagnosis of thyroid cancer may be done by physical exam and history, laryngoscopy, blood hormone studies, blood chemistry studies, biopsy (fine-needle aspiration and surgical), and imaging tests which include: radioactive iodine (RAI) scan, computerized tomography (CT), magnetic resonance imaging (MRI), and positron emission tomography (PET) scans. ^{28, 29}

Treatment

Treatment varies depending on the type of tumor. Surgery is the primary treatment of choice combined with radiation therapy. Chemotherapy is used when the above two treatments are not effective. ²⁹

Table 46: Thyroid Cancer by County of Residence at Diagnosis, Nevada Residents, 2001-2005

County of	2001-2005 Incidence					
Residence	C	Cru	Crude Rate*		Age-Adjusted Rate**	
at Diagnosis	Cases	Rate	95% C.I.	Rate	95% C.I.	
Carson City	34	12.9	(8.6-17.3)	12.2	(8.1-16.4)	
Churchill	12	9.3	(4.1-14.6)	9.5	(4.1-14.8)	
Clark	907	11.1	(10.4-11.8)	11.2	(10.4-11.9)	
Douglas	24	10.4	(6.2-14.5)	8.2	(4.8-11.6)	
Elko	17	7.3	(3.8-10.8)	9.0	(4.2-13.7)	
Esmeralda	٨					
Eureka	٨					
Humboldt	5					
Lander	٨					
Lincoln	٨					
Lyon	24	11.6	(6.9-16.2)	10.9	(6.4-15.3)	
Mineral	0					
Nye	14	7.5	(3.6-11.5)	6.7	(2.9-10.4)	
Pershing	0					
Storey	0					
Washoe	201	10.8	(9.3-12.3)	10.6	(9.1-12.1)	
White Pine	7					
Total	1,250	10.8	(10.2-11.4)	10.7	(10.1-11.3)	

^{*} Rates are per 100,000 population.

** Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Table 47: Thyroid Cancer by Gender, Race/Ethnicity and Region, Nevada Residents, 2001-2005

		County/Region	of Residence	
Category	Total	Clark	Washoe	All Other Counties
Total				
Cases	1,250	907	201	142
Rate*	10.7	11.2	10.6	8.9
95% C.I.	(10.1-11.3)	(10.4-11.9)	(9.1-12.1)	(7.4-10.3)
Gender				
Male	295	208	50	37
Rate*	5.1	5.2	5.1	4.4
95% C.I.	(4.5-5.7)	(4.5-6.0)	(3.7-6.5)	(3.0-5.9)
Female	955	699	151	105
Rate*	16.6	17.3	16.3	13.4
95% C.I.	(15.6-17.7)	(16.0-18.6)	(13.7-18.9)	(10.8-16.0)
Race/Ethnicity				
White	938	639	172	127
Rate*	11.9	12.4	11.9	9.4
95% C.I.	(11.1-12.6)	(11.4-13.4)	(10.1-13.8)	(7.7-11.1)
Black	50	47	٨	0
Rate*	7.3	7.3		
95% C.I.	(5.2-9.3)	(5.2-9.5)		
Native American	7	٨	٨	٨
Rate*				
95% C.I.				
Asian	95	78	14	٨
Rate*	14.0	14.3	13.0	
95% C.I.	(10.9-17.0)	(10.7-17.8)	(6.1-19.9)	
Hispanic	141	121	10	10
Rate*	8.4	9.3	4.4	6.2
95% C.I.	(6.9-10.0)	(7.5-11.2)	(1.2-7.6)	(1.9-10.5)
Unknown	19	19	0	0

Note:

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

Figure 42: Thyroid Cancer Age-Adjusted Rates by County/Region of Residence, Nevada Residents, 2001-2005 vs. U.S. 2001-2005

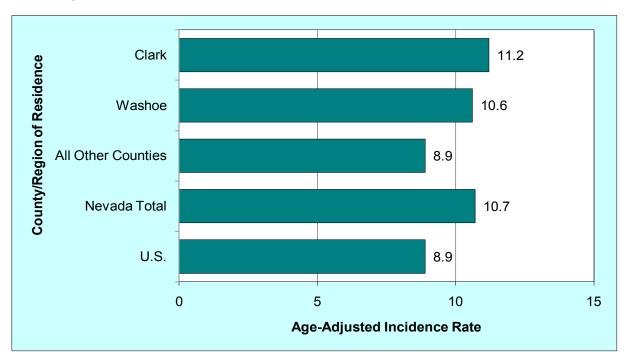


Figure 43: Thyroid Cancer by Race/Ethnicity, Nevada Residents, 2001-2005

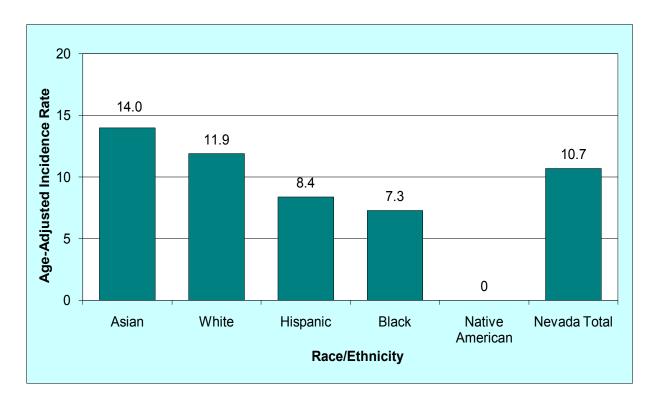


Figure 44: Thyroid Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

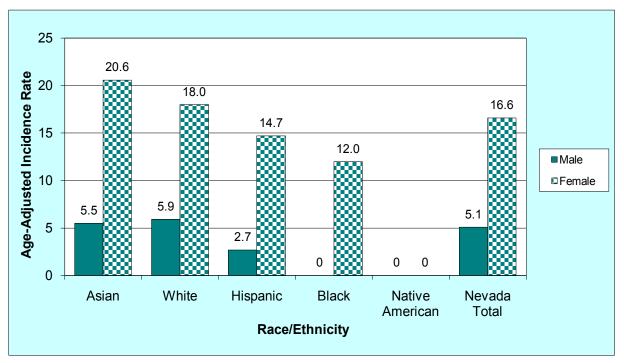


Figure 45: Thyroid Cancer by Gender and Year of Diagnosis, Nevada Residents, 2001-2005

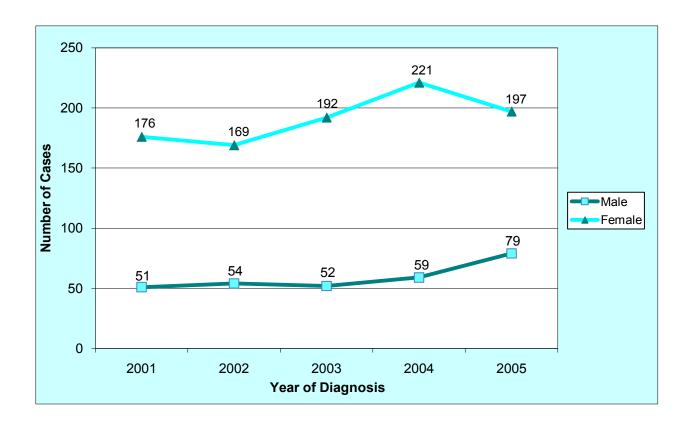


Table 48: Thyroid Cancer by Race/Ethnicity and Gender, Nevada Residents, 2001-2005

D/	-41 1 - 14	Gender					
Race/Ethnicity		Total	Male	Female	Other		
	Incidence	1,250	295	955	0		
Total	Rate*	10.7	5.1	16.6			
	95% C.I.	(10.1-11.3)	(4.5-5.7)	(15.6-17.7)			
	Incidence	938	246	692	0		
White	Rate*	11.9	5.9	18.0			
	95% C.I.	(11.1-12.6)	(5.2-6.7)	(16.7-19.4)			
	Incidence	50	8	42	0		
Black	Rate*	7.3		12.0			
	95% C.I.	(5.2-9.3)		(8.3-15.7)			
NI = 41:	Incidence	7	۸	٨	0		
Native American	Rate*						
American	95% C.I.				<u> </u>		
	Incidence	95	15	80	0		
Asian	Rate*	14.0	5.5	20.6			
	95% C.I.	(10.9-17.0)	(2.6-8.4)	(15.6-25.5)			
	Incidence	141	22	119	0		
Hispanic	Rate*	8.4	2.7	14.7			
	95% C.I.	(6.9-10.0)	(1.4-4.0)	(11.9-17.6)			
Unknown		19	٨	17	0		

Note:

Rates were adjusted for cases where race/ethnicity was listed as other/unknown.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

^{*} Rates are per 100,000 population and are age-adjusted to the 2000 U.S. Standard Population.

[^] Cases less than five have been suppressed.

Table 49: Thyroid Cancer by Age Group and Gender, Nevada Residents, 2001-2005

Age	Gender						
Group	Total	Male	Female	Other			
Total	1,250	295	955	0			
Rate*	10.8	5.0	16.8				
95% C.I.	(10.2-11.4)	(4.5-5.6)	(15.8-17.9)				
<1	0	0	0	0			
Rate*	_						
95% C.I.							
1-4	0	0	0	0			
Rate*							
95% C.I.							
5-14	۸	۸	٨	0			
Rate*							
95% C.I.							
15-24	60	12	48	0			
Rate*	3.7	1.4	6.1				
95% C.I.	(2.7-4.6)	(0.6-2.2)	(4.4-7.8)				
25-34	181	23	158	0			
Rate*	10.7	2.6	19.6				
95% C.I.	(9.2-12.3)	(1.5-3.7)	(16.5-22.6)				
35-44	284	56	228	0			
Rate*	16.2	6.1	27.0				
95% C.I.	(14.3-18.1)	(4.5-7.7)	(23.5-30.5)				
45-54	295	60	235	0			
Rate*	18.8	7.6	30.4				
95% C.I.	(16.7-21.0)	(5.6-9.5)	(26.5-34.3)				
55-64	240	73	167	0			
Rate*	20.7	12.8	28.4				
95% C.I.	(18.1-23.3)	(9.9-15.7)	(24.1-32.7)				
65-74	124	51	73	0			
Rate*	16.5	13.8	19.2				
95% C.I.	(13.6-19.4)	(10.0-17.6)	(14.8-23.6)				
75-84	56	17	39	0			
Rate*	13.1	8.9	16.6				
95% C.I.	(9.6-16.5)	(4.6-13.0)	(11.4-21.8)				
85+	7	٨	5	0			
Rate*							
95% C.I.							

^{*} Rates are per 100,000 age-specific population. ^ Cases less than five have been suppressed.

The "--" denotes suppressed rates and confidence intervals for cases less than ten.

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APPENDICES

Appendix A: ICD-O-3 CODES USED

Table 50: ICD-O-3 Codes Used for Cancer Groupings in This Report

	I	CD-O-3 Codes	
Type of Cancer	ICD-O-3 Site	ICD-O-3 Histology	Excluded Histology/Site
Total	Sum		
Lip, Oral Cavity and Pharynx	Sum of subgroups		
Lip	C00		
Base of Tongue	C01		
Other & Unspecified Parts of the Tongue	C02		
Parotid Gland	C07		
Other & Unspecified Major Salivary glands	C08		
Floor of mouth	C04		
Gum	C03		9590-9989
Palate	C05		9050-9055
Other & Unspecified Parts of the mouth	C06		9140
Nasopharynx	C11		
Tonsil	C09		
Oropharynx	C10		
Pyriform Sinus	C12		
Hypopharynx	C13		
Other & Unspecified Oral Cavity & Pharynx	C14	Ī	
Digestive System	S	um of subgroups	
Esophagus	C15		
Stomach	C16		
Small Intestine	C17		
Colon (excluding Rectum)			
Cecum	C18.0		
Appendix	C18.1		
Ascending Colon	C18.2		9590-9989
Hepatic Flexure	C18.3		9050-9055
Transverse Colon	C18.4		9140
Splenic Flexure	C18.5		
Descending Colon	C18.6		
Sigmoid Colon	C18.7		
Large Intestine, NOS	C18.8-C18.9, C26.0		
Rectum	C20		
Rectosigmoid Junction	C19		
Anus, Anal Canal and Anorectum	C21		
Liver	C22.0		
Intrahepatic Bile Ducts	C22.1		
Gallbladder	C23		
Other & Unspecified Biliary Tract	C24		
Pancreas	C25		
Retroperitoneum	C48.0		

...continued

Table 50: ICD-O-3 Codes Used for Cancer Groupings in This Report (continued)

	10	CD-O-3 Codes	
Type of Cancer	ICD-O-3 Site	ICD-O-3 Histology	Excluded Histology/Site
Peritoneum, Omentum and Mesentery	C48.1-C48.2		
Other Digestive Organs	C26.8-C26.9, C48.8		
Respiratory System	Sı	ım of subgroups	
Nose, Nasal Cavity & Middle Ear	C30	• ,	
Accessory Sinuses	C31		
Larynx	C32		9590-9989
Lung and Bronchus	C34		9050-9055
Pleura	C38.4		9140
Trachea	C33		
Mediastinum & Other Respiratory Organs	C38.1-C38.3,C38.8, C39.0,39.8,39.9		
Bones, Joints and Articular Cartilage	Sı	ım of subgroups	
Bones, Joints & Articular Cartilage of Limbs	C40		9590-9989
Bones, Joints & Articular Cartilage of Other	C41		9050-9055
& Unspecified sites			9140
Soft Tissue Including Heart	Sı	ım of subgroups	
Heart	C38		9590-9989
Peripheral Nerves & Autonomic Nervous System	C47		9050-9055
Connective, Subcutaneous & Other Soft Tissues	C49		9140
Skin (excluding basal and squamous)	Si	ım of subgroups	-
Melanoma of the skin	C44	8720-8790	
Other Non-Epithelial Skin	C44		8000-8005,
-			8010-8045,
			8050-8084,
			8090-8110,
			8720-8790,
			9590-9989
			9050-9055, 9140
Breast	C50		9590-9989
			9050-9055, 9140
Female Genital System	Sı	ım of subgroups	,
Cervix Uteri	C53		
Corpus Uteri	C54		
Uterus, NOS	C55		
Ovary	C56		9590-9989
Vagina	C52		9050-9055
Vulva	C51		9140
Placenta	C58		
Other Female Genital Organs	C57		
Male Genital System	Sı	ım of subgroups	
Prostate	C61		9590-9989
Testis	C62		9050-9055
Penis	C60		9140
Other Male Genital Organs	C63		

...continued

Table 50: ICD-O-3 Codes Used for Cancer Groupings in This Report (continued)

		ICD-O-3 Codes	
Type of Cancer	ICD-O-3 Site	ICD-O-3 Histology	Excluded Histology/Site
Urinary System		Sum of subgroups	<u> </u>
Urinary Bladder	C67		
Kidney	C64	1	9590-9989
Renal Pelvis	C65	1	9050-9055
Ureter	C66		9140
Other Urinary Organs	C68		
Eye and Orbit	C69		9590-9989 9050-9055, 9140
Brain and Other Central Nervous System		Sum of subgroups	
Brain	C71		9530-9539 9590-9989 9050-9055, 9140
Meninges	C70		9590-9989 9050-9055, 9140
Spinal Cord, Cranial Nerves & Other Parts of	C72		9590-9989
CNS			9050-9055, 9140
	C71	9530-9539	
Endocrine System		Sum of subgroups	
Thyroid gland	C73		9590-9989
Adrenal gland	C74		9050-9055
Other Endocrine (including Thymus)	C37, C75		9140
Hodgkin Lymphoma		9650-9667	
Non-Hodgkin Lymphoma		9590-9596,	
		9670-9671,	
		9678-9680,	
		9689-9691,	
		9698-9702,	
		9708-9709,	
		9714-9719,	
		9727-9729,	
		9673, 9675, 9684,	
		9687, 9695, 9705	G12 0 G12 1 G12 1
Malana		9823, 9827	C42.0,C42.1,C42.4
Myeloma		9731-9732, 9734	
Leukemia Lymphogytia		Sum of subgroups	
Lymphocytic Acute Lymphocytic		9826, 9835-9837	
Chronic Lymphocytic	C42.0,C42.1,C42.4	9823	
Other Lymphocytic	C 12.0, C 12.1, C 12.1	9820, 9832-9834,	
, J r 3		9940	

...continued

Table 50: ICD-O-3 Codes Used for Cancer Groupings in This Report (continued)

		ICD-O-3 Codes	
Type of Cancer	ICD-O-3 Site	ICD-O-3 Histology	Excluded Histology/Site
Myeloid and Monocytic			
Acute Myeloid		9840, 9861, 9866.	
		9867, 9910, 9920	
		9871-9874,	
		9895-9897	
Acute Monocytic		9891	
Chronic Myeloid		9863, 9875, 9876	
		9945, 9946	
Other Myeloid/Monocytic		9860, 9930	
Other			
Other, Acute		9801, 9805, 9931	
Aleukemic, Subleukemic and NOS		9733, 9742, 9800,	
		9831, 9870, 9948,	
		9963, 9964	
	C42.0, C42.1, 42.4	9827	
Mesothelioma		9050-9055	
Kaposi Sarcoma		9140	
Other, ill-defined and unspecified sites	All oth	ner sites and histologies	<u> </u>

Note:

NOS - not otherwise specified

CNS - central nervous system

Appendix B: NEVADA POPULATION ESTIMATES, 2001-2005 Nevada Population Estimates by Age Groups, Race/Ethnicity, Gender, and Region, 2001-2005

								Race/Eth	nnicity					
	Age	WI	hite	Bla	ack	Native A	merican	As	ian	Hispa	anic		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
- 	<1	41,532	39,269	6,889	6,575	1,084	1,054	5,996	5,692	31,600	30,386	87,101	82,976	170,077
$\overline{\omega}$	1-4	163,199	<u>155,</u> 126	26,745	25 <u>,</u> 544	4,443	4,205	21,681	20,805	120,183	114,726	336,250	320,406	656,657
\Box	5-14	439,424	416,327	72,085	68,958	12,245	11,770	46,166	44,057	258,532	243,717	828,452	784,829	1,613,282
וש	15-24	458,634	436,424	67,104	64,724	13,232	12,682	48,340	49,971	265,323	225,739	852,634	789,540	1,642,174
	25-34	471,100	<u>455,</u> 994	55,850	56 <u>,</u> 189	11,244	<u>11,90</u> 8	55,457	61,0 <u>3</u> 3	285,506	222,400	879,158	807,524	1,686,682
(a)	35-44	585,167	546,262	62,742	58,620	12,193	12,680	51,545	63,056	200,594	163,456	912,242	844,074	1,756,316
<u> </u>	45-54	582,480	554,711	50,566	49,814	9,836	11,092	42,662	58,962	108,655	97,563	794,199	772,143	1,566,342
	55-64	459 <u>,</u> 709	458,172	28,190	32,633	6,781	7,797	27,234	38,833	48,920	<u>51,161</u>	570,833	<u>588,59</u> 7	1,159,430
	65-74	307,453	307,209	18,529	20,077	3,504	3,891	<u> 15,817</u>	22,511	23,618	<u>27,145</u>	368,920	380,833	749,754
	75-84	<u>167,40</u> 1	201,549	8 <u>,</u> 469	<u>10,161</u>	1,457	1,872	6,892	9,436	9,256	<u>11,977</u>	1 <u>9</u> 3,474	<u>234,996</u>	<u>428,</u> 470
	85+	30,990	60,703	1,231	2,743	312	681	809	1,204	1,306	2,610	34,647	67,940	102,587
	Total	3,707,089	3,631,747	398,401	396,037	76,330	79,632	322,598	375,561	1,353,493	1,190,880	5,857,911	5,673,858	11,531,769

								Race/Etl	nnicity					
	Age	W	hite	Bla	ack	Native A	merican	As	ian	Hispa	anic		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
	<1	27,458	26,007	6,520	6,208	460	431	4,887	4,602	24,781	23,914	64,105	61,161	125,266
١	1-4	107,307	102,279	25,250	24,080	1,980	1,865	17,564	16,840	94,513	90,565	246,614	235,628	482,242
×	5-14	280,239	265,337	67,145	64,061	5,043	5,006	37,527	35,742	199,803	188,916	589,756	559,061	1,148,818
	15-24	291,838	277,671	61,788	60,350	5,490	5,410	38,005	39,447	203,502	175,238	600,623	558,117	1,158,739
σ	25-34	<u>324,502</u>	313, <u>5</u> 11	50,699	53,003	<u>5,517</u>	5,810	44,923	<u>49,172</u>	229,783	178,699	655,424	<u>600,</u> 1 <u>9</u> 6	1,255,620
	35-44	390,801	355,856	58,333	55,404	5,858	5,788	43,211	52,197	158,635	126,846	656,838	596,093	1,252,930
	45-54	368,572	346,953	46,657	46,922	4,585	4,903	35,330	48,547	85,345	75,878	540,489	523,203	1,063,692
	55-64	299,314	303,494	26,037	30,917	3,149	3,465	22,565	32,046	38,251	41,127	389,316	411,050	800,366
	65-74	205,276	204,905	17,287	18,953	1,397	1,521	13,001	18,486	18,191	21,405	255,152	265,270	520,422
	75-84	<u>1</u> 11,753	132,884	7,927	9,540	538	670	5,642	7,890	6,984	9,341	132,844	160,324	293,168
	85+	19,555	38,741	1,085	2,466	113	258	618	1,004	825	2,049	22,195	44,518	66,713
	Total	2,426,613	2,367,639	368,728	371,904	34,130	35,128	263,272	305,972	1,060,613	933,977	4,153,356	4,014,620	8,167,976

								Race/Et	hnicity					
	Age	W	hite	Bla	ack	Native A	American	As	ian	Hispa	anic		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
മ	<1	7,631	7 <u>,</u> 160	319	312	294	311	940	912	4,811	4,536	13,996	13,231	27,226
1 🗡	1-4	29,622	27,622	1,262	1,224	1,132	1,100	3,446	3,262	18,011	16,843	53,473	50,051	103,523
	5-14	80,290	76,085	3,867	3,978	2,962	2,732	6,909	6,659	38,442	35,875	132,469	125,329	257,798
	15-24	88,526	85,577	3,836	3,408	3,030	2,872	8,756	8,965	40,545	32,140	144,692	132,961	277,654
S	25-34	85 <u>,</u> 319	83,636	3,234	2,435	2,581	2,786	9,043	10,094	36,921	29,048	137,098	127,999	265,097
$ \omega $	35-44	107 <u>,</u> 663	103,269	3,221	2,474	2,896	2,772	6,798	8,582	26,526	23,370	147,103	140,467	287,570
	45-54	<u>113,030</u>	108,040	3,050	2,315	2,193	2,348	5,722	7,970	13,486	12,649	1 <u>37,481</u>	133,322	270,803
\leq	55-64	80 <u>,</u> 191	76,635	1 <u>,</u> 674	1,334	1,426	1,561	3,885	5,300	5,955	5,893	93,132	90,722	183,854
	65-74	46,613	47,654	903	825	752	836	2,380	3,150	2,899	3,343	53,547	55,807	109,354
	75-84	25,155	33,337	340	458	291	392	1,028	1,171	1,246	1,619	28,060	36,977	65,037
	85+	5,368	11,613	109		65	132	145		229	292	5,916	12,393	18,308
	Total	669,410	660,627	21,815	18961	17,620	17,841	49,051	56,221	189,070	165,607	946,966	919,258	1,866,224

10								Race/Et	nnicity					
es	Age	WI	nite	Bla	ack	Native A	American	As	ian	Hispa	anic		Total	
		Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Total
J	<1	6,442	6,102	50	55	330	313	169	178	2,008	1,937	9,000	8,584	17,584
∣⋽	1-4	26,270	25,225	233	240	1,331	1,241	671	703	7,659	7,319	36,164	34,728	70,891
0	5-14	78,895	74,905	1,073	919	4,241	4,031	1,730	1,657	20,287	18,927	106,227	100,439	206,666
()	15-24	78,271	73,176	1,480	967	4,712	4,399	1,580	1,559	21,276	18,361	107,319	98,462	205,781
	25-34	61,279	58,848	1,918	751	3,146	3,312	1,491	1,766	18,802	14,652	86,636	79,329	165,965
e e	35-44	86,703	87,137	1,189	742	3,439	4,120	1,536	2,277	15,434	13,240	108,300	107,515	215,815
	45-54	100,878	99,719	859	576	3,058	3,842	1,610	2,446	9,824	9,035	116,229	<u>115,618</u>	231,847
三	55-64	80,204	78,043	478	381	2,206	2,771	784	1,487	4,713	4,142	88,385	86,825	175,210
\cup	65-74	55 <u>,</u> 564	54,650	339	299	1,355	1,534	436	876	2,528	2,398	60,222	<u>59,</u> 7 <u>5</u> 6	<u>119,978</u>
_	75-84	30,493	35,328	202	163	628	810	221	375	1,026	1,017	32,570	37,694	70,265
7	85+	6,066	10,348	37	79	135	291	46	43	252	269	6,537	11,030	17,566
	Total	611,066	603,481	7,858	5,172	24,580	26,663	10,275	13,367	103,811	91,297	757,589	739,980	1,497,569

Note: All Other Counties include: Carson City, Churchill, Douglas, Elko, Esmeralda, Eureka, Humboldt, Lander, Lincoln, Lyon, Mineral, Nye, Pershing, Storey and White Pine.

Nevada Population Estimates by Age Groups, County and Gender, 2001-2005

								(Countie	S						
S	Age	C	Carson Cit	У		Churchill			Douglas			Elko			Esmeralda	ì
<u>e</u> .		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
nti	<1	1,871	1,785	3,656	872	873	1,745	986	979	1,965	1,624	1,582	3,206	15	16	32
$\overline{}$	1-4	7,297	6,961	14,258	3,727	3,472	7,199	4,279	4,177	8,455	6,113	6,032	12,145	71	78	149
⊺ರ	5-14	18,498	17,749	36,247	10,467	10,170	20,636	13,366	12,510	25,876	19,084	18,147	37,232	326	248	574
\sim	15-24	17,089	16,690	33,779	10,097	9,596	19,693	14,936	13,146	28,083	21,179	18,846	40,025	525	387	911
	25-34	15,378	14,249	29,627	7,924	7,830	15,755	11,288	10,924	22,212	17,834	15,344	33,177	394	319	713
$\boldsymbol{\omega}$	35-44	19,007	17,974	36,981	8,978	8,784	17,762	16,330	17,416	33,746	18,402	18,381	36,783	423	323	746
0	45-54	20,024	20,228	40,252	8,867	9,069	17,935	20,587	21,179	41,766	18,031	16,451	34,482	439	417	856
Ø	55-64	13,161	15,446	28,607	6,455	6,381	12,836	16,208	15,749	31,956	11,336	9,398	20,734	413	378	791
≥	65-74	8,958	10,830	19,788	4,021	4,329	8,350	11,058	10,713	21,771	5,767	4,742	10,509	313	244	556
<u>e</u>	75-84	6,645	9,187	15,832	2,399	2,829	5,228	6,128	6,553	12,682	1,574	2,125	3,699	167	153	321
_	85+	1,492	2,662	4,154	498	907	1,405	1,133	1,528	2,662	265	856	1,122	35	46	80
	Total	129,420	133,760	263,180	64,303	64,240	128,543	116,299	114,875	231,174	121,210	111,904	233,114	3,121	2,609	5,730

									Counties	5						
S	Age		Eureka			Humboldt			Lander			Lincoln			Lyon	
<u>.e</u>		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
=	<1	48	34	82	631	506	1,137	168	176	344	112	101	213	1,265	1,199	2,464
\perp	1-4	172	202	374	2,583	2,336	4,919	832	800	1,631	431	352	783	4,966	4,906	9,871
\vdash	5-14	574	594	1,169	7,100	6,569	13,669	2,626	2,402	5,028	1,161	1,063	2,224	13,953	13,221	27,174
\sim	15-24	363	377	740	6,461	5,708	12,169	2,100	1,914	4,015	1,773	1,594	3,367	13,859	12,677	26,536
	25-34	426	375	801	4,807	3,659	8,466	1,148	1,164	2,313	1,167	997	2,164	13,108	11,686	24,794
Ø	35-44	665	595	1,260	6,729	6,317	13,046	2,171	2,218	4,390	835	936	1,771	14,931	15,400	30,331
0	45-54	585	480	1,065	6,892	6,426	13,318	2,208	2,022	4,230	1,009	1,118	2,128	15,258	15,955	31,213
$\boldsymbol{\omega}$	55-64	462	386	848	4,644	4,062	8,706	1,775	1,512	3,288	769	1,008	1,777	12,390	12,263	24,653
>	65-74	303	304	607	2,327	2,083	4,411	754	646	1,400	738	856	1,594	9,033	8,716	17,749
<u>a</u>	75-84	132	141	273	1,209	1,108	2,317	241	347	588	534	635	1,170	4,825	5,205	10,030
Z	85+	24	35	59	283	473	756	79	145	224	102	253	355	1,063	1,434	2,498
	Total	3,755	3,524	7,279	43,666	39,248	82,914	14,103	13,348	27,451	8,633	8,914	17,547	104,652	102,662	207,313

								(Counties	S						
S	Age		Mineral			Nye			Pershing			Storey		\	Vhite Pine)
<u>e</u> .		Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
 	<1	106	109	215	889	838	1,726	164	155	318	43	33	77	205	199	404
\perp	1-4	453	476	929	3,612	3,374	6,987	619	593	1,212	179	108	287	830	861	1,691
1	5-14	1,666	1,634	3,300	11,618	10,763	22,381	2,136	1,827	3,963	936	746	1,681	2,716	2,796	5,512
\sim	15-24	1,687	1,346	3,032	11,099	10,281	21,380	2,390	2,553	4,943	1,131	1,015	2,147	2,630	2,331	4,961
	25-34	938	930	1,868	7,830	7,789	15,619	1,602	1,420	3,022	829	660	1,489	1,962	1,982	3,943
a	35-44	1,293	1,364	2,657	12,538	12,402	24,940	2,030	1,699	3,729	1,451	1,514	2,965	2,517	2,192	4,709
0	45-54	1,660	1,713	3,373	13,795	13,857	27,651	2,110	1,725	3,835	2,049	1,967	4,016	2,716	3,011	5,726
ற	55-64	1,535	1,551	3,086	13,976	13,306	27,282	1,275	1,452	2,727	1,833	1,558	3,391	2,154	2,374	4,529
≥	65-74	1,368	1,283	2,651	12,208	11,392	23,600	868	983	1,851	924	873	1,797	1,580	1,762	3,341
<u> </u>	75-84	900	902	1,802	5,713	6,173	11,886	481	531	1,012	428	428	856	1,194	1,375	2,569
_	85+	153	360	513	932	1,173	2,105	108	235	343	48	145	193	322	778	1,099
	Total	11,759	11,668	23,427	94,210	91,347	185,556	13,782	13,173	26,956	9,850	9,048	18,898	18,827	19,659	38,486

Appendix C: FORMULAS

CRUDE RATE:

Crude Rate =
$$\frac{Number\ of\ Events}{Population} \times 100,000$$

AGE-SPECIFIC CRUDE RATE:

$$\frac{\textit{Number of Events in a specific age-group}}{\textit{Population in specific age-group}} \times 100,000$$

CRUDE RATE CONFIDENCE INTERVALS:

CI lower =
$$\left(\frac{100,000}{Population}\right) \times \left(Events - \left(1.96 \times \sqrt{Events}\right)\right)$$

$$\mathbf{CI}_{\text{upper}} = \left(\frac{100,000}{Population}\right) \times \left(Events + \left(1.96 \times \sqrt{Events}\right)\right)$$

AGE-ADJUSTED RATE (ADR):

If

 d_i = the number of events in the *i*-th age interval

 p_i = the population size in the *i*-th age interval

 m_i = the age-specific crude rate in the *i*-th age interval = $\frac{d_i}{p_i} \times 100,000$ and

 P_{si} = proportion of the population in the *i*-th age group in the standard population (2000 U.S. population)

k = Number of age groups

Then,

$$\mathbf{ADR} = \sum_{i=1}^{k} (m_i * P_{si})$$

AGE-ADJUSTED STANDARD ERROR (SE):

$$\mathbf{SE} = \sqrt{\sum_{i=1}^{k} \left(\frac{m_i * (100,000 - m_i)}{p_i} \right) * (P_{si})^2}$$

AGE-ADJUSTED 95% CONFIDENCE INTERVALS (C.I.):

OR

95% C.I._{Lower} =
$$\sum_{i=1}^{k} (m_i * P_{si}) - 1.96* \sqrt{\sum_{i=1}^{k} \left(\frac{m_i * (100,000 - m_i)}{p_i} \right) * (P_{si})^2}$$

95% C.I._{Upper} =
$$\sum_{i=1}^{k} (m_i * P_{si}) + 1.96* \sqrt{\sum_{i=1}^{k} \left(\frac{m_i * (100,000 - m_i)}{p_i} \right) * (P_{si})^2}$$

Appendix D: FEEDBACK AND SUGGESTIONS

In a continuing effort to provide an annual Cancer Report that is useful to the communities in Nevada, feedback and suggestions on the information contained in this report are welcome.

Please return the completed survey by mail, fax or email to:
 Alicia Chancellor Hansen, MS
 Office of Health Statistics and Surveillance
Bureau of Health Statistics Planning & Emergency Response
 4150 Technology Way, Suite #104
 Carson City, Nevada 89706
 Fax: 775-684-4156

Email: ahansen@health.nv.gov

1. How did y	ou first obta	in the report?				
Hard Copy	Elec	tronic Copy	State	Website		
2. Please rate	e the overall	value of the re	eport:			
Extremely	Valuable	Mod	derate	Of Little	No	
Valuable		Valı	ie	Value	Value	
5	4	3	•	2	1	
2. Please rate	e the overall	IMPORTANC	CE of the repor	t:		
Very	Important	Modera	tely O	f Little	Unimportai	nt
important		Importa	nt In	nportance		
5	4	3		2	1	
<u> </u>		· · · · · · · · · · · · · · · · · · ·				
3. Please rate	e the informa	ntion on specifi	ic types of canc	er included	in this report	:
3. Please rate	Extremely	Helpful	Somewhat	eer included A Little	in this report	: Not
Type of	Extremely Helpful	Helpful	Somewhat Helpful	A Little Helpful	Not Helpful	
Туре	Extremely		Somewhat	A Little	Not	Not
Type of	Extremely Helpful	Helpful	Somewhat Helpful	A Little Helpful 2	Not Helpful	Not Applicable
Type of	Extremely Helpful	Helpful	Somewhat Helpful 3	A Little Helpful 2	Not Helpful	Not Applicable
Type of Information	Extremely Helpful 5	Helpful	Somewhat Helpful 3	A Little Helpful 2	Not Helpful	Not Applicable
Type of Information All Cancers	Extremely Helpful 5	Helpful	Somewhat Helpful 3	A Little Helpful 2	Not Helpful	Not Applicable
Type of Information All Cancers Lung and Bro	Extremely Helpful 5	Helpful	Somewhat Helpful 3	A Little Helpful 2	Not Helpful	Not Applicable
Type of Information All Cancers Lung and Bro	Extremely Helpful 5	Helpful	Somewhat Helpful 3	A Little Helpful 2	Not Helpful	Not Applicable

Urinary Bladder							
Non-Hodgkin							
Skin		H					
Kidney & Renal				H			
Leukemia		H					
Thyroid							
Other Comments:							
If you would like to by the Office of Hea http://health.nv.gov/	Ith Statistics	and Surve			pdates when	reports are released	
Optional:							
Name:				Phone:	Phone:		
Business Organizati	on or Affiliat	ion:					
Mailing Address:							
City:		State:		Zip	Code:		
Email Address:							