

Table 6.1  
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence<sup>a,b</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2009 With up to Five Joinpoints, 1992-2009 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	2000-09	2005-09
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2009</u>														
All Races	1975-85	0.8*	1985-95	-1.8*	1995-98	1.6	1998-09	-2.4*					-2.4*	-2.4*
White	1975-85	0.8*	1985-95	-2.0*	1995-98	1.8	1998-09	-2.6*					-2.6*	-2.6*
Black	1975-80	3.2*	1980-02	-0.1	2002-09	-2.3*							-1.8*	-2.3*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2009</u>														
All Races	1992-95	-2.1*	1995-98	1.7	1998-09	-2.3*							-2.3*	-2.3*
White	1992-95	-2.2*	1995-98	1.8	1998-09	-2.5*							-2.5*	-2.5*
Black	1992-03	-0.1	2003-09	-2.2*									-1.5*	-2.2*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2009</u>														
All Races	1975-85	0.8*	1985-95	-1.8*	1995-98	1.6	1998-09	-2.5*					-2.5*	-2.5*
White	1975-85	0.8*	1985-95	-2.0*	1995-98	1.8	1998-09	-2.7*					-2.7*	-2.7*
Black	1975-80	3.3*	1980-03	-0.2	2003-09	-2.9*							-2.0*	-2.9*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2009</u>														
All Races	1992-95	-2.2*	1995-98	1.8	1998-09	-2.4*							-2.4*	-2.4*
White	1992-95	-2.2*	1995-98	1.9	1998-09	-2.6*							-2.6*	-2.6*
White NH <sup>ef</sup>	1992-95	-2.2*	1995-98	2.0	1998-09	-2.7*							-2.7*	-2.7*
Black	1992-03	-0.1	2003-09	-2.5*									-1.7*	-2.5*
Black NH <sup>ef</sup>	1992-03	-0.1	2003-09	-2.4*									-1.6*	-2.4*
API <sup>e</sup>	1992-09	-1.1*											-1.1*	-1.1*
AI/AN <sup>eg</sup>	1992-09	-0.4											-0.4	-0.4
Hispanic <sup>f</sup>	1992-98	1.2	1998-09	-0.9*									-0.9*	-0.9*
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2009</u>														
All Races	1975-84	-0.5*	1984-02	-1.8*	2002-05	-4.0*	2005-09	-2.4*					-2.8*	-2.4*
White	1975-84	-0.6*	1984-02	-1.9*	2002-05	-4.1*	2005-09	-2.4*					-2.8*	-2.4*
Black	1975-90	0.6*	1990-01	-0.8*	2001-09	-2.7*							-2.5*	-2.7*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2009</u>														
All Races	1992-01	-1.8*	2001-09	-3.1*									-2.9*	-3.1*
White	1992-02	-1.9*	2002-05	-4.1*	2005-09	-2.4*							-2.8*	-2.4*
White NH <sup>ef</sup>	1992-02	-1.8*	2002-05	-3.7*	2005-09	-2.3*							-2.7*	-2.3*
Black	1992-01	-0.7*	2001-09	-2.8*									-2.5*	-2.8*
Black NH <sup>ef</sup>	1992-01	-0.6*	2001-09	-2.6*									-2.3*	-2.6*
API <sup>e</sup>	1992-09	-2.0*											-2.0*	-2.0*
AI/AN <sup>eg</sup>	1992-09	0.2											0.2	0.2
Hispanic <sup>f</sup>	1992-99	0.4	1999-09	-1.9*									-1.9*	-1.9*

Joinpoint Regression Program Version 3.5, April 2011, 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.

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Table 6.2  
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence<sup>a,b</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2009 With up to Five Joinpoints, 1992-2009 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	2000-09	2005-09										
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2009</u>														
All Races	1975-85	1.1*	1985-91	-1.2*	1991-95	-3.2*	1995-98	2.1	1998-09	-2.9*			-2.9*	-2.9*
White	1975-85	1.1*	1985-91	-1.4*	1991-95	-3.3*	1995-98	2.2	1998-09	-3.1*			-3.1*	-3.1*
Black	1975-91	1.2*	1991-09	-1.0*									-1.0*	-1.0*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2009</u>														
All Races	1992-95	-2.6*	1995-98	1.5	1998-09	-2.6*							-2.6*	-2.6*
White	1992-95	-2.8*	1995-98	1.6	1998-09	-2.9*							-2.9*	-2.9*
Black	1992-09	-0.9*											-0.9*	-0.9*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2009</u>														
All Races	1975-85	1.1*	1985-91	-1.2*	1991-95	-3.2*	1995-98	2.1	1998-09	-2.9*			-2.9*	-2.9*
White	1975-85	1.1*	1985-91	-1.4*	1991-95	-3.3*	1995-98	2.2	1998-09	-3.2*			-3.2*	-3.2*
Black	1975-80	4.6	1980-03	0.0	2003-09	-3.4*							-2.3*	-3.4*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2009</u>														
All Races	1992-95	-2.6*	1995-98	1.6	1998-09	-2.7*							-2.7*	-2.7*
White	1992-95	-2.9*	1995-98	1.7	1998-09	-3.0*							-3.0*	-3.0*
White NH <sup>ef</sup>	1992-95	-3.0*	1995-98	1.7	1998-09	-3.1*							-3.1*	-3.1*
Black	1992-03	-0.1	2003-09	-2.8*									-1.9*	-2.8*
Black NH <sup>ef</sup>	1992-03	-0.1	2003-09	-2.7*									-1.9*	-2.7*
API <sup>e</sup>	1992-01	-0.4	2001-09	-2.6*									-2.3*	-2.6*
AI/AN <sup>eg</sup>	1992-09	-0.6											-0.6	-0.6
Hispanic <sup>f</sup>	1992-98	1.5	1998-09	-1.4*									-1.4*	-1.4*
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2009</u>														
All Races	1975-78	0.8	1978-84	-0.4	1984-90	-1.3*	1990-02	-2.0*	2002-05	-3.9*	2005-09	-2.5*	-2.9*	-2.5*
White	1975-79	0.5	1979-87	-0.8*	1987-02	-2.1*	2002-05	-4.2*	2005-09	-2.5*			-3.0*	-2.5*
Black	1975-90	1.2*	1990-02	-0.7*	2002-09	-2.5*							-2.1*	-2.5*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2009</u>														
All Races	1992-02	-2.0*	2002-05	-4.0*	2005-09	-2.4*							-2.9*	-2.4*
White	1992-02	-2.1*	2002-05	-4.1*	2005-09	-2.5*							-2.9*	-2.5*
White NH <sup>ef</sup>	1992-97	-2.4*	1997-02	-1.7*	2002-05	-4.0*	2005-09	-2.5*					-2.8*	-2.5*
Black	1992-02	-0.7*	2002-09	-2.5*									-2.1*	-2.5*
Black NH <sup>ef</sup>	1992-09	-1.2*											-1.2*	-1.2*
API <sup>e</sup>	1992-09	-2.1*											-2.1*	-2.1*
AI/AN <sup>eg</sup>	1992-96	15.7	1996-09	-1.5									-1.5	-1.5
Hispanic <sup>f</sup>	1992-98	1.0*	1998-07	-2.4*	2007-09	0.3							-1.8*	-1.1

Joinpoint Regression Program Version 3.5, April 2011, 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.

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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,  
1975-2009 With up to Five Joinpoints, 1992-2009 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	2000-09	2005-09
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2009</u>														
All Races	1975-85	0.3*	1985-95	-1.9*	1995-98	1.9	1998-09	-2.1*					-2.1*	-2.1*
White	1975-85	0.3	1985-95	-2.0*	1995-98	2.1	1998-09	-2.3*					-2.3*	-2.3*
Black	1975-02	0.0	2002-09	-2.2*									-1.8*	-2.2*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2009</u>														
All Races	1992-95	-1.8*	1995-98	1.9	1998-09	-2.1*							-2.1*	-2.1*
White	1992-95	-1.7	1995-98	1.9	1998-09	-2.3*							-2.3*	-2.3*
Black	1992-00	0.5	2000-09	-1.6*									-1.6*	-1.6*
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2009</u>														
All Races	1975-85	0.3*	1985-95	-1.9*	1995-98	1.9	1998-09	-2.2*					-2.2*	-2.2*
White	1975-85	0.3	1985-95	-2.1*	1995-98	2.2	1998-09	-2.4*					-2.4*	-2.4*
Black	1975-02	0.0	2002-09	-2.5*									-1.9*	-2.5*
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2009</u>														
All Races	1992-95	-1.9*	1995-98	1.9	1998-09	-2.1*							-2.1*	-2.1*
White	1992-95	-1.7	1995-98	1.9	1998-09	-2.4*							-2.4*	-2.4*
White NH <sup>ef</sup>	1992-95	-1.7	1995-98	2.1	1998-09	-2.4*							-2.4*	-2.4*
Black	1992-00	0.5	2000-09	-1.7*									-1.7*	-1.7*
Black NH <sup>ef</sup>	1992-00	0.4	2000-09	-1.6*									-1.6*	-1.6*
API <sup>e</sup>	1992-09	-0.8*											-0.8*	-0.8*
AI/AN <sup>eg</sup>	1992-09	-0.1											-0.1	-0.1
Hispanic <sup>f</sup>	1992-09	-0.3											-0.3	-0.3
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2009</u>														
All Races	1975-84	-1.0*	1984-01	-1.8*	2001-09	-3.1*							-2.9*	-3.1*
White	1975-84	-1.2*	1984-01	-2.0*	2001-09	-3.1*							-3.0*	-3.1*
Black	1975-85	0.7*	1985-01	-0.7*	2001-09	-3.3*							-3.0*	-3.3*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2009</u>														
All Races	1992-01	-1.7*	2001-09	-3.1*									-3.0*	-3.1*
White	1992-00	-1.8*	2000-09	-3.1*									-3.1*	-3.1*
White NH <sup>ef</sup>	1992-00	-1.7*	2000-09	-2.8*									-2.8*	-2.8*
Black	1992-01	-0.7*	2001-09	-3.2*									-3.0*	-3.2*
Black NH <sup>ef</sup>	1992-01	-0.6*	2001-09	-3.1*									-2.8*	-3.1*
API <sup>e</sup>	1992-09	-1.8*											-1.8*	-1.8*
AI/AN <sup>eg</sup>	1992-09	0.0											0.0	0.0
Hispanic <sup>f</sup>	1992-01	0.1	2001-09	-2.3*									-2.1*	-2.3*

Joinpoint Regression Program Version 3.5, April 2011, 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 6.4  
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,  
1975-2009 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	2005-09
<b>SEER 9 Observed Incidence<sup>a</sup> for Cancer of the Colon, 1975-2009</b>														
All Races	Both Sexes	1975-85	1.1*	1985-95	-1.6*	1995-01	-0.3	2001-09	-3.1*					-3.1*
All Races	Male	1975-85	1.7*	1985-91	-1.2*	1991-95	-3.1*	1995-98	1.8	1998-09	-3.1*			-3.1*
All Races	Female	1975-85	0.6*	1985-93	-1.8*	1993-01	-0.3	2001-09	-2.7*					-2.7*
White	Both Sexes	1975-85	1.1*	1985-95	-1.9*	1995-98	1.6	1998-09	-2.7*					-2.7*
White	Male	1975-86	1.6*	1986-95	-2.2*	1995-98	1.3	1998-09	-3.2*					-3.2*
White	Female	1975-85	0.6*	1985-93	-2.1*	1993-00	0.0	2000-09	-2.7*					-2.7*
Black	Both Sexes	1975-80	3.5*	1980-02	-0.1	2002-09	-3.1*							-3.1*
Black	Male	1975-87	1.8*	1987-03	-0.4	2003-09	-3.9*							-3.9*
Black	Female	1975-02	0.0	2002-09	-3.0*									-3.0*
<b>SEER 9 Observed Incidence<sup>a</sup> for Cancer of the Rectum, 1975-2009</b>														
All Races	Both Sexes	1975-87	-0.3	1987-95	-2.4*	1995-98	2.5	1998-09	-2.3*					-2.3*
All Races	Male	1975-89	-0.3	1989-94	-3.6*	1994-98	1.7	1998-09	-2.6*					-2.6*
All Races	Female	1975-84	-0.2	1984-95	-2.2*	1995-98	2.3	1998-09	-2.1*					-2.1*
White	Both Sexes	1975-85	-0.1	1985-95	-2.3*	1995-98	2.5	1998-09	-2.8*					-2.8*
White	Male	1975-89	-0.3	1989-94	-3.9*	1994-99	1.1	1999-09	-3.2*					-3.2*
White	Female	1975-84	-0.2	1984-95	-2.3*	1995-98	2.5	1998-09	-2.6*					-2.6*
Black	Both Sexes	1975-09	-0.1											-0.1
Black	Male	1975-09	0.0											0.0
Black	Female	1975-09	-0.2											-0.2

Joinpoint Regression Program Version 3.5, April 2011, 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.

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Table 6.5  
Cancer of the Colon and Rectum (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Year of Diagnosis:</b>									
1975	59.53	68.44	53.65	60.18	69.75	54.04	56.85	59.33	54.66
1976	61.35	71.72	54.14	62.14	72.66	55.02	55.04	58.53	51.28
1977	62.41	73.49	54.96	63.20	74.32	55.78	60.69	75.66	51.47
1978	62.04	72.37	55.26	62.79	73.90	55.60	62.04	65.70	60.44
1979	62.37	74.11	54.58	62.96	75.20	54.95	58.57	61.64	56.29
1980	63.75	74.54	56.54	63.95	74.88	56.83	70.82	79.68	64.23
1981	64.24	75.83	56.48	64.88	76.70	57.14	62.76	72.77	55.94
1982	62.78	75.18	54.51	63.44	76.24	55.05	61.26	68.97	55.92
1983	63.67	75.59	55.61	64.28	76.60	56.05	66.75	75.69	61.15
1984	64.82	77.64	56.08	65.83	79.28	56.72	62.41	70.28	58.21
1985	66.31	79.16	57.34	67.22	80.20	58.39	63.96	74.30	56.29
1986	64.19	77.80	54.71	64.59	78.89	54.75	64.62	73.27	58.51
1987	62.72	77.49	52.67	62.89	78.22	52.62	66.25	77.52	59.05
1988	61.37	75.19	51.80	61.54	75.77	51.72	63.11	72.44	56.82
1989	61.71	74.97	52.44	61.97	75.44	52.70	64.53	79.47	54.71
1990	60.72	74.38	51.29	60.69	74.79	51.05	66.75	74.92	61.63
1991	59.50	72.91	50.07	59.33	73.14	49.70	65.66	76.37	58.23
1992	58.02	70.44	49.23	57.88	70.74	48.75	65.53	78.54	57.38
1993	56.83	68.47	48.34	56.37	68.15	47.83	64.52	78.09	55.33
1994	55.65	66.29	47.75	55.41	66.35	47.22	64.55	75.39	58.08
1995	54.06	63.85	46.95	53.75	63.47	46.65	61.97	71.23	56.06
1996	54.80	65.58	46.73	54.81	65.95	46.46	58.59	66.66	53.05
1997	56.46	68.15	47.99	56.48	67.99	48.13	64.65	77.68	56.21
1998	56.81	67.12	49.32	56.80	67.39	49.08	62.98	74.00	56.11
1999	55.53	65.79	47.90	55.39	65.95	47.29	63.26	72.00	58.18
2000	54.20	63.76	46.82	53.89	63.21	46.60	64.41	73.99	58.17
2001	53.57	62.97	46.22	53.02	62.62	45.42	64.18	74.65	57.50
2002	53.16	61.51	46.66	52.36	60.34	46.01	63.26	74.71	56.34
2003	50.75	59.46	43.88	50.25	58.65	43.46	62.44	75.37	54.52
2004	49.77	58.50	43.06	49.02	58.03	41.97	62.24	73.85	54.55
2005	47.66	55.14	41.73	47.31	55.15	40.98	57.77	64.59	54.09
2006	46.71	53.16	41.51	45.97	52.53	40.54	57.64	65.07	52.95
2007	46.15	53.11	40.49	45.26	51.98	39.76	57.67	66.53	51.43
2008	44.94	51.28	39.74	44.18	50.30	39.13	54.60	64.49	47.35
2009	43.15	48.83	38.58	41.68	47.12	37.20	54.02	61.43	49.49

Additional information on the model used to delay-adjust SEER Incidence rates can be found at (<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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Year of Diagnosis:</b>									
1975-2009	56.06	66.14	48.66	56.14	66.37	48.63	61.63	71.22	55.38
1975	59.53	68.44	53.65	60.18	69.75	54.04	56.85	59.33	54.66
1976	61.35	71.72	54.14	62.14	72.66	55.02	55.04	58.53	51.28
1977	62.41	73.49	54.96	63.20	74.32	55.78	60.69	75.66	51.47
1978	62.04	72.37	55.26	62.79	73.90	55.60	62.04	65.70	60.44
1979	62.37	74.11	54.58	62.96	75.20	54.95	58.57	61.64	56.29
1980	63.75	74.54	56.54	63.95	74.88	56.83	70.82	79.68	64.23
1981	64.24	75.83	56.48	64.88	76.70	57.14	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	64.27	76.59	56.04	66.74	75.67	61.14
1984	64.81	77.64	56.08	65.82	79.27	56.71	62.39	70.26	58.20
1985	66.30	79.15	57.33	67.20	80.19	58.38	63.94	74.28	56.27
1986	64.18	77.79	54.71	64.58	78.87	54.74	64.59	73.24	58.49
1987	62.71	77.48	52.66	62.88	78.20	52.60	66.21	77.48	59.01
1988	61.36	75.18	51.79	61.52	75.75	51.71	63.08	72.41	56.79
1989	61.69	74.96	52.42	61.95	75.41	52.67	64.47	79.41	54.67
1990	60.70	74.36	51.28	60.66	74.75	51.02	66.69	74.85	61.57
1991	59.48	72.89	50.05	59.29	73.10	49.67	65.59	76.29	58.16
1992	58.00	70.41	49.21	57.84	70.69	48.71	65.45	78.45	57.31
1993	56.80	68.44	48.31	56.33	68.10	47.79	64.43	77.98	55.25
1994	55.62	66.25	47.72	55.36	66.30	47.17	64.44	75.27	57.98
1995	54.03	63.81	46.92	53.70	63.41	46.60	61.85	71.10	55.95
1996	54.76	65.54	46.69	54.74	65.88	46.41	58.47	66.52	52.93
1997	56.41	68.09	47.94	56.40	67.89	48.06	64.49	77.49	56.07
1998	56.76	67.06	49.27	56.72	67.30	49.01	62.82	73.81	55.96
1999	55.46	65.71	47.84	55.28	65.82	47.19	63.04	71.75	57.98
2000	54.12	63.67	46.74	53.77	63.06	46.49	64.15	73.70	57.93
2001	53.48	62.87	46.14	52.88	62.46	45.29	63.89	74.31	57.23
2002	53.05	61.39	46.56	52.19	60.16	45.86	62.92	74.32	56.03
2003	50.63	59.32	43.77	50.06	58.44	43.29	62.06	74.92	54.18
2004	49.63	58.34	42.93	48.81	57.78	41.79	61.80	73.34	54.16
2005	47.49	54.96	41.59	47.06	54.87	40.77	57.29	64.07	53.63
2006	46.52	52.95	41.34	45.69	52.21	40.29	57.09	64.46	52.43
2007	45.92	52.86	40.28	44.94	51.61	39.47	57.03	65.80	50.85
2008	44.68	50.99	39.50	43.80	49.87	38.79	53.89	63.66	46.72
2009	42.61	48.23	38.08	40.99	46.36	36.58	52.74	59.99	48.30

<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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Year of Diagnosis:</b>									
1975-2009	40.44	46.00	36.46	40.45	46.14	36.36	47.34	53.59	43.42
1975	41.35	45.40	38.90	41.72	46.13	39.14	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	44.12	49.87	40.63	47.65	48.81	47.68
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	55.17	58.32	52.85
1981	45.47	51.34	41.71	45.88	51.94	42.12	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	54.57	41.32	47.03	55.57	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	46.79	54.36	41.58	47.06	55.15	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	52.59	38.66	44.26	52.85	38.41	48.86	54.02	45.49
1989	44.37	52.43	38.97	44.47	52.48	39.20	48.95	60.41	41.62
1990	44.19	51.99	38.92	44.05	52.00	38.73	52.08	57.83	48.56
1991	43.60	51.84	37.91	43.30	51.86	37.41	51.74	57.75	47.67
1992	42.29	49.65	37.22	42.05	49.76	36.72	50.83	60.31	45.17
1993	41.61	48.96	36.32	41.07	48.65	35.65	51.16	60.56	45.02
1994	40.83	46.92	36.34	40.61	47.00	35.82	50.12	57.06	46.30
1995	39.65	45.05	35.86	39.31	44.68	35.48	48.74	54.79	45.42
1996	39.37	45.37	34.89	39.31	45.78	34.45	44.57	48.40	42.04
1997	41.11	48.41	35.97	41.12	48.26	36.17	49.23	59.18	42.55
1998	41.05	46.86	37.02	40.98	47.18	36.60	47.55	54.41	43.90
1999	39.80	45.43	35.67	39.59	45.43	35.14	48.41	54.74	44.84
2000	39.37	44.44	35.48	38.99	43.92	35.17	50.91	57.32	46.93
2001	39.16	44.01	35.45	38.78	43.78	34.87	48.75	55.46	44.57
2002	38.62	43.21	35.07	37.85	42.11	34.48	49.46	57.40	44.63
2003	36.84	41.34	33.26	36.45	40.63	33.03	47.45	56.69	41.93
2004	36.14	41.22	32.35	35.58	40.92	31.54	47.09	54.38	42.35
2005	34.24	37.82	31.45	33.98	37.93	30.83	43.84	48.48	41.70
2006	33.71	37.13	30.95	33.16	36.65	30.27	44.19	49.03	41.05
2007	32.74	35.90	30.26	32.31	35.47	29.85	42.12	46.74	38.75
2008	32.28	35.53	29.63	31.90	35.13	29.26	39.91	45.69	35.73
2009	30.45	32.95	28.50	29.48	31.97	27.46	39.17	43.98	36.61

<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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Year of Diagnosis:</b>									
1975-2009	15.62	20.14	12.21	15.69	20.23	12.27	14.29	17.63	11.97
1975	18.18	23.04	14.75	18.45	23.62	14.89	14.02	15.19	13.01
1976	18.30	23.97	14.19	18.70	24.48	14.63	11.96	14.93	9.37
1977	18.44	23.94	14.60	18.54	24.26	14.59	15.30	17.33	13.81
1978	18.19	23.25	14.66	18.67	24.03	14.97	14.39	16.89	12.76
1979	18.60	23.91	14.96	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	17.85	23.09	14.17	16.54	17.15	15.89
1984	18.30	23.07	14.76	18.79	23.70	15.15	13.71	16.24	12.15
1985	18.42	24.12	14.36	18.79	24.58	14.72	14.00	16.79	12.06
1986	17.39	23.42	13.13	17.52	23.73	13.21	15.31	17.83	13.15
1987	17.47	23.05	13.50	17.74	23.69	13.53	14.87	17.64	13.29
1988	17.06	22.59	13.13	17.26	22.90	13.30	14.21	18.38	11.30
1989	17.32	22.52	13.45	17.47	22.93	13.47	15.52	19.00	13.05
1990	16.51	22.37	12.36	16.61	22.75	12.29	14.61	17.02	13.01
1991	15.88	21.05	12.14	15.99	21.24	12.26	13.85	18.55	10.50
1992	15.71	20.76	11.98	15.79	20.93	11.99	14.62	18.14	12.14
1993	15.19	19.48	12.00	15.26	19.44	12.14	13.27	17.42	10.22
1994	14.79	19.33	11.38	14.75	19.29	11.35	14.32	18.21	11.68
1995	14.38	18.77	11.06	14.39	18.73	11.13	13.11	16.31	10.53
1996	15.39	20.16	11.81	15.43	20.10	11.95	13.90	18.12	10.89
1997	15.30	19.69	11.97	15.28	19.63	11.90	15.27	18.31	13.52
1998	15.71	20.20	12.26	15.75	20.12	12.41	15.27	19.41	12.07
1999	15.67	20.28	12.17	15.69	20.39	12.05	14.64	17.01	13.13
2000	14.75	19.22	11.27	14.78	19.15	11.32	13.24	16.38	11.01
2001	14.31	18.86	10.68	14.10	18.68	10.43	15.13	18.85	12.66
2002	14.43	18.18	11.48	14.34	18.05	11.37	13.47	16.92	11.40
2003	13.79	17.98	10.51	13.61	17.81	10.27	14.60	18.24	12.25
2004	13.49	17.12	10.58	13.22	16.86	10.24	14.71	18.96	11.81
2005	13.26	17.14	10.14	13.08	16.95	9.94	13.45	15.58	11.93
2006	12.81	15.82	10.39	12.53	15.56	10.02	12.90	15.43	11.38
2007	13.18	16.95	10.03	12.62	16.14	9.62	14.90	19.06	12.10
2008	12.40	15.46	9.87	11.90	14.74	9.53	13.98	17.97	10.99
2009	12.16	15.28	9.58	11.51	14.39	9.12	13.58	16.02	11.69

<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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Year of Death:</b>									
1975-2009	22.60	27.27	19.35	22.33	27.02	19.05	27.74	33.27	24.22
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	20.66	25.07	17.49	20.15	24.45	17.01	28.17	35.01	23.89
2001	20.12	24.34	17.08	19.57	23.80	16.48	27.78	33.47	24.25
2002	19.70	23.97	16.56	19.18	23.34	16.06	27.12	33.86	22.95
2003	19.07	23.14	16.10	18.52	22.57	15.51	26.70	32.71	22.91
2004	18.01	21.78	15.22	17.51	21.23	14.72	25.09	30.87	21.41
2005	17.47	21.20	14.69	16.89	20.56	14.13	25.22	31.21	21.42
2006	17.19	20.69	14.59	16.66	20.02	14.12	24.54	31.65	20.29
2007	16.81	20.24	14.21	16.30	19.64	13.73	23.72	29.76	19.88
2008	16.36	19.66	13.82	15.84	18.98	13.36	23.03	29.28	18.97
2009	15.73	19.11	13.14	15.26	18.59	12.68	22.12	27.57	18.59

<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
<b>SEER Incidence</b>									
<b>Age at Diagnosis</b>									
Age-Adjusted Rates, 2005-2009									
All ages	46.3	54.0	40.2	45.4	53.1	39.2	57.0	66.9	50.3
Under 65	18.5	21.0	16.0	17.5	20.0	15.1	25.1	28.4	22.4
65 and over	238.7	281.9	207.1	238.2	282.1	205.8	277.4	332.8	243.1
All ages (IARC world std) <sup>c</sup>	28.9	33.8	24.8	28.1	32.9	23.9	36.9	43.2	32.4
Age-Specific Rates, 2005-2009									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.3	0.3	0.3	0.3	0.3	0.3	-	-	-
20-24	0.9	0.9	0.9	0.9	0.9	0.9	0.9	1.0	0.8
25-29	2.1	2.1	2.0	2.1	2.1	2.0	1.7	1.5	1.9
30-34	4.5	4.5	4.4	4.5	4.7	4.3	4.3	3.4	5.1
35-39	8.4	8.7	8.2	8.3	8.5	8.0	9.2	9.5	8.9
40-44	16.6	17.1	16.0	15.8	16.0	15.6	20.4	21.6	19.3
45-49	29.3	32.2	26.4	27.8	30.8	24.9	37.5	39.8	35.5
50-54	57.2	64.0	50.6	53.2	60.1	46.3	81.7	87.7	76.6
55-59	76.1	90.0	63.1	71.4	84.8	58.3	109.1	130.9	91.2
60-64	107.3	129.5	86.9	102.7	124.3	82.4	152.2	183.7	127.3
65-69	160.9	194.7	131.3	156.3	189.6	126.5	208.2	253.0	174.6
70-74	209.2	252.8	173.6	206.8	250.3	170.6	257.6	313.2	218.5
75-79	262.5	308.3	228.5	264.4	311.3	229.1	288.3	337.2	257.6
80-84	313.4	362.7	282.2	317.4	367.4	285.4	331.7	408.0	291.2
85+	343.4	395.4	319.5	346.9	402.7	321.4	389.1	455.0	364.4
<b>U.S. Mortality</b>									
<b>Age at Death</b>									
Age-Adjusted Rates, 2005-2009									
All ages	16.7	20.2	14.1	16.2	19.5	13.6	23.7	29.8	19.8
Under 65	5.0	5.9	4.1	4.7	5.5	3.8	8.1	9.8	6.7
65 and over	97.7	118.9	82.8	95.8	116.5	81.0	131.5	168.4	110.3
All ages (IARC world std) <sup>c</sup>	9.5	11.4	7.8	9.1	11.0	7.5	14.0	17.6	11.5
Age-Specific Rates, 2005-2009									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	0.1	0.0	0.0	0.1	-	-	-	-
20-24	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.2	-
25-29	0.5	0.5	0.4	0.4	0.5	0.4	0.7	0.8	0.5
30-34	1.0	1.1	1.0	1.0	1.0	0.9	1.4	1.5	1.3
35-39	2.0	2.2	1.8	2.0	2.2	1.7	2.9	3.2	2.7
40-44	4.0	4.3	3.8	3.8	4.0	3.5	6.2	6.7	5.8
45-49	7.7	8.5	6.9	7.1	7.9	6.4	12.5	14.4	10.8
50-54	13.4	15.6	11.4	12.4	14.4	10.5	22.5	26.9	18.8
55-59	21.5	26.0	17.4	20.1	24.3	16.1	35.6	44.1	28.5
60-64	33.4	41.6	25.8	31.5	39.5	24.1	55.0	69.9	43.4
65-69	49.7	62.8	38.1	47.7	60.3	36.4	76.2	99.8	58.9
70-74	71.4	89.0	56.9	69.6	86.8	55.1	99.2	127.7	79.4
75-79	98.5	120.8	82.0	96.5	118.3	80.0	131.1	166.3	109.4
80-84	138.7	169.0	119.5	137.3	167.2	117.9	177.1	223.1	152.9
85+	208.9	243.2	193.4	206.9	240.4	191.8	267.6	343.7	239.5

<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.

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

<sup>c</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 6.11  
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, 2005-2009									
All ages	33.2	37.4	29.9	32.6	36.9	29.1	42.9	49.4	38.7
Under 65	11.6	12.8	10.5	11.0	12.2	9.8	17.3	19.1	15.9
65 and over	182.0	207.5	163.6	182.0	207.8	163.0	219.8	258.7	196.0
All ages (IARC world std) <sup>b</sup>	20.0	22.7	17.9	19.4	22.1	17.2	27.3	31.2	24.5
Age-Specific Rates, 2005-2009									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.2	0.2	0.2	0.2	0.2	0.3	-	-	-
20-24	0.5	0.5	0.5	0.6	0.5	0.6	0.5	-	-
25-29	1.2	1.2	1.2	1.2	1.2	1.2	0.9	-	1.2
30-34	2.7	2.7	2.8	2.7	2.8	2.6	2.9	2.0	3.8
35-39	5.0	5.1	5.0	4.9	5.0	4.9	5.8	5.7	5.9
40-44	9.9	9.9	9.8	9.4	9.4	9.4	12.8	13.0	12.5
45-49	17.2	18.0	16.4	16.2	17.2	15.2	23.8	24.3	23.4
50-54	34.6	37.6	31.7	32.1	35.6	28.5	53.5	55.0	52.2
55-59	49.1	56.0	42.6	45.4	52.0	39.0	78.6	92.6	67.1
60-64	73.3	85.4	62.3	69.4	81.2	58.3	114.4	134.4	98.6
65-69	114.0	132.8	97.5	110.3	129.3	93.4	159.8	187.3	139.2
70-74	154.8	180.6	133.7	153.0	178.7	131.6	200.8	242.0	171.7
75-79	201.4	228.1	181.7	203.2	230.3	182.8	229.0	262.8	207.8
80-84	247.1	276.3	228.6	250.7	279.9	232.0	266.2	325.8	234.6
85+	279.8	312.3	264.8	283.4	319.2	267.0	322.2	366.3	305.7
<u>Cancer of the Rectum</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2005-2009									
All ages	13.1	16.5	10.3	12.8	16.2	10.1	14.0	17.5	11.6
Under 65	6.8	8.2	5.5	6.5	7.8	5.3	7.8	9.3	6.5
65 and over	56.6	74.5	43.5	56.3	74.3	42.9	57.5	74.1	47.2
All ages (IARC world std) <sup>b</sup>	8.9	11.1	6.9	8.6	10.8	6.7	9.6	12.0	7.9
Age-Specific Rates, 2005-2009									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	0.1	-	-	-	-	-	-	-	-
20-24	0.4	0.4	0.4	0.4	0.4	0.4	0.4	-	-
25-29	0.8	0.9	0.8	0.8	0.9	0.8	0.8	0.9	-
30-34	1.7	1.8	1.6	1.8	1.9	1.6	1.3	1.4	1.3
35-39	3.4	3.6	3.2	3.4	3.5	3.2	3.4	3.8	3.0
40-44	6.7	7.2	6.2	6.4	6.7	6.2	7.6	8.6	6.7
45-49	12.1	14.2	10.0	11.6	13.6	9.6	13.7	15.5	12.1
50-54	22.5	26.3	18.8	21.1	24.5	17.7	28.2	32.6	24.5
55-59	27.1	34.0	20.5	25.9	32.8	19.3	30.5	38.3	24.1
60-64	34.0	44.2	24.6	33.4	43.2	24.1	37.8	49.3	28.7
65-69	46.9	61.9	33.8	45.9	60.4	33.0	48.4	65.7	35.4
70-74	54.4	72.2	39.9	53.8	71.6	38.9	56.9	71.2	46.7
75-79	61.1	80.3	46.9	61.2	81.0	46.3	59.3	74.5	49.7
80-84	66.3	86.4	53.6	66.7	87.5	53.4	65.4	82.1	56.6
85+	63.7	83.0	54.7	63.6	83.5	54.4	66.9	88.7	58.8

<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
<b>5-Year Relative Survival (Percent)</b>									
<b>Year of Diagnosis:</b>									
1960-1963 <sup>a</sup>	-	-	-	-	-	-	-	-	-
1970-1973 <sup>a</sup>	-	-	-	-	-	-	-	-	-
1975-1977 <sup>b</sup>	50.1	49.2	50.8	50.3	49.6	50.9	45.1	43.4	46.4
1978-1980 <sup>b</sup>	51.4	50.5	52.3	51.8	50.8	52.6	45.5	43.6	46.9
1981-1983 <sup>b</sup>	54.3	54.0	54.5	54.7	54.7	54.6	46.6	42.8	49.7
1984-1986 <sup>b</sup>	57.9	57.9	57.8	58.6	58.7	58.4	48.4	47.5	49.2
1987-1989 <sup>b</sup>	59.8	60.1	59.5	60.3	60.8	59.7	52.4	50.1	54.5
1990-1992 <sup>b</sup>	61.4	61.3	61.6	62.2	62.0	62.4	53.0	54.6	51.5
1993-1995 <sup>b</sup>	60.2	60.0	60.4	60.8	60.6	61.0	52.0	51.2	52.7
1996-1998 <sup>b</sup>	62.7	62.6	62.8	63.3	63.1	63.5	54.0	54.9	53.2
1999-2001 <sup>b</sup>	65.4	66.3	64.5	66.9	67.6	66.1	54.2	55.5	53.0
2002-2008 <sup>b</sup>	66.0 <sup>f</sup>	66.2 <sup>f</sup>	65.7 <sup>f</sup>	67.0 <sup>f</sup>	67.7 <sup>f</sup>	66.3 <sup>f</sup>	56.7 <sup>f</sup>	54.7 <sup>f</sup>	58.5 <sup>f</sup>
<b>5-Year Period Survival (Percent)<sup>cd</sup></b>									
2008	65.0	65.2	64.8	65.7	66.0	65.3	57.6	56.6	58.5
<b>Stage Distribution (%) 2002-2008<sup>ce</sup></b>									
<b>All Stages</b>									
Number of cases	214,881	109,472	105,409	172,006	88,423	83,583	24,607	11,534	13,073
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	39	40	39	40	40	39	36	36	36
Regional	36	36	37	36	36	37	34	34	34
Distant	20	20	20	19	19	19	24	25	24
Unstaged	5	4	5	5	4	5	5	5	6
<b>5-Year Relative Survival (Percent), 2002-2008<sup>c</sup></b>									
<b>Age at Diagnosis:</b>									
Ages <45	67.2	66.0	68.5	68.7	66.6	70.9	59.5	58.3	60.7
Ages 45-54	69.7	68.6	71.1	70.5	69.5	72.0	61.7	59.3	63.8
Ages 55-64	68.0	67.3	69.0	68.7	68.1	69.6	60.6	59.0	62.3
Ages 65-74	66.5	66.0	67.1	67.0	66.7	67.3	59.6	57.7	61.4
Ages 75+	57.9	58.4	57.6	59.2	59.8	58.7	45.1	43.5	45.8
Ages <65	68.5	67.6	69.6	69.3	68.4	70.6	60.8	59.0	62.7
Ages 65+	61.5	62.1	60.9	62.3	63.1	61.6	52.5	51.9	52.9
<b>Stage<sup>e</sup>:</b>									
All Stages	64.3	64.6	64.1	65.0	65.4	64.6	56.8	55.9	57.6
Localized	89.9	90.0	89.7	90.2	90.5	90.0	85.7	84.9	86.3
Regional	69.6	69.3	70.0	70.1	69.9	70.3	63.9	62.5	65.0
Distant	11.9	11.4	12.5	12.3	11.8	12.9	9.0	8.2	9.6
Unstaged	33.9	37.6	30.6	31.4	35.1	28.1	36.3	39.7	33.8

<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).

<sup>c</sup> Based on follow-up of patients into 2009.

<sup>d</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).

<sup>e</sup> Based on follow-up of patients into 2009.

<sup>f</sup> Period survival provides a 2008 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2006-2008: 0-1 year survival), (2005-2007: 1-2 year survival), (2004-2006: 2-3 year survival), (2003-2005: 3-4 year survival), (2002-2004: 4-5 years survival).

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

<sup>h</sup> The difference between 1975-1977 and 2002-2008 is statistically significant ( $p<.05$ ).

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

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

<sup>k</sup> 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
<b>5-Year Relative Survival (Percent)</b>									
<b>Year of Diagnosis:</b>									
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>	50.9	50.4	51.3	51.1	50.8	51.4	45.3	43.9	46.1
1978-1980 <sup>b</sup>	52.5	51.5	53.4	52.6	51.6	53.5	48.9	47.5	49.9
1981-1983 <sup>b</sup>	55.4	55.8	55.0	55.7	56.4	55.1	48.7	44.9	51.7
1984-1986 <sup>b</sup>	58.5	59.0	58.0	59.2	59.8	58.6	49.3	48.9	49.5
1987-1989 <sup>b</sup>	60.5	61.0	59.9	60.9	61.7	60.2	52.5	50.9	53.8
1990-1992 <sup>b</sup>	62.2	62.5	62.0	63.0	63.2	62.7	53.5	55.0	52.3
1993-1995 <sup>b</sup>	60.1	60.3	59.9	60.8	61.0	60.6	51.5	51.0	51.8
1996-1998 <sup>b</sup>	62.4	62.5	62.2	63.2	63.2	63.1	53.5	55.3	52.1
1999-2001 <sup>b</sup>	65.2	66.3	64.1	66.9	68.0	65.9	52.6	53.8	51.5
2002-2008 <sup>b</sup>	65.1 <sup>f</sup>	65.4 <sup>f</sup>	64.9 <sup>f</sup>	66.2 <sup>f</sup>	66.9 <sup>f</sup>	65.6 <sup>f</sup>	55.4 <sup>f</sup>	53.4 <sup>f</sup>	56.9 <sup>f</sup>
<b>5-Year Period Survival (Percent)<sup>cd</sup></b>									
2008	64.4	64.6	64.1	65.2	65.5	65.0	56.9	56.6	57.1
<b>Stage Distribution (%) 2002-2008<sup>ce</sup></b>									
<b>All Stages</b>									
Number of cases	152,034	73,954	78,080	121,750	59,796	61,954	18,395	8,355	10,040
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	37	38	36	38	39	37	34	34	33
Regional	38	37	38	38	37	38	36	36	36
Distant	21	21	21	20	20	20	26	26	25
Unstaged	4	4	5	4	4	5	4	4	5
<b>5-Year Relative Survival (Percent), 2002-2008<sup>c</sup></b>									
<b>Age at Diagnosis:</b>									
Ages <45	65.6	65.1	66.1	67.5	65.9	69.2	58.4	59.2	57.6
Ages 45-54	67.0	66.4	67.7	67.9	67.4	68.6	60.0	58.5	61.3
Ages 55-64	66.6	66.1	67.2	67.6	67.1	68.2	59.0	58.6	59.4
Ages 65-74	66.5	66.2	66.8	67.0	66.9	67.1	59.8	58.1	61.3
Ages 75+	59.1	59.6	58.7	60.3	61.0	59.9	46.5	45.1	47.2
Ages <65	66.6	66.1	67.2	67.7	67.1	68.5	59.3	58.7	59.8
Ages 65+	62.0	62.7	61.4	62.8	63.6	62.1	53.2	52.6	53.5
<b>Stage<sup>e</sup>:</b>									
All Stages	63.6	64.0	63.2	64.4	64.9	64.0	56.1	55.9	56.3
Localized	90.8	91.1	90.5	91.3	91.7	90.8	86.7	86.1	87.2
Regional	70.0	69.8	70.3	70.5	70.3	70.7	65.1	64.4	65.6
Distant	11.7	11.3	12.0	12.1	11.6	12.6	8.9	8.4	9.3
Unstaged	27.4	31.5	24.3	25.6	29.2	22.8	28.2	33.2	24.9

<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).

<sup>c</sup> Based on follow-up of patients into 2009.

<sup>d</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).

<sup>e</sup> Based on follow-up of patients into 2009.

<sup>f</sup> Period survival provides a 2008 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2006-2008: 0-1 year survival), (2005-2007: 1-2 year survival), (2004-2006: 2-3 year survival), (2003-2005: 3-4 year survival), (2002-2004: 4-5 years survival).

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

<sup>h</sup> The difference between 1975-1977 and 2002-2008 is statistically significant ( $p<.05$ ).

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

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

<sup>k</sup> 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
<b>5-Year Relative Survival (Percent)</b>									
<b>Year of Diagnosis:</b>									
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>	48.3	47.2	49.6	48.4	47.5	49.5	44.6	41.8	46.9
1978-1980 <sup>b</sup>	49.1	48.6	49.6	49.9	49.5	50.3	34.9	34.0	35.6
1981-1983 <sup>b</sup>	51.7	50.5	53.1	52.4	51.3	53.6	39.8	37.3	42.4
1984-1986 <sup>b</sup>	56.5	55.9	57.3	57.3	56.7	57.9	45.8	43.5	48.0
1987-1989 <sup>b</sup>	58.3	58.1	58.5	58.8	59.1	58.5	52.3	47.7	57.1
1990-1992 <sup>b</sup>	59.5	58.7	60.6	60.2	59.4	61.4	51.3	53.5	48.7
1993-1995 <sup>b</sup>	60.4	59.2	61.8	60.8	59.7	62.2	53.9	51.6	56.5
1996-1998 <sup>b</sup>	63.6	62.8	64.6	63.9	63.2	64.8	55.3	54.0	56.4
1999-2001 <sup>b</sup>	66.1	66.5	65.6	66.8	66.9	66.7	59.4	60.3	58.3
2002-2008 <sup>b</sup>	68.1 <sup>f</sup>	67.9 <sup>f</sup>	68.4 <sup>f</sup>	68.8 <sup>f</sup>	69.2 <sup>f</sup>	68.3 <sup>f</sup>	60.7 <sup>f</sup>	58.1 <sup>f</sup>	63.3 <sup>f</sup>
<b>5-Year Period Survival (Percent)<sup>cd</sup></b>									
2008	66.6	66.5	66.6	66.8	67.1	66.3	59.7	56.5	63.0
<b>Stage Distribution (%) 2002-2008<sup>ce</sup></b>									
<b>All Stages</b>									
Number of cases	62,847	35,518	27,329	50,256	28,627	21,629	6,212	3,179	3,033
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	44	44	45	44	44	45	44	42	46
Regional	33	33	32	33	34	33	28	29	27
Distant	17	18	17	17	18	17	20	22	18
Unstaged	6	5	6	5	5	6	8	7	9
<b>5-Year Relative Survival (Percent), 2002-2008<sup>c</sup></b>									
<b>Age at Diagnosis:</b>									
Ages <45	69.6	67.1	72.5	70.3	67.5	73.8	61.3	56.5	66.9
Ages 45-54	73.9	71.7	77.0	74.4	72.3	77.4	65.0	60.6	69.7
Ages 55-64	70.7	69.3	73.1	70.9	69.9	72.6	65.3	60.1	71.3
Ages 65-74	66.6	65.6	68.0	67.0	66.4	67.9	58.6	56.0	61.1
Ages 75+	53.9	54.6	53.3	55.2	56.3	54.3	39.2	37.8	39.9
Ages <65	71.7	69.9	74.5	72.1	70.5	74.6	64.5	59.7	69.9
Ages 65+	60.1	60.7	59.4	60.8	61.7	59.7	49.8	49.1	50.4
<b>Stage<sup>e</sup>:</b>									
All Stages	66.2	65.8	66.7	66.5	66.4	66.6	58.9	56.1	61.7
Localized	88.0	88.1	88.0	88.2	88.4	88.0	83.2	82.2	84.0
Regional	68.5	68.2	68.9	69.2	69.1	69.3	59.2	56.3	62.2
Distant	12.7	11.7	14.0	12.9	12.2	13.8	9.3	7.3	11.0
Unstaged	45.4	47.0	43.6	42.4	44.5	40.0	49.6	48.9	49.8

<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).

<sup>c</sup> Based on follow-up of patients into 2009.

<sup>d</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).

<sup>e</sup> Based on follow-up of patients into 2009.

<sup>f</sup> Period survival provides a 2008 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2006-2008: 0-1 year survival), (2005-2007: 1-2 year survival), (2004-2006: 2-3 year survival), (2003-2005: 3-4 year survival), (2002-2004: 4-5 years survival).

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

<sup>h</sup> The difference between 1975-1977 and 2002-2008 is statistically significant ( $p<.05$ ).

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

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

<sup>k</sup> 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
<b>Survival Time</b>																						
1-year	74.7	77.8	80.6	81.7	82.4	81.5	80.6	81.4	80.0	81.8	80.8	82.5	82.7	82.5	83.5	83.7	82.9	83.9	84.3	84.0	84.4	85.0
2-year	63.5	67.3	71.5	73.1	73.6	72.9	72.2	72.6	71.7	73.7	72.8	74.9	74.9	74.8	76.1	77.2	76.1	77.0	77.1	77.4	77.2	
3-year	57.2	60.8	66.0	67.9	67.9	67.2	67.0	67.5	66.0	68.8	67.6	69.7	70.2	70.5	71.4	72.4	71.1	71.8	72.7	72.1		
4-year	53.2	56.7	62.1	63.5	64.3	63.5	62.9	63.4	62.2	65.2	64.6	66.6	67.1	67.2	68.5	69.2	67.9	68.5	68.9			
5-year	50.6	53.9	59.5	61.1	61.9	61.3	60.1	60.4	60.0	62.8	61.8	63.5	64.8	65.1	66.3	66.5	65.5	65.9				
6-year	48.8	51.9	57.8	59.6	59.9	59.7	58.4	58.7	57.5	61.4	60.0	61.7	63.4	63.3	64.4	64.6	63.6					
7-year	47.5	50.4	56.2	57.9	58.4	58.1	56.7	57.3	55.8	60.3	59.1	60.3	62.3	61.8	62.4	63.1						
8-year	46.6	49.4	55.2	56.4	57.1	56.6	55.7	56.4	55.2	59.6	58.2	59.6	60.9	60.4	61.3							
9-year	46.0	48.7	54.3	55.7	55.9	55.7	54.8	56.0	54.9	58.8	57.3	58.3	60.1	59.6								
10-year	45.3	47.9	53.5	55.0	55.3	55.0	54.1	54.9	54.2	58.2	56.6	57.5	59.4									
11-year	44.8	47.3	53.1	54.4	55.1	54.3	53.2	54.5	53.3	57.5	55.8	56.6										
12-year	44.3	46.9	52.6	53.9	54.9	54.2	52.3	53.8	52.6	57.4	55.4											
13-year	43.9	46.6	51.9	53.4	54.5	53.5	51.8	53.7	52.0	57.0												
14-year	43.4	46.1	51.6	52.9	54.0	53.1	51.3	53.1	51.5													
15-year	43.0	45.8	51.1	52.2	53.9	53.1	50.4	52.4														
16-year	42.6	45.3	50.8	52.1	53.9	53.1	50.4															
17-year	42.2	44.9	50.2	51.9	53.1	52.6																
18-year	41.8	44.6	49.9	51.2	52.2																	
19-year	41.8	44.1	49.5	51.1																		
20-year	41.6	43.8	49.1																			

<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
<b>Survival Time</b>																						
1-year	74.6	78.7	81.6	82.9	83.1	82.6	81.3	82.4	81.5	83.1	81.7	82.6	83.8	84.1	85.5	83.6	83.6	84.9	85.1	85.1	85.8	86.6
2-year	63.5	67.7	72.8	74.0	74.6	73.8	72.7	73.4	73.0	75.3	74.1	74.9	75.5	76.7	77.8	76.9	76.5	78.3	78.1	78.5	78.6	
3-year	56.6	60.9	67.1	69.0	68.7	67.8	67.4	68.5	67.2	70.0	68.5	69.1	70.8	72.3	73.0	72.2	71.4	72.9	73.4	73.1		
4-year	52.4	56.5	62.7	64.2	64.5	63.6	62.9	63.5	63.3	65.5	65.5	65.5	67.7	69.1	70.1	68.9	68.1	69.3	69.0			
5-year	49.6	53.5	60.0	61.1	61.6	61.0	59.7	59.9	60.2	62.6	62.6	62.6	65.1	66.4	67.5	65.9	65.6	66.4				
6-year	47.4	51.3	58.0	59.3	58.9	59.4	58.2	58.0	57.5	61.1	60.6	60.4	63.9	64.1	65.2	63.7	63.2					
7-year	46.1	49.7	56.4	57.1	57.0	57.8	56.5	56.5	55.9	59.8	59.9	58.9	62.7	62.2	63.2	61.9						
8-year	45.0	48.6	55.4	55.6	55.6	56.0	55.6	54.9	55.3	59.5	58.5	57.6	61.4	60.3	62.4							
9-year	44.3	47.7	54.4	55.1	54.6	55.1	54.2	54.3	54.8	59.0	57.5	56.4	60.2	59.8								
10-year	43.5	46.9	53.8	54.4	53.8	54.5	53.2	53.0	54.2	58.1	56.9	55.7	59.4									
11-year	43.0	46.2	53.3	53.9	53.8	53.8	51.9	52.9	53.3	57.3	56.0	54.8										
12-year	42.4	45.7	52.7	53.4	53.7	53.8	51.4	51.9	52.4	57.1	55.8											
13-year	41.9	45.5	52.1	52.9	53.3	53.1	50.3	51.5	52.0	56.7												
14-year	41.2	44.8	52.0	52.4	52.2	52.5	49.9	51.1	51.1													
15-year	41.0	44.6	51.4	51.7	51.8	52.4	49.0	50.6														
16-year	40.5	44.5	51.2	51.7	51.8	52.4	49.0															
17-year	40.1	43.8	50.7	51.6	50.8	52.4	49.0															
18-year	39.7	43.5	50.4	50.8	50.0																	
19-year	39.6	43.2	50.1	50.8																		
20-year	39.4	42.7	49.6																			

<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
<b>Survival Time</b>																						
1-year	74.7	77.0	79.6	80.5	81.6	80.4	79.9	80.4	78.5	80.4	79.9	82.4	81.5	80.7	81.5	83.8	82.1	82.9	83.5	82.9	82.9	83.3
2-year	63.5	66.9	70.2	72.2	72.6	72.0	71.6	71.8	70.4	72.1	71.5	74.9	74.2	72.9	74.3	77.6	75.7	75.6	76.1	76.2	75.7	
3-year	57.7	60.6	64.9	66.6	67.0	66.6	66.5	66.6	64.9	67.6	66.7	70.3	69.7	68.7	69.6	72.6	70.7	70.7	71.8	71.2		
4-year	54.0	56.8	61.5	62.8	64.0	63.4	62.9	63.3	61.1	64.8	63.5	67.6	66.5	65.2	66.8	69.5	67.7	67.6	68.9			
5-year	51.6	54.3	59.1	61.0	62.1	61.6	60.4	60.9	59.8	62.9	61.0	64.5	64.5	63.8	65.1	67.1	65.5	65.4				
6-year	50.0	52.5	57.5	59.9	60.8	60.0	58.7	59.5	57.5	61.7	59.4	63.0	62.8	62.5	63.5	65.6	64.1					
7-year	48.9	51.2	56.0	58.6	59.8	58.3	57.0	58.1	55.7	60.8	58.1	61.7	61.8	61.5	61.5	64.4						
8-year	48.0	50.3	54.8	57.3	58.7	57.1	55.8	57.7	55.0	59.6	57.8	61.3	60.4	60.6	60.2							
9-year	47.5	49.5	54.1	56.3	57.3	56.4	55.4	57.7	54.8	58.7	57.2	60.2	59.9	59.3								
10-year	46.9	48.9	53.3	55.6	56.8	55.4	55.1	56.7	54.2	58.1	56.3	59.3	59.5									
11-year	46.4	48.3	52.8	54.8	56.2	54.8	54.6	56.1	53.3	57.7	55.5	58.4										
12-year	46.1	47.9	52.5	54.5	56.1	54.4	53.1	55.8	52.8	57.7	54.7											
13-year	45.8	47.6	51.7	53.9	55.6	53.8	53.1	55.8	52.0	57.2												
14-year	45.3	47.3	51.2	53.4	55.6	53.6	52.6	55.2	51.8													
15-year	44.9	46.9	50.7	52.7	55.6	53.6	51.8	54.3														
16-year	44.5	46.1	50.3	52.5	55.6	53.5	51.2															
17-year	44.2	45.9	49.6	52.0	55.5	52.5																
18-year	43.7	45.5	49.3	51.2	54.5																	
19-year	43.7	45.1	49.0	50.9																		
20-year	43.4	44.9	48.5																			

<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, 2007-2009 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	Risk of Dying from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.00	0.00	0.02	4.96	2.02	Asian/ Pacific Islander	0	0.00	0.00	0.02	5.16	2.07	
	10	0.00	0.02	0.08	5.02	2.04		10	0.00	0.02	0.08	5.20	2.09	
	20	0.02	0.08	0.31	5.04	2.05		20	0.02	0.08	0.30	5.21	2.09	
	30	0.07	0.30	0.90	5.07	2.07		30	0.06	0.28	0.88	5.22	2.10	
	40	0.24	0.85	1.92	5.07	2.08		40	0.22	0.82	1.86	5.19	2.10	
	50	0.63	1.73	3.29	4.97	2.08		50	0.61	1.66	3.09	5.04	2.08	
	60	1.18	2.84	4.21	4.64	2.03		60	1.09	2.57	3.93	4.59	2.01	
	70	1.91	3.49	-	3.97	1.88		70	1.62	3.09	-	3.81	1.89	
	80	2.19	-	-	2.86	1.61		80	1.81	-	-	2.70	1.67	
White	0	0.00	0.00	0.02	4.89	1.99	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.00	0.02	4.01	1.81	
	10	0.00	0.02	0.08	4.94	2.01		10	0.00	0.02	0.11	4.06	1.84	
	20	0.02	0.08	0.30	4.96	2.01		20	0.02	0.11	0.37	4.09	1.85	
	30	0.07	0.29	0.85	4.98	2.03		30	0.09	0.36	0.88	4.15	1.88	
	40	0.22	0.79	1.83	4.98	2.04		40	0.27	0.81	1.82	4.17	1.91	
	50	0.58	1.65	3.21	4.89	2.04		50	0.56	1.62	2.95	4.09	1.93	
	60	1.13	2.79	4.17	4.58	1.99		60	1.15	2.59	3.60	3.83	1.89	
	70	1.90	3.48	-	3.95	1.85		70	1.68	2.86	-	3.12	1.80	
	80	2.20	-	-	2.85	1.58		80	1.64	-	-	2.00	1.40	
Black	0	0.00	0.00	0.01	5.05	2.33	Hispanic <sup>b</sup>	0	0.00	0.00	0.01	4.68	1.89	
	10	0.00	0.01	0.08	5.17	2.38		10	0.00	0.01	0.06	4.73	1.91	
	20	0.01	0.08	0.37	5.19	2.40		20	0.01	0.06	0.24	4.74	1.91	
	30	0.07	0.36	1.18	5.25	2.42		30	0.05	0.23	0.75	4.77	1.93	
	40	0.30	1.14	2.46	5.30	2.45		40	0.18	0.71	1.68	4.76	1.93	
	50	0.88	2.25	3.79	5.23	2.46		50	0.54	1.53	2.94	4.68	1.93	
	60	1.54	3.25	4.48	4.86	2.42		60	1.05	2.53	3.78	4.36	1.88	
	70	2.13	3.66	-	4.12	2.25		70	1.64	3.04	-	3.69	1.73	
	80	2.30	-	-	3.00	1.94		80	1.80	-	-	2.62	1.48	

Devcan Version 6.6.1, April 2012, 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, 2007-2009 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer						Risk of Being Diagnosed with Cancer						Risk of Dying from Cancer		Risk of Dying from Cancer			
		+10 yrs			+20 yrs			+30 yrs			Ever								
All Races	0	0.00	0.00	0.02	5.17	2.11	Asian/ Pacific Islander	0	0.00	0.00	0.02	5.36	2.19	White	0.00	0.00	0.03	4.08	1.67
	10	0.00	0.02	0.08	5.24	2.14		10	0.00	0.02	0.09	5.41	2.20		0.00	0.00	0.13	4.14	1.70
	20	0.02	0.08	0.33	5.26	2.15		20	0.02	0.09	0.33	5.42	2.21		0.02	0.03	0.38	4.18	1.72
	30	0.07	0.32	1.00	5.31	2.17		30	0.07	0.32	0.99	5.44	2.22		0.11	0.37	0.93	4.26	1.76
	40	0.25	0.94	2.19	5.33	2.19		40	0.25	0.93	2.14	5.41	2.22		0.27	0.86	2.05	4.31	1.80
	50	0.72	2.01	3.71	5.26	2.20		50	0.69	1.93	3.54	5.26	2.21		0.62	1.89	3.13	4.28	1.84
	60	1.40	3.24	4.59	4.93	2.16		60	1.30	2.98	4.30	4.79	2.15		1.39	2.77	3.77	4.04	1.77
	70	2.18	3.78	-	4.19	1.99		70	1.87	3.34	-	3.88	2.01		1.66	2.86	-	3.19	1.68
	80	2.37	-	-	2.97	1.68		80	1.89	-	-	2.60	1.75		1.77	-	-	2.25	1.33
White	0	0.00	0.00	0.02	5.11	2.08	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.00	0.03	4.08	1.67	Black	0.00	0.00	0.01	5.13	2.08
	10	0.00	0.02	0.08	5.17	2.10		10	0.00	0.03	0.13	4.14	1.70		0.00	0.01	0.06	5.18	2.10
	20	0.02	0.08	0.31	5.19	2.11		20	0.03	0.13	0.38	4.18	1.72		0.01	0.06	0.25	5.21	2.11
	30	0.07	0.30	0.94	5.24	2.13		30	0.11	0.37	0.93	4.26	1.76		0.19	0.80	1.96	5.27	2.15
	40	0.24	0.89	2.10	5.26	2.15		40	0.27	0.86	2.05	4.31	1.80		0.62	1.81	3.47	5.22	2.15
	50	0.67	1.92	3.62	5.19	2.16		50	0.62	1.89	3.13	4.28	1.84		1.27	3.04	4.35	4.91	2.11
	60	1.35	3.19	4.55	4.88	2.12		60	1.39	2.77	3.77	4.04	1.77		2.02	3.52	-	4.16	1.94
	70	2.17	3.78	-	4.17	1.96		70	1.66	2.86	-	3.19	1.68		2.03	-	-	2.89	1.63
	80	2.39	-	-	2.97	1.65		80	1.77	-	-	2.25	1.33		-	-	-	-	-
Black	0	0.00	0.00	0.01	5.07	2.41	Hispanic <sup>b</sup>	0	0.00	0.00	0.01	5.13	2.08	-	-	-	-	-	-
	10	0.00	0.01	0.07	5.19	2.47		10	0.00	0.01	0.06	5.18	2.10	-	-	-	-	-	-
	20	0.01	0.07	0.37	5.23	2.49		20	0.01	0.06	0.25	5.21	2.11	-	-	-	-	-	-
	30	0.06	0.37	1.29	5.32	2.54		30	0.05	0.24	0.84	5.25	2.13	-	-	-	-	-	-
	40	0.32	1.26	2.76	5.41	2.58		40	0.19	0.80	1.96	5.27	2.15	-	-	-	-	-	-
	50	1.00	2.58	4.19	5.39	2.61		50	0.62	1.81	3.47	5.22	2.15	-	-	-	-	-	-
	60	1.83	3.67	4.81	5.05	2.60		60	1.27	3.04	4.35	4.91	2.11	-	-	-	-	-	-
	70	2.45	3.96	-	4.28	2.43		70	2.02	3.52	-	4.16	1.94	-	-	-	-	-	-
	80	2.53	-	-	3.07	2.12		80	2.03	-	-	2.89	1.63	-	-	-	-	-	-

Devcan Version 6.6.1, April 2012, 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, 2007-2009 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being						Risk of Being					
		Diagnosed with Cancer			Risk of Dying			Diagnosed with Cancer			Risk of Dying		
		+10 yrs	+20 yrs	+30 yrs	Ever	from Cancer		+10 yrs	+20 yrs	+30 yrs	Ever	from Cancer	
All Races	0	0.00	0.00	0.02	4.78	1.94	Asian/	0	0.00	0.00	0.02	4.98	1.98
	10	0.00	0.02	0.08	4.83	1.96	Pacific	10	0.00	0.02	0.07	5.02	1.99
	20	0.01	0.08	0.30	4.84	1.97	Islander	20	0.01	0.07	0.27	5.02	2.00
	30	0.07	0.28	0.81	4.85	1.98		30	0.06	0.25	0.79	5.03	2.00
	40	0.22	0.75	1.66	4.83	1.98		40	0.20	0.74	1.60	4.99	1.99
	50	0.54	1.47	2.91	4.71	1.97		50	0.55	1.42	2.71	4.85	1.97
	60	0.98	2.48	3.89	4.38	1.91		60	0.90	2.23	3.62	4.43	1.91
	70	1.68	3.25	-	3.80	1.79		70	1.42	2.90	-	3.76	1.80
	80	2.06	-	-	2.79	1.56		80	1.76	-	-	2.78	1.61
White	0	0.00	0.00	0.02	4.69	1.90	American	0	0.00	0.00	0.02	3.96	1.93
	10	0.00	0.02	0.08	4.73	1.92	Indian/	10	0.00	0.02	0.09	4.01	1.96
	20	0.01	0.08	0.28	4.74	1.93	Alaska	20	0.02	0.09	0.36	4.03	1.97
	30	0.06	0.27	0.75	4.75	1.93	Native <sup>a</sup>	30	0.08	0.35	0.82	4.06	1.99
	40	0.21	0.70	1.57	4.72	1.94		40	0.28	0.76	1.61	4.06	2.01
	50	0.50	1.39	2.82	4.61	1.92		50	0.50	1.38	2.78	3.93	2.01
	60	0.93	2.43	3.83	4.31	1.87		60	0.94	2.44	3.46	3.66	1.98
	70	1.67	3.24	-	3.76	1.76		70	1.70	2.87	-	3.09	1.88
	80	2.07	-	-	2.77	1.54		80	1.55	-	-	1.85	1.44
Black	0	0.00	0.00	0.02	5.04	2.27	Hispanic <sup>b</sup>	0	0.00	0.00	0.01	4.31	1.74
	10	0.00	0.02	0.08	5.15	2.32		10	0.00	0.01	0.06	4.35	1.75
	20	0.01	0.08	0.37	5.16	2.33		20	0.01	0.06	0.23	4.36	1.76
	30	0.07	0.36	1.09	5.19	2.34		30	0.05	0.22	0.67	4.36	1.76
	40	0.29	1.04	2.19	5.20	2.35		40	0.17	0.62	1.43	4.34	1.76
	50	0.77	1.97	3.45	5.09	2.35		50	0.45	1.28	2.47	4.23	1.75
	60	1.31	2.92	4.23	4.70	2.29		60	0.85	2.09	3.31	3.92	1.69
	70	1.90	3.45	-	4.01	2.14		70	1.34	2.67	-	3.33	1.58
	80	2.17	-	-	2.96	1.85		80	1.64	-	-	2.46	1.39

Devcan Version 6.6.1, April 2012, 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 2005-2009			Trend 2000-2009 <sup>c</sup>			Trend 2000-2009 <sup>d</sup>		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	46.3	54.0	40.2	-2.4*	-2.7*	-2.1*	-2.5*	-2.9*	-2.2*
White	45.4	53.1	39.2	-2.6*	-3.0*	-2.4*	-2.7*	-3.2*	-2.4*
White Hispanic <sup>e</sup>	38.1	46.1	31.9	-1.0*	-1.4*	-0.4*	-	-	-
White Non-Hispanic <sup>e</sup>	46.4	54.2	40.2	-2.7*	-3.1*	-2.4*	-	-	-
Black	57.0	66.9	50.3	-1.7*	-1.9*	-1.7*	-2.0*	-2.3*	-1.9*
Asian/Pacific Islander	38.9	44.9	34.2	-1.1*	-2.3*	-0.8*	-	-	-
Amer Ind/Alaska Nat <sup>f</sup>	41.4	45.2	38.0	-0.4	-0.6	-0.1	-	-	-
Hispanic <sup>e</sup>	37.6	45.2	31.5	-0.9*	-1.4*	-0.3	-	-	-
<u>U.S. Mortality<sup>g</sup></u>									
	Rate 2005-2009			Trend 2000-2009 <sup>h</sup>			AAPC (%)		
	Rate per 100,000 persons								
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	16.7	20.2	14.1	-2.9*	-2.9*	-3.0*			
White	16.2	19.5	13.6	-2.8*	-2.9*	-3.1*			
White Hispanic <sup>e</sup>	12.8	15.8	10.5	-1.9*	-1.7*	-2.0*			
White Non-Hispanic <sup>e</sup>	16.4	19.8	13.8	-2.7*	-2.8*	-2.8*			
Black	23.7	29.8	19.8	-2.5*	-2.1*	-3.0*			
Asian/Pacific Islander	11.1	13.1	9.6	-2.0*	-2.1*	-1.8*			
Amer Ind/Alaska Nat									
Total U.S.	12.5	14.3	11.1	-1.5*	-2.6*	1.3			
CHSDA Counties	16.4	18.8	14.6	0.2	-1.5	0.0			
Non-CHSDA Counties	7.8	9.1	6.7	-1.6*	-1.0	-1.3			
Hispanic <sup>e</sup>	12.4	15.3	10.2	-1.9*	-1.8*	-2.1*			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 3.5, April 2011, 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 2000-2009 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2009.

<sup>d</sup> The 2000-2009 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2009.

<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. The 2005-2009 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, North Dakota, and South Carolina. The 2000-2009 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.

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

<sup>g</sup> US Mortality Files, National Center for Health Statistics, CDC.

<sup>h</sup> The 2000-2009 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2009.

\* 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**  
**SEER Incidence**

RACE/ETHNICITY	SEER 18 Areas <sup>b</sup> Rate 2005-2009 Rate per 100,000 persons			SEER 13 Areas <sup>b</sup> Trend 2000-2009 <sup>c</sup> AAPC (%)			SEER 9 Areas <sup>b</sup> Trend 2000-2009 <sup>d</sup> AAPC (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	33.2	37.4	29.9	-2.4*	-2.9*	-2.3*	-2.8*	-3.1*	-2.4*
White	32.6	36.9	29.1	-2.6*	-3.0*	-2.5*	-2.7*	-3.2*	-2.7*
White Hispanic <sup>e</sup>	26.5	30.7	23.3	-1.2	-0.6*	-1.2	-	-	-
White Non-Hispanic <sup>e</sup>	33.4	37.8	29.9	-2.9*	-3.1*	-2.6*	-	-	-
Black	42.9	49.4	38.7	-2.1*	-2.4*	-2.0*	-2.5*	-2.7*	-2.4*
Asian/Pacific Islander	26.0	28.2	24.3	-2.1*	-2.8*	-0.9*	-	-	-
Amer Ind/Alaska Nat <sup>f</sup>	29.2	30.3	28.4	-0.7	-1.3	-0.1	-	-	-
Hispanic <sup>e</sup>	26.1	30.1	23.1	-0.9*	-1.3*	-0.1	-	-	-

**Cancer of the Rectum**  
**SEER Incidence**

RACE/ETHNICITY	SEER 18 Areas <sup>b</sup> Rate 2005-2009 Rate per 100,000 persons			SEER 13 Areas <sup>b</sup> Trend 2000-2009 <sup>c</sup> AAPC (%)			SEER 9 Areas <sup>b</sup> Trend 2000-2009 <sup>d</sup> AAPC (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	13.1	16.5	10.3	-2.0*	-2.2*	-2.1*	-2.3*	-2.6*	-2.1*
White	12.8	16.2	10.1	-2.6*	-2.9*	-2.2*	-2.8*	-3.2*	-2.6*
White Hispanic <sup>e</sup>	11.6	15.4	8.6	-0.9*	-1.1*	-0.8*	-	-	-
White Non-Hispanic <sup>e</sup>	13.1	16.4	10.3	-2.7*	-3.0*	-2.6*	-	-	-
Black	14.0	17.5	11.6	-0.3	-0.5	-0.1	-0.1	0.0	-0.2
Asian/Pacific Islander	12.9	16.7	9.8	-0.9*	-2.3	-1.5*	-	-	-
Amer Ind/Alaska Nat <sup>f</sup>	12.1	14.9	9.7	0.2	-	-	-	-	-
Hispanic <sup>e</sup>	11.4	15.1	8.5	-0.8*	-1.0*	-0.7*	-	-	-

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

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

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

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

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

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.

d The 2000-2009 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2009.

e The 2000-2009 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2009.

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

\* 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
<b>SEER Incidence Rates<sup>a</sup>, 2005-2009</b>									
California	43.70	50.71	38.07	43.04	50.18	37.23	56.79	64.64	50.94
Greater Bay Area	43.50	48.82	39.16	43.15	48.53	38.76	55.18	63.41	49.44
San Francisco-Oakland	44.84	50.49	40.29	44.22	49.91	39.57	55.20	63.62	49.36
San Jose-Monterey	40.77	45.50	36.79	41.21	46.08	37.25	53.87	63.77	48.13
Los Angeles	45.17	53.05	39.10	43.18	50.96	37.11	59.67	68.11	53.81
Greater California	43.11	50.32	37.21	42.96	50.38	36.86	54.06	60.97	48.25
Connecticut	47.24	55.26	41.10	46.66	54.62	40.54	53.42	61.88	47.65
Detroit	49.36	56.43	44.23	46.74	53.52	41.62	60.00	70.35	53.40
Georgia	45.01	53.35	38.80	42.20	50.48	35.77	54.82	65.00	48.26
Atlanta	40.90	45.86	37.33	36.03	41.31	31.93	53.57	59.66	49.96
Rural Georgia	46.76	59.36	37.06	43.63	55.21	34.37	53.86	69.27	42.89
Greater Georgia	46.97	56.66	39.70	44.63	53.98	37.38	56.36	69.01	48.04
Hawaii	48.55	59.58	38.69	48.21	59.62	36.98	26.37	34.44	-
Iowa	52.14	59.65	45.94	51.97	59.54	45.70	63.03	73.74	56.92
Kentucky	55.10	65.67	46.86	54.61	65.24	46.25	64.32	76.61	56.11
Louisiana	52.78	64.62	43.71	49.55	61.04	40.30	63.55	78.93	53.45
New Jersey	49.47	58.19	42.99	49.33	58.28	42.63	53.46	61.62	47.96
New Mexico	40.03	46.43	34.59	40.48	47.04	34.89	27.73	21.14	31.40
Seattle-Puget Sound	43.25	49.65	37.86	43.01	49.23	37.68	50.40	59.15	43.72
Utah	35.01	39.29	31.25	35.41	39.66	31.67	29.72	-	-
9 SEER Areas <sup>b</sup>	45.39	51.94	40.10	44.44	50.92	39.12	55.54	63.56	50.28
11 SEER Areas <sup>b</sup>	45.07	51.79	39.69	43.99	50.63	38.59	56.64	64.77	51.21
13 SEER Areas <sup>b</sup>	45.16	51.90	39.76	43.99	50.64	38.58	56.58	64.82	51.07
18 SEER Areas <sup>b</sup>	46.29	54.00	40.19	45.39	53.13	39.18	56.98	66.87	50.29

<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
<b>SEER Death Rates<sup>a</sup>, 2005-2009</b>									
California	15.17	18.10	12.92	15.12	18.12	12.81	23.45	28.07	20.34
Greater Bay Area	14.56	17.24	12.48	14.60	17.37	12.41	23.76	28.90	20.66
San Francisco-Oakland	15.26	18.16	13.00	15.25	18.24	12.86	24.23	29.04	21.18
San Jose-Monterey	13.14	15.43	11.38	13.42	15.84	11.56	20.33	32.09	13.99
Los Angeles	15.76	19.20	13.25	15.15	18.63	12.60	24.55	29.60	21.22
Greater California	15.10	17.92	12.92	15.26	18.14	13.01	21.89	25.79	19.04
Connecticut	14.82	17.27	13.04	14.71	17.23	12.89	18.32	21.20	16.13
Detroit	17.81	21.58	15.22	16.21	19.50	13.92	24.97	31.77	20.61
Georgia	16.36	20.18	13.75	14.81	18.36	12.22	22.40	28.61	19.05
Atlanta	14.61	16.99	13.12	12.06	14.16	10.64	21.98	26.27	19.79
Rural Georgia	18.65	24.10	14.33	17.07	23.18	11.79	21.97	26.77	18.88
Greater Georgia	17.12	21.46	14.10	15.84	19.84	12.89	22.85	30.21	18.88
Hawaii	14.37	18.69	10.78	14.98	18.91	11.33	-	-	-
Iowa	17.52	20.62	15.23	17.50	20.59	15.18	29.04	41.61	24.38
Kentucky	19.85	24.30	16.60	19.51	24.01	16.20	27.72	32.41	24.62
Louisiana	19.70	25.06	15.70	17.48	22.32	13.70	27.22	35.60	21.80
New Jersey	18.16	21.99	15.48	17.98	21.97	15.16	24.06	28.93	21.16
New Mexico	15.82	18.73	13.54	15.90	19.02	13.46	17.89	-	21.00
Seattle-Puget Sound	14.49	17.02	12.43	14.53	17.02	12.49	22.65	25.67	18.87
Utah	12.23	14.33	10.44	12.22	14.25	10.47	-	-	-
9 SEER Areas <sup>b</sup>	15.52	18.37	13.35	15.13	17.88	13.03	23.06	28.01	19.89
11 SEER Areas <sup>b</sup>	15.44	18.38	13.22	15.05	17.92	12.87	23.38	28.42	20.15
13 SEER Areas <sup>b</sup>	15.46	18.42	13.23	15.04	17.93	12.85	23.34	28.36	20.10
18 SEER Areas <sup>b</sup>	16.29	19.58	13.82	15.92	19.18	13.44	23.92	29.60	20.34
Total U.S.	16.69	20.15	14.08	16.17	19.53	13.59	23.68	29.83	19.79

<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).

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.

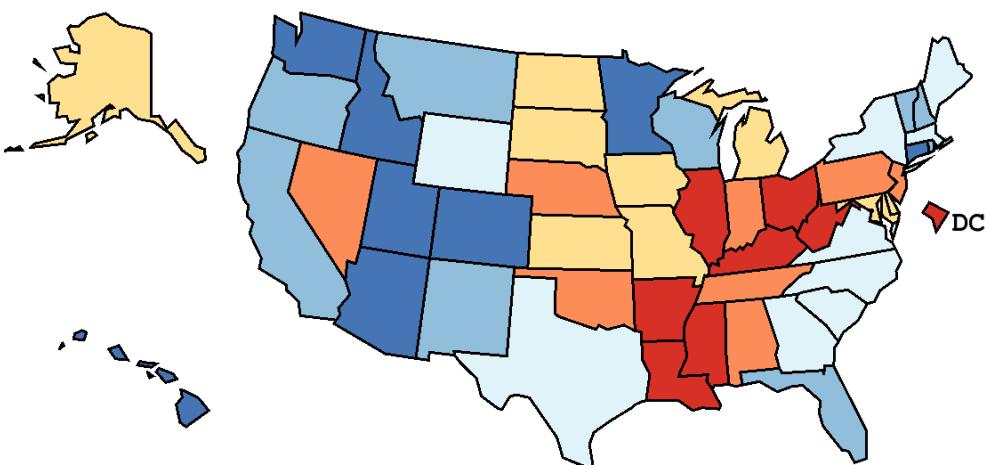
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 6.25  
Cancer of the Colon and Rectum (Invasive)

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2005-2009

Males and Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	16.69	0.03							
High Five States									
West Virginia	19.96 <sup>b</sup>	0.42	(01)	19.59 <sup>c</sup>					
Mississippi	19.92 <sup>b</sup>	0.37	(02)	19.35 <sup>c</sup>					
D.C.	19.89 <sup>b</sup>	0.83	(03)	19.17 <sup>c</sup>					
Kentucky	19.85 <sup>b</sup>	0.30	(04)	18.91 <sup>c</sup>					
Louisiana	19.70 <sup>b</sup>	0.30	(05)	18.04 <sup>c</sup>					
Low Five States									
Connecticut	14.82 <sup>b</sup>	0.27	(47)	-11.20 <sup>c</sup>					
Idaho	14.52 <sup>b</sup>	0.45	(48)	-13.00 <sup>c</sup>					
Hawaii	14.37 <sup>b</sup>	0.44	(49)	-13.92 <sup>c</sup>					
Arizona	13.99 <sup>b</sup>	0.21	(50)	-16.17 <sup>c</sup>					
Utah	12.23 <sup>b</sup>	0.35	(51)	-26.73 <sup>c</sup>					



**Age-Adjusted Death  
Rates per 100,000  
Quantile Interval**

18.37 - 19.96
17.71 - 18.36
16.93 - 17.70
16.16 - 16.92
14.98 - 16.15
12.23 - 14.97

U.S. Rate: 16.69

<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.

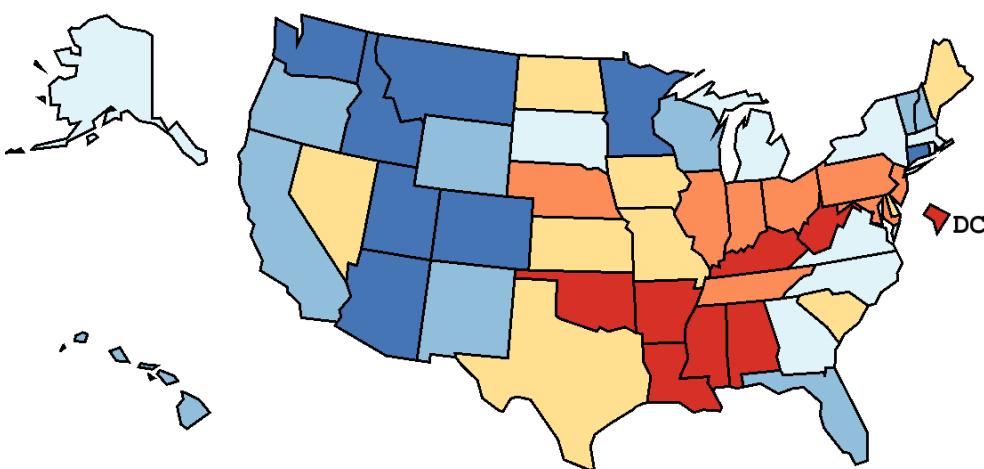
PD Percent difference between state rate and total U.S. rate.

- 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, 2005-2009

Males					
State	Rate	SE	Rank	PD	
TOTAL U.S.	20.15	0.06			
High Five States					
Louisiana	25.06 <sup>b</sup>	0.53	(01)	24.34 <sup>c</sup>	
Mississippi	24.95 <sup>b</sup>	0.65	(02)	23.79 <sup>c</sup>	
Kentucky	24.30 <sup>b</sup>	0.52	(03)	20.58 <sup>c</sup>	
West Virginia	24.21 <sup>b</sup>	0.72	(04)	20.13 <sup>c</sup>	
D.C.	23.07	1.44	(05)	14.47 <sup>c</sup>	
Low Five States					
Colorado	17.41 <sup>b</sup>	0.45	(47)	-13.61 <sup>c</sup>	
Connecticut	17.27 <sup>b</sup>	0.47	(48)	-14.28 <sup>c</sup>	
Arizona	16.79 <sup>b</sup>	0.34	(49)	-16.67 <sup>c</sup>	
Idaho	15.88 <sup>b</sup>	0.71	(50)	-21.19 <sup>c</sup>	
Utah	14.33 <sup>b</sup>	0.58	(51)	-28.88 <sup>c</sup>	
State	Rate	SE	Rank	PD	
Alabama	22.91 <sup>b</sup>	0.48	(06)	13.71 <sup>c</sup>	
Alaska	20.04	1.55	(29)	-0.54	
Arizona	16.79 <sup>b</sup>	0.34	(49)	-16.67 <sup>c</sup>	
Arkansas	22.54 <sup>b</sup>	0.58	(08)	11.87 <sup>c</sup>	
California	18.10 <sup>b</sup>	0.16	(43)	-10.17 <sup>c</sup>	
Colorado	17.41 <sup>b</sup>	0.45	(47)	-13.61 <sup>c</sup>	
Connecticut	17.27 <sup>b</sup>	0.47	(48)	-14.28 <sup>c</sup>	
Delaware	20.32	1.00	(24)	0.84	
D.C.	23.07	1.44	(05)	14.47 <sup>c</sup>	
Florida	18.35 <sup>b</sup>	0.19	(42)	-8.95	
Georgia	20.18	0.36	(26)	0.12	
Hawaii	18.69	0.76	(40)	-7.27	
Idaho	15.88 <sup>b</sup>	0.71	(50)	-21.19 <sup>c</sup>	
Illinois	22.48 <sup>b</sup>	0.30	(11)	11.57 <sup>c</sup>	
Indiana	22.49 <sup>b</sup>	0.41	(10)	11.60 <sup>c</sup>	
Iowa	20.62	0.53	(21)	2.31	
Kansas	21.17	0.58	(19)	5.08	
Kentucky	24.30 <sup>b</sup>	0.52	(03)	20.58 <sup>c</sup>	
Louisiana	25.06 <sup>b</sup>	0.53	(01)	24.34 <sup>c</sup>	
Maine	20.51	0.79	(22)	1.76	
Maryland	21.97 <sup>b</sup>	0.45	(16)	9.04	
Massachusetts	19.62	0.37	(32)	-2.63	
Michigan	20.17	0.31	(27)	0.07	
Minnesota	18.01 <sup>b</sup>	0.40	(44)	-10.63 <sup>c</sup>	
Mississippi	24.95 <sup>b</sup>	0.65	(02)	23.79 <sup>c</sup>	
Missouri	21.59 <sup>b</sup>	0.40	(18)	7.16	
Montana	17.76	0.86	(45)	-11.87 <sup>c</sup>	
Nebraska	22.46	0.74	(12)	11.47 <sup>c</sup>	
Nevada	20.71	0.63	(20)	2.80	
New Hampshire	19.33	0.82	(35)	-4.07	
New Jersey	21.99 <sup>b</sup>	0.34	(15)	9.12	
New Mexico	18.73	0.66	(38)	-7.07	
New York	19.43	0.22	(34)	-3.57	
North Carolina	19.85	0.33	(31)	-1.50	
North Dakota	21.63	1.15	(17)	7.35	
Ohio	22.50 <sup>b</sup>	0.30	(09)	11.66 <sup>c</sup>	
Oklahoma	22.91 <sup>b</sup>	0.53	(07)	13.69 <sup>c</sup>	
Oregon	18.50 <sup>b</sup>	0.46	(41)	-8.20	
Pennsylvania	22.29 <sup>b</sup>	0.27	(14)	10.60 <sup>c</sup>	
Rhode Island	19.60	0.90	(33)	-2.74	
South Carolina	20.48	0.46	(23)	1.63	
South Dakota	20.12	1.00	(28)	-0.15	
Tennessee	22.36 <sup>b</sup>	0.42	(13)	10.94 <sup>c</sup>	
Texas	20.22	0.22	(25)	0.32	
Utah	14.33 <sup>b</sup>	0.58	(51)	-28.88 <sup>c</sup>	
Vermont	18.81	1.15	(37)	-6.63	
Virginia	19.95	0.37	(30)	-1.01	
Washington	17.66 <sup>b</sup>	0.36	(46)	-12.35 <sup>c</sup>	
West Virginia	24.21 <sup>b</sup>	0.72	(04)	20.13 <sup>c</sup>	
Wisconsin	18.69 <sup>b</sup>	0.39	(39)	-7.25	
Wyoming	18.94	1.29	(36)	-6.02	



Age-Adjusted Death  
Rates per 100,000  
Quantile Interval

- 22.51 - 25.06
- 21.64 - 22.50
- 20.19 - 21.63
- 19.34 - 20.18
- 18.02 - 19.33
- 14.33 - 18.01

U.S. Rate: 20.15

<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.

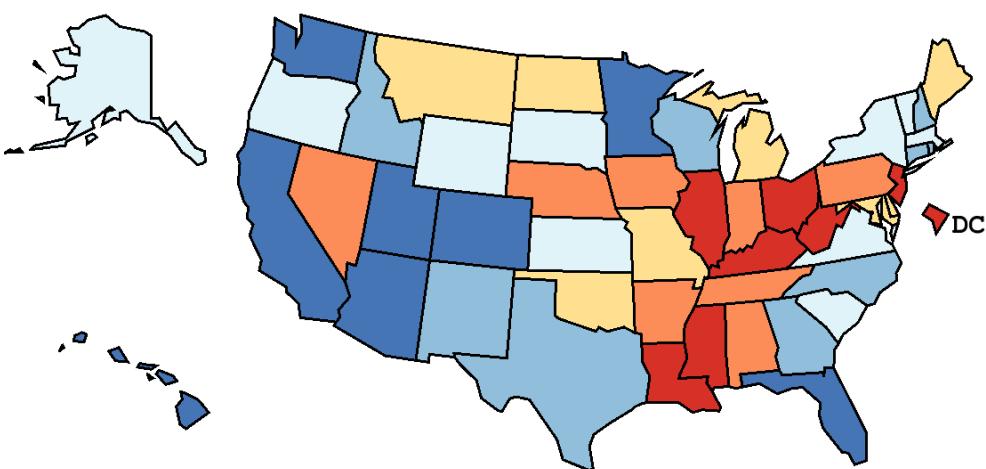
PD Percent difference between state rate and total U.S. rate.

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

Table 6.27  
Cancer of the Colon and Rectum (Invasive)

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2005-2009

Females				
State	Rate	SE	Rank	PD
TOTAL U.S.	14.08	0.04		
High Five States				
D.C.	17.74 <sup>b</sup>	1.02	(01)	26.00 <sup>c</sup>
West Virginia	16.85 <sup>b</sup>	0.52	(02)	19.68 <sup>c</sup>
Kentucky	16.60 <sup>b</sup>	0.36	(03)	17.89 <sup>c</sup>
Mississippi	16.23 <sup>b</sup>	0.44	(04)	15.27 <sup>c</sup>
Louisiana	15.70 <sup>b</sup>	0.35	(05)	11.55 <sup>c</sup>
Low Five States				
Washington	12.69 <sup>b</sup>	0.27	(47)	-9.88
Minnesota	12.65 <sup>b</sup>	0.29	(48)	-10.16 <sup>c</sup>
Arizona	11.64 <sup>b</sup>	0.25	(49)	-17.29 <sup>c</sup>
Hawaii	10.78 <sup>b</sup>	0.52	(50)	-23.40 <sup>c</sup>
Utah	10.44 <sup>b</sup>	0.44	(51)	-25.83 <sup>c</sup>
State	Rate	SE	Rank	PD
Alabama	15.09	0.32	(14)	7.23
Alaska	14.13	1.18	(29)	0.40
Arizona	11.64 <sup>b</sup>	0.25	(49)	-17.29 <sup>c</sup>
Arkansas	15.18	0.41	(12)	7.85
California	12.92 <sup>b</sup>	0.12	(46)	-8.19
Colorado	13.01	0.33	(44)	-7.56
Connecticut	13.04	0.34	(43)	-7.35
Delaware	14.34	0.72	(24)	1.85
D.C.	17.74 <sup>b</sup>	1.02	(01)	26.00 <sup>c</sup>
Florida	12.98 <sup>b</sup>	0.14	(45)	-7.80
Georgia	13.75	0.24	(35)	-2.29
Hawaii	10.78 <sup>b</sup>	0.52	(50)	-23.40 <sup>c</sup>
Idaho	13.42	0.59	(38)	-4.69
Illinois	15.60 <sup>b</sup>	0.20	(06)	10.83 <sup>c</sup>
Indiana	14.96	0.28	(16)	6.27
Iowa	15.23	0.39	(10)	8.22
Kansas	14.00	0.41	(32)	-0.53
Kentucky	16.60 <sup>b</sup>	0.36	(03)	17.89 <sup>c</sup>
Louisiana	15.70 <sup>b</sup>	0.35	(05)	11.55 <sup>c</sup>
Maine	14.38	0.56	(23)	2.15
Maryland	14.56	0.30	(22)	3.46
Massachusetts	13.81	0.25	(34)	-1.88
Michigan	14.72	0.22	(20)	4.54
Minnesota	12.65 <sup>b</sup>	0.29	(48)	-10.16 <sup>c</sup>
Mississippi	16.23 <sup>b</sup>	0.44	(04)	15.27 <sup>c</sup>
Missouri	14.62	0.28	(21)	3.89
Montana	14.73	0.70	(19)	4.62
Nebraska	15.07	0.52	(15)	7.05
Nevada	15.31	0.50	(09)	8.73
New Hampshire	13.21	0.57	(40)	-6.14
New Jersey	15.48 <sup>b</sup>	0.24	(08)	9.98
New Mexico	13.54	0.50	(37)	-3.82
New York	14.00	0.15	(31)	-0.52
North Carolina	13.63	0.23	(36)	-3.14
North Dakota	14.79	0.84	(18)	5.06
Ohio	15.49 <sup>b</sup>	0.20	(07)	10.06 <sup>c</sup>
Oklahoma	14.80	0.37	(17)	5.13
Oregon	13.92	0.35	(33)	-1.14
Pennsylvania	15.21 <sup>b</sup>	0.18	(11)	8.04
Rhode Island	13.28	0.61	(39)	-5.63
South Carolina	14.06	0.32	(30)	-0.09
South Dakota	14.23	0.74	(25)	1.09
Tennessee	15.15 <sup>b</sup>	0.29	(13)	7.61
Texas	13.14 <sup>b</sup>	0.15	(41)	-6.63
Utah	10.44 <sup>b</sup>	0.44	(51)	-25.83 <sup>c</sup>
Vermont	14.23	0.84	(26)	1.09
Virginia	14.19	0.26	(27)	0.80
Washington	12.69 <sup>b</sup>	0.27	(47)	-9.88
West Virginia	16.85 <sup>b</sup>	0.52	(02)	19.68 <sup>c</sup>
Wisconsin	13.13	0.27	(42)	-6.70
Wyoming	14.18	0.99	(28)	0.71



Age-Adjusted Death  
Rates per 100,000  
Quantile Interval

- 15.32 - 17.74
- 14.81 - 15.31
- 14.24 - 14.80
- 13.76 - 14.23
- 10.44 - 13.01

U.S. Rate: 14.08

<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 6.28  
Cancer of the Colon and Rectum (Invasive)

Estimated United States Cancer Prevalence Counts<sup>a</sup> on January 1, 2009  
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <19 <sup>e</sup>	0 to <34 <sup>e</sup>	>=34 <sup>g</sup>	Complete <sup>h</sup>
<u>Race</u>											
All Races <sup>b</sup>	Both Sexes	405,797	278,550	177,574	117,163	74,383	39,813	959,520	1,111,907	28,254	1,140,161
	Males	205,558	139,486	87,277	57,095	35,600	16,670	480,383	548,761	9,923	558,684
	Females	200,239	139,064	90,297	60,068	38,783	23,143	479,137	563,146	18,331	581,477
White <sup>b</sup>	Both Sexes	338,421	239,116	153,599	102,486	65,848	35,380	816,532	951,501	24,954	976,455
	Males	173,886	121,152	76,050	50,366	31,868	14,969	413,436	474,638	8,886	483,524
	Females	164,535	117,964	77,549	52,120	33,980	20,411	403,096	476,863	16,068	492,931
Black <sup>b</sup>	Both Sexes	44,714	26,111	16,145	10,114	6,032	3,039	95,277	107,424	2,082	109,506
	Males	19,971	11,222	6,952	4,459	2,419	1,012	41,918	46,467	654	47,121
	Females	24,743	14,889	9,193	5,655	3,613	2,027	53,359	60,957	1,428	62,385
Asian/ Pacific	Both Sexes	16,130	9,554	5,932	+	+	+	34,375	+	+	+
	Males	8,366	4,903	3,077	+	+	+	17,691	+	+	+
Islander <sup>c</sup>	Females	7,764	4,651	2,855	+	+	+	16,684	+	+	+
Hispanic <sup>d</sup>	Both Sexes	27,741	14,273	8,149	+	+	+	54,499	+	+	+
	Males	14,957	7,449	4,267	+	+	+	28,852	+	+	+
	Females	12,784	6,824	3,882	+	+	+	25,647	+	+	+

Estimated prevalence percent<sup>a</sup> on January 1, 2009, of the SEER 11 population diagnosed in the previous 19 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>												
All Races <sup>c</sup>	Both Sexes	0.2579%	-	0.0003%	0.0049%	0.0236%	0.0976%	0.3206%	0.7365%	1.4325%	2.0351%	0.2611%
	Males	0.2627%	-	0.0002%	0.0049%	0.0240%	0.1026%	0.3564%	0.8718%	1.7062%	2.3123%	0.3023%
	Females	0.2531%	-	0.0003%	0.0049%	0.0231%	0.0926%	0.2862%	0.6138%	1.2149%	1.8804%	0.2286%
White <sup>c</sup>	Both Sexes	0.2675%	-	0.0003%	0.0051%	0.0234%	0.0944%	0.3039%	0.7120%	1.4327%	2.0561%	0.2575%
	Males	0.2725%	-	0.00050%	0.0042%	0.0242%	0.0973%	0.3413%	0.8496%	1.7075%	2.3421%	0.2992%
	Females	0.2624%	-	0.0003%	0.0052%	0.0226%	0.0914%	0.2667%	0.5835%	1.2090%	1.8967%	0.2240%
Black <sup>c</sup>	Both Sexes	0.2122%	-	-	0.0035%	0.0222%	0.1070%	0.3910%	0.9132%	1.4723%	2.0218%	0.2860%
	Males	0.2009%	-	-	0.0033%	0.0201%	0.1150%	0.4131%	1.0387%	1.6332%	2.1002%	0.3118%
	Females	0.2224%	-	-	0.0038%	0.0240%	0.1000%	0.3726%	0.8170%	1.3615%	1.9851%	0.2679%
Asian/ Pacific	Both Sexes	0.2429%	-	-	0.0042%	0.0236%	0.1007%	0.3413%	0.7264%	1.3643%	1.8564%	0.2532%
	Males	0.2566%	-	-	0.0049%	0.0252%	0.1162%	0.3763%	0.8578%	1.6824%	2.1566%	0.2990%
Islander <sup>c</sup>	Females	0.2301%	-	-	0.0035%	0.0221%	0.0865%	0.3109%	0.6146%	1.1233%	1.6703%	0.2182%
Hispanic <sup>d</sup>	Both Sexes	0.1059%	-	-	0.0034%	0.0180%	0.0739%	0.2524%	0.6065%	1.0854%	1.3485%	0.1973%
	Males	0.1080%	-	-	0.0037%	0.0191%	0.0715%	0.2745%	0.7299%	1.3883%	1.5992%	0.2358%
	Females	0.1037%	-	-	0.0029%	0.0168%	0.0764%	0.2309%	0.4998%	0.8584%	1.2017%	0.1684%

<sup>a</sup> US 2009 cancer prevalence counts are based on 2009 cancer prevalence proportions from the SEER registries and 1/1/2009 US population estimates based on the average of 2008 and 2009 population estimates from the US Bureau of the Census.

<sup>b c d</sup> Prevalence was calculated using the First Malignant Primary Only for a person.

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

<sup>e</sup> Maximum limited-duration prevalence: 34 years for 1975-2009 SEER 9 data; 19 years for 1990-2009 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

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

(g) Cases diagnosed more than 34 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 <34 and >=34. (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, 2005-2009  
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	183,623	99.5%	146,739	99.5%	20,915	99.5%	13,258	99.5%	841	98.8%	16,784	99.5%
Epidermoid carcinoma <sup>d</sup> (8051-8131)	955	0.5%	800	0.5%	118	0.6%	-	-	-	-	79	0.5%
Squamous cell carcinoma (8070-8078, 8083-8084)	896	0.5%	749	0.5%	112	0.5%	-	-	-	-	72	0.4%
Adenocarcinoma	173,461	94.0%	139,639	94.7%	19,213	91.4%	12,362	92.8%	787	92.5%	15,683	93.0%
(8050, 8140-8147, 8160-8162, 8180-8221, 8250-8507, 8520-8551, 8560, 8570-8574, 8576, 8940-8941)												
Adenocarcinoma, NOS	119,580	64.8%	95,986	65.1%	13,381	63.6%	8,829	66.3%	587	69.0%	10,773	63.9%
Adenocarcinoma in adenomatous polyp (8210)	13,927	7.5%	11,116	7.5%	1,376	6.5%	1,120	8.4%	57	6.7%	1,198	7.1%
Adenocarcinoma in villous adenoma (8261)	5,363	2.9%	4,351	3.0%	572	2.7%	369	2.8%	21	2.5%	582	3.4%
Mucinous adenocarcinoma (8470-8473, 8480, 8482)	12,571	6.8%	10,477	7.1%	1,281	6.1%	704	5.3%	41	4.8%	1,216	7.2%
Mucin-producing adenocarcinoma (8481)	2,964	1.6%	2,400	1.6%	412	2.0%	134	1.0%	-	-	259	1.5%
Signet ring adenocarcinoma (8490)	2,052	1.1%	1,716	1.2%	169	0.8%	150	1.1%	-	-	188	1.1%
Other adenocarcinomas <sup>e</sup>	17,004	9.2%	13,593	9.2%	2,022	9.6%	1,056	7.9%	67	7.9%	1,467	8.7%
Other specific carcinomas (8012-8015, 8030-8046, 8150-8155, 8170-8175, 8230-8249, 8508, 8510-8513, 8561-8562, 8575, 8580-8671)	7,490	4.1%	4,959	3.4%	1,362	6.5%	763	5.7%	37	4.3%	866	5.1%
Neuroendocrine carcinoid (8240-8245)	6,174	3.3%	3,877	2.6%	1,220	5.8%	685	5.1%	31	3.6%	753	4.5%
Other <sup>f</sup>	1,316	0.7%	1,082	0.7%	142	0.7%	78	0.6%	-	-	113	0.7%
Unspecified, Carcinoma, NOS (8010-8011, 8020-8022)	1,717	0.9%	1,341	0.9%	222	1.1%	118	0.9%	-	-	156	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.

- 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, 2005-2009  
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)	96	0.1%	75	0.1%	-	-	-	-	-	-	-	-
Other specific types (8720-8790,8930-8936, 8950-8983,9000-9030, 9060-9110,9260-9365, 9380-9539)	238	0.1%	172	0.1%	32	0.2%	31	0.2%	-	-	24	0.1%
Unspecified (8000-8005)	564	0.3%	461	0.3%	64	0.3%	23	0.2%	-	-	51	0.3%
Total <sup>d</sup>	184,521	100.0%	147,447	100.0%	21,024	100.0%	13,319	100.0%	851	100.0%	16,872	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.

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

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

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Colon and Rectum, by Race and Sex

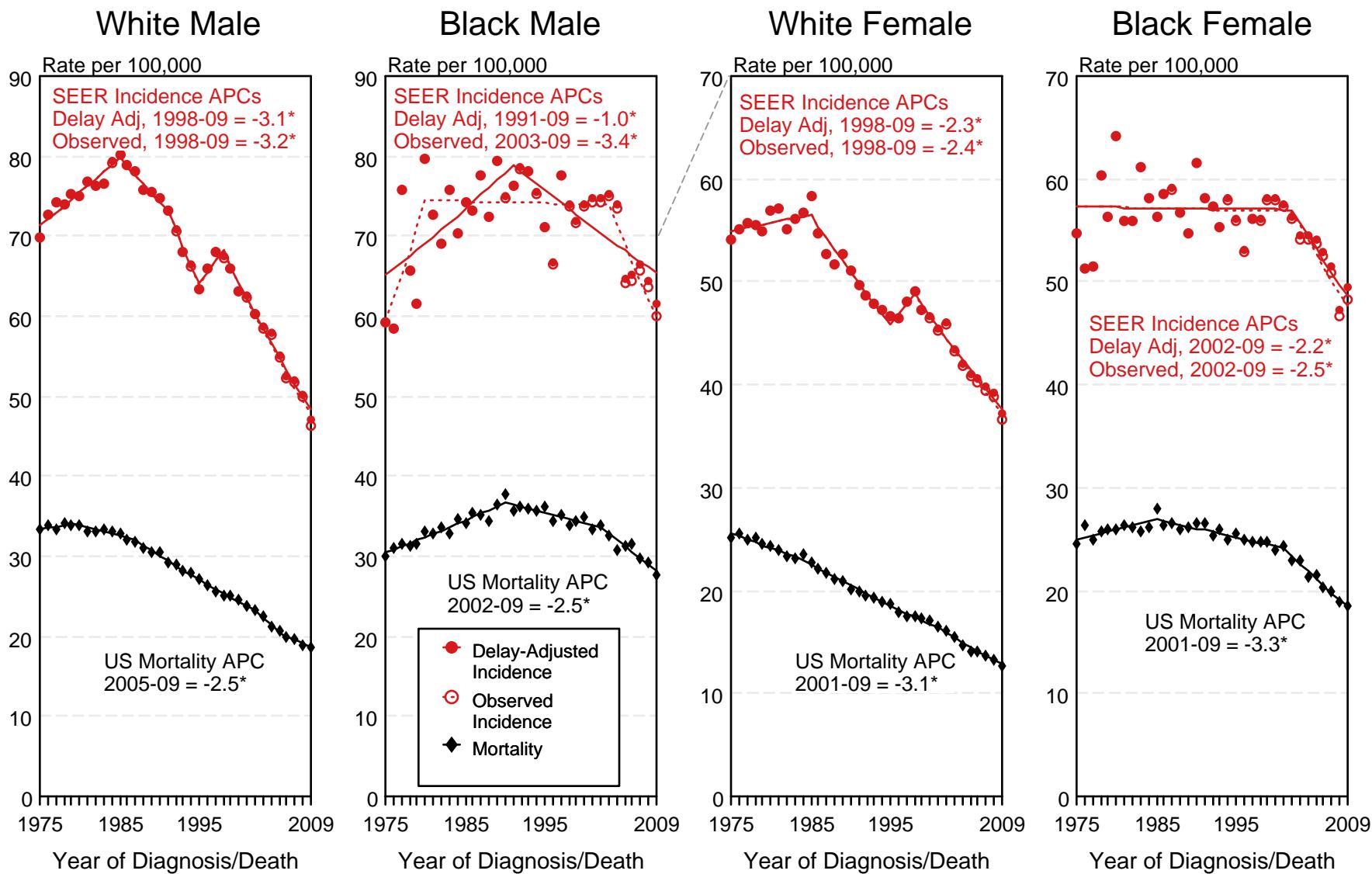


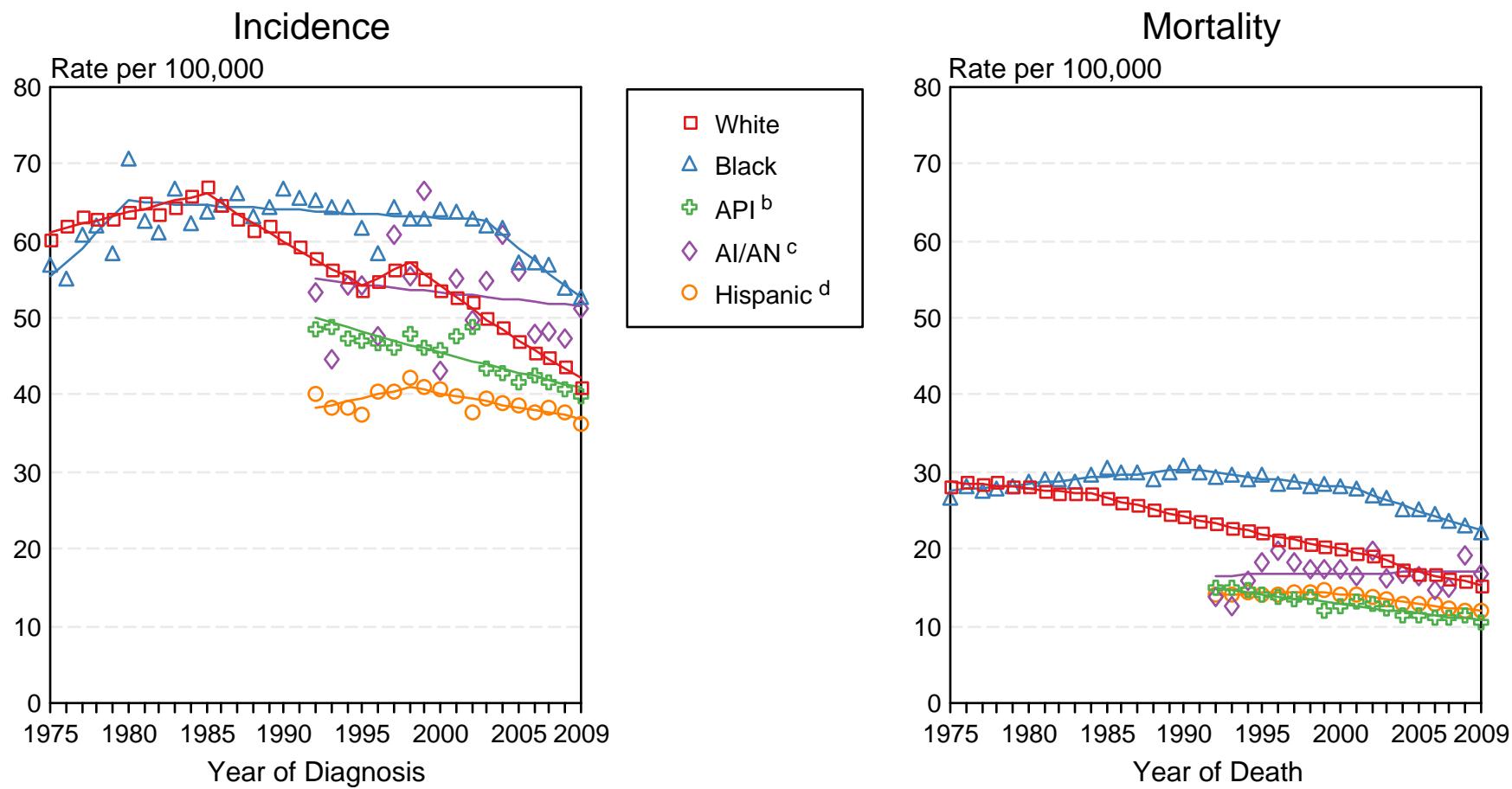
Figure 6.1

- <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 3.5, April 2011, 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 ( $p < 0.05$ ).

# SEER Incidence and US Death Rates<sup>a</sup>

## Cancer of the Colon and Rectum, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2009  
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2009



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 3.5, April 2011, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2009 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2009 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.

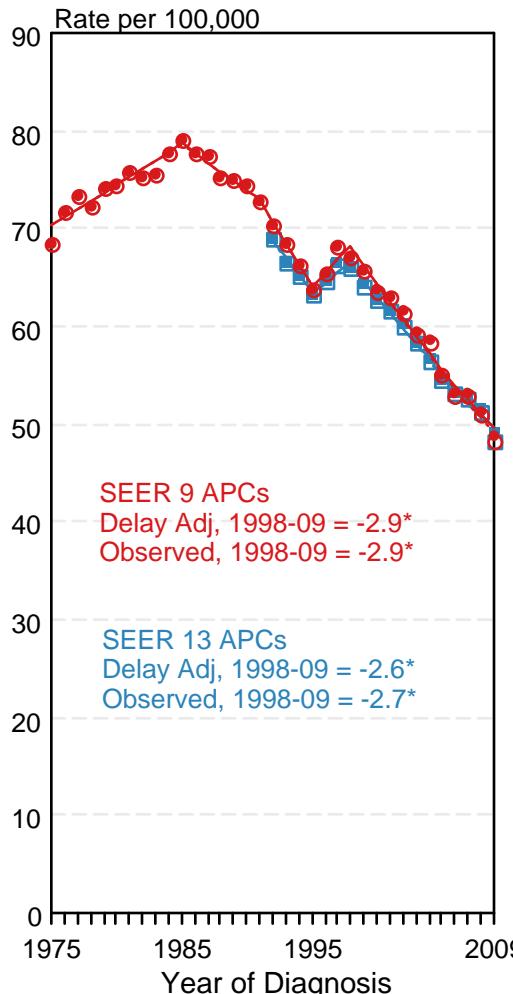
Figure 6.2

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates<sup>a</sup>

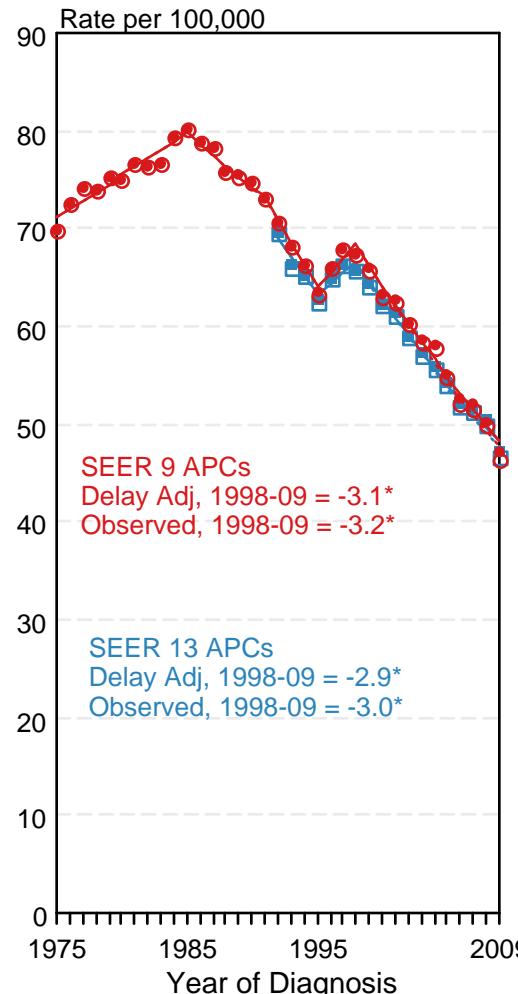
## SEER 9 Areas Compared to SEER 13 Areas

### Cancer of the Colon and Rectum, Male, by Race

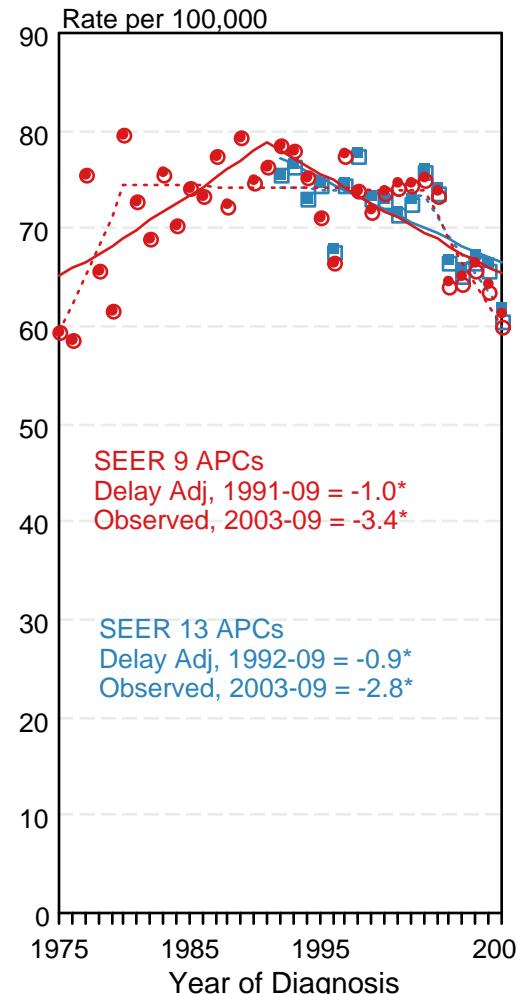
All Races



White



Black



● 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 3.5, April 2011, 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 ( $p < 0.05$ ).

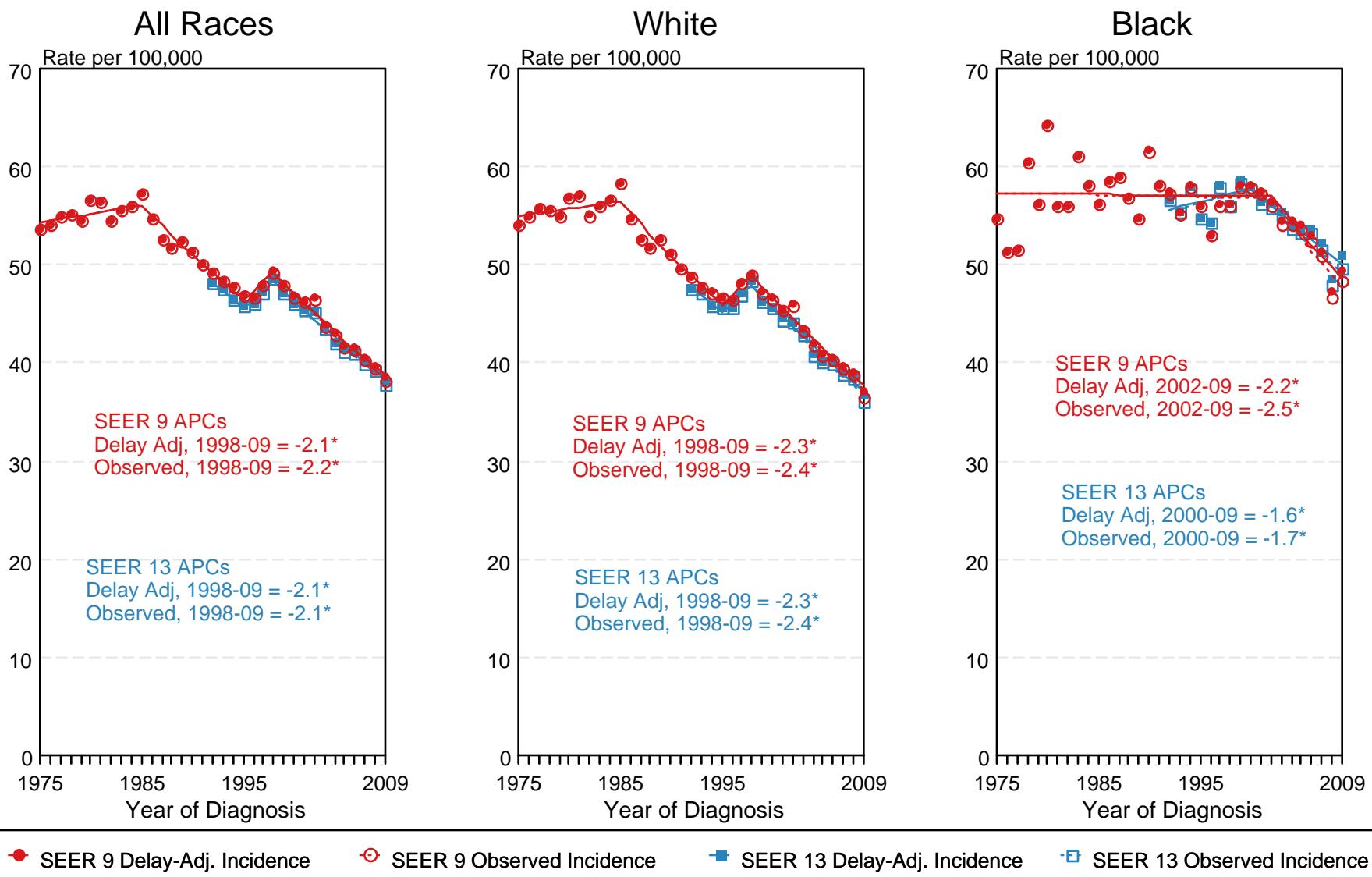
Figure 6.3

# 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, Female, by Race

Figure 6.4



<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).

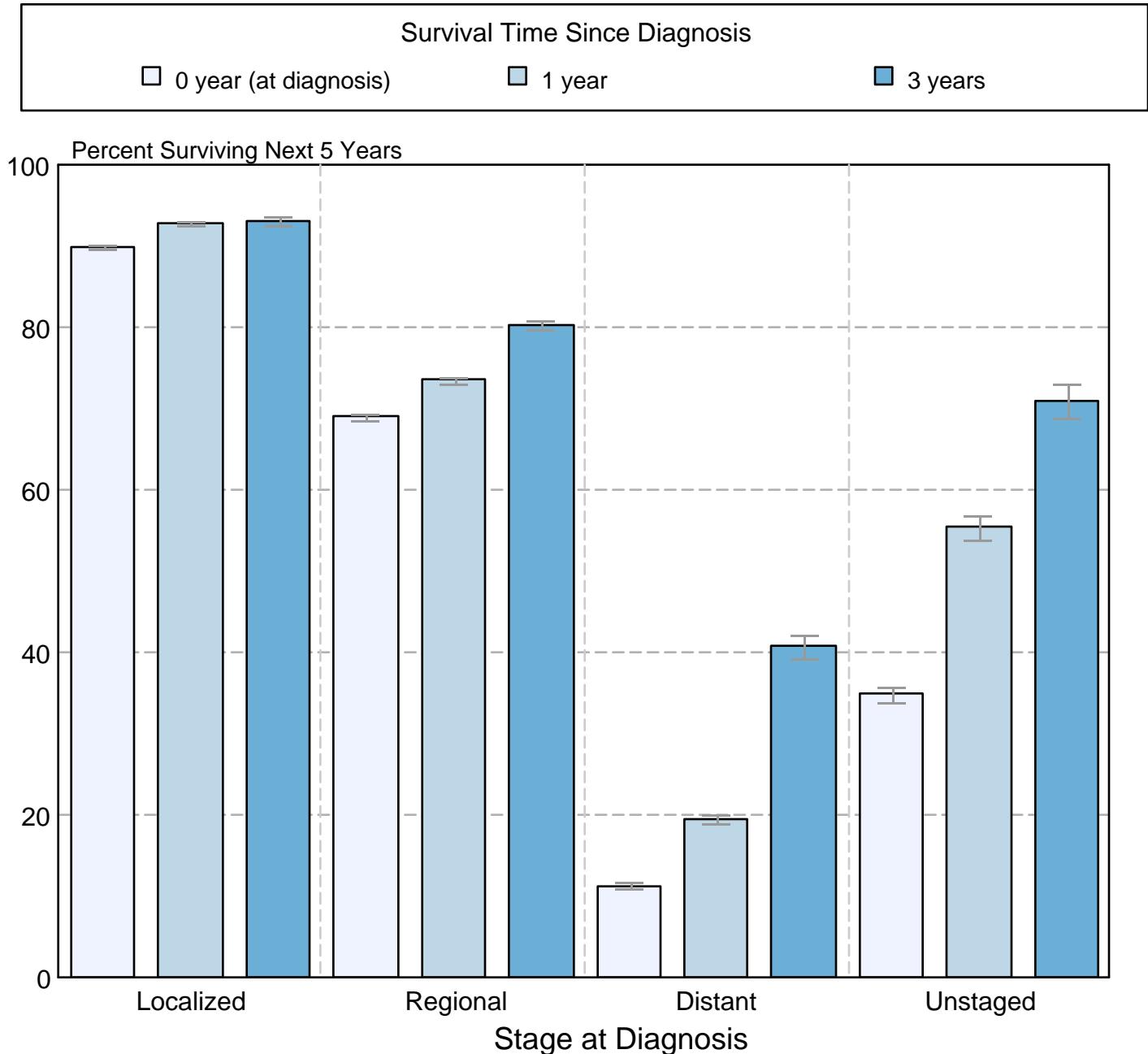
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

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**  
**1998-2008 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 2000-2008. The remaining 13 SEER Areas contribute cases for the entire period 1998-2008.

Stage at diagnosis is classified using SEER Summary Stage 2000.

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.