

Table 2.1
All Cancer Sites (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints,
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	2008-17	2013-17										
SEER 9 Delay-Adjusted Incidence^a, 1975-2017														
All Races	1975-83	0.9*	1983-92	1.8*	1992-95	-1.2	1995-09	-0.1	2009-13	-1.8*	2013-17	0.0	-0.8*	0.0
White	1975-82	0.8*	1982-92	1.8*	1992-95	-2.1	1995-98	1.3	1998-07	-0.2	2007-17	-0.8*	-0.8*	-0.8*
Black	1975-84	1.6*	1984-89	0.5	1989-92	3.9*	1992-09	-0.6*	2009-14	-1.9*	2014-17	0.2	-1.1*	-0.4
SEER 21 Delay-Adjusted Incidence^b, 2000-2017														
All Races	2000-04	-0.9*	2004-08	0.4	2008-13	-1.4*	2013-17	-0.2					-0.9*	-0.2
White	2000-04	-0.9*	2004-07	0.9	2007-13	-1.2*	2013-17	-0.2					-0.8*	-0.2
White NH ^{ef}	2000-04	-0.9*	2004-07	1.0	2007-13	-1.1*	2013-17	-0.1					-0.6*	-0.1
Black	2000-05	-0.8*	2005-09	0.2	2009-14	-1.7*	2014-17	-0.2					-1.0*	-0.5
Black NH ^{ef}	2000-05	-0.7*	2005-09	0.3	2009-14	-1.7*	2014-17	-0.1					-0.9*	-0.5
API ^e	2000-17	-0.3*											-0.3*	-0.3*
AI/AN ^{eg}	2000-17	0.1											0.1	0.1
Hispanic ^f	2000-17	-0.6*											-0.6*	-0.6*
U.S. Cancer Mortality^c, 1975-2017														
All Races	1975-84	0.5*	1984-91	0.3*	1991-94	-0.5	1994-98	-1.3*	1998-01	-0.8	2001-17	-1.5*	-1.5*	-1.5*
White	1975-90	0.4*	1990-94	-0.3	1994-98	-1.2*	1998-01	-0.6	2001-17	-1.4*			-1.4*	-1.4*
Black	1975-83	1.3*	1983-91	0.7*	1991-95	-0.8*	1995-01	-1.6*	2001-17	-2.1*			-2.1*	-2.1*
U.S. Cancer Mortality^c, 2000-2017														
All Races	2000-17	-1.5*											-1.5*	-1.5*
White	2000-17	-1.4*											-1.4*	-1.4*
White NH ^{ef}	2000-15	-1.3*	2015-17	-1.8*									-1.5*	-1.6*
Black	2000-17	-2.1*											-2.1*	-2.1*
Black NH ^{ef}	2000-17	-2.0*											-2.0*	-2.0*
API ^e	2000-17	-1.3*											-1.3*	-1.3*
AI/AN ^{eg}	2000-17	-1.0*											-1.0*	-1.0*
Hispanic ^f	2000-17	-1.2*											-1.2*	-1.2*

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

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

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

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

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

Table 2.2
All Cancer Sites (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints,
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	2008-17	2013-17								
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2017</u>														
All Races	1975-89	1.3*	1989-92	5.0*	1992-95	-4.2*	1995-08	-0.3*	2008-13	-2.8*	2013-17	-0.1	-1.7*	-0.1
White	1975-89	1.4*	1989-92	4.9*	1992-95	-4.5*	1995-07	-0.1	2007-13	-2.4*	2013-17	-0.3	-1.5*	-0.3
Black	1975-81	2.8*	1981-89	0.7	1989-92	6.3*	1992-09	-1.3*	2009-14	-3.4*	2014-17	0.5	-1.9*	-0.5
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2017</u>														
All Races	2000-04	-1.4*	2004-07	0.7	2007-14	-2.2*	2014-17	-0.1					-1.5*	-0.6
White	2000-04	-1.3*	2004-07	0.8	2007-13	-2.3*	2013-17	-0.6					-1.6*	-0.6
White NH ^{e,f}	2000-04	-1.3*	2004-07	1.0	2007-13	-2.2*	2013-17	-0.3					-1.4*	-0.3
Black	2000-05	-1.7*	2005-09	-0.3	2009-14	-3.4*	2014-17	-0.2					-2.0*	-1.0
Black NH ^{e,f}	2000-05	-1.6*	2005-09	-0.2	2009-14	-3.4*	2014-17	-0.1					-2.0*	-0.9
API ^e	2000-17	-1.3*											-1.3*	-1.3*
AI/AN ^{e,g}	2000-17	-0.4											-0.4	-0.4
Hispanic ^f	2000-09	-0.7*	2009-13	-3.2*	2013-17	-1.0							-2.0*	-1.0
<u>U.S. Cancer Mortality^c, 1975-2017</u>														
All Races	1975-79	1.0*	1979-90	0.3*	1990-93	-0.5	1993-02	-1.5*	2002-17	-1.8*			-1.8*	-1.8*
White	1975-80	0.8*	1980-92	0.2*	1992-02	-1.4*	2002-17	-1.7*					-1.7*	-1.7*
Black	1975-82	1.8*	1982-90	1.0*	1990-93	-0.2	1993-01	-2.0*	2001-17	-2.7*			-2.7*	-2.7*
<u>U.S. Cancer Mortality^c, 2000-2017</u>														
All Races	2000-17	-1.8*											-1.8*	-1.8*
White	2000-17	-1.7*											-1.7*	-1.7*
White NH ^{e,f}	2000-17	-1.6*											-1.6*	-1.6*
Black	2000-17	-2.7*											-2.7*	-2.7*
Black NH ^{e,f}	2000-17	-2.6*											-2.6*	-2.6*
API ^e	2000-17	-1.6*											-1.6*	-1.6*
AI/AN ^{e,g}	2000-17	-0.9*											-0.9*	-0.9*
Hispanic ^f	2000-17	-1.6*											-1.6*	-1.6*

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

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

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

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

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

Table 2.3
All Cancer Sites (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints,
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	2008-17	2013-17								
SEER 9 Delay-Adjusted Incidence^a, 1975-2017														
All Races	1975-79	-0.3	1979-87	1.6*	1987-95	0.1	1995-98	1.5	1998-03	-0.5	2003-17	0.0	0.0	0.0
White	1975-79	-0.2	1979-87	1.7*	1987-95	0.1	1995-98	1.7	1998-03	-0.5	2003-17	0.0	0.0	0.0
Black	1975-92	1.1*	1992-17	0.0									0.0	0.0
SEER 21 Delay-Adjusted Incidence^b, 2000-2017														
All Races	2000-17	0.0											0.0	0.0
White	2000-17	0.0											0.0	0.0
White NH ^{ef}	2000-17	0.1*											0.1*	0.1*
Black	2000-17	0.2*											0.2*	0.2*
Black NH ^{ef}	2000-17	0.2*											0.2*	0.2*
API ^e	2000-17	0.5*											0.5*	0.5*
AI/AN ^{eg}	2000-17	0.5*											0.5*	0.5*
Hispanic ^f	2000-17	0.4*											0.4*	0.4*
U.S. Cancer Mortality^c, 1975-2017														
All Races	1975-90	0.6*	1990-94	-0.2	1994-02	-0.8*	2002-17	-1.4*					-1.4*	-1.4*
White	1975-90	0.6*	1990-95	-0.2	1995-98	-1.2*	1998-01	-0.2	2001-17	-1.3*			-1.3*	-1.3*
Black	1975-91	1.0*	1991-99	-0.5*	1999-17	-1.6*							-1.6*	-1.6*
U.S. Cancer Mortality^c, 2000-2017														
All Races	2000-17	-1.4*											-1.4*	-1.4*
White	2000-17	-1.3*											-1.3*	-1.3*
White NH ^{ef}	2000-17	-1.3*											-1.3*	-1.3*
Black	2000-17	-1.6*											-1.6*	-1.6*
Black NH ^{ef}	2000-17	-1.5*											-1.5*	-1.5*
API ^e	2000-17	-1.0*											-1.0*	-1.0*
AI/AN ^{eg}	2000-17	-1.2*											-1.2*	-1.2*
Hispanic ^f	2000-17	-1.0*											-1.0*	-1.0*

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

Table 2.4
All Cancer Sites (Invasive)

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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-1979	407.23	484.12	365.02	409.26	485.32	369.85	437.62	564.41	350.93
1980	418.09	505.83	368.15	419.52	505.23	373.41	467.51	615.07	366.63
1981	425.28	510.80	377.17	427.70	510.84	383.89	472.90	634.34	362.89
1982	424.49	511.10	376.18	427.78	512.52	383.41	465.28	622.36	359.24
1983	431.11	519.94	380.71	434.35	520.95	387.93	487.26	646.27	382.24
1984	440.01	525.48	392.46	443.66	527.77	399.53	488.26	643.87	386.15
1985	448.94	531.30	403.24	453.60	533.72	411.55	489.39	643.82	388.62
1986	451.36	538.15	402.34	456.09	542.94	409.26	493.79	643.41	396.80
1987	468.14	563.36	413.34	475.07	569.08	423.42	501.15	666.26	394.20
1988	464.04	558.53	409.48	470.38	565.08	418.02	504.65	658.20	405.13
1989	468.01	567.21	408.62	475.42	573.81	418.82	493.01	661.19	385.30
1990	482.13	592.90	415.66	488.99	599.49	424.82	522.41	699.83	409.93
1991	503.15	637.52	419.04	510.68	644.72	428.64	549.60	765.72	412.80
1992	510.81	658.50	414.95	517.14	663.96	423.57	570.51	811.80	414.26
1993	493.57	622.41	408.35	497.08	620.68	416.97	570.41	822.06	404.91
1994	483.72	589.99	413.71	487.79	588.05	423.34	559.02	785.28	409.71
1995	477.36	572.13	415.22	482.62	570.87	426.41	544.75	752.47	405.49
1996	479.61	573.03	418.49	485.43	574.80	428.46	543.26	730.94	418.76
1997	486.88	576.21	428.72	493.95	577.27	441.21	543.56	744.48	412.36
1998	488.82	573.44	434.38	496.99	577.03	446.80	541.58	728.72	421.12
1999	491.06	581.27	431.07	499.15	583.63	443.94	544.66	729.92	422.97
2000	487.04	581.18	422.77	497.23	585.15	438.21	532.73	719.39	407.79
2001	490.80	582.48	427.68	501.92	588.90	442.87	525.14	705.80	403.37
2002	488.64	575.91	428.89	498.47	582.40	441.42	539.22	704.83	428.65
2003	476.49	561.45	418.13	487.15	566.57	433.19	523.83	687.84	414.66
2004	477.74	559.60	421.11	487.69	565.33	434.14	528.39	691.22	421.15
2005	473.79	550.59	420.50	485.53	559.18	434.75	514.02	650.95	423.49
2006	477.61	557.91	420.33	489.57	565.91	435.26	514.15	653.78	418.31
2007	483.68	569.11	422.00	494.70	575.76	436.32	522.63	675.79	417.33
2008	477.30	550.56	425.18	487.67	556.14	439.23	521.08	670.28	419.70
2009	476.57	542.00	430.21	487.25	548.80	443.69	515.34	647.80	425.64
2010	467.37	531.87	421.05	479.45	540.30	435.92	497.77	621.58	412.37
2011	462.55	520.59	421.66	474.44	529.04	436.27	492.42	598.35	419.89
2012	450.56	492.91	422.32	461.29	500.25	436.17	489.75	582.86	425.59
2013	445.61	485.58	419.49	457.13	493.20	434.67	476.57	570.26	411.52
2014	444.73	479.27	423.12	458.87	490.12	440.57	458.81	536.14	406.95
2015	445.98	480.78	424.15	460.63	492.48	441.71	461.34	536.29	410.18
2016	445.66	482.56	421.44	458.51	491.62	437.79	470.84	546.76	418.53
2017	444.78	482.14	419.97	456.73	489.32	436.32	464.29	551.48	403.21

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

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

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

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

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

Table 2.5
All Cancer Sites (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:									
1975-2017	460.67	538.16	410.07	467.94	542.93	420.27	500.06	644.83	403.00
1975-1979	407.23	484.12	365.02	409.26	485.32	369.85	437.62	564.41	350.93
1980	418.09	505.83	368.15	419.52	505.23	373.41	467.51	615.07	366.63
1981	425.28	510.80	377.17	427.70	510.84	383.89	472.90	634.34	362.89
1982	424.49	511.10	376.18	427.78	512.52	383.41	465.28	622.36	359.24
1983	431.11	519.94	380.71	434.35	520.95	387.93	487.26	646.27	382.24
1984	440.01	525.48	392.46	443.66	527.77	399.53	488.26	643.87	386.15
1985	448.94	531.30	403.24	453.60	533.72	411.55	489.39	643.82	388.62
1986	451.36	538.15	402.34	456.09	542.94	409.26	493.79	643.41	396.80
1987	468.14	563.36	413.34	475.07	569.08	423.42	501.15	666.26	394.20
1988	464.04	558.53	409.48	470.38	565.08	418.02	504.65	658.20	405.13
1989	468.01	567.21	408.62	475.42	573.81	418.82	493.01	661.19	385.30
1990	482.13	592.90	415.66	488.99	599.49	424.82	522.41	699.83	409.93
1991	503.15	637.52	419.04	510.68	644.72	428.64	549.60	765.72	412.80
1992	510.81	658.50	414.95	517.14	663.96	423.57	570.51	811.80	414.26
1993	493.57	622.41	408.35	497.08	620.68	416.97	570.41	822.06	404.91
1994	483.72	589.99	413.71	487.79	588.05	423.34	559.02	785.28	409.71
1995	477.36	572.13	415.22	482.62	570.87	426.41	544.75	752.47	405.49
1996	479.61	573.03	418.49	485.43	574.80	428.46	543.26	730.94	418.76
1997	486.88	576.21	428.72	493.95	577.27	441.21	543.56	744.48	412.36
1998	488.82	573.44	434.38	496.99	577.03	446.80	541.58	728.72	421.12
1999	491.06	581.27	431.07	499.15	583.63	443.94	544.66	729.92	422.97
2000	487.04	581.18	422.77	497.23	585.15	438.21	532.73	719.39	407.79
2001	490.80	582.48	427.68	501.92	588.90	442.87	525.14	705.80	403.37
2002	488.64	575.91	428.89	498.47	582.40	441.42	539.22	704.83	428.65
2003	476.49	561.45	418.13	487.15	566.57	433.19	523.83	687.84	414.66
2004	477.74	559.60	421.11	487.69	565.33	434.14	528.39	691.22	421.15
2005	473.79	550.59	420.50	485.53	559.18	434.75	514.02	650.95	423.49
2006	477.61	557.91	420.33	489.57	565.91	435.26	514.15	653.78	418.31
2007	483.68	569.11	422.00	494.70	575.76	436.32	522.63	675.79	417.33
2008	477.30	550.56	425.18	487.67	556.14	439.23	521.08	670.28	419.70
2009	476.08	541.43	429.76	486.52	547.97	443.03	514.10	646.22	424.63
2010	466.39	530.77	420.17	478.01	538.67	434.62	495.37	618.54	410.41
2011	461.11	518.97	420.34	472.30	526.64	434.32	488.90	594.05	416.91
2012	448.68	490.86	420.56	458.52	497.23	433.56	485.02	577.11	421.56
2013	443.29	483.06	417.29	453.69	489.49	431.41	470.83	563.23	406.67
2014	441.95	476.28	420.48	454.74	485.68	436.62	452.19	528.26	401.17
2015	441.99	476.48	420.36	454.91	486.34	436.24	452.88	526.31	402.77
2016	439.97	476.34	416.10	450.66	483.14	430.35	459.54	533.48	408.62
2017	434.82	471.13	410.75	443.49	474.94	423.85	446.26	529.59	387.88

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

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

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

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

Table 2.6
All Cancer Sites (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:									
1975-2017	191.25	239.87	158.76	189.61	236.34	158.39	232.63	314.14	181.79
1975-1979	202.75	264.24	162.54	199.61	259.14	161.35	244.15	334.74	179.95
1980	206.96	271.08	165.75	203.27	265.03	164.17	256.18	353.91	189.25
1981	206.40	269.78	165.90	202.64	263.27	164.55	256.77	358.65	187.47
1982	208.32	272.89	167.45	204.54	266.28	166.11	260.36	364.86	190.17
1983	209.21	274.09	168.27	205.17	267.22	166.69	263.75	369.32	193.24
1984	210.91	275.08	170.55	206.66	267.55	169.02	268.15	377.93	195.67
1985	211.35	275.68	170.96	207.25	268.25	169.58	268.06	377.82	196.31
1986	211.79	276.04	171.59	207.73	268.83	170.01	269.45	378.92	199.05
1987	211.91	276.34	171.54	207.78	268.96	169.87	271.12	383.24	199.91
1988	212.62	276.89	172.53	208.48	269.46	170.94	271.59	384.17	200.36
1989	214.30	278.50	174.25	209.96	270.25	172.88	275.87	395.28	200.87
1990	214.95	279.82	174.65	210.41	271.48	172.89	279.30	399.14	205.39
1991	215.06	279.15	175.30	210.62	271.19	173.41	278.97	395.85	207.39
1992	213.46	276.51	174.39	209.24	268.91	172.58	274.93	389.20	205.80
1993	213.45	275.89	174.55	209.16	267.89	172.82	277.09	394.76	206.29
1994	211.74	272.12	174.11	207.83	264.73	172.62	271.96	385.20	204.06
1995	209.89	268.50	173.35	206.09	261.46	171.73	269.51	379.02	204.53
1996	207.00	263.75	171.21	203.40	256.83	169.85	265.28	373.70	200.94
1997	203.55	258.13	169.00	199.94	251.58	167.35	262.14	363.18	202.53
1998	200.82	253.63	166.93	197.56	247.62	165.38	255.66	353.13	198.38
1999	200.72	252.75	167.24	197.75	247.14	165.92	253.80	349.23	197.54
2000	198.79	248.46	166.70	196.37	243.37	165.98	248.07	341.20	193.21
2001	196.29	245.05	164.61	193.98	240.31	163.75	244.34	334.14	192.12
2002	194.36	241.63	163.38	192.38	237.62	162.56	240.81	325.80	191.45
2003	190.89	235.81	161.16	189.10	232.16	160.40	235.16	314.60	188.76
2004	186.84	230.27	157.92	185.21	226.60	157.41	228.98	307.30	183.51
2005	185.23	228.09	156.46	183.87	224.94	156.04	224.83	300.33	180.94
2006	182.03	222.56	154.63	181.10	220.02	154.52	218.93	290.16	177.31
2007	179.26	219.33	152.00	178.30	216.64	151.91	216.23	286.57	175.47
2008	176.32	215.34	149.27	175.69	213.21	149.37	209.37	275.26	170.41
2009	173.40	211.17	147.12	173.03	209.33	147.48	205.39	268.91	167.41
2010	171.75	208.81	145.74	171.36	207.16	145.85	202.86	264.16	166.20
2011	168.79	204.35	143.54	168.57	203.36	143.48	199.13	253.69	166.11
2012	166.42	200.66	141.86	166.49	199.96	142.09	194.20	247.31	161.82
2013	163.31	196.60	139.34	163.63	196.07	139.91	189.82	240.45	158.63
2014	161.44	193.73	138.03	161.95	193.65	138.59	186.49	234.19	157.07
2015	158.91	190.21	136.03	159.61	190.36	136.74	181.12	226.86	152.72
2016	156.03	186.05	134.11	156.79	186.35	134.81	178.42	221.85	151.56
2017	152.61	181.62	131.34	153.57	182.15	132.24	173.74	215.39	147.66

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

Table 2.8
All Cancer Sites (Invasive)

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year 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	-	-	-	39	-	-	27	-	-
1970-1973 ^a	-	-	-	43	-	-	31	-	-
1975-1977 ^b	48.9	41.7	55.9	49.8	42.7	56.5	39.1	32.7	46.3
1978-1980 ^b	49.0	43.1	54.9	50.0	44.3	55.6	39.0	33.3	45.6
1981-1983 ^b	50.2	45.2	55.1	51.3	46.5	56.0	38.8	34.2	44.4
1984-1986 ^b	52.4	47.1	57.6	53.6	48.6	58.6	40.2	35.5	45.5
1987-1989 ^b	55.3	51.1	59.6	56.7	52.8	60.6	43.0	38.9	47.7
1990-1992 ^b	59.9	59.1	60.9	61.4	60.8	62.1	47.9	47.7	48.2
1993-1995 ^b	61.3	60.9	61.8	62.4	62.1	62.8	52.9	54.6	50.7
1996-1998 ^b	63.3	63.0	63.6	64.4	64.1	64.7	55.4	58.1	52.2
1999-2001 ^b	66.0	66.3	65.7	67.2	67.6	66.8	58.2	61.3	54.4
2002-2004 ^b	67.1	67.7	66.5	68.4	69.0	67.7	59.8	63.5	55.5
2005-2009 ^b	68.9	69.5	68.3	70.0	70.6	69.5	62.6	65.9	58.8
2010-2016 ^b	69.5 ^e	68.6 ^e	70.5 ^e	70.5 ^e	69.5 ^e	71.5 ^e	64.1 ^e	66.1 ^e	62.1 ^e
5-Year Period Survival (Percent)^{cd}									
2016	67.7	66.3	69.1	68.0	66.2	69.7	63.0	64.4	61.4
5-Year Relative Survival (Percent), 2010-2016^c									
Age at Diagnosis:									
Ages <45	83.3	79.4	85.8	84.6	80.9	87.0	74.1	69.2	76.9
Ages 45-54	75.3	69.7	79.6	76.0	70.0	80.7	68.6	67.5	69.6
Ages 55-64	70.1	68.6	71.9	70.9	69.0	73.1	63.8	65.5	61.4
Ages 65-74	67.4	68.8	65.6	67.7	68.7	66.4	62.5	66.8	56.7
Ages 75+	50.8	52.8	49.0	51.5	52.9	50.1	44.4	48.7	41.1
Ages <65	74.3	70.6	77.7	75.1	71.1	78.8	67.0	66.5	67.6
Ages 65+	60.1	62.4	57.5	60.4	62.2	58.3	55.8	61.2	49.8

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

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

^c Based on follow-up of patients into 2017. Expected survival rates are derived from the U.S. Annual Life Tables.

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

^e Based on follow-up of patients into 2017.

^f Period survival provides a 2016 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

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

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

ⁱ The standard error is greater than 10 percentage points.

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

Table 2.9
All Cancer Sites (Invasive)

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

All Races, Males and Females

Year of Diagnosis

Survival Time	1975-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
	1975-1979	1980-1984	1985-1989	1990-1994	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
1-year	69.1	70.6	73.2	76.3	76.6	77.0	77.6	77.9	78.8	79.0	79.5	79.7	79.6	80.0	80.3	80.9	81.5	81.6	81.9	81.8	82.2	81.8	82.1	81.9	82.7	82.8				
2-year	59.8	61.3	64.4	68.8	69.4	70.1	70.9	71.5	72.3	72.7	73.4	74.0	73.5	74.0	74.3	75.4	75.8	75.9	76.1	76.3	76.5	75.9	76.3	76.3	76.3	77.0				
3-year	54.8	56.2	59.8	64.9	65.8	66.7	67.5	68.1	69.0	69.5	70.3	70.9	70.4	71.0	71.3	72.3	72.7	72.7	73.1	73.2	73.4	72.6	73.0	73.0	73.1					
4-year	51.4	52.8	56.8	62.4	63.4	64.3	65.1	65.8	66.9	67.5	68.3	68.8	68.3	68.9	69.3	70.2	70.8	70.7	71.1	71.0	71.3	70.6	70.9							
5-year	48.9	50.2	54.4	60.4	61.6	62.5	63.3	64.0	65.2	66.0	66.8	67.3	66.8	67.3	67.7	68.7	69.4	69.1	69.6	69.5	69.7	69.0								
6-year	47.0	48.2	52.6	58.9	60.2	61.2	61.9	62.7	63.9	64.8	65.7	66.2	65.6	66.1	66.5	67.7	68.2	68.0	68.4	68.5	68.5									
7-year	45.4	46.5	51.1	57.6	59.1	60.1	61.0	61.7	62.9	63.7	64.7	65.2	64.5	65.1	65.6	66.7	67.2	66.9	67.5	67.5										
8-year	44.1	45.1	49.8	56.5	58.1	59.2	60.1	60.9	62.0	62.7	63.8	64.4	63.7	64.3	64.8	65.9	66.4	66.1	66.7											
9-year	42.9	43.9	48.6	55.5	57.2	58.2	59.2	59.9	61.2	62.0	63.1	63.6	62.9	63.5	64.0	65.2	65.8	65.3												
10-year	41.8	42.9	47.7	54.6	56.5	57.4	58.5	59.1	60.5	61.3	62.3	63.1	62.0	62.8	63.3	64.5	65.1													
11-year	40.9	41.9	46.8	53.7	55.6	56.8	57.8	58.4	59.8	60.5	61.7	62.4	61.4	62.1	62.7	63.9														
12-year	40.1	41.1	45.9	53.0	54.9	56.2	57.2	57.8	59.2	59.9	61.1	61.7	60.8	61.6	62.1															
13-year	39.3	40.3	45.1	52.3	54.0	55.5	56.5	57.1	58.6	59.2	60.4	61.2	60.3	61.0																
14-year	38.7	39.6	44.5	51.7	53.3	54.8	55.9	56.6	57.9	58.6	59.9	60.7	59.6																	
15-year	38.0	39.0	43.8	51.1	52.7	54.3	55.4	56.1	57.4	58.0	59.4	60.3																		
16-year	37.5	38.3	43.2	50.5	52.2	53.8	54.7	55.5	56.8	57.6	58.9																			
17-year	36.9	37.7	42.7	49.8	51.6	53.2	54.2	55.0	56.3	57.1																				
18-year	36.4	37.2	42.2	49.3	51.0	52.7	53.6	54.8	55.7																					
19-year	36.0	36.6	41.8	48.7	50.5	52.0	53.2	54.3																						
20-year	35.5	36.1	41.3	48.2	49.8	51.4	52.8																							
21-year	35.0	35.6	40.9	47.7	49.2	50.9																								
22-year	34.6	35.2	40.5	47.1	48.7																									
23-year	34.2	34.7	40.0	46.7																										
24-year	33.7	34.3	39.5																											
25-year	33.2	33.9	39.1																											
26-year	32.8	33.5	38.6																											
27-year	32.5	33.1	38.2																											
28-year	32.2	32.8	37.7																											
29-year	31.8	32.5																												
30-year	31.5	32.1																												

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

Table 2.11
All Cancer Sites (Invasive)

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

All Races, Females

Year of Diagnosis

	1975-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Survival Time																														
1-year	74.6	74.8	76.6	77.4	78.0	77.8	78.5	79.2	79.5	79.4	79.9	80.3	80.1	80.4	80.7	80.9	81.4	81.9	82.2	82.3	82.9	83.2	83.5	83.4	84.1	84.1				
2-year	66.1	66.2	68.7	70.1	70.8	71.0	71.6	72.6	73.1	73.0	73.8	74.4	74.0	74.2	74.6	75.2	75.7	76.1	76.5	76.7	77.3	77.3	78.0	78.1	78.8					
3-year	61.3	61.2	64.2	65.9	67.0	67.3	67.9	69.1	69.5	69.6	70.2	70.9	70.5	70.9	71.3	72.0	72.1	72.7	73.2	73.3	74.0	74.0	74.8	74.8						
4-year	58.0	57.9	61.4	63.2	64.3	64.8	65.4	66.6	67.1	67.3	68.0	68.5	68.2	68.4	69.1	69.7	70.0	70.6	71.0	71.0	71.8	71.9	72.6							
5-year	55.6	55.3	59.0	61.2	62.4	62.8	63.5	64.6	65.3	65.7	66.2	66.6	66.3	66.6	67.3	67.9	68.3	68.6	69.3	69.3	70.0	70.1								
6-year	53.6	53.4	57.3	59.6	61.0	61.3	62.0	63.2	63.8	64.4	64.9	65.3	65.0	65.3	66.0	66.7	67.0	67.3	68.0	68.1	68.6									
7-year	52.1	51.7	55.8	58.2	59.6	60.2	60.9	62.1	62.6	63.2	63.7	64.1	63.8	64.2	65.0	65.6	66.0	66.1	66.8	67.0										
8-year	50.8	50.4	54.6	57.1	58.6	59.1	60.0	61.2	61.6	62.2	62.7	63.2	62.9	63.4	64.2	64.7	65.1	65.1	65.8											
9-year	49.7	49.2	53.5	56.1	57.7	58.1	58.9	60.2	60.8	61.3	61.7	62.3	62.1	62.5	63.3	63.9	64.2	64.2												
10-year	48.7	48.1	52.5	55.3	57.0	57.3	58.1	59.3	60.1	60.6	61.1	61.7	61.2	61.7	62.5	63.2	63.4													
11-year	47.8	47.1	51.7	54.4	56.1	56.7	57.4	58.6	59.2	59.8	60.4	61.1	60.6	61.0	61.8	62.6														
12-year	47.1	46.4	50.9	53.7	55.4	56.1	56.9	58.1	58.5	59.2	59.5	60.3	60.0	60.5	61.1															
13-year	46.4	45.6	50.1	53.0	54.5	55.4	56.3	57.3	57.9	58.5	58.8	59.7	59.4	59.7																
14-year	45.8	44.9	49.5	52.4	54.0	54.7	55.7	56.8	57.2	58.0	58.2	59.2	58.7																	
15-year	45.1	44.3	48.9	51.9	53.5	54.1	55.1	56.1	56.7	57.4	57.8	58.7																		
16-year	44.6	43.6	48.3	51.3	52.9	53.6	54.4	55.6	56.0	56.9	57.3																			
17-year	44.1	43.0	47.8	50.7	52.4	52.9	54.1	55.1	55.5	56.4																				
18-year	43.6	42.5	47.3	50.2	51.6	52.4	53.6	54.8	54.9																					
19-year	43.2	42.0	46.9	49.6	51.2	51.7	53.1	54.2																						
20-year	42.7	41.6	46.5	49.1	50.7	51.1	52.5																							
21-year	42.2	41.0	46.0	48.6	50.2	50.3																								
22-year	41.8	40.6	45.6	48.0	49.6																									
23-year	41.4	40.2	45.1	47.6																										
24-year	40.9	39.7	44.7																											
25-year	40.4	39.2	44.3																											
26-year	40.1	38.9	43.7																											
27-year	39.7	38.4	43.2																											
28-year	39.3	38.0	42.7																											
29-year	39.0	37.7																												
30-year	38.6	37.2																												

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

Table 2.12
All Cancer Sites (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
Lifetime Risk of Dying from Cancer Given Alive at Current Age
Both Sexes, 2015-2017 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					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	0.18	0.38	0.86	39.55	19.37	Asian/ Pacific Islander	0	0.16	0.32	0.67	34.39	17.66	
	10	0.20	0.69	1.85	39.83	19.58		10	0.16	0.52	1.43	34.53	17.79	
	20	0.49	1.66	4.32	39.82	19.62		20	0.36	1.27	3.52	34.48	17.80	
	30	1.18	3.88	9.75	39.86	19.78		30	0.92	3.18	7.54	34.36	17.83	
	40	2.76	8.77	18.96	39.61	19.92		40	2.29	6.71	14.08	33.89	17.81	
	50	6.30	16.99	28.81	38.63	19.94		50	4.55	12.16	21.45	32.59	17.62	
	60	11.88	25.02	33.59	35.94	19.38		60	8.10	17.99	26.08	29.86	16.98	
	70	16.19	26.75	-	29.65	17.52		70	11.21	20.37	-	24.65	15.55	
	80	15.58	-	-	19.86	13.81		80	11.62	-	-	17.05	12.90	
White	0	0.18	0.40	0.92	39.72	19.52	American Indian/ Alaska Native ^a	0	0.11	0.21	0.52	27.75	15.72	
	10	0.22	0.75	1.95	39.95	19.70		10	0.10	0.41	1.26	27.93	15.92	
	20	0.53	1.74	4.42	39.92	19.74		20	0.31	1.16	2.91	27.99	15.98	
	30	1.23	3.94	9.77	39.94	19.88		30	0.87	2.65	6.57	28.23	16.25	
	40	2.78	8.76	18.94	39.68	20.03		40	1.85	5.91	12.54	28.34	16.63	
	50	6.26	16.94	28.93	38.69	20.04		50	4.29	11.30	19.46	28.00	17.01	
	60	11.86	25.18	33.80	36.01	19.48		60	7.76	16.80	23.65	26.26	16.80	
	70	16.39	27.00	-	29.73	17.62		70	10.79	18.97	-	22.09	15.49	
	80	15.76	-	-	19.81	13.85		80	11.56	-	-	15.96	12.33	
Black	0	0.13	0.26	0.58	36.17	19.26	Hispanic ^b	0	0.17	0.36	0.79	36.39	16.95	
	10	0.14	0.46	1.43	36.75	19.64		10	0.20	0.63	1.60	36.59	17.09	
	20	0.33	1.30	3.84	36.81	19.72		20	0.44	1.40	3.53	36.55	17.11	
	30	0.99	3.57	9.87	37.05	19.95		30	0.98	3.13	7.83	36.53	17.19	
	40	2.65	9.13	19.79	37.06	20.17		40	2.19	6.98	15.57	36.22	17.23	
	50	6.85	18.12	28.48	36.39	20.30		50	4.97	13.88	24.37	35.29	17.16	
	60	12.89	24.73	31.53	33.77	19.77		60	9.67	21.06	29.51	32.93	16.70	
	70	15.46	24.33	-	27.26	17.78		70	13.48	23.48	-	27.51	15.32	
	80	13.72	-	-	18.25	14.16		80	13.68	-	-	19.21	12.50	

Devcan 6.7.8, April 2020, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

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

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

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

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

- Statistic could not be calculated.

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

Table 2.13
All Cancer Sites (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
Lifetime Risk of Dying from Cancer Given Alive at Current Age
Males, 2015-2017 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					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	0.18	0.39	0.81	40.46	20.89	Asian/ Pacific Islander	0	0.16	0.32	0.61	34.92	20.00	
	10	0.21	0.63	1.42	40.78	21.14		10	0.16	0.46	1.01	35.07	20.16	
	20	0.43	1.22	3.12	40.81	21.21		20	0.30	0.86	2.19	35.04	20.18	
	30	0.81	2.74	8.52	41.07	21.47		30	0.57	1.91	5.60	35.03	20.25	
	40	1.98	7.91	19.41	41.26	21.77		40	1.36	5.09	13.07	34.87	20.29	
	50	6.21	18.25	31.32	41.13	22.02		50	3.83	12.00	22.60	34.35	20.22	
	60	13.55	28.27	37.11	39.30	21.80		60	8.71	20.00	28.71	32.51	19.76	
	70	18.97	30.37	-	33.20	20.21		70	13.08	23.18	-	27.58	18.43	
	80	18.26	-	-	22.79	16.71		80	13.51	-	-	19.41	15.76	
White	0	0.19	0.41	0.87	40.15	21.02	American Indian/ Alaska Native ^a	0	0.12	0.25	0.51	26.69	16.22	
	10	0.22	0.68	1.51	40.40	21.23		10	0.12	0.39	0.92	26.89	16.44	
	20	0.47	1.30	3.19	40.42	21.29		20	0.27	0.80	2.02	26.96	16.52	
	30	0.85	2.77	8.41	40.64	21.54		30	0.55	1.80	5.46	27.36	16.91	
	40	1.97	7.76	19.02	40.81	21.83		40	1.31	5.12	12.11	27.91	17.48	
	50	6.05	17.84	30.92	40.65	22.07		50	4.05	11.48	20.11	28.25	18.19	
	60	13.24	27.93	36.79	38.85	21.83		60	8.35	18.05	25.26	27.20	18.34	
	70	18.82	30.18	-	32.83	20.23		70	11.98	20.89	-	23.28	17.30	
	80	18.21	-	-	22.45	16.68		80	13.27	-	-	16.85	13.89	
Black	0	0.13	0.27	0.54	38.04	20.80	Hispanic ^b	0	0.18	0.38	0.77	37.16	19.02	
	10	0.14	0.41	1.05	38.71	21.26		10	0.21	0.60	1.22	37.38	19.19	
	20	0.28	0.91	2.95	38.85	21.39		20	0.39	1.02	2.40	37.37	19.24	
	30	0.65	2.73	9.75	39.39	21.79		30	0.64	2.04	6.35	37.51	19.39	
	40	2.15	9.39	22.50	39.95	22.26		40	1.43	5.83	15.29	37.59	19.55	
	50	7.69	21.62	33.20	40.17	22.76		50	4.55	14.35	26.09	37.45	19.67	
	60	16.40	30.03	36.38	38.23	22.80		60	10.73	23.59	32.58	36.03	19.50	
	70	19.43	28.49	-	31.13	21.32		70	15.76	26.78	-	31.01	18.38	
	80	15.86	-	-	20.49	18.14		80	16.18	-	-	22.39	15.65	

Devcan 6.7.8, April 2020, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

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

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

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

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

- Statistic could not be calculated.

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

Table 2.14
All Cancer Sites (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
 Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
 Lifetime Risk of Dying from Cancer Given Alive at Current Age
 Females, 2015-2017 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being						Race/ Ethnicity	Current Age	Risk of Being						
		Diagnosed with Cancer			Risk of Dying					Diagnosed with Cancer			Risk of Dying			
		+10 yrs	+20 yrs	+30 yrs	Ever	from Cancer				+10 yrs	+20 yrs	+30 yrs	Ever	from Cancer		
All Races	0	0.17	0.37	0.92	38.88	18.11		Asian/Pacific Islander	0	0.16	0.31	0.73	34.13	15.90		
	10	0.20	0.76	2.30	39.13	18.28		Pacific Islander	10	0.16	0.58	1.81	34.24	16.00		
	20	0.56	2.10	5.53	39.07	18.30			20	0.42	1.65	4.72	34.17	16.00		
	30	1.56	5.02	10.97	38.90	18.36			30	1.24	4.32	9.27	33.96	16.00		
	40	3.54	9.63	18.57	38.21	18.37			40	3.13	8.15	15.01	33.21	15.93		
	50	6.39	15.79	26.45	36.41	18.18			50	5.21	12.32	20.45	31.19	15.65		
	60	10.32	22.03	30.43	32.97	17.38			60	7.58	16.24	23.86	27.68	14.90		
	70	13.87	23.81	-	26.81	15.44			70	9.63	18.10	-	22.35	13.48		
	80	13.75	-	-	17.91	11.87			80	10.29	-	-	15.45	11.03		
White	0	0.17	0.39	0.98	39.54	18.26		American Indian/Alaska Native ^a	0	0.10	0.18	0.53	28.91	15.27		
	10	0.21	0.81	2.41	39.74	18.40		Alaska Native ^a	10	0.08	0.44	1.62	29.08	15.45		
	20	0.60	2.21	5.70	39.68	18.42			20	0.36	1.55	3.84	29.11	15.49		
	30	1.62	5.15	11.18	39.49	18.48			30	1.20	3.53	7.71	29.17	15.64		
	40	3.61	9.78	18.91	38.78	18.50			40	2.40	6.71	13.00	28.82	15.84		
	50	6.48	16.07	27.04	36.95	18.31			50	4.54	11.15	18.90	27.81	15.92		
	60	10.54	22.59	31.07	33.47	17.51			60	7.23	15.70	22.30	25.43	15.45		
	70	14.29	24.35	-	27.20	15.56			70	9.82	17.47	-	21.10	14.01		
	80	14.04	-	-	18.02	11.91			80	10.36	-	-	15.27	11.19		
Black	0	0.13	0.26	0.63	34.66	18.17		Hispanic ^b	0	0.15	0.34	0.82	36.26	15.42		
	10	0.13	0.51	1.79	35.15	18.49			10	0.19	0.67	2.00	36.44	15.54		
	20	0.38	1.66	4.66	35.14	18.52			20	0.48	1.82	4.72	36.37	15.54		
	30	1.30	4.33	9.99	35.11	18.60			30	1.34	4.27	9.38	36.18	15.56		
	40	3.10	8.90	17.44	34.62	18.64			40	2.98	8.18	16.00	35.47	15.49		
	50	6.11	15.11	24.47	33.22	18.47			50	5.40	13.52	23.01	33.75	15.25		
	60	10.03	20.47	27.65	30.22	17.57			60	8.75	18.96	27.05	30.54	14.59		
	70	12.73	21.49	-	24.63	15.48			70	11.73	21.02	-	25.03	13.14		
	80	12.50	-	-	16.97	12.07			80	12.07	-	-	17.28	10.53		

Devcan 6.7.8, April 2020, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

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

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

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

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

- Statistic could not be calculated.

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

Table 2.15
All Cancer Sites (Invasive)

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

SEER Incidence	SEER 21 Areas ^b			SEER 21 Areas ^b			SEER 9 Areas ^b		
	Rate 2013-2017			Trend 2008-2017 ^c			Trend 2008-2017 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
Race/Ethnicity	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	442.4	480.3	418.3	-1.1*	-1.8*	-0.1*	-1.1*	-1.9*	-0.2*
White	452.1	485.5	432.0	-1.1*	-1.9*	-0.1*	-1.1*	-1.7*	-0.2*
White Hispanic ^e	353.0	371.3	347.6	-1.5*	-2.9*	-0.3	-	-	-
White Non-Hispanic ^e	470.7	505.6	449.0	-1.0*	-1.7*	0.0	-	-	-
Black	440.4	515.1	390.7	-1.5*	-2.5*	-0.4*	-1.5*	-2.3*	-0.7*
Asian/Pacific Islander	302.1	304.4	304.7	-0.6*	-1.6*	0.2*	-	-	-
Amer Ind/Alaska Nat ^f	310.1	321.0	305.9	-0.5*	-1.0*	-0.1	-	-	-
Hispanic ^e	348.4	370.4	339.5	-1.1*	-2.5*	0.2*	-	-	-
<u>U.S. Mortality^g</u>									
	Rate 2013-2017			Trend 2008-2017 ^h					
	Rate per 100,000 persons			AAPC (%)					
Race/Ethnicity	Total	Males	Females	Total	Males	Females			
All Races	158.3	189.5	135.7	-1.5*	-1.8*	-1.4*			
White	159.0	189.6	136.4	-1.4*	-1.7*	-1.3*			
White Hispanic ^e	118.9	144.0	101.2	-1.1*	-1.4*	-0.8*			
White Non-Hispanic ^e	162.9	193.8	139.9	-1.5*	-1.6*	-1.3*			
Black	181.7	227.3	153.4	-2.1*	-2.7*	-1.6*			
Asian/Pacific Islander	98.9	117.3	85.6	-1.3*	-1.6*	-1.0*			
Amer Ind/Alaska Nat									
Total U.S.	106.2	126.8	90.5	-1.7*	-1.8*	-1.8*			
PRCDA Counties	144.2	173.1	123.0	-1.0*	-0.9*	-1.2*			
Non-PRCDA Counties	63.8	76.7	53.4	-2.6*	-2.8*	-2.6*			
Hispanic ^e	112.3	136.2	95.5	-1.2*	-1.6*	-1.0*			

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

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

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

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

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

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

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

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

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

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

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

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

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

Table 2.16
All Cancer Sites (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates^a, 2013-2017</u>									
California	397.50	424.16	381.76	411.45	436.17	397.74	398.84	445.08	366.75
Greater Bay Area	396.15	422.40	381.11	426.92	453.00	412.99	426.37	481.76	385.94
San Francisco-Oakland	401.49	429.28	385.24	431.62	458.64	417.03	434.61	493.30	392.17
San Jose-Monterey	386.03	409.58	373.10	418.68	443.10	405.91	378.02	419.43	344.53
Los Angeles	373.99	397.07	362.42	384.40	404.28	376.20	396.24	440.35	367.77
Greater California	408.62	436.75	390.96	417.61	443.60	402.01	388.82	432.77	356.38
Connecticut	461.68	493.87	442.40	461.87	490.19	446.03	419.32	494.12	370.44
Detroit	484.09	534.84	450.12	489.01	530.16	464.06	491.92	578.98	432.56
Georgia	456.69	519.48	412.63	465.16	516.98	429.86	454.16	549.16	391.85
Atlanta	452.25	515.25	409.94	467.46	514.78	438.71	455.95	553.49	394.37
Rural Georgia	472.65	546.38	417.99	484.41	534.63	443.55	457.41	585.38	378.31
Greater Georgia	459.45	521.61	415.29	464.80	518.68	426.98	453.69	544.73	392.31
Hawaii	410.55	429.92	401.87	476.74	500.38	457.43	390.93	447.07	309.63
Idaho	433.59	463.29	411.92	432.06	460.30	411.71	343.76	428.51	259.04
Iowa	470.55	513.03	442.48	470.31	511.16	443.62	491.15	564.05	435.20
Kentucky	509.45	562.68	474.10	508.44	556.56	477.19	471.25	527.33	438.53
Louisiana	472.33	545.46	418.41	471.45	535.59	424.43	485.33	584.40	415.77
Massachusetts	446.51	470.22	434.60	447.22	466.95	439.04	393.76	443.18	360.76
New Jersey	475.72	517.62	450.42	487.22	524.12	466.64	441.76	506.06	403.21
New Mexico	369.37	384.66	361.13	372.60	384.72	367.00	311.77	358.56	269.17
New York	473.84	517.73	446.71	487.29	524.45	466.13	435.92	518.48	384.91
Seattle-Puget Sound	460.79	494.98	439.63	472.68	504.91	453.04	453.84	516.07	400.66
Utah	395.36	429.99	370.14	397.40	432.04	372.01	367.21	411.42	314.35
SEER 9 Areas ^b	440.31	476.53	416.92	451.41	483.79	431.63	456.00	535.63	401.18
SEER 13 Areas ^b	422.65	455.51	402.26	435.61	465.37	418.26	441.34	512.42	392.73
SEER 18 Areas ^b	435.02	472.88	410.46	445.12	479.10	424.12	444.71	517.87	394.88
SEER 21 Areas ^b	442.44	480.30	418.31	452.11	485.54	432.04	440.37	515.12	390.74

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

Table 2.17
All Cancer Sites (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
SEER Death Rates^a, 2013-2017									
California	142.80	168.01	124.62	148.90	174.37	130.35	176.35	211.01	154.57
Greater Bay Area	129.95	152.06	114.15	137.61	159.69	121.88	180.42	214.87	158.09
San Francisco-Oakland	132.26	154.67	116.36	138.05	159.73	122.61	185.96	223.68	161.48
San Jose-Monterey	125.39	147.02	109.69	136.73	159.56	120.47	146.61	165.15	134.76
Los Angeles	138.83	163.64	121.81	142.81	167.26	125.76	180.74	216.93	160.06
Greater California	149.11	175.53	129.58	154.34	181.16	134.40	169.98	203.27	146.82
Connecticut	143.77	170.41	125.52	145.31	171.57	127.19	148.87	185.62	127.09
Detroit	169.10	198.31	149.33	164.68	192.41	145.67	195.25	236.21	169.63
Georgia	162.78	201.37	135.69	161.17	197.57	134.19	176.13	230.18	144.80
Atlanta	148.74	180.40	128.47	141.30	169.17	122.54	170.16	219.50	143.37
Rural Georgia	184.52	234.26	146.57	173.95	213.32	140.47	210.80	294.61	160.48
Greater Georgia	169.30	210.60	139.38	168.31	207.65	138.53	180.32	236.38	146.33
Hawaii	132.23	159.77	111.06	156.83	176.46	138.53	140.53	168.07	106.02
Idaho	154.93	181.56	133.77	156.22	183.19	134.76	89.71	115.68	-
Iowa	163.49	198.44	138.15	163.46	198.65	137.92	195.32	223.20	175.59
Kentucky	194.78	239.64	162.31	195.95	240.73	163.22	194.85	247.23	163.33
Louisiana	179.98	221.54	149.59	170.60	207.88	142.81	209.98	268.86	170.43
Massachusetts	153.21	183.56	132.56	157.03	187.38	136.43	135.08	169.10	113.77
New Jersey	151.38	176.46	134.88	155.20	180.77	138.08	170.28	206.41	150.39
New Mexico	141.82	167.15	122.31	144.73	170.42	124.61	140.48	176.30	114.42
New York	148.14	174.81	130.16	153.61	179.91	135.52	146.02	178.65	127.78
Seattle-Puget Sound	150.94	176.55	132.14	154.48	179.21	136.18	163.32	197.10	136.88
Utah	125.50	146.31	109.05	125.96	146.80	109.44	147.44	147.25	142.46
SEER 9 Areas ^b	147.01	173.82	127.88	149.08	175.29	130.08	176.13	216.46	151.30
SEER 13 Areas ^b	144.31	170.40	125.77	147.34	172.95	128.88	177.08	216.69	153.00
SEER 18 Areas ^b	152.62	181.50	131.89	155.63	184.19	134.83	181.05	224.93	153.75
SEER 21 Areas ^b	151.89	180.45	131.66	155.37	183.64	135.06	170.27	211.33	145.41
Total U.S.	158.34	189.46	135.68	159.01	189.56	136.38	181.69	227.34	153.38

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

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

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

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

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

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

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

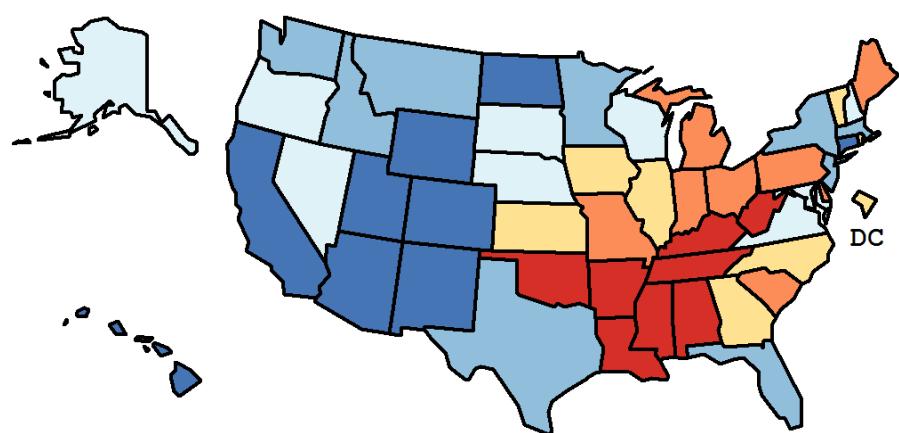
Table 2.18
All Cancer Sites (Invasive)

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

Males and Females

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	158.34	0.09							
High Five States									
Kentucky	194.78	0.88	01(01,01)	23.01 ^c					
Mississippi	190.06	1.07	02(02,03)	20.03 ^c					
West Virginia	186.72	1.24	03(02,04)	17.92 ^c					
Arkansas	181.92	1.02	04(03,07)	14.89 ^c					
Tennessee	181.00	0.69	05(04,07)	14.31 ^c					
Low Five States									
Arizona	141.01	0.59	47(45,48)	-10.94 ^c					
Wyoming	140.99	2.11	48(43,49)	-10.96 ^c					
Colorado	136.25	0.72	49(48,50)	-13.95 ^c					
Hawaii	132.23	1.24	50(49,50)	-16.49 ^c					
Utah	125.50	1.03	51(51,51)	-20.74 ^c					

Alabama	175.80	0.79	08(08,11)	11.03 ^c	Montana	154.18	1.55	36(30,41)	-2.63
Alaska	158.77	2.45	30(16,39)	0.27	Nebraska	157.08	1.21	33(26,36)	-0.79
Arizona	141.01	0.59	47(45,48)	-10.94 ^c	Nevada	161.09	1.04	25(19,31)	1.73
Arkansas	181.92	1.02	04(03,07)	14.89 ^c	New Hampshire	159.10	1.40	29(21,34)	0.48
California	142.80	0.27	45(44,47)	-9.81 ^c	New Jersey	151.38	0.54	40(36,42)	-4.39
Colorado	136.25	0.72	49(48,50)	-13.95 ^c	New Mexico	141.82	1.09	46(44,48)	-10.44 ^c
Connecticut	143.77	0.81	44(43,47)	-9.20 ^c	New York	148.14	0.36	42(42,43)	-6.44 ^c
Delaware	166.62	1.69	15(12,24)	5.23 ^c	North Carolina	164.31	0.54	19(16,23)	3.77
D.C.	164.23	2.29	20(12,32)	3.72	North Dakota	148.07	1.89	43(36,45)	-6.48 ^c
Florida	150.22	0.33	41(39,42)	-5.13 ^c	Ohio	174.90	0.50	10(08,11)	10.46 ^c
Georgia	162.78	0.57	23(18,26)	2.81	Oklahoma	180.98	0.91	06(04,07)	14.30 ^c
Hawaii	132.23	1.24	50(49,50)	-16.49 ^c	Oregon	159.75	0.82	27(23,32)	0.89
Idaho	154.93	1.32	34(29,40)	-2.15	Pennsylvania	166.22	0.45	16(14,19)	4.98
Illinois	165.24	0.48	17(15,21)	4.36	Rhode Island	162.97	1.59	22(15,30)	2.92
Indiana	175.62	0.69	09(08,11)	10.91 ^c	South Carolina	168.53	0.77	13(12,16)	6.43 ^c
Iowa	163.49	0.93	21(16,26)	3.25	South Dakota	159.22	1.79	28(19,35)	0.55
Kansas	162.09	1.00	24(18,29)	2.37	Tennessee	181.00	0.69	05(04,07)	14.31 ^c
Kentucky	194.78	0.88	01(01,01)	23.01 ^c	Texas	151.67	0.35	39(37,41)	-4.21
Louisiana	179.98	0.85	07(04,07)	13.67 ^c	Utah	125.50	1.03	51(51,51)	-20.74 ^c
Maine	172.00	1.37	12(08,14)	8.63 ^c	Vermont	164.69	2.04	18(12,29)	4.01
Maryland	157.71	0.69	32(27,34)	-0.40	Virginia	158.31	0.59	31(26,33)	-0.02
Massachusetts	153.21	0.62	37(34,40)	-3.24	Washington	154.31	0.63	35(33,37)	-2.55
Michigan	167.73	0.53	14(13,17)	5.93 ^c	West Virginia	186.72	1.24	03(02,04)	17.92 ^c
Minnesota	151.68	0.70	38(36,42)	-4.21	Wisconsin	160.07	0.68	26(23,31)	1.09
Mississippi	190.06	1.07	02(02,03)	20.03 ^c	Wyoming	140.99	2.11	48(43,49)	-10.96 ^c
Missouri	172.61	0.69	11(10,12)	9.01 ^c					



Age-Adjusted Death Rates per 100,000 Quantile Interval

	175.63 - 194.78
	165.25 - 175.62
	161.10 - 165.24
	154.94 - 161.09
	148.08 - 154.93
	125.50 - 148.07
	Suppressed
U.S. rate: 158.34	

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

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

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

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

SE Standard error of the rate.

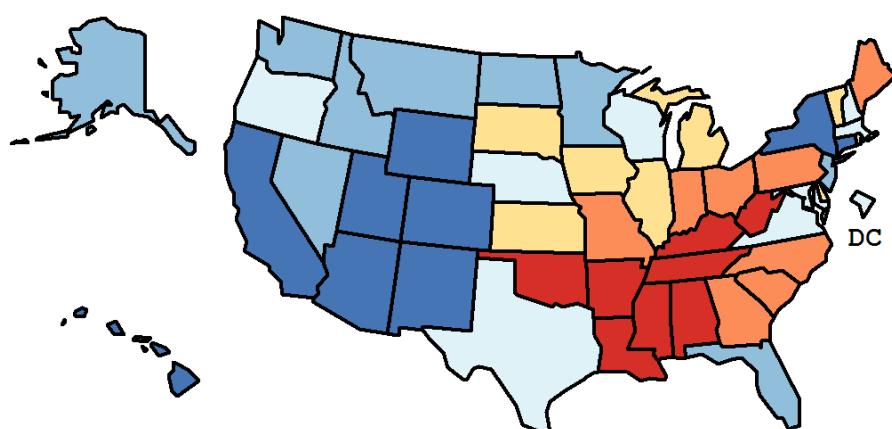
PD Percent difference between state rate and total U.S. rate.

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

Table 2.19
All Cancer Sites (Invasive)

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

Males									
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	189.46	0.15							
High Five States									
Mississippi	240.48	1.86	01(01,02)	26.93 ^c					
Kentucky	239.64	1.49	02(01,02)	26.49 ^c					
Tennessee	224.10	1.18	03(03,07)	18.28 ^c					
Arkansas	223.89	1.70	04(03,08)	18.18 ^c					
West Virginia	222.64	2.03	05(03,08)	17.51 ^c					
Low Five States									
Arizona	165.03	0.94	47(45,49)	-12.90 ^c					
Wyoming	163.41	3.36	48(43,50)	-13.75 ^c					
Colorado	160.64	1.18	49(48,50)	-15.21 ^c					
Hawaii	159.77	2.01	50(47,50)	-15.67 ^c					
Utah	146.31	1.65	51(51,51)	-22.78 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	221.03	1.35	07(03,08)	16.66 ^c	Montana	177.75	2.45	40(31,44)	-6.18 ^c
Alaska	181.76	3.96	35(23,44)	-4.07	Nebraska	186.78	1.99	29(24,36)	-1.41
Arizona	165.03	0.94	47(45,49)	-12.90 ^c	Nevada	183.16	1.63	34(27,39)	-3.32
Arkansas	223.89	1.70	04(03,08)	18.18 ^c	New Hampshire	187.25	2.28	27(23,37)	-1.16
California	168.01	0.44	45(44,47)	-11.32 ^c	New Jersey	176.46	0.90	41(38,43)	-6.86 ^c
Colorado	160.64	1.18	49(48,50)	-15.21 ^c	New Mexico	167.15	1.76	46(44,49)	-11.78 ^c
Connecticut	170.41	1.34	44(43,46)	-10.05 ^c	New York	174.81	0.60	43(40,43)	-7.73 ^c
Delaware	199.03	2.79	17(12,25)	5.05 ^c	North Carolina	202.14	0.92	14(13,18)	6.69 ^c
D.C.	185.87	3.80	30(20,42)	-1.89	North Dakota	176.25	3.07	42(31,45)	-6.97 ^c
Florida	178.96	0.53	39(35,41)	-5.54 ^c	Ohio	209.73	0.83	10(10,13)	10.70 ^c
Georgia	201.37	1.00	15(13,19)	6.29 ^c	Oklahoma	219.18	1.51	08(04,09)	15.69 ^c
Hawaii	159.77	2.01	50(47,50)	-15.67 ^c	Oregon	185.86	1.32	31(26,36)	-1.90
Idaho	181.56	2.12	36(28,42)	-4.17	Pennsylvania	199.87	0.75	16(14,21)	5.49 ^c
Illinois	197.13	0.81	20(17,23)	4.05	Rhode Island	197.12	2.68	21(13,27)	4.04
Indiana	213.92	1.16	09(08,10)	12.91 ^c	South Carolina	209.13	1.31	11(09,13)	10.38 ^c
Iowa	198.44	1.54	18(14,24)	4.74	South Dakota	192.62	2.93	24(16,32)	1.67
Kansas	193.80	1.64	23(18,27)	2.29	Tennessee	224.10	1.18	03(03,07)	18.28 ^c
Kentucky	239.64	1.49	02(01,02)	26.49 ^c	Texas	183.81	0.59	32(29,36)	-2.98
Louisiana	221.54	1.44	06(03,08)	16.93 ^c	Utah	146.31	1.65	51(51,51)	-22.78 ^c
Maine	206.22	2.26	13(10,17)	8.85 ^c	Vermont	196.71	3.36	22(13,28)	3.83
Maryland	186.94	1.17	28(26,34)	-1.33	Virginia	190.54	1.00	26(23,29)	0.57
Massachusetts	183.56	1.04	33(28,37)	-3.11	Washington	180.82	1.03	37(32,40)	-4.56
Michigan	198.38	0.88	19(15,22)	4.71	West Virginia	222.64	2.03	05(03,08)	17.51 ^c
Minnesota	179.17	1.15	38(34,42)	-5.43 ^c	Wisconsin	191.97	1.13	25(21,28)	1.32
Mississippi	240.48	1.86	01(01,02)	26.93 ^c	Wyoming	163.41	3.36	48(43,50)	-13.75 ^c
Missouri	207.51	1.15	12(10,14)	9.53 ^c					



Age-Adjusted Death Rates per 100,000 Quantile Interval

	213.93 - 240.48
	199.04 - 213.92
	191.98 - 199.03
	183.17 - 191.97
	174.82 - 183.16
	146.31 - 174.81
	Suppressed

U.S. rate: 189.46

^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).

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

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

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

SE Standard error of the rate.

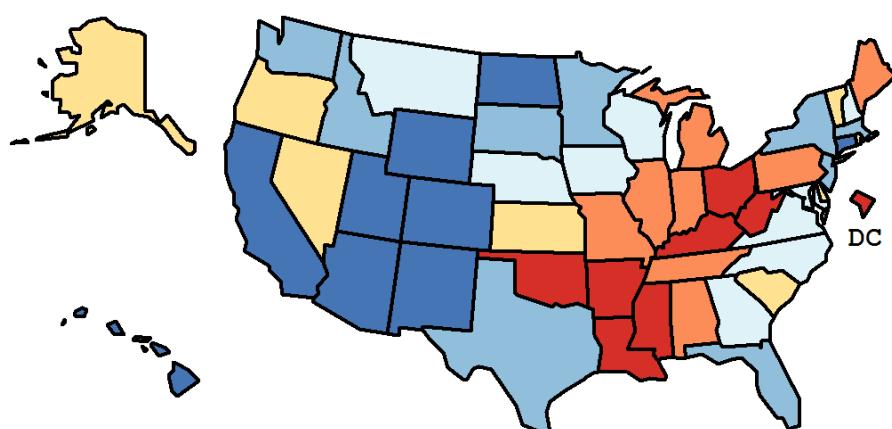
PD Percent difference between state rate and total U.S. rate.

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

Table 2.20
All Cancer Sites (Invasive)

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

Females									
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	135.68	0.12							
High Five States									
Kentucky	162.31	1.08	01(01,02)	19.63 ^c					
West Virginia	159.79	1.57	02(01,03)	17.77 ^c					
Mississippi	154.21	1.29	03(02,06)	13.66 ^c					
Oklahoma	152.22	1.14	04(03,09)	12.19 ^c					
D.C.	150.76	2.91	05(02,17)	11.12 ^c					
Low Five States									
New Mexico	122.31	1.38	47(43,49)	-9.85 ^c					
Arizona	121.54	0.76	48(45,49)	-10.42 ^c					
Colorado	118.65	0.90	49(47,49)	-12.55 ^c					
Hawaii	111.06	1.56	50(50,51)	-18.15 ^c					
Utah	109.05	1.30	51(50,51)	-19.62 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	143.20	0.95	15(12,21)	5.54 ^c	Montana	135.59	2.02	32(19,40)	-0.06
Alaska	140.20	3.14	22(08,39)	3.34	Nebraska	135.61	1.54	31(20,39)	-0.05
Arizona	121.54	0.76	48(45,49)	-10.42 ^c	Nevada	142.47	1.34	18(12,25)	5.00 ^c
Arkansas	150.27	1.26	06(03,12)	10.76 ^c	New Hampshire	138.64	1.78	25(15,37)	2.18
California	124.62	0.34	45(43,47)	-8.15 ^c	New Jersey	134.88	0.68	34(28,38)	-0.59
Colorado	118.65	0.90	49(47,49)	-12.55 ^c	New Mexico	122.31	1.38	47(43,49)	-9.85 ^c
Connecticut	125.52	1.01	44(41,47)	-7.49 ^c	New York	130.16	0.45	40(38,41)	-4.06
Delaware	142.52	2.11	17(09,30)	5.04 ^c	North Carolina	137.58	0.66	28(21,32)	1.41
D.C.	150.76	2.91	05(02,17)	11.12 ^c	North Dakota	127.10	2.41	43(35,48)	-6.32 ^c
Florida	127.35	0.41	42(41,45)	-6.14 ^c	Ohio	150.09	0.63	07(04,11)	10.62 ^c
Georgia	135.69	0.70	30(26,37)	0.01	Oklahoma	152.22	1.14	04(03,09)	12.19 ^c
Hawaii	111.06	1.56	50(50,51)	-18.15 ^c	Oregon	140.29	1.05	21(15,29)	3.40
Idaho	133.77	1.69	37(23,41)	-1.41	Pennsylvania	142.75	0.56	16(13,21)	5.22 ^c
Illinois	143.24	0.60	14(13,20)	5.57 ^c	Rhode Island	140.34	1.98	20(12,35)	3.44
Indiana	148.12	0.85	10(05,13)	9.17 ^c	South Carolina	139.16	0.94	23(18,31)	2.57
Iowa	138.15	1.17	26(18,34)	1.82	South Dakota	134.34	2.27	36(20,41)	-0.98
Kansas	138.71	1.25	24(17,33)	2.24	Tennessee	149.47	0.84	09(04,12)	10.17 ^c
Kentucky	162.31	1.08	01(01,02)	19.63 ^c	Texas	127.77	0.43	41(40,44)	-5.82 ^c
Louisiana	149.59	1.04	08(04,12)	10.25 ^c	Utah	109.05	1.30	51(50,51)	-19.62 ^c
Maine	146.70	1.72	12(05,19)	8.12 ^c	Vermont	140.90	2.57	19(10,37)	3.85
Maryland	137.77	0.87	27(20,33)	1.54	Virginia	135.18	0.73	33(27,37)	-0.37
Massachusetts	132.56	0.77	38(33,40)	-2.30	Washington	134.56	0.80	35(28,38)	-0.82
Michigan	145.66	0.67	13(10,16)	7.36 ^c	West Virginia	159.79	1.57	02(01,03)	17.77 ^c
Minnesota	131.72	0.89	39(34,41)	-2.92	Wisconsin	137.14	0.86	29(21,35)	1.08
Mississippi	154.21	1.29	03(02,06)	13.66 ^c	Wyoming	123.09	2.71	46(39,49)	-9.28 ^c
Missouri	147.32	0.86	11(07,14)	8.58 ^c					



Age-Adjusted Death Rates per 100,000 Quantile Interval

149.48 - 162.31
142.53 - 149.47
138.65 - 142.52
134.89 - 138.64
127.11 - 134.88
109.05 - 127.10
Suppressed
U.S. rate: 135.68

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

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

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

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

SE Standard error of the rate.

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

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

Table 2.21
All Cancer Sites (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2017
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to 5	> 5 to 10	> 10 to 15	> 15 to 20	> 20 to 25	<=25 ^b	> 25 ^d	Complete ^e
Race	Sex								
All Races	Both Sexes	4,863,591	3,678,954	2,671,940	1,874,577	1,156,722	14,245,784	1,515,155	15,760,939
	Males	2,338,455	1,857,458	1,307,418	852,831	477,140	6,833,302	397,509	7,230,811
	Females	2,525,136	1,821,495	1,364,523	1,021,746	679,582	7,412,482	1,117,646	8,530,128
White	Both Sexes	4,024,750	3,103,763	2,301,691	1,639,332	1,019,739	12,089,276	1,304,407	13,393,683
	Males	1,927,986	1,556,489	1,120,549	741,727	420,910	5,767,660	356,439	6,124,100
	Females	2,096,765	1,547,275	1,181,142	897,605	598,830	6,321,616	947,968	7,269,584
Black	Both Sexes	522,353	366,426	243,349	153,030	87,254	1,372,412	107,632	1,480,045
	Males	258,109	197,693	128,021	76,937	38,045	698,805	20,401	719,206
	Females	264,244	168,733	115,328	76,093	49,209	673,608	87,231	760,839
Asian/ Pacific	Both Sexes	183,298	121,582	80,129	51,196	29,176	465,381	+	+
	Males	72,929	49,034	31,005	17,917	9,032	179,916	+	+
Islander	Females	110,369	72,548	49,124	33,279	20,144	285,465	+	+
Hispanic	Both Sexes	408,638	276,391	184,454	116,896	68,716	1,055,094	+	+
	Males	177,231	127,177	83,223	49,354	25,903	462,888	+	+
	Females	231,407	149,214	101,232	67,542	42,812	592,206	+	+

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

Age at Prevalence	All Ages	Age Specific (Crude)								Age-Adjusted ^c All Ages		
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79			
Race	Sex											
All Races	Both Sexes	4.3954	0.0901	0.2070	0.4041	0.9211	2.1986	5.0523	10.5439	18.5788	22.1076	3.7298
	Males	4.2813	0.0920	0.2200	0.3959	0.7363	1.4994	3.9928	10.6625	22.1101	29.8954	3.9647
	Females	4.5060	0.0881	0.1934	0.4127	1.1074	2.8862	6.0653	10.4365	15.6244	17.2583	3.6235
White	Both Sexes	4.7774	0.0947	0.2237	0.4462	1.0025	2.3143	5.1610	10.6316	18.8503	22.5479	3.8150
	Males	4.5989	0.0958	0.2385	0.4391	0.8084	1.5833	3.9945	10.4705	21.9382	29.9112	3.9716
	Females	4.9527	0.0935	0.2081	0.4537	1.2035	3.0536	6.3009	10.7809	16.2101	17.8801	3.7752
Black	Both Sexes	3.0132	0.0672	0.1434	0.2520	0.6091	1.6838	4.5141	10.4660	17.5131	18.6314	3.3375
	Males	3.1967	0.0714	0.1455	0.2433	0.4611	1.1542	4.1869	12.7224	24.8331	29.8122	4.1795
	Females	2.8439	0.0629	0.1412	0.2608	0.7458	2.1530	4.7992	8.6631	12.3947	13.0482	2.8361
Asian/ Pacific	Both Sexes	2.2316	0.0756	0.1492	0.2405	0.5355	1.5093	3.5040	6.7079	10.7417	13.4818	2.3412
	Males	1.7996	0.0780	0.1624	0.2220	0.3636	0.7925	2.0939	5.5224	11.5436	17.2364	2.1409
Islander	Females	2.6294	0.0732	0.1358	0.2591	0.6920	2.1434	4.7256	7.6631	10.0999	11.0339	2.5440
Hispanic	Both Sexes	1.8149	0.0836	0.1966	0.3481	0.6952	1.5731	3.5145	7.3612	12.8691	15.3187	2.6454
	Males	1.5761	0.0868	0.2121	0.3525	0.5450	0.9735	2.4303	6.7974	15.3010	21.5215	2.7366
	Females	2.0588	0.0802	0.1805	0.3433	0.8587	2.1895	4.5874	7.8620	10.9951	11.4686	2.6693

^a US 2017 cancer prevalence counts are based on 2017 cancer prevalence proportions from the SEER 13 Areas (excluding the Alaska Native Registry) and 1/1/2017 US population estimates based on the average of 2016 and 2017 population estimates from the US Bureau of the Census.

^b Prevalence was calculated using the first invasive tumor for each cancer site diagnosed during the previous 25 years.

^c Maximum limited-duration prevalence is 25 years for 1992-2017 data.

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

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

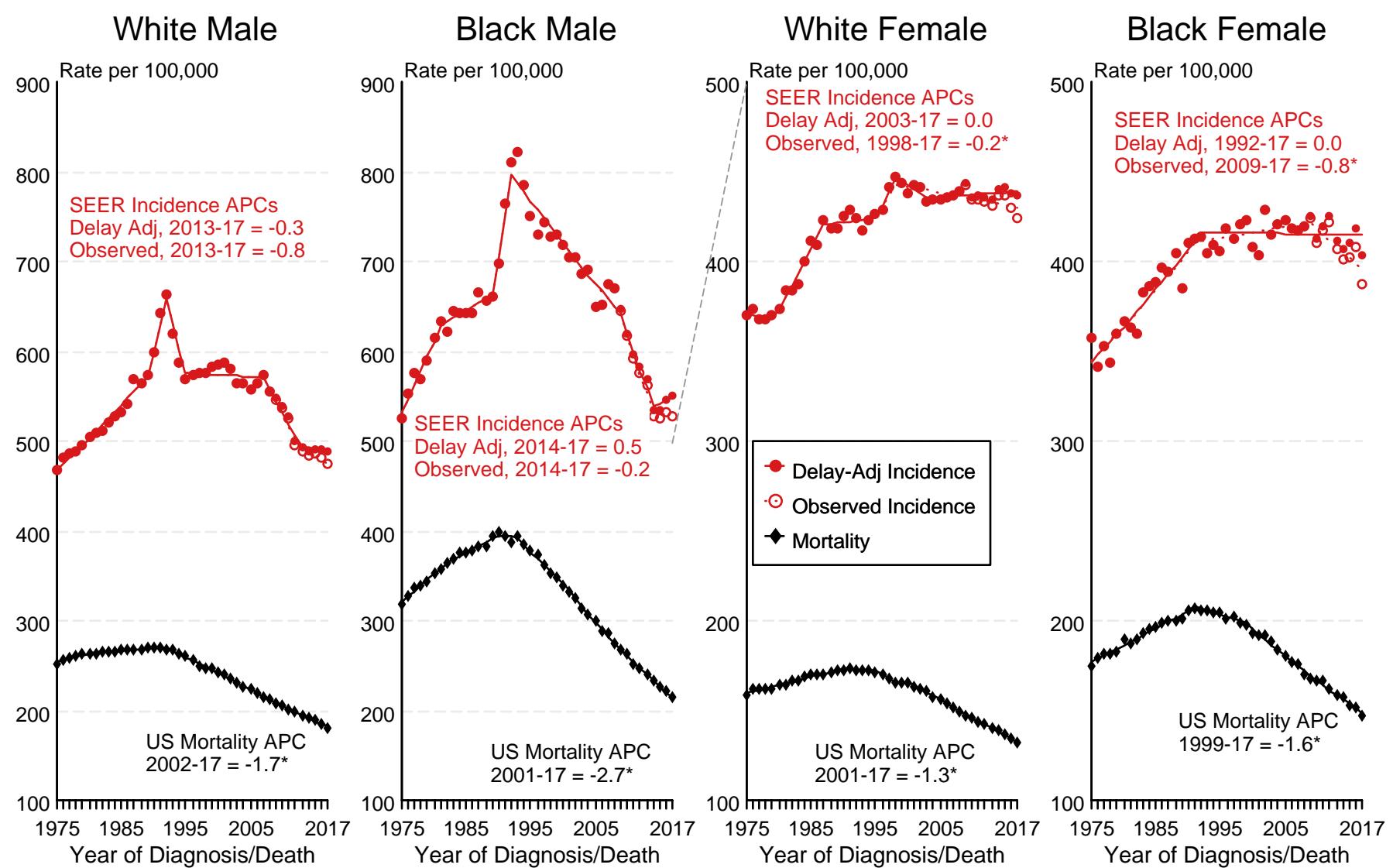
- Complete prevalence is obtained by summing <=25 and > 25.

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

Not available.

Figure 2.1

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a All Cancer Sites, 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).

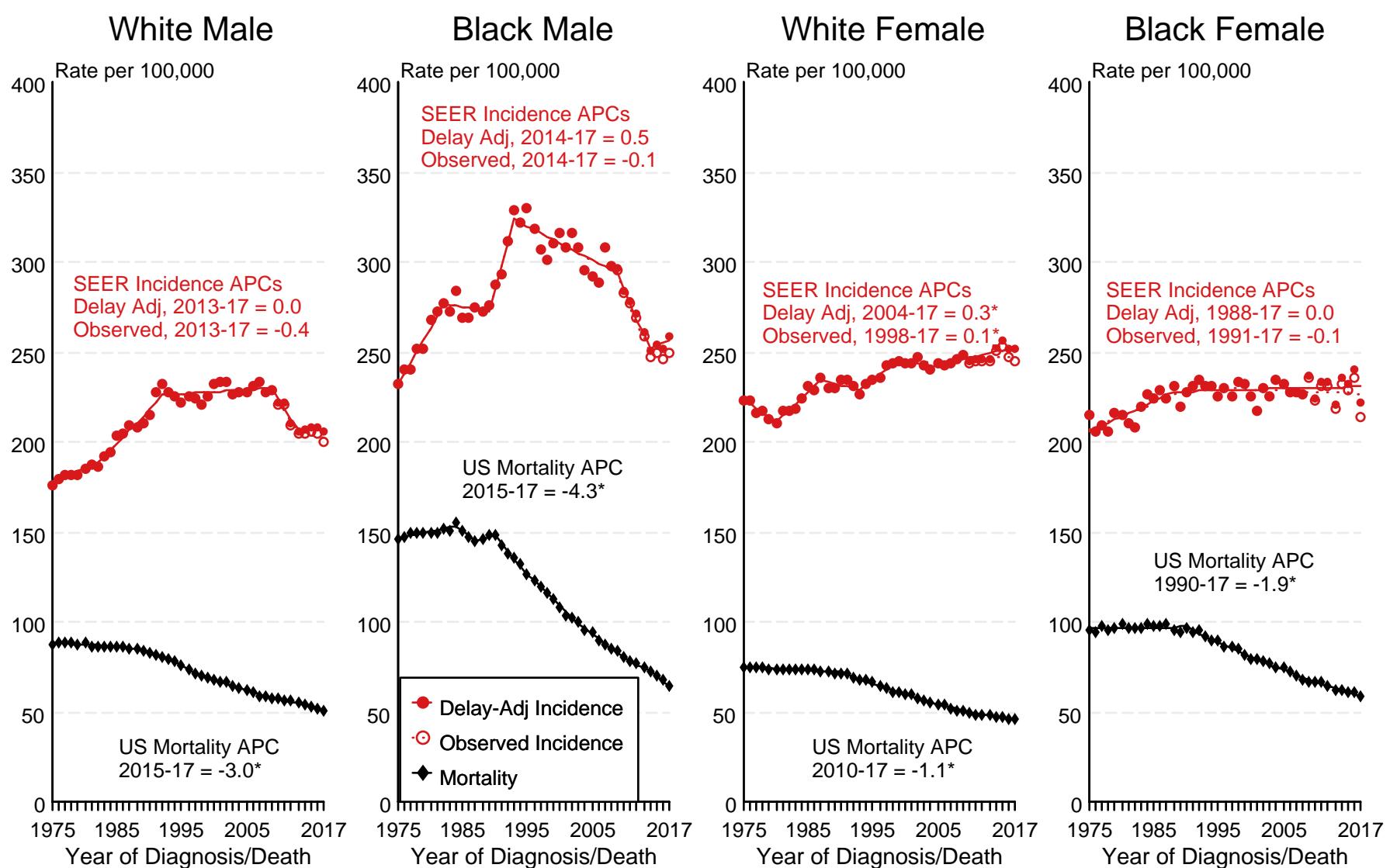
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

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

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

Figure 2.2

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a All Cancer Sites, 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).

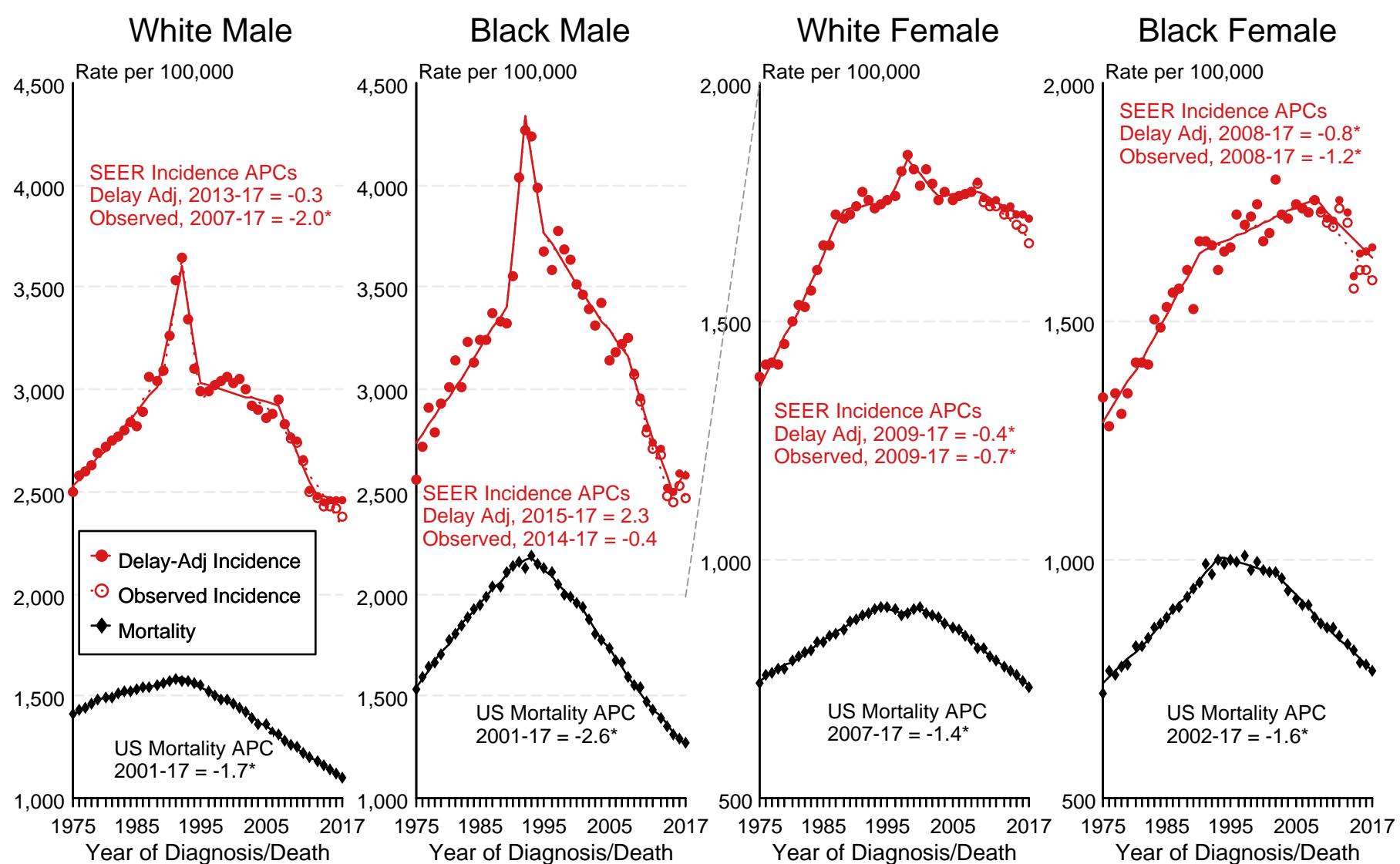
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

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

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

Figure 2.3

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a All Cancer Sites, 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 4.8, April 2020, National Cancer Institute.

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

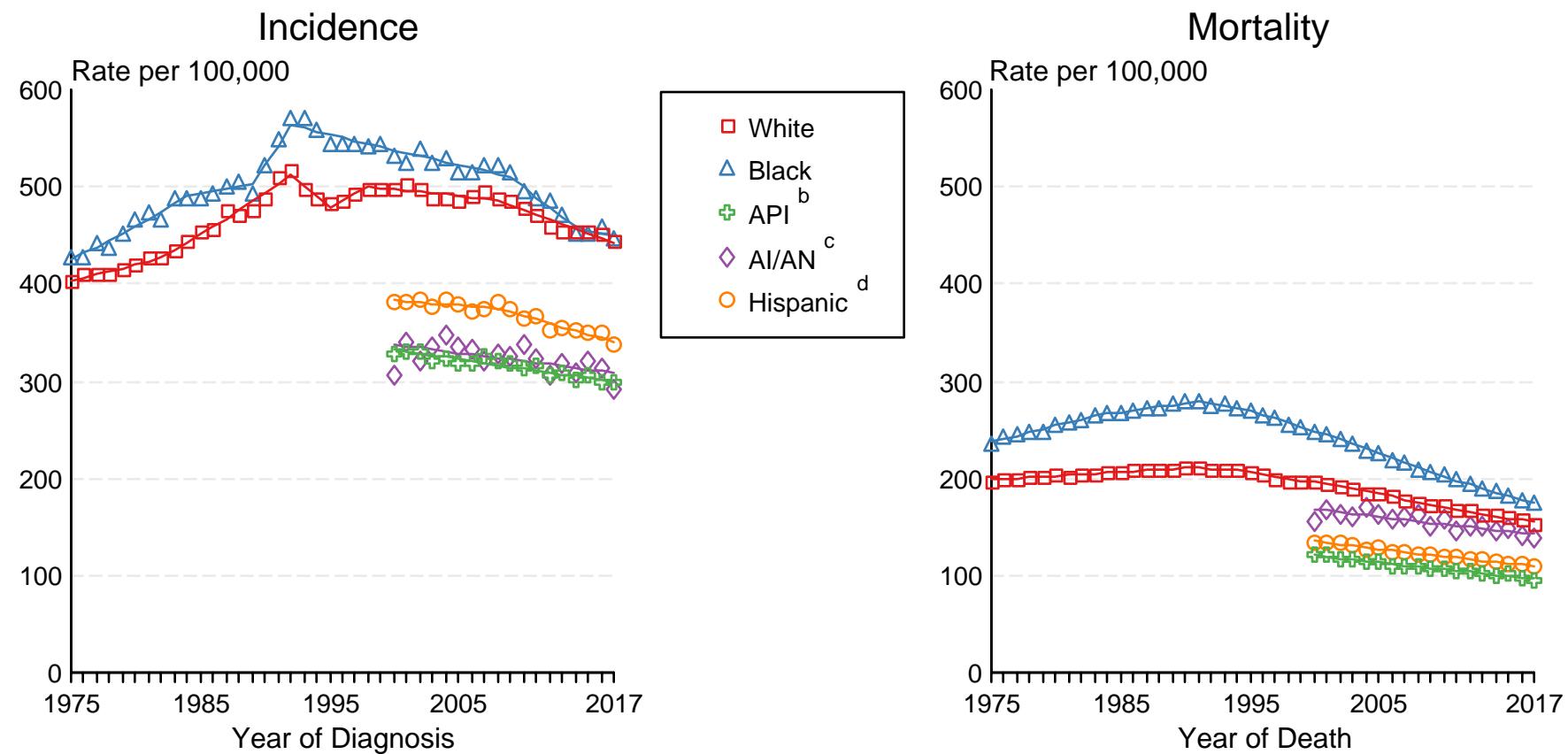
* The APC is significantly different from zero ($p < 0.05$).

Figure 2.4

SEER Incidence and US Death Rates^a

All Cancer Sites, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2017
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 2000-2017



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

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

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

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

^b API = Asian/Pacific Islander.

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

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