

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,
1975-2017 With up to Five Joinpoints, 2000-2017 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	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2008-17	2013-17
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2017</u>														
All Races	1975-82	2.5*	1982-91	1.0*	1991-07	-0.7*	2007-17	-2.1*					-2.1*	-2.1*
White	1975-82	2.5*	1982-91	1.1*	1991-07	-0.6*	2007-17	-2.0*					-2.0*	-2.0*
Black	1975-84	3.5*	1984-03	-0.6*	2003-17	-2.4*							-2.4*	-2.4*
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2017</u>														
All Races	2000-08	-0.7*	2008-11	-2.7*	2011-17	-1.7*							-2.0*	-1.7*
White	2000-08	-0.6*	2008-11	-2.7*	2011-17	-1.7*							-2.0*	-1.7*
White NH ^{ef}	2000-08	-0.5*	2008-11	-2.5*	2011-17	-1.4*							-1.8*	-1.4*
Black	2000-09	-1.2*	2009-17	-2.5*									-2.4*	-2.5*
Black NH ^{ef}	2000-09	-1.1*	2009-17	-2.6*									-2.4*	-2.6*
API ^e	2000-17	-0.7*											-0.7*	-0.7*
AI/AN ^{eg}	2000-17	-1.1*											-1.1*	-1.1*
Hispanic ^f	2000-07	-0.6	2007-17	-1.9*									-1.9*	-1.9*
<u>U.S. Cancer Mortality^c, 1975-2017</u>														
All Races	1975-80	3.0*	1980-90	1.8*	1990-95	-0.2	1995-05	-1.0*	2005-14	-2.4*	2014-17	-4.9*	-3.3*	-4.3*
White	1975-80	2.9*	1980-90	1.8*	1990-95	-0.1	1995-06	-0.9*	2006-14	-2.5*	2014-17	-4.6*	-3.2*	-4.1*
Black	1975-81	3.5*	1981-90	1.9*	1990-95	-0.7*	1995-04	-1.7*	2004-13	-2.7*	2013-17	-5.1*	-3.7*	-5.1*
<u>U.S. Cancer Mortality^c, 2000-2017</u>														
All Races	2000-05	-1.1*	2005-10	-2.2*	2010-14	-2.8*	2014-17	-4.6*					-3.3*	-4.2*
White	2000-05	-1.0*	2005-10	-2.0*	2010-15	-2.9*	2015-17	-5.2*					-3.2*	-4.0*
White NH ^{ef}	2000-05	-0.9*	2005-10	-1.9*	2010-15	-2.8*	2015-17	-4.9*					-3.1*	-3.9*
Black	2000-04	-1.6*	2004-13	-2.7*	2013-17	-5.1*							-3.7*	-5.1*
Black NH ^{ef}	2000-05	-1.5*	2005-08	-3.2*	2008-13	-2.3*	2013-17	-5.2*					-3.6*	-5.2*
API ^e	2000-13	-1.3*	2013-17	-3.4*									-2.2*	-3.4*
AI/AN ^{eg}	2000-08	0.6	2008-17	-3.1*									-3.1*	-3.1*
Hispanic ^f	2000-15	-2.2*	2015-17	-7.0*									-3.3*	-4.6*

Joinpoint Regression Program Version 4.8, April 2020, 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).

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

^b 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).

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

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

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

^f 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.

^g 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,
1975-2017 With up to Five Joinpoints, 2000-2017 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	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2008-17	2013-17
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2017</u>														
All Races	1975-82	1.5*	1982-91	-0.5*	1991-07	-1.7*	2007-17	-2.6*					-2.6*	-2.6*
White	1975-81	1.4*	1981-89	-0.1	1989-07	-1.6*	2007-17	-2.6*					-2.6*	-2.6*
Black	1975-84	2.9*	1984-98	-1.4*	1998-17	-2.9*							-2.9*	-2.9*
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2017</u>														
All Races	2000-09	-1.8*	2009-12	-3.5*	2012-17	-2.3*							-2.7*	-2.3*
White	2000-08	-1.6*	2008-17	-2.8*									-2.8*	-2.8*
White NH ^{ef}	2000-09	-1.5*	2009-12	-3.3*	2012-17	-2.1*							-2.4*	-2.1*
Black	2000-17	-2.8*											-2.8*	-2.8*
Black NH ^{ef}	2000-17	-2.7*											-2.7*	-2.7*
API ^e	2000-17	-1.4*											-1.4*	-1.4*
AI/AN ^{eg}	2000-17	-1.6*											-1.6*	-1.6*
Hispanic ^f	2000-17	-2.4*											-2.4*	-2.4*
<u>U.S. Cancer Mortality^c, 1975-2017</u>														
All Races	1975-78	2.4*	1978-84	1.2*	1984-91	0.3*	1991-05	-1.9*	2005-13	-3.0*	2013-17	-4.8*	-3.8*	-4.8*
White	1975-82	1.7*	1982-91	0.4*	1991-05	-1.8*	2005-13	-2.9*	2013-17	-4.7*			-3.7*	-4.7*
Black	1975-81	3.1*	1981-89	1.6*	1989-93	-0.6	1993-02	-2.6*	2002-13	-3.4*	2013-17	-5.7*	-4.4*	-5.7*
<u>U.S. Cancer Mortality^c, 2000-2017</u>														
All Races	2000-05	-2.0*	2005-12	-2.9*	2012-15	-4.0*	2015-17	-5.6*					-3.9*	-4.8*
White	2000-05	-1.8*	2005-11	-2.8*	2011-15	-3.7*	2015-17	-5.6*					-3.8*	-4.6*
White NH ^{ef}	2000-05	-1.7*	2005-10	-2.6*	2010-14	-3.2*	2014-17	-4.8*					-3.6*	-4.5*
Black	2000-13	-3.3*	2013-17	-5.8*									-4.4*	-5.8*
Black NH ^{ef}	2000-13	-3.2*	2013-17	-5.8*									-4.3*	-5.8*
API ^e	2000-08	-1.3*	2008-17	-2.9*									-2.9*	-2.9*
AI/AN ^{eg}	2000-08	0.6	2008-17	-3.6*									-3.6*	-3.6*
Hispanic ^f	2000-15	-3.0*	2015-17	-7.5*									-4.0*	-5.3*

Joinpoint Regression Program Version 4.8, April 2020, 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).

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

^b 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).

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

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

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

^f 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.

^g 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,
1975-2017 With up to Five Joinpoints, 2000-2017 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	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2008-17	2013-17
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2017</u>														
All Races	1975-82	5.6*	1982-91	3.4*	1991-06	0.5*	2006-17	-1.4*					-1.4*	-1.4*
White	1975-88	4.8*	1988-97	1.4*	1997-07	0.2	2007-17	-1.4*					-1.4*	-1.4*
Black	1975-90	4.2*	1990-06	0.7*	2006-17	-1.9*							-1.9*	-1.9*
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2017</u>														
All Races	2000-08	0.2*	2008-11	-2.3*	2011-17	-1.0*							-1.4*	-1.0*
White	2000-08	0.3*	2008-11	-2.3*	2011-17	-0.9*							-1.4*	-0.9*
White NH ^{ef}	2000-08	0.5*	2008-11	-2.1*	2011-17	-0.7*							-1.2*	-0.7*
Black	2000-09	0.3	2009-17	-2.0*									-1.7*	-2.0*
Black NH ^{ef}	2000-09	0.3	2009-17	-2.0*									-1.7*	-2.0*
API ^e	2000-17	0.3*											0.3*	0.3*
AI/AN ^{eg}	2000-17	-0.6											-0.6	-0.6
Hispanic ^f	2000-17	-0.3*											-0.3*	-0.3*
<u>U.S. Cancer Mortality^c, 1975-2017</u>														
All Races	1975-82	6.0*	1982-90	4.2*	1990-95	1.8*	1995-05	0.2*	2005-14	-1.8*	2014-17	-4.4*	-2.7*	-3.7*
White	1975-83	5.9*	1983-92	3.8*	1992-02	0.6*	2002-07	-0.6	2007-14	-1.9*	2014-17	-4.0*	-2.6*	-3.5*
Black	1975-82	6.3*	1982-92	3.7*	1992-04	0.3*	2004-13	-1.9*	2013-17	-4.5*			-3.1*	-4.5*
<u>U.S. Cancer Mortality^c, 2000-2017</u>														
All Races	2000-02	0.6	2002-07	-0.7*	2007-14	-2.0*	2014-17	-4.2*					-2.7*	-3.7*
White	2000-02	0.6	2002-07	-0.6*	2007-14	-1.9*	2014-17	-4.0*					-2.6*	-3.5*
White NH ^{ef}	2000-02	0.7	2002-07	-0.4	2007-14	-1.8*	2014-17	-3.9*					-2.5*	-3.3*
Black	2000-04	0.6	2004-13	-1.8*	2013-17	-4.5*							-3.1*	-4.5*
Black NH ^{ef}	2000-05	0.5	2005-08	-2.8	2008-13	-1.4*	2013-17	-4.7*					-2.9*	-4.7*
API ^e	2000-14	-0.4	2014-17	-4.6*									-1.8*	-3.5*
AI/AN ^{eg}	2000-04	4.0	2004-17	-2.1*									-2.1*	-2.1*
Hispanic ^f	2000-15	-1.0*	2015-17	-6.4									-2.2*	-3.7*

Joinpoint Regression Program Version 4.8, April 2020, 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).

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

^b 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).

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

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

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

^f 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.

^g 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,
1975-2017 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	Years	APC	Years	APC	Years	APC	Years	APC	2013-17
<u>SEER 9 Observed Incidence^c for Small Cell Cancer of the Lung and Bronchus^a, 1975-2017</u>														
All Races	Both Sexes	1975-82	6.2*	1982-89	1.1	1989-07	-2.3*	2007-17	-3.0*					-3.0*
All Races	Male	1975-81	5.6*	1981-88	0.0	1988-17	-3.1*							-3.1*
All Races	Female	1975-82	9.5*	1982-90	3.3*	1990-04	-1.4*	2004-17	-2.6*					-2.6*
White	Both Sexes	1975-82	6.4*	1982-89	1.3*	1989-07	-2.1*	2007-17	-3.0*					-3.0*
White	Male	1975-78	8.8*	1978-86	2.1*	1986-17	-3.0*							-3.0*
White	Female	1975-82	10.0*	1982-90	3.4*	1990-06	-1.2*	2006-17	-2.6*					-2.6*
Black	Both Sexes	1975-86	4.9*	1986-17	-2.5*									-2.5*
Black	Male	1975-85	5.0*	1985-17	-3.4*									-3.4*
Black	Female	1975-91	4.6*	1991-17	-1.9*									-1.9*
<u>SEER 9 Observed Incidence^c for Non-Small Cell Cancer of the Lung and Bronchus^b, 1975-2017</u>														
All Races	Both Sexes	1975-80	5.2*	1980-88	1.7*	1988-00	-0.9*	2000-03	6.2*	2003-17	-1.7*			-1.7*
All Races	Male	1975-84	2.9*	1984-00	-1.7*	2000-03	4.7	2003-17	-2.5*					-2.5*
All Races	Female	1975-78	10.2*	1978-88	4.7*	1988-99	0.6	1999-05	3.8*	2005-17	-1.2*			-1.2*
White	Both Sexes	1975-79	6.1*	1979-88	1.9*	1988-00	-0.8*	2000-03	6.1*	2003-17	-1.7*			-1.7*
White	Male	1975-80	4.4*	1980-88	0.5	1988-99	-2.3*	1999-02	5.4	2002-17	-2.3*			-2.3*
White	Female	1975-78	10.4*	1978-88	4.9*	1988-00	0.7*	2000-03	7.1*	2003-17	-0.9*			-0.9*
Black	Both Sexes	1975-84	4.5*	1984-00	-1.2*	2000-03	5.8	2003-17	-2.4*					-2.4*
Black	Male	1975-84	3.9*	1984-00	-2.2*	2000-03	4.2	2003-17	-3.2*					-3.2*
Black	Female	1975-90	5.0*	1990-97	-1.5	1997-05	4.1*	2005-17	-1.9*					-1.9*

Joinpoint Regression Program Version 4.8, April 2020, 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).

^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 Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

* The 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	99.97	32.20	59.42	97.70	32.35	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	98.62	40.23	63.97	96.87	40.85	89.56	149.68	46.04
1986	65.77	99.03	42.29	65.13	97.31	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	46.13	67.57	97.06	47.26	89.11	142.77	51.49
1990	68.08	96.92	47.78	68.23	96.12	48.95	86.78	137.17	52.13
1991	69.19	97.21	49.57	68.96	95.89	50.61	93.12	144.76	57.02
1992	69.46	97.21	49.85	68.92	94.90	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	50.44	67.10	87.95	52.45	85.87	138.94	50.12
1996	66.46	87.97	51.24	66.79	86.67	52.97	84.56	128.32	55.73
1997	66.63	86.31	52.59	67.19	84.81	54.92	82.27	129.54	50.49
1998	67.55	88.03	52.98	68.00	86.59	55.02	87.52	130.87	58.30
1999	65.83	84.57	52.50	66.29	83.25	54.42	84.56	122.46	58.85
2000	64.14	82.12	51.22	64.66	80.78	53.22	80.71	115.16	57.75
2001	64.16	81.41	51.67	65.06	81.09	53.50	80.63	114.51	57.82
2002	64.06	80.44	52.50	64.79	79.85	54.23	81.48	113.10	60.71
2003	64.77	81.05	53.10	65.51	79.56	55.65	81.20	119.40	55.81
2004	62.24	76.29	52.06	62.79	75.29	53.77	76.21	105.42	57.02
2005	63.03	75.82	53.84	64.00	75.53	55.79	74.73	97.97	59.55
2006	62.30	74.30	53.46	62.83	73.10	55.34	76.75	101.10	59.96
2007	62.10	73.77	53.57	63.12	72.89	56.03	74.19	100.68	56.64
2008	60.39	72.14	51.87	61.13	70.72	54.30	75.04	103.38	56.16
2009	60.02	70.71	52.30	60.72	69.80	54.16	74.34	98.11	58.69
2010	57.78	68.05	50.16	58.96	67.98	52.20	67.18	85.65	55.02
2011	56.33	65.77	49.40	57.35	65.45	51.40	65.85	86.44	52.49
2012	55.37	64.13	48.85	55.82	63.06	50.47	69.65	89.44	56.28
2013	54.24	61.88	48.58	54.94	60.98	50.48	64.01	82.01	51.98
2014	53.36	60.35	48.20	54.78	60.45	50.68	60.37	75.07	50.67
2015	52.12	59.11	46.87	53.04	58.40	49.04	60.47	76.65	49.81
2016	51.60	58.72	46.24	52.38	57.81	48.35	59.47	75.77	48.05
2017	50.56	56.69	46.04	51.45	56.06	48.11	57.71	73.28	47.62

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.

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Table 15.6
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
1975-2017	61.21	81.45	46.27	61.64	80.94	47.48	75.91	112.05	50.79
1975-1979	56.22	94.32	28.33	55.60	93.59	28.39	72.01	125.85	30.72
1980	60.65	99.97	32.20	59.42	97.70	32.35	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	98.62	40.23	63.97	96.87	40.85	89.56	149.68	46.04
1986	65.77	99.03	42.29	65.13	97.31	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	46.13	67.57	97.06	47.26	89.11	142.77	51.49
1990	68.08	96.92	47.78	68.23	96.12	48.95	86.78	137.17	52.13
1991	69.19	97.21	49.57	68.96	95.89	50.61	93.12	144.76	57.02
1992	69.46	97.21	49.85	68.92	94.90	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	50.44	67.10	87.95	52.45	85.87	138.94	50.12
1996	66.46	87.97	51.24	66.79	86.67	52.97	84.56	128.32	55.73
1997	66.63	86.31	52.59	67.19	84.81	54.92	82.27	129.54	50.49
1998	67.55	88.03	52.98	68.00	86.59	55.02	87.52	130.87	58.30
1999	65.83	84.57	52.50	66.29	83.25	54.42	84.56	122.46	58.85
2000	64.14	82.12	51.22	64.66	80.78	53.22	80.71	115.16	57.75
2001	64.16	81.41	51.67	65.06	81.09	53.50	80.63	114.51	57.82
2002	64.06	80.44	52.50	64.79	79.85	54.23	81.48	113.10	60.71
2003	64.77	81.05	53.10	65.51	79.56	55.65	81.20	119.40	55.81
2004	62.24	76.29	52.06	62.79	75.29	53.77	76.21	105.42	57.02
2005	63.03	75.82	53.84	64.00	75.53	55.79	74.73	97.97	59.55
2006	62.30	74.30	53.46	62.83	73.10	55.34	76.75	101.10	59.96
2007	62.10	73.77	53.57	63.12	72.89	56.03	74.19	100.68	56.64
2008	60.39	72.14	51.87	61.13	70.72	54.30	75.04	103.38	56.16
2009	59.99	70.67	52.27	60.69	69.76	54.13	74.27	98.01	58.63
2010	57.73	67.98	50.11	58.90	67.91	52.15	67.04	85.48	54.92
2011	56.25	65.67	49.33	57.26	65.34	51.32	65.67	86.19	52.35
2012	55.26	64.00	48.76	55.70	62.92	50.36	69.38	89.08	56.07
2013	54.11	61.72	48.46	54.79	60.82	50.34	63.72	81.63	51.74
2014	53.20	60.17	48.06	54.61	60.25	50.52	60.01	74.61	50.37
2015	51.86	58.81	46.64	52.76	58.08	48.78	60.01	76.06	49.43
2016	51.14	58.19	45.84	51.89	57.26	47.90	58.75	74.83	47.48
2017	49.45	55.43	45.05	50.24	54.71	47.00	56.12	71.20	46.33

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

^a 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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2017	8.36	10.37	6.84	8.87	10.81	7.42	7.86	10.61	5.93
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	15.00	7.10	10.81	15.28	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	11.27	14.86	8.71	11.71	15.25	9.23	12.14	17.67	8.47
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	9.73	12.09	7.98	10.29	12.49	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	10.46	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	8.26	8.85	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	7.59	8.12	7.20	6.38	8.85	4.87
2009	7.13	7.78	6.68	7.60	8.12	7.26	7.56	8.36	7.02
2010	6.81	7.49	6.34	7.46	7.98	7.13	5.89	6.88	5.15
2011	6.28	6.86	5.86	6.77	7.10	6.56	5.28	6.44	4.49
2012	6.46	7.20	5.89	6.94	7.55	6.46	6.64	8.31	5.62
2013	6.35	7.13	5.80	6.89	7.50	6.47	5.51	6.77	4.74
2014	6.03	6.36	5.81	6.56	6.64	6.57	5.84	6.58	5.29
2015	5.93	6.25	5.71	6.42	6.54	6.38	5.78	6.28	5.38
2016	5.55	6.11	5.14	5.86	6.17	5.66	5.74	6.33	5.23
2017	5.53	5.87	5.30	5.94	6.03	5.91	5.03	5.99	4.46

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](#).
^a 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 15.8
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
1975-2017	42.19	56.03	31.81	41.98	55.06	32.22	54.85	80.90	36.49
1975-1979	34.57	57.32	17.36	33.74	55.99	17.26	48.45	86.22	19.14
1980	39.34	64.33	20.68	38.13	62.17	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	65.85	26.34	42.24	63.88	26.57	63.60	107.17	31.77
1986	43.12	64.55	27.46	42.33	62.63	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	31.36	44.14	61.91	31.67	64.83	102.15	38.08
1992	45.24	63.86	31.70	44.40	61.45	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	43.02	58.54	31.84	42.69	57.33	32.35	58.55	90.39	35.94
1995	42.41	57.08	31.68	42.20	55.56	32.61	58.29	93.15	34.32
1996	41.52	54.46	32.10	41.45	53.39	32.92	54.16	81.27	35.44
1997	41.36	54.54	31.60	41.49	53.39	32.76	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	32.46	54.31	79.49	37.09
2000	38.58	49.69	30.49	38.76	48.89	31.52	48.95	69.38	34.97
2001	46.75	60.00	36.95	47.09	59.36	37.98	60.15	86.62	42.50
2002	46.92	59.22	38.00	46.89	58.29	38.66	62.45	85.95	46.53
2003	47.37	60.04	38.09	47.60	58.54	39.72	61.64	92.24	40.86
2004	45.60	56.51	37.61	45.65	55.23	38.65	56.34	79.61	40.83
2005	46.79	56.21	39.89	46.89	55.36	40.73	58.12	75.00	46.72
2006	46.44	55.84	39.43	46.18	54.18	40.27	60.67	81.89	45.95
2007	46.38	55.37	39.67	46.49	54.00	40.90	58.79	79.68	44.77
2008	45.66	54.64	39.09	45.63	52.93	40.41	59.50	81.34	44.60
2009	44.95	52.97	39.07	45.22	52.02	40.22	56.36	75.21	43.79
2010	43.75	51.81	37.69	44.25	51.54	38.72	50.98	64.28	42.19
2011	42.91	50.02	37.57	43.12	49.19	38.55	52.72	69.93	41.41
2012	41.75	48.43	36.76	41.59	47.15	37.49	54.27	69.28	43.83
2013	40.94	46.50	36.78	41.02	45.34	37.80	49.72	64.17	40.02
2014	40.27	45.25	36.57	40.90	44.85	38.01	46.60	58.31	39.01
2015	39.08	44.50	34.95	39.21	43.50	35.95	47.49	60.92	38.48
2016	38.99	43.83	35.30	39.25	42.80	36.57	45.71	58.45	36.76
2017	38.05	42.33	34.88	38.33	41.56	36.00	44.39	55.72	36.87

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.

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

^a 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

Year of Death:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2017	50.87	72.59	34.93	51.05	71.97	35.66	57.38	91.82	33.90
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	60.06	37.94	48.11	59.93	39.17	51.15	73.52	36.27
2011	46.02	57.89	37.02	46.73	57.86	38.21	49.33	70.04	35.45
2012	44.96	56.24	36.44	45.67	56.14	37.66	48.36	68.90	34.75
2013	43.47	53.99	35.49	44.16	53.94	36.66	46.99	66.05	34.14
2014	42.24	52.00	34.76	43.03	52.09	36.02	44.76	62.56	32.82
2015	40.68	49.83	33.60	41.54	49.95	34.97	42.25	59.10	30.78
2016	38.51	46.97	31.95	39.31	47.11	33.21	40.25	55.41	29.83
2017	36.69	44.49	30.64	37.54	44.68	31.95	37.94	52.24	28.18

^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
<u>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2013-2017									
All ages	54.2	61.7	48.6	56.0	62.2	51.5	54.8	71.2	43.8
Under 65	16.1	16.9	15.4	16.2	16.5	16.0	19.7	23.2	16.7
65 and over	317.3	371.7	277.9	331.3	378.2	297.2	297.7	402.7	231.1
All ages (WHO world std) ^c	37.9	42.6	34.4	39.1	42.7	36.4	39.7	50.9	31.9
Age-Specific Rates, 2013-2017									
<1	-	-	-	-	-	-	-	-	-
1-4	0.1	-	-	0.1	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	0.1	-	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	-	-
25-29	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.6	-
30-34	1.2	1.1	1.2	1.1	1.0	1.2	1.5	1.7	1.3
35-39	2.6	2.5	2.7	2.4	2.2	2.6	3.1	3.7	2.6
40-44	6.3	5.9	6.7	6.2	5.7	6.7	6.4	7.1	5.8
45-49	16.5	15.7	17.4	16.7	15.4	18.0	18.4	18.8	18.0
50-54	42.6	41.9	43.2	42.9	40.9	44.9	52.0	56.8	47.8
55-59	84.6	88.9	80.5	85.1	87.0	83.4	108.8	126.9	93.3
60-64	134.6	150.5	120.2	136.4	147.8	125.6	163.8	209.7	126.7
65-69	215.5	242.3	191.8	222.7	242.9	204.4	230.8	301.7	176.9
70-74	318.8	355.3	288.2	334.4	360.3	312.2	310.3	417.7	234.4
75-79	390.5	451.1	343.2	410.8	463.1	369.0	359.4	476.5	283.9
80-84	406.5	489.4	348.7	425.6	501.7	371.2	342.7	471.9	270.3
85+	308.8	417.4	252.0	317.7	424.3	261.4	260.4	387.2	207.1
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2013-2017									
All ages	40.2	49.3	33.2	41.0	49.4	34.5	42.3	58.8	31.1
Under 65	11.0	12.7	9.5	11.1	12.5	9.8	13.4	17.3	10.1
65 and over	242.2	302.6	197.6	248.0	304.8	205.6	242.1	346.2	175.8
All ages (WHO world std) ^c	23.6	28.4	19.6	24.0	28.4	20.3	26.0	35.6	18.9
Age-Specific Rates, 2013-2017									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	0.0	-	-	-	-	-	-	-	-
15-19	0.0	0.0	0.0	0.0	-	-	-	-	-
20-24	0.1	0.1	0.1	0.1	0.1	0.0	0.1	-	-
25-29	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	-
30-34	0.4	0.5	0.4	0.4	0.4	0.3	0.7	1.0	0.4
35-39	1.2	1.3	1.1	1.2	1.2	1.1	1.7	2.3	1.2
40-44	3.7	3.8	3.6	3.8	3.8	3.8	3.9	4.8	3.1
45-49	10.8	11.3	10.3	11.2	11.4	10.9	11.1	13.2	9.3
50-54	29.5	32.1	27.0	29.8	31.7	27.9	35.4	42.2	29.3
55-59	60.0	69.3	51.1	60.1	67.9	52.5	75.9	96.7	58.1
60-64	93.8	114.1	75.1	94.4	112.4	77.6	115.0	157.8	80.2
65-69	146.4	177.0	119.1	148.8	175.5	124.3	167.3	236.0	114.0
70-74	222.7	268.3	183.6	228.3	269.5	192.2	234.6	331.1	164.9
75-79	288.0	351.1	237.5	296.2	354.7	248.5	283.2	400.5	206.1
80-84	332.8	419.2	271.3	341.9	425.1	281.3	306.5	437.3	232.4
85+	309.9	431.7	245.6	315.9	437.2	250.9	277.5	421.1	217.0

^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.

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

^d 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, 2013-2017									
All ages	6.0	6.4	5.6	6.6	6.8	6.4	4.8	5.6	4.2
Under 65	2.1	2.1	2.1	2.4	2.3	2.4	1.8	2.1	1.7
65 and over	32.6	36.1	30.0	35.6	38.2	33.8	25.1	30.3	21.6
Age-Specific Rates, 2013-2017									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	0.1	0.1	-	0.1	-	-	-	-	-
35-39	0.2	0.2	0.1	0.2	0.2	0.1	-	-	-
40-44	0.5	0.5	0.5	0.6	0.6	0.6	0.5	-	-
45-49	2.0	2.0	2.0	2.3	2.2	2.4	1.5	1.7	1.4
50-54	5.6	5.3	5.8	6.4	5.9	6.9	4.4	5.0	3.9
55-59	12.1	12.0	12.2	13.5	13.0	14.0	10.4	10.7	10.2
60-64	18.5	19.2	17.9	20.3	20.4	20.3	16.8	19.3	14.8
65-69	27.9	29.7	26.3	30.7	31.4	30.0	23.3	29.0	18.9
70-74	37.5	38.8	36.4	41.2	40.9	41.4	28.5	34.7	24.2
75-79	40.9	45.1	37.7	44.9	48.3	42.1	31.9	36.4	29.0
80-84	34.0	40.0	29.9	36.8	42.1	33.1	22.1	24.2	21.0
85+	16.6	24.9	12.2	17.4	25.6	13.1	13.4	20.8	10.2
<u>Non-Small Cell Cancer Lung and Bronchus^b</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2013-2017									
All ages	41.2	46.7	37.0	42.1	46.7	38.8	43.2	55.9	34.5
Under 65	12.9	13.4	12.4	12.7	12.8	12.6	16.3	19.1	14.0
65 and over	236.8	277.5	207.0	245.2	280.4	219.4	229.0	310.9	176.5
Age-Specific Rates, 2013-2017									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	0.0	-	-	-	-	-	-	-	-
15-19	0.1	0.1	0.1	0.1	0.1	0.1	-	-	-
20-24	0.3	0.2	0.3	0.2	0.2	0.3	0.4	-	-
25-29	0.5	0.5	0.6	0.5	0.5	0.6	0.4	-	-
30-34	1.0	0.9	1.1	1.0	0.8	1.1	1.2	1.3	1.2
35-39	2.3	2.1	2.5	2.1	1.9	2.4	2.6	3.0	2.4
40-44	5.4	5.0	5.8	5.2	4.7	5.8	5.3	5.9	4.8
45-49	13.7	12.7	14.6	13.5	12.2	14.8	15.7	16.2	15.4
50-54	34.3	33.4	35.2	33.8	31.9	35.7	43.9	47.2	41.1
55-59	66.8	69.9	63.9	66.0	67.1	64.9	90.5	104.8	78.2
60-64	105.7	117.8	94.7	105.5	114.2	97.3	133.0	169.2	103.7
65-69	169.9	190.1	152.0	173.5	188.5	159.8	188.1	245.1	144.8
70-74	249.8	278.3	226.0	260.0	280.3	242.5	248.7	333.7	188.7
75-79	301.6	350.0	263.8	314.4	356.2	281.0	286.4	385.8	222.3
80-84	295.9	359.3	251.7	307.8	366.7	265.8	254.2	356.9	196.7
85+	177.0	249.0	139.3	180.9	252.8	142.9	150.3	226.2	118.3

^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	11.0	15.3	12.2	11.0	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	14.9	13.2	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	13.3	18.1	12.7	10.8	15.4
2002-2004 ^b	16.1	14.2	18.4	16.5	14.4	18.9	13.3	12.7	14.1
2005-2009 ^b	18.4	15.8	21.2	18.8	16.2	21.6	15.5	13.3	18.0
2010-2016 ^b	21.8 ^f	18.3 ^f	25.5 ^f	21.9 ^f	18.5 ^f	25.5 ^f	20.4 ^f	16.9 ^f	24.1 ^f
5-Year Period Survival (Percent) ^{cd}									
2016	21.7	18.1	25.7	21.8	18.1	25.7	19.5	16.2	23.2
Stage Distribution (%) 2010-2016 ^{ce}									
All Stages									
Number of cases	262,454	137,025	125,429	211,444	109,049	102,395	30,626	16,646	13,980
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	17	15	19	18	16	20	14	12	16
Regional	22	22	22	22	22	22	22	21	23
Distant	57	59	54	56	58	54	61	63	58
Unstaged/Unknown	4	4	4	4	4	5	3	3	3
5-Year Relative Survival (Percent), 2010-2016 ^c									
Age at Diagnosis:									
Ages <45	36.6	31.2	41.7	38.1	32.8	42.9	28.8	24.4	34.1
Ages 45-54	23.5	18.6	28.7	23.6	18.6	28.8	21.5	16.8	26.7
Ages 55-64	22.0	18.2	26.8	21.9	18.2	26.6	19.8	16.2	25.0
Ages 65-74	22.2	18.6	26.4	22.4	18.7	26.4	18.8	15.6	22.8
Ages 75+	15.8	13.1	18.3	16.0	13.3	18.5	12.3	9.2	14.9
Ages <65	23.1	18.8	28.2	23.1	18.8	28.0	20.7	16.7	26.0
Ages 65+	19.1	16.1	22.2	19.3	16.2	22.3	16.2	13.3	19.2
Stage ^e :									
All Stages	20.5	17.1	24.2	20.6	17.2	24.2	18.4	15.1	22.3
Localized	59.0	53.0	64.1	59.1	53.2	64.0	54.8	46.8	61.8
Regional	31.7	28.1	35.7	31.4	27.9	35.1	30.6	27.0	34.6
Distant	5.8	4.7	7.1	5.5	4.3	6.7	6.0	5.1	7.1
Unstaged/Unknown	8.3	7.7	9.0	7.5	6.7	8.3	9.1	8.4	9.7

^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).

Based on follow-up of patients into 2017. [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.

Based on follow-up of patients into 2017.

^d Period survival provides a 2016 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).

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

^f The difference between 1975-1977 and 2010-2016 is statistically significant (p<.05).

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

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

- 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	5.0	3.9	6.6	5.1	3.8	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	7.8	6.2	5.0	7.6	6.7	4.0	10.4
1996-1998 ^a	5.8	5.3	6.5	6.0	5.5	6.6	3.6	2.6	4.5
1999-2001 ^a	5.7	4.8	6.7	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	8.5	5.3	5.3	5.1
2005-2009 ^a	6.8	5.2	8.5	6.7	5.1	8.4	6.7	4.5	8.9
2010-2016 ^a	7.0 ^e	5.7 ^e	8.2 ^e	7.0 ^e	5.7 ^e	8.2 ^e	7.5 ^e	7.1 ^e	7.8
5-Year Period Survival (Percent) ^{bc}									
2016	6.7	5.0	8.4	6.7	4.9	8.4	7.7	7.0	8.5
Stage Distribution (%) 2010-2016 ^{bd}									
All Stages									
Number of cases	33,251	16,684	16,567	28,703	14,145	14,558	3,033	1,549	1,484
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	4	4	4	4	3	4	4	4	4
Regional	20	18	22	20	18	22	19	17	21
Distant	75	77	72	75	77	72	75	77	74
Unstaged/Unknown	2	2	2	2	2	2	2	2	1
5-Year Relative Survival (Percent), 2010-2016 ^b									
Age at Diagnosis:									
Ages <45	13.3	9.6	17.2	14.0	10.9	17.3	10.6	-	-
Ages 45-54	9.7	7.0	12.1	9.4	6.4	12.0	12.1	11.6	12.8
Ages 55-64	7.8	5.7	10.0	7.8	5.6	10.0	8.0	5.9	10.1
Ages 65-74	6.2	5.5	7.0	6.2	5.3	7.1	7.1	7.9	6.2
Ages 75+	3.7	2.8	4.5	3.7	2.7	4.5	3.5	2.1	4.5
Ages <65	8.4	6.1	10.7	8.3	5.9	10.7	9.2	7.5	10.9
Ages 65+	5.2	4.5	6.0	5.2	4.3	6.0	5.8	6.1	5.5
Stage ^d :									
All Stages	6.5	5.1	7.9	6.5	5.0	7.9	7.5	6.8	8.2
Localized	27.2	25.5	28.3	27.2	25.4	28.4	34.9 ^f	37.4 ^f	32.1 ^f
Regional	16.4	14.8	17.7	16.5	14.7	18.0	17.5	16.1	18.7
Distant	2.9	2.0	3.8	2.8	1.9	3.7	3.8	3.3	4.2
Unstaged/Unknown	8.1	5.7	10.2	8.0	4.2	11.0	3.4	6.6 ^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).

Based on follow-up of patients into 2017. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^b 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.

Based on follow-up of patients into 2017.

^c Period survival provides a 2016 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).

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

^e The difference between 1975-1977 and 2010-2016 is statistically significant (p<.05).

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

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

- 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	16.7	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	16.8	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	23.3	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	17.5	24.7	14.8	12.0	18.9
2002-2004 ^a	19.6	17.0	22.8	20.4	17.7	23.7	15.0	13.9	16.6
2005-2009 ^a	22.2	18.9	26.0	23.1	19.7	26.8	17.4	14.8	20.6
2010-2016 ^a	26.5 ^e	22.1 ^e	31.2 ^e	27.0 ^e	22.5 ^e	31.8 ^e	23.4 ^e	19.0 ^e	28.1 ^e
5-Year Period Survival (Percent) ^{bc}									
2016	26.3	21.8	31.2	26.8	22.1	31.7	22.4	18.4	27.1
Stage Distribution (%) 2010-2016 ^{bd}									
All Stages									
Number of cases	199,070	104,884	94,186	157,707	82,267	75,440	24,448	13,379	11,069
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	20	17	23	21	18	24	16	14	18
Regional	24	24	23	24	25	24	24	23	24
Distant	54	57	52	53	55	51	59	62	56
Unstaged/Unknown	2	2	2	2	2	2	2	2	2
5-Year Relative Survival (Percent), 2010-2016 ^b									
Age at Diagnosis:									
Ages <45	38.7	33.3	43.7	40.6	35.0	45.6	30.1	26.1	34.8
Ages 45-54	26.4	20.8	32.3	27.0	21.2	33.0	23.0	17.5	28.7
Ages 55-64	25.7	21.2	31.4	26.0	21.6	31.6	22.1	18.2	27.8
Ages 65-74	26.7	22.2	31.7	27.2	22.7	32.2	21.6	17.5	26.7
Ages 75+	20.8	17.0	24.5	21.3	17.4	24.9	15.8	11.7	19.7
Ages <65	26.5	21.6	32.4	27.0	22.0	32.8	22.7	18.4	28.4
Ages 65+	24.0	19.9	28.3	24.4	20.3	28.7	19.4	15.4	23.8
Stage ^d :									
All Stages	24.9	20.6	29.7	25.3	21.0	30.1	21.1	17.0	26.0
Localized	63.1	56.7	68.4	63.2	57.0	68.4	58.1	49.1	65.9
Regional	35.4	30.9	40.6	35.2	30.8	40.1	33.3	29.1	38.0
Distant	6.9	5.6	8.6	6.6	5.2	8.2	6.6	5.6	8.0
Unstaged/Unknown	14.8	14.2	15.5	13.7	12.9	14.6	11.5	9.4	13.5

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).

Based on follow-up of patients into 2017. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^b 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.

Based on follow-up of patients into 2017.

^c Period survival provides a 2016 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).

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

^e The difference between 1975-1977 and 2010-2016 is statistically significant ($p < .05$).

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

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

- 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

Survival Time	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	2016				
1-year	35.3	37.1	38.4	39.3	40.5	39.8	40.1	39.7	41.6	40.7	40.0	40.5	42.0	42.0	43.3	43.8	44.5	45.0	45.6	44.7	46.9	45.8	47.9	48.0	50.2	51.8				
2-year	21.1	21.9	22.6	23.7	24.9	24.6	24.6	25.2	25.9	25.8	25.5	26.5	26.6	27.7	28.4	29.5	30.1	30.9	31.4	31.2	32.9	31.8	33.6	35.0	37.2					
3-year	16.3	16.9	17.1	18.3	19.1	19.3	19.3	19.9	19.8	20.2	19.8	20.7	20.8	22.3	22.6	23.5	24.0	24.8	25.3	25.0	26.5	25.6	27.4	28.9						
4-year	14.0	14.5	14.6	15.5	16.5	16.3	16.6	17.0	17.0	17.5	16.8	17.5	17.9	18.9	19.5	20.0	20.6	21.4	21.7	21.6	23.0	22.2	24.2							
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	19.4	20.5	19.9								
6-year	11.4	11.7	11.9	12.7	13.2	13.2	13.3	13.3	13.7	14.2	13.5	14.1	14.5	15.4	15.7	16.2	16.8	17.3	17.9	17.8	18.7									
7-year	10.7	10.8	10.9	11.6	12.3	12.1	12.2	12.2	12.7	13.0	12.4	12.9	13.3	14.1	14.6	15.1	15.4	16.0	16.6	16.2										
8-year	10.0	10.0	10.1	10.7	11.5	11.2	11.3	11.2	11.8	12.0	11.5	11.9	12.1	13.2	13.5	14.1	14.2	14.6	15.3											
9-year	9.4	9.2	9.4	9.9	10.7	10.3	10.4	10.5	11.1	11.2	10.6	11.1	11.1	11.1	12.5	12.5	12.7	13.3	13.6											
10-year	8.8	8.6	8.8	9.2	10.0	9.5	9.8	10.0	10.5	10.4	10.1	10.4	10.3	11.6	11.6	11.7	12.4													
11-year	8.3	8.2	8.2	8.6	9.4	8.8	9.2	9.4	9.7	9.8	9.4	9.5	9.8	10.8	10.9	11.2														
12-year	7.8	7.7	7.7	8.0	8.9	8.3	8.5	8.9	9.1	9.1	8.8	8.9	9.3	10.1	10.3															
13-year	7.4	7.2	7.2	7.5	8.2	7.9	8.0	8.1	8.6	8.6	8.2	8.3	8.7	9.4																
14-year	7.1	6.8	6.8	7.1	7.7	7.6	7.5	7.6	8.0	8.1	7.7	7.9	7.9																	
15-year	6.6	6.4	6.4	6.7	7.3	7.0	7.1	7.1	7.6	7.7	7.2	7.6																		
16-year	6.3	6.0	6.1	6.3	6.9	6.7	6.6	6.8	7.2	7.5	6.9																			
17-year	6.0	5.6	5.7	5.9	6.4	6.3	6.2	6.3	6.8	7.1																				
18-year	5.7	5.3	5.3	5.5	5.9	6.0	5.7	6.1	6.4																					
19-year	5.4	5.0	5.0	5.2	5.5	5.6	5.4	5.8																						
20-year	5.2	4.6	4.7	4.9	5.2	5.3	5.0																							
21-year	4.9	4.3	4.5	4.6	5.0																									
22-year	4.7	4.1	4.2	4.4	4.7																									
23-year	4.4	3.8	4.0	4.1																										
24-year	4.2	3.6	3.8																											
25-year	4.0	3.4	3.6																											
26-year	3.8	3.2	3.5																											
27-year	3.6	3.1	3.3																											
28-year	3.5	2.9	3.1																											
29-year	3.3	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- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Survival Time																										
1-year	33.4	35.2	36.4	37.1	38.2	37.9	37.8	36.7	38.4	38.5	36.7	36.9	39.5	38.8	39.7	41.1	41.0	41.8	42.5	41.0	42.6	41.6	42.7	43.9	46.9	47.8
2-year	19.5	20.2	21.0	21.6	23.1	22.9	22.9	22.7	22.8	23.7	22.2	23.2	23.8	24.7	24.7	26.9	26.2	27.7	27.5	27.4	28.6	28.0	28.0	30.9	33.3	
3-year	14.8	15.3	15.6	16.4	17.3	17.7	17.7	17.4	16.7	18.2	17.2	18.0	18.2	19.5	19.5	20.8	20.9	22.0	21.9	21.6	22.5	22.1	22.1	25.2		
4-year	12.5	12.9	13.1	13.7	14.8	14.6	15.0	14.7	14.1	15.6	14.4	15.1	15.5	16.7	16.6	17.3	17.6	18.9	18.4	18.6	19.0	18.9	19.4			
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	14.8	15.1	15.7	16.7	16.5	16.5	16.8	16.8				
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	13.5	13.2	13.9	14.3	15.2	15.1	15.2	15.3					
7-year	9.4	9.5	9.7	10.0	11.2	10.6	10.8	10.1	10.3	11.4	10.5	11.2	11.6	12.3	12.2	12.8	12.8	14.1	13.7	13.9						
8-year	8.8	8.7	9.0	9.1	10.2	9.8	10.1	9.0	9.5	10.7	9.6	10.1	10.8	11.4	11.2	11.9	11.7	12.9	12.6							
9-year	8.2	7.9	8.4	8.4	9.6	9.1	9.2	8.5	8.8	10.0	8.9	9.3	9.9	10.8	10.4	10.7	10.9	12.0								
10-year	7.6	7.4	7.9	7.9	8.8	8.2	8.6	8.0	8.3	9.2	8.4	8.7	8.9	10.0	9.5	9.6	10.0									
11-year	7.2	7.0	7.3	7.2	8.3	7.4	8.0	7.5	7.7	8.5	7.8	8.1	8.4	9.4	8.8	8.9										
12-year	6.7	6.6	6.8	6.7	8.0	6.9	7.3	7.0	7.2	7.8	7.3	7.4	8.1	8.7	8.3											
13-year	6.3	6.2	6.3	6.2	7.3	6.7	6.8	6.3	6.8	7.3	6.5	6.9	7.6	8.2												
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	6.9													
15-year	5.6	5.5	5.6	5.5	6.4	5.8	6.1	5.6	5.9	6.5	5.5	6.3														
16-year	5.3	5.0	5.3	5.1	6.2	5.5	5.7	5.2	5.8	6.3	5.3															
17-year	5.1	4.6	4.9	4.8	5.8	5.2	5.3	4.9	5.4	6.0																
18-year	4.7	4.4	4.5	4.5	5.3	4.9	4.9	4.6	5.1																	
19-year	4.5	4.1	4.2	4.3	4.6	4.6	4.5	4.5																		
20-year	4.2	3.8	3.9	4.0	4.3	4.5	4.0																			
21-year	4.1	3.5	3.6	3.7	4.1	4.1																				
22-year	3.9	3.3	3.4	3.5	3.8																					
23-year	3.7	3.1	3.2	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	2.3																							
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- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Survival Time																										
1-year	40.4	41.3	42.0	42.7	43.6	42.3	43.0	43.5	45.6	43.6	44.1	44.7	45.0	45.7	47.2	46.9	48.4	48.6	48.9	48.8	51.5	50.4	53.4	52.3	53.7	56.0
2-year	25.4	25.7	25.5	26.7	27.5	26.9	26.8	28.5	29.6	28.5	29.6	30.5	29.9	31.1	32.3	32.6	34.4	34.5	35.5	35.5	37.4	35.9	39.6	39.2	41.4	
3-year	20.3	20.5	19.7	21.1	21.6	21.4	21.3	23.0	23.6	22.7	23.0	24.0	23.8	25.4	26.1	26.6	27.4	27.8	29.0	28.7	30.8	29.5	32.9	32.8		
4-year	17.8	17.8	17.2	18.3	18.8	18.4	18.5	19.9	20.5	19.9	19.9	20.4	20.7	21.5	22.8	23.0	23.8	24.1	25.2	24.9	27.1	25.8	29.4			
5-year	16.1	16.0	15.4	16.4	16.5	16.5	16.4	17.4	18.4	17.7	17.8	17.9	18.3	19.0	20.2	20.4	21.3	21.2	23.0	22.5	24.4	23.2				
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	19.6	21.0	20.7	22.3					
7-year	14.0	13.6	12.9	13.9	13.9	14.1	14.0	14.9	15.6	15.0	14.7	15.0	15.3	16.3	17.1	17.7	18.2	17.9	19.6	18.8						
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	15.2	16.0	16.5	17.0	16.4	18.1							
9-year	12.4	11.9	11.2	12.1	12.3	12.0	11.9	13.1	13.8	12.8	12.7	13.1	12.7	14.3	14.8	15.0	16.0	15.4								
10-year	11.6	11.1	10.4	11.3	11.6	11.1	11.2	12.4	13.1	12.0	12.2	12.4	11.9	13.3	13.9	14.2	15.0									
11-year	11.1	10.6	9.8	10.6	11.0	10.7	10.6	11.9	12.2	11.3	11.5	11.3	11.4	12.3	13.1	13.7										
12-year	10.7	9.9	9.3	9.9	10.1	10.1	9.9	11.3	11.4	10.7	10.7	10.6	10.7	11.6	12.5											
13-year	10.3	9.3	8.8	9.4	9.4	9.6	9.4	10.5	10.7	10.2	10.2	9.9	9.9	10.7												
14-year	9.7	8.9	8.2	8.9	8.7	9.1	8.9	9.7	10.0	9.6	9.6	9.6	9.5	9.1												
15-year	9.2	8.4	7.8	8.4	8.4	8.7	8.3	9.1	9.6	9.2	9.2	9.2	9.0													
16-year	8.9	8.0	7.4	7.9	7.9	8.2	7.6	8.6	8.9	9.0	8.9															
17-year	8.4	7.7	7.1	7.4	7.3	7.8	7.2	8.1	8.5	8.4																
18-year	8.0	7.2	6.7	7.0	6.8	7.4	6.7	7.8	8.1																	
19-year	7.7	6.6	6.3	6.5	6.5	6.9	6.4	7.3																		
20-year	7.4	6.3	6.1	6.2	6.3	6.4	6.2																			
21-year	6.9	5.9	5.9	5.9	6.1	6.2																				
22-year	6.5	5.6	5.5	5.6	5.8																					
23-year	6.2	5.3	5.4	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	4.4																							
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, 2015-2017 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.01	6.27	4.76	Asian/ Pacific Islander	0	0.00	0.00	0.01	5.53	3.95
	10	0.00	0.01	0.03	6.33	4.81		10	0.00	0.01	0.03	5.57	3.98
	20	0.00	0.02	0.14	6.35	4.83		20	0.01	0.03	0.13	5.58	3.99
	30	0.02	0.13	0.71	6.41	4.88		30	0.02	0.12	0.51	5.60	4.00
	40	0.12	0.70	2.15	6.47	4.94		40	0.10	0.49	1.51	5.61	4.01
	50	0.60	2.08	4.46	6.51	5.01		50	0.39	1.43	3.16	5.57	4.01
	60	1.57	4.10	5.89	6.27	4.88		60	1.07	2.85	4.56	5.34	3.92
	70	2.86	4.88	-	5.32	4.30		70	1.92	3.75	-	4.58	3.59
80	2.70	-	-	3.27	2.94	80	2.18	-	-	3.16	2.84		
White	0	0.00	0.00	0.01	6.45	4.87	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	4.45	3.51
	10	0.00	0.01	0.02	6.50	4.92		10	0.00	0.00	0.01	4.49	3.56
	20	0.00	0.02	0.14	6.52	4.94		20	0.00	0.01	0.09	4.51	3.58
	30	0.02	0.13	0.71	6.57	4.99		30	0.01	0.09	0.48	4.59	3.65
	40	0.12	0.71	2.19	6.65	5.05		40	0.08	0.48	1.46	4.71	3.77
	50	0.60	2.12	4.61	6.69	5.11		50	0.42	1.44	3.20	4.82	3.91
	60	1.61	4.24	6.09	6.45	4.98		60	1.10	3.00	4.25	4.74	3.91
	70	2.98	5.06	-	5.47	4.38		70	2.17	3.60	-	4.15	3.56
80	2.79	-	-	3.34	2.98	80	1.92	-	-	2.66	2.39		
Black	0	0.00	0.00	0.01	5.54	4.30	Hispanic ^b	0	0.00	0.00	0.01	4.03	2.64
	10	0.00	0.01	0.03	5.64	4.39		10	0.00	0.00	0.02	4.06	2.66
	20	0.00	0.03	0.15	5.66	4.41		20	0.00	0.02	0.07	4.07	2.67
	30	0.02	0.15	0.83	5.73	4.48		30	0.01	0.07	0.32	4.10	2.69
	40	0.13	0.83	2.35	5.82	4.56		40	0.05	0.31	1.06	4.13	2.71
	50	0.72	2.30	4.36	5.90	4.66		50	0.26	1.02	2.44	4.15	2.73
	60	1.72	3.95	5.30	5.63	4.54		60	0.79	2.28	3.57	4.06	2.72
	70	2.67	4.27	-	4.67	3.96		70	1.63	3.06	-	3.60	2.52
80	2.26	-	-	2.83	2.70	80	1.78	-	-	2.46	1.93		

Devcan 6.7.8, April 2020, 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 (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, 2015-2017 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.01	6.57	5.22	Asian/ Pacific Islander	0	0.00	0.00	0.01	6.71	4.90
	10	0.00	0.01	0.02	6.64	5.29		10	0.00	0.01	0.02	6.76	4.94
	20	0.00	0.02	0.13	6.66	5.31		20	0.01	0.02	0.12	6.77	4.96
	30	0.02	0.13	0.71	6.75	5.39		30	0.02	0.12	0.55	6.80	4.98
	40	0.11	0.71	2.27	6.85	5.49		40	0.10	0.54	1.80	6.83	5.01
	50	0.61	2.23	4.78	6.95	5.60		50	0.45	1.72	3.91	6.84	5.03
	60	1.73	4.47	6.40	6.80	5.54		60	1.32	3.59	5.73	6.64	4.95
	70	3.19	5.44	-	5.91	4.97		70	2.48	4.82	-	5.81	4.58
80	3.17	-	-	3.83	3.53	80	2.90	-	-	4.13	3.70		
White	0	0.00	0.00	0.01	6.58	5.27	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	4.33	3.63
	10	0.00	0.01	0.02	6.65	5.33		10	0.00	0.00	0.01	4.38	3.68
	20	0.00	0.02	0.12	6.67	5.35		20	0.00	0.01	0.08	4.40	3.71
	30	0.02	0.12	0.69	6.75	5.43		30	0.01	0.08	0.43	4.50	3.81
	40	0.11	0.69	2.24	6.86	5.53		40	0.07	0.44	1.35	4.65	3.96
	50	0.60	2.20	4.80	6.96	5.63		50	0.38	1.34	3.12	4.82	4.16
	60	1.72	4.50	6.46	6.83	5.57		60	1.05	3.00	4.43	4.86	4.29
	70	3.24	5.51	-	5.94	4.99		70	2.28	3.96	-	4.47	4.05
80	3.22	-	-	3.83	3.54	80	2.38	-	-	3.09	2.68		
Black	0	0.00	0.00	0.01	6.34	5.12	Hispanic ^b	0	0.00	0.00	0.00	4.49	3.27
	10	0.00	0.01	0.03	6.46	5.23		10	0.00	0.00	0.01	4.53	3.30
	20	0.01	0.03	0.17	6.50	5.27		20	0.00	0.01	0.06	4.54	3.32
	30	0.03	0.16	0.94	6.62	5.38		30	0.01	0.06	0.31	4.59	3.35
	40	0.14	0.93	2.80	6.77	5.52		40	0.05	0.30	1.12	4.64	3.40
	50	0.83	2.79	5.25	6.93	5.70		50	0.26	1.10	2.74	4.71	3.45
	60	2.17	4.90	6.42	6.77	5.68		60	0.89	2.63	4.18	4.71	3.48
	70	3.44	5.35	-	5.79	5.06		70	1.96	3.72	-	4.32	3.30
80	2.95	-	-	3.63	3.53	80	2.32	-	-	3.11	2.58		

Devcan 6.7.8, April 2020, 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 PRCA (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, 2015-2017 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.01	6.04	4.34	Asian/ Pacific Islander	0	0.00	0.00	0.01	4.57	3.19
	10	0.00	0.01	0.03	6.09	4.38		10	0.00	0.01	0.03	4.60	3.21
	20	0.01	0.03	0.15	6.10	4.39		20	0.01	0.03	0.13	4.61	3.22
	30	0.02	0.14	0.71	6.13	4.42		30	0.03	0.13	0.47	4.61	3.22
	40	0.12	0.69	2.03	6.16	4.46		40	0.10	0.44	1.26	4.60	3.23
	50	0.58	1.94	4.18	6.15	4.48		50	0.35	1.18	2.52	4.54	3.21
	60	1.43	3.76	5.44	5.83	4.31		60	0.85	2.23	3.61	4.29	3.12
	70	2.58	4.43	-	4.85	3.76		70	1.45	2.91	-	3.63	2.84
80	2.36	-	-	2.90	2.53	80	1.67	-	-	2.50	2.26		
White	0	0.00	0.00	0.01	6.36	4.51	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	4.60	3.41
	10	0.00	0.01	0.03	6.41	4.55		10	0.00	0.00	0.01	4.64	3.45
	20	0.01	0.03	0.15	6.42	4.56		20	0.00	0.01	0.09	4.66	3.47
	30	0.02	0.15	0.74	6.44	4.59		30	0.01	0.09	0.52	4.71	3.51
	40	0.13	0.72	2.14	6.48	4.63		40	0.09	0.53	1.56	4.79	3.59
	50	0.61	2.05	4.44	6.47	4.65		50	0.45	1.52	3.29	4.85	3.68
	60	1.51	4.01	5.77	6.13	4.47		60	1.13	3.00	4.12	4.66	3.57
	70	2.76	4.70	-	5.10	3.88		70	2.07	3.31	-	3.91	3.15
80	2.48	-	-	3.00	2.58	80	1.60	-	-	2.37	2.18		
Black	0	0.00	0.00	0.01	4.89	3.61	Hispanic ^b	0	0.00	0.00	0.01	3.68	2.12
	10	0.00	0.00	0.02	4.97	3.68		10	0.00	0.01	0.02	3.71	2.14
	20	0.00	0.02	0.14	4.98	3.69		20	0.00	0.02	0.08	3.71	2.14
	30	0.02	0.14	0.74	5.01	3.71		30	0.01	0.07	0.33	3.72	2.15
	40	0.12	0.73	1.96	5.05	3.76		40	0.06	0.32	1.00	3.73	2.16
	50	0.63	1.90	3.62	5.08	3.81		50	0.26	0.96	2.20	3.72	2.16
	60	1.35	3.19	4.42	4.76	3.66		60	0.71	1.99	3.09	3.56	2.11
	70	2.11	3.52	-	3.90	3.19		70	1.38	2.56	-	3.07	1.95
80	1.87	-	-	2.38	2.23	80	1.42	-	-	2.04	1.51		

Devcan 6.7.8, April 2020, 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 (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 2013-2017			Trend 2008-2017 ^c			Trend 2008-2017 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
Race/Ethnicity	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	54.2	61.7	48.6	-2.1*	-2.9*	-1.5*	-2.2*	-2.9*	-1.6*
White	56.0	62.2	51.5	-2.1*	-2.9*	-1.5*	-2.2*	-2.9*	-1.6*
White Hispanic ^e	29.6	35.8	25.4	-2.5*	-3.6*	-1.4*	-	-	-
White Non-Hispanic ^e	60.2	66.2	55.8	-1.9*	-2.7*	-1.3*	-	-	-
Black	54.8	71.2	43.8	-2.6*	-2.9*	-1.9*	-2.8*	-3.0*	-2.1*
Asian/Pacific Islander	36.2	46.2	28.6	-0.9*	-1.6*	0.1	-	-	-
Amer Ind/Alaska Nat ^f	38.1	43.5	34.3	-1.6*	-2.1*	-1.0	-	-	-
Hispanic ^e	29.0	35.1	24.8	-2.2*	-3.2*	-1.1*	-	-	-
<u>U.S. Mortality^g</u>									
U.S. Mortality ^g	Rate 2013-2017			Trend 2008-2017 ^h					
	Rate per 100,000 persons			AAPC (%)					
	Total	Males	Females	Total	Males	Females			
All Races	40.2	49.3	33.2	-3.3*	-3.9*	-2.7*			
White	41.0	49.4	34.5	-3.2*	-3.8*	-2.6*			
White Hispanic ^e	18.5	25.5	13.4	-3.2*	-4.0*	-2.1*			
White Non-Hispanic ^e	43.4	51.8	36.8	-3.1*	-3.6*	-2.5*			
Black	42.3	58.8	31.1	-3.7*	-4.4*	-3.1*			
Asian/Pacific Islander	22.2	29.3	16.9	-2.2*	-2.9*	-1.8*			
Amer Ind/Alaska Nat									
Total U.S.	26.3	32.0	21.9	-3.0*	-4.1*	-2.9*			
PRCDA Counties	33.4	40.1	28.4	-3.1*	-3.6*	-2.1*			
Non-PRCDA Counties	18.3	23.2	14.4	-3.0*	-3.3*	-2.9*			
Hispanic ^e	17.6	24.2	12.7	-3.3*	-4.0*	-2.2*			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

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

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

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).

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

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.

The 2008-2017 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 2000-2017.

The 2008-2017 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2017.

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.

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.

The 2008-2017 mortality AAPCs are based on a Joinpoint analysis using years of death 2000-2017.

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
<u>SEER Incidence Rates^a, 2013-2017</u>									
California	41.46	46.38	37.78	42.17	45.83	39.50	50.91	60.37	44.28
Greater Bay Area	39.73	44.47	36.22	39.66	41.73	38.32	54.62	65.57	46.83
San Francisco-Oakland	40.79	45.33	37.48	40.03	41.24	39.39	57.39	69.03	49.35
San Jose-Monterey	37.66	42.82	33.73	39.01	42.57	36.44	36.85	45.54	28.93
Los Angeles	36.31	43.15	31.29	35.32	40.94	31.17	51.02	61.41	44.21
Greater California	44.35	48.43	41.28	45.43	48.77	42.97	49.06	57.01	43.08
Connecticut	59.57	64.97	55.82	60.58	65.18	57.45	54.00	70.64	43.70
Detroit	68.94	78.00	62.55	69.20	76.22	64.40	72.34	90.78	60.04
Georgia	62.79	79.04	50.58	66.44	80.41	55.60	56.01	80.49	40.02
Atlanta	50.75	60.10	44.24	52.06	58.05	47.89	51.85	69.36	41.10
Rural Georgia	64.84	89.10	46.01	63.82	81.46	48.67	66.65	112.06	38.52
Greater Georgia	68.43	87.19	54.00	71.66	88.15	58.67	59.04	87.40	39.65
Hawaii	45.71	57.25	36.25	44.98	49.10	40.66	48.34	44.19	54.12
Idaho	49.49	54.25	45.73	49.46	54.22	45.73	-	-	-
Iowa	63.27	74.73	54.55	63.22	74.44	54.72	78.21	98.53	61.97
Kentucky	91.01	108.95	77.47	92.14	110.21	78.41	84.54	101.84	73.09
Louisiana	66.21	82.62	53.55	66.00	77.91	56.84	68.44	99.13	46.73
Massachusetts	61.21	64.99	58.90	62.83	65.89	61.16	43.75	52.14	38.15
New Jersey	55.32	60.75	51.70	58.19	62.79	55.23	51.82	62.86	45.18
New Mexico	38.52	43.90	34.34	40.22	45.38	36.19	47.06	60.51	35.68
New York	58.67	66.17	53.43	62.27	68.07	58.37	46.49	59.57	38.20
Seattle-Puget Sound	55.15	60.32	51.32	56.42	60.80	53.16	57.71	68.55	49.17
Utah	25.99	30.21	22.52	25.90	30.11	22.43	42.93	41.10	45.43
SEER 9 Areas ^b	51.89	58.77	46.76	52.80	58.14	48.86	59.60	75.48	49.00
SEER 13 Areas ^b	47.77	54.65	42.65	48.56	53.94	44.59	57.30	72.02	47.43
SEER 18 Areas ^b	52.63	60.57	46.63	54.13	60.74	49.15	58.43	76.21	46.23
SEER 21 Areas ^b	54.17	61.72	48.59	56.04	62.22	51.53	54.80	71.19	43.78

^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, 2013-2017</u>									
California	29.55	34.99	25.39	30.33	34.86	26.85	37.74	47.31	30.97
Greater Bay Area	26.81	31.43	23.30	27.16	30.05	25.00	38.40	47.92	31.55
San Francisco-Oakland	27.63	32.20	24.20	27.40	29.89	25.60	40.75	51.51	33.10
San Jose-Monterey	25.20	29.95	21.53	26.73	30.33	23.93	23.42	26.88	20.56
Los Angeles	26.35	32.92	21.51	25.70	31.26	21.53	39.31	49.18	32.84
Greater California	31.93	37.11	27.91	32.94	37.51	29.39	35.91	45.37	28.64
Connecticut	34.68	39.67	31.04	35.54	39.86	32.39	31.57	45.08	23.17
Detroit	45.37	53.60	39.46	45.05	51.72	40.32	50.10	66.23	39.39
Georgia	42.64	56.73	32.13	45.01	57.62	35.22	38.42	58.19	25.70
Atlanta	33.13	42.03	26.91	33.19	39.86	28.34	35.00	50.11	25.89
Rural Georgia	47.50	66.45	33.20	46.53	61.65	33.59	49.18	78.69	31.94
Greater Georgia	46.95	62.98	34.72	49.14	63.66	37.76	40.79	63.32	25.57
Hawaii	30.49	38.97	23.53	32.33	34.70	29.91	32.57	-	-
Idaho	33.57	39.05	29.04	33.81	39.39	29.19	-	-	-
Iowa	43.20	54.04	34.87	43.16	54.01	34.85	57.35	68.57	47.27
Kentucky	63.64	80.77	50.60	64.49	81.69	51.29	57.72	75.56	46.09
Louisiana	49.65	64.52	38.15	48.83	60.04	40.01	53.61	80.86	34.68
Massachusetts	38.69	44.86	34.33	40.02	45.86	35.93	26.86	35.28	20.91
New Jersey	35.24	41.04	31.14	36.91	42.28	33.12	36.08	47.35	29.01
New Mexico	28.48	33.42	24.60	29.93	34.76	26.10	34.15	46.34	23.27
New York	35.35	42.54	30.15	37.87	44.32	33.17	28.93	39.01	22.60
Seattle-Puget Sound	35.99	41.70	31.50	37.11	42.07	33.18	36.89	47.62	27.22
Utah	18.55	22.31	15.40	18.50	22.29	15.32	34.17	-	-
SEER 9 Areas ^b	34.17	40.69	29.21	34.82	40.31	30.62	40.48	54.33	31.20
SEER 13 Areas ^b	32.08	38.57	27.16	32.66	38.11	28.48	40.00	52.88	31.37
SEER 18 Areas ^b	36.10	43.84	30.18	37.17	43.99	31.90	41.65	57.48	30.84
SEER 21 Areas ^b	36.09	43.60	30.41	37.42	44.08	32.35	37.81	52.07	28.27
Total U.S.	40.23	49.33	33.23	41.05	49.44	34.51	42.30	58.83	31.07

^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 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.

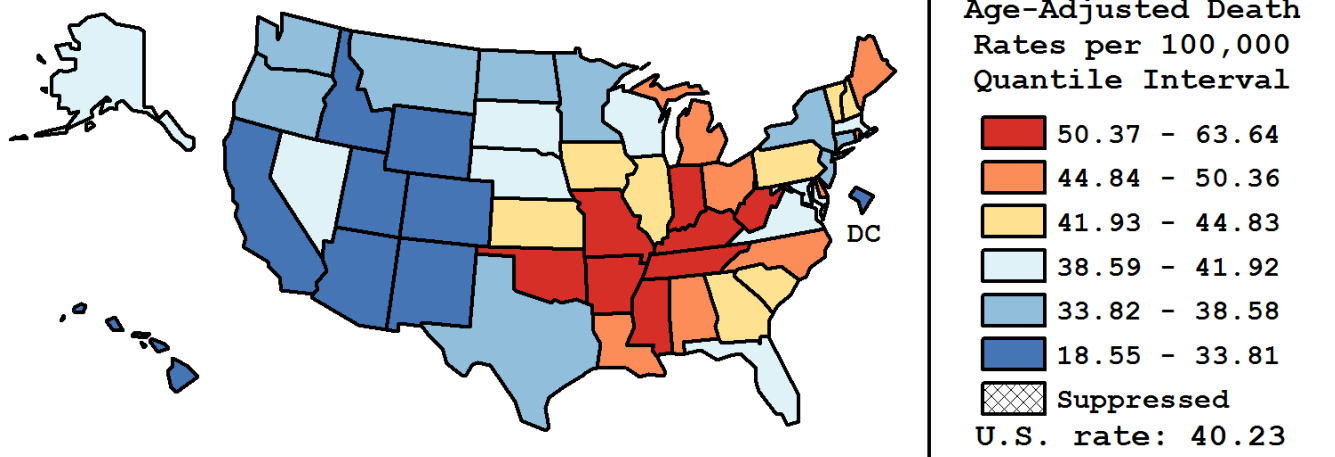
Table 15.24
Cancer of the Lung and Bronchus (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2013-2017

Males and Females

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	40.23	0.05		
High Five States				
Kentucky	63.64	0.50	01(01,01)	58.18 ^c
Arkansas	55.46	0.55	02(02,04)	37.85 ^c
West Virginia	54.90	0.66	03(02,05)	36.45 ^c
Mississippi	54.65	0.57	04(02,05)	35.83 ^c
Tennessee	53.57	0.37	05(03,06)	33.13 ^c
Low Five States				
Hawaii	30.49	0.59	47(46,49)	-24.21 ^c
California	29.55	0.12	48(47,49)	-26.56 ^c
New Mexico	28.48	0.48	49(48,50)	-29.21 ^c
Colorado	27.91	0.32	50(49,50)	-30.63 ^c
Utah	18.55	0.40	51(51,51)	-53.90 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	50.36	0.41	09(06,11)	25.17 ^c	Montana	37.27	0.76	36(30,41)	-7.38 ^c
Alaska	39.61	1.23	30(19,38)	-1.56	Nebraska	39.78	0.61	29(25,34)	-1.13
Arizona	32.88	0.28	45(43,46)	-18.27 ^c	Nevada	41.92	0.53	25(18,27)	4.18
Arkansas	55.46	0.55	02(02,04)	37.85 ^c	New Hampshire	42.49	0.72	23(17,27)	5.61 ^c
California	29.55	0.12	48(47,49)	-26.56 ^c	New Jersey	35.24	0.26	41(38,43)	-12.41 ^c
Colorado	27.91	0.32	50(49,50)	-30.63 ^c	New Mexico	28.48	0.48	49(48,50)	-8.84 ^c
Connecticut	34.68	0.40	42(39,44)	-13.80 ^c	New York	35.35	0.17	40(38,43)	-12.15 ^c
Delaware	45.02	0.87	16(13,22)	11.90 ^c	North Carolina	46.07	0.28	13(13,16)	14.49 ^c
D.C.	33.81	1.04	43(37,47)	-15.96 ^c	North Dakota	36.68	0.94	38(30,43)	-8.84 ^c
Florida	39.14	0.16	31(28,34)	-2.73	Ohio	48.45	0.26	12(10,12)	20.42 ^c
Georgia	42.64	0.29	22(18,25)	5.98 ^c	Oklahoma	52.02	0.48	06(05,08)	29.29 ^c
Hawaii	30.49	0.59	47(46,49)	-24.21 ^c	Oregon	38.58	0.40	34(29,36)	-4.11
Idaho	33.57	0.61	44(40,46)	-16.57 ^c	Pennsylvania	42.32	0.23	24(19,26)	5.17 ^c
Illinois	43.00	0.24	19(17,24)	6.86 ^c	Rhode Island	45.19	0.84	15(13,21)	12.31 ^c
Indiana	50.85	0.37	07(06,10)	26.38 ^c	South Carolina	44.83	0.39	17(13,18)	11.42 ^c
Iowa	43.20	0.48	18(17,25)	7.36 ^c	South Dakota	40.69	0.90	26(19,34)	1.13
Kansas	42.90	0.51	20(17,26)	6.61 ^c	Tennessee	53.57	0.37	05(03,06)	33.13 ^c
Kentucky	63.64	0.50	01(01,01)	58.18 ^c	Texas	35.82	0.17	39(37,41)	-10.96 ^c
Louisiana	49.65	0.44	10(07,12)	23.41 ^c	Utah	18.55	0.40	51(51,51)	-53.90 ^c
Maine	48.79	0.72	11(08,12)	21.26 ^c	Vermont	42.80	1.03	21(14,29)	6.38 ^c
Maryland	38.81	0.34	32(29,35)	-3.55	Virginia	40.40	0.30	27(25,30)	0.40
Massachusetts	38.69	0.31	33(29,35)	-3.84	Washington	37.29	0.31	35(34,38)	-7.33 ^c
Michigan	45.52	0.28	14(13,17)	13.14 ^c	West Virginia	54.90	0.66	03(02,05)	36.45 ^c
Minnesota	36.92	0.34	37(34,39)	-8.23 ^c	Wisconsin	40.14	0.34	28(26,31)	-0.23
Mississippi	54.65	0.57	04(02,05)	35.83 ^c	Wyoming	32.20	1.00	46(41,48)	-19.96 ^c
Missouri	50.81	0.37	08(06,10)	26.29 ^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 ($p \leq .0002$).

^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.

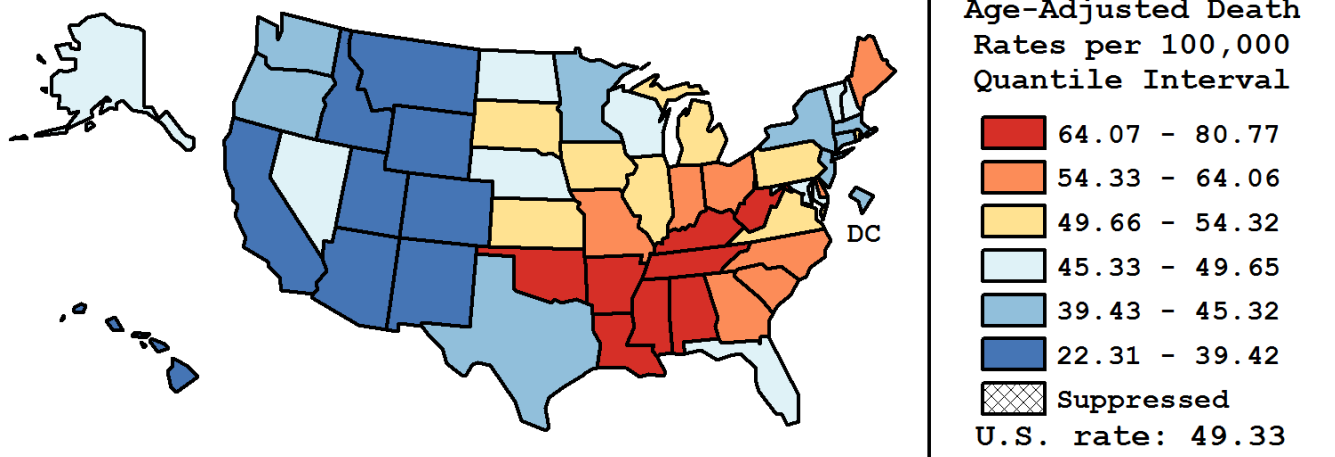
Table 15.25
Cancer of the Lung and Bronchus (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2013-2017

Males

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	49.33	0.08		
High Five States				
Kentucky	80.77	0.85	01(01,01)	63.74 ^c
Mississippi	75.51	1.03	02(02,03)	53.07 ^c
Arkansas	71.85	0.95	03(02,05)	45.66 ^c
Tennessee	69.98	0.65	04(03,06)	41.86 ^c
West Virginia	69.40	1.11	05(03,06)	40.68 ^c
Low Five States				
Wyoming	36.43	1.58	47(40,49)	-26.16 ^c
California	34.99	0.20	48(47,49)	-29.07 ^c
New Mexico	33.42	0.78	49(47,50)	-32.26 ^c
Colorado	30.94	0.52	50(49,50)	-37.27 ^c
Utah	22.31	0.64	51(51,51)	-54.78 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	68.39	0.74	06(04,06)	38.64 ^c	Montana	39.42	1.15	43(38,47)	-20.08 ^c
Alaska	45.79	1.98	32(22,42)	-7.17 ^c	Nebraska	48.38	1.01	26(22,32)	-1.92
Arizona	38.21	0.45	46(42,47)	-22.54 ^c	Nevada	45.96	0.81	31(26,36)	-6.83 ^c
Arkansas	71.85	0.95	03(02,05)	45.66 ^c	New Hampshire	48.31	1.15	27(22,34)	-2.07
California	34.99	0.20	48(47,49)	-29.07 ^c	New Jersey	41.04	0.43	40(39,43)	-16.79 ^c
Colorado	30.94	0.52	50(49,50)	-37.27 ^c	New Mexico	33.42	0.78	49(47,50)	-32.26 ^c
Connecticut	39.67	0.65	42(40,46)	-19.59 ^c	New York	42.54	0.29	39(35,40)	-13.75 ^c
Delaware	55.09	1.46	16(13,23)	11.67 ^c	North Carolina	60.03	0.50	12(11,14)	21.70 ^c
D.C.	40.25	1.76	41(32,47)	-18.41 ^c	North Dakota	45.56	1.56	33(24,40)	-7.65 ^c
Florida	47.47	0.27	29(25,31)	-3.77	Ohio	60.42	0.44	11(10,14)	22.48 ^c
Georgia	56.73	0.52	15(14,17)	15.00 ^c	Oklahoma	64.93	0.81	07(07,10)	31.63 ^c
Hawaii	38.97	0.99	45(40,47)	-20.99 ^c	Oregon	43.45	0.63	36(33,40)	-11.92 ^c
Idaho	39.05	0.97	44(40,47)	-20.84 ^c	Pennsylvania	52.50	0.38	20(18,23)	6.44 ^c
Illinois	52.37	0.41	21(18,24)	6.15 ^c	Rhode Island	53.19	1.39	19(15,25)	7.82 ^c
Indiana	64.06	0.63	09(07,10)	29.87 ^c	South Carolina	58.86	0.68	14(11,15)	19.32 ^c
Iowa	54.04	0.80	18(15,22)	9.55 ^c	South Dakota	49.95	1.48	24(17,32)	1.25
Kansas	51.91	0.84	22(17,25)	5.23 ^c	Tennessee	69.98	0.65	04(03,06)	41.86 ^c
Kentucky	80.77	0.85	01(01,01)	63.74 ^c	Texas	45.32	0.29	34(30,35)	-8.12 ^c
Louisiana	64.52	0.77	08(07,10)	30.80 ^c	Utah	22.31	0.64	51(51,51)	-54.78 ^c
Maine	59.20	1.19	13(10,16)	20.02 ^c	Vermont	49.65	1.66	25(17,34)	0.65
Maryland	46.29	0.58	30(27,35)	-6.17 ^c	Virginia	50.50	0.51	23(21,26)	2.38
Massachusetts	44.86	0.51	35(30,37)	-9.07 ^c	Washington	43.01	0.50	37(34,40)	-12.80 ^c
Michigan	54.32	0.45	17(16,20)	10.12 ^c	West Virginia	69.40	1.11	05(03,06)	40.68 ^c
Minnesota	42.62	0.55	38(35,41)	-13.61 ^c	Wisconsin	48.05	0.56	28(24,31)	-2.60
Mississippi	75.51	1.03	02(02,03)	53.07 ^c	Wyoming	36.43	1.58	47(40,49)	-26.16 ^c
Missouri	62.60	0.62	10(08,11)	26.89 ^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 ($p \leq .0002$).

^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.

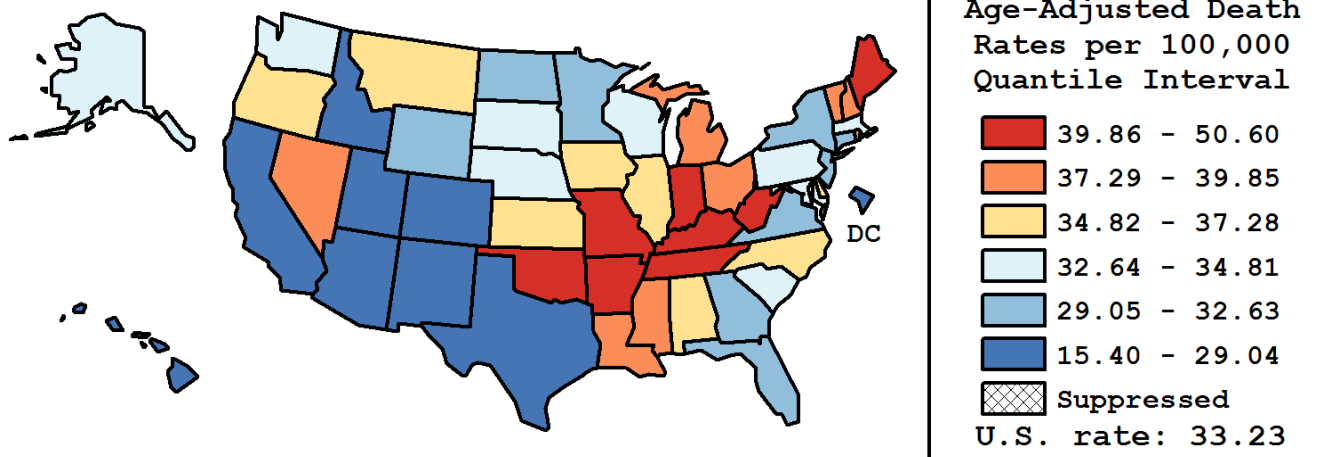
Table 15.26
Cancer of the Lung And Bronchus (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2013-2017

Females

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	33.23	0.06		
High Five States				
Kentucky	50.60	0.60	01(01,01)	52.27 ^c
West Virginia	43.64	0.81	02(02,06)	31.32 ^c
Arkansas	42.53	0.66	03(02,08)	27.96 ^c
Oklahoma	41.92	0.59	04(02,09)	26.12 ^c
Missouri	41.79	0.46	05(02,09)	25.75 ^c
Low Five States				
Colorado	25.64	0.42	47(46,49)	-22.84 ^c
California	25.39	0.15	48(46,49)	-23.59 ^c
New Mexico	24.60	0.61	49(47,50)	-25.99 ^c
Hawaii	23.53	0.71	50(47,50)	-29.20 ^c
Utah	15.40	0.49	51(51,51)	-53.65 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	36.75	0.47	18(14,23)	10.59 ^c	Montana	35.84	1.02	21(12,33)	7.85
Alaska	34.20	1.57	27(12,42)	2.90	Nebraska	33.24	0.76	32(22,39)	0.03
Arizona	28.42	0.36	46(41,46)	-14.50 ^c	Nevada	38.37	0.69	13(08,19)	15.46 ^c
Arkansas	42.53	0.66	03(02,08)	27.96 ^c	New Hampshire	38.18	0.93	14(07,22)	14.90 ^c
California	25.39	0.15	48(46,49)	-23.59 ^c	New Jersey	31.14	0.32	38(36,42)	-6.29
Colorado	25.64	0.42	47(46,49)	-22.84 ^c	New Mexico	24.60	0.61	49(47,50)	-25.99 ^c
Connecticut	31.04	0.50	39(34,43)	-6.60	New York	30.15	0.22	40(39,44)	-9.28
Delaware	37.28	1.06	17(08,28)	12.18 ^c	North Carolina	35.64	0.33	22(17,26)	7.23
D.C.	28.97	1.28	44(34,48)	-12.83 ^c	North Dakota	29.73	1.17	41(32,46)	-10.55 ^c
Florida	32.27	0.20	36(31,38)	-2.90	Ohio	39.44	0.32	10(08,14)	18.67 ^c
Georgia	32.13	0.34	37(31,39)	-3.31	Oklahoma	41.92	0.59	04(02,09)	26.12 ^c
Hawaii	23.53	0.71	50(47,50)	-29.20 ^c	Oregon	34.82	0.52	24(18,31)	4.77
Idaho	29.04	0.78	43(38,46)	-12.62 ^c	Pennsylvania	34.81	0.28	25(20,29)	4.75
Illinois	36.07	0.30	19(16,24)	8.52	Rhode Island	39.85	1.05	09(03,18)	19.91 ^c
Indiana	40.81	0.45	07(04,10)	22.79 ^c	South Carolina	34.04	0.46	29(22,34)	2.42
Iowa	34.87	0.58	23(18,32)	4.93	South Dakota	33.94	1.13	30(16,40)	2.12
Kansas	35.94	0.64	20(15,29)	8.15	Tennessee	41.07	0.44	06(03,10)	23.59 ^c
Kentucky	50.60	0.60	01(01,01)	52.27 ^c	Texas	28.46	0.20	45(41,46)	-14.37 ^c
Louisiana	38.15	0.52	15(09,18)	14.79 ^c	Utah	15.40	0.49	51(51,51)	-53.65 ^c
Maine	40.74	0.90	08(02,15)	22.60 ^c	Vermont	37.35	1.31	16(06,31)	12.37 ^c
Maryland	33.36	0.42	31(25,37)	0.37	Virginia	32.61	0.36	35(29,38)	-1.86
Massachusetts	34.33	0.39	26(21,32)	3.30	Washington	32.77	0.40	33(28,38)	-1.41
Michigan	38.83	0.34	12(08,16)	16.84 ^c	West Virginia	43.64	0.81	02(02,06)	31.32 ^c
Minnesota	32.63	0.44	34(28,38)	-1.82	Wisconsin	34.15	0.43	28(22,33)	2.75
Mississippi	39.12	0.64	11(07,17)	17.70 ^c	Wyoming	29.17	1.32	42(32,48)	-12.23 ^c
Missouri	41.79	0.46	05(02,09)	25.75 ^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 ($p \leq .0002$).

^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, 2017
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to 5	> 5 to 10	> 10 to 15	> 15 to 20	> 20 to 25	<=25 ^b		> 25 ^d	Complete ^e
<u>Race</u>	<u>Sex</u>									
All Races	Both Sexes	309,999	109,572	54,256	28,332	14,971	517,130		41,120	558,250
	Males	141,510	45,588	21,736	11,364	6,138	226,337		21,765	248,102
	Females	168,488	63,984	32,519	16,968	8,833	290,793		19,355	310,148
White	Both Sexes	258,339	93,440	46,822	24,613	12,939	436,153		24,670	460,823
	Males	116,834	38,583	18,374	9,649	5,184	188,624		11,651	200,275
	Females	141,505	54,857	28,448	14,964	7,755	247,530		13,019	260,548
Black	Both Sexes	36,049	11,452	5,411	2,605	1,499	57,017		2,802	59,819
	Males	17,097	4,951	2,443	1,198	686	26,375		1,431	27,806
	Females	18,952	6,501	2,968	1,407	813	30,642		1,371	32,013
Asian/ Pacific Islander	Both Sexes	12,447	3,592	1,679	846	379	18,944		+	+
	Males	6,106	1,598	791	397	192	9,084		+	+
	Females	6,341	1,994	889	450	187	9,860		+	+
Hispanic	Both Sexes	14,069	4,565	2,209	1,153	581	22,577		+	+
	Males	6,217	1,853	926	451	244	9,692		+	+
	Females	7,852	2,712	1,282	702	337	12,885		+	+

Estimated prevalence percent^a on January 1, 2017, of the SEER population diagnosed in the previous 25 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence		Age Specific (Crude)										Age-Adjusted ^c
		All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages
<u>Race</u>	<u>Sex</u>											
All Races	Both Sexes	0.1596	0.0004	0.0004	0.0020	0.0066	0.0250	0.1250	0.3820	0.8972	0.9877	0.1332
	Males	0.1418	0.0003	0.0005	0.0017	0.0059	0.0216	0.1058	0.3676	0.8840	1.0532	0.1308
	Females	0.1768	0.0004	0.0003	0.0022	0.0072	0.0285	0.1434	0.3950	0.9082	0.9470	0.1361
White	Both Sexes	0.1724	0.0003	0.0005	0.0021	0.0069	0.0250	0.1196	0.3744	0.9105	1.0089	0.1336
	Males	0.1504	0.0002	0.0006	0.0016	0.0061	0.0211	0.0990	0.3515	0.8760	1.0544	0.1284
	Females	0.1939	0.0004	0.0004	0.0026	0.0077	0.0291	0.1398	0.3956	0.9400	0.9801	0.1389
Black	Both Sexes	0.1252	0.0007	0.0003	0.0017	0.0051	0.0249	0.1695	0.4765	0.9086	0.8480	0.1408
	Males	0.1207	0.0008	0.0005	0.0023	0.0055	0.0248	0.1530	0.5204	1.0559	1.0662	0.1584
	Females	0.1294	0.0005	-	0.0012	0.0046	0.0249	0.1839	0.4414	0.8056	0.7391	0.1300
Asian/ Pacific Islander	Both Sexes	0.0908	-	-	0.0012	0.0056	0.0238	0.0995	0.2915	0.6085	0.7913	0.0997
	Males	0.0909	-	-	0.0013	0.0038	0.0200	0.0972	0.3137	0.6950	0.9516	0.1109
	Females	0.0908	-	-	0.0010	0.0072	0.0271	0.1016	0.2737	0.5393	0.6868	0.0917
Hispanic	Both Sexes	0.0388	0.0001	0.0002	0.0015	0.0042	0.0131	0.0543	0.1617	0.4417	0.5334	0.0653
	Males	0.0330	0.0001	0.0002	0.0011	0.0031	0.0109	0.0454	0.1456	0.4429	0.6119	0.0655
	Females	0.0448	0.0002	0.0002	0.0019	0.0054	0.0154	0.0631	0.1760	0.4408	0.4847	0.0661

^a US 2017 cancer prevalence counts are based on 2017 cancer prevalence proportions from the SEER 13 Areas (excluding the Alaska Native Registry) and 1/1/2017 US population estimates based on the average of 2016 and 2017 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 25 years. Maximum limited-duration prevalence is 25 years for 1992-2017 data.

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

^d Cases diagnosed more than 25 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000).

^e Complete prevalence is obtained by summing <=25 and > 25.

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

+ Not available.

Table 15.28

Cancer of the Lung and Bronchus (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2013-2017
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	47.8	319,082	99.8%	261,850	99.8%	34,890	99.8%	19,767	99.8%	1,089	99.8%	19,717	99.5%
Small cell (8002,8041-8045)	5.9	39,968	12.5%	34,951	13.3%	3,409	9.7%	1,335	6.7%	153	14.0%	2,029	10.2%
Non-small cell	40.5	269,735	84.3%	219,330	83.6%	30,289	86.6%	17,918	90.4%	886	81.2%	17,018	85.9%
Squamous and transitional cell ^d	10.9	72,205	22.6%	60,448	23.0%	8,247	23.6%	2,876	14.5%	326	29.9%	3,818	19.3%
Adenocarcinoma ^e	24.1	161,224	50.4%	128,729	49.0%	17,900	51.2%	13,318	67.2%	450	41.2%	10,664	53.8%
Large cell ^f	0.6	4,150	1.3%	3,361	1.3%	583	1.7%	183	0.9%	-	-	226	1.1%
Non-small cell carcinoma ^g	2.2	14,719	4.6%	11,919	4.5%	1,909	5.5%	765	3.9%	56	5.1%	929	4.7%
Other specified carcinomas ^h	2.6	17,437	5.5%	14,873	5.7%	1,650	4.7%	776	3.9%	46	4.2%	1,381	7.0%
Carcinoma, NOS ⁱ	1.4	9,379	2.9%	7,569	2.9%	1,192	3.4%	514	2.6%	50	4.6%	670	3.4%
Sarcoma ^j	0.1	496	0.2%	413	0.2%	47	0.1%	30	0.2%	-	-	68	0.3%
Other specified types ^k	0.0	269	0.1%	217	0.1%	34	0.1%	16	0.1%	-	-	28	0.1%
Total	47.9	319,847	100.0%	262,480	100.0%	34,971	100.0%	19,813	100.0%	1,091	100.0%	19,813	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).

Percentages 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.

^k 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.

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

- 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, 2013-2017
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	54.0	161,700	99.7%	130,845	99.7%	18,645	99.8%	10,935	99.8%	521	99.8%	10,085	99.5%
Small cell (8002,8041-8045)	6.3	19,443	12.0%	16,658	12.7%	1,693	9.1%	952	8.7%	77	14.8%	1,051	10.4%
Non-small cell	46.0	137,085	84.6%	110,067	83.9%	16,269	87.1%	9,672	88.2%	416	79.7%	8,664	85.5%
Squamous and transitional cell ^d	14.9	44,189	27.3%	36,643	27.9%	5,052	27.0%	2,118	19.3%	184	35.2%	2,363	23.3%
Adenocarcinoma ^e	24.9	74,619	46.0%	58,655	44.7%	8,949	47.9%	6,477	59.1%	172	33.0%	5,079	50.1%
Large cell ^f	0.8	2,357	1.5%	1,862	1.4%	353	1.9%	128	1.2%	-	-	137	1.4%
Non-small cell carcinoma ^g	2.8	8,320	5.1%	6,580	5.0%	1,151	6.2%	517	4.7%	34	6.5%	497	4.9%
Other specified carcinomas ^h	2.5	7,600	4.7%	6,327	4.8%	764	4.1%	432	3.9%	23	4.4%	588	5.8%
Carcinoma, NOS ⁱ	1.8	5,172	3.2%	4,120	3.1%	683	3.7%	311	2.8%	28	5.4%	370	3.7%
Sarcoma ^j	0.1	297	0.2%	252	0.2%	24	0.1%	17	0.2%	-	-	35	0.3%
Other specified types ^k	0.0	133	0.1%	104	0.1%	20	0.1%	-	-	-	-	-	-
Total	54.2	162,130	100.0%	131,201	100.0%	18,689	100.0%	10,960	100.0%	522	100.0%	10,131	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).

Percentages 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.

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

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

^e 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.

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

^g Non-small cell carcinoma includes histology 8046.

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

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

^j 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.

^k 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.

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

- 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, 2013-2017
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	43.1	157,382	99.8%	131,005	99.8%	16,245	99.8%	8,832	99.8%	568	99.8%	9,632	99.5%
Small cell (8002,8041-8045)	5.6	20,525	13.0%	18,293	13.9%	1,716	10.5%	383	4.3%	76	13.4%	978	10.1%
Non-small cell	36.4	132,650	84.1%	109,263	83.2%	14,020	86.1%	8,246	93.1%	470	82.6%	8,354	86.3%
Squamous and transitional cell ^d	7.7	28,016	17.8%	23,805	18.1%	3,195	19.6%	758	8.6%	142	25.0%	1,455	15.0%
Adenocarcinoma ^e	23.7	86,605	54.9%	70,074	53.4%	8,951	55.0%	6,841	77.3%	278	48.9%	5,585	57.7%
Large cell ^f	0.5	1,793	1.1%	1,499	1.1%	230	1.4%	55	0.6%	-	-	89	0.9%
Non-small cell carcinoma ^g	1.8	6,399	4.1%	5,339	4.1%	758	4.7%	248	2.8%	22	3.9%	432	4.5%
Other specified carcinomas ^h	2.7	9,837	6.2%	8,546	6.5%	886	5.4%	344	3.9%	23	4.0%	793	8.2%
Carcinoma, NOS ⁱ	1.1	4,207	2.7%	3,449	2.6%	509	3.1%	203	2.3%	22	3.9%	300	3.1%
Sarcoma ^j	0.1	199	0.1%	161	0.1%	23	0.1%	-	-	-	-	33	0.3%
Other specified types ^k	0.0	136	0.1%	113	0.1%	-	-	-	-	-	-	17	0.2%
Total	43.2	157,717	100.0%	131,279	100.0%	16,282	100.0%	8,853	100.0%	569	100.0%	9,682	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).

Percentages 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.

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

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

^e 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.

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

^g Non-small cell carcinoma includes histology 8046.

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

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

^j 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.

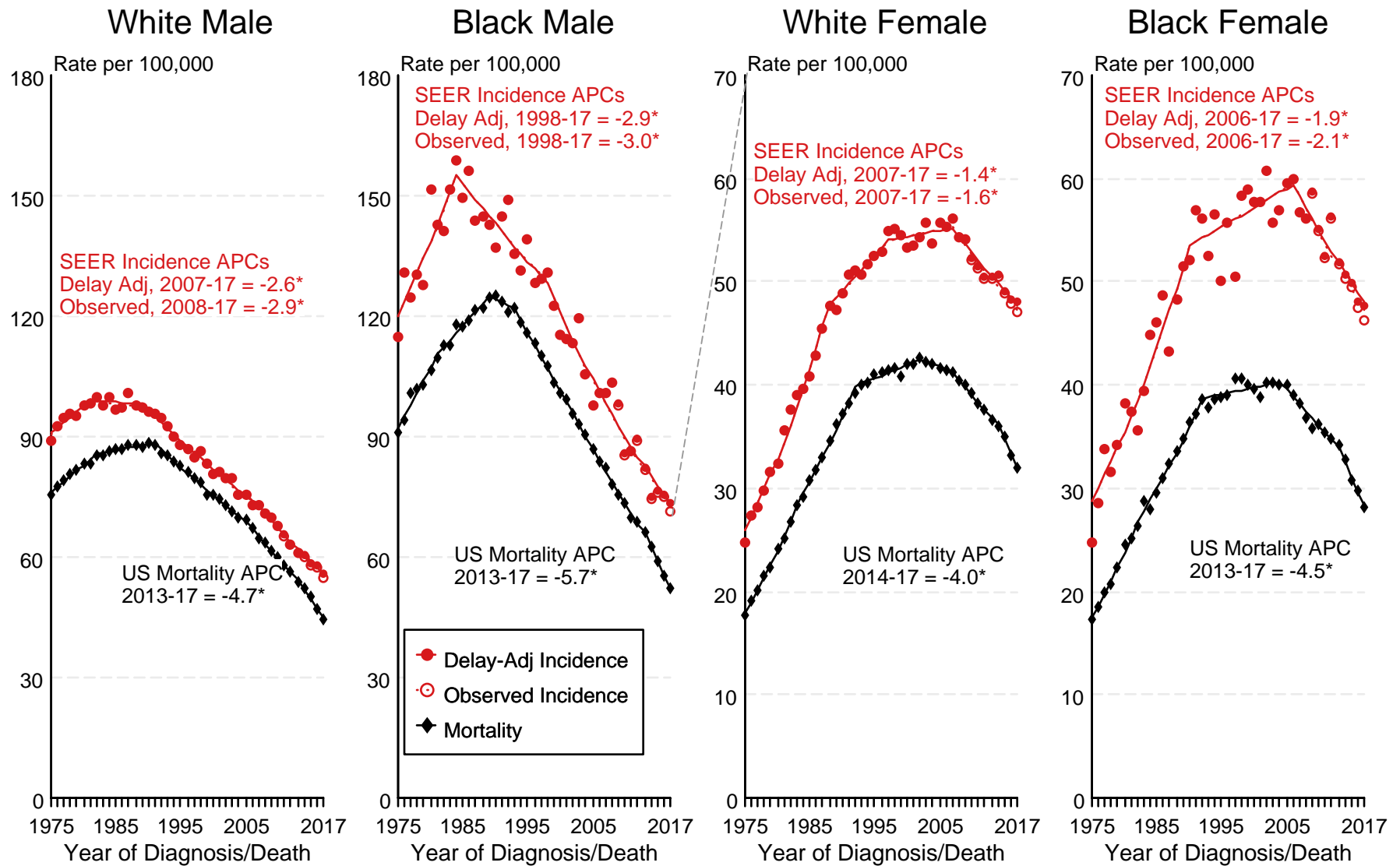
^k Other specific types includes melanomas and is defined as histologies 8580, 8650, 8720-8790, 8933, 8963, 8972-8973, 8980-8982, 9064-9065, 9070, 9080, 9084-9085, 9100, 9260, 9364, 9503, 9530.

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

- 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



Source: SEER 9 areas and 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).

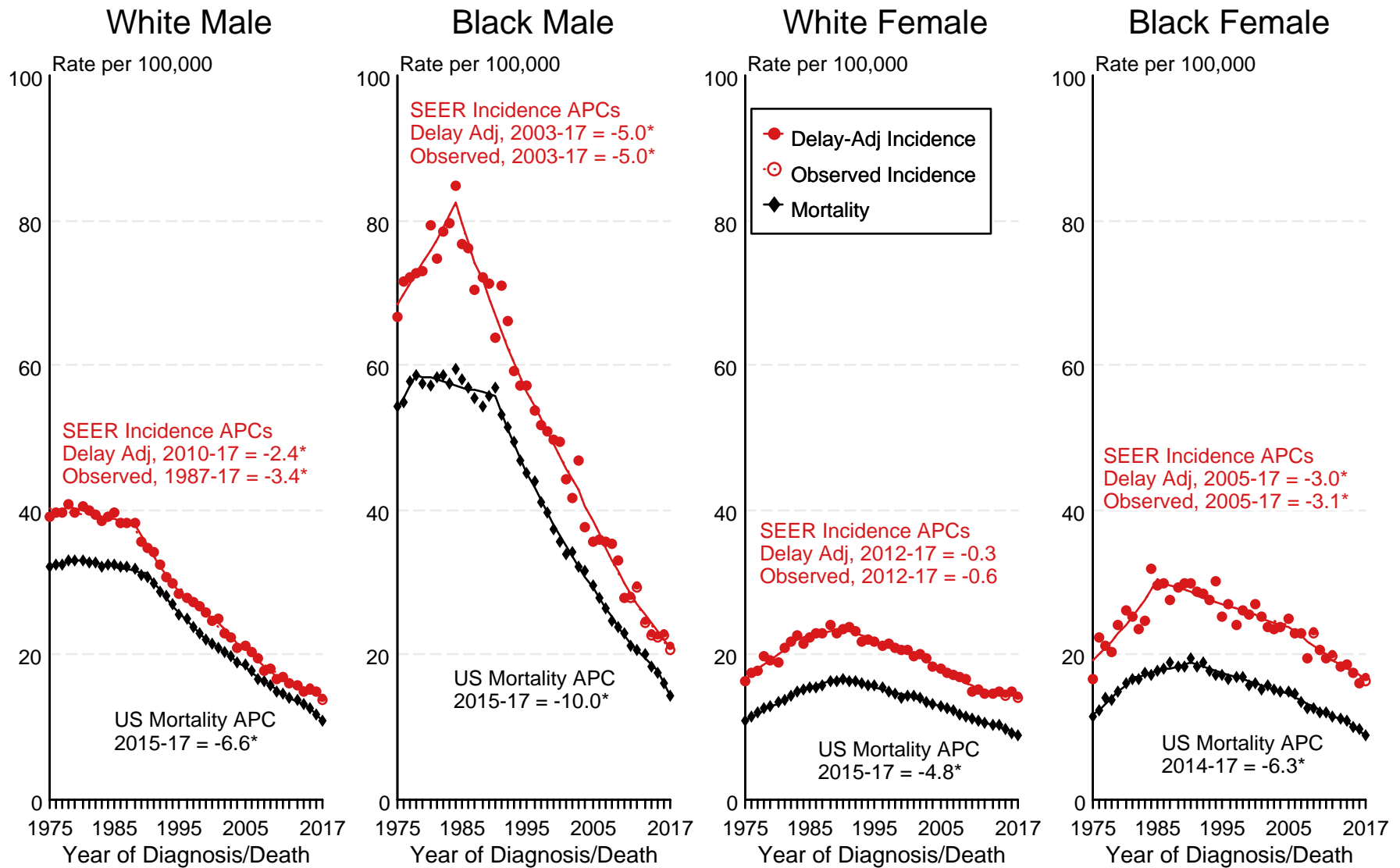
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

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



Source: SEER 9 areas and 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).

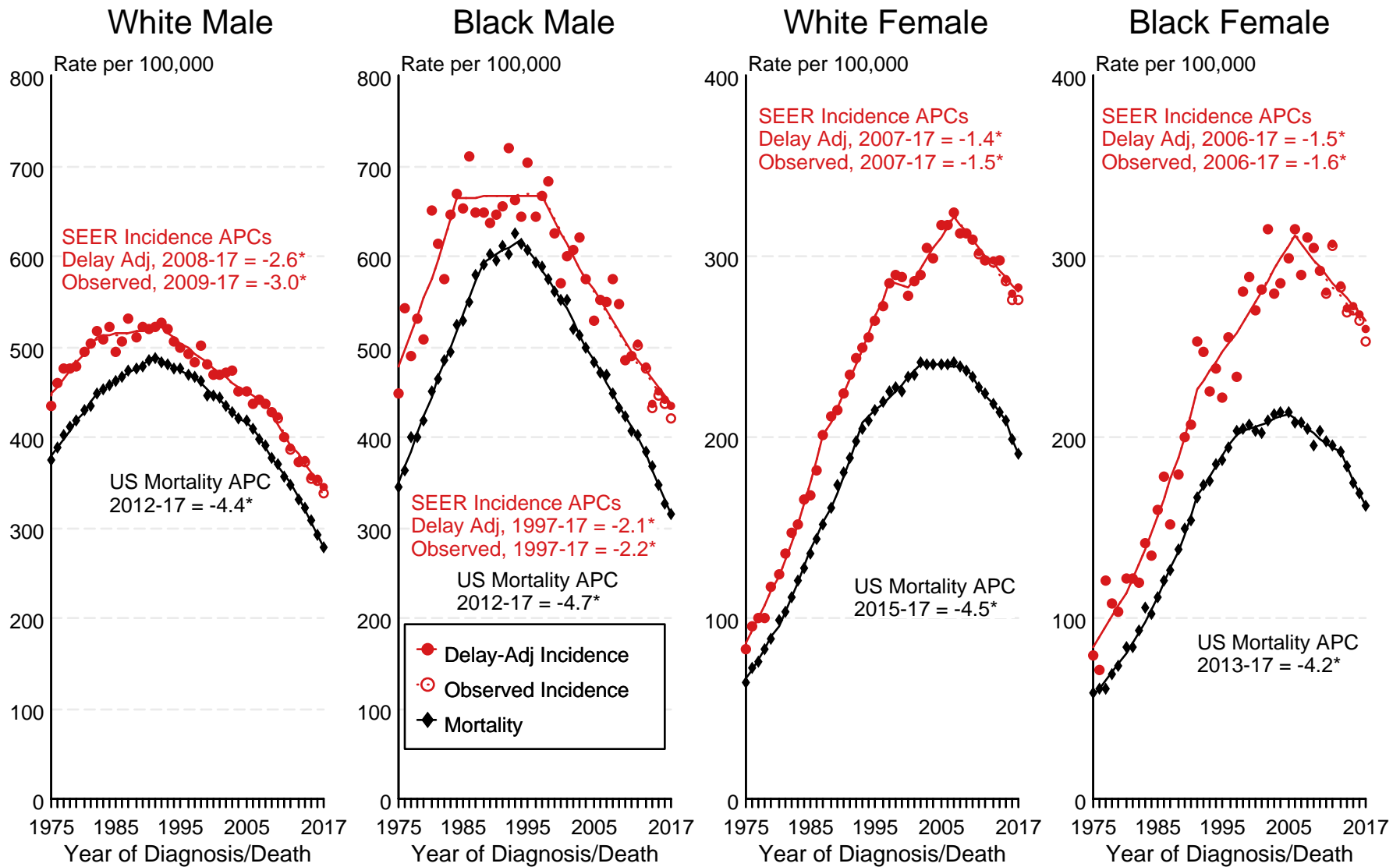
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

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



Source: SEER 9 areas and 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 and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

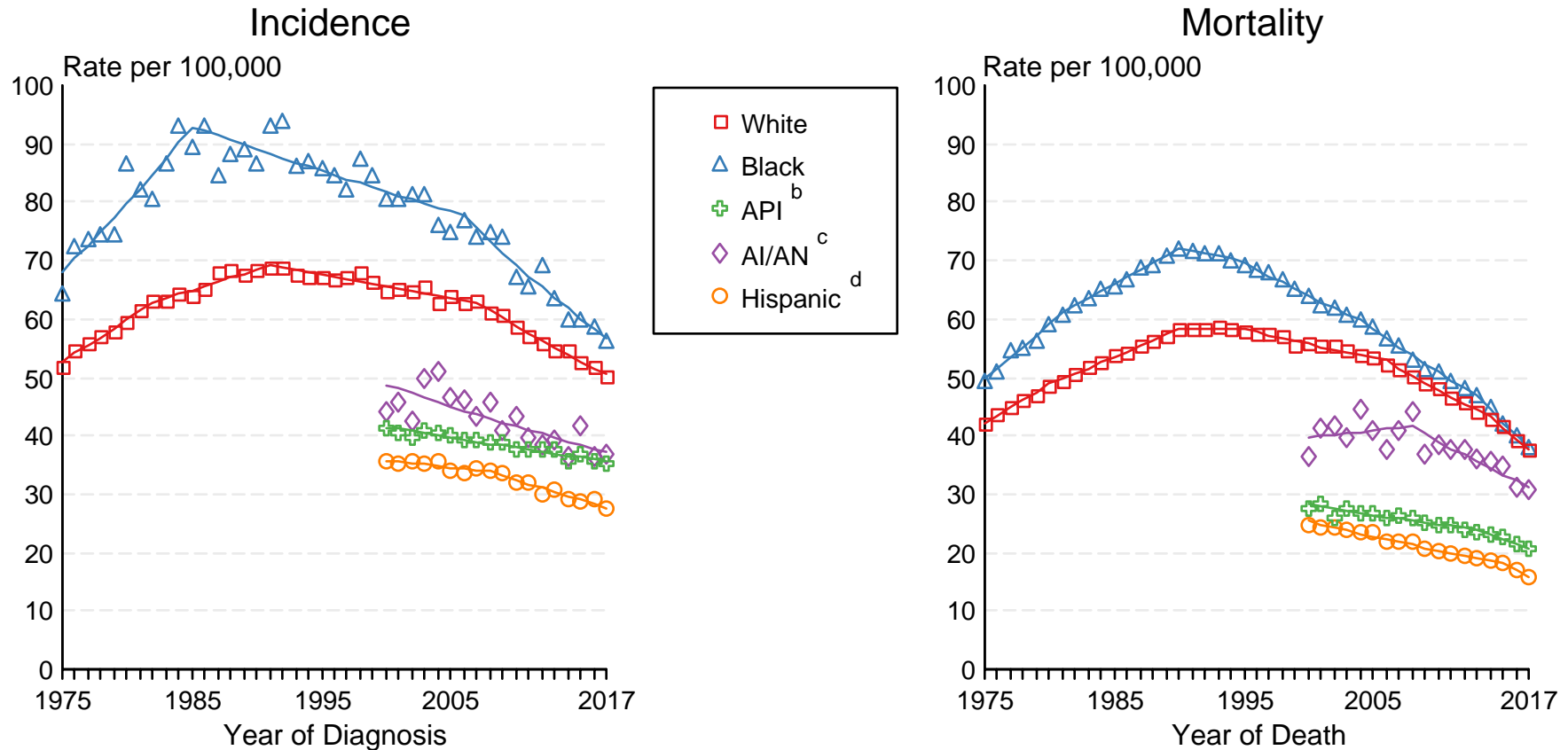
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* 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 1975-2017
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 2000-2017



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 4.8, April 2020, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2017 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 2000-2017 allow a maximum of 3 joinpoints.

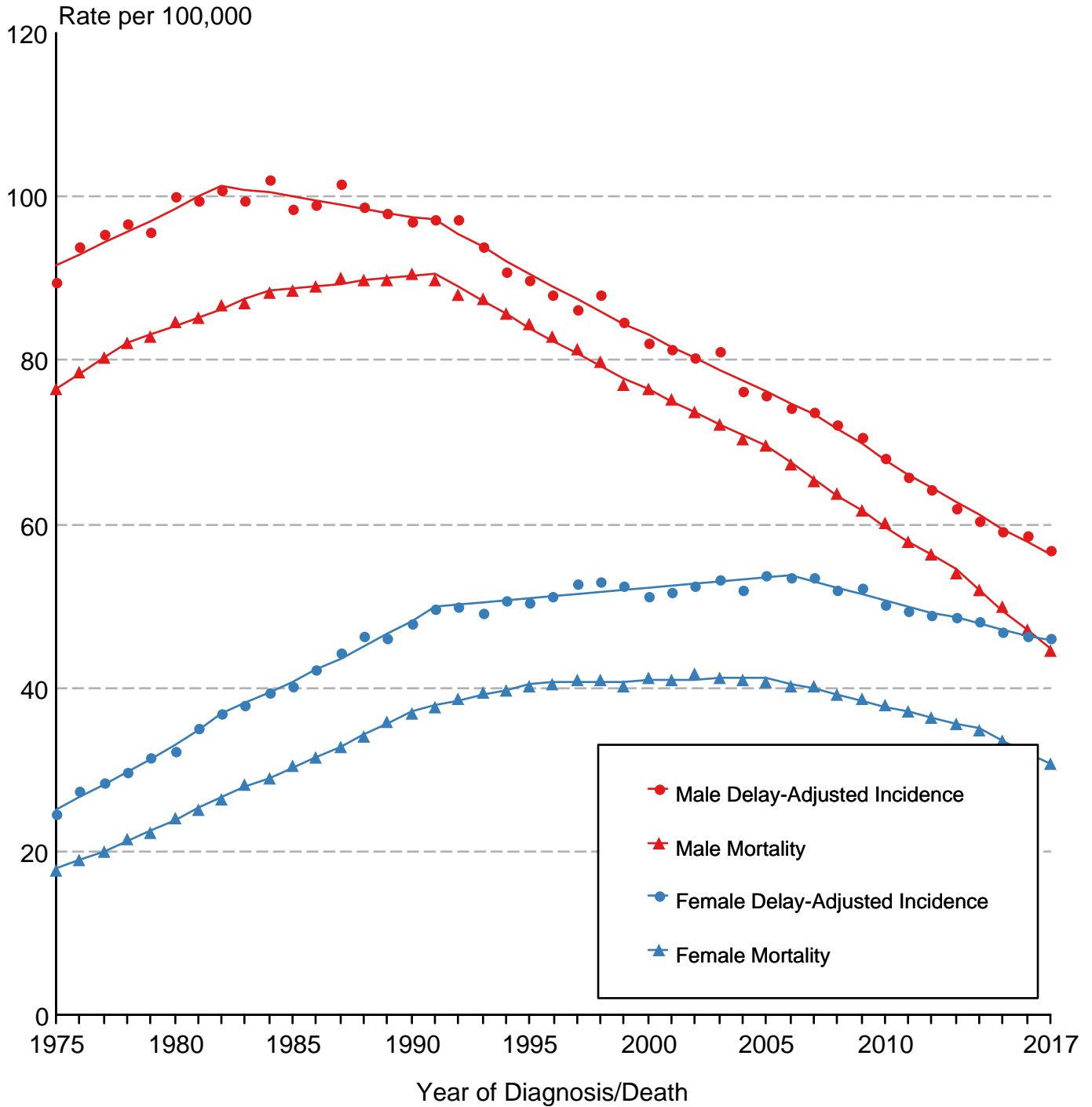
^b API = Asian/Pacific Islander.

^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

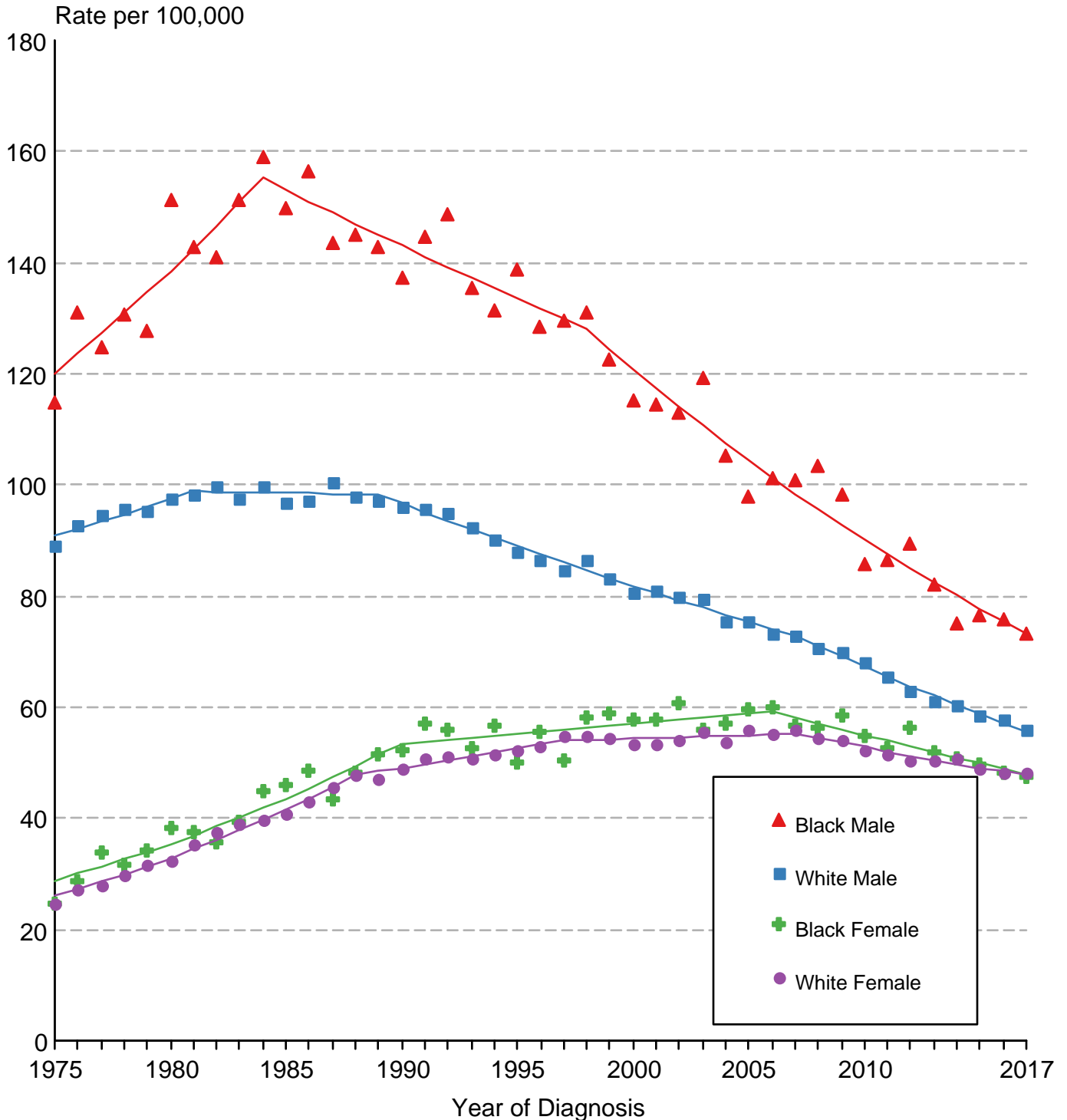
Cancer of the Lung & Bronchus SEER Delay-Adjusted Incidence & US Death Rates, 1975-2017, All Races, By Sex



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 4.8, April 2020, National Cancer Institute.

Figure 15.6

Cancer of the Lung & Bronchus SEER Delay-Adjusted Incidence, 1975-2017 By Sex and Race

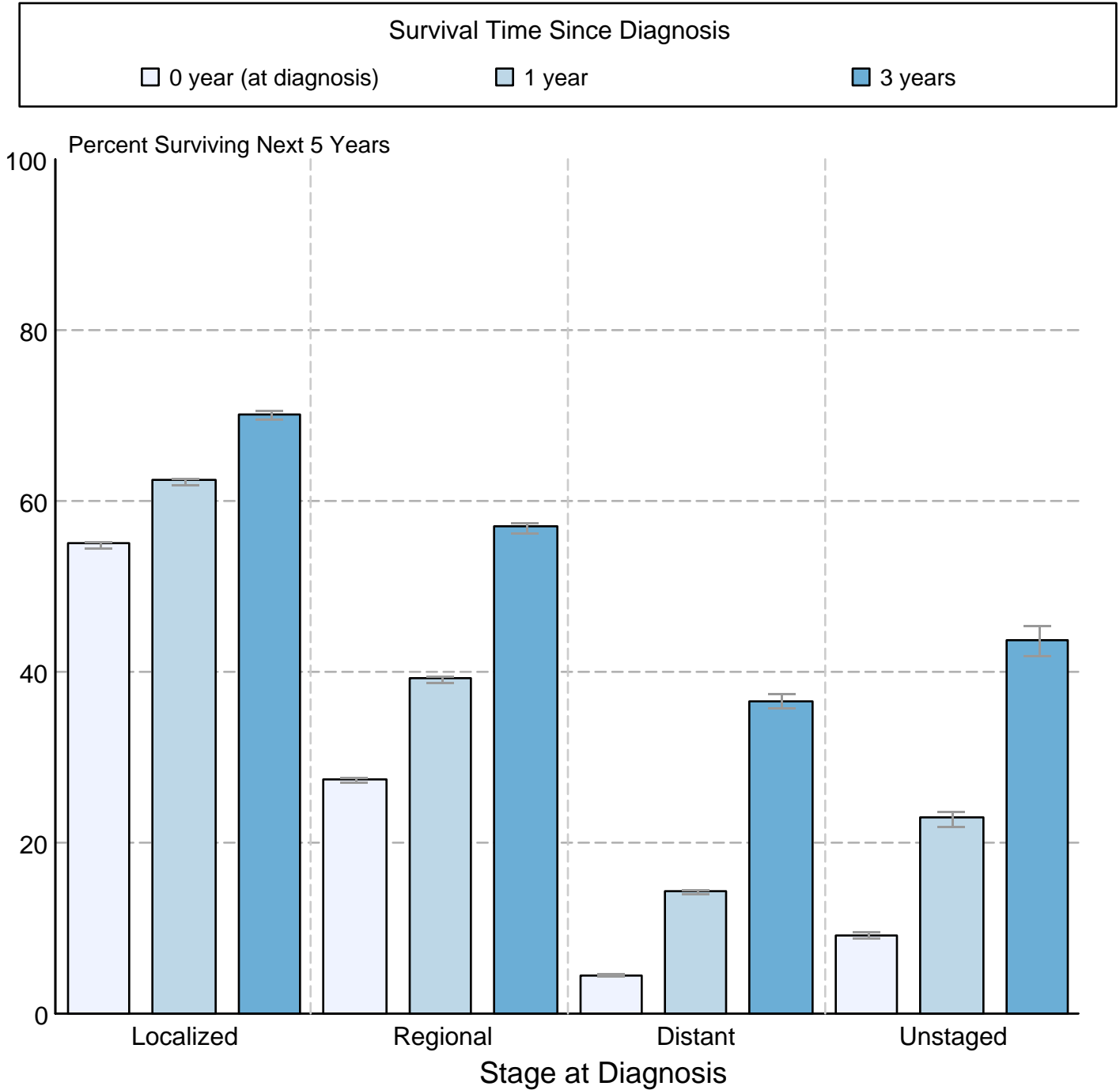


Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

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.