

Table 4.1
Cancer of the Female Breast (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2013 With up to Five Joinpoints, 1992-2013 With up to Four Joinpoints,
All Ages by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2004-13	2009-13
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2013</u>														
All Races	1975-80	-0.5	1980-87	4.0*	1987-94	-0.2	1994-99	1.8*	1999-04	-2.3*	2004-13	0.4*	0.4*	0.4*
White	1975-80	-0.5	1980-87	4.1*	1987-94	-0.2	1994-99	2.0*	1999-04	-2.4*	2004-13	0.2	0.2	0.2
Black	1975-79	-1.5	1979-86	4.4*	1986-13	0.5*							0.5*	0.5*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2013</u>														
All Races	1992-99	1.3*	1999-04	-2.2*	2004-13	0.3							0.3	0.3
White	1992-99	1.5*	1999-04	-2.4*	2004-13	0.1							0.1	0.1
Black	1992-13	0.4*											0.4*	0.4*
<u>SEER 9 Observed Incidence^a, 1975-2013</u>														
All Races	1975-80	-0.5	1980-87	4.0*	1987-94	-0.2	1994-99	1.8*	1999-04	-2.3*	2004-13	0.3	0.3	0.3
White	1975-80	-0.5	1980-87	4.1*	1987-94	-0.2	1994-99	2.0*	1999-04	-2.4*	2004-13	0.1	0.1	0.1
Black	1975-91	2.3*	1991-13	0.3*									0.3*	0.3*
<u>SEER 13 Observed Incidence^b, 1992-2013</u>														
All Races	1992-99	1.3*	1999-04	-2.2*	2004-13	0.2							0.2	0.2
White	1992-99	1.5*	1999-04	-2.3*	2004-13	0.0							0.0	0.0
White NH ^{ef}	1992-99	1.7*	1999-04	-2.3*	2004-13	0.1							0.1	0.1
Black	1992-13	0.2*											0.2*	0.2*
Black NH ^{ef}	1992-13	0.3*											0.3*	0.3*
API ^e	1992-94	-4.6	1994-97	7.0	1997-05	-0.7	2005-13	1.4*					1.1*	1.4*
AI/AN ^{eg}	1992-13	-0.1											-0.1	-0.1
Hispanic ^f	1992-13	0.1											0.1	0.1
<u>U.S. Cancer Mortality^c, 1975-2013</u>														
All Races	1975-90	0.4*	1990-95	-1.8*	1995-98	-3.3*	1998-13	-1.9*					-1.9*	-1.9*
White	1975-90	0.3*	1990-95	-2.0*	1995-98	-3.5*	1998-13	-1.9*					-1.9*	-1.9*
Black	1975-93	1.4*	1993-13	-1.5*									-1.5*	-1.5*
<u>U.S. Cancer Mortality^c, 1992-2013</u>														
All Races	1992-95	-1.3*	1995-98	-3.5*	1998-13	-1.9*							-1.9*	-1.9*
White	1992-95	-1.5*	1995-98	-3.7*	1998-13	-1.9*							-1.9*	-1.9*
White NH ^{ef}	1992-95	-1.2*	1995-98	-3.6*	1998-13	-1.8*							-1.8*	-1.8*
Black	1992-95	0.4	1995-13	-1.5*									-1.5*	-1.5*
Black NH ^{ef}	1992-94	1.6	1994-13	-1.4*									-1.4*	-1.4*
API ^e	1992-13	-1.0*											-1.0*	-1.0*
AI/AN ^{eg}	1992-13	-0.7											-0.7	-0.7
Hispanic ^f	1992-96	1.4	1996-99	-4.0	1999-11	-1.5*	2011-13	1.6					-0.8	0.0

Joinpoint Regression Program Version 4.3.0.0, April 2016, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

^a 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).

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

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

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

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

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

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

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

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

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

Table 4.2
Cancer of the Female Breast (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2013 With up to Five Joinpoints, 1992-2013 With up to Four Joinpoints,
Ages <50 by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2004-13	2009-13
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2013</u>														
All Races	1975-80	-1.3	1980-87	2.7*	1987-94	-0.8	1994-13	0.3*					0.3*	0.3*
White	1975-80	-1.1	1980-87	2.7*	1987-94	-0.8	1994-13	0.3*					0.3*	0.3*
Black	1975-91	1.3*	1991-13	-0.2									-0.2	-0.2
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2013</u>														
All Races	1992-13	0.2*											0.2*	0.2*
White	1992-13	0.2*											0.2*	0.2*
Black	1992-02	-1.3*	2002-05	4.1	2005-13	-0.9							-0.4	-0.9
<u>SEER 9 Observed Incidence^a, 1975-2013</u>														
All Races	1975-80	-1.4	1980-85	3.1*	1985-13	0.1							0.1	0.1
White	1975-80	-1.1	1980-87	2.6*	1987-94	-0.8	1994-13	0.2*					0.2*	0.2*
Black	1975-91	1.3*	1991-13	-0.3									-0.3	-0.3
<u>SEER 13 Observed Incidence^b, 1992-2013</u>														
All Races	1992-13	0.2*											0.2*	0.2*
White	1992-13	0.1*											0.1*	0.1*
White NH ^{ef}	1992-13	0.4*											0.4*	0.4*
Black	1992-02	-1.3*	2002-05	4.1	2005-13	-1.2*							-0.6	-1.2*
Black NH ^{ef}	1992-02	-1.4*	2002-05	4.5	2005-13	-1.0							-0.4	-1.0
API ^e	1992-13	0.9*											0.9*	0.9*
AI/AN ^{eg}	1992-13	-0.3											-0.3	-0.3
Hispanic ^f	1992-13	0.1											0.1	0.1
<u>U.S. Cancer Mortality^c, 1975-2013</u>														
All Races	1975-90	-0.4*	1990-07	-3.2*	2007-13	-1.3*							-1.9*	-1.3*
White	1975-90	-0.6*	1990-04	-3.7*	2004-13	-1.8*							-1.8*	-1.8*
Black	1975-87	1.8*	1987-95	-1.1*	1995-13	-2.4*							-2.4*	-2.4*
<u>U.S. Cancer Mortality^c, 1992-2013</u>														
All Races	1992-07	-3.1*	2007-13	-1.3									-2.0*	-1.3
White	1992-04	-3.7*	2004-13	-1.8*									-1.8*	-1.8*
White NH ^{ef}	1992-00	-4.1*	2000-13	-2.3*									-2.3*	-2.3*
Black	1992-13	-2.3*											-2.3*	-2.3*
Black NH ^{ef}	1992-13	-2.2*											-2.2*	-2.2*
API ^e	1992-13	-2.4*											-2.4*	-2.4*
AI/AN ^{eg}	1992-13	-2.1*											-2.1*	-2.1*
Hispanic ^f	1992-13	-2.5*											-2.5*	-2.5*

Joinpoint Regression Program Version 4.3.0.0, April 2016, 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).

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

Table 4.3
Cancer of the Female Breast (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2013 With up to Five Joinpoints, 1992-2013 With up to Four Joinpoints,
Ages 50+ by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2004-13	2009-13
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2013</u>														
All Races	1975-82	0.9	1982-87	5.3*	1987-93	-0.3	1993-99	1.9*	1999-05	-2.6*	2005-13	0.7*	0.3	0.7*
White	1975-82	0.9*	1982-87	5.5*	1987-93	-0.3	1993-00	1.7*	2000-04	-3.8*	2004-13	0.3	0.3	0.3
Black	1975-88	3.2*	1988-13	0.7*									0.7*	0.7*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2013</u>														
All Races	1992-99	1.7*	1999-04	-2.9*	2004-13	0.3							0.3	0.3
White	1992-00	1.4*	2000-04	-3.7*	2004-13	0.1							0.1	0.1
Black	1992-13	0.5*											0.5*	0.5*
<u>SEER 9 Observed Incidence^a, 1975-2013</u>														
All Races	1975-82	0.9	1982-87	5.3*	1987-93	-0.3	1993-99	1.9*	1999-05	-2.6*	2005-13	0.5	0.2	0.5
White	1975-82	0.9*	1982-87	5.5*	1987-93	-0.3	1993-00	1.7*	2000-04	-3.8*	2004-13	0.1	0.1	0.1
Black	1975-92	2.6*	1992-13	0.4*									0.4*	0.4*
<u>SEER 13 Observed Incidence^b, 1992-2013</u>														
All Races	1992-99	1.7*	1999-04	-2.9*	2004-13	0.1							0.1	0.1
White	1992-00	1.4*	2000-04	-3.7*	2004-13	0.0							0.0	0.0
White NH ^{ef}	1992-01	1.3*	2001-04	-5.1	2004-13	0.2							0.2	0.2
Black	1992-13	0.4*											0.4*	0.4*
Black NH ^{ef}	1992-13	0.4*											0.4*	0.4*
API ^e	1992-94	-5.5	1994-97	8.2	1997-04	-1.4	2004-13	1.4*					1.4*	1.4*
AI/AN ^{eg}	1992-13	0.0											0.0	0.0
Hispanic ^f	1992-13	0.1											0.1	0.1
<u>U.S. Cancer Mortality^c, 1975-2013</u>														
All Races	1975-90	0.5*	1990-13	-1.9*									-1.9*	-1.9*
White	1975-89	0.5*	1989-94	-1.2*	1994-97	-3.2*	1997-13	-1.8*					-1.8*	-1.8*
Black	1975-93	1.6*	1993-13	-1.2*									-1.2*	-1.2*
<u>U.S. Cancer Mortality^c, 1992-2013</u>														
All Races	1992-94	-0.4	1994-97	-3.2*	1997-13	-1.8*							-1.8*	-1.8*
White	1992-94	-0.6	1994-97	-3.3*	1997-13	-1.8*							-1.8*	-1.8*
White NH ^{ef}	1992-94	-0.1	1994-97	-3.3*	1997-13	-1.8*							-1.8*	-1.8*
Black	1992-13	-1.2*											-1.2*	-1.2*
Black NH ^{ef}	1992-94	2.3	1994-13	-1.2*									-1.2*	-1.2*
API ^e	1992-13	-0.7*											-0.7*	-0.7*
AI/AN ^{eg}	1992-13	-0.5											-0.5	-0.5
Hispanic ^f	1992-13	-1.3*											-1.3*	-1.3*

Joinpoint Regression Program Version 4.3.0.0, April 2016, 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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Data for American Indian/Alaska Native are based on the CHSDA (Contract Health Service Delivery Area) counties.

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

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

Table 4.4
Cancer of the Female Breast (*In Situ*)

Trends in SEER Incidence^{ab} Using the Joinpoint Regression Program,
1975-2013 With up to Five Joinpoints, 1992-2013 With up to Four Joinpoints,
All Ages by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2004-13	2009-13
SEER 9 Observed Incidence^a, 1975-2013														
All Races	1975-81	-3.0	1981-87	24.9*	1987-95	4.2*	1995-98	11.7	1998-13	0.6*			0.6*	0.6*
White	1975-81	-2.9	1981-87	25.4*	1987-95	3.9*	1995-98	12.0	1998-13	0.4			0.4	0.4
Black	1975-83	6.0	1983-87	23.9*	1987-98	8.2*	1998-13	1.5*					1.5*	1.5*
SEER 13 Observed Incidence^b, 1992-2013														
All Races	1992-99	7.3*	1999-13	0.4									0.4	0.4
White	1992-94	-0.7	1994-98	10.9*	1998-13	0.2							0.2	0.2
White NH ^{ef}	1992-94	0.6	1994-99	9.2*	1999-05	-0.8	2005-08	3.7	2008-13	-2.1*			0.0	-2.1*
Black	1992-98	9.1*	1998-13	1.6*									1.6*	1.6*
Black NH ^{ef}	1992-98	8.9*	1998-13	1.7*									1.7*	1.7*
API ^e	1992-01	7.6*	2001-13	1.3*									1.3*	1.3*
AI/AN ^{eg}	1992-13	1.6											1.6	1.6
Hispanic ^f	1992-98	8.5*	1998-13	1.7*									1.7*	1.7*

Joinpoint Regression Program Version 4.3.0.0, April 2016, 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).

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

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

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Table 4.5
Cancer of the Breast (Invasive)

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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2013	68.98	1.11	126.01	70.58	1.11	129.67	67.63	1.71	117.66
1975	58.06	0.85	105.07	59.46	0.88	107.36	52.10	-	93.57
1976	56.48	1.11	101.97	58.13	1.13	104.80	48.24	-	85.72
1977	55.99	0.96	100.83	57.45	0.89	103.39	49.71	-	87.14
1978	55.84	0.90	100.62	57.54	0.89	103.60	48.29	-	86.13
1979	56.84	0.99	102.10	58.28	0.94	104.70	49.91	-	86.94
1980	56.92	0.90	102.26	58.54	0.93	105.12	50.59	-	89.48
1981	59.33	1.00	106.36	61.24	0.93	109.92	54.41	-	94.35
1982	59.25	0.98	106.50	61.07	0.94	109.93	53.93	-	93.58
1983	61.90	1.04	111.14	63.69	1.13	114.43	59.08	-	103.82
1984	64.49	0.93	116.00	66.59	0.94	119.92	58.39	-	102.41
1985	69.11	0.95	124.25	70.98	0.97	127.79	64.03	-	111.54
1986	70.45	0.95	126.82	72.27	0.96	130.35	66.37	-	115.22
1987	74.80	0.96	134.51	77.81	0.98	140.26	63.13	-	109.55
1988	73.11	1.24	131.35	75.60	1.16	136.27	69.13	2.76	118.90
1989	70.76	1.13	127.25	73.39	1.07	132.40	60.73	-	105.20
1990	73.19	1.14	131.87	75.34	1.15	136.24	68.73	-	118.86
1991	74.11	1.12	133.87	76.64	1.17	138.92	67.59	-	117.72
1992	73.05	1.04	132.08	74.72	1.02	135.71	71.65	-	124.12
1993	71.33	1.08	129.20	73.14	1.04	133.10	68.86	-	119.53
1994	72.10	1.13	130.99	74.27	1.08	135.68	70.74	-	122.72
1995	72.88	0.96	132.70	75.14	0.92	137.63	71.68	-	123.85
1996	73.38	1.31	133.75	75.35	1.32	138.17	71.73	-	124.43
1997	75.61	1.10	138.03	77.57	1.07	142.59	72.98	-	126.19
1998	77.37	1.08	141.47	79.62	1.14	146.53	72.14	-	125.78
1999	77.18	0.98	141.49	79.56	0.97	147.03	72.95	-	126.29
2000	74.41	1.16	136.56	77.22	1.14	142.92	68.83	2.86	118.61
2001	75.61	1.22	138.80	78.21	1.22	144.85	66.84	1.66	115.81
2002	73.69	1.15	135.77	75.92	1.13	141.21	71.45	1.95	123.96
2003	68.98	1.33	127.07	70.85	1.34	131.82	71.35	1.85	123.82
2004	69.39	1.21	128.10	70.77	1.23	131.96	71.38	1.61	124.11
2005	68.43	1.06	126.65	70.21	1.15	131.33	68.15	-	118.79
2006	68.25	1.15	126.38	69.66	1.18	130.45	71.88	1.54	125.23
2007	69.13	1.10	128.23	70.49	1.13	132.38	71.76	1.82	124.45
2008	69.08	1.17	128.39	69.88	1.18	131.41	73.52	1.43	128.14
2009	70.37	1.18	130.78	71.35	1.25	134.22	74.14	-	129.30
2010	68.18	1.22	126.90	69.23	1.11	130.59	70.62	2.93	122.42
2011	69.84	1.38	130.10	70.64	1.32	133.38	73.49	2.74	127.74
2012	69.70	1.33	129.91	70.02	1.34	132.30	76.29	2.10	132.68
2013	69.70	1.20	130.37	69.95	1.22	132.68	73.29	1.96	127.79

^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 4.6
Cancer of the Breast (Invasive)

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

Year of Death:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2013	15.81	0.32	27.91	15.65	0.30	27.73	19.76	0.54	33.57
1975	17.83	0.37	31.45	18.03	0.38	31.79	16.82	0.41	29.49
1976	18.06	0.38	31.80	18.25	0.36	32.17	17.61	0.60	30.47
1977	18.47	0.36	32.48	18.56	0.35	32.67	18.90	0.51	32.80
1978	18.05	0.36	31.73	18.12	0.35	31.90	18.63	0.60	32.14
1979	17.74	0.28	31.21	17.87	0.26	31.48	17.87	0.54	30.82
1980	18.04	0.30	31.68	18.15	0.30	31.93	18.37	0.42	31.68
1981	18.20	0.32	31.92	18.28	0.31	32.12	18.95	0.46	32.55
1982	18.39	0.33	32.19	18.42	0.32	32.31	19.68	0.56	33.75
1983	18.33	0.31	32.07	18.36	0.29	32.20	19.57	0.50	33.53
1984	18.79	0.29	32.90	18.76	0.28	32.90	20.97	0.47	35.94
1985	18.84	0.34	32.98	18.88	0.34	33.11	20.35	0.43	34.85
1986	18.76	0.28	32.87	18.76	0.27	32.93	20.69	0.42	35.44
1987	18.66	0.34	32.66	18.57	0.34	32.57	21.53	0.47	36.73
1988	18.98	0.33	33.20	18.85	0.28	33.09	22.35	0.88	37.78
1989	19.00	0.33	33.23	18.95	0.33	33.23	21.56	0.45	36.61
1990	18.93	0.28	33.14	18.79	0.26	33.02	22.49	0.52	38.00
1991	18.66	0.28	32.69	18.46	0.27	32.45	22.62	0.44	38.28
1992	18.07	0.31	31.64	17.89	0.30	31.43	21.88	0.45	37.09
1993	17.98	0.36	31.39	17.74	0.34	31.09	22.62	0.66	38.04
1994	17.67	0.35	30.92	17.40	0.34	30.56	22.44	0.60	37.74
1995	17.44	0.35	30.55	17.11	0.32	30.09	22.70	0.77	38.18
1996	16.83	0.34	29.49	16.52	0.31	29.05	22.09	0.72	37.13
1997	16.07	0.32	28.21	15.67	0.30	27.62	22.25	0.63	37.43
1998	15.67	0.32	27.54	15.32	0.31	27.01	21.08	0.56	35.53
1999	15.18	0.34	26.61	14.77	0.32	25.98	20.93	0.69	35.21
2000	15.19	0.37	26.64	14.86	0.35	26.17	20.48	0.63	34.36
2001	14.77	0.35	26.01	14.37	0.33	25.43	20.52	0.65	34.52
2002	14.54	0.31	25.62	14.13	0.29	25.02	20.32	0.61	34.14
2003	14.31	0.31	25.27	13.89	0.30	24.66	20.24	0.47	34.10
2004	13.82	0.29	24.49	13.44	0.28	23.94	19.11	0.56	32.29
2005	13.61	0.29	24.14	13.18	0.28	23.49	19.37	0.49	32.81
2006	13.25	0.29	23.56	12.87	0.29	23.02	18.73	0.47	31.62
2007	12.90	0.28	22.96	12.51	0.27	22.40	18.51	0.45	31.36
2008	12.66	0.31	22.55	12.26	0.29	21.99	18.37	0.60	30.96
2009	12.43	0.28	22.24	12.09	0.28	21.76	17.78	0.41	30.19
2010	12.26	0.30	21.92	11.85	0.28	21.33	17.77	0.59	30.16
2011	12.01	0.30	21.54	11.60	0.28	20.93	17.70	0.50	30.15
2012	11.82	0.26	21.26	11.43	0.25	20.70	17.22	0.42	29.39
2013	11.51	0.30	20.72	11.18	0.28	20.27	16.56	0.55	28.19

^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 4.7
Cancer of the Female Breast (Invasive)

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

Year of Diagnosis:	All Races, Females			White Females			Black Females		
	All	<50	50+	All	<50	50+	All	<50	50+
1975	105.07	40.63	273.82	107.36	40.68	281.95	93.57	42.97	226.09
1976	101.97	40.05	264.11	104.80	40.81	272.36	85.72	38.05	210.55
1977	100.83	39.12	262.44	103.39	39.34	271.12	87.14	37.87	216.14
1978	100.62	38.85	262.38	103.60	39.30	271.99	86.13	39.99	206.95
1979	102.10	38.01	269.93	104.70	38.59	277.81	86.94	37.76	215.71
1980	102.26	37.80	271.06	105.12	38.29	280.13	89.48	37.69	225.12
1981	106.36	39.22	282.16	109.92	40.12	292.69	94.35	38.86	239.64
1982	106.50	40.57	279.14	109.93	41.22	289.86	93.58	38.02	239.06
1983	111.14	40.25	296.79	114.43	40.82	307.17	103.82	41.70	266.47
1984	116.00	42.40	308.75	119.92	43.15	320.95	102.41	44.66	253.62
1985	124.25	44.34	333.50	127.79	44.38	346.19	111.54	45.52	284.41
1986	126.82	44.48	342.44	130.35	45.25	353.19	115.22	45.64	297.40
1987	134.51	45.56	367.44	140.26	46.52	385.71	109.55	43.28	283.08
1988	131.35	44.01	360.07	136.27	44.97	375.35	118.90	43.00	317.67
1989	127.25	43.40	346.80	132.40	44.51	362.54	105.20	42.26	270.03
1990	131.87	45.62	357.73	136.24	45.36	374.19	118.86	49.05	301.66
1991	133.87	47.27	360.65	138.92	47.26	378.93	117.72	51.15	292.05
1992	132.08	43.45	364.16	135.71	43.61	376.88	124.12	46.91	326.28
1993	129.20	42.86	355.30	133.10	43.25	368.39	119.53	45.29	313.93
1994	130.99	42.44	362.87	135.68	42.80	378.89	122.72	47.65	319.29
1995	132.70	43.20	367.06	137.63	43.71	383.56	123.85	45.63	328.68
1996	133.75	43.60	369.83	138.17	44.03	384.69	124.43	44.37	334.07
1997	138.03	43.54	385.46	142.59	44.04	400.64	126.19	44.77	339.39
1998	141.47	45.49	392.78	146.53	45.50	411.09	125.78	47.20	331.57
1999	141.49	43.83	397.22	147.03	45.07	414.03	126.29	44.11	341.49
2000	136.56	43.50	380.26	142.92	43.95	402.10	118.61	44.88	311.66
2001	138.80	43.97	387.12	144.85	44.74	407.02	115.81	39.85	314.74
2002	135.77	42.87	379.05	141.21	43.54	396.97	123.96	41.43	340.07
2003	127.07	43.42	346.12	131.82	44.30	360.98	123.82	43.40	334.40
2004	128.10	44.95	345.85	131.96	44.82	360.15	124.11	47.97	323.49
2005	126.76	44.16	343.06	131.44	44.53	359.02	119.06	45.86	310.74
2006	126.61	44.25	342.28	130.68	45.15	354.63	125.75	45.41	336.14
2007	128.57	45.43	346.26	132.73	45.85	360.21	125.23	45.53	333.94
2008	128.84	45.69	346.56	131.87	45.75	357.39	129.28	45.46	348.77
2009	131.36	45.62	355.90	134.81	46.10	367.13	130.63	45.84	352.66
2010	127.58	44.46	345.23	131.29	45.29	356.48	123.91	44.64	331.49
2011	131.01	45.70	354.41	134.30	45.62	366.51	129.73	48.91	341.37
2012	131.10	44.52	357.82	133.58	45.02	365.48	135.27	42.62	377.90
2013	132.18	45.91	358.10	134.74	46.34	366.24	131.24	42.53	363.54

Additional information on the model used to delay-adjust SEER Incidence rates can be found at [\(http://surveillance.cancer.gov/delay/\)](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 4.8
Cancer of the Female Breast (Invasive)

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

Year of Diagnosis:	All Races, Females			White Females			Black Females		
	All	<50	50+	All	<50	50+	All	<50	50+
1975-2013	126.01	43.53	342.02	129.67	43.95	354.15	117.66	44.25	309.88
1975	105.07	40.63	273.82	107.36	40.68	281.95	93.57	42.97	226.09
1976	101.97	40.05	264.11	104.80	40.81	272.36	85.72	38.05	210.55
1977	100.83	39.12	262.44	103.39	39.34	271.12	87.14	37.87	216.14
1978	100.62	38.85	262.38	103.60	39.30	271.99	86.13	39.99	206.95
1979	102.10	38.01	269.93	104.70	38.59	277.81	86.94	37.76	215.71
1980	102.26	37.80	271.06	105.12	38.29	280.13	89.48	37.69	225.12
1981	106.36	39.22	282.16	109.92	40.12	292.69	94.35	38.86	239.64
1982	106.50	40.57	279.14	109.93	41.22	289.86	93.58	38.02	239.06
1983	111.14	40.25	296.79	114.43	40.82	307.17	103.82	41.70	266.47
1984	116.00	42.40	308.75	119.92	43.15	320.95	102.41	44.66	253.62
1985	124.25	44.34	333.50	127.79	44.38	346.19	111.54	45.52	284.41
1986	126.82	44.48	342.44	130.35	45.25	353.19	115.22	45.64	297.40
1987	134.51	45.56	367.44	140.26	46.52	385.71	109.55	43.28	283.08
1988	131.35	44.01	360.07	136.27	44.97	375.35	118.90	43.00	317.67
1989	127.25	43.40	346.80	132.40	44.51	362.54	105.20	42.26	270.03
1990	131.87	45.62	357.73	136.24	45.36	374.19	118.86	49.05	301.66
1991	133.87	47.27	360.65	138.92	47.26	378.93	117.72	51.15	292.05
1992	132.08	43.45	364.16	135.71	43.61	376.88	124.12	46.91	326.28
1993	129.20	42.86	355.30	133.10	43.25	368.39	119.53	45.29	313.93
1994	130.99	42.44	362.87	135.68	42.80	378.89	122.72	47.65	319.29
1995	132.70	43.20	367.06	137.63	43.71	383.56	123.85	45.63	328.68
1996	133.75	43.60	369.83	138.17	44.03	384.69	124.43	44.37	334.07
1997	138.03	43.54	385.46	142.59	44.04	400.64	126.19	44.77	339.39
1998	141.47	45.49	392.78	146.53	45.50	411.09	125.78	47.20	331.57
1999	141.49	43.83	397.22	147.03	45.07	414.03	126.29	44.11	341.49
2000	136.56	43.50	380.26	142.92	43.95	402.10	118.61	44.88	311.66
2001	138.80	43.97	387.12	144.85	44.74	407.02	115.81	39.85	314.74
2002	135.77	42.87	379.05	141.21	43.54	396.97	123.96	41.43	340.07
2003	127.07	43.42	346.12	131.82	44.30	360.98	123.82	43.40	334.40
2004	128.10	44.95	345.85	131.96	44.82	360.15	124.11	47.97	323.49
2005	126.65	44.11	342.77	131.33	44.49	358.71	118.79	45.76	310.01
2006	126.38	44.16	341.69	130.45	45.07	354.01	125.23	45.22	334.72
2007	128.23	45.30	345.37	132.38	45.73	359.27	124.45	45.26	331.82
2008	128.39	45.51	345.39	131.41	45.58	356.17	128.14	45.12	345.54
2009	130.78	45.40	354.38	134.22	45.88	365.54	129.30	45.43	348.91
2010	126.90	44.21	343.46	130.59	45.04	354.63	122.42	44.20	327.24
2011	130.10	45.37	351.97	133.38	45.31	364.01	127.74	48.25	335.87
2012	129.91	44.11	354.56	132.30	44.60	361.94	132.68	41.92	370.32
2013	130.37	45.30	353.16	132.68	45.65	360.57	127.79	41.47	353.83

^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 4.9
Cancer of the Female Breast (Invasive)
Age-adjusted U.S. Death^a Rates by Year, Race and Age

Year of Death:	All Races, Females			White Females			Black Females		
	All	<50	50+	All	<50	50+	All	<50	50+
1975-2013	27.91	6.65	83.58	27.73	6.29	83.88	33.57	10.25	94.64
1975	31.45	9.11	89.94	31.79	9.01	91.42	29.49	10.68	78.75
1976	31.80	8.74	92.21	32.17	8.64	93.80	30.47	10.22	83.50
1977	32.48	8.86	94.34	32.67	8.75	95.32	32.80	10.52	91.13
1978	31.73	8.69	92.08	31.90	8.46	93.29	32.14	11.37	86.53
1979	31.21	8.58	90.47	31.48	8.34	92.07	30.82	11.36	81.78
1980	31.68	8.57	92.22	31.93	8.39	93.56	31.68	10.82	86.31
1981	31.92	8.46	93.33	32.12	8.20	94.77	32.55	11.48	87.74
1982	32.19	8.42	94.43	32.31	8.19	95.46	33.75	11.19	92.83
1983	32.07	8.16	94.70	32.20	7.89	95.85	33.53	11.17	92.10
1984	32.90	8.58	96.57	32.90	8.22	97.55	35.94	12.55	97.21
1985	32.98	8.56	96.90	33.11	8.30	98.09	34.85	12.04	94.58
1986	32.87	8.64	96.32	32.93	8.26	97.53	35.44	12.86	94.58
1987	32.66	8.44	96.08	32.57	7.99	96.93	36.73	12.94	99.04
1988	33.20	8.39	98.18	33.09	8.01	98.78	37.78	12.71	103.42
1989	33.23	8.42	98.22	33.23	8.06	99.16	36.61	12.41	99.96
1990	33.14	8.32	98.14	33.02	7.99	98.55	38.00	11.99	106.13
1991	32.69	8.16	96.91	32.45	7.73	97.15	38.28	12.31	106.29
1992	31.64	7.77	94.15	31.43	7.37	94.45	37.09	12.03	102.73
1993	31.39	7.41	94.18	31.09	6.99	94.20	38.04	11.65	107.14
1994	30.92	7.37	92.58	30.56	6.92	92.47	37.74	11.70	105.91
1995	30.55	7.29	91.46	30.09	6.80	91.07	38.18	11.71	107.49
1996	29.49	6.95	88.53	29.05	6.40	88.35	37.13	11.74	103.61
1997	28.21	6.71	84.53	27.62	6.22	83.64	37.43	11.03	106.56
1998	27.54	6.34	83.05	27.01	5.82	82.50	35.53	10.65	100.68
1999	26.61	5.75	81.22	25.98	5.20	80.40	35.21	10.27	100.52
2000	26.64	5.89	80.99	26.17	5.37	80.64	34.36	9.94	98.31
2001	26.01	5.86	78.77	25.43	5.36	77.98	34.52	9.85	99.12
2002	25.62	5.63	77.97	25.02	5.07	77.28	34.14	10.02	97.31
2003	25.27	5.58	76.85	24.66	5.08	75.90	34.10	9.62	98.19
2004	24.49	5.21	74.99	23.94	4.67	74.38	32.29	9.26	92.60
2005	24.14	5.20	73.74	23.49	4.65	72.83	32.81	9.46	93.95
2006	23.56	5.05	72.01	23.02	4.58	71.32	31.62	8.88	91.17
2007	22.96	4.77	70.60	22.40	4.28	69.85	31.36	8.55	91.10
2008	22.55	4.74	69.20	21.99	4.32	68.23	30.96	8.23	90.47
2009	22.24	4.81	67.88	21.76	4.48	67.01	30.19	7.96	88.39
2010	21.92	4.53	67.47	21.33	4.07	66.53	30.16	8.02	88.13
2011	21.54	4.47	66.25	20.93	4.03	65.19	30.15	7.83	88.61
2012	21.26	4.58	64.93	20.70	4.15	64.05	29.39	7.89	85.68
2013	20.72	4.41	63.42	20.27	4.07	62.69	28.19	7.32	82.85

^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 4.10
Cancer of the Female Breast (*In Situ*)

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

	All Races, Females			White Females			Black Females		
	All	<50	50+	All	<50	50+	All	<50	50+
Year of Diagnosis:									
1975-2013	24.06	9.89	61.16	23.98	9.99	60.62	23.79	8.34	64.24
1975	5.83	3.78	11.19	5.89	3.82	11.33	3.94	-	8.31
1976	5.28	2.70	12.02	5.36	2.87	11.87	3.28	-	9.40
1977	4.25	2.56	8.68	4.33	2.60	8.85	3.17	-	-
1978	4.40	2.36	9.74	4.55	2.50	9.91	3.29	-	-
1979	4.58	2.81	9.21	4.65	2.85	9.37	4.78	-	9.55
1980	4.83	2.98	9.67	5.05	3.09	10.17	3.71	-	-
1981	4.97	2.64	11.05	4.93	2.52	11.26	4.11	-	8.84
1982	5.30	2.73	12.03	5.34	2.71	12.24	5.55	2.73	12.94
1983	6.09	3.03	14.09	6.22	3.03	14.57	5.41	-	13.20
1984	8.62	4.79	18.66	9.20	5.21	19.64	6.35	2.37	16.77
1985	11.53	5.92	26.24	12.10	6.27	27.36	8.21	3.49	20.57
1986	13.63	6.79	31.56	14.25	7.21	32.69	9.32	5.12	20.32
1987	17.38	7.82	42.39	18.22	8.25	44.33	12.30	5.64	29.73
1988	17.58	8.16	42.23	18.11	8.52	43.22	16.03	7.06	39.52
1989	16.54	7.02	41.49	17.10	7.27	42.84	14.66	5.52	38.59
1990	19.14	8.38	47.31	19.89	8.70	49.20	15.15	5.54	40.32
1991	19.79	8.78	48.62	20.50	8.90	50.87	15.41	7.29	36.66
1992	21.43	9.01	53.98	22.14	9.23	55.97	19.16	6.93	51.16
1993	20.70	8.36	53.04	21.36	8.80	54.26	16.62	6.06	44.27
1994	22.31	8.74	57.84	22.84	8.98	59.14	20.10	7.56	52.96
1995	24.72	9.63	64.24	25.10	10.02	64.58	22.80	6.50	65.50
1996	25.36	9.84	66.02	25.91	9.83	68.02	22.93	7.71	62.80
1997	28.31	11.03	73.57	28.87	11.18	75.18	28.44	11.39	73.11
1998	32.77	12.00	87.16	33.71	12.30	89.77	30.63	10.96	82.14
1999	32.76	11.99	87.14	33.20	12.24	88.08	29.61	10.47	79.72
2000	32.84	11.80	87.95	33.89	12.50	89.90	29.67	8.04	86.31
2001	33.69	11.59	91.57	34.24	12.04	92.34	31.92	9.09	91.69
2002	34.05	11.90	92.05	34.58	12.29	92.95	28.81	8.85	81.07
2003	32.50	12.03	86.09	33.48	12.52	88.35	30.17	9.43	84.48
2004	33.21	12.79	86.66	33.96	13.00	88.85	30.71	10.26	84.24
2005	32.68	12.51	85.47	33.60	13.01	87.49	32.33	10.43	89.70
2006	33.25	13.84	84.10	33.62	14.41	83.92	36.10	11.74	99.88
2007	35.38	14.38	90.36	35.83	14.87	90.69	33.70	10.93	93.34
2008	36.85	14.12	96.37	37.16	14.73	95.92	36.81	11.73	102.46
2009	37.01	14.42	96.17	37.75	15.00	97.32	35.71	11.38	99.40
2010	33.88	13.12	88.25	34.20	13.15	89.31	33.18	12.23	88.06
2011	35.60	14.41	91.08	35.98	14.80	91.44	33.90	10.85	94.26
2012	33.47	13.68	85.30	33.15	14.03	83.22	35.14	11.63	96.70
2013	34.82	14.36	88.37	34.27	14.39	86.33	36.91	12.14	101.77

^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 4.11
Cancer of the Breast (Invasive)SEER Incidence^a and U.S. Death^b Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2009-2013									
All ages	67.2	1.2	125.0	68.0	1.2	128.0	71.2	1.8	125.2
Under 65	41.7	0.4	81.5	41.6	0.4	82.3	44.9	0.7	83.7
65 and over	243.1	6.4	425.8	250.8	6.4	443.4	253.0	9.6	412.2
All ages (IARC world std) ^c	47.6	0.7	90.2	48.0	0.7	92.1	50.5	1.2	90.7
Age-Specific Rates, 2009-2013									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	-	0.2	0.1	-	0.1	-	-	-
20-24	0.7	-	1.4	0.7	-	1.4	0.9	-	1.8
25-29	4.4	-	9.0	4.2	-	8.7	6.2	-	12.0
30-34	13.4	-	27.0	12.8	-	26.3	18.1	-	34.6
35-39	30.4	0.1	60.4	29.2	0.2	59.3	36.4	-	68.6
40-44	61.6	0.5	122.2	60.9	0.4	122.9	65.1	1.1	122.8
45-49	95.9	0.7	189.2	95.7	0.7	191.7	97.6	1.2	184.2
50-54	114.9	1.1	224.9	114.7	1.0	227.4	119.2	2.3	223.9
55-59	136.5	1.7	263.4	136.4	1.7	266.7	150.5	2.7	277.8
60-64	178.5	2.8	339.7	180.9	2.7	349.0	190.9	4.1	343.4
65-69	227.1	4.9	424.2	232.3	4.8	438.9	232.1	8.4	405.8
70-74	246.0	5.9	447.0	254.3	5.9	466.7	250.5	8.8	425.5
75-79	258.1	6.8	451.3	268.5	6.9	474.4	267.6	9.9	434.5
80-84	252.9	7.8	418.4	261.9	7.9	437.1	267.0	11.3	407.0
85+	235.2	8.3	350.1	240.8	8.6	358.7	262.9	11.4	366.5
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2009-2013									
All ages	12.0	0.3	21.5	11.6	0.3	21.0	17.4	0.5	29.6
Under 65	5.4	0.1	10.5	5.0	0.1	9.9	9.0	0.2	16.7
65 and over	57.4	1.6	97.4	57.1	1.6	97.7	75.1	2.6	118.8
All ages (IARC world std) ^c	7.5	0.2	13.9	7.2	0.2	13.4	11.3	0.3	19.8
Age-Specific Rates, 2009-2013									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	0.0	-	0.1	0.0	-	0.1	-	-	-
25-29	0.3	-	0.7	0.3	-	0.6	0.7	-	1.4
30-34	1.3	-	2.7	1.1	-	2.3	2.9	-	5.4
35-39	3.3	0.1	6.5	3.0	-	5.9	6.0	-	11.1
40-44	6.6	0.1	13.1	5.9	0.0	11.9	12.4	-	23.3
45-49	10.3	0.2	20.3	9.5	0.1	18.8	17.4	0.4	32.6
50-54	15.6	0.2	30.4	14.5	0.2	28.5	25.9	0.5	48.2
55-59	21.0	0.4	40.4	19.6	0.4	38.2	34.5	0.6	63.3
60-64	27.7	0.7	52.7	26.8	0.6	51.4	40.9	1.2	73.2
65-69	35.2	0.9	65.9	34.7	0.9	65.6	48.6	1.4	84.9
70-74	43.2	1.2	78.7	42.6	1.2	78.3	60.1	2.2	101.5
75-79	55.0	1.6	96.5	54.9	1.5	97.3	71.6	2.6	115.5
80-84	73.9	2.4	122.4	73.6	2.3	123.0	97.6	4.2	147.7
85+	120.3	3.3	178.2	121.0	3.4	179.8	145.0	3.9	201.3

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

- 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 4.12
Cancer of the Female Breast (*In Situ*)

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

	All Races, Females	White Females	Black Females
<u>Age-Adjusted Rates, 2009-2013</u>			
Age at Diagnosis:			
All ages	31.5	31.5	31.0
Under 65	23.3	23.4	21.6
65 and over	88.0	88.0	96.2
All ages (IARC world std) ^b	23.8	23.8	23.2
<u>Age-Specific Rates, 2009-2013</u>			
Age at Diagnosis:			
<1	-	-	-
1-4	-	-	-
5-9	-	-	-
10-14	-	-	-
15-19	-	-	-
20-24	0.2	0.2	-
25-29	0.6	0.5	0.8
30-34	2.6	2.3	3.6
35-39	10.3	10.4	9.4
40-44	40.9	41.1	33.9
45-49	62.4	63.2	49.6
50-54	71.7	72.9	61.7
55-59	74.0	73.5	77.2
60-64	87.2	85.6	98.6
65-69	108.3	107.6	115.1
70-74	103.0	102.9	111.5
75-79	91.1	91.5	102.9
80-84	66.4	67.4	74.6
85+	31.8	31.7	36.7

^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 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 4.13
Cancer of the Female Breast (Invasive)

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

	All Races, Females			White Females			Black Females		
	All	<50	50+	All	<50	50+	All	<50	50+
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	63	-	-	46	-	-
1970-1973 ^a	-	-	-	68	-	-	51	-	-
1975-1977 ^b	74.8	76.5	74.3	75.6	77.8	74.9	62.2	62.4	62.0
1978-1980 ^b	74.4	75.5	74.1	75.1	76.1	74.8	63.4	67.0	61.5
1981-1983 ^b	76.1	77.4	75.7	77.1	78.5	76.7	63.4	65.1	62.6
1984-1986 ^b	78.9	77.8	79.3	80.0	79.5	80.2	65.1	63.9	65.8
1987-1989 ^b	84.1	81.4	85.0	85.1	82.7	85.9	71.1	69.6	71.9
1990-1992 ^b	85.2	83.4	85.9	86.5	85.1	87.0	71.5	70.1	72.3
1993-1995 ^b	86.4	84.3	87.1	87.7	86.2	88.1	72.7	70.4	74.1
1996-1998 ^b	88.2	86.6	88.8	89.3	88.3	89.7	76.2	73.9	77.6
1999-2001 ^b	89.7	88.1	90.3	90.8	89.8	91.1	78.8	76.9	80.0
2002-2005 ^b	90.1	89.6	90.3	91.6	91.5	91.6	77.8	77.9	77.8
2006-2012 ^b	90.8 ^f	91.0 ^f	90.8 ^f	92.0 ^f	92.2 ^f	92.0 ^f	81.5 ^f	82.6 ^f	81.0 ^f
5-Year Period Survival (Percent) ^{cd}									
2012	89.8	89.6	89.8	90.9	90.9	90.9	80.2	80.4	80.2
Stage Distribution (%) 2006-2012 ^{ce}									
All Stages									
Number of cases	332,526	79,474	253,052	265,322	59,107	206,215	36,579	10,708	25,871
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	61	54	64	62	55	65	53	47	55
Regional	31	39	29	31	39	28	37	43	34
Distant	6	5	6	5	5	6	9	8	9
Unstaged	2	1	2	2	1	2	2	2	2
5-Year Relative Survival (Percent), 2006-2012 ^c									
Age at Diagnosis:									
Ages <45	88.4	-	-	89.8	-	-	78.8	-	-
Ages 45-54	90.6	-	-	91.8	-	-	81.4	-	-
Ages 55-64	90.2	-	-	91.3	-	-	81.1	-	-
Ages 65-74	91.3	-	-	92.2	-	-	82.9	-	-
Ages 75+	87.0	-	-	88.2	-	-	74.5	-	-
Ages <65	90.0	-	-	91.2	-	-	80.6	-	-
Ages 65+	89.4	-	-	90.3	-	-	79.5	-	-
Stage ^e :									
All Stages	89.7	89.6	89.8	90.8	90.9	90.8	80.3	80.4	80.2
Localized	98.8	96.9	99.4	99.4	97.3	99.9	94.7	93.7	95.1
Regional	85.2	86.7	84.6	86.5	88.2	85.8	75.6	76.5	75.2
Distant	26.3	36.1	23.6	27.4	38.8	24.6	18.3	24.4	15.9
Unstaged	52.5	74.8	47.5	50.5	75.6	45.8	49.8	64.1	45.0
<i>In Situ</i> ^j	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.8	100.0

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

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

Based on follow-up of patients into 2013.

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

Based on follow-up of patients into 2013.

^d Period survival provides a 2012 estimate of survival by piecing together the most recent conditional survival estimates

from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

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

^f The difference between 1975-1977 and 2006-2012 is statistically significant ($p < .05$).

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

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

^j *In situ* cases are not included in the All Stages group.

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

Table 4.14
Cancer of the Female Breast (Invasive)

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

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Survival Time																						
1-year	94.4	95.1	96.3	97.1	97.1	97.0	97.4	97.5	97.5	97.5	97.3	97.5	97.8	97.7	97.8	97.7	97.7	97.7	97.8	97.6	97.8	98.0
2-year	88.7	89.9	92.3	93.8	94.0	93.7	94.4	94.9	95.1	95.3	95.1	95.4	95.4	95.6	95.7	95.6	96.0	95.7	96.0	95.7	95.9	
3-year	83.1	84.6	88.3	90.5	91.3	90.9	92.0	92.9	93.1	93.4	92.8	93.5	93.3	93.2	93.8	93.8	94.0	93.7	93.9	93.8		
4-year	78.4	80.2	85.0	87.8	88.8	88.9	89.9	91.0	91.2	91.6	91.0	91.7	91.5	91.3	91.9	92.2	92.4	92.3	92.4			
5-year	74.6	76.3	82.2	85.6	86.8	86.7	88.4	89.5	89.5	90.2	89.4	90.2	89.7	89.9	90.5	90.7	91.1	90.6				
6-year	71.4	73.4	79.9	83.8	85.4	85.0	86.9	88.3	88.0	89.0	88.2	88.7	88.6	88.5	89.1	89.6	89.7					
7-year	68.6	70.6	77.8	82.1	83.8	83.8	85.9	87.1	86.9	87.7	86.8	87.6	87.4	87.4	87.9	88.5						
8-year	66.4	68.3	76.3	80.9	82.6	82.4	84.9	85.8	85.8	86.3	85.9	86.4	86.3	86.4	87.2							
9-year	64.2	66.4	74.6	79.7	81.3	81.4	83.7	84.6	84.9	85.2	85.2	85.5	85.8	85.4								
10-year	62.4	64.5	73.3	78.7	80.5	80.3	82.6	83.4	84.0	84.4	84.4	84.4	84.9	84.6								
11-year	60.8	62.7	72.1	77.6	79.4	79.5	81.7	82.6	82.8	83.5	83.5	84.3										
12-year	59.3	61.5	70.8	76.7	78.4	78.6	81.0	82.0	82.3	82.5	82.3											
13-year	58.1	60.4	69.8	75.8	77.3	77.5	80.0	81.0	81.5	81.6												
14-year	57.1	59.1	69.0	74.9	76.7	76.8	79.2	80.3	80.4													
15-year	56.0	58.3	68.0	74.1	75.8	76.1	78.3	79.3														
16-year	55.1	57.2	67.2	73.2	74.8	75.5	77.2															
17-year	54.1	56.2	66.4	72.3	73.9	74.7																
18-year	53.3	55.5	65.7	71.6	72.6																	
19-year	52.5	54.9	65.0	70.9																		
20-year	51.8	54.1	64.4																			
21-year	51.1	53.4	63.7																			
22-year	50.5	52.7	63.1																			
23-year	49.9	52.0	62.5																			
24-year	49.3	51.4	61.8																			
25-year	48.5	50.9																				
26-year	48.2	50.5																				
27-year	47.8	49.9																				
28-year	47.3	49.3																				
29-year	46.8	48.4																				
30-year	46.4																					

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

Table 4.15
Cancer of the Female Breast (Ages <50, Invasive)

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

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Survival Time																						
1-year	96.6	97.4	97.9	98.0	97.9	97.7	98.0	98.3	98.6	98.4	98.2	98.5	98.7	98.5	98.8	98.8	99.0	98.7	98.8	98.6	99.0	98.8
2-year	90.7	91.2	92.5	93.8	93.6	93.8	94.7	95.1	95.0	95.6	94.6	95.7	96.0	95.9	96.1	96.7	97.1	96.4	96.4	96.3	97.0	
3-year	84.5	85.5	87.3	89.7	90.0	90.8	91.6	92.2	92.2	93.0	91.6	93.2	93.7	93.2	93.8	94.8	95.1	94.0	94.2	93.8		
4-year	79.9	80.9	83.3	86.3	86.6	88.1	88.7	89.5	90.0	90.6	89.3	90.6	91.8	91.1	92.1	93.0	93.4	92.4	92.5			
5-year	76.1	77.0	80.1	83.8	84.1	85.5	86.8	87.3	88.1	89.0	87.3	88.6	89.8	89.4	90.7	91.1	91.8	90.7				
6-year	73.2	74.1	77.9	81.7	82.2	83.3	84.7	85.4	86.1	87.4	85.3	86.8	88.1	87.8	89.3	89.5	90.3					
7-year	70.8	71.5	75.8	80.0	80.2	81.7	83.2	83.7	84.8	85.6	83.5	85.3	86.8	86.2	88.2	88.6						
8-year	68.9	69.5	74.1	78.5	78.7	80.1	81.5	82.3	83.5	83.8	82.1	84.2	85.6	85.1	87.3							
9-year	67.0	67.7	72.6	77.3	77.6	79.0	80.5	80.8	82.5	82.5	81.0	83.1	84.9	84.1								
10-year	65.5	66.3	71.4	76.3	76.3	77.6	79.2	79.8	81.5	81.6	80.1	82.3	83.9									
11-year	64.2	65.0	70.3	75.3	75.5	76.7	78.2	78.9	80.3	80.8	79.2	81.5										
12-year	62.8	64.0	69.3	74.4	74.6	76.0	77.3	78.1	79.8	80.0	78.3											
13-year	61.6	63.0	68.3	73.4	73.7	74.7	76.4	77.5	79.1	79.2												
14-year	60.9	61.9	67.6	72.8	73.0	74.0	75.4	77.1	77.9													
15-year	60.1	61.1	66.8	72.1	72.2	73.3	74.7	76.5														
16-year	59.4	60.4	66.1	71.3	71.4	72.9	74.0															
17-year	58.9	59.7	65.6	70.7	70.3	72.2																
18-year	58.3	59.1	64.9	70.1	69.2																	
19-year	57.6	58.7	64.4	69.5																		
20-year	57.0	58.1	63.9																			
21-year	56.3	57.3	63.3																			
22-year	55.7	56.6	62.8																			
23-year	55.1	56.0	62.3																			
24-year	54.5	55.4	61.9																			
25-year	53.9	55.0																				
26-year	53.6	54.4																				
27-year	53.0	53.9																				
28-year	52.6	53.3																				
29-year	52.2	52.8																				
30-year	51.9																					

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

Table 4.16
Cancer of the Female Breast (Ages 50+, Invasive)

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

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Survival Time																						
1-year	93.7	94.4	95.8	96.8	96.8	96.7	97.1	97.2	97.2	97.2	97.0	97.2	97.5	97.5	97.4	97.4	97.3	97.4	97.5	97.3	97.4	97.8
2-year	88.0	89.6	92.3	93.8	94.1	93.6	94.3	94.9	95.2	95.3	95.2	95.4	95.2	95.5	95.6	95.3	95.7	95.5	95.8	95.6	95.6	
3-year	82.6	84.3	88.6	90.7	91.8	91.0	92.1	93.1	93.4	93.6	93.2	93.6	93.1	93.2	93.8	93.4	93.6	93.6	93.8	93.9		
4-year	77.9	79.9	85.6	88.4	89.6	89.1	90.3	91.6	91.7	92.0	91.6	92.1	91.4	91.4	91.8	92.0	92.1	92.3	92.4			
5-year	74.1	76.1	83.0	86.3	87.8	87.1	88.9	90.3	90.0	90.6	90.2	90.7	89.7	90.1	90.4	90.6	90.8	90.5				
6-year	70.8	73.1	80.5	84.6	86.6	85.6	87.7	89.4	88.7	89.5	89.3	89.4	88.8	88.8	89.1	89.6	89.6					
7-year	67.9	70.4	78.6	82.9	85.1	84.6	86.8	88.4	87.7	88.4	88.0	88.4	87.7	87.8	87.8	88.6						
8-year	65.6	68.0	77.1	81.9	84.1	83.3	86.2	87.1	86.6	87.3	87.2	87.2	86.6	87.0	87.2							
9-year	63.3	65.9	75.3	80.7	82.7	82.3	84.9	86.1	85.8	86.2	86.8	86.3	86.2	86.0								
10-year	61.3	63.8	73.9	79.6	82.1	81.4	83.8	84.8	85.0	85.5	85.9	85.9	84.9									
11-year	59.5	61.8	72.7	78.5	81.0	80.6	83.0	84.0	83.8	84.5	85.1	85.3										
12-year	58.0	60.6	71.3	77.6	79.9	79.6	82.4	83.5	83.2	83.4	83.8											
13-year	56.7	59.4	70.3	76.6	78.7	78.7	81.3	82.3	82.4	82.6												
14-year	55.6	58.1	69.4	75.7	78.2	77.9	80.8	81.5	81.4													
15-year	54.4	57.2	68.4	74.8	77.2	77.3	79.6	80.2														
16-year	53.3	55.9	67.5	73.8	76.1	76.5	78.4															
17-year	52.1	54.8	66.6	72.8	75.3	75.7																
18-year	51.2	54.0	65.7	72.0	73.9																	
19-year	50.3	53.3	65.1	71.2																		
20-year	49.5	52.4	64.3																			
21-year	48.8	51.6	63.5																			
22-year	48.2	51.0	62.9																			
23-year	47.6	50.2	62.1																			
24-year	46.9	49.5	61.3																			
25-year	45.9	49.0																				
26-year	45.6	48.7																				
27-year	45.2	48.0																				
28-year	44.8	47.3																				
29-year	44.1	46.1																				
30-year	43.6																					

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

Table 4.17
Cancer of the Female Breast (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, 2011-2013 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.06	12.43	2.65	Asian/ Pacific Islander	0	0.00	0.00	0.05	10.50	1.73
	10	0.00	0.06	0.51	12.55	2.68		10	0.00	0.05	0.48	10.57	1.74
	20	0.06	0.51	1.95	12.57	2.68		20	0.05	0.48	1.88	10.59	1.74
	30	0.45	1.90	4.10	12.57	2.69		30	0.43	1.83	3.78	10.56	1.74
	40	1.47	3.69	6.84	12.27	2.67		40	1.41	3.37	5.90	10.21	1.72
	50	2.30	5.55	8.82	11.16	2.56		50	2.00	4.59	6.95	8.99	1.62
	60	3.47	6.95	8.94	9.44	2.32		60	2.69	5.15	6.69	7.28	1.44
	70	3.95	6.22	-	6.78	1.95		70	2.65	4.31	-	4.94	1.19
80	3.00	-	-	3.75	1.52	80	1.95	-	-	2.70	0.93		
White	0	0.00	0.00	0.06	12.70	2.61	American Indian/ Alaska Native ^a	0	0.00	0.01	0.05	9.38	1.70
	10	0.00	0.06	0.50	12.81	2.64		10	0.01	0.05	0.39	9.46	1.72
	20	0.06	0.50	1.96	12.84	2.64		20	0.04	0.39	1.25	9.48	1.72
	30	0.45	1.91	4.13	12.84	2.65		30	0.35	1.22	2.77	9.54	1.74
	40	1.48	3.73	6.97	12.55	2.63		40	0.89	2.47	5.21	9.39	1.73
	50	2.33	5.67	9.07	11.43	2.53		50	1.65	4.49	6.96	8.85	1.69
	60	3.56	7.18	9.22	9.69	2.31		60	3.04	5.68	7.25	7.69	1.59
	70	4.12	6.43	-	6.97	1.95		70	3.00	4.79	-	5.29	1.36
80	3.09	-	-	3.81	1.51	80	2.37	-	-	3.03	1.13		
Black	0	0.00	0.00	0.09	11.38	3.22	Hispanic ^b	0	0.00	0.00	0.05	9.95	2.09
	10	0.00	0.09	0.58	11.58	3.28		10	0.00	0.05	0.40	10.03	2.11
	20	0.08	0.58	1.96	11.60	3.29		20	0.05	0.40	1.54	10.05	2.11
	30	0.50	1.89	4.07	11.60	3.30		30	0.35	1.49	3.27	10.03	2.11
	40	1.42	3.64	6.58	11.30	3.25		40	1.15	2.95	5.43	9.76	2.09
	50	2.31	5.38	8.20	10.31	3.07		50	1.84	4.37	6.78	8.81	1.99
	60	3.35	6.44	8.19	8.74	2.73		60	2.65	5.18	6.74	7.30	1.79
	70	3.66	5.74	-	6.39	2.29		70	2.77	4.49	-	5.10	1.52
80	2.92	-	-	3.83	1.82	80	2.12	-	-	2.88	1.21		

Devcan 6.7.4, August 2016, 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 4.18
Cancer of the Female Breast (Invasive)

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

SEER Incidence	SEER 18 Areas ^b	SEER 13 Areas ^b	SEER 9 Areas ^b
	Rate 2009-2013	Trend 2004-2013 ^c	Trend 2004-2013 ^d
	Rate per 100,000 persons	AAPC (%)	AAPC (%)
RACE/ETHNICITY	Females	Females	Females
All Races	125.0	0.2	0.3
White	128.0	0.0	0.1
White Hispanic ^e	96.1	0.2	-
White Non-Hispanic ^e	134.3	0.1	-
Black	125.2	0.2*	0.3*
Asian/Pacific Islander	97.3	1.1*	-
Amer Ind/Alaska Nat ^f	81.2	-0.1	-
Hispanic ^e	92.4	0.1	-
<u>U.S. Mortality^g</u>			
	Rate 2009-2013	Trend 2004-2013 ^h	
	Rate per 100,000 persons	AAPC (%)	
RACE/ETHNICITY	Females	Females	
All Races	21.5	-1.9*	
White	21.0	-1.9*	
White Hispanic ^e	15.3	-1.0*	
White Non-Hispanic ^e	21.5	-1.8*	
Black	29.6	-1.5*	
Asian/Pacific Islander	11.2	-1.0*	
Amer Ind/Alaska Nat			
Total U.S.	11.1	-3.9*	
CHSDA Counties	14.7	-0.7	
Non-CHSDA Counties	7.1	-3.4*	
Hispanic ^e	14.5	-0.8	

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

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

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

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

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

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

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

^c The 2004-2013 AAPC estimates are based on a Joinpoint analysis with up to 4 Joinpoints over diagnosis years 1992-2013.

^d The 2004-2013 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2013.

^e Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2004-2013 Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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

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

^h The 2004-2013 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2013.

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

Table 4.19
Cancer of the Female Breast (*In Situ*)

SEER Incidence
Age-Adjusted Rates and Trends^a
By Race/Ethnicity

SEER Incidence RACE/ETHNICITY	SEER 18 Areas ^b Rate 2009-2013 Rate per 100,000 persons	SEER 13 Areas ^b Trend 2004-2013 ^c AAPC (%)	SEER 9 Areas ^b Trend 2004-2013 ^d AAPC (%)
	Females	Females	Females
All Races	31.5	0.4	0.6*
White	31.5	0.2	0.4
White Hispanic ^e	21.9	1.8*	-
White Non-Hispanic ^e	33.8	0.0	-
Black	31.0	1.6*	1.5*
Asian/Pacific Islander	30.5	1.3*	-
Amer Ind/Alaska Nat ^f	16.5	1.6	-
Hispanic ^e	21.3	1.7*	-

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

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

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

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

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

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

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

^c The 2004-2013 AAPC estimates are based on a Joinpoint analysis with up to 4 Joinpoints over diagnosis years 1992-2013.

^d The 2004-2013 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2013.

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

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

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

Table 4.20
Cancer of the Female Breast (Invasive)

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

	All Races			Whites			Blacks		
	All Ages	Ages <50	Ages 50+	All Ages	Ages <50	Ages 50+	All Ages	Ages <50	Ages 50+
<u>SEER Incidence Rates^a, 2009-2013</u>									
California	121.45	41.04	331.98	126.28	41.22	349.00	123.18	40.96	338.49
Greater Bay Area	124.76	44.63	334.57	133.78	45.62	364.64	123.98	38.58	347.61
San Francisco-Oakland	126.90	44.75	342.00	135.07	45.19	370.42	124.63	38.66	349.73
San Jose-Monterey	120.62	44.41	320.18	131.62	46.40	354.79	120.63	38.06	336.83
Los Angeles	116.10	40.55	313.92	119.11	39.47	327.63	127.67	43.46	348.19
Greater California	122.74	39.98	339.46	127.01	40.76	352.87	117.67	39.67	321.93
Connecticut	137.78	51.12	364.70	140.42	53.06	369.19	115.53	39.70	314.12
Detroit	131.85	46.05	356.52	133.06	46.72	359.14	131.31	45.56	355.86
Georgia	123.43	43.14	333.69	123.97	41.53	339.82	125.77	47.52	330.69
Atlanta	133.06	46.75	359.08	138.62	48.23	375.31	133.31	47.43	358.22
Rural Georgia	127.58	48.73	334.05	132.79	48.82	352.68	116.52	49.37	292.35
Greater Georgia	118.50	40.81	321.95	118.23	38.55	326.88	120.76	47.54	312.50
Hawaii	134.43	50.87	353.26	142.43	52.80	377.14	115.16	47.15	293.25
Iowa	122.57	41.22	335.57	123.31	41.57	337.35	103.48	39.53	270.91
Kentucky	121.99	41.29	333.32	121.86	41.06	333.44	127.21	42.87	348.07
Louisiana	123.43	41.99	336.69	121.65	39.89	335.77	130.87	47.75	348.51
New Jersey	131.43	48.72	348.04	135.46	50.34	358.34	120.54	44.12	320.67
New Mexico	112.82	35.96	314.09	118.23	38.80	326.22	83.42	-	250.49
Seattle-Puget Sound	140.12	46.12	386.27	144.72	46.60	401.64	132.10	42.38	367.04
Utah	112.74	36.08	313.47	113.73	36.53	315.88	80.26	-	207.70
SEER 9 Areas ^b	129.63	44.88	351.57	132.64	45.31	361.32	128.10	44.24	347.68
SEER 13 Areas ^b	126.09	43.83	341.48	129.67	43.96	354.10	127.78	44.06	347.01
SEER 18 Areas ^b	125.00	43.03	339.64	127.96	43.12	350.13	125.19	44.58	336.25

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

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

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

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

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

Table 4.21
Cancer of the Female Breast (Invasive)

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

	All Races			Whites			Blacks		
	All Ages	Ages <50	Ages 50+	All Ages	Ages <50	Ages 50+	All Ages	Ages <50	Ages 50+
<u>SEER Death Rates^a, 2009-2013</u>									
California	20.89	4.38	64.10	21.83	4.32	67.70	30.91	8.31	90.08
Greater Bay Area	19.29	3.68	60.18	20.97	3.33	67.15	28.48	8.56	80.65
San Francisco-Oakland	19.71	3.77	61.46	20.94	3.09	67.69	29.32	8.89	82.81
San Jose-Monterey	18.49	3.52	57.70	21.02	3.74	66.25	21.68	-	61.21
Los Angeles	21.40	4.62	65.35	21.82	4.36	67.55	33.15	8.49	97.72
Greater California	21.21	4.52	64.91	22.07	4.57	67.90	29.75	8.04	86.61
Connecticut	19.83	4.22	60.71	19.65	3.96	60.74	22.71	6.58	64.93
Detroit	24.29	5.18	74.31	22.44	4.37	69.78	31.51	7.76	93.71
Georgia	22.93	5.12	69.56	20.92	4.00	65.25	28.92	7.65	84.61
Atlanta	23.98	5.35	72.75	20.85	3.85	65.38	31.05	7.73	92.12
Rural Georgia	28.57	-	86.61	22.38	-	71.85	38.76	-	113.68
Greater Georgia	22.35	4.95	67.91	20.96	4.07	65.20	27.25	7.51	78.95
Hawaii	14.86	4.55	41.87	17.58	5.65	48.82	-	-	-
Iowa	19.71	4.07	60.68	19.84	4.06	61.15	19.81	-	53.02
Kentucky	22.39	4.38	69.56	21.92	4.17	68.41	30.16	7.34	89.89
Louisiana	24.53	5.21	75.14	20.79	3.81	65.25	34.79	8.33	104.07
New Jersey	23.38	4.43	73.00	23.09	4.15	72.68	30.74	7.37	91.92
New Mexico	19.91	4.61	59.98	20.69	5.05	61.64	26.22	-	88.18
Seattle-Puget Sound	20.36	3.59	64.29	21.16	3.58	67.20	24.06	5.62	72.35
Utah	20.73	3.75	65.21	21.11	3.87	66.27	-	-	-
SEER 9 Areas ^b	20.71	4.31	63.65	20.71	3.92	64.66	29.20	7.49	86.05
SEER 13 Areas ^b	20.76	4.31	63.83	20.96	3.99	65.40	30.11	7.67	88.86
SEER 18 Areas ^b	21.57	4.47	66.36	21.54	4.16	67.07	30.40	7.72	89.79
Total U.S.	21.52	4.56	65.94	20.99	4.16	65.05	29.59	7.80	86.64

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

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

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

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

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

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

Table 4.22
Cancer of the Female Breast (*In Situ*)

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

	All Races			Whites			Blacks		
	All Ages	Ages <50	Ages 50+	All Ages	Ages <50	Ages 50+	All Ages	Ages <50	Ages 50+
<u>SEER Incidence Rates^a, 2009-2013</u>									
California	28.86	10.74	76.30	28.32	10.31	75.47	29.12	8.76	82.44
Greater Bay Area	34.00	13.67	87.21	33.70	13.15	87.51	27.85	9.19	76.72
San Francisco-Oakland	35.81	14.45	91.74	35.40	14.08	91.25	29.67	9.69	81.97
San Jose-Monterey	30.56	12.28	78.43	30.77	11.57	81.06	15.28	-	39.04
Los Angeles	25.82	9.39	68.85	24.75	8.88	66.30	29.31	8.47	83.90
Greater California	28.48	10.36	75.94	28.25	10.14	75.69	29.33	8.83	83.00
Connecticut	45.84	20.64	111.81	46.75	21.67	112.40	39.45	14.39	105.09
Detroit	36.33	13.85	95.18	36.73	15.09	93.40	36.05	10.65	102.53
Georgia	30.32	11.41	79.84	30.74	11.87	80.13	30.77	10.81	83.04
Atlanta	36.11	13.52	95.26	39.55	15.52	102.46	33.87	11.78	91.72
Rural Georgia	24.31	8.52	65.67	22.87	-	63.62	25.45	-	67.96
Greater Georgia	27.59	10.17	73.22	27.60	10.38	72.67	28.54	9.88	77.43
Hawaii	33.92	14.25	85.45	31.03	13.65	76.54	-	-	-
Iowa	27.84	10.53	73.16	27.89	10.65	73.03	32.71	-	86.77
Kentucky	25.60	9.43	67.94	25.18	9.39	66.51	32.22	9.58	91.49
Louisiana	25.53	8.43	70.30	25.95	8.89	70.61	25.56	7.60	72.57
New Jersey	41.41	18.93	100.27	43.12	20.06	103.51	32.33	12.15	85.15
New Mexico	21.03	7.65	56.07	21.94	8.14	58.05	21.94	-	62.59
Seattle-Puget Sound	39.44	15.40	102.39	39.10	14.88	102.51	43.76	14.13	121.33
Utah	24.06	9.13	63.16	24.20	9.20	63.48	41.20	-	-
SEER 9 Areas ^b	34.95	14.00	89.80	35.06	14.27	89.48	35.00	11.65	96.15
SEER 13 Areas ^b	32.56	12.77	84.36	32.54	12.81	84.19	33.40	10.91	92.29
SEER 18 Areas ^b	31.50	12.32	81.72	31.54	12.40	81.68	31.02	10.26	85.39

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

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

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

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

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

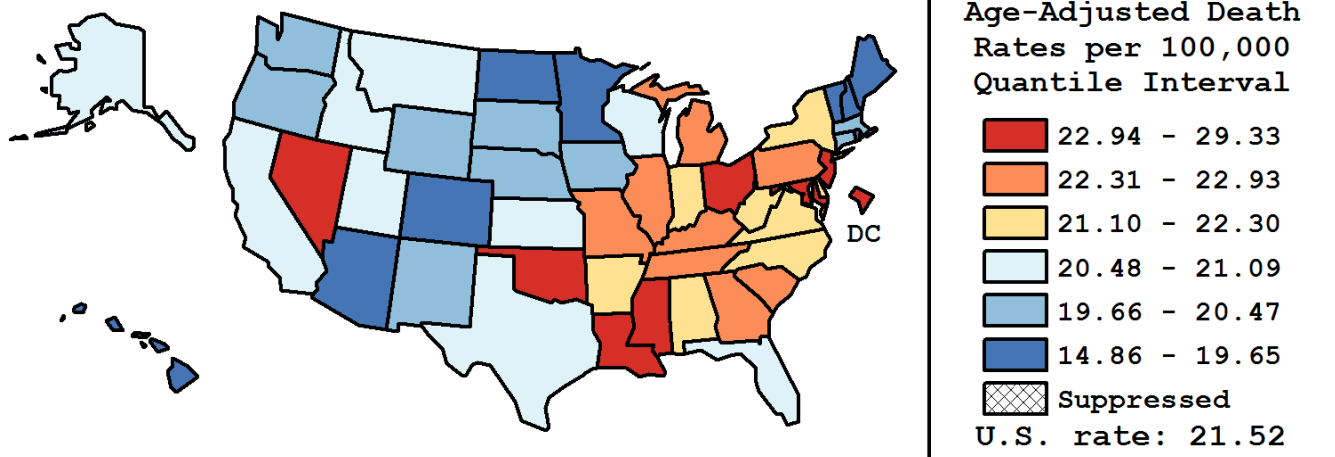
Table 4.23
Cancer of the Female Breast (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2009-2013

Females

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	21.52	0.05		
High Five States				
D.C.	29.33	1.34	01(01,01)	36.25 ^c
Louisiana	24.53	0.44	02(02,06)	13.99 ^c
Mississippi	24.09	0.53	03(02,17)	11.93 ^c
New Jersey	23.38	0.29	04(02,15)	8.64
Ohio	23.32	0.25	05(03,15)	8.37
Low Five States				
Rhode Island	19.40	0.76	47(22,50)	-9.86
Vermont	19.08	0.98	48(19,50)	-11.37 ^c
North Dakota	19.01	0.96	49(21,50)	-11.65 ^c
Maine	18.84	0.65	50(30,50)	-12.48 ^c
Hawaii	14.86	0.61	51(51,51)	-30.94 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	22.20	0.39	20(05,28)	3.13	Montana	20.87	0.83	28(05,50)	-3.01
Alaska	21.09	1.28	25(02,50)	-2.01	Nebraska	19.78	0.61	40(23,50)	-8.10
Arizona	19.65	0.32	43(30,50)	-8.71	Nevada	23.08	0.57	07(02,25)	7.24
Arkansas	22.27	0.50	18(04,30)	3.47	New Hampshire	19.62	0.69	45(21,50)	-8.82
California	20.89	0.14	27(23,35)	-2.95	New Jersey	23.38	0.29	04(02,15)	8.64
Colorado	19.47	0.38	46(31,50)	-9.55	New Mexico	19.91	0.58	38(23,50)	-7.49
Connecticut	19.83	0.42	39(26,50)	-7.86	New York	21.22	0.19	24(21,32)	-1.40
Delaware	21.76	0.88	22(02,47)	1.09	North Carolina	21.70	0.28	23(13,30)	0.81
D.C.	29.33	1.34	01(01,01)	36.25 ^c	North Dakota	19.01	0.96	49(21,50)	-11.65 ^c
Florida	20.57	0.18	33(25,40)	-4.45	Ohio	23.32	0.25	05(03,15)	8.37
Georgia	22.93	0.30	09(03,21)	6.54	Oklahoma	23.22	0.46	06(02,22)	7.89
Hawaii	14.86	0.61	51(51,51)	-30.94 ^c	Oregon	20.47	0.42	34(22,47)	-4.91
Idaho	20.77	0.70	29(10,49)	-3.49	Pennsylvania	22.78	0.23	11(04,21)	5.85
Illinois	22.69	0.25	12(04,22)	5.44	Rhode Island	19.40	0.76	47(22,50)	-9.86
Indiana	22.30	0.34	17(05,26)	3.61	South Carolina	22.49	0.40	13(04,26)	4.52
Iowa	19.71	0.46	41(26,50)	-8.41	South Dakota	20.06	0.90	37(11,50)	-6.78
Kansas	20.57	0.50	32(19,48)	-4.43	Tennessee	22.49	0.34	14(04,25)	4.51
Kentucky	22.39	0.41	16(04,27)	4.03	Texas	20.66	0.18	31(24,38)	-3.99
Louisiana	24.53	0.44	02(02,06)	13.99 ^c	Utah	20.73	0.60	30(15,48)	-3.66
Maine	18.84	0.65	50(30,50)	-12.48 ^c	Vermont	19.08	0.98	48(19,50)	-11.37 ^c
Maryland	22.98	0.37	08(03,22)	6.75	Virginia	22.21	0.31	19(07,26)	3.20
Massachusetts	19.67	0.31	42(31,50)	-8.60	Washington	20.16	0.33	36(26,47)	-6.31
Michigan	22.47	0.27	15(05,24)	4.40	West Virginia	22.16	0.60	21(03,34)	2.98
Minnesota	19.64	0.35	44(30,50)	-8.73	Wisconsin	20.92	0.35	26(20,40)	-2.82
Mississippi	24.09	0.53	03(02,17)	11.93 ^c	Wyoming	20.23	1.13	35(04,50)	-6.01
Missouri	22.79	0.35	10(03,23)	5.90					



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

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

^c Absolute percent difference between state rate and total U.S. rate is 10% or more.

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

SE Standard error of the rate.

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

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

Table 4.24
Cancer of the Breast (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2013
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 <21 ^e	0 to <38 ^e	>=38 ^g	Complete ^h
<u>Race</u>	<u>Sex</u>										
All Races ^b	Both Sexes	894,709	687,678	571,451	381,567	246,862	141,227	2,697,125	3,027,655	41,576	3,069,231
	Males	6,335	3,856	2,472	1,476	706	450	14,650	15,682	99	15,781
	Females	888,374	683,822	568,979	380,091	246,156	140,777	2,682,475	3,011,973	41,477	3,053,450
White ^b	Both Sexes	746,789	592,304	503,572	338,960	221,949	127,864	2,326,391	2,625,985	36,580	2,662,565
	Males	5,157	3,344	2,071	1,305	603	392	12,323	13,236	0 ⁱ	13,236
	Females	741,632	588,960	501,501	337,655	221,346	127,472	2,314,068	2,612,749	36,580	2,649,329
Black ^b	Both Sexes	96,917	62,687	43,796	28,425	16,751	9,164	243,131	264,386	+	+
	Males	917	413	292	110	97	49	1,792	1,902	+	+
	Females	96,000	62,274	43,504	28,315	16,654	9,115	241,339	262,484	3,261	265,745
Asian/ Pacific Islander ^c	Both Sexes	37,519	25,527	18,619	+	+	+	94,100	+	+	+
	Males	151	83	57	+	+	+	334	+	+	+
	Females	37,368	25,444	18,562	+	+	+	93,766	+	+	+
Hispanic ^d	Both Sexes	65,003	44,545	31,261	+	+	+	162,074	+	+	+
	Males	320	167	90	+	+	+	613	+	+	+
	Females	64,683	44,378	31,171	+	+	+	161,461	+	+	+

Estimated prevalence percent^a on January 1, 2013, of the SEER^c population diagnosed in the previous 21 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence		Age Specific (Crude)									Age-Adjusted ^f	
		All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages
<u>Race</u>	<u>Sex</u>											
All Races ^c	Both Sexes	0.7517%	-	0.0001%	0.0067%	0.0861%	0.4766%	1.2197%	2.2556%	3.2003%	3.6644%	0.6971%
	Males	0.0081%	-	-	-	0.0005%	0.0028%	0.0087%	0.0255%	0.0496%	0.0683%	0.0086%
	Females	1.4763%	-	0.0003%	0.0135%	0.1720%	0.9462%	2.3807%	4.2695%	5.7673%	5.8130%	1.2814%
White ^c	Both Sexes	0.8239%	-	0.0002%	0.0064%	0.0847%	0.4758%	1.2487%	2.3649%	3.4267%	3.9136%	0.7291%
	Males	0.0088%	-	-	-	0.0004%	0.0025%	0.0078%	0.0266%	0.0512%	0.0740%	0.0088%
	Females	1.6356%	-	0.0004%	0.0132%	0.1734%	0.9651%	2.4779%	4.5509%	6.2495%	6.2367%	1.3575%
Black ^c	Both Sexes	0.5507%	-	-	0.0081%	0.0982%	0.4861%	1.1440%	2.0443%	2.7618%	3.1188%	0.6352%
	Males	0.0082%	-	-	-	-	0.0059%	0.0169%	0.0329%	0.0610%	0.0623%	0.0110%
	Females	1.0449%	-	-	0.0159%	0.1835%	0.9083%	2.1276%	3.6162%	4.6472%	4.6217%	1.0993%
Asian/ Pacific Islander ^c	Both Sexes	0.5778%	-	-	0.0064%	0.0826%	0.4779%	1.1319%	1.7675%	2.2007%	2.3789%	0.5500%
	Males	0.0044%	-	-	-	-	-	0.0065%	0.0127%	0.0304%	0.0323%	0.0049%
	Females	1.1036%	-	-	0.0129%	0.1565%	0.8994%	2.1010%	3.2106%	3.8879%	3.8165%	0.9867%
Hispanic ^d	Both Sexes	0.3141%	-	-	0.0046%	0.0648%	0.3299%	0.8846%	1.6052%	2.1663%	2.3799%	0.4860%
	Males	0.0023%	-	-	-	-	0.0015%	0.0041%	0.0161%	0.0235%	0.0341%	0.0046%
	Females	0.6313%	-	-	0.0095%	0.1334%	0.6715%	1.7320%	2.9752%	3.7545%	3.7924%	0.8851%

^a US 2013 cancer prevalence counts are based on 2013 cancer prevalence proportions from the SEER registries and 1/1/2013 US population estimates based on the average of 2012 and 2013 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

^{b c d} Statistics based on (b) SEER 9 Areas (c) SEER 13 Areas excluding the Alaska Native Registry

(d) NHIA for Hispanic for SEER 13 Areas excluding the Alaska Native Registry.

^e Maximum limited-duration prevalence: 38 years for 1975-2013 SEER 9 data; 21 years for 1992-2013 SEER 13 data (excluding the Alaska Native Registry) used to calculate prevalence for Hispanics and Asian Pacific Islanders.

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

^{g h i} (g) Cases diagnosed more than 38 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 <38 and >=38. (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 4.25

Cancer of the Female Breast (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2009-2013
Females by Race

Histology ^a	All Races		White		Black		Asian/Pacific Islander		American Indian/ Alaska Native ^b		Hispanic ^c	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	299,215	99.4%	238,533	99.5%	32,760	99.3%	23,931	99.3%	1,240	99.0%	31,465	99.2%
Epidermoid carcinoma ^d (8051-8131)	147	0.0%	117	0.0%	21	0.1%	-	-	-	-	-	-
Adenocarcinoma ^e	293,284	97.4%	234,031	97.6%	31,784	96.3%	23,586	97.8%	1,216	97.0%	30,807	97.1%
Adenocarcinoma, NOS (8140)	2,142	0.7%	1,670	0.7%	292	0.9%	139	0.6%	-	-	235	0.7%
Infiltrating duct carcinoma (8500)	220,968	73.4%	174,157	72.6%	24,903	75.5%	18,909	78.4%	974	77.7%	23,640	74.5%
Lobular carcinoma, NOS (8520)	27,753	9.2%	23,645	9.9%	2,397	7.3%	1,366	5.7%	95	7.6%	2,418	7.6%
Inflammatory adenocarcinoma (8530)	939	0.3%	749	0.3%	129	0.4%	51	0.2%	-	-	140	0.4%
Infiltrating duct mixed and infiltrating lobular mixed (8522-8524)	27,566	9.2%	22,940	9.6%	2,458	7.4%	1,862	7.7%	80	6.4%	3,000	9.5%
Mucinous adenocarcinoma (8480,8482)	5,724	1.9%	4,439	1.9%	645	2.0%	572	2.4%	22	1.8%	552	1.7%
Mucin-producing adenocarcinoma (8481)	67	0.0%	47	0.0%	-	-	-	-	-	-	-	-
Tubular adenocarcinoma (8211)	1,719	0.6%	1,523	0.6%	99	0.3%	89	0.4%	-	-	134	0.4%
Papillary adenocarcinoma (8050,8260,8503,8504)	1,848	0.6%	1,303	0.5%	303	0.9%	210	0.9%	-	-	193	0.6%
Paget disease (8540-8543)	1,156	0.4%	910	0.4%	122	0.4%	109	0.5%	-	-	131	0.4%
Other adenocarcinomas ^f	3,402	1.1%	2,648	1.1%	422	1.3%	275	1.1%	-	-	357	1.1%
Other specific carcinomas ^g	2,466	0.8%	1,839	0.8%	448	1.4%	151	0.6%	-	-	311	1.0%
Medullary adenocarcinoma (8510-8513)	773	0.3%	525	0.2%	194	0.6%	48	0.2%	-	-	150	0.5%
Other ^h	1,693	0.6%	1,314	0.5%	254	0.8%	103	0.4%	-	-	161	0.5%
Unspecified, Carcinoma, NOS (8010-8011,8020-8022)	3,318	1.1%	2,546	1.1%	507	1.5%	187	0.8%	-	-	336	1.1%

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, myelomas, 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 Epidermoid carcinoma includes squamous, basal, and transitional cell carcinomas.

^e Adenocarcinoma includes histologies 8050, 8140-8147, 8160-8162, 8180-8221, 8250-8507, 8514, 8520-8551, 8560, 8570-8574, 8576, 8940-8941.

^f Other adenocarcinomas include histologies 8141-8147, 8160-8162, 8180-8210, 8212-8221, 8250-8259, 8261-8479, 8483-8499, 8501-8502, 8505-8507, 8514, 8521, 8525-8529, 8531-8539, 8544-8551, 8560, 8570-8574, 8576, 8940-8941.

^g Other specific carcinomas include histologies 8012-8015, 8030-8046, 8150-8155, 8170-8175, 8230-8249, 8508, 8510-8513, 8561-8562, 8575, 8580-8671.

^h Other includes histologies 8012-8015, 8030-8046, 8150-8155, 8170-8175, 8230-8249, 8508, 8561-8562, 8575, 8580-8671.

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

Table 4.25 - continued

Cancer of the Female Breast (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2009-2013
Females by Race

Histology ^a	All Races		White		Black		Asian/Pacific Islander		American Indian/ Alaska Native ^b		Hispanic ^c	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Sarcoma and other soft tissue tumors (8680-8713,8800-8921, 9040-9044,9120-9136, 9150-9252,9370-9373, 9540-9582)	335	0.1%	255	0.1%	50	0.2%	24	0.1%	-	-	32	0.1%
Hemangiosarcomas (9120-9126,9170)	161	0.1%	138	0.1%	-	-	-	-	-	-	-	-
Other sarcomas ^d	174	0.1%	117	0.0%	37	0.1%	-	-	-	-	21	0.1%
Other specific types (8720-8790,8930-8936, 8950-9030,9060-9110, 9260-9365,9380-9539)	754	0.3%	539	0.2%	93	0.3%	111	0.5%	-	-	134	0.4%
Phyllodes tumor, malignant (9020)	638	0.2%	451	0.2%	72	0.2%	104	0.4%	-	-	113	0.4%
Other ^e	116	0.0%	88	0.0%	21	0.1%	-	-	-	-	21	0.1%
Unspecified (8000-8005)	666	0.2%	498	0.2%	93	0.3%	45	0.2%	-	-	85	0.3%
Total ^f	300,970	100.0%	239,825	100.0%	32,996	100.0%	24,111	100.0%	1,253	100.0%	31,716	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, myelomas, 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.

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

^d Other sarcomas include histologies 8680-8713, 8800-8921, 9040-9044, 9127-9136, 9150-9169, 9171-9252, 9370-9373, 9540-9582.

^e Other includes histologies 8720-8790, 8930-8936, 8950-9019, 9021-9030, 9060-9110, 9260-9365, 9380-9539.

^f Total includes carcinoma cases from the previous page.

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

Table 4.26

Cancer of the Female Breast(In Situ)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2009-2013
Females by Race

Histology ^a	All Races		White		Black		Asian/Pacific Islander		American Indian/ Alaska Native ^b		Hispanic ^c	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Adenocarcinoma ^d	76,141	99.9%	58,824	99.9%	8,413	99.8%	7,627	99.9%	267	100.0%	7,484	99.9%
Adenocarcinoma <i>in situ</i> , NOS (8140/2)	-	-	-	-	-	-	-	-	-	-	-	-
Ductal carcinoma <i>in situ</i> ^e	64,696	84.8%	49,379	83.8%	7,385	87.6%	6,930	90.8%	234	87.6%	6,433	85.8%
Cribriform carcinoma <i>in situ</i> (8201/2)	6,557	8.6%	4,913	8.3%	774	9.2%	762	10.0%	21	7.9%	653	8.7%
Ductal carcinoma <i>in situ</i> , solid type(8230/2)	5,243	6.9%	4,125	7.0%	498	5.9%	540	7.1%	22	8.2%	449	6.0%
Ductal carcinoma <i>in situ</i> , NOS (8500/2)	22,102	29.0%	17,159	29.1%	2,481	29.4%	2,071	27.1%	86	32.2%	2,161	28.8%
Comedocarcinoma <i>in situ</i> (8501/2)	6,258	8.2%	4,762	8.1%	680	8.1%	723	9.5%	34	12.7%	588	7.8%
Ductal carcinoma <i>in situ</i> papillary(8503/2)	1,171	1.5%	801	1.4%	205	2.4%	142	1.9%	-	-	125	1.7%
Noninfiltrating intracystic carcinoma(8504/2)	268	0.4%	164	0.3%	43	0.5%	61	0.8%	-	-	31	0.4%
Ductal carcinoma <i>in situ</i> micropapillary(8507/2)	1,272	1.7%	995	1.7%	163	1.9%	94	1.2%	-	-	137	1.8%
Intraductal with other types of carcinoma <i>in situ</i> (8523/2)	21,637	28.4%	16,326	27.7%	2,531	30.0%	2,495	32.7%	64	24.0%	2,274	30.3%
Lobular carcinoma <i>in situ</i> (8520/2-8521/2, 8524/2)	8,761	11.5%	7,323	12.4%	733	8.7%	462	6.1%	29	10.9%	817	10.9%
Lobular carcinoma <i>in situ</i> , NOS (8520/2)	8,743	11.5%	7,309	12.4%	730	8.7%	462	6.1%	28	10.5%	816	10.9%
Lobular CIS ^f with other CIS ^f (8524/2)	18	0.0%	-	-	-	-	-	-	-	-	-	-
Intraductal and lobular <i>in situ</i> carcinoma (8522/2)	2,166	2.8%	1,739	3.0%	231	2.7%	169	2.2%	-	-	185	2.5%
Other adenocarcinomas ^g	512	0.7%	380	0.6%	63	0.7%	64	0.8%	-	-	49	0.7%
Other <i>in situ</i> histologies ^h	111	0.1%	84	0.1%	-	-	-	-	-	-	-	-
Total	76,252	100.0%	58,908	100.0%	8,428	100.0%	7,632	100.0%	267	100.0%	7,495	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, myelomas, 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 Adenocarcinoma includes histologies 8050,8140-8147,8160-8162,8180-8221,8230,8250-8507,8514,8520-8551,8560,8570-8574,8576,8940-8941.

^f Ductal carcinoma includes histologies 8201, 8230, 8401, 8500-8507, 8523.

^g CIS = Carcinoma *in situ*.

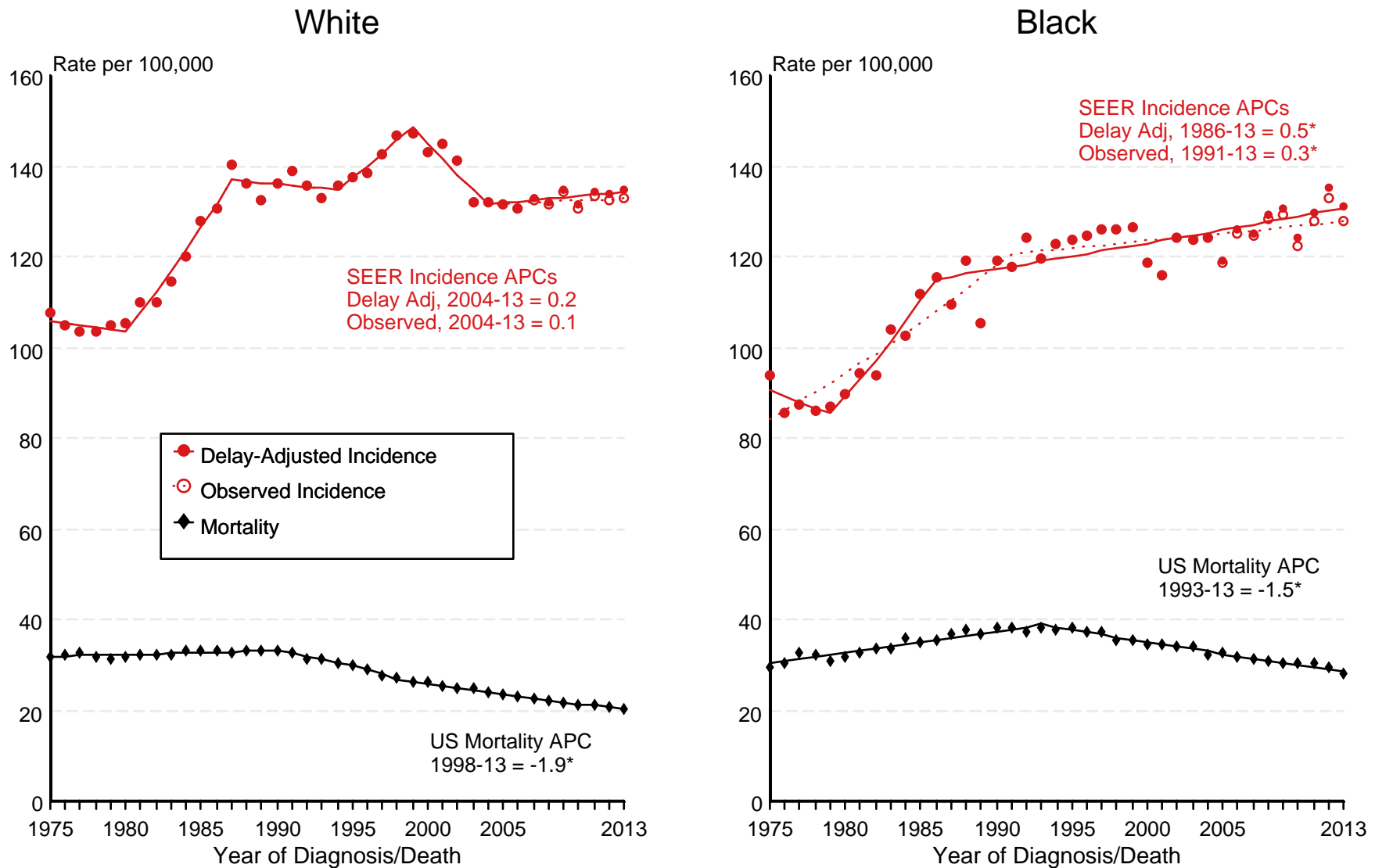
^h Other adenocarcinomas include 8050, 8141-8147, 8160-8162, 8180-8200, 8202-8221, 8250-8400, 8402-8499, 8514, 8525-8551, 8560, 8570-8574, 8576, 8940-8941.

^h Other histologies include 8000-8049, 8051-8139, 8148-8159, 8163-8179, 8222-8229, 8231-8249, 8508-8513, 8515-8519, 8552-8559, 8561-8569, 8575, 8577-8939, 8942-9989.

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

Figure 4.1

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Female Breast, by Race



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

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

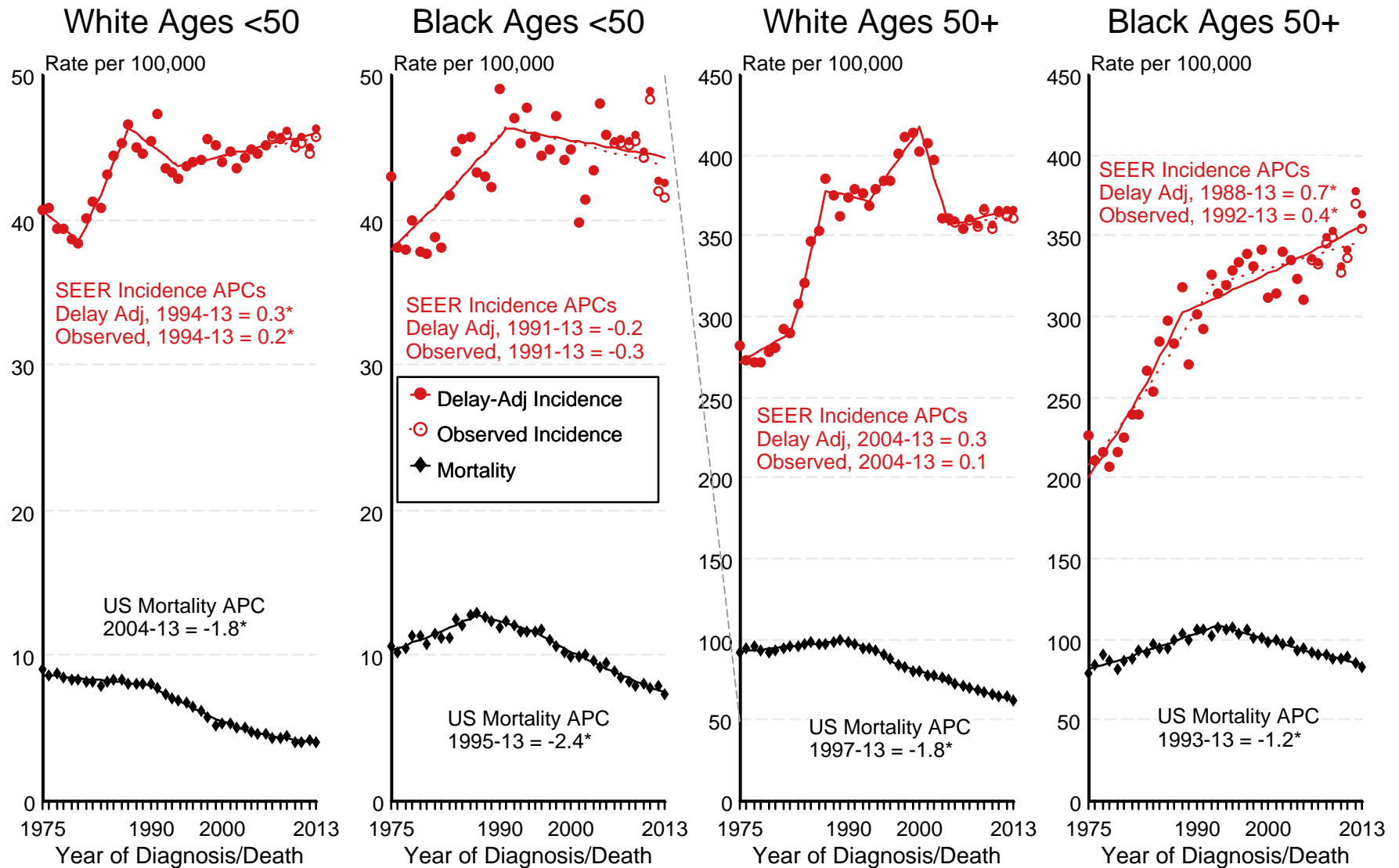
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.3.0.0, April 2016, National Cancer Institute.

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 4.2

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Female Breast, by Age and Race



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

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

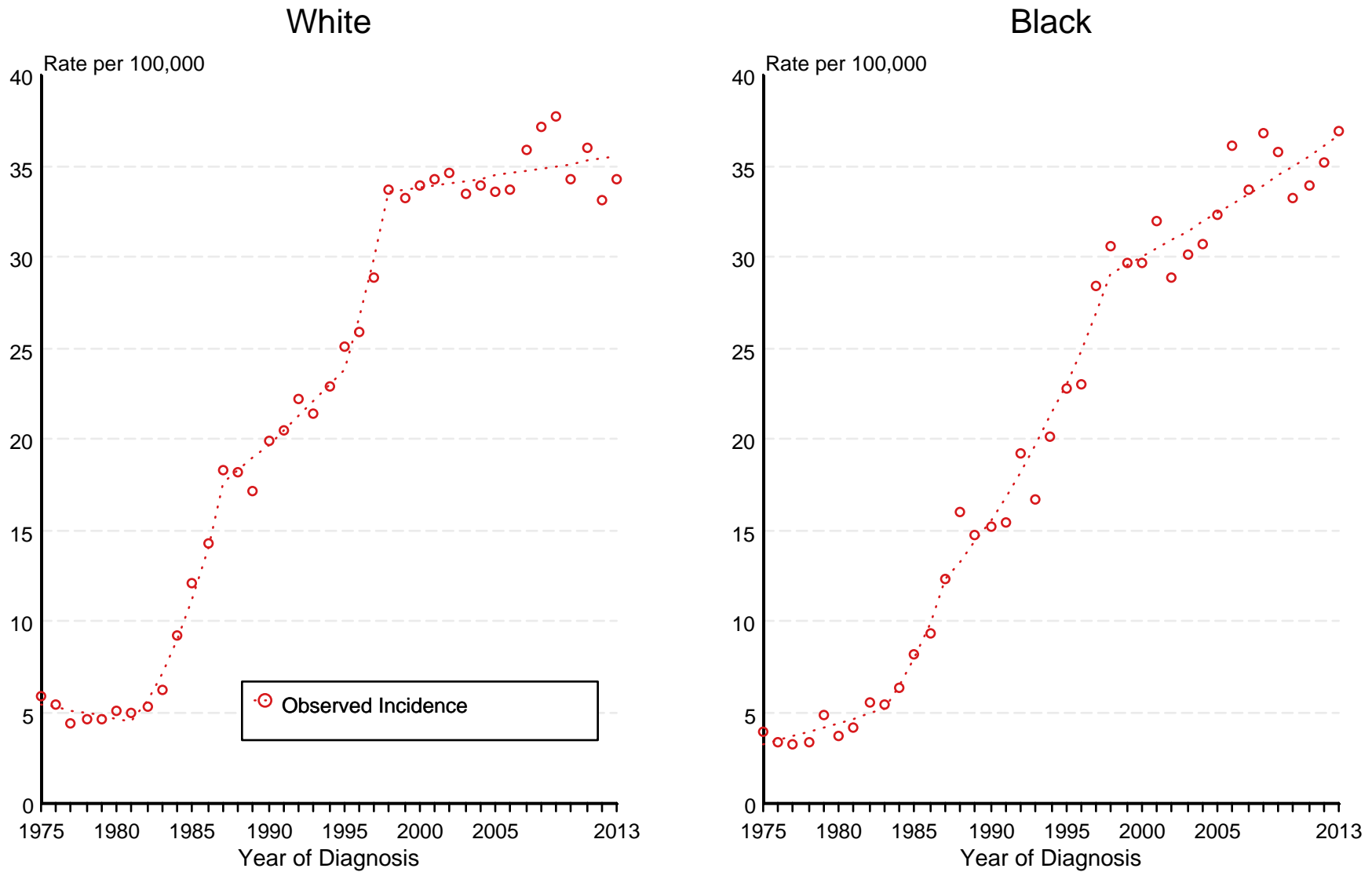
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.3.0.0, April 2016, National Cancer Institute.

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 4.3

SEER Observed Incidence Rates^a Cancer of the Female Breast (*In Situ*), by Race



Source: SEER 9 areas.

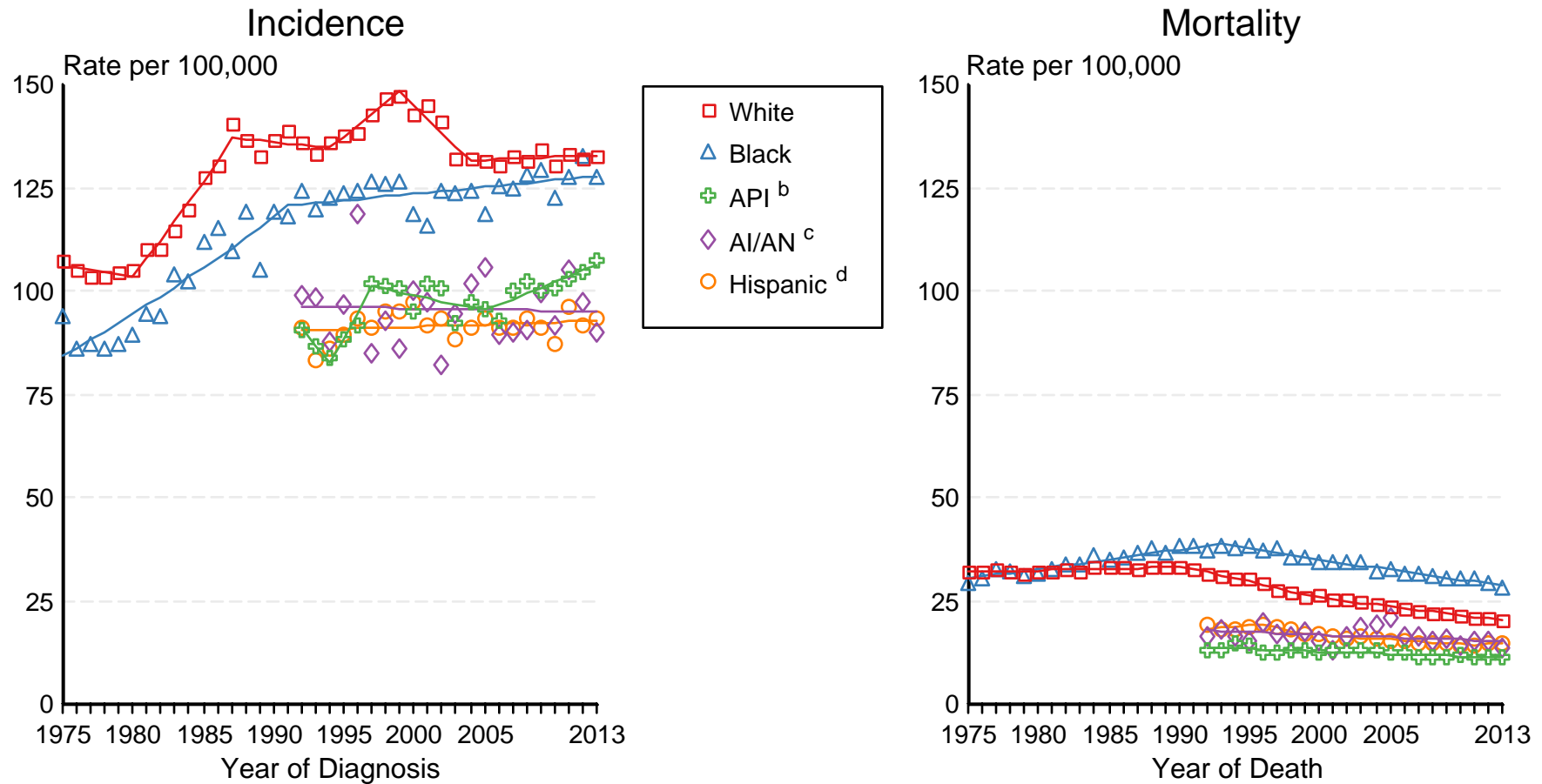
^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.3.0.0, April 2016, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 4.4

SEER Incidence and US Death Rates^a Cancer of the Female Breast

Joinpoint Analyses for Whites and Blacks from 1975-2013
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2013



Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from US Mortality Files, National Center for Health Statistics, CDC.

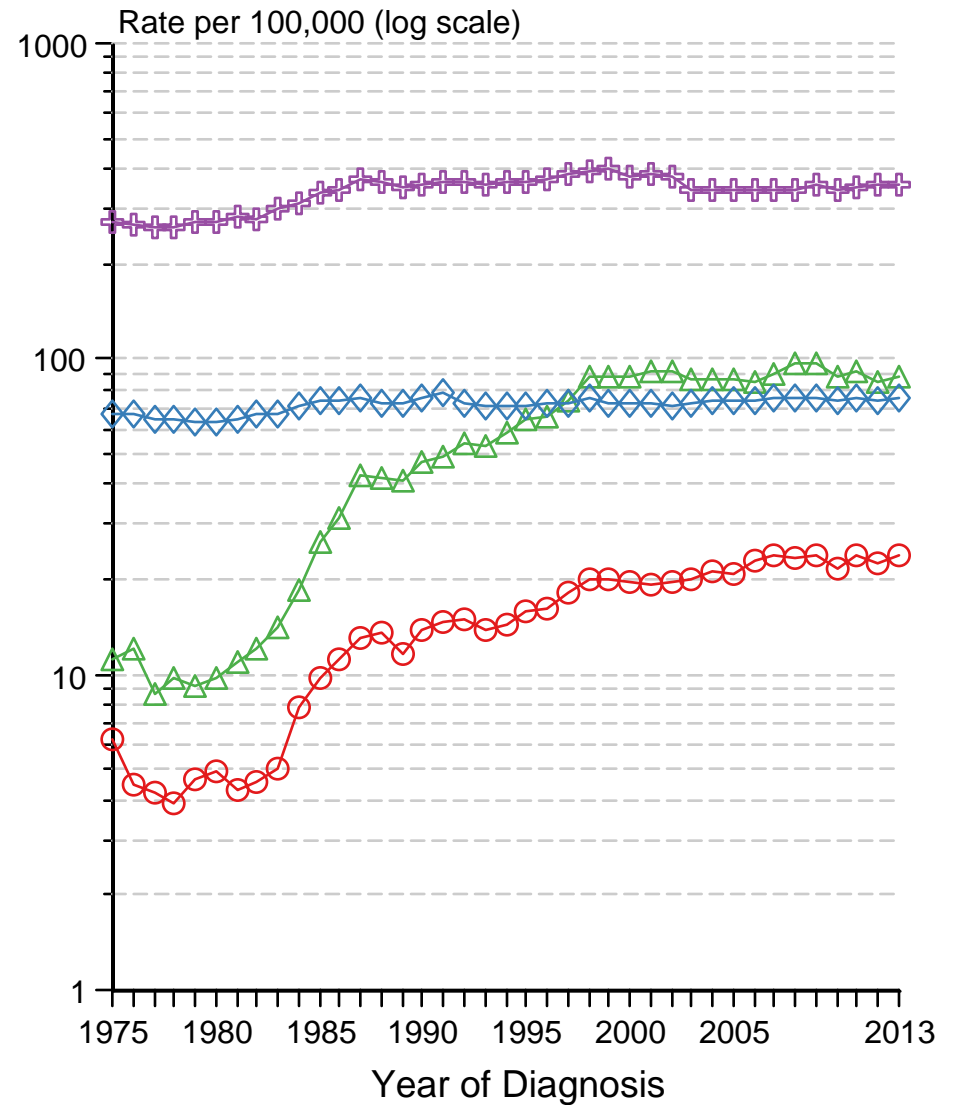
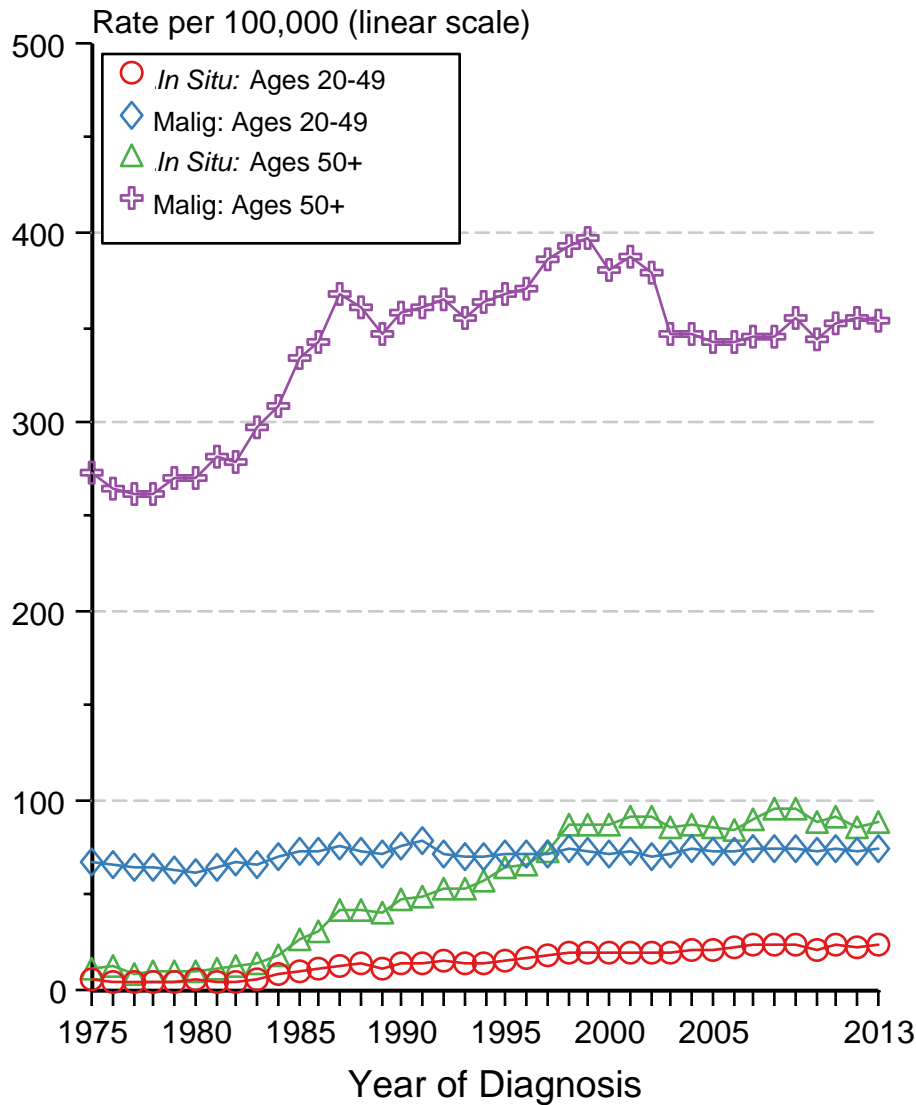
- ^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 4.3.0.0, April 2016, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2013 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2013 allow a maximum of 4 joinpoints.
- ^b API = Asian/Pacific Islander.
- ^c AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
- ^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from New Hampshire and Oklahoma.

Figure 4.5

Cancer of Female Breast, Incidence Rates, 1975-2013

In Situ vs Malignant, by Age

All Races, Females



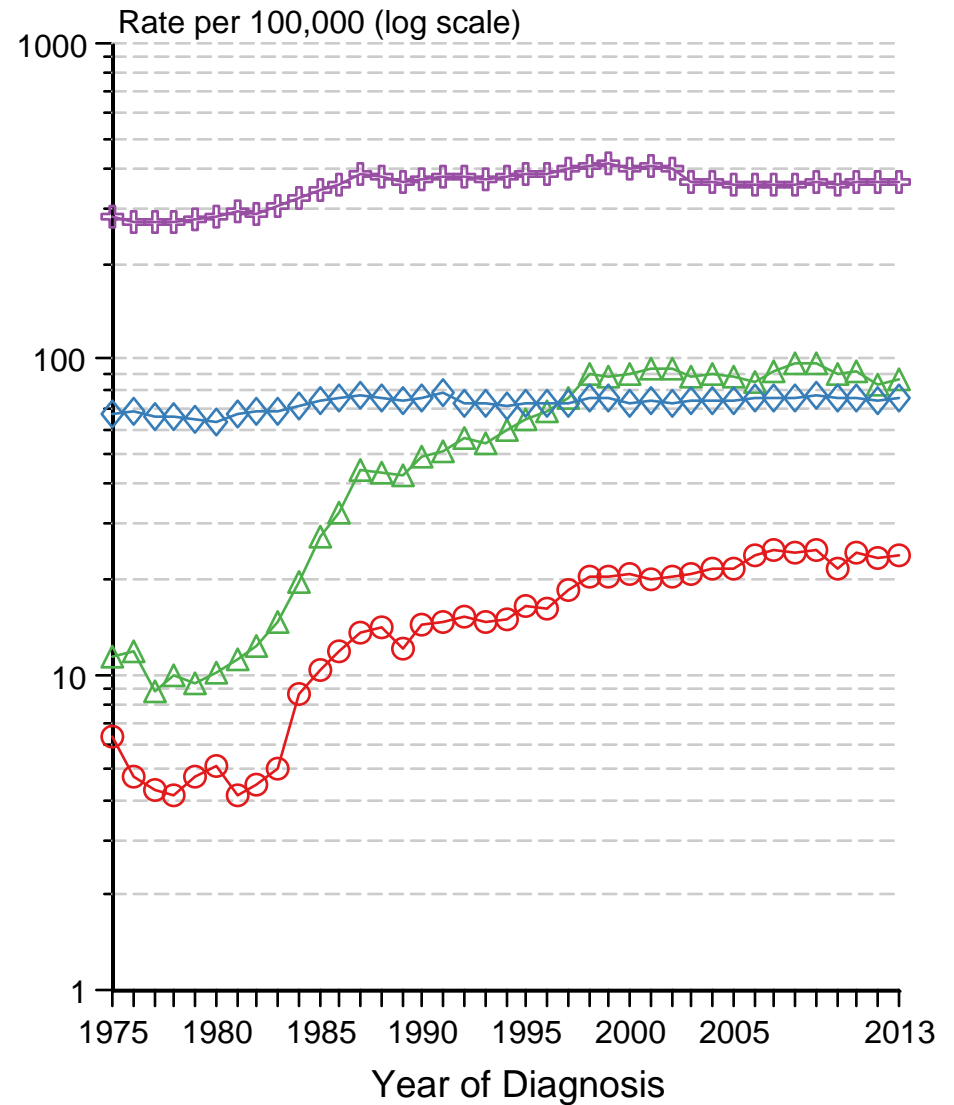
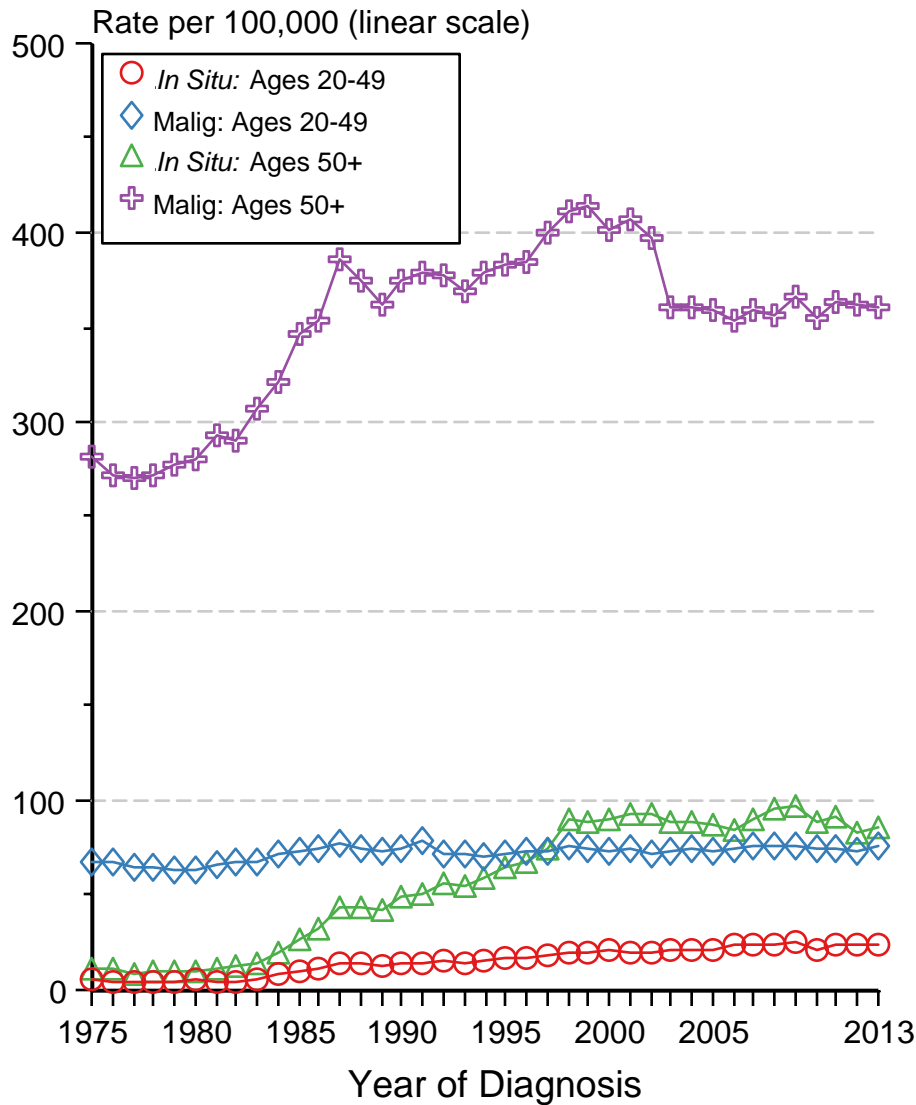
Source: SEER 9 areas. Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Figure 4.6

Cancer of Female Breast, Incidence Rates, 1975-2013

In Situ vs Malignant, by Age

White, Females



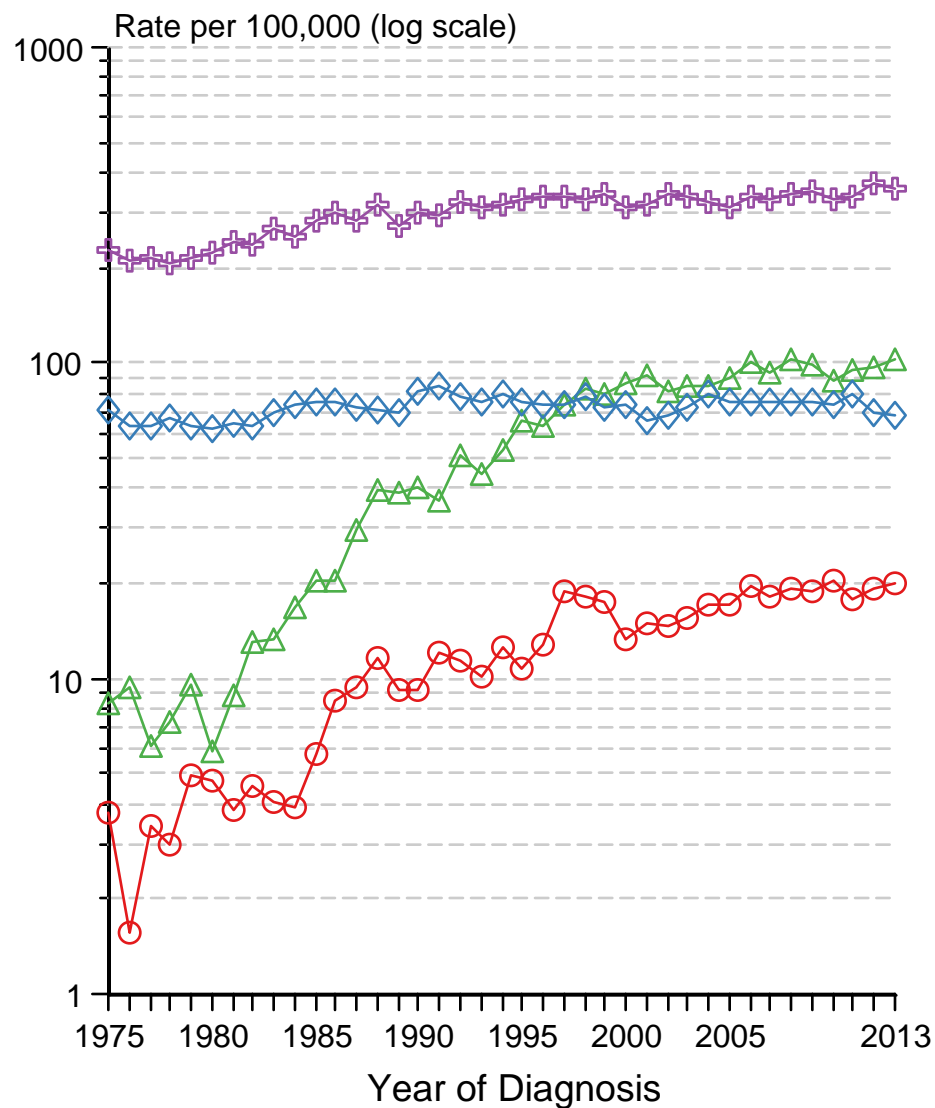
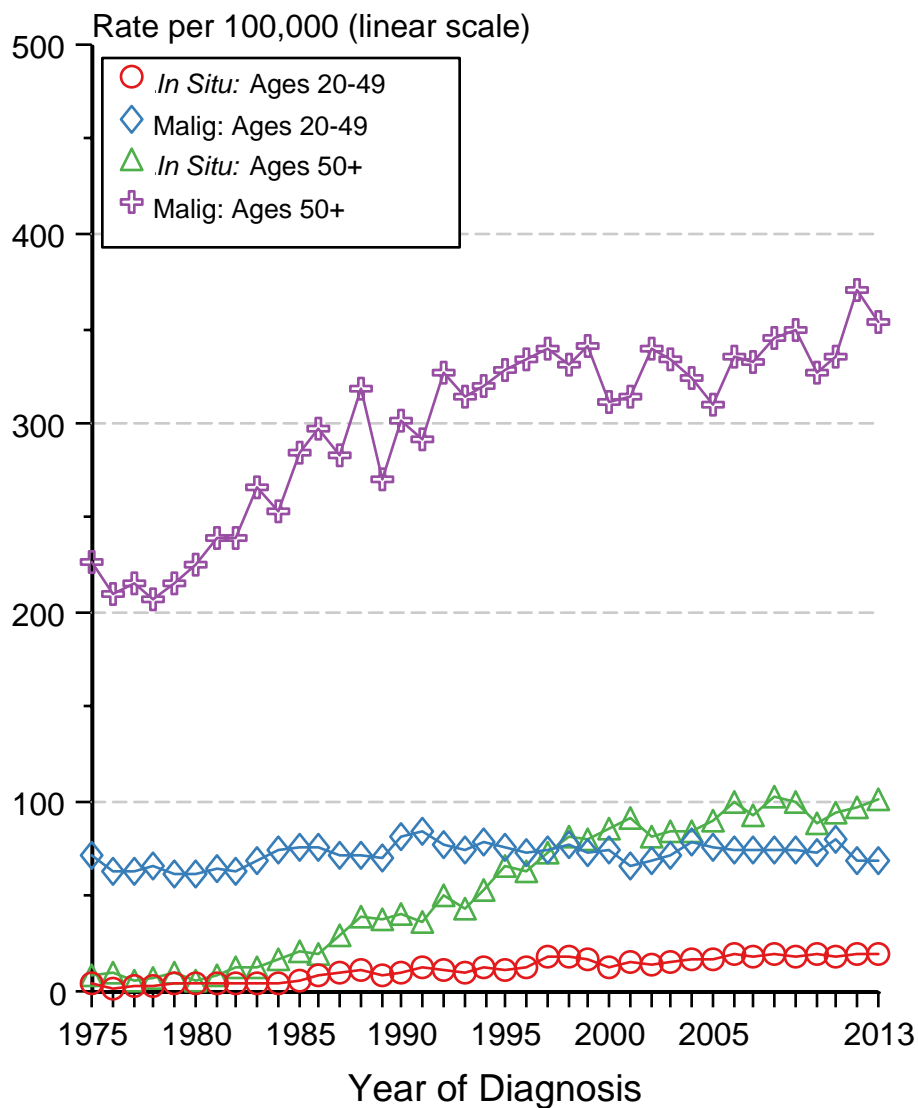
Source: SEER 9 areas. Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Figure 4.7

Cancer of Female Breast, Incidence Rates, 1975-2013

In Situ vs Malignant, by Age

Black, Females



Source: SEER 9 areas. Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

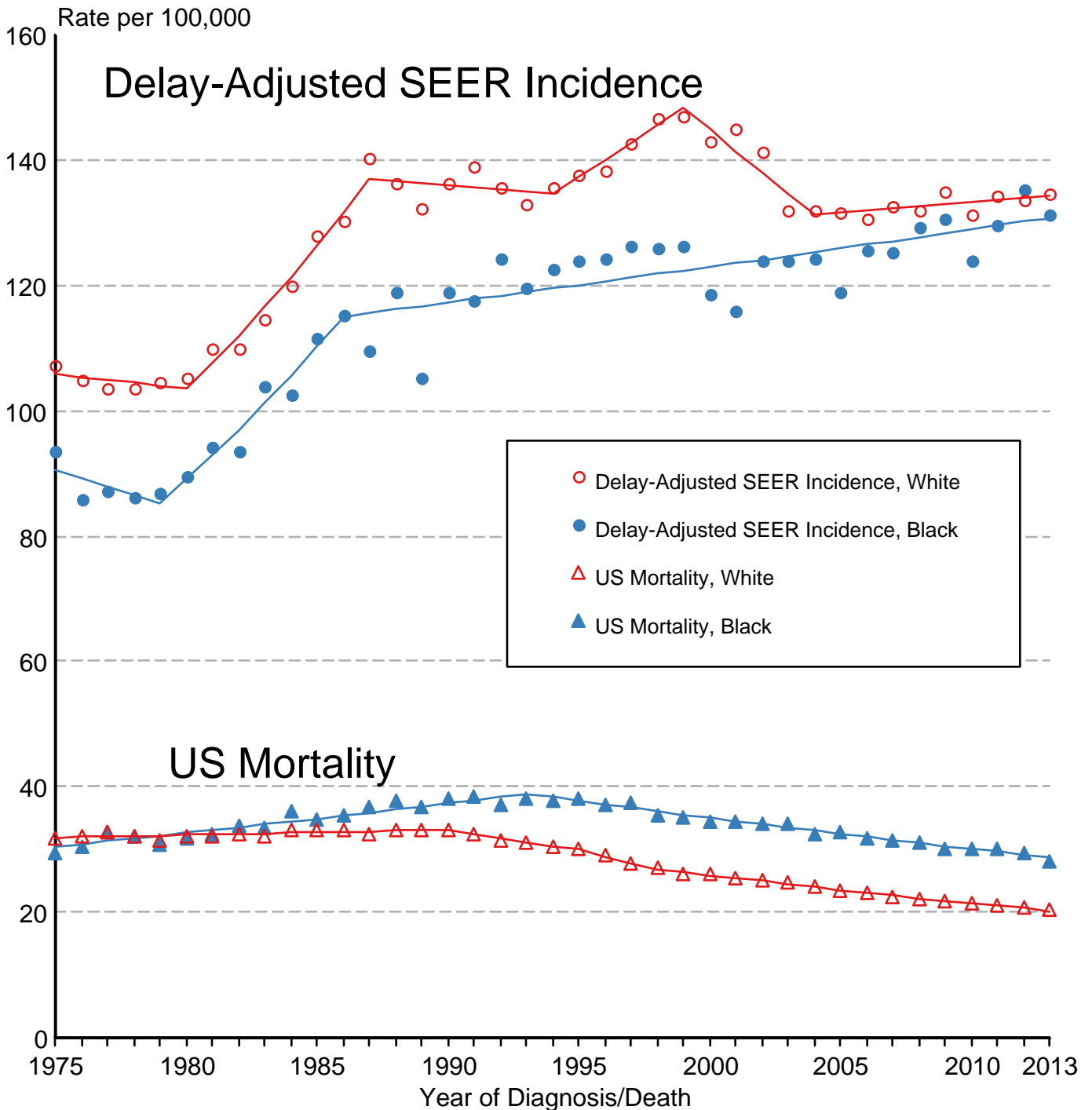
Figure 4.8

Cancer of the Breast

Delay-Adjusted SEER Incidence & US Mortality

White Females vs Black Females

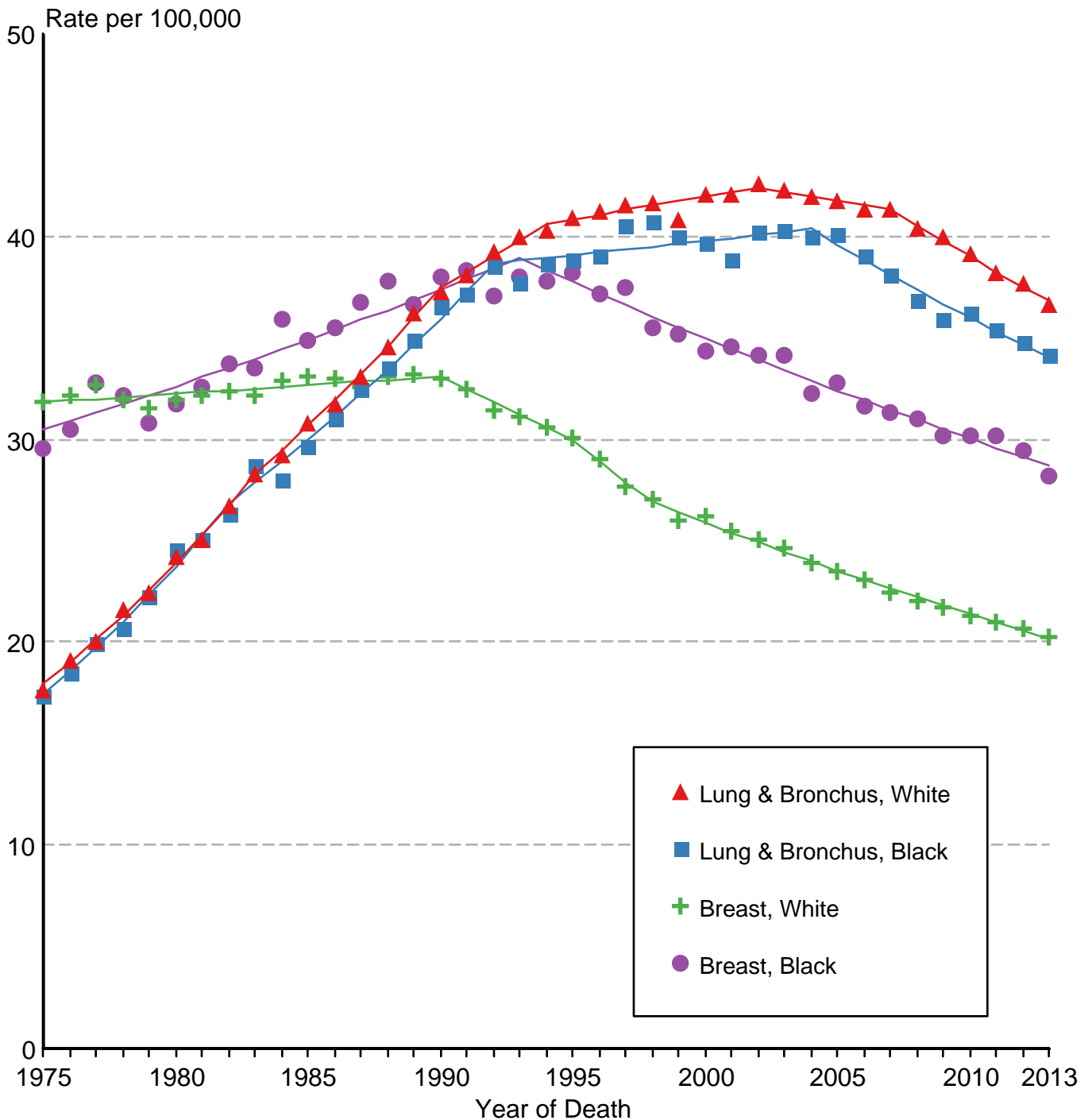
1975-2013



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 4.3.0.0, April 2016, National Cancer Institute.

Figure 4.9

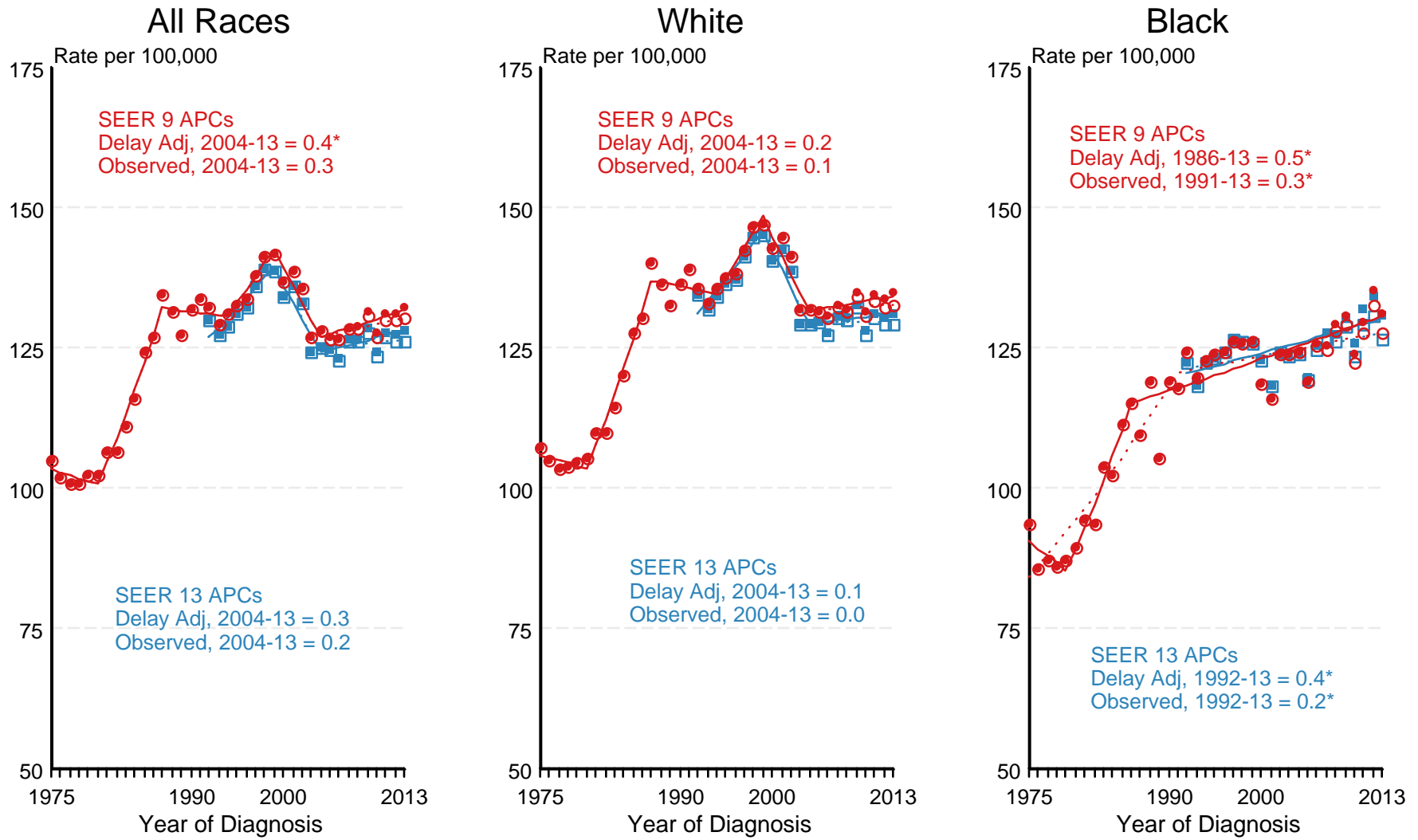
US Death Rates for Cancer of the Breast and Cancer of the Lung and Bronchus White Females vs Black Females 1975-2013



Source: 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 4.3.0.0, April 2016,
National Cancer Institute.

Figure 4.10

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Cancer of the Female Breast, by Race



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

Source: SEER 9 areas and SEER 13 areas.

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.3.0.0, April 2016, National Cancer Institute.

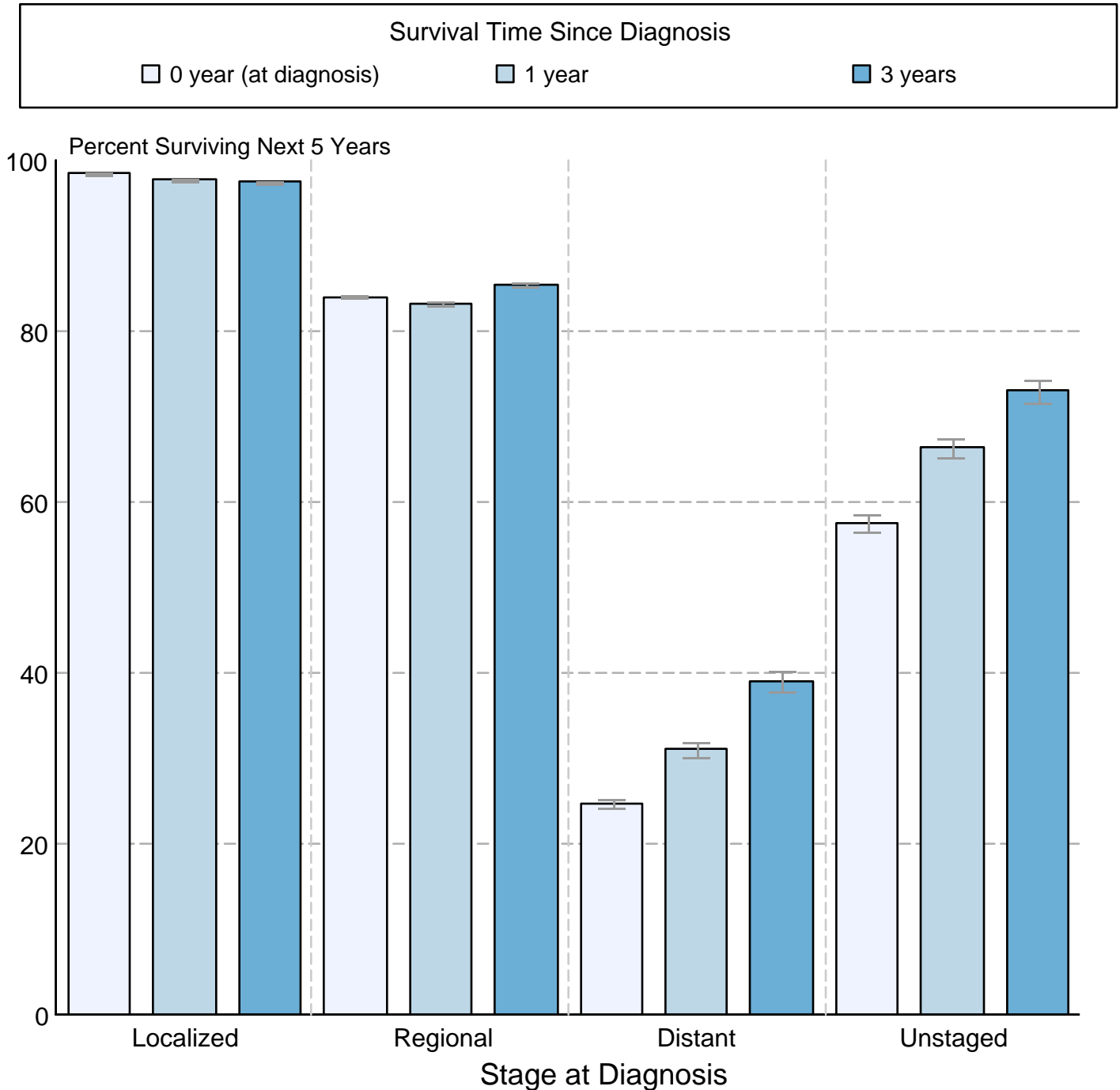
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 4.11

Cancer of the Female Breast 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
1998-2012 by stage at diagnosis



Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG contribute cases for diagnosis years 2000 and later. The remaining 13 SEER Areas contribute cases for the entire time period. Percent surviving is not shown if based on less than 25 cases. Confidence intervals are not shown if length of the confidence interval is greater than 5 times the standard error.