Table 29 (page 1 of 3). Death rates for malignant neoplasms of trachea, bronchus, and lung, by sex, race, Hispanic origin, and age: United States, selected years 1950–2011

Updated data when available, Excel, PDF, and more data years: http://www.cdc.gov/nchs/hus/contents2013.htm#029.

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	*1950*[1,2]	*1960*[1,2]	*1970*[2]	*1980*[2]	*1990*[2]	*2000*[3]	*2010*[3]	*2011*[3]
All persons			Deaths per 100,000 resident population					
All ages, age-adjusted[4]	15.0	24.1	37.1	49.9	59.3	56.1	47.6	46.0
All ages, crude	12.2	20.3	32.1	45.8	56.8	55.3	51.3	50.4
Under 25 years	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0
25–34 years	0.8	1.0	0.9	0.6	0.7	0.5	0.4	0.3
35–44 years	4.5	6.8	11.0	9.2	6.8	6.1	3.3	3.1
45–54 years	20.4	29.6	43.4	54.1	46.8	31.6	26.9	25.7
55–64 years	48.7	75.3	109.1	138.2	160.6	122.4	85.4	83.5
65–74 years	59.7	108.1	164.5	233.3	288.4	284.2	223.9	214.3
75–84 years	55.8	91.5	163.2	240.5	333.3	370.8	357.2	345.9
85 years and over	42.3	65.6	101.7	176.0	242.5	302.1	332.4	323.7
Male								
All ages, age-adjusted[4]	24.6	43.6	67.5	85.2	91.1	76.7	60.3	57.7
All ages, crude	19.9	35.4	53.4	68.6	75.1	65.5	57.8	56.6
Under 25 years	0.0	0.0	0.1	0.1	0.0	*	*	0.0
25–34 years	1.1	1.4	1.3	0.8	0.9	0.5	0.4	0.3
35–44 years	7.1	10.5	16.1	11.9	8.5	6.9	3.2	3.1
45–54 years	35.0	50.6	67.5	76.0	59.7	38.5	30.0	28.1
55–64 years	83.8	139.3	189.7	213.6	222.9	154.0	104.9	102.5
65–74 years	98.7	204.3	320.8	403.9	430.4	377.9	274.9	262.8
75–84 years	82.6	167.1	330.8	488.8	572.9	532.2	461.9	442.4
85 years and over	62.5	107.7	194.0	368.1	513.2	521.2	492.3	467.3
Female								
All ages, age-adjusted[4]	5.8	7.5	13.1	24.4	37.1	41.3	38.1	37.1
All ages, crude	4.5	6.4	11.9	24.3	39.4	45.4	45.0	44.4
Under 25 years	0.1	0.0	0.0	*	*	*	0.0	*
25–34 years	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.3
35–44 years	1.9	3.2	6.1	6.5	5.2	5.3	3.3	3.1
45–54 years	5.8	9.2	21.0	33.7	34.5	25.0	23.8	23.3
55–64 years	13.6	15.4	36.8	72.0	105.0	93.3	67.2	65.7
65–74 years	23.3	24.4	43.1	102.7	177.6	206.9	179.5	171.9
75–84 years	32.9	32.8	52.4	94.1	190.1	265.6	281.7	275.3
85 years and over	28.2	38.8	50.0	91.9	138.1	212.8	255.2	252.9
White male[5]								
All ages, age-adjusted[4]	25.1	43.6	67.1	83.8	89.0	75.7	60.1	57.7
All ages, crude	20.8	36.4	54.6	70.2	77.8	69.4	62.3	61.2
45–54 years	35.1	49.2	63.3	70.9	55.2	35.7	28.8	27.4
55–64 years	85.4	139.2	186.8	205.6	213.7	150.8	101.8	100.7
65–74 years	101.5	207.5	325.0	401.0	422.1	374.9	275.7	262.9
75–84 years	85.5	170.4	336.7	493.5	572.2	529.9	465.5	446.7
85 years and over	67.4	109.4	199.6	374.1	516.3	522.4	495.0	471.0
Black or African American male[5]								
All ages, age-adjusted[4]	17.8	42.6	75.4	107.6	125.4	101.1	73.7	69.6
All ages, crude	12.1	28.1	47.7	66.6	73.7	58.3	48.7	47.2
45–54 years	34.4	68.4	115.4	133.8	114.9	70.7	45.2	40.4
55–64 years	68.3	146.8	234.3	321.1	358.6	223.5	155.4	145.4
65–74 years	53.8	168.3	300.5	472.3	585.4	488.8	341.3	333.1
75–84 years[6]	36.2	107.3	271.6	472.9	645.4	642.5	509.1	479.7
85 years and over	- - -	82.8	137.0	311.3	499.5	562.8	521.8	473.9
American Indian or Alaska Native male[5]								
All ages, age-adjusted[4]	- - -	- - -	- - -	31.7	47.5	42.9	41.6	38.1
All ages, crude	- - -	- - -	- - -	14.2	20.0	18.1	20.8	18.9
45–54 years	- - -	- - -	- - -	*	26.6	14.5	19.7	16.4
55–64 years	- - -	- - -	- - -	72.0	97.8	86.0	67.6	52.9
65–74 years	- - -	- - -	- - -	202.8	194.3	184.8	213.2	164.1
75–84 years	- - -	- - -	- - -	*	356.2	367.9	325.8	333.2
85 years and over	- - -	- - -	- - -	*	*	*	276.4	328.3

See footnotes at end of table.

Table 29 (page 2 of 3). Death rates for malignant neoplasms of trachea, bronchus, and lung, by sex, race, Hispanic origin, and age: United States, selected years 1950–2011

Updated data when available, Excel, PDF, and more data years: http://www.cdc.gov/nchs/hus/contents2013.htm#029.

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	*1950*[1,2]	*1960*[1,2]	*1970*[2]	*1980*[2]	*1990*[2]	*2000*[3]	*2010*[3]	*2011*[3]
Asian or Pacific Islander male[5]				Deaths per 100,000 resident population				
All ages, age-adjusted[4]	- - -	- - -	- - -	43.3	44.2	40.9	33.8	32.9
All ages, crude	- - -	- - -	- - -	22.1	20.7	22.7	22.5	22.7
45–54 years	- - -	- - -	- - -	33.3	18.8	17.2	13.8	12.2
55–64 years	- - -	- - -	- - -	94.4	74.4	61.4	51.1	45.0
65–74 years	- - -	- - -	- - -	174.3	215.8	183.2	127.0	131.3
75–84 years	- - -	- - -	- - -	301.3	307.5	323.2	286.4	276.1
85 years and over	- - -	- - -	- - -	*	421.3	378.0	382.0	370.7
Hispanic or Latino male[5,7]								
All ages, age-adjusted[4]	- - -	- - -	- - -	- - -	44.1	39.0	29.6	28.7
All ages, crude	- - -	- - -	- - -	- - -	16.2	13.3	11.9	12.0
45–54 years	- - -	- - -	- - -	- - -	21.5	14.8	9.0	8.3
55–64 years	- - -	- - -	- - -	- - -	80.7	58.6	40.1	39.4
65–74 years	- - -	- - -	- - -	- - -	195.5	167.3	126.2	120.2
75–84 years	- - -	- - -	- - -	- - -	313.4	327.5	256.3	240.6
85 years and over	- - -	- - -	- - -	- - -	420.7	368.8	307.9	330.3
White, not Hispanic or Latino male[7]								
All ages, age-adjusted[4]	- - -	- - -	- - -	- - -	91.1	77.9	62.7	60.3
All ages, crude	- - -	- - -	- - -	- - -	84.7	78.9	73.8	72.7
45–54 years	- - -	- - -	- - -	- - -	57.8	37.7	31.8	30.6
55–64 years	- - -	- - -	- - -	- - -	221.0	157.7	107.8	106.9
65–74 years	- - -	- - -	- - -	- - -	431.4	387.3	287.3	274.4
75–84 years	- - -	- - -	- - -	- - -	580.4	537.7	479.3	461.0
85 years and over	- - -	- - -	- - -	- - -	520.9	527.3	504.4	478.2
White female[5]								
All ages, age-adjusted[4]	5.9	6.8	13.1	24.5	37.6	42.3	39.3	38.3
All ages, crude	4.7	5.9	12.3	25.6	42.4	49.9	50.0	49.3
45–54 years	5.7	9.0	20.9	33.0	34.6	24.8	24.3	23.9
55–64 years	13.7	15.1	37.2	71.9	105.7	96.1	68.9	67.2
65–74 years	23.7	24.8	42.9	104.6	181.3	213.2	187.4	179.6
75–84 years	34.0	32.7	52.6	95.2	194.6	272.7	290.5	284.9
85 years and over	29.3	39.1	50.6	92.4	138.3	215.9	258.3	256.3
Black or African American female[5]								
All ages, age-adjusted[4]	4.5	6.8	13.7	24.8	36.8	39.8	36.5	35.4
All ages, crude	2.8	4.3	9.4	18.3	28.1	30.8	31.4	31.2
45–54 years	7.5	11.3	23.9	43.4	41.3	32.9	27.7	26.8
55–64 years	12.9	17.9	33.5	79.9	117.9	95.3	74.0	73.3
65–74 years	14.0	18.1	46.1	88.0	164.3	194.1	163.1	156.9
75–84 years[6]	*	31.3	49.1	79.4	148.1	224.3	249.2	240.5
85 years and over	- - -	34.2	44.8	85.8	134.9	185.9	249.3	236.8
American Indian or Alaska Native female[5]								
All ages, age-adjusted[4]	- - -	- - -	- - -	11.7	19.3	24.8	26.3	23.9
All ages, crude	- - -	- - -	- - -	6.0	11.2	14.0	16.0	15.3
45–54 years	- - -	- - -	- - -	*	22.9	12.1	13.2	13.8
55–64 years	- - -	- - -	- - -	*	53.7	52.6	40.3	39.5
65–74 years	- - -	- - -	- - -	*	78.5	151.5	141.8	110.2
75–84 years	- - -	- - -	- - -	*	111.8	136.3	185.9	189.7
85 years and over	- - -	- - -	- - -	*	*	*	200.0	168.3

See footnotes at end of table.

Table 29 (page 3 of 3). Death rates for malignant neoplasms of trachea, bronchus, and lung, by sex, race, Hispanic origin, and age: United States, selected years 1950–2011

Updated data when available, Excel, PDF, and more data years: http://www.cdc.gov/nchs/hus/contents2013.htm#029.

[Data are based on death certificates]

Sex, race, Hispanic origin, and age	*1950*[1,2]	*1960*[1,2]	*1970*[2]	*1980*[2]	*1990*[2]	*2000*[3]	*2010*[3]	*2011*[3]
Asian or Pacific Islander female[5]				Deaths per 100,000 resident population				
All ages, age-adjusted[4]	- - -	- - -	- - -	15.4	18.9	18.4	18.3	18.6
All ages, crude	- - -	- - -	- - -	8.4	10.5	12.6	14.9	15.8
45–54 years	- - -	- - -	- - -	13.5	11.3	9.9	8.8	8.5
55–64 years	- - -	- - -	- - -	24.6	38.3	30.4	28.0	29.0
65–74 years	- - -	- - -	- - -	62.4	71.6	77.0	67.0	70.6
75–84 years	- - -	- - -	- - -	117.7	137.9	135.0	160.3	149.1
85 years and over	- - -	- - -	- - -	*	172.9	175.3	171.1	200.8
Hispanic or Latina female[5,7]								
All ages, age-adjusted[4]	- - -	- - -	- - -	- - -	14.1	14.7	13.8	13.3
All ages, crude	- - -	- - -	- - -	- - -	7.2	7.2	7.7	7.6
45–54 years	- - -	- - -	- - -	- - -	8.7	7.1	7.1	5.7
55–64 years	- - -	- - -	- - -	- - -	25.1	22.2	19.3	18.5
65–74 years	- - -	- - -	- - -	- - -	66.8	66.0	51.7	54.2
75–84 years	- - -	- - -	- - -	- - -	94.3	112.3	117.3	108.6
85 years and over	- - -	- - -	- - -	- - -	118.2	137.5	143.4	144.8
White, not Hispanic or Latina female[7]								
All ages, age-adjusted[4]	- - -	- - -	- - -	- - -	39.0	44.1	41.7	40.7
All ages, crude	- - -	- - -	- - -	- - -	46.2	56.4	59.0	58.5
45–54 years	- - -	- - -	- - -	- - -	36.6	26.4	26.9	26.8
55–64 years	- - -	- - -	- - -	- - -	111.3	102.2	74.0	72.4
65–74 years	- - -	- - -	- - -	- - -	186.4	222.9	199.5	191.3
75–84 years	- - -	- - -	- - -	- - -	199.1	279.2	303.0	298.7
85 years and over	- - -	- - -	- - -	- - -	139.0	218.0	263.8	261.9

0.0 Quantity more than zero but less than 0.05.
* Rates based on fewer than 20 deaths are considered unreliable and are not shown.
- - - Data not available.
[1]Includes deaths of persons who were not residents of the 50 states and the District of Columbia (D.C.).
[2]Underlying cause of death was coded according to the 6th Revision of the *International Classification of Diseases* (ICD) in 1950, 7th Revision in 1960, 8th Revision in 1970, and 9th Revision in 1980–1998. See Appendix II, Cause of death; Table III; Table IV.
[3]Starting with 1999 data, cause of death is coded according to ICD–10. See Appendix II, Cause of death; Comparability ratio; Table IV; Table V.
[4]Age-adjusted rates are calculated using the year 2000 standard population. Prior to 2001, age-adjusted rates were calculated using standard million proportions based on rounded population numbers. Starting with 2001 data, unrounded population numbers are used to calculate age-adjusted rates. See Appendix II, Age adjustment.
[5]The race groups, white, black, Asian or Pacific Islander, and American Indian or Alaska Native, include persons of Hispanic and non-Hispanic origin. Persons of Hispanic origin may be of any race. Death rates for Hispanic, American Indian or Alaska Native, and Asian or Pacific Islander persons should be interpreted with caution because of inconsistencies in reporting Hispanic origin or race on the death certificate (death rate numerators) compared with population figures (death rate denominators). The net effect of misclassification is an underestimation of deaths and death rates for races other than white and black. See Appendix II, Race, for a detailed discussion of sources of bias in death rates by race and Hispanic origin.
[6]In 1950, rate is for the age group 75 years and over.
[7]Prior to 1997, data from states that did not report Hispanic origin on the death certificate were excluded. See Appendix II, Hispanic origin.

NOTES: Starting with *Health, United States, 2003*, rates for 1991–1999 were revised using intercensal population estimates based on the 1990 and 2000 censuses. For 2000, population estimates are bridged-race April 1 census counts. Starting with *Health, United States, 2012*, rates for 2001–2009 were revised using intercensal population estimates based on the 2000 and 2010 censuses. For 2010, population estimates are bridged-race April 1 census counts. Rates for 2011 were computed using 2010-based postcensal estimates. See Appendix I, Population Census and Population Estimates. Age groups were selected to minimize the presentation of unstable age-specific death rates based on small numbers of deaths and for consistency among comparison groups. Starting with 2003 data, some states allowed the reporting of more than one race on the death certificate. The multiple-race data for these states were bridged to the single-race categories of the 1977 Office of Management and Budget standards, for comparability with other states. See Appendix II, Race. Data for additional years are available. See the Excel spreadsheet on the *Health, United States* website at: http://www.cdc.gov/nchs/hus.htm.

SOURCE: CDC/NCHS, National Vital Statistics System; Grove RD, Hetzel AM. Vital statistics rates in the United States, 1940–1960. Washington, DC: U.S. Government Printing Office. 1968; numerator data from National Vital Statistics System, annual public-use Mortality Files; denominator data from national population estimates for race groups from Table 1 and unpublished Hispanic population estimates for 1985–1996 prepared by the Housing and Household Economic Statistics Division, U.S. Census Bureau; Kochanek KD, Murphy SL, Xu JQ, et al. Deaths: Final data for 2011. National vital statistics reports; vol 63 no 3. Hyattsville, MD: NCHS; 2014. Available from: http://www.cdc.gov/nchs/data/nvsr/nvsr63/nvsr63_03.pdf. See Appendix I, National Vital Statistics System (NVSS).