

Table 6.1
Cancer of the Colon and Rectum (Invasive)

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

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	2004-13	2009-13								
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2013</u>														
All Races	1975-85	0.8*	1985-95	-1.8*	1995-98	1.4	1998-07	-2.3*	2007-13	-3.4*			-3.1*	-3.4*
White	1975-85	0.8*	1985-95	-2.0*	1995-98	1.6	1998-07	-2.5*	2007-13	-3.6*			-3.2*	-3.6*
Black	1975-80	3.2*	1980-03	-0.1	2003-13	-2.9*							-2.9*	-2.9*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2013</u>														
All Races	1992-95	-2.1*	1995-98	1.6	1998-08	-2.2*	2008-13	-3.7*					-3.0*	-3.7*
White	1992-95	-2.2*	1995-98	1.7	1998-08	-2.4*	2008-13	-3.8*					-3.2*	-3.8*
Black	1992-04	-0.1	2004-13	-3.1*									-3.1*	-3.1*
<u>SEER 9 Observed Incidence^a, 1975-2013</u>														
All Races	1975-85	0.8*	1985-95	-1.8*	1995-98	1.5	1998-08	-2.4*	2008-13	-3.9*			-3.2*	-3.9*
White	1975-85	0.8*	1985-95	-2.0*	1995-98	1.6	1998-07	-2.5*	2007-13	-3.8*			-3.4*	-3.8*
Black	1975-80	3.3*	1980-04	-0.2	2004-13	-3.5*							-3.5*	-3.5*
<u>SEER 13 Observed Incidence^b, 1992-2013</u>														
All Races	1992-95	-2.1*	1995-98	1.6	1998-08	-2.2*	2008-13	-3.9*					-3.2*	-3.9*
White	1992-95	-2.2*	1995-98	1.7	1998-08	-2.4*	2008-13	-4.1*					-3.3*	-4.1*
White NH ^{ef}	1992-95	-2.2*	1995-98	1.8	1998-08	-2.5*	2008-13	-4.0*					-3.4*	-4.0*
Black	1992-04	-0.1	2004-13	-3.4*									-3.4*	-3.4*
Black NH ^{ef}	1992-04	-0.1	2004-13	-3.4*									-3.4*	-3.4*
API ^e	1992-02	-0.3	2002-13	-2.6*									-2.6*	-2.6*
AI/AN ^{eg}	1992-13	-0.4											-0.4	-0.4
Hispanic ^f	1992-95	-1.2	1995-98	3.6	1998-02	-1.9	2002-08	0.1	2008-13	-4.1*			-2.3*	-4.1*
<u>U.S. Cancer Mortality^c, 1975-2013</u>														
All Races	1975-84	-0.5*	1984-02	-1.8*	2002-05	-3.8*	2005-13	-2.5*					-2.7*	-2.5*
White	1975-84	-0.7*	1984-02	-1.9*	2002-05	-3.9*	2005-13	-2.5*					-2.6*	-2.5*
Black	1975-90	0.6*	1990-01	-0.8*	2001-13	-2.9*							-2.9*	-2.9*
<u>U.S. Cancer Mortality^c, 1992-2013</u>														
All Races	1992-02	-1.8*	2002-05	-3.8*	2005-13	-2.5*							-2.7*	-2.5*
White	1992-02	-1.9*	2002-05	-3.9*	2005-13	-2.5*							-2.6*	-2.5*
White NH ^{ef}	1992-02	-1.8*	2002-05	-4.0*	2005-13	-2.5*							-2.6*	-2.5*
Black	1992-01	-0.6*	2001-13	-3.0*									-3.0*	-3.0*
Black NH ^{ef}	1992-01	-0.6*	2001-13	-2.9*									-2.9*	-2.9*
API ^e	1992-13	-1.8*											-1.8*	-1.8*
AI/AN ^{eg}	1992-13	0.1											0.1	0.1
Hispanic ^f	1992-01	0.2	2001-13	-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). 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.

a

b

c

d

e

f

g

*

-

Table 6.2
Cancer of the Colon and Rectum (Invasive)

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

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	2004-13	2009-13										
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2013</u>														
All Races	1975-85	1.1*	1985-91	-1.2*	1991-95	-3.2*	1995-98	2.3	1998-13	-3.0*			-3.0*	-3.0*
White	1975-85	1.1*	1985-91	-1.4*	1991-95	-3.3*	1995-98	2.0	1998-07	-2.9*	2007-13	-3.8*	-3.5*	-3.8*
Black	1975-80	4.5	1980-02	0.0	2002-13	-2.6*							-2.6*	-2.6*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2013</u>														
All Races	1992-95	-2.6*	1995-98	1.4	1998-08	-2.5*	2008-13	-3.6*					-3.1*	-3.6*
White	1992-95	-2.8*	1995-98	1.5	1998-08	-2.8*	2008-13	-4.0*					-3.4*	-4.0*
Black	1992-03	-0.1	2003-13	-2.7*									-2.7*	-2.7*
<u>SEER 9 Observed Incidence^a, 1975-2013</u>														
All Races	1975-85	1.1*	1985-91	-1.2*	1991-95	-3.1*	1995-98	1.7	1998-04	-2.5*	2004-13	-3.4*	-3.4*	-3.4*
White	1975-85	1.1*	1985-91	-1.4*	1991-95	-3.3*	1995-98	2.0	1998-07	-2.9*	2007-13	-4.1*	-3.7*	-4.1*
Black	1975-80	4.5	1980-02	0.0	2002-13	-2.8*							-2.8*	-2.8*
<u>SEER 13 Observed Incidence^b, 1992-2013</u>														
All Races	1992-95	-2.6*	1995-98	1.4	1998-08	-2.6*	2008-13	-3.8*					-3.3*	-3.8*
White	1992-95	-2.8*	1995-98	1.5	1998-08	-2.8*	2008-13	-4.2*					-3.6*	-4.2*
White NH ^{ef}	1992-95	-2.9*	1995-98	1.6	1998-08	-2.9*	2008-13	-4.2*					-3.7*	-4.2*
Black	1992-03	-0.1	2003-13	-3.0*									-3.0*	-3.0*
Black NH ^{ef}	1992-03	-0.1	2003-13	-2.9*									-2.9*	-2.9*
API ^e	1992-01	-0.4	2001-13	-2.5*									-2.5*	-2.5*
AI/AN ^{eg}	1992-13	-0.3											-0.3	-0.3
Hispanic ^f	1992-98	1.4	1998-09	-0.9*	2009-13	-4.2*							-2.4*	-4.2*
<u>U.S. Cancer Mortality^c, 1975-2013</u>														
All Races	1975-78	0.8	1978-84	-0.3	1984-90	-1.3*	1990-02	-2.0*	2002-05	-3.9*	2005-13	-2.6*	-2.7*	-2.6*
White	1975-79	0.6	1979-87	-0.8*	1987-02	-2.1*	2002-05	-4.1*	2005-13	-2.6*			-2.7*	-2.6*
Black	1975-90	1.2*	1990-02	-0.7*	2002-13	-2.7*							-2.7*	-2.7*
<u>U.S. Cancer Mortality^c, 1992-2013</u>														
All Races	1992-02	-2.0*	2002-05	-4.0*	2005-13	-2.5*							-2.7*	-2.5*
White	1992-02	-2.1*	2002-05	-4.1*	2005-13	-2.6*							-2.7*	-2.6*
White NH ^{ef}	1992-02	-2.1*	2002-05	-4.2*	2005-13	-2.6*							-2.8*	-2.6*
Black	1992-02	-0.8*	2002-13	-2.7*									-2.7*	-2.7*
Black NH ^{ef}	1992-02	-0.7*	2002-13	-2.6*									-2.6*	-2.6*
API ^e	1992-13	-1.9*											-1.9*	-1.9*
AI/AN ^{eg}	1992-96	14.8	1996-13	-1.0									-1.0	-1.0
Hispanic ^f	1992-98	0.7	1998-13	-1.4*									-1.4*	-1.4*

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.

a
b
c
d
e
f

g
*
-

Table 6.3
Cancer of the Colon and Rectum (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,
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	2004-13	2009-13								
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2013</u>														
All Races	1975-85	0.3	1985-95	-1.9*	1995-98	1.8	1998-08	-2.0*	2008-13	-3.8*			-3.0*	-3.8*
White	1975-85	0.3	1985-95	-2.1*	1995-98	2.5	1998-13	-2.6*					-2.6*	-2.6*
Black	1975-05	-0.1	2005-13	-4.1*									-3.7*	-4.1*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2013</u>														
All Races	1992-95	-1.8*	1995-98	1.8	1998-08	-2.0*	2008-13	-3.8*					-3.0*	-3.8*
White	1992-95	-1.7*	1995-98	1.8	1998-08	-2.2*	2008-13	-3.7*					-3.0*	-3.7*
Black	1992-06	-0.2	2006-13	-4.3*									-3.4*	-4.3*
<u>SEER 9 Observed Incidence^a, 1975-2013</u>														
All Races	1975-85	0.3	1985-95	-1.9*	1995-98	1.8	1998-08	-2.1*	2008-13	-4.0*			-3.2*	-4.0*
White	1975-85	0.3	1985-95	-2.1*	1995-98	2.1	1998-08	-2.3*	2008-13	-3.9*			-3.2*	-3.9*
Black	1975-05	-0.1	2005-13	-4.4*									-4.0*	-4.4*
<u>SEER 13 Observed Incidence^b, 1992-2013</u>														
All Races	1992-95	-1.8*	1995-98	1.8	1998-08	-2.0*	2008-13	-4.1*					-3.1*	-4.1*
White	1992-95	-1.7*	1995-98	1.8	1998-08	-2.2*	2008-13	-3.9*					-3.1*	-3.9*
White NH ^{ef}	1992-95	-1.8	1995-98	2.0	1998-08	-2.3*	2008-13	-3.8*					-3.1*	-3.8*
Black	1992-06	-0.3	2006-13	-4.7*									-3.7*	-4.7*
Black NH ^{ef}	1992-00	0.4	2000-09	-1.5*	2009-13	-6.5*							-3.8*	-6.5*
API ^e	1992-10	-1.0*	2010-13	-8.1*									-3.4*	-6.4*
AI/AN ^{eg}	1992-13	-0.4											-0.4	-0.4
Hispanic ^f	1992-07	0.1	2007-13	-3.6*									-2.4*	-3.6*
<u>U.S. Cancer Mortality^c, 1975-2013</u>														
All Races	1975-84	-1.0*	1984-01	-1.8*	2001-13	-2.9*							-2.9*	-2.9*
White	1975-84	-1.2*	1984-01	-2.0*	2001-13	-2.8*							-2.8*	-2.8*
Black	1975-85	0.7*	1985-01	-0.7*	2001-13	-3.4*							-3.4*	-3.4*
<u>U.S. Cancer Mortality^c, 1992-2013</u>														
All Races	1992-00	-1.6*	2000-13	-2.8*									-2.8*	-2.8*
White	1992-00	-1.8*	2000-13	-2.8*									-2.8*	-2.8*
White NH ^{ef}	1992-00	-1.7*	2000-13	-2.8*									-2.8*	-2.8*
Black	1992-01	-0.7*	2001-13	-3.4*									-3.4*	-3.4*
Black NH ^{ef}	1992-01	-0.6*	2001-13	-3.3*									-3.3*	-3.3*
API ^e	1992-13	-1.7*											-1.7*	-1.7*
AI/AN ^{eg}	1992-13	0.0											0.0	0.0
Hispanic ^f	1992-02	0.3	2002-13	-2.2*									-2.2*	-2.2*

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).

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

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

Table 6.4
Cancer of the Colon (Invasive) and Cancer of the Rectum (Invasive)

Trends in SEER 9 Observed Incidence^a Using the Joinpoint Regression Program,
1975-2013 With up to Five Joinpoints,
By Race and Sex

		JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d
		Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2009-13
SEER 9 Observed Incidence^a for Cancer of the Colon, 1975-2013														
All Races	Both Sexes	1975-85	1.1*	1985-95	-1.6*	1995-01	-0.1	2001-13	-3.3*					-3.3*
All Races	Male	1975-85	1.7*	1985-91	-1.2*	1991-95	-3.0*	1995-98	1.3	1998-04	-2.5*	2004-13	-3.7*	-3.7*
All Races	Female	1975-85	0.6*	1985-93	-1.8*	1993-02	-0.3	2002-13	-3.2*					-3.2*
White	Both Sexes	1975-85	1.1*	1985-95	-1.9*	1995-98	1.3	1998-07	-2.4*	2007-13	-4.2*			-4.2*
White	Male	1975-85	1.7*	1985-91	-1.4*	1991-95	-3.1*	1995-98	1.6	1998-08	-3.0*	2008-13	-4.7*	-4.7*
White	Female	1975-85	0.6*	1985-93	-2.1*	1993-01	-0.1	2001-13	-3.1*					-3.1*
Black	Both Sexes	1975-80	3.6*	1980-03	-0.1	2003-13	-3.6*							-3.6*
Black	Male	1975-87	1.8*	1987-03	-0.4	2003-13	-3.4*							-3.4*
Black	Female	1975-04	-0.1	2004-13	-4.3*									-4.3*
SEER 9 Observed Incidence^a for Cancer of the Rectum, 1975-2013														
All Races	Both Sexes	1975-87	-0.3	1987-95	-2.4*	1995-98	2.7	1998-13	-2.3*					-2.3*
All Races	Male	1975-89	-0.3	1989-94	-3.6*	1994-98	1.7	1998-13	-2.6*					-2.6*
All Races	Female	1975-84	-0.2	1984-95	-2.2*	1995-98	2.6	1998-13	-2.2*					-2.2*
White	Both Sexes	1975-85	-0.1	1985-95	-2.3*	1995-98	2.5	1998-13	-2.7*					-2.7*
White	Male	1975-89	-0.3	1989-94	-3.9*	1994-99	1.1	1999-13	-3.1*					-3.1*
White	Female	1975-84	-0.2	1984-95	-2.3*	1995-98	2.5	1998-13	-2.5*					-2.5*
Black	Both Sexes	1975-08	0.0	2008-13	-4.4*									-4.4*
Black	Male	1975-08	0.0	2008-13	-3.8									-3.8
Black	Female	1975-09	-0.1	2009-13	-7.4*									-7.4*

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). The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint. The APC/AAPC is significantly different from zero ($p < .05$). Joinpoint regression line analysis could not be performed on data series.

a

b

*

-

Table 6.5
Cancer of the Colon and Rectum (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975	59.54	68.45	53.66	60.19	69.76	54.05	56.85	59.33	54.66
1976	61.34	71.72	54.12	62.14	72.68	55.00	55.04	58.53	51.28
1977	62.40	73.48	54.95	63.19	74.32	55.75	60.69	75.66	51.47
1978	62.03	72.34	55.25	62.77	73.87	55.59	62.10	65.83	60.42
1979	62.37	74.11	54.58	62.94	75.19	54.94	58.57	61.79	56.16
1980	63.76	74.56	56.54	63.95	74.88	56.83	70.83	79.71	64.23
1981	64.25	75.82	56.49	64.87	76.68	57.14	62.83	72.89	55.97
1982	62.79	75.18	54.51	63.44	76.24	55.05	61.25	68.97	55.92
1983	63.65	75.54	55.61	64.24	76.51	56.04	66.79	75.80	61.13
1984	64.82	77.65	56.08	65.83	79.26	56.74	62.46	70.42	58.20
1985	66.30	79.19	57.31	67.19	80.20	58.35	64.06	74.39	56.39
1986	64.18	77.78	54.70	64.57	78.88	54.72	64.66	73.09	58.75
1987	62.71	77.47	52.68	62.89	78.18	52.63	66.28	77.63	59.01
1988	61.37	75.19	51.80	61.54	75.77	51.73	63.00	72.41	56.62
1989	61.70	74.98	52.42	61.94	75.42	52.64	64.52	79.41	54.76
1990	60.70	74.36	51.28	60.66	74.75	51.03	66.87	75.15	61.66
1991	59.48	72.91	50.04	59.29	73.11	49.65	65.65	76.42	58.16
1992	58.00	70.41	49.21	57.81	70.66	48.68	65.66	78.59	57.57
1993	56.79	68.43	48.30	56.31	68.06	47.79	64.49	78.12	55.25
1994	55.63	66.28	47.73	55.37	66.32	47.17	64.44	75.27	57.98
1995	54.04	63.84	46.91	53.68	63.40	46.58	62.04	71.49	55.98
1996	54.78	65.60	46.67	54.73	65.94	46.34	58.63	66.66	53.11
1997	56.40	68.08	47.92	56.35	67.87	47.99	64.58	77.55	56.17
1998	56.78	67.07	49.31	56.66	67.19	48.99	63.31	74.49	56.30
1999	55.48	65.75	47.84	55.28	65.85	47.18	63.21	71.89	58.15
2000	54.12	63.65	46.76	53.73	63.02	46.46	64.37	74.04	58.06
2001	53.59	63.05	46.20	52.95	62.60	45.31	64.35	74.94	57.59
2002	53.17	61.54	46.64	52.27	60.28	45.88	63.22	74.04	56.59
2003	50.80	59.49	43.93	50.22	58.55	43.46	62.57	75.31	54.68
2004	49.88	58.60	43.16	49.04	57.87	42.08	62.43	74.43	54.53
2005	47.85	55.30	41.91	47.41	55.10	41.16	58.39	65.14	54.71
2006	46.91	53.34	41.70	46.16	52.65	40.73	58.24	65.33	53.64
2007	46.48	53.42	40.79	45.57	52.25	40.03	57.94	65.83	52.30
2008	45.38	51.66	40.17	44.57	50.56	39.54	55.17	65.04	48.00
2009	43.38	49.07	38.71	42.08	47.58	37.43	54.17	61.40	49.66
2010	41.09	47.22	36.11	39.80	45.88	34.71	49.99	57.26	45.23
2011	39.87	45.70	35.09	38.77	43.99	34.37	48.59	56.49	43.07
2012	39.05	44.25	34.65	38.19	42.81	34.15	48.29	57.40	41.85
2013	37.87	43.72	32.97	36.71	41.54	32.61	47.77	59.17	39.68

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

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

Table 6.6
Cancer of the Colon and Rectum (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:									
1975-2013	53.80	63.10	46.83	53.83	63.17	46.81	59.68	69.06	53.47
1975	59.54	68.45	53.66	60.19	69.76	54.05	56.85	59.33	54.66
1976	61.34	71.72	54.12	62.14	72.68	55.00	55.04	58.53	51.28
1977	62.40	73.48	54.95	63.19	74.32	55.75	60.69	75.66	51.47
1978	62.03	72.34	55.25	62.77	73.87	55.59	62.10	65.83	60.42
1979	62.37	74.11	54.58	62.94	75.19	54.94	58.57	61.79	56.16
1980	63.76	74.56	56.54	63.95	74.88	56.83	70.83	79.71	64.23
1981	64.25	75.82	56.49	64.87	76.68	57.14	62.83	72.89	55.97
1982	62.79	75.18	54.51	63.44	76.24	55.05	61.25	68.97	55.92
1983	63.65	75.54	55.61	64.24	76.51	56.04	66.79	75.80	61.13
1984	64.82	77.65	56.08	65.83	79.26	56.74	62.46	70.42	58.20
1985	66.30	79.19	57.31	67.19	80.20	58.35	64.06	74.39	56.39
1986	64.18	77.78	54.70	64.57	78.88	54.72	64.66	73.09	58.75
1987	62.71	77.47	52.68	62.89	78.18	52.63	66.28	77.63	59.01
1988	61.37	75.19	51.80	61.54	75.77	51.73	63.00	72.41	56.62
1989	61.70	74.98	52.42	61.94	75.42	52.64	64.52	79.41	54.76
1990	60.70	74.36	51.28	60.66	74.75	51.03	66.87	75.15	61.66
1991	59.48	72.91	50.04	59.29	73.11	49.65	65.65	76.42	58.16
1992	58.00	70.41	49.21	57.81	70.66	48.68	65.66	78.59	57.57
1993	56.79	68.43	48.30	56.31	68.06	47.79	64.49	78.12	55.25
1994	55.63	66.28	47.73	55.37	66.32	47.17	64.44	75.27	57.98
1995	54.04	63.84	46.91	53.68	63.40	46.58	62.04	71.49	55.98
1996	54.78	65.60	46.67	54.73	65.94	46.34	58.63	66.66	53.11
1997	56.40	68.08	47.92	56.35	67.87	47.99	64.58	77.55	56.17
1998	56.78	67.07	49.31	56.66	67.19	48.99	63.31	74.49	56.30
1999	55.48	65.75	47.84	55.28	65.85	47.18	63.21	71.89	58.15
2000	54.12	63.65	46.76	53.73	63.02	46.46	64.37	74.04	58.06
2001	53.59	63.05	46.20	52.95	62.60	45.31	64.35	74.94	57.59
2002	53.17	61.54	46.64	52.27	60.28	45.88	63.22	74.04	56.59
2003	50.80	59.49	43.93	50.22	58.55	43.46	62.57	75.31	54.68
2004	49.88	58.60	43.16	49.04	57.87	42.08	62.43	74.43	54.53
2005	47.81	55.26	41.89	47.37	55.05	41.13	58.26	64.99	54.59
2006	46.85	53.26	41.65	46.10	52.58	40.68	57.98	65.03	53.42
2007	46.38	53.31	40.71	45.47	52.14	39.95	57.58	65.39	52.00
2008	45.25	51.51	40.07	44.44	50.41	39.43	54.71	64.47	47.61
2009	43.23	48.90	38.59	41.93	47.41	37.31	53.62	60.69	49.20
2010	40.92	47.02	35.97	39.63	45.67	34.57	49.40	56.50	44.74
2011	39.63	45.40	34.89	38.53	43.71	34.16	47.90	55.63	42.50
2012	38.68	43.81	34.34	37.81	42.38	33.82	47.33	56.18	41.06
2013	37.20	42.90	32.42	36.01	40.71	32.02	46.26	57.18	38.51

^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 6.7
Cancer of the Colon (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:									
1975-2013	38.75	43.80	35.04	38.76	43.86	34.99	45.61	51.69	41.74
1975	41.35	45.40	38.91	41.73	46.13	39.15	42.83	44.14	41.64
1976	43.04	47.75	39.94	43.44	48.20	40.38	43.08	43.60	41.91
1977	43.96	49.54	40.35	44.65	50.07	41.16	45.39	58.33	37.66
1978	43.84	49.10	40.59	44.10	49.84	40.63	47.71	48.94	47.67
1979	43.77	50.21	39.61	44.10	51.03	39.71	44.68	45.73	43.84
1980	45.57	50.69	42.34	45.59	50.90	42.33	55.19	58.35	52.85
1981	45.48	51.34	41.73	45.89	51.94	42.13	46.85	50.60	44.36
1982	45.76	53.45	40.68	46.07	54.09	40.85	48.27	52.48	45.19
1983	46.10	53.01	41.63	46.40	53.44	41.86	50.26	58.65	45.25
1984	46.51	54.57	41.32	47.03	55.55	41.58	48.75	54.18	46.05
1985	47.88	55.06	42.95	48.39	55.61	43.62	50.01	57.49	44.33
1986	46.79	54.37	41.56	47.05	55.17	41.49	49.36	55.41	45.46
1987	45.25	54.42	39.18	45.15	54.49	39.10	51.42	59.99	45.73
1988	44.30	52.60	38.66	44.28	52.87	38.42	48.79	54.02	45.32
1989	44.38	52.45	38.96	44.46	52.49	39.17	49.00	60.41	41.70
1990	44.19	51.99	38.92	44.06	52.01	38.75	52.14	57.98	48.56
1991	43.59	51.84	37.90	43.30	51.85	37.40	51.74	57.75	47.67
1992	42.30	49.65	37.24	42.04	49.75	36.70	51.04	60.45	45.43
1993	41.60	48.95	36.32	41.06	48.61	35.67	51.16	60.58	45.02
1994	40.85	46.95	36.36	40.62	47.04	35.82	50.12	57.06	46.30
1995	39.66	45.08	35.84	39.29	44.67	35.46	48.88	55.18	45.36
1996	39.38	45.41	34.88	39.30	45.83	34.41	44.68	48.54	42.13
1997	41.09	48.38	35.97	41.09	48.24	36.12	49.27	59.13	42.65
1998	41.07	46.85	37.06	40.93	47.07	36.60	47.96	54.98	44.16
1999	39.82	45.49	35.67	39.58	45.46	35.11	48.57	54.88	45.02
2000	39.37	44.44	35.48	38.97	43.89	35.15	51.06	57.47	47.05
2001	39.23	44.12	35.50	38.81	43.85	34.88	49.14	56.05	44.82
2002	38.71	43.32	35.14	37.92	42.20	34.52	49.65	57.19	45.00
2003	36.97	41.46	33.38	36.58	40.71	33.17	47.82	56.87	42.33
2004	36.34	41.43	32.53	35.77	40.99	31.77	47.60	55.42	42.57
2005	34.48	38.03	31.69	34.22	38.03	31.13	44.50	49.03	42.37
2006	33.98	37.37	31.21	33.48	36.90	30.61	44.91	49.58	41.79
2007	33.10	36.24	30.59	32.72	35.84	30.23	42.40	46.31	39.45
2008	32.75	35.96	30.10	32.43	35.58	29.78	40.34	45.88	36.37
2009	30.91	33.39	28.91	30.18	32.67	28.06	39.50	44.21	36.93
2010	28.95	32.26	26.28	28.24	31.51	25.48	35.95	40.11	33.41
2011	28.07	30.96	25.70	27.37	29.94	25.18	35.89	41.22	32.26
2012	27.57	29.90	25.62	27.17	29.11	25.47	35.33	41.01	31.43
2013	26.35	28.95	24.17	25.66	27.67	23.96	34.68	41.53	29.87

^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 6.8
Cancer of the Rectum (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:									
1975-2013	15.05	19.30	11.79	15.07	19.31	11.82	14.07	17.37	11.74
1975	18.18	23.05	14.75	18.46	23.63	14.89	14.02	15.19	13.01
1976	18.30	23.97	14.18	18.70	24.48	14.63	11.96	14.93	9.37
1977	18.44	23.94	14.60	18.54	24.26	14.59	15.30	17.33	13.81
1978	18.19	23.25	14.66	18.67	24.03	14.96	14.39	16.89	12.76
1979	18.60	23.89	14.97	18.84	24.16	15.23	13.90	16.06	12.31
1980	18.18	23.88	14.20	18.36	23.98	14.51	15.65	21.36	11.38
1981	18.76	24.48	14.76	18.99	24.73	15.01	15.99	22.30	11.61
1982	17.02	21.73	13.83	17.36	22.15	14.19	12.98	16.49	10.73
1983	17.55	22.52	13.98	17.85	23.07	14.18	16.54	17.15	15.89
1984	18.31	23.08	14.76	18.80	23.72	15.16	13.71	16.24	12.15
1985	18.42	24.13	14.36	18.80	24.59	14.73	14.05	16.90	12.06
1986	17.39	23.41	13.13	17.52	23.72	13.23	15.31	17.68	13.28
1987	17.47	23.05	13.49	17.74	23.69	13.53	14.87	17.64	13.29
1988	17.07	22.59	13.14	17.26	22.90	13.30	14.21	18.38	11.30
1989	17.32	22.52	13.45	17.47	22.93	13.47	15.52	19.00	13.05
1990	16.51	22.37	12.36	16.60	22.74	12.28	14.73	17.16	13.10
1991	15.88	21.07	12.14	15.99	21.25	12.25	13.91	18.68	10.50
1992	15.70	20.75	11.97	15.77	20.91	11.99	14.62	18.14	12.14
1993	15.19	19.48	11.98	15.25	19.44	12.12	13.32	17.54	10.22
1994	14.78	19.33	11.37	14.74	19.28	11.35	14.32	18.21	11.68
1995	14.38	18.76	11.07	14.39	18.73	11.12	13.16	16.31	10.63
1996	15.39	20.18	11.79	15.43	20.11	11.93	13.95	18.12	10.99
1997	15.30	19.70	11.95	15.27	19.63	11.87	15.31	18.42	13.52
1998	15.72	20.22	12.25	15.74	20.12	12.39	15.35	19.52	12.14
1999	15.66	20.26	12.18	15.70	20.39	12.07	14.64	17.01	13.13
2000	14.75	19.22	11.27	14.76	19.12	11.30	13.31	16.57	11.01
2001	14.35	18.92	10.70	14.14	18.75	10.43	15.21	18.88	12.77
2002	14.46	18.21	11.50	14.35	18.08	11.36	13.57	16.86	11.59
2003	13.83	18.02	10.54	13.64	17.85	10.29	14.75	18.44	12.35
2004	13.54	17.17	10.63	13.27	16.88	10.31	14.83	19.01	11.97
2005	13.33	17.23	10.20	13.15	17.02	10.00	13.77	15.96	12.22
2006	12.87	15.89	10.44	12.62	15.68	10.07	13.08	15.45	11.62
2007	13.28	17.07	10.12	12.75	16.30	9.71	15.17	19.08	12.55
2008	12.50	15.56	9.97	12.01	14.83	9.65	14.37	18.59	11.24
2009	12.32	15.51	9.68	11.75	14.74	9.25	14.11	16.47	12.27
2010	11.97	14.76	9.68	11.40	14.16	9.09	13.45	16.39	11.33
2011	11.56	14.44	9.19	11.16	13.77	8.98	12.01	14.41	10.24
2012	11.11	13.91	8.72	10.64	13.26	8.36	12.00	15.18	9.63
2013	10.86	13.95	8.25	10.35	13.04	8.06	11.58	15.65	8.64

^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 6.9
Cancer of the Colon and Rectum (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:									
1975-2013	21.57	25.90	18.49	21.32	25.65	18.21	26.61	32.04	23.12
1975	28.09	32.84	24.96	28.30	33.24	25.06	26.79	30.09	24.55
1976	28.58	33.34	25.44	28.74	33.76	25.45	28.23	31.16	26.26
1977	28.19	33.21	24.87	28.34	33.49	24.97	27.61	31.44	24.92
1978	28.54	33.75	25.13	28.70	34.12	25.17	27.91	31.20	25.66
1979	28.15	33.56	24.63	28.25	33.92	24.57	28.16	31.57	25.96
1980	28.05	33.74	24.35	28.12	33.99	24.32	28.81	33.18	25.89
1981	27.52	32.95	23.97	27.53	33.16	23.85	28.93	32.83	26.32
1982	27.24	32.96	23.55	27.21	33.11	23.42	29.11	33.71	26.12
1983	27.12	33.08	23.23	27.13	33.32	23.11	28.67	32.90	25.82
1984	27.35	33.02	23.61	27.30	33.12	23.49	29.58	34.65	26.22
1985	26.93	32.66	23.11	26.75	32.74	22.77	30.49	34.10	28.04
1986	26.16	32.05	22.31	26.00	32.01	22.07	29.82	35.36	26.35
1987	25.89	31.91	21.95	25.68	31.85	21.63	29.85	35.10	26.48
1988	25.28	31.08	21.46	25.08	31.04	21.16	29.18	34.29	25.88
1989	25.01	30.80	21.16	24.70	30.52	20.82	30.05	36.37	26.07
1990	24.65	30.77	20.64	24.25	30.43	20.18	30.77	37.64	26.59
1991	24.01	29.64	20.30	23.63	29.35	19.85	30.02	35.80	26.50
1992	23.62	29.32	19.85	23.25	28.99	19.42	29.47	36.23	25.43
1993	23.31	28.56	19.77	22.88	28.18	19.28	29.77	35.84	26.04
1994	22.92	28.28	19.28	22.50	27.89	18.84	29.04	35.66	24.88
1995	22.59	27.65	19.14	22.11	27.16	18.64	29.54	36.30	25.47
1996	21.86	26.71	18.51	21.39	26.29	17.98	28.59	34.52	24.86
1997	21.47	26.23	18.11	20.95	25.68	17.59	28.84	35.07	24.80
1998	21.19	25.62	18.03	20.68	25.13	17.48	28.31	33.90	24.78
1999	20.93	25.48	17.75	20.43	24.99	17.20	28.51	34.50	24.70
2000	20.67	25.08	17.50	20.16	24.46	17.02	28.15	34.98	23.88
2001	20.16	24.37	17.12	19.61	23.83	16.52	27.75	33.39	24.26
2002	19.76	24.01	16.63	19.24	23.39	16.13	27.08	33.73	22.96
2003	19.15	23.18	16.19	18.61	22.62	15.62	26.64	32.49	22.92
2004	18.10	21.81	15.34	17.61	21.28	14.85	25.01	30.64	21.41
2005	17.56	21.22	14.83	17.00	20.60	14.27	25.13	30.87	21.45
2006	17.28	20.70	14.73	16.77	20.04	14.27	24.43	31.28	20.30
2007	16.91	20.23	14.36	16.43	19.66	13.90	23.56	29.29	19.87
2008	16.46	19.64	13.98	15.96	18.99	13.54	22.84	28.73	18.95
2009	15.81	19.06	13.28	15.37	18.57	12.84	21.89	26.98	18.54
2010	15.51	18.75	12.99	15.04	18.15	12.57	21.50	27.45	17.62
2011	15.11	18.06	12.77	14.64	17.51	12.33	21.08	26.16	17.70
2012	14.69	17.59	12.37	14.30	17.05	12.05	19.89	25.42	16.18
2013	14.45	17.34	12.12	14.13	16.86	11.87	19.28	24.61	15.68

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

Table 6.10
Cancer of the Colon and Rectum (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	41.0	47.1	36.0	40.1	46.0	35.2	50.7	59.2	44.8
Under 65	17.9	20.2	15.7	17.1	19.3	14.9	23.5	26.3	21.1
65 and over	201.1	233.5	176.5	199.6	230.8	175.6	239.0	286.6	208.5
All ages (IARC world std) ^c	26.0	30.0	22.5	25.2	29.0	21.8	33.2	38.5	29.2
Age-Specific Rates, 2009-2013									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	0.1	-	0.1	0.1	-	0.2	-	-	-
15-19	0.4	0.4	0.4	0.4	0.4	0.5	-	-	-
20-24	1.1	1.1	1.0	1.2	1.3	1.0	0.8	0.7	0.9
25-29	2.4	2.4	2.5	2.5	2.5	2.5	2.3	2.0	2.5
30-34	5.0	5.2	4.8	5.1	5.3	4.9	5.0	4.5	5.5
35-39	9.0	9.1	8.9	9.1	9.2	8.9	9.5	9.2	9.8
40-44	17.2	17.8	16.7	16.8	17.4	16.2	20.2	20.5	20.0
45-49	31.2	33.5	29.0	30.0	32.1	27.8	39.5	42.7	36.5
50-54	58.0	65.0	51.1	54.6	61.9	47.4	75.5	81.5	70.1
55-59	68.7	80.8	57.2	64.7	76.1	53.7	96.4	114.4	80.8
60-64	94.0	113.5	76.2	88.8	106.7	71.8	135.1	161.8	113.4
65-69	132.5	159.9	108.3	127.3	153.1	103.8	176.9	215.0	147.3
70-74	176.0	208.7	148.6	173.0	205.4	145.3	223.3	267.0	191.6
75-79	218.9	250.7	194.5	218.4	248.3	194.8	266.2	308.6	238.8
80-84	267.9	302.6	244.4	270.2	301.7	248.5	294.1	376.9	248.8
85+	295.8	337.2	274.8	300.3	342.7	278.8	298.1	343.3	279.5
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2009-2013									
All ages	15.1	18.1	12.7	14.7	17.6	12.3	20.7	26.1	17.1
Under 65	4.9	5.8	4.0	4.6	5.5	3.7	7.3	8.8	6.1
65 and over	85.8	103.4	72.8	84.3	101.2	71.6	113.0	145.5	93.3
All ages (IARC world std) ^c	8.6	10.4	7.1	8.3	10.0	6.8	12.3	15.4	10.1
Age-Specific Rates, 2009-2013									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.0	0.0	-	0.0	-	-	-	-	-
20-24	0.2	0.2	0.2	0.2	0.2	0.1	0.3	0.3	0.2
25-29	0.5	0.5	0.4	0.4	0.5	0.4	0.6	0.6	0.6
30-34	1.1	1.2	1.0	1.0	1.2	0.9	1.4	1.5	1.3
35-39	2.2	2.5	1.9	2.2	2.5	1.8	3.0	3.4	2.7
40-44	4.2	4.6	3.8	4.0	4.5	3.6	5.7	6.4	5.2
45-49	8.0	9.1	6.9	7.6	8.6	6.6	11.5	13.4	9.8
50-54	13.8	16.1	11.6	13.0	15.2	10.8	21.1	24.5	18.1
55-59	20.4	25.0	16.1	19.2	23.6	15.0	31.8	39.4	25.3
60-64	30.3	37.6	23.6	28.7	35.8	22.1	47.3	59.1	37.7
65-69	42.2	52.8	32.7	40.4	50.6	31.2	65.1	84.2	50.4
70-74	61.3	76.4	48.5	59.6	74.3	47.0	86.3	113.0	67.3
75-79	86.2	105.1	71.6	84.7	102.6	70.6	115.2	151.8	91.9
80-84	121.4	145.1	105.4	119.4	142.4	103.5	158.6	202.6	135.0
85+	190.6	219.6	176.2	190.2	218.3	176.2	217.1	271.0	195.6

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

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

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

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

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

Table 6.11
Cancer of the Colon (Invasive) and Cancer of the Rectum (Invasive)

SEER Incidence^a 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>Cancer of the Colon</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2009-2013									
All ages	29.0	32.1	26.5	28.4	31.4	26.0	37.9	43.1	34.3
Under 65	11.0	12.1	10.1	10.4	11.5	9.5	16.0	17.3	14.9
65 and over	153.3	170.9	140.0	152.7	169.2	139.9	188.9	221.3	168.2
All ages (IARC world std) ^b	17.7	19.7	16.0	17.1	19.1	15.4	24.2	27.3	21.9
Age-Specific Rates, 2009-2013									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	0.1	-	0.1	0.1	-	-	-	-	-
15-19	0.3	0.3	0.3	0.3	0.3	0.4	-	-	-
20-24	0.7	0.8	0.7	0.8	0.9	0.7	0.5	-	-
25-29	1.5	1.4	1.6	1.5	1.4	1.6	1.4	1.1	1.6
30-34	3.0	3.0	3.0	3.2	3.3	3.1	3.0	2.4	3.5
35-39	5.4	5.3	5.5	5.4	5.5	5.3	6.2	5.4	6.9
40-44	10.3	10.2	10.4	9.8	9.8	9.8	14.0	13.6	14.3
45-49	18.5	18.9	18.1	17.5	17.9	17.1	27.1	28.0	26.3
50-54	34.3	37.4	31.2	32.0	35.6	28.4	49.0	51.8	46.5
55-59	42.8	48.7	37.3	40.0	45.5	34.7	66.0	76.8	56.8
60-64	62.5	72.7	53.2	58.7	68.1	49.8	96.9	110.3	85.9
65-69	92.6	107.7	79.2	88.7	102.7	75.9	134.2	161.0	113.4
70-74	130.6	148.9	115.4	128.4	146.5	112.9	175.5	202.8	155.7
75-79	167.9	184.8	155.0	167.9	183.0	156.0	211.2	239.6	192.9
80-84	212.2	229.7	200.4	215.3	230.0	205.2	235.0	295.4	201.9
85+	240.9	264.0	229.2	245.2	268.9	233.3	245.2	279.7	232.6
<u>Cancer of the Rectum</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2009-2013									
All ages	12.0	15.0	9.5	11.7	14.6	9.3	12.9	16.1	10.5
Under 65	6.8	8.1	5.6	6.6	7.8	5.5	7.5	9.0	6.2
65 and over	47.7	62.5	36.5	47.0	61.6	35.7	50.2	65.3	40.4
All ages (IARC world std) ^b	8.3	10.3	6.5	8.0	9.9	6.4	9.0	11.1	7.3
Age-Specific Rates, 2009-2013									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	-	-	0.1	-	-	-	-	-
20-24	0.4	0.4	0.3	0.4	0.4	0.3	-	-	-
25-29	1.0	1.0	0.9	0.9	1.0	0.9	0.9	0.9	0.9
30-34	2.0	2.1	1.9	1.9	2.1	1.8	2.1	2.1	2.1
35-39	3.6	3.8	3.4	3.7	3.7	3.7	3.3	3.8	2.9
40-44	6.9	7.6	6.2	7.0	7.7	6.4	6.3	6.9	5.7
45-49	12.7	14.6	10.9	12.5	14.2	10.8	12.4	14.7	10.2
50-54	23.7	27.6	20.0	22.6	26.3	19.0	26.5	29.7	23.6
55-59	25.9	32.1	20.0	24.7	30.6	18.9	30.3	37.6	24.0
60-64	31.5	40.7	23.0	30.1	38.6	22.1	38.3	51.5	27.4
65-69	39.9	52.2	29.1	38.6	50.4	27.9	42.7	54.0	33.9
70-74	45.3	59.8	33.2	44.6	58.9	32.3	47.7	64.1	35.9
75-79	51.0	65.9	39.5	50.5	65.3	38.8	55.0	69.0	45.9
80-84	55.6	72.9	44.0	54.9	71.7	43.3	59.1	81.5	46.9
85+	54.9	73.3	45.6	55.1	73.9	45.5	52.9	67.6	46.9

^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 6.12
Cancer of the Colon and Rectum (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	-	-	-	-	-	-
1970-1973 ^a	-	-	-	-	-	-	-	-	-
1975-1977 ^b	49.8	49.0	50.6	50.1	49.3	50.7	44.6	43.3	45.9
1978-1980 ^b	51.2	50.2	52.2	51.6	50.6	52.5	45.4	43.4	46.9
1981-1983 ^b	54.0	53.8	54.2	54.4	54.4	54.3	46.5	42.8	49.5
1984-1986 ^b	57.7	57.7	57.6	58.4	58.5	58.2	48.4	47.5	49.0
1987-1989 ^b	59.6	59.8	59.3	60.0	60.5	59.5	52.3	49.9	54.5
1990-1992 ^b	61.2	61.0	61.3	61.9	61.7	62.0	52.9	54.4	51.5
1993-1995 ^b	59.9	59.8	60.0	60.5	60.3	60.6	51.7	51.3	52.1
1996-1998 ^b	62.4	62.4	62.5	63.0	62.8	63.2	54.0	55.1	53.0
1999-2001 ^b	65.1	66.1	64.1	66.5	67.4	65.7	54.1	55.3	53.0
2002-2005 ^b	65.9	65.8	66.0	66.9	67.2	66.5	56.2	53.9	58.2
2006-2012 ^b	66.2 ^f	66.2 ^f	66.2 ^f	67.1 ^f	67.2 ^f	66.9 ^f	59.1 ^f	57.6 ^f	60.3 ^f
5-Year Period Survival (Percent)^{cd}									
2012	65.1	64.8	65.4	65.7	65.5	66.0	58.3	56.1	60.3
Stage Distribution (%) 2006-2012^{ce}									
All Stages									
Number of cases	209,895	107,990	101,905	163,542	84,797	78,745	25,653	12,345	13,308
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	39	40	39	39	40	39	38	37	38
Regional	35	35	36	36	36	36	32	32	32
Distant	21	21	20	20	20	20	25	26	24
Unstaged	5	4	5	4	4	5	5	5	5
5-Year Relative Survival (Percent), 2006-2012^c									
Age at Diagnosis:									
Ages <45	68.1	65.7	70.7	69.8	67.1	72.8	59.3	55.3	62.7
Ages 45-54	71.1	69.6	72.8	72.0	70.7	73.7	63.6	60.2	67.0
Ages 55-64	68.2	67.6	69.1	68.8	68.2	69.7	62.0	60.5	63.8
Ages 65-74	67.5	66.7	68.4	68.2	67.6	68.9	59.0	55.9	61.8
Ages 75+	57.2	57.0	57.4	58.6	58.2	58.8	46.4	44.8	47.2
Ages <65	69.2	68.0	70.7	70.1	68.9	71.6	62.2	59.8	64.9
Ages 65+	61.7	61.9	61.5	62.6	62.8	62.3	52.9	51.4	54.0
Stage^e:									
All Stages	65.1	64.9	65.2	65.8	65.7	65.8	58.1	56.5	59.6
Localized	90.1	89.7	90.6	90.5	89.9	91.0	86.6	85.6	87.5
Regional	71.2	71.1	71.3	71.9	72.0	71.9	64.9	62.9	66.8
Distant	13.5	12.7	14.4	14.1	13.2	15.1	9.9	8.8	10.9
Unstaged	35.5	38.1	33.1	32.2	34.9	29.8	39.6	41.9	37.4

^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). Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding. The difference between 1975-1977 and 2006-2012 is statistically significant ($p<.05$).

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

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

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

Table 6.13
Cancer of the Colon (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	43	42	44	34	32	35
1970-1973 ^a	-	-	-	49	47	50	37	36	38
1975-1977 ^b	50.6	50.1	51.1	50.9	50.5	51.3	44.7	44.0	45.3
1978-1980 ^b	52.3	51.3	53.2	52.4	51.3	53.4	48.9	47.5	49.8
1981-1983 ^b	55.2	55.6	54.8	55.4	56.1	54.8	48.5	44.6	51.5
1984-1986 ^b	58.3	58.8	57.8	59.0	59.6	58.5	49.1	48.9	49.3
1987-1989 ^b	60.2	60.7	59.7	60.6	61.4	59.9	52.3	50.7	53.7
1990-1992 ^b	62.0	62.3	61.7	62.7	63.1	62.4	53.4	54.6	52.3
1993-1995 ^b	59.8	60.1	59.5	60.4	60.7	60.2	51.1	51.2	51.0
1996-1998 ^b	62.1	62.4	61.9	62.8	62.9	62.8	53.6	55.8	51.9
1999-2001 ^b	64.9	66.1	63.8	66.6	67.8	65.5	52.5	53.6	51.6
2002-2005 ^b	65.0	64.7	65.2	66.0	66.1	65.9	54.9	52.9	56.5
2006-2012 ^b	65.5 ^f	65.9 ^f	65.1 ^f	66.7 ^f	67.0 ^f	66.3 ^f	56.9 ^f	56.8 ^f	57.0 ^f
5-Year Period Survival (Percent)^{cd}									
2012	64.4	64.3	64.4	65.4	65.4	65.4	56.8	55.0	58.4
Stage Distribution (%) 2006-2012^{ce}									
All Stages									
Number of cases	146,515	71,901	74,614	114,451	56,584	57,867	18,802	8,736	10,066
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	38	39	37	38	39	37	35	35	35
Regional	36	36	37	37	36	37	34	34	35
Distant	22	22	22	21	21	21	27	27	26
Unstaged	4	4	5	4	4	4	4	4	4
5-Year Relative Survival (Percent), 2006-2012^c									
Age at Diagnosis:									
Ages <45	67.1	65.8	68.4	69.6	67.9	71.4	57.5	54.6	59.7
Ages 45-54	68.9	68.1	69.8	70.4	69.6	71.4	59.9	58.0	61.7
Ages 55-64	67.1	67.1	67.3	68.0	68.0	68.1	60.4	59.6	61.4
Ages 65-74	67.5	67.1	68.0	68.5	68.2	68.9	58.5	56.3	60.5
Ages 75+	58.6	58.1	59.0	60.1	59.4	60.5	47.7	46.1	48.5
Ages <65	67.7	67.2	68.3	69.0	68.5	69.7	59.9	58.5	61.2
Ages 65+	62.2	62.4	62.1	63.3	63.5	63.2	53.1	52.0	54.0
Stage^e:									
All Stages	64.4	64.5	64.3	65.4	65.6	65.3	56.6	55.7	57.4
Localized	91.1	90.9	91.4	91.8	91.5	92.1	86.7	86.3	87.0
Regional	71.7	71.6	71.7	72.4	72.4	72.3	66.1	64.7	67.1
Distant	13.3	12.6	14.0	14.0	13.2	14.8	9.4	8.0	10.6
Unstaged	27.5	31.0	24.7	25.3	28.9	22.3	30.1	34.3	26.7

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

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

^c Based on follow-up of patients into 2013.

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

^e Based on follow-up of patients into 2013.

^f 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).

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

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

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

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

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

Table 6.14
Cancer of the Rectum (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	38	36	41	27	28	27
1970-1973 ^a	-	-	-	45	43	48	30	20	40
1975-1977 ^b	48.1	47.0	49.5	48.3	47.3	49.4	44.4	41.4	46.8
1978-1980 ^b	48.9	48.3	49.5	49.7	49.3	50.1	34.6	33.5	35.5
1981-1983 ^b	51.4	50.2	52.8	52.0	51.0	53.2	40.3	38.1	42.5
1984-1986 ^b	56.2	55.5	57.1	57.0	56.4	57.7	45.9	43.4	48.2
1987-1989 ^b	58.1	57.9	58.4	58.7	58.9	58.4	52.3	47.7	56.9
1990-1992 ^b	59.2	58.4	60.2	59.9	59.0	61.0	51.2	53.7	48.5
1993-1995 ^b	60.1	59.0	61.6	60.6	59.5	61.9	53.8	51.4	56.4
1996-1998 ^b	63.2	62.4	64.2	63.5	62.8	64.4	55.1	53.6	56.4
1999-2001 ^b	65.8	66.1	65.4	66.5	66.5	66.4	59.2	60.0	58.2
2002-2005 ^b	68.2	67.9	68.5	69.0	69.4	68.5	60.2	56.5	63.8
2006-2012 ^b	67.9 ^f	66.9 ^f	69.2 ^f	68.0 ^f	67.6 ^f	68.7 ^f	64.7 ^f	59.4 ^f	70.1 ^f
5-Year Period Survival (Percent)^{cd}									
2012	66.7	65.6	68.0	66.5	65.6	67.7	62.2	58.7	66.2
Stage Distribution (%) 2006-2012^{ce}									
All Stages									
Number of cases	63,380	36,089	27,291	49,091	28,213	20,878	6,851	3,609	3,242
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	43	42	45	42	42	43	46	43	50
Regional	33	34	32	34	35	34	27	29	24
Distant	18	19	17	18	19	17	20	21	18
Unstaged	6	5	6	5	5	6	7	7	8
5-Year Relative Survival (Percent), 2006-2012^c									
Age at Diagnosis:									
Ages <45	69.6	65.6	74.4	70.1	66.0	74.9	62.6	56.6	69.2
Ages 45-54	74.2	71.7	77.7	74.1	72.0	77.1	70.4	63.7	78.4
Ages 55-64	70.2	68.4	73.2	70.3	68.6	73.2	66.1	62.7	70.6
Ages 65-74	67.3	65.9	69.4	67.3	66.1	69.0	60.6	54.6	67.0
Ages 75+	52.1	53.6	50.8	52.9	54.3	51.6	40.7	39.4	41.4
Ages <65	71.6	69.2	75.2	71.7	69.5	75.0	67.3	62.2	73.7
Ages 65+	60.0	60.6	59.1	60.1	60.9	59.2	52.1	49.3	54.4
Stage^e:									
All Stages	66.6	65.8	67.8	66.5	65.9	67.4	62.2	58.4	66.4
Localized	88.2	87.6	88.9	87.8	87.2	88.6	86.4	84.2	88.2
Regional	70.0	70.0	70.1	70.9	71.0	70.7	60.9	57.5	65.0
Distant	14.0	13.0	15.5	14.4	13.3	16.0	11.7	11.3	12.5
Unstaged	48.9	48.3	49.3	44.7	44.1	45.1	53.7	51.1	55.5

^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 2013.

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

^e Based on follow-up of patients into 2013.

^f 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). Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding. The difference between 1975-1977 and 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.

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

Table 6.15
Cancer of the Colon and Rectum (Invasive)

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

All Races, Males and Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Survival Time																						
1-year	74.0	77.1	80.0	80.9	79.4	81.3	80.3	82.0	82.3	81.9	83.1	83.3	82.4	83.5	84.0	83.6	84.0	84.7	84.3	84.2	83.7	84.0
2-year	63.0	66.8	71.1	72.4	71.3	73.3	72.4	74.5	74.5	74.4	75.6	76.8	75.8	76.6	77.0	77.1	77.1	78.3	77.3	77.2	76.6	
3-year	56.8	60.5	65.7	67.2	65.8	68.6	67.2	69.4	70.0	70.2	71.1	72.2	70.8	71.6	72.5	72.1	72.3	73.2	72.3	71.9		
4-year	53.0	56.4	61.8	63.2	61.9	65.0	64.2	66.3	66.9	66.9	68.2	69.0	67.7	68.3	68.8	68.4	69.0	69.9	68.6			
5-year	50.4	53.7	59.3	60.7	59.7	62.6	61.5	63.3	64.5	64.8	66.1	66.3	65.3	65.7	66.2	66.1	66.6	67.2				
6-year	48.6	51.8	57.5	59.0	57.3	61.3	59.8	61.4	63.0	63.1	64.1	64.4	63.5	63.9	64.5	64.5	64.5					
7-year	47.4	50.3	56.0	57.4	55.5	60.2	58.8	60.1	61.9	61.6	62.2	63.0	62.1	62.8	62.8	62.8						
8-year	46.4	49.3	55.0	56.2	54.9	59.4	57.9	59.3	60.6	60.2	61.2	62.0	61.3	61.7	61.7							
9-year	45.8	48.4	54.1	55.4	54.6	58.7	57.2	58.0	59.7	59.5	60.3	60.7	60.1	60.9								
10-year	45.1	47.8	53.3	54.6	53.9	58.1	56.4	57.3	59.2	58.9	59.6	60.4	58.9									
11-year	44.5	47.2	52.8	54.1	53.0	57.5	55.6	56.4	58.4	58.0	59.1	59.6										
12-year	44.1	46.7	52.4	53.5	52.3	57.4	55.2	56.2	57.8	57.4	58.1											
13-year	43.6	46.4	51.7	53.0	51.6	56.8	54.9	55.6	57.6	57.0												
14-year	43.1	45.9	51.4	52.6	51.1	55.9	54.1	55.4	56.8													
15-year	42.8	45.6	50.8	52.2	50.5	55.3	53.4	55.3														
16-year	42.3	45.1	50.6	52.2	49.9	54.8	52.6															
17-year	41.9	44.7	50.0	51.5	49.4	53.8																
18-year	41.5	44.3	49.7	51.0	48.8																	
19-year	41.5	43.8	49.4	50.4																		
20-year	41.3	43.6	48.9																			
21-year	40.9	42.9	48.9																			
22-year	40.6	42.4	48.7																			
23-year	40.1	42.2	48.2																			
24-year	39.7	41.8	47.5																			
25-year	39.4	41.3																				
26-year	38.9	40.8																				
27-year	38.4	40.4																				
28-year	38.3	39.9																				
29-year	37.8	39.8																				
30-year	37.3																					

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

Table 6.16
Cancer of the Colon and Rectum (Invasive)

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

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Survival Time																						
1-year	74.0	78.0	81.0	81.7	81.0	82.6	81.3	82.1	83.4	83.6	85.1	83.2	83.2	84.5	84.6	84.7	85.4	86.3	85.5	85.4	84.0	84.6
2-year	63.0	67.2	72.4	73.2	72.6	75.0	73.6	74.4	75.2	76.3	77.4	76.6	76.3	77.9	77.9	78.2	78.4	79.3	78.4	78.3	76.9	
3-year	56.3	60.6	66.7	67.9	66.9	69.7	68.2	68.8	70.5	72.0	72.8	72.0	71.1	72.5	73.1	72.9	73.4	74.0	73.2	72.8		
4-year	52.1	56.2	62.4	63.5	63.1	65.3	65.2	65.4	67.5	68.9	69.9	68.7	67.8	69.1	68.8	68.7	69.5	70.2	69.1			
5-year	49.4	53.3	59.7	60.5	60.0	62.4	62.3	62.4	64.9	66.0	67.3	65.7	65.4	66.1	65.8	66.5	66.7	67.5				
6-year	47.2	51.2	57.8	58.5	57.3	61.0	60.3	60.1	63.7	63.7	65.0	63.4	62.8	64.2	63.7	64.6	64.3					
7-year	45.9	49.5	56.2	56.8	55.7	59.8	59.6	58.7	62.5	61.9	63.1	61.7	61.5	62.6	61.5	63.0						
8-year	44.8	48.4	55.3	55.3	55.1	59.4	58.3	57.4	61.1	60.0	62.4	60.4	60.2	61.5	60.5							
9-year	44.1	47.5	54.3	54.5	54.6	58.9	57.4	56.2	60.0	59.7	61.4	59.4	58.9	60.8								
10-year	43.3	46.7	53.5	53.6	53.9	58.0	56.7	55.5	59.1	58.6	60.4	59.2	57.5									
11-year	42.8	46.0	53.1	53.1	53.1	57.3	55.8	54.5	58.4	57.7	59.6	58.4										
12-year	42.1	45.6	52.5	52.7	52.2	57.0	55.6	54.0	57.8	57.0	59.0											
13-year	41.7	45.4	51.9	51.9	51.7	56.6	55.2	53.5	57.2	56.8												
14-year	41.0	44.7	51.7	51.4	50.7	55.7	54.5	53.2	56.2													
15-year	40.7	44.5	51.1	50.9	49.8	55.4	54.3	53.0														
16-year	40.3	44.3	51.0	50.8	49.2	55.1	53.1															
17-year	39.7	43.7	50.5	50.4	48.8	54.2																
18-year	39.4	43.3	50.2	49.8	47.9																	
19-year	39.3	42.8	49.8	49.5																		
20-year	39.2	42.5	49.4																			
21-year	38.9	41.7	49.3																			
22-year	38.4	41.1	49.3																			
23-year	38.0	40.8	48.6																			
24-year	37.6	40.3	47.9																			
25-year	37.2	39.9																				
26-year	36.3	39.2																				
27-year	35.8	38.7																				
28-year	35.6	38.3																				
29-year	35.2	38.1																				
30-year	34.2																					

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

Table 6.17
Cancer of the Colon and Rectum (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	73.9	76.3	78.9	80.0	77.9	79.9	79.3	82.0	81.2	80.3	81.0	83.4	81.7	82.5	83.4	82.5	82.5	83.0	83.0	82.8	83.3	83.3
2-year	63.0	66.4	69.8	71.6	70.0	71.6	71.1	74.6	73.9	72.5	73.7	77.1	75.2	75.3	76.0	76.0	75.9	77.2	76.0	75.9	75.9	76.2
3-year	57.4	60.3	64.6	66.4	64.6	67.4	66.2	70.0	69.5	68.5	69.3	72.3	70.5	70.6	71.8	71.3	71.2	72.5	71.3	71.0		
4-year	53.8	56.6	61.2	63.0	60.8	64.7	63.1	67.2	66.2	64.9	66.5	69.3	67.6	67.5	68.8	68.0	68.4	69.6	68.2			
5-year	51.4	54.1	58.9	60.9	59.4	62.7	60.6	64.1	64.2	63.5	64.8	66.8	65.3	65.3	66.6	65.8	66.5	67.0				
6-year	49.8	52.3	57.2	59.5	57.3	61.5	59.2	62.7	62.4	62.4	63.2	65.5	64.2	63.5	65.3	64.4	64.4	64.8				
7-year	48.7	51.0	55.7	58.1	55.4	60.6	57.9	61.3	61.3	61.3	61.3	64.3	62.7	63.0	64.2	62.6						
8-year	47.9	50.1	54.6	57.1	54.7	59.4	57.6	61.0	60.2	60.4	60.1	63.6	62.4	62.4	62.0	63.0						
9-year	47.3	49.3	53.9	56.3	54.4	58.5	57.0	59.8	59.5	59.3	59.2	62.1	61.3	61.0								
10-year	46.7	48.7	53.1	55.5	53.8	58.0	56.1	59.0	59.3	59.2	58.7	61.5	60.3									
11-year	46.1	48.2	52.5	55.0	53.0	57.6	55.4	58.3	58.4	58.2	58.5	60.8										
12-year	45.9	47.7	52.3	54.4	52.4	57.6	54.7	58.3	57.9	57.7	57.2											
13-year	45.5	47.4	51.4	54.1	51.6	56.9	54.5	57.8	57.9	57.0												
14-year	45.1	47.0	51.0	53.8	51.4	56.0	53.6	57.5	57.4													
15-year	44.6	46.6	50.5	53.4	51.2	55.1	52.3	57.5														
16-year	44.2	45.9	50.1	53.4	50.6	54.5	51.9															
17-year	44.0	45.6	49.5	52.6	50.0	53.3																
18-year	43.4	45.2	49.2	52.2	49.4																	
19-year	43.4	44.7	48.9	51.2																		
20-year	43.1	44.6	48.4																			
21-year	42.7	44.0	48.4																			
22-year	42.5	43.5	48.0																			
23-year	41.9	43.3	47.7																			
24-year	41.6	43.2	47.1																			
25-year	41.4	42.4																				
26-year	41.2	42.2																				
27-year	40.6	41.9																				
28-year	40.6	41.3																				
29-year	40.0	41.2																				
30-year	39.9																					

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

Table 6.18
Cancer of the Colon and Rectum (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, 2011-2013 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	Risk of Dying from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.00	0.00	0.02	4.39	1.85	Asian/ Pacific Islander	0	0.00	0.00	0.02	4.66	1.91	
	10	0.00	0.02	0.09	4.44	1.87		10	0.00	0.02	0.07	4.69	1.92	
	20	0.02	0.09	0.33	4.45	1.88		20	0.01	0.07	0.28	4.70	1.92	
	30	0.07	0.31	0.88	4.46	1.89		30	0.06	0.27	0.79	4.70	1.93	
	40	0.24	0.81	1.73	4.45	1.90		40	0.21	0.74	1.62	4.67	1.92	
	50	0.59	1.53	2.83	4.32	1.89		50	0.53	1.43	2.63	4.52	1.90	
	60	1.00	2.39	3.60	3.97	1.83		60	0.93	2.17	3.48	4.12	1.83	
	70	1.58	2.96	-	3.38	1.69		70	1.34	2.74	-	3.43	1.70	
	80	1.88	-	-	2.44	1.45		80	1.69	-	-	2.51	1.48	
White	0	0.00	0.00	0.02	4.28	1.81	American Indian/ Alaska Native ^a	0	0.00	0.01	0.03	5.02	1.91	
	10	0.00	0.02	0.10	4.32	1.83		10	0.01	0.03	0.11	5.07	1.94	
	20	0.02	0.09	0.32	4.33	1.84		20	0.02	0.10	0.38	5.09	1.95	
	30	0.07	0.30	0.84	4.35	1.85		30	0.08	0.36	0.96	5.15	1.98	
	40	0.23	0.77	1.65	4.33	1.86		40	0.29	0.91	1.91	5.19	2.02	
	50	0.55	1.45	2.74	4.21	1.84		50	0.65	1.69	3.36	5.12	2.04	
	60	0.95	2.32	3.53	3.88	1.79		60	1.13	2.92	4.20	4.81	2.00	
	70	1.55	2.93	-	3.32	1.66		70	2.06	3.52	-	4.23	1.87	
	80	1.88	-	-	2.42	1.42		80	2.02	-	-	2.99	1.64	
Black	0	0.00	0.00	0.02	4.64	2.18	Hispanic ^b	0	0.00	0.00	0.02	4.26	1.86	
	10	0.00	0.02	0.09	4.73	2.23		10	0.00	0.02	0.07	4.30	1.88	
	20	0.02	0.09	0.37	4.75	2.24		20	0.01	0.07	0.25	4.31	1.89	
	30	0.07	0.36	1.09	4.79	2.26		30	0.05	0.23	0.72	4.32	1.90	
	40	0.29	1.04	2.19	4.81	2.28		40	0.18	0.67	1.54	4.30	1.90	
	50	0.78	1.98	3.39	4.70	2.28		50	0.50	1.38	2.59	4.20	1.89	
	60	1.32	2.87	3.96	4.31	2.22		60	0.92	2.19	3.42	3.87	1.84	
	70	1.88	3.20	-	3.62	2.05		70	1.39	2.76	-	3.26	1.71	
	80	1.94	-	-	2.56	1.77		80	1.72	-	-	2.36	1.47	

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 6.19

Cancer of the Colon and Rectum (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, 2011-2013 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer						Risk of Being Diagnosed with Cancer						Risk of Dying from Cancer								
		+10 yrs			+20 yrs			+30 yrs			Ever			+10 yrs			+20 yrs			+30 yrs		
All Races	0	0.00	0.00	0.02	4.56	1.94		Asian/	0	0.00	0.00	0.02	5.13	2.05								
	10	0.00	0.02	0.09	4.62	1.97		Pacific	10	0.00	0.02	0.08	5.17	2.07								
	20	0.02	0.09	0.34	4.63	1.98		Islander	20	0.01	0.08	0.31	5.18	2.08								
	30	0.07	0.33	0.97	4.67	2.00			30	0.06	0.29	0.91	5.19	2.08								
	40	0.26	0.91	1.97	4.67	2.01			40	0.23	0.85	1.96	5.17	2.08								
	50	0.67	1.77	3.18	4.56	2.01			50	0.63	1.76	3.17	5.02	2.06								
	60	1.19	2.71	3.89	4.20	1.95			60	1.17	2.65	4.02	4.58	1.98								
	70	1.78	3.17	-	3.53	1.80			70	1.62	3.13	-	3.74	1.84								
	80	2.00	-	-	2.52	1.52			80	1.89	-	-	2.67	1.61								
White	0	0.00	0.00	0.02	4.43	1.90		American	0	0.00	0.01	0.03	4.99	1.82								
	10	0.00	0.02	0.10	4.48	1.92		Indian/	10	0.00	0.03	0.10	5.05	1.85								
	20	0.02	0.09	0.34	4.50	1.93		Alaska	20	0.02	0.10	0.36	5.08	1.86								
	30	0.07	0.32	0.92	4.53	1.95		Native ^a	30	0.08	0.35	1.02	5.17	1.91								
	40	0.25	0.86	1.87	4.53	1.96			40	0.28	0.97	2.10	5.24	1.95								
	50	0.63	1.68	3.06	4.42	1.96			50	0.73	1.92	3.60	5.22	1.98								
	60	1.12	2.62	3.79	4.08	1.90			60	1.30	3.16	4.56	4.94	1.95								
	70	1.75	3.12	-	3.46	1.76			70	2.20	3.86	-	4.32	1.73								
	80	1.98	-	-	2.48	1.48			80	2.45	-	-	3.12	1.38								
Black	0	0.00	0.00	0.02	4.77	2.34		Hispanic ^b	0	0.00	0.00	0.02	4.59	2.10								
	10	0.00	0.02	0.09	4.87	2.39			10	0.00	0.02	0.07	4.63	2.12								
	20	0.01	0.09	0.38	4.90	2.41			20	0.02	0.07	0.26	4.65	2.12								
	30	0.07	0.38	1.20	4.98	2.45			30	0.05	0.24	0.79	4.68	2.14								
	40	0.31	1.15	2.49	5.04	2.48			40	0.19	0.74	1.77	4.68	2.15								
	50	0.88	2.28	3.77	4.95	2.50			50	0.57	1.62	3.04	4.60	2.15								
	60	1.57	3.25	4.33	4.58	2.46			60	1.11	2.62	3.90	4.28	2.11								
	70	2.14	3.52	-	3.85	2.30			70	1.71	3.15	-	3.59	1.96								
	80	2.24	-	-	2.77	2.01			80	1.93	-	-	2.51	1.67								

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 6.20
Cancer of the Colon and Rectum (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					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	Risk of Dying from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.00	0.00	0.02	4.23	1.77	Asian/ Pacific Islander	0	0.00	0.00	0.01	4.25	1.79	
	10	0.00	0.02	0.09	4.27	1.79		10	0.00	0.01	0.07	4.28	1.80	
	20	0.02	0.09	0.31	4.27	1.79		20	0.01	0.07	0.26	4.29	1.80	
	30	0.07	0.30	0.79	4.27	1.80		30	0.06	0.25	0.69	4.28	1.80	
	40	0.23	0.72	1.50	4.24	1.80		40	0.19	0.63	1.33	4.24	1.80	
	50	0.50	1.30	2.51	4.10	1.78		50	0.45	1.15	2.18	4.10	1.77	
	60	0.83	2.10	3.35	3.77	1.72		60	0.72	1.78	3.04	3.74	1.70	
	70	1.40	2.78	-	3.25	1.61		70	1.12	2.45	-	3.19	1.60	
	80	1.79	-	-	2.38	1.40		80	1.54	-	-	2.40	1.40	
White	0	0.00	0.00	0.02	4.14	1.73	American Indian/ Alaska Native ^a	0	0.00	0.01	0.03	5.04	1.96	
	10	0.00	0.02	0.10	4.18	1.75		10	0.01	0.03	0.11	5.08	1.99	
	20	0.02	0.09	0.31	4.18	1.75		20	0.03	0.11	0.40	5.09	1.99	
	30	0.07	0.29	0.75	4.18	1.76		30	0.08	0.37	0.91	5.12	2.01	
	40	0.22	0.68	1.43	4.14	1.76		40	0.30	0.85	1.73	5.13	2.03	
	50	0.47	1.23	2.43	4.00	1.74		50	0.57	1.48	3.13	5.00	2.05	
	60	0.80	2.05	3.30	3.70	1.69		60	0.97	2.71	3.89	4.69	2.01	
	70	1.38	2.77	-	3.21	1.58		70	1.94	3.25	-	4.14	1.93	
	80	1.80	-	-	2.38	1.38		80	1.72	-	-	2.88	1.77	
Black	0	0.00	0.00	0.02	4.53	2.06	Hispanic ^b	0	0.00	0.00	0.02	3.97	1.67	
	10	0.00	0.02	0.10	4.61	2.10		10	0.00	0.02	0.07	4.00	1.69	
	20	0.02	0.09	0.36	4.62	2.11		20	0.01	0.07	0.24	4.01	1.69	
	30	0.08	0.34	1.00	4.63	2.12		30	0.05	0.23	0.66	4.01	1.70	
	40	0.27	0.94	1.93	4.62	2.13		40	0.17	0.61	1.33	3.97	1.69	
	50	0.69	1.72	3.07	4.49	2.11		50	0.44	1.17	2.20	3.85	1.68	
	60	1.11	2.57	3.68	4.10	2.04		60	0.76	1.82	3.02	3.53	1.63	
	70	1.69	2.98	-	3.47	1.89		70	1.14	2.45	-	2.99	1.52	
	80	1.77	-	-	2.44	1.65		80	1.58	-	-	2.24	1.35	

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 6.21
Cancer of the Colon and Rectum (Invasive)

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

SEER Incidence	SEER 18 Areas ^b			SEER 13 Areas ^b			SEER 9 Areas ^b		
	Rate 2009-2013			Trend 2004-2013 ^c			Trend 2004-2013 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	41.0	47.1	36.0	-3.2*	-3.3*	-3.1*	-3.2*	-3.4*	-3.2*
White	40.1	46.0	35.2	-3.3*	-3.6*	-3.1*	-3.4*	-3.7*	-3.2*
White Hispanic ^e	35.8	42.9	30.2	-2.3*	-2.3*	-2.4*	-	-	-
White Non-Hispanic ^e	41.0	46.7	36.2	-3.4*	-3.7*	-3.1*	-	-	-
Black	50.7	59.2	44.8	-3.4*	-3.0*	-3.7*	-3.5*	-2.8*	-4.0*
Asian/Pacific Islander	34.8	41.2	29.8	-2.6*	-2.5*	-3.4*	-	-	-
Amer Ind/Alaska Nat ^f	40.9	46.2	36.8	-0.4	-0.3	-0.4	-	-	-
Hispanic ^e	34.7	41.3	29.4	-2.3*	-2.4*	-2.4*	-	-	-
<u>U.S. Mortality^g</u>									
	Rate 2009-2013			Trend 2004-2013 ^h			AAPC (%)		
	Rate per 100,000 persons								
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	15.1	18.1	12.7	-2.7*	-2.7*	-2.8*			
White	14.7	17.6	12.3	-2.6*	-2.7*	-2.8*			
White Hispanic ^e	12.7	16.3	10.0	-1.5*	-1.2*	-2.0*			
White Non-Hispanic ^e	14.9	17.7	12.5	-2.6*	-2.8*	-2.8*			
Black	20.7	26.1	17.1	-3.0*	-2.7*	-3.4*			
Asian/Pacific Islander	10.5	12.6	9.0	-1.8*	-1.9*	-1.7*			
Amer Ind/Alaska Nat									
Total U.S.	12.1	13.9	10.8	-1.4*	-2.0*	-0.8			
CHSDA Counties	16.8	18.9	15.1	0.1	-1.0	0.0			
Non-CHSDA Counties	6.9	8.5	5.9	-1.9*	-2.0*	-1.5*			
Hispanic ^e	12.0	15.4	9.4	-1.7*	-1.4*	-2.2*			

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

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

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

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

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

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

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

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

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

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

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

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

^k The 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 6.22
Cancer of the Colon (Invasive) and Cancer of the Rectum (Invasive)

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

Cancer of the Colon
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 (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	29.0	32.1	26.5	-3.5*	-3.6*	-3.4*	-3.3*	-3.7*	-3.2*
White	28.4	31.4	26.0	-3.6*	-3.9*	-3.4*	-3.6*	-4.0*	-3.1*
White Hispanic ^e	24.7	28.4	21.8	-2.5*	-2.5*	-2.5*	-	-	-
White Non-Hispanic ^e	29.1	32.0	26.6	-3.6*	-3.9*	-3.1*	-	-	-
Black	37.9	43.1	34.3	-3.5*	-3.4*	-4.0*	-3.6*	-3.4*	-4.3*
Asian/Pacific Islander	22.9	25.8	20.6	-3.0*	-3.0*	-3.5*	-	-	-
Amer Ind/Alaska Nat ^f	28.8	31.1	27.3	-0.7	-0.9	-0.5	-	-	-
Hispanic ^e	23.9	27.3	21.3	-2.4*	-2.5*	-2.5*	-	-	-

Cancer of the Rectum
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 (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	12.0	15.0	9.5	-2.2*	-2.4*	-2.5*	-2.3*	-2.6*	-2.2*
White	11.7	14.6	9.3	-2.5*	-2.8*	-2.7*	-2.7*	-3.1*	-2.5*
White Hispanic ^e	11.1	14.5	8.3	-2.6*	-1.1*	-3.1	-	-	-
White Non-Hispanic ^e	11.9	14.8	9.5	-2.6*	-3.0*	-2.4*	-	-	-
Black	12.9	16.1	10.5	-2.8*	-1.0*	-3.4*	-2.5*	-2.1	-3.4*
Asian/Pacific Islander	11.9	15.4	9.2	-1.8*	-1.3*	-2.8*	-	-	-
Amer Ind/Alaska Nat ^f	12.1	15.1	9.5	0.3	0.9	-0.4	-	-	-
Hispanic ^e	10.8	14.0	8.2	-2.6*	-1.1*	-1.0*	-	-	-

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

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

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

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

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

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

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

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

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

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

i 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 6.23
Cancer of the Colon and Rectum (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, 2009-2013</u>									
California	38.28	43.86	33.65	37.84	43.27	33.24	48.72	55.48	43.72
Greater Bay Area	37.24	41.95	33.33	37.05	41.24	33.46	46.96	53.05	42.78
San Francisco-Oakland	38.44	43.16	34.55	37.98	41.71	34.75	48.04	55.40	43.02
San Jose-Monterey	34.89	39.64	30.93	35.40	40.42	31.22	40.08	38.77	41.27
Los Angeles	39.45	46.13	34.18	37.99	44.37	32.83	50.85	58.92	45.24
Greater California	38.14	43.54	33.53	38.05	43.48	33.36	47.56	53.44	42.76
Connecticut	40.19	46.52	35.08	39.43	45.68	34.29	46.23	55.33	40.43
Detroit	43.08	49.19	38.45	40.44	46.19	35.96	53.16	61.99	47.16
Georgia	41.72	48.84	36.24	39.32	45.94	34.00	49.95	59.99	43.33
Atlanta	39.74	46.41	34.78	36.16	42.06	31.49	47.41	57.36	41.20
Rural Georgia	46.78	50.61	43.88	36.68	40.81	32.50	66.70	72.07	63.85
Greater Georgia	42.70	50.07	36.93	40.64	47.63	35.01	51.23	61.30	44.31
Hawaii	44.26	53.12	36.36	39.56	44.24	34.28	36.93	41.43	-
Iowa	45.50	52.23	39.70	45.43	52.03	39.74	49.15	52.46	45.92
Kentucky	50.79	59.59	43.69	50.36	59.29	43.16	57.15	63.66	51.82
Louisiana	48.63	57.31	41.85	45.22	53.41	38.62	58.93	69.90	51.16
New Jersey	43.49	49.48	38.78	43.44	49.40	38.67	46.67	54.47	41.55
New Mexico	34.73	40.52	29.79	34.55	40.24	29.67	32.38	34.27	29.62
Seattle-Puget Sound	38.06	42.51	34.28	37.67	41.76	34.12	40.00	45.86	35.10
Utah	31.90	36.08	28.22	31.69	35.97	27.92	56.61	60.42	51.33
SEER 9 Areas ^b	39.85	45.50	35.18	38.71	43.87	34.33	48.78	57.15	43.05
SEER 13 Areas ^b	39.57	45.36	34.83	38.34	43.71	33.82	49.41	57.50	43.83
SEER 18 Areas ^b	41.03	47.14	36.03	40.15	46.02	35.23	50.71	59.18	44.76

^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 6.24
Cancer of the Colon and Rectum (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, 2009-2013									
California	13.86	16.37	11.85	13.90	16.45	11.84	20.71	24.12	18.17
Greater Bay Area	12.68	14.73	11.04	12.83	14.96	11.11	18.46	20.59	17.14
San Francisco-Oakland	13.14	15.30	11.41	13.22	15.49	11.34	18.50	21.06	16.91
San Jose-Monterey	11.76	13.65	10.26	12.14	14.03	10.67	18.20	17.35	18.98
Los Angeles	14.25	17.07	12.06	13.89	16.65	11.69	22.01	26.10	19.12
Greater California	14.10	16.62	12.05	14.21	16.79	12.10	20.54	23.93	17.73
Connecticut	12.20	14.32	10.56	12.12	14.24	10.43	14.84	18.59	12.55
Detroit	16.15	19.44	13.79	14.75	17.76	12.51	22.19	28.00	18.44
Georgia	15.48	19.44	12.59	14.22	17.87	11.41	20.13	26.56	16.32
Atlanta	14.72	19.00	11.83	12.89	16.58	10.21	19.08	26.17	15.17
Rural Georgia	19.97	27.77	15.06	16.46	20.37	13.78	25.96	45.37	15.96
Greater Georgia	15.76	19.53	12.91	14.69	18.33	11.82	20.65	26.07	17.20
Hawaii	13.68	17.30	10.75	13.49	15.63	11.46	-	-	-
Iowa	16.43	19.44	14.10	16.35	19.38	14.01	22.20	21.24	22.91
Kentucky	17.61	21.15	14.77	17.43	21.02	14.58	21.89	24.48	19.38
Louisiana	18.08	22.10	14.97	16.21	19.59	13.54	23.95	30.75	19.21
New Jersey	15.65	18.88	13.26	15.51	18.70	13.13	20.48	26.42	16.69
New Mexico	14.31	17.58	11.70	14.39	17.66	11.77	16.80	-	18.60
Seattle-Puget Sound	13.03	15.10	11.30	13.09	15.01	11.46	15.15	19.73	11.63
Utah	11.50	13.05	10.06	11.39	12.90	9.98	19.91	-	-
SEER 9 Areas ^b	13.98	16.62	11.90	13.65	16.14	11.65	19.36	24.28	16.21
SEER 13 Areas ^b	13.95	16.60	11.87	13.61	16.11	11.60	20.07	24.87	16.93
SEER 18 Areas ^b	14.73	17.60	12.48	14.43	17.21	12.21	20.86	25.97	17.40
Total U.S.	15.10	18.13	12.69	14.68	17.60	12.32	20.68	26.07	17.10

^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.

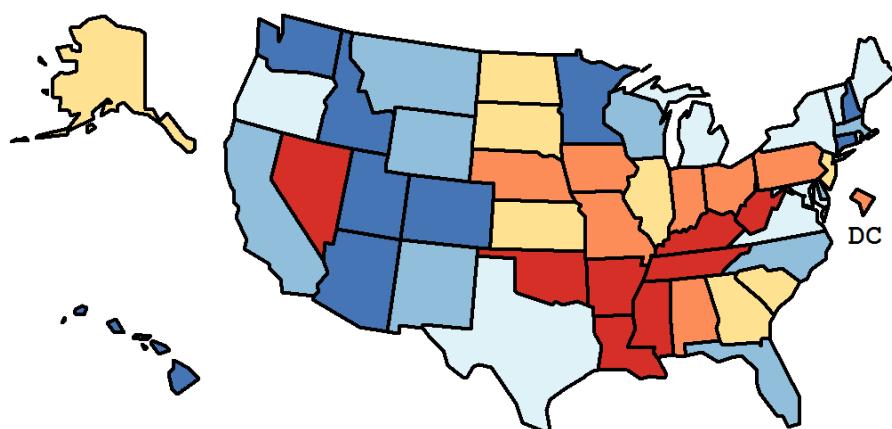
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 6.25
Cancer of the Colon and Rectum (Invasive)

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

Males and Females

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	15.10	0.03							
High Five States									
Mississippi	19.46	0.35	01(01,03)	28.92 ^c					
West Virginia	18.78	0.40	02(01,06)	24.39 ^c					
Arkansas	18.16	0.33	03(01,08)	20.27 ^c					
Louisiana	18.08	0.28	04(02,07)	19.78 ^c					
Kentucky	17.61	0.27	05(02,10)	16.62 ^c					
Low Five States									
Minnesota	13.49	0.22	47(36,49)	-10.60 ^c					
Arizona	13.24	0.19	48(40,49)	-12.31 ^c					
Colorado	12.95	0.23	49(43,50)	-14.20 ^c					
Connecticut	12.20	0.24	50(48,51)	-19.16 ^c					
Utah	11.50	0.33	51(50,51)	-23.82 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	16.89	0.25	09(05,17)	11.90 ^c	Montana	13.95	0.48	40(22,49)	-7.62
Alaska	15.64	0.83	21(03,47)	3.61	Nebraska	16.27	0.40	15(05,26)	7.78
Arizona	13.24	0.19	48(40,49)	-12.31 ^c	Nevada	16.97	0.36	08(03,19)	12.43 ^c
Arkansas	18.16	0.33	03(01,08)	20.27 ^c	New Hampshire	13.70	0.43	43(26,49)	-9.27
California	13.86	0.09	41(35,46)	-8.19	New Jersey	15.65	0.18	20(15,25)	3.64
Colorado	12.95	0.23	49(43,50)	-14.20 ^c	New Mexico	14.31	0.36	34(22,47)	-5.19
Connecticut	12.20	0.24	50(48,51)	-19.16 ^c	New York	14.63	0.12	29(25,36)	-3.07
Delaware	14.09	0.52	38(20,49)	-6.68	North Carolina	14.27	0.17	36(28,43)	-5.48
D.C.	16.69	0.76	10(02,32)	10.59 ^c	North Dakota	15.56	0.62	22(06,42)	3.08
Florida	13.96	0.10	39(33,45)	-7.50	Ohio	16.59	0.16	11(07,18)	9.91
Georgia	15.48	0.19	23(16,28)	2.54	Oklahoma	17.27	0.29	06(03,14)	14.42 ^c
Hawaii	13.68	0.41	44(27,49)	-9.36	Oregon	14.56	0.26	30(23,42)	-3.53
Idaho	13.52	0.41	46(29,50)	-10.42 ^c	Pennsylvania	16.33	0.14	14(09,20)	8.16
Illinois	16.20	0.15	17(10,21)	7.31	Rhode Island	14.72	0.48	28(15,47)	-2.52
Indiana	16.24	0.22	16(08,21)	7.60	South Carolina	15.79	0.25	18(11,27)	4.57
Iowa	16.43	0.30	12(06,22)	8.84	South Dakota	15.71	0.57	19(06,38)	4.07
Kansas	15.30	0.31	24(14,34)	1.36	Tennessee	17.11	0.22	07(04,13)	13.34 ^c
Kentucky	17.61	0.27	05(02,10)	16.62 ^c	Texas	15.07	0.12	26(21,31)	-0.16
Louisiana	18.08	0.28	04(02,07)	19.78 ^c	Utah	11.50	0.33	51(50,51)	-23.82 ^c
Maine	14.44	0.41	32(20,48)	-4.34	Vermont	14.35	0.62	33(16,49)	-4.96
Maryland	14.86	0.22	27(21,37)	-1.55	Virginia	14.52	0.19	31(25,40)	-3.81
Massachusetts	13.77	0.19	42(33,48)	-8.82	Washington	13.55	0.20	45(36,49)	-10.25 ^c
Michigan	15.22	0.16	25(19,30)	0.82	West Virginia	18.78	0.40	02(01,06)	24.39 ^c
Minnesota	13.49	0.22	47(36,49)	-10.60 ^c	Wisconsin	14.17	0.21	37(28,45)	-6.16
Mississippi	19.46	0.35	01(01,03)	28.92 ^c	Wyoming	14.27	0.70	35(14,50)	-5.47
Missouri	16.35	0.22	13(07,21)	8.34					



Age-Adjusted Death Rates per 100,000 Quantile Interval

16.90 - 19.46
16.21 - 16.89
15.23 - 16.20
14.32 - 15.22
13.71 - 14.31
11.50 - 13.70
Suppressed
U.S. rate: 15.10

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

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

^c Absolute percent difference between state rate and total U.S. rate is 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.

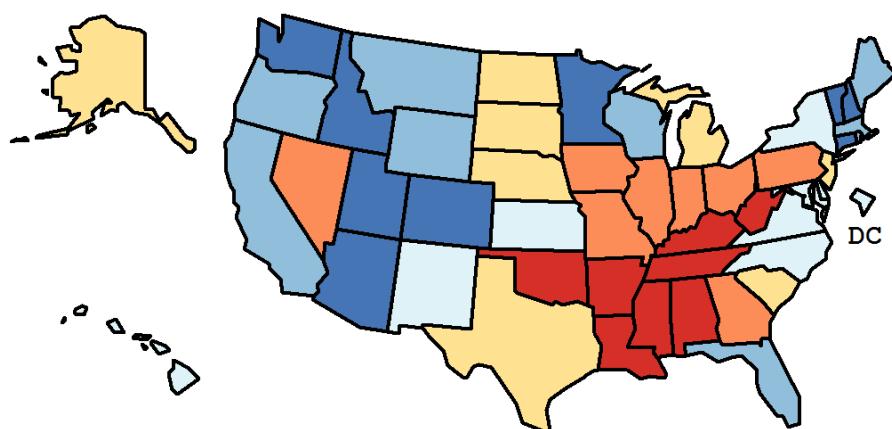
PD Percent difference between state rate and total U.S. rate.

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

Table 6.26
Cancer of the Colon and Rectum (Invasive)

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

Males									
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	18.13	0.05							
High Five States									
Mississippi	23.82	0.61	01(01,04)	31.38 ^c					
West Virginia	23.12	0.68	02(01,06)	27.55 ^c					
Louisiana	22.10	0.48	03(01,09)	21.93 ^c					
Arkansas	22.01	0.56	04(01,10)	21.38 ^c					
Kentucky	21.15	0.46	05(02,14)	16.64 ^c					
Low Five States									
Arizona	15.52	0.31	47(39,50)	-14.37 ^c					
New Hampshire	15.28	0.70	48(29,51)	-15.72 ^c					
Colorado	14.83	0.38	49(43,51)	-18.22 ^c					
Connecticut	14.32	0.40	50(46,51)	-21.01 ^c					
Utah	13.05	0.52	51(49,51)	-28.03 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	21.14	0.44	06(02,13)	16.58 ^c	Montana	16.46	0.77	41(21,50)	-9.20
Alaska	18.20	1.35	24(03,49)	0.41	Nebraska	18.75	0.65	19(08,37)	3.41
Arizona	15.52	0.31	47(39,50)	-14.37 ^c	Nevada	20.44	0.59	09(03,22)	12.74 ^c
Arkansas	22.01	0.56	04(01,10)	21.38 ^c	New Hampshire	15.28	0.70	48(29,51)	-15.72 ^c
California	16.37	0.14	42(35,45)	-9.73	New Jersey	18.88	0.30	18(12,28)	4.12
Colorado	14.83	0.38	49(43,51)	-18.22 ^c	New Mexico	17.58	0.60	30(15,44)	-3.02
Connecticut	14.32	0.40	50(46,51)	-21.01 ^c	New York	17.40	0.20	31(25,38)	-4.01
Delaware	17.92	0.90	28(08,47)	-1.14	North Carolina	17.61	0.29	29(21,39)	-2.85
D.C.	18.03	1.24	27(04,49)	-0.54	North Dakota	18.30	1.02	22(05,47)	0.93
Florida	16.77	0.17	38(30,43)	-7.52	Ohio	20.42	0.27	10(05,15)	12.65 ^c
Georgia	19.44	0.33	15(09,24)	7.22	Oklahoma	20.99	0.49	07(02,16)	15.75 ^c
Hawaii	17.30	0.69	33(16,47)	-4.59	Oregon	16.92	0.42	36(24,46)	-6.67
Idaho	16.31	0.67	43(22,50)	-10.06 ^c	Pennsylvania	19.58	0.24	14(09,21)	8.01
Illinois	19.63	0.26	13(08,22)	8.25	Rhode Island	16.65	0.80	39(18,50)	-8.14
Indiana	19.79	0.37	12(07,22)	9.17	South Carolina	19.31	0.43	17(08,27)	6.49
Iowa	19.44	0.50	16(07,28)	7.21	South Dakota	18.72	0.94	20(05,44)	3.28
Kansas	18.11	0.52	26(13,39)	-0.08	Tennessee	20.95	0.38	08(03,13)	15.54 ^c
Kentucky	21.15	0.46	05(02,14)	16.64 ^c	Texas	18.65	0.20	21(16,28)	2.89
Louisiana	22.10	0.48	03(01,09)	21.93 ^c	Utah	13.05	0.52	51(49,51)	-28.03 ^c
Maine	17.00	0.69	35(18,48)	-6.23	Vermont	16.24	1.02	44(15,51)	-10.41 ^c
Maryland	18.12	0.38	25(16,36)	-0.04	Virginia	17.30	0.32	32(23,42)	-4.58
Massachusetts	16.53	0.33	40(29,47)	-8.83	Washington	15.63	0.32	46(38,49)	-13.78 ^c
Michigan	18.29	0.28	23(17,32)	0.90	West Virginia	23.12	0.68	02(01,06)	27.55 ^c
Minnesota	15.68	0.35	45(37,49)	-13.53 ^c	Wisconsin	16.81	0.35	37(26,46)	-7.26
Mississippi	23.82	0.61	01(01,04)	31.38 ^c	Wyoming	17.25	1.13	34(07,50)	-4.84
Missouri	19.85	0.37	11(06,22)	9.50					



Age-Adjusted Death Rates per 100,000 Quantile Interval

20.45 - 23.82
19.32 - 20.44
18.13 - 19.31
17.26 - 18.12
16.32 - 17.25
13.05 - 16.31
Suppressed
U.S. rate: 18.13

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

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

^c Absolute percent difference between state rate and total U.S. rate is 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.

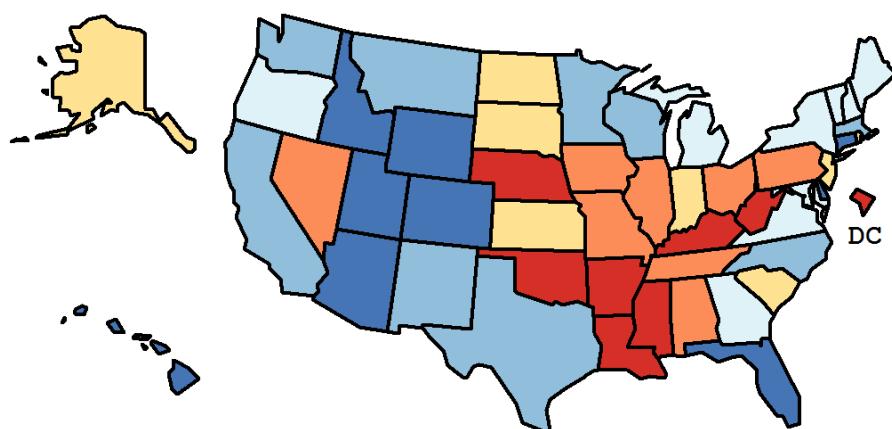
PD Percent difference between state rate and total U.S. rate.

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

Table 6.27
Cancer of the Colon and Rectum (Invasive)

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

Females									
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	12.69	0.04							
High Five States									
Mississippi	16.14	0.43	01(01,05)	27.17 ^c					
D.C.	15.76	0.98	02(01,25)	24.13 ^c					
West Virginia	15.38	0.49	03(01,12)	21.13 ^c					
Arkansas	15.08	0.41	04(01,13)	18.78 ^c					
Louisiana	14.97	0.34	05(01,12)	17.96 ^c					
Low Five States									
Idaho	11.14	0.51	47(25,51)	-12.23 ^c					
Delaware	10.98	0.61	48(24,51)	-13.53 ^c					
Hawaii	10.75	0.50	49(31,51)	-15.35 ^c					
Connecticut	10.56	0.30	50(43,51)	-16.84 ^c					
Utah	10.06	0.42	51(45,51)	-20.72 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	13.68	0.30	14(06,26)	7.80	Montana	11.71	0.60	40(15,51)	-7.74
Alaska	13.28	1.04	20(01,50)	4.60	Nebraska	14.26	0.50	08(02,26)	12.35 ^c
Arizona	11.28	0.24	46(35,50)	-11.14 ^c	Nevada	13.87	0.45	11(03,30)	9.23
Arkansas	15.08	0.41	04(01,13)	18.78 ^c	New Hampshire	12.53	0.55	30(09,48)	-1.28
California	11.85	0.11	36(32,45)	-6.63	New Jersey	13.26	0.21	21(11,28)	4.47
Colorado	11.46	0.29	45(30,50)	-9.71	New Mexico	11.70	0.44	41(22,50)	-7.82
Connecticut	10.56	0.30	50(43,51)	-16.84 ^c	New York	12.54	0.14	29(21,36)	-1.19
Delaware	10.98	0.61	48(24,51)	-13.53 ^c	North Carolina	11.74	0.20	39(31,47)	-7.54
D.C.	15.76	0.98	02(01,25)	24.13 ^c	North Dakota	13.30	0.77	19(02,47)	4.74
Florida	11.61	0.13	43(34,48)	-8.58	Ohio	13.69	0.19	13(08,23)	7.80
Georgia	12.59	0.22	28(19,38)	-0.80	Oklahoma	14.31	0.36	07(03,21)	12.69 ^c
Hawaii	10.75	0.50	49(31,51)	-15.35 ^c	Oregon	12.63	0.32	27(15,41)	-0.52
Idaho	11.14	0.51	47(25,51)	-12.23 ^c	Pennsylvania	13.80	0.17	12(07,21)	8.73
Illinois	13.63	0.19	15(09,23)	7.34	Rhode Island	13.33	0.60	18(04,43)	4.99
Indiana	13.41	0.26	17(08,28)	5.66	South Carolina	12.93	0.30	23(12,36)	1.83
Iowa	14.10	0.37	10(03,23)	11.05 ^c	South Dakota	13.04	0.69	22(04,47)	2.69
Kansas	12.87	0.38	24(10,40)	1.42	Tennessee	14.23	0.27	09(04,19)	12.10 ^c
Kentucky	14.77	0.33	06(02,14)	16.36 ^c	Texas	12.20	0.14	34(26,40)	-3.88
Louisiana	14.97	0.34	05(01,12)	17.96 ^c	Utah	10.06	0.42	51(45,51)	-20.72 ^c
Maine	12.45	0.51	32(10,47)	-1.92	Vermont	12.69	0.78	26(04,50)	-0.01
Maryland	12.46	0.27	31(19,42)	-1.87	Virginia	12.34	0.23	33(21,42)	-2.83
Massachusetts	11.76	0.23	38(28,48)	-7.36	Washington	11.77	0.25	37(28,48)	-7.32
Michigan	12.84	0.20	25(17,34)	1.13	West Virginia	15.38	0.49	03(01,12)	21.13 ^c
Minnesota	11.69	0.27	42(28,49)	-7.94	Wisconsin	12.09	0.26	35(23,46)	-4.78
Mississippi	16.14	0.43	01(01,05)	27.17 ^c	Wyoming	11.59	0.87	44(08,51)	-8.72
Missouri	13.61	0.27	16(07,25)	7.19					



Age-Adjusted Death Rates per 100,000 Quantile Interval

14.24 - 16.14
13.42 - 14.23
12.85 - 13.41
12.21 - 12.84
11.62 - 12.20
10.06 - 11.61
Suppressed
U.S. rate: 12.69

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

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

^c Absolute percent difference between state rate and total U.S. rate is 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 6.28
Cancer of the Colon and Rectum (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>											
All Races ^b	Both Sexes	393,064	281,906	206,320	121,413	79,266	46,430	1,054,865	1,160,780	16,776	1,177,556
	Males	201,444	141,586	103,205	60,694	38,518	21,344	532,958	579,395	5,741	585,136
	Females	191,620	140,320	103,115	60,719	40,748	25,086	521,907	581,385	11,035	592,420
White ^b	Both Sexes	318,724	235,878	175,895	103,853	69,080	40,904	879,946	973,061	14,682	987,743
	Males	164,730	120,728	89,034	52,292	34,129	19,056	449,833	491,231	5,097	496,328
	Females	153,994	115,150	86,861	51,561	34,951	21,848	430,113	481,830	9,585	491,415
Black ^b	Both Sexes	47,070	29,885	19,890	11,665	6,934	3,916	112,879	121,718	1,275	122,993
	Males	22,212	12,561	8,611	5,214	2,882	1,392	50,552	53,636	393	54,029
	Females	24,858	17,324	11,279	6,451	4,052	2,524	62,327	68,082	882	68,964
Asian/ Pacific	Both Sexes	18,561	11,624	7,604	+	+	+	42,739	+	+	+
	Males	9,770	5,985	3,819	+	+	+	22,100	+	+	+
Islander ^c	Females	8,791	5,639	3,785	+	+	+	20,639	+	+	+
Hispanic ^d	Both Sexes	32,255	18,902	10,733	+	+	+	68,895	+	+	+
	Males	17,364	9,764	5,528	+	+	+	36,267	+	+	+
	Females	14,891	9,138	5,205	+	+	+	32,628	+	+	+

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			
<u>Race</u>												
All Races ^c	Both Sexes	0.3002%	-	0.0005%	0.0052%	0.0274%	0.1109%	0.3521%	0.7582%	1.5052%	2.3794%	0.2841%
	Males	0.3084%	-	0.0003%	0.0050%	0.0265%	0.1180%	0.3875%	0.8884%	1.7808%	2.6789%	0.3259%
	Females	0.2922%	-	0.0007%	0.0054%	0.0282%	0.1038%	0.3181%	0.6407%	1.2806%	2.2005%	0.2506%
White ^c	Both Sexes	0.3125%	-	0.0006%	0.0056%	0.0287%	0.1094%	0.3359%	0.7253%	1.4977%	2.4090%	0.2803%
	Males	0.3214%	-	0.0004%	0.0054%	0.0273%	0.1155%	0.3724%	0.8543%	1.7810%	2.7000%	0.3221%
	Females	0.3036%	-	0.0008%	0.0058%	0.0303%	0.1031%	0.2998%	0.6047%	1.2607%	2.2329%	0.2459%
Black ^c	Both Sexes	0.2556%	-	-	0.0042%	0.0220%	0.1200%	0.4171%	0.9561%	1.6767%	2.2572%	0.3138%
	Males	0.2416%	-	-	0.0044%	0.0215%	0.1230%	0.4250%	1.0706%	1.8217%	2.4139%	0.3387%
	Females	0.2683%	-	-	0.0040%	0.0224%	0.1173%	0.4103%	0.8666%	1.5755%	2.1801%	0.2966%
Asian/ Pacific	Both Sexes	0.2754%	-	-	0.0026%	0.0230%	0.1028%	0.3610%	0.7600%	1.3920%	2.2152%	0.2712%
	Males	0.2937%	-	-	0.0027%	0.0239%	0.1187%	0.4128%	0.9069%	1.6873%	2.5942%	0.3215%
Islander ^c	Females	0.2586%	-	-	0.0025%	0.0223%	0.0887%	0.3164%	0.6393%	1.1624%	1.9831%	0.2329%
Hispanic ^d	Both Sexes	0.1326%	-	-	0.0037%	0.0216%	0.0814%	0.2803%	0.6468%	1.1988%	1.8001%	0.2268%
	Males	0.1374%	-	-	0.0032%	0.0214%	0.0860%	0.3031%	0.7643%	1.5176%	2.2005%	0.2716%
	Females	0.1278%	-	-	0.0042%	0.0218%	0.0766%	0.2583%	0.5455%	0.9624%	1.5591%	0.1934%

^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.

^b Prevalence was calculated using the First Malignant Primary Only for a person.

^c 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 (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.

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

ⁱ Not available.

Table 6.29

Cancer of the Colon And Rectum (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2009-2013
Both Sexes 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	178,971	99.4%	139,391	99.4%	21,893	99.4%	14,568	99.4%	1,018	99.6%	18,902	99.4%
Epidermoid carcinoma ^d (8051-8131)	1,122	0.6%	958	0.7%	116	0.5%	25	0.2%	-	-	97	0.5%
Squamous cell carcinoma (8070-8078, 8083-8084)	1,069	0.6%	918	0.7%	110	0.5%	24	0.2%	-	-	94	0.5%
Adenocarcinoma	167,109	92.8%	131,344	93.7%	19,763	89.8%	13,494	92.1%	946	92.6%	17,541	92.2%
(8050, 8140-8147, 8160-8162, 8180-8221, 8250-8507, 8520-8551, 8560, 8570-8574, 8576, 8940-8941)												
Adenocarcinoma, NOS	114,952	63.8%	90,084	64.3%	13,712	62.3%	9,625	65.7%	675	66.0%	12,150	63.9%
Adenocarcinoma in adenomatous polyp (8210)	15,085	8.4%	11,699	8.3%	1,701	7.7%	1,309	8.9%	105	10.3%	1,343	7.1%
Adenocarcinoma in villous adenoma (8261)	3,977	2.2%	3,184	2.3%	440	2.0%	299	2.0%	16	1.6%	535	2.8%
Mucinous adenocarcinoma (8470-8473, 8480, 8482)	11,517	6.4%	9,477	6.8%	1,192	5.4%	737	5.0%	50	4.9%	1,335	7.0%
Mucin-producing adenocarcinoma (8481)	1,571	0.9%	1,251	0.9%	211	1.0%	100	0.7%	-	-	155	0.8%
Signet ring adenocarcinoma (8490)	2,082	1.2%	1,707	1.2%	198	0.9%	152	1.0%	-	-	227	1.2%
Other adenocarcinomas ^e	17,925	10.0%	13,942	9.9%	2,309	10.5%	1,272	8.7%	90	8.8%	1,796	9.4%
Other specific carcinomas (8012-8015, 8030-8046, 8150-8155, 8170-8175, 8230-8249, 8508, 8510-8513, 8561-8562, 8575, 8580-8671)	9,207	5.1%	5,901	4.2%	1,813	8.2%	946	6.5%	53	5.2%	1,090	5.7%
Neuroendocrine carcinoid (8240-8245)	6,785	3.8%	4,111	2.9%	1,443	6.6%	762	5.2%	44	4.3%	858	4.5%
Other ^f	2,422	1.3%	1,790	1.3%	370	1.7%	184	1.3%	-	-	232	1.2%
Unspecified, Carcinoma, NOS (8010-8011, 8020-8022)	1,533	0.9%	1,188	0.8%	201	0.9%	103	0.7%	16	1.6%	174	0.9%

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.

^f Includes histologies 8050, 8141-8147, 8160-8162, 8180-8204, 8211-8221, 8250-8260, 8262-8264, 8270-8463, 8500-8507, 8514, 8520-8551, 8560, 8570-8574, 8576, 8940-8941.

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

Table 6.29 - continued

Cancer of the Colon And Rectum (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2009-2013
Both Sexes 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, 8990-8991,9040-9044, 9120-9136,9150-9252, 9370-9373,9540-9582)	108	0.1%	88	0.1%	-	-	-	-	-	-	21	0.1%
Other specific types (8720-8790,8930-8936, 8950-8983,9000-9030, 9060-9110,9260-9365, 9380-9539)	293	0.2%	200	0.1%	49	0.2%	43	0.3%	-	-	33	0.2%
Unspecified (8000-8005)	670	0.4%	496	0.4%	65	0.3%	41	0.3%	-	-	69	0.4%
Total ^d	180,042	100.0%	140,175	100.0%	22,019	100.0%	14,658	100.0%	1,022	100.0%	19,025	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.

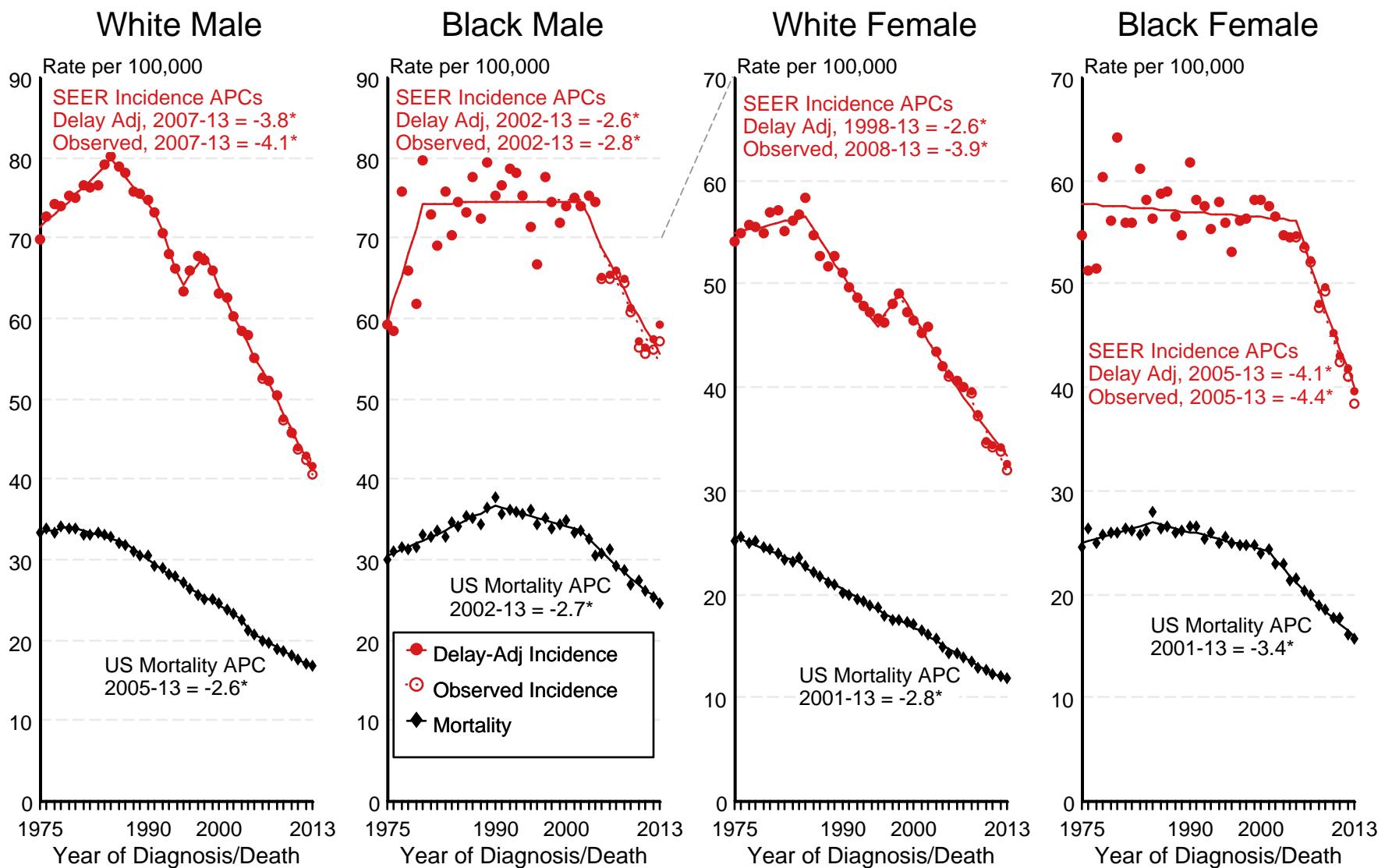
^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

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

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

Figure 6.1

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Colon and Rectum, 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 4.3.0.0, 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.

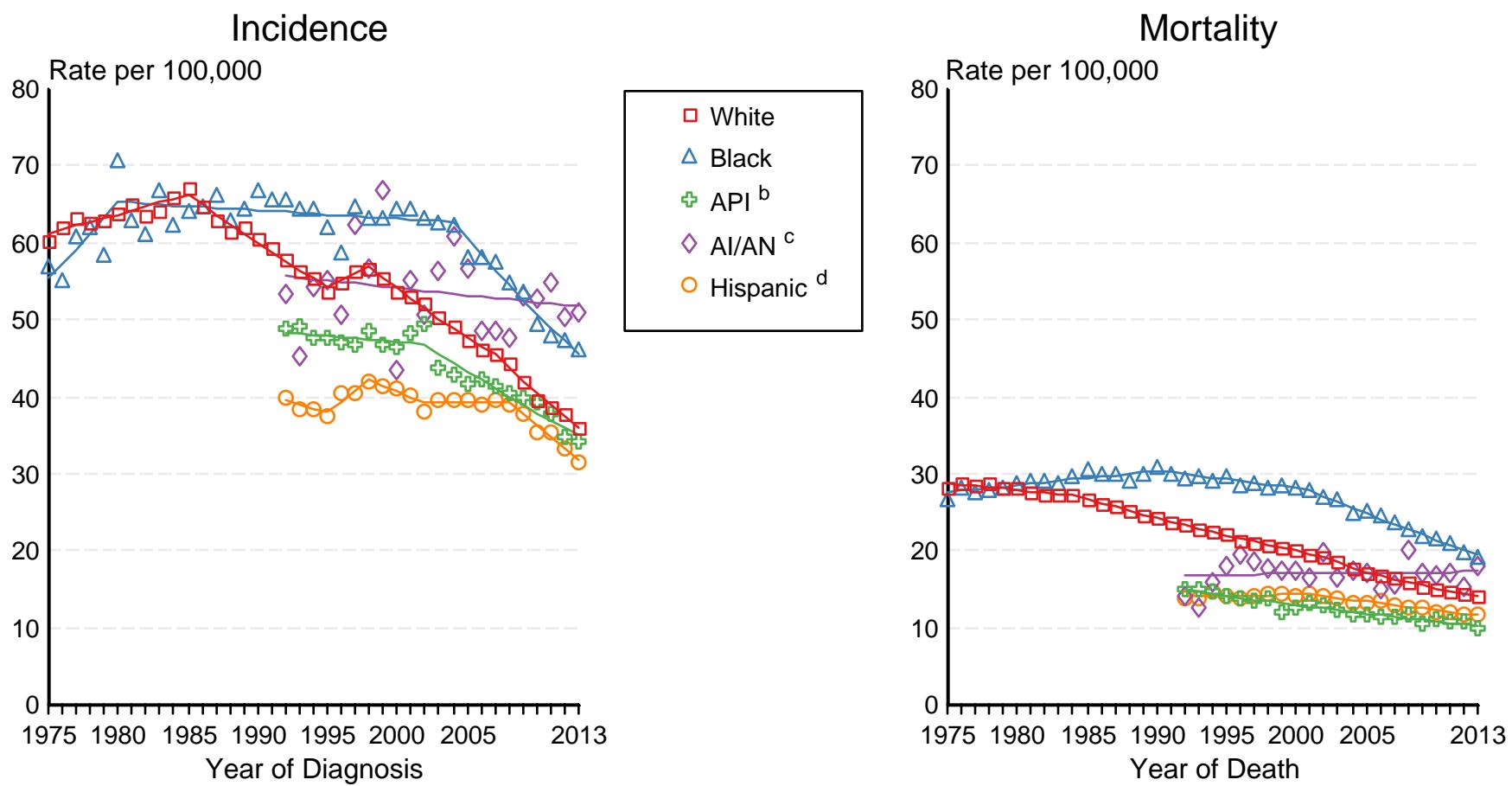
* The APC is significantly different from zero ($p < 0.05$).

Figure 6.2

SEER Incidence and US Death Rates^a

Cancer of the Colon and Rectum, Both Sexes

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.

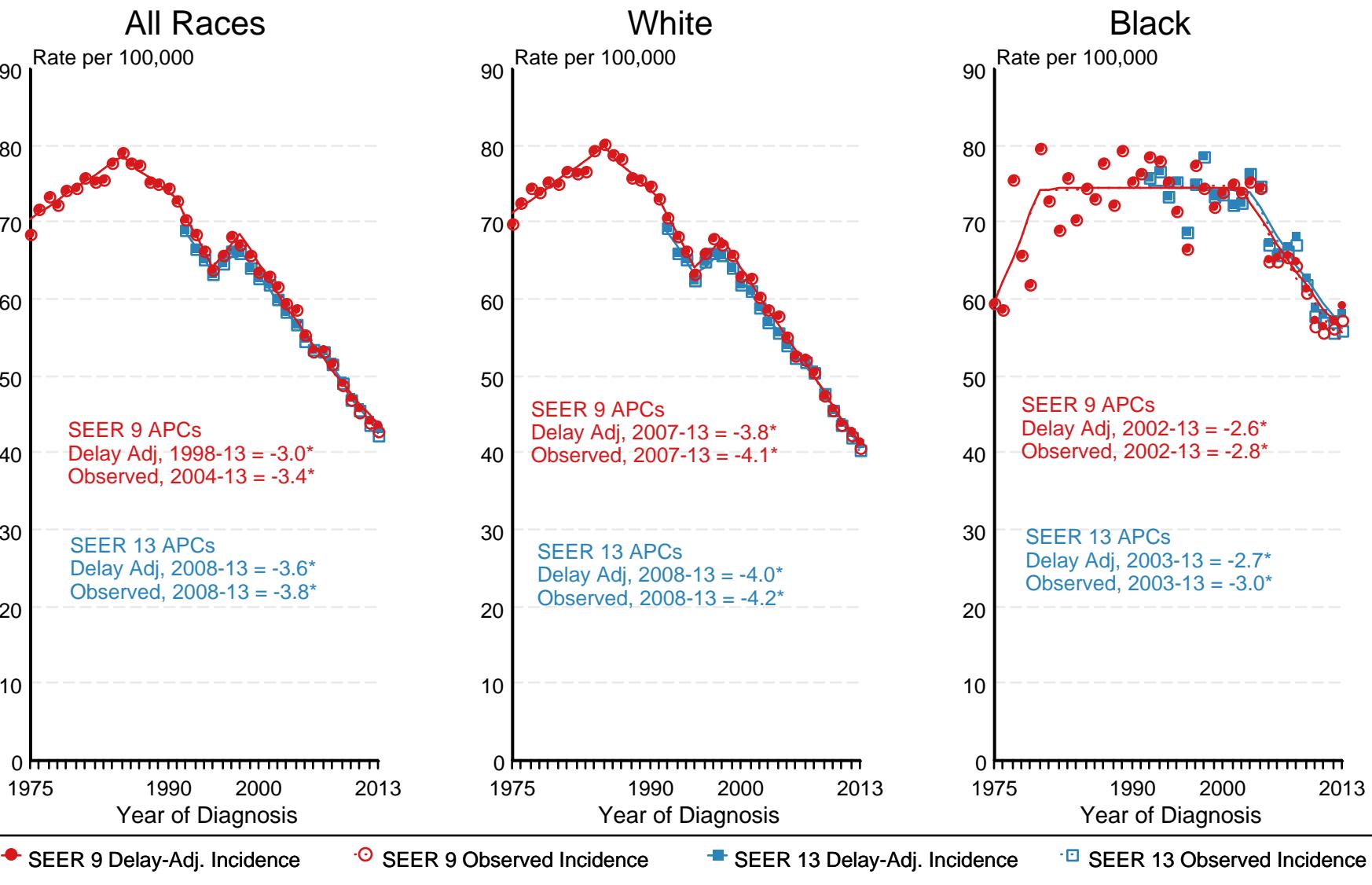
^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from New Hampshire and Oklahoma.

Figure 6.3

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a

SEER 9 Areas Compared to SEER 13 Areas

Cancer of the Colon and Rectum, Male, by Race



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.

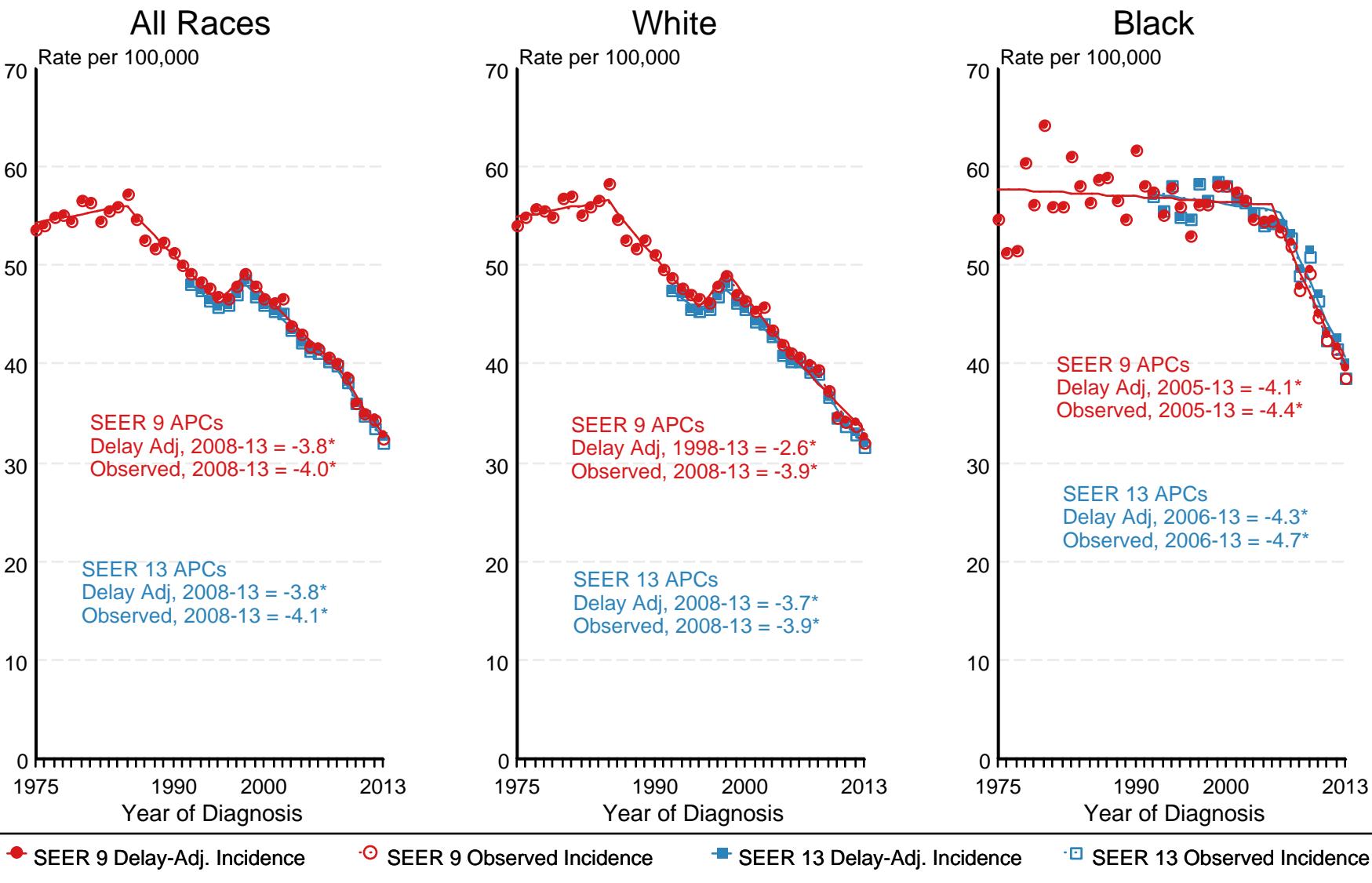
* The APC is significantly different from zero ($p < 0.05$).

Figure 6.4

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a

SEER 9 Areas Compared to SEER 13 Areas

Cancer of the Colon and Rectum, Female, by Race



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).

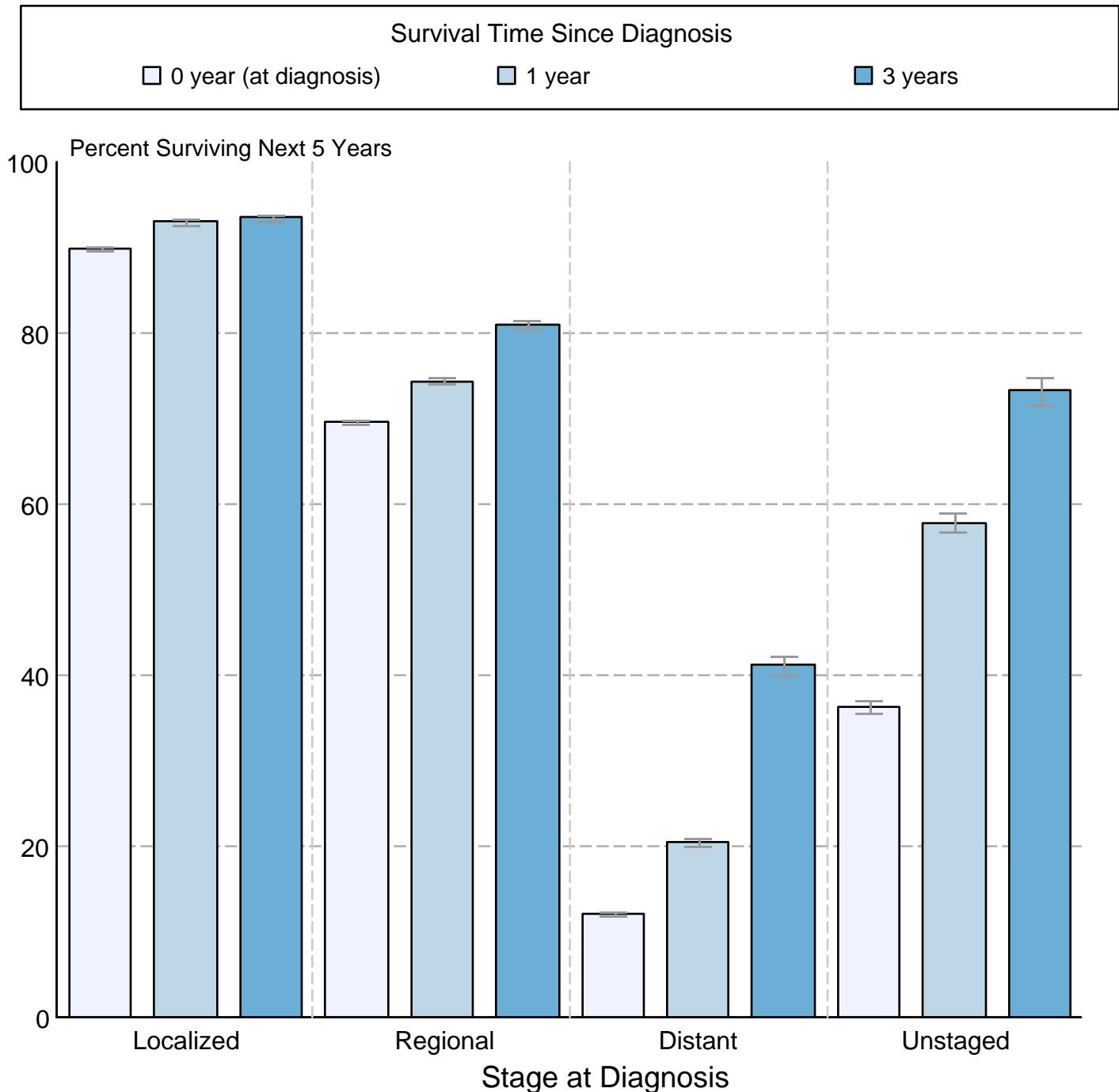
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.3.0.0, April 2016, National Cancer Institute.

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 6.5

Cancer of the Colon and Rectum
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.