

Table 6.1  
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2010 With up to Five Joinpoints, 1992-2010 With up to Three Joinpoints,  
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2001-10	2006-10
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2010</u>														
All Races	1975-85	0.8*	1985-95	-1.8*	1995-98	1.6	1998-10	-2.4*					-2.4*	-2.4*
White	1975-85	0.8*	1985-95	-2.0*	1995-98	1.6	1998-08	-2.4*	2008-10	-5.3*			-3.1*	-3.9*
Black	1975-80	3.2*	1980-03	-0.1	2003-10	-3.0*							-2.3*	-3.0*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2010</u>														
All Races	1992-95	-2.1*	1995-98	1.6	1998-08	-2.1*	2008-10	-4.2*					-2.6*	-3.2*
White	1992-95	-2.1*	1995-98	1.7*	1998-08	-2.3*	2008-10	-4.9*					-2.9*	-3.6*
Black	1992-03	0.0	2003-10	-2.5*									-2.0*	-2.5*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2010</u>														
All Races	1975-85	0.8*	1985-95	-1.8*	1995-98	1.5	1998-08	-2.3*	2008-10	-5.1*			-2.9*	-3.7*
White	1975-85	0.8*	1985-95	-2.0*	1995-98	1.6	1998-08	-2.5*	2008-10	-5.8*			-3.2*	-4.2*
Black	1975-80	3.2*	1980-03	-0.1	2003-10	-3.2*							-2.5*	-3.2*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2010</u>														
All Races	1992-95	-2.1*	1995-98	1.6	1998-08	-2.2*	2008-10	-4.8*					-2.8*	-3.5*
White	1992-95	-2.2*	1995-98	1.6	1998-08	-2.4*	2008-10	-5.4*					-3.1*	-3.9*
White NH <sup>ef</sup>	1992-95	-2.2*	1995-98	1.8	1998-08	-2.5*	2008-10	-5.5*					-3.2*	-4.0*
Black	1992-03	0.0	2003-10	-2.8*									-2.2*	-2.8*
Black NH <sup>ef</sup>	1992-03	0.0	2003-10	-2.7*									-2.1*	-2.7*
API <sup>e</sup>	1992-01	-0.3	2001-10	-2.3*									-2.3*	-2.3*
AI/AN <sup>eg</sup>	1992-10	-0.4											-0.4	-0.4
Hispanic <sup>f</sup>	1992-08	0.0	2008-10	-5.7									-1.3	-2.9
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2010</u>														
All Races	1975-84	-0.5*	1984-02	-1.8*	2002-05	-3.8*	2005-10	-2.5*					-2.8*	-2.5*
White	1975-84	-0.7*	1984-02	-1.9*	2002-05	-3.8*	2005-10	-2.5*					-2.9*	-2.5*
Black	1975-90	0.6*	1990-01	-0.8*	2001-10	-2.8*							-2.8*	-2.8*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2010</u>														
All Races	1992-01	-1.8*	2001-10	-2.9*									-2.9*	-2.9*
White	1992-02	-1.9*	2002-05	-3.9*	2005-10	-2.5*							-2.9*	-2.5*
White NH <sup>ef</sup>	1992-01	-1.8*	2001-10	-2.8*									-2.8*	-2.8*
Black	1992-01	-0.7*	2001-10	-2.9*									-2.9*	-2.9*
Black NH <sup>ef</sup>	1992-01	-0.6*	2001-10	-2.7*									-2.7*	-2.7*
API <sup>e</sup>	1992-10	-1.8*											-1.8*	-1.8*
AI/AN <sup>eg</sup>	1992-10	0.3											0.3	0.3
Hispanic <sup>f</sup>	1992-99	0.5	1999-10	-1.5*									-1.5*	-1.5*

Joinpoint Regression Program Version 4.0.3, April 2013, 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 CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.

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

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

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

Table 6.2  
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2010 With up to Five Joinpoints, 1992-2010 With up to Three Joinpoints,  
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2001-10	2006-10
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2010</u>														
All Races	1975-85	1.1*	1985-91	-1.2*	1991-95	-3.2*	1995-98	2.1	1998-10	-2.8*			-2.8*	-2.8*
White	1975-85	1.1*	1985-91	-1.4*	1991-95	-3.3*	1995-98	2.2	1998-10	-3.1*			-3.1*	-3.1*
Black	1975-92	1.0*	1992-10	-1.2*									-1.2*	-1.2*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2010</u>														
All Races	1992-95	-2.6*	1995-98	1.4	1998-08	-2.5*	2008-10	-4.2*					-2.9*	-3.3*
White	1992-95	-2.8*	1995-98	1.5	1998-08	-2.7*	2008-10	-4.7*					-3.2*	-3.7*
Black	1992-03	-0.1	2003-10	-2.9*									-2.3*	-2.9*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2010</u>														
All Races	1975-85	1.1*	1985-91	-1.2*	1991-95	-3.2*	1995-98	2.0	1998-08	-2.8*	2008-10	-4.8*	-3.2*	-3.8*
White	1975-85	1.1*	1985-91	-1.4*	1991-95	-3.3*	1995-98	2.0	1998-08	-3.0*	2008-10	-5.6*	-3.6*	-4.3*
Black	1975-80	4.5	1980-03	0.0	2003-10	-3.6*							-2.8*	-3.6*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2010</u>														
All Races	1992-95	-2.6*	1995-98	1.4	1998-08	-2.5*	2008-10	-4.7*					-3.0*	-3.6*
White	1992-95	-2.8*	1995-98	1.5	1998-08	-2.7*	2008-10	-5.3*					-3.3*	-4.0*
White NH <sup>ef</sup>	1992-95	-2.9*	1995-98	1.5	1998-08	-2.9*	2008-10	-5.2*					-3.4*	-4.1*
Black	1992-03	-0.1	2003-10	-3.1*									-2.4*	-3.1*
Black NH <sup>ef</sup>	1992-04	-0.2	2004-10	-3.4*									-2.4*	-3.4*
API <sup>e</sup>	1992-01	-0.4	2001-10	-2.7*									-2.7*	-2.7*
AI/AN <sup>eg</sup>	1992-10	-0.3											-0.3	-0.3
Hispanic <sup>f</sup>	1992-98	1.7	1998-10	-1.1*									-1.1*	-1.1*
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2010</u>														
All Races	1975-78	0.8	1978-85	-0.4*	1985-90	-1.4*	1990-02	-2.0*	2002-05	-4.0*	2005-10	-2.5*	-2.9*	-2.5*
White	1975-79	0.6	1979-87	-0.8*	1987-02	-2.1*	2002-05	-4.2*	2005-10	-2.5*			-3.0*	-2.5*
Black	1975-90	1.2*	1990-02	-0.7*	2002-10	-2.6*							-2.4*	-2.6*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2010</u>														
All Races	1992-02	-2.0*	2002-05	-4.0*	2005-10	-2.5*							-2.9*	-2.5*
White	1992-02	-2.1*	2002-05	-4.1*	2005-10	-2.5*							-3.0*	-2.5*
White NH <sup>ef</sup>	1992-97	-2.4*	1997-02	-1.7*	2002-05	-4.1*	2005-10	-2.6*					-3.0*	-2.6*
Black	1992-02	-0.8*	2002-10	-2.6*									-2.4*	-2.6*
Black NH <sup>ef</sup>	1992-02	-0.7*	2002-10	-2.4*									-2.2*	-2.4*
API <sup>e</sup>	1992-10	-1.9*											-1.9*	-1.9*
AI/AN <sup>eg</sup>	1992-96	15.4	1996-10	-1.3									-1.3	-1.3
Hispanic <sup>f</sup>	1992-96	1.8*	1996-10	-1.2*									-1.2*	-1.2*

Joinpoint Regression Program Version 4.0.3, April 2013, 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

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The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.

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

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

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

Table 6.3  
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2010 With up to Five Joinpoints, 1992-2010 With up to Three Joinpoints,  
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2001-10	2006-10
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2010</u>														
All Races	1975-85	0.3*	1985-95	-1.9*	1995-98	2.1	1998-10	-2.2*					-2.2*	-2.2*
White	1975-85	0.3	1985-95	-2.1*	1995-98	2.3	1998-10	-2.4*					-2.4*	-2.4*
Black	1975-02	0.0	2002-10	-2.5*									-2.3*	-2.5*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2010</u>														
All Races	1992-95	-1.8*	1995-98	1.8	1998-08	-1.9*	2008-10	-4.1*					-2.4*	-3.0*
White	1992-95	-1.7*	1995-98	1.7	1998-08	-2.1*	2008-10	-4.9*					-2.7*	-3.5*
Black	1992-01	0.4	2001-10	-1.9*									-1.9*	-1.9*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2010</u>														
All Races	1975-85	0.3	1985-95	-1.9*	1995-98	1.8	1998-08	-2.0*	2008-10	-5.1*			-2.7*	-3.6*
White	1975-85	0.3	1985-95	-2.1*	1995-98	2.0	1998-08	-2.2*	2008-10	-6.0*			-3.0*	-4.1*
Black	1975-04	-0.1	2004-10	-3.7*									-2.5*	-3.7*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2010</u>														
All Races	1992-95	-1.8*	1995-98	1.8	1998-08	-2.0*	2008-10	-4.7*					-2.6*	-3.3*
White	1992-95	-1.7	1995-98	1.7	1998-08	-2.1*	2008-10	-5.4*					-2.9*	-3.8*
White NH <sup>ef</sup>	1992-95	-1.7	1995-98	1.9	1998-08	-2.2*	2008-10	-5.7*					-3.0*	-4.0*
Black	1992-02	0.2	2002-10	-2.3*									-2.1*	-2.3*
Black NH <sup>ef</sup>	1992-02	0.2	2002-10	-2.2*									-2.0*	-2.2*
API <sup>e</sup>	1992-10	-1.0*											-1.0*	-1.0*
AI/AN <sup>eg</sup>	1992-10	-0.5											-0.5	-0.5
Hispanic <sup>f</sup>	1992-07	0.1	2007-10	-3.6*									-1.1*	-2.6*
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2010</u>														
All Races	1975-84	-1.0*	1984-01	-1.8*	2001-10	-2.9*							-2.9*	-2.9*
White	1975-84	-1.2*	1984-01	-2.0*	2001-10	-2.9*							-2.9*	-2.9*
Black	1975-85	0.7*	1985-01	-0.7*	2001-10	-3.3*							-3.3*	-3.3*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2010</u>														
All Races	1992-01	-1.7*	2001-10	-3.0*									-3.0*	-3.0*
White	1992-01	-1.8*	2001-10	-3.0*									-3.0*	-3.0*
White NH <sup>ef</sup>	1992-01	-1.7*	2001-10	-2.8*									-2.8*	-2.8*
Black	1992-01	-0.7*	2001-10	-3.3*									-3.3*	-3.3*
Black NH <sup>ef</sup>	1992-01	-0.6*	2001-10	-3.2*									-3.2*	-3.2*
API <sup>e</sup>	1992-10	-1.6*											-1.6*	-1.6*
AI/AN <sup>eg</sup>	1992-10	0.2											0.2	0.2
Hispanic <sup>f</sup>	1992-01	0.3	2001-10	-2.1*									-2.1*	-2.1*

Joinpoint Regression Program Version 4.0.3, April 2013, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

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

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

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

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

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

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

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The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.

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

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

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

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

Trends in SEER 9 Observed Incidence<sup>a</sup> Using the Joinpoint Regression Program,  
1975-2010 With up to Five Joinpoints,  
By Race and Sex

		JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>
		Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2006-10
<u>SEER 9 Observed Incidence<sup>a</sup> for Cancer of the Colon, 1975-2010</u>														
All Races	Both Sexes	1975-85	1.1*	1985-95	-1.6*	1995-00	0.0	2000-08	-2.7*	2008-10	-5.6*			-4.1*
All Races	Male	1975-85	1.7*	1985-91	-1.2*	1991-95	-3.1*	1995-98	1.3	1998-04	-2.5*	2004-10	-3.8*	-3.8*
All Races	Female	1975-85	0.6*	1985-94	-1.7*	1994-01	0.0	2001-10	-2.9*					-2.9*
White	Both Sexes	1975-85	1.1*	1985-95	-1.9*	1995-98	1.3	1998-08	-2.4*	2008-10	-6.7*			-4.6*
White	Male	1975-85	1.7*	1985-91	-1.4*	1991-95	-3.1*	1995-98	1.6	1998-08	-3.0*	2008-10	-6.2*	-4.6*
White	Female	1975-85	0.5*	1985-95	-1.9*	1995-98	1.8	1998-08	-2.1*	2008-10	-7.1*			-4.7*
Black	Both Sexes	1975-80	3.6*	1980-03	-0.1	2003-10	-4.0*							-4.0*
Black	Male	1975-85	2.2*	1985-03	-0.2	2003-10	-4.3*							-4.3*
Black	Female	1975-04	-0.1	2004-10	-4.6*									-4.6*
<u>SEER 9 Observed Incidence<sup>a</sup> for Cancer of the Rectum, 1975-2010</u>														
All Races	Both Sexes	1975-87	-0.3	1987-95	-2.4*	1995-98	2.5	1998-10	-2.3*					-2.3*
All Races	Male	1975-89	-0.3	1989-94	-3.6*	1994-98	1.7	1998-10	-2.6*					-2.6*
All Races	Female	1975-84	-0.2	1984-95	-2.2*	1995-98	2.2	1998-10	-2.0*					-2.0*
White	Both Sexes	1975-85	-0.1	1985-95	-2.3*	1995-98	2.5	1998-10	-2.7*					-2.7*
White	Male	1975-89	-0.3	1989-94	-3.9*	1994-99	1.1	1999-10	-3.2*					-3.2*
White	Female	1975-84	-0.2	1984-95	-2.3*	1995-98	2.4	1998-10	-2.5*					-2.5*
Black	Both Sexes	1975-10	-0.2											-0.2
Black	Male	1975-10	-0.1											-0.1
Black	Female	1975-10	-0.2											-0.2

Joinpoint Regression Program Version 4.0.3, April 2013, 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.

Table 6.5  
Cancer of the Colon and Rectum (Invasive)

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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975	59.53	68.44	53.66	60.18	69.75	54.05	56.85	59.33	54.66
1976	61.35	71.72	54.13	62.14	72.66	55.01	55.04	58.53	51.28
1977	62.40	73.49	54.96	63.19	74.32	55.77	60.69	75.66	51.47
1978	62.04	72.37	55.26	62.79	73.90	55.60	62.04	65.70	60.42
1979	62.38	74.11	54.59	62.96	75.20	54.96	58.57	61.64	56.29
1980	63.75	74.55	56.54	63.95	74.88	56.83	70.83	79.71	64.23
1981	64.25	75.83	56.50	64.89	76.70	57.16	62.76	72.77	55.94
1982	62.79	75.18	54.51	63.44	76.24	55.05	61.26	68.98	55.93
1983	63.67	75.60	55.61	64.29	76.60	56.06	66.68	75.69	61.01
1984	64.83	77.67	56.08	65.84	79.31	56.72	62.41	70.28	58.22
1985	66.31	79.17	57.34	67.22	80.21	58.40	63.97	74.31	56.29
1986	64.19	77.79	54.72	64.61	78.91	54.77	64.63	73.13	58.65
1987	62.71	77.49	52.66	62.89	78.22	52.61	66.25	77.53	59.05
1988	61.38	75.20	51.81	61.57	75.80	51.76	63.00	72.45	56.61
1989	61.71	74.99	52.43	61.98	75.47	52.69	64.53	79.48	54.72
1990	60.72	74.38	51.30	60.71	74.81	51.06	66.76	74.93	61.63
1991	59.49	72.92	50.05	59.33	73.17	49.69	65.67	76.38	58.23
1992	58.00	70.41	49.22	57.88	70.72	48.76	65.48	78.55	57.29
1993	56.80	68.45	48.32	56.35	68.13	47.81	64.52	78.09	55.33
1994	55.64	66.27	47.75	55.42	66.36	47.22	64.48	75.27	58.07
1995	54.07	63.86	46.95	53.74	63.47	46.64	62.00	71.33	56.04
1996	54.81	65.62	46.71	54.80	65.97	46.44	58.63	66.78	53.03
1997	56.45	68.14	47.98	56.46	67.99	48.09	64.60	77.48	56.26
1998	56.83	67.14	49.34	56.81	67.40	49.09	63.04	74.05	56.16
1999	55.54	65.79	47.91	55.36	65.92	47.26	63.20	71.93	58.12
2000	54.21	63.76	46.83	53.87	63.21	46.56	64.35	73.75	58.22
2001	53.66	63.12	46.28	53.04	62.69	45.40	64.32	74.78	57.63
2002	53.26	61.65	46.71	52.37	60.39	45.99	63.26	74.43	56.43
2003	50.94	59.65	44.05	50.34	58.74	43.53	62.48	75.16	54.65
2004	50.02	58.76	43.28	49.18	58.15	42.12	62.46	74.04	54.79
2005	47.98	55.47	42.02	47.55	55.35	41.21	58.11	64.63	54.58
2006	47.05	53.48	41.83	46.24	52.75	40.79	57.85	65.05	53.22
2007	46.57	53.50	40.90	45.62	52.26	40.11	57.55	65.71	51.73
2008	45.51	51.84	40.27	44.71	50.78	39.63	54.46	64.03	47.42
2009	43.44	49.15	38.78	42.11	47.58	37.51	53.44	60.71	48.97
2010	41.36	47.50	36.39	39.89	45.85	34.89	49.76	57.50	44.72

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

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

Table 6.6  
Cancer of the Colon and Rectum (Invasive)

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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2010	55.58	65.47	48.28	55.66	65.67	48.25	61.16	70.59	55.01
1975	59.53	68.44	53.66	60.18	69.75	54.05	56.85	59.33	54.66
1976	61.35	71.72	54.13	62.14	72.66	55.01	55.04	58.53	51.28
1977	62.40	73.49	54.96	63.19	74.32	55.77	60.69	75.66	51.47
1978	62.04	72.37	55.26	62.79	73.90	55.60	62.04	65.70	60.42
1979	62.38	74.11	54.59	62.96	75.20	54.96	58.57	61.64	56.29
1980	63.75	74.55	56.54	63.95	74.88	56.83	70.83	79.71	64.23
1981	64.25	75.83	56.50	64.89	76.70	57.16	62.76	72.77	55.94
1982	62.78	75.18	54.51	63.43	76.24	55.04	61.25	68.97	55.92
1983	63.67	75.59	55.60	64.28	76.59	56.06	66.66	75.67	60.99
1984	64.82	77.66	56.08	65.83	79.29	56.71	62.39	70.26	58.20
1985	66.30	79.16	57.33	67.21	80.20	58.38	63.94	74.28	56.27
1986	64.19	77.78	54.71	64.59	78.88	54.75	64.59	73.09	58.62
1987	62.70	77.48	52.65	62.87	78.20	52.59	66.21	77.48	59.01
1988	61.37	75.19	51.80	61.55	75.77	51.74	62.96	72.41	56.57
1989	61.69	74.98	52.41	61.95	75.43	52.66	64.47	79.41	54.67
1990	60.70	74.36	51.29	60.67	74.77	51.03	66.69	74.85	61.57
1991	59.48	72.91	50.04	59.29	73.12	49.65	65.59	76.29	58.16
1992	57.99	70.39	49.21	57.83	70.66	48.73	65.40	78.45	57.22
1993	56.79	68.42	48.30	56.31	68.07	47.77	64.43	77.98	55.25
1994	55.62	66.24	47.72	55.37	66.30	47.17	64.38	75.15	57.98
1995	54.04	63.82	46.93	53.69	63.41	46.59	61.90	71.21	55.95
1996	54.77	65.58	46.68	54.74	65.90	46.39	58.52	66.66	52.93
1997	56.41	68.09	47.94	56.39	67.92	48.03	64.47	77.33	56.15
1998	56.78	67.08	49.30	56.75	67.32	49.04	62.91	73.91	56.05
1999	55.46	65.71	47.84	55.28	65.82	47.19	63.04	71.75	57.98
2000	54.12	63.66	46.75	53.78	63.10	46.48	64.18	73.54	58.06
2001	53.55	63.00	46.18	52.94	62.57	45.32	64.13	74.56	57.46
2002	53.13	61.51	46.60	52.27	60.28	45.90	63.06	74.19	56.25
2003	50.79	59.49	43.91	50.23	58.61	43.44	62.25	74.89	54.45
2004	49.85	58.56	43.12	49.05	58.00	42.01	62.20	73.73	54.56
2005	47.77	55.24	41.83	47.41	55.18	41.09	57.82	64.31	54.32
2006	46.80	53.21	41.60	46.07	52.56	40.64	57.51	64.68	52.91
2007	46.28	53.17	40.63	45.40	52.02	39.92	57.13	65.23	51.36
2008	45.16	51.45	39.94	44.44	50.46	39.38	53.95	63.43	46.98
2009	43.03	48.70	38.40	41.73	47.15	37.18	52.73	59.91	48.32
2010	40.58	46.62	35.68	39.21	45.06	34.29	48.56	56.12	43.64

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

Table 6.7  
Cancer of the Colon (Invasive)

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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2010	40.08	45.52	36.15	40.09	45.64	36.07	46.89	53.03	43.03
1975	41.35	45.40	38.91	41.73	46.13	39.15	42.83	44.14	41.64
1976	43.05	47.75	39.95	43.44	48.19	40.39	43.08	43.60	41.91
1977	43.97	49.55	40.36	44.66	50.06	41.19	45.39	58.33	37.66
1978	43.85	49.12	40.59	44.11	49.86	40.63	47.65	48.81	47.67
1979	43.77	50.20	39.62	44.11	51.03	39.72	44.68	45.58	43.97
1980	45.57	50.67	42.34	45.58	50.88	42.33	55.19	58.35	52.85
1981	45.48	51.34	41.73	45.89	51.94	42.14	46.85	50.60	44.36
1982	45.76	53.44	40.68	46.07	54.08	40.85	48.27	52.48	45.19
1983	46.11	53.04	41.63	46.42	53.50	41.87	50.20	58.52	45.25
1984	46.51	54.58	41.32	47.04	55.58	41.57	48.68	54.02	46.05
1985	47.88	55.03	42.97	48.41	55.61	43.66	49.94	57.49	44.21
1986	46.80	54.37	41.58	47.07	55.17	41.52	49.29	55.41	45.33
1987	45.23	54.43	39.16	45.14	54.51	39.07	51.35	59.84	45.73
1988	44.30	52.60	38.66	44.28	52.87	38.43	48.75	54.02	45.27
1989	44.37	52.45	38.96	44.48	52.50	39.19	48.95	60.41	41.62
1990	44.20	51.99	38.93	44.06	52.02	38.74	52.08	57.83	48.56
1991	43.60	51.84	37.91	43.29	51.86	37.40	51.74	57.75	47.67
1992	42.29	49.63	37.23	42.05	49.74	36.73	50.83	60.31	45.17
1993	41.60	48.95	36.31	41.06	48.64	35.64	51.16	60.56	45.02
1994	40.84	46.91	36.35	40.62	47.00	35.83	50.07	56.95	46.30
1995	39.66	45.06	35.85	39.30	44.68	35.47	48.73	54.90	45.32
1996	39.38	45.40	34.88	39.31	45.81	34.44	44.63	48.54	42.04
1997	41.10	48.38	35.98	41.11	48.26	36.14	49.21	59.02	42.63
1998	41.06	46.87	37.04	40.99	47.18	36.62	47.59	54.38	43.98
1999	39.80	45.44	35.67	39.59	45.45	35.14	48.41	54.74	44.84
2000	39.37	44.45	35.48	39.01	43.96	35.17	50.93	57.16	47.06
2001	39.22	44.11	35.49	38.81	43.85	34.88	48.96	55.68	44.77
2002	38.68	43.31	35.10	37.91	42.20	34.50	49.59	57.34	44.82
2003	36.97	41.47	33.37	36.59	40.75	33.15	47.57	56.60	42.10
2004	36.32	41.40	32.51	35.78	41.08	31.72	47.40	54.72	42.65
2005	34.45	38.01	31.65	34.23	38.12	31.08	44.16	48.61	42.09
2006	33.92	37.33	31.14	33.44	36.90	30.53	44.44	49.17	41.34
2007	33.01	36.12	30.53	32.65	35.72	30.20	42.24	46.28	39.20
2008	32.66	35.89	29.98	32.37	35.53	29.71	40.00	45.67	35.88
2009	30.80	33.27	28.82	30.04	32.47	27.99	39.04	43.73	36.55
2010	28.72	32.03	26.05	27.95	31.10	25.28	35.38	40.25	32.42

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

Table 6.8  
Cancer of the Rectum (Invasive)

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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2010	15.50	19.95	12.13	15.56	20.03	12.18	14.28	17.56	11.98
1975	18.18	23.04	14.75	18.45	23.62	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	18.43	23.94	14.60	18.53	24.26	14.58	15.30	17.33	13.81
1978	18.19	23.25	14.67	18.67	24.03	14.97	14.39	16.89	12.76
1979	18.61	23.91	14.97	18.85	24.17	15.24	13.90	16.06	12.31
1980	18.18	23.88	14.20	18.37	24.00	14.51	15.65	21.36	11.38
1981	18.77	24.49	14.77	19.00	24.76	15.02	15.92	22.17	11.59
1982	17.02	21.74	13.83	17.36	22.15	14.19	12.98	16.49	10.73
1983	17.56	22.56	13.98	17.86	23.09	14.18	16.46	17.15	15.75
1984	18.31	23.08	14.76	18.80	23.72	15.15	13.71	16.24	12.15
1985	18.42	24.13	14.36	18.79	24.59	14.72	14.00	16.79	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	13.50	17.73	23.69	13.52	14.87	17.64	13.29
1988	17.07	22.59	13.14	17.27	22.90	13.31	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	16.61	22.75	12.29	14.61	17.02	13.01
1991	15.88	21.07	12.13	16.00	21.27	12.25	13.85	18.55	10.50
1992	15.70	20.76	11.97	15.78	20.92	11.99	14.57	18.14	12.05
1993	15.19	19.48	11.99	15.25	19.43	12.13	13.27	17.42	10.22
1994	14.78	19.33	11.37	14.75	19.29	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	20.17	11.80	15.43	20.10	11.95	13.90	18.12	10.89
1997	15.30	19.70	11.96	15.29	19.66	11.89	15.27	18.31	13.52
1998	15.72	20.21	12.26	15.76	20.14	12.41	15.32	19.52	12.07
1999	15.66	20.27	12.17	15.68	20.38	12.05	14.64	17.01	13.13
2000	14.75	19.22	11.27	14.78	19.15	11.31	13.25	16.39	11.01
2001	14.34	18.90	10.70	14.13	18.72	10.44	15.16	18.88	12.68
2002	14.45	18.20	11.50	14.37	18.07	11.40	13.47	16.86	11.43
2003	13.82	18.02	10.54	13.64	17.86	10.29	14.68	18.29	12.35
2004	13.53	17.16	10.61	13.28	16.91	10.29	14.80	19.01	11.91
2005	13.33	17.23	10.19	13.17	17.06	10.00	13.67	15.71	12.22
2006	12.88	15.88	10.46	12.63	15.66	10.12	13.08	15.51	11.57
2007	13.27	17.05	10.11	12.76	16.30	9.72	14.89	18.95	12.16
2008	12.50	15.56	9.96	12.07	14.93	9.67	13.95	17.76	11.10
2009	12.23	15.43	9.59	11.69	14.68	9.19	13.69	16.18	11.77
2010	11.86	14.59	9.63	11.26	13.96	9.01	13.17	15.87	11.22

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



Table 6.9  
Cancer of the Colon and Rectum (Invasive)

Age-adjusted U.S. Death<sup>a</sup> Rates by Year, Race and Sex

Year of Death:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2010	22.37	26.94	19.17	22.11	26.70	18.88	27.45	32.92	23.96
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	21.51	27.48	17.63

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

Table 6.10  
Cancer of the Colon and Rectum (Invasive)

SEER Incidence<sup>a</sup> and U.S. Death<sup>b</sup> Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2006-2010									
All ages	45.0	52.2	39.3	44.2	51.3	38.4	55.3	64.3	49.2
Under 65	18.2	20.7	15.9	17.4	19.8	15.1	24.3	27.1	22.0
65 and over	230.4	270.0	200.9	229.6	269.0	199.7	269.8	321.5	237.3
All ages (IARC world std) <sup>c</sup>	28.1	32.7	24.2	27.4	31.9	23.4	35.7	41.3	31.6
Age-Specific Rates, 2006-2010									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.3	0.3	0.3	0.3	0.3	0.3	-	-	-
20-24	1.0	1.0	0.9	1.0	1.0	1.0	0.9	1.0	0.8
25-29	2.1	2.2	2.1	2.2	2.2	2.1	1.8	1.6	1.9
30-34	4.6	4.9	4.3	4.8	5.2	4.3	4.1	3.1	5.0
35-39	8.5	8.6	8.3	8.4	8.5	8.3	9.4	9.7	9.2
40-44	17.0	17.6	16.4	16.3	16.7	15.9	20.9	21.2	20.7
45-49	29.9	32.7	27.2	28.7	31.5	25.9	37.4	39.1	35.8
50-54	57.2	63.8	50.9	53.8	60.6	47.0	78.6	83.5	74.2
55-59	73.5	86.8	61.1	69.5	82.4	57.2	103.9	123.1	87.7
60-64	102.3	123.4	82.9	98.0	118.5	78.7	144.9	173.3	121.7
65-69	152.3	183.9	124.5	148.0	179.3	119.9	196.8	233.2	168.8
70-74	202.9	245.1	168.2	201.0	242.5	166.0	251.6	308.8	210.5
75-79	252.3	292.9	221.8	253.6	294.4	222.2	288.5	332.5	260.7
80-84	302.6	345.7	274.7	303.9	346.0	276.2	337.2	415.3	295.8
85+	338.0	384.1	315.6	341.2	388.8	318.1	358.4	415.7	335.8
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2006-2010									
All ages	16.4	19.6	13.9	15.9	19.1	13.4	22.8	28.7	19.0
Under 65	4.9	5.8	4.1	4.6	5.5	3.8	7.8	9.3	6.5
65 and over	95.5	115.2	81.3	93.7	112.7	79.7	126.8	162.9	105.8
All ages (IARC world std) <sup>c</sup>	9.2	11.1	7.7	8.9	10.7	7.3	13.4	16.7	11.1
Age-Specific Rates, 2006-2010									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.0	0.1	0.0	0.0	0.1	-	-	-	-
20-24	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.3	-
25-29	0.5	0.5	0.5	0.5	0.5	0.4	0.7	0.8	0.6
30-34	1.0	1.1	0.9	1.0	1.1	0.9	1.3	1.4	1.2
35-39	2.1	2.3	1.9	2.0	2.3	1.8	3.0	3.2	2.8
40-44	4.1	4.5	3.7	3.9	4.2	3.5	6.1	6.8	5.5
45-49	7.8	8.7	7.0	7.3	8.1	6.6	12.2	14.2	10.5
50-54	13.5	15.6	11.4	12.6	14.7	10.5	21.5	25.3	18.2
55-59	21.1	25.5	17.0	19.8	24.0	15.9	33.9	41.6	27.4
60-64	32.3	40.2	24.9	30.6	38.4	23.3	51.7	64.1	41.6
65-69	47.0	59.1	36.4	45.3	57.1	34.8	70.5	90.2	55.4
70-74	68.2	84.7	54.4	66.4	82.4	52.8	95.7	124.5	75.4
75-79	95.9	116.5	80.3	93.7	113.7	78.3	131.6	167.9	109.2
80-84	135.9	164.7	117.3	133.9	161.8	115.6	177.8	229.3	150.9
85+	210.9	242.3	196.2	209.7	239.8	195.5	248.0	316.9	221.7

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

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

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

- 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<sup>a</sup> Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>Cancer of the Colon</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2006-2010									
All ages	32.2	36.1	29.1	31.7	35.6	28.5	41.6	47.2	37.8
Under 65	11.4	12.6	10.3	10.8	12.0	9.7	16.7	18.1	15.5
65 and over	176.1	198.9	159.1	175.8	198.6	158.6	213.5	248.3	191.7
All ages (IARC world std) <sup>b</sup>	19.4	21.9	17.4	18.9	21.4	16.8	26.3	29.6	23.8
Age-Specific Rates, 2006-2010									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.2	0.2	0.2	0.2	0.2	0.2	-	-	-
20-24	0.6	0.6	0.5	0.6	0.7	0.6	0.5	-	-
25-29	1.3	1.2	1.3	1.3	1.3	1.3	1.0	-	1.2
30-34	2.9	2.9	2.8	3.0	3.1	2.8	2.8	2.0	3.5
35-39	5.0	5.0	5.0	5.0	5.1	4.9	5.9	5.6	6.2
40-44	10.1	10.1	10.1	9.7	9.6	9.7	13.3	12.5	14.0
45-49	17.6	18.2	16.9	16.7	17.5	15.8	24.1	24.2	24.1
50-54	34.4	37.5	31.4	32.1	35.7	28.5	51.2	52.4	50.2
55-59	47.1	53.6	41.0	43.9	49.9	38.0	74.7	87.5	63.8
60-64	69.5	81.0	58.9	65.9	77.2	55.4	107.2	124.9	92.8
65-69	108.0	126.0	92.2	104.9	123.2	88.5	149.7	171.3	133.0
70-74	150.4	175.4	129.8	149.0	173.5	128.3	195.5	234.3	167.7
75-79	194.3	216.8	177.4	195.6	217.9	178.4	232.2	260.8	214.1
80-84	238.4	263.0	222.4	240.3	263.7	224.9	269.8	333.0	236.2
85+	275.4	303.4	261.8	278.8	308.4	264.4	294.0	327.9	280.6
<u>Cancer of the Rectum</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2006-2010									
All ages	12.8	16.1	10.1	12.6	15.7	9.9	13.7	17.1	11.4
Under 65	6.8	8.1	5.5	6.6	7.8	5.4	7.6	9.0	6.4
65 and over	54.3	71.0	41.9	53.8	70.4	41.2	56.3	73.2	45.6
All ages (IARC world std) <sup>b</sup>	8.7	10.8	6.8	8.5	10.5	6.7	9.4	11.7	7.8
Age-Specific Rates, 2006-2010									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	-	-	0.1	-	-	-	-	-
20-24	0.4	0.4	0.4	0.4	0.3	0.4	0.4	-	-
25-29	0.9	0.9	0.8	0.9	1.0	0.8	0.8	0.9	-
30-34	1.8	2.0	1.6	1.8	2.2	1.5	1.3	1.1	1.5
35-39	3.4	3.6	3.3	3.4	3.4	3.4	3.5	4.0	3.1
40-44	6.9	7.5	6.3	6.7	7.1	6.2	7.6	8.7	6.7
45-49	12.4	14.4	10.4	12.1	14.0	10.1	13.3	14.9	11.8
50-54	22.9	26.4	19.5	21.7	24.9	18.5	27.4	31.1	24.0
55-59	26.4	33.1	20.1	25.7	32.5	19.1	29.2	35.5	23.9
60-64	32.8	42.4	24.0	32.0	41.3	23.3	37.6	48.4	28.9
65-69	44.2	57.8	32.3	43.1	56.1	31.3	47.1	61.8	35.7
70-74	52.5	69.7	38.4	52.0	69.0	37.7	56.1	74.5	42.8
75-79	58.0	76.1	44.4	58.0	76.4	43.8	56.3	71.7	46.6
80-84	64.2	82.7	52.3	63.6	82.3	51.4	67.4	82.3	59.6
85+	62.6	80.7	53.8	62.4	80.4	53.7	64.4	87.8	55.2

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

<sup>b</sup> 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 <sup>a</sup>	-	-	-	-	-	-	-	-	-
1970-1973 <sup>a</sup>	-	-	-	-	-	-	-	-	-
1975-1977 <sup>b</sup>	49.8	48.9	50.6	50.0	49.3	50.7	44.6	43.2	45.8
1978-1980 <sup>b</sup>	51.2	50.2	52.2	51.6	50.6	52.5	45.4	43.2	46.9
1981-1983 <sup>b</sup>	54.0	53.8	54.2	54.4	54.4	54.4	46.5	42.9	49.5
1984-1986 <sup>b</sup>	57.6	57.7	57.6	58.4	58.5	58.2	48.2	47.2	48.9
1987-1989 <sup>b</sup>	59.6	59.6	59.3	60.0	60.5	59.5	52.2	49.8	54.4
1990-1992 <sup>b</sup>	61.2	61.0	61.3	61.9	61.7	62.1	52.7	54.3	51.3
1993-1995 <sup>b</sup>	59.9	59.7	60.1	60.5	60.3	60.7	51.7	51.1	52.2
1996-1998 <sup>b</sup>	62.4	62.4	62.5	63.1	62.9	63.2	53.8	54.8	53.0
1999-2002 <sup>b</sup>	65.5	66.0	64.9	66.7	67.1	66.3	55.1	56.1	54.2
2003-2009 <sup>b</sup>	66.1 <sup>f</sup>	66.5 <sup>f</sup>	65.7 <sup>f</sup>	67.0 <sup>f</sup>	67.9 <sup>f</sup>	66.1 <sup>f</sup>	57.3 <sup>f</sup>	55.2 <sup>f</sup>	59.0 <sup>f</sup>
5-Year Period Survival (Percent) <sup>cd</sup>									
2009	65.5	65.7	65.2	66.0	66.4	65.7	58.2	57.0	59.3
Stage Distribution (%) 2003-2009 <sup>ee</sup>									
All Stages									
Number of cases	213,951	109,325	104,626	170,129	87,720	82,409	24,979	11,806	13,173
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	40	40	39	40	40	39	37	37	37
Regional	36	36	36	36	36	37	34	34	33
Distant	20	20	20	20	20	19	24	25	24
Unstaged	5	4	5	4	4	5	5	5	6
5-Year Relative Survival (Percent), 2003-2009 <sup>c</sup>									
Age at Diagnosis:									
Ages <45	67.1	65.6	68.7	68.7	66.6	71.1	58.7	56.6	60.9
Ages 45-54	70.4	69.2	71.8	71.2	70.1	72.5	62.6	59.8	65.4
Ages 55-64	68.5	67.9	69.3	69.1	68.5	70.0	61.6	60.7	62.4
Ages 65-74	67.3	66.8	67.8	67.8	67.5	68.1	60.2	58.2	61.9
Ages 75+	58.2	58.7	57.8	59.5	60.2	59.0	45.4	44.2	46.1
Ages <65	68.9	68.0	70.1	69.7	68.8	71.0	61.5	59.8	63.3
Ages 65+	62.0	62.7	61.3	62.8	63.7	62.0	53.0	52.6	53.3
Stage <sup>e</sup> :									
All Stages	64.9	65.1	64.6	65.5	65.9	65.1	57.5	56.7	58.2
Localized	90.3	90.4	90.1	90.6	90.8	90.4	86.7	86.5	87.0
Regional	70.4	70.2	70.7	71.0	70.9	71.1	64.0	62.2	65.6
Distant	12.5	12.0	12.9	12.9	12.3	13.4	9.1	8.5	9.7
Unstaged	33.6	37.2	30.5	31.1	34.3	28.5	37.0	43.0	32.3

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

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

Based on follow-up of patients into 2010.

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

Based on follow-up of patients into 2010.

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

<sup>e</sup> Stage at diagnosis is classified using SEER Summary Stage 2000.

<sup>f</sup> The difference between 1975-1977 and 2003-2009 is statistically significant (p<.05).

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

<sup>h</sup> The standard error is greater than 10 percentage points.

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

Table 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 <sup>a</sup>	-	-	-	43	42	44	34	32	35
1970-1973 <sup>a</sup>	-	-	-	49	47	50	37	36	38
1975-1977 <sup>b</sup>	50.6	50.1	51.1	50.9	50.5	51.2	44.7	43.9	45.3
1978-1980 <sup>b</sup>	52.3	51.3	53.2	52.5	51.3	53.4	48.8	47.3	49.9
1981-1983 <sup>b</sup>	55.2	55.6	54.8	55.4	56.1	54.8	48.6	44.8	51.5
1984-1986 <sup>b</sup>	58.3	58.8	57.8	59.0	59.6	58.5	49.0	48.7	49.1
1987-1989 <sup>b</sup>	60.2	60.7	59.6	60.6	61.4	59.9	52.2	50.6	53.6
1990-1992 <sup>b</sup>	62.0	62.2	61.7	62.7	63.0	62.5	53.2	54.5	52.2
1993-1995 <sup>b</sup>	59.9	60.1	59.6	60.5	60.7	60.3	51.1	50.9	51.1
1996-1998 <sup>b</sup>	62.4	62.4	62.0	62.9	62.9	62.9	53.4	55.4	51.8
1999-2002 <sup>b</sup>	64.9	65.7	64.2	66.4	67.0	65.8	53.6	54.7	52.8
2003-2009 <sup>b</sup>	65.4 <sup>f</sup>	65.9 <sup>f</sup>	65.0 <sup>f</sup>	66.6 <sup>f</sup>	67.5 <sup>f</sup>	65.8 <sup>f</sup>	55.6 <sup>f</sup>	54.2 <sup>f</sup>	56.7 <sup>f</sup>
5-Year Period Survival (Percent) <sup>cd</sup>									
2009	64.8	65.2	64.3	65.6	66.1	65.2	57.0	56.5	57.3
Stage Distribution (%) 2003-2009 <sup>ee</sup>									
All Stages									
Number of cases	150,930	73,610	77,320	120,128	59,129	60,999	18,530	8,489	10,041
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	38	38	37	38	39	37	34	35	34
Regional	37	37	38	37	37	38	36	36	36
Distant	21	21	21	20	20	20	26	26	26
Unstaged	4	4	5	4	4	5	4	4	5
5-Year Relative Survival (Percent), 2003-2009 <sup>c</sup>									
Age at Diagnosis:									
Ages <45	65.6	65.4	65.9	67.8	67.0	68.6	57.7	56.4	58.9
Ages 45-54	67.9	67.5	68.4	68.9	68.5	69.4	60.6	59.1	61.9
Ages 55-64	67.1	66.8	67.5	68.0	67.6	68.6	59.6	59.9	59.1
Ages 65-74	67.4	67.1	67.6	68.1	67.9	68.3	59.7	58.6	60.6
Ages 75+	59.5	60.0	59.1	60.9	61.6	60.5	46.3	44.6	47.2
Ages <65	67.2	66.8	67.6	68.3	67.8	68.9	59.7	59.2	60.1
Ages 65+	62.6	63.3	62.0	63.6	64.4	62.9	53.1	52.8	53.2
Stage <sup>e</sup> :									
All Stages	64.2	64.7	63.8	65.1	65.6	64.6	56.3	56.3	56.4
Localized	91.4	91.7	91.0	91.9	92.2	91.5	87.3	87.7	87.1
Regional	70.8	70.6	70.9	71.4	71.3	71.5	64.7	63.5	65.6
Distant	12.3	11.9	12.6	12.8	12.3	13.2	8.9	8.1	9.7
Unstaged	26.5	31.0	23.1	25.1	28.7	22.3	27.8	35.8	22.0

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

<sup>b</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).  
Based on follow-up of patients into 2010.

<sup>c</sup> SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).  
Based on follow-up of patients into 2010.

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

<sup>e</sup> Stage at diagnosis is classified using SEER Summary Stage 2000.

<sup>f</sup> The difference between 1975-1977 and 2003-2009 is statistically significant (p<.05).

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

<sup>h</sup> The standard error is greater than 10 percentage points.

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

Table 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 <sup>a</sup>	-	-	-	38	36	41	27	28	27
1970-1973 <sup>a</sup>	-	-	-	45	43	48	30	20	40
1975-1977 <sup>b</sup>	48.1	46.9	49.5	48.2	47.3	49.4	44.4	41.4	46.8
1978-1980 <sup>b</sup>	48.8	48.3	49.4	49.7	49.3	50.1	34.6	33.5	35.5
1981-1983 <sup>b</sup>	51.4	50.2	52.8	52.0	50.9	53.2	39.9	37.7	42.2
1984-1986 <sup>b</sup>	56.2	55.5	57.1	56.9	56.4	57.6	45.7	43.1	48.2
1987-1989 <sup>b</sup>	58.1	57.9	58.4	58.6	58.8	58.3	52.3	47.7	56.9
1990-1992 <sup>b</sup>	59.2	58.5	60.2	59.9	59.1	61.0	51.0	53.5	48.2
1993-1995 <sup>b</sup>	60.1	59.0	61.6	60.6	59.4	62.0	53.8	51.6	56.3
1996-1998 <sup>b</sup>	63.3	62.4	64.3	63.6	62.9	64.5	54.9	53.2	56.4
1999-2002 <sup>b</sup>	66.9	66.8	67.1	67.6	67.3	67.9	60.0	60.4	59.2
2003-2009 <sup>b</sup>	67.7 <sup>f</sup>	67.7 <sup>f</sup>	67.8 <sup>f</sup>	68.1 <sup>f</sup>	68.8 <sup>f</sup>	67.2 <sup>f</sup>	61.7 <sup>f</sup>	57.4 <sup>f</sup>	66.1 <sup>f</sup>
5-Year Period Survival (Percent) <sup>cd</sup>									
2009	67.1	66.7	67.6	67.0	67.0	67.1	61.7	58.0	65.7
Stage Distribution (%) 2003-2009 <sup>ee</sup>									
All Stages									
Number of cases	63,021	35,715	27,306	50,001	28,591	21,410	6,449	3,317	3,132
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	44	44	45	44	44	44	45	42	48
Regional	33	33	32	33	34	32	28	29	26
Distant	18	18	17	17	18	17	20	22	18
Unstaged	6	5	7	5	5	6	8	7	8
5-Year Relative Survival (Percent), 2003-2009 <sup>c</sup>									
Age at Diagnosis:									
Ages <45	69.3	65.9	73.3	70.0	65.9	74.9	60.6	56.8	64.8
Ages 45-54	74.1	71.6	77.7	74.5	72.4	77.7	66.7	61.0	73.1
Ages 55-64	71.1	69.7	73.4	71.1	70.0	73.0	67.3	63.0	72.5
Ages 65-74	67.0	66.1	68.3	67.1	66.8	67.6	61.7	57.0	66.6
Ages 75+	53.6	54.9	52.5	54.5	55.9	53.2	41.6	42.0	41.0
Ages <65	72.0	69.9	75.1	72.2	70.3	75.1	65.8	61.1	71.5
Ages 65+	60.2	61.2	59.1	60.6	61.9	59.0	52.9	51.8	53.8
Stage <sup>e</sup> :									
All Stages	66.5	66.1	67.0	66.6	66.5	66.6	61.0	58.0	64.1
Localized	88.2	88.2	88.2	88.1	88.2	87.9	85.5	84.0	86.8
Regional	69.5	69.3	69.8	70.0	70.1	69.9	61.6	58.3	65.5
Distant	12.9	12.1	14.1	13.1	12.3	14.2	9.8	9.6	9.9
Unstaged	46.0	46.6	45.3	42.4	43.1	41.7	51.9	52.4	50.5

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

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

Based on follow-up of patients into 2010.

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

Based on follow-up of patients into 2010.

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

<sup>e</sup> Stage at diagnosis is classified using SEER Summary Stage 2000.

<sup>f</sup> The difference between 1975-1977 and 2003-2009 is statistically significant (p<.05).

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

<sup>h</sup> The standard error is greater than 10 percentage points.

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

Table 6.15  
Cancer of the Colon and Rectum (Invasive)

SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Survival Time																							
1-year	73.9	77.1	80.0	81.0	81.7	81.0	79.9	80.7	79.4	81.2	80.3	82.0	82.3	81.9	83.1	83.3	82.5	83.5	84.0	83.5	83.9	84.6	84.1
2-year	63.0	66.8	71.1	72.7	73.1	72.4	71.7	72.2	71.3	73.3	72.4	74.5	74.5	74.5	75.6	76.9	75.8	76.6	76.9	77.0	77.0	78.2	
3-year	56.8	60.4	65.7	67.5	67.6	66.9	66.7	67.3	65.8	68.6	67.3	69.4	70.0	70.2	71.2	72.2	70.8	71.5	72.4	72.0	72.2		
4-year	53.0	56.4	61.8	63.3	64.0	63.3	62.5	63.1	62.0	65.0	64.2	66.3	66.9	67.0	68.3	69.0	67.8	68.3	68.7	68.2			
5-year	50.4	53.7	59.3	60.8	61.6	61.0	59.8	60.2	59.8	62.5	61.5	63.3	64.6	64.8	66.1	66.3	65.4	65.8	66.1				
6-year	48.6	51.8	57.5	59.4	59.6	59.5	58.0	58.5	57.3	61.2	59.8	61.5	63.1	63.1	64.2	64.5	63.5	63.9					
7-year	47.4	50.3	56.0	57.7	58.1	57.8	56.5	57.1	55.6	60.2	58.9	60.1	62.0	61.6	62.3	63.0	62.2						
8-year	46.4	49.3	55.0	56.2	56.9	56.4	55.4	56.1	55.0	59.4	58.0	59.4	60.7	60.2	61.3	62.0							
9-year	45.8	48.4	54.1	55.5	55.8	55.5	54.6	55.7	54.7	58.6	57.2	58.1	59.8	59.5	60.4								
10-year	45.1	47.7	53.3	54.8	55.0	54.8	53.8	54.7	54.0	57.9	56.5	57.4	59.3	58.9									
11-year	44.5	47.1	52.8	54.2	54.9	54.2	53.0	54.3	53.2	57.4	55.7	56.5	58.6										
12-year	44.1	46.7	52.4	53.8	54.7	54.0	51.9	53.6	52.5	57.2	55.3	56.3											
13-year	43.7	46.4	51.6	53.1	54.2	53.1	51.6	53.5	51.8	56.7	55.0												
14-year	43.2	45.9	51.3	52.6	53.8	52.9	51.1	52.9	51.4	55.7													
15-year	42.8	45.6	50.8	52.0	53.6	52.9	50.3	52.3	50.8														
16-year	42.4	45.1	50.5	51.8	53.6	52.9	50.3	52.3															
17-year	41.9	44.7	49.9	51.6	52.9	52.5	49.5																
18-year	41.5	44.3	49.6	51.0	52.0	52.0																	
19-year	41.5	43.8	49.2	51.0	51.0																		
20-year	41.2	43.6	48.8	49.8																			
21-year	40.8	42.8	48.7																				
22-year	40.5	42.3																					
23-year	40.0	42.1																					
24-year	39.7	41.7																					
25-year	39.3	41.1																					
26-year	38.8	40.6																					
27-year	38.4																						
28-year	38.1																						
29-year	37.6																						
30-year	37.2																						

<sup>a</sup> 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<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Survival Time																							
1-year	74.0	78.0	81.0	82.2	82.2	82.0	80.5	81.6	80.9	82.6	81.3	82.1	83.3	83.6	85.0	83.2	83.2	84.5	84.6	84.6	85.4	86.3	85.5
2-year	63.0	67.2	72.4	73.6	74.0	73.2	72.3	73.1	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	
3-year	56.3	60.6	66.7	68.6	68.2	67.4	67.1	68.1	66.9	69.7	68.2	68.8	70.5	72.0	72.8	72.0	71.2	72.5	73.1	72.9	73.4		
4-year	52.1	56.2	62.4	64.0	64.2	63.3	62.6	63.1	63.1	65.3	65.2	65.4	67.5	69.0	69.9	68.7	68.0	69.1	68.8	68.8			
5-year	49.4	53.2	59.7	60.8	61.4	60.8	59.5	59.7	60.0	62.3	62.3	62.4	64.9	66.1	67.3	65.7	65.6	66.2	65.9				
6-year	47.2	51.1	57.8	59.0	58.7	59.1	57.9	57.8	57.3	60.9	60.3	60.1	63.7	63.7	65.0	63.5	63.0	64.4					
7-year	45.9	49.5	56.2	56.9	56.6	57.7	56.3	56.2	55.6	59.7	59.7	58.8	62.5	62.0	63.2	61.8	61.9						
8-year	44.8	48.4	55.2	55.3	55.2	55.9	55.2	54.8	55.1	59.3	58.3	57.5	61.2	60.0	62.4	60.5							
9-year	44.1	47.4	54.2	55.0	54.4	54.9	54.0	54.0	54.7	58.8	57.4	56.2	60.1	59.7	61.6								
10-year	43.3	46.7	53.5	54.2	53.6	54.4	52.9	52.8	54.0	57.9	56.8	55.6	59.2	58.7									
11-year	42.8	46.0	53.1	53.7	53.6	53.6	51.6	52.7	53.1	57.2	55.9	54.7	58.7										
12-year	42.2	45.6	52.5	53.2	53.5	53.6	51.1	51.6	52.3	56.9	55.7	54.3											
13-year	41.7	45.3	51.9	52.6	52.9	52.7	50.0	51.3	51.8	56.5	55.4												
14-year	41.0	44.6	51.7	52.1	52.1	52.3	49.6	50.7	50.9	55.6													
15-year	40.8	44.5	51.1	51.5	51.6	52.1	48.8	50.3	50.0														
16-year	40.3	44.2	51.0	51.5	51.6	52.1	48.8	50.0															
17-year	39.8	43.6	50.5	51.4	50.6	52.1	48.8																
18-year	39.4	43.3	50.1	50.7	49.8	51.2																	
19-year	39.3	42.8	49.8	50.7	49.1																		
20-year	39.2	42.5	49.3	50.3																			
21-year	39.0	41.6	49.3																				
22-year	38.4	41.0																					
23-year	38.1	40.8																					
24-year	37.7	40.2																					
25-year	37.2	39.8																					
26-year	36.4	39.1																					
27-year	36.0																						
28-year	35.7																						
29-year	35.4																						
30-year	34.5																						

<sup>a</sup> 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<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Survival Time																							
1-year	73.9	76.2	78.9	79.8	81.1	79.9	79.3	79.8	77.9	79.8	79.3	81.9	81.2	80.3	81.0	83.4	81.7	82.5	83.3	82.4	82.4	83.0	82.7
2-year	63.0	66.4	69.8	71.7	72.1	71.6	71.0	71.3	70.0	71.6	71.1	74.6	73.9	72.6	73.8	77.1	75.3	75.2	75.9	75.8	75.6	77.1	
3-year	57.4	60.3	64.5	66.4	66.9	66.3	66.3	66.4	64.7	67.4	66.2	70.0	69.5	68.5	69.4	72.4	70.5	70.6	71.7	71.0	70.9		
4-year	53.8	56.6	61.2	62.5	63.9	63.2	62.5	63.0	60.9	64.7	63.1	67.2	66.3	64.9	66.6	69.3	67.6	67.5	68.7	67.7			
5-year	51.4	54.1	58.9	60.8	61.8	61.3	60.0	60.7	59.6	62.7	60.6	64.2	64.3	63.6	64.8	66.9	65.3	65.3	66.3				
6-year	49.8	52.3	57.2	59.7	60.6	59.8	58.2	59.2	57.3	61.5	59.3	62.8	62.6	62.4	63.3	65.5	64.1	63.4					
7-year	48.7	51.0	55.7	58.4	59.6	58.0	56.7	58.0	55.5	60.6	58.0	61.5	61.5	61.3	61.4	64.3	62.6						
8-year	47.9	50.1	54.6	57.1	58.6	56.8	55.7	57.5	54.9	59.4	57.7	61.2	60.2	60.3	60.2	63.6							
9-year	47.3	49.4	53.9	56.1	57.2	56.2	55.3	57.4	54.6	58.4	57.0	60.0	59.6	59.2	59.3								
10-year	46.7	48.7	53.0	55.4	56.4	55.3	54.8	56.5	53.9	57.9	56.1	59.1	59.4	59.2									
11-year	46.1	48.2	52.5	54.6	56.0	54.6	54.4	55.9	53.2	57.5	55.5	58.3	58.5										
12-year	45.9	47.7	52.2	54.3	55.9	54.2	52.8	55.5	52.6	57.5	54.8	58.3											
13-year	45.5	47.4	51.3	53.6	55.4	53.6	52.8	55.5	51.8	56.8	54.4												
14-year	45.1	47.1	50.9	53.1	55.4	53.4	52.5	55.0	51.7	55.9													
15-year	44.6	46.7	50.4	52.5	55.4	53.4	51.9	54.2	51.5														
16-year	44.2	45.9	49.9	52.2	55.4	53.4	51.3	54.2															
17-year	43.9	45.7	49.3	51.8	55.3	52.8	50.1																
18-year	43.3	45.3	49.0	51.1	54.3	52.6																	
19-year	43.3	44.8	48.6	50.8	53.0																		
20-year	43.0	44.6	48.2	49.0																			
21-year	42.5	44.0	48.0																				
22-year	42.3	43.5																					
23-year	41.8	43.2																					
24-year	41.4	43.0																					
25-year	41.2	42.3																					
26-year	40.9	42.0																					
27-year	40.4																						
28-year	40.3																						
29-year	39.5																						
30-year	39.4																						

<sup>a</sup> 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, 2008-2010 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.02	4.82	1.98	Asian/ Pacific Islander	0	0.00	0.00	0.02	5.05	2.10
	10	0.00	0.02	0.09	4.88	2.00		10	0.00	0.02	0.07	5.09	2.12
	20	0.02	0.08	0.32	4.89	2.01		20	0.01	0.07	0.28	5.10	2.12
	30	0.07	0.30	0.89	4.92	2.03		30	0.05	0.26	0.82	5.11	2.12
	40	0.24	0.83	1.84	4.91	2.04		40	0.21	0.78	1.74	5.09	2.12
	50	0.61	1.65	3.15	4.80	2.03		50	0.57	1.55	2.91	4.94	2.10
	60	1.11	2.70	4.05	4.47	1.98		60	1.01	2.42	3.85	4.52	2.04
	70	1.82	3.37	-	3.84	1.84		70	1.52	3.07	-	3.79	1.92
80	2.12	-	-	2.78	1.58	80	1.89	-	-	2.77	1.71		
White	0	0.00	0.00	0.02	4.74	1.94	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.00	0.02	4.20	1.95
	10	0.00	0.02	0.09	4.79	1.96		10	0.00	0.02	0.09	4.25	1.97
	20	0.02	0.09	0.31	4.80	1.97		20	0.02	0.09	0.35	4.28	1.99
	30	0.07	0.29	0.85	4.82	1.98		30	0.07	0.33	0.81	4.33	2.02
	40	0.23	0.79	1.76	4.81	1.99		40	0.27	0.76	1.72	4.36	2.05
	50	0.57	1.58	3.07	4.71	1.99		50	0.51	1.52	2.88	4.26	2.07
	60	1.07	2.65	4.00	4.40	1.94		60	1.08	2.54	3.53	4.03	2.02
	70	1.81	3.35	-	3.81	1.80		70	1.69	2.84	-	3.41	1.95
80	2.13	-	-	2.76	1.55	80	1.58	-	-	2.37	1.68		
Black	0	0.00	0.00	0.01	4.94	2.31	Hispanic <sup>b</sup>	0	0.00	0.00	0.01	4.71	1.90
	10	0.00	0.01	0.08	5.05	2.36		10	0.00	0.01	0.07	4.76	1.92
	20	0.01	0.08	0.36	5.07	2.37		20	0.01	0.07	0.24	4.77	1.92
	30	0.07	0.35	1.12	5.13	2.40		30	0.05	0.23	0.73	4.79	1.94
	40	0.29	1.08	2.33	5.16	2.42		40	0.18	0.68	1.61	4.78	1.94
	50	0.82	2.13	3.67	5.08	2.43		50	0.51	1.46	2.86	4.70	1.93
	60	1.44	3.15	4.35	4.72	2.38		60	1.00	2.46	3.84	4.39	1.88
	70	2.09	3.56	-	4.02	2.22		70	1.62	3.15	-	3.76	1.74
80	2.20	-	-	2.90	1.91	80	1.96	-	-	2.74	1.48		

Devcan 6.7.0, June 2013, 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.

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

<sup>b</sup> Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.

- 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, 2008-2010 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.02	5.01	2.07	Asian/ Pacific Islander	0	0.00	0.00	0.02	5.27	2.19
	10	0.00	0.02	0.09	5.08	2.10		10	0.00	0.02	0.07	5.31	2.21
	20	0.02	0.09	0.33	5.10	2.11		20	0.02	0.07	0.30	5.32	2.22
	30	0.07	0.32	0.98	5.14	2.14		30	0.06	0.29	0.92	5.34	2.22
	40	0.25	0.92	2.10	5.16	2.15		40	0.23	0.87	2.02	5.32	2.23
	50	0.69	1.91	3.54	5.07	2.16		50	0.65	1.82	3.38	5.18	2.21
	60	1.32	3.08	4.39	4.74	2.11		60	1.22	2.85	4.24	4.73	2.15
	70	2.08	3.63	-	4.04	1.95		70	1.80	3.33	-	3.87	2.02
80	2.27	-	-	2.87	1.66	80	1.96	-	-	2.65	1.74		
White	0	0.00	0.00	0.02	4.94	2.04	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.00	0.02	4.53	1.86
	10	0.00	0.02	0.09	4.99	2.06		10	0.00	0.02	0.09	4.59	1.89
	20	0.02	0.09	0.33	5.01	2.07		20	0.02	0.09	0.35	4.62	1.91
	30	0.07	0.31	0.94	5.05	2.09		30	0.07	0.34	0.82	4.71	1.95
	40	0.24	0.88	2.02	5.06	2.11		40	0.27	0.78	1.93	4.78	1.99
	50	0.66	1.83	3.45	4.98	2.11		50	0.53	1.74	3.09	4.74	2.03
	60	1.27	3.02	4.33	4.67	2.07		60	1.32	2.79	4.03	4.58	1.98
	70	2.06	3.60	-	4.00	1.91		70	1.75	3.22	-	3.88	1.92
80	2.27	-	-	2.85	1.62	80	2.15	-	-	3.11	1.69		
Black	0	0.00	0.00	0.01	5.00	2.41	Hispanic <sup>b</sup>	0	0.00	0.00	0.01	5.22	2.17
	10	0.00	0.01	0.07	5.12	2.48		10	0.00	0.01	0.07	5.27	2.19
	20	0.01	0.07	0.36	5.15	2.49		20	0.01	0.07	0.26	5.29	2.20
	30	0.06	0.36	1.21	5.24	2.54		30	0.06	0.25	0.82	5.34	2.22
	40	0.30	1.18	2.57	5.32	2.58		40	0.19	0.78	1.90	5.35	2.23
	50	0.92	2.39	4.04	5.28	2.60		50	0.60	1.75	3.39	5.29	2.24
	60	1.67	3.54	4.69	4.96	2.57		60	1.22	2.97	4.45	4.99	2.20
	70	2.43	3.91	-	4.26	2.43		70	2.00	3.68	-	4.30	2.04
80	2.47	-	-	3.05	2.11	80	2.29	-	-	3.13	1.75		

Devcan 6.7.0, June 2013, 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.

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

<sup>b</sup> Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.

- 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, 2008-2010 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.02	4.65	1.90	Asian/ Pacific Islander	0	0.00	0.00	0.01	4.87	2.02
	10	0.00	0.02	0.08	4.69	1.92		10	0.00	0.01	0.06	4.91	2.04
	20	0.02	0.08	0.30	4.70	1.92		20	0.01	0.06	0.26	4.91	2.04
	30	0.07	0.29	0.80	4.71	1.93		30	0.05	0.24	0.74	4.91	2.04
	40	0.22	0.74	1.60	4.68	1.93		40	0.20	0.69	1.50	4.88	2.04
	50	0.53	1.41	2.79	4.56	1.92		50	0.50	1.32	2.52	4.74	2.01
	60	0.92	2.37	3.76	4.23	1.86		60	0.83	2.07	3.54	4.35	1.95
	70	1.61	3.16	-	3.68	1.75		70	1.31	2.87	-	3.73	1.85
80	2.03	-	-	2.72	1.53	80	1.83	-	-	2.85	1.68		
White	0	0.00	0.00	0.02	4.56	1.86	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.00	0.02	3.95	2.05
	10	0.00	0.02	0.09	4.60	1.88		10	0.00	0.02	0.09	3.99	2.07
	20	0.02	0.08	0.29	4.61	1.88		20	0.02	0.09	0.35	4.01	2.08
	30	0.07	0.28	0.76	4.61	1.89		30	0.07	0.33	0.80	4.03	2.10
	40	0.21	0.70	1.51	4.58	1.89		40	0.26	0.74	1.52	4.02	2.12
	50	0.49	1.33	2.71	4.47	1.87		50	0.50	1.30	2.68	3.89	2.12
	60	0.88	2.32	3.71	4.16	1.82		60	0.86	2.32	3.13	3.60	2.08
	70	1.60	3.15	-	3.65	1.72		70	1.64	2.55	-	3.09	1.98
80	2.03	-	-	2.69	1.50	80	1.21	-	-	1.91	1.69		
Black	0	0.00	0.00	0.01	4.90	2.23	Hispanic <sup>b</sup>	0	0.00	0.00	0.01	4.29	1.69
	10	0.00	0.01	0.09	4.99	2.27		10	0.00	0.01	0.07	4.33	1.70
	20	0.01	0.09	0.36	5.01	2.28		20	0.01	0.07	0.23	4.34	1.71
	30	0.07	0.35	1.05	5.03	2.29		30	0.05	0.22	0.64	4.34	1.71
	40	0.28	0.99	2.11	5.03	2.30		40	0.17	0.59	1.35	4.31	1.71
	50	0.74	1.90	3.35	4.92	2.30		50	0.43	1.20	2.40	4.21	1.69
	60	1.26	2.84	4.08	4.54	2.24		60	0.80	2.04	3.34	3.91	1.64
	70	1.85	3.31	-	3.85	2.09		70	1.34	2.75	-	3.37	1.53
80	2.05	-	-	2.81	1.81	80	1.74	-	-	2.50	1.33		

Devcan 6.7.0, June 2013, 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.

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

<sup>b</sup> Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire, North Dakota and South Carolina.

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

SEER Incidence	SEER 18 Areas <sup>b</sup>			SEER 13 Areas <sup>b</sup>			SEER 9 Areas <sup>b</sup>		
	Rate 2006-2010			Trend 2001-2010 <sup>c</sup>			Trend 2001-2010 <sup>d</sup>		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	45.0	52.2	39.3	-2.8*	-3.0*	-2.6*	-2.9*	-3.2*	-2.7*
White	44.2	51.3	38.4	-3.1*	-3.3*	-2.9*	-3.2*	-3.6*	-3.0*
White Hispanic <sup>e</sup>	38.8	47.1	32.5	-1.3	-0.5*	-1.1*	-	-	-
White Non-Hispanic <sup>e</sup>	45.1	52.1	39.3	-3.2*	-3.4*	-3.0*	-	-	-
Black	55.3	64.3	49.2	-2.2*	-2.4*	-2.1*	-2.5*	-2.8*	-2.5*
Asian/Pacific Islander	37.6	43.8	32.7	-2.3*	-2.7*	-1.0*	-	-	-
Amer Ind/Alaska Nat <sup>f</sup>	39.9	44.1	36.6	-0.4	-0.3	-0.5	-	-	-
Hispanic <sup>e</sup>	37.7	45.5	31.6	-1.3	-1.1*	-1.1*	-	-	-
<u>U.S. Mortality<sup>g</sup></u>									
RACE/ETHNICITY	Rate 2006-2010			Trend 2001-2010 <sup>h</sup>					
	Rate per 100,000 persons			AAPC (%)					
	Total	Males	Females	Total	Males	Females			
All Races	16.4	19.6	13.9	-2.9*	-2.9*	-3.0*			
White	15.9	19.1	13.4	-2.9*	-3.0*	-3.0*			
White Hispanic <sup>e</sup>	13.4	16.9	10.7	-1.4*	-1.1*	-1.9*			
White Non-Hispanic <sup>e</sup>	16.1	19.2	13.6	-2.8*	-3.0*	-2.8*			
Black	22.8	28.7	19.0	-2.9*	-2.4*	-3.3*			
Asian/Pacific Islander	11.2	13.1	9.7	-1.8*	-1.9*	-1.6*			
Amer Ind/Alaska Nat									
Total U.S.	12.6	14.4	11.3	-1.4*	-2.2*	-0.7			
CHSDA Counties	16.9	18.7	15.4	0.3	-1.3	0.2			
Non-CHSDA Counties	7.7	9.5	6.3	-1.7*	-2.8*	-1.8			
Hispanic <sup>e</sup>	12.7	16.1	10.2	-1.5*	-1.2*	-2.1*			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.0.3, April 2013, National Cancer Institute.

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

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

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

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

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

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

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

c The 2001-2010 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2010.

d The 2001-2010 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2010.

e Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2006-2010 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, North Dakota, and South Carolina. The 2001-2010 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, South Carolina and Vermont.

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

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

h The 2001-2010 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2010.

\* 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<sup>a</sup>  
By Race/Ethnicity and Sex

Cancer of the Colon <u>SEER Incidence</u>	SEER 18 Areas <sup>b</sup> Rate 2006-2010 Rate per 100,000 persons			SEER 13 Areas <sup>b</sup> Trend 2001-2010 <sup>c</sup> AAPC (%)			SEER 9 Areas <sup>b</sup> Trend 2001-2010 <sup>d</sup> AAPC (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
	RACE/ETHNICITY								
All Races	32.2	36.1	29.1	-3.0*	-3.3*	-2.9*	-3.3*	-3.4*	-2.9*
White	31.7	35.6	28.5	-3.3*	-3.5*	-3.1*	-3.4*	-3.7*	-3.2*
White Hispanic <sup>e</sup>	27.0	31.5	23.7	-1.5*	-1.9	-1.4*	-	-	-
White Non-Hispanic <sup>e</sup>	32.3	36.2	29.2	-3.3*	-3.6*	-3.2*	-	-	-
Black	41.6	47.2	37.8	-2.6*	-2.9*	-2.7*	-3.1*	-3.4*	-3.1*
Asian/Pacific Islander	25.1	27.7	23.0	-2.5*	-3.0*	-1.2*	-	-	-
Amer Ind/Alaska Nat <sup>f</sup>	28.3	29.6	27.6	-0.7	-1.1	-0.3	-	-	-
Hispanic <sup>e</sup>	26.2	30.4	23.1	-1.7*	-1.9	-1.4*	-	-	-
Cancer of the Rectum <u>SEER Incidence</u>	SEER 18 Areas <sup>b</sup> Rate 2006-2010 Rate per 100,000 persons			SEER 13 Areas <sup>b</sup> Trend 2001-2010 <sup>c</sup> AAPC (%)			SEER 9 Areas <sup>b</sup> Trend 2001-2010 <sup>d</sup> AAPC (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
	RACE/ETHNICITY								
All Races	12.8	16.1	10.1	-2.1*	-2.4*	-1.5*	-2.3*	-2.6*	-2.0*
White	12.6	15.7	9.9	-2.5*	-2.8*	-1.8*	-2.7*	-3.2*	-2.5*
White Hispanic <sup>e</sup>	11.8	15.6	8.8	-0.6*	-0.8*	-0.5	-	-	-
White Non-Hispanic <sup>e</sup>	12.8	15.9	10.1	-2.6*	-3.0*	-1.9*	-	-	-
Black	13.7	17.1	11.4	-0.4	-0.7*	-0.1	-0.2	-0.1	-0.2
Asian/Pacific Islander	12.5	16.1	9.7	-1.1*	-2.4	-1.2	-	-	-
Amer Ind/Alaska Nat <sup>f</sup>	11.6	14.5	9.1	0.1	-	-	-	-	-
Hispanic <sup>e</sup>	11.4	15.1	8.6	-0.6*	-0.8*	-0.5	-	-	-

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.0.3, April 2013, National Cancer Institute.

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

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

<sup>a</sup> 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).

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

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

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

<sup>c</sup> The 2001-2010 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2010.

<sup>d</sup> The 2001-2010 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2010.

<sup>e</sup> 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.

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates<sup>a</sup>, 2006-2010</u>									
California	42.74	49.37	37.30	42.39	49.08	36.83	54.16	60.54	49.30
Greater Bay Area	42.90	47.98	38.72	43.19	48.34	38.90	52.72	59.17	48.06
San Francisco-Oakland	44.59	50.17	40.09	44.64	50.28	39.97	53.54	61.24	47.99
San Jose-Monterey	39.53	43.66	35.97	40.60	44.89	36.96	46.47	46.64	47.61
Los Angeles	44.33	52.13	38.25	42.81	50.49	36.72	58.78	65.84	53.73
Greater California	41.95	48.62	36.36	42.01	48.77	36.30	49.37	55.35	44.37
Connecticut	44.58	51.27	39.17	44.01	50.71	38.53	50.27	58.71	44.52
Detroit	48.10	55.54	42.60	45.54	52.59	40.12	58.14	68.68	51.35
Georgia	44.31	52.12	38.41	41.56	49.14	35.57	53.77	63.62	47.39
Atlanta	42.84	48.99	38.23	38.60	44.97	33.53	52.84	59.49	48.49
Rural Georgia	44.55	54.00	37.96	39.60	44.60	35.54	54.79	74.37	42.73
Greater Georgia	45.08	53.50	38.66	42.74	50.85	36.36	54.66	65.76	47.31
Hawaii	46.94	56.87	38.02	43.92	50.91	36.35	27.67	28.63	-
Iowa	50.06	56.90	44.25	49.93	56.81	44.07	55.91	63.30	52.06
Kentucky	53.83	63.89	45.97	53.38	63.44	45.46	61.89	73.70	53.71
Louisiana	52.12	62.42	44.05	49.16	59.32	40.78	62.16	75.00	53.59
New Jersey	46.96	54.65	41.16	46.88	54.74	40.85	52.26	60.49	46.77
New Mexico	38.40	44.08	33.61	38.51	44.31	33.64	31.54	22.58	37.00
Seattle-Puget Sound	41.72	47.33	36.99	41.29	46.79	36.53	47.76	53.97	43.00
Utah	34.98	39.35	31.17	35.27	39.74	31.38	27.59	-	-
9 SEER Areas <sup>b</sup>	44.30	50.54	39.19	43.30	49.36	38.22	53.85	61.72	48.53
11 SEER Areas <sup>b</sup>	44.02	50.47	38.79	43.03	49.31	37.83	55.07	62.57	49.91
13 SEER Areas <sup>b</sup>	44.10	50.56	38.87	43.02	49.29	37.82	55.06	62.75	49.79
18 SEER Areas <sup>b</sup>	45.03	52.18	39.27	44.22	51.32	38.40	55.34	64.30	49.18

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

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

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

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

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

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

Table 6.24  
Cancer of the Colon and Rectum (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Death Rates<sup>a</sup>, 2006-2010</u>									
California	14.83	17.53	12.71	14.87	17.63	12.69	22.28	25.89	19.69
Greater Bay Area	14.34	16.98	12.26	14.57	17.44	12.26	23.19	26.73	21.05
San Francisco-Oakland	14.98	17.87	12.70	15.18	18.36	12.57	23.26	26.64	21.08
San Jose-Monterey	13.03	15.24	11.32	13.46	15.80	11.65	22.70	29.80	18.93
Los Angeles	15.16	18.34	12.78	14.78	17.94	12.39	23.54	27.82	20.53
Greater California	14.85	17.36	12.83	15.00	17.57	12.91	20.16	23.20	17.80
Connecticut	13.86	16.15	12.09	13.76	16.03	12.00	16.69	20.06	14.24
Detroit	17.36	20.97	14.87	15.93	19.23	13.63	23.44	29.38	19.66
Georgia	16.39	20.17	13.76	14.79	18.27	12.22	22.35	28.65	18.85
Atlanta	15.65	18.88	13.55	13.27	16.09	11.31	21.50	26.71	18.63
Rural Georgia	17.09	23.98	12.48	15.02	20.84	10.40	21.75	31.97	16.50
Greater Georgia	16.72	20.59	13.93	15.36	18.96	12.64	22.93	29.55	19.18
Hawaii	13.80	17.27	10.90	13.88	16.03	11.65	-	-	-
Iowa	17.28	19.98	15.21	17.24	19.93	15.13	26.57	36.36	22.97
Kentucky	19.30	23.43	16.21	19.04	23.19	15.93	25.72	29.79	22.64
Louisiana	19.32	24.05	15.70	17.31	21.35	14.09	25.97	33.95	20.62
New Jersey	17.46	21.02	14.90	17.28	20.92	14.59	22.89	27.91	19.81
New Mexico	15.41	18.80	12.70	15.52	19.15	12.62	22.12	15.60	26.09
Seattle-Puget Sound	14.20	16.54	12.25	14.21	16.53	12.26	20.55	22.65	18.47
Utah	12.40	14.35	10.69	12.39	14.30	10.70	-	-	-
9 SEER Areas <sup>b</sup>	15.23	18.01	13.08	14.90	17.59	12.77	21.92	26.47	18.99
11 SEER Areas <sup>b</sup>	15.09	17.92	12.92	14.79	17.56	12.63	22.36	26.88	19.39
13 SEER Areas <sup>b</sup>	15.12	17.96	12.94	14.79	17.55	12.63	22.30	26.90	19.29
18 SEER Areas <sup>b</sup>	15.91	18.97	13.56	15.59	18.59	13.24	22.90	28.10	19.52
Total U.S.	16.37	19.65	13.85	15.90	19.06	13.41	22.80	28.68	19.02

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

<sup>b</sup> The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta. The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

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

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



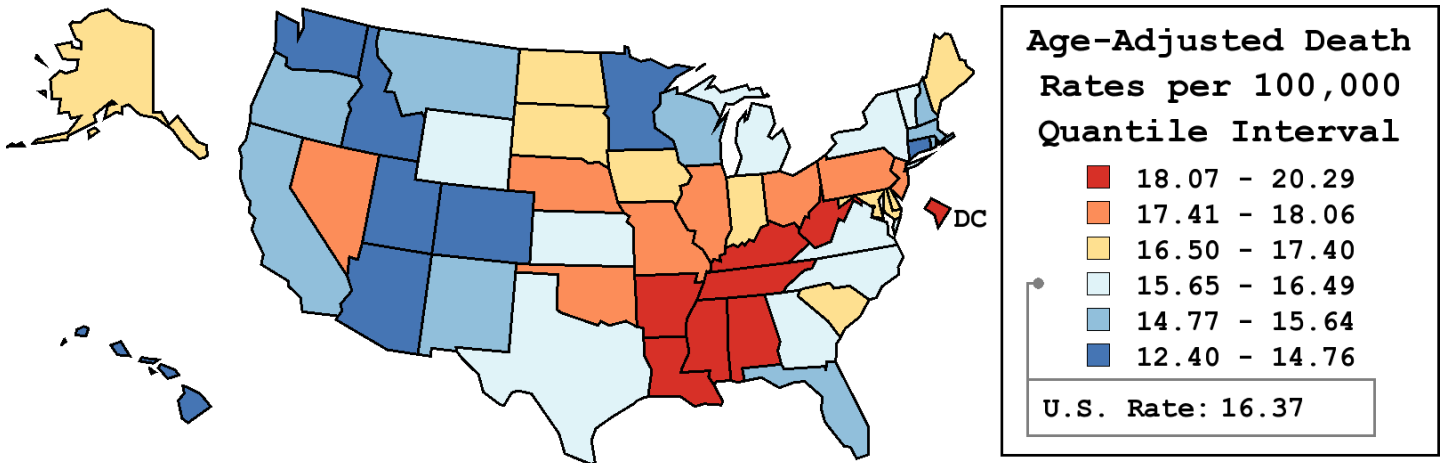
Table 6.25  
Cancer of the Colon and Rectum (Invasive)

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2006-2010

Males and Females

State	Rate	SE	Rank	PD
TOTAL U.S.	16.37	0.03		
High Five States				
D.C.	20.29	0.85	(01)	23.92 <sup>c</sup>
Mississippi	20.07	0.37	(02)	22.58 <sup>c</sup>
Louisiana	19.32	0.30	(03)	18.02 <sup>c</sup>
Kentucky	19.30	0.29	(04)	17.87 <sup>c</sup>
West Virginia	19.25	0.41	(05)	17.58 <sup>c</sup>
Low Five States				
Arizona	14.24	0.21	(47)	-13.02 <sup>c</sup>
Idaho	14.08	0.44	(48)	-14.00 <sup>c</sup>
Connecticut	13.86	0.26	(49)	-15.38 <sup>c</sup>
Hawaii	13.80	0.43	(50)	-15.72 <sup>c</sup>
Utah	12.40	0.36	(51)	-24.29 <sup>c</sup>

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	18.14	0.27	(07)	10.76 <sup>c</sup>	Montana	15.30	0.52	(39)	-6.57
Alaska	17.37	0.95	(18)	6.07	Nebraska	17.89	0.42	(11)	9.26
Arizona	14.24	0.21	(47)	-13.02 <sup>c</sup>	Nevada	17.71	0.39	(14)	8.15
Arkansas	18.67	0.34	(06)	14.00 <sup>c</sup>	New Hampshire	15.23	0.47	(41)	-7.01
California	14.83	0.09	(43)	-9.40	New Jersey	17.46	0.19	(16)	6.66
Colorado	14.30	0.26	(46)	-12.66 <sup>c</sup>	New Mexico	15.41	0.39	(38)	-5.88
Connecticut	13.86	0.26	(49)	-15.38 <sup>c</sup>	New York	16.03	0.12	(32)	-2.09
Delaware	16.58	0.59	(24)	1.23	North Carolina	15.79	0.18	(34)	-3.58
D.C.	20.29	0.85	(01)	23.92 <sup>c</sup>	North Dakota	17.09	0.66	(20)	4.38
Florida	15.24	0.11	(40)	-6.90	Ohio	18.05	0.17	(10)	10.25 <sup>c</sup>
Georgia	16.39	0.20	(29)	0.11	Oklahoma	17.80	0.30	(12)	8.74
Hawaii	13.80	0.43	(50)	-15.72 <sup>c</sup>	Oregon	15.47	0.27	(36)	-5.49
Idaho	14.08	0.44	(48)	-14.00 <sup>c</sup>	Pennsylvania	17.74	0.15	(13)	8.37
Illinois	18.06	0.17	(09)	10.31 <sup>c</sup>	Rhode Island	15.44	0.50	(37)	-5.68
Indiana	17.40	0.23	(17)	6.27	South Carolina	16.90	0.27	(21)	3.23
Iowa	17.28	0.31	(19)	5.54	South Dakota	16.61	0.60	(23)	1.42
Kansas	16.47	0.33	(27)	0.56	Tennessee	18.09	0.24	(08)	10.45 <sup>c</sup>
Kentucky	19.30	0.29	(04)	17.87 <sup>c</sup>	Texas	16.16	0.13	(31)	-1.33
Louisiana	19.32	0.30	(03)	18.02 <sup>c</sup>	Utah	12.40	0.36	(51)	-24.29 <sup>c</sup>
Maine	16.53	0.45	(25)	0.98	Vermont	15.92	0.67	(33)	-2.75
Maryland	16.76	0.24	(22)	2.35	Virginia	16.22	0.21	(30)	-0.93
Massachusetts	15.64	0.21	(35)	-4.48	Washington	14.61	0.21	(45)	-10.75 <sup>c</sup>
Michigan	16.46	0.17	(28)	0.51	West Virginia	19.25	0.41	(05)	17.58 <sup>c</sup>
Minnesota	14.76	0.23	(44)	-9.87	Wisconsin	15.00	0.22	(42)	-8.40
Mississippi	20.07	0.37	(02)	22.58 <sup>c</sup>	Wyoming	16.49	0.78	(26)	0.70
Missouri	17.48	0.23	(15)	6.78					



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

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

<sup>c</sup> Absolute percent difference between state rate and total U.S. rate is 10% or more.

SE Standard error of the rate.

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

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

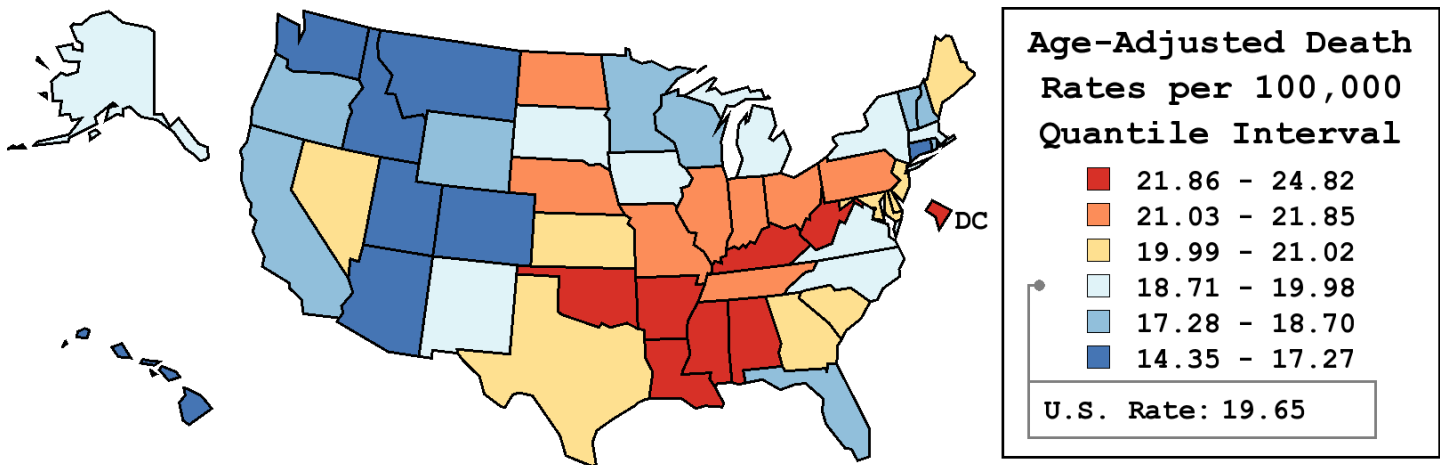
Table 6.26  
Cancer of the Colon and Rectum (Invasive)

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2006-2010

Males

State	Rate	SE	Rank	PD
TOTAL U.S.	19.65	0.05		
High Five States				
Mississippi	24.82	0.65	(01)	26.30 <sup>c</sup>
Louisiana	24.05	0.52	(02)	22.38 <sup>c</sup>
West Virginia	23.43	0.70	(03)	19.27 <sup>c</sup>
Kentucky	23.43	0.51	(04)	19.23 <sup>c</sup>
Arkansas	22.70	0.58	(05)	15.54 <sup>c</sup>
Low Five States				
Colorado	16.74	0.43	(47)	-14.78 <sup>c</sup>
Montana	16.73	0.82	(48)	-14.85 <sup>c</sup>
Connecticut	16.15	0.44	(49)	-17.79 <sup>c</sup>
Idaho	16.13	0.70	(50)	-17.91 <sup>c</sup>
Utah	14.35	0.58	(51)	-26.97 <sup>c</sup>

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	22.47	0.47	(06)	14.34 <sup>c</sup>	Montana	16.73	0.82	(48)	-14.85 <sup>c</sup>
Alaska	19.62	1.51	(28)	-0.17	Nebraska	21.41	0.71	(13)	8.94
Arizona	17.08	0.35	(46)	-13.07 <sup>c</sup>	Nevada	21.00	0.65	(18)	6.88
Arkansas	22.70	0.58	(05)	15.54 <sup>c</sup>	New Hampshire	17.93	0.78	(40)	-8.75
California	17.53	0.16	(42)	-10.78 <sup>c</sup>	New Jersey	21.02	0.33	(17)	6.96
Colorado	16.74	0.43	(47)	-14.78 <sup>c</sup>	New Mexico	18.80	0.65	(33)	-4.34
Connecticut	16.15	0.44	(49)	-17.79 <sup>c</sup>	New York	19.16	0.21	(32)	-2.47
Delaware	20.43	1.00	(21)	3.98	North Carolina	19.41	0.32	(30)	-1.24
D.C.	22.20	1.41	(07)	12.98 <sup>c</sup>	North Dakota	21.22	1.12	(15)	8.00
Florida	18.14	0.19	(37)	-7.70	Ohio	21.85	0.29	(09)	11.20 <sup>c</sup>
Georgia	20.17	0.36	(24)	2.66	Oklahoma	22.09	0.52	(08)	12.40 <sup>c</sup>
Hawaii	17.27	0.71	(44)	-12.11 <sup>c</sup>	Oregon	18.11	0.45	(38)	-7.81
Idaho	16.13	0.70	(50)	-17.91 <sup>c</sup>	Pennsylvania	21.45	0.26	(12)	9.19
Illinois	21.69	0.29	(11)	10.40 <sup>c</sup>	Rhode Island	18.60	0.86	(36)	-5.36
Indiana	21.32	0.40	(14)	8.51	South Carolina	20.22	0.46	(22)	2.92
Iowa	19.98	0.51	(26)	1.69	South Dakota	19.83	0.99	(27)	0.90
Kansas	20.56	0.57	(19)	4.64	Tennessee	21.80	0.41	(10)	10.95 <sup>c</sup>
Kentucky	23.43	0.51	(04)	19.23 <sup>c</sup>	Texas	20.03	0.22	(25)	1.93
Louisiana	24.05	0.52	(02)	22.38 <sup>c</sup>	Utah	14.35	0.58	(51)	-26.97 <sup>c</sup>
Maine	20.19	0.77	(23)	2.77	Vermont	17.37	1.09	(43)	-11.62 <sup>c</sup>
Maryland	20.51	0.42	(20)	4.38	Virginia	19.18	0.35	(31)	-2.39
Massachusetts	18.72	0.36	(34)	-4.74	Washington	17.12	0.35	(45)	-12.87 <sup>c</sup>
Michigan	19.41	0.29	(29)	-1.21	West Virginia	23.43	0.70	(03)	19.27 <sup>c</sup>
Minnesota	17.58	0.39	(41)	-10.52 <sup>c</sup>	Wisconsin	17.96	0.37	(39)	-8.58
Mississippi	24.82	0.65	(01)	26.30 <sup>c</sup>	Wyoming	18.70	1.24	(35)	-4.85
Missouri	21.16	0.39	(16)	7.70					



<sup>a</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).  
<sup>b</sup> Difference between state rate and total U.S. rate is statistically significant (p<=.0002).  
<sup>c</sup> Absolute percent difference between state rate and total U.S. rate is 10% or more.  
SE Standard error of the rate.  
PD Percent difference between state rate and total U.S. rate.  
- Statistic not shown. Rate based on less than 16 cases for the time interval.

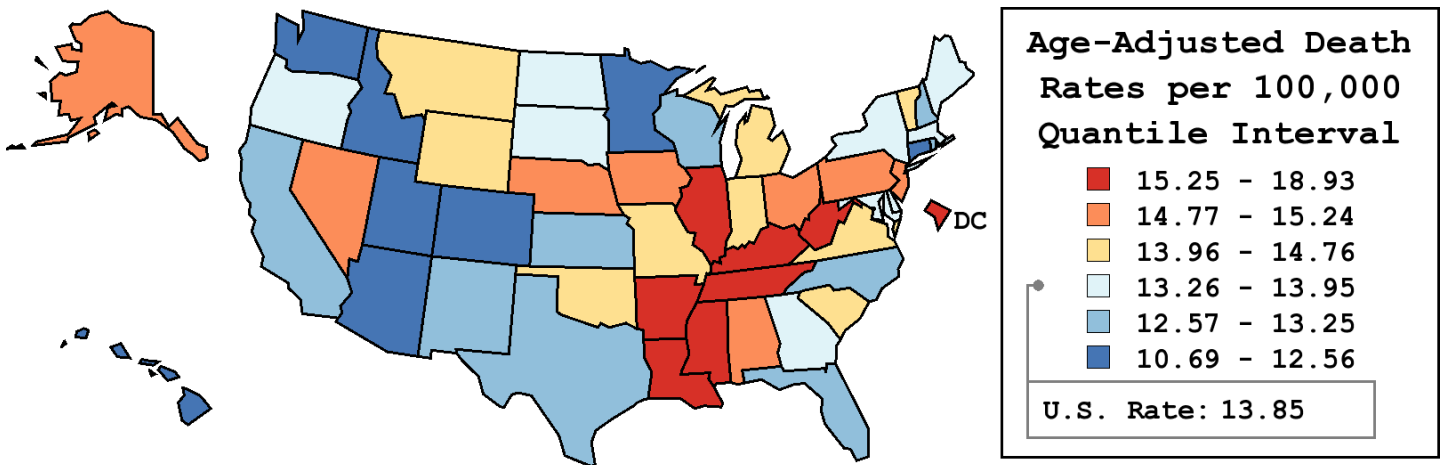
Table 6.27  
Cancer of the Colon and Rectum (Invasive)

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2006-2010

Females

State	Rate	SE	Rank	PD
TOTAL U.S.	13.85	0.04		
High Five States				
D.C.	18.93	1.08	(01)	36.66 <sup>c</sup>
Mississippi	16.51	0.44	(02)	19.21 <sup>c</sup>
Kentucky	16.21	0.35	(03)	17.07 <sup>c</sup>
West Virginia	16.13	0.50	(04)	16.44 <sup>c</sup>
Louisiana	15.70	0.35	(05)	13.34 <sup>c</sup>
Low Five States				
Colorado	12.40	0.32	(47)	-10.48 <sup>c</sup>
Connecticut	12.09	0.32	(48)	-12.73 <sup>c</sup>
Arizona	11.86	0.26	(49)	-14.35 <sup>c</sup>
Hawaii	10.90	0.51	(50)	-21.30 <sup>c</sup>
Utah	10.69	0.45	(51)	-22.81 <sup>c</sup>

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	15.00	0.32	(12)	8.27	Montana	14.02	0.67	(24)	1.21
Alaska	15.08	1.20	(11)	8.87	Nebraska	14.96	0.51	(14)	7.99
Arizona	11.86	0.26	(49)	-14.35 <sup>c</sup>	Nevada	14.88	0.49	(16)	7.42
Arkansas	15.56	0.42	(06)	12.32 <sup>c</sup>	New Hampshire	13.12	0.57	(38)	-5.29
California	12.71	0.11	(42)	-8.21	New Jersey	14.90	0.23	(15)	7.59
Colorado	12.40	0.32	(47)	-10.48 <sup>c</sup>	New Mexico	12.70	0.47	(43)	-8.29
Connecticut	12.09	0.32	(48)	-12.73 <sup>c</sup>	New York	13.78	0.15	(30)	-0.49
Delaware	13.34	0.69	(33)	-3.66	North Carolina	13.12	0.22	(39)	-5.30
D.C.	18.93	1.08	(01)	36.66 <sup>c</sup>	North Dakota	13.85	0.79	(29)	0.01
Florida	12.85	0.14	(40)	-7.24	Ohio	15.24	0.20	(09)	10.05 <sup>c</sup>
Georgia	13.76	0.24	(31)	-0.67	Oklahoma	14.51	0.36	(21)	4.73
Hawaii	10.90	0.51	(50)	-21.30 <sup>c</sup>	Oregon	13.26	0.34	(34)	-4.23
Idaho	12.43	0.56	(46)	-10.24 <sup>c</sup>	Pennsylvania	15.00	0.18	(13)	8.26
Illinois	15.43	0.20	(07)	11.43 <sup>c</sup>	Rhode Island	13.25	0.61	(35)	-4.36
Indiana	14.51	0.28	(20)	4.77	South Carolina	14.22	0.32	(23)	2.65
Iowa	15.21	0.38	(10)	9.78	South Dakota	13.86	0.72	(28)	0.05
Kansas	13.14	0.39	(36)	-5.11	Tennessee	15.28	0.29	(08)	10.32 <sup>c</sup>
Kentucky	16.21	0.35	(03)	17.07 <sup>c</sup>	Texas	13.12	0.15	(37)	-5.28
Louisiana	15.70	0.35	(05)	13.34 <sup>c</sup>	Utah	10.69	0.45	(51)	-22.81 <sup>c</sup>
Maine	13.91	0.55	(27)	0.40	Vermont	14.76	0.85	(17)	6.55
Maryland	13.95	0.29	(26)	0.74	Virginia	13.98	0.25	(25)	0.92
Massachusetts	13.42	0.25	(32)	-3.09	Washington	12.50	0.26	(45)	-9.74
Michigan	14.24	0.22	(22)	2.85	West Virginia	16.13	0.50	(04)	16.44 <sup>c</sup>
Minnesota	12.56	0.28	(44)	-9.31	Wisconsin	12.74	0.27	(41)	-8.04
Mississippi	16.51	0.44	(02)	19.21 <sup>c</sup>	Wyoming	14.67	1.00	(18)	5.94
Missouri	14.65	0.28	(19)	5.75					



<sup>a</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).  
<sup>b</sup> Difference between state rate and total U.S. rate is statistically significant (p<=.0002).  
<sup>c</sup> Absolute percent difference between state rate and total U.S. rate is 10% or more.  
SE Standard error of the rate.  
PD Percent difference between state rate and total U.S. rate.  
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 6.28  
Cancer of the Colon and Rectum (Invasive)

Estimated United States Cancer Prevalence Counts<sup>a</sup> on January 1, 2010  
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 <18 <sup>e</sup>	0 to <35 <sup>e</sup>	>=35 <sup>g</sup>	Complete <sup>h</sup>
<u>Race</u>	<u>Sex</u>										
All Races <sup>b</sup>	Both Sexes	407,833	280,179	185,283	117,126	75,687	40,740	990,422	1,129,666	24,815	1,154,481
	Males	207,302	141,885	91,940	57,815	36,542	17,157	498,942	561,245	8,685	569,930
	Females	200,531	138,294	93,343	59,311	39,145	23,583	491,480	568,421	16,130	584,551
White <sup>b</sup>	Both Sexes	336,917	239,200	159,963	102,083	66,617	36,354	838,164	961,429	21,884	983,313
	Males	173,422	122,564	80,173	50,857	32,595	15,447	427,017	482,801	7,763	490,564
	Females	163,495	116,636	79,790	51,226	34,022	20,907	411,147	478,628	14,121	492,749
Black <sup>b</sup>	Both Sexes	46,655	26,895	16,978	10,215	6,465	3,126	100,742	111,919	1,832	113,751
	Males	20,957	12,002	7,311	4,525	2,581	1,082	44,795	48,922	581	49,503
	Females	25,698	14,893	9,667	5,690	3,884	2,044	55,947	62,997	1,251	64,248
Asian/ Pacific Islander <sup>c</sup>	Both Sexes	16,814	9,983	6,174	+	+	+	35,254	+	+	+
	Males	8,770	5,066	3,175	+	+	+	18,147	+	+	+
	Females	8,044	4,917	2,999	+	+	+	17,107	+	+	+
Hispanic <sup>d</sup>	Both Sexes	29,358	15,120	8,943	+	+	+	53,421	+	+	+
	Males	16,031	7,903	4,688	+	+	+	28,622	+	+	+
	Females	13,327	7,217	4,255	+	+	+	24,799	+	+	+

Estimated prevalence percent<sup>a</sup> on January 1, 2010, of the SEER 11 population diagnosed in the previous 18 years  
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence		Age Specific (Crude)									Age-Adjusted <sup>f</sup>	
		All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages
<u>Race</u>	<u>Sex</u>											
All Races <sup>c</sup>	Both Sexes	0.2614%	-	0.0003%	0.0053%	0.0251%	0.1005%	0.3250%	0.7145%	1.4138%	2.0252%	0.2591%
	Males	0.2685%	-	0.0004%	0.0052%	0.0257%	0.1068%	0.3626%	0.8487%	1.6776%	2.2478%	0.2983%
	Females	0.2546%	-	0.0003%	0.0054%	0.0244%	0.0943%	0.2892%	0.5931%	1.2032%	1.8962%	0.2276%
White <sup>c</sup>	Both Sexes	0.2736%	-	0.0003%	0.0056%	0.0256%	0.0983%	0.3114%	0.6933%	1.4150%	2.0435%	0.2563%
	Males	0.2810%	-	0.0003%	0.0053%	0.0264%	0.1026%	0.3510%	0.8307%	1.6819%	2.2624%	0.2957%
	Females	0.2663%	-	0.0003%	0.0059%	0.0248%	0.0938%	0.2724%	0.5652%	1.1966%	1.9159%	0.2238%
Black <sup>c</sup>	Both Sexes	0.2184%	-	-	0.0040%	0.0213%	0.1130%	0.3874%	0.8754%	1.5139%	1.9608%	0.2836%
	Males	0.2073%	-	-	0.0043%	0.0183%	0.1159%	0.4014%	0.9896%	1.6714%	2.0416%	0.3066%
	Females	0.2285%	-	-	0.0038%	0.0239%	0.1104%	0.3754%	0.7851%	1.4056%	1.9225%	0.2674%
Asian/ Pacific Islander <sup>c</sup>	Both Sexes	0.2362%	-	-	0.0041%	0.0239%	0.0965%	0.3314%	0.6903%	1.3093%	1.8890%	0.2470%
	Males	0.2519%	-	-	0.0051%	0.0260%	0.1154%	0.3695%	0.8182%	1.5943%	2.1933%	0.2919%
	Females	0.2218%	-	-	0.0032%	0.0220%	0.0798%	0.2988%	0.5838%	1.0923%	1.7009%	0.2129%
Hispanic <sup>d</sup>	Both Sexes	0.1094%	-	-	0.0035%	0.0205%	0.0736%	0.2555%	0.5982%	1.1051%	1.5088%	0.2042%
	Males	0.1148%	-	-	0.0036%	0.0223%	0.0754%	0.2869%	0.7358%	1.4419%	1.7804%	0.2482%
	Females	0.1038%	-	-	0.0035%	0.0186%	0.0718%	0.2257%	0.4817%	0.8578%	1.3482%	0.1713%

<sup>a</sup> US 2010 cancer prevalence counts are based on 2010 cancer prevalence proportions from the SEER registries and 1/1/2010 US population estimates based on the average of 2009 and 2010 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

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

<sup>e</sup> Maximum limited-duration prevalence: 35 years for 1975-2010 SEER 9 data; 18 years for 1992-2010 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

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

<sup>g h i</sup> (g) Cases diagnosed more than 35 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 <35 and >=35. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.

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

+ Not available.

Table 6.29

## Cancer of the Colon And Rectum (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2006-2010  
Both Sexes by Race

Histology <sup>a</sup>	All Races		White		Black		Asian/Pacific Islander		American Indian/ Alaska Native <sup>b</sup>		Hispanic <sup>c</sup>	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	183,663	99.5%	145,685	99.5%	21,531	99.5%	13,667	99.5%	871	99.1%	17,382	99.5%
Epidermoid carcinoma <sup>d</sup> (8051-8131)	1,023	0.6%	868	0.6%	119	0.5%	16	0.1%	-	-	78	0.4%
Squamous cell carcinoma (8070-8078,8083-8084)	967	0.5%	820	0.6%	113	0.5%	16	0.1%	-	-	72	0.4%
Adenocarcinoma (8050,8140-8147, 8160-8162,8180-8221, 8250-8507,8520-8551,8560, 8570-8574,8576,8940-8941)	172,934	93.7%	138,269	94.4%	19,669	90.9%	12,709	92.6%	807	91.8%	16,209	92.7%
Adenocarcinoma, NOS (8140)	118,914	64.4%	94,737	64.7%	13,694	63.3%	9,080	66.1%	596	67.8%	11,117	63.6%
Adenocarcinoma in adenomatous polyp (8210)	14,652	7.9%	11,646	8.0%	1,493	6.9%	1,183	8.6%	69	7.8%	1,314	7.5%
Adenocarcinoma in villous adenoma (8261)	5,108	2.8%	4,135	2.8%	542	2.5%	359	2.6%	23	2.6%	593	3.4%
Mucinous adenocarcinoma (8470-8473,8480,8482)	12,170	6.6%	10,110	6.9%	1,266	5.8%	692	5.0%	40	4.6%	1,191	6.8%
Mucin-producing adenocarcinoma (8481)	2,505	1.4%	2,039	1.4%	344	1.6%	110	0.8%	-	-	218	1.2%
Signet ring adenocarcinoma (8490)	2,038	1.1%	1,697	1.2%	171	0.8%	153	1.1%	-	-	201	1.2%
Other adenocarcinomas <sup>e</sup>	17,547	9.5%	13,905	9.5%	2,159	10.0%	1,132	8.2%	68	7.7%	1,575	9.0%
Other specific carcinomas (8012-8015,8030-8046, 8150-8155,8170-8175, 8230-8249,8508,8510-8513, 8561-8562,8575,8580-8671)	8,042	4.4%	5,255	3.6%	1,538	7.1%	820	6.0%	42	4.8%	942	5.4%
Neuroendocrine carcinoid (8240-8245)	6,545	3.5%	4,049	2.8%	1,368	6.3%	723	5.3%	35	4.0%	799	4.6%
Other <sup>f</sup>	1,497	0.8%	1,206	0.8%	170	0.8%	97	0.7%	-	-	143	0.8%
Unspecified, Carcinoma, NOS (8010-8011, 8020-8022)	1,664	0.9%	1,293	0.9%	205	0.9%	122	0.9%	20	2.3%	153	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.

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

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

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

<sup>d</sup> Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

<sup>e</sup> Epidermoid carcinoma includes squamous, basal, and transitional cell carcinomas.

<sup>f</sup> 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.

<sup>f</sup> Includes histologies 8012-8015, 8030-8046, 8150-8155, 8170-8175, 8230-8231, 8246-8249, 8508, 8510-8513, 8561-8562, 8575, 8580-8671.

- 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, 2006-2010  
Both Sexes by Race

Histology <sup>a</sup>	All Races		White		Black		Asian/Pacific Islander		American Indian/ Alaska Native <sup>b</sup>		Hispanic <sup>c</sup>	
	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)	104	0.1%	87	0.1%	-	-	-	-	-	-	18	0.1%
Other specific types (8720-8790,8930-8936, 8950-8983,9000-9030, 9060-9110,9260-9365, 9380-9539)	257	0.1%	183	0.1%	40	0.2%	32	0.2%	-	-	25	0.1%
Unspecified (8000-8005)	564	0.3%	457	0.3%	65	0.3%	26	0.2%	-	-	52	0.3%
Total <sup>d</sup>	184,588	100.0%	146,412	100.0%	21,646	100.0%	13,731	100.0%	879	100.0%	17,477	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.

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

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

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

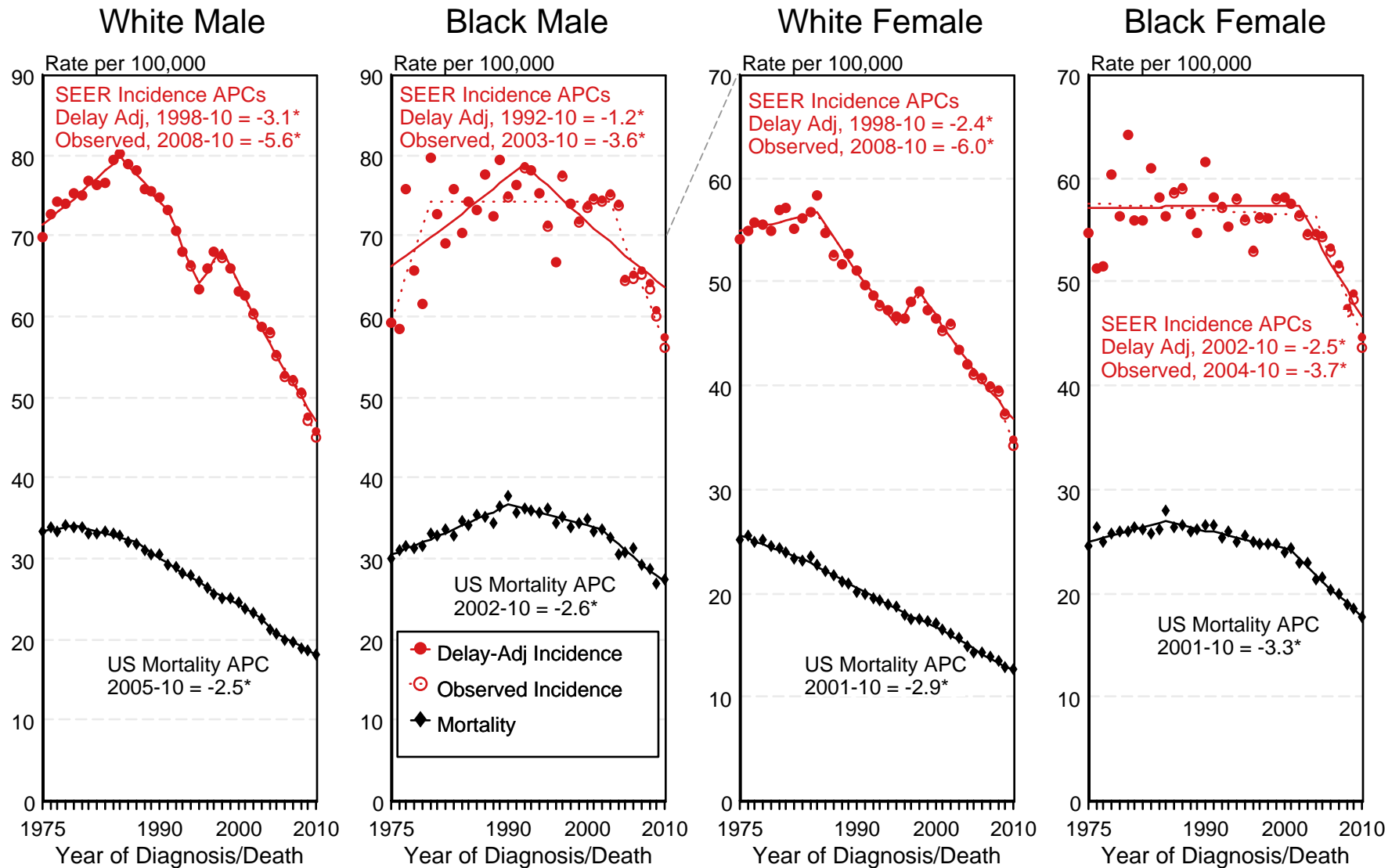
Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

<sup>d</sup> Total includes carcinoma cases from the previous page.

- 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<sup>a</sup> Cancer of the Colon and Rectum, by Race and Sex

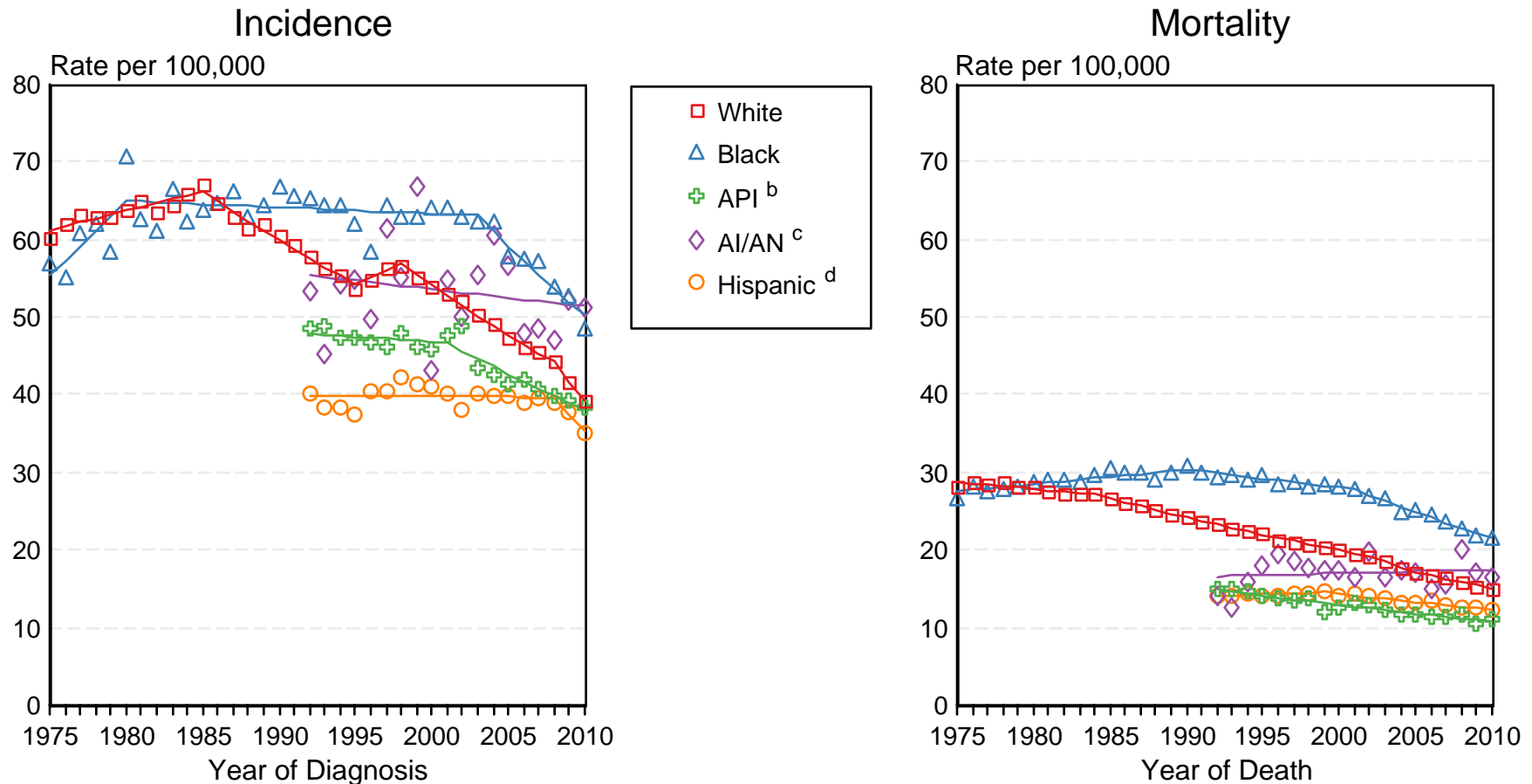


<sup>a</sup> Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.0.3, April 2013, National 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<sup>a</sup> Cancer of the Colon and Rectum, Both Sexes

and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2010



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

<sup>a</sup> Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 4.0.3, April 2013, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2010 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2010 allow a maximum of 3 joinpoints.

<sup>b</sup> API = Asian/Pacific Islander.

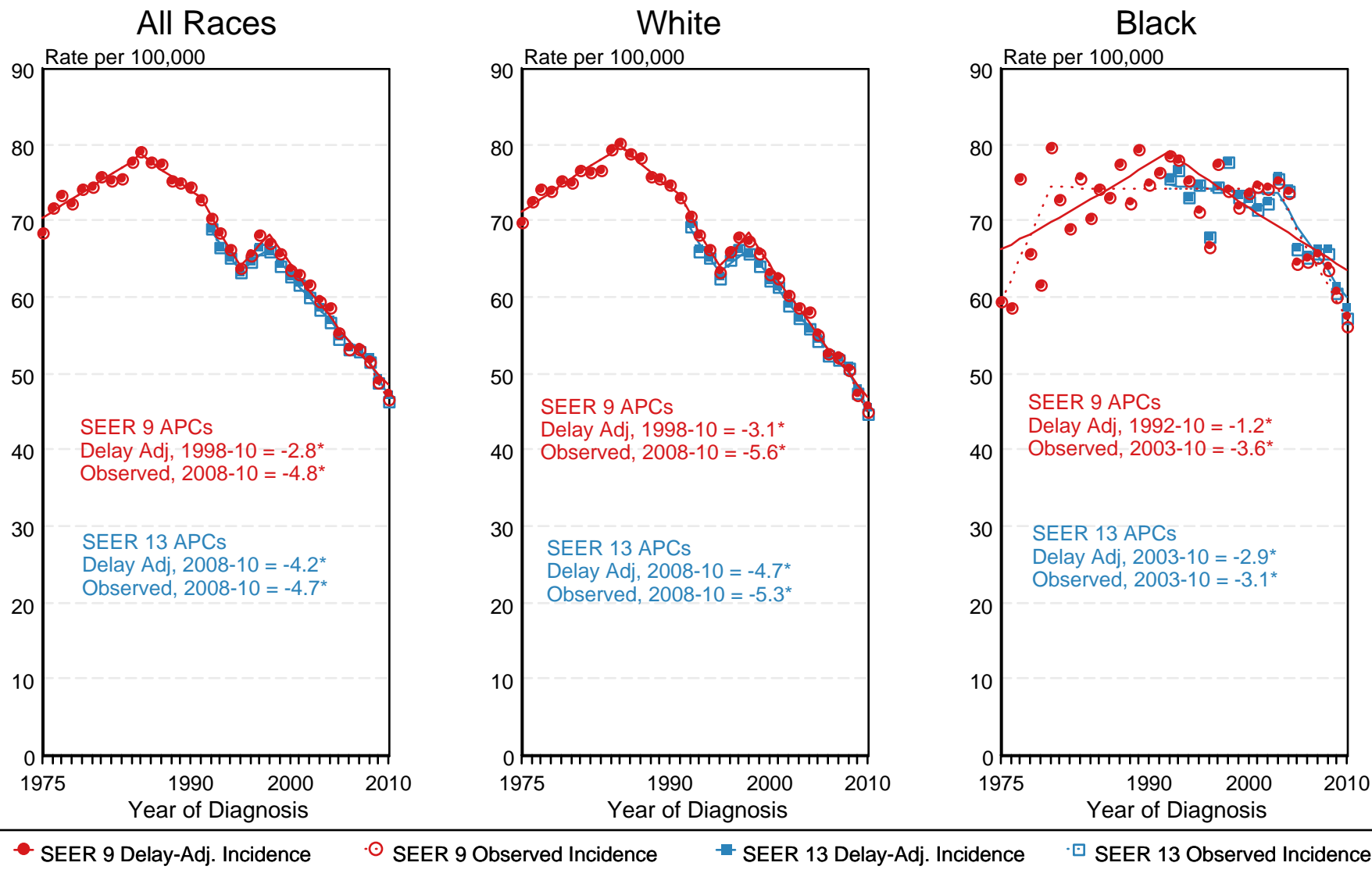
<sup>c</sup> AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

<sup>d</sup> Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, South Carolina, Oklahoma, and Vermont.



Figure 6.3

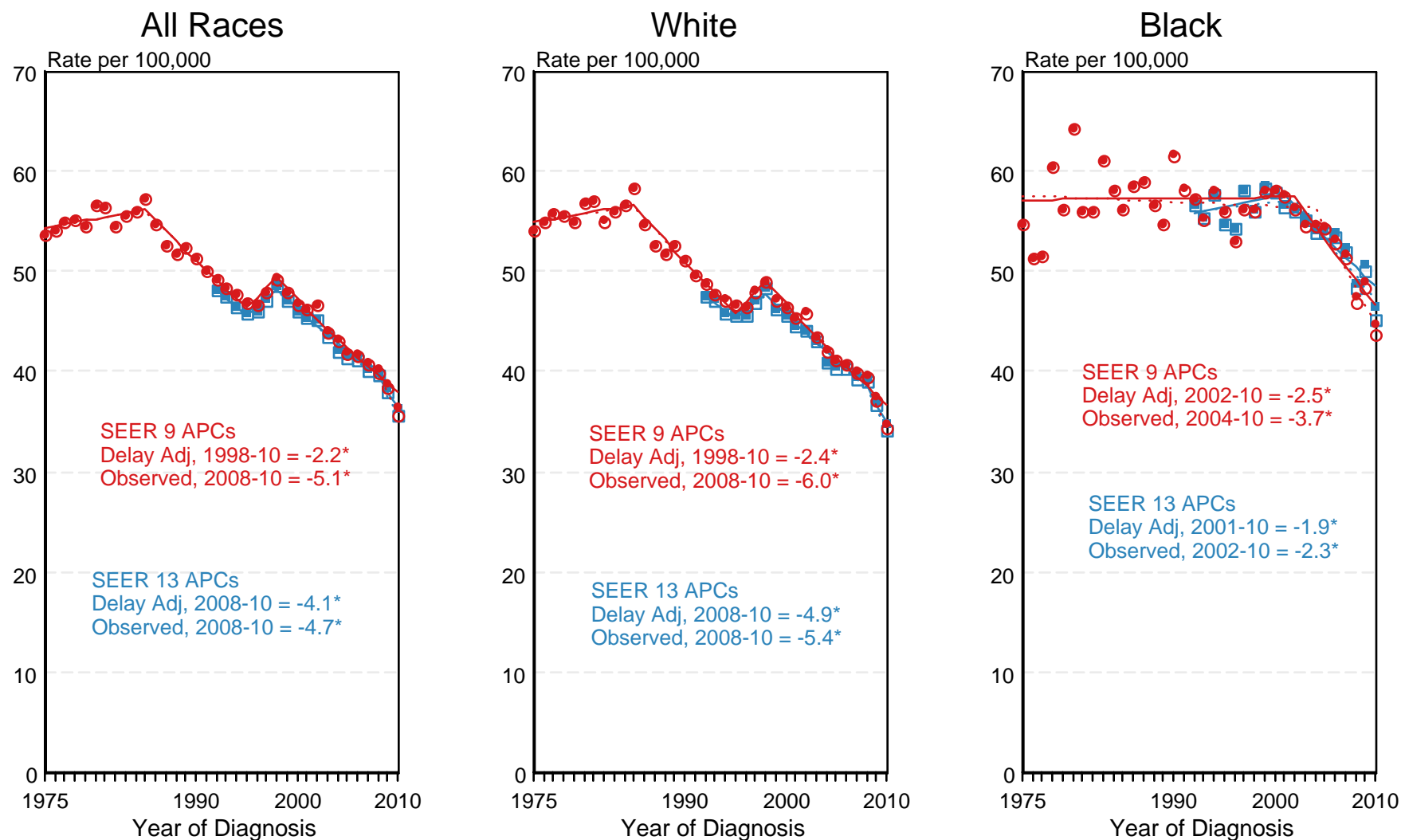
# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates<sup>a</sup> SEER 9 Areas Compared to SEER 13 Areas Cancer of the Colon and Rectum, Male, by Race



<sup>a</sup> Source: SEER 9 areas and SEER 13 areas.  
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).  
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.0.3, April 2013, 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<sup>a</sup> SEER 9 Areas Compared to SEER 13 Areas Cancer of the Colon and Rectum, Female, by Race

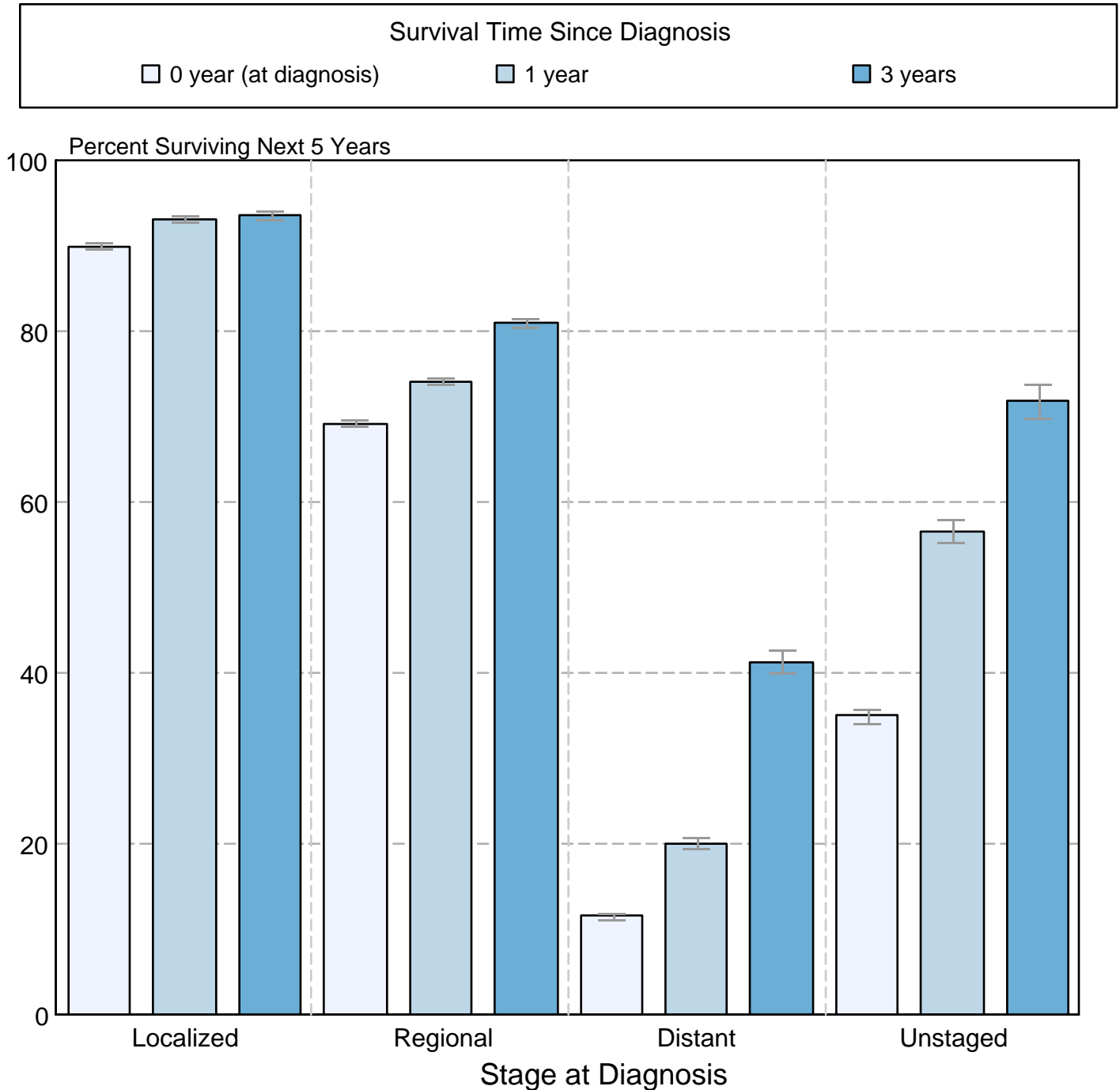


● SEER 9 Delay-Adj. Incidence   
 ○ SEER 9 Observed Incidence   
 ■ SEER 13 Delay-Adj. Incidence   
 □ SEER 13 Observed Incidence

<sup>a</sup> Source: SEER 9 areas and SEER 13 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.0.3, April 2013, 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 1998-2009 by stage at diagnosis



Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG contribute cases for diagnosis years 2000-2009. The remaining 13 SEER Areas contribute cases for the entire period 1998-2009. 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.