

Table 15.1  
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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 <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2005-14	2010-14
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2014</u>														
All Races	1975-82	2.5*	1982-91	0.9*	1991-07	-0.7*	2007-14	-2.1*					-1.8*	-2.1*
White	1975-82	2.6*	1982-91	1.1*	1991-07	-0.6*	2007-14	-2.1*					-1.7*	-2.1*
Black	1975-85	3.2*	1985-08	-0.9*	2008-14	-3.4*							-2.6*	-3.4*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2014</u>														
All Races	1992-07	-1.0*	2007-14	-2.3*									-2.0*	-2.3*
White	1992-07	-0.9*	2007-14	-2.3*									-2.0*	-2.3*
Black	1992-09	-1.3*	2009-14	-3.8*									-2.7*	-3.8*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2014</u>														
All Races	1975-82	2.5*	1982-91	0.9*	1991-07	-0.7*	2007-14	-2.3*					-2.0*	-2.3*
White	1975-82	2.6*	1982-91	1.1*	1991-07	-0.6*	2007-14	-2.3*					-1.9*	-2.3*
Black	1975-85	3.2*	1985-08	-0.9*	2008-14	-3.7*							-2.8*	-3.7*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2014</u>														
All Races	1992-08	-1.0*	2008-14	-2.8*									-2.2*	-2.8*
White	1992-07	-0.9*	2007-14	-2.5*									-2.2*	-2.5*
White NH <sup>ef</sup>	1992-07	-0.7*	2007-14	-2.4*									-2.0*	-2.4*
Black	1992-09	-1.3*	2009-14	-4.3*									-3.0*	-4.3*
Black NH <sup>ef</sup>	1992-09	-1.3*	2009-14	-4.2*									-2.9*	-4.2*
API <sup>e</sup>	1992-05	-0.4	2005-14	-1.7*									-1.7*	-1.7*
AI/AN <sup>eg</sup>	1992-10	-0.3	2010-14	-8.8									-4.1*	-8.8
Hispanic <sup>f</sup>	1992-14	-1.4*											-1.4*	-1.4*
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2014</u>														
All Races	1975-80	3.0*	1980-90	1.8*	1990-95	-0.2	1995-05	-1.0*	2005-10	-2.2*	2010-14	-2.8*	-2.5*	-2.8*
White	1975-80	2.9*	1980-90	1.8*	1990-95	-0.1	1995-05	-0.8*	2005-10	-2.1*	2010-14	-2.8*	-2.4*	-2.8*
Black	1975-81	3.5*	1981-90	1.9*	1990-95	-0.7*	1995-04	-1.7*	2004-14	-2.7*			-2.7*	-2.7*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2014</u>														
All Races	1992-03	-0.8*	2003-08	-1.7*	2008-14	-2.7*							-2.4*	-2.7*
White	1992-03	-0.7*	2003-08	-1.6*	2008-14	-2.6*							-2.3*	-2.6*
White NH <sup>ef</sup>	1992-03	-0.5*	2003-08	-1.5*	2008-14	-2.5*							-2.1*	-2.5*
Black	1992-97	-1.1*	1997-05	-1.8*	2005-14	-2.8*							-2.8*	-2.8*
Black NH <sup>ef</sup>	1992-96	-0.9*	1996-05	-1.7*	2005-14	-2.7*							-2.7*	-2.7*
API <sup>e</sup>	1992-09	-1.1*	2009-14	-2.1*									-1.7*	-2.1*
AI/AN <sup>eg</sup>	1992-14	-0.4											-0.4	-0.4
Hispanic <sup>f</sup>	1992-95	1.5	1995-05	-1.3*	2005-14	-2.6*							-2.6*	-2.6*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

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

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

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

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) 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<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four Joinpoints,  
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2005-14	2010-14
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2014</u>														
All Races	1975-82	1.5*	1982-91	-0.5*	1991-08	-1.7*	2008-14	-2.9*					-2.5*	-2.9*
White	1975-81	1.5*	1981-90	-0.2	1990-08	-1.7*	2008-14	-2.8*					-2.4*	-2.8*
Black	1975-84	2.9*	1984-98	-1.4*	1998-14	-2.8*							-2.8*	-2.8*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2014</u>														
All Races	1992-08	-1.9*	2008-14	-3.1*									-2.7*	-3.1*
White	1992-09	-1.9*	2009-14	-3.2*									-2.6*	-3.2*
Black	1992-14	-2.7*											-2.7*	-2.7*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2014</u>														
All Races	1975-82	1.5*	1982-91	-0.5*	1991-09	-1.7*	2009-14	-3.5*					-2.7*	-3.5*
White	1975-81	1.5*	1981-90	-0.2	1990-09	-1.7*	2009-14	-3.4*					-2.6*	-3.4*
Black	1975-84	2.9*	1984-98	-1.4*	1998-14	-2.9*							-2.9*	-2.9*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2014</u>														
All Races	1992-09	-1.9*	2009-14	-3.7*									-2.9*	-3.7*
White	1992-09	-1.9*	2009-14	-3.6*									-2.8*	-3.6*
White NH <sup>ef</sup>	1992-09	-1.8*	2009-14	-3.4*									-2.7*	-3.4*
Black	1992-09	-2.4*	2009-14	-5.4*									-4.1*	-5.4*
Black NH <sup>ef</sup>	1992-09	-2.4*	2009-14	-5.3*									-4.0*	-5.3*
API <sup>e</sup>	1992-06	-0.8*	2006-14	-2.7*									-2.5*	-2.7*
AI/AN <sup>eg</sup>	1992-14	-1.7*											-1.7*	-1.7*
Hispanic <sup>f</sup>	1992-14	-2.1*											-2.1*	-2.1*
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2014</u>														
All Races	1975-78	2.4*	1978-84	1.2*	1984-91	0.3*	1991-05	-1.9*	2005-12	-3.0*	2012-14	-3.9*	-3.2*	-3.5*
White	1975-80	1.9*	1980-87	0.7*	1987-91	0.1	1991-05	-1.7*	2005-11	-2.8*	2011-14	-3.6*	-3.1*	-3.4*
Black	1975-77	4.9*	1977-84	2.3*	1984-90	1.2*	1990-94	-1.2*	1994-04	-2.7*	2004-14	-3.5*	-3.5*	-3.5*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2014</u>														
All Races	1992-05	-1.9*	2005-14	-3.1*									-3.1*	-3.1*
White	1992-06	-1.8*	2006-14	-3.1*									-3.0*	-3.1*
White NH <sup>ef</sup>	1992-06	-1.6*	2006-14	-3.0*									-2.9*	-3.0*
Black	1992-94	-0.9	1994-04	-2.7*	2004-14	-3.5*							-3.5*	-3.5*
Black NH <sup>ef</sup>	1992-94	-0.6	1994-04	-2.7*	2004-14	-3.4*							-3.4*	-3.4*
API <sup>e</sup>	1992-08	-1.4*	2008-14	-3.0*									-2.5*	-3.0*
AI/AN <sup>eg</sup>	1992-14	-1.2*											-1.2*	-1.2*
Hispanic <sup>f</sup>	1992-94	3.2	1994-05	-1.9*	2005-14	-3.4*							-3.4*	-3.4*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

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

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

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

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) 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<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four Joinpoints,  
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2005-14	2010-14
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2014</u>														
All Races	1975-82	5.6*	1982-91	3.4*	1991-06	0.5*	2006-14	-1.4*					-1.2*	-1.4*
White	1975-88	4.8*	1988-97	1.4*	1997-07	0.2	2007-14	-1.5*					-1.1*	-1.5*
Black	1975-90	4.2*	1990-06	0.6*	2006-14	-1.7*							-1.5*	-1.7*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2014</u>														
All Races	1992-06	0.1	2006-14	-1.6*									-1.4*	-1.6*
White	1992-98	0.9*	1998-01	-1.4	2001-07	0.3	2007-12	-2.3*	2012-14	0.0			-1.2*	-1.2
Black	1992-05	0.8*	2005-14	-1.7*									-1.7*	-1.7*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2014</u>														
All Races	1975-82	5.6*	1982-91	3.4*	1991-06	0.5*	2006-14	-1.6*					-1.4*	-1.6*
White	1975-82	5.6*	1982-88	4.2*	1988-97	1.5*	1997-07	0.2	2007-14	-1.7*			-1.3*	-1.7*
Black	1975-90	4.2*	1990-06	0.6*	2006-14	-2.0*							-1.7*	-2.0*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2014</u>														
All Races	1992-07	0.0	2007-14	-2.1*									-1.6*	-2.1*
White	1992-97	0.8		-0.2	2007-14	-2.0*							-1.6*	-2.0*
White NH <sup>ef</sup>	1992-97	1.1	1997-07	0.0	2007-14	-1.8*							-1.4*	-1.8*
Black	1992-05	0.8*	2005-14	-1.9*									-1.9*	-1.9*
Black NH <sup>ef</sup>	1992-05	0.8*	2005-14	-1.9*									-1.9*	-1.9*
API <sup>e</sup>	1992-14	0.1											0.1	0.1
AI/AN <sup>eg</sup>	1992-06	2.3*	2006-14	-5.4*									-4.6*	-5.4*
Hispanic <sup>f</sup>	1992-14	-0.5*											-0.5*	-0.5*
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2014</u>														
All Races	1975-82	6.0*	1982-90	4.2*	1990-95	1.7*	1995-03	0.3*	2003-07	-0.8	2007-14	-2.0*	-1.7*	-2.0*
White	1975-83	5.8*	1983-90	4.1*	1990-94	2.0*	1994-02	0.5*	2002-07	-0.5	2007-14	-1.9*	-1.6*	-1.9*
Black	1975-82	6.4*	1982-92	3.7*	1992-04	0.4*	2004-14	-1.9*					-1.9*	-1.9*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2014</u>														
All Races	1992-95	1.4*	1995-03	0.3*	2003-07	-0.8	2007-14	-2.0*					-1.7*	-2.0*
White	1992-95	1.4*	1995-02	0.5*	2002-07	-0.5	2007-14	-1.9*					-1.6*	-1.9*
White NH <sup>ef</sup>	1992-95	1.7*	1995-03	0.6*	2003-08	-0.7*	2008-14	-1.9*					-1.5*	-1.9*
Black	1992-04	0.4*	2004-14	-2.0*									-2.0*	-2.0*
Black NH <sup>ef</sup>	1992-04	0.5*	2004-14	-1.9*									-1.9*	-1.9*
API <sup>e</sup>	1992-14	-0.4*											-0.4*	-0.4*
AI/AN <sup>eg</sup>	1992-05	2.1*	2005-14	-1.7*									-1.7*	-1.7*
Hispanic <sup>f</sup>	1992-03	0.5	2003-14	-1.3*									-1.3*	-1.3*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>).  
<sup>a</sup> The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).  
<sup>b</sup> Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).  
<sup>c</sup> Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).  
<sup>d</sup> Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.  
<sup>e</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.  
<sup>f</sup> API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic  
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.  
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.  
<sup>g</sup> Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) 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<sup>a</sup>(Invasive) and Non-Small Cell Cancer of the Lung and Bronchus<sup>b</sup>(Invasive)

Trends in SEER 9 Observed Incidence<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2014 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 <sup>d</sup>
		Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2010-14
<u>SEER 9 Observed Incidence<sup>c</sup> for Small Cell Cancer of the Lung and Bronchus<sup>a</sup>, 1975-2014</u>														
All Races	Both Sexes	1975-82	6.2*	1982-89	1.3*	1989-14	-2.4*							-2.4*
All Races	Male	1975-81	5.6*	1981-88	0.0	1988-14	-3.1*							-3.1*
All Races	Female	1975-82	9.6*	1982-91	3.1*	1991-14	-1.9*							-1.9*
White	Both Sexes	1975-82	6.3*	1982-89	1.4*	1989-14	-2.2*							-2.2*
White	Male	1975-78	8.9*	1978-86	2.0*	1986-14	-3.0*							-3.0*
White	Female	1975-82	10.2*	1982-91	3.2*	1991-14	-1.7*							-1.7*
Black	Both Sexes	1975-86	4.9*	1986-14	-2.5*									-2.5*
Black	Male	1975-85	5.0*	1985-14	-3.4*									-3.4*
Black	Female	1975-91	4.6*	1991-14	-2.0*									-2.0*
<u>SEER 9 Observed Incidence<sup>c</sup> for Non-Small Cell Cancer of the Lung and Bronchus<sup>b</sup>, 1975-2014</u>														
All Races	Both Sexes	1975-80	5.2*	1980-88	1.6*	1988-00	-0.9*	2000-03	6.1*	2003-14	-1.6*			-1.6*
All Races	Male	1975-84	2.9*	1984-00	-1.7*	2000-03	4.6	2003-14	-2.5*					-2.5*
All Races	Female	1975-78	10.2*	1978-88	4.7*	1988-00	0.6*	2000-03	7.0*	2003-14	-0.8*			-0.8*
White	Both Sexes	1975-79	6.1*	1979-88	1.9*	1988-00	-0.8*	2000-03	6.0*	2003-14	-1.6*			-1.6*
White	Male	1975-80	4.4*	1980-88	0.5	1988-99	-2.3*	1999-02	5.2	2002-14	-2.2*			-2.2*
White	Female	1975-78	10.4*	1978-88	4.9*	1988-00	0.7*	2000-03	6.9*	2003-14	-0.7*			-0.7*
Black	Both Sexes	1975-84	4.5*	1984-00	-1.2*	2000-03	5.6	2003-14	-2.3*					-2.3*
Black	Male	1975-84	3.9*	1984-00	-2.2*	2000-03	4.3	2003-14	-3.3*					-3.3*
Black	Female	1975-90	5.0*	1990-97	-1.5	1997-05	4.0*	2005-14	-1.7*					-1.7*

Joinpoint Regression Program Version 4.4, January 2017, 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).

<sup>a</sup> Small Cell Cancer of the Lung and Bronchus includes histologies 8002, 8041-8045.

<sup>b</sup> 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.

<sup>c</sup> Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

<sup>d</sup> 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<sup>a</sup> Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975	52.24	89.53	24.52	51.94	89.15	24.84	64.46	114.71	24.66
1976	55.41	93.79	27.31	54.63	92.74	27.28	72.34	131.00	28.63
1977	56.68	95.48	28.31	55.87	94.73	28.06	73.58	124.86	33.88
1978	57.84	96.67	29.63	57.25	95.85	29.87	74.44	130.51	31.53
1979	58.62	95.81	31.58	58.03	95.19	31.64	74.54	127.72	34.11
1980	60.65	99.95	32.22	59.42	97.69	32.37	86.62	151.43	38.25
1981	62.03	99.41	35.11	61.54	98.44	35.52	82.31	142.96	37.45
1982	63.29	100.69	36.73	63.05	99.68	37.68	80.37	141.06	35.68
1983	63.45	99.46	37.88	63.03	97.63	39.09	86.62	151.34	39.49
1984	65.49	102.05	39.45	64.33	99.89	39.61	92.93	158.84	44.82
1985	64.61	98.59	40.25	63.97	96.84	40.87	89.56	149.68	46.04
1986	65.77	99.03	42.29	65.14	97.32	42.94	92.94	156.27	48.67
1987	67.89	101.51	44.15	68.08	100.66	45.50	84.76	143.59	43.28
1988	68.02	98.67	46.30	68.24	97.89	47.71	88.13	144.93	48.07
1989	67.53	97.94	46.09	67.54	97.03	47.22	89.04	142.77	51.37
1990	68.08	96.91	47.79	68.21	96.10	48.96	86.78	137.17	52.13
1991	69.19	97.20	49.58	68.96	95.88	50.63	93.13	144.76	57.03
1992	69.46	97.21	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	89.84	50.43	67.09	87.97	52.43	85.87	138.94	50.12
1996	66.46	87.99	51.22	66.79	86.67	52.97	84.45	128.35	55.53
1997	66.62	86.31	52.59	67.20	84.80	54.94	82.27	129.54	50.49
1998	67.55	88.03	52.99	68.00	86.58	55.02	87.57	131.01	58.29
1999	65.84	84.57	52.50	66.27	83.23	54.42	84.51	122.34	58.85
2000	64.13	82.10	51.22	64.63	80.75	53.19	80.42	114.78	57.55
2001	64.14	81.39	51.65	64.97	80.97	53.43	80.51	114.29	57.74
2002	64.05	80.44	52.48	64.76	79.80	54.21	81.29	112.83	60.56
2003	64.75	81.01	53.10	65.47	79.46	55.65	81.13	119.38	55.73
2004	62.22	76.27	52.04	62.77	75.28	53.75	76.11	105.17	57.02
2005	63.02	75.82	53.82	64.01	75.55	55.78	74.61	97.91	59.40
2006	62.32	74.34	53.46	62.84	73.10	55.37	76.66	101.13	59.81
2007	62.15	73.82	53.63	63.17	72.92	56.09	74.31	100.91	56.70
2008	60.46	72.26	51.90	61.21	70.85	54.33	75.17	103.59	56.25
2009	60.11	70.81	52.37	60.76	69.80	54.23	74.49	98.60	58.63
2010	57.83	68.13	50.18	58.92	67.90	52.21	67.28	86.07	54.91
2011	56.39	65.84	49.45	57.40	65.47	51.49	66.16	86.94	52.68
2012	55.52	64.34	48.96	55.96	63.24	50.58	69.92	89.99	56.40
2013	54.40	62.12	48.66	55.14	61.23	50.66	63.75	81.95	51.60
2014	53.68	60.85	48.40	55.01	60.87	50.79	59.91	74.74	50.16

Additional information on the model used to delay-adjust SEER Incidence rates can be found at [\(https://surveillance.cancer.gov/delay/\)](https://surveillance.cancer.gov/delay/).

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Table 15.6  
Cancer of the Lung and Bronchus (Invasive)

Age-adjusted SEER Incidence<sup>a</sup> Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2014	62.35	84.20	46.31	62.66	83.56	47.45	78.15	117.16	51.03
1975	52.24	89.53	24.52	51.94	89.15	24.84	64.46	114.71	24.66
1976	55.41	93.79	27.31	54.63	92.74	27.28	72.34	131.00	28.63
1977	56.68	95.48	28.31	55.87	94.73	28.06	73.58	124.86	33.88
1978	57.84	96.67	29.63	57.25	95.85	29.87	74.44	130.51	31.53
1979	58.62	95.81	31.58	58.03	95.19	31.64	74.54	127.72	34.11
1980	60.65	99.95	32.22	59.42	97.69	32.37	86.62	151.43	38.25
1981	62.03	99.41	35.11	61.54	98.44	35.52	82.31	142.96	37.45
1982	63.29	100.69	36.73	63.05	99.68	37.68	80.37	141.06	35.68
1983	63.45	99.46	37.88	63.03	97.63	39.09	86.62	151.34	39.49
1984	65.49	102.05	39.45	64.33	99.89	39.61	92.93	158.84	44.82
1985	64.61	98.59	40.25	63.97	96.84	40.87	89.56	149.68	46.04
1986	65.77	99.03	42.29	65.14	97.32	42.94	92.94	156.27	48.67
1987	67.89	101.51	44.15	68.08	100.66	45.50	84.76	143.59	43.28
1988	68.02	98.67	46.30	68.24	97.89	47.71	88.13	144.93	48.07
1989	67.53	97.94	46.09	67.54	97.03	47.22	89.04	142.77	51.37
1990	68.08	96.91	47.79	68.21	96.10	48.96	86.78	137.17	52.13
1991	69.19	97.20	49.58	68.96	95.88	50.63	93.13	144.76	57.03
1992	69.46	97.21	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	89.84	50.43	67.09	87.97	52.43	85.87	138.94	50.12
1996	66.46	87.99	51.22	66.79	86.67	52.97	84.45	128.35	55.53
1997	66.62	86.31	52.59	67.20	84.80	54.94	82.27	129.54	50.49
1998	67.55	88.03	52.99	68.00	86.58	55.02	87.57	131.01	58.29
1999	65.84	84.57	52.50	66.27	83.23	54.42	84.51	122.34	58.85
2000	64.13	82.10	51.22	64.63	80.75	53.19	80.42	114.78	57.55
2001	64.14	81.39	51.65	64.97	80.97	53.43	80.51	114.29	57.74
2002	64.05	80.44	52.48	64.76	79.80	54.21	81.29	112.83	60.56
2003	64.75	81.01	53.10	65.47	79.46	55.65	81.13	119.38	55.73
2004	62.22	76.27	52.04	62.77	75.28	53.75	76.11	105.17	57.02
2005	63.02	75.82	53.82	64.01	75.55	55.78	74.61	97.91	59.40
2006	62.29	74.30	53.43	62.81	73.06	55.34	76.57	101.00	59.74
2007	62.08	73.73	53.57	63.10	72.84	56.02	74.11	100.65	56.55
2008	60.35	72.13	51.81	61.10	70.72	54.24	74.88	103.19	56.03
2009	59.97	70.64	52.24	60.63	69.64	54.10	74.10	98.09	58.31
2010	57.66	67.92	50.03	58.76	67.71	52.06	66.85	85.53	54.55
2011	56.18	65.59	49.28	57.20	65.24	51.31	65.67	86.29	52.29
2012	55.19	63.95	48.67	55.64	62.87	50.29	69.19	89.03	55.82
2013	53.85	61.50	48.18	54.58	60.60	50.15	62.88	80.86	50.88
2014	52.38	59.36	47.25	53.64	59.34	49.54	58.32	72.73	48.85

<sup>a</sup> 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<sup>a</sup> Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2014	8.66	10.86	7.00	9.16	11.30	7.57	8.18	11.23	6.05
1975	6.65	10.34	3.79	6.89	10.70	3.97	5.87	8.94	3.48
1976	7.06	11.36	3.84	7.12	11.51	3.89	8.23	12.82	4.76
1977	7.72	12.40	4.23	7.86	12.82	4.23	8.13	11.19	5.78
1978	8.65	13.39	5.04	8.87	13.69	5.28	7.88	13.89	3.24
1979	8.70	13.10	5.38	9.05	13.64	5.63	7.63	11.83	4.47
1980	9.11	14.20	5.25	9.34	14.40	5.56	9.99	17.53	4.38
1981	9.74	14.59	6.13	10.03	14.87	6.48	9.28	15.87	4.34
1982	10.44	15.00	7.17	10.81	15.36	7.62	9.69	16.08	4.92
1983	10.39	14.92	7.10	10.78	15.09	7.66	9.23	15.20	4.95
1984	10.71	15.24	7.41	11.07	15.71	7.76	10.41	14.99	6.86
1985	10.47	14.98	7.10	10.80	15.26	7.52	11.12	17.90	6.27
1986	11.22	15.57	7.98	11.57	16.05	8.27	12.26	17.70	8.35
1987	10.67	14.15	8.22	11.18	14.57	8.86	9.68	14.61	6.20
1988	11.38	15.28	8.53	11.91	15.62	9.23	10.49	17.86	5.30
1989	11.25	14.85	8.69	11.70	15.24	9.22	12.07	17.67	8.35
1990	10.67	13.86	8.39	11.28	14.49	9.06	9.35	13.70	6.21
1991	11.31	13.99	9.39	11.71	14.32	9.88	12.34	15.92	10.00
1992	10.51	13.41	8.45	10.97	13.85	8.96	10.22	13.32	8.05
1993	10.03	12.34	8.34	10.48	12.64	8.94	9.43	13.36	6.74
1994	9.77	11.69	8.42	10.24	11.97	9.05	9.95	13.53	7.50
1995	9.87	12.30	8.12	10.37	12.64	8.73	9.50	13.89	6.61
1996	9.72	12.09	7.98	10.28	12.48	8.64	8.80	12.02	6.84
1997	9.53	10.86	8.64	10.11	11.12	9.49	7.86	10.82	6.05
1998	9.29	10.87	8.14	9.86	11.29	8.82	9.50	12.26	7.55
1999	8.82	10.06	7.97	9.33	10.25	8.78	8.25	11.21	6.05
2000	8.80	10.45	7.59	9.28	10.85	8.13	9.59	11.80	8.02
2001	8.37	9.86	7.33	8.91	10.35	7.92	8.52	10.80	6.89
2002	8.29	9.39	7.54	8.97	9.86	8.38	7.21	9.80	5.71
2003	8.22	9.12	7.60	8.72	9.37	8.33	7.93	9.50	6.83
2004	8.12	9.00	7.49	8.52	9.24	8.00	8.64	10.08	7.75
2005	7.59	8.69	6.82	8.22	9.24	7.50	6.63	7.78	5.88
2006	7.68	8.53	7.08	8.25	8.84	7.85	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	7.10	7.96	6.47	7.59	8.11	7.21	6.38	8.85	4.87
2009	7.13	7.78	6.69	7.60	8.10	7.27	7.51	8.36	6.94
2010	6.80	7.49	6.33	7.46	7.98	7.12	5.89	6.87	5.15
2011	6.27	6.85	5.86	6.77	7.11	6.56	5.29	6.45	4.50
2012	6.45	7.19	5.88	6.92	7.54	6.43	6.65	8.33	5.63
2013	6.34	7.12	5.78	6.87	7.48	6.46	5.41	6.79	4.58
2014	6.00	6.31	5.81	6.54	6.59	6.56	5.76	6.45	5.24

Note: Small Cell Cancer of the Lung and Bronchus includes histologies 8002, 8041-8045.  
<sup>a</sup> 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<sup>a</sup> Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2014	42.58	57.47	31.47	42.31	56.41	31.85	55.99	83.92	36.27
1975	30.10	51.18	13.90	29.38	49.96	13.86	42.55	77.28	14.84
1976	32.95	54.73	16.40	32.22	53.60	16.26	45.60	82.38	17.51
1977	35.02	58.18	17.44	34.01	56.56	17.25	50.07	88.75	20.09
1978	36.66	60.58	18.75	35.97	59.42	18.81	50.47	90.36	19.70
1979	37.74	61.45	20.01	36.84	59.99	19.92	52.76	91.51	22.84
1980	39.34	64.32	20.69	38.13	62.15	20.55	59.12	103.14	25.80
1981	40.55	64.79	22.59	40.00	63.85	22.68	54.97	94.67	24.97
1982	41.41	66.26	23.20	40.81	65.02	23.49	55.81	97.81	24.13
1983	41.84	66.20	24.06	41.16	64.37	24.68	60.76	107.14	26.02
1984	43.46	68.00	25.50	42.07	65.55	25.26	67.33	116.65	30.98
1985	43.09	65.84	26.35	42.24	63.87	26.58	63.60	107.17	31.77
1986	43.12	64.55	27.46	42.34	62.64	27.82	64.72	109.68	32.57
1987	45.62	69.47	28.34	45.27	68.19	28.88	60.52	104.01	29.58
1988	45.09	65.77	29.99	44.98	65.04	30.63	59.81	96.94	33.14
1989	44.25	64.39	29.70	43.86	63.32	30.10	61.00	97.84	34.69
1990	44.74	63.59	31.10	44.41	62.63	31.39	59.87	92.31	37.15
1991	44.92	63.76	31.37	44.14	61.90	31.68	64.84	102.15	38.09
1992	45.24	63.86	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	43.03	58.55	31.84	42.69	57.33	32.35	58.55	90.39	35.94
1995	42.40	57.07	31.68	42.19	55.56	32.59	58.29	93.15	34.32
1996	41.52	54.47	32.10	41.45	53.38	32.93	54.05	81.30	35.24
1997	41.36	54.53	31.60	41.49	53.38	32.76	53.59	84.62	32.39
1998	42.11	55.39	32.52	42.35	54.42	33.78	54.89	83.06	35.77
1999	40.49	52.61	31.60	40.50	51.56	32.44	54.26	79.37	37.09
2000	38.57	49.67	30.48	38.74	48.87	31.49	48.71	69.17	34.71
2001	46.74	59.98	36.93	47.02	59.26	37.93	60.08	86.51	42.42
2002	46.92	59.21	37.99	46.87	58.26	38.65	62.30	85.69	46.45
2003	47.36	60.01	38.09	47.56	58.47	39.71	61.56	92.22	40.77
2004	45.60	56.50	37.60	45.65	55.24	38.64	56.29	79.50	40.83
2005	46.78	56.20	39.88	46.89	55.37	40.71	58.00	74.93	46.57
2006	46.44	55.86	39.42	46.18	54.16	40.28	60.54	81.78	45.82
2007	46.36	55.32	39.68	46.48	53.95	40.92	58.65	79.50	44.67
2008	45.63	54.65	39.02	45.61	52.95	40.35	59.42	81.21	44.54
2009	44.93	52.95	39.04	45.19	51.98	40.20	56.27	75.29	43.60
2010	43.70	51.77	37.62	44.17	51.42	38.68	50.80	64.35	41.84
2011	42.88	49.99	37.56	43.11	49.14	38.59	52.70	70.01	41.34
2012	41.72	48.43	36.71	41.59	47.15	37.49	54.05	69.19	43.56
2013	40.85	46.43	36.68	40.96	45.32	37.72	49.43	63.38	40.08
2014	39.93	44.93	35.24	40.53	44.51	37.62	45.70	57.18	38.29

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.

<sup>a</sup> 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<sup>a</sup> Rates by Year, Race and Sex

Year of Death:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2014	52.22	75.54	35.25	52.27	74.71	35.90	59.57	96.54	34.43
1975	42.56	76.39	17.56	42.08	75.47	17.67	49.33	91.01	17.34
1976	44.20	78.52	18.97	43.72	77.55	19.10	51.07	93.96	18.51
1977	45.49	80.45	20.01	44.82	79.09	20.09	54.56	100.80	19.91
1978	46.88	82.06	21.40	46.29	80.76	21.58	55.26	101.65	20.66
1979	47.69	82.94	22.32	47.08	81.64	22.42	56.43	102.89	22.24
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	39.18	51.15	73.52	36.27
2011	46.00	57.87	37.01	46.72	57.84	38.21	49.31	70.01	35.43
2012	44.93	56.20	36.42	45.65	56.12	37.65	48.34	68.86	34.73
2013	43.43	53.93	35.45	44.13	53.91	36.64	46.96	66.00	34.11
2014	42.20	51.96	34.73	43.02	52.07	36.01	44.73	62.54	32.80

<sup>a</sup> 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<sup>a</sup> and U.S. Death<sup>b</sup> 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, 2010-2014									
All ages	55.8	65.7	48.4	57.3	65.9	50.8	63.0	83.7	49.0
Under 65	16.4	17.9	15.1	16.4	17.4	15.5	22.8	27.9	18.6
65 and over	327.9	395.9	278.7	339.9	401.2	295.1	341.0	469.6	259.4
All ages (WHO world std) <sup>c</sup>	39.1	45.4	34.2	40.1	45.3	35.9	45.7	59.8	35.7
Age-Specific Rates, 2010-2014									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	-	0.1	0.1	-	0.1	-	-	-
20-24	0.3	0.3	0.4	0.4	0.3	0.4	-	-	-
25-29	0.6	0.6	0.6	0.6	0.6	0.6	0.5	-	-
30-34	1.2	1.1	1.2	1.1	1.0	1.2	1.6	2.2	1.0
35-39	2.7	2.7	2.7	2.7	2.7	2.8	2.5	2.6	2.3
40-44	6.7	6.3	7.1	6.6	6.0	7.3	7.7	8.6	6.9
45-49	19.3	18.8	19.9	19.2	18.5	20.0	25.6	25.6	25.6
50-54	45.3	46.5	44.1	45.0	45.0	44.9	65.5	73.1	58.7
55-59	82.1	91.5	73.2	81.2	88.0	74.6	120.6	148.8	96.1
60-64	134.9	156.5	115.1	135.8	152.2	120.3	183.6	246.0	132.7
65-69	231.5	265.2	201.5	239.2	266.9	213.9	271.6	355.4	206.5
70-74	327.6	378.7	284.6	343.0	387.1	305.2	349.0	460.6	268.1
75-79	401.6	476.1	343.9	418.0	484.0	365.7	408.0	556.4	311.0
80-84	415.2	521.8	342.3	428.7	526.8	360.0	394.6	582.9	290.1
85+	313.0	435.5	250.1	318.3	438.4	256.3	299.8	459.1	233.3
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2010-2014									
All ages	44.7	55.9	36.3	45.5	55.9	37.5	48.0	68.0	34.6
Under 65	12.4	14.5	10.4	12.4	14.1	10.7	15.7	20.7	11.6
65 and over	268.5	342.3	215.1	274.3	344.5	222.9	271.0	395.0	194.0
All ages (WHO world std) <sup>c</sup>	30.7	37.8	25.0	31.1	37.7	25.9	33.9	47.5	24.4
Age-Specific Rates, 2010-2014									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	0.0	-	-	-	-	-	-	-	-
15-19	0.0	0.0	-	0.0	-	-	-	-	-
20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-
25-29	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	-
30-34	0.5	0.5	0.5	0.5	0.5	0.4	0.8	1.0	0.5
35-39	1.4	1.5	1.3	1.4	1.5	1.3	1.5	1.8	1.3
40-44	4.5	4.4	4.5	4.6	4.5	4.7	4.6	5.0	4.2
45-49	14.3	14.9	13.7	14.5	14.8	14.2	17.0	19.6	14.8
50-54	34.8	38.9	30.9	34.6	37.6	31.5	46.2	57.5	36.2
55-59	63.4	76.1	51.3	62.9	74.0	52.3	84.0	111.9	60.1
60-64	102.5	125.7	81.2	102.9	123.2	83.9	128.3	180.0	86.2
65-69	170.8	207.3	138.2	173.9	206.6	144.0	193.0	271.8	132.1
70-74	251.3	307.6	203.4	257.8	309.9	212.6	263.1	375.1	182.8
75-79	319.1	395.9	258.9	327.5	399.9	269.5	313.0	444.6	228.4
80-84	363.2	474.1	287.0	370.5	477.3	295.5	348.2	525.3	251.9
85+	322.4	466.8	249.8	327.1	470.6	254.1	297.6	472.0	227.1

<sup>a</sup> SEER 18 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

<sup>b</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

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

<sup>d</sup> 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<sup>a</sup>(Invasive) and Non-Small Cell Cancer of the Lung and Bronchus<sup>b</sup>(Invasive)

SEER Incidence<sup>c</sup> 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<sup>a</sup></u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2010-2014									
All ages	6.5	7.1	6.0	7.0	7.5	6.7	5.9	7.1	5.0
Under 65	2.3	2.3	2.3	2.5	2.5	2.6	2.3	2.5	2.0
65 and over	35.2	40.2	31.6	38.2	42.4	35.1	30.8	38.6	25.7
Age-Specific Rates, 2010-2014									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	0.1	-	-	-	-	-	-	-	-
35-39	0.2	0.2	0.2	0.2	0.2	0.2	-	-	-
40-44	0.7	0.6	0.7	0.8	0.7	0.8	0.6	-	-
45-49	2.5	2.3	2.6	2.8	2.6	3.0	2.3	2.3	2.3
50-54	6.5	6.3	6.7	7.2	6.7	7.7	6.7	7.9	5.7
55-59	12.0	12.6	11.5	13.2	13.5	12.9	12.2	13.1	11.4
60-64	19.6	20.4	18.9	21.6	21.7	21.4	18.9	21.5	16.8
65-69	32.0	35.1	29.3	35.1	37.4	33.1	26.9	34.2	21.2
70-74	39.6	43.1	36.7	43.8	46.4	41.5	31.7	38.0	27.2
75-79	42.9	47.6	39.3	46.2	49.6	43.5	41.0	51.4	34.2
80-84	36.6	44.9	31.0	38.9	46.6	33.4	32.1	37.9	28.8
85+	18.1	27.4	13.3	18.7	27.6	14.0	18.1	28.1	13.9
<u>Non-Small Cell Cancer Lung and Bronchus<sup>b</sup></u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2010-2014									
All ages	42.1	49.7	36.4	42.8	49.4	37.8	49.1	65.2	38.0
Under 65	13.0	14.1	12.0	12.7	13.5	12.0	18.9	22.9	15.5
65 and over	243.2	295.3	205.0	250.5	297.7	215.6	258.0	357.7	194.0
Age-Specific Rates, 2010-2014									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	-	0.1	0.1	-	-	-	-	-
20-24	0.3	0.2	0.3	0.3	0.3	0.4	-	-	-
25-29	0.5	0.5	0.6	0.5	0.5	0.5	0.5	-	-
30-34	1.0	1.0	1.0	0.9	0.8	1.0	1.3	1.8	0.8
35-39	2.3	2.3	2.3	2.3	2.3	2.4	2.1	2.2	2.0
40-44	5.6	5.1	6.0	5.4	4.7	6.2	6.4	7.3	5.5
45-49	15.7	15.1	16.2	15.2	14.5	15.9	21.9	21.8	22.0
50-54	36.0	36.9	35.2	35.1	35.1	35.0	54.2	59.3	49.6
55-59	64.6	71.9	57.8	62.5	67.8	57.4	100.5	123.4	80.7
60-64	104.9	122.1	89.1	103.8	116.9	91.3	149.2	199.8	107.9
65-69	180.3	206.1	157.5	184.2	205.1	165.1	222.0	290.3	168.9
70-74	255.5	296.5	221.0	265.4	301.2	234.7	278.5	365.9	215.1
75-79	308.1	369.9	260.3	318.6	373.6	275.0	316.3	439.9	235.6
80-84	299.6	381.1	243.8	308.4	384.5	255.1	280.7	418.2	204.4
85+	178.8	261.5	136.3	181.4	263.5	139.1	167.8	276.9	122.2

<sup>a</sup> Small Cell Cancer of the Lung and Bronchus includes histologies 8002, 8041-8045.  
<sup>b</sup> 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.  
<sup>c</sup> SEER 18 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 <sup>a</sup>	-	-	-	8	7	11	5	5	6
1970-1973 <sup>a</sup>	-	-	-	10	9	14	7	6	10
1975-1977 <sup>b</sup>	12.2	11.1	15.3	12.3	11.1	15.4	11.2	10.5	13.8
1978-1980 <sup>b</sup>	12.8	11.3	16.3	12.9	11.5	16.2	11.7	9.7	17.8
1981-1983 <sup>b</sup>	13.1	11.5	16.4	13.3	11.7	16.6	11.3	10.1	14.9
1984-1986 <sup>b</sup>	12.8	11.2	16.0	13.0	11.2	16.3	11.1	10.3	12.8
1987-1989 <sup>b</sup>	13.0	11.9	15.0	13.3	12.0	15.3	10.9	10.8	11.1
1990-1992 <sup>b</sup>	13.6	12.1	15.9	14.0	12.5	16.2	10.5	9.3	12.7
1993-1995 <sup>b</sup>	14.3	12.5	16.9	14.5	12.6	17.1	12.8	11.2	15.7
1996-1998 <sup>b</sup>	14.6	12.9	16.8	14.8	13.1	17.0	12.3	10.7	15.0
1999-2001 <sup>b</sup>	15.3	13.1	17.9	15.5	13.3	18.0	12.6	10.8	15.2
2002-2006 <sup>b</sup>	16.7	14.5	19.2	17.1	14.8	19.7	13.4	12.7	14.4
2007-2013 <sup>b</sup>	19.5 <sup>f</sup>	16.6 <sup>f</sup>	22.6 <sup>f</sup>	19.6 <sup>f</sup>	16.9 <sup>f</sup>	22.6 <sup>f</sup>	17.3 <sup>f</sup>	14.2 <sup>f</sup>	20.7 <sup>f</sup>
5-Year Period Survival (Percent) <sup>cd</sup>									
2013	18.7	15.6	22.2	18.8	15.7	22.1	16.2	12.9	20.2
Stage Distribution (%) 2007-2013 <sup>ce</sup>									
All Stages									
Number of cases	265,429	139,842	125,587	216,128	112,341	103,787	30,511	16,903	13,608
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	16	14	18	16	15	18	13	12	15
Regional	22	22	22	22	22	22	22	21	23
Distant	57	59	55	56	58	54	61	63	58
Unstaged	5	5	5	5	5	5	4	4	4
5-Year Relative Survival (Percent), 2007-2013 <sup>c</sup>									
Age at Diagnosis:									
Ages <45	32.3	27.9	36.5	33.7	28.9	38.3	27.4	23.6	31.8
Ages 45-54	20.8	16.7	25.4	21.5	17.3	26.1	17.2	13.2	21.9
Ages 55-64	20.1	16.7	24.6	20.3	17.0	24.6	16.6	13.9	20.8
Ages 65-74	19.3	16.0	23.1	19.6	16.3	23.2	15.5	12.2	19.6
Ages 75+	13.5	11.6	15.4	13.8	11.8	15.6	10.3	7.6	12.6
Ages <65	20.9	17.2	25.6	21.3	17.6	25.8	17.3	14.1	21.8
Ages 65+	16.5	13.9	19.1	16.7	14.2	19.2	13.3	10.6	16.3
Stage <sup>e</sup> :									
All Stages	18.1	15.2	21.3	18.3	15.4	21.4	15.3	12.5	18.8
Localized	55.6	49.5	61.0	55.7	49.7	60.9	50.7	43.8	57.5
Regional	28.9	25.6	32.5	28.9	25.8	32.1	25.7	21.9	30.0
Distant	4.5	3.8	5.4	4.3	3.6	5.2	4.3	3.6	5.3
Unstaged	7.5	7.1	7.9	6.8	6.4	7.2	9.4	9.1	9.7

<sup>a</sup> Based on End Results data from a series of hospital registries and one population-based registry.

<sup>b</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2014.

<sup>c</sup> 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).

Based on follow-up of patients into 2014.

<sup>d</sup> Period survival provides a 2013 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).

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

<sup>f</sup> The difference between 1975-1977 and 2007-2013 is statistically significant ( $p < .05$ ).

<sup>g</sup> The standard error is between 5 and 10 percentage points.

<sup>h</sup> 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 <sup>a</sup>	3.6	3.1	4.8	3.7	3.1	4.9	3.7	3.8	3.6
1978-1980 <sup>a</sup>	4.2	3.2	6.5	4.3	3.3	6.4	3.1	2.4	5.0
1981-1983 <sup>a</sup>	4.5	3.5	6.2	4.6	3.6	6.1	5.0	3.7	8.2
1984-1986 <sup>a</sup>	4.5	3.5	6.2	4.7	3.6	6.4	3.5	2.2	5.6
1987-1989 <sup>a</sup>	5.1	3.9	6.6	5.1	3.9	6.8	4.0	3.3	5.1
1990-1992 <sup>a</sup>	5.4	4.5	6.4	5.4	4.5	6.6	4.2	3.9	4.4
1993-1995 <sup>a</sup>	6.4	5.1	7.9	6.3	5.0	7.6	6.7	4.0	10.4
1996-1998 <sup>a</sup>	5.8	5.2	6.5	6.0	5.4	6.7	3.6	2.6	4.5
1999-2001 <sup>a</sup>	5.7	4.8	6.7	5.6	4.4	6.9	5.2	6.0	4.2
2002-2006 <sup>a</sup>	6.5	4.9	8.1	6.5	4.7	8.3	5.2	5.0	5.4
2007-2013 <sup>a</sup>	7.0 <sup>e</sup>	5.7 <sup>e</sup>	8.2 <sup>e</sup>	6.8 <sup>e</sup>	5.7 <sup>e</sup>	7.9 <sup>e</sup>	7.8 <sup>e</sup>	5.4 <sup>e</sup>	9.9
5-Year Period Survival (Percent) <sup>bc</sup>									
2013	6.3	5.0	7.5	6.2	4.9	7.5	6.8	5.4	8.2
Stage Distribution (%) 2007-2013 <sup>bd</sup>									
All Stages									
Number of cases	34,414	17,267	17,147	29,825	14,753	15,072	3,087	1,565	1,522
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	4	4	4	4	4	4	4	4	3
Regional	20	18	22	20	18	22	20	18	23
Distant	74	76	72	74	76	72	75	77	72
Unstaged	2	2	2	2	2	2	2	2	2
5-Year Relative Survival (Percent), 2007-2013 <sup>b</sup>									
Age at Diagnosis:									
Ages <45	11.9	12.0	11.7	11.7	11.9	11.6	8.9	-	0.0
Ages 45-54	9.1	7.0	11.3	9.0	6.5	11.4	10.4	8.7	12.3
Ages 55-64	8.2	6.3	10.3	8.0	6.2	9.9	8.9	5.6	12.1
Ages 65-74	6.1	4.8	7.4	6.1	4.7	7.4	5.4	4.5	6.2
Ages 75+	3.4	3.0	3.7	3.4	3.0	3.7	3.9	3.2	4.3
Ages <65	8.6	6.7	10.6	8.4	6.4	10.4	9.3	6.7	12.1
Ages 65+	5.0	4.1	5.8	5.0	4.1	5.9	4.8	4.1	5.4
Stage <sup>d</sup> :									
All Stages	6.5	5.2	7.8	6.4	5.1	7.7	7.1	5.5	8.7
Localized	28.9	25.0	32.7	28.9	24.7	32.6	30.4 <sup>f</sup>	28.5 <sup>f</sup>	32.4 <sup>f</sup>
Regional	15.3	13.3	17.0	15.3	13.1	17.0	14.8	11.9	17.1
Distant	2.9	2.2	3.6	2.8	2.2	3.4	3.9	2.8	5.0
Unstaged	7.6	6.2	8.9	6.9	5.0	8.6	8.5	6.6 <sup>f</sup>	9.0 <sup>f</sup>

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

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2014.

<sup>b</sup> 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).

Based on follow-up of patients into 2014.

<sup>c</sup> Period survival provides a 2013 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).

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

<sup>e</sup> The difference between 1975-1977 and 2007-2013 is statistically significant ( $p < .05$ ).

<sup>f</sup> The standard error is between 5 and 10 percentage points.

<sup>g</sup> 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 <sup>a</sup>	16.4	14.8	21.0	16.7	15.0	21.4	13.4	12.4	17.7
1978-1980 <sup>a</sup>	16.7	14.8	21.4	17.0	15.2	21.5	14.2	11.6	22.8
1981-1983 <sup>a</sup>	17.1	15.0	21.8	17.5	15.4	22.1	13.9	12.2	19.2
1984-1986 <sup>a</sup>	16.6	14.4	21.0	17.0	14.7	21.5	13.1	11.9	16.4
1987-1989 <sup>a</sup>	16.9	15.2	19.8	17.4	15.5	20.6	13.2	12.9	14.0
1990-1992 <sup>a</sup>	17.7	15.5	21.1	18.3	16.2	21.7	12.8	11.1	16.2
1993-1995 <sup>a</sup>	18.7	16.1	22.5	19.3	16.5	23.2	15.1	13.3	18.5
1996-1998 <sup>a</sup>	19.4	16.7	22.9	19.9	17.1	23.5	15.3	12.8	19.4
1999-2001 <sup>a</sup>	20.0	16.8	24.0	20.7	17.5	24.6	14.7	12.0	18.6
2002-2006 <sup>a</sup>	20.2	17.4	23.6	21.2	18.1	24.7	15.1	13.9	16.7
2007-2013 <sup>a</sup>	23.6 <sup>e</sup>	19.9 <sup>e</sup>	27.8 <sup>e</sup>	24.2 <sup>e</sup>	20.5 <sup>e</sup>	28.3 <sup>e</sup>	19.8 <sup>e</sup>	16.1 <sup>e</sup>	24.0 <sup>e</sup>
5-Year Period Survival (Percent) <sup>bc</sup>									
2013	22.9	18.8	27.5	23.3	19.3	27.8	18.6	14.7	23.4
Stage Distribution (%) 2007-2013 <sup>bd</sup>									
All Stages									
Number of cases	199,153	106,453	92,700	159,653	84,377	75,276	24,179	13,518	10,661
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	19	16	22	20	17	23	15	13	17
Regional	24	24	24	24	25	24	24	23	25
Distant	55	57	53	54	56	51	59	62	56
Unstaged	2	2	2	2	2	2	2	2	2
5-Year Relative Survival (Percent), 2007-2013 <sup>b</sup>									
Age at Diagnosis:									
Ages <45	34.1	28.9	39.0	36.1	30.2	41.5	28.4	24.4	33.2
Ages 45-54	23.4	18.6	28.7	24.6	19.6	29.9	18.2	13.8	23.3
Ages 55-64	23.5	19.3	29.0	24.2	20.0	29.6	18.1	15.1	22.8
Ages 65-74	23.3	19.3	28.1	23.8	19.8	28.4	18.0	14.0	23.0
Ages 75+	18.2	15.2	21.2	18.6	15.5	21.7	13.6	10.1	16.9
Ages <65	24.0	19.6	29.5	24.9	20.4	30.4	18.7	15.1	23.6
Ages 65+	20.9	17.4	24.7	21.4	17.8	25.1	16.3	12.7	20.4
Stage <sup>d</sup> :									
All Stages	22.1	18.3	26.5	22.6	18.8	26.9	17.5	14.0	21.9
Localized	59.5	53.0	65.2	59.7	53.3	65.1	54.0	46.6	61.1
Regional	32.3	28.2	37.2	32.5	28.6	37.0	28.1	23.7	33.2
Distant	5.2	4.3	6.3	5.0	4.1	6.2	4.5	3.6	5.7
Unstaged	13.4	12.2	14.7	12.6	11.1	14.2	11.9	12.0	12.1

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.

<sup>a</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2014.

<sup>b</sup> 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).

Based on follow-up of patients into 2014.

<sup>c</sup> Period survival provides a 2013 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).

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

<sup>e</sup> The difference between 1975-1977 and 2007-2013 is statistically significant ( $p < .05$ ).

<sup>f</sup> The standard error is between 5 and 10 percentage points.

<sup>g</sup> 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<sup>a</sup> 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
1-year	35.3	37.2	38.5	39.5	40.3	39.9	40.4	39.9	41.4	40.8	40.2	40.7	41.9	42.2	43.5	44.0	44.4	45.2	45.8	44.9	46.7	45.8	47.8
2-year	21.1	22.0	22.6	23.7	24.9	24.7	24.7	25.2	25.8	25.8	25.5	26.5	26.5	27.7	28.4	29.4	30.1	31.0	31.4	31.1	32.7	31.6	
3-year	16.3	16.9	17.1	18.3	19.1	19.3	19.3	19.8	19.8	20.2	19.8	20.7	20.7	22.3	22.6	23.5	24.0	24.8	25.3	24.8	26.3		
4-year	13.9	14.5	14.6	15.5	16.5	16.2	16.5	17.0	17.0	17.5	16.8	17.5	17.9	18.9	19.5	20.0	20.6	21.3	21.6	21.4			
5-year	12.5	12.9	13.0	13.8	14.5	14.6	14.7	14.6	15.1	15.7	15.0	15.5	16.0	16.8	17.4	17.6	18.3	18.8	19.6				
6-year	11.4	11.7	11.9	12.7	13.2	13.2	13.3	13.3	13.7	14.2	13.4	14.1	14.5	15.4	15.7	16.2	16.8	17.2					
7-year	10.7	10.8	10.9	11.6	12.3	12.1	12.2	12.2	12.7	12.9	12.3	12.9	13.3	14.1	14.5	15.1	15.3						
8-year	10.0	10.0	10.1	10.7	11.4	11.2	11.3	11.2	11.8	12.0	11.4	11.8	12.0	13.2	13.5	14.0							
9-year	9.4	9.2	9.4	10.0	10.7	10.3	10.4	10.5	11.0	11.2	10.6	11.0	11.1	12.4	12.5								
10-year	8.8	8.6	8.8	9.3	10.0	9.5	9.8	10.0	10.5	10.4	10.0	10.3	10.2	11.5									
11-year	8.3	8.1	8.2	8.6	9.4	8.8	9.1	9.4	9.7	9.7	9.3	9.5	9.7										
12-year	7.8	7.7	7.7	8.0	8.9	8.3	8.4	8.9	9.1	9.1	8.7	8.8											
13-year	7.4	7.2	7.2	7.5	8.2	7.9	8.0	8.1	8.5	8.6	8.1												
14-year	7.1	6.8	6.8	7.1	7.6	7.5	7.5	7.6	8.0	8.0													
15-year	6.6	6.4	6.4	6.7	7.3	7.0	7.1	7.2	7.6														
16-year	6.3	6.0	6.1	6.2	6.9	6.6	6.5	6.8															
17-year	6.0	5.6	5.7	5.9	6.4	6.3	6.1																
18-year	5.7	5.3	5.3	5.5	5.9	6.0																	
19-year	5.4	4.9	4.9	5.2	5.4																		
20-year	5.2	4.6	4.7	4.9																			
21-year	4.9	4.3	4.5																				
22-year	4.7	4.1	4.2																				
23-year	4.4	3.8	4.0																				
24-year	4.2	3.6	3.8																				
25-year	4.0	3.4	3.6																				
26-year	3.8	3.2																					
27-year	3.6	3.0																					
28-year	3.5	2.9																					
29-year	3.3	2.7																					
30-year	3.2	2.6																					

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 15.16  
Cancer of the Lung and Bronchus (Invasive)

SEER<sup>a</sup> 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
Survival Time																							
1-year	33.4	35.4	36.5	37.2	38.0	38.0	38.1	37.0	38.2	38.6	37.0	37.2	39.4	39.0	40.0	41.3	40.9	42.0	42.7	41.2	42.4	41.6	42.6
2-year	19.5	20.2	21.0	21.6	23.1	23.0	23.0	22.6	22.7	23.7	22.2	23.1	23.7	24.7	24.8	26.8	26.2	27.8	27.6	27.3	28.4	27.9	
3-year	14.8	15.3	15.6	16.4	17.4	17.7	17.7	17.4	16.7	18.2	17.2	17.9	18.1	19.5	19.5	20.8	20.9	22.1	21.9	21.5	22.3		
4-year	12.5	12.9	13.1	13.7	14.8	14.6	15.0	14.7	14.1	15.5	14.3	15.0	15.5	16.6	16.6	17.3	17.6	18.9	18.4	18.5			
5-year	11.1	11.4	11.6	12.1	13.2	13.1	13.3	12.4	12.5	14.0	12.7	13.5	14.0	14.9	14.9	15.1	15.7	16.7	16.5				
6-year	10.1	10.3	10.6	11.0	11.8	11.7	11.9	11.0	11.2	12.6	11.5	12.2	12.6	13.6	13.3	13.9	14.2	15.2					
7-year	9.4	9.5	9.7	10.0	11.2	10.6	10.8	10.1	10.3	11.3	10.4	11.2	11.6	12.3	12.2	12.8	12.8						
8-year	8.8	8.7	9.0	9.1	10.2	9.8	10.0	9.1	9.5	10.7	9.6	10.0	10.7	11.4	11.2	11.9							
9-year	8.2	7.9	8.4	8.4	9.6	9.1	9.2	8.5	8.7	9.9	8.9	9.3	9.8	10.8	10.5								
10-year	7.7	7.4	7.9	7.9	8.8	8.2	8.6	8.0	8.3	9.1	8.3	8.6	8.9	10.0									
11-year	7.2	7.0	7.3	7.2	8.3	7.4	7.9	7.5	7.7	8.4	7.7	8.0	8.4										
12-year	6.7	6.6	6.8	6.7	8.0	6.9	7.2	7.0	7.2	7.7	7.2	7.4											
13-year	6.3	6.2	6.3	6.2	7.3	6.7	6.8	6.3	6.8	7.2	6.5												
14-year	6.0	5.8	6.0	5.8	6.9	6.3	6.4	6.0	6.3	6.6													
15-year	5.6	5.4	5.6	5.5	6.4	5.8	6.1	5.6	5.9														
16-year	5.3	5.0	5.3	5.1	6.2	5.4	5.7	5.3															
17-year	5.1	4.6	4.8	4.8	5.8	5.2	5.3																
18-year	4.7	4.4	4.5	4.5	5.2	4.9																	
19-year	4.5	4.1	4.1	4.2	4.6																		
20-year	4.2	3.7	3.9	4.0																			
21-year	4.1	3.5	3.6																				
22-year	3.9	3.3	3.4																				
23-year	3.7	3.1	3.2																				
24-year	3.4	2.8	3.0																				
25-year	3.3	2.7	2.8																				
26-year	3.1	2.5																					
27-year	2.8	2.4																					
28-year	2.8	2.3																					
29-year	2.7	2.2																					
30-year	2.6	2.1																					

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).



Table 15.17  
Cancer of the Lung and Bronchus (Invasive)

SEER<sup>a</sup> 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
Survival Time																							
1-year	40.4	41.3	42.2	42.8	43.5	42.4	43.3	43.6	45.4	43.6	44.2	45.0	44.9	45.8	47.4	47.1	48.2	48.8	49.1	48.9	51.3	50.4	53.3
2-year	25.3	25.7	25.5	26.7	27.4	26.9	26.9	28.4	29.5	28.5	29.7	30.5	29.9	31.1	32.4	32.4	34.3	34.5	35.5	35.2	37.3	35.8	
3-year	20.2	20.5	19.7	21.1	21.6	21.4	21.2	22.9	23.6	22.8	22.9	24.0	23.8	25.4	26.0	26.6	27.3	27.7	28.9	28.5	30.6		
4-year	17.7	17.8	17.2	18.3	18.8	18.3	18.5	19.9	20.5	19.9	19.8	20.4	20.7	21.4	22.7	23.0	23.8	24.0	25.1	24.6			
5-year	16.1	16.0	15.4	16.4	16.4	16.5	16.5	17.4	18.3	17.7	17.7	17.9	18.3	18.9	20.2	20.4	21.2	21.1	22.9				
6-year	14.9	14.6	14.1	15.1	15.0	15.2	15.1	16.1	16.7	16.1	15.8	16.4	16.8	17.6	18.5	18.8	19.6	19.4					
7-year	14.0	13.6	12.9	13.9	13.9	14.0	14.1	14.9	15.6	15.0	14.6	15.0	15.3	16.2	17.1	17.6	18.0						
8-year	13.1	12.8	11.9	13.0	13.1	13.0	12.8	13.9	14.7	13.6	13.7	14.0	13.6	15.2	15.9	16.4							
9-year	12.4	11.9	11.2	12.1	12.3	11.9	11.9	13.1	13.8	12.8	12.6	13.1	12.6	14.3	14.7								
10-year	11.6	11.1	10.4	11.3	11.6	11.1	11.2	12.4	13.1	12.0	12.1	12.3	11.8	13.2									
11-year	11.1	10.6	9.8	10.6	10.9	10.6	10.6	11.9	12.2	11.4	11.3	11.2	11.3										
12-year	10.6	9.9	9.2	9.9	10.1	10.0	9.9	11.3	11.4	10.7	10.6	10.5											
13-year	10.2	9.3	8.8	9.4	9.4	9.6	9.4	10.4	10.7	10.2	10.0												
14-year	9.7	8.9	8.2	9.0	8.7	9.1	8.9	9.7	10.0	9.6													
15-year	9.2	8.4	7.8	8.4	8.4	8.6	8.3	9.1	9.5														
16-year	8.9	8.0	7.4	7.9	7.9	8.2	7.5	8.6															
17-year	8.4	7.7	7.0	7.4	7.3	7.7	7.2																
18-year	8.0	7.2	6.7	7.0	6.8	7.3																	
19-year	7.7	6.6	6.3	6.5	6.4																		
20-year	7.4	6.3	6.1	6.2																			
21-year	6.9	5.9	5.9																				
22-year	6.5	5.6	5.5																				
23-year	6.2	5.3	5.3																				
24-year	6.0	5.1	5.1																				
25-year	5.8	4.8	4.9																				
26-year	5.5	4.6																					
27-year	5.3	4.2																					
28-year	5.1	3.9																					
29-year	4.9	3.7																					
30-year	4.5	3.6																					

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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, 2012-2014 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	6.37	5.31	Asian/ Pacific Islander	0	0.00	0.00	0.01	5.45	4.18
	10	0.00	0.01	0.03	6.43	5.37		10	0.00	0.01	0.02	5.49	4.21
	20	0.00	0.02	0.15	6.45	5.39		20	0.01	0.02	0.13	5.50	4.22
	30	0.02	0.15	0.73	6.50	5.44		30	0.02	0.12	0.48	5.51	4.23
	40	0.13	0.72	2.22	6.56	5.50		40	0.11	0.46	1.39	5.53	4.24
	50	0.61	2.14	4.59	6.59	5.55		50	0.36	1.30	3.07	5.49	4.23
	60	1.63	4.23	6.00	6.36	5.39		60	0.97	2.79	4.56	5.28	4.13
	70	2.95	4.96	-	5.37	4.70		70	1.96	3.85	-	4.62	3.80
80	2.71	-	-	3.25	3.11	80	2.25	-	-	3.18	2.98		
White	0	0.00	0.00	0.01	6.50	5.42	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.00	0.00	4.19	4.04
	10	0.00	0.01	0.02	6.56	5.48		10	0.00	0.00	0.01	4.23	4.09
	20	0.00	0.02	0.15	6.58	5.50		20	0.00	0.01	0.05	4.25	4.11
	30	0.02	0.15	0.73	6.63	5.54		30	0.01	0.04	0.37	4.32	4.19
	40	0.13	0.72	2.24	6.69	5.60		40	0.04	0.37	1.36	4.41	4.30
	50	0.60	2.17	4.72	6.72	5.65		50	0.35	1.38	2.96	4.56	4.44
	60	1.66	4.37	6.16	6.50	5.49		60	1.11	2.81	4.15	4.52	4.49
	70	3.07	5.10	-	5.48	4.78		70	1.94	3.48	-	3.91	4.09
80	2.76	-	-	3.27	3.13	80	2.08	-	-	2.65	2.72		
Black	0	0.00	0.00	0.01	6.11	4.95	Hispanic <sup>b</sup>	0	0.00	0.00	0.00	3.98	2.90
	10	0.00	0.01	0.03	6.22	5.05		10	0.00	0.00	0.02	4.02	2.93
	20	0.00	0.03	0.19	6.25	5.07		20	0.00	0.02	0.07	4.03	2.94
	30	0.02	0.19	0.99	6.33	5.13		30	0.01	0.07	0.30	4.05	2.96
	40	0.17	0.99	2.74	6.43	5.22		40	0.05	0.29	1.01	4.07	2.98
	50	0.85	2.67	4.90	6.50	5.30		50	0.24	0.97	2.40	4.09	3.00
	60	1.99	4.44	5.88	6.19	5.12		60	0.77	2.26	3.58	4.02	2.97
	70	2.96	4.70	-	5.07	4.42		70	1.64	3.09	-	3.58	2.74
80	2.54	-	-	3.08	2.97	80	1.82	-	-	2.44	2.06		

Devcan 6.7.5, April 2017, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the 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). Mortality data are from the NCHS public use data file for the total US.

<sup>a</sup> Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>b</sup> 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, 2012-2014 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	6.85	5.96	Asian/ Pacific Islander	0	0.00	0.00	0.01	6.61	5.15
	10	0.00	0.00	0.02	6.93	6.04		10	0.00	0.01	0.02	6.66	5.19
	20	0.00	0.02	0.15	6.96	6.07		20	0.01	0.02	0.13	6.67	5.20
	30	0.02	0.15	0.77	7.04	6.14		30	0.02	0.13	0.54	6.70	5.23
	40	0.13	0.76	2.43	7.13	6.24		40	0.11	0.53	1.70	6.73	5.25
	50	0.65	2.37	5.05	7.23	6.34		50	0.42	1.61	3.81	6.73	5.26
	60	1.85	4.74	6.71	7.08	6.25		60	1.24	3.52	5.75	6.56	5.18
	70	3.37	5.67	-	6.11	5.57		70	2.50	4.94	-	5.82	4.80
80	3.29	-	-	3.92	3.88	80	3.04	-	-	4.13	3.87		
White	0	0.00	0.00	0.00	6.84	6.01	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.00	0.00	4.90	4.37
	10	0.00	0.00	0.02	6.91	6.08		10	0.00	0.00	0.01	4.95	4.44
	20	0.00	0.02	0.14	6.94	6.10		20	0.00	0.01	0.04	4.99	4.47
	30	0.02	0.14	0.74	7.02	6.18		30	0.01	0.04	0.41	5.09	4.59
	40	0.12	0.73	2.39	7.11	6.27		40	0.03	0.41	1.55	5.24	4.74
	50	0.63	2.33	5.05	7.20	6.37		50	0.39	1.59	3.57	5.47	4.98
	60	1.84	4.76	6.73	7.08	6.29		60	1.32	3.48	5.08	5.56	5.15
	70	3.41	5.70	-	6.11	5.59		70	2.56	4.45	-	5.02	4.85
80	3.29	-	-	3.87	3.87	80	2.71	-	-	3.53	3.30		
Black	0	0.00	0.00	0.01	7.15	6.06	Hispanic <sup>b</sup>	0	0.00	0.00	0.00	4.51	3.65
	10	0.00	0.01	0.03	7.30	6.20		10	0.00	0.00	0.02	4.56	3.69
	20	0.00	0.03	0.20	7.34	6.24		20	0.00	0.02	0.06	4.57	3.70
	30	0.03	0.20	1.14	7.48	6.35		30	0.01	0.06	0.30	4.61	3.74
	40	0.17	1.14	3.34	7.64	6.49		40	0.05	0.29	1.08	4.65	3.77
	50	1.01	3.31	5.98	7.82	6.66		50	0.24	1.06	2.78	4.71	3.83
	60	2.58	5.57	7.27	7.62	6.57		60	0.86	2.69	4.25	4.73	3.85
	70	3.81	5.97	-	6.43	5.83		70	2.06	3.82	-	4.36	3.61
80	3.47	-	-	4.21	4.17	80	2.33	-	-	3.04	2.75		

Devcan 6.7.5, April 2017, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the 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). Mortality data are from the NCHS public use data file for the total US.

<sup>a</sup> Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>b</sup> 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, 2012-2014 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	5.95	4.73	Asian/ Pacific Islander	0	0.00	0.00	0.01	4.51	3.41
	10	0.00	0.01	0.03	6.01	4.78		10	0.00	0.01	0.02	4.54	3.43
	20	0.00	0.02	0.16	6.02	4.79		20	0.01	0.02	0.13	4.54	3.44
	30	0.02	0.15	0.70	6.04	4.81		30	0.02	0.12	0.42	4.55	3.44
	40	0.13	0.69	2.02	6.07	4.85		40	0.10	0.41	1.13	4.55	3.44
	50	0.56	1.92	4.17	6.05	4.85		50	0.31	1.03	2.45	4.49	3.42
	60	1.42	3.78	5.40	5.75	4.66		60	0.75	2.19	3.61	4.28	3.32
	70	2.61	4.40	-	4.78	4.01		70	1.53	3.02	-	3.72	3.05
80	2.30	-	-	2.79	2.58	80	1.72	-	-	2.53	2.38		
White	0	0.00	0.00	0.01	6.21	4.90	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.00	0.00	3.56	3.75
	10	0.00	0.01	0.03	6.26	4.95		10	0.00	0.00	0.01	3.59	3.79
	20	0.00	0.03	0.16	6.27	4.96		20	0.00	0.01	0.05	3.60	3.81
	30	0.02	0.16	0.72	6.30	4.98		30	0.01	0.04	0.33	3.64	3.85
	40	0.14	0.70	2.10	6.33	5.01		40	0.04	0.33	1.19	3.70	3.93
	50	0.58	2.01	4.40	6.31	5.02		50	0.30	1.19	2.41	3.78	3.98
	60	1.50	4.00	5.67	6.00	4.81		60	0.93	2.22	3.36	3.67	3.95
	70	2.77	4.62	-	4.98	4.12		70	1.43	2.70	-	3.04	3.52
80	2.39	-	-	2.85	2.63	80	1.64	-	-	2.08	2.36		
Black	0	0.00	0.00	0.00	5.24	4.03	Hispanic <sup>b</sup>	0	0.00	0.00	0.00	3.57	2.29
	10	0.00	0.00	0.02	5.33	4.11		10	0.00	0.00	0.02	3.60	2.31
	20	0.00	0.02	0.18	5.34	4.12		20	0.00	0.02	0.07	3.60	2.32
	30	0.02	0.18	0.87	5.37	4.14		30	0.01	0.07	0.30	3.61	2.32
	40	0.16	0.86	2.22	5.43	4.19		40	0.06	0.29	0.95	3.62	2.33
	50	0.72	2.12	3.99	5.43	4.22		50	0.24	0.90	2.09	3.61	2.33
	60	1.51	3.52	4.78	5.07	4.02		60	0.68	1.91	3.04	3.48	2.28
	70	2.32	3.79	-	4.12	3.47		70	1.32	2.54	-	3.01	2.10
80	2.00	-	-	2.46	2.32	80	1.47	-	-	2.04	1.62		

Devcan 6.7.5, April 2017, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the 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). Mortality data are from the NCHS public use data file for the total US.

<sup>a</sup> Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>b</sup> 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<sup>a</sup>  
By Race/Ethnicity and Sex

SEER Incidence	SEER 18 Areas <sup>b</sup>			SEER 13 Areas <sup>b</sup>			SEER 9 Areas <sup>b</sup>		
	Rate 2010-2014			Trend 2005-2014 <sup>c</sup>			Trend 2005-2014 <sup>d</sup>		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	55.8	65.7	48.4	-2.2*	-2.9*	-1.6*	-2.0*	-2.7*	-1.4*
White	57.3	65.9	50.8	-2.2*	-2.8*	-1.6*	-1.9*	-2.6*	-1.3*
White Hispanic <sup>e</sup>	29.7	36.5	24.8	-1.4*	-2.2*	-0.5*	-	-	-
White Non-Hispanic <sup>e</sup>	61.8	70.5	55.3	-2.0*	-2.7*	-1.4*	-	-	-
Black	63.0	83.7	49.0	-3.0*	-4.1*	-1.9*	-2.8*	-2.9*	-1.7*
Asian/Pacific Islander	35.7	46.4	27.9	-1.7*	-2.5*	0.1	-	-	-
Amer Ind/Alaska Nat <sup>f</sup>	37.4	46.9	30.4	-4.1*	-1.7*	-4.6*	-	-	-
Hispanic <sup>e</sup>	28.8	35.3	24.2	-1.4*	-2.1*	-0.5*	-	-	-
<u>U.S. Mortality<sup>g</sup></u>									
	Rate 2010-2014			Trend 2005-2014 <sup>h</sup>					
	Rate per 100,000 persons			AAPC (%)					
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females			
All Races	44.7	55.9	36.3	-2.4*	-3.1*	-1.7*			
White	45.5	55.9	37.5	-2.3*	-3.0*	-1.6*			
White Hispanic <sup>e</sup>	20.3	28.7	14.1	-2.3*	-3.2*	-1.1*			
White Non-Hispanic <sup>e</sup>	47.9	58.4	39.9	-2.1*	-2.9*	-1.5*			
Black	48.0	68.0	34.6	-2.8*	-3.5*	-2.0*			
Asian/Pacific Islander	23.7	31.7	18.0	-1.7*	-2.5*	-0.4*			
Amer Ind/Alaska Nat									
Total U.S.	29.9	37.1	24.4	-1.3*	-2.1*	-2.8*			
CHSDA Counties	37.5	46.3	30.8	-0.4	-1.2*	-1.7*			
Non-CHSDA Counties	21.3	26.8	17.0	-2.4*	-3.3*	-2.3*			
Hispanic <sup>e</sup>	19.3	27.3	13.4	-2.6*	-3.4*	-1.3*			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.3.0.0, April 2016, 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.

a 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).

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.

c The 2005-2014 AAPC estimates are based on a Joinpoint analysis with up to 4 Joinpoints over diagnosis years 1992-2014.

d The 2005-2014 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2014.

e 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. The 2005-2014 Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

f Incidence data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

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

h The 2005-2014 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2014.

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

Table 15.22  
Cancer of the Lung And Bronchus (Invasive)

Age-Adjusted SEER Incidence Rates<sup>a</sup>  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates<sup>a</sup>, 2010-2014</u>									
California	44.65	50.99	39.89	45.72	50.74	41.96	56.00	67.84	47.69
Greater Bay Area	43.24	48.99	38.97	43.48	46.20	41.61	62.11	74.34	53.28
San Francisco-Oakland	44.94	50.35	40.93	44.76	46.11	43.96	65.34	78.76	55.92
San Jose-Monterey	39.94	46.40	35.11	41.23	46.34	37.47	41.10	48.09	34.48
Los Angeles	38.30	45.61	32.92	37.62	43.72	33.00	53.49	65.03	46.07
Greater California	48.00	54.05	43.42	49.41	54.62	45.49	55.77	67.56	46.81
Connecticut	62.12	69.75	56.78	63.14	69.85	58.55	54.16	71.75	42.92
Detroit	73.11	85.03	64.80	72.69	82.47	65.99	79.15	101.40	64.61
Georgia	65.88	84.58	52.16	69.07	85.40	56.71	58.04	84.75	40.99
Atlanta	54.05	65.28	46.46	55.59	63.88	49.99	53.72	72.55	42.57
Rural Georgia	64.04	89.91	44.02	64.47	85.62	47.86	62.13	103.05	34.81
Greater Georgia	71.36	92.76	55.25	74.00	92.90	59.45	61.26	92.52	40.42
Hawaii	46.38	56.92	38.06	49.34	54.17	44.79	44.97	48.65	-
Iowa	63.91	78.28	53.00	63.82	78.14	52.96	82.83	94.64	73.03
Kentucky	95.30	116.24	79.66	95.98	116.85	80.35	94.54	118.42	77.91
Louisiana	70.48	90.81	54.91	69.57	85.51	57.18	74.52	109.45	50.31
New Jersey	57.80	65.61	52.49	60.22	67.22	55.53	56.22	70.53	47.37
New Mexico	40.98	47.31	35.95	43.00	48.96	38.23	50.40	68.78	36.26
Seattle-Puget Sound	59.18	66.14	53.97	60.38	66.60	55.73	62.92	76.58	51.46
Utah	27.93	32.69	24.05	27.60	32.29	23.78	46.01	55.60	-
SEER 9 Areas <sup>b</sup>	54.99	63.55	48.66	55.92	63.05	50.66	64.45	82.68	52.39
SEER 13 Areas <sup>b</sup>	50.55	58.83	44.41	51.45	58.34	46.32	61.34	77.94	50.30
SEER 18 Areas <sup>b</sup>	55.81	65.70	48.39	57.30	65.89	50.83	63.03	83.69	49.00

<sup>a</sup> Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)

<sup>b</sup> 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.

- 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<sup>a</sup>  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Death Rates<sup>a</sup>, 2010-2014</u>									
California	33.39	39.84	28.53	34.45	39.98	30.26	43.37	54.90	35.27
Greater Bay Area	30.63	35.93	26.72	31.45	34.73	29.08	45.06	54.84	37.99
San Francisco-Oakland	32.09	37.35	28.23	32.62	35.14	30.91	47.49	58.68	39.59
San Jose-Monterey	27.83	33.21	23.79	29.40	34.01	25.89	29.27	31.85	27.01
Los Angeles	29.54	36.95	24.09	29.10	35.52	24.26	44.05	56.40	36.09
Greater California	36.08	42.46	31.21	37.30	43.09	32.88	41.83	53.34	33.00
Connecticut	39.37	46.31	34.41	40.21	46.45	35.78	35.39	50.69	25.72
Detroit	50.16	61.74	41.90	49.60	59.41	42.60	55.72	76.05	42.45
Georgia	47.67	64.17	35.61	50.14	65.04	38.85	42.44	65.17	28.15
Atlanta	37.93	48.85	30.55	38.26	46.41	32.64	39.42	58.52	28.36
Rural Georgia	48.68	72.21	30.98	49.10	67.15	34.85	47.51	86.80	22.86
Greater Georgia	52.02	70.55	38.14	54.32	71.41	41.17	44.64	69.15	28.40
Hawaii	32.08	40.83	25.14	36.00	40.41	31.57	41.82	54.57	-
Iowa	46.01	59.15	35.97	45.94	59.14	35.85	62.83	70.92	55.55
Kentucky	69.61	89.63	54.70	70.25	90.43	55.14	67.46	86.99	54.12
Louisiana	55.05	72.90	41.54	53.89	67.90	43.11	59.69	91.07	38.29
New Jersey	39.79	48.41	33.76	41.44	49.67	35.68	40.58	54.95	31.52
New Mexico	31.56	38.14	26.37	33.12	39.54	28.03	39.26	59.25	22.31
Seattle-Puget Sound	41.02	48.46	35.39	42.38	49.30	37.11	43.10	56.48	31.60
Utah	19.96	24.58	16.15	20.07	24.71	16.22	23.78	-	-
SEER 9 Areas <sup>b</sup>	38.25	46.50	32.09	39.08	46.32	33.63	45.93	62.87	34.76
SEER 13 Areas <sup>b</sup>	35.91	43.88	29.96	36.67	43.63	31.42	45.20	61.04	34.74
SEER 18 Areas <sup>b</sup>	40.41	49.93	33.25	41.60	50.23	35.05	46.95	65.66	34.33
Total U.S.	44.73	55.89	36.27	45.47	55.87	37.50	48.00	68.00	34.62

<sup>a</sup> 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).

<sup>b</sup> 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.

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

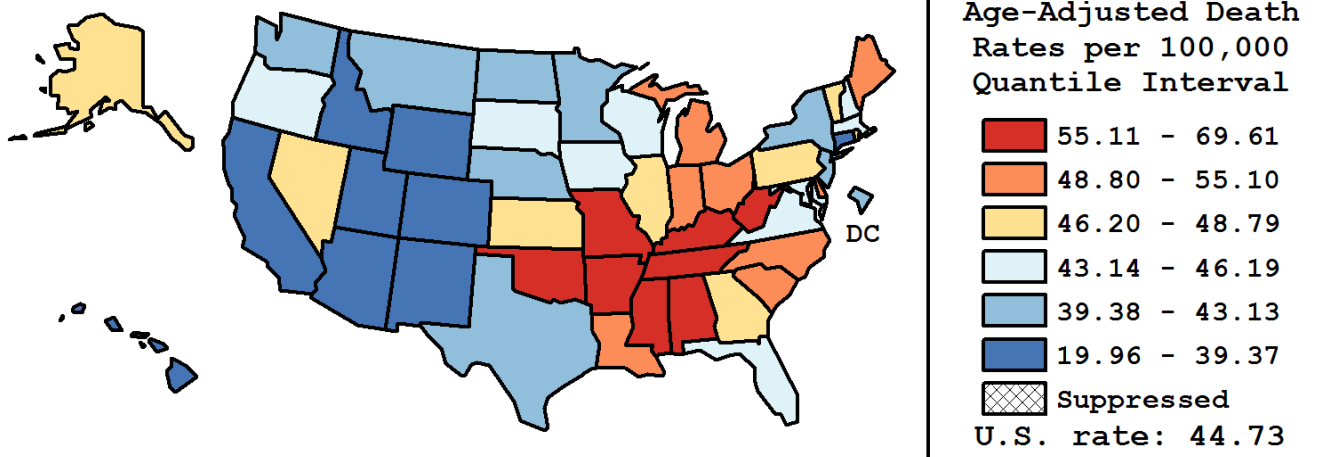
Table 15.24  
Cancer of the Lung and Bronchus (Invasive)

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2010-2014

Males and Females

State	Rate	SE	Rank(CI) <sup>d</sup>	PD
TOTAL U.S.	44.73	0.05		
High Five States				
Kentucky	69.61	0.53	01(01,01)	55.63 <sup>c</sup>
West Virginia	60.25	0.71	02(02,05)	34.70 <sup>c</sup>
Arkansas	60.12	0.59	03(02,05)	34.42 <sup>c</sup>
Mississippi	58.83	0.61	04(02,05)	31.52 <sup>c</sup>
Tennessee	58.58	0.40	05(03,05)	30.97 <sup>c</sup>
Low Five States				
California	33.39	0.14	47(47,48)	-25.35 <sup>c</sup>
Hawaii	32.08	0.63	48(47,50)	-28.29 <sup>c</sup>
Colorado	31.67	0.36	49(48,50)	-29.19 <sup>c</sup>
New Mexico	31.56	0.53	50(48,50)	-29.45 <sup>c</sup>
Utah	19.96	0.43	51(51,51)	-55.38 <sup>c</sup>

State	Rate	SE	Rank(CI) <sup>d</sup>	PD	State	Rate	SE	Rank(CI) <sup>d</sup>	PD
Alabama	55.55	0.45	07(06,10)	24.19 <sup>c</sup>	Montana	41.22	0.82	36(32,43)	-7.84 <sup>c</sup>
Alaska	47.60	1.44	20(13,32)	6.42 <sup>c</sup>	Nebraska	43.13	0.65	34(27,37)	-3.57
Arizona	36.08	0.31	46(44,46)	-19.33 <sup>c</sup>	Nevada	46.58	0.59	23(17,27)	4.13
Arkansas	60.12	0.59	03(02,05)	34.42 <sup>c</sup>	New Hampshire	46.19	0.78	25(17,30)	3.27
California	33.39	0.14	47(47,48)	-25.35 <sup>c</sup>	New Jersey	39.79	0.28	41(37,43)	-11.05 <sup>c</sup>
Colorado	31.67	0.36	49(48,50)	-29.19 <sup>c</sup>	New Mexico	31.56	0.53	50(48,50)	-29.45 <sup>c</sup>
Connecticut	39.37	0.43	43(37,44)	-11.99 <sup>c</sup>	New York	40.15	0.19	40(37,42)	-10.24 <sup>c</sup>
Delaware	51.05	0.97	13(11,18)	14.14 <sup>c</sup>	North Carolina	50.68	0.31	14(12,16)	13.30 <sup>c</sup>
D.C.	40.29	1.18	38(32,44)	-9.92 <sup>c</sup>	North Dakota	40.20	1.01	39(33,44)	-10.12 <sup>c</sup>
Florida	43.82	0.18	31(28,34)	-2.02	Ohio	52.85	0.28	11(11,13)	18.15 <sup>c</sup>
Georgia	47.67	0.32	18(17,23)	6.56 <sup>c</sup>	Oklahoma	56.47	0.52	06(05,10)	26.25 <sup>c</sup>
Hawaii	32.08	0.63	48(47,50)	-28.29 <sup>c</sup>	Oregon	44.05	0.44	29(27,34)	-1.53
Idaho	36.98	0.67	44(43,46)	-17.32 <sup>c</sup>	Pennsylvania	46.39	0.24	24(20,27)	3.71
Illinois	47.62	0.27	19(17,23)	6.46 <sup>c</sup>	Rhode Island	48.79	0.89	17(13,24)	9.08 <sup>c</sup>
Indiana	55.10	0.40	09(06,10)	23.19 <sup>c</sup>	South Carolina	50.37	0.43	15(12,18)	12.62 <sup>c</sup>
Iowa	46.01	0.50	26(20,28)	2.87	South Dakota	43.85	0.95	30(23,37)	-1.96
Kansas	46.64	0.55	22(18,27)	4.26	Tennessee	58.58	0.40	05(03,05)	30.97 <sup>c</sup>
Kentucky	69.61	0.53	01(01,01)	55.63 <sup>c</sup>	Texas	40.62	0.19	37(36,40)	-9.18 <sup>c</sup>
Louisiana	55.05	0.48	10(06,10)	23.08 <sup>c</sup>	Utah	19.96	0.43	51(51,51)	-55.38 <sup>c</sup>
Maine	52.48	0.77	12(10,15)	17.32 <sup>c</sup>	Vermont	47.10	1.11	21(15,29)	5.31 <sup>c</sup>
Maryland	43.19	0.38	33(28,36)	-3.45	Virginia	45.49	0.33	27(22,29)	1.71
Massachusetts	43.68	0.34	32(28,34)	-2.36	Washington	42.24	0.35	35(32,37)	-5.57 <sup>c</sup>
Michigan	49.79	0.30	16(14,18)	11.32 <sup>c</sup>	West Virginia	60.25	0.71	02(02,05)	34.70 <sup>c</sup>
Minnesota	39.69	0.37	42(37,43)	-11.28 <sup>c</sup>	Wisconsin	44.24	0.37	28(27,34)	-1.09
Mississippi	58.83	0.61	04(02,05)	31.52 <sup>c</sup>	Wyoming	36.69	1.11	45(41,46)	-17.97 <sup>c</sup>
Missouri	55.29	0.40	08(06,10)	23.61 <sup>c</sup>					



<sup>a</sup> 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).

<sup>b</sup> Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).

<sup>c</sup> Absolute percent difference between state rate and total U.S. rate is 5% or more.

<sup>d</sup> 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.



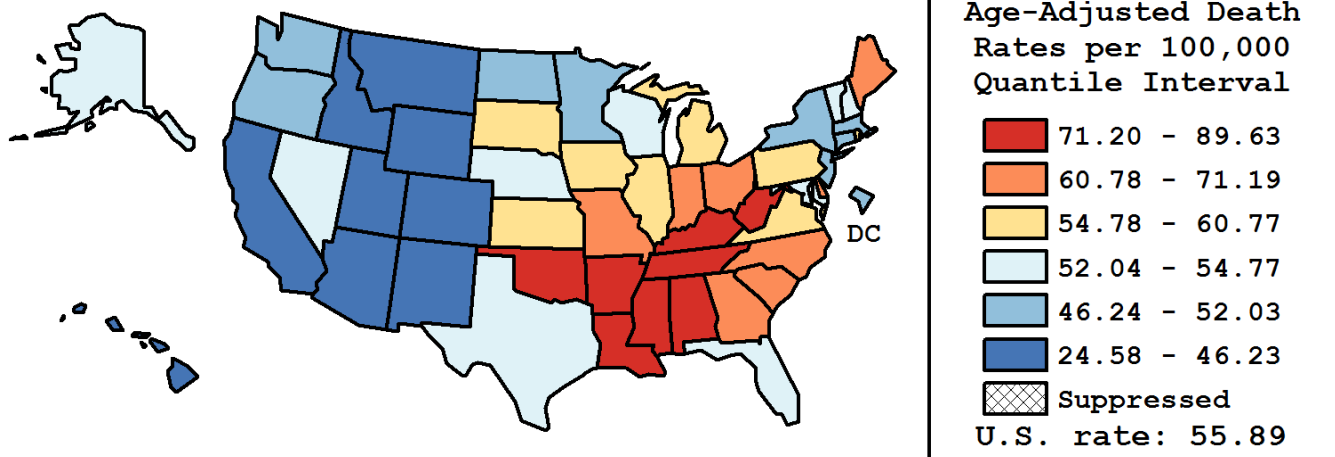
Table 15.25  
Cancer of the Lung and Bronchus (Invasive)

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2010-2014

Males

State	Rate	SE	Rank(CI) <sup>d</sup>	PD
TOTAL U.S.	55.89	0.09		
High Five States				
Kentucky	89.63	0.93	01(01,01)	60.38 <sup>c</sup>
Mississippi	82.73	1.11	02(02,03)	48.04 <sup>c</sup>
Arkansas	81.05	1.04	03(02,05)	45.03 <sup>c</sup>
Tennessee	78.43	0.72	04(03,06)	40.34 <sup>c</sup>
Alabama	77.16	0.82	05(04,06)	38.07 <sup>c</sup>
Low Five States				
Hawaii	40.83	1.06	47(44,49)	-26.94 <sup>c</sup>
California	39.84	0.22	48(46,49)	-28.72 <sup>c</sup>
New Mexico	38.14	0.87	49(47,50)	-31.76 <sup>c</sup>
Colorado	36.42	0.59	50(49,50)	-34.84 <sup>c</sup>
Utah	24.58	0.71	51(51,51)	-56.02 <sup>c</sup>

State	Rate	SE	Rank(CI) <sup>d</sup>	PD	State	Rate	SE	Rank(CI) <sup>d</sup>	PD
Alabama	77.16	0.82	05(04,06)	38.07 <sup>c</sup>	Montana	46.23	1.29	43(37,46)	-17.27 <sup>c</sup>
Alaska	54.77	2.33	25(17,40)	-2.00	Nebraska	54.30	1.10	27(22,35)	-2.84
Arizona	42.96	0.50	45(43,47)	-23.14 <sup>c</sup>	Nevada	52.78	0.92	31(24,37)	-5.56 <sup>c</sup>
Arkansas	81.05	1.04	03(02,05)	45.03 <sup>c</sup>	New Hampshire	53.83	1.27	29(22,37)	-3.69
California	39.84	0.22	48(46,49)	-28.72 <sup>c</sup>	New Jersey	48.41	0.48	40(37,42)	-13.38 <sup>c</sup>
Colorado	36.42	0.59	50(49,50)	-34.84 <sup>c</sup>	New Mexico	38.14	0.87	49(47,50)	-6.91 <sup>c</sup>
Connecticut	46.31	0.72	42(40,44)	-17.14 <sup>c</sup>	New York	49.03	0.33	39(36,41)	-12.27 <sup>c</sup>
Delaware	62.35	1.63	16(12,22)	11.56 <sup>c</sup>	North Carolina	67.88	0.55	11(10,13)	21.46 <sup>c</sup>
D.C.	49.61	2.05	38(25,44)	-11.23 <sup>c</sup>	North Dakota	52.03	1.71	34(23,41)	-6.91 <sup>c</sup>
Florida	54.09	0.30	28(24,31)	-3.22	Ohio	66.53	0.48	13(11,14)	19.04 <sup>c</sup>
Georgia	64.17	0.59	15(13,16)	14.83 <sup>c</sup>	Oklahoma	71.55	0.88	08(07,10)	28.03 <sup>c</sup>
Hawaii	40.83	1.06	47(44,49)	-26.94 <sup>c</sup>	Oregon	50.57	0.71	36(31,40)	-9.51 <sup>c</sup>
Idaho	43.73	1.08	44(42,47)	-21.76 <sup>c</sup>	Pennsylvania	59.06	0.41	20(17,23)	5.68 <sup>c</sup>
Illinois	59.00	0.45	21(17,23)	5.56 <sup>c</sup>	Rhode Island	59.12	1.50	19(15,26)	5.78 <sup>c</sup>
Indiana	71.19	0.68	09(07,10)	27.39 <sup>c</sup>	South Carolina	67.06	0.77	12(10,14)	19.99 <sup>c</sup>
Iowa	59.15	0.85	18(16,24)	5.83 <sup>c</sup>	South Dakota	55.51	1.60	24(18,35)	-0.68
Kansas	57.35	0.91	23(18,26)	2.62	Tennessee	78.43	0.72	04(03,06)	40.34 <sup>c</sup>
Kentucky	89.63	0.93	01(01,01)	60.38 <sup>c</sup>	Texas	52.24	0.33	32(28,36)	-6.52 <sup>c</sup>
Louisiana	72.90	0.85	07(06,09)	30.45 <sup>c</sup>	Utah	24.58	0.71	51(51,51)	-56.02 <sup>c</sup>
Maine	64.45	1.29	14(11,17)	15.32 <sup>c</sup>	Vermont	54.33	1.79	26(19,38)	-2.80
Maryland	52.20	0.64	33(27,37)	-6.61 <sup>c</sup>	Virginia	57.41	0.57	22(19,26)	2.72
Massachusetts	51.86	0.57	35(28,37)	-7.21 <sup>c</sup>	Washington	49.88	0.57	37(34,40)	-10.74 <sup>c</sup>
Michigan	60.77	0.49	17(16,19)	8.74 <sup>c</sup>	West Virginia	77.15	1.21	06(03,07)	38.04 <sup>c</sup>
Minnesota	47.57	0.61	41(38,43)	-14.87 <sup>c</sup>	Wisconsin	53.43	0.61	30(24,35)	-4.40
Mississippi	82.73	1.11	02(02,03)	48.04 <sup>c</sup>	Wyoming	41.93	1.76	46(42,49)	-24.97 <sup>c</sup>
Missouri	69.36	0.68	10(08,12)	24.10 <sup>c</sup>					



<sup>a</sup> 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).

<sup>b</sup> Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).

<sup>c</sup> Absolute percent difference between state rate and total U.S. rate is 5% or more.

<sup>d</sup> 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.

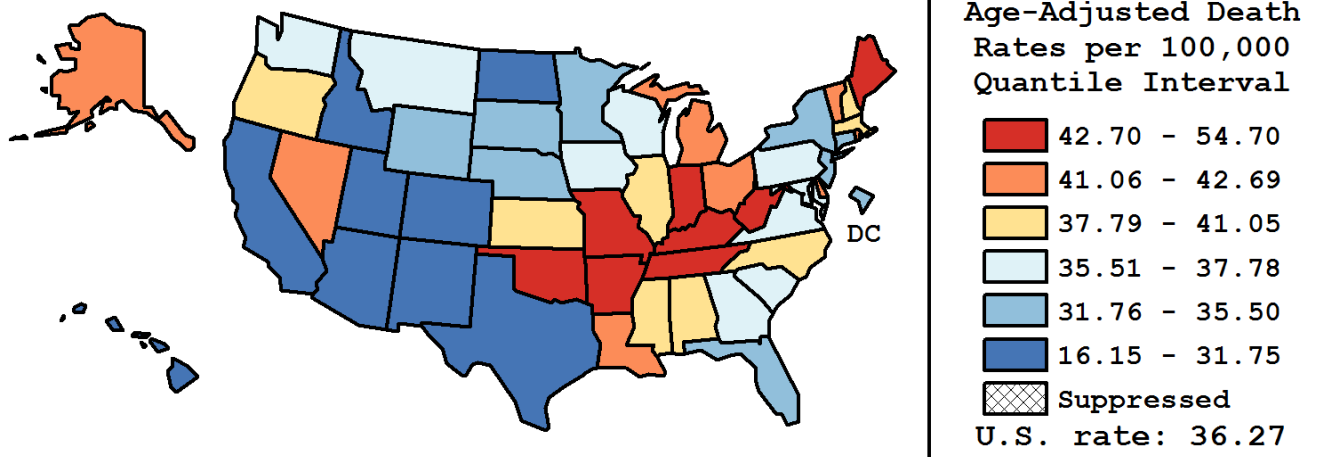
Table 15.26  
Cancer of the Lung And Bronchus (Invasive)

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2010-2014

Females

State	Rate	SE	Rank(CI) <sup>d</sup>	PD
TOTAL U.S.	36.27	0.06		
High Five States				
Kentucky	54.70	0.64	01(01,01)	50.82 <sup>c</sup>
West Virginia	47.17	0.85	02(02,04)	30.05 <sup>c</sup>
Oklahoma	44.91	0.62	03(02,09)	23.82 <sup>c</sup>
Missouri	44.67	0.48	04(02,08)	23.15 <sup>c</sup>
Arkansas	43.90	0.68	05(02,13)	21.02 <sup>c</sup>
Low Five States				
California	28.53	0.17	47(46,48)	-21.35 <sup>c</sup>
Colorado	28.08	0.46	48(46,49)	-22.59 <sup>c</sup>
New Mexico	26.37	0.65	49(48,50)	-27.30 <sup>c</sup>
Hawaii	25.14	0.76	50(49,50)	-30.69 <sup>c</sup>
Utah	16.15	0.53	51(51,51)	-55.47 <sup>c</sup>

State	Rate	SE	Rank(CI) <sup>d</sup>	PD	State	Rate	SE	Rank(CI) <sup>d</sup>	PD
Alabama	39.49	0.51	19(15,24)	8.88	Montana	37.21	1.07	27(17,39)	2.59
Alaska	41.67	1.84	12(02,31)	14.90 <sup>c</sup>	Nebraska	34.60	0.79	36(28,43)	-4.62
Arizona	30.42	0.39	46(43,46)	-16.14 <sup>c</sup>	Nevada	41.40	0.76	16(06,20)	14.14 <sup>c</sup>
Arkansas	43.90	0.68	05(02,13)	21.02 <sup>c</sup>	New Hampshire	40.70	0.99	18(06,24)	12.20 <sup>c</sup>
California	28.53	0.17	47(46,48)	-21.35 <sup>c</sup>	New Jersey	33.76	0.35	40(35,43)	-6.94
Colorado	28.08	0.46	48(46,49)	-22.59 <sup>c</sup>	New Mexico	26.37	0.65	49(48,50)	-27.30 <sup>c</sup>
Connecticut	34.41	0.54	37(31,42)	-5.13	New York	33.85	0.23	39(35,42)	-6.68
Delaware	42.61	1.19	10(03,21)	17.46 <sup>c</sup>	North Carolina	37.91	0.36	24(20,29)	4.50
D.C.	33.52	1.42	41(24,46)	-7.58	North Dakota	31.40	1.22	44(35,48)	-13.42 <sup>c</sup>
Florida	35.50	0.22	34(30,37)	-2.12	Ohio	42.69	0.34	09(06,14)	17.68 <sup>c</sup>
Georgia	35.61	0.37	33(29,38)	-1.82	Oklahoma	44.91	0.62	03(02,09)	23.82 <sup>c</sup>
Hawaii	25.14	0.76	50(49,50)	-30.69 <sup>c</sup>	Oregon	39.07	0.57	21(16,27)	7.70
Idaho	31.37	0.84	45(39,46)	-13.51 <sup>c</sup>	Pennsylvania	37.14	0.29	28(23,32)	2.40
Illinois	39.42	0.32	20(16,23)	8.68	Rhode Island	41.77	1.10	11(03,22)	15.16 <sup>c</sup>
Indiana	42.95	0.47	08(04,14)	18.42 <sup>c</sup>	South Carolina	37.78	0.50	25(20,31)	4.17
Iowa	35.97	0.60	32(24,38)	-0.82	South Dakota	35.21	1.17	35(21,43)	-2.93
Kansas	38.40	0.67	22(17,31)	5.86	Tennessee	43.69	0.47	06(03,12)	20.44 <sup>c</sup>
Kentucky	54.70	0.64	01(01,01)	50.82 <sup>c</sup>	Texas	31.75	0.22	43(41,45)	-12.46 <sup>c</sup>
Louisiana	41.54	0.56	13(08,18)	14.52 <sup>c</sup>	Utah	16.15	0.53	51(51,51)	-55.47 <sup>c</sup>
Maine	43.25	0.95	07(03,18)	19.24 <sup>c</sup>	Vermont	41.52	1.42	15(03,26)	14.47 <sup>c</sup>
Maryland	36.60	0.46	29(23,35)	0.90	Virginia	36.47	0.39	30(25,35)	0.54
Massachusetts	37.98	0.42	23(20,30)	4.72	Washington	36.36	0.44	31(24,36)	0.24
Michigan	41.52	0.36	14(09,18)	14.47 <sup>c</sup>	West Virginia	47.17	0.85	02(02,04)	30.05 <sup>c</sup>
Minnesota	33.88	0.46	38(35,43)	-6.60	Wisconsin	37.46	0.46	26(21,32)	3.29
Mississippi	41.05	0.67	17(08,21)	13.18 <sup>c</sup>	Wyoming	32.49	1.44	42(28,47)	-10.42 <sup>c</sup>
Missouri	44.67	0.48	04(02,08)	23.15 <sup>c</sup>					



<sup>a</sup> 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).

<sup>b</sup> Difference between state rate and total U.S. rate is statistically significant ( $p \leq .0002$ ).

<sup>c</sup> Absolute percent difference between state rate and total U.S. rate is 5% or more.

<sup>d</sup> 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<sup>a</sup> on January 1, 2014  
By Race/Ethnicity, Sex and Years Since Diagnosis

WARNING: The Prevalence Estimates presented on this page utilize a different tumor selection criteria from previous CSR releases and are NOT directly comparable to estimates from previous CSR releases.  
Please see the Prevalence Comparison Chapter of this CSR for more information.

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <22 <sup>a</sup>	0 to <39 <sup>e</sup>	>=39 <sup>g</sup>	Complete <sup>h</sup>
<u>Race</u>	<u>Sex</u>										
All Races <sup>b</sup>	Both Sexes	309,108	107,103	50,607	26,967	13,888	7,161	505,358	520,203	7,025	527,228
	Males	141,514	45,597	21,029	11,278	5,838	2,791	224,209	230,475	4,065	234,540
	Females	167,594	61,506	29,578	15,689	8,050	4,370	281,149	289,728	2,960	292,688
White <sup>b</sup>	Both Sexes	259,910	92,970	44,345	23,505	12,283	6,477	430,931	444,151	2,609	446,760
	Males	118,138	39,082	18,006	9,539	5,076	2,495	188,938	194,407	1,214	195,621
	Females	141,772	53,888	26,339	13,966	7,207	3,982	241,993	249,744	1,395	251,139
Black <sup>b</sup>	Both Sexes	35,388	9,995	4,554	2,480	1,237	516	53,477	54,678	237	54,915
	Males	16,796	4,500	2,206	1,173	581	208	25,142	25,728	129	25,857
	Females	18,592	5,495	2,348	1,307	656	308	28,335	28,950	108	29,058
Asian/ Pacific Islander <sup>c</sup>	Both Sexes	10,569	3,030	1,295	721	+	+	15,726	+	+	+
	Males	5,134	1,487	596	391	+	+	7,666	+	+	+
	Females	5,435	1,543	699	330	+	+	8,060	+	+	+
Hispanic <sup>d</sup>	Both Sexes	11,882	3,966	1,842	954	+	+	18,827	+	+	+
	Males	5,184	1,705	804	413	+	+	8,206	+	+	+
	Females	6,698	2,261	1,038	541	+	+	10,621	+	+	+

Estimated prevalence percent<sup>a</sup> on January 1, 2014, of the SEER<sup>c</sup> population diagnosed in the previous 22 years  
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence		All Ages	0-9	10-19	20-29	Age Specific (Crude)					Age-Adjusted <sup>f</sup>	
						30-39	40-49	50-59	60-69	70-79	80+	All Ages
<u>Race</u>	<u>Sex</u>											
All Races <sup>c</sup>	Both Sexes	0.1331%	0.0002%	0.0004%	0.0018%	0.0061%	0.0249%	0.1183%	0.3659%	0.8570%	0.8995%	0.1263%
	Males	0.1203%	0.0002%	0.0004%	0.0018%	0.0054%	0.0222%	0.1036%	0.3589%	0.8528%	1.0290%	0.1276%
	Females	0.1456%	0.0002%	0.0004%	0.0019%	0.0068%	0.0277%	0.1324%	0.3723%	0.8604%	0.8215%	0.1264%
White <sup>c</sup>	Both Sexes	0.1448%	0.0002%	0.0005%	0.0021%	0.0063%	0.0250%	0.1160%	0.3691%	0.8984%	0.9392%	0.1302%
	Males	0.1271%	-	0.0004%	0.0019%	0.0054%	0.0219%	0.0996%	0.3489%	0.8652%	1.0401%	0.1275%
	Females	0.1624%	-	0.0005%	0.0023%	0.0072%	0.0281%	0.1323%	0.3880%	0.9264%	0.8776%	0.1336%
Black <sup>c</sup>	Both Sexes	0.1143%	-	-	0.0013%	0.0062%	0.0298%	0.1659%	0.4751%	0.8974%	0.7497%	0.1378%
	Males	0.1119%	-	-	0.0017%	0.0054%	0.0296%	0.1482%	0.5327%	1.0370%	1.0324%	0.1580%
	Females	0.1164%	-	-	-	0.0068%	0.0300%	0.1814%	0.4300%	0.8001%	0.6097%	0.1258%
Asian/ Pacific Islander <sup>c</sup>	Both Sexes	0.0978%	-	-	0.0011%	0.0053%	0.0219%	0.0960%	0.2759%	0.6124%	0.7478%	0.0967%
	Males	0.0992%	-	-	0.0014%	0.0053%	0.0192%	0.0951%	0.3034%	0.6831%	0.9694%	0.1099%
	Females	0.0966%	-	-	-	0.0052%	0.0243%	0.0967%	0.2533%	0.5573%	0.6116%	0.0876%
Hispanic <sup>d</sup>	Both Sexes	0.0355%	-	-	0.0015%	0.0039%	0.0130%	0.0516%	0.1603%	0.4362%	0.4930%	0.0630%
	Males	0.0305%	-	-	0.0013%	0.0034%	0.0121%	0.0441%	0.1492%	0.4348%	0.5768%	0.0640%
	Females	0.0406%	-	-	0.0017%	0.0044%	0.0140%	0.0588%	0.1700%	0.4373%	0.4424%	0.0630%

- <sup>a</sup> US 2014 cancer prevalence counts are based on 2014 cancer prevalence proportions from the SEER registries and 1/1/2014 US population estimates based on the average of 2013 and 2014 population estimates from the US Bureau of the Census.  
<sup>b c d</sup> Prevalence was calculated using the first invasive tumor for each cancer site diagnosed during the previous 39/22 years. Statistics based on (b) SEER 9 Areas (c) SEER 13 Areas excluding the Alaska Native Registry  
<sup>e</sup> (d) NHIA for Hispanic for SEER 13 Areas excluding the Alaska Native Registry.  
<sup>f</sup> Maximum limited-duration prevalence: 39 years for 1975-2014 SEER 9 data; 22 years for 1992-2014 SEER 13 data (excluding the Alaska Native Registry) used to calculate prevalence for Hispanics and Asian Pacific Islanders.  
<sup>g h i</sup> Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups. (g) Cases diagnosed more than 39 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (h) Complete prevalence is obtained by summing 0 to <39 and >=39. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.  
- 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, 2010-2014  
Both Sexes by Race

Histology <sup>a</sup>	All Races			White		Black		Asian/Pacific Islander		American Indian/Alaska Native <sup>b</sup>		Hispanic <sup>c</sup>	
	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	49.2	226,536	99.7%	185,073	99.7%	25,714	99.8%	14,106	99.8%	768	99.5%	13,329	99.5%
Small cell (8002,8041-8045)	6.3	29,654	13.1%	25,769	13.9%	2,654	10.3%	1,023	7.2%	125	16.2%	1,395	10.4%
Non-small cell	41.5	190,304	83.8%	154,056	83.0%	22,207	86.2%	12,658	89.5%	620	80.3%	11,446	85.4%
Squamous and transitional cell <sup>d</sup>	11.6	52,719	23.2%	43,884	23.6%	6,216	24.1%	2,199	15.6%	231	29.9%	2,620	19.6%
Adenocarcinoma <sup>e</sup>	23.0	105,863	46.6%	84,119	45.3%	12,164	47.2%	8,864	62.7%	279	36.1%	6,712	50.1%
Large cell <sup>f</sup>	0.8	3,725	1.6%	3,057	1.6%	495	1.9%	155	1.1%	-	-	174	1.3%
Non-small cell carcinoma <sup>g</sup>	3.5	16,205	7.1%	12,914	7.0%	2,220	8.6%	928	6.6%	72	9.3%	1,029	7.7%
Other specified carcinomas <sup>h</sup>	2.6	11,792	5.2%	10,082	5.4%	1,112	4.3%	512	3.6%	31	4.0%	911	6.8%
Carcinoma, NOS <sup>i</sup>	1.4	6,578	2.9%	5,248	2.8%	853	3.3%	425	3.0%	23	3.0%	488	3.6%
Sarcoma <sup>j</sup>	0.1	417	0.2%	344	0.2%	42	0.2%	24	0.2%	-	-	51	0.4%
Other specified types <sup>k</sup>	0.0	200	0.1%	169	0.1%	21	0.1%	-	-	-	-	-	-
Total	49.4	227,153	100.0%	185,586	100.0%	25,777	100.0%	14,140	100.0%	772	100.0%	13,395	100.0%

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).

Percentages may not sum to 100 due to rounding.

<sup>a</sup> Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

<sup>b</sup> Estimates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>c</sup> 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.

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

<sup>e</sup> 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.

<sup>f</sup> Large cell includes histologies 8012-8014, 8021, 8034, 8082.

<sup>g</sup> Non-small cell carcinoma includes histology 8046.

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

<sup>i</sup> Carcinoma, NOS includes histologies 8000-8001, 8010-8011, 8020, 8230.

<sup>j</sup> 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.

<sup>k</sup> 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, 2010-2014  
Males by Race

Histology <sup>a</sup>	All Races			White		Black		Asian/Pacific Islander		American Indian/Alaska Native <sup>b</sup>		Hispanic <sup>c</sup>	
	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	57.7	118,770	99.7%	95,840	99.7%	14,190	99.7%	7,874	99.8%	413	99.5%	6,966	99.4%
Small cell (8002,8041-8045)	7.0	14,762	12.4%	12,629	13.1%	1,345	9.5%	687	8.7%	63	15.2%	721	10.3%
Non-small cell	48.9	100,280	84.2%	80,296	83.5%	12,323	86.6%	6,927	87.8%	337	81.2%	5,956	85.0%
Squamous and transitional cell <sup>d</sup>	16.2	32,888	27.6%	27,126	28.2%	3,914	27.5%	1,590	20.1%	134	32.3%	1,638	23.4%
Adenocarcinoma <sup>e</sup>	24.6	50,719	42.6%	39,761	41.4%	6,248	43.9%	4,366	55.3%	141	34.0%	3,225	46.0%
Large cell <sup>f</sup>	1.0	2,087	1.8%	1,674	1.7%	303	2.1%	99	1.3%	-	-	104	1.5%
Non-small cell carcinoma <sup>g</sup>	4.4	9,198	7.7%	7,213	7.5%	1,312	9.2%	595	7.5%	42	10.1%	583	8.3%
Other specified carcinomas <sup>h</sup>	2.6	5,388	4.5%	4,522	4.7%	546	3.8%	277	3.5%	18	4.3%	406	5.8%
Carcinoma, NOS <sup>i</sup>	1.9	3,728	3.1%	2,915	3.0%	522	3.7%	260	3.3%	-	-	289	4.1%
Sarcoma <sup>j</sup>	0.1	251	0.2%	210	0.2%	27	0.2%	-	-	-	-	32	0.5%
Other specified types <sup>k</sup>	0.1	121	0.1%	102	0.1%	-	-	-	-	-	-	-	-
Total	57.9	119,142	100.0%	96,152	100.0%	14,230	100.0%	7,891	100.0%	415	100.0%	7,007	100.0%

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).

Percentages may not sum to 100 due to rounding.

<sup>a</sup> Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

<sup>b</sup> Estimates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>c</sup> 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.

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

<sup>e</sup> 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.

<sup>f</sup> Large cell includes histologies 8012-8014, 8021, 8034, 8082.

<sup>g</sup> Non-small cell carcinoma includes histology 8046.

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

<sup>i</sup> Carcinoma, NOS includes histologies 8000-8001, 8010-8011, 8020, 8230.

<sup>j</sup> 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.

<sup>k</sup> 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, 2010-2014  
Females by Race

Histology <sup>a</sup>	All Races			White		Black		Asian/Pacific Islander		American Indian/Alaska Native <sup>b</sup>		Hispanic <sup>c</sup>	
	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	42.8	107,766	99.8%	89,233	99.8%	11,524	99.8%	6,232	99.7%	355	99.4%	6,363	99.6%
Small cell (8002,8041-8045)	5.9	14,892	13.8%	13,140	14.7%	1,309	11.3%	336	5.4%	62	17.4%	674	10.6%
Non-small cell	35.8	90,024	83.3%	73,760	82.5%	9,884	85.6%	5,731	91.7%	283	79.3%	5,490	85.9%
Squamous and transitional cell <sup>d</sup>	8.0	19,831	18.4%	16,758	18.7%	2,302	19.9%	609	9.7%	97	27.2%	982	15.4%
Adenocarcinoma <sup>e</sup>	21.9	55,144	51.1%	44,358	49.6%	5,916	51.2%	4,498	72.0%	138	38.7%	3,487	54.6%
Large cell <sup>f</sup>	0.7	1,638	1.5%	1,383	1.5%	192	1.7%	56	0.9%	-	-	70	1.1%
Non-small cell carcinoma <sup>g</sup>	2.8	7,007	6.5%	5,701	6.4%	908	7.9%	333	5.3%	30	8.4%	446	7.0%
Other specified carcinomas <sup>h</sup>	2.6	6,404	5.9%	5,560	6.2%	566	4.9%	235	3.8%	-	-	505	7.9%
Carcinoma, NOS <sup>i</sup>	1.1	2,850	2.6%	2,333	2.6%	331	2.9%	165	2.6%	-	-	199	3.1%
Sarcoma <sup>j</sup>	0.1	166	0.2%	134	0.1%	-	-	-	-	-	-	19	0.3%
Other specified types <sup>k</sup>	0.0	79	0.1%	67	0.1%	-	-	-	-	-	-	-	-
Total	42.9	108,011	100.0%	89,434	100.0%	11,547	100.0%	6,249	100.0%	357	100.0%	6,388	100.0%

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).

Percentages may not sum to 100 due to rounding.

<sup>a</sup> Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

<sup>b</sup> Estimates for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

<sup>c</sup> 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.

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

<sup>e</sup> 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.

<sup>f</sup> Large cell includes histologies 8012-8014, 8021, 8034, 8082.

<sup>g</sup> Non-small cell carcinoma includes histology 8046.

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

<sup>i</sup> Carcinoma, NOS includes histologies 8000-8001, 8010-8011, 8020, 8230.

<sup>j</sup> 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.

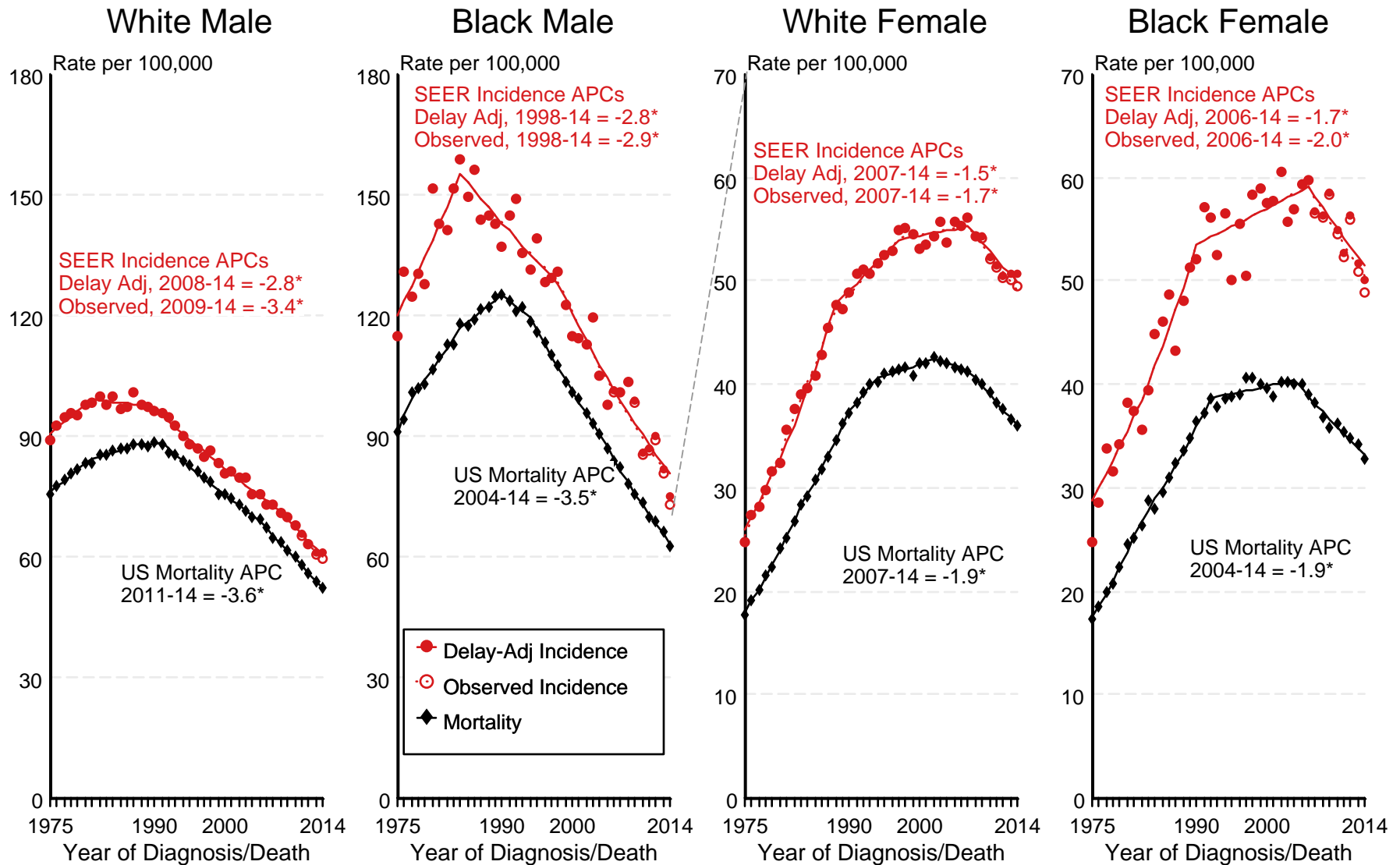
<sup>k</sup> Other specific types includes melanomas and is defined as histologies 8580, 8650, 8720-8790, 8933, 8963, 8972-8973, 8980-8982, 9064-9065, 9070, 9080, 9084-9085, 9100, 9260, 9364, 9503, 9530.

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<sup>a</sup> Cancer of the Lung and Bronchus, by Race and Sex



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

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

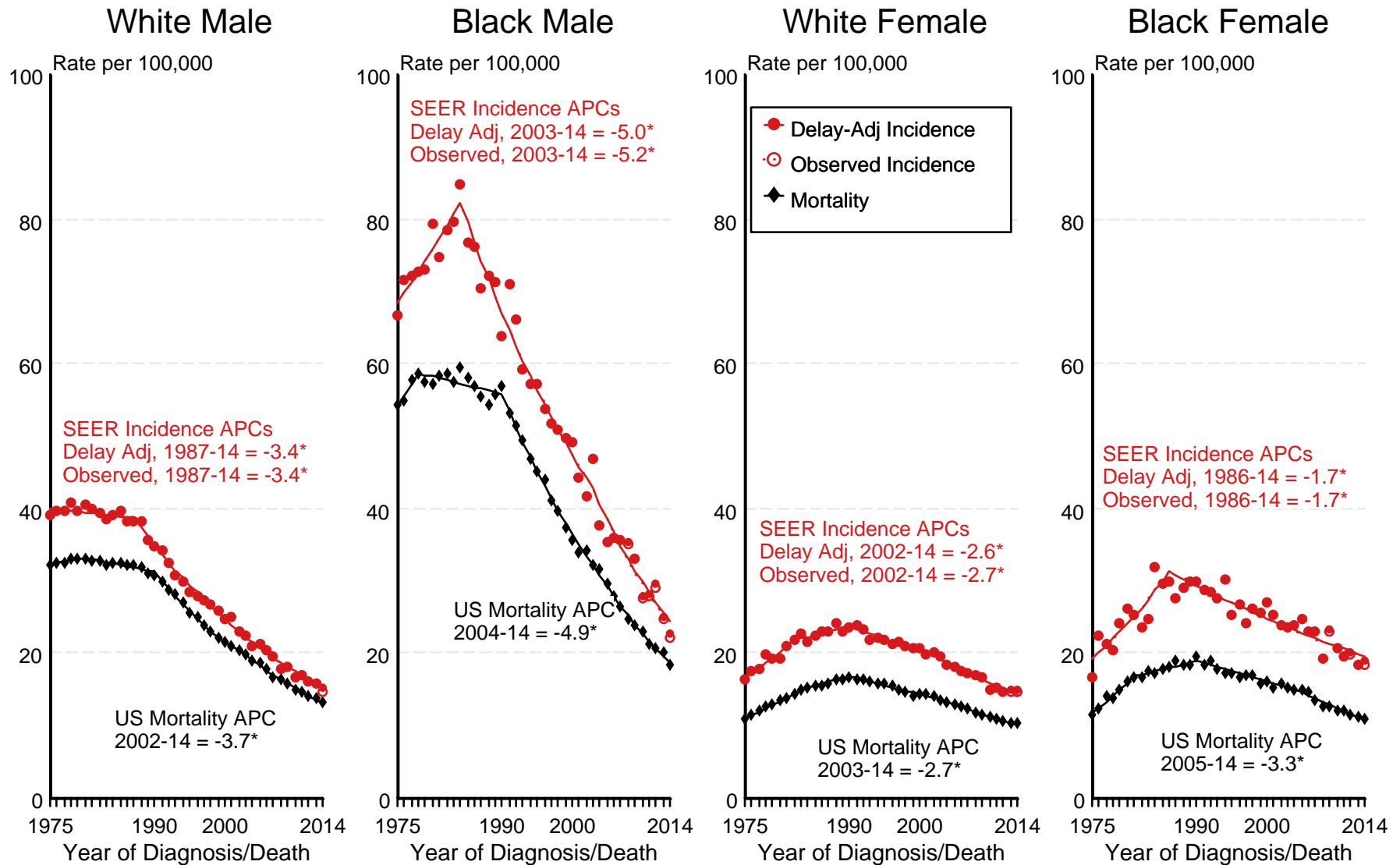
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.

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<sup>a</sup> 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).

<sup>a</sup> 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 4.4, January 2017, National Cancer Institute.

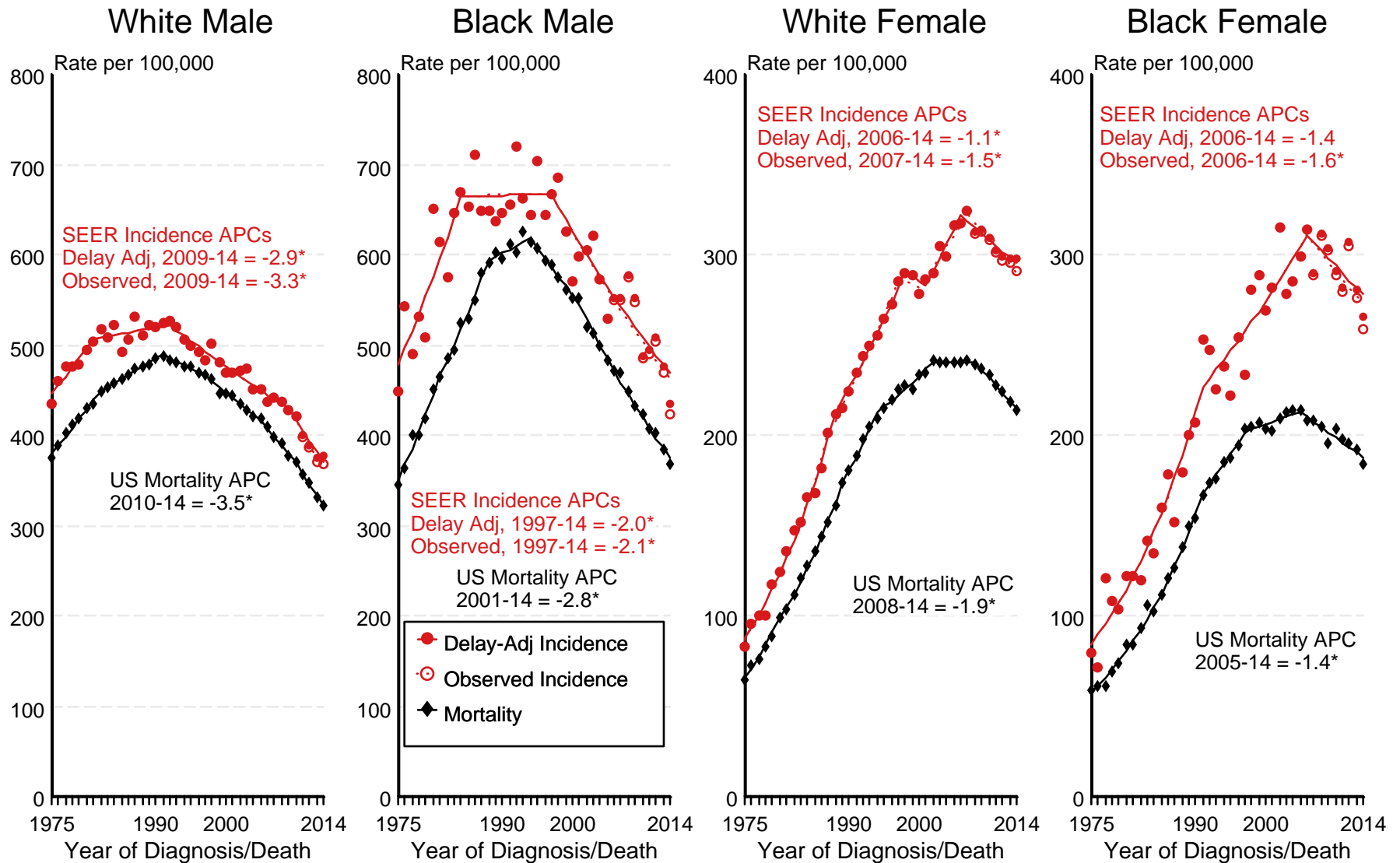
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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



Figure 15.3

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> 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).

<sup>a</sup> 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 4.4, January 2017, National Cancer Institute.

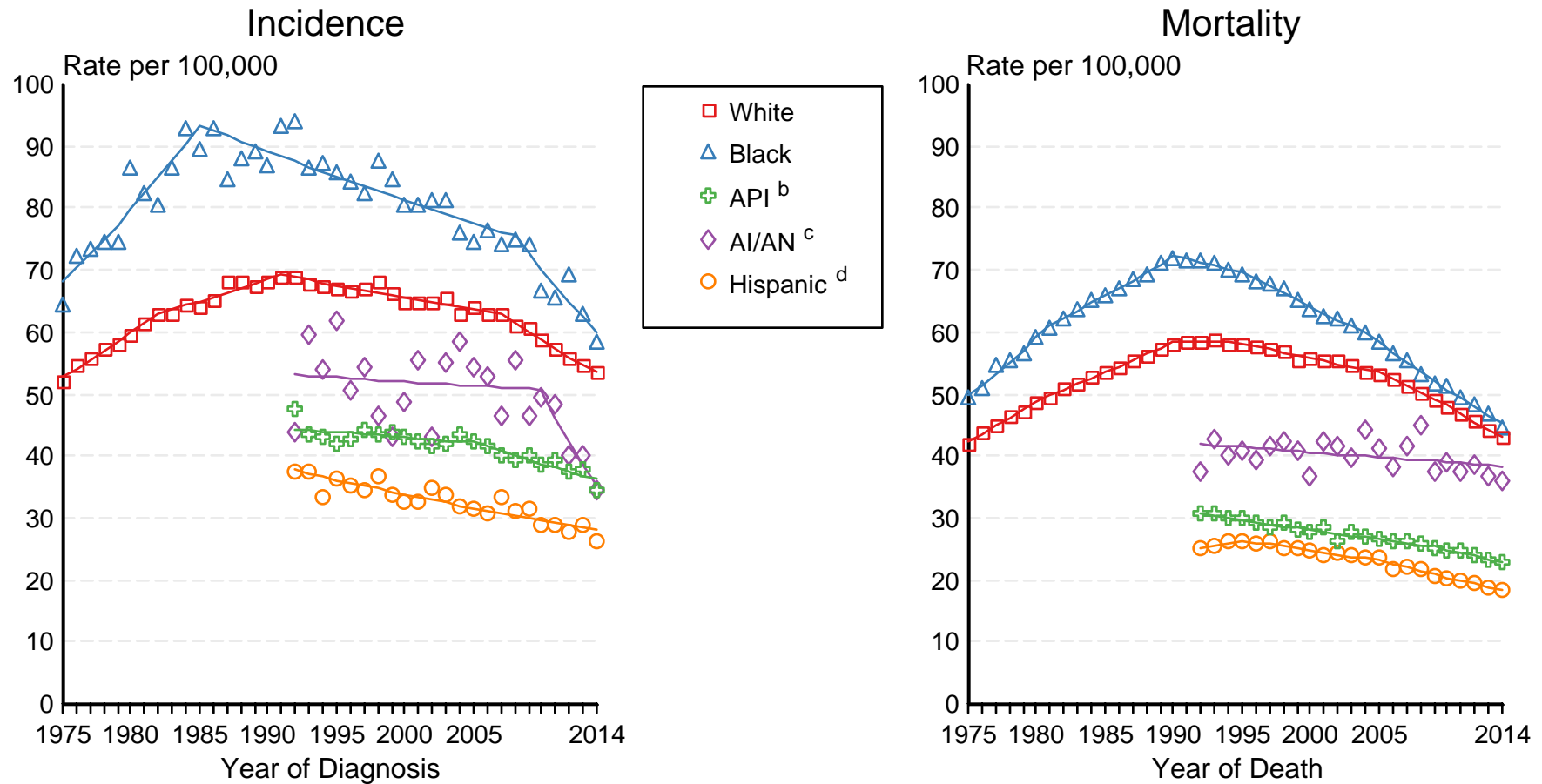
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 15.4

# SEER Incidence and US Death Rates<sup>a</sup> Cancer of the Lung and Bronchus, Both Sexes

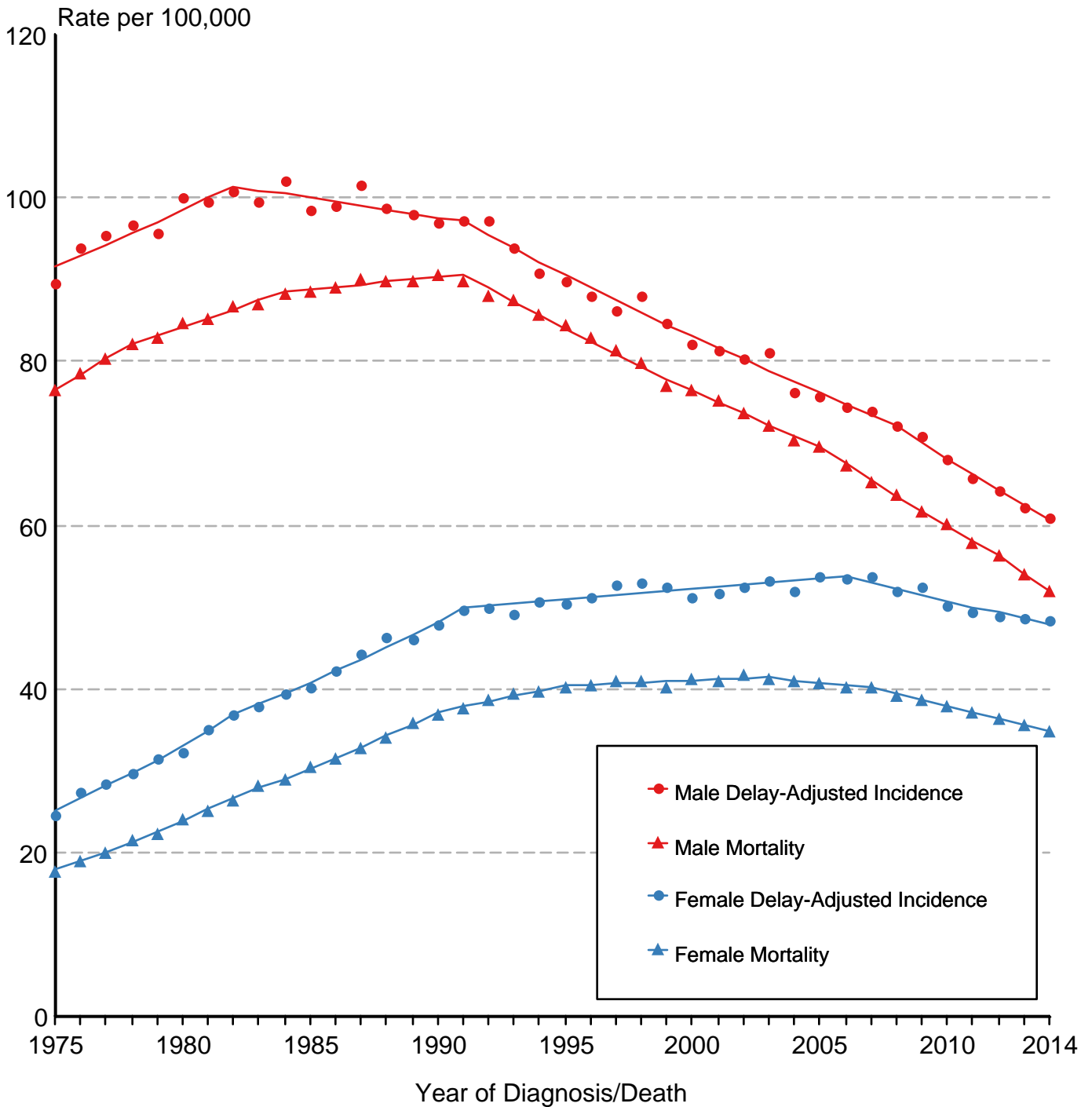
Joinpoint Analyses for Whites and Blacks from 1975-2014  
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2014



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 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from US Mortality Files, National Center for Health Statistics, CDC.

- <sup>a</sup> 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 4.4, January 2017, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2014 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2014 allow a maximum of 4 joinpoints.
- <sup>b</sup> API = Asian/Pacific Islander.
- <sup>c</sup> AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
- <sup>d</sup> 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. Mortality data for Hispanics exclude cases from New Hampshire and Oklahoma.

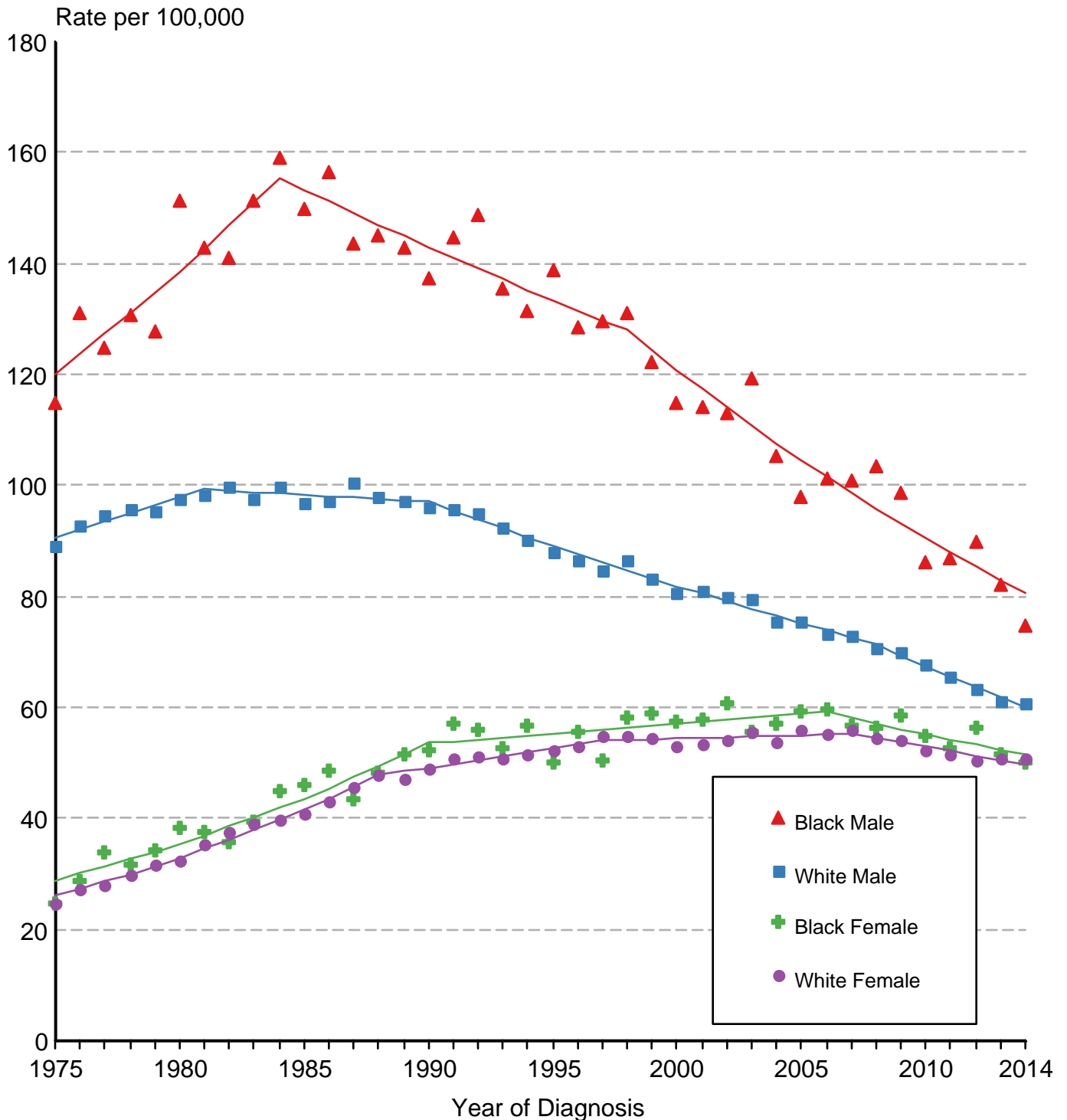
# Cancer of the Lung & Bronchus SEER Delay-Adjusted Incidence & US Death Rates, 1975-2014, All Races, By Sex



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 4.4, January 2017, National Cancer Institute.

Figure 15.6

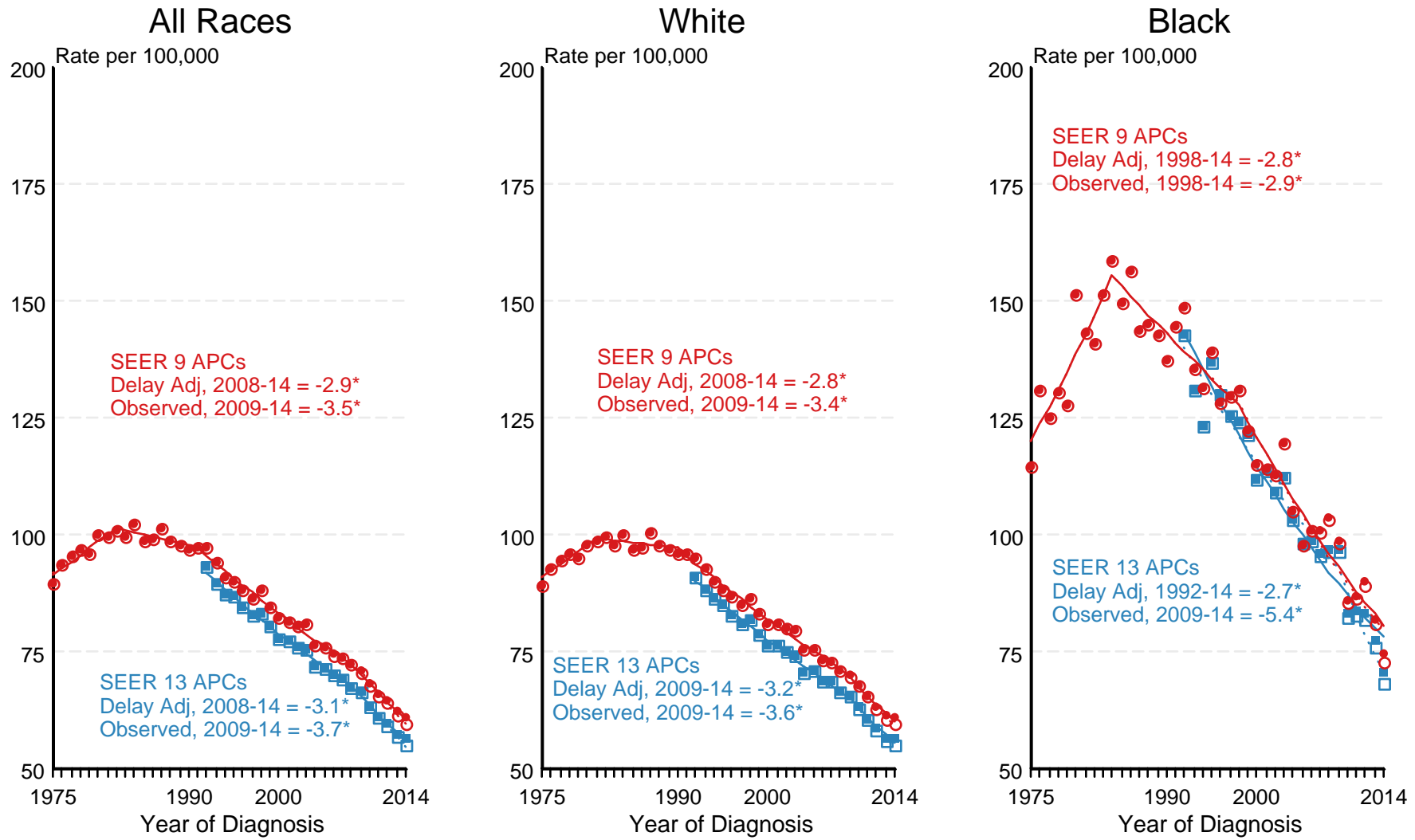
# Cancer of the Lung & Bronchus SEER Delay-Adjusted Incidence, 1975-2014 By Sex and Race



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 4.4, January 2017, National Cancer Institute.

Figure 15.7

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates<sup>a</sup> SEER 9 Areas Compared to SEER 13 Areas Cancer of the Lung and Bronchus, Male, by Race

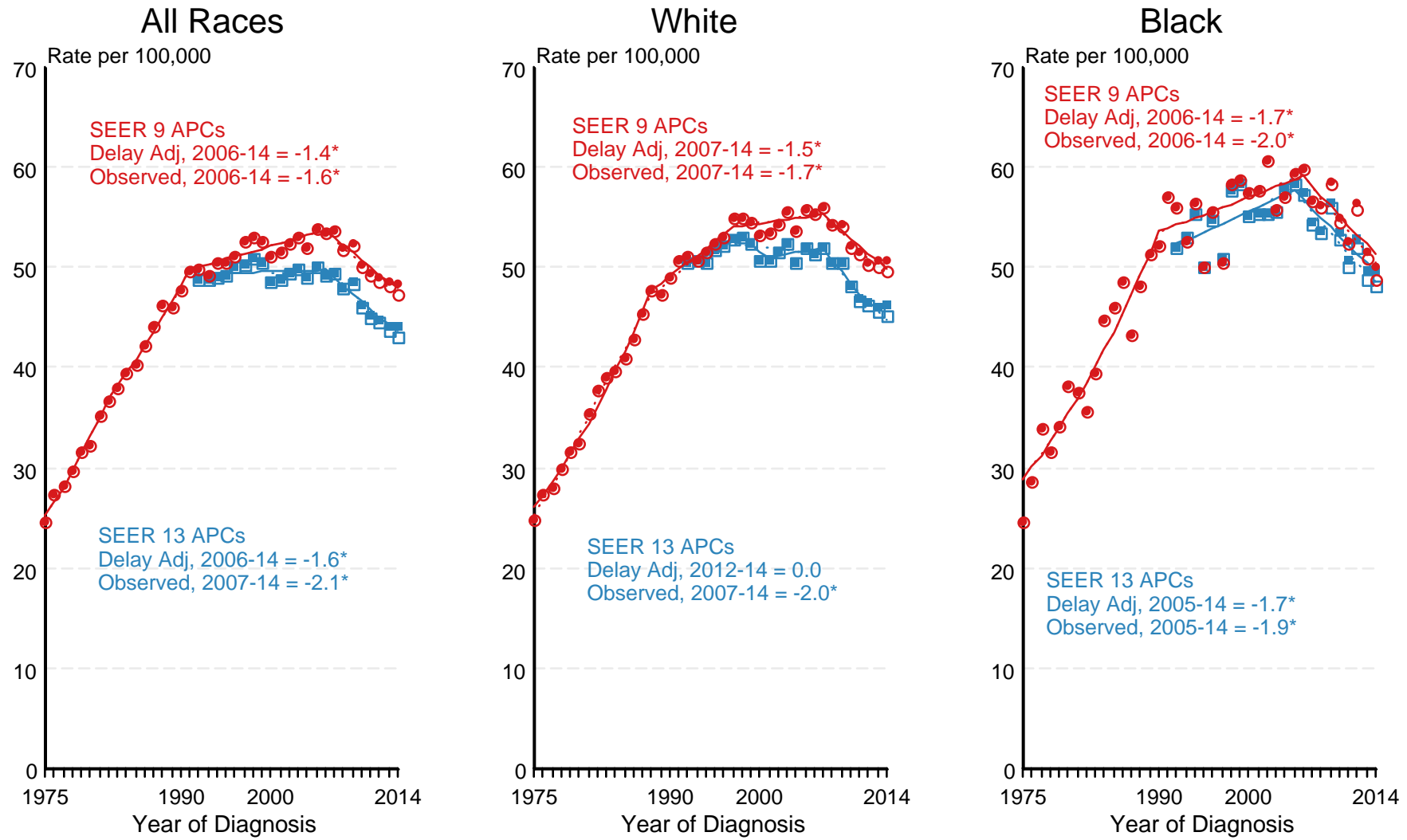


● SEER 9 Delay-Adj. Incidence    
 ○ SEER 9 Observed Incidence    
 ■ SEER 13 Delay-Adj. Incidence    
 □ SEER 13 Observed Incidence

Source: SEER 9 areas and SEER 13 areas.  
<sup>a</sup> 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 4.4, January 2017, 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 15.8

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates<sup>a</sup> SEER 9 Areas Compared to SEER 13 Areas Cancer of the Lung and Bronchus, Female, by Race



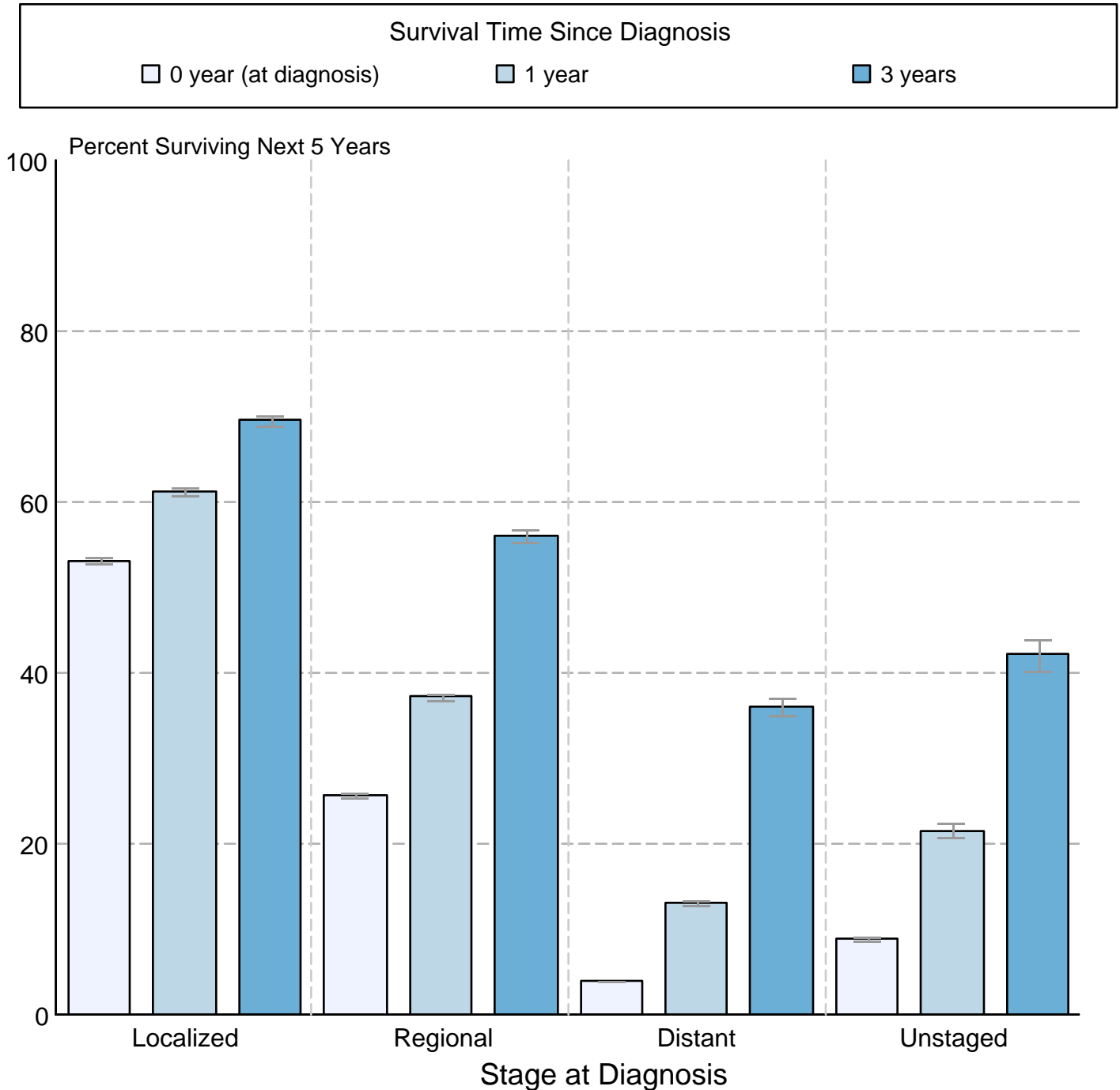
● SEER 9 Delay-Adj. Incidence    ○ SEER 9 Observed Incidence    ■ SEER 13 Delay-Adj. Incidence    □ SEER 13 Observed Incidence

Source: SEER 9 areas and SEER 13 areas.  
<sup>a</sup> 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 4.4, January 2017, 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 15.9

## 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  
1998-2013 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). California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG contribute cases for diagnosis years 2000 and later. The remaining 13 SEER Areas contribute cases for the entire time period. 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.