

Comprehensive Report Lung & Bronchus Cancer

September 2015 | Edition 1.0



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PURPOSE

The primary purpose of this report is to provide the most current and accurate lung & bronchus tumor incidence and mortality data, to describe the long-term trends of lung & bronchus tumors in the State of Nevada and its counties, and compare them to the United States lung & bronchus cancer incidence and mortality. It is our hope that the report findings will be utilized by advisory boards, public health professionals, policy makers, and community members to develop programs and policies that will protect the health and well-being of individuals in Nevada.

METHODS

Lung & bronchus tumor counts, information on county at diagnosis, age at diagnosis, and year of diagnosis, were obtained from the 12/05/2014 Nevada Central Cancer Registry data extract¹. Age-adjusted rates, and confidence intervals were calculated with SEER*Stat methodology², as well as relative standard error (RSE).

Annual age-adjusted rates from years 1995 to 2012 were calculated for lung & bronchus cases by year, by county, by region, by gender, and by race/ethnicity. For adjustment, population counts were obtained from the 2000 US Standard Population (19 Age-groups)^{3, 4}.

Geographical description was included by county and by describing four geo-demographical regions: Urban-high populated counties (Clark County, Washoe County, and Carson City) and All Other counties (Rural, Frontier, low, and very low population density counties).

For analyses, lung & bronchus incidence and mortality age-adjusted overall, by gender, and by race rates were compared between Nevada and the US, age-adjusted rates were compared between age groups (<20, 20-39, 40-64, 65-79, and 80+) within Nevada, and age-adjusted rates were compared between counties and between geo-demographical regions. All age-adjusted rates were calculated for the 1995-2012 diagnosis years (annually) and cumulative age-adjusted rates were calculated for the 2008-2012 diagnosis years. Confidence intervals were calculated and included in tables associated with each figure.

TECHNICAL NOTES

The incidence rate is the basic measure of disease occurrence as it expresses the probability or risk of disease in a defined population over a specific period of time. Age-adjusted rates with a common standard population allow for the comparison of rates in populations across regions with different age distributions. This method allows for the comparison between the US, Nevada, Nevada urban counties, Nevada rural and frontier counties. The annual and cumulative age-adjusted rates were calculated by summing the weighted crude, age-specific rates utilizing the national standard: Year 2000 US Standard Population (19 Age-groups), which were expressed per 100,000 Standard Population.

The reliability of the estimates of incidence age-adjusted rates are reflected by the RSE. RSE is the measure of the extent of the age-adjusted rate is likely to deviate from the true population, expressed as a fraction of the age-adjusted estimate, and is usually displayed as a percentage. A RSE of magnitude $\geq 30\%$ is considered statistically unreliable for this report and a “¥” symbol has been shown in place of a rate with a value equivalent or greater.

The variability of the age-adjusted rates was assessed in terms of confidence intervals. The confidence intervals for this report, the computed intervals, are where we would expect the true age-adjusted rate to be within 95% of the time. Counts more than zero but less than or equal to 5 and their resulting rates and confidence limits were removed due to confidentiality and reliability issues, a “¥” symbol was shown in place of them.

Lung & bronchus cancer case definitions for this report utilized the current NAACCR Standard Site Analysis Categories⁵. For lung & bronchus incidence, this includes ICD-O-3 Codes C340-C349, all histologies except 9590-9989, 9050-9055, and 9140. For lung & bronchus mortality, this includes ICD-9 Codes 162.2-162.5 and 162.8-162.9 and ICD-10 Code C34.

LIMITATIONS

INCIDENCE DATA INTERPRETATION

Due to poor reporting practices in healthcare facilities within Nevada, the completeness or quality of cancer abstracts and timeliness of reporting has declined. In terms of completeness, although required by the NAC, submission of patients' race has not been included in 12.8% of cases reported to NCCR for cancers diagnosed in 2011. In addition, the number of reports received is lower than expected. In terms of timeliness, although required by the NAC, the majority of abstracts were submitted outside of healthcare facilities reporting window for each abstract.

Nevada has two large urban population concentrations and counties among the greatest population dispersion in the nation. This demographic distribution phenomenon results in similar rates between urban counties and the state, and unreliable rates or rates with large variability (large confidence intervals) in smaller, rural and frontier counties. This is primarily due to low frequency cancer cases and small populations.

For Hispanics, "Race" is underreported due to the misunderstanding between "Race" and "Ethnicity." Whether "Hispanic" is written in the race or ethnicity field, after reporting, the ethnicity field will be classified as "Hispanic" and the race field will be left empty. This results in race data being poorly reported.

Native American/Alaska Natives are underrepresented in NCCR. "Studies that estimate misclassification among American Indians/Alaska Natives using cancer registry data report these rates are underreported by 40%–57%, depending on the region of the country." ^{7,8,9}

Reliable survival data depend on the accuracy, completeness, and timeliness of mortality data and cancer data linkages with the state and the National Death Index, and cancer data sharing between other states. The NCCR is actively improving processes in order to attain the data quality necessary for survival calculations.

COMPARING STATE AND COUNTY RATES

Careful interpretation of counties with higher incidence or death rates than other counties or the state is needed to avoid misinterpretation or false conclusions.

Accessibility to medical care and population medical care coverage should be considered when interpreting differing cancer rates. Counties with increased participation in cancer screening result in more diagnosed cancers. In addition, screening leads to earlier detection that have a better prognosis and may find tumors that grow so slowly that they would not have otherwise been recognized in a person's lifetime.

Varying county cancer rates may be explained by the distribution of known risk factors among population in these counties. Although environmental carcinogens are responsible for a few specific cancers, majority of cases appear to be related to lifestyle factors.

Certain racial and ethnic populations are more prone to certain cancers. Thus, a county's racial and ethnic distribution should be considered when making conclusions. Statistical adjustment by race and ethnicity or age-adjusted rates by race and ethnicity can mitigate this issue.

The importance of cancer as a public health problem in a state is more a function of the absolute cancer rate than the state's relative ranking in incidence or mortality. In addition, the true burden of cancer on a healthcare system and economy of a state is determined by the number of people diagnosed with cancer, the number of people dying of cancer, and its social implications. Therefore, higher cancer rates between states may obscure the absolute number of cancer cases.

After adjustment, some uncertainty in computed cancer rates may persist because many factors contribute to the incidence and death rate in a given year or location, and some factors exhibit random behavior. Chance plays a role in determining if and when cancer develops in an individual, whether that cancer is detected, and whether that cancer progresses and leads to death. For these reasons, the reported rates are expected to vary from year to year within a state or county even in the absence of a general trend. Thus, caution is warranted when examining cancer rates for a single year and more so when rates are based on relatively few cases.

A 95% confidence interval is expected to contain the true underlying rate 95% of the time. Confidence intervals are available for age-adjusted rates to assist with interpreting results. Due to variations in the population sizes and number of reported cases and deaths across counties, more uncertainty is present in the incidence and death rates for certain counties. The confidence intervals provide a simple measure of the variability in rates and a basis when making county-specific comparisons. However, it is not recommended to use overlapping confidence intervals as a method to conclude rates are significantly different.

Another consideration when comparing differences between rates is their public health importance. Some rates have large numerators and/or denominators and consequently small standard errors that result in statistically significant differences. Conversely, some rates have large standard errors which are suppressed when they do not meet the maximum 30% relative standard error requirement.

LUNG & BRONCHUS CANCER MORTALITY

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Figure 1: Lung & Bronchus Cancer Mortality Trend, Nevada vs. United States, 1995-2012.

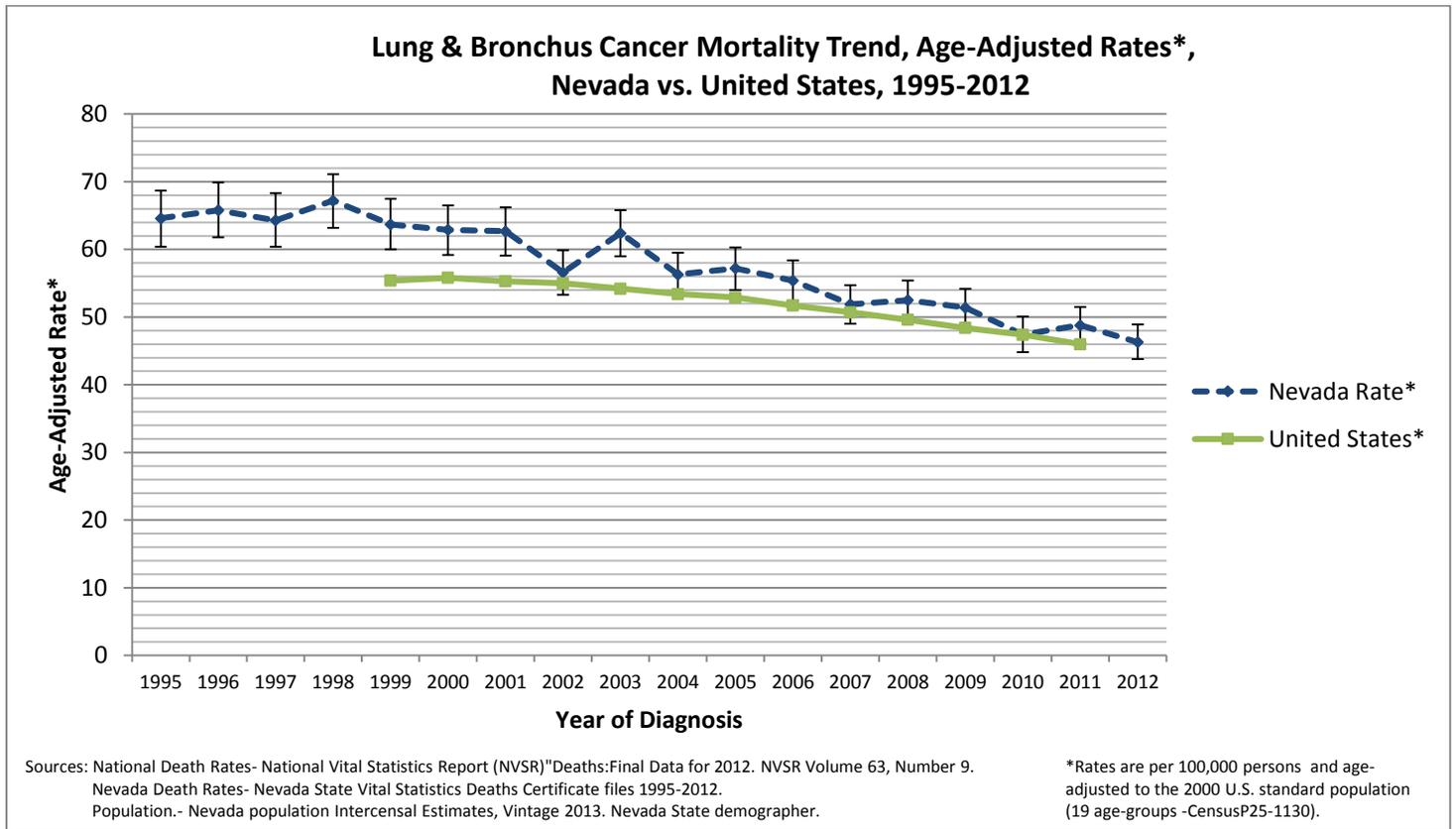


Table 1: Lung & Bronchus Cancer Mortality Age-Adjusted Rates* by year, Nevada and United States, 1995-2012.

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Nevada	64.6 (60.5-68.8)	65.8 (61.7-69.8)	64.3 (60.3-68.2)	67.2 (63.3-71.2)	63.7 (59.9-67.4)	62.9 (59.3-66.6)	62.7 (59.2-66.3)	56.6 (53.3-59.9)	62.4 (59.0-65.8)
United States					55.4 (55.1-55.7)	55.8 (55.6-56.1)	55.3 (55.0-55.6)	55.0 (54.7-55.3)	54.2 (53.9-54.5)

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Nevada	56.3 (53.1-59.5)	57.2 (54.1-60.4)	55.4 (52.4-58.4)	51.9 (49.1-54.8)	52.5 (49.6-55.3)	51.4 (48.6-54.2)	47.4 (44.7-50.0)	48.8 (46.1-51.4)	46.3 (43.7-48.8)
United States	53.4 (53.1-53.6)	52.9 (52.6-53.1)	51.7 (51.5-52.0)	50.7 (50.5-51.0)	49.6 (49.3-49.8)	48.4 (48.2-48.7)	47.4 (47.2-47.7)	46 (45.8-46.2)	

*Rates are per 100,000 persons and age-adjusted to the 2000 U.S. standard population (19 age-groups -CensusP25-1130).

LUNG & BRONCHUS CANCER MORTALITY BY GENDER

Figure 2: Lung & Bronchus Cancer Mortality Trend by Gender, Age-Adjusted Rates*, Nevada vs. United States, 1995-2012.

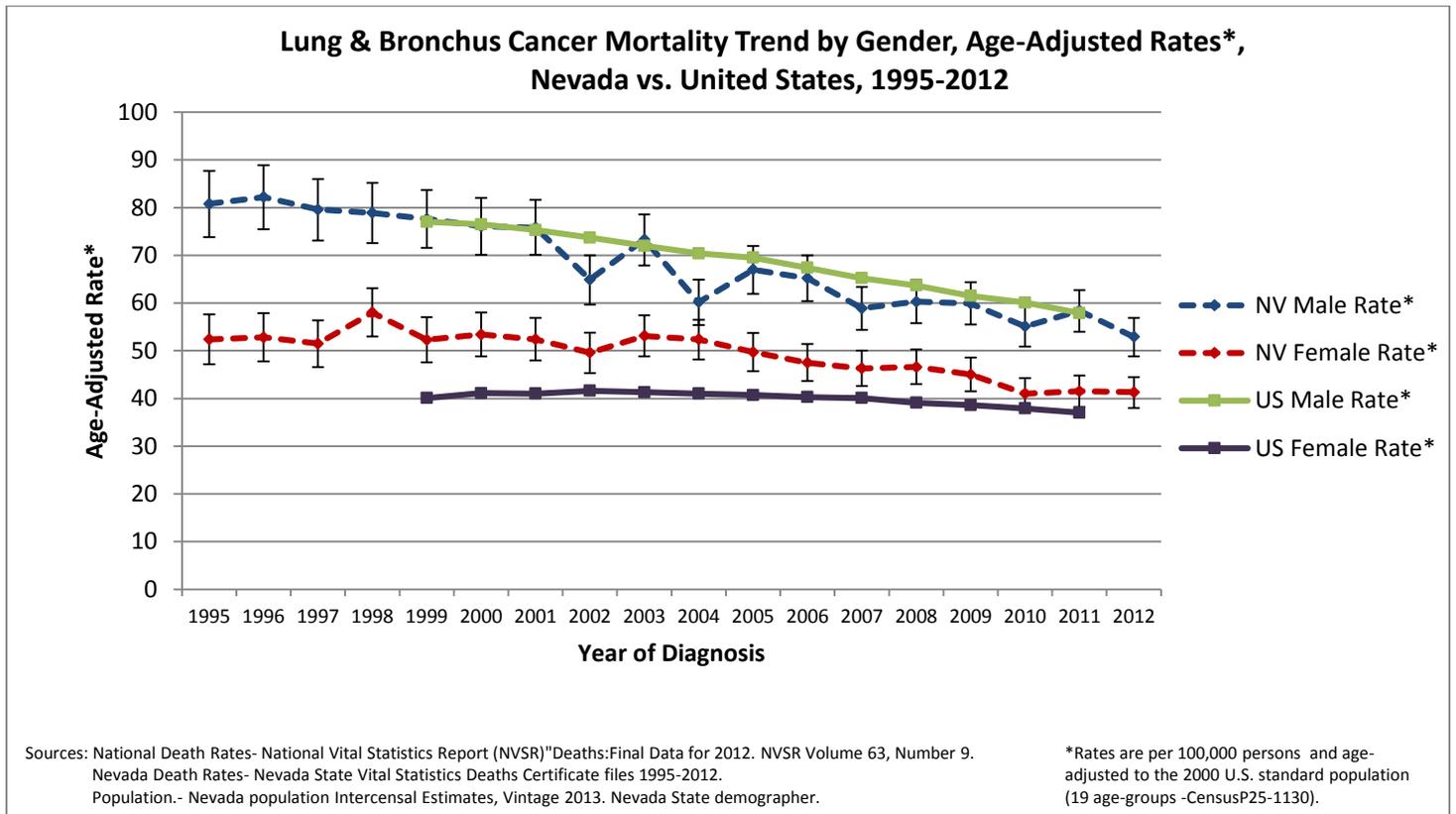


Table 2: Lung & Bronchus Cancer Mortality Trend by Gender, Age-Adjusted Rates*, Nevada and United States, 1995-2012.

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Nevada Male	80.8 (73.9-87.8)	82.2 (75.5-88.9)	79.6 (73.2-86.1)	78.9 (72.6-85.2)	77.6 (71.5-83.6)	76.1 (70.2-82.1)	75.8 (70.0-81.5)	64.9 (59.8-70.1)	73.3 (68.0-78.7)
Nevada Female	52.4 (47.2-57.6)	52.8 (47.7-57.8)	51.5 (46.6-56.4)	58.0 (52.9-63.0)	52.3 (47.6-57.0)	53.4 (48.8-58.0)	52.4 (47.9-56.8)	49.6 (45.4-53.9)	53.1 (48.8-57.4)
United States Male					77.0 (76.5-77.5)	76.5 (76.0-77.0)	75.3 (74.8-75.8)	73.7 (73.2-74.2)	72.0 (71.6-72.5)
United States Female					40.1 (39.8-40.5)	41.1 (40.8-41.4)	41.0 (40.7-41.3)	41.6 (41.3-41.9)	41.3 (41.0-41.6)

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Nevada Male	60.2 (55.5-65.0)	67.0 (62.0-72.1)	65.2 (60.4-70.0)	58.9 (54.4-63.4)	60.3 (55.8-64.8)	59.9 (55.4-64.3)	55.1 (50.9-59.3)	58.4 (54.1-62.8)	52.9 (48.9-57.0)
Nevada Female	52.4 (48.3-56.6)	49.7 (45.7-53.7)	47.5 (43.6-51.3)	46.3 (42.6-50.0)	46.6 (42.9-50.2)	45.0 (41.4-48.5)	41.0 (37.7-44.4)	41.5 (38.2-44.8)	41.3 (38.1-44.6)
United States Male	70.4 (70.0-70.9)	69.5 (69.0-70.0)	67.4 (66.9-67.8)	65.2 (64.7-65.6)	63.7 (63.3-64.2)	61.5 (61.1-62.0)	60.1 (59.7-60.5)	57.9 (57.5-58.3)	
United States Female	41 (40.7-41.3)	40.7 (40.4-41.0)	40.3 (40.0-40.6)	40.1 (39.8-40.4)	39.1 (38.8-39.4)	38.6 (38.3-38.9)	37.9 (37.7-38.2)	37.0 (36.7-37.3)	

*Rates are per 100,000 persons and age-adjusted to the 2000 U.S. standard population (19 age-groups -CensusP25-1130).

LUNG & BRONCHUS CANCER MORTALITY BY GENDER, 2008-2012

Figure 3: Lung & Bronchus Cancer Mortality (Cumulative Annual 5 years period) Age-Adjusted Rates* by Gender, Nevada vs. United States.

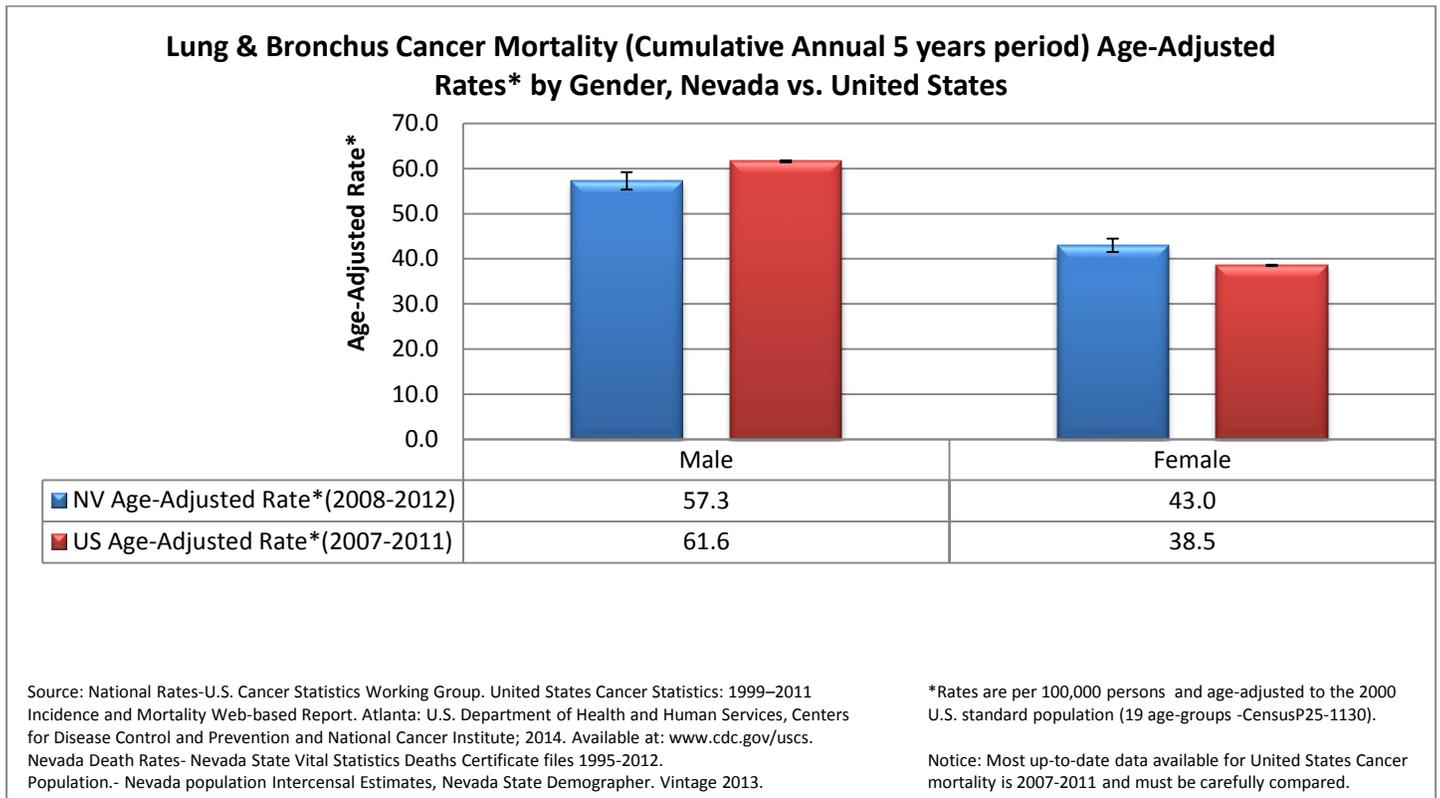


Table 3: Lung & Bronchus Cancer Mortality by Region and Gender. Cumulative Annual Age-Adjusted Rates* Nevada Geodemographical Regions.

Lung & Bronchus Cancer Mortality (All Ages, All Races) by Gender - Age-Adjusted Rates*, Nevada, 2008-2012 (Regions ordered by population size)				
Gender	Clark	Washoe	Carson City	Rural
Male	56.5 (54.2-58.8)	56.0 (51.0-61.0)	74.2 (59.6-88.7)	60.3 (55.1-65.6)
Female	41.5 (39.7-43.3)	45.3 (41.2-49.4)	55.0 (44.4-65.6)	46.3 (41.8-50.8)
All Genders	48.0 (46.5-49.4)	49.7 (46.5-52.9)	62.8 (54.1-71.4)	53.0 (49.6-56.5)

‡ Counts more than zero or less than or equal to 5 or Rates with Relative Standard Error (RSE) >30% are suppressed; due to reliability and/or confidentiality issues.

* Rates are per 100,000 persons and age-adjusted to the 2000 US Census standard population.

LUNG & BRONCHUS CANCER MORTALITY TREND BY RACE/ETHNICITY

Figure 4: Lung & Bronchus Cancer Mortality Trend by Race/Ethnicity, Confidence Intervals, Age-Adjusted Rates*, Nevada, 1995-2012.

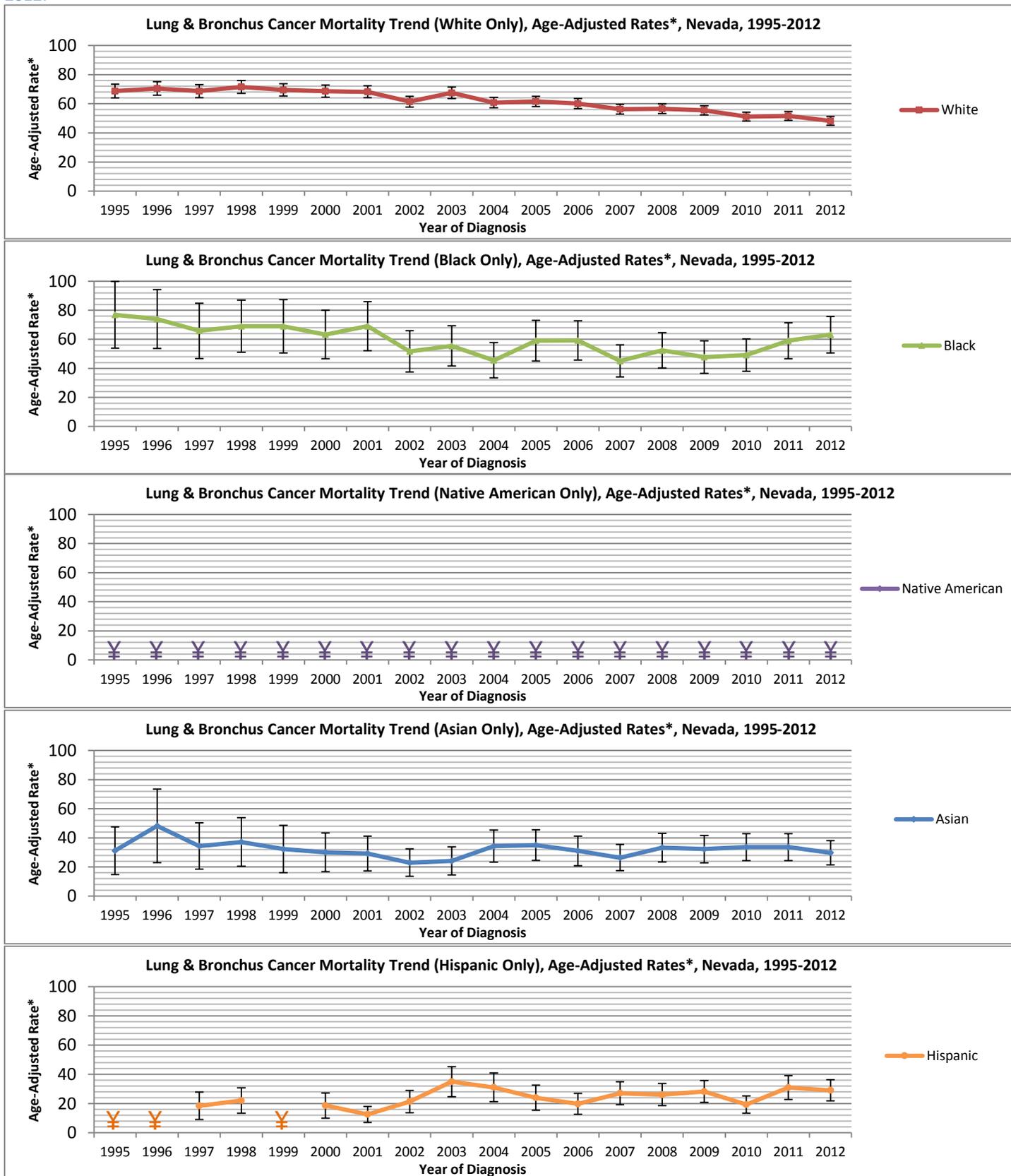


Figure 5: Lung & Bronchus Cancer Mortality Trend by Race/Ethnicity, Age-Adjusted Rates*, United States, 1999-2011.

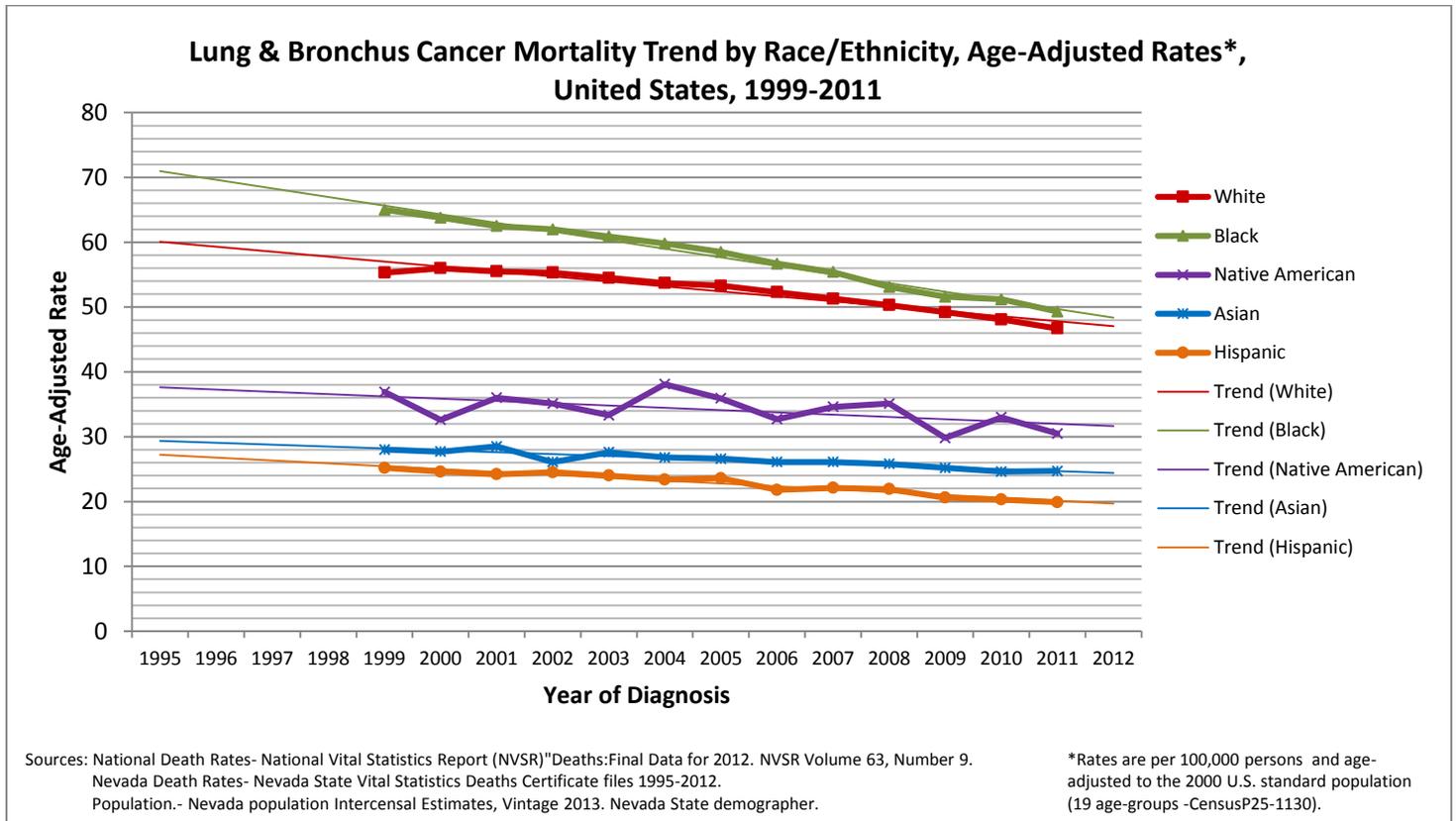


Table 4: Lung & Bronchus Cancer Mortality Annual Age-Adjusted Rates* by Race/Ethnicity, Nevada, 1995-2012.

Nevada	1995	1996	1997	1998	1999	2000	2001	2002	2003
White	68.7 (64.1-73.4)	70.5 (65.9-75.1)	68.7 (64.2-73.1)	71.6 (67.2-76.0)	69.5 (65.3-73.8)	68.6 (64.5-72.8)	68.2 (64.2-72.3)	61.5 (57.7-65.2)	67.5 (63.6-71.4)
Black	76.9 (53.9-99.8)	74.0 (53.7-94.3)	65.9 (46.8-84.9)	69.0 (51.1-87.0)	69.0 (50.6-87.4)	63.3 (46.6-80.1)	69.1 (52.1-86.0)	51.7 (37.5-65.9)	55.5 (41.7-69.3)
Native American	¥	¥	¥	¥	¥	¥	¥	¥	¥
Asian	31.2 (14.9-47.6)	48.2 (23.0-73.5)	34.4 (18.5-50.3)	37.2 (20.5-53.9)	32.3 (16.0-48.7)	30.1 (16.9-43.4)	29.3 (17.3-41.3)	23.0 (13.6-32.4)	24.1 (14.5-33.8)
Hispanic	¥	¥	18.5 (9.2-27.9)	22.1 (13.5-30.8)	¥	18.7 (10.1-27.3)	12.6 (7.1-18.1)	21.4 (13.7-29.0)	35.0 (24.7-45.2)

Nevada	2004	2005	2006	2007	2008	2009	2010	2011	2012
White	60.8 (57.2-64.4)	61.6 (58.0-65.2)	60.1 (56.6-63.6)	56.3 (53.0-59.6)	56.6 (53.3-59.9)	55.5 (52.3-58.7)	51.1 (48.1-54.2)	51.7 (48.6-54.7)	48.2 (45.3-51.2)
Black	45.5 (33.4-57.7)	59.1 (45.0-73.1)	59.2 (45.7-72.8)	45.1 (34.0-56.2)	52.4 (40.2-64.6)	47.8 (36.6-59.0)	49.2 (38.0-60.3)	59.0 (46.6-71.4)	63.2 (50.7-75.7)
Native American	¥	¥	¥	¥	¥	¥	¥	¥	¥
Asian	34.3 (23.3-45.4)	35.0 (24.5-45.5)	31.1 (20.9-41.2)	26.4 (17.4-35.5)	33.3 (23.4-43.1)	32.3 (22.8-41.7)	33.7 (24.4-43.0)	33.7 (24.4-43.0)	29.8 (21.4-38.2)
Hispanic	31.1 (21.2-41.0)	24.0 (15.4-32.6)	19.8 (12.7-26.9)	27.1 (19.3-35.0)	26.1 (18.6-33.7)	28.2 (20.8-35.7)	19.3 (13.5-25.2)	31 (22.8-39.1)	29.1 (21.9-36.4)

*Rates are per 100,000 persons and age-adjusted to the 2000 U.S. standard population (19 age-groups -CensusP25-1130).

Table 5: Lung & Bronchus Cancer Mortality Annual Age-Adjusted Rates* by Race/Ethnicity, United States, 1999-2011.

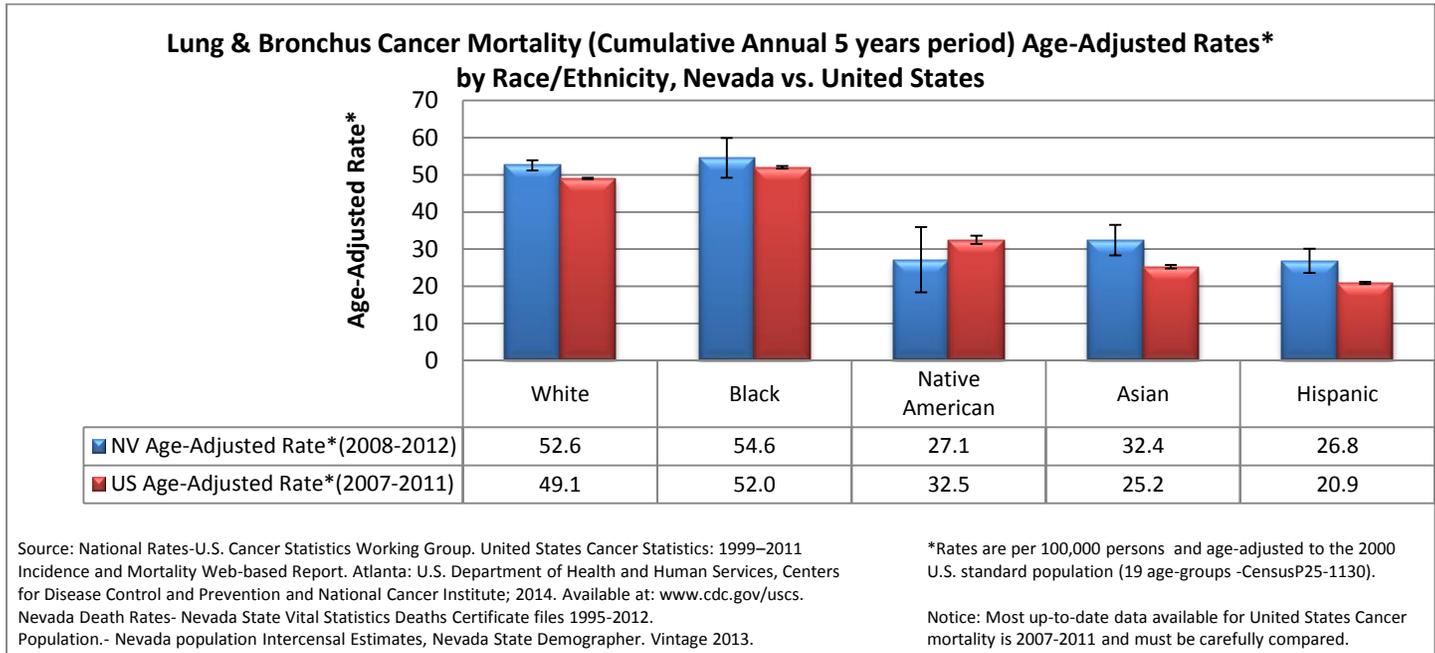
United States	1995	1996	1997	1998	1999	2000	2001	2002	2003
White					55.3 (55.0-55.6)	56.0 (55.7-56.3)	55.5 (55.3-55.8)	55.3 (55.0-55.6)	54.5 (54.2-54.8)
Black					65.0 (64.0-66.0)	63.8 (62.8-64.8)	62.5 (61.6-63.5)	62.0 (61.1-63.0)	60.9 (60.0-61.9)
N. American					36.9 (33.6-40.5)	32.6 (29.6-35.8)	36.0 (32.8-39.3)	35.1 (32.1-38.4)	33.3 (30.4-36.3)
Asian					28.0 (26.7-29.4)	27.7 (26.5-29.0)	28.5 (27.2-29.7)	26.1 (24.9-27.2)	27.6 (26.4-28.7)
Hispanic					25.2 (24.4-26.1)	24.6 (23.8-25.5)	24.2 (23.4-25.0)	24.5 (23.7-25.3)	24.0 (23.2-24.7)

United States	2004	2005	2006	2007	2008	2009	2010	2011	2012
White	53.7 (53.4-54.0)	53.3 (53.0-53.6)	52.3 (52.0-52.5)	51.3 (51.0-51.6)	50.3 (50.0-50.5)	49.2 (48.9-49.4)	48.1 (47.9-48.4)	46.7 (46.5-47.0)	
Black	59.8 (58.9-60.7)	58.5 (57.6-59.4)	56.7 (55.8-57.6)	55.4 (54.5-56.3)	53.1 (52.3-54.0)	51.6 (50.7-52.4)	51.2 (50.4-52.0)	49.3 (48.6-50.1)	
N. American	38.1 (35.1-41.2)	35.9 (33.1-38.9)	32.7 (30.1-35.6)	34.6 (31.9-37.5)	35.1 (32.4-37.9)	29.8 (27.5-32.3)	33.0 (30.5-35.5)	30.5 (28.2-33.0)	
Asian	26.8 (25.8-27.9)	26.6 (25.5-27.6)	26.1 (25.1-27.1)	26.1 (25.1-27.1)	25.8 (24.8-26.7)	25.2 (24.3-26.2)	24.6 (23.7-25.5)	24.7 (23.8-25.5)	
Hispanic	23.4 (22.7-24.2)	23.6 (22.9-24.3)	21.8 (21.1-22.5)	22.1 (21.4-22.7)	21.9 (21.2-22.5)	20.6 (20.0-21.2)	20.3 (19.7-20.9)	19.9 (19.4-20.5)	

*Rates are per 100,000 persons and age-adjusted to the 2000 U.S. standard population (19 age-groups -CensusP25-1130).

LUNG & BRONCHUS CANCER MORTALITY TREND BY RACE/ETHNICITY, 2008-2012

Figure 6: Lung & Bronchus Cancer Mortality (Cumulative Annual 5 years period) Age-Adjusted Rates* by Race/Ethnicity, Nevada vs. United States.



LUNG & BRONCHUS CANCER MORTALITY BY REGION, BY RACE/ETHNICITY IN NEVADA, 2008-2012

Table 6: Lung & Bronchus Cancer Mortality by Region and by Race/Ethnicity, Age-Adjusted Rates*, Nevada Geo-demographical Regions, 2008-2012

Lung & Bronchus Cancer Mortality (All Ages, All Races) by Races - Age-Adjusted Rates*, 2008-2012 (Regions ordered by population size)				
Race/Ethnicity	Clark	Washoe	Carson City	Rural
White	51.2 (49.5-52.9)	54.1 (50.5-57.7)	63.7 (54.6-72.8)	55.4 (51.7-59.1)
Black	53.8 (48.3-59.3)	59.9 (32.9-86.8)	¥	¥
Native American	¥	¥	¥	40.1 (21.6-58.6)
Asian	35.1 (30.4-39.9)	22.6 (13.6-31.7)	¥	¥
Hispanic	29.1 (25.3-33.0)	14.9 (8.2-21.6)	¥	24.0 (12.9-35.1)
All Races/Ethnicities	48.0 (46.5-49.4)	49.7 (46.5-52.9)	62.8 (54.1-71.4)	53.0 (49.6-56.5)

¥ Counts more than zero or less than or equal to 5 or Rates with Relative Standard Error (RSE) >30% are suppressed due to reliability and/or confidentiality issues.

* Rates are per 100,000 persons and age-adjusted to the 2000 US Census standard population.

LUNG & BRONCHUS CANCER MORTALITY TREND BY AGE GROUPS, 1995-2012

Figure 7: Lung & Bronchus Cancer Mortality Trend by Age Groups, Age-Adjusted Rates*, Nevada, 1995-2012.

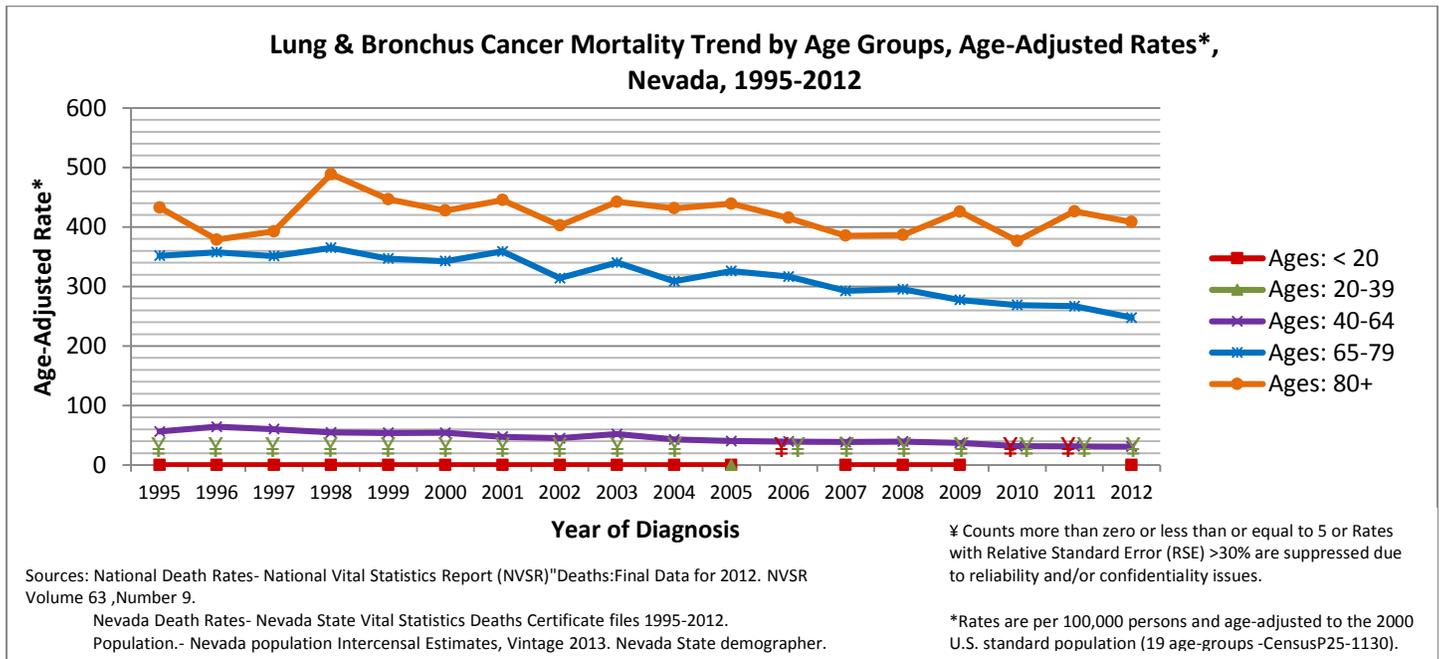


Table 7: Lung & Bronchus Cancer Mortality Annual Age-Adjusted Rates* by Age Groups, Nevada, 1995-2012.

Nevada	1995	1996	1997	1998	1999	2000	2001	2002	2003
< 20	0	0	0	0	0	0	0	0	0
20 - 39	‡	‡	‡	‡	‡	‡	‡	‡	‡
40 - 64	56.4 (49.6-63.1)	64.3 (57.3-71.2)	60.3 (53.8-66.8)	54.6 (48.6-60.6)	53.9 (48.1-59.7)	54.3 (48.7-60.0)	47.4 (42.3-52.6)	45.2 (40.3-50.1)	52.1 (46.9-57.2)
65 - 79	351.8 (321.2-382.5)	357.7 (327.6-387.7)	351.2 (321.9-380.5)	365.0 (335.9-394.1)	347.0 (319.2-374.8)	342.5 (315.4-369.7)	358.9 (331.6-386.2)	314.1 (289.0-339.2)	340.3 (314.4-366.2)
80 +	432.8 (358.4-507.3)	378.7 (310.9-446.4)	392.6 (324.6-460.6)	488.8 (417.2-560.4)	446.6 (381.2-512.1)	427.6 (364.9-490.2)	445.3 (384.4-506.3)	402.5 (346.7-458.3)	442.3 (386.6-498.0)

Nevada	2004	2005	2006	2007	2008	2009	2010	2011	2012
< 20	0	0	‡	0	0	0	‡	‡	0
20 - 39	‡	0	‡	‡	‡	‡	‡	‡	‡
40 - 64	43.0 (38.4-47.5)	40.3 (36-44.6)	39.5 (35.3-43.7)	38.8 (34.8-42.9)	39.4 (35.4-43.4)	37.2 (33.4-41.0)	31.8 (28.3-35.3)	31.4 (27.9-34.8)	30.9 (27.5-34.3)
65 - 79	308.7 (284.6-332.8)	325.9 (301.2-350.5)	316.8 (293.1-340.5)	292.6 (270.1-315.0)	295.3 (273.1-317.5)	277.5 (256.4-298.6)	268.7 (248.1-289.3)	267.0 (246.7-287.2)	247.7 (228.6-266.9)
80 +	431.3 (377.3-485.3)	439.1 (385.8-492.3)	415.3 (365.5-465.2)	385.4 (337.6-433.1)	386.5 (339.6-433.4)	425.7 (377.0-474.4)	376.5 (331.4-421.6)	426.3 (378.9-473.8)	408.3 (362.4-454.2)

*Rates are per 100,000 persons and age-adjusted to the 2000 U.S. standard population (19 age-groups -CensusP25-1130).

LUNG & BRONCHUS CANCER MORTALITY BY AGE GROUPS, 2008-2012

Figure 8: Lung & Bronchus Cancer Mortality by Age Groups, Cumulative Annual Age-Adjusted Rates*, Nevada, 2008-2012.

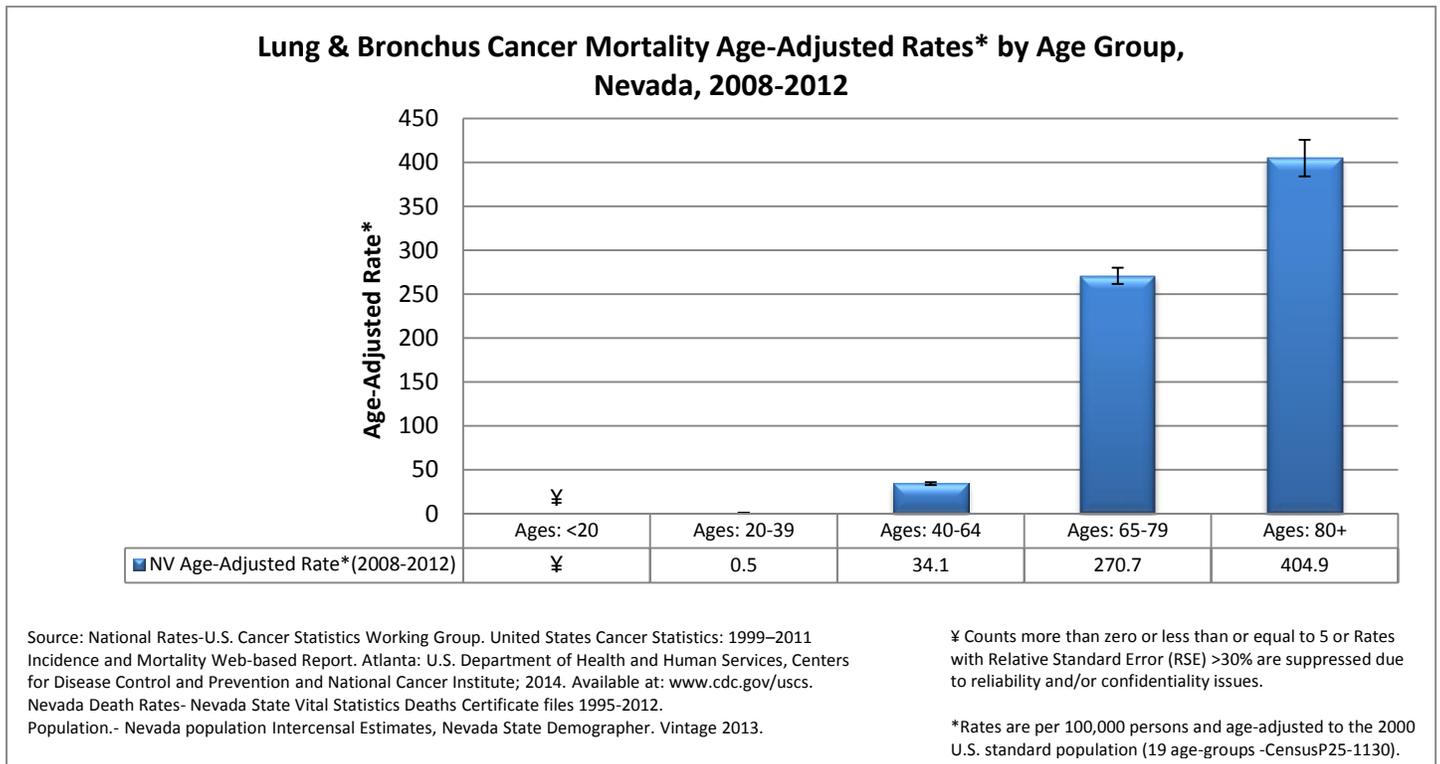


Table 8: Lung & Bronchus Cancer Mortality by Region and by Age Groups, Age-Adjusted Rates*, Nevada Geo-demographical Regions, 2008-2012

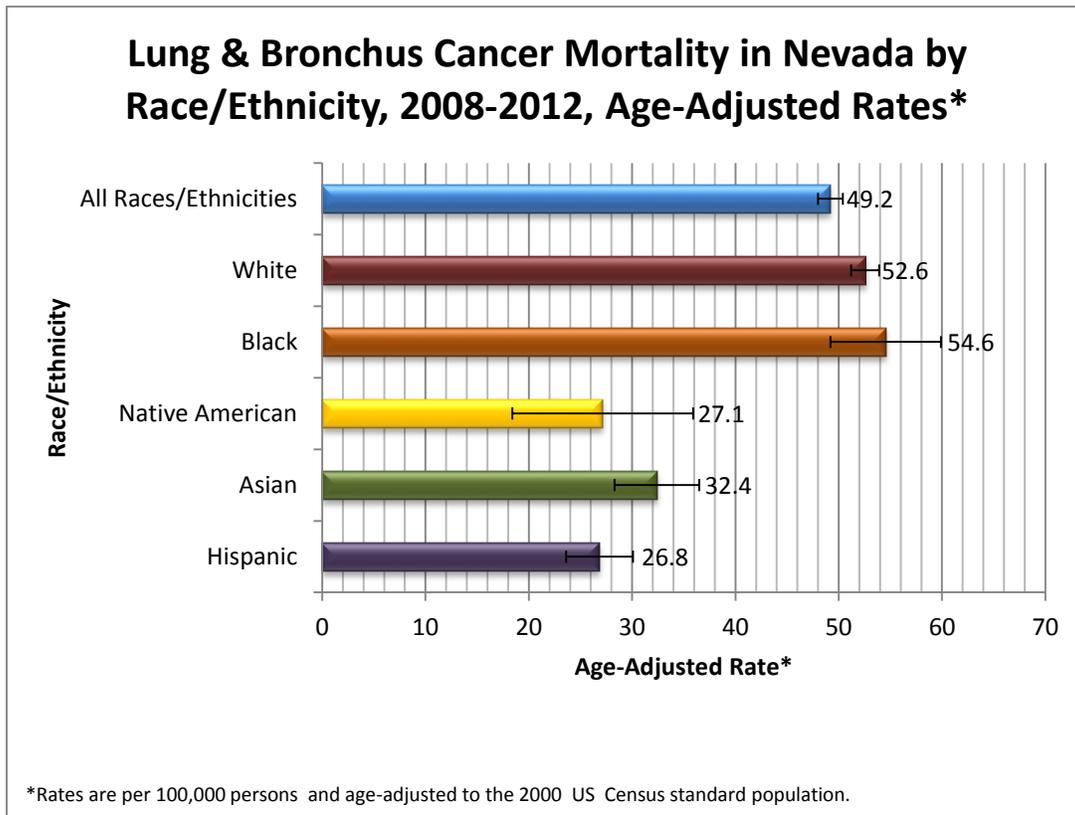
Lung & Bronchus Cancer Mortality (All Races) by Age Group - Age-Adjusted Rates*, 2008-2012 (Regions ordered by population size)				
Age Groups	Clark	Washoe	Carson City	Rural
< 20	¥	0	0	0
20 - 39	0.5 (0.2-0.7)	¥	¥	¥
40 - 64	33.2 (31.3-35.1)	31.6 (27.7-35.5)	42.6 (30.8-54.4)	40.3 (35.2-45.4)
65 - 79	263.3 (252.4-274.1)	269.5 (244.8-294.2)	379.2 (306.3-452.1)	293.8 (267.5-320.0)
80 +	396.3 (371.4-421.2)	448.7 (391.3-506.1)	419.3 (300.7-537.9)	396.9 (339.4-454.4)
All Ages	48.0 (46.5-49.4)	49.7 (46.5-52.9)	62.8 (54.1-71.4)	53.0 (49.6-56.5)

¥ Counts more than zero or less than or equal to 5 or Rates with Relative Standard Error (RSE) >30% are suppressed due to reliability and/or confidentiality issues.

* Rates are per 100,000 persons and age-adjusted to the 2000 US Census standard population.

LUNG & BRONCHUS CANCER MORTALITY SNAPSHOT

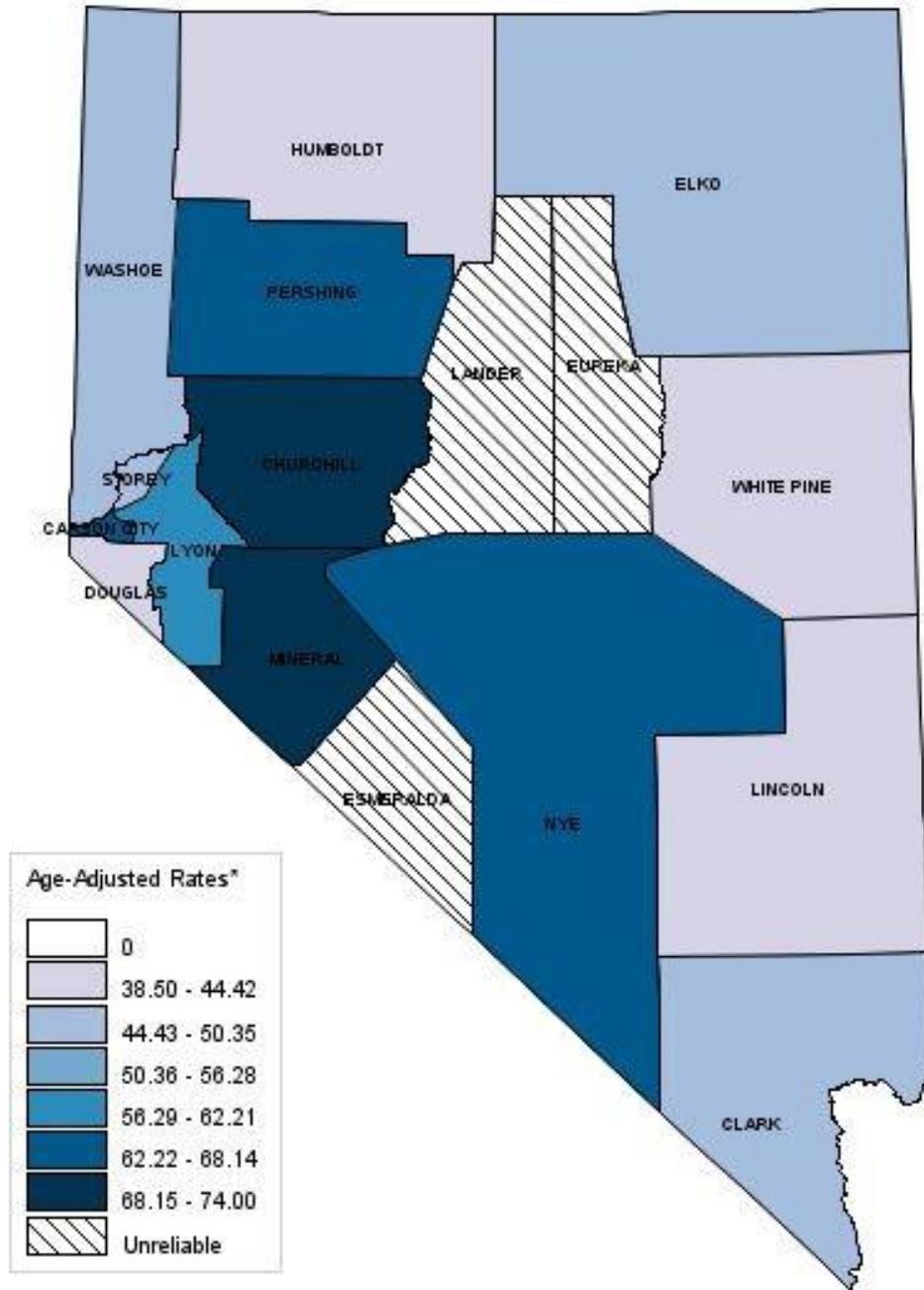
Table 9: Lung & Bronchus Cancer Mortality Causes Annual Age-Adjusted Rates* by Race/Ethnicity, Nevada, 2008-2012.



LUNG & BRONCHUS CANCER MORTALITY BY GEOGRAPHICAL DISTRIBUTION

Figure 9: Lung & Bronchus Cancer Mortality Cumulative Annual Age-Adjusted Rates* by County, Nevada, 2008-2012.

Nevada Lung Cancer Mortality, 2008-2012 (All Ages, All Races) by County



*Rates are per 100,000 persons and age-adjusted to the 2000 US Census standard population (19 age grps.-CensusP25-1130).

Figure 10: Lung & Bronchus Cancer Mortality by County, Age-Adjusted Rates*, Nevada, 2008-2012.

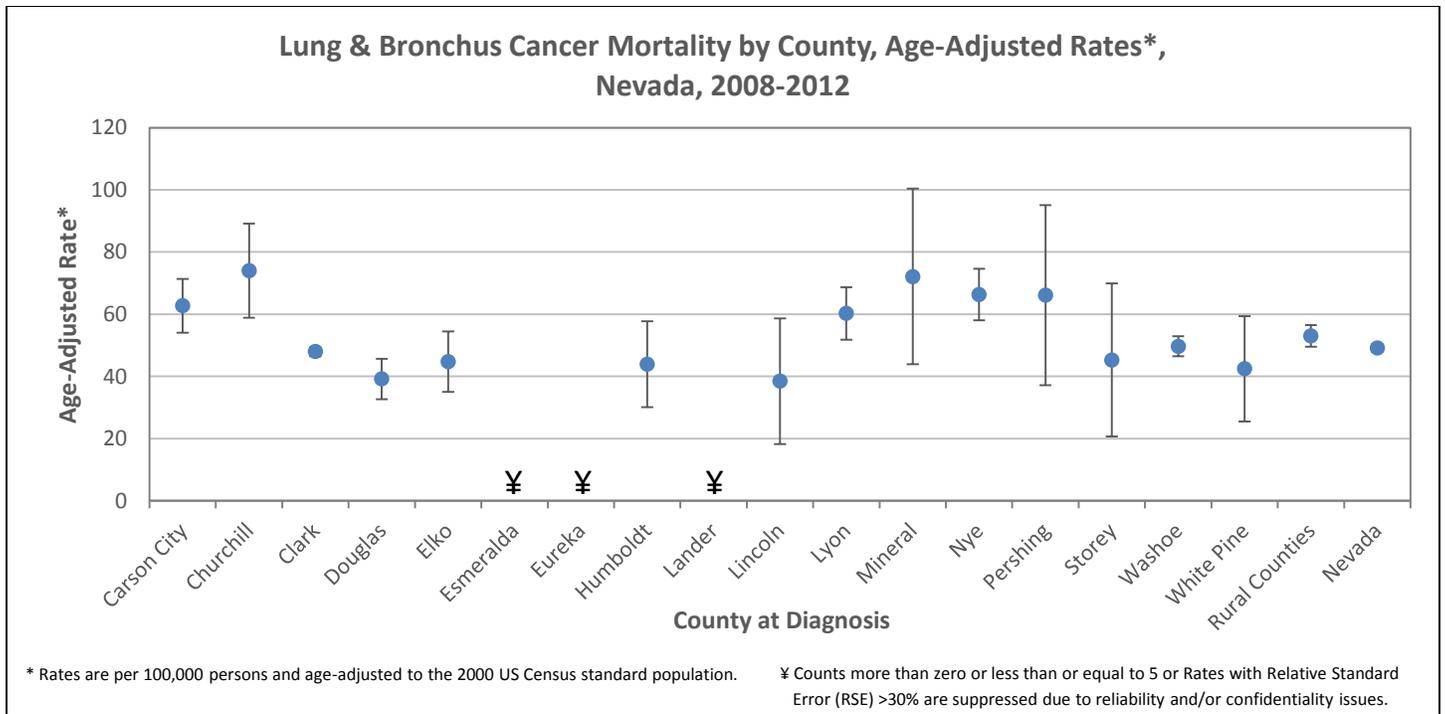


Table 10: Lung & Bronchus Cancer Mortality Cumulative Annual Age-Adjusted Rates* by County, Nevada, 2008-2012.

Nevada Lung & Bronchus Cancer Mortality (All Ages, All Races) by County - Counts/Age-Adjusted Rates*, 2008-2012		
County	Counts	Age Adj. Rate*
Carson City	203	62.8 (54.1-71.4)
Churchill	92	74.0 (58.9-89.2)
Clark	4,393	48.0 (46.5-49.4)
Douglas	139	39.2 (32.7-45.7)
Elko	81	44.8 (35.0-54.5)
Esmeralda	¥	¥
Eureka	7	¥
Humboldt	39	43.9 (30.1-57.7)
Lander	¥	¥
Lincoln	14	38.5 (18.3-58.7)
Lyon	196	60.3 (51.8-68.7)
Mineral	25	72.1 (43.9-100.4)
Nye	248	66.3 (58.1-74.6)
Pershing	20	66.1 (37.2-95.1)
Storey	13	45.3 (20.7-69.9)
Washoe	947	49.7 (46.5-52.9)
White Pine	24	42.5 (25.5-59.4)
Rural Counties	908	53.0 (49.6-56.5)

¥ Counts more than zero or less than or equal to 5 or Rates with Relative Standard Error (RSE) >30% are suppressed due to reliability and/or confidentiality issues.

* Rates are per 100,000 persons and age-adjusted to the 2000 US Census standard population.

LUNG & BRONCHUS CANCER INCIDENCE

LUNG & BRONCHUS CANCER INCIDENCE

Figure 11: Lung & Bronchus Cancer Incidence Trend, Nevada vs. United States, 1995-2012.

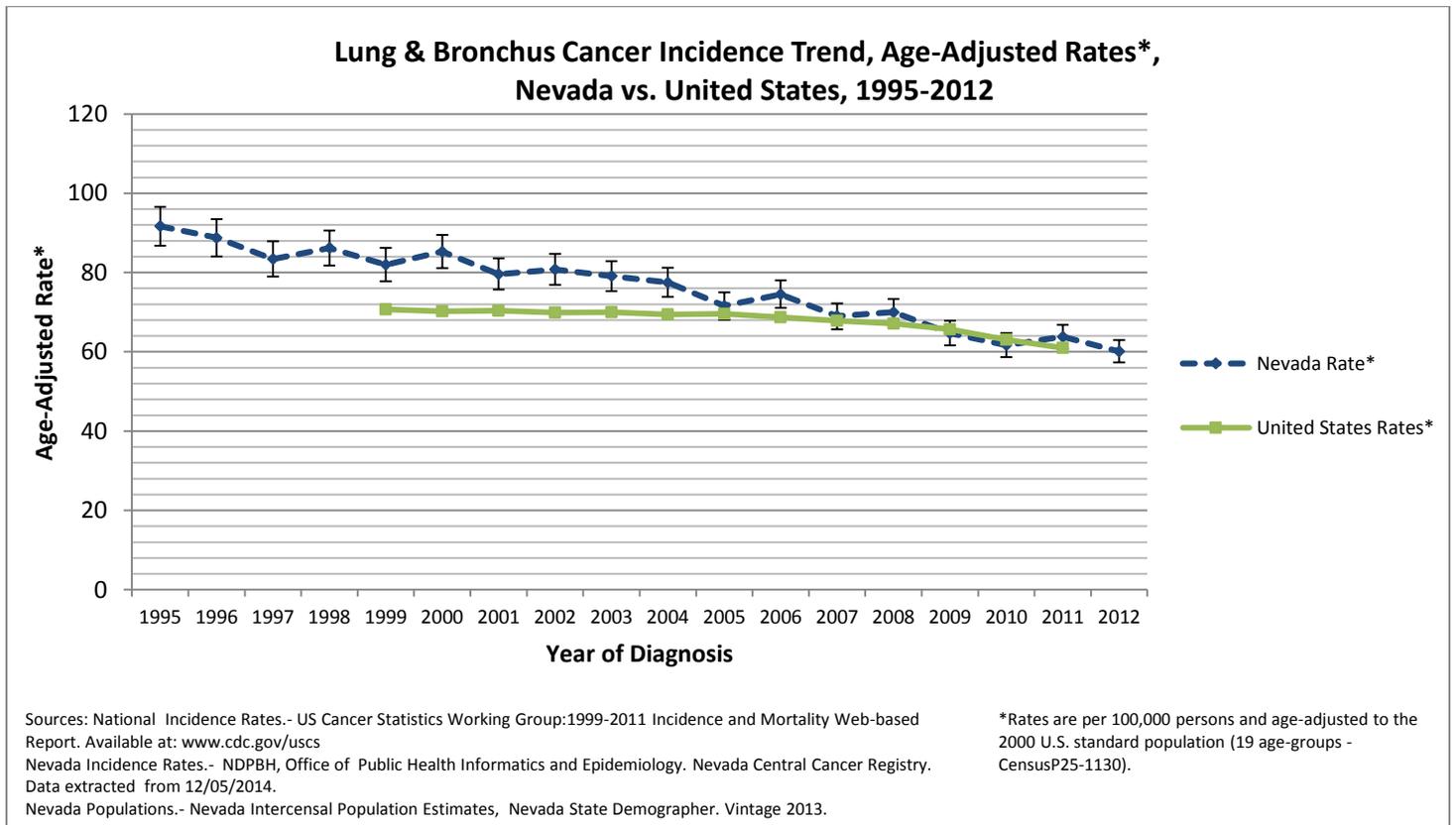


Table 11: Lung & Bronchus Cancer Incidence Age-Adjusted Rates* by year, Nevada and United States, 1995-2012.

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Nevada	91.7 (86.8-96.6)	88.8 (84.1-93.5)	83.4 (78.9-87.8)	86.2 (81.8-90.6)	85.3 (77.8-86.2)	85.3 (81.1-89.5)	79.6 (75.6-83.5)	80.8 (76.9-84.7)	79.1 (75.3-82.9)
United States					70.7 (70.4-71.0)	70.2 (69.9-70.6)	70.4 (70.1-70.8)	69.9 (69.6-70.3)	70.0 (69.7-70.3)

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Nevada	77.5 (73.8-81.1)	71.6 (68.2-75.1)	74.5 (71.0-77.9)	69.0 (65.8-72.3)	70.0 (66.7-73.2)	64.7 (61.6-67.8)	61.7 (58.7-64.7)	63.8 (60.8-66.8)	60.1 (57.2-62.9)
United States	69.4 (69.1-69.7)	69.6 (69.3-69.9)	68.7 (68.4-69.0)	67.8 (67.5-68.1)	67.1 (66.8-67.4)	65.7 (65.5-66.0)	63.1 (62.9-63.4)	61.0 (60.8-61.3)	

*Rates are per 100,000 persons and age-adjusted to the 2000 U.S. standard population (19 age-groups -CensusP25-1130).

LUNG & BRONCHUS CANCER INCIDENCE BY GENDER

Figure 12: Lung & Bronchus Cancer Incidence Trend by Gender, Age-Adjusted Rates*, Nevada vs. United States, 1995-2012.

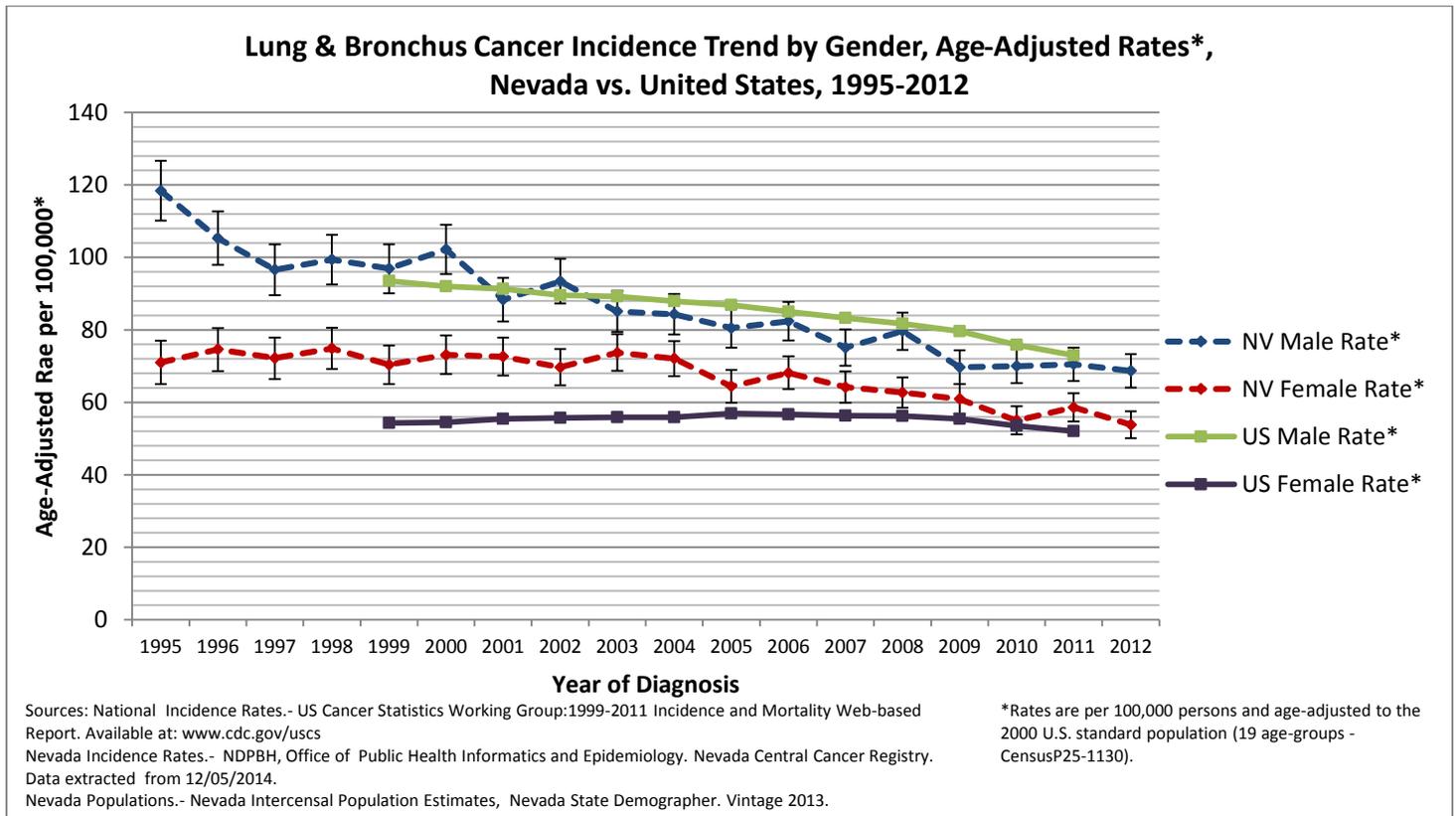


Table 12: Lung & Bronchus Cancer Incidence by Gender, Age-Adjusted Rates*, Nevada and United States, 1995-2012.

	1995	1996	1997	1998	1999	2000	2001	2002	2003
Nevada Male	118.4 (110.1-126.6)	105.3 (97.9-112.7)	96.6 (89.6-103.6)	99.4 (92.6-106.3)	96.9 (90.2-103.7)	102.2 (95.4-109.0)	88.3 (82.2-94.3)	93.4 (87.2-99.5)	85.1 (79.4-90.8)
Nevada Female	71.0 (65.0-77.0)	74.6 (68.7-80.6)	72.2 (66.5-78.0)	74.9 (69.2-80.6)	70.4 (65.1-75.8)	73.1 (67.7-78.4)	72.6 (67.3-77.8)	69.7 (64.7-74.7)	73.7 (68.6-78.7)
United States Male					93.5 (92.9-94.0)	92.0 (91.4-92.5)	91.3 (90.7-91.8)	89.6 (89.0-90.1)	89.2 (88.7-89.8)
United States Female					54.3 (53.9-54.7)	54.5 (54.1-54.9)	55.4 (55.0-55.7)	55.7 (55.3-56.1)	55.9 (55.6-56.3)

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Nevada Male	84.3 (78.7-89.9)	80.5 (75.2-85.9)	82.4 (77.1-87.7)	75.1 (70.1-80.1)	79.7 (74.6-84.9)	69.7 (65.0-74.4)	70.0 (65.3-74.7)	70.5 (65.9-75.1)	68.7 (64.1-73.3)
Nevada Female	72.1 (67.3-77.0)	64.4 (59.8-68.9)	68.1 (63.5-72.6)	64.2 (59.9-68.5)	62.7 (58.5-66.9)	60.9 (56.8-65.0)	55.0 (51.1-58.8)	58.6 (54.7-62.5)	53.8 (50.1-57.5)
United States Male	87.9 (87.4-88.4)	86.9 (86.4-87.5)	85.0 (84.5-85.5)	83.3 (82.8-83.8)	81.7 (81.3-82.2)	79.6 (79.1-80.0)	75.9 (75.4-76.3)	73.0 (72.6-73.5)	
United States Female	55.9 (55.5-56.3)	56.9 (56.5-57.3)	56.7 (56.4-57.1)	56.3 (55.9-56.7)	56.2 (55.8-56.5)	55.4 (55.1-55.8)	53.5 (53.2-53.9)	52.0 (51.7-52.4)	

*Rates are per 100,000 persons and age-adjusted to the 2000 U.S. standard population (19 age-groups -CensusP25-1130).

LUNG & BRONCHUS CANCER INCIDENCE BY GENDER, 2008-2012

Figure 13: Lung & Bronchus Cancer Incidence (Cumulative Annual 5 years period) Age-Adjusted Rates* by Gender, Nevada vs. United States.

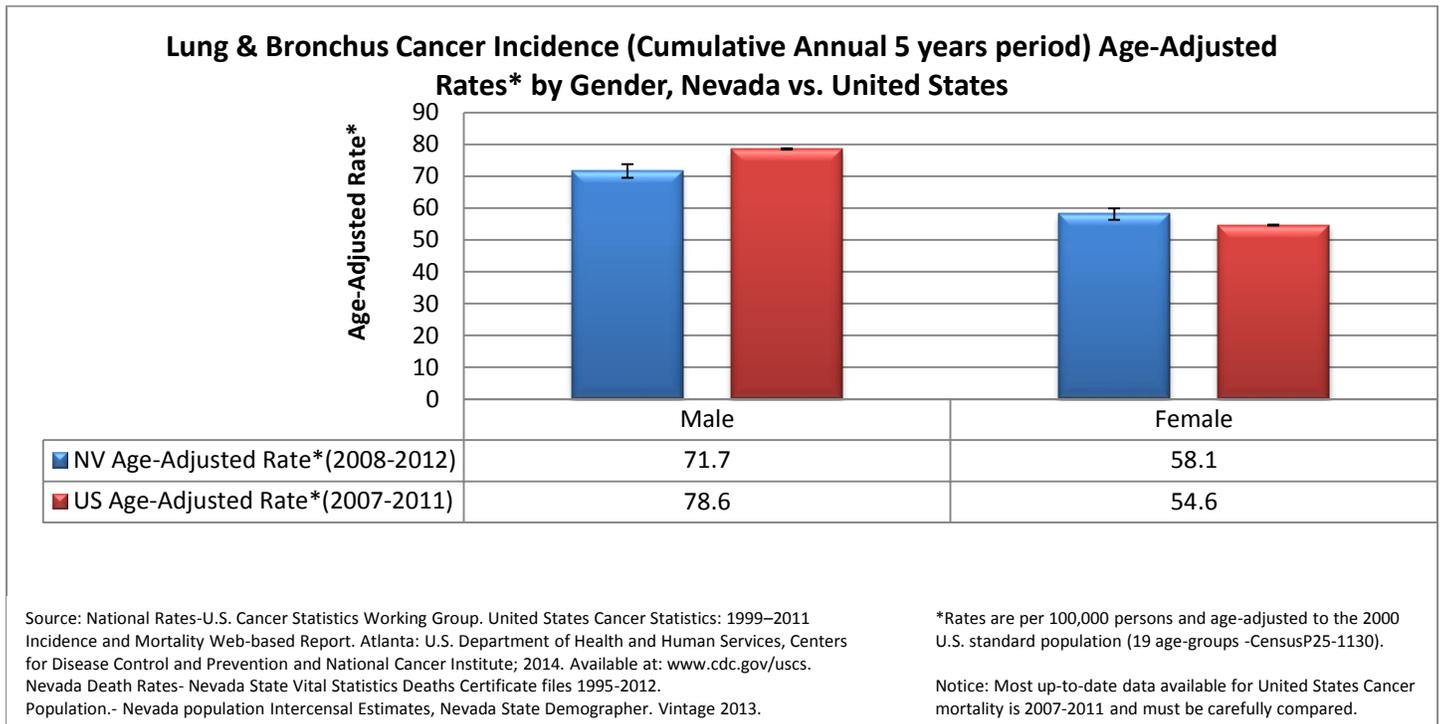


Table 13: Lung & Bronchus Cancer Incidence by Region and Gender. Cumulative Annual Age-Adjusted Rates* Nevada Geodemographical Regions.

Lung & Bronchus Cancer Incidence (All Ages, All Races) by Gender - Age-Adjusted Rates*, Nevada, 2008-2012 (Regions ordered by population size)				
Gender	Clark	Washoe	Carson City	Rural
Male	71.4 (68.9-74.0)	68.1 (62.7-73.5)	88.6 (72.9-104.2)	74.0 (68.2-79.8)
Female	55.8 (53.8-57.9)	63.0 (58.2-67.8)	79.7 (66.8-92.6)	60.1 (55.1-65.2)
All Genders	62.5 (60.9-64.1)	65.0 (61.5-68.6)	83.1 (73.2-93.1)	66.7 (62.9-70.5)

‡ Counts more than zero or less than or equal to 5 or Rates with Relative Standard Error (RSE) >30% are suppressed due to reliability and/or confidentiality issues.

* Rates are per 100,000 persons and age-adjusted to the 2000 US Census standard population.

LUNG & BRONCHUS CANCER INCIDENCE TREND BY RACE/ETHNICITY

Figure 14: Lung & Bronchus Cancer Incidence Trend by Race/Ethnicity, Confidence Intervals, Age-Adjusted Rates*, Nevada, 1995-2012.

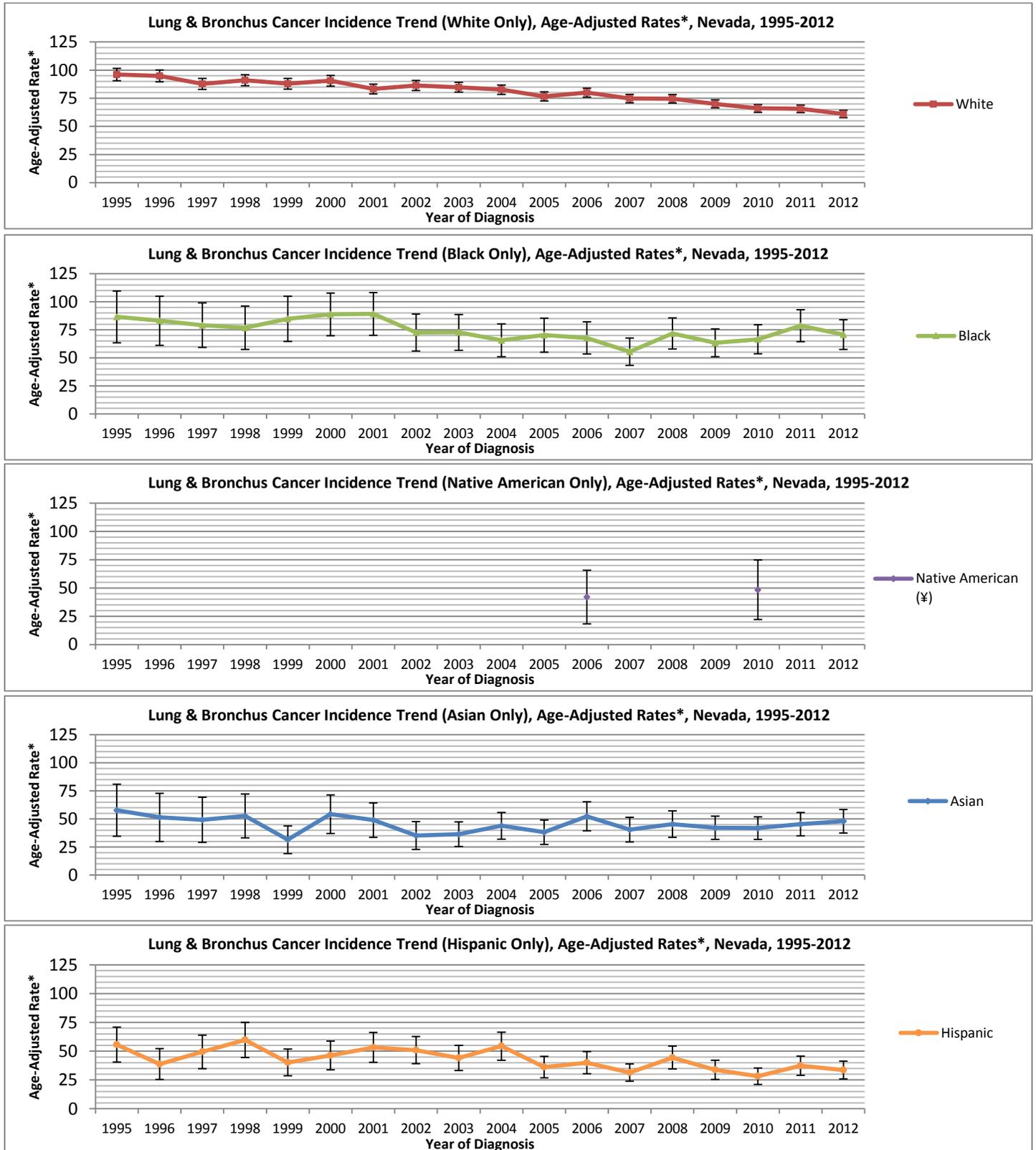


Figure 15: Lung & Bronchus Cancer Incidence Trend by Race/Ethnicity, Age-Adjusted Rates*, United States, 1999-2011.

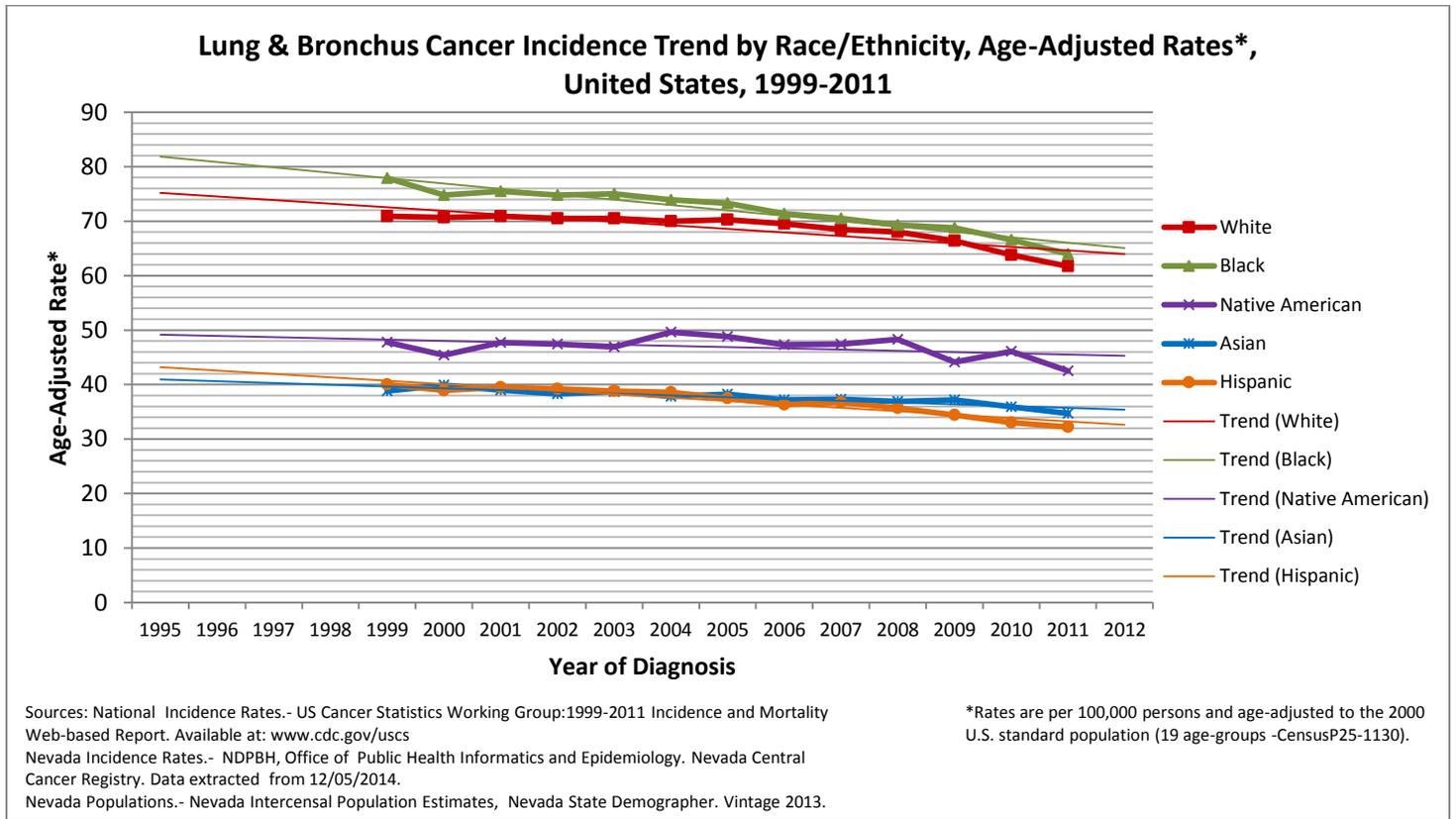


Table 14: Lung & Bronchus Cancer Incidence Annual Age-Adjusted Rates* by Race/Ethnicity, Nevada, 1995-2012.

Nevada	1995	1996	1997	1998	1999	2000	2001	2002	2003
White	96.1 (90.6-101.5)	94.8 (89.6-100.1)	87.8 (82.8-92.7)	91.0 (86.1-95.9)	87.9 (83.1-92.6)	90.5 (85.8-95.3)	83.2 (78.8-87.6)	86.4 (81.9-90.8)	84.8 (80.5-89.2)
Black	86.6 (63.5-109.7)	83.1 (61.3-104.9)	79.2 (59.3-99.0)	76.8 (57.5-96.1)	84.8 (64.7-105.0)	88.8 (69.8-107.8)	89.2 (70.2-108.1)	72.6 (56.2-89.1)	72.8 (56.8-88.7)
Native American	¥	¥	¥	¥	¥	¥	¥	¥	¥
Asian	57.9 (34.7-81.0)	51.4 (29.9-72.9)	49.2 (29.1-69.3)	52.8 (33.2-72.3)	31.5 (19.2-43.8)	54.3 (37.0-71.5)	49.0 (33.6-64.4)	35.2 (22.8-47.6)	36.5 (25.4-47.5)
Hispanic	55.7 (40.6-70.9)	38.8 (25.4-52.2)	49.4 (34.8-64.0)	59.8 (44.6-75.1)	40.2 (28.6-51.8)	46.3 (33.8-58.8)	53.3 (40.3-66.4)	50.9 (39.1-62.8)	44.2 (33.3-55.1)

Nevada	2004	2005	2006	2007	2008	2009	2010	2011	2012
White	82.6 (78.4-86.8)	76.6 (72.6-80.6)	80.0 (76.0-84.0)	74.7 (70.9-78.5)	74.5 (70.7-78.2)	69.9 (66.4-73.5)	66.0 (62.5-69.4)	65.6 (62.2-69.0)	61.0 (57.7-64.3)
Black	65.7 (51.0-80.4)	70.4 (55.2-85.5)	67.8 (53.5-82.1)	55.6 (43.4-67.8)	71.7 (57.9-85.6)	63.5 (51.0-75.9)	66.5 (53.6-79.5)	78.6 (64.4-92.9)	70.7 (57.5-83.9)
Native American	¥	¥	42.1 (18.3-65.8)	¥	¥	¥	48.4 (22.1-74.7)	¥	¥
Asian	43.9 (31.9-55.8)	38.2 (27.4-49.1)	52.4 (39.6-65.3)	40.5 (29.5-51.5)	45.4 (33.6-57.2)	42.2 (31.8-52.5)	41.9 (31.8-51.9)	45.4 (35.1-55.8)	48.0 (37.5-58.4)
Hispanic	54.4 (42.2-66.6)	36.2 (26.8-45.6)	40.0 (30.4-49.6)	31.4 (23.9-39.0)	44.4 (34.5-54.4)	33.8 (25.4-42.2)	28.3 (21.1-35.4)	37.3 (29.0-45.7)	33.6 (25.9-41.3)

*Rates are per 100,000 persons and age-adjusted to the 2000 U.S. standard population (19 age-groups -CensusP25-1130).

Table 15: Lung & Bronchus Cancer Incidence Annual Age-Adjusted Rates* by Race/Ethnicity, United States, 1999-2011.

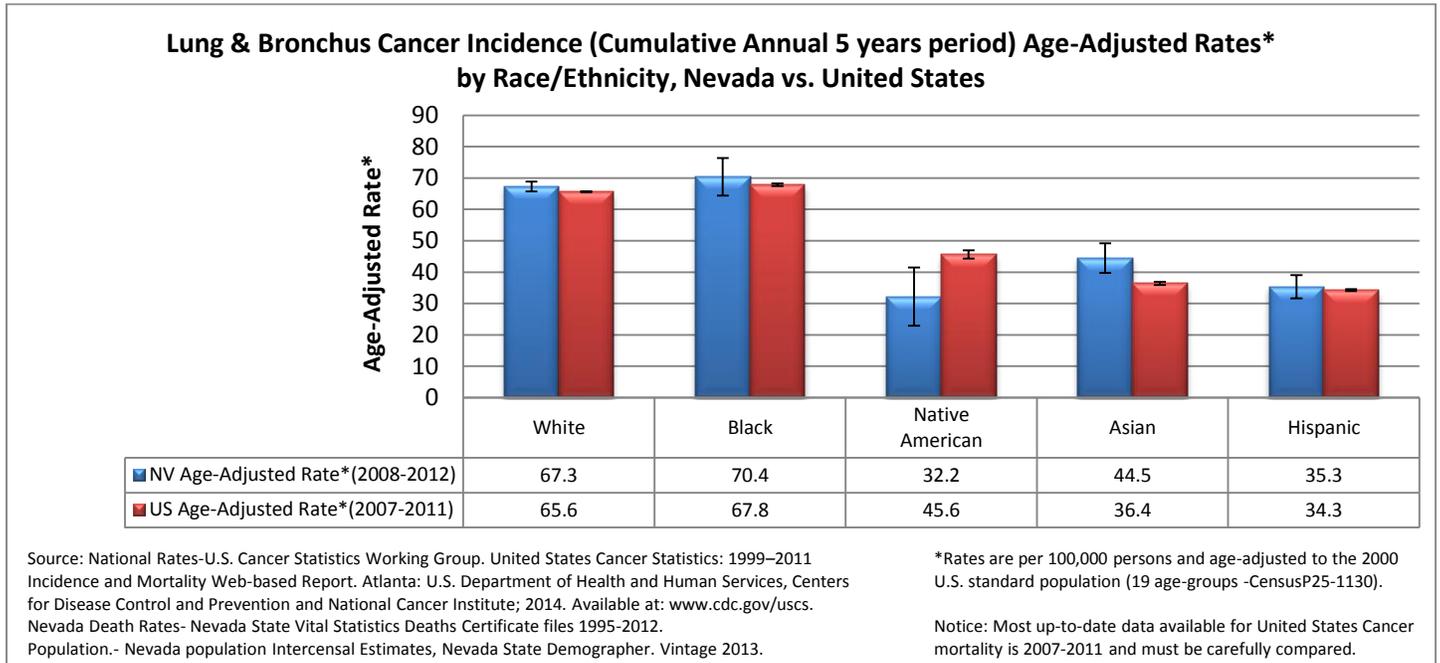
United States	1995	1996	1997	1998	1999	2000	2001	2002	2003
White					70.9 (70.6-71.3)	70.7 (70.3-71.0)	70.9 (70.6-71.3)	70.5 (70.1-70.8)	70.5 (70.2-70.8)
Black					77.9 (76.7-79.2)	74.8 (73.6-75.9)	75.5 (74.4-76.7)	74.8 (73.6-75.9)	75 (73.9-76.1)
Native American					47.8 (43.9-52.0)	45.4 (41.8-49.1)	47.7 (44.1-51.5)	47.4 (43.9-51.1)	46.9 (43.6-50.5)
Asian					38.8 (37.3-40.4)	39.9 (38.4-41.4)	39.0 (37.5-40.4)	38.3 (37.0-39.7)	38.7 (37.4-40.0)
Hispanic					40.0 (38.9-41.1)	38.9 (37.9-40.0)	39.5 (38.5-40.5)	39.2 (38.2-40.2)	38.8 (37.8-39.7)

United States	2004	2005	2006	2007	2008	2009	2010	2011	2012
White	70.0 (69.7-70.3)	70.3 (69.9-70.6)	69.5 (69.2-69.9)	68.5 (68.2-68.8)	68.0 (67.7-68.3)	66.4 (66.1-66.7)	63.8 (63.5-64.1)	61.7 (61.4-62.0)	
Black	73.9 (72.9-75.0)	73.3 (72.3-74.3)	71.4 (70.4-72.4)	70.5 (69.6-71.5)	69.3 (68.3-70.2)	68.8 (67.9-69.7)	66.6 (65.7-67.5)	64.0 (63.1-64.8)	
Native American	49.6 (46.2-53.1)	48.8 (45.5-52.2)	47.3 (44.1-50.6)	47.4 (44.2-50.7)	48.3 (45.2-51.5)	44.1 (41.3-47.0)	46.1 (43.3-49.1)	42.5 (39.8-45.3)	
Asian	37.8 (36.6-39.1)	38.2 (37.0-39.5)	37.2 (36.0-38.4)	37.3 (36.1-38.4)	36.9 (35.8-38.0)	37.2 (36.1-38.3)	35.9 (34.9-37.0)	34.7 (33.7-35.7)	
Hispanic	38.6 (37.7-39.6)	37.5 (36.6-38.4)	36.3 (35.4-37.1)	36.7 (35.9-37.6)	35.7 (34.9-36.5)	34.4 (33.6-35.1)	33.0 (32.3-33.8)	32.2 (31.5-33.0)	

*Rates are per 100,000 persons and age-adjusted to the 2000 U.S. standard population (19 age-groups -CensusP25-1130).

LUNG & BRONCHUS CANCER INCIDENCE TREND BY RACE/ETHNICITY, 2008-2012

Figure 16: Lung & Bronchus Cancer Incidence (Cumulative Annual 5 years period) Age-Adjusted Rates* by Race/Ethnicity, Nevada vs. United States.



LUNG & BRONCHUS CANCER INCIDENCE BY REGION, BY RACE/ETHNICITY IN NEVADA, 2008-2012

Table 16: Lung & Bronchus Cancer Incidence by Region and by Race/Ethnicity, Age-Adjusted Rates*, Nevada Geo-demographical Regions, 2008-2012

Lung & Bronchus Cancer Incidence (All Ages, All Races) by Races - Age-Adjusted Rates*, 2008-2012 (Regions ordered by population size)				
Race/Ethnicity	Clark	Washoe	Carson City	Rural
White	65.1 (63.2-67.0)	70.3 (66.2-74.3)	87.2 (76.6-97.8)	70.1 (65.9-74.2)
Black	70.5 (64.3-76.7)	71.6 (42.9-100.2)	¥	¥
Native American	¥	40.6 (17.6-63.5)	¥	43.5 (24.4-62.6)
Asian	48.1 (42.7-53.5)	27.3 (17.4-37.3)	¥	¥
Hispanic	38.8 (34.4-43.2)	25.1 (16.6-33.5)	¥	23.6 (12.4-34.9)
All Races/Ethnicities	62.5 (60.9-64.1)	65.0 (61.5-68.6)	83.1 (73.2-93.1)	66.7 (62.9-70.5)

¥ Counts more than zero or less than or equal to 5 or Rates with Relative Standard Error (RSE) >30% are suppressed due to reliability and/or confidentiality issues.

* Rates are per 100,000 persons and age-adjusted to the 2000 US Census standard population.

LUNG & BRONCHUS CANCER INCIDENCE TREND BY AGE GROUPS, 1995-2012

Figure 17: Lung & Bronchus Cancer Incidence Trend by Age Groups, Age-Adjusted Rates*, Nevada, 1995-2012.

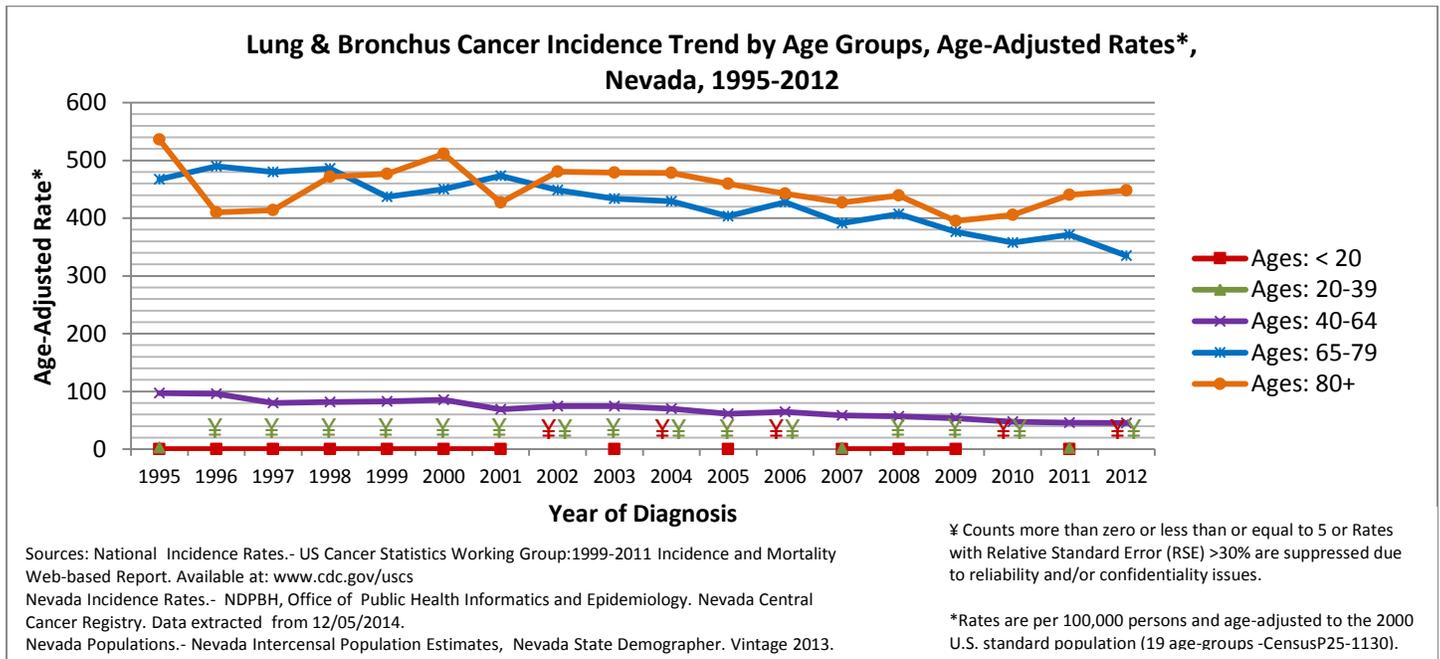


Table 17: Lung & Bronchus Cancer Incidence Annual Age-Adjusted Rates* by Age Groups, Nevada, 1995-2012.

Nevada	1995	1996	1997	1998	1999	2000	2001	2002	2003
< 20	0	0	0	0	0	0	0	¥	0
20 - 39	2.8 (1.3-4.2)	¥	¥	¥	¥	¥	¥	¥	¥
40 - 64	97.1 (88.3-106.0)	96.1 (87.6-104.6)	80.2 (72.6-87.7)	81.5 (74.1-88.8)	82.7 (75.6-89.9)	85.2 (78.1-92.3)	68.8 (62.6-75.0)	74.5 (68.2-80.8)	74.4 (68.3-80.6)
65 - 79	467.5 (432.5-502.6)	489.9 (454.8-525.1)	480.1 (445.9-514.2)	485.8 (452.3-519.2)	436.8 (405.6-468.0)	450.3 (419.2-481.4)	473.4 (442.1-504.7)	448.6 (418.6-478.7)	433.4 (404.3-462.6)
80 +	536.4 (452.8-620.1)	410.0 (339.3-480.8)	413.9 (344.8-482.9)	471.8 (401.9-541.7)	476.9 (408.9-544.8)	511.6 (443.2-580.0)	427.1 (367.5-486.8)	480.4 (419.3-541.6)	478.8 (420.7-536.9)

Nevada	2004	2005	2006	2007	2008	2009	2010	2011	2012
< 20	¥	0	¥	0	0	0	¥	0	¥
20 - 39	¥	¥	¥	2.2 (1.1-3.3)	¥	¥	¥	2.2 (1.1-3.2)	¥
40 - 64	70.0 (64.2-75.8)	61.1 (55.8-66.4)	64.4 (59.1-69.8)	58.5 (53.5-63.4)	56.6 (51.8-61.4)	53.3 (48.7-57.9)	47.6 (43.3-51.9)	45.9 (41.7-50.1)	45.2 (41.1-49.3)
65 - 79	429.3 (400.8-457.9)	403.3 (376.0-430.6)	427.6 (400.1-455.1)	391.4 (365.6-417.2)	407.1 (381.2-433.1)	376.2 (351.7-400.7)	357.7 (334.0-381.4)	371.6 (347.8-395.5)	335.1 (312.8-357.3)
80 +	478.1 (421.6-534.6)	459.7 (405.6-513.7)	442.3 (390.9-493.6)	426.8 (376.7-477.0)	439.2 (389.4-489.0)	395.0 (348.5-441.5)	405.7 (358.9-452.5)	440.4 (392.4-488.5)	448.0 (400.0-496.0)

*Rates are per 100,000 persons and age-adjusted to the 2000 U.S. standard population (19 age-groups -CensusP25-1130).

LUNG & BRONCHUS CANCER INCIDENCE BY AGE GROUPS, 2008-2012

Figure 18: Lung & Bronchus Cancer Incidence by Age Groups, Cumulative Annual Age-Adjusted Rates*, Nevada, 2008-2012.

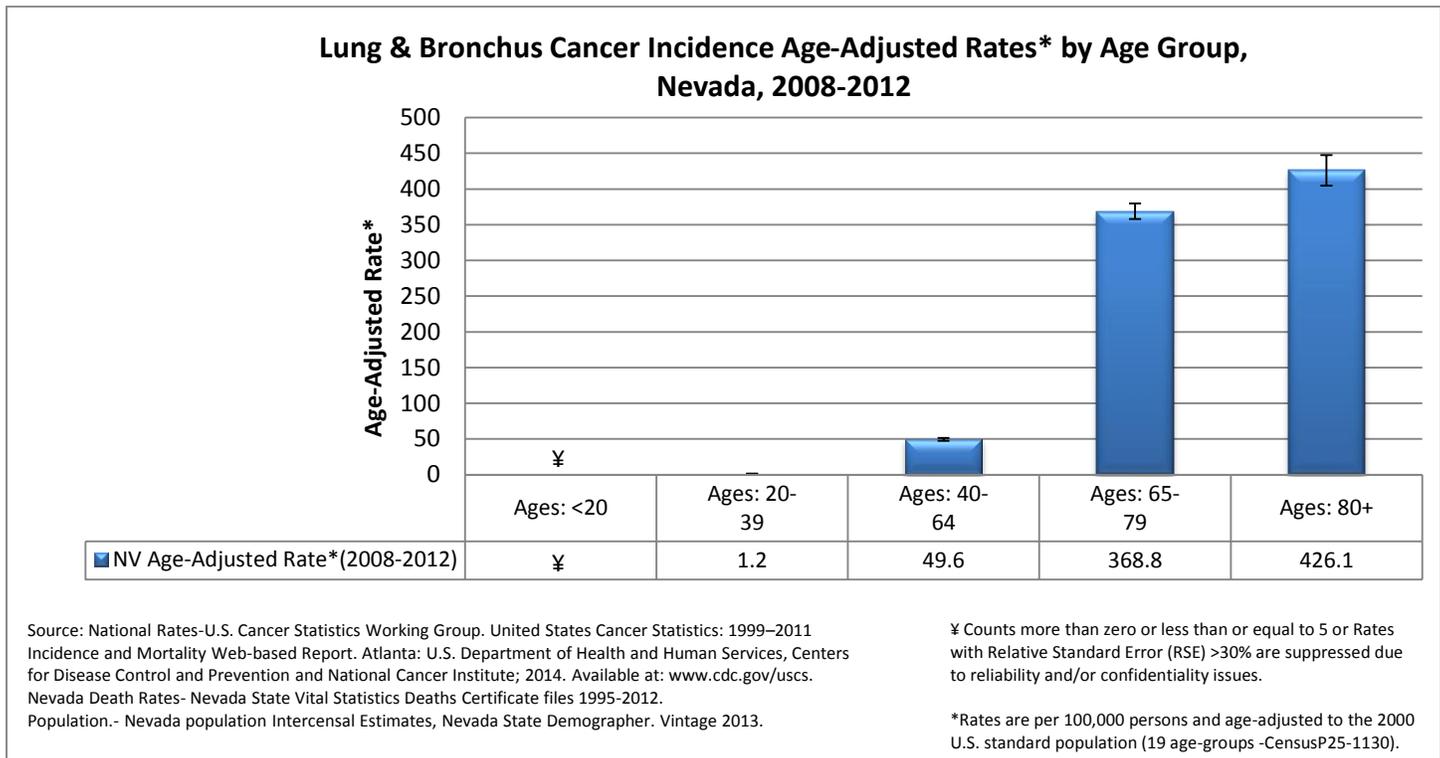


Table 18: Lung & Bronchus Cancer Incidence by Region and by Age Groups, Age-Adjusted Rates*, Nevada Geo-demographical Regions, 2008-2012

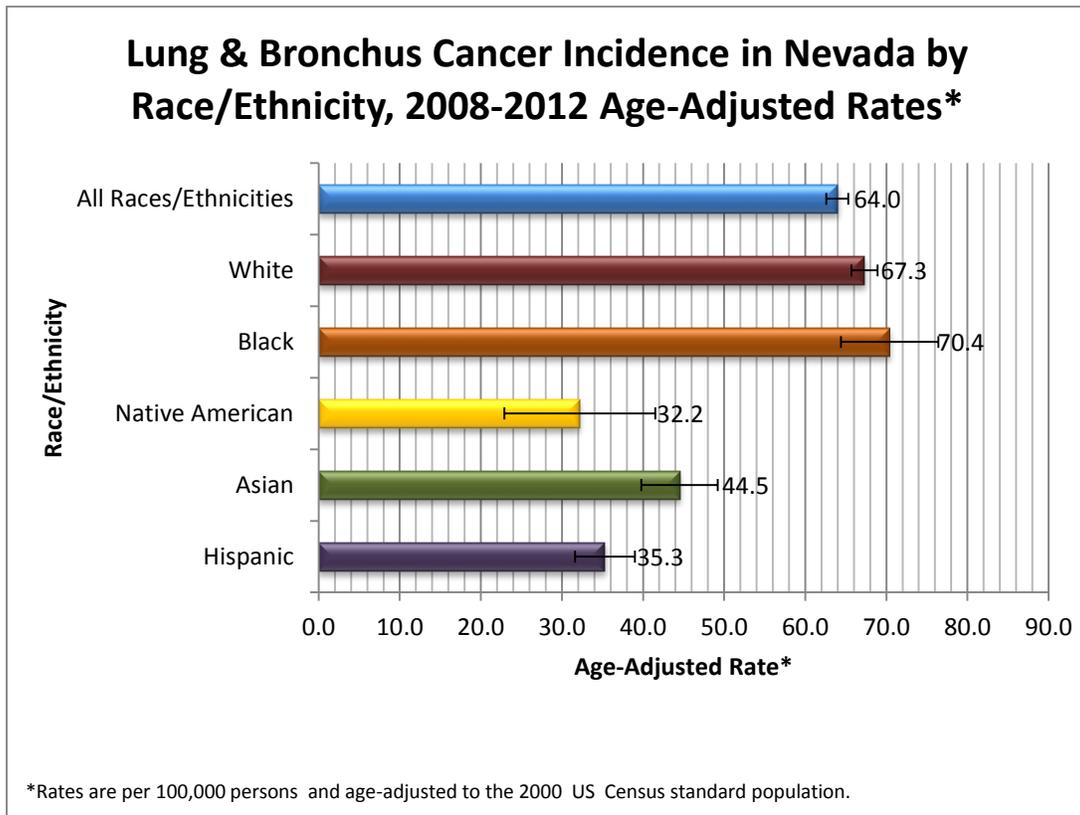
Lung & Bronchus Cancer Incidence (All Races) by Age Group - Age-Adjusted Rates*, 2008-2012 (Regions ordered by population size)				
Age Groups	Clark	Washoe	Carson City	Rural
< 20	¥	0	0	0
20 - 39	1.3 (0.8-1.7)	¥	¥	¥
40 - 64	49.2 (46.9-51.5)	48.5 (43.6-53.4)	48.5 (35.9-61.1)	53.2 (47.3-59.0)
65 - 79	355.9 (343.3-368.5)	374.5 (345.8-403.2)	535.0 (449.3-620.6)	400.6 (370.0-431.1)
80 +	422.4 (396.7-448.0)	457.8 (400.0-515.6)	542.0 (407.1-676.9)	381.0 (324.8-437.1)
All Ages	62.5 (60.9-64.1)	65.0 (61.5-68.6)	83.1 (73.2-93.1)	66.7 (62.9-70.5)

¥ Counts more than zero or less than or equal to 5 or Rates with Relative Standard Error (RSE) >30% are suppressed due to reliability and/or confidentiality issues.

* Rates are per 100,000 persons and age-adjusted to the 2000 US Census standard population.

LUNG & BRONCHUS CANCER INCIDENCE SNAPSHOT

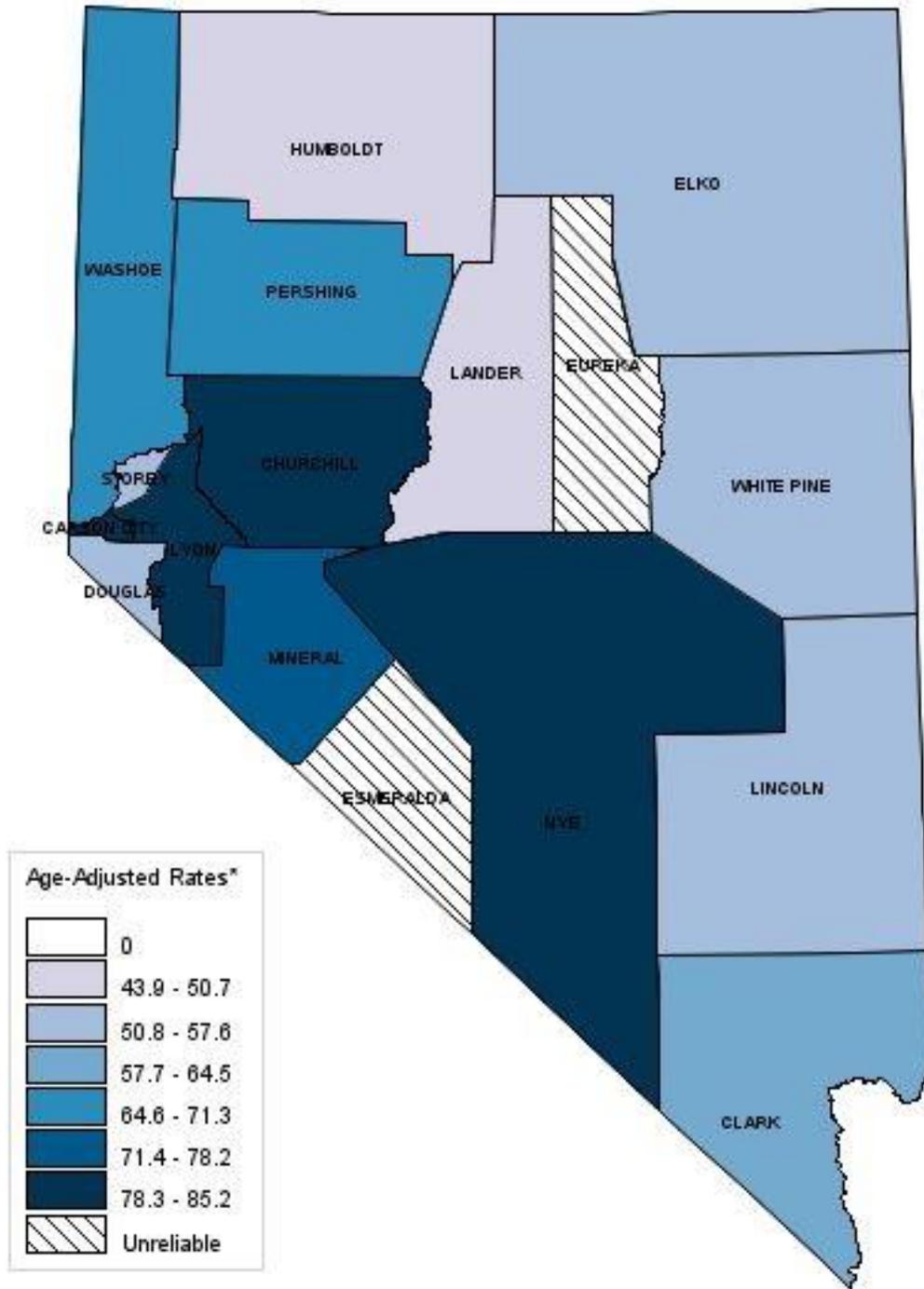
Table 19: Lung & Bronchus Cancer Incidence Causes Annual Age-Adjusted Rates* by Race/Ethnicity, Nevada, 2008-2012.



LUNG & BRONCHUS CANCER INCIDENCE BY GEOGRAPHICAL DISTRIBUTION

Figure 19: Lung & Bronchus Cancer Incidence Cumulative Annual Age-Adjusted Rates* by Region, Nevada, 2008-2012.

Nevada Lung Cancer Incidence, 2008-2012 (All Ages, All Races) by County



*Rates are per 100,000 persons and age-adjusted to the 2000 US Census standard population (19 age grps.-CensusP25-1130).

Figure 20: Lung & Bronchus Cancer Incidence by County, Age-Adjusted Rates*, Nevada, 2008-2012.

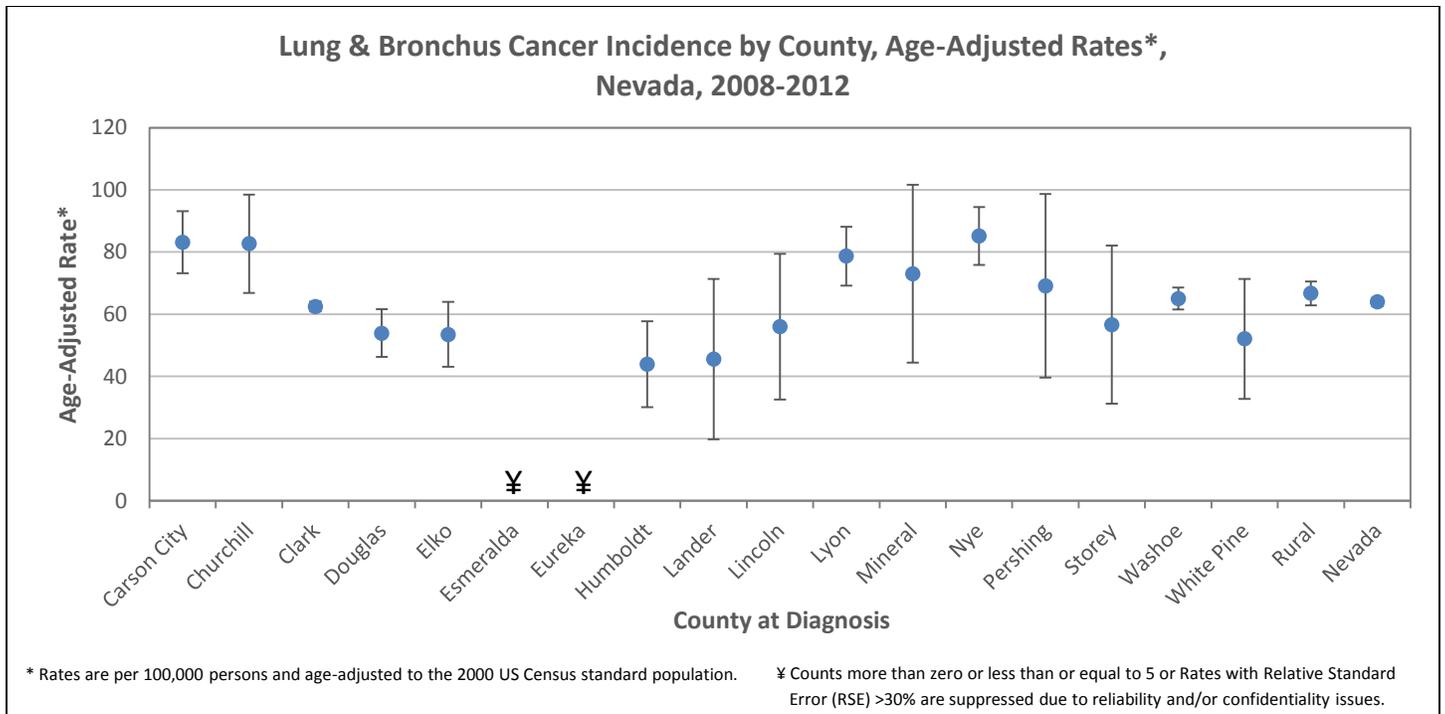


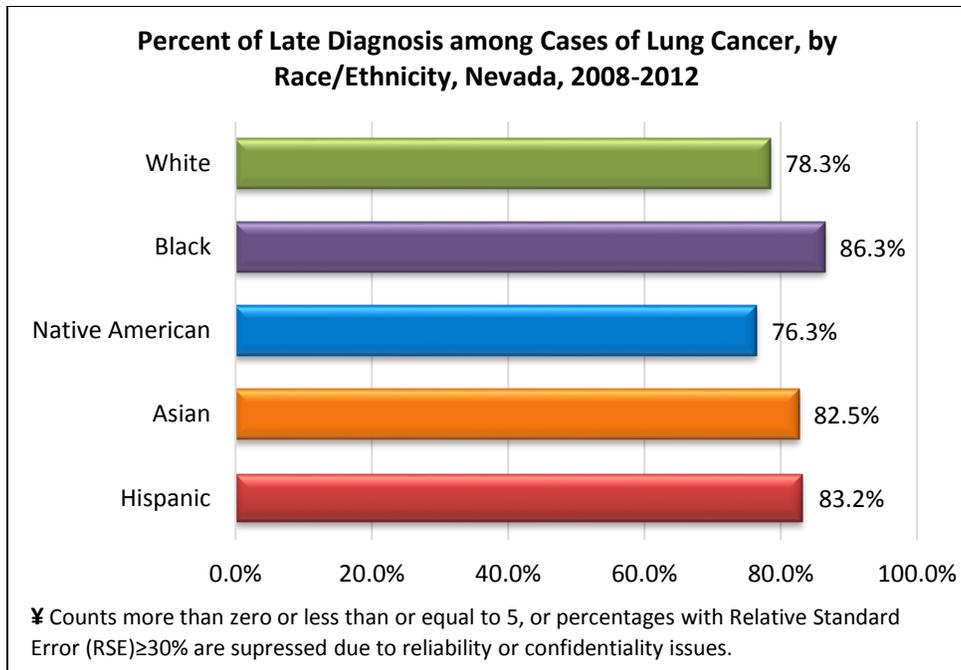
Table 20: Lung & Bronchus Cancer Incidence Cumulative Annual Age-Adjusted Rates* by County, Nevada, 2008-2012.

Nevada Lung & Bronchus Cancer Incidence (All Ages, All Races) by County - Counts/Age-Adjusted Rates*, 2008-2012		
County	Counts	Age Adj. Rate*
Carson City	270	83.1 (73.2-93.1)
Churchill	105	82.7 (66.9-98.5)
Clark	5,846	62.5 (60.9-64.1)
Douglas	193	53.9 (46.3-61.6)
Elko	101	53.5 (43.1-64.0)
Esmeralda	6	¥
Eureka	6	¥
Humboldt	39	43.9 (30.1-57.7)
Lander	12	45.6 (19.8-71.4)
Lincoln	22	56.0 (32.6-79.4)
Lyon	264	78.7 (69.2-88.1)
Mineral	25	73.0 (44.4-101.6)
Nye	321	85.2 (75.9-94.5)
Pershing	21	69.1 (39.6-98.7)
Storey	19	56.6 (31.2-82.1)
Washoe	1,278	65.0 (61.5-68.6)
White Pine	28	52.1 (32.8-71.4)
Rural Counties	1,162	66.7 (62.9-70.5)

¥ Counts more than zero or less than or equal to 5 or Rates with Relative Standard Error (RSE) >30% are suppressed due to reliability and/or confidentiality issues.

* Rates are per 100,000 persons and age-adjusted to the 2000 US Census standard population.

Figure 21: Percent of Late Diagnosis among Cases of Lung Cancer, by Race/Ethnicity, Nevada, 2008-2012



CITATIONS

1. Nevada Central Cancer Registry. 2012. Database accessed December 2014.
2. National Cancer Institute. Surveillance, Epidemiology, and End Results Program. For Researches Data Sets and Software. Calculating Age-adjusted Rates. SEER*Stat Tutorials, Steps to calculate an age-adjusted rate. Available at: <http://seer.cancer.gov/seerstat/tutorials/aarates/definition.html>
3. US census, Population estimates, historical data: Population Estimates for Counties by Age, Race, Sex, and Hispanic Origin: Annual Time Series: July 1, 1990 to July 1, 1999. Nevada [ZIP file] . Available at: <http://www.census.gov/popest/data/counties/asrh/1990s/CO-99-12.html>
4. US census, Population estimates, historical data: Intercensal Estimates of the Resident Population by Age, Sex, Race, and Hispanic Origin: April 1, 2000 to July1, 2010 County Characteristics . Available at: <http://www.census.gov/popest/data/intercensal/county/files/CO-EST00INT-ALLDATA-32.csv>
5. Hofferkamp, J (Ed). Standards for Cancer Registries Volume III: Standards for Completeness, Quality, Analysis, Management, Security and Confidentiality of Data. Springfield (IL): North American Association of Central Cancer Registries, August 2008.
6. US Cancer Statistics Working Group. United States Cancer Statistics: 1999–2010 Incidence and Mortality Web-based Report. Atlanta: US Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute; 2013. Available at: <http://apps.nccd.cdc.gov/uscs/>
7. Sugarman JR, Holliday M, Ross A, Castorina J, Hui Y. Improving American Indian cancer data in the Washington State Cancer Registry using linkages with the Indian Health Service and tribal records. *Cancer* 1996; 78(7 Suppl):1564–1568.
8. Frost F, Taylor V, Fries E. Racial misclassification of Native Americans in a Surveillance, Epidemiology and End Results cancer registry. *Journal of the National Cancer Institute* 1992; 84(12):957–962.
9. Kwong SL, Perkins CL, Snipes KP, Wright WF. Improving American Indian cancer data in the California Cancer Registry by linkage with the Indian Health Service. *Journal of Registry Management* 1998; 25(1):17–20.
10. Division of Cancer Prevention and Control, National Center of Chronic Disease Prevention and Health Promotion. Guidance for Comparing States Cancer Data. Available at: http://www.cdc.gov/cancer/npcr/uscs/data/00_guidance_include.htm

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FUNDING SOURCE(S)

This publication was supported by Cooperative Agreement Number 5U58DP003929-03 from the Centers for Disease Control and Prevention (CDC). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of CDC.

RECOMMENDED CITATION

Nevada Central Cancer Registry. Division of Public and Behavioral Health. *Comprehensive Report: Lung & Bronchus Cancer*. e 1.0. Carson City, Nevada. September 2015.



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