

Table 15.1
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence^{a,b} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	2002-11	2007-11								
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2011</u>														
All Races	1975-82	2.5*	1982-91	0.9*	1991-07	-0.7*	2007-11	-2.2*					-1.4*	-2.2*
White	1975-82	2.6*	1982-91	1.1*	1991-07	-0.6*	2007-11	-2.1*					-1.3*	-2.1*
Black	1975-84	3.3*	1984-98	-0.4	1998-11	-1.7*							-1.7*	-1.7*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2011</u>														
All Races	1992-09	-1.0*	2009-11	-4.0*									-1.7*	-2.5*
White	1992-08	-0.9*	2008-11	-2.9*									-1.6*	-2.4*
Black	1992-09	-1.3*	2009-11	-5.8									-2.3*	-3.6*
<u>SEER 9 Observed Incidence^a, 1975-2011</u>														
All Races	1975-82	2.5*	1982-91	0.9*	1991-07	-0.7*	2007-11	-2.6*					-1.5*	-2.6*
White	1975-82	2.6*	1982-91	1.1*	1991-07	-0.6*	2007-11	-2.5*					-1.5*	-2.5*
Black	1975-85	3.2*	1985-08	-0.9*	2008-11	-5.2*							-2.4*	-4.1*
<u>SEER 13 Observed Incidence^b, 1992-2011</u>														
All Races	1992-09	-1.0*	2009-11	-4.8*									-1.9*	-2.9*
White	1992-09	-1.0*	2009-11	-4.8*									-1.8*	-2.9*
White NH ^{e,f}	1992-08	-0.7*	2008-11	-3.4*									-1.6*	-2.7*
Black	1992-09	-1.3*	2009-11	-6.7*									-2.6*	-4.1*
Black NH ^{e,f}	1992-09	-1.3*	2009-11	-6.6*									-2.5*	-4.0*
API ^e	1992-05	-0.5*	2005-11	-1.6*									-1.2*	-1.6*
AI/AN ^{eg}	1992-11	-0.5											-0.5	-0.5
Hispanic ^f	1992-11	-1.2*											-1.2*	-1.2*
<u>U.S. Cancer Mortality^c, 1975-2011</u>														
All Races	1975-80	3.0*	1980-90	1.8*	1990-95	-0.2	1995-05	-1.0*	2005-11	-2.3*			-1.8*	-2.3*
White	1975-80	2.9*	1980-90	1.8*	1990-95	-0.1	1995-05	-0.8*	2005-11	-2.2*			-1.7*	-2.2*
Black	1975-81	3.5*	1981-90	1.9*	1990-95	-0.7*	1995-04	-1.7*	2004-11	-2.7*			-2.5*	-2.7*
<u>U.S. Cancer Mortality^c, 1992-2011</u>														
All Races	1992-04	-0.8*	2004-11	-2.1*									-1.9*	-2.1*
White	1992-05	-0.7*	2005-11	-2.2*									-1.7*	-2.2*
White NH ^{e,f}	1992-05	-0.6*	2005-11	-2.1*									-1.6*	-2.1*
Black	1992-97	-1.1*	1997-05	-1.8*	2005-11	-2.8*							-2.5*	-2.8*
Black NH ^{e,f}	1992-96	-0.9*	1996-05	-1.7*	2005-11	-2.7*							-2.4*	-2.7*
API ^e	1992-11	-1.1*											-1.1*	-1.1*
AI/AN ^{eg}	1992-11	-0.1											-0.1	-0.1
Hispanic ^f	1992-95	1.4	1995-05	-1.2*	2005-11	-2.6*							-2.2*	-2.6*

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://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).

^a ^b ^c ^d ^e ^f ^g ^{*} -

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

Table 15.2
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	2002-11	2007-11										
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2011</u>														
All Races	1975-82	1.4*	1982-91	-0.4	1991-11	-1.8*							-1.8*	-1.8*
White	1975-81	1.5*	1981-90	-0.2	1990-11	-1.7*							-1.7*	-1.7*
Black	1975-84	2.9*	1984-97	-1.4*	1997-11	-2.7*							-2.7*	-2.7*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2011</u>														
All Races	1992-09	-1.9*	2009-11	-4.0*									-2.4*	-3.0*
White	1992-11	-1.9*											-1.9*	-1.9*
Black	1992-11	-2.6*											-2.6*	-2.6*
<u>SEER 9 Observed Incidence^a, 1975-2011</u>														
All Races	1975-82	1.5*	1982-91	-0.5*	1991-09	-1.8*	2009-11	-4.3*					-2.3*	-3.1*
White	1975-81	1.5*	1981-90	-0.2	1990-09	-1.7*	2009-11	-4.0*					-2.2*	-2.9*
Black	1975-84	2.9*	1984-97	-1.4*	1997-11	-2.8*							-2.8*	-2.8*
<u>SEER 13 Observed Incidence^b, 1992-2011</u>														
All Races	1992-09	-1.9*	2009-11	-4.8*									-2.6*	-3.4*
White	1992-09	-1.9*	2009-11	-4.5*									-2.5*	-3.2*
White NH ^{ef}	1992-09	-1.8*	2009-11	-4.2*									-2.3*	-3.0*
Black	1992-11	-2.6*											-2.6*	-2.6*
Black NH ^{ef}	1992-11	-2.6*											-2.6*	-2.6*
API ^e	1992-94	-6.8	1994-99	0.5	1999-08	-1.3*	2008-11	-4.2*					-2.3*	-3.5*
AI/AN ^{eg}	1992-11	-1.3*											-1.3*	-1.3*
Hispanic ^f	1992-11	-2.0*											-2.0*	-2.0*
<u>U.S. Cancer Mortality^c, 1975-2011</u>														
All Races	1975-78	2.5*	1978-84	1.2*	1984-90	0.4*	1990-93	-1.1	1993-05	-1.9*	2005-11	-2.9*	-2.6*	-2.9*
White	1975-82	1.7*	1982-91	0.4*	1991-05	-1.8*	2005-11	-2.8*					-2.5*	-2.8*
Black	1975-77	4.9*	1977-84	2.3*	1984-90	1.2*	1990-94	-1.2*	1994-04	-2.7*	2004-11	-3.5*	-3.3*	-3.5*
<u>U.S. Cancer Mortality^c, 1992-2011</u>														
All Races	1992-05	-1.9*	2005-11	-2.9*									-2.6*	-2.9*
White	1992-05	-1.8*	2005-11	-2.8*									-2.5*	-2.8*
White NH ^{ef}	1992-05	-1.6*	2005-11	-2.7*									-2.4*	-2.7*
Black	1992-94	-0.9	1994-04	-2.7*	2004-11	-3.5*							-3.3*	-3.5*
Black NH ^{ef}	1992-94	-0.6	1994-04	-2.7*	2004-11	-3.4*							-3.2*	-3.4*
API ^e	1992-11	-1.5*											-1.5*	-1.5*
AI/AN ^{eg}	1992-11	-1.0*											-1.0*	-1.0*
Hispanic ^f	1992-99	-0.7	1999-11	-2.7*									-2.7*	-2.7*

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://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

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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).

^a ^b ^c ^d ^e ^f ^g ^{*} -

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

Table 15.3
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	2002-11	2007-11										
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2011</u>														
All Races	1975-82	5.6*	1982-91	3.4*	1991-07	0.5*	2007-11	-2.1*					-0.7*	-2.1*
White	1975-82	5.6*	1982-88	4.2*	1988-97	1.5*	1997-07	0.3	2007-11	-1.8*			-0.6*	-1.8*
Black	1975-91	4.2*	1991-11	0.1									0.1	0.1
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2011</u>														
All Races	1992-07	0.0	2007-11	-2.2*									-1.0*	-2.2*
White	1992-98	1.0*	1998-01	-1.3	2001-07	0.4	2007-11	-2.4*					-0.9*	-2.4*
Black	1992-05	0.8*	2005-11	-1.9*									-1.0	-1.9*
<u>SEER 9 Observed Incidence^a, 1975-2011</u>														
All Races	1975-82	5.6*	1982-91	3.4*	1991-07	0.5*	2007-11	-2.4*					-0.8*	-2.4*
White	1975-82	5.6*	1982-88	4.2*	1988-97	1.5*	1997-07	0.2	2007-11	-2.1*			-0.8*	-2.1*
Black	1975-91	4.2*	1991-11	0.1									0.1	0.1
<u>SEER 13 Observed Incidence^b, 1992-2011</u>														
All Races	1992-07	0.0	2007-11	-2.5*									-1.1*	-2.5*
White	1992-97	1.0	1997-09	-0.3*	2009-11	-4.7*							-1.3*	-2.5*
White NH ^{ef}	1992-97	1.1*	1997-08	0.0	2008-11	-3.3*							-1.1*	-2.5*
Black	1992-05	0.8*	2005-11	-2.2*									-1.2*	-2.2*
Black NH ^{ef}	1992-06	0.7*	2006-11	-2.6*									-1.2	-2.6*
API ^e	1992-11	0.3											0.3	0.3
AI/AN ^{eg}	1992-11	0.8											0.8	0.8
Hispanic ^f	1992-11	-0.4*											-0.4*	-0.4*
<u>U.S. Cancer Mortality^c, 1975-2011</u>														
All Races	1975-82	6.0*	1982-90	4.2*	1990-95	1.7*	1995-03	0.3*	2003-07	-0.8	2007-11	-1.9*	-1.2*	-1.9*
White	1975-83	5.8*	1983-90	4.1*	1990-94	2.0*	1994-02	0.5*	2002-07	-0.5	2007-11	-1.8*	-1.1*	-1.8*
Black	1975-82	6.4*	1982-92	3.7*	1992-04	0.4*	2004-11	-1.9*					-1.4*	-1.9*
<u>U.S. Cancer Mortality^c, 1992-2011</u>														
All Races	1992-95	1.4*	1995-03	0.3*	2003-07	-0.8	2007-11	-1.9*					-1.2*	-1.9*
White	1992-02	0.7*	2002-07	-0.6	2007-11	-1.8*							-1.1*	-1.8*
White NH ^{ef}	1992-95	1.7*	1995-03	0.6*	2003-07	-0.5	2007-11	-1.6*					-0.9*	-1.6*
Black	1992-04	0.4*	2004-11	-2.0*									-1.4*	-2.0*
Black NH ^{ef}	1992-04	0.5*	2004-11	-1.9*									-1.4*	-1.9*
API ^e	1992-11	-0.3*											-0.3*	-0.3*
AI/AN ^{eg}	1992-08	1.6*	2008-11	-6.3									-1.1	-4.4
Hispanic ^f	1992-04	0.4	2004-11	-1.6*									-1.2*	-1.6*

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://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).

^a ^b ^c ^d ^e ^f - Joinpoint regression line analysis could not be performed on data series.

Table 15.4

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

Trends in SEER 9 Observed Incidence^c Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints,
By Race and Sex

		JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d
		Years	APC	Years	APC	2007-11								
SEER 9 Observed Incidence^c for Small Cell Cancer of the Lung and Bronchus^a, 1975-2011														
All Races	Both Sexes	1975-82	6.2*	1982-89	1.3	1989-11	-2.4*							-2.4*
All Races	Male	1975-81	5.6*	1981-88	0.0	1988-11	-3.2*							-3.2*
All Races	Female	1975-82	9.6*	1982-91	3.0*	1991-11	-1.8*							-1.8*
White	Both Sexes	1975-82	6.4*	1982-89	1.4*	1989-11	-2.2*							-2.2*
White	Male	1975-78	8.9*	1978-86	2.0*	1986-11	-3.0*							-3.0*
White	Female	1975-82	10.2*	1982-91	3.1*	1991-11	-1.5*							-1.5*
Black	Both Sexes	1975-86	4.9*	1986-11	-2.5*									-2.5*
Black	Male	1975-85	5.0*	1985-11	-3.4*									-3.4*
Black	Female	1975-91	4.6*	1991-11	-2.1*									-2.1*
SEER 9 Observed Incidence^c for Non-Small Cell Cancer of the Lung and Bronchus^b, 1975-2011														
All Races	Both Sexes	1975-81	4.8*	1981-90	1.1*	1990-99	-1.5*	1999-02	6.0*	2002-11	-1.0*			-1.0*
All Races	Male	1975-80	4.5*	1980-88	0.4	1988-99	-2.3*	1999-02	4.8	2002-11	-1.9*			-1.9*
All Races	Female	1975-88	5.2*	1988-00	0.5	2000-03	6.9*	2003-11	-0.5					-0.5
White	Both Sexes	1975-87	3.0*	1987-99	-1.0*	1999-02	5.6	2002-11	-0.9*					-0.9*
White	Male	1975-80	4.4*	1980-88	0.5	1988-99	-2.3*	1999-02	4.7	2002-11	-1.9*			-1.9*
White	Female	1975-88	5.4*	1988-00	0.6*	2000-03	6.7	2003-11	-0.5					-0.5
Black	Both Sexes	1975-84	4.5*	1984-00	-1.3*	2000-03	5.2	2003-11	-2.1*					-2.1*
Black	Male	1975-84	3.3*	1984-11	-1.6*									-1.6*
Black	Female	1975-90	5.0*	1990-97	-1.6	1997-05	4.0*	2005-11	-2.0					-2.0

^aJoinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Small Cell Cancer of the Lung and Bronchus includes histologies 8002, 8041-8045.

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

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

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

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

Table 15.5
Cancer of the Lung and Bronchus (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975	52.24	89.52	24.53	51.94	89.12	24.85	64.55	114.90	24.66
1976	55.42	93.80	27.31	54.64	92.75	27.28	72.34	131.00	28.63
1977	56.70	95.51	28.31	55.88	94.76	28.04	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	58.61	95.81	31.57	58.02	95.19	31.63	74.54	127.72	34.11
1980	60.66	99.97	32.22	59.43	97.72	32.37	86.57	151.30	38.25
1981	62.03	99.41	35.11	61.53	98.44	35.51	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	99.45	37.89	63.03	97.63	39.10	86.62	151.34	39.49
1984	65.49	102.05	39.45	64.34	99.92	39.62	92.93	158.84	44.82
1985	64.62	98.62	40.24	63.99	96.87	40.89	89.56	149.68	46.05
1986	65.77	99.04	42.28	65.14	97.34	42.93	92.94	156.28	48.67
1987	67.90	101.52	44.16	68.08	100.66	45.50	84.76	143.60	43.28
1988	68.03	98.69	46.30	68.25	97.92	47.71	88.14	144.94	48.08
1989	67.54	97.95	46.09	67.56	97.05	47.24	89.05	142.78	51.37
1990	68.08	96.92	47.79	68.24	96.14	48.96	86.79	137.18	52.13
1991	69.21	97.23	49.59	68.98	95.91	50.63	93.15	144.78	57.06
1992	69.46	97.20	49.85	68.93	94.88	51.07	93.90	148.75	55.89
1993	67.77	93.97	49.17	67.83	92.53	50.67	86.32	135.38	52.45
1994	67.18	90.95	50.55	67.29	90.15	51.62	87.23	131.52	56.54
1995	66.85	89.84	50.44	67.11	88.00	52.43	85.77	138.76	50.11
1996	66.47	88.01	51.23	66.83	86.74	52.99	84.38	128.46	55.36
1997	66.64	86.31	52.61	67.26	84.89	54.99	82.16	129.24	50.51
1998	67.56	88.05	52.98	68.09	86.68	55.11	87.09	130.46	57.85
1999	65.86	84.61	52.51	66.36	83.37	54.46	84.39	121.89	58.96
2000	64.17	82.16	51.25	64.74	80.90	53.28	80.18	114.38	57.36
2001	64.19	81.44	51.70	65.10	81.11	53.56	80.32	114.05	57.57
2002	64.09	80.46	52.53	64.84	79.85	54.33	81.29	112.87	60.53
2003	64.81	81.11	53.13	65.64	79.73	55.75	80.71	118.71	55.43
2004	62.30	76.38	52.11	62.93	75.46	53.89	76.13	105.12	57.09
2005	63.09	75.91	53.88	64.16	75.74	55.90	74.65	97.97	59.43
2006	62.41	74.45	53.53	63.04	73.31	55.56	76.53	100.98	59.70
2007	62.16	73.78	53.67	63.30	73.01	56.25	74.21	100.56	56.77
2008	60.52	72.37	51.93	61.37	71.06	54.45	75.00	103.32	56.17
2009	60.08	70.89	52.28	60.85	70.05	54.20	73.82	97.40	58.32
2010	57.72	67.98	50.09	58.93	67.87	52.25	66.97	85.93	54.44
2011	56.64	66.17	49.62	57.81	65.92	51.86	66.20	87.47	52.32

Additional information on the model used to delay-adjust SEER Incidence rates can be found at (<http://surveillance.cancer.gov/delay/>).

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). - Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 15.6
Cancer of the Lung and Bronchus (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975-2011	63.33	86.87	46.15	63.55	86.11	47.24	80.06	122.07	50.80
1975	52.24	89.52	24.53	51.94	89.12	24.85	64.55	114.90	24.66
1976	55.42	93.80	27.31	54.64	92.75	27.28	72.34	131.00	28.63
1977	56.70	95.51	28.31	55.88	94.76	28.04	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	58.61	95.81	31.57	58.02	95.19	31.63	74.54	127.72	34.11
1980	60.66	99.97	32.22	59.43	97.72	32.37	86.57	151.30	38.25
1981	62.03	99.41	35.11	61.53	98.44	35.51	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	99.45	37.89	63.03	97.63	39.10	86.62	151.34	39.49
1984	65.49	102.05	39.45	64.34	99.92	39.62	92.92	158.84	44.82
1985	64.62	98.62	40.23	63.99	96.87	40.88	89.56	149.68	46.04
1986	65.77	99.04	42.28	65.14	97.33	42.93	92.94	156.27	48.67
1987	67.90	101.52	44.15	68.08	100.66	45.50	84.76	143.59	43.28
1988	68.03	98.68	46.30	68.25	97.91	47.71	88.13	144.93	48.07
1989	67.54	97.95	46.09	67.56	97.05	47.23	89.04	142.77	51.37
1990	68.08	96.92	47.79	68.23	96.13	48.96	86.78	137.17	52.13
1991	69.20	97.22	49.58	68.98	95.90	50.63	93.14	144.76	57.05
1992	69.46	97.19	49.85	68.92	94.87	51.06	93.88	148.73	55.88
1993	67.76	93.96	49.17	67.82	92.52	50.66	86.30	135.35	52.43
1994	67.17	90.93	50.54	67.27	90.13	51.61	87.20	131.49	56.53
1995	66.84	89.83	50.43	67.10	87.97	52.42	85.75	138.72	50.09
1996	66.46	87.99	51.22	66.81	86.71	52.98	84.35	128.41	55.34
1997	66.62	86.29	52.60	67.24	84.85	54.97	82.12	129.18	50.49
1998	67.54	88.03	52.96	68.06	86.65	55.09	87.04	130.39	57.82
1999	65.83	84.57	52.49	66.32	83.32	54.43	84.33	121.81	58.92
2000	64.14	82.11	51.22	64.69	80.83	53.23	80.10	114.28	57.30
2001	64.15	81.38	51.67	65.03	81.02	53.50	80.22	113.91	57.50
2002	64.03	80.39	52.48	64.76	79.75	54.26	81.17	112.70	60.43
2003	64.74	81.02	53.07	65.53	79.60	55.66	80.56	118.49	55.33
2004	62.21	76.26	52.03	62.80	75.31	53.78	75.95	104.87	56.96
2005	62.96	75.76	53.77	63.99	75.54	55.76	74.42	97.68	59.25
2006	62.25	74.26	53.39	62.83	73.07	55.38	76.24	100.60	59.48
2007	61.95	73.53	53.49	63.03	72.70	56.01	73.85	100.07	56.50
2008	60.26	72.05	51.70	61.03	70.67	54.15	74.53	102.69	55.82
2009	59.74	70.48	51.98	60.42	69.55	53.81	73.24	96.63	57.86
2010	57.28	67.46	49.71	58.39	67.24	51.76	66.29	85.06	53.89
2011	55.50	64.83	48.63	56.48	64.40	50.67	64.56	85.29	51.02

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). - Statistic not shown. Rate based on less than 16 cases for the time interval.

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975-2011	8.94	11.34	7.15	9.43	11.77	7.69	8.50	11.81	6.17
1975	6.64	10.33	3.79	6.88	10.69	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	7.77	10.41	14.99	6.86
1985	10.47	14.99	7.10	10.81	15.28	7.52	11.12	17.90	6.27
1986	11.22	15.57	7.98	11.57	16.05	8.27	12.26	17.70	8.35
1987	10.67	14.15	8.22	11.18	14.57	8.86	9.68	14.61	6.20
1988	11.39	15.29	8.53	11.92	15.63	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	8.97	10.16	13.32	7.95
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	11.98	9.05	9.95	13.53	7.50
1995	9.87	12.30	8.12	10.37	12.64	8.74	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	9.87	11.31	8.83	9.37	12.10	7.45
1999	8.81	10.05	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	8.14	9.48	11.62	7.94
2001	8.38	9.85	7.34	8.91	10.34	7.94	8.52	10.80	6.89
2002	8.29	9.39	7.54	8.98	9.86	8.39	7.21	9.80	5.71
2003	8.23	9.12	7.61	8.73	9.37	8.34	7.93	9.50	6.83
2004	8.12	9.00	7.49	8.53	9.25	8.01	8.60	9.98	7.75
2005	7.59	8.69	6.81	8.22	9.24	7.50	6.63	7.78	5.88
2006	7.67	8.51	7.08	8.24	8.82	7.86	6.83	8.19	5.89
2007	7.67	8.59	7.01	8.33	8.96	7.92	7.10	9.40	5.44
2008	7.09	7.94	6.46	7.57	8.10	7.20	6.36	8.79	4.87
2009	7.12	7.77	6.67	7.58	8.10	7.25	7.51	8.36	6.94
2010	6.79	7.46	6.33	7.45	7.94	7.13	5.87	6.87	5.10
2011	6.23	6.81	5.82	6.74	7.05	6.56	5.24	6.64	4.28

Note:

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

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

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

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

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975-2011	42.81	58.76	30.94	42.49	57.63	31.31	56.78	86.74	35.57
1975	30.10	51.18	13.90	29.37	49.95	13.86	42.64	77.46	14.84
1976	32.96	54.74	16.40	32.22	53.61	16.26	45.60	82.38	17.51
1977	35.03	58.20	17.44	34.03	56.60	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	37.73	61.45	20.00	36.84	59.99	19.90	52.76	91.51	22.84
1980	39.35	64.33	20.69	38.14	62.18	20.55	59.06	103.02	25.80
1981	40.54	64.79	22.59	40.00	63.85	22.68	54.97	94.67	24.97
1982	41.41	66.26	23.20	40.81	65.02	23.49	55.81	97.81	24.13
1983	41.84	66.19	24.06	41.16	64.37	24.68	60.76	107.14	26.02
1984	43.46	68.00	25.50	42.08	65.57	25.26	67.33	116.65	30.98
1985	43.08	65.84	26.34	42.24	63.87	26.58	63.60	107.17	31.77
1986	43.12	64.56	27.45	42.34	62.65	27.81	64.72	109.68	32.57
1987	45.63	69.48	28.34	45.27	68.19	28.88	60.52	104.01	29.58
1988	45.09	65.77	29.99	44.99	65.05	30.63	59.81	96.94	33.14
1989	44.25	64.40	29.70	43.87	63.33	30.11	61.00	97.84	34.69
1990	44.75	63.60	31.10	44.43	62.66	31.39	59.87	92.31	37.15
1991	44.93	63.77	31.37	44.14	61.91	31.68	64.85	102.15	38.11
1992	45.25	63.87	31.70	44.40	61.45	32.29	64.76	104.87	36.43
1993	43.66	61.02	30.97	43.50	59.81	31.73	56.72	89.94	33.59
1994	43.03	58.55	31.84	42.68	57.32	32.35	58.60	90.49	35.94
1995	42.39	57.05	31.67	42.19	55.56	32.58	58.13	92.93	34.23
1996	41.51	54.47	32.10	41.46	53.40	32.94	53.97	81.25	35.15
1997	41.36	54.52	31.61	41.52	53.41	32.79	53.54	84.51	32.39
1998	42.10	55.39	32.49	42.40	54.46	33.83	54.54	82.60	35.49
1999	40.49	52.62	31.59	40.54	51.63	32.46	54.10	78.98	37.10
2000	38.57	49.69	30.47	38.78	48.92	31.52	48.56	69.03	34.55
2001	46.75	60.00	36.95	47.08	59.34	38.00	59.85	86.27	42.17
2002	46.90	59.16	38.00	46.88	58.21	38.70	62.18	85.56	46.32
2003	47.34	60.01	38.05	47.63	58.59	39.73	60.96	91.38	40.29
2004	45.59	56.49	37.59	45.68	55.26	38.68	56.12	79.31	40.68
2005	46.75	56.17	39.85	46.89	55.35	40.73	57.91	74.93	46.42
2006	46.42	55.84	39.38	46.20	54.20	40.29	60.27	81.38	45.65
2007	46.27	55.20	39.62	46.43	53.87	40.90	58.37	79.00	44.54
2008	45.57	54.58	38.96	45.59	52.92	40.33	59.11	80.77	44.34
2009	44.80	52.84	38.91	45.09	51.91	40.06	55.73	74.39	43.32
2010	43.50	51.54	37.46	44.01	51.18	38.57	50.45	64.24	41.33
2011	42.59	49.73	37.24	42.80	48.83	38.27	52.11	69.57	40.61

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

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

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

Table 15.9
Cancer of the Lung and Bronchus (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Death:									
1975-2011	53.23	78.12	35.25	53.16	77.10	35.84	61.32	100.71	34.54
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	73.53	36.27
2011	46.00	57.86	37.01	46.70	57.82	38.19	49.35	70.09	35.46

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.10
Cancer of the Lung and Bronchus (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
SEER Incidence									
Age at Diagnosis									
Age-Adjusted Rates, 2007-2011									
All ages	60.1	72.2	51.1	61.7	72.4	53.8	68.0	93.0	51.2
Under 65	18.1	20.1	16.3	18.1	19.5	16.8	25.1	31.5	19.7
65 and over	350.3	432.6	292.0	363.2	438.2	309.5	364.2	518.1	268.9
All ages (IARC world std) ^c	37.0	43.3	31.9	37.9	43.3	33.6	43.9	58.5	33.3
Age-Specific Rates, 2007-2011									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	0.1	0.1	0.1	-	0.1	-	-	-
20-24	0.4	0.4	0.3	0.4	0.4	0.4	-	-	-
25-29	0.6	0.6	0.7	0.6	0.6	0.6	0.6	-	-
30-34	1.3	1.3	1.3	1.2	1.2	1.3	1.4	1.6	1.2
35-39	2.9	2.8	2.9	2.9	2.8	3.1	2.8	3.1	2.6
40-44	8.0	7.8	8.2	8.0	7.7	8.4	10.5	11.0	10.0
45-49	22.9	22.3	23.6	22.8	21.8	23.8	32.0	32.3	31.6
50-54	49.2	53.0	45.5	48.3	50.4	46.3	73.7	89.9	59.1
55-59	86.0	99.4	73.5	85.6	96.0	75.5	125.8	165.4	92.0
60-64	150.9	174.0	129.7	153.1	171.3	136.0	197.3	261.9	144.5
65-69	259.6	299.4	224.5	269.4	302.2	239.9	302.1	401.1	225.4
70-74	351.3	413.7	299.5	368.3	423.2	321.8	367.3	501.9	270.2
75-79	425.5	520.3	353.7	442.8	529.4	375.5	430.0	603.2	319.8
80-84	429.6	555.8	346.9	442.7	560.3	364.3	416.6	634.9	300.0
85+	326.5	470.8	255.3	329.8	470.5	260.4	320.5	527.4	237.8
U.S. Mortality									
Age at Death									
Age-Adjusted Rates, 2007-2011									
All ages	48.4	61.6	38.5	49.1	61.4	39.8	52.0	75.7	36.5
Under 65	13.6	16.1	11.2	13.5	15.7	11.5	17.7	23.7	12.6
65 and over	288.8	375.9	227.2	294.7	377.7	235.3	289.4	434.9	201.7
All ages (IARC world std) ^c	28.9	36.0	23.2	29.2	35.7	24.0	32.6	46.3	22.7
Age-Specific Rates, 2007-2011									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.0	0.0	-	0.0	0.0	-	-	-	-
20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	-
25-29	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	-
30-34	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.7	0.4
35-39	1.6	1.7	1.5	1.6	1.7	1.5	1.5	1.5	1.5
40-44	5.6	5.6	5.6	5.7	5.6	5.9	6.3	7.0	5.6
45-49	17.5	18.5	16.5	17.3	17.9	16.7	23.5	27.3	20.1
50-54	37.6	43.3	32.0	37.0	41.5	32.6	51.3	66.5	37.8
55-59	65.3	80.7	50.8	64.5	77.9	51.6	88.5	123.7	58.7
60-64	114.6	140.3	90.8	115.0	137.8	93.6	143.0	201.2	95.6
65-69	194.3	238.7	154.9	198.0	238.5	161.3	217.5	309.1	147.4
70-74	273.3	338.4	218.7	280.6	340.9	229.1	276.6	402.3	187.4
75-79	344.2	438.5	272.1	352.1	441.4	282.4	335.5	493.7	236.8
80-84	379.4	511.5	292.5	386.3	514.9	300.0	361.6	555.8	259.3
85+	328.5	491.3	250.7	332.1	491.9	255.0	311.6	538.3	223.7

^a 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.

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

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

^c Rates are per 100,000 and are age-adjusted to the IARC world standard population.

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

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

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>Small Cell Cancer of the Lung and Bronchus^a</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2007-2011									
All ages	7.2	8.0	6.6	7.8	8.4	7.3	6.5	7.9	5.5
Under 65	2.6	2.7	2.5	2.8	2.9	2.8	2.5	2.8	2.2
65 and over	38.8	44.7	34.8	41.8	46.8	38.4	34.3	43.4	28.5
Age-Specific Rates, 2007-2011									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	0.1	-	-	0.1	-	-	-	-	-
35-39	0.2	0.2	0.2	0.3	0.2	0.3	-	-	-
40-44	0.9	0.9	0.9	1.0	1.0	1.0	0.8	1.0	-
45-49	3.1	2.9	3.4	3.5	3.2	3.9	3.0	3.0	3.1
50-54	7.4	7.6	7.2	8.1	8.1	8.1	7.5	8.8	6.4
55-59	12.7	13.6	11.9	14.0	14.6	13.4	12.2	14.1	10.6
60-64	22.1	23.2	21.1	24.2	24.7	23.7	20.1	23.2	17.6
65-69	36.3	38.7	34.2	39.9	41.5	38.5	29.7	35.3	25.4
70-74	43.8	48.5	40.0	47.8	51.1	45.0	38.3	48.3	31.1
75-79	46.9	52.7	42.5	50.2	54.9	46.5	42.6	54.4	35.1
80-84	39.7	49.9	32.9	41.7	51.6	35.1	36.2	46.3	30.8
85+	19.2	29.7	14.1	19.5	29.7	14.5	19.6	28.8	16.0
<u>Non-Small Cell Cancer Lung and Bronchus^b</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2007-2011									
All ages	44.9	54.3	37.9	45.7	54.1	39.5	52.4	71.6	39.3
Under 65	14.2	15.7	12.8	14.0	15.1	13.0	20.6	25.7	16.2
65 and over	257.3	320.8	211.5	265.2	323.8	222.7	272.2	388.8	198.7
Age-Specific Rates, 2007-2011									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	-	0.1	0.1	-	0.1	-	-	-
20-24	0.3	0.3	0.3	0.4	0.3	0.4	-	-	-
25-29	0.6	0.5	0.6	0.5	0.5	0.6	0.6	-	-
30-34	1.1	1.1	1.1	1.0	1.0	1.1	1.2	1.4	1.0
35-39	2.4	2.4	2.5	2.5	2.3	2.6	2.3	2.6	2.0
40-44	6.6	6.3	7.0	6.6	6.1	7.0	8.6	9.1	8.3
45-49	18.4	17.7	19.0	17.9	17.1	18.8	26.9	26.5	27.2
50-54	38.7	41.5	35.9	37.3	38.7	36.0	60.3	73.1	48.8
55-59	66.9	77.4	57.2	65.4	73.4	57.6	102.7	134.3	75.7
60-64	116.9	135.9	99.5	116.8	131.9	102.6	160.6	214.4	116.6
65-69	202.2	234.7	173.5	207.5	234.2	183.4	246.9	330.3	182.3
70-74	270.8	321.0	229.2	282.3	327.3	244.2	286.8	392.9	210.2
75-79	322.1	400.6	262.7	333.1	405.8	276.7	329.7	466.3	242.7
80-84	305.2	404.4	240.2	313.5	407.2	250.9	291.6	448.1	208.0
85+	183.1	275.9	137.3	184.1	275.4	139.0	176.1	307.0	123.8

- ^a Small Cell Cancer of the Lung and Bronchus includes histologies 8002, 8041-8045.
^b Non-Small Cell Cancer of the Lung and Bronchus includes histologies 8003-8004, 8012-8015, 8021-8022, 8030-8035, 8046, 8050-8052, 8070-8076, 8078, 8082-8084, 8090, 8094, 8120, 8123, 8140-8141, 8143-8145, 8147, 8190, 8200-8201, 8211, 8240-8241, 8243-8246, 8249-8255, 8260, 8290, 8310, 8320, 8323, 8333, 8401, 8430, 8440, 8470-8471, 8480-8481, 8490, 8503, 8507, 8525, 8550, 8560, 8562, 8570-8572, 8574-8576.
^c SEER 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 ^a	-	-	-	8	7	11	5	5	6
1970-1973 ^a	-	-	-	10	9	14	7	6	10
1975-1977 ^b	12.2	11.1	15.3	12.2	11.1	15.4	11.3	10.6	13.8
1978-1980 ^b	12.8	11.4	16.3	12.9	11.5	16.2	11.7	9.7	17.8
1981-1983 ^b	13.1	11.5	16.4	13.3	11.7	16.5	11.3	10.1	14.9
1984-1986 ^b	12.8	11.2	16.0	13.0	11.3	16.3	11.1	10.3	12.8
1987-1989 ^b	13.0	11.9	14.9	13.3	12.0	15.3	10.9	10.8	11.1
1990-1992 ^b	13.6	12.1	15.9	14.0	12.4	16.2	10.4	9.3	12.5
1993-1995 ^b	14.3	12.5	16.9	14.5	12.6	17.1	12.9	11.3	15.7
1996-1998 ^b	14.6	12.9	16.8	14.8	13.0	17.0	12.3	10.7	14.8
1999-2003 ^b	15.5	13.4	18.0	15.8	13.7	18.3	12.7	11.3	14.5
2004-2010 ^b	17.8 ^f	15.5 ^f	20.4 ^f	18.2 ^f	15.8 ^f	20.7 ^f	14.9 ^f	13.0 ^f	17.1 ^f
5-Year Period Survival (Percent)^{cd}									
2010	17.4	14.9	20.2	17.7	15.3	20.4	14.3	12.2	17.0
Stage Distribution (%) 2004-2010^{ce}									
All Stages									
Number of cases	268,159	142,878	125,281	221,014	116,179	104,835	29,906	16,797	13,109
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	15	14	17	16	14	18	13	11	14
Regional	22	22	22	22	22	22	22	21	22
Distant	57	59	55	56	58	54	61	62	59
Unstaged	6	5	6	6	5	6	4	5	4
5-Year Relative Survival (Percent), 2004-2010^c									
Age at Diagnosis:									
Ages <45	28.9	25.2	32.4	30.4	25.9	34.8	24.2	23.0	25.3
Ages 45-54	19.7	15.8	24.3	20.6	16.5	25.2	15.2	12.0	19.4
Ages 55-64	19.1	16.2	23.1	19.6	16.6	23.4	15.1	12.6	19.1
Ages 65-74	17.9	15.2	21.2	18.2	15.4	21.4	14.5	12.4	17.3
Ages 75+	12.2	10.7	13.7	12.6	10.9	14.1	8.5	7.5	9.4
Ages <65	19.9	16.6	24.1	20.5	17.1	24.7	15.7	13.0	19.7
Ages 65+	15.0	13.0	17.2	15.3	13.3	17.5	12.0	10.6	13.6
Stage^e:									
All Stages	16.8	14.4	19.6	17.1	14.7	19.8	13.9	11.8	16.5
Localized	54.0	48.6	58.9	54.5	49.0	59.4	46.1	41.9	50.5
Regional	26.5	24.2	29.2	26.6	24.4	29.1	23.8	21.1	27.2
Distant	4.0	3.3	4.8	3.8	3.1	4.6	3.9	3.3	4.7
Unstaged	7.4	6.9	7.9	6.8	6.1	7.5	10.5	10.2	10.7

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

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

^c Based on follow-up of patients into 2011.

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

^e Based on follow-up of patients into 2011.

^f Period survival provides a 2010 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2007-2009: 0-1 year survival), (2006-2008: 1-2 year survival), (2005-2007: 2-3 year survival), (2004-2006: 3-4 year survival), (2003-2005: 4-5 years survival).

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

^h The difference between 1975-1977 and 2004-2010 is statistically significant ($p<.05$).

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

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

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

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

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	3.6	3.1	4.8	3.7	3.1	4.9	3.7	3.8	3.6
1978-1980 ^a	4.2	3.2	6.4	4.3	3.3	6.4	3.1	2.4	5.0
1981-1983 ^a	4.5	3.5	6.2	4.6	3.6	6.1	5.0	3.7	8.2
1984-1986 ^a	4.5	3.5	6.2	4.7	3.6	6.4	3.5	2.2	5.6
1987-1989 ^a	5.1	3.9	6.6	5.1	3.9	6.8	4.0	3.3	5.1
1990-1992 ^a	5.4	4.5	6.4	5.5	4.5	6.6	3.9	3.9	3.9
1993-1995 ^a	6.4	5.1	7.9	6.3	5.1	7.7	6.7	4.0	10.4
1996-1998 ^b	5.9	5.2	6.5	6.1	5.4	6.7	3.6	2.7	4.5
1999-2003 ^a	6.1	4.8	7.4	6.0	4.5	7.6	5.2	5.4	4.9
2004-2010 ^a	6.6 ^e	4.9 ^e	8.3 ^e	6.5 ^e	4.8 ^e	8.2 ^e	6.9 ^e	5.7 ^e	8.0
5-Year Period Survival (Percent)^{bc}									
2010	6.5	5.2	7.8	6.4	5.0	7.7	7.4	6.2	8.5
Stage Distribution (%) 2004-2010^{bd}									
All Stages									
Number of cases	35,840	18,203	17,637	31,308	15,711	15,597	3,077	1,564	1,513
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	5	4	5	5	4	5	5	4	5
Regional	21	19	22	21	19	22	21	19	23
Distant	72	74	70	72	74	70	73	75	70
Unstaged	3	3	3	3	3	3	2	2	2
5-Year Relative Survival (Percent), 2004-2010^b									
Age at Diagnosis:									
Ages <45	10.1	10.3	9.8	8.9	9.2	8.4	15.6	17.4 ^f	14.1 ^f
Ages 45-54	9.0	7.4	10.8	8.7	6.8	10.8	9.0	7.2	11.0
Ages 55-64	8.1	5.8	10.7	8.1	5.9	10.4	7.8	4.8	12.2
Ages 65-74	5.7	4.7	6.8	5.8	4.5	6.9	5.3	5.1	5.5
Ages 75+	3.4	2.9	3.8	3.3	2.7	3.8	3.9	6.0	2.9
Ages <65	8.4	6.5	10.6	8.3	6.3	10.4	8.7	6.0	12.0
Ages 65+	4.7	3.9	5.5	4.7	3.8	5.6	4.7	5.3	4.2
Stage^d:									
All Stages	6.3	5.0	7.6	6.2	4.9	7.5	6.8	5.7	7.8
Localized	24.2	20.7	27.3	24.5	21.0	27.7	20.7	20.9 ^f	20.1 ^f
Regional	14.3	12.0	16.4	14.3	11.7	16.4	14.9	13.3	16.1
Distant	2.8	2.3	3.4	2.7	2.1	3.2	3.5	2.5	4.7
Unstaged	7.8	6.6	9.0	7.7	5.4	9.9	10.4	19.1 ^f	-

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

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

Based on follow-up of patients into 2011.

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

Based on follow-up of patients into 2011.

^c Period survival provides a 2010 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2007-2009: 0-1 year survival), (2006-2008: 1-2 year survival), (2005-2007: 2-3 year survival), (2004-2006: 3-4 year survival), (2003-2005: 4-5 years survival).

^d Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding. The difference between 1975-1977 and 2004-2010 is statistically significant ($p<.05$).

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

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

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

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

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	16.4	14.8	21.0	16.7	15.0	21.4	13.6	12.5	17.7
1978-1980 ^a	16.7	14.8	21.4	17.0	15.2	21.5	14.2	11.6	22.8
1981-1983 ^a	17.1	15.0	21.8	17.5	15.4	22.1	13.9	12.2	19.2
1984-1986 ^a	16.6	14.4	21.0	17.0	14.7	21.5	13.2	11.9	16.4
1987-1989 ^a	16.9	15.2	19.8	17.4	15.5	20.6	13.2	12.9	14.0
1990-1992 ^a	17.6	15.5	21.1	18.3	16.1	21.7	12.8	11.1	16.1
1993-1995 ^a	18.7	16.1	22.5	19.3	16.5	23.2	15.1	13.3	18.4
1996-1998 ^b	19.4	16.7	22.9	19.9	17.1	23.5	15.2	12.8	19.3
1999-2003 ^a	19.7	16.8	23.4	20.5	17.5	24.1	14.6	12.7	17.4
2004-2010 ^a	21.7 ^e	18.7 ^e	25.1 ^e	22.6 ^e	19.5 ^e	26.0 ^e	16.7 ^e	14.2 ^e	19.6
5-Year Period Survival (Percent)^{bc}									
2010	21.4	18.0	25.4	22.2	18.7	26.1	16.4	13.6	19.9
Stage Distribution (%) 2004-2010^{bd}									
All Stages									
Number of cases	198,887	107,826	91,061	161,471	86,539	74,932	23,496	13,360	10,136
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	18	16	21	19	17	22	14	13	16
Regional	24	24	24	24	25	24	23	23	24
Distant	55	57	53	54	55	51	60	62	58
Unstaged	3	3	3	3	3	3	3	3	2
5-Year Relative Survival (Percent), 2004-2010^b									
Age at Diagnosis:									
Ages <45	30.6	26.3	34.6	33.0	27.9	37.9	23.5	21.3	25.7
Ages 45-54	22.1	17.6	27.2	23.6	18.9	28.8	15.9	12.2	20.5
Ages 55-64	22.4	19.0	27.2	23.3	19.8	27.9	16.7	14.1	21.0
Ages 65-74	21.8	18.3	26.0	22.3	18.8	26.6	17.0	14.3	20.7
Ages 75+	16.6	14.1	19.1	17.2	14.5	19.9	10.8	9.1	12.2
Ages <65	22.9	19.0	27.8	24.0	20.0	28.9	16.9	13.9	21.2
Ages 65+	19.3	16.4	22.6	19.9	16.8	23.2	14.6	12.5	17.1
Stage^d:									
All Stages	20.7	17.4	24.5	21.4	18.0	25.2	15.8	13.3	19.1
Localized	58.2	52.5	63.3	58.7	53.0	63.8	49.8	45.3	54.4
Regional	29.8	26.7	33.5	30.1	27.2	33.5	26.0	22.8	30.1
Distant	4.5	3.7	5.6	4.4	3.6	5.4	4.1	3.5	5.1
Unstaged	12.3	10.4	14.3	12.3	10.1	14.5	10.6	9.2	12.5

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

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

Based on follow-up of patients into 2011.

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

Based on follow-up of patients into 2011.

c Period survival provides a 2010 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2007-2009: 0-1 year survival), (2006-2008: 1-2 year survival), (2005-2007: 2-3 year survival), (2004-2006: 3-4 year survival), (2003-2005: 4-5 years survival). Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding. The difference between 1975-1977 and 2004-2010 is statistically significant ($p<.05$).

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

e The standard error is greater than 10 percentage points.

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

Table 15.15
Cancer of the Lung and Bronchus (Invasive)

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

All Races, Males and Females

Year of Diagnosis

	1975– 1979	1980– 1984	1985– 1989	1990– 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Survival Time																				
1-year	35.3	37.2	38.5	39.5	40.3	39.9	40.4	39.9	41.4	40.8	40.2	40.8	41.9	42.2	43.5	44.0	44.3	45.1	45.6	44.4
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	29.5	30.0	30.8	31.1	
3-year	16.3	16.9	17.1	18.3	19.1	19.3	19.3	19.8	19.8	20.3	19.8	20.7	20.7	22.3	22.6	23.5	23.8	24.4		
4-year	13.9	14.5	14.6	15.5	16.5	16.2	16.6	17.0	17.0	17.5	16.8	17.5	17.9	18.8	19.5	19.9	20.3			
5-year	12.5	12.9	13.0	13.8	14.5	14.5	14.7	14.6	15.2	15.7	15.0	15.6	16.0	16.7	17.3	17.5				
6-year	11.4	11.7	11.9	12.6	13.2	13.2	13.3	13.3	13.7	14.2	13.4	14.1	14.5	15.3	15.7					
7-year	10.7	10.8	10.9	11.6	12.3	12.1	12.3	12.2	12.7	12.9	12.3	12.9	13.2	14.0						
8-year	10.0	10.0	10.1	10.7	11.5	11.2	11.3	11.2	11.9	12.0	11.4	11.8	11.9							
9-year	9.4	9.2	9.4	9.9	10.7	10.3	10.4	10.5	11.1	11.2	10.6	11.0								
10-year	8.8	8.6	8.8	9.3	10.0	9.5	9.8	10.0	10.5	10.4	10.0									
11-year	8.3	8.1	8.2	8.6	9.5	8.8	9.1	9.4	9.7	9.6										
12-year	7.8	7.6	7.7	8.0	8.9	8.3	8.5	8.9	9.1											
13-year	7.4	7.2	7.2	7.5	8.2	7.9	8.0	8.1												
14-year	7.1	6.8	6.8	7.1	7.7	7.5	7.5													
15-year	6.6	6.4	6.4	6.7	7.3	7.0														
16-year	6.3	6.0	6.1	6.2	6.9															
17-year	6.0	5.6	5.7	5.9																
18-year	5.7	5.3	5.3																	
19-year	5.4	4.9	4.9																	
20-year	5.2	4.6	4.7																	
21-year	4.9	4.3	4.4																	
22-year	4.7	4.1	4.2																	
23-year	4.4	3.8																		
24-year	4.2	3.6																		
25-year	4.0	3.4																		
26-year	3.8	3.2																		
27-year	3.6	3.0																		
28-year	3.5																			
29-year	3.3																			
30-year	3.2																			

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

All Races, Males

Year of Diagnosis

	1975– 1979	1980– 1984	1985– 1989	1990– 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Survival Time																				
1-year	33.4	35.4	36.5	37.2	38.0	38.0	38.0	37.0	38.2	38.6	37.0	37.2	39.4	39.0	39.9	41.3	40.8	41.9	42.6	40.7
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	26.1	27.7	27.3	
3-year	14.8	15.3	15.6	16.3	17.4	17.8	17.7	17.4	16.7	18.2	17.2	17.9	18.2	19.5	19.5	20.8	20.7	21.9		
4-year	12.5	12.9	13.1	13.6	14.8	14.6	15.0	14.7	14.1	15.6	14.3	15.0	15.6	16.6	16.6	17.3	17.4			
5-year	11.1	11.4	11.6	12.1	13.2	13.1	13.3	12.4	12.6	14.1	12.7	13.5	14.1	14.9	14.9	15.1				
6-year	10.1	10.4	10.6	11.0	11.8	11.7	11.9	11.0	11.2	12.6	11.5	12.1	12.6	13.5	13.2					
7-year	9.4	9.5	9.7	10.0	11.2	10.6	10.8	10.1	10.3	11.3	10.4	11.1	11.6	12.2						
8-year	8.8	8.7	9.0	9.1	10.3	9.8	10.0	9.1	9.5	10.7	9.5	10.0	10.8							
9-year	8.2	7.9	8.4	8.4	9.6	9.1	9.1	8.5	8.8	9.9	8.9	9.2								
10-year	7.7	7.4	7.9	7.9	8.8	8.2	8.6	8.1	8.4	9.1	8.3									
11-year	7.2	7.0	7.3	7.2	8.3	7.5	7.9	7.5	7.7	8.3										
12-year	6.7	6.6	6.8	6.7	8.0	6.9	7.2	7.0	7.2											
13-year	6.3	6.2	6.3	6.2	7.3	6.7	6.8	6.3												
14-year	6.0	5.8	6.0	5.8	6.9	6.3	6.4													
15-year	5.6	5.4	5.6	5.5	6.4	5.7														
16-year	5.3	5.0	5.3	5.1	6.2															
17-year	5.1	4.6	4.8	4.8																
18-year	4.7	4.4	4.5																	
19-year	4.5	4.1	4.1																	
20-year	4.2	3.7	3.9																	
21-year	4.1	3.5	3.6																	
22-year	3.9	3.3	3.4																	
23-year	3.7	3.1																		
24-year	3.4	2.8																		
25-year	3.3	2.7																		
26-year	3.1	2.5																		
27-year	2.8	2.4																		
28-year	2.8																			
29-year	2.7																			
30-year	2.6																			

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

All Races, Females

Year of Diagnosis

	1975– 1979	1980– 1984	1985– 1989	1990– 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Survival Time																				
1-year	40.4	41.3	42.2	42.8	43.5	42.4	43.4	43.6	45.4	43.6	44.2	45.0	44.9	45.8	47.3	47.1	48.1	48.6	48.8	48.5
2-year	25.3	25.7	25.5	26.7	27.4	26.9	27.0	28.4	29.5	28.6	29.7	30.6	29.9	31.1	32.3	32.4	34.2	34.2	35.1	
3-year	20.2	20.5	19.7	21.1	21.6	21.4	21.3	22.9	23.6	22.8	23.0	24.1	23.7	25.4	26.0	26.5	27.1	27.3		
4-year	17.7	17.8	17.2	18.3	18.8	18.3	18.6	19.9	20.5	19.9	19.9	20.5	20.6	21.4	22.6	22.9	23.5			
5-year	16.1	16.0	15.4	16.4	16.4	16.5	16.5	17.4	18.4	17.7	17.8	18.0	18.3	18.9	20.0	20.2				
6-year	14.9	14.6	14.1	15.1	15.0	15.1	15.1	16.1	16.8	16.1	15.8	16.4	16.6	17.5	18.3					
7-year	14.0	13.6	12.9	13.9	13.9	14.0	14.1	14.9	15.6	14.9	14.6	15.0	15.1	16.1						
8-year	13.1	12.8	11.9	13.0	13.1	13.0	12.9	13.9	14.8	13.6	13.7	14.0	13.4							
9-year	12.4	11.9	11.2	12.1	12.3	11.9	12.0	13.0	13.9	12.7	12.6	13.1								
10-year	11.6	11.1	10.4	11.3	11.6	11.0	11.3	12.4	13.1	11.9	12.1									
11-year	11.1	10.5	9.8	10.6	11.0	10.6	10.6	11.8	12.1	11.2										
12-year	10.6	9.9	9.2	9.9	10.1	10.0	9.9	11.2	11.3											
13-year	10.2	9.3	8.8	9.4	9.4	9.6	9.4	10.3												
14-year	9.6	8.9	8.2	9.0	8.7	9.1	8.9													
15-year	9.1	8.4	7.8	8.4	8.4	8.6														
16-year	8.8	8.0	7.4	7.9	7.8															
17-year	8.4	7.7	7.0	7.4																
18-year	8.0	7.2	6.7																	
19-year	7.7	6.6	6.3																	
20-year	7.4	6.2	6.1																	
21-year	6.9	5.9	5.8																	
22-year	6.5	5.6	5.5																	
23-year	6.2	5.3																		
24-year	6.0	5.1																		
25-year	5.8	4.8																		
26-year	5.5	4.6																		
27-year	5.4	4.2																		
28-year	5.1																			
29-year	4.9																			
30-year	4.5																			

^a 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, 2009-2011 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	Risk of Dying from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.00	0.00	0.01	6.75	5.66	Asian/ Pacific Islander	0	0.00	0.00	0.01	5.55	4.30	
	10	0.00	0.01	0.03	6.83	5.73		10	0.00	0.00	0.03	5.59	4.33	
	20	0.01	0.03	0.18	6.85	5.75		20	0.00	0.03	0.13	5.60	4.34	
	30	0.02	0.18	0.80	6.90	5.80		30	0.02	0.12	0.50	5.62	4.35	
	40	0.16	0.78	2.43	6.96	5.87		40	0.10	0.48	1.47	5.63	4.36	
	50	0.64	2.33	4.94	6.99	5.91		50	0.39	1.39	3.19	5.60	4.36	
	60	1.79	4.56	6.39	6.74	5.74		60	1.04	2.89	4.69	5.38	4.25	
	70	3.15	5.23	-	5.63	4.93		70	1.99	3.93	-	4.66	3.88	
	80	2.83	-	-	3.37	3.19		80	2.33	-	-	3.21	2.97	
White	0	0.00	0.00	0.01	6.92	5.79	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	4.46	4.12	
	10	0.00	0.01	0.03	6.98	5.85		10	0.00	0.00	0.01	4.51	4.18	
	20	0.01	0.03	0.18	7.01	5.87		20	0.00	0.01	0.10	4.53	4.21	
	30	0.02	0.18	0.79	7.06	5.92		30	0.00	0.10	0.47	4.60	4.28	
	40	0.15	0.77	2.46	7.12	5.98		40	0.10	0.47	1.46	4.70	4.40	
	50	0.64	2.37	5.08	7.15	6.02		50	0.39	1.41	3.25	4.78	4.53	
	60	1.84	4.72	6.57	6.91	5.86		60	1.10	3.06	4.40	4.71	4.51	
	70	3.27	5.38	-	5.76	5.02		70	2.25	3.78	-	4.14	4.01	
	80	2.89	-	-	3.41	3.22		80	2.09	-	-	2.58	2.70	
Black	0	0.00	0.00	0.01	6.47	5.21	Hispanic ^b	0	0.00	0.00	0.01	4.28	3.01	
	10	0.00	0.01	0.03	6.61	5.33		10	0.00	0.01	0.02	4.32	3.04	
	20	0.00	0.03	0.23	6.64	5.35		20	0.00	0.02	0.08	4.33	3.05	
	30	0.02	0.23	1.11	6.72	5.42		30	0.01	0.08	0.34	4.36	3.07	
	40	0.21	1.11	2.96	6.83	5.52		40	0.06	0.33	1.11	4.38	3.09	
	50	0.93	2.86	5.25	6.88	5.59		50	0.27	1.07	2.58	4.40	3.11	
	60	2.12	4.75	6.24	6.55	5.40		60	0.84	2.42	3.84	4.32	3.08	
	70	3.21	5.02	-	5.39	4.58		70	1.74	3.31	-	3.84	2.80	
	80	2.68	-	-	3.23	3.02		80	1.99	-	-	2.66	2.09	

Devcan 6.8.0, August 2014, National Cancer Institute (<http://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.

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

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

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

Statistic could not be calculated.

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

Table 15.19

Cancer of the Lung and Bronchus (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
 Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
 Lifetime Risk of Dying from Cancer Given Alive at Current Age
 Males, 2009-2011 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	Risk of Dying from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.00	0.00	0.01	7.43	6.47	Asian/ Pacific Islander	0	0.00	0.00	0.00	6.83	5.43	
	10	0.00	0.01	0.03	7.52	6.56		10	0.00	0.00	0.03	6.89	5.48	
	20	0.01	0.03	0.17	7.56	6.59		20	0.00	0.03	0.13	6.90	5.49	
	30	0.02	0.17	0.85	7.64	6.68		30	0.02	0.12	0.56	6.94	5.51	
	40	0.15	0.84	2.68	7.74	6.78		40	0.10	0.54	1.80	6.96	5.54	
	50	0.71	2.61	5.55	7.84	6.88		50	0.45	1.72	3.96	6.98	5.56	
	60	2.05	5.21	7.30	7.68	6.79		60	1.33	3.65	5.98	6.79	5.47	
	70	3.71	6.15	-	6.60	5.96		70	2.55	5.10	-	5.99	5.04	
	80	3.54	-	-	4.19	4.07		80	3.21	-	-	4.33	3.98	
White	0	0.00	0.00	0.01	7.46	6.53	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	4.89	4.63	
	10	0.00	0.01	0.03	7.54	6.61		10	0.00	0.00	0.00	4.96	4.71	
	20	0.01	0.03	0.17	7.57	6.64		20	0.00	0.00	0.08	5.00	4.75	
	30	0.02	0.17	0.82	7.65	6.72		30	0.00	0.08	0.50	5.10	4.87	
	40	0.15	0.81	2.65	7.75	6.82		40	0.08	0.51	1.51	5.24	5.04	
	50	0.69	2.58	5.58	7.85	6.92		50	0.45	1.50	3.64	5.41	5.25	
	60	2.04	5.26	7.35	7.71	6.83		60	1.14	3.46	5.05	5.39	5.33	
	70	3.76	6.20	-	6.62	5.99		70	2.74	4.61	-	5.01	4.94	
	80	3.54	-	-	4.15	4.06		80	2.71	-	-	3.29	3.37	
Black	0	0.00	0.00	0.01	7.78	6.49	Hispanic ^b	0	0.00	0.00	0.01	4.96	3.97	
	10	0.00	0.01	0.03	7.95	6.65		10	0.00	0.01	0.02	5.01	4.01	
	20	0.00	0.03	0.24	8.00	6.70		20	0.00	0.02	0.08	5.03	4.03	
	30	0.03	0.24	1.30	8.16	6.83		30	0.01	0.07	0.35	5.08	4.07	
	40	0.22	1.31	3.64	8.34	6.99		40	0.06	0.34	1.23	5.12	4.11	
	50	1.15	3.59	6.58	8.52	7.15		50	0.28	1.20	3.03	5.19	4.17	
	60	2.75	6.12	7.99	8.31	7.05		60	0.97	2.91	4.62	5.19	4.19	
	70	4.31	6.70	-	7.12	6.15		70	2.20	4.13	-	4.78	3.89	
	80	3.91	-	-	4.59	4.28		80	2.59	-	-	3.47	2.98	

Devcan 6.8.0, August 2014, National Cancer Institute (<http://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.

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

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

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

Statistic could not be calculated.

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

Table 15.20

Cancer of the Lung and Bronchus (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
 Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
 Lifetime Risk of Dying from Cancer Given Alive at Current Age
 Females, 2009-2011 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.00	0.00	0.01	6.17	4.95	Asian/ Pacific Islander	0	0.00	0.00	0.01	4.50	3.39	
	10	0.00	0.01	0.03	6.24	5.00		10	0.00	0.01	0.03	4.53	3.41	
	20	0.01	0.03	0.19	6.25	5.02		20	0.01	0.03	0.13	4.54	3.42	
	30	0.02	0.18	0.74	6.27	5.04		30	0.02	0.12	0.45	4.54	3.42	
	40	0.16	0.73	2.18	6.30	5.07		40	0.10	0.43	1.20	4.54	3.42	
	50	0.58	2.07	4.39	6.27	5.07		50	0.33	1.11	2.55	4.48	3.40	
	60	1.56	3.99	5.62	5.96	4.87		60	0.79	2.27	3.68	4.25	3.30	
	70	2.70	4.51	-	4.88	4.14		70	1.57	3.05	-	3.65	3.01	
	80	2.35	-	-	2.84	2.62		80	1.73	-	-	2.43	2.28	
White	0	0.00	0.00	0.01	6.46	5.14	American Indian/ Alaska Native ^a	0	0.00	0.00	0.01	4.11	3.70	
	10	0.00	0.01	0.03	6.52	5.19		10	0.00	0.01	0.01	4.15	3.75	
	20	0.01	0.03	0.19	6.53	5.20		20	0.01	0.01	0.13	4.16	3.76	
	30	0.03	0.18	0.75	6.56	5.22		30	0.01	0.12	0.44	4.19	3.80	
	40	0.16	0.73	2.28	6.58	5.25		40	0.12	0.44	1.41	4.26	3.87	
	50	0.59	2.16	4.63	6.55	5.24		50	0.33	1.33	2.91	4.27	3.95	
	60	1.65	4.23	5.91	6.24	5.04		60	1.05	2.72	3.86	4.16	3.87	
	70	2.86	4.73	-	5.09	4.26		70	1.86	3.14	-	3.47	3.33	
	80	2.44	-	-	2.91	2.66		80	1.68	-	-	2.11	2.30	
Black	0	0.00	0.00	0.00	5.39	4.15	Hispanic ^b	0	0.00	0.00	0.01	3.75	2.23	
	10	0.00	0.00	0.03	5.49	4.24		10	0.00	0.01	0.02	3.78	2.25	
	20	0.00	0.02	0.23	5.50	4.25		20	0.00	0.02	0.09	3.79	2.26	
	30	0.02	0.23	0.94	5.54	4.27		30	0.01	0.08	0.33	3.80	2.26	
	40	0.21	0.93	2.36	5.59	4.32		40	0.07	0.32	1.01	3.80	2.27	
	50	0.75	2.22	4.13	5.56	4.34		50	0.25	0.96	2.20	3.78	2.27	
	60	1.59	3.66	4.89	5.20	4.15		60	0.73	2.01	3.21	3.65	2.21	
	70	2.41	3.84	-	4.20	3.52		70	1.39	2.68	-	3.15	2.01	
	80	1.99	-	-	2.49	2.35		80	1.58	-	-	2.15	1.53	

Devcan 6.8.0, August 2014, National Cancer Institute (<http://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.

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

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

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

- Statistic could not be calculated.

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

Table 15.21
Lung and Bronchus (Invasive)

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

SEER Incidence	SEER 18 Areas ^b			SEER 13 Areas ^b			SEER 9 Areas ^b		
	Rate 2007-2011			Trend 2002-2011 ^c			Trend 2002-2011 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	60.1	72.2	51.1	-1.9*	-2.6*	-1.1*	-1.5*	-2.3*	-0.8*
White	61.7	72.4	53.8	-1.8*	-2.5*	-1.3*	-1.5*	-2.2*	-0.8*
White Hispanic ^e	32.4	41.0	26.3	-1.3*	-2.0*	-0.4*	-	-	-
White Non-Hispanic ^e	66.2	77.0	58.1	-1.6*	-2.3*	-1.1*	-	-	-
Black	68.0	93.0	51.2	-2.6*	-2.6*	-1.2*	-2.4*	-2.8*	0.1
Asian/Pacific Islander	37.0	49.4	28.1	-1.2*	-2.3*	0.3	-	-	-
Amer Ind/Alaska Nat ^f	40.9	49.5	34.7	-0.5	-1.3*	0.8	-	-	-
Hispanic ^e	31.3	39.6	25.5	-1.2*	-2.0*	-0.4*	-	-	-
U.S. Mortality ^g	Rate 2007-2011			Trend 2002-2011 ^h			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	48.4	61.6	38.5	-1.9*	-2.6*	-1.2*			
White	49.1	61.4	39.8	-1.7*	-2.5*	-1.1*			
White Hispanic ^e	21.9	31.9	14.6	-2.1*	-2.4*	-1.1*			
White Non-Hispanic ^e	51.5	63.9	42.1	-1.6*	-2.4*	-0.9*			
Black	52.0	75.7	36.5	-2.5*	-3.3*	-1.4*			
Asian/Pacific Islander	25.2	34.7	18.4	-1.1*	-1.5*	-0.3*			
Amer Ind/Alaska Nat									
Total U.S.	32.5	41.0	26.1	-1.0*	-1.9*	-1.7*			
CHSDA Counties	39.9	50.0	32.4	-0.1	-1.0*	-1.1			
Non-CHSDA Counties	23.6	30.2	18.5	-1.9*	-3.0*	-1.9*			
Hispanic ^e	20.9	30.5	14.0	-2.2*	-2.7*	-1.2*			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

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

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

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

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

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

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

^f The 2002-2011 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2011.

^g The 2002-2011 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2011.

^h 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 2002-2011 Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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

^j US Mortality Files, National Center for Health Statistics, CDC.

^k The 2002-2011 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2011.

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

Table 15.22
Cancer of the Lung And Bronchus (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates^a, 2007-2011</u>									
California	49.48	58.01	43.12	51.15	58.45	45.68	61.34	77.62	49.93
Greater Bay Area	46.92	54.09	41.74	48.13	52.61	45.00	68.46	82.67	58.43
San Francisco-Oakland	49.25	56.77	43.82	50.26	54.19	47.56	70.80	86.65	59.92
San Jose-Monterey	42.36	48.88	37.61	44.39	49.83	40.52	51.45	55.28	46.80
Los Angeles	43.13	52.65	36.10	43.09	50.88	37.21	59.29	77.93	47.23
Greater California	53.27	61.74	46.89	55.07	62.92	49.16	59.98	74.59	48.71
Connecticut	64.84	74.35	58.24	65.76	74.27	59.97	57.39	75.98	44.99
Detroit	78.82	93.91	68.42	78.28	90.52	70.02	85.53	113.63	67.10
Georgia	69.92	90.97	54.76	73.47	91.63	59.99	61.69	93.51	42.05
Atlanta	58.06	72.20	48.41	59.63	69.30	52.92	57.89	84.77	42.45
Rural Georgia	73.10	107.87	46.71	77.60	107.41	53.58	63.65	111.10	33.65
Greater Georgia	75.00	98.29	57.95	78.19	98.89	62.70	64.35	98.66	42.26
Hawaii	49.13	62.58	38.44	53.60	60.32	47.27	45.37	57.65	-
Iowa	66.79	82.99	54.73	66.55	82.78	54.44	98.00	116.48	86.02
Kentucky	98.52	122.91	80.73	98.66	122.48	81.17	105.09	140.45	82.40
Louisiana	74.19	96.92	56.99	73.57	92.30	59.15	77.60	113.84	52.67
New Jersey	61.64	71.35	55.11	63.75	72.37	58.09	61.11	79.95	49.19
New Mexico	43.70	51.24	37.67	45.60	52.79	39.83	52.86	76.44	30.16
Seattle-Puget Sound	64.08	72.83	57.70	65.20	73.07	59.47	70.21	84.30	58.44
Utah	28.22	34.21	23.29	27.93	33.89	23.01	49.54	57.59	-
9 SEER Areas ^b	58.86	69.55	51.04	59.79	68.82	53.22	70.30	93.55	54.95
11 SEER Areas ^b	54.46	64.68	46.95	55.57	64.19	49.24	67.24	88.93	52.87
13 SEER Areas ^b	54.60	64.93	47.00	55.65	64.34	49.25	67.17	89.23	52.58
18 SEER Areas ^b	60.10	72.21	51.13	61.73	72.44	53.79	67.96	92.98	51.20

^a Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)
^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.
The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.
The SEER 13 areas comprise the SEER 11 areas plus 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^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Death Rates^a, 2007-2011</u>									
California	37.48	45.54	31.45	38.76	45.95	33.36	48.95	63.53	38.71
Greater Bay Area	34.13	40.77	29.28	35.09	39.70	31.76	52.39	66.69	42.29
San Francisco-Oakland	35.54	42.59	30.40	36.04	40.34	32.96	54.31	70.24	43.29
San Jose-Monterey	31.38	37.25	27.06	33.44	38.61	29.65	38.68	42.82	34.94
Los Angeles	33.53	42.83	26.67	33.19	41.06	27.27	49.20	65.44	38.83
Greater California	40.44	48.39	34.44	41.91	49.54	36.15	46.62	59.34	36.59
Connecticut	43.02	51.30	37.22	43.67	51.23	38.43	40.49	58.59	28.67
Detroit	53.83	67.30	44.46	53.29	64.70	45.38	59.07	82.08	44.11
Georgia	51.33	70.08	38.06	53.60	70.52	41.23	46.52	72.30	30.75
Atlanta	41.59	53.75	33.45	41.65	50.49	35.57	44.34	66.71	31.78
Rural Georgia	52.95	82.87	30.71	54.48	78.45	35.38	50.00	94.07	22.99
Greater Georgia	55.47	76.40	40.39	57.64	77.05	43.35	48.20	75.43	30.67
Hawaii	34.84	46.68	25.54	41.81	47.99	36.23	44.32	58.56	-
Iowa	48.86	63.17	38.13	48.80	63.11	38.07	69.87	86.78	56.59
Kentucky	72.03	94.49	55.53	72.21	94.35	55.83	77.09	107.42	57.10
Louisiana	58.40	79.07	43.15	57.34	74.10	44.85	62.82	97.16	39.66
New Jersey	43.60	53.88	36.55	45.09	54.77	38.47	44.88	63.12	33.54
New Mexico	34.25	42.25	27.90	35.84	43.71	29.57	48.37	76.66	22.84
Seattle-Puget Sound	46.03	54.01	40.15	47.29	54.71	41.80	51.57	62.05	43.02
Utah	20.87	26.51	16.24	20.78	26.36	16.22	41.14	-	-
9 SEER Areas ^b	41.76	51.46	34.64	42.54	51.01	36.29	51.11	71.10	38.02
11 SEER Areas ^b	39.35	48.76	32.43	40.15	48.34	34.08	50.46	69.25	38.16
13 SEER Areas ^b	39.56	49.05	32.56	40.32	48.56	34.19	50.42	69.56	37.91
18 SEER Areas ^b	44.19	55.43	35.87	45.38	55.61	37.75	51.63	73.69	36.98
Total U.S.	48.37	61.58	38.53	49.06	61.41	39.78	52.03	75.70	36.50

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

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

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

The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus 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.

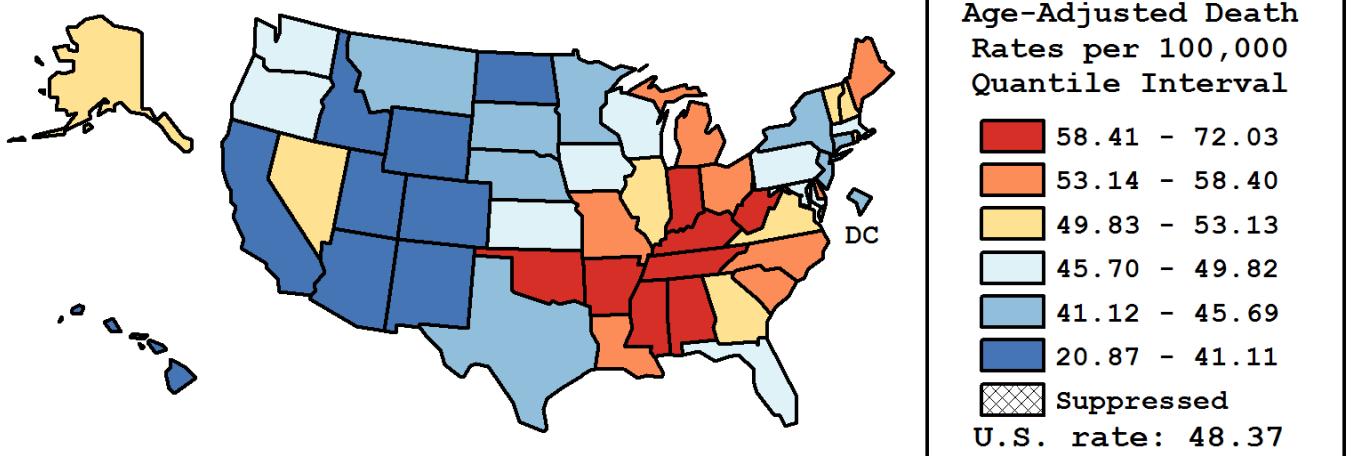
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 15.24
Cancer of the Lung and Bronchus (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2007-2011

Males and Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	48.37	0.05							
High Five States									
Kentucky	72.03 ^b	0.56	(01)	48.91 ^c					
Arkansas	63.79 ^b	0.62	(02)	31.88 ^c					
West Virginia	63.77 ^b	0.74	(03)	31.82 ^c					
Tennessee	62.83 ^b	0.43	(04)	29.88 ^c					
Mississippi	62.63 ^b	0.64	(05)	29.48 ^c					
Low Five States									
California	37.48 ^b	0.15	(47)	-22.52 ^c					
Colorado	35.64 ^b	0.41	(48)	-26.33 ^c					
Hawaii	34.84 ^b	0.68	(49)	-27.98 ^c					
New Mexico	34.25 ^b	0.57	(50)	-29.20 ^c					
Utah	20.87 ^b	0.46	(51)	-56.87 ^c					



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

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

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

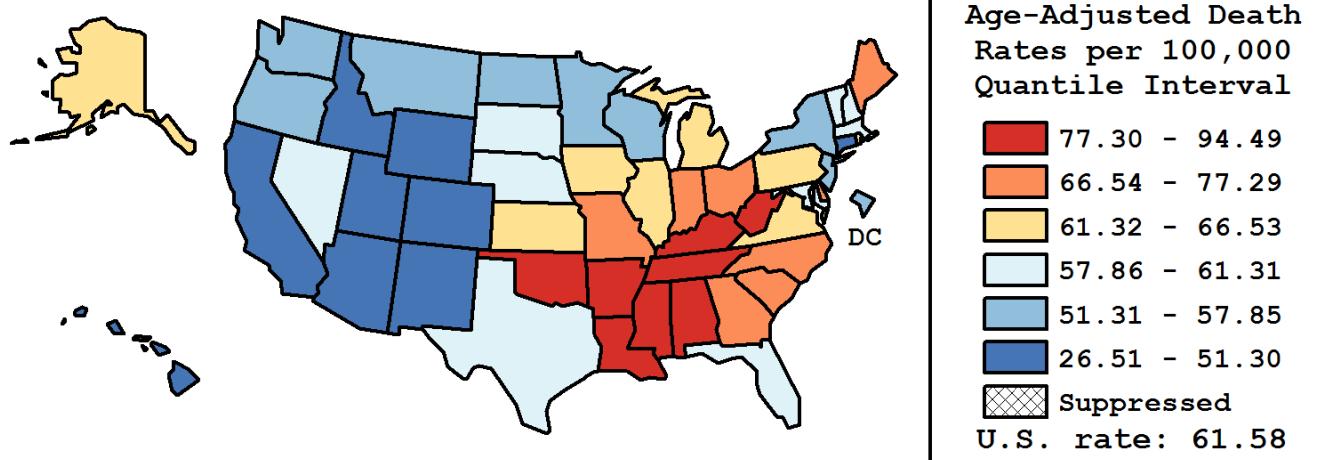
SE Standard error of the rate.

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

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

Table 15.25
Cancer of the Lung and Bronchus (Invasive)
Age-Adjusted Cancer Death^a Rates By State, All Races, 2007-2011

Males									
State	Rate	SE	Rank	PD					
TOTAL U.S.	61.58	0.09							
High Five States									
Kentucky	94.49 ^b	0.98	(01)	53.44 ^c					
Mississippi	92.02 ^b	1.22	(02)	49.42 ^c					
Arkansas	88.13 ^b	1.12	(03)	43.10 ^c					
Tennessee	86.50 ^b	0.79	(04)	40.45 ^c					
Alabama	85.52 ^b	0.89	(05)	38.87 ^c					
Low Five States									
Hawaii	46.68 ^b	1.18	(47)	-24.19 ^c					
California	45.54 ^b	0.25	(48)	-26.06 ^c					
Colorado	42.78 ^b	0.68	(49)	-30.54 ^c					
New Mexico	42.25 ^b	0.96	(50)	-31.39 ^c					
Utah	26.51 ^b	0.77	(51)	-56.95 ^c					
State	Rate	SE	Rank	PD	State				
Alabama	85.52 ^b	0.89	(05)	38.87 ^c	Montana	52.26 ^b	1.42	(41)	-15.14 ^c
Alaska	62.84	2.66	(24)	2.04	Nebraska	57.92	1.16	(33)	-5.95 ^c
Arizona	47.85 ^b	0.56	(46)	-22.30 ^c	Nevada	57.97	1.03	(32)	-5.87 ^c
Arkansas	88.13 ^b	1.12	(03)	43.10 ^c	New Hampshire	59.22	1.38	(28)	-3.84
California	45.54 ^b	0.25	(48)	-26.06 ^c	New Jersey	53.88 ^b	0.52	(38)	-12.51 ^c
Colorado	42.78 ^b	0.68	(49)	-30.54 ^c	New Mexico	42.25 ^b	0.96	(50)	-31.39 ^c
Connecticut	51.30 ^b	0.78	(43)	-16.71 ^c	New York	52.87 ^b	0.35	(39)	-14.15 ^c
Delaware	67.27	1.76	(16)	9.23 ^c	North Carolina	74.42 ^b	0.61	(11)	20.84 ^c
D.C.	57.07	2.26	(35)	-7.33 ^c	North Dakota	52.70 ^b	1.76	(40)	-14.43 ^c
Florida	59.25 ^b	0.33	(27)	-3.80	Ohio	72.79 ^b	0.51	(13)	18.20 ^c
Georgia	70.08 ^b	0.65	(14)	13.80 ^c	Oklahoma	78.45 ^b	0.95	(08)	27.39 ^c
Hawaii	46.68 ^b	1.18	(47)	-24.19 ^c	Oregon	56.38 ^b	0.78	(36)	-8.45 ^c
Idaho	48.00 ^b	1.19	(45)	-22.06 ^c	Pennsylvania	63.92 ^b	0.44	(22)	3.79
Illinois	64.18 ^b	0.49	(20)	4.21	Rhode Island	63.93	1.59	(21)	3.81
Indiana	77.29 ^b	0.74	(09)	25.50 ^c	South Carolina	74.87 ^b	0.86	(10)	21.58 ^c
Iowa	63.17	0.90	(23)	2.58	South Dakota	60.03	1.72	(26)	-2.53
Kansas	64.32	0.99	(19)	4.44	Tennessee	86.50 ^b	0.79	(04)	40.45 ^c
Kentucky	94.49 ^b	0.98	(01)	53.44 ^c	Texas	58.64 ^b	0.37	(30)	-4.77
Louisiana	79.07 ^b	0.92	(07)	28.40 ^c	Utah	26.51 ^b	0.77	(51)	-56.95 ^c
Maine	67.65 ^b	1.37	(15)	9.85 ^c	Vermont	61.31	1.98	(25)	-0.45
Maryland	58.88 ^b	0.70	(29)	-4.39	Virginia	64.73 ^b	0.63	(18)	5.11 ^c
Massachusetts	58.02 ^b	0.62	(31)	-5.79 ^c	Washington	55.58 ^b	0.62	(37)	-9.75 ^c
Michigan	66.53 ^b	0.53	(17)	8.03 ^c	West Virginia	82.31 ^b	1.28	(06)	33.65 ^c
Minnesota	51.85 ^b	0.66	(42)	-15.80 ^c	Wisconsin	57.85 ^b	0.65	(34)	-6.06 ^c
Mississippi	92.02 ^b	1.22	(02)	49.42 ^c	Wyoming	48.93 ^b	1.99	(44)	-20.55 ^c
Missouri	74.17 ^b	0.72	(12)	20.44 ^c					



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

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

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

SE Standard error of the rate.

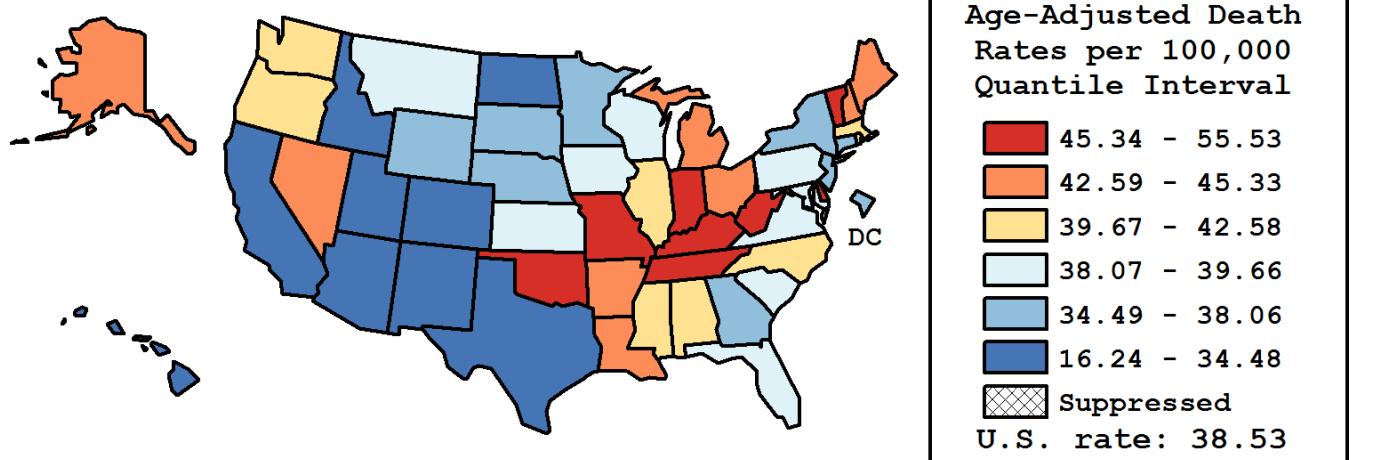
PD Percent difference between state rate and total U.S. rate.

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

Table 15.26
Cancer of the Lung And Bronchus (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2007-2011

Females				
State	Rate	SE	Rank	PD
TOTAL U.S.	38.53	0.07		
High Five States				
Kentucky	55.53 ^b	0.65	(01)	44.13 ^c
West Virginia	49.82 ^b	0.88	(02)	29.32 ^c
Oklahoma	46.16 ^b	0.65	(03)	19.81 ^c
Delaware	45.89 ^b	1.28	(04)	19.12 ^c
Tennessee	45.65 ^b	0.49	(05)	18.49 ^c
Low Five States				
North Dakota	31.36 ^b	1.24	(47)	-18.59 ^c
Colorado	30.34 ^b	0.50	(48)	-21.25 ^c
New Mexico	27.90 ^b	0.69	(49)	-27.59 ^c
Hawaii	25.54 ^b	0.78	(50)	-33.70 ^c
Utah	16.24 ^b	0.55	(51)	-57.84 ^c
State	Rate	SE	Rank	PD
Alabama	40.70 ^b	0.53	(23)	5.64 ^c
Alaska	45.33	2.02	(09)	17.65 ^c
Arizona	32.24 ^b	0.42	(45)	-16.32 ^c
Arkansas	45.27 ^b	0.71	(10)	17.50 ^c
California	31.45 ^b	0.18	(46)	-18.37 ^c
Colorado	30.34 ^b	0.50	(48)	-21.25 ^c
Connecticut	37.22	0.58	(35)	-3.40
Delaware	45.89 ^b	1.28	(04)	19.12 ^c
D.C.	35.42	1.48	(40)	-8.07 ^c
Florida	38.12	0.24	(33)	-1.06
Georgia	38.06	0.40	(34)	-1.22
Hawaii	25.54 ^b	0.78	(50)	-33.70 ^c
Idaho	33.87 ^b	0.91	(44)	-12.08 ^c
Illinois	41.56 ^b	0.34	(19)	7.87 ^c
Indiana	45.54 ^b	0.49	(06)	18.21 ^c
Iowa	38.13	0.63	(32)	-1.04
Kansas	38.76	0.69	(30)	0.60
Kentucky	55.53 ^b	0.65	(01)	44.13 ^c
Louisiana	43.15 ^b	0.58	(15)	11.99 ^c
Maine	44.46 ^b	0.99	(12)	15.40 ^c
Maryland	39.66	0.50	(25)	2.95
Massachusetts	41.16 ^b	0.45	(21)	6.83 ^c
Michigan	43.55 ^b	0.38	(14)	13.03 ^c
Minnesota	36.14 ^b	0.49	(37)	-6.20 ^c
Mississippi	41.34 ^b	0.69	(20)	7.31 ^c
Missouri	45.53 ^b	0.50	(07)	18.17 ^c
Montana	39.43	1.14	(26)	2.35
Nebraska	35.49 ^b	0.81	(39)	-7.89 ^c
Nevada	45.23 ^b	0.83	(11)	17.40 ^c
New Hampshire	43.09 ^b	1.05	(16)	11.85 ^c
New Jersey	36.55 ^b	0.37	(36)	-5.14 ^c
New Mexico	27.90 ^b	0.69	(49)	-27.59 ^c
New York	35.77 ^b	0.25	(38)	-7.16 ^c
North Carolina	39.94 ^b	0.38	(24)	3.66
North Dakota	31.36 ^b	1.24	(47)	-18.59 ^c
Ohio	43.94 ^b	0.35	(13)	14.04 ^c
Oklahoma	46.16 ^b	0.65	(03)	19.81 ^c
Oregon	41.76 ^b	0.61	(18)	8.39 ^c
Pennsylvania	39.25	0.30	(27)	1.88
Rhode Island	42.58 ^b	1.13	(17)	10.52 ^c
South Carolina	39.02	0.53	(29)	1.28
South Dakota	34.98	1.19	(41)	-9.21 ^c
Tennessee	45.65 ^b	0.49	(05)	18.49 ^c
Texas	34.48 ^b	0.24	(43)	-10.50 ^c
Utah	16.24 ^b	0.55	(51)	-57.84 ^c
Vermont	45.37 ^b	1.52	(08)	17.75 ^c
Virginia	39.15	0.42	(28)	1.61
Washington	41.04 ^b	0.48	(22)	6.52 ^c
West Virginia	49.82 ^b	0.88	(02)	29.32 ^c
Wisconsin	38.62	0.48	(31)	0.23
Wyoming	34.61	1.53	(42)	-10.16 ^c



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

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

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

SE Standard error of the rate.

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

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

Table 15.27
Cancer of the Lung And Bronchus (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2011
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <19 ^e	0 to <36 ^e	>=36 ^g	Complete ^h
Race	Sex										
All Races ^b	Both Sexes	231,126	77,607	41,694	22,634	12,124	6,214	376,088	395,186	7,140	402,326
	Males	107,276	34,010	17,823	10,198	5,209	2,765	170,515	179,129	4,086	183,215
	Females	123,850	43,597	23,871	12,436	6,915	3,449	205,573	216,057	3,054	219,111
White ^b	Both Sexes	196,046	67,584	36,611	19,757	10,797	5,441	322,693	339,549	2,910	342,459
	Males	90,417	29,237	15,323	8,775	4,505	2,411	144,794	152,256	1,359	153,615
	Females	105,629	38,347	21,288	10,982	6,292	3,030	177,899	187,293	1,551	188,844
Black ^b	Both Sexes	24,928	7,416	3,703	2,194	998	611	38,499	40,198	261	40,459
	Males	11,660	3,506	1,755	1,068	548	275	18,124	19,014	137	19,151
	Females	13,268	3,910	1,948	1,126	450	336	20,375	21,184	124	21,308
Asian/ Pacific	Both Sexes	7,365	2,011	1,020	+	+	+	10,778	+	+	+
	Males	3,791	964	548	+	+	+	5,503	+	+	+
Islander ^c	Females	3,574	1,047	472	+	+	+	5,275	+	+	+
Hispanic ^d	Both Sexes	8,687	2,559	1,275	+	+	+	13,118	+	+	+
	Males	4,093	1,156	606	+	+	+	6,151	+	+	+
	Females	4,594	1,403	669	+	+	+	6,967	+	+	+

Estimated prevalence percent^a on January 1, 2011, of the SEER^c population diagnosed in the previous 19 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	All Ages	Age Specific (Crude)								Age-Adjusted ^f		
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79			
Race	Sex											
All Races ^c	Both Sexes	0.1014%	0.0001%	0.0004%	0.0016%	0.0056%	0.0244%	0.1083%	0.3249%	0.6490%	0.6211%	0.1004%
	Males	0.0941%	-	0.0004%	0.0015%	0.0050%	0.0212%	0.1016%	0.3324%	0.6722%	0.7046%	0.1036%
	Females	0.1085%	-	0.0003%	0.0017%	0.0061%	0.0276%	0.1148%	0.3181%	0.6303%	0.5722%	0.0985%
White ^c	Both Sexes	0.1099%	0.0001%	0.0004%	0.0017%	0.0057%	0.0246%	0.1066%	0.3316%	0.6769%	0.6405%	0.1031%
	Males	0.0991%	-	0.0004%	0.0016%	0.0049%	0.0214%	0.0976%	0.3283%	0.6772%	0.7051%	0.1032%
	Females	0.1206%	-	0.0004%	0.0019%	0.0065%	0.0279%	0.1155%	0.3346%	0.6767%	0.6023%	0.1038%
Black ^c	Both Sexes	0.0871%	-	-	0.0016%	0.0062%	0.0314%	0.1539%	0.3995%	0.6713%	0.4987%	0.1092%
	Males	0.0863%	-	-	0.0019%	0.0076%	0.0262%	0.1533%	0.4525%	0.7743%	0.6605%	0.1236%
	Females	0.0878%	-	-	0.0013%	0.0050%	0.0360%	0.1544%	0.3575%	0.5998%	0.4213%	0.0999%
Asian/ Pacific	Both Sexes	0.0750%	-	-	0.0006%	0.0048%	0.0190%	0.0843%	0.2351%	0.4880%	0.5551%	0.0781%
	Males	0.0798%	-	-	-	0.0038%	0.0181%	0.0890%	0.2764%	0.5883%	0.7127%	0.0926%
Islander ^c	Females	0.0707%	-	-	-	0.0057%	0.0199%	0.0804%	0.2009%	0.4109%	0.4582%	0.0676%
Hispanic ^d	Both Sexes	0.0262%	-	-	0.0011%	0.0034%	0.0128%	0.0439%	0.1481%	0.3303%	0.3435%	0.0499%
	Males	0.0241%	-	-	0.0008%	0.0034%	0.0115%	0.0434%	0.1493%	0.3697%	0.3995%	0.0543%
	Females	0.0284%	-	-	0.0015%	0.0035%	0.0141%	0.0443%	0.1471%	0.3011%	0.3103%	0.0471%

^a US 2011 cancer prevalence counts are based on 2011 cancer prevalence proportions from the SEER registries and 1/1/2011 US population estimates based on the average of 2010 and 2011 population estimates from the US Bureau of the Census.

^{b c d} Prevalence was calculated using the First Malignant Primary Only for a person.

Statistics based on (b) SEER 9 Areas (c) SEER 11 Areas and Rural Georgia (d) NHIA for Hispanic for SEER 11 Areas and Rural Georgia.

^e Maximum limited-duration prevalence: 36 years for 1975-2011 SEER 9 data; 19 years for 1992-2011 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

^{f g h i} 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 36 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 <36 and >=36. (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, 2007-2011
Both Sexes by Race

Histology ^a	All Races			White		Black		Asian/Pacific Islander		American Indian/Alaska Native ^b		Hispanic ^c	
	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	53.1	226,636	99.7%	187,403	99.7%	25,035	99.7%	12,606	99.7%	750	99.1%	12,439	99.4%
Small cell (8002,8041-8045)	7.0	30,407	13.4%	26,559	14.1%	2,640	10.5%	997	7.9%	136	18.0%	1,441	11.5%
Non-small cell	44.3	188,975	83.2%	155,008	82.5%	21,484	85.6%	11,158	88.3%	589	77.8%	10,463	83.6%
Squamous and transitional cell ^d	11.9	50,017	22.0%	41,875	22.3%	5,847	23.3%	1,939	15.3%	183	24.2%	2,322	18.6%
Adenocarcinoma ^e	22.0	94,257	41.5%	76,348	40.6%	10,283	41.0%	7,024	55.6%	225	29.7%	5,512	44.1%
Large cell ^f	1.2	5,261	2.3%	4,289	2.3%	717	2.9%	222	1.8%	17	2.2%	248	2.0%
Non-small cell carcinoma ^g	6.7	28,578	12.6%	23,140	12.3%	3,659	14.6%	1,523	12.1%	135	17.8%	1,574	12.6%
Other specified carcinomas ^h	2.5	10,862	4.8%	9,356	5.0%	978	3.9%	450	3.6%	29	3.8%	807	6.5%
Carcinoma, NOS ⁱ	1.7	7,254	3.2%	5,836	3.1%	911	3.6%	451	3.6%	25	3.3%	535	4.3%
Sarcoma ^j	0.1	422	0.2%	338	0.2%	48	0.2%	25	0.2%	-	-	50	0.4%
Other specified types ^k	0.0	184	0.1%	151	0.1%	25	0.1%	-	-	-	-	22	0.2%
Total	53.2	227,242	100.0%	187,892	100.0%	25,108	100.0%	12,639	100.0%	757	100.0%	12,511	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).

Percents may not sum to 100 due to rounding.

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

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

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

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

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

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

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

^h Non-small cell carcinoma includes histology 8046.

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

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

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

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

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

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

Table 15.29

Cancer of the Lung and Bronchus (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2007-2011
Males by Race

Histology ^a	All Races			White		Black		Asian/Pacific Islander		American Indian/Alaska Native ^b		Hispanic ^c	
	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	63.6	120,359	99.7%	98,209	99.7%	14,094	99.8%	7,177	99.7%	402	99.3%	6,649	99.4%
Small cell (8002,8041-8045)	7.8	15,186	12.6%	13,078	13.3%	1,348	9.5%	659	9.2%	64	15.8%	769	11.5%
Non-small cell	53.6	101,107	83.8%	81,932	83.2%	12,198	86.3%	6,232	86.6%	325	80.2%	5,571	83.3%
Squamous and transitional cell ^d	16.9	31,503	26.1%	26,077	26.5%	3,762	26.6%	1,424	19.8%	111	27.4%	1,489	22.3%
Adenocarcinoma ^e	24.0	45,578	37.8%	36,429	37.0%	5,380	38.1%	3,471	48.2%	111	27.4%	2,620	39.2%
Large cell ^f	1.5	2,952	2.4%	2,384	2.4%	413	2.9%	136	1.9%	-	-	150	2.2%
Non-small cell carcinoma ^g	8.5	16,069	13.3%	12,831	13.0%	2,139	15.1%	950	13.2%	80	19.8%	925	13.8%
Other specified carcinomas ^h	2.6	5,005	4.1%	4,211	4.3%	504	3.6%	251	3.5%	-	-	387	5.8%
Carcinoma, NOS ⁱ	2.2	4,066	3.4%	3,199	3.2%	548	3.9%	286	4.0%	-	-	309	4.6%
Sarcoma ^j	0.1	227	0.2%	186	0.2%	23	0.2%	-	-	-	-	24	0.4%
Other specified types ^k	0.1	114	0.1%	97	0.1%	-	-	-	-	-	-	-	-
Total	63.8	120,700	100.0%	98,492	100.0%	14,128	100.0%	7,195	100.0%	405	100.0%	6,687	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).

Percents may not sum to 100 due to rounding.

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

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

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

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

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

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

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

^h Non-small cell carcinoma includes histology 8046.

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

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

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

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

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

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

Table 15.30

Cancer of the Lung and Bronchus (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2007-2011
Females by Race

Histology ^a	All Races			White		Black		Asian/Pacific Islander		American Indian/Alaska Native ^b		Hispanic ^c	
	Rate	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	45.2	106,277	99.8%	89,194	99.8%	10,941	99.6%	5,429	99.7%	348	98.9%	5,790	99.4%
Small cell (8002,8041-8045)	6.5	15,221	14.3%	13,481	15.1%	1,292	11.8%	338	6.2%	72	20.5%	672	11.5%
Non-small cell	37.4	87,868	82.5%	73,076	81.7%	9,286	84.6%	4,926	90.5%	264	75.0%	4,892	84.0%
Squamous and transitional cell ^d	8.0	18,514	17.4%	15,798	17.7%	2,085	19.0%	515	9.5%	72	20.5%	833	14.3%
Adenocarcinoma ^e	20.7	48,679	45.7%	39,919	44.7%	4,903	44.7%	3,553	65.3%	114	32.4%	2,892	49.7%
Large cell ^f	1.0	2,309	2.2%	1,905	2.1%	304	2.8%	86	1.6%	-	-	98	1.7%
Non-small cell carcinoma ^g	5.3	12,509	11.7%	10,309	11.5%	1,520	13.8%	573	10.5%	55	15.6%	649	11.1%
Other specified carcinomas ^h	2.5	5,857	5.5%	5,145	5.8%	474	4.3%	199	3.7%	16	4.5%	420	7.2%
Carcinoma, NOS ⁱ	1.3	3,188	3.0%	2,637	2.9%	363	3.3%	165	3.0%	-	-	226	3.9%
Sarcoma ^j	0.1	195	0.2%	152	0.2%	25	0.2%	-	-	-	-	26	0.4%
Other specified types ^k	0.0	70	0.1%	54	0.1%	-	-	-	-	-	-	-	-
Total	45.4	106,542	100.0%	89,400	100.0%	10,980	100.0%	5,444	100.0%	352	100.0%	5,824	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).

Percents may not sum to 100 due to rounding.

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

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

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

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

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

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

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

^h Non-small cell carcinoma includes histology 8046.

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

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

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

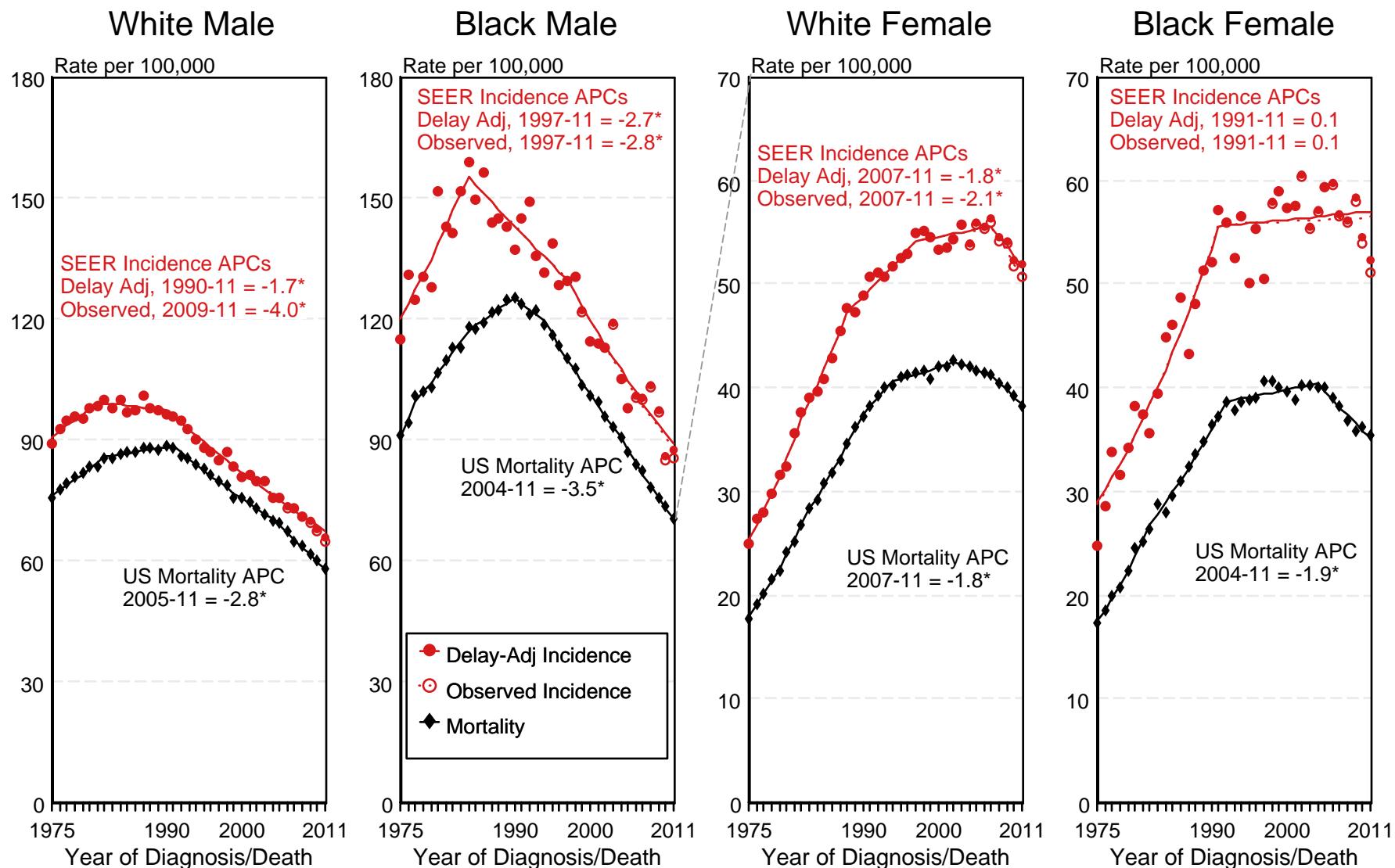
^l Other specific types includes melanomas and is defined as histologies 8580, 8650, 8720-8790, 8933, 8963, 8972-8973, 8980-8982, 9064-9065, 9070, 9080, 9084-9085, 9100, 9260, 9364, 9503, 9530.

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

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

Figure 15.1

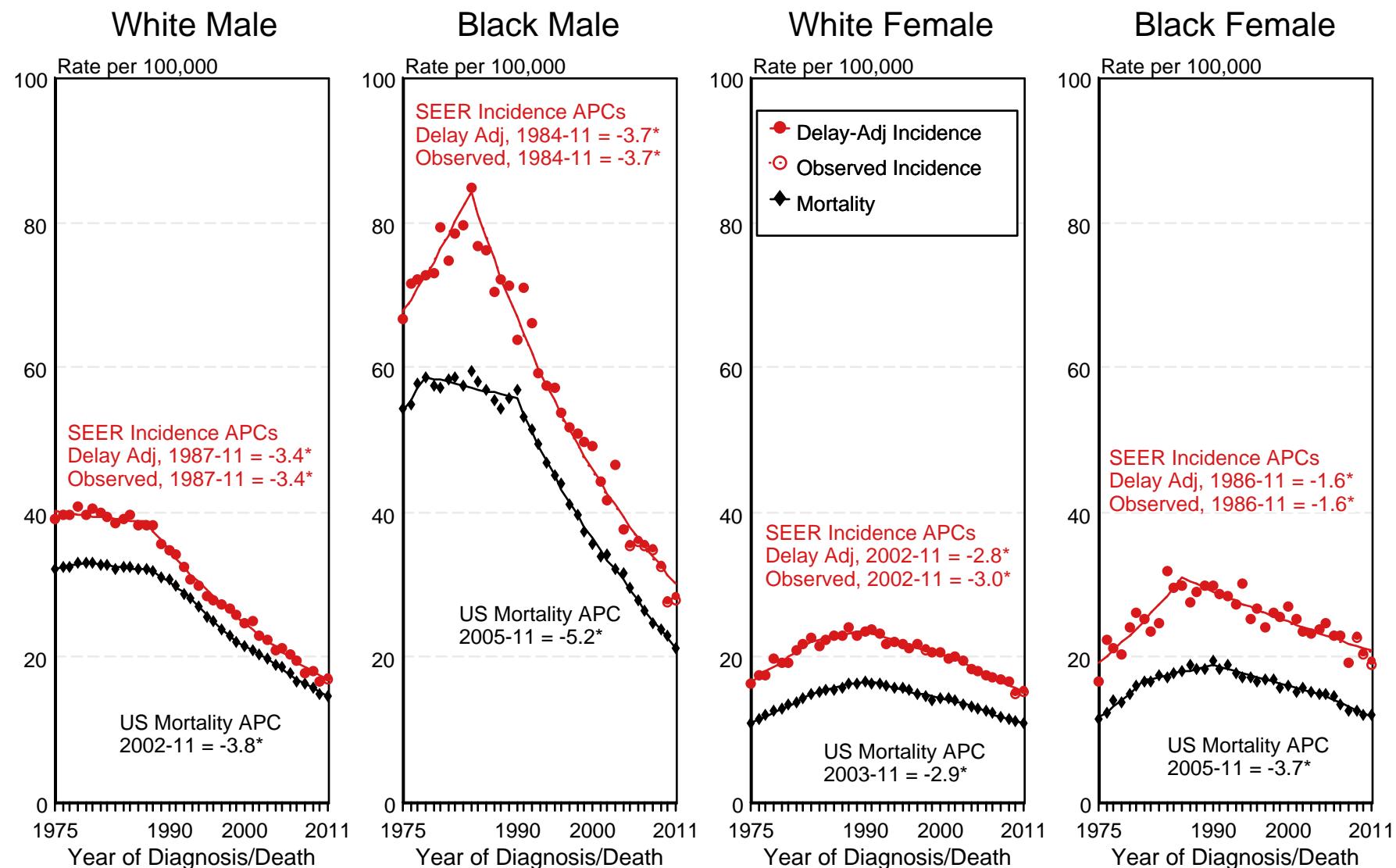
SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Lung and Bronchus, by Race and Sex



- ^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
 * The APC is significantly different from zero ($p < 0.05$).

Figure 15.2

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



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

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

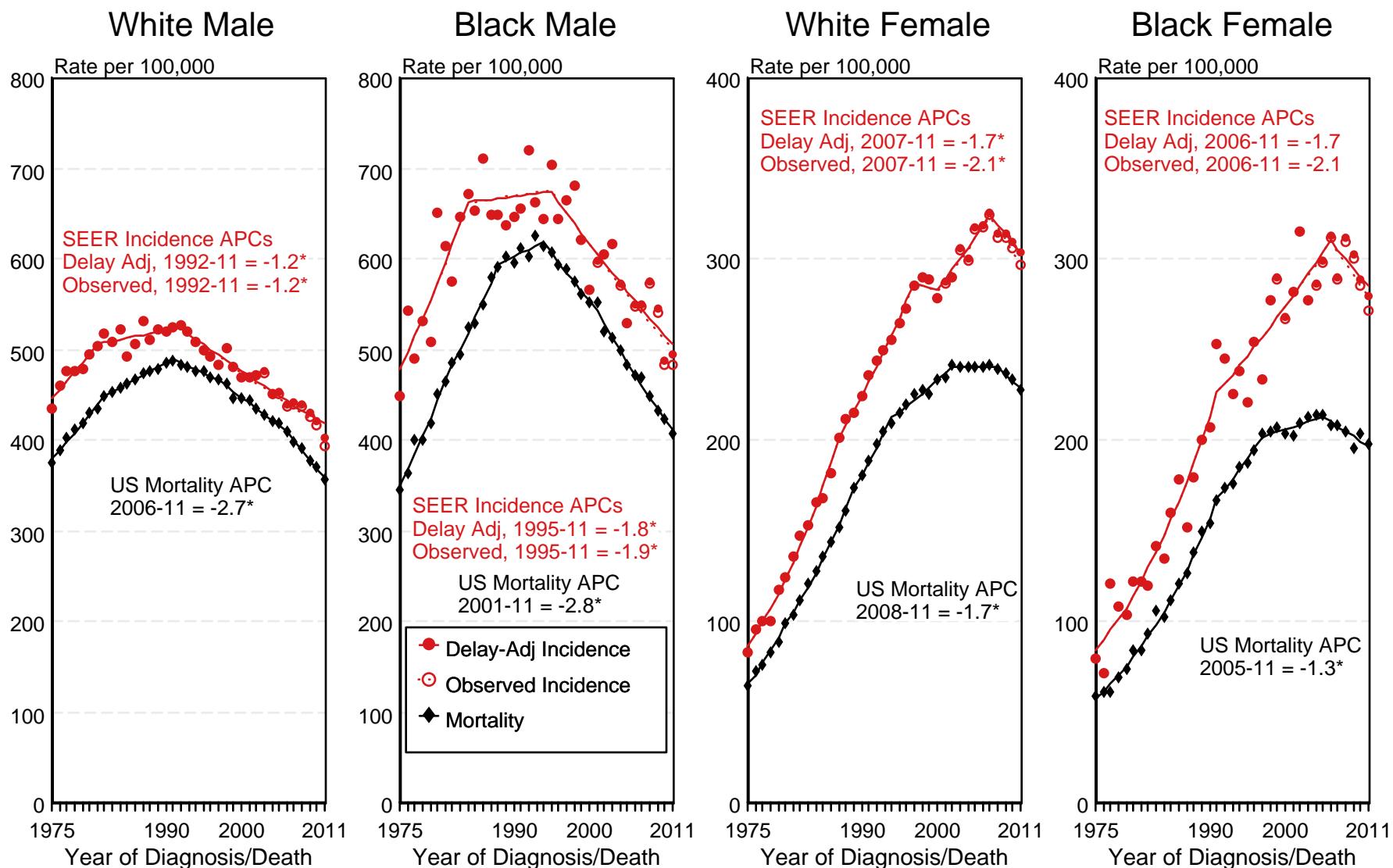
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

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

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

Figure 15.3

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



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

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

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

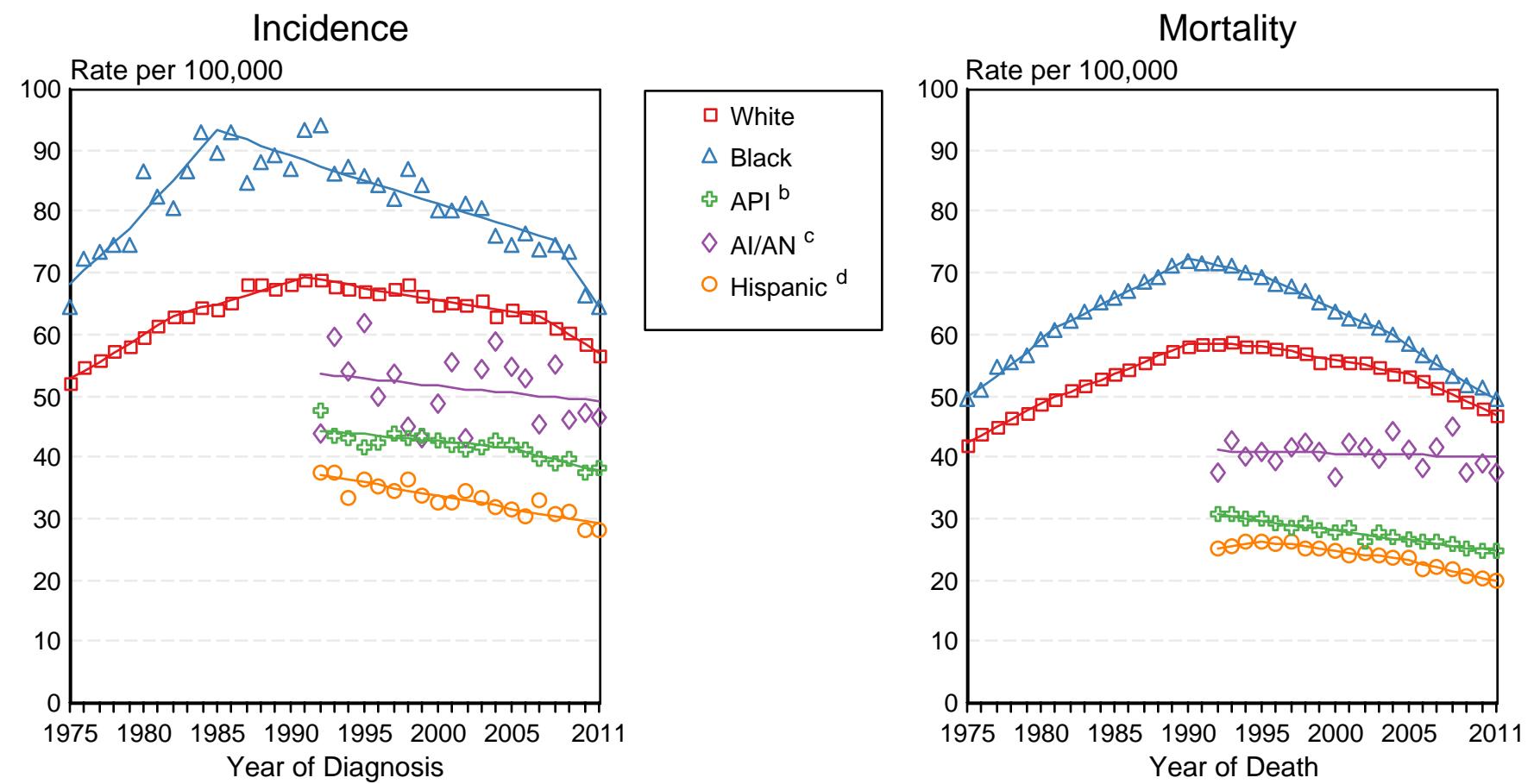
* The APC is significantly different from zero ($p < 0.05$).

Figure 15.4

SEER Incidence and US Death Rates^a

Cancer of the Lung and Bronchus, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2011 and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2011



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,

^a Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from 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 4.1.0, April 2014, National Cancer Institute. Joinpoint analyses for Whites and

^b Blacks during the 1975-2011 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2011 allow a maximum of 3 joinpoints.

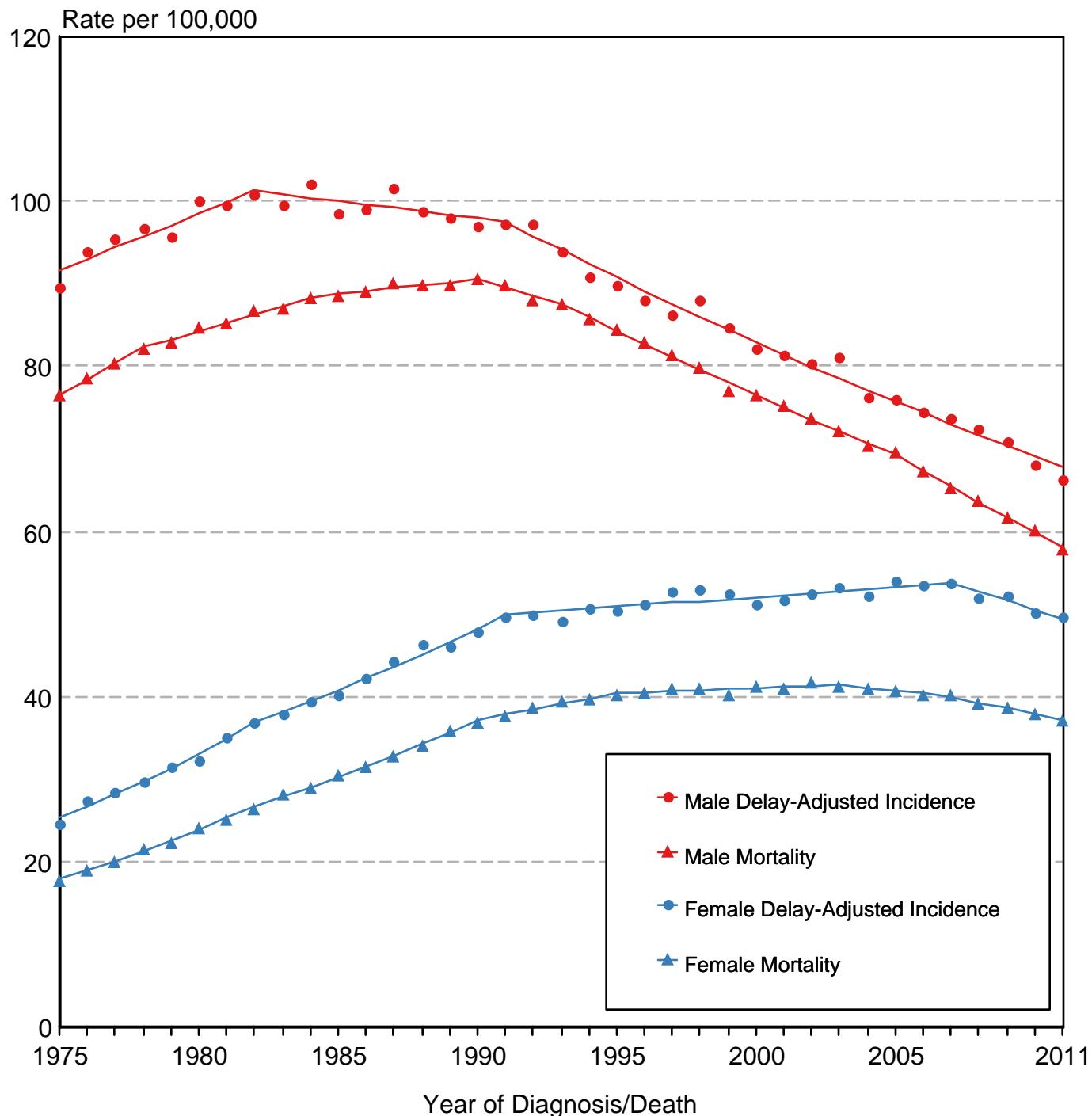
^c API = Asian/Pacific Islander.

^d AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

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.

Figure 15.5

Cancer of the Lung & Bronchus SEER Delay-Adjusted Incidence & US Death Rates, 1975-2011, All Races, By Sex



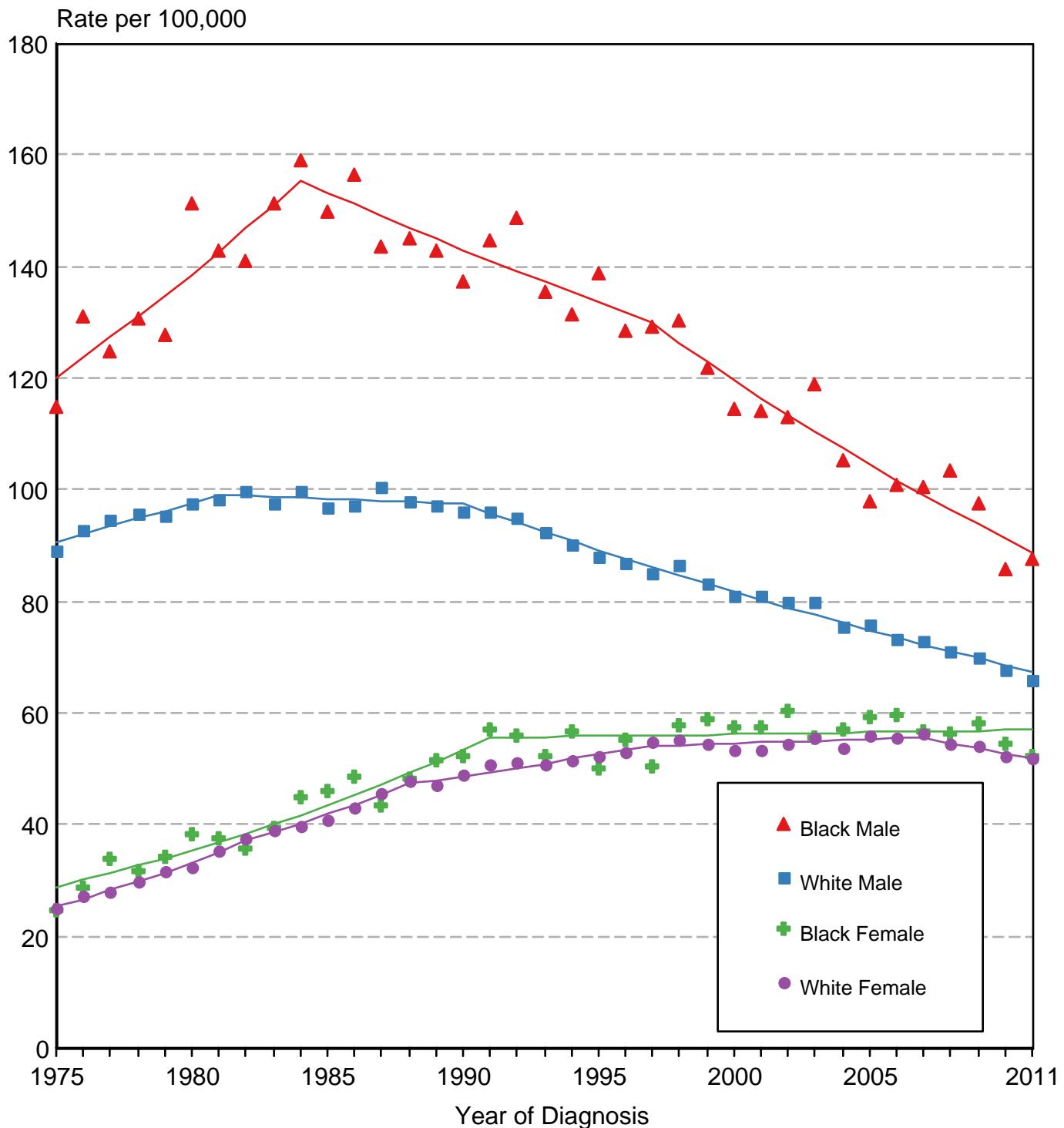
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
 Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014,
 National Cancer Institute.

Figure 15.6

Cancer of the Lung & Bronchus

SEER Delay-Adjusted Incidence, 1975-2011

By Sex and Race



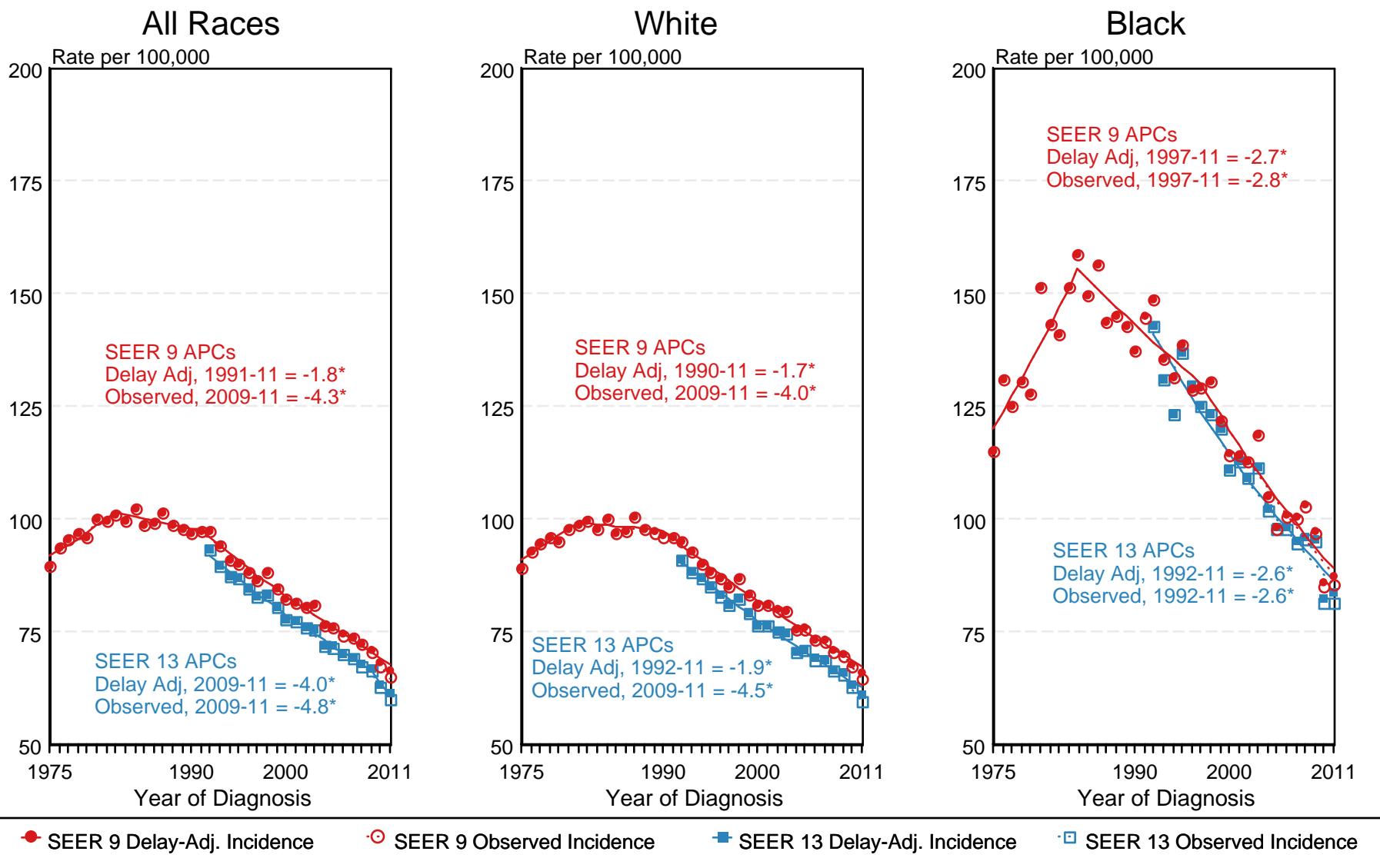
Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

Figure 15.7

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a

SEER 9 Areas Compared to SEER 13 Areas

Cancer of the Lung and Bronchus, Male, by Race



^a Source: SEER 9 areas and SEER 13 areas.

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 4.1.0, April 2014, 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.

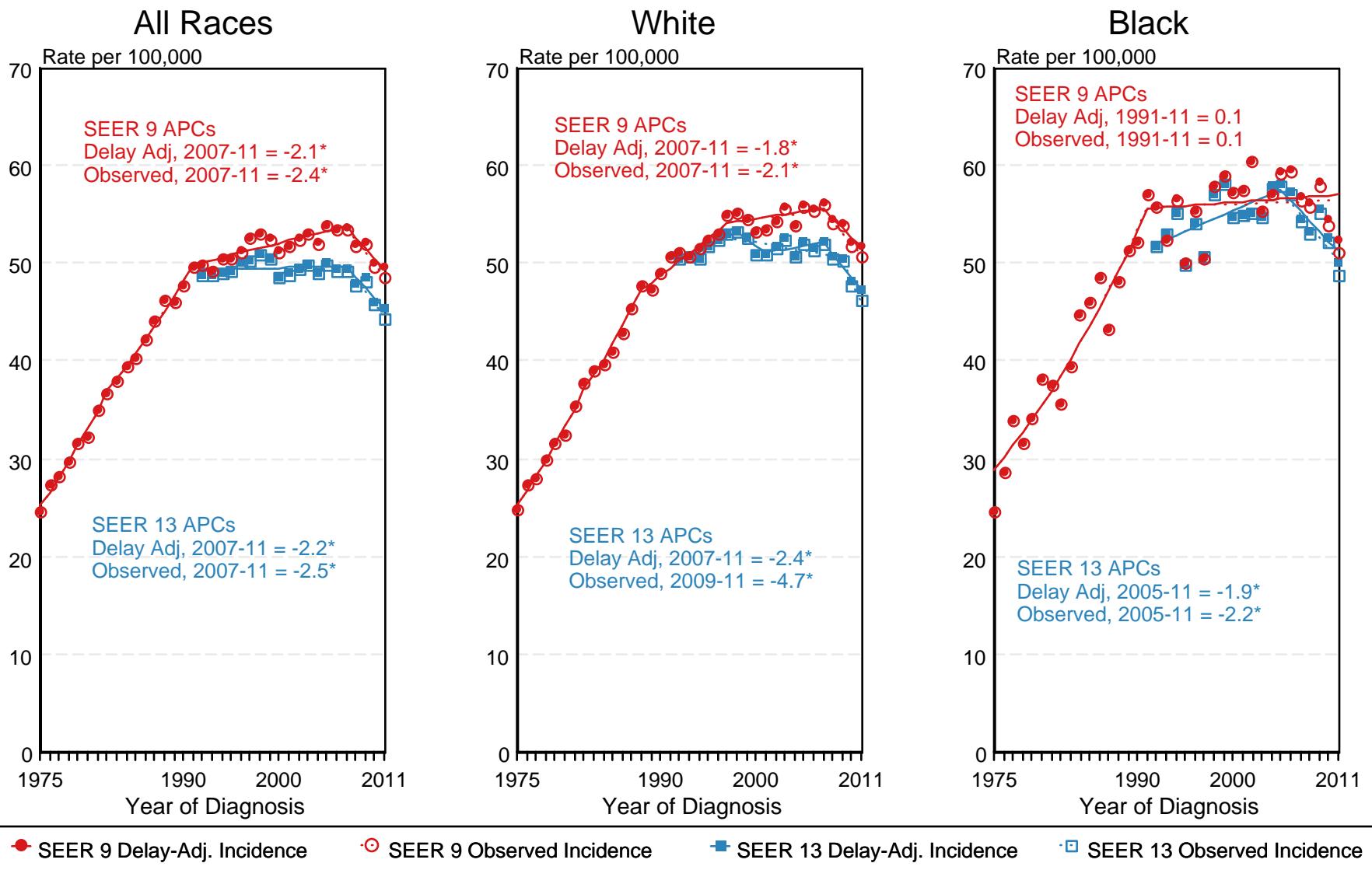
* The APC is significantly different from zero ($p < 0.05$).

Figure 15.8

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a

SEER 9 Areas Compared to SEER 13 Areas

Cancer of the Lung and Bronchus, Female, by Race



^a Source: SEER 9 areas and SEER 13 areas.

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

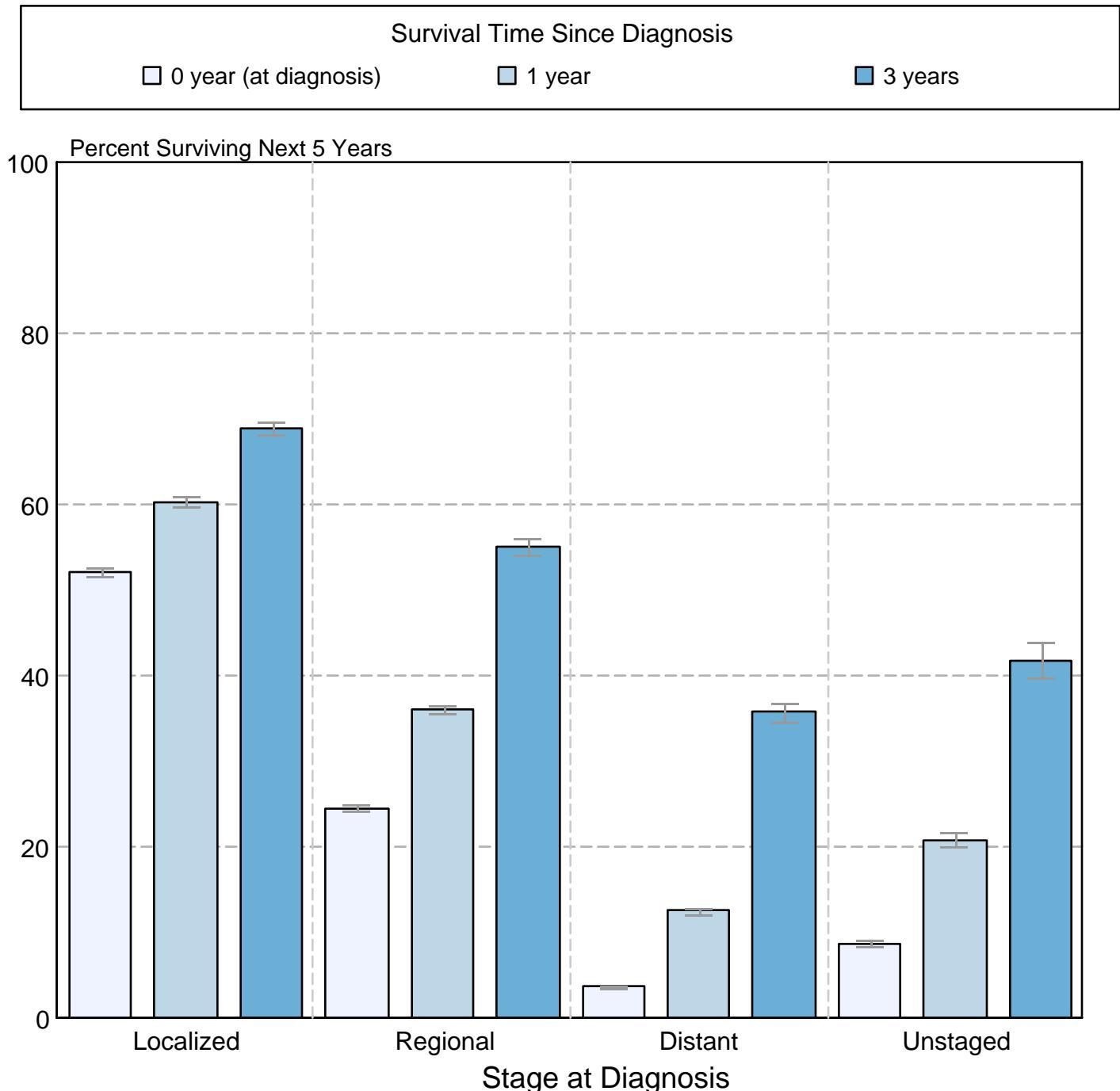
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.

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
1998-2010 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 2000-2009. The remaining 13 SEER Areas contribute cases for the entire period 1998-2010. 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.