

Table 15.1
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints,
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	2007-16	2012-16										
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2016</u>														
All Races	1975-82	2.5*	1982-91	1.0*	1991-07	-0.7*	2007-16	-2.1*					-2.1*	-2.1*
White	1975-82	2.6*	1982-91	1.1*	1991-07	-0.6*	2007-16	-2.1*					-2.1*	-2.1*
Black	1975-84	3.5*	1984-03	-0.6*	2003-16	-2.4*							-2.4*	-2.4*
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2016</u>														
All Races	2000-08	-0.8*	2008-16	-2.2*									-2.1*	-2.2*
White	2000-08	-0.7*	2008-16	-2.2*									-2.0*	-2.2*
White NH ^{ef}	2000-07	-0.4*	2007-16	-1.9*									-1.9*	-1.9*
Black	2000-09	-1.2*	2009-16	-2.6*									-2.3*	-2.6*
Black NH ^{ef}	2000-09	-1.1*	2009-16	-2.6*									-2.3*	-2.6*
API ^e	2000-16	-0.8*											-0.8*	-0.8*
AI/AN ^{eg}	2000-16	-1.3*											-1.3*	-1.3*
Hispanic ^f	2000-08	-0.7*	2008-16	-2.2*									-2.0*	-2.2*
<u>U.S. Cancer Mortality^c, 1975-2016</u>														
All Races	1975-80	3.0*	1980-90	1.8*	1990-95	-0.2	1995-05	-1.0*	2005-12	-2.3*	2012-16	-3.7*	-2.9*	-3.7*
White	1975-80	2.9*	1980-90	1.8*	1990-95	-0.1	1995-05	-0.8*	2005-12	-2.2*	2012-16	-3.6*	-2.8*	-3.6*
Black	1975-81	3.5*	1981-90	1.9*	1990-95	-0.7*	1995-04	-1.7*	2004-13	-2.7*	2013-16	-5.0*	-3.5*	-4.4*
<u>U.S. Cancer Mortality^c, 2000-2016</u>														
All Races	2000-05	-1.1*	2005-10	-2.2*	2010-14	-2.8*	2014-16	-4.5*					-3.0*	-3.7*
White	2000-05	-1.0*	2005-10	-2.0*	2010-14	-2.7*	2014-16	-4.3*					-2.9*	-3.5*
White NH ^{ef}	2000-05	-0.8*	2005-10	-1.9*	2010-14	-2.6*	2014-16	-4.2*					-2.7*	-3.4*
Black	2000-04	-1.6*	2004-13	-2.7*	2013-16	-5.0*							-3.5*	-4.4*
Black NH ^{ef}	2000-04	-1.5*	2004-13	-2.6*	2013-16	-5.0*							-3.4*	-4.4*
API ^e	2000-11	-1.2*	2011-16	-2.6*									-1.9*	-2.6*
AI/AN ^{eg}	2000-16	-1.4*											-1.4*	-1.4*
Hispanic ^f	2000-16	-2.3*											-2.3*	-2.3*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

* The APC/AAPC is significantly different from zero (p<.05).

- Joinpoint regression line analysis could not be performed on data series.

Table 15.2
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints,
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	2007-16	2012-16										
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2016</u>														
All Races	1975-82	1.5*	1982-91	-0.5*	1991-08	-1.7*	2008-16	-2.8*					-2.7*	-2.8*
White	1975-81	1.4*	1981-89	-0.1	1989-07	-1.6*	2007-16	-2.7*					-2.7*	-2.7*
Black	1975-84	2.9*	1984-98	-1.4*	1998-16	-2.9*							-2.9*	-2.9*
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2016</u>														
All Races	2000-08	-1.7*	2008-16	-2.9*									-2.8*	-2.9*
White	2000-08	-1.6*	2008-16	-2.9*									-2.8*	-2.9*
White NH ^{ef}	2000-08	-1.5*	2008-16	-2.7*									-2.5*	-2.7*
Black	2000-16	-2.7*											-2.7*	-2.7*
Black NH ^{ef}	2000-16	-2.7*											-2.7*	-2.7*
API ^e	2000-16	-1.5*											-1.5*	-1.5*
AI/AN ^{eg}	2000-16	-1.8*											-1.8*	-1.8*
Hispanic ^f	2000-07	-1.4*	2007-16	-3.2*									-3.2*	-3.2*
<u>U.S. Cancer Mortality^c, 1975-2016</u>														
All Races	1975-78	2.4*	1978-84	1.2*	1984-91	0.3*	1991-05	-1.9*	2005-12	-2.9*	2012-16	-4.3*	-3.5*	-4.3*
White	1975-80	1.9*	1980-87	0.7*	1987-91	0.1	1991-05	-1.7*	2005-12	-2.9*	2012-16	-4.2*	-3.4*	-4.2*
Black	1975-82	2.9*	1982-90	1.3*	1990-94	-1.3*	1994-03	-2.7*	2003-13	-3.4*	2013-16	-5.6*	-4.1*	-5.1*
<u>U.S. Cancer Mortality^c, 2000-2016</u>														
All Races	2000-05	-2.0*	2005-10	-2.8*	2010-14	-3.4*	2014-16	-5.0*					-3.6*	-4.2*
White	2000-05	-1.9*	2005-10	-2.7*	2010-14	-3.4*	2014-16	-4.9*					-3.5*	-4.1*
White NH ^{ef}	2000-05	-1.7*	2005-10	-2.6*	2010-14	-3.3*	2014-16	-4.7*					-3.4*	-4.0*
Black	2000-13	-3.3*	2013-16	-5.8*									-4.1*	-5.2*
Black NH ^{ef}	2000-13	-3.2*	2013-16	-5.8*									-4.1*	-5.1*
API ^e	2000-08	-1.3*	2008-16	-2.8*									-2.7*	-2.8*
AI/AN ^{eg}	2000-16	-1.6*											-1.6*	-1.6*
Hispanic ^f	2000-16	-3.1*											-3.1*	-3.1*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

The APC/AAPC is significantly different from zero ($p < .05$).

Joinpoint regression line analysis could not be performed on data series.

Table 15.3
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints,
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	2007-16	2012-16										
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2016</u>														
All Races	1975-82	5.6*	1982-91	3.4*	1991-06	0.5*	2006-16	-1.5*					-1.5*	-1.5*
White	1975-88	4.8*	1988-97	1.4*	1997-07	0.2	2007-16	-1.5*					-1.5*	-1.5*
Black	1975-90	4.2*	1990-06	0.6*	2006-16	-1.9*							-1.9*	-1.9*
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2016</u>														
All Races	2000-07	0.3*	2007-16	-1.5*									-1.5*	-1.5*
White	2000-07	0.4*	2007-16	-1.5*									-1.5*	-1.5*
White NH ^{ef}	2000-07	0.6*	2007-16	-1.3*									-1.3*	-1.3*
Black	2000-09	0.3	2009-16	-2.0*									-1.5*	-2.0*
Black NH ^{ef}	2000-09	0.4	2009-16	-2.0*									-1.5*	-2.0*
API ^e	2000-16	0.1											0.1	0.1
AI/AN ^{eg}	2000-16	-0.7											-0.7	-0.7
Hispanic ^f	2000-16	-0.4*											-0.4*	-0.4*
<u>U.S. Cancer Mortality^c, 1975-2016</u>														
All Races	1975-83	5.9*	1983-92	3.8*	1992-02	0.5*	2002-07	-0.7*	2007-14	-2.0*	2014-16	-4.2*	-2.5*	-3.1*
White	1975-83	5.9*	1983-92	3.8*	1992-02	0.6*	2002-07	-0.6	2007-14	-1.9*	2014-16	-4.0*	-2.4*	-2.9*
Black	1975-82	6.3*	1982-92	3.7*	1992-04	0.4*	2004-13	-1.9*	2013-16	-4.5*			-2.7*	-3.8*
<u>U.S. Cancer Mortality^c, 2000-2016</u>														
All Races	2000-02	0.6	2002-07	-0.7*	2007-14	-2.0*	2014-16	-4.2*					-2.5*	-3.1*
White	2000-02	0.6	2002-07	-0.6*	2007-14	-1.9*	2014-16	-4.0*					-2.4*	-2.9*
White NH ^{ef}	2000-02	0.7	2002-07	-0.4	2007-14	-1.8*	2014-16	-3.9*					-2.2*	-2.8*
Black	2000-04	0.6	2004-13	-1.9*	2013-16	-4.5*							-2.7*	-3.8*
Black NH ^{ef}	2000-05	0.5	2005-08	-2.8	2008-13	-1.4*	2013-16	-4.7*					-2.7*	-3.9*
API ^e	2000-13	-0.3	2013-16	-3.3									-1.3*	-2.6*
AI/AN ^{eg}	2000-02	10.8	2002-16	-1.7*									-1.7*	-1.7*
Hispanic ^f	2000-16	-1.1*											-1.1*	-1.1*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

* The APC/AAPC is significantly different from zero ($p < .05$).

- Joinpoint regression line analysis could not be performed on data series.

Table 15.4

Small Cell Cancer of the Lung and Bronchus^a(Invasive) and Non-Small Cell Cancer of the Lung and Bronchus^b(Invasive)

Trends in SEER 9 Observed Incidence^c Using the Joinpoint Regression Program,
1975-2016 With up to Five Joinpoints,
By Race and Sex

		JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d
		Years	APC	Years	APC	2012-16								
SEER 9 Observed Incidence^c for Small Cell Cancer of the Lung and Bronchus^a, 1975-2016														
All Races	Both Sexes	1975-82	6.2*	1982-89	1.1	1989-07	-2.3*	2007-16	-3.1*					-3.1*
All Races	Male	1975-81	5.6*	1981-88	0.0	1988-16	-3.1*							-3.1*
All Races	Female	1975-82	9.7*	1982-91	2.9*	1991-07	-1.6*	2007-16	-2.9*					-2.9*
White	Both Sexes	1975-82	6.4*	1982-89	1.3*	1989-07	-2.1*	2007-16	-3.1*					-3.1*
White	Male	1975-78	8.8*	1978-86	2.0*	1986-16	-3.0*							-3.0*
White	Female	1975-82	10.0*	1982-90	3.4*	1990-07	-1.3*	2007-16	-2.9*					-2.9*
Black	Both Sexes	1975-86	4.9*	1986-16	-2.5*									-2.5*
Black	Male	1975-85	5.0*	1985-16	-3.4*									-3.4*
Black	Female	1975-91	4.5*	1991-16	-1.9*									-1.9*
SEER 9 Observed Incidence^c for Non-Small Cell Cancer of the Lung and Bronchus^b, 1975-2016														
All Races	Both Sexes	1975-80	5.2*	1980-88	1.7*	1988-00	-0.9*	2000-03	6.2*	2003-16	-1.7*			-1.7*
All Races	Male	1975-80	4.4*	1980-87	0.6	1987-00	-2.0*	2000-03	5.1	2003-16	-2.5*			-2.5*
All Races	Female	1975-78	10.2*	1978-88	4.7*	1988-99	0.6	1999-05	3.8*	2005-16	-1.3*			-1.3*
White	Both Sexes	1975-79	6.1*	1979-88	1.9*	1988-00	-0.8*	2000-03	6.1*	2003-16	-1.7*			-1.7*
White	Male	1975-80	4.4*	1980-88	0.5	1988-99	-2.3*	1999-02	5.4	2002-16	-2.3*			-2.3*
White	Female	1975-78	10.4*	1978-88	4.9*	1988-00	0.7*	2000-03	7.1*	2003-16	-0.9*			-0.9*
Black	Both Sexes	1975-84	4.5*	1984-00	-1.2*	2000-03	5.8	2003-16	-2.4*					-2.4*
Black	Male	1975-84	3.9*	1984-00	-2.2*	2000-03	4.3	2003-16	-3.2*					-3.2*
Black	Female	1975-90	5.0*	1990-97	-1.5	1997-05	4.1*	2005-16	-1.9*					-1.9*

^aJoinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Small Cell Cancer of the Lung and Bronchus includes histologies 8002, 8041-8045.

^bNon-Small Cell Cancer of the Lung and Bronchus includes histologies 8003-8004, 8012-8015, 8021-8022, 8030-8035, 8046, 8050-8052, 8070-8076, 8078, 8082-8084, 8090, 8094, 8120, 8123, 8140-8141, 8143-8145, 8147, 8190, 8200-8201, 8211, 8240-8241, 8243-8246, 8249-8255, 8260, 8290, 8310, 8320, 8323, 8333, 8401, 8430, 8440, 8470-8471, 8480-8481, 8490, 8503, 8507, 8525, 8550, 8560, 8562, 8570-8572, 8574-8576.

^cTrends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

^dThe APC/AAPC is significantly different from zero (p<.05).

^{*}Joinpoint regression line analysis could not be performed on data series.

Table 15.5
Cancer of the Lung and Bronchus (Invasive)

Delay-adjusted SEER Incidence^a Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-1979	56.22	94.32	28.33	55.60	93.59	28.39	72.01	125.85	30.72
1980	60.65	99.96	32.21	59.42	97.69	32.36	86.62	151.43	38.25
1981	62.03	99.41	35.11	61.53	98.44	35.52	82.31	142.96	37.45
1982	63.29	100.69	36.73	63.05	99.68	37.68	80.37	141.06	35.68
1983	63.45	99.46	37.88	63.03	97.63	39.09	86.62	151.34	39.49
1984	65.49	102.05	39.45	64.33	99.89	39.61	92.93	158.84	44.82
1985	64.61	98.59	40.25	63.97	96.84	40.87	89.56	149.68	46.04
1986	65.77	99.03	42.29	65.14	97.32	42.94	92.94	156.27	48.67
1987	67.90	101.51	44.16	68.08	100.66	45.49	84.76	143.59	43.28
1988	68.06	98.70	46.34	68.26	97.92	47.73	88.24	144.93	48.26
1989	67.56	97.96	46.12	67.57	97.06	47.26	89.04	142.77	51.37
1990	68.08	96.91	47.79	68.23	96.11	48.96	86.78	137.17	52.13
1991	69.19	97.20	49.58	68.96	95.88	50.63	93.13	144.76	57.03
1992	69.46	97.20	49.85	68.92	94.89	51.04	93.99	148.73	56.06
1993	67.75	93.95	49.15	67.80	92.51	50.63	86.36	135.35	52.54
1994	67.17	90.93	50.54	67.28	90.13	51.61	87.16	131.39	56.53
1995	66.85	89.82	50.43	67.09	87.95	52.43	85.87	138.94	50.12
1996	66.46	87.96	51.24	66.78	86.66	52.97	84.57	128.35	55.73
1997	66.62	86.31	52.59	67.19	84.80	54.93	82.27	129.54	50.49
1998	67.55	88.02	52.98	68.00	86.60	55.02	87.52	130.87	58.30
1999	65.83	84.57	52.50	66.28	83.25	54.42	84.56	122.46	58.85
2000	64.14	82.11	51.22	64.65	80.78	53.21	80.71	115.09	57.81
2001	64.15	81.41	51.65	65.04	81.07	53.48	80.63	114.51	57.82
2002	64.06	80.43	52.50	64.79	79.84	54.23	81.48	113.10	60.71
2003	64.76	81.05	53.09	65.51	79.56	55.65	81.20	119.56	55.73
2004	62.24	76.28	52.07	62.79	75.30	53.77	76.16	105.27	57.02
2005	63.03	75.82	53.85	64.01	75.53	55.80	74.69	97.97	59.49
2006	62.30	74.29	53.45	62.82	73.08	55.35	76.75	101.10	59.96
2007	62.09	73.75	53.58	63.12	72.86	56.05	74.13	100.68	56.55
2008	60.41	72.20	51.86	61.15	70.78	54.29	75.03	103.42	56.12
2009	60.05	70.74	52.32	60.73	69.79	54.17	74.37	98.20	58.67
2010	57.81	68.08	50.18	58.90	67.87	52.19	67.23	85.82	55.00
2011	56.35	65.78	49.44	57.36	65.42	51.45	65.92	86.52	52.56
2012	55.37	64.14	48.84	55.80	63.04	50.44	69.69	89.37	56.40
2013	54.22	61.86	48.55	54.91	60.91	50.49	63.77	81.82	51.71
2014	53.37	60.41	48.17	54.75	60.46	50.61	60.49	75.19	50.82
2015	52.02	59.01	46.77	52.94	58.32	48.91	60.27	76.34	49.75
2016	51.26	58.22	45.99	52.07	57.35	48.11	58.95	74.98	47.64

Reference: [Cancer Incidence Rates Adjusted for Reporting Delay](#).

Individual rates for diagnosis years 1975-1979 available in web browser version of [Cancer Statistics Review](#).

SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

- Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 15.6
Cancer of the Lung and Bronchus (Invasive)

Age-adjusted SEER Incidence^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975-2016	61.58	82.34	46.28	61.97	81.79	47.47	76.65	113.70	50.89
1975-1979	56.22	94.32	28.33	55.60	93.59	28.39	72.01	125.85	30.72
1980	60.65	99.96	32.21	59.42	97.69	32.36	86.62	151.43	38.25
1981	62.03	99.41	35.11	61.53	98.44	35.52	82.31	142.96	37.45
1982	63.29	100.69	36.73	63.05	99.68	37.68	80.37	141.06	35.68
1983	63.45	99.46	37.88	63.03	97.63	39.09	86.62	151.34	39.49
1984	65.49	102.05	39.45	64.33	99.89	39.61	92.93	158.84	44.82
1985	64.61	98.59	40.25	63.97	96.84	40.87	89.56	149.68	46.04
1986	65.77	99.03	42.29	65.14	97.32	42.94	92.94	156.27	48.67
1987	67.90	101.51	44.16	68.08	100.66	45.49	84.76	143.59	43.28
1988	68.06	98.70	46.34	68.26	97.92	47.73	88.24	144.93	48.26
1989	67.56	97.96	46.12	67.57	97.06	47.26	89.04	142.77	51.37
1990	68.08	96.91	47.79	68.23	96.11	48.96	86.78	137.17	52.13
1991	69.19	97.20	49.58	68.96	95.88	50.63	93.13	144.76	57.03
1992	69.46	97.20	49.85	68.92	94.89	51.04	93.99	148.73	56.06
1993	67.75	93.95	49.15	67.80	92.51	50.63	86.36	135.35	52.54
1994	67.17	90.93	50.54	67.28	90.13	51.61	87.16	131.39	56.53
1995	66.85	89.82	50.43	67.09	87.95	52.43	85.87	138.94	50.12
1996	66.46	87.96	51.24	66.78	86.66	52.97	84.57	128.35	55.73
1997	66.62	86.31	52.59	67.19	84.80	54.93	82.27	129.54	50.49
1998	67.55	88.02	52.98	68.00	86.60	55.02	87.52	130.87	58.30
1999	65.83	84.57	52.50	66.28	83.25	54.42	84.56	122.46	58.85
2000	64.14	82.11	51.22	64.65	80.78	53.21	80.71	115.09	57.81
2001	64.15	81.41	51.65	65.04	81.07	53.48	80.63	114.51	57.82
2002	64.06	80.43	52.50	64.79	79.84	54.23	81.48	113.10	60.71
2003	64.76	81.05	53.09	65.51	79.56	55.65	81.20	119.56	55.73
2004	62.24	76.28	52.07	62.79	75.30	53.77	76.16	105.27	57.02
2005	63.03	75.82	53.85	64.01	75.53	55.80	74.69	97.97	59.49
2006	62.30	74.29	53.45	62.82	73.08	55.35	76.75	101.10	59.96
2007	62.09	73.75	53.58	63.12	72.86	56.05	74.13	100.68	56.55
2008	60.37	72.15	51.83	61.12	70.74	54.26	74.96	103.32	56.06
2009	59.98	70.66	52.26	60.66	69.71	54.11	74.22	98.01	58.55
2010	57.71	67.97	50.10	58.81	67.76	52.11	67.03	85.57	54.84
2011	56.22	65.62	49.32	57.23	65.28	51.34	65.67	86.18	52.36
2012	55.20	63.95	48.70	55.65	62.87	50.30	69.33	88.90	56.12
2013	54.02	61.64	48.38	54.73	60.71	50.33	63.40	81.36	51.40
2014	53.08	60.07	47.91	54.45	60.13	50.34	59.97	74.52	50.38
2015	51.58	58.50	46.38	52.50	57.83	48.51	59.54	75.41	49.15
2016	50.24	57.04	45.10	50.98	56.13	47.13	57.41	73.01	46.41

^a Individual rates for diagnosis years 1975-1979 available in web browser version of [Cancer Statistics Review](#). SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). - Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.7
Small Cell Cancer of the Lung and Bronchus (Invasive)
Age-adjusted SEER Incidence^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975-2016	8.45	10.53	6.89	8.97	10.97	7.46	7.98	10.82	5.98
1975-1979	7.77	12.14	4.47	7.97	12.49	4.61	7.57	11.77	4.35
1980	9.11	14.20	5.25	9.34	14.40	5.56	9.99	17.53	4.38
1981	9.74	14.59	6.13	10.03	14.87	6.48	9.28	15.87	4.34
1982	10.44	15.00	7.17	10.81	15.36	7.62	9.69	16.08	4.92
1983	10.39	14.92	7.10	10.78	15.09	7.66	9.23	15.20	4.95
1984	10.71	15.24	7.41	11.07	15.71	7.76	10.41	14.99	6.86
1985	10.47	14.98	7.10	10.80	15.26	7.52	11.12	17.90	6.27
1986	11.22	15.57	7.98	11.57	16.05	8.27	12.26	17.70	8.35
1987	10.67	14.15	8.22	11.18	14.57	8.86	9.68	14.61	6.20
1988	11.38	15.28	8.53	11.91	15.62	9.23	10.49	17.86	5.30
1989	11.26	14.86	8.70	11.71	15.25	9.23	12.07	17.67	8.35
1990	10.67	13.86	8.40	11.28	14.49	9.06	9.35	13.70	6.21
1991	11.31	13.99	9.39	11.71	14.32	9.88	12.34	15.92	10.00
1992	10.51	13.41	8.45	10.97	13.85	8.96	10.22	13.32	8.05
1993	10.03	12.34	8.34	10.48	12.64	8.94	9.43	13.36	6.74
1994	9.77	11.69	8.42	10.24	11.97	9.05	9.95	13.53	7.50
1995	9.87	12.30	8.12	10.37	12.64	8.73	9.50	13.89	6.61
1996	9.72	12.09	7.98	10.28	12.48	8.64	8.80	12.02	6.84
1997	9.53	10.86	8.64	10.11	11.12	9.48	7.86	10.82	6.05
1998	9.29	10.86	8.14	9.86	11.28	8.82	9.50	12.26	7.55
1999	8.82	10.06	7.97	9.33	10.25	8.78	8.25	11.21	6.05
2000	8.80	10.45	7.59	9.28	10.85	8.13	9.59	11.80	8.02
2001	8.37	9.86	7.33	8.91	10.35	7.93	8.57	10.91	6.89
2002	8.29	9.39	7.54	8.98	9.86	8.39	7.21	9.80	5.71
2003	8.22	9.12	7.60	8.73	9.38	8.33	7.93	9.50	6.83
2004	8.12	9.00	7.49	8.52	9.25	8.00	8.64	10.08	7.75
2005	7.59	8.69	6.82	8.22	9.24	7.51	6.63	7.78	5.88
2006	7.69	8.53	7.08	8.25	8.84	7.86	6.83	8.19	5.89
2007	7.68	8.60	7.02	8.33	8.96	7.92	7.10	9.40	5.44
2008	7.09	7.96	6.46	7.58	8.11	7.20	6.38	8.85	4.87
2009	7.13	7.78	6.69	7.60	8.10	7.27	7.51	8.36	6.94
2010	6.81	7.49	6.34	7.46	7.98	7.13	5.89	6.88	5.15
2011	6.27	6.85	5.86	6.77	7.09	6.57	5.28	6.44	4.49
2012	6.46	7.19	5.89	6.94	7.55	6.46	6.64	8.31	5.62
2013	6.35	7.13	5.79	6.89	7.49	6.48	5.45	6.77	4.66
2014	6.02	6.36	5.80	6.55	6.63	6.56	5.84	6.57	5.29
2015	5.92	6.25	5.70	6.41	6.54	6.38	5.77	6.28	5.38
2016	5.48	6.05	5.06	5.78	6.12	5.56	5.67	6.32	5.11

Note:

Small Cell Cancer of the Lung and Bronchus includes histologies 8002, 8041-8045.

Individual rates for diagnosis years 1975-1979 available in web browser version of [Cancer Statistics Review](#).

SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.8
Non-Small Cell Cancer of the Lung and Bronchus (Invasive)
Age-adjusted SEER Incidence^a Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2016	42.32	56.50	31.68	42.09	55.50	32.09	55.24	81.92	36.41
1975-1979	34.57	57.32	17.36	33.74	55.99	17.26	48.45	86.22	19.14
1980	39.34	64.32	20.69	38.13	62.16	20.54	59.12	103.14	25.80
1981	40.54	64.79	22.59	40.00	63.85	22.68	54.97	94.67	24.97
1982	41.41	66.26	23.20	40.81	65.02	23.49	55.81	97.81	24.13
1983	41.84	66.20	24.06	41.16	64.37	24.68	60.76	107.14	26.02
1984	43.46	68.00	25.50	42.07	65.55	25.26	67.33	116.65	30.98
1985	43.09	65.84	26.35	42.24	63.87	26.58	63.60	107.17	31.77
1986	43.12	64.55	27.46	42.34	62.64	27.82	64.72	109.68	32.57
1987	45.63	69.47	28.35	45.27	68.19	28.88	60.52	104.01	29.58
1988	45.12	65.80	30.02	45.01	65.07	30.65	59.91	96.94	33.34
1989	44.26	64.40	29.72	43.87	63.33	30.12	61.00	97.84	34.69
1990	44.74	63.59	31.09	44.42	62.64	31.39	59.87	92.31	37.15
1991	44.92	63.76	31.37	44.14	61.90	31.68	64.84	102.15	38.09
1992	45.24	63.85	31.70	44.39	61.44	32.28	64.81	104.87	36.51
1993	43.65	61.01	30.96	43.48	59.80	31.70	56.77	89.94	33.69
1994	43.03	58.55	31.84	42.69	57.33	32.35	58.55	90.39	35.94
1995	42.40	57.07	31.68	42.19	55.56	32.59	58.29	93.15	34.32
1996	41.52	54.46	32.10	41.45	53.39	32.92	54.17	81.30	35.44
1997	41.36	54.53	31.60	41.49	53.38	32.77	53.59	84.62	32.39
1998	42.11	55.41	32.49	42.35	54.44	33.76	54.84	82.92	35.78
1999	40.49	52.60	31.60	40.51	51.57	32.45	54.31	79.49	37.09
2000	38.58	49.69	30.49	38.76	48.89	31.52	48.96	69.38	34.98
2001	46.74	60.00	36.93	47.07	59.35	37.96	60.15	86.62	42.50
2002	46.92	59.21	38.00	46.89	58.28	38.66	62.45	85.95	46.53
2003	47.37	60.04	38.09	47.60	58.54	39.72	61.64	92.40	40.77
2004	45.61	56.51	37.61	45.66	55.23	38.65	56.34	79.61	40.83
2005	46.80	56.21	39.90	46.90	55.36	40.74	58.08	75.00	46.66
2006	46.44	55.84	39.43	46.19	54.17	40.29	60.67	81.89	45.95
2007	46.37	55.34	39.68	46.49	53.97	40.93	58.73	79.68	44.67
2008	45.65	54.65	39.06	45.63	52.95	40.39	59.42	81.28	44.50
2009	44.95	52.97	39.06	45.21	52.01	40.20	56.36	75.21	43.79
2010	43.73	51.80	37.67	44.21	51.45	38.71	50.97	64.37	42.11
2011	42.89	49.98	37.57	43.11	49.15	38.57	52.72	69.92	41.43
2012	41.71	48.39	36.72	41.55	47.11	37.44	54.22	69.11	43.88
2013	40.89	46.46	36.72	40.98	45.28	37.80	49.55	63.90	39.93
2014	40.20	45.19	36.50	40.81	44.77	37.91	46.59	58.22	39.06
2015	38.90	44.28	34.80	39.05	43.33	35.79	47.17	60.46	38.30
2016	38.61	43.40	34.96	38.89	42.40	36.24	44.98	57.36	36.23

Note: Non-Small Cell Cancer of the Lung and Bronchus includes histologies 8003-8004, 8012-8015, 8021-8022, 8030-8035, 8046, 8050-8052, 8070-8076, 8078, 8082-8084, 8090, 8094, 8120, 8123, 8140-8141, 8143-8145, 8147, 8190, 8200-8201, 8211, 8240-8241, 8243-8246, 8249-8255, 8260, 8290, 8310, 8320, 8323, 8333, 8401, 8430, 8440, 8470-8471, 8480-8481, 8490, 8503, 8507, 8525, 8550, 8560, 8562, 8570-8572, 8574-8576.

^a Individual rates for diagnosis years 1975-1979 available in web browser version of [Cancer Statistics Review](#).

SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.9
Cancer of the Lung and Bronchus (Invasive)

Age-adjusted U.S. Death^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Death:									
1975-2016	51.36	73.61	35.07	51.50	72.92	35.77	58.15	93.43	34.12
1975-1979	45.41	80.14	20.10	44.85	78.97	20.21	53.41	98.19	19.78
1980	49.41	84.71	24.13	48.75	83.27	24.22	59.16	106.67	24.57
1981	49.99	85.16	24.95	49.28	83.52	25.10	60.57	109.71	25.10
1982	51.43	86.79	26.47	50.78	85.18	26.72	62.27	112.55	26.30
1983	52.40	87.04	28.10	51.70	85.40	28.28	63.68	112.76	28.73
1984	53.36	88.22	28.94	52.64	86.24	29.27	65.07	117.98	27.98
1985	54.32	88.54	30.41	53.68	86.69	30.81	65.76	117.50	29.64
1986	55.04	88.95	31.41	54.36	87.03	31.76	66.95	119.18	31.00
1987	56.24	90.05	32.72	55.56	88.09	33.04	68.65	121.77	32.48
1988	56.97	89.87	34.14	56.35	87.86	34.57	69.18	122.15	33.54
1989	57.90	89.77	35.77	57.21	87.57	36.27	71.04	124.72	34.87
1990	58.85	90.56	36.85	58.18	88.40	37.31	72.06	125.17	36.48
1991	58.99	89.88	37.61	58.38	87.76	38.12	71.64	123.58	37.16
1992	58.90	88.01	38.70	58.34	85.98	39.21	71.35	121.06	38.55
1993	59.13	87.60	39.28	58.66	85.52	39.97	71.12	121.98	37.72
1994	58.54	85.69	39.62	58.15	83.78	40.30	70.15	118.63	38.61
1995	58.38	84.37	40.26	58.08	82.62	40.97	69.28	116.08	38.84
1996	57.91	82.82	40.41	57.69	81.15	41.22	68.30	113.18	39.08
1997	57.51	81.33	40.82	57.31	79.83	41.52	67.89	110.21	40.53
1998	57.08	79.89	40.98	56.93	78.47	41.69	66.86	107.40	40.67
1999	55.42	76.97	40.15	55.31	75.67	40.86	65.00	103.61	40.00
2000	55.85	76.48	41.12	55.99	75.41	42.08	63.77	100.87	39.64
2001	55.32	75.32	41.01	55.55	74.34	42.05	62.54	99.32	38.80
2002	55.00	73.67	41.60	55.31	72.89	42.64	62.05	95.59	40.21
2003	54.19	72.03	41.29	54.52	71.32	42.30	60.92	92.96	40.25
2004	53.37	70.43	40.96	53.71	69.74	41.99	59.79	90.41	39.95
2005	52.85	69.49	40.71	53.32	69.09	41.70	58.52	86.96	40.12
2006	51.73	67.39	40.26	52.27	67.05	41.36	56.73	83.89	39.06
2007	50.71	65.17	40.10	51.28	64.76	41.30	55.38	82.19	38.13
2008	49.59	63.73	39.13	50.28	63.51	40.40	53.13	78.20	36.88
2009	48.41	61.54	38.63	49.18	61.41	39.97	51.56	75.49	35.90
2010	47.42	60.05	37.94	48.11	59.92	39.17	51.14	73.52	36.27
2011	46.00	57.87	37.01	46.72	57.85	38.20	49.31	70.02	35.44
2012	44.94	56.21	36.42	45.65	56.12	37.64	48.34	68.86	34.73
2013	43.44	53.95	35.46	44.14	53.92	36.64	46.96	66.00	34.11
2014	42.20	51.95	34.72	43.00	52.05	35.99	44.71	62.49	32.78
2015	40.63	49.77	33.56	41.51	49.91	34.94	42.19	59.02	30.74
2016	38.47	46.92	31.91	39.29	47.09	33.18	40.19	55.35	29.78

^a Individual rates for years of death 1975-1979 available in web browser version of [Cancer Statistics Review](#). US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). - Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.10
Cancer of the Lung and Bronchus (Invasive)

SEER Incidence^a and U.S. Death^b Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
SEER Incidence									
Age at Diagnosis									
Age-Adjusted Rates, 2012-2016									
All ages	54.9	63.0	48.9	56.7	63.5	51.8	56.2	73.5	44.6
Under 65	16.4	17.3	15.6	16.5	16.9	16.1	20.5	24.5	17.2
65 and over	320.9	378.8	279.2	334.9	385.6	298.4	302.8	412.1	234.0
All ages (WHO world std) ^c	38.5	43.5	34.6	39.7	43.6	36.6	40.8	52.6	32.5
Age-Specific Rates, 2012-2016									
<1	-	-	-	-	-	-	-	-	-
1-4	0.1	-	-	0.1	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	0.1	-	-	0.1	-	-	-	-	-
15-19	0.1	0.1	0.1	0.1	0.1	0.2	-	-	-
20-24	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.5	-
25-29	0.6	0.6	0.6	0.6	0.5	0.6	0.5	0.6	-
30-34	1.2	1.1	1.2	1.0	0.9	1.2	1.6	2.0	1.3
35-39	2.7	2.6	2.7	2.6	2.4	2.7	3.0	3.5	2.5
40-44	6.6	6.0	7.1	6.5	5.8	7.2	6.6	7.1	6.2
45-49	17.8	16.9	18.7	17.9	16.7	19.2	21.2	21.2	21.2
50-54	44.2	43.9	44.4	44.4	42.9	45.8	56.6	62.0	51.9
55-59	85.0	90.3	79.9	85.5	88.2	83.0	110.7	132.4	92.1
60-64	134.9	152.5	118.8	136.5	149.4	124.4	167.7	219.0	126.3
65-69	220.1	248.2	195.2	228.0	249.5	208.5	235.6	309.5	179.6
70-74	323.6	363.7	290.1	340.0	370.3	314.0	315.4	422.9	239.7
75-79	395.1	458.6	345.9	415.1	469.3	372.0	363.1	489.3	282.0
80-84	408.3	498.3	346.2	425.7	509.6	366.4	354.9	489.9	280.3
85+	308.2	422.2	249.2	316.9	429.0	258.5	260.6	392.5	205.7
U.S. Mortality									
Age at Death									
Age-Adjusted Rates, 2012-2016									
All ages	41.9	51.6	34.4	42.7	51.7	35.6	44.3	62.1	32.4
Under 65	11.5	13.3	9.8	11.6	13.1	10.1	14.3	18.5	10.7
65 and over	251.6	316.4	204.0	257.5	318.6	212.0	252.3	363.3	182.2
All ages (WHO world std) ^c	24.6	29.8	20.3	25.0	29.7	21.0	27.3	37.6	19.7
Age-Specific Rates, 2012-2016									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	0.0	-	-	-	-	-	-	-	-
15-19	0.0	0.0	-	0.0	-	-	-	-	-
20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-
25-29	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	-
30-34	0.5	0.5	0.4	0.4	0.4	0.4	0.7	1.0	0.4
35-39	1.3	1.4	1.2	1.2	1.3	1.2	1.6	2.2	1.1
40-44	4.0	4.0	3.9	4.1	4.0	4.1	4.2	4.9	3.7
45-49	12.0	12.5	11.5	12.3	12.5	12.0	13.0	15.4	10.9
50-54	31.6	34.7	28.6	31.7	34.1	29.3	39.9	48.2	32.6
55-59	61.7	72.2	51.8	61.7	70.6	53.1	78.9	102.2	58.9
60-64	96.6	118.1	76.9	97.2	116.1	79.5	119.7	165.8	82.2
65-69	154.0	186.5	125.0	156.7	185.3	130.4	174.9	246.8	119.0
70-74	233.7	283.1	191.6	239.7	284.9	200.3	246.2	347.5	173.2
75-79	298.9	365.7	245.9	307.2	369.4	256.8	293.4	413.9	214.6
80-84	343.3	438.0	276.6	351.9	443.2	286.1	320.3	467.8	237.9
85+	315.5	445.6	247.9	321.2	450.1	253.2	285.9	444.3	220.0

^a SEER 21 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^c Rates are per 100,000 and are age-adjusted to the world (WHO 2000-2025) standard million.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.11
Small Cell Cancer of the Lung and Bronchus^a(Invasive) and Non-Small Cell Cancer of the Lung and Bronchus^b(Invasive)

SEER Incidence^c Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>Small Cell Cancer of the Lung and Bronchus^a</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2012-2016									
All ages	6.1	6.6	5.8	6.7	7.0	6.5	4.9	5.8	4.3
Under 65	2.2	2.2	2.2	2.4	2.4	2.5	1.9	2.1	1.8
65 and over	33.2	37.2	30.5	36.3	39.3	34.2	25.4	31.0	21.8
Age-Specific Rates, 2012-2016									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	0.1	-	-	-	-	-	-	-	-
35-39	0.1	0.2	0.1	0.2	0.2	0.1	-	-	-
40-44	0.6	0.6	0.6	0.7	0.6	0.7	0.5	-	-
45-49	2.2	2.1	2.3	2.5	2.4	2.7	1.8	1.8	1.7
50-54	5.9	5.7	6.1	6.8	6.3	7.2	4.8	5.4	4.3
55-59	12.2	12.0	12.4	13.5	12.9	14.1	10.7	11.1	10.3
60-64	18.7	19.5	18.0	20.5	20.8	20.3	17.2	19.3	15.5
65-69	29.0	31.2	27.0	31.9	33.0	30.9	23.0	29.5	18.1
70-74	38.4	40.1	36.9	42.4	42.9	41.9	28.0	33.0	24.5
75-79	41.5	45.8	38.2	45.3	48.6	42.7	33.0	39.3	28.9
80-84	34.0	40.2	29.7	36.5	42.0	32.6	24.3	26.5	23.1
85+	17.0	25.9	12.4	17.8	26.5	13.2	13.9	21.0	10.9
<u>Non-Small Cell Cancer Lung and Bronchus^b</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2012-2016									
All ages	41.7	47.7	37.1	42.6	47.6	38.9	44.2	57.7	35.1
Under 65	13.1	13.7	12.5	12.9	13.2	12.7	17.1	20.2	14.4
65 and over	239.1	282.9	207.2	247.6	286.0	219.5	232.0	316.9	177.8
Age-Specific Rates, 2012-2016									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	0.0	-	-	-	-	-	-	-	-
15-19	0.1	0.1	0.1	0.1	-	0.2	-	-	-
20-24	0.3	0.2	0.3	0.2	0.2	0.3	0.4	0.5	-
25-29	0.5	0.5	0.6	0.5	0.5	0.6	0.4	-	-
30-34	1.0	0.9	1.1	0.9	0.7	1.0	1.3	1.5	1.1
35-39	2.3	2.2	2.5	2.3	2.1	2.4	2.6	2.9	2.3
40-44	5.6	5.0	6.2	5.5	4.8	6.2	5.5	5.9	5.2
45-49	14.7	13.7	15.6	14.4	13.2	15.7	18.3	18.5	18.1
50-54	35.5	34.9	36.1	34.9	33.3	36.5	48.0	51.9	44.5
55-59	67.3	71.3	63.5	66.4	68.5	64.5	92.3	109.1	77.9
60-64	105.9	119.3	93.7	105.6	115.2	96.5	136.2	177.5	102.9
65-69	173.1	194.5	154.3	177.3	193.5	162.6	193.0	252.7	147.7
70-74	253.1	284.7	226.6	263.6	287.7	242.8	253.6	338.7	193.8
75-79	304.5	356.3	264.2	317.2	361.5	282.0	286.0	394.8	216.0
80-84	296.9	365.9	249.1	307.6	372.9	261.3	261.8	363.8	205.5
85+	176.1	251.6	137.1	179.8	255.2	140.6	146.0	224.5	113.3

- ^a Small Cell Cancer of the Lung and Bronchus includes histologies 8002, 8041-8045.
^b Non-Small Cell Cancer of the Lung and Bronchus includes histologies 8003-8004, 8012-8015, 8021-8022, 8030-8035, 8046, 8050-8052, 8070-8076, 8078, 8082-8084, 8090, 8094, 8120, 8123, 8140-8141, 8143-8145, 8147, 8190, 8200-8201, 8211, 8240-8241, 8243-8246, 8249-8255, 8260, 8290, 8310, 8320, 8323, 8333, 8401, 8430, 8440, 8470-8471, 8480-8481, 8490, 8503, 8507, 8525, 8550, 8560, 8562, 8570-8572, 8574-8576.
^c SEER 21 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.12
Cancer of the Lung and Bronchus (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	8	7	11	5	5	6
1970-1973 ^a	-	-	-	10	9	14	7	6	10
1975-1977 ^b	12.2	11.1	15.3	12.3	11.1	15.5	11.2	10.5	13.8
1978-1980 ^b	12.8	11.3	16.3	12.9	11.5	16.2	11.7	9.7	17.8
1981-1983 ^b	13.1	11.5	16.4	13.3	11.7	16.6	11.4	10.2	14.9
1984-1986 ^b	12.8	11.2	16.0	13.0	11.2	16.3	11.1	10.3	12.8
1987-1989 ^b	13.0	11.9	15.0	13.3	12.0	15.3	10.9	10.8	11.1
1990-1992 ^b	13.6	12.1	15.9	14.0	12.5	16.2	10.5	9.3	12.7
1993-1995 ^b	14.3	12.5	16.9	14.5	12.6	17.1	12.8	11.2	15.7
1996-1998 ^b	14.6	12.9	16.8	14.8	13.1	17.0	12.3	10.6	15.1
1999-2001 ^b	15.3	13.1	17.9	15.5	13.4	18.0	12.7	10.8	15.4
2002-2004 ^b	16.1	14.2	18.4	16.5	14.4	18.9	13.3	12.8	13.9
2005-2008 ^b	18.1	15.6	20.8	18.5	16.0	21.2	14.7	12.5	17.2
2009-2015 ^b	20.6 ^f	17.2 ^f	24.3 ^f	20.7 ^f	17.3 ^f	24.2 ^f	19.3 ^f	15.8 ^f	23.0 ^f
5-Year Period Survival (Percent)^{cd}									
2015	20.2	16.7	23.8	20.3	16.9	23.8	17.8	14.4	21.8
Stage Distribution (%) 2009-2015^{ce}									
All Stages									
Number of cases	263,385	137,877	125,508	212,884	110,083	102,801	30,661	16,749	13,912
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	16	14	18	17	15	19	14	12	15
Regional	22	22	22	22	22	22	22	21	23
Distant	57	59	55	56	58	54	61	64	58
Unstaged/Unknown	4	4	5	5	4	5	3	3	3
5-Year Relative Survival (Percent), 2009-2015^c									
Age at Diagnosis:									
Ages <45	34.6	29.5	39.3	36.2	30.8	41.2	27.4	23.9	31.6
Ages 45-54	22.1	17.5	27.1	22.5	17.7	27.6	19.5	15.1	24.3
Ages 55-64	20.8	17.1	25.5	20.9	17.3	25.4	18.1	14.6	23.4
Ages 65-74	21.0	17.4	25.2	21.3	17.7	25.3	17.5	14.3	21.5
Ages 75+	14.9	12.4	17.3	15.2	12.6	17.5	12.3	9.3	14.8
Ages <65	21.8	17.8	26.7	22.0	17.9	26.8	19.0	15.2	24.1
Ages 65+	18.1	15.1	21.1	18.3	15.3	21.2	15.3	12.4	18.4
Stage^e:									
All Stages	19.4	16.1	23.0	19.5	16.2	23.0	17.1	13.9	21.0
Localized	57.4	51.2	62.7	57.3	51.5	62.2	53.8	44.6	62.1
Regional	30.8	27.1	34.8	30.7	27.0	34.6	28.9	25.8	32.2
Distant	5.2	4.2	6.3	4.9	4.0	6.1	5.2	4.3	6.3
Unstaged/Unknown	8.2	7.5	9.0	7.4	6.5	8.3	9.5	8.3	10.8

^a Based on End Results data from a series of hospital registries and one population-based registry.

^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

^c Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^d SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

^e Based on follow-up of patients into 2016.

^f Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^g Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^h The difference between 1975-1977 and 2009-2015 is statistically significant ($p<.05$).

ⁱ The standard error is between 5 and 10 percentage points.

^j The standard error is greater than 10 percentage points.

^k Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 15.13
Small Cell Cancer of the Lung and Bronchus (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	3.6	3.1	4.8	3.7	3.1	4.9	3.7	3.8	3.6
1978-1980 ^a	4.2	3.2	6.5	4.3	3.3	6.4	3.1	2.4	5.0
1981-1983 ^a	4.5	3.5	6.2	4.6	3.6	6.1	5.3	4.1	8.2
1984-1986 ^a	4.5	3.5	6.2	4.7	3.6	6.4	3.5	2.2	5.6
1987-1989 ^a	5.1	3.9	6.6	5.1	3.9	6.8	4.0	3.3	5.1
1990-1992 ^a	5.4	4.5	6.4	5.4	4.5	6.5	4.2	3.9	4.4
1993-1995 ^a	6.4	5.1	7.9	6.3	5.0	7.6	6.7	4.0	10.4
1996-1998 ^a	5.8	5.2	6.5	6.0	5.4	6.6	3.6	2.6	4.5
1999-2001 ^a	5.8	4.8	6.8	5.6	4.4	6.9	5.2	6.0	4.2
2002-2004 ^a	6.5	4.7	8.2	6.5	4.4	8.4	5.3	5.3	5.1
2005-2008 ^a	6.9	5.4	8.5	6.8	5.3	8.4	7.4	5.6	9.4
2009-2015 ^a	6.6 ^e	5.1 ^e	8.2 ^e	6.6 ^e	4.9 ^e	8.2 ^e	6.3 ^e	5.2 ^e	7.0
5-Year Period Survival (Percent)^{bc}									
2015	6.5	4.9	8.1	6.5	4.8	8.0	7.2	5.8	8.6
Stage Distribution (%) 2009-2015^{bd}									
All Stages									
Number of cases	33,824	16,941	16,883	29,208	14,394	14,814	3,123	1,591	1,532
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	4	4	4	4	4	4	4	4	3
Regional	19	17	21	19	17	21	19	17	21
Distant	75	77	73	75	77	73	75	77	74
Unstaged/Unknown	2	2	2	2	2	2	2	2	2
5-Year Relative Survival (Percent), 2009-2015^b									
Age at Diagnosis:									
Ages <45	13.4	11.3	15.8	13.5	11.7	15.5	11.1	6.2 ^f	-
Ages 45-54	9.0	6.1	11.8	8.9	5.6	11.9	11.1	9.7	12.6
Ages 55-64	7.7	5.5	9.9	7.6	5.3	9.9	7.8	5.4	10.1
Ages 65-74	6.0	4.9	7.1	6.0	4.7	7.2	5.8	5.9	5.6
Ages 75+	3.6	2.5	4.5	3.6	2.4	4.7	3.6	3.3	3.8
Ages <65	8.2	5.8	10.6	8.1	5.5	10.6	8.9	6.8	11.0
Ages 65+	5.0	4.0	6.0	5.0	3.8	6.2	5.0	5.1	4.9
Stage^d:									
All Stages	6.3	4.7	7.9	6.3	4.5	7.9	7.0	6.0	8.0
Localized	27.3	23.6	30.6	27.2	22.7	31.0	32.0 ^e	34.2 ^e	30.1 ^e
Regional	15.6	13.0	17.7	15.8	13.1	18.0	15.4	12.4	17.7
Distant	2.8	2.0	3.7	2.7	1.9	3.6	3.7	3.2	4.2
Unstaged/Unknown	9.5	5.4	13.1	9.1	3.1	14.0	4.6	8.5 ^f	-

Note: Small Cell Cancer of the Lung and Bronchus includes histologies 8002, 8041-8045.

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

^b Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

^d Based on follow-up of patients into 2016.

^e Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^f Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

The difference between 1975-1977 and 2009-2015 is statistically significant ($p<.05$).

The standard error is between 5 and 10 percentage points.

The standard error is greater than 10 percentage points.

^g Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 15.14
Non-Small Cell Cancer of the Lung and Bronchus (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	16.4	14.8	21.1	16.8	15.0	21.5	13.4	12.4	17.7
1978-1980 ^a	16.7	14.8	21.4	17.0	15.2	21.5	14.2	11.6	22.8
1981-1983 ^a	17.1	15.0	21.7	17.5	15.4	22.1	13.9	12.2	19.2
1984-1986 ^a	16.6	14.4	21.0	17.0	14.7	21.5	13.1	11.9	16.4
1987-1989 ^a	16.9	15.2	19.8	17.3	15.5	20.5	13.2	12.9	13.9
1990-1992 ^a	17.7	15.5	21.1	18.3	16.2	21.7	12.8	11.1	16.2
1993-1995 ^a	18.7	16.1	22.5	19.3	16.5	23.2	15.1	13.3	18.5
1996-1998 ^a	19.4	16.7	22.9	19.9	17.1	23.5	15.3	12.7	19.5
1999-2001 ^a	20.0	16.9	24.1	20.7	17.6	24.6	14.8	12.0	18.9
2002-2004 ^a	19.6	17.0	22.8	20.4	17.6	23.7	15.0	13.9	16.5
2005-2008 ^a	21.8	18.7	25.4	22.8	19.5	26.4	16.3	13.7	19.3
2009-2015 ^a	25.1 ^e	20.8 ^e	29.7 ^e	25.5 ^e	21.3 ^e	30.1 ^e	22.3 ^e	18.0 ^e	27.0 ^e
5-Year Period Survival (Percent)^{bc}									
2015	24.6	20.3	29.3	25.1	20.7	29.7	20.3	16.3	25.1
Stage Distribution (%) 2009-2015^{bd}									
All Stages									
Number of cases	198,888	105,279	93,609	158,136	82,886	75,250	24,379	13,412	10,967
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	19	17	22	20	18	23	15	13	18
Regional	24	24	23	24	25	24	24	23	24
Distant	55	57	52	54	56	51	60	62	56
Unstaged/Unknown	2	2	2	2	2	2	2	2	2
5-Year Relative Survival (Percent), 2009-2015^b									
Age at Diagnosis:									
Ages <45	36.7	31.4	41.5	39.0	32.9	44.3	28.9	25.7	32.5
Ages 45-54	24.8	19.6	30.3	25.7	20.3	31.5	20.9	16.0	26.1
Ages 55-64	24.3	20.0	29.9	24.8	20.5	30.2	20.1	16.2	25.8
Ages 65-74	25.3	20.9	30.4	25.9	21.5	30.8	20.3	16.3	25.2
Ages 75+	19.9	16.2	23.4	20.3	16.7	23.8	15.9	11.7	19.8
Ages <65	25.1	20.4	30.7	25.7	21.0	31.4	20.8	16.6	26.2
Ages 65+	22.8	18.9	27.0	23.3	19.3	27.4	18.6	14.7	22.9
Stage ^d :									
All Stages	23.7	19.5	28.3	24.1	19.9	28.7	19.7	15.7	24.5
Localized	61.4	54.8	66.9	61.4	55.3	66.5	57.2	47.0	66.5
Regional	34.5	29.9	39.7	34.5	29.9	39.7	31.6	28.2	35.4
Distant	6.1	5.0	7.5	5.9	4.7	7.3	5.7	4.6	7.1
Unstaged/Unknown	14.6	13.8	15.4	13.8	12.8	14.9	11.3	10.3	12.5

Note: Non-Small Cell Cancer of the Lung and Bronchus includes histologies 8003-8004, 8012-8015, 8021-8022, 8030-8035, 8046, 8050-8052, 8070-8076, 8078, 8082-8084, 8090, 8094, 8120, 8123, 8140-8141, 8143-8145, 8147, 8190, 8200-8201, 8211, 8240-8241, 8243-8246, 8249-8255, 8260, 8290, 8310, 8320, 8323, 8333, 8401, 8430, 8440, 8470-8471, 8480-8481, 8490, 8503, 8507, 8525, 8550, 8560, 8562, 8570-8572, 8574-8576.

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

^b Based on follow-up of patients into 2016. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^c SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

^d Based on follow-up of patients into 2016.

^e Period survival provides a 2015 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^f Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

^g The difference between 1975-1977 and 2009-2015 is statistically significant ($p<.05$).

^h The standard error is between 5 and 10 percentage points.

ⁱ The standard error is greater than 10 percentage points.

^j Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 15.15
Cancer of the Lung and Bronchus (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015							
Survival Time																																				
1-year	35.3	37.2	38.6	39.5	40.3	39.9	40.4	39.9	41.4	40.9	40.2	40.7	41.9	42.2	43.5	44.0	44.4	45.2	45.8	44.9	46.7	45.9	48.0	48.1	49.8											
2-year	21.1	22.0	22.6	23.7	24.9	24.7	24.7	25.2	25.8	25.8	25.6	26.5	26.5	27.7	28.5	29.5	30.1	31.0	31.4	31.1	32.8	31.8	33.6	34.7												
3-year	16.3	16.9	17.1	18.3	19.1	19.3	19.3	19.8	19.8	20.2	19.8	20.7	20.7	22.3	22.6	23.5	24.0	24.8	25.3	24.9	26.4	25.5	27.2													
4-year	13.9	14.5	14.6	15.5	16.5	16.2	16.5	17.0	17.0	17.5	16.8	17.5	17.9	18.9	19.5	20.0	20.6	21.4	21.6	21.5	22.9	22.0														
5-year	12.5	12.9	13.0	13.8	14.5	14.6	14.7	14.6	15.2	15.7	15.0	15.6	16.0	16.8	17.4	17.6	18.4	18.9	19.6	19.3	20.4															
6-year	11.4	11.7	11.9	12.6	13.2	13.2	13.3	13.3	13.7	14.2	13.5	14.1	14.5	15.4	15.8	16.2	16.8	17.3	17.9	17.7																
7-year	10.7	10.8	10.9	11.6	12.3	12.1	12.2	12.2	12.7	13.0	12.3	12.9	13.3	14.2	14.6	15.1	15.3	15.9	16.5																	
8-year	10.0	10.0	10.1	10.7	11.4	11.2	11.3	11.2	11.8	12.0	11.5	11.9	12.0	13.2	13.5	14.0	14.2	14.5																		
9-year	9.4	9.2	9.4	9.9	10.7	10.3	10.4	10.5	10.5	11.0	11.2	10.6	11.1	11.1	12.5	12.5	12.7	13.3																		
10-year	8.8	8.6	8.8	9.2	10.0	9.5	9.8	10.0	10.5	10.4	10.1	10.3	10.3	10.6	11.6	11.6	11.7																			
11-year	8.3	8.1	8.2	8.6	9.4	8.8	9.1	9.4	9.7	9.8	9.4	9.5	9.7	10.8	10.8																					
12-year	7.8	7.7	7.7	8.0	8.9	8.3	8.5	8.5	8.9	9.1	9.1	8.8	8.8	9.2	10.1																					
13-year	7.4	7.2	7.2	7.5	8.2	7.9	8.0	8.1	8.5	8.6	8.2	8.3	8.6																							
14-year	7.1	6.8	6.8	7.1	7.7	7.6	7.5	7.6	8.0	8.0	7.7	7.9																								
15-year	6.6	6.4	6.4	6.7	7.3	7.0	7.1	7.1	7.6	7.6	7.7	7.7																								
16-year	6.3	6.0	6.1	6.2	6.9	6.7	6.5	6.7	7.2	7.2																										
17-year	6.0	5.6	5.7	5.9	6.4	6.3	6.1	6.3	6.8																											
18-year	5.7	5.3	5.3	5.5	5.9	6.0	5.7	6.0																												
19-year	5.4	5.0	5.0	5.2	5.4	5.6	5.4																													
20-year	5.2	4.6	4.7	4.9	5.2	5.3																														
21-year	4.9	4.3	4.5	4.6	5.0																															
22-year	4.7	4.1	4.2	4.3																																
23-year	4.4	3.8	4.0																																	
24-year	4.2	3.6	3.8																																	
25-year	4.0	3.4	3.6																																	
26-year	3.8	3.2	3.4																																	
27-year	3.6	3.0	3.3																																	
28-year	3.5	2.9																																		
29-year	3.4	2.7																																		
30-year	3.2	2.6																																		

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

Table 15.16
Cancer of the Lung and Bronchus (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Survival Time																													
1-year	33.4	35.4	36.5	37.2	38.0	38.0	38.1	37.0	38.2	38.6	37.0	37.2	39.4	39.0	40.0	41.3	40.9	42.0	42.7	41.2	42.4	41.6	42.8	44.0	46.6				
2-year	19.5	20.2	21.0	21.6	23.1	23.0	23.0	22.6	22.7	23.7	22.2	23.1	23.7	24.7	24.8	26.8	26.2	27.8	27.6	27.3	28.5	28.0	27.9	30.7					
3-year	14.8	15.3	15.6	16.4	17.3	17.8	17.7	17.4	16.7	18.2	17.3	17.9	18.2	19.5	19.5	20.8	20.8	22.1	21.9	21.5	22.3	22.0	21.9						
4-year	12.5	12.9	13.1	13.6	14.8	14.6	15.0	14.7	14.1	15.5	14.3	15.0	15.5	16.6	16.6	17.3	17.5	18.9	18.4	18.5	19.0	18.7							
5-year	11.1	11.4	11.6	12.1	13.2	13.1	13.3	12.4	12.5	14.1	12.7	13.6	14.1	14.9	14.9	15.1	15.7	16.8	16.5	16.5	16.7								
6-year	10.1	10.4	10.6	11.0	11.8	11.7	11.9	11.0	11.2	12.6	11.6	12.2	12.6	13.6	13.3	14.0	14.2	15.3	15.1	15.1									
7-year	9.4	9.5	9.7	10.0	11.2	10.6	10.8	10.1	10.3	11.3	10.5	11.2	11.6	12.3	12.2	12.8	12.8	14.2	13.8										
8-year	8.8	8.7	9.0	9.1	10.2	9.8	10.0	9.0	9.5	10.7	9.6	10.1	10.8	11.4	11.2	11.9	11.6	12.9											
9-year	8.2	8.0	8.4	8.4	9.6	9.1	9.2	8.5	8.7	10.0	8.9	9.3	9.9	10.8	10.5	10.7	10.8												
10-year	7.7	7.4	7.9	7.9	8.8	8.2	8.6	8.0	8.3	9.1	8.4	8.6	8.9	10.0	9.6	9.5													
11-year	7.2	7.0	7.3	7.2	8.3	7.4	7.9	7.5	7.7	8.4	7.8	8.0	8.4	9.4	8.8														
12-year	6.7	6.6	6.8	6.7	8.0	6.9	7.2	7.0	7.2	7.8	7.3	7.4	8.1	8.7															
13-year	6.3	6.2	6.3	6.2	7.3	6.7	6.8	6.3	6.8	7.2	6.5	6.9	7.6																
14-year	6.0	5.8	6.0	5.8	6.9	6.3	6.4	5.9	6.3	6.7	6.2	6.5																	
15-year	5.6	5.5	5.6	5.5	6.4	5.8	6.1	5.6	5.9	6.4	5.5																		
16-year	5.3	5.0	5.3	5.1	6.2	5.4	5.7	5.2	5.8	6.2																			
17-year	5.1	4.6	4.8	4.8	5.8	5.2	5.3	4.9	5.4																				
18-year	4.7	4.4	4.5	4.5	5.3	4.9	4.9	4.6																					
19-year	4.5	4.1	4.1	4.3	4.6	4.6	4.5																						
20-year	4.2	3.8	3.9	4.0	4.3	4.4																							
21-year	4.1	3.5	3.6	3.7	4.1																								
22-year	3.9	3.3	3.4	3.5																									
23-year	3.7	3.1	3.2																										
24-year	3.4	2.8	3.0																										
25-year	3.3	2.7	2.8																										
26-year	3.1	2.5	2.6																										
27-year	2.8	2.5	2.5																										
28-year	2.8	2.4																											
29-year	2.7	2.2																											
30-year	2.6	2.1																											

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

Table 15.17
Cancer of the Lung and Bronchus (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Survival Time																													
1-year	40.5	41.3	42.2	42.8	43.5	42.5	43.3	43.7	45.4	43.6	44.2	45.0	44.9	45.8	47.4	47.1	48.2	48.8	49.1	49.0	51.3	50.5	53.5	52.3	53.3				
2-year	25.3	25.7	25.5	26.7	27.4	26.9	26.9	28.4	29.5	28.5	29.7	30.5	29.9	31.2	32.4	32.5	34.3	34.6	35.6	35.3	37.3	35.9	39.6	38.8					
3-year	20.3	20.5	19.7	21.1	21.6	21.4	21.2	22.9	23.6	22.8	23.0	24.0	23.8	25.5	26.1	26.6	27.4	27.8	28.9	28.6	30.7	29.4	32.7						
4-year	17.8	17.8	17.2	18.3	18.8	18.3	18.5	19.9	20.5	19.9	19.9	20.4	20.6	21.4	22.7	23.0	23.8	24.1	25.1	24.8	27.1	25.6							
5-year	16.1	16.0	15.4	16.4	16.4	16.5	16.4	17.4	18.3	17.7	17.8	17.9	18.3	19.0	20.2	20.4	21.2	21.2	23.0	22.4	24.2								
6-year	15.0	14.6	14.1	15.1	15.0	15.2	15.0	16.1	16.8	16.1	15.8	16.4	16.8	17.6	18.5	18.8	19.6	19.5	20.9	20.6									
7-year	14.0	13.6	12.9	13.9	13.9	14.1	14.0	14.9	15.6	15.0	14.6	15.0	15.3	16.3	17.1	17.6	18.1	17.9	19.5										
8-year	13.1	12.8	12.0	13.0	13.1	13.1	12.8	13.9	14.7	13.6	13.8	14.0	13.6	15.3	16.0	16.4	16.9	16.3											
9-year	12.4	11.9	11.2	12.1	12.3	11.9	11.9	13.1	13.8	12.8	12.7	13.1	12.6	14.3	14.8	15.0	15.9												
10-year	11.6	11.1	10.4	11.3	11.6	11.1	11.2	12.4	13.1	12.0	12.2	12.3	11.8	13.3	13.9	14.1													
11-year	11.1	10.5	9.8	10.6	11.0	10.7	10.6	11.9	12.2	11.4	11.4	11.3	11.3	12.4	13.1														
12-year	10.6	9.9	9.2	9.9	10.1	10.1	9.9	11.3	11.4	10.7	10.7	10.5	10.6	11.6															
13-year	10.2	9.3	8.8	9.4	9.4	9.6	9.4	10.4	10.7	10.2	10.1	9.9	9.9																
14-year	9.7	8.9	8.2	9.0	8.7	9.1	8.9	9.7	10.0	9.6	9.5	9.5																	
15-year	9.2	8.4	7.8	8.4	8.4	8.7	8.3	9.1	9.7	10.0	9.6	9.5	9.5																
16-year	8.9	8.0	7.4	7.9	7.9	8.2	7.6	8.6	8.6	8.9	9.0																		
17-year	8.4	7.7	7.0	7.4	7.3	7.8	7.2	8.0	8.5																				
18-year	8.0	7.2	6.7	7.0	6.8	7.4	6.7	7.8																					
19-year	7.7	6.6	6.3	6.5	6.5	6.9	6.4																						
20-year	7.4	6.3	6.1	6.2	6.3	6.4																							
21-year	6.9	5.9	5.9	5.9	6.0																								
22-year	6.5	5.6	5.5	5.6																									
23-year	6.2	5.3	5.4																										
24-year	6.0	5.1	5.1																										
25-year	5.8	4.8	4.9																										
26-year	5.6	4.6	4.8																										
27-year	5.4	4.2	4.6																										
28-year	5.2	4.0																											
29-year	4.9	3.7																											
30-year	4.6	3.6																											

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

Table 15.18

Cancer of the Lung and Bronchus (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
 Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
 Lifetime Risk of Dying from Cancer Given Alive at Current Age
 Both Sexes, 2014-2016 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	Risk of Dying from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.00	0.00	0.01	6.34	4.97	Asian/ Pacific Islander	0	0.00	0.00	0.01	5.41	4.06	
	10	0.00	0.01	0.03	6.41	5.03		10	0.00	0.01	0.03	5.45	4.09	
	20	0.00	0.02	0.14	6.43	5.04		20	0.01	0.03	0.13	5.46	4.10	
	30	0.02	0.14	0.73	6.48	5.09		30	0.02	0.12	0.50	5.47	4.11	
	40	0.12	0.72	2.18	6.54	5.15		40	0.10	0.48	1.47	5.48	4.12	
	50	0.61	2.10	4.52	6.57	5.21		50	0.38	1.38	3.09	5.44	4.12	
	60	1.58	4.15	5.94	6.32	5.07		60	1.03	2.79	4.47	5.21	4.02	
	70	2.90	4.92	-	5.35	4.46		70	1.88	3.68	-	4.47	3.68	
	80	2.70	-	-	3.27	3.01		80	2.13	-	-	3.06	2.90	
White	0	0.00	0.00	0.01	6.52	5.08	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	4.47	3.67	
	10	0.00	0.01	0.02	6.58	5.14		10	0.00	0.00	0.01	4.52	3.72	
	20	0.00	0.02	0.14	6.60	5.15		20	0.00	0.01	0.07	4.54	3.74	
	30	0.02	0.14	0.73	6.65	5.20		30	0.01	0.06	0.43	4.61	3.81	
	40	0.12	0.72	2.22	6.72	5.27		40	0.05	0.43	1.44	4.72	3.92	
	50	0.62	2.15	4.68	6.76	5.32		50	0.39	1.44	3.23	4.85	4.06	
	60	1.62	4.30	6.14	6.50	5.18		60	1.13	3.05	4.32	4.79	4.10	
	70	3.02	5.10	-	5.51	4.54		70	2.19	3.64	-	4.17	3.74	
	80	2.79	-	-	3.34	3.05		80	1.94	-	-	2.66	2.43	
Black	0	0.00	0.00	0.01	5.69	4.54	Hispanic ^b	0	0.00	0.00	0.01	4.03	2.77	
	10	0.00	0.01	0.03	5.80	4.63		10	0.00	0.00	0.02	4.06	2.80	
	20	0.01	0.03	0.16	5.82	4.65		20	0.00	0.02	0.07	4.07	2.81	
	30	0.02	0.16	0.88	5.89	4.71		30	0.01	0.07	0.33	4.10	2.83	
	40	0.14	0.87	2.41	5.97	4.80		40	0.05	0.32	1.08	4.12	2.85	
	50	0.76	2.36	4.46	6.04	4.89		50	0.27	1.04	2.46	4.14	2.87	
	60	1.74	4.03	5.42	5.75	4.75		60	0.81	2.29	3.55	4.04	2.85	
	70	2.74	4.39	-	4.79	4.13		70	1.63	3.02	-	3.56	2.64	
	80	2.34	-	-	2.90	2.81		80	1.73	-	-	2.41	2.02	

Devcan 6.7.7, April 2019, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 21 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). Mortality data are from the NCHS public use data file for the total US.

^a Underlying incidence and mortality data for American Indian/Alaska Native are based on the PRCD(A(Purchased/Referred Care Delivery Areas) counties.

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 15.19

Cancer of the Lung and Bronchus (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
 Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
 Lifetime Risk of Dying from Cancer Given Alive at Current Age
 Males, 2014-2016 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	Risk of Dying from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.00	0.00	0.01	6.70	5.49	Asian/ Pacific Islander	0	0.00	0.00	0.01	6.57	5.02	
	10	0.00	0.01	0.02	6.78	5.56		10	0.00	0.01	0.02	6.62	5.06	
	20	0.00	0.02	0.14	6.80	5.59		20	0.00	0.02	0.12	6.63	5.07	
	30	0.02	0.13	0.74	6.88	5.66		30	0.02	0.12	0.55	6.66	5.10	
	40	0.12	0.73	2.32	6.98	5.76		40	0.10	0.54	1.77	6.69	5.12	
	50	0.63	2.27	4.88	7.07	5.87		50	0.44	1.69	3.86	6.69	5.14	
	60	1.76	4.57	6.52	6.92	5.79		60	1.30	3.55	5.63	6.48	5.06	
	70	3.26	5.53	-	6.00	5.18		70	2.45	4.73	-	5.66	4.67	
	80	3.20	-	-	3.86	3.65		80	2.81	-	-	3.96	3.77	
White	0	0.00	0.00	0.01	6.73	5.54	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	4.50	3.90	
	10	0.00	0.00	0.02	6.80	5.60		10	0.00	0.00	0.01	4.55	3.96	
	20	0.00	0.02	0.13	6.82	5.62		20	0.00	0.01	0.05	4.58	3.99	
	30	0.02	0.13	0.72	6.90	5.70		30	0.01	0.05	0.39	4.67	4.09	
	40	0.12	0.72	2.30	7.00	5.80		40	0.04	0.39	1.39	4.82	4.24	
	50	0.62	2.25	4.91	7.09	5.90		50	0.37	1.42	3.32	5.02	4.45	
	60	1.75	4.60	6.58	6.95	5.83		60	1.15	3.23	4.65	5.09	4.60	
	70	3.31	5.60	-	6.04	5.21		70	2.43	4.10	-	4.61	4.35	
	80	3.25	-	-	3.86	3.66		80	2.35	-	-	3.06	2.82	
Black	0	0.00	0.00	0.01	6.59	5.45	Hispanic ^b	0	0.00	0.00	0.00	4.49	3.45	
	10	0.00	0.01	0.04	6.72	5.58		10	0.00	0.00	0.02	4.53	3.48	
	20	0.01	0.03	0.17	6.75	5.62		20	0.00	0.02	0.07	4.55	3.49	
	30	0.03	0.17	0.99	6.87	5.73		30	0.01	0.06	0.33	4.59	3.53	
	40	0.14	0.98	2.90	7.01	5.87		40	0.05	0.32	1.15	4.64	3.57	
	50	0.88	2.88	5.42	7.18	6.04		50	0.27	1.13	2.79	4.70	3.62	
	60	2.22	5.05	6.62	7.00	5.98		60	0.91	2.67	4.16	4.68	3.66	
	70	3.55	5.53	-	5.99	5.33		70	1.99	3.67	-	4.26	3.46	
	80	3.07	-	-	3.79	3.76		80	2.22	-	-	2.99	2.68	

Devcan 6.7.7, April 2019, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 21 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). Mortality data are from the NCHS public use data file for the total US.

^a Underlying incidence and mortality data for American Indian/Alaska Native are based on the PRCD(A(Purchased/Referred Care Delivery Areas) counties.

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 15.20

Cancer of the Lung and Bronchus (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
 Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
 Lifetime Risk of Dying from Cancer Given Alive at Current Age
 Females, 2014-2016 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.00	0.00	0.01	6.05	4.50	Asian/ Pacific Islander	0	0.00	0.00	0.01	4.46	3.30	
	10	0.00	0.01	0.03	6.10	4.54		10	0.00	0.01	0.03	4.49	3.32	
	20	0.00	0.03	0.15	6.11	4.55		20	0.01	0.03	0.13	4.50	3.33	
	30	0.02	0.15	0.72	6.14	4.58		30	0.02	0.12	0.45	4.50	3.33	
	40	0.13	0.71	2.04	6.17	4.61		40	0.10	0.43	1.21	4.49	3.33	
	50	0.59	1.95	4.20	6.16	4.63		50	0.34	1.12	2.44	4.43	3.31	
	60	1.42	3.77	5.44	5.82	4.45		60	0.80	2.15	3.52	4.19	3.22	
	70	2.59	4.43	-	4.85	3.87		70	1.42	2.86	-	3.57	2.95	
	80	2.34	-	-	2.88	2.57		80	1.65	-	-	2.46	2.33	
White	0	0.00	0.00	0.01	6.37	4.67	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	4.49	3.47	
	10	0.00	0.01	0.03	6.42	4.72		10	0.00	0.00	0.02	4.53	3.51	
	20	0.01	0.03	0.16	6.43	4.73		20	0.00	0.01	0.08	4.54	3.53	
	30	0.02	0.15	0.75	6.46	4.75		30	0.01	0.08	0.46	4.58	3.57	
	40	0.13	0.73	2.14	6.49	4.79		40	0.07	0.46	1.48	4.65	3.65	
	50	0.61	2.05	4.46	6.48	4.80		50	0.40	1.46	3.15	4.73	3.73	
	60	1.50	4.02	5.76	6.13	4.61		60	1.11	2.90	4.06	4.57	3.68	
	70	2.78	4.69	-	5.10	4.00		70	1.99	3.27	-	3.84	3.27	
	80	2.46	-	-	2.97	2.62		80	1.65	-	-	2.39	2.19	
Black	0	0.00	0.00	0.01	4.97	3.77	Hispanic ^b	0	0.00	0.00	0.01	3.68	2.22	
	10	0.00	0.00	0.02	5.06	3.84		10	0.00	0.01	0.02	3.71	2.24	
	20	0.00	0.02	0.15	5.07	3.85		20	0.00	0.02	0.08	3.71	2.25	
	30	0.02	0.15	0.78	5.10	3.87		30	0.01	0.07	0.34	3.72	2.25	
	40	0.13	0.77	1.99	5.14	3.92		40	0.06	0.32	1.01	3.73	2.26	
	50	0.66	1.91	3.67	5.15	3.96		50	0.27	0.97	2.19	3.72	2.26	
	60	1.35	3.22	4.49	4.81	3.79		60	0.72	1.98	3.07	3.56	2.22	
	70	2.15	3.60	-	3.97	3.30		70	1.36	2.52	-	3.05	2.04	
	80	1.93	-	-	2.42	2.29		80	1.40	-	-	2.04	1.59	

Devcan 6.7.7, April 2019, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 21 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). Mortality data are from the NCHS public use data file for the total US.

^a Underlying incidence and mortality data for American Indian/Alaska Native are based on the PRCD(A(Purchased/Referred Care Delivery Areas) counties.

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 15.21
Lung and Bronchus (Invasive)

SEER Incidence and U.S. Mortality
Age-Adjusted Rates and Trends^a
By Race/Ethnicity and Sex

SEER Incidence	SEER 21 Areas ^b			SEER 21 Areas ^b			SEER 9 Areas ^b		
	Rate 2012-2016			Trend 2007-2016 ^c			Trend 2007-2016 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
Race/Ethnicity	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	54.9	63.0	48.9	-2.2*	-2.9*	-1.7*	-2.3*	-2.8*	-1.8*
White	56.7	63.5	51.8	-2.2*	-2.9*	-1.6*	-2.2*	-2.8*	-1.7*
White Hispanic ^e	29.8	36.1	25.4	-2.5*	-3.6*	-1.3*	-	-	-
White Non-Hispanic ^e	60.9	67.5	56.0	-2.0*	-2.7*	-1.4*	-	-	-
Black	56.2	73.5	44.6	-2.5*	-2.8*	-1.7*	-3.1*	-3.0*	-2.1*
Asian/Pacific Islander	36.0	46.3	28.2	-1.0*	-1.7*	-0.6	-	-	-
Amer Ind/Alaska Nat ^f	37.8	43.3	33.9	-1.7*	-2.2*	-1.1	-	-	-
Hispanic ^e	29.1	35.2	24.8	-2.3*	-3.4*	-1.1*	-	-	-
<u>U.S. Mortality^g</u>									
	Rate 2012-2016			Trend 2007-2016 ^h			AAPC (%)		
	Rate per 100,000 persons								
Race/Ethnicity	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	41.9	51.6	34.4	-3.0*	-3.6*	-2.5*			
White	42.7	51.7	35.6	-2.9*	-3.5*	-2.4*			
White Hispanic ^e	19.2	26.6	13.8	-2.2*	-3.0*	-1.0*			
White Non-Hispanic ^e	45.0	54.1	38.0	-2.7*	-3.4*	-2.2*			
Black	44.3	62.1	32.4	-3.5*	-4.1*	-2.7*			
Asian/Pacific Islander	22.7	30.2	17.3	-1.9*	-2.7*	-1.3*			
Amer Ind/Alaska Nat									
Total U.S.	27.7	33.6	23.1	-2.8*	-2.3*	-2.7*			
PRCDA Counties	34.8	42.0	29.4	-1.4*	-1.6*	-1.7*			
Non-PRCDA Counties	19.5	24.1	15.7	-2.8*	-3.1*	-2.6*			
Hispanic ^e	18.3	25.3	13.1	-2.3*	-3.1*	-1.1*			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

^a Trend based on less than 10 cases for at least one year within the time interval.

^b Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^c The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta.

^d The SEER 21 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts.

^e The 2007-2016 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 2000-2016.

^f The 2007-2016 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2016.

^g Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^h Incidence data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

* US Mortality Files, National Center for Health Statistics, CDC.

ⁱ The 2007-2016 mortality AAPCs are based on a Joinpoint analysis using years of death 2000-2016.

^j The APC is significantly different from zero ($p < .05$).

Table 15.22
Cancer of the Lung And Bronchus (Invasive)

Age-Adjusted SEER Incidence Rates^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
SEER Incidence Rates^a, 2012-2016									
California	42.05	47.39	38.07	42.86	46.87	39.92	52.13	62.68	44.72
Greater Bay Area	40.84	46.14	36.87	40.71	43.19	39.00	58.32	70.47	49.44
San Francisco-Oakland	41.96	47.04	38.19	41.02	42.55	40.11	61.25	73.90	52.19
San Jose-Monterey	38.69	44.48	34.29	40.16	44.32	37.04	40.34	51.93	30.16
Los Angeles	36.56	43.33	31.60	35.79	41.42	31.61	50.79	60.62	44.41
Greater California	44.94	49.60	41.45	46.13	49.92	43.34	50.65	61.22	42.71
Connecticut	59.81	65.56	55.81	60.78	65.67	57.45	54.31	72.15	43.25
Detroit	70.20	80.19	63.11	70.09	78.16	64.47	75.20	94.42	62.41
Georgia	64.05	81.21	51.29	67.76	82.72	56.30	56.89	81.87	40.48
Atlanta	51.82	62.01	44.76	52.98	60.17	48.06	53.10	70.49	42.14
Rural Georgia	64.57	91.52	43.65	63.94	84.84	46.40	65.69	111.02	36.71
Greater Georgia	69.78	89.42	54.84	73.14	90.52	59.62	59.70	88.91	39.81
Hawaii	45.69	57.16	36.41	45.35	49.89	40.67	44.80	44.18	-
Idaho	50.33	55.58	46.28	50.36	55.52	46.38	-	-	-
Iowa	63.05	74.98	54.00	63.09	74.85	54.18	74.66	92.52	61.33
Kentucky	92.24	111.24	77.84	93.14	112.27	78.60	88.96	107.24	75.98
Louisiana	67.49	84.76	54.15	67.01	79.67	57.18	70.43	102.44	47.92
Massachusetts	61.81	66.27	59.07	63.40	67.29	61.15	45.33	52.74	40.55
New Jersey	56.13	62.24	52.03	58.85	64.08	55.44	53.53	66.33	45.89
New Mexico	39.57	45.49	34.88	41.44	47.18	36.87	46.39	59.29	36.62
New York	58.86	66.98	53.23	62.43	68.88	58.09	47.51	61.35	38.80
Seattle-Puget Sound	56.56	62.06	52.44	57.86	62.40	54.46	60.64	74.10	49.51
Utah	26.86	31.51	23.04	26.78	31.40	22.98	48.42	50.08	46.65
SEER 9 Areas ^b	52.76	60.15	47.24	53.61	59.46	49.28	61.75	78.37	50.55
SEER 13 Areas ^b	48.49	55.77	43.06	49.31	55.11	45.00	58.77	73.93	48.54
SEER 18 Areas ^b	53.45	61.94	47.03	54.95	62.09	49.56	59.99	78.81	47.08
SEER 21 Areas ^b	54.88	62.99	48.88	56.74	63.49	51.81	56.20	73.51	44.59

^a Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)
^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.
The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry and Rural Georgia.
The SEER 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG.
The SEER 21 areas comprise the SEER 18 areas plus Idaho, New York and Massachusetts.
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.23
Cancer of the Lung And Bronchus (Invasive)

Age-Adjusted SEER Death Rates^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Death Rates^a, 2012-2016</u>									
California	30.80	36.47	26.49	31.67	36.37	28.06	39.58	49.73	32.45
Greater Bay Area	28.04	32.89	24.38	28.56	31.50	26.35	41.12	51.60	33.61
San Francisco-Oakland	29.13	33.87	25.61	29.21	31.65	27.49	43.76	55.37	35.57
San Jose-Monterey	25.93	31.02	22.00	27.39	31.23	24.37	24.31	29.79	19.66
Los Angeles	27.39	33.91	22.59	26.75	32.17	22.68	40.95	51.47	34.06
Greater California	33.29	38.81	29.01	34.38	39.27	30.59	37.51	47.30	30.09
Connecticut	35.79	41.52	31.62	36.60	41.70	32.88	32.08	45.18	24.00
Detroit	47.14	56.55	40.32	46.63	54.42	40.99	52.66	70.24	41.02
Georgia	44.58	59.80	33.32	47.05	60.68	36.58	39.81	61.22	26.13
Atlanta	34.61	44.46	27.79	34.82	42.33	29.47	36.09	52.66	26.13
Rural Georgia	47.46	68.88	31.44	47.42	64.73	33.19	47.97	81.19	27.67
Greater Georgia	49.12	66.30	36.10	51.38	66.95	39.24	42.46	66.63	26.30
Hawaii	30.62	39.13	23.79	32.30	35.68	28.77	34.99	-	-
Idaho	34.90	40.36	30.35	35.22	40.71	30.64	-	-	-
Iowa	44.61	55.93	35.98	44.65	55.99	36.01	55.57	65.41	46.54
Kentucky	66.13	84.55	52.22	66.97	85.58	52.82	60.61	78.22	48.94
Louisiana	51.47	67.44	39.16	50.55	62.90	40.83	55.52	84.03	35.84
Massachusetts	40.48	47.45	35.57	41.82	48.50	37.14	28.98	37.80	22.81
New Jersey	36.60	43.37	31.81	38.31	44.67	33.80	37.51	50.10	29.66
New Mexico	29.96	35.22	25.79	31.53	36.74	27.35	31.81	44.14	21.31
New York	37.11	45.11	31.37	39.71	46.94	34.48	30.80	42.02	23.81
Seattle-Puget Sound	37.84	43.87	33.21	39.12	44.50	34.94	38.30	48.07	29.66
Utah	19.18	23.45	15.65	19.21	23.48	15.68	30.31	-	-
SEER 9 Areas ^b	35.58	42.63	30.26	36.34	42.38	31.74	42.30	57.14	32.40
SEER 13 Areas ^b	33.39	40.29	28.20	34.05	39.89	29.59	41.70	55.53	32.45
SEER 18 Areas ^b	37.59	45.91	31.25	38.72	46.12	33.02	43.37	60.24	31.93
SEER 21 Areas ^b	37.64	45.78	31.52	39.04	46.32	33.52	39.56	54.87	29.40
Total U.S.	41.86	51.64	34.36	42.65	51.71	35.64	44.35	62.11	32.35

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry and Rural Georgia.

The SEER 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG.

The SEER 21 areas comprise the SEER 18 areas plus Idaho, New York and Massachusetts.

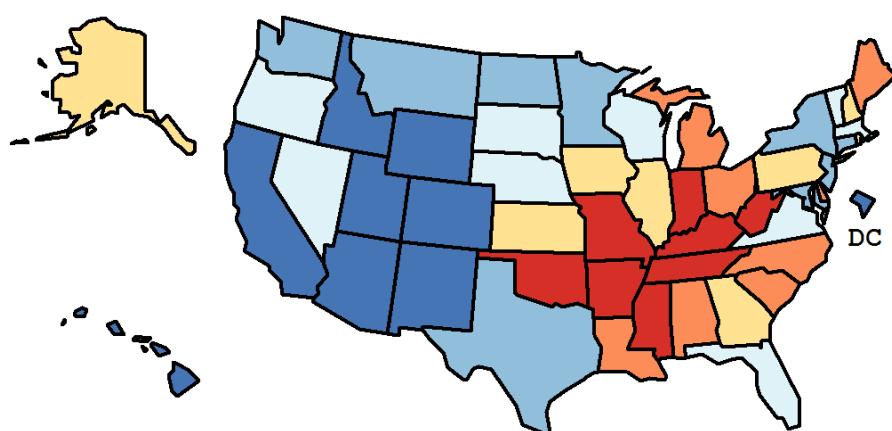
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.24
Cancer of the Lung and Bronchus (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2012-2016

Males and Females

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	41.86	0.05							
High Five States									
Kentucky	66.13	0.51	01(01,01)	57.98 ^c					
Arkansas	57.47	0.57	02(02,05)	37.31 ^c					
West Virginia	56.99	0.68	03(02,05)	36.16 ^c					
Mississippi	56.46	0.58	04(02,05)	34.89 ^c					
Tennessee	55.86	0.38	05(03,05)	33.44 ^c					
Low Five States									
California	30.80	0.13	47(47,49)	-26.42 ^c					
Hawaii	30.62	0.60	48(46,50)	-26.85 ^c					
New Mexico	29.96	0.50	49(47,50)	-28.42 ^c					
Colorado	29.31	0.34	50(48,50)	-29.99 ^c					
Utah	19.18	0.41	51(51,51)	-54.18 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	51.92	0.43	09(07,11)	24.05 ^c	Montana	38.73	0.78	36(30,41)	-7.47 ^c
Alaska	43.59	1.33	24(14,34)	4.14	Nebraska	41.25	0.63	30(25,35)	-1.46
Arizona	34.31	0.29	45(43,46)	-18.03 ^c	Nevada	43.39	0.54	26(19,28)	3.66
Arkansas	57.47	0.57	02(02,05)	37.31 ^c	New Hampshire	44.21	0.74	22(17,27)	5.63 ^c
California	30.80	0.13	47(47,49)	-26.42 ^c	New Jersey	36.60	0.27	41(39,43)	-12.56 ^c
Colorado	29.31	0.34	50(48,50)	-29.99 ^c	New Mexico	29.96	0.50	49(47,50)	-28.42 ^c
Connecticut	35.79	0.41	42(40,45)	-14.50 ^c	New York	37.11	0.18	40(38,42)	-11.35 ^c
Delaware	47.20	0.91	14(13,20)	12.76 ^c	North Carolina	47.66	0.29	13(13,17)	13.85 ^c
D.C.	35.62	1.08	43(36,46)	-14.89 ^c	North Dakota	38.25	0.97	37(31,43)	-8.63 ^c
Florida	40.76	0.17	31(28,34)	-2.61	Ohio	50.37	0.27	12(10,12)	20.33 ^c
Georgia	44.58	0.30	20(17,25)	6.51 ^c	Oklahoma	53.84	0.50	06(06,08)	28.62 ^c
Hawaii	30.62	0.60	48(46,50)	-26.85 ^c	Oregon	40.68	0.42	32(27,35)	-2.80
Idaho	34.90	0.63	44(41,46)	-16.63 ^c	Pennsylvania	43.92	0.23	23(19,26)	4.94
Illinois	44.72	0.25	18(17,24)	6.85 ^c	Rhode Island	46.94	0.86	17(13,20)	12.13 ^c
Indiana	52.37	0.38	08(06,10)	25.10 ^c	South Carolina	46.97	0.41	16(13,18)	12.21 ^c
Iowa	44.61	0.49	19(17,26)	6.58 ^c	South Dakota	41.79	0.92	28(22,35)	-0.16
Kansas	44.33	0.52	21(17,26)	5.90 ^c	Tennessee	55.86	0.38	05(03,05)	33.44 ^c
Kentucky	66.13	0.51	01(01,01)	57.98 ^c	Texas	37.36	0.18	39(37,41)	-10.73 ^c
Louisiana	51.47	0.45	10(07,12)	22.97 ^c	Utah	19.18	0.41	51(51,51)	-54.18 ^c
Maine	50.55	0.74	11(07,12)	20.76 ^c	Vermont	43.44	1.05	25(17,32)	3.78
Maryland	40.26	0.36	34(29,36)	-3.81	Virginia	42.23	0.31	27(25,30)	0.88
Massachusetts	40.48	0.32	33(28,35)	-3.29	Washington	39.03	0.32	35(34,38)	-6.77 ^c
Michigan	46.98	0.28	15(13,17)	12.25 ^c	West Virginia	56.99	0.68	03(02,05)	36.16 ^c
Minnesota	37.95	0.35	38(35,40)	-9.33 ^c	Wisconsin	41.34	0.35	29(26,34)	-1.23
Mississippi	56.46	0.58	04(02,05)	34.89 ^c	Wyoming	33.61	1.04	46(41,47)	-19.71 ^c
Missouri	52.64	0.38	07(06,10)	25.76 ^c					



Age-Adjusted Death Rates per 100,000 Quantile Interval

51.93 - 66.13
46.95 - 51.92
43.45 - 46.94
40.27 - 43.44
35.63 - 40.26
19.18 - 35.62
Suppressed
U.S. rate: 41.86

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b Difference between state rate and total U.S. rate is statistically significant ($p < .0002$).

^c Absolute percent difference between state rate and total U.S. rate is 5% or more.

^d Rank of state level death rate and the 95% confidence intervals (low, high) for the rank.

SE Standard error of the rate.

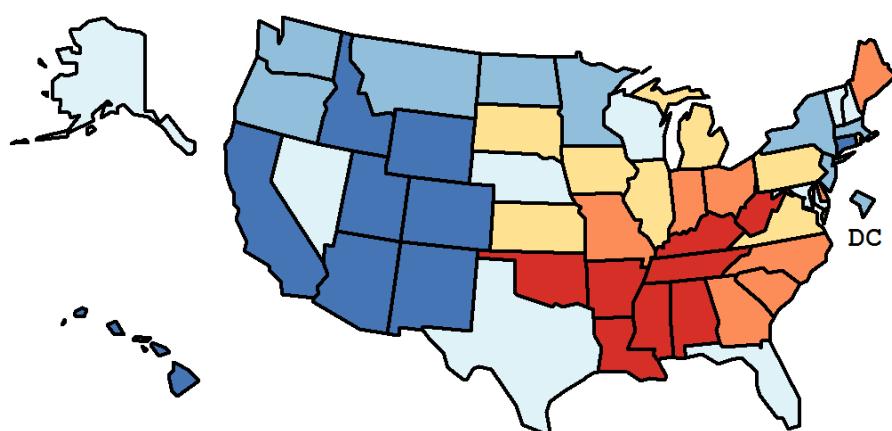
PD Percent difference between state rate and total U.S. rate.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.25
Cancer of the Lung and Bronchus (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2012-2016

Males									
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	51.64	0.08							
High Five States									
Kentucky	84.55	0.88	01(01,01)	63.73 ^c					
Mississippi	78.59	1.06	02(02,03)	52.19 ^c					
Arkansas	75.70	0.98	03(02,05)	46.58 ^c					
Tennessee	73.31	0.67	04(03,06)	41.95 ^c					
West Virginia	72.53	1.15	05(03,06)	40.45 ^c					
Low Five States									
Wyoming	37.21	1.62	47(42,50)	-27.95 ^c					
California	36.47	0.21	48(47,49)	-29.39 ^c					
New Mexico	35.22	0.81	49(47,50)	-31.80 ^c					
Colorado	32.52	0.54	50(49,50)	-37.03 ^c					
Utah	23.45	0.67	51(51,51)	-54.60 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	70.90	0.76	06(04,06)	37.28 ^c	Montana	41.87	1.20	42(38,47)	-18.92 ^c
Alaska	50.31	2.13	26(17,38)	-2.58	Nebraska	50.49	1.04	25(22,34)	-2.24
Arizona	40.06	0.47	45(42,47)	-22.42 ^c	Nevada	47.57	0.84	33(27,37)	-7.89 ^c
Arkansas	75.70	0.98	03(02,05)	46.58 ^c	New Hampshire	50.22	1.18	27(22,35)	-2.76
California	36.47	0.21	48(47,49)	-29.39 ^c	New Jersey	43.37	0.45	40(38,43)	-16.02 ^c
Colorado	32.52	0.54	50(49,50)	-37.03 ^c	New Mexico	35.22	0.81	49(47,50)	-31.80 ^c
Connecticut	41.52	0.67	43(40,46)	-19.61 ^c	New York	45.11	0.31	38(35,40)	-12.65 ^c
Delaware	57.00	1.51	16(14,23)	10.38 ^c	North Carolina	62.53	0.51	12(11,14)	21.09 ^c
D.C.	43.11	1.84	41(31,47)	-16.52 ^c	North Dakota	47.37	1.61	35(25,41)	-8.26 ^c
Florida	49.79	0.28	30(25,31)	-3.59	Ohio	62.72	0.46	11(11,14)	21.46 ^c
Georgia	59.80	0.55	15(14,16)	15.79 ^c	Oklahoma	67.20	0.84	08(07,10)	30.12 ^c
Hawaii	39.13	1.01	46(42,48)	-24.23 ^c	Oregon	46.49	0.67	36(30,39)	-9.97 ^c
Idaho	40.36	1.01	44(41,47)	-21.84 ^c	Pennsylvania	55.23	0.39	20(17,22)	6.96 ^c
Illinois	54.81	0.43	21(18,23)	6.13 ^c	Rhode Island	56.38	1.44	18(15,24)	9.17 ^c
Indiana	66.66	0.65	09(07,10)	29.09 ^c	South Carolina	61.92	0.71	13(11,15)	19.90 ^c
Iowa	55.93	0.82	19(16,22)	8.30 ^c	South Dakota	52.40	1.53	24(17,32)	1.48
Kansas	53.41	0.86	22(18,26)	3.42	Tennessee	73.31	0.67	04(03,06)	41.95 ^c
Kentucky	84.55	0.88	01(01,01)	63.73 ^c	Texas	47.62	0.30	32(30,36)	-7.79 ^c
Louisiana	67.44	0.80	07(07,10)	30.60 ^c	Utah	23.45	0.67	51(51,51)	-54.60 ^c
Maine	61.72	1.23	14(10,16)	19.51 ^c	Vermont	50.01	1.68	28(20,37)	-3.15
Maryland	48.50	0.60	31(26,36)	-6.09 ^c	Virginia	52.96	0.53	23(21,26)	2.55
Massachusetts	47.45	0.53	34(29,37)	-8.12 ^c	Washington	45.16	0.52	37(35,40)	-12.56 ^c
Michigan	56.47	0.47	17(16,20)	9.35 ^c	West Virginia	72.53	1.15	05(03,06)	40.45 ^c
Minnesota	44.12	0.57	39(36,42)	-14.56 ^c	Wisconsin	49.91	0.58	29(24,32)	-3.35
Mississippi	78.59	1.06	02(02,03)	52.19 ^c	Wyoming	37.21	1.62	47(42,50)	-27.95 ^c
Missouri	65.04	0.64	10(08,11)	25.95 ^c					



Age-Adjusted Death Rates per 100,000 Quantile Interval

66.67 - 84.55
56.48 - 66.66
50.50 - 56.47
47.46 - 50.49
41.53 - 47.45
23.45 - 41.52
Suppressed
U.S. rate: 51.64

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b Difference between state rate and total U.S. rate is statistically significant ($p < .0002$).

^c Absolute percent difference between state rate and total U.S. rate is 5% or more.

^d Rank of state level death rate and the 95% confidence intervals (low, high) for the rank.

SE Standard error of the rate.

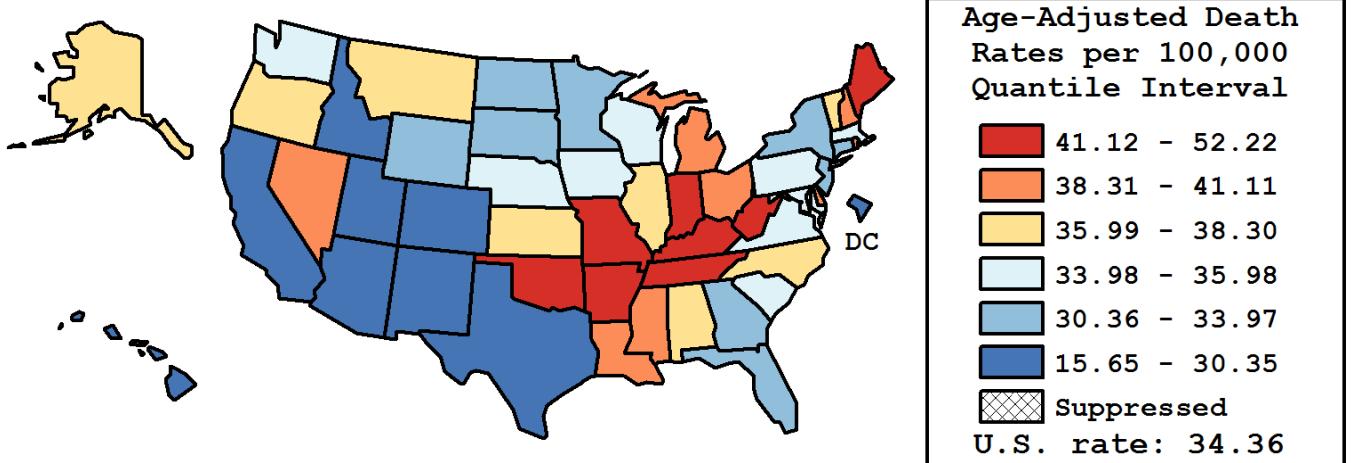
PD Percent difference between state rate and total U.S. rate.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.26
Cancer of the Lung And Bronchus (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2012-2016

Females									
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	34.36	0.06							
High Five States									
Kentucky	52.22	0.61	01(01,01)	51.96 ^c					
West Virginia	45.05	0.83	02(02,06)	31.11 ^c					
Oklahoma	43.39	0.61	03(02,08)	26.27 ^c					
Missouri	43.18	0.47	04(02,08)	25.66 ^c					
Arkansas	43.03	0.67	05(02,10)	25.23 ^c					
Low Five States									
Colorado	26.86	0.44	47(46,49)	-21.84 ^c					
California	26.49	0.16	48(47,49)	-22.93 ^c					
New Mexico	25.79	0.63	49(47,50)	-24.94 ^c					
Hawaii	23.79	0.72	50(49,50)	-30.78 ^c					
Utah	15.65	0.50	51(51,51)	-54.47 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	37.72	0.49	19(15,24)	9.76	Montana	36.42	1.04	23(14,36)	5.99
Alaska	37.79	1.69	18(05,37)	9.99	Nebraska	34.31	0.78	30(22,39)	-0.15
Arizona	29.52	0.37	45(41,46)	-14.09 ^c	Nevada	39.84	0.72	14(07,19)	15.92 ^c
Arkansas	43.03	0.67	05(02,10)	25.23 ^c	New Hampshire	39.87	0.96	12(05,21)	16.01 ^c
California	26.49	0.16	48(47,49)	-22.93 ^c	New Jersey	31.81	0.33	38(37,43)	-7.42
Colorado	26.86	0.44	47(46,49)	-21.84 ^c	New Mexico	25.79	0.63	49(47,50)	-24.94 ^c
Connecticut	31.62	0.51	39(36,44)	-8.00	New York	31.37	0.22	40(38,44)	-8.71
Delaware	39.86	1.12	13(04,22)	16.01 ^c	North Carolina	36.55	0.34	22(18,27)	6.37
D.C.	30.05	1.31	44(32,48)	-12.55 ^c	North Dakota	31.29	1.21	41(29,46)	-8.94
Florida	33.35	0.21	36(32,38)	-2.95	Ohio	41.11	0.33	09(06,13)	19.63 ^c
Georgia	33.32	0.35	37(30,39)	-3.02	Oklahoma	43.39	0.61	03(02,08)	26.27 ^c
Hawaii	23.79	0.72	50(49,50)	-30.78 ^c	Oregon	36.22	0.53	24(18,31)	5.41
Idaho	30.35	0.81	43(37,46)	-11.66 ^c	Pennsylvania	35.60	0.28	26(22,31)	3.60
Illinois	37.34	0.31	20(17,24)	8.66	Rhode Island	40.45	1.07	10(03,20)	17.72 ^c
Indiana	41.54	0.45	08(05,13)	20.89 ^c	South Carolina	35.54	0.47	28(21,33)	3.41
Iowa	35.98	0.60	25(18,32)	4.71	South Dakota	33.97	1.14	34(20,43)	-1.15
Kansas	37.31	0.65	21(15,28)	8.58	Tennessee	42.66	0.45	06(03,09)	24.16 ^c
Kentucky	52.22	0.61	01(01,01)	51.96 ^c	Texas	29.46	0.21	46(42,46)	-14.28 ^c
Louisiana	39.16	0.53	16(10,20)	13.97 ^c	Utah	15.65	0.50	51(51,51)	-54.47 ^c
Maine	41.85	0.92	07(02,15)	21.80 ^c	Vermont	38.30	1.34	17(07,31)	11.47 ^c
Maryland	34.24	0.44	32(26,37)	-0.35	Virginia	34.00	0.37	33(28,37)	-1.05
Massachusetts	35.57	0.40	27(21,32)	3.52	Washington	34.27	0.41	31(27,37)	-0.28
Michigan	39.77	0.35	15(09,18)	15.73 ^c	West Virginia	45.05	0.83	02(02,06)	31.11 ^c
Minnesota	33.38	0.45	35(29,39)	-2.87	Wisconsin	34.94	0.44	29(23,35)	1.67
Mississippi	39.99	0.66	11(07,18)	16.37 ^c	Wyoming	31.04	1.39	42(28,46)	-9.68
Missouri	43.18	0.47	04(02,08)	25.66 ^c					



^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b Difference between state rate and total U.S. rate is statistically significant ($p < .0002$).

^c Absolute percent difference between state rate and total U.S. rate is 5% or more.

^d Rank of state level death rate and the 95% confidence intervals (low, high) for the rank.

SE Standard error of the rate.

PD Percent difference between state rate and total U.S. rate.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.27
Cancer of the Lung And Bronchus (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2016
By Race/Ethnicity, Sex and Years Since Diagnosis

<u>Years Since Diagnosis</u>		0 to <5	5 to <10	10 to <15	15 to <20	20 to <24	0 to <24 ^b	>=24 ^d	Complete ^e
<u>Race</u>	<u>Sex</u>								
All Races	Both Sexes	296,258	106,837	52,045	27,542	12,276	494,958	43,284	538,243
	Males	135,269	44,604	20,996	11,092	5,095	217,057	22,799	239,856
	Females	160,989	62,233	31,049	16,450	7,181	277,901	20,485	298,387
White	Both Sexes	247,227	91,706	45,073	24,033	10,557	418,596	26,947	447,921
	Males	112,082	37,908	17,888	9,484	4,290	181,652	12,781	195,508
	Females	135,145	53,798	27,185	14,548	6,267	236,944	14,166	252,413
Black	Both Sexes	34,379	10,866	5,121	2,396	1,283	54,045	2,986	57,031
	Males	16,053	4,731	2,283	1,075	592	24,734	1,520	26,254
	Females	18,326	6,134	2,838	1,322	691	29,311	1,466	30,777
Asian/ Pacific	Both Sexes	11,557	3,291	1,527	827	294	17,495	+	+
	Males	5,652	1,530	702	404	144	8,433	+	+
	Females	5,905	1,761	824	423	150	9,063	+	+
Hispanic	Both Sexes	12,554	4,359	2,023	1,048	477	20,462	+	+
	Males	5,566	1,752	878	418	203	8,817	+	+
	Females	6,988	2,607	1,145	630	274	11,645	+	+

Estimated prevalence percent^a on January 1, 2016, of the SEER population diagnosed in the previous 24 years
By Age at Prevalence, Race/Ethnicity and Sex

<u>Age at Prevalence</u>	<u>All Ages</u>	<u>Age Specific (Crude)</u>								<u>Age-Adjusted^c</u>	
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79		
<u>Race</u>	<u>Sex</u>										
All Races	Both Sexes	0.1536	0.0002	0.0005	0.0017	0.0063	0.0250	0.1217	0.3745	0.8893	0.9606
	Males	0.1368	0.0002	0.0006	0.0016	0.0057	0.0217	0.1031	0.3611	0.8754	1.0432
	Females	0.1699	0.0002	0.0003	0.0019	0.0069	0.0283	0.1395	0.3867	0.9009	0.9099
White	Both Sexes	0.1660	0.0002	0.0005	0.0018	0.0066	0.0251	0.1165	0.3666	0.9048	0.9817
	Males	0.1454	0.0002	0.0006	0.0015	0.0058	0.0217	0.0977	0.3429	0.8725	1.0468
	Females	0.1863	0.0002	0.0005	0.0022	0.0074	0.0286	0.1348	0.3885	0.9322	0.9410
Black	Both Sexes	0.1198	0.0004	0.0004	0.0017	0.0058	0.0254	0.1655	0.4706	0.8818	0.8197
	Males	0.1143	0.0004	0.0008	0.0024	0.0066	0.0232	0.1414	0.5274	0.9944	1.0415
	Females	0.1249	0.0003	-	0.0010	0.0050	0.0274	0.1864	0.4251	0.8034	0.7103
Asian/ Pacific	Both Sexes	0.0859	-	-	0.0011	0.0048	0.0214	0.0938	0.2817	0.6035	0.7546
	Males	0.0864	-	-	0.0012	0.0037	0.0181	0.0915	0.3086	0.6896	0.9019
	Females	0.0854	-	-	0.0011	0.0058	0.0243	0.0959	0.2599	0.5343	0.6598
Islander	Both Sexes	0.0358	0.0001	0.0002	0.0015	0.0040	0.0126	0.0507	0.1569	0.4091	0.5149
	Males	0.0306	0.0001	0.0003	0.0011	0.0034	0.0122	0.0426	0.1436	0.3983	0.5928
	Females	0.0412	-	0.0001	0.0019	0.0047	0.0130	0.0586	0.1687	0.4173	0.4668
Hispanic	Both Sexes	0.0358	0.0001	0.0002	0.0015	0.0040	0.0126	0.0507	0.1569	0.4091	0.5149
	Males	0.0306	0.0001	0.0003	0.0011	0.0034	0.0122	0.0426	0.1436	0.3983	0.5928
	Females	0.0412	-	0.0001	0.0019	0.0047	0.0130	0.0586	0.1687	0.4173	0.4668

^a US 2016 cancer prevalence counts are based on 2016 cancer prevalence proportions from the SEER 13 Areas (excluding the Alaska Native Registry) and 1/1/2016 US population estimates based on the average of 2015 and 2016 population estimates from the US Bureau of the Census.

^b Prevalence was calculated using the first invasive tumor for each cancer site diagnosed during the previous 24 years.

^c Maximum limited-duration prevalence is 24 years for 1992-2016 data.

^d Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.

^e Cases diagnosed more than 24 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000).

^f Complete prevalence is obtained by summing 0 to <24 and >=24.

^g Statistic not shown. Statistic based on fewer than 5 cases estimated alive in SEER for the time interval.

^h Not available.

Table 15.28

Cancer of the Lung and Bronchus (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2012-2016
Both Sexes by Race

Histology ^a	All Races			White		Black		Asian/Pacific Islander		American Indian/Alaska Native ^b		Hispanic ^c	
	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	48.5	316,080	99.7%	260,060	99.7%	34,701	99.8%	18,892	99.8%	1,034	99.9%	19,066	99.6%
Small cell (8002,8041-8045)	6.0	39,940	12.6%	34,975	13.4%	3,370	9.7%	1,314	6.9%	155	15.0%	2,003	10.5%
Non-small cell	41.0	266,983	84.3%	217,675	83.5%	30,163	86.7%	17,090	90.2%	838	81.0%	16,430	85.8%
Squamous and transitional cell ^d	11.2	71,874	22.7%	60,221	23.1%	8,268	23.8%	2,806	14.8%	306	29.6%	3,670	19.2%
Adenocarcinoma ^e	24.1	157,488	49.7%	126,234	48.4%	17,558	50.5%	12,531	66.2%	417	40.3%	10,141	53.0%
Large cell ^f	0.7	4,384	1.4%	3,589	1.4%	600	1.7%	173	0.9%	-	-	231	1.2%
Non-small cell carcinoma ^g	2.5	16,061	5.1%	12,974	5.0%	2,098	6.0%	847	4.5%	67	6.5%	1,028	5.4%
Other specified carcinomas ^h	2.7	17,176	5.4%	14,657	5.6%	1,639	4.7%	733	3.9%	40	3.9%	1,360	7.1%
Carcinoma, NOS ⁱ	1.4	9,157	2.9%	7,410	2.8%	1,168	3.4%	488	2.6%	41	4.0%	633	3.3%
Sarcoma ^j	0.1	522	0.2%	436	0.2%	49	0.1%	30	0.2%	-	-	64	0.3%
Other specified types ^k	0.0	279	0.1%	225	0.1%	36	0.1%	17	0.1%	-	-	21	0.1%
Total	48.6	316,881	100.0%	260,721	100.0%	34,786	100.0%	18,939	100.0%	1,035	100.0%	19,151	100.0%

Source: SEER 21 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

^b Estimates for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^d Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^e Squamous and transitional cell includes histologies 8051-8052, 8070-8076, 8078, 8083-8084, 8090, 8094, 8120, 8123.

^f Adenocarcinoma includes histologies 8015, 8050, 8140-8141, 8143-8145, 8147, 8190, 8201, 8211, 8250-8255, 8260, 8290, 8310, 8320, 8323, 8333, 8401, 8440, 8470-8471, 8480-8481, 8490, 8503, 8507, 8550, 8570-8572, 8574, 8576.

^g Large cell includes histologies 8012-8014, 8021, 8034, 8082.

^h Non-small cell carcinoma includes histology 8046.

ⁱ Other specified carcinomas includes histologies 8003-8004, 8022, 8030, 8031-8033, 8035, 8200, 8240-8241, 8243-8246, 8249, 8430, 8525, 8560, 8562, 8575.

^j Carcinoma, NOS includes histologies 8000-8001, 8010-8011, 8020, 8230.

^k Sarcoma includes histologies 8680, 8711, 8800-8805, 8810-8811, 8815, 8824, 8830, 8840, 8852, 8855, 8890-8891, 8894-8895, 8900-8902, 8910, 8920-8921, 8940, 8990, 9040-9041, 9043, 9120, 9130, 9133, 9150, 9180, 9220, 9231, 9240, 9251, 9473, 9540, 9560, 9580.

^l Other specific types includes melanomas and is defined as histologies 8580, 8650, 8720-8790, 8933, 8963, 8972-8973, 8980-8982, 9064-9065, 9070, 9080, 9084-9085, 9100, 9260, 9364, 9503, 9530.

^m Note: For this analysis, the following histologies were classified as metastases of another primary site and not included: 8005, 8130, 8146, 8170, 8231, 8247, 8263, 8312, 8340-8341, 8350, 8441, 8460, 8500-8501, 8524, 8530, 8551, 8581, 8585, 8710, 8772, 8806, 8850, 8854, 8896, 8935, 9015, 9042, 9071, 9101, 9181, 9370, 9500, 9561, 9581.

ⁿ Statistic not shown due to fewer than 16 cases during the time period.

Table 15.29

Cancer of the Lung and Bronchus (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2012-2016
Males by Race

Histology ^a	All Races			White		Black		Asian/Pacific Islander		American Indian/Alaska Native ^b		Hispanic ^c	
	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	55.3	161,224	99.7%	130,797	99.7%	18,698	99.7%	10,516	99.7%	492	99.8%	9,801	99.5%
Small cell (8002,8041-8045)	6.5	19,495	12.1%	16,754	12.8%	1,665	8.9%	931	8.8%	71	14.4%	1,032	10.5%
Non-small cell	47.0	136,635	84.5%	110,002	83.9%	16,327	87.1%	9,287	88.1%	398	80.7%	8,409	85.4%
Squamous and transitional cell ^d	15.3	44,154	27.3%	36,644	27.9%	5,080	27.1%	2,074	19.7%	174	35.3%	2,272	23.1%
Adenocarcinoma ^e	25.1	73,378	45.4%	57,902	44.1%	8,854	47.2%	6,129	58.1%	161	32.7%	4,845	49.2%
Large cell ^f	0.8	2,463	1.5%	1,979	1.5%	355	1.9%	116	1.1%	-	-	141	1.4%
Non-small cell carcinoma ^g	3.1	9,059	5.6%	7,150	5.5%	1,271	6.8%	560	5.3%	39	7.9%	572	5.8%
Other specified carcinomas ^h	2.6	7,581	4.7%	6,327	4.8%	767	4.1%	408	3.9%	21	4.3%	579	5.9%
Carcinoma, NOS ⁱ	1.8	5,094	3.2%	4,041	3.1%	706	3.8%	298	2.8%	23	4.7%	360	3.7%
Sarcoma ^j	0.1	321	0.2%	271	0.2%	27	0.1%	19	0.2%	-	-	35	0.4%
Other specified types ^k	0.1	148	0.1%	118	0.1%	20	0.1%	-	-	-	-	-	-
Total	55.4	161,693	100.0%	131,186	100.0%	18,745	100.0%	10,544	100.0%	493	100.0%	9,846	100.0%

Source: SEER 21 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

^b Estimates for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^d Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^e Squamous and transitional cell includes histologies 8051-8052, 8070-8076, 8078, 8083-8084, 8090, 8094, 8120, 8123.

^f Adenocarcinoma includes histologies 8015, 8050, 8140-8141, 8143-8145, 8147, 8190, 8201, 8211, 8250-8255, 8260, 8290, 8310, 8320, 8323, 8333, 8401, 8440, 8470-8471, 8480-8481, 8490, 8503, 8507, 8550, 8570-8572, 8574, 8576.

^g Large cell includes histologies 8012-8014, 8021, 8034, 8082.

^h Non-small cell carcinoma includes histology 8046.

ⁱ Other specified carcinomas includes histologies 8003-8004, 8022, 8030, 8031-8033, 8035, 8200, 8240-8241, 8243-8246, 8249, 8430, 8525, 8560, 8562, 8575.

^j Carcinoma, NOS includes histologies 8000-8001, 8010-8011, 8020, 8230.

^k Sarcoma includes histologies 8680, 8711, 8800-8805, 8810-8811, 8815, 8824, 8830, 8840, 8852, 8855, 8890-8891, 8894-8895, 8900-8902, 8910, 8920-8921, 8940, 8990, 9040-9041, 9043, 9120, 9130, 9133, 9150, 9180, 9220, 9231, 9240, 9251, 9473, 9540, 9560, 9580.

^l Other specific types includes melanomas and is defined as histologies 8580, 8650, 8720-8790, 8933, 8963, 8972-8973, 8980-8982, 9064-9065, 9070, 9080, 9084-9085, 9100, 9260, 9364, 9503, 9530.

^m Note: For this analysis, the following histologies were classified as metastases of another primary site and not included: 8005, 8130, 8146, 8170, 8231, 8247, 8263, 8312, 8340-8341, 8350, 8441, 8460, 8500-8501, 8524, 8530, 8551, 8581, 8585, 8710, 8772, 8806, 8850, 8854, 8896, 8935, 9015, 9042, 9071, 9101, 9181, 9370, 9500, 9561, 9581

ⁿ - Statistic not shown due to fewer than 16 cases during the time period.

Table 15.30

Cancer of the Lung and Bronchus (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2012-2016
Females by Race

Histology ^a	All Races			White		Black		Asian/Pacific Islander		American Indian/Alaska Native ^b		Hispanic ^c	
	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	43.4	154,856	99.8%	129,263	99.8%	16,003	99.8%	8,376	99.8%	542	100.0%	9,265	99.6%
Small cell (8002,8041-8045)	5.7	20,445	13.2%	18,221	14.1%	1,705	10.6%	383	4.6%	84	15.5%	971	10.4%
Non-small cell	36.6	130,348	84.0%	107,673	83.1%	13,836	86.3%	7,803	92.9%	440	81.2%	8,021	86.2%
Squamous and transitional cell ^d	7.8	27,720	17.9%	23,577	18.2%	3,188	19.9%	732	8.7%	132	24.4%	1,398	15.0%
Adenocarcinoma ^e	23.5	84,110	54.2%	68,332	52.8%	8,704	54.3%	6,402	76.3%	256	47.2%	5,296	56.9%
Large cell ^f	0.5	1,921	1.2%	1,610	1.2%	245	1.5%	57	0.7%	-	-	90	1.0%
Non-small cell carcinoma ^g	2.0	7,002	4.5%	5,824	4.5%	827	5.2%	287	3.4%	28	5.2%	456	4.9%
Other specified carcinomas ^h	2.7	9,595	6.2%	8,330	6.4%	872	5.4%	325	3.9%	19	3.5%	781	8.4%
Carcinoma, NOS ⁱ	1.1	4,063	2.6%	3,369	2.6%	462	2.9%	190	2.3%	18	3.3%	273	2.9%
Sarcoma ^j	0.1	201	0.1%	165	0.1%	22	0.1%	-	-	-	-	29	0.3%
Other specified types ^k	0.0	131	0.1%	107	0.1%	16	0.1%	-	-	-	-	-	-
Total	43.5	155,188	100.0%	129,535	100.0%	16,041	100.0%	8,395	100.0%	542	100.0%	9,305	100.0%

Source: SEER 21 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

^b Estimates for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^d Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^e Squamous and transitional cell includes histologies 8051-8052, 8070-8076, 8078, 8083-8084, 8090, 8094, 8120, 8123.

^f Adenocarcinoma includes histologies 8015, 8050, 8140-8141, 8143-8145, 8147, 8190, 8201, 8211, 8250-8255, 8260, 8290, 8310, 8320, 8323, 8333, 8401, 8440, 8470-8471, 8480-8481, 8490, 8503, 8507, 8550, 8570-8572, 8574, 8576.

^g Large cell includes histologies 8012-8014, 8021, 8034, 8082.

^h Non-small cell carcinoma includes histology 8046.

ⁱ Other specified carcinomas includes histologies 8003-8004, 8022, 8030, 8031-8033, 8035, 8200, 8240-8241, 8243-8246, 8249, 8430, 8525, 8560, 8562, 8575.

^j Carcinoma, NOS includes histologies 8000-8001, 8010-8011, 8020, 8230.

^k Sarcoma includes histologies 8680, 8711, 8800-8805, 8810-8811, 8815, 8824, 8830, 8840, 8852, 8855, 8890-8891, 8894-8895, 8900-8902, 8910, 8920-8921, 8940, 8990, 9040-9041, 9043, 9120, 9130, 9133, 9150, 9180, 9220, 9231, 9240, 9251, 9473, 9540, 9560, 9580.

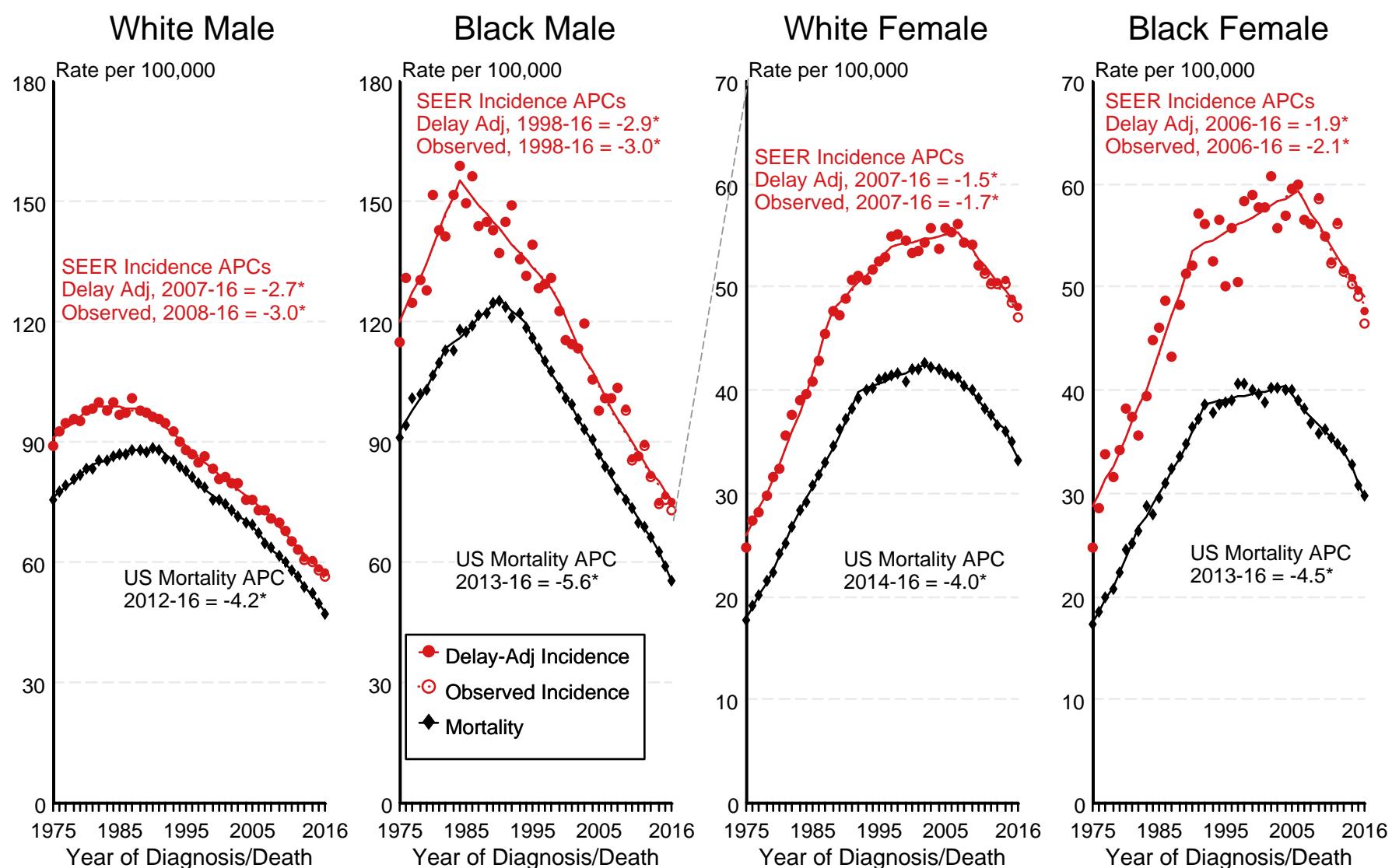
^l Other specific types includes melanomas and is defined as histologies 8580, 8650, 8720-8790, 8933, 8963, 8972-8973, 8980-8982, 9064-9065, 9070, 9080, 9084-9085, 9100, 9260, 9364, 9503, 9530.

^m Note: For this analysis, the following histologies were classified as metastases of another primary site and not included: 8005, 8130, 8146, 8170, 8231, 8247, 8263, 8312, 8340-8341, 8350, 8441, 8460, 8500-8501, 8524, 8530, 8551, 8581, 8585, 8710, 8772, 8806, 8850, 8854, 8896, 8935, 9015, 9042, 9071, 9101, 9181, 9370, 9500, 9561, 9581.

ⁿ Statistic not shown due to fewer than 16 cases during the time period.

Figure 15.1

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Lung and Bronchus, by Race and Sex



^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

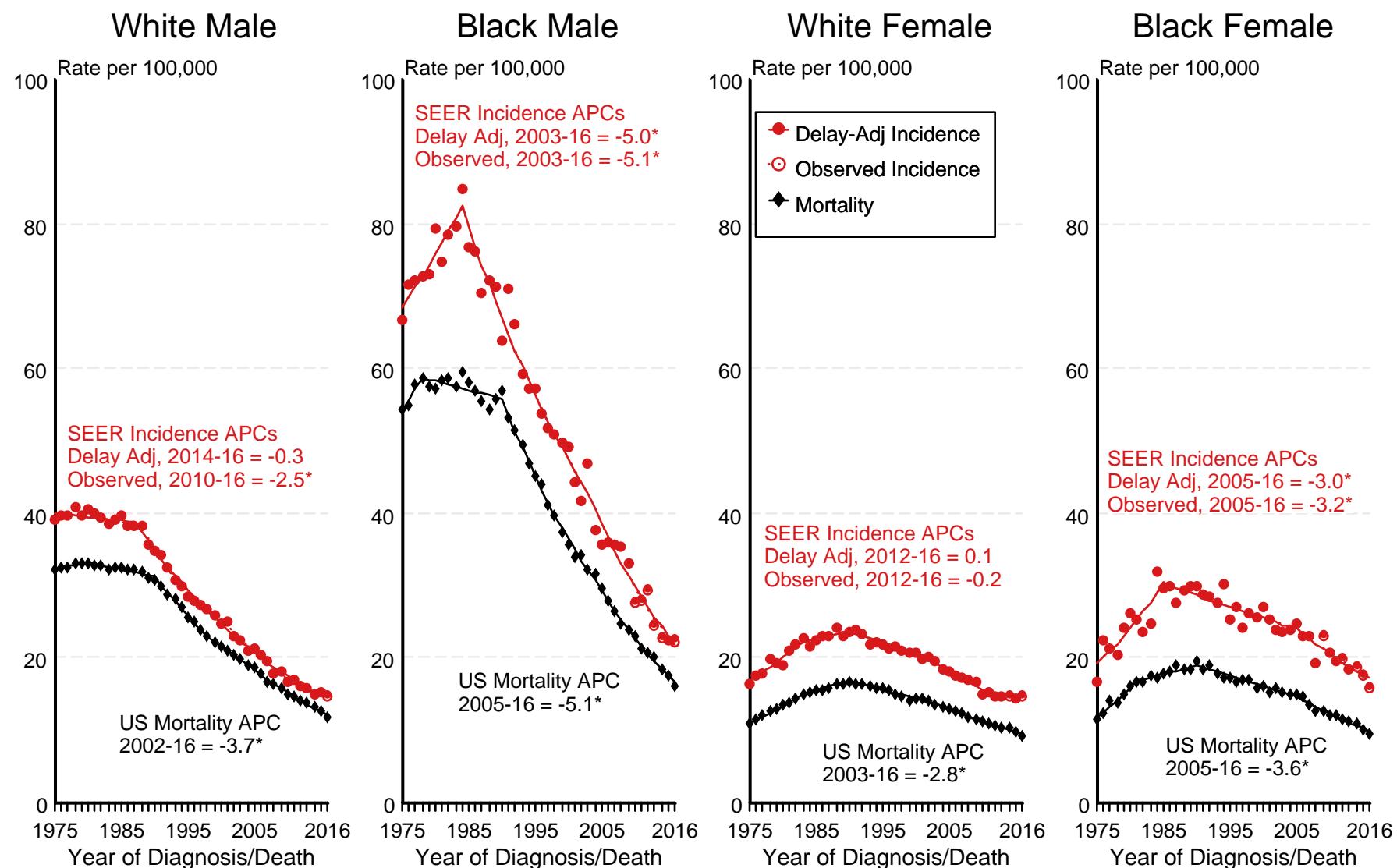
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

Figure 15.2

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Lung and Bronchus, Under 65 Years of Age, by Race and Sex



^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

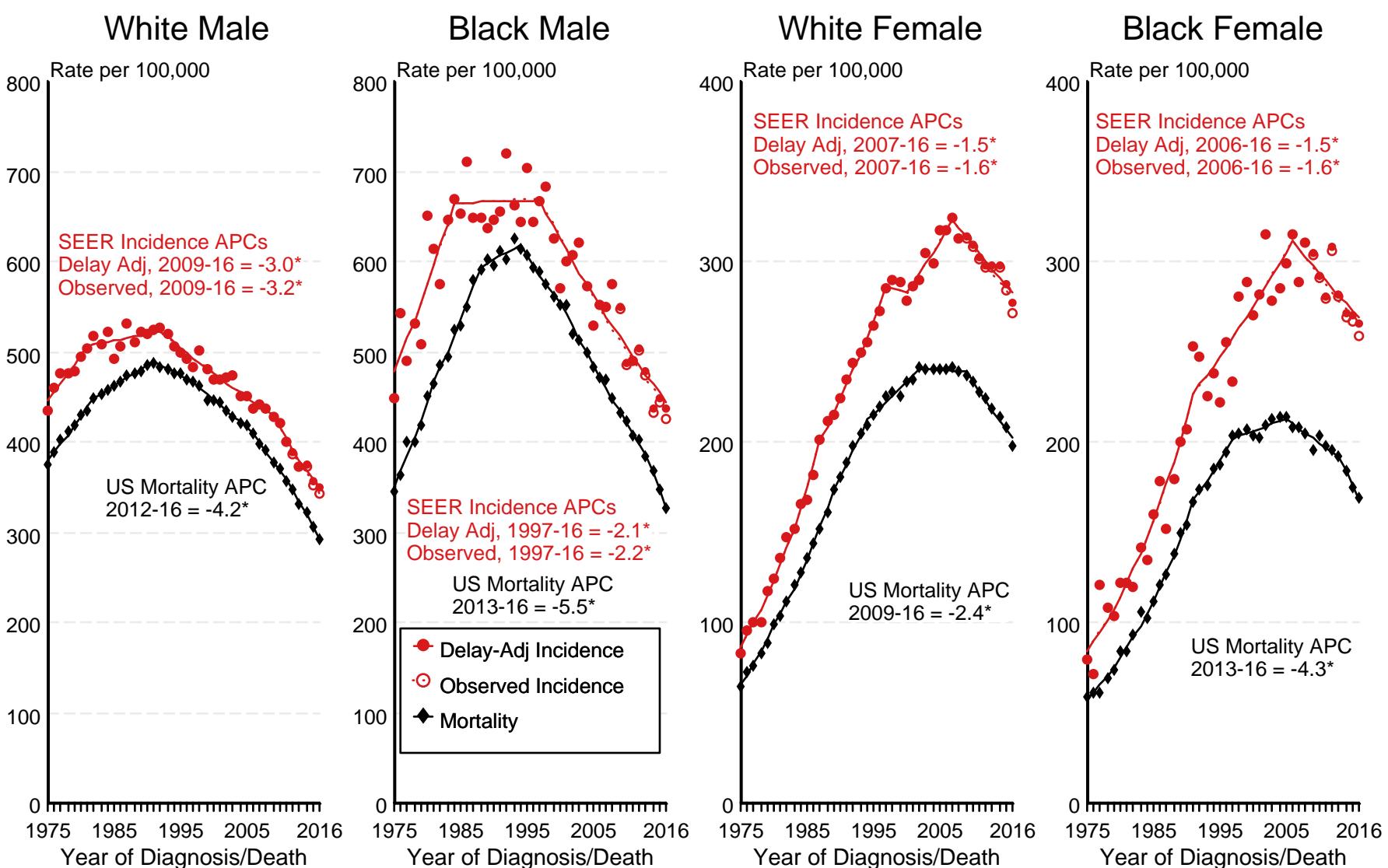
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

Figure 15.3

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Lung and Bronchus, Ages 65 and Over, by Race and Sex



^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

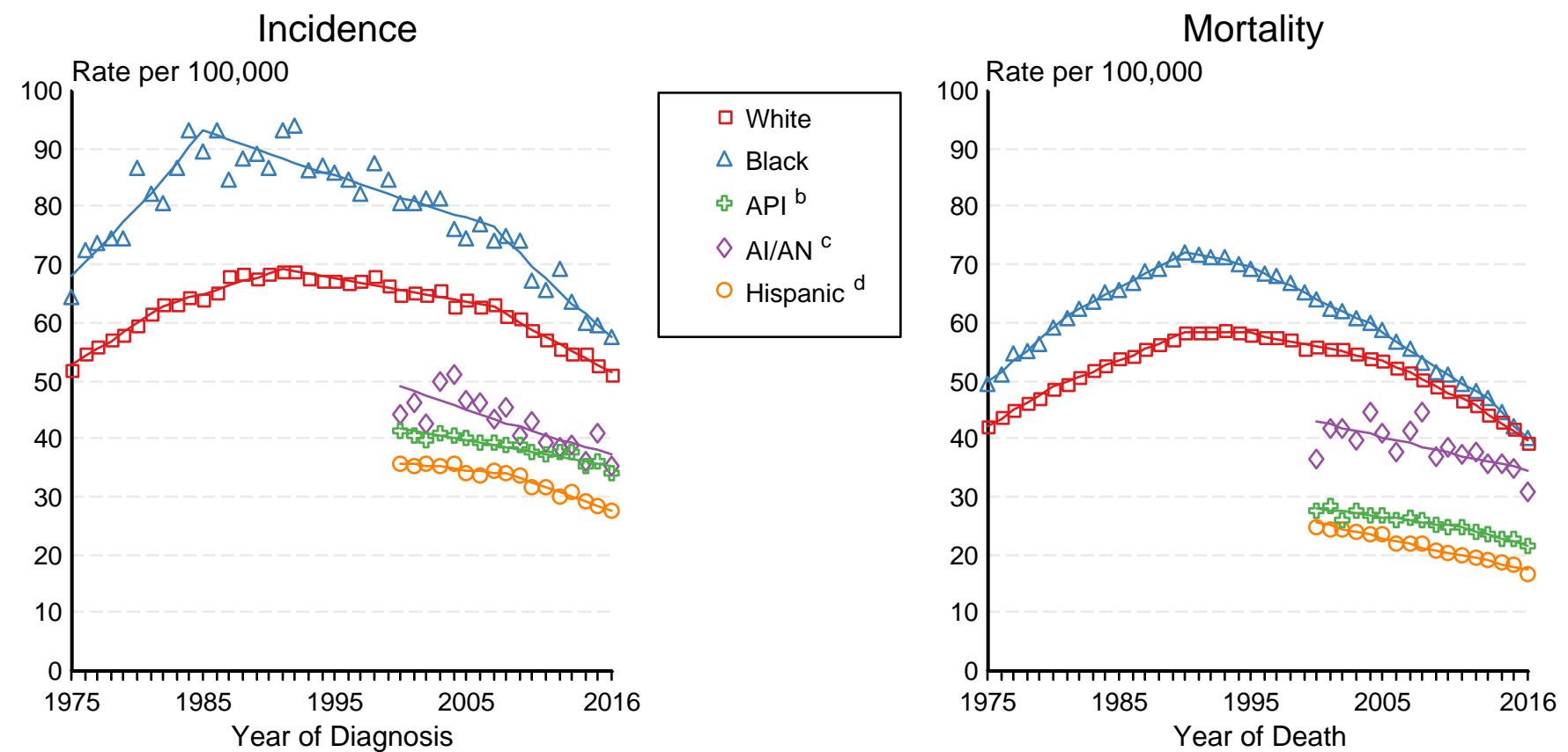
* The APC is significantly different from zero ($p < 0.05$).

Figure 15.4

SEER Incidence and US Death Rates^a

Cancer of the Lung and Bronchus, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2016
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 2000-2016



Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 21 areas (SEER 9 areas, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

Mortality data are from US Mortality Files, National Center for Health Statistics, CDC.

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2016 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 2000-2016 allow a maximum of 3 joinpoints.

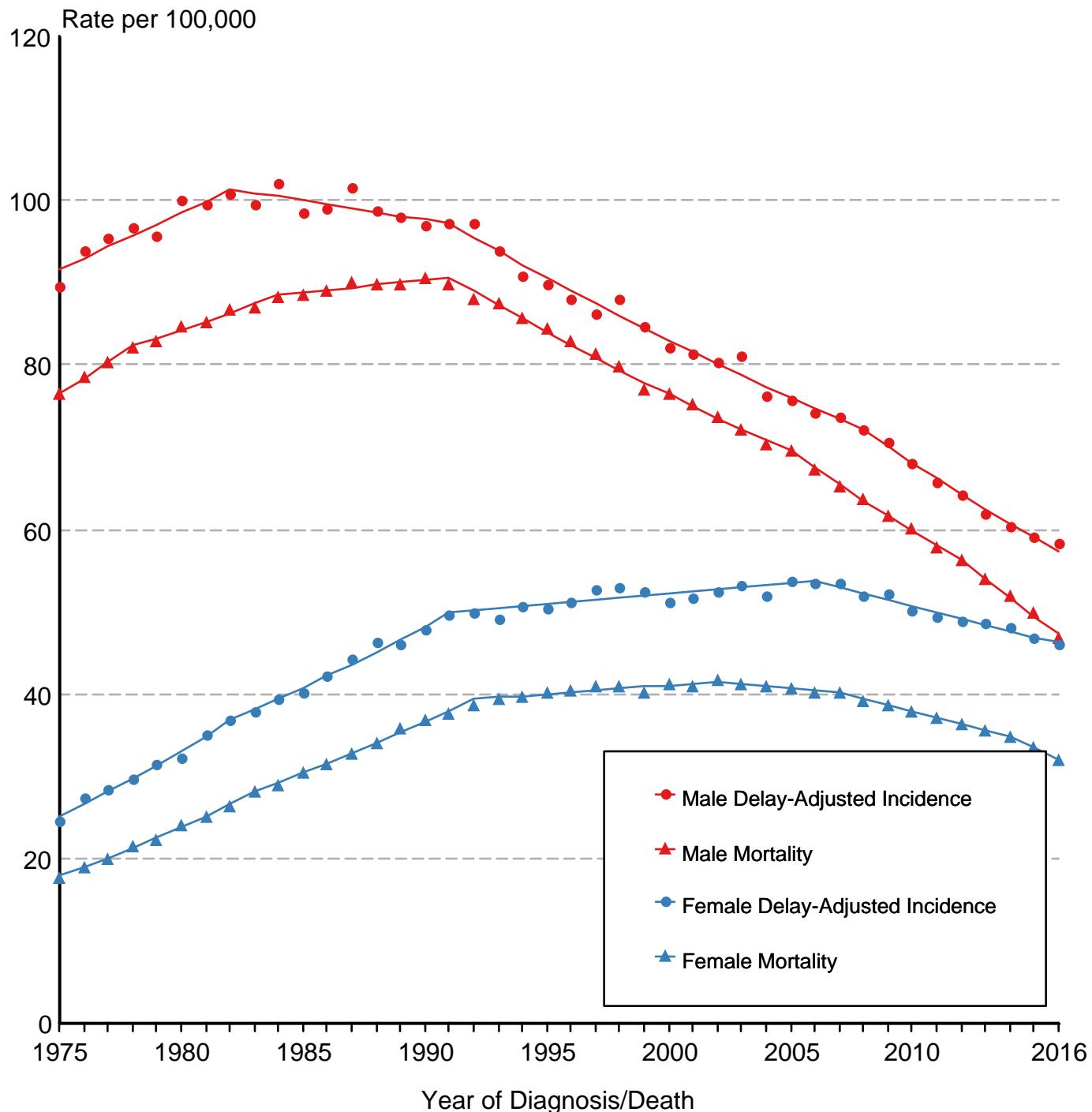
^b API = Asian/Pacific Islander.

^c AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Figure 15.5

Cancer of the Lung & Bronchus SEER Delay-Adjusted Incidence & US Death Rates, 1975-2016, All Races, By Sex



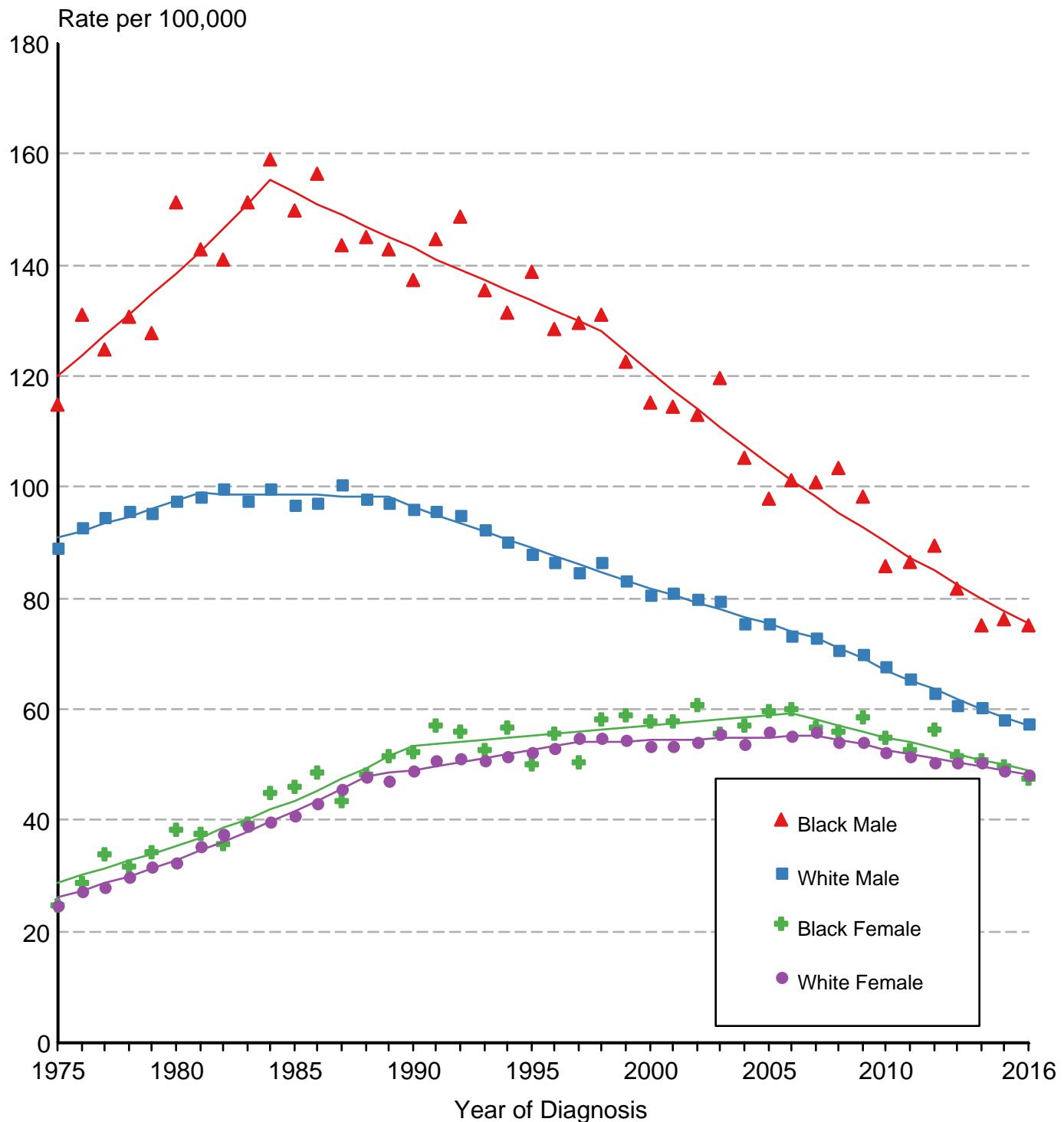
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
 Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines are calculated using the Joinpoint Regression Program Version 4.7, February 2019,
 National Cancer Institute.

Figure 15.6

Cancer of the Lung & Bronchus

SEER Delay-Adjusted Incidence, 1975-2016

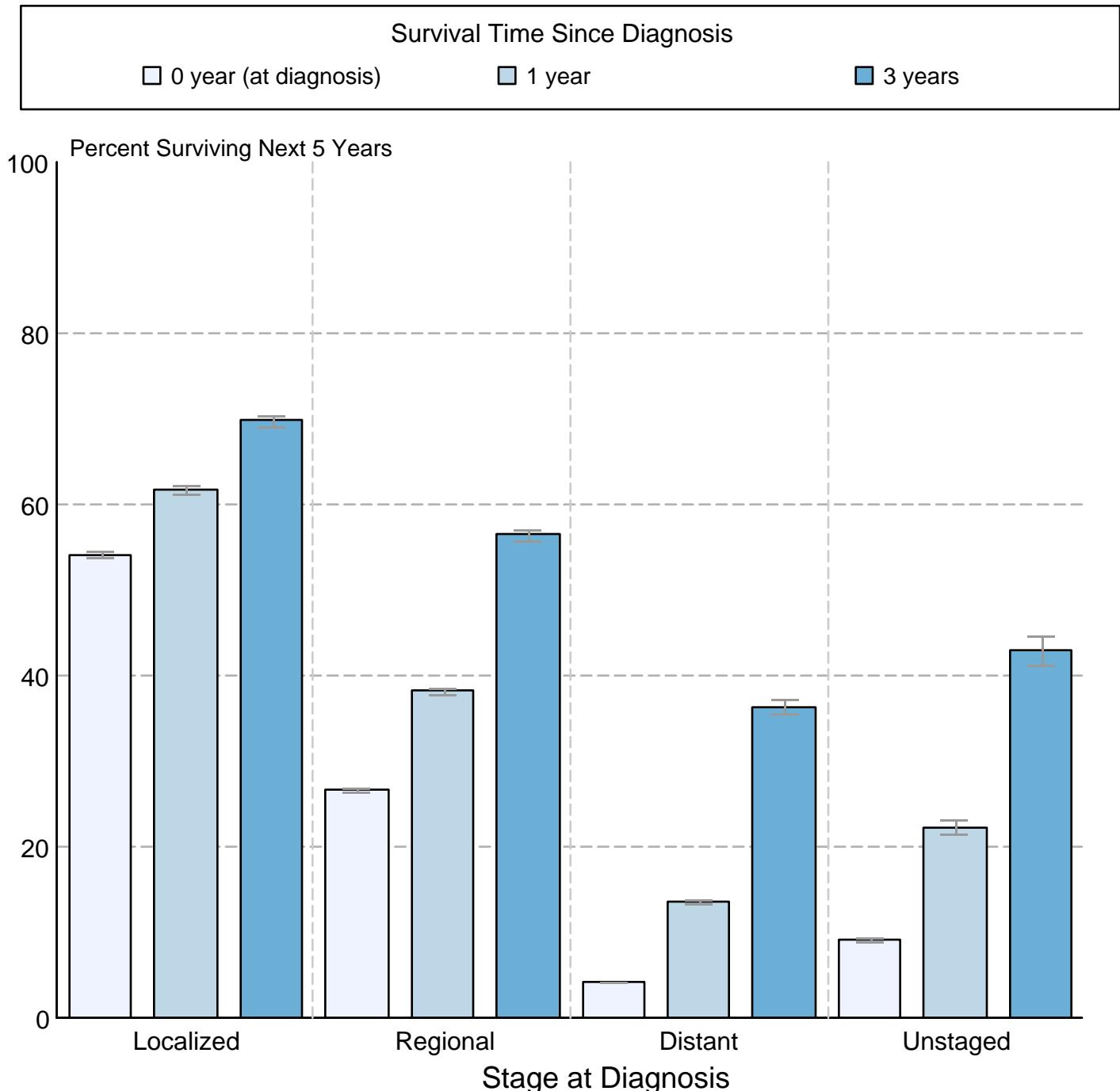
By Sex and Race



Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

Figure 15.7

Cancer of the Lung and Bronchus
5-Year SEER Conditional Relative Survival and
95% Confidence Intervals
Probability of surviving the next 5 years given the cohort
has already survived 0, 1, or 3 years
2000-2015 by stage at diagnosis



Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

Percent surviving is not shown if based on less than 25 cases.

Confidence intervals are not shown if length of the confidence interval is greater than 5 times the standard error.