

Table VI-1
COLON AND RECTUM CANCER (Invasive)

TRENDS IN SEER INCIDENCE AND U.S. MORTALITY USING THE JOINPOINT REGRESSION PROGRAM, 1973-1997
WITH UP TO THREE JOINPOINTS BY RACE AND SEX

	<u>All Races</u>		<u>Whites</u>		<u>Blacks</u>	
	<u>Year</u>	<u>APC</u>	<u>Year</u>	<u>APC</u>	<u>Year</u>	<u>APC</u>
<u>SEER Cancer Incidence</u>						
Sex - Male and Female	1973-85	0.8★	1973-85	0.7★	1973-80	3.4★
	1985-97	-1.6★	1985-97	-1.8★	1980-97	-0.2
Sex - Male	1973-85	1.2★	1973-85	1.1★	1973-80	4.4★
	1985-91	-1.2★	1985-91	-1.3★	1980-97	0.0
	1991-95	-3.3★	1991-95	-3.5★		
	1995-97	1.8	1995-97	1.5		
Sex - Female	1973-84	0.5★	1973-84	0.5★	1973-80	2.8★
	1984-97	-1.6★	1984-97	-1.8★	1980-97	-0.3
<u>U.S. Cancer Mortality</u>						
Sex - Male and Female	1973-84	-0.6★	1973-84	-0.7★	1973-85	0.9★
	1984-97	-1.8★	1984-97	-1.9★	1985-97	-0.3★
Sex - Male	1973-85	-0.1	1973-78	0.4	1973-89	1.3★
	1985-97	-1.8★	1978-86	-0.6★	1989-97	-0.6
			1986-97	-2.0★		
Sex - Female	1973-84	-1.1★	1973-84	-1.2★	1973-85	0.5★
	1984-97	-1.9★	1984-97	-2.1★	1985-97	-0.7★

The APC is the Annual Percent Change based on rates age-adjusted to the 1970 U.S. standard population using the Joinpoint Regression Program.

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

Table VI-2
COLON CANCER (Invasive) AND RECTUM CANCER (Invasive)

TRENDS IN SEER INCIDENCE USING THE JOINPOINT REGRESSION PROGRAM, 1973-1997
WITH UP TO THREE JOINPOINTS BY RACE AND SEX

	<u>All Races</u>		<u>Whites</u>		<u>Blacks</u>	
	<u>Year</u>	<u>APC</u>	<u>Year</u>	<u>APC</u>	<u>Year</u>	<u>APC</u>
<u>SEER Cancer Incidence for Colon</u>						
Sex - Male and Female	1973-85	1.1★	1973-85	1.1★	1973-80	4.2★
	1985-97	-1.6★	1985-97	-1.7★	1980-97	-0.1
Sex - Male	1973-85	1.8★	1973-85	1.7★	1973-87	2.5★
	1985-97	-1.7★	1985-97	-1.8★	1987-97	-1.3
Sex - Female	1973-84	0.7★	1973-84	0.6★	1973-80	4.1★
	1984-97	-1.5★	1984-97	-1.7★	1980-97	-0.4
<u>SEER Cancer Incidence for Rectum</u>						
Sex - Male and Female	1973-85	0.0	1973-85	0.0	1973-97	0.1
	1985-97	-1.7★	1985-97	-1.9★		
Sex - Male	1973-87	0.0	1973-87	-0.1	1973-97	0.6★
	1987-97	-2.1★	1987-97	-2.3★		
Sex - Female	1973-84	0.0	1973-81	0.6	1973-97	-0.4
	1984-95	-2.2★	1981-97	-1.8★		
	1995-97	3.1				

The APC is the Annual Percent Change based on rates age-adjusted to the 1970 U.S. standard population using the Joinpoint Regression Program.

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

Table VI-3
COLON AND RECTUM CANCER (Invasive)

SEER INCIDENCE 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>AGE-ADJUSTED RATES</u>									
<u>YEAR OF DIAGNOSIS:</u>									
1973	46.4	53.2	41.6	46.9	54.2	41.7	42.4	42.8	41.8
1974	47.7	56.1	41.6	48.4	57.4	41.9	41.3	46.8	37.5
1975	47.4	54.1	42.7	47.8	55.1	42.9	45.4	47.6	43.5
1976	49.1	57.2	43.1	49.6	57.7	43.8	44.6	49.2	40.5
1977	49.5	58.0	43.5	50.0	58.7	43.9	48.0	58.1	41.4
1978	49.4	57.2	43.9	50.0	58.4	44.2	49.4	51.3	48.5
1979	49.3	58.3	43.0	49.7	59.0	43.2	46.8	50.0	44.5
1980	50.5	58.8	44.6	50.5	58.8	44.8	55.8	63.8	49.7
1981	50.9	59.9	44.5	51.3	60.5	45.0	50.3	58.2	44.8
1982	49.7	59.3	43.0	50.2	60.1	43.3	49.1	55.4	44.6
1983	50.4	59.9	43.6	50.8	60.5	43.8	54.0	61.0	49.5
1984	51.5	61.6	44.2	52.2	62.9	44.6	49.9	54.8	47.1
1985	52.8	63.0	45.3	53.3	63.5	46.0	52.1	60.9	45.6
1986	51.2	61.9	43.2	51.3	62.4	43.1	53.0	59.9	48.0
1987	49.8	61.2	41.5	49.7	61.5	41.3	53.2	61.1	48.0
1988	48.6	59.6	40.6	48.5	59.8	40.3	51.0	58.4	45.8
1989	48.8	59.4	41.1	48.8	59.4	41.1	53.0	64.6	45.0
1990	48.3	58.9	40.4	48.1	59.1	40.2	53.6	59.5	49.7
1991	47.3	58.0	39.3	47.0	58.0	38.9	53.0	62.2	46.3
1992	46.3	56.1	38.9	46.1	56.2	38.4	52.3	61.9	45.9
1993	45.2	54.4	38.1	44.8	54.1	37.7	52.0	62.6	44.5
1994	44.2	52.8	37.4	43.9	52.8	36.9	51.9	59.8	46.7
1995	42.9	50.4	37.1	42.5	49.9	36.7	49.2	55.1	45.1
1996	43.2	51.6	36.6	42.8	51.3	35.9	46.7	52.3	42.4
1997	43.9	52.6	37.0	43.4	51.9	36.7	51.3	60.0	45.1
<u>AGE-ADJUSTED RATES, 1993-97</u>									
<u>AGE AT DIAGNOSIS:</u>									
All ages	43.9	52.4	37.2	43.5	52.0	36.8	50.2	57.8	44.7
Under 65	17.1	20.0	14.5	16.5	19.2	13.8	22.5	25.8	19.9
65 and over	287.8	347.8	245.0	290.1	351.4	246.4	302.6	350.3	271.3
All ages (world std.) [§]	33.2	39.6	28.1	32.7	39.1	27.6	38.8	44.6	34.5
<u>AGE-SPECIFIC RATES, 1993-97</u>									
<u>AGE AT DIAGNOSIS:</u>									
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-14	0.1	0.1	0.0	0.0	0.1	0.0	0.1	0.2	0.0
15-19	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.2	0.2
20-24	0.7	0.7	0.6	0.6	0.6	0.5	0.9	0.9	0.9
25-29	1.7	1.7	1.8	1.5	1.4	1.6	2.0	2.3	1.7
30-34	3.4	3.8	3.1	3.0	3.4	2.6	5.3	4.1	6.4
35-39	6.3	6.9	5.7	5.8	6.4	5.3	7.6	8.1	7.2
40-44	12.6	13.9	11.2	11.7	13.1	10.3	16.8	19.1	14.9
45-49	24.1	26.1	22.0	22.0	24.2	19.8	35.2	38.5	32.3
50-54	48.1	55.7	40.8	44.2	51.7	36.9	74.0	83.0	66.4
55-59	84.6	98.8	71.3	82.7	97.3	68.7	108.3	119.1	99.7
60-64	135.8	163.8	110.5	134.4	159.7	110.8	163.2	200.6	134.0
65-69	193.7	242.1	153.1	194.6	243.8	152.5	211.1	243.3	186.0
70-74	268.4	323.6	225.7	270.2	325.6	227.0	299.4	349.6	263.9
75-79	340.7	413.1	290.2	343.3	416.6	292.4	353.9	407.7	319.1
80-84	425.6	506.5	378.8	426.7	510.8	379.1	445.3	520.6	404.6
85+	450.9	519.0	423.1	462.0	536.2	433.0	392.4	444.6	369.3

§ SEER Program. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population, except where noted.
 § SEER Program. Rates are per 100,000 and are age-adjusted to the world standard population.

Table VI-4
COLON CANCER (Invasive)

SEER INCIDENCE 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>AGE-ADJUSTED RATES</u>									
<u>YEAR OF DIAGNOSIS:</u>									
1973	31.7	34.2	30.2	32.0	34.8	30.3	30.9	31.7	30.0
1974	32.9	36.9	30.2	33.4	37.6	30.5	29.9	34.4	26.7
1975	32.6	35.5	30.8	32.9	36.1	30.9	33.7	34.7	32.7
1976	34.1	37.7	31.7	34.3	37.9	32.0	34.4	36.0	32.7
1977	34.6	38.8	31.8	35.1	39.2	32.3	35.5	43.9	30.1
1978	34.6	38.4	32.1	34.8	39.0	32.0	37.9	37.9	38.3
1979	34.3	39.1	31.0	34.5	39.6	31.0	35.3	36.4	34.6
1980	35.6	39.4	33.0	35.5	39.4	33.0	43.2	46.1	41.1
1981	35.7	40.1	32.6	35.9	40.4	32.9	37.6	40.7	35.5
1982	35.8	41.7	31.7	36.0	42.1	31.8	38.3	42.0	35.6
1983	36.0	41.3	32.4	36.2	41.6	32.5	40.3	46.4	36.6
1984	36.4	42.5	32.3	36.8	43.3	32.3	38.8	41.8	37.3
1985	37.7	43.2	33.6	37.9	43.4	34.0	40.7	47.1	35.8
1986	36.8	42.7	32.5	36.8	43.1	32.3	40.2	44.6	37.3
1987	35.4	42.4	30.5	35.2	42.2	30.3	41.1	47.3	36.8
1988	34.7	41.2	30.0	34.5	41.3	29.6	39.2	43.3	36.4
1989	34.6	40.9	30.2	34.5	40.6	30.3	40.2	49.0	34.3
1990	34.6	40.5	30.3	34.4	40.4	30.1	41.8	46.3	38.8
1991	34.2	40.6	29.5	33.9	40.6	29.0	41.4	46.4	37.8
1992	33.2	38.9	29.1	33.0	39.0	28.7	40.1	46.8	35.9
1993	32.7	38.3	28.5	32.2	38.0	27.9	41.0	47.6	36.4
1994	32.0	36.9	28.1	31.8	37.0	27.6	39.9	44.4	37.1
1995	31.1	35.0	28.1	30.7	34.7	27.7	38.4	41.8	36.3
1996	30.6	35.3	26.9	30.2	35.2	26.3	35.2	37.4	33.4
1997	31.5	36.8	27.4	31.1	36.2	27.2	38.8	45.4	33.9
<u>AGE-ADJUSTED RATES, 1993-97</u>									
<u>AGE AT DIAGNOSIS:</u>									
All ages	31.5	36.4	27.8	31.2	36.2	27.3	38.6	43.2	35.4
Under 65	11.3	12.7	10.0	10.8	12.2	9.5	16.4	18.1	15.0
65 and over	216.1	252.6	190.0	217.3	255.1	190.5	241.6	272.1	221.8
All ages (world std.) [§]	23.5	27.1	20.7	23.2	26.8	20.2	29.6	33.0	27.1
<u>AGE-SPECIFIC RATES, 1993-97</u>									
<u>AGE AT DIAGNOSIS:</u>									
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-14	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
15-19	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.0	0.2
20-24	0.4	0.4	0.4	0.3	0.3	0.3	0.6	0.5	0.7
25-29	1.1	1.0	1.1	0.9	0.9	1.0	1.2	0.9	1.4
30-34	2.1	2.4	1.8	1.9	2.2	1.5	3.2	2.2	4.1
35-39	4.2	4.5	3.9	3.9	4.2	3.5	5.4	4.9	5.9
40-44	7.9	8.6	7.2	7.2	8.0	6.4	12.4	13.8	11.2
45-49	15.2	15.6	14.8	13.8	14.6	13.0	23.9	23.7	24.1
50-54	30.6	34.2	27.1	27.6	31.4	23.9	53.9	59.8	48.9
55-59	56.2	62.9	49.9	54.9	61.7	48.3	76.5	81.4	72.7
60-64	93.2	108.5	79.4	91.3	105.2	78.4	124.6	150.2	104.6
65-69	137.4	165.6	113.7	137.2	166.3	112.4	164.0	182.0	150.0
70-74	197.5	230.2	172.2	197.5	230.7	172.4	239.0	271.0	216.4
75-79	259.2	306.1	226.5	260.9	309.1	227.5	279.2	308.9	260.0
80-84	332.2	385.1	301.6	333.6	389.0	302.2	362.3	421.2	330.6
85+	361.7	400.3	346.0	370.8	414.0	353.9	331.9	374.7	312.9

§ SEER Program. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population, except where noted.
 § SEER Program. Rates are per 100,000 and are age-adjusted to the world standard population.

Table VI-5
RECTUM CANCER (Invasive)

SEER INCIDENCE 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>AGE-ADJUSTED RATES</u>									
<u>YEAR OF DIAGNOSIS:</u>									
1973	14.7	18.9	11.4	14.9	19.5	11.5	11.5	11.1	11.8
1974	14.8	19.2	11.4	15.0	19.7	11.4	11.4	12.4	10.7
1975	14.8	18.6	11.9	15.0	19.1	12.0	11.8	12.9	10.8
1976	15.0	19.6	11.5	15.2	19.9	11.8	10.2	13.1	7.8
1977	14.9	19.3	11.7	15.0	19.5	11.7	12.5	14.2	11.3
1978	14.8	18.8	11.9	15.2	19.4	12.1	11.5	13.4	10.2
1979	15.0	19.2	12.0	15.2	19.4	12.2	11.4	13.6	9.9
1980	14.9	19.4	11.5	15.0	19.4	11.8	12.6	17.7	8.6
1981	15.2	19.8	11.9	15.4	20.0	12.1	12.7	17.5	9.3
1982	13.9	17.6	11.3	14.2	17.9	11.5	10.8	13.4	9.0
1983	14.4	18.6	11.2	14.6	18.9	11.3	13.7	14.6	12.9
1984	15.1	19.1	11.9	15.5	19.6	12.2	11.1	13.0	9.8
1985	15.1	19.7	11.7	15.4	20.1	12.0	11.4	13.8	9.8
1986	14.4	19.2	10.8	14.4	19.3	10.8	12.8	15.4	10.7
1987	14.3	18.8	11.0	14.5	19.2	11.0	12.1	13.7	11.2
1988	13.9	18.4	10.6	14.1	18.6	10.7	11.8	15.0	9.4
1989	14.2	18.5	10.9	14.3	18.8	10.9	12.8	15.7	10.7
1990	13.6	18.4	10.1	13.8	18.7	10.1	11.8	13.2	10.8
1991	13.1	17.3	9.8	13.1	17.4	9.9	11.6	15.8	8.5
1992	13.0	17.2	9.8	13.1	17.3	9.8	12.2	15.1	10.0
1993	12.5	16.1	9.7	12.6	16.1	9.8	11.0	15.0	8.1
1994	12.2	15.9	9.3	12.1	15.8	9.2	12.0	15.3	9.7
1995	11.8	15.4	9.0	11.8	15.3	9.1	10.8	13.4	8.7
1996	12.6	16.4	9.7	12.5	16.1	9.7	11.6	14.9	9.0
1997	12.4	15.9	9.6	12.3	15.7	9.5	12.5	14.5	11.2
<u>AGE-ADJUSTED RATES, 1993-97</u>									
<u>AGE AT DIAGNOSIS:</u>									
All ages	12.3	15.9	9.4	12.3	15.8	9.5	11.6	14.6	9.4
Under 65	5.8	7.2	4.5	5.6	7.0	4.4	6.2	7.6	5.0
65 and over	71.8	95.2	55.0	72.8	96.4	55.9	61.1	78.1	49.4
All ages (world std.) [§]	9.7	12.4	7.4	9.6	12.3	7.4	9.2	11.6	7.4
<u>AGE-SPECIFIC RATES, 1993-97</u>									
<u>AGE AT DIAGNOSIS:</u>									
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-14	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.2	0.0
15-19	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.2	0.0
20-24	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.4	0.2
25-29	0.7	0.7	0.6	0.6	0.5	0.7	0.8	1.4	0.3
30-34	1.3	1.4	1.2	1.1	1.2	1.1	2.1	1.9	2.3
35-39	2.1	2.4	1.9	1.9	2.1	1.8	2.2	3.2	1.3
40-44	4.7	5.3	4.1	4.5	5.1	3.9	4.5	5.3	3.7
45-49	8.9	10.6	7.3	8.2	9.6	6.8	11.2	14.7	8.2
50-54	17.5	21.5	13.7	16.6	20.3	13.0	20.1	23.2	17.5
55-59	28.5	35.9	21.5	27.8	35.6	20.4	31.8	37.7	27.0
60-64	42.6	55.3	31.1	43.0	54.5	32.4	38.6	50.4	29.4
65-69	56.3	76.5	39.3	57.3	77.5	40.1	47.1	61.3	36.0
70-74	70.9	93.4	53.4	72.3	94.9	54.6	60.4	78.5	47.5
75-79	81.5	107.0	63.7	82.4	107.5	64.9	74.7	98.8	59.1
80-84	93.4	121.4	77.1	93.2	121.8	76.9	82.9	99.4	74.0
85+	89.2	118.7	77.1	91.2	122.2	79.1	60.5	69.9	56.4

§ SEER Program. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population, except where noted.
 § SEER Program. Rates are per 100,000 and are age-adjusted to the world standard population.

Table VI-6
COLON AND RECTUM CANCER (Invasive)

U.S. MORTALITY 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>AGE-ADJUSTED RATES</u>									
<u>YEAR OF DEATH:</u>									
1973	21.9	24.9	19.8	22.0	25.3	19.8	21.0	22.0	20.4
1974	22.2	25.8	19.7	22.3	26.0	19.8	21.2	23.6	19.5
1975	21.7	25.3	19.3	21.9	25.6	19.3	21.5	23.9	19.7
1976	22.0	25.6	19.5	22.1	25.9	19.5	22.3	24.4	20.8
1977	21.8	25.6	19.1	21.8	25.7	19.1	22.0	25.0	19.9
1978	21.9	25.9	19.2	22.0	26.1	19.2	21.9	24.4	20.2
1979	21.7	25.7	18.9	21.7	25.9	18.8	22.4	24.8	20.8
1980	21.5	25.8	18.6	21.5	25.9	18.5	22.7	26.1	20.3
1981	21.1	25.2	18.2	21.1	25.3	18.1	22.7	25.7	20.7
1982	20.9	25.2	18.0	20.8	25.2	17.8	23.0	26.4	20.6
1983	20.8	25.3	17.7	20.8	25.4	17.6	22.7	26.1	20.3
1984	21.0	25.3	18.0	20.9	25.3	17.8	23.3	27.3	20.6
1985	20.6	25.1	17.5	20.5	25.1	17.2	24.0	27.0	21.8
1986	20.1	24.5	17.0	19.9	24.5	16.7	23.3	27.5	20.6
1987	19.9	24.4	16.7	19.6	24.3	16.4	23.7	27.8	20.9
1988	19.3	23.7	16.3	19.1	23.6	16.0	22.9	27.0	20.2
1989	19.1	23.5	15.9	18.8	23.2	15.6	23.5	28.3	20.3
1990	18.8	23.4	15.6	18.4	23.1	15.2	24.0	29.2	20.7
1991	18.3	22.6	15.3	18.0	22.3	15.0	23.3	27.6	20.5
1992	18.0	22.3	15.0	17.7	22.0	14.6	23.0	27.9	19.8
1993	17.8	21.8	15.0	17.5	21.5	14.5	23.3	27.8	20.3
1994	17.6	21.6	14.6	17.2	21.2	14.2	22.8	27.8	19.4
1995	17.3	21.1	14.5	16.9	20.7	14.1	23.2	28.0	20.0
1996	16.8	20.4	14.0	16.3	20.0	13.6	22.4	26.8	19.5
1997	16.4	20.0	13.7	16.0	19.6	13.3	22.5	27.2	19.2
<u>AGE-ADJUSTED RATES, 1993-97</u>									
<u>AGE AT DEATH:</u>									
All ages	17.2	21.0	14.4	16.8	20.6	13.9	22.8	27.5	19.7
Under 65	5.7	6.8	4.7	5.5	6.5	4.5	8.7	10.5	7.2
65 and over	121.5	150.0	102.2	120.0	148.9	100.2	152.2	182.9	133.1
All ages (world std.)N	12.6	15.4	10.5	12.3	15.1	10.2	17.1	20.6	14.7
<u>AGE-SPECIFIC RATES, 1993-97</u>									
<u>AGE AT DEATH:</u>									
0-4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0
15-19	0.1	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.1
20-24	0.2	0.3	0.1	0.2	0.2	0.1	0.2	0.3	0.1
25-29	0.5	0.6	0.4	0.4	0.5	0.4	0.8	1.0	0.5
30-34	1.0	1.1	0.8	0.9	1.0	0.8	1.6	2.1	1.2
35-39	1.9	2.0	1.8	1.7	1.8	1.6	3.1	3.2	3.0
40-44	3.9	4.2	3.6	3.6	3.9	3.3	6.5	7.4	5.8
45-49	8.2	9.2	7.2	7.5	8.5	6.6	14.1	16.2	12.2
50-54	15.6	18.3	13.1	14.8	17.5	12.1	25.2	29.1	22.1
55-59	28.3	33.7	23.4	27.1	32.2	22.3	42.7	52.9	34.8
60-64	46.9	58.2	37.0	45.6	56.6	35.7	64.9	80.8	52.9
65-69	70.2	88.6	54.9	68.8	87.5	53.0	92.1	110.6	78.3
70-74	101.6	127.5	81.6	99.4	125.3	79.2	139.0	171.5	116.8
75-79	137.1	169.3	115.0	135.6	168.0	113.2	169.9	205.7	147.9
80-84	193.4	238.8	167.8	191.6	238.3	165.2	236.5	281.8	213.2
85+	282.8	332.4	263.1	283.2	334.8	263.0	305.2	351.2	286.3

* NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population, except where noted.

N NCHS public use tape. Rates are per 100,000 and are age-adjusted to the world standard population.

Table VI-7
COLON AND RECTUM CANCER (Invasive)

SURVIVAL RATES, BY RACE, SEX, DIAGNOSIS YEAR, STAGE AND AGE

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>5-YR RELATIVE SURVIVAL RATES</u>									
YEAR OF DIAGNOSIS:									
1960-63 ^a	-	-	-	-	-	-	-	-	-
1970-73 ^a	-	-	-	-	-	-	-	-	-
1974-76 ^b	49.8	48.9	50.6	50.1	49.3	50.8	45.0	42.0	47.5
1977-79 ^b	51.9	50.6	53.1	52.2	51.1	53.3	45.7	43.8	47.3
1980-82 ^b	54.4	53.9	54.8	54.8	54.5	55.2	46.4	43.6	48.9
1983-85 ^b	56.9	56.9	56.8	57.6	57.7	57.6	47.9	46.9	48.7
1986-88 ^b	60.2	60.4	59.9	60.8	61.2	60.4	52.3	50.7	53.6
1989-96 ^b	61.3S	61.4S	61.2S	62.1S	62.2S	62.0S	52.2S	52.7S	51.9S
1989-96 ^b									
ALL STAGES	61.3	61.4	61.2	62.1	62.2	62.0	52.2	52.7	51.9
LOCALIZED	90.0	89.9	90.1	90.8	90.8	90.9	83.7	84.9	82.7
REGIONAL	65.0	64.7	65.4	65.6	65.3	66.0	58.5	58.6	58.5
DISTANT	8.3	8.1	8.5	8.5	8.0	9.0	6.8	7.8	6.0
UNSTAGED	35.9	40.6	31.1	35.5	40.9	30.0	38.0	39.3	36.8
<u>STAGE DISTRIBUTION (%) 1989-96^b</u>									
ALL STAGES									
Number of cases	82,016	41,670	40,346	69,312	35,193	34,119	7,065	3,336	3,729
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCALIZED	37	38	36	37	38	36	33	33	33
REGIONAL	37	36	38	37	36	38	35	34	35
DISTANT	20	20	20	20	20	19	25	25	24
UNSTAGED	6	6	6	6	6	6	8	7	8
<u>5-YR RELATIVE SURVIVAL RATES, 1989-96^b</u>									
AGE AT DIAGNOSIS:									
<45	58.0	56.2	60.1	58.9	57.1	61.0	52.7	50.4	55.0
45-54	63.0	61.9	64.3	63.7	62.4	65.5	56.6	56.5	56.7
55-64	62.8	62.7	62.9	63.3	63.2	63.6	55.2	57.2	53.1
65-74	63.5	64.0	62.9	64.4	65.0	63.8	52.5	51.9	53.1
75+	57.9	57.5	58.2	58.7	58.3	59.1	45.5	46.2	45.2
Under 65	62.1	61.5	62.8	62.8	62.1	63.7	55.1	55.7	54.5
65 and over	60.9	61.5	60.4	61.8	62.4	61.3	49.7	50.0	49.7

^a Rates are based on End Results data from a series of hospital registries and one population-based registry.
^b Rates are from the SEER Program. They are based on data from population-based registries in Connecticut, New Mexico, Utah, Iowa, Hawaii, Atlanta, Detroit, Seattle-Puget Sound and San Francisco-Oakland. Rates are based on follow-up of patients through 1997.
 S The difference in rates between 1974-76 and 1989-96 is statistically significant (p<.05).
 ↑ The standard error of the survival rate is between 5 and 10 percentage points.
 ↑ The standard error of the survival rate is greater than 10 percentage points.
 - Statistic could not be calculated.

Table VI-8
COLON CANCER (Invasive)

SURVIVAL RATES, BY RACE, SEX, DIAGNOSIS YEAR, STAGE AND AGE

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>5-YR RELATIVE SURVIVAL RATES</u>									
YEAR OF DIAGNOSIS:									
1960-63 ^a	-	-	-	43	42	44	34	32	35
1970-73 ^a	-	-	-	49	47	50	37	36	38
1974-76 ^b	50.4	49.7	51.0	50.6	50.0	51.2	46.1	44.8	47.1
1977-79 ^b	52.8	51.6	53.9	53.0	51.8	53.9	48.2	45.9	50.0
1980-82 ^b	55.4	55.7	55.2	55.7	56.0	55.4	49.1	46.7	50.9
1983-85 ^b	57.7	58.1	57.2	58.4	59.0	57.9	49.3	48.4	50.0
1986-88 ^b	60.8	61.6	60.1	61.5	62.4	60.7	52.7	52.1	53.1
1989-96 ^b	61.8S	62.4S	61.3S	62.6S	63.2S	62.1S	52.2S	52.8S	51.8S
1989-96 ^b									
ALL STAGES	61.8	62.4	61.3	62.6	63.2	62.1	52.2	52.8	51.8
LOCALIZED	91.7	92.2	91.3	92.6	93.2	92.0	85.2	85.1	85.3
REGIONAL	68.2	68.2	68.2	68.6	68.4	68.8	61.6	63.0	60.6
DISTANT	8.8	8.9	8.8	9.0	8.7	9.3	6.9	8.2	5.9
UNSTAGED	32.8	38.8	27.6	32.7	39.6	26.8	35.2	37.7↑	32.9
<u>STAGE DISTRIBUTION (%) 1989-96^b</u>									
ALL STAGES									
Number of cases	58,658	28,426	30,232	49,497	23,973	25,524	5,400	2,456	2,944
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCALIZED	35	37	34	35	37	34	31	31	30
REGIONAL	38	37	40	38	37	40	36	35	36
DISTANT	21	22	21	21	22	21	27	27	26
UNSTAGED	5	5	5	5	5	5	7	7	7
<u>5-YR RELATIVE SURVIVAL RATES, 1989-96^b</u>									
AGE AT DIAGNOSIS:									
<45	57.0	56.5	57.6	57.4	56.9	58.0	53.8	53.9	54.0
45-54	62.0	61.3	62.7	62.8	61.4	64.7	54.8	56.5	53.4
55-64	62.7	63.5	61.7	63.0	63.8	62.1	53.8	54.8	52.8
65-74	64.1	65.4	62.9	65.2	66.5	63.8	53.3	52.7	54.0
75+	59.6	59.2	59.9	60.4	59.9	60.8	47.0	47.7	46.7
Under 65	61.7	61.9	61.3	62.2	62.3	62.1	54.1	55.1	53.2
65 and over	62.0	62.9	61.3	62.9	63.8	62.2	50.7	50.9	50.7

^a Rates are based on End Results data from a series of hospital registries and one population-based registry.
^b Rates are from the SEER Program. They are based on data from population-based registries in Connecticut, New Mexico, Utah, Iowa, Hawaii, Atlanta, Detroit, Seattle-Puget Sound and San Francisco-Oakland. Rates are based on follow-up of patients through 1997.
S The difference in rates between 1974-76 and 1989-96 is statistically significant ($p < .05$).
↑ The standard error of the survival rate is between 5 and 10 percentage points.
↑↑ The standard error of the survival rate is greater than 10 percentage points.
- Statistic could not be calculated.

Table VI-9
RECTUM CANCER (Invasive)

SURVIVAL RATES, BY RACE, SEX, DIAGNOSIS YEAR, STAGE AND AGE

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>5-YR RELATIVE SURVIVAL RATES</u>									
YEAR OF DIAGNOSIS:									
1960-63 ^a	-	-	-	38	36	41	27	28	27
1970-73 ^a	-	-	-	45	43	48	30	20	40
1974-76 ^b	48.5	47.7	49.6	48.9	48.0	49.9	42.1	35.2	48.9
1977-79 ^b	49.9	48.8	51.1	50.7	49.9	51.7	38.6	38.4	38.9
1980-82 ^b	52.0	50.4	54.0	52.9	51.4	54.6	38.0	35.9	40.7
1983-85 ^b	55.0	54.4	55.8	55.9	55.3	56.6	43.5	42.3	44.5
1986-88 ^b	58.5	57.9	59.4	59.2	58.8	59.6	51.1	46.7	55.5
1989-96 ^b	60.0 ^S	59.3 ^S	60.9 ^S	60.7 ^S	60.2 ^S	61.5 ^S	52.3 ^S	52.4 ^S	52.2
1989-96 ^b									
ALL STAGES	60.0	59.3	60.9	60.7	60.2	61.5	52.3	52.4	52.2
LOCALIZED	86.4	85.6	87.4	87.2	86.3	88.4	80.1	84.7	75.6
REGIONAL	56.9	57.2	56.4	57.8	58.6	56.8	47.9	46.7	49.2
DISTANT	6.6	6.1	7.5	6.7	6.0	7.7	6.4	6.1	6.6
UNSTAGED	40.4	42.9	37.4	39.6	42.4	35.8	44.1 [†]	42.3 [†]	45.8 [†]
<u>STAGE DISTRIBUTION (%) 1989-96^b</u>									
ALL STAGES									
Number of cases	23,358	13,244	10,114	19,815	11,220	8,595	1,665	880	785
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCALIZED	42	41	43	42	41	43	39	38	40
REGIONAL	35	35	34	35	35	34	33	34	32
DISTANT	16	16	15	16	16	15	19	19	18
UNSTAGED	8	7	8	8	8	8	10	9	10
<u>5-YR RELATIVE SURVIVAL RATES, 1989-96^b</u>									
AGE AT DIAGNOSIS:									
<45	59.8	55.4	65.0	61.5	57.3	66.6	49.9	43.2 [†]	57.9 [†]
45-54	64.8	62.8	67.6	65.1	63.9	66.9	60.5	56.7	65.5 [†]
55-64	63.0	61.2	66.0	63.9	62.0	67.4	59.3	64.0	54.0
65-74	61.9	61.2	63.0	62.7	61.9	63.9	49.6	49.6	49.6
75+	52.3	52.9	51.9	53.3	53.9	52.8	38.7	40.3 [†]	37.5 [†]
Under 65	62.9	60.7	66.3	63.8	61.8	67.1	57.8	57.0	58.7
65 and over	58.0	58.4	57.6	58.8	59.1	58.4	45.9	46.8	45.1

^a

^b

Rates are based on End Results data from a series of hospital registries and one population-based registry. Rates are from the SEER Program. They are based on data from population-based registries in Connecticut, New Mexico, Utah, Iowa, Hawaii, Atlanta, Detroit, Seattle-Puget Sound and San Francisco-Oakland. Rates are based on follow-up of patients through 1997.

S

The difference in rates between 1974-76 and 1989-96 is statistically significant ($p < .05$).

[†]

The standard error of the survival rate is between 5 and 10 percentage points.

^{††}

The standard error of the survival rate is greater than 10 percentage points.

-

Statistic could not be calculated.

Table VI-10
COLON AND RECTUM CANCER (Invasive)

INCIDENCE, MORTALITY, AND SURVIVAL RATES

By Year of Diagnosis/Death

All Races, Males and Females

Year of Diagnosis/Death

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Incidence																						
SEER	49.1	49.5	49.4	49.3	50.5	50.9	49.7	50.4	51.5	52.8	51.2	49.8	48.6	48.8	48.3	47.3	46.3	45.2	44.2	42.9	43.2	43.9
Mortality																						
U.S.	22.0	21.8	21.9	21.7	21.5	21.1	20.9	20.8	21.0	20.6	20.1	19.9	19.3	19.1	18.8	18.3	18.0	17.8	17.6	17.3	16.8	16.4
SEER	22.1	22.2	22.0	21.8	21.1	20.6	20.7	19.6	20.3	20.8	19.2	19.0	18.4	18.7	17.8	17.3	16.9	16.8	16.9	16.1	15.7	15.6
Relative Survival Rates (SEER)																						
1-year	74.7	74.7	75.0	76.1	75.7	78.6	78.4	78.3	79.2	80.1	81.2	80.9	80.3	81.3	81.9	82.6	81.8	80.9	81.7	80.1	81.7	
2-year	62.9	63.6	64.6	65.6	65.5	68.8	68.1	67.8	69.0	71.0	71.9	71.9	71.9	72.4	73.4	73.9	73.2	72.6	72.9	71.9		
3-year	56.9	57.3	58.4	58.9	58.7	62.1	62.2	61.7	62.6	65.1	66.5	66.3	66.4	67.6	68.4	68.4	67.7	67.6	67.9			
4-year	53.1	53.8	54.4	55.2	55.0	57.8	58.3	57.8	58.9	61.3	62.7	62.3	62.9	63.6	64.2	64.9	64.1	63.6				
5-year	51.2	51.2	51.6	52.9	52.4	55.5	55.2	55.6	55.9	59.0	60.3	59.9	60.4	60.9	61.9	62.5	62.0					
6-year	49.6	49.4	49.8	51.2	50.7	53.5	53.3	53.4	54.2	57.2	58.2	58.1	58.8	59.5	60.5	60.5						
7-year	48.7	48.5	48.8	49.9	49.4	51.8	52.0	52.0	52.7	55.8	56.8	56.4	57.3	58.0	58.9							
8-year	48.1	47.4	48.2	48.8	48.2	51.0	50.7	50.8	52.2	55.1	55.6	55.7	56.4	56.8								
9-year	47.5	46.6	47.6	48.2	47.6	50.1	50.3	50.0	51.3	54.1	54.9	54.9	55.5									
10-year	47.2	46.2	46.9	47.5	47.1	49.5	50.0	49.2	50.2	53.4	54.6	54.3										
11-year	46.6	46.0	46.4	46.8	46.4	49.3	49.5	48.3	49.7	53.0	54.2											
12-year	45.8	45.6	46.3	46.2	46.1	49.3	48.9	48.1	49.0	52.7												
13-year	45.2	45.4	45.9	46.0	46.1	49.2	48.9	47.2	48.8													
14-year	44.9	44.7	45.2	45.7	45.7	48.8	48.5	46.4														
15-year	44.4	44.4	45.2	45.7	45.7	48.4	48.3															
16-year	44.2	43.8	45.2	45.3	45.5	47.5																
17-year	44.2	43.4	44.9	45.3	45.2																	
18-year	44.2	42.8	44.2	44.7																		
19-year	44.2	42.6	44.2																			
20-year	44.1	42.6																				
21-year	44.1																					

Note: Incidence and mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
Survival rates are relative rates expressed as percents.

Table VI-11
COLON AND RECTUM CANCER (Invasive)

INCIDENCE, MORTALITY, AND SURVIVAL RATES

By Year of Diagnosis/Death

All Races, Males

Year of Diagnosis/Death

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Incidence																						
SEER	57.2	58.0	57.2	58.3	58.8	59.9	59.3	59.9	61.6	63.0	61.9	61.2	59.6	59.4	58.9	58.0	56.1	54.4	52.8	50.4	51.6	52.6
Mortality																						
U.S.	25.6	25.6	25.9	25.7	25.8	25.2	25.2	25.3	25.3	25.1	24.5	24.4	23.7	23.5	23.4	22.6	22.3	21.8	21.6	21.1	20.4	20.0
SEER	25.9	25.8	26.6	26.0	24.9	24.1	24.8	23.8	24.3	25.8	23.1	22.6	22.6	22.9	21.7	21.3	21.2	20.0	21.1	19.4	18.7	19.0
Relative Survival Rates (SEER)																						
1-year	74.8	74.5	75.0	76.3	76.5	79.8	79.5	79.5	79.3	81.4	82.4	81.8	81.1	82.0	83.0	83.3	82.8	81.7	82.8	81.6	83.1	
2-year	62.6	62.9	65.1	65.7	66.2	69.2	68.5	68.9	68.6	72.4	73.1	73.0	73.4	73.3	74.2	74.9	74.1	73.2	73.8	73.1		
3-year	56.4	56.2	57.8	58.2	59.4	62.4	62.6	62.6	61.6	66.6	67.2	67.1	67.4	68.4	69.5	69.2	68.5	68.1	69.0			
4-year	52.6	52.5	53.3	53.9	55.2	57.8	58.0	58.5	57.5	62.4	63.4	62.5	62.8	64.1	64.9	65.2	64.4	63.8				
5-year	50.2	49.9	50.6	51.2	52.1	54.9	54.5	56.2	54.7	59.6	60.6	60.0	60.5	61.3	62.0	62.3	61.9					
6-year	48.3	47.9	48.4	49.4	50.3	52.4	52.6	53.8	52.6	57.6	58.2	58.6	58.7	59.8	60.4	59.7						
7-year	47.0	46.9	47.5	48.1	48.9	50.3	51.2	52.1	51.1	55.9	56.9	56.7	57.3	58.4	58.6							
8-year	46.2	46.1	47.0	46.6	47.7	50.0	49.9	50.2	50.4	55.3	56.0	55.8	56.4	57.6								
9-year	45.5	44.6	46.4	46.4	46.7	49.5	49.6	49.1	49.2	54.2	55.2	55.2	55.4									
10-year	45.1	44.2	45.4	45.5	46.4	48.7	49.1	48.3	48.3	53.6	55.2	54.7										
11-year	44.7	43.8	44.7	45.1	46.0	48.0	48.4	47.4	47.7	53.3	55.0											
12-year	43.8	43.3	44.5	44.1	45.5	47.9	47.8	47.3	47.4	53.0												
13-year	42.7	43.1	44.0	43.9	45.5	47.9	47.8	46.7	47.0													
14-year	42.0	42.1	43.2	43.5	45.5	47.4	47.5	45.8														
15-year	41.9	41.9	43.0	43.5	45.5	47.4	47.1															
16-year	41.9	41.4	42.8	42.9	45.5	47.1																
17-year	41.7	41.2	42.3	42.7	45.2																	
18-year	41.7	40.8	41.5	42.5																		
19-year	41.7	40.6	41.5																			
20-year	41.7	40.6																				
21-year	41.7																					

Note: Incidence and mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
 Survival rates are relative rates expressed as percents.

Table VI-12
COLON AND RECTUM CANCER (Invasive)

INCIDENCE, MORTALITY, AND SURVIVAL RATES

By Year of Diagnosis/Death

All Races, Females

Year of Diagnosis/Death

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Incidence																						
SEER	43.1	43.5	43.9	43.0	44.6	44.5	43.0	43.6	44.2	45.3	43.2	41.5	40.6	41.1	40.4	39.3	38.9	38.1	37.4	37.1	36.6	37.0
Mortality																						
U.S.	19.5	19.1	19.2	18.9	18.6	18.2	18.0	17.7	18.0	17.5	17.0	16.7	16.3	15.9	15.6	15.3	15.0	15.0	14.6	14.5	14.0	13.7
SEER	19.4	19.8	18.8	18.9	18.5	18.2	18.0	16.8	17.5	17.3	16.4	16.6	15.4	15.8	15.1	14.5	13.9	14.5	13.8	13.5	13.4	13.0
Relative Survival Rates (SEER)																						
1-year	74.6	74.9	74.9	76.0	74.9	77.5	77.3	77.1	79.0	78.8	80.0	79.9	79.5	80.6	80.6	81.7	80.7	80.1	80.5	78.7	80.3	
2-year	63.3	64.2	64.2	65.6	64.8	68.3	67.6	66.8	69.4	69.6	70.8	70.7	70.3	71.4	72.5	73.0	72.3	72.0	71.9	70.6		
3-year	57.3	58.4	58.9	59.6	58.0	61.9	61.8	60.9	63.7	63.6	65.7	65.4	65.4	66.8	67.2	67.6	67.0	67.0	66.7			
4-year	53.6	55.0	55.5	56.5	54.8	57.7	58.7	57.1	60.2	60.4	62.1	62.0	63.0	63.1	63.5	64.6	63.9	63.3				
5-year	52.1	52.3	52.5	54.4	52.7	56.0	55.9	55.0	57.1	58.4	59.9	59.7	60.2	60.5	61.7	62.7	62.0					
6-year	50.8	50.8	51.1	52.9	51.1	54.5	53.9	53.1	55.7	56.7	58.3	57.7	58.8	59.3	60.5	61.3						
7-year	50.2	49.9	50.0	51.5	49.9	53.1	52.7	51.9	54.2	55.8	56.6	56.1	57.4	57.7	59.3							
8-year	49.7	48.6	49.4	50.7	48.8	51.9	51.5	51.4	53.9	54.8	55.1	55.5	56.4	56.1								
9-year	49.3	48.4	48.7	49.9	48.4	50.7	50.9	50.8	53.3	53.9	54.6	54.7	55.6									
10-year	49.0	47.8	48.1	49.4	47.7	50.3	50.9	50.0	52.0	53.3	53.9	53.8										
11-year	48.4	47.8	47.9	48.3	46.7	50.3	50.5	49.0	51.6	52.7	53.5											
12-year	47.7	47.5	47.9	48.1	46.7	50.3	49.8	48.8	50.5	52.3												
13-year	47.5	47.4	47.6	47.9	46.3	50.3	49.8	47.7	50.5													
14-year	47.3	46.9	46.9	47.7	45.8	50.0	49.4	46.9														
15-year	46.5	46.5	46.9	47.7	45.8	49.0	49.4															
16-year	46.1	45.9	46.9	47.4	45.2	47.9																
17-year	46.1	45.2	46.9	47.4	45.2																	
18-year	45.9	44.3	46.5	46.6																		
19-year	45.9	44.2	46.5																			
20-year	45.9	43.7																				
21-year	45.7																					

Note: Incidence and mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
 Survival rates are relative rates expressed as percents.

Table VI-13
COLON AND RECTUM CANCER (Invasive)

Percent Diagnosed With Cancer In 10, 20 and 30 Years and In Remaining Lifetime,
 Given Cancer Free At Current Age By Race and Sex

Lifetime Risk (Percent) of Being Diagnosed With Cancer and
 Lifetime Risk (Percent) of Dying From Cancer

9 SEER Areas, 1995-97

All Races

Current Age	Males				Females				
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually	
0	0.00	0.00	0.02	5.78	0.00	0.00	0.01	5.55	
10	0.00	0.02	0.07	5.84	0.00	0.01	0.05	5.59	
20	0.01	0.06	0.25	5.87	0.01	0.05	0.21	5.61	
30	0.05	0.24	0.90	5.95	0.04	0.20	0.72	5.62	
40	0.19	0.87	2.40	6.03	0.16	0.69	1.77	5.64	
50	0.70	2.30	4.37	6.08	0.54	1.65	3.42	5.59	
60	1.74	4.00	5.57	5.86	1.17	3.04	4.81	5.33	
Lifetime Risk of Being Diagnosed =				5.78%	Lifetime Risk of Being Diagnosed =				5.55%
Lifetime Risk of Dying =				2.41%	Lifetime Risk of Dying =				2.40%

Whites

Current Age	Males				Females				
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually	
0	0.00	0.00	0.01	5.87	0.00	0.00	0.01	5.59	
10	0.00	0.01	0.06	5.92	0.00	0.01	0.05	5.63	
20	0.01	0.06	0.23	5.96	0.01	0.05	0.19	5.64	
30	0.05	0.23	0.86	6.02	0.04	0.18	0.68	5.66	
40	0.18	0.83	2.36	6.09	0.15	0.65	1.74	5.67	
50	0.67	2.26	4.39	6.13	0.51	1.63	3.43	5.62	
60	1.72	4.02	5.61	5.90	1.17	3.06	4.85	5.36	
Lifetime Risk of Being Diagnosed =				5.87%	Lifetime Risk of Being Diagnosed =				5.59%
Lifetime Risk of Dying =				2.47%	Lifetime Risk of Dying =				2.41%

Blacks

Current Age	Males				Females				
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually	
0	0.00	0.00	0.01	4.37	0.00	0.00	0.02	5.14	
10	0.00	0.01	0.07	4.46	0.00	0.02	0.08	5.23	
20	0.01	0.07	0.31	4.52	0.01	0.08	0.28	5.25	
30	0.06	0.30	1.06	4.66	0.07	0.27	0.95	5.29	
40	0.26	1.06	2.44	4.83	0.20	0.90	2.09	5.33	
50	0.88	2.39	3.90	5.03	0.73	1.97	3.70	5.37	
60	1.81	3.61	4.72	4.95	1.37	3.27	4.72	5.13	
Lifetime Risk of Being Diagnosed =				4.37%	Lifetime Risk of Being Diagnosed =				5.14%
Lifetime Risk of Dying =				2.15%	Lifetime Risk of Dying =				2.49%

Table VI-14
COLON AND RECTUM CANCER (Invasive)

AGE-ADJUSTED SEER INCIDENCE AND U.S. MORTALITY RATES

By Race/Ethnicity and Sex

Incidenceⁱ

RACE/ETHNICITY	Rate 1990-1997 Rate per 100,000 persons			Trend 1990-1997 EAPC (%)		
	Total	Males	Females	Total	Males	Females
	All Races	43.9	52.9	37.1	-1.7★	-2.0★
White	43.6	52.7	36.6	-1.8★	-2.3★	-1.5★
White Hispanic	30.4	37.7	24.9	-1.4★	-0.8	-2.2★
White Non-Hispanic	44.8	54.1	37.7	-1.8★	-2.3★	-1.4★
Black	50.7	58.3	45.2	-1.3★	-1.6	-1.2
Asian/Pacific Islander	38.1	47.2	30.9	-0.7★	-0.1	-1.3
American Indian	16.3	20.4	13.1	0.0	-4.1	-
Hispanic [⊗]	28.8	35.7	23.6	-1.6★	-1.1	-2.2★

Mortality[❖]

RACE/ETHNICITY	Rate 1990-1997 Rate per 100,000 persons			Trend 1990-1997 EAPC (%)		
	Total	Males	Females	Total	Males	Females
	All Races	17.6	21.6	14.7	-1.8★	-2.1★
White	17.2	21.3	14.3	-1.9★	-2.2★	-1.8★
White Hispanic	10.9	13.9	8.7	-1.0★	-0.5	-1.8★
White Non-Hispanic	17.4	21.5	14.5	-1.8★	-2.1★	-1.7★
Black	23.0	27.7	19.9	-0.8★	-0.7★	-1.0★
Asian/Pacific Islander	10.8	13.1	8.9	-1.3★	-2.0★	-0.3
American Indian	10.1	11.6	8.9	3.5	5.3	1.5
Hispanic [⊗]	10.3	13.1	8.3	-1.2★	-0.7	-2.0★

- The EAPC is the Estimated Annual Percent Change over the time interval.
- Statistic not shown. Rate based on less than 25 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.
- ⁱ Incidence data are from the 11 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, and Los Angeles). Unless specified, other tables use data from 9 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
- [⊗] Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians. For incidence, all 11 SEER areas are included. For mortality, information is included for all states except Connecticut, Oklahoma, Louisiana, and New Hampshire.
- [❖] Mortality data are analyzed from a public-use file provided by the National Center for Health Statistics (NCHS).
- [★] The EAPC is significantly different from zero (p<.05).

Table VI-15
COLON CANCER (Invasive) and RECTUM CANCER (Invasive)

AGE-ADJUSTED SEER INCIDENCE

By Race/Ethnicity and Sex

Colon Incidenceⁱ

	Rate 1990-1997 Rate per 100,000 persons			Trend 1990-1997 EAPC (%)		
	Total	Males	Females	Total	Males	Females
RACE/ETHNICITY						
All Races	31.5	36.7	27.6	-1.7★	-2.0★	-1.5★
White	31.2	36.6	27.2	-1.8★	-2.2★	-1.6★
White Hispanic	20.5	24.2	17.7	-1.1	-0.3	-2.1★
White Non-Hispanic	32.2	37.7	28.0	-1.8★	-2.3★	-1.5★
Black	38.7	43.3	35.6	-1.5★	-2.1★	-1.1★
Asian/Pacific Islander	25.5	30.4	21.6	-0.6	-0.3	-0.8
American Indian	10.8	13.0	9.1	0.3	-6.4	-
Hispanic [⊙]	19.5	23.0	16.8	-1.3	-0.6	-2.1

Rectum Incidenceⁱ

	Rate 1990-1997 Rate per 100,000 persons			Trend 1990-1997 EAPC (%)		
	Total	Males	Females	Total	Males	Females
RACE/ETHNICITY						
All Races	12.4	16.2	9.5	-1.6★	-2.0★	-1.4★
White	12.4	16.1	9.4	-1.7★	-2.4★	-1.2
White Hispanic	9.9	13.5	7.2	-1.9	-1.7	-2.5★
White Non-Hispanic	12.6	16.3	9.6	-1.7★	-2.4★	-1.1
Black	11.9	15.1	9.6	-0.7	-0.1	-1.3
Asian/Pacific Islander	12.6	16.9	9.3	-0.9	0.2	-2.3★
American Indian	5.5	7.4	4.0	-	-	-
Hispanic [⊙]	9.4	12.7	6.8	-2.1	-2.0	-2.5★

- The EAPC is the Estimated Annual Percent Change over the time interval.
- Statistic not shown. Rate based on less than 25 cases for the time interval. Trend based on less than 10 cases for at least one year within the time interval.
- ⁱ Incidence data are from the 11 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, and Los Angeles). Unless specified, other tables use data from 9 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
- [⊙] Hispanic is not mutually exclusive from whites, blacks, Asian Pacific Islanders, and American Indians. For incidence, all 11 SEER areas are included. For mortality, information is included for all states except Connecticut, Oklahoma, Louisiana, and New Hampshire.
- ❖ Mortality data are analyzed from a public-use file provided by the National Center for Health Statistics (NCHS).
- ★ The EAPC is significantly different from zero (p<.05).

Table VI-16
COLON AND RECTUM CANCER (Invasive)

AGE-ADJUSTED SEER INCIDENCE RATES§ AND SEER MORTALITY RATES*
 By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER INCIDENCE RATES§, 1993-97</u>									
REGISTRY									
11 registries	42.7	51.1	36.2	42.3	50.7	35.7	49.6	56.9	44.3
9 registries	43.9	52.4	37.2	43.5	52.0	36.8	50.2	57.8	44.7
San Francisco-Oakland	42.4	50.8	35.9	42.9	50.8	36.7	45.9	54.7	39.0
Connecticut	48.3	58.2	40.9	48.0	57.9	40.5	51.8	65.8	43.0
Metropolitan Detroit	46.3	56.8	38.7	45.0	56.7	36.5	51.0	57.2	46.5
Hawaii	44.1	54.5	34.9	48.1	58.1	38.4	-	-	-
Iowa	49.6	58.5	42.6	49.6	58.5	42.6	-	-	-
New Mexico	33.5	39.7	28.2	34.1	40.4	28.8	-	-	-
Seattle-Puget Sound	41.6	49.2	35.5	41.2	48.8	35.2	49.9	64.7	37.1
Utah	32.4	37.8	27.7	32.3	37.8	27.7	-	-	-
Metropolitan Atlanta	43.6	51.1	38.3	40.5	48.4	34.8	54.0	61.4	49.6
San Jose-Monterey	40.1	47.3	34.3	40.8	48.1	35.0	37.1	47.1	29.9
Los Angeles	39.6	47.9	33.3	38.6	46.8	32.3	48.7	55.1	43.9
<u>SEER MORTALITY RATES*, 1993-97</u>									
REGISTRY									
11 registries	15.8	19.1	13.3	15.6	19.0	13.0	21.7	25.2	19.2
9 registries	16.2	19.6	13.6	16.0	19.6	13.3	22.0	25.4	19.7
San Francisco-Oakland	15.8	19.2	13.3	15.9	19.6	13.2	21.1	23.8	18.9
Connecticut	16.7	20.7	13.7	16.6	20.7	13.6	18.1	22.2	15.2
Metropolitan Detroit	17.7	22.0	14.7	16.6	21.3	13.2	22.7	25.5	20.7
Hawaii	13.7	16.7	11.0	17.0	21.6	12.7	-	-	-
Iowa	18.5	22.1	15.8	18.5	22.1	15.9	-	-	-
New Mexico	14.3	17.4	11.7	14.5	17.8	11.8	-	-	-
Seattle-Puget Sound	15.2	18.4	12.8	15.2	18.3	12.9	21.7	31.1	13.5
Utah	12.3	14.1	10.8	12.2	14.0	10.8	-	-	-
Metropolitan Atlanta	16.3	19.0	14.5	14.3	17.1	12.3	24.3	27.9	22.4
San Jose-Monterey	14.3	17.1	12.1	14.7	17.5	12.5	21.6	33.3	15.1
Los Angeles	14.8	18.0	12.5	14.4	17.6	12.1	21.0	24.4	18.3

Note: San Jose-Monterey and Los Angeles are new SEER areas as of 1992 and their data are only used in tables where indicated.
 § SEER Program. Incidence rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
 * NCHS public use tape. Mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
 - Statistic could not be calculated or populations are inadequate.

Table VI-17
COLON AND RECTUM CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY* RATES BY STATE, 1993-97

All Races, Males and Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	17.2	0.03							
High Five States									
New Jersey	20.0⊕*	0.20	(01)	16.3					
District of Columbia	19.9*	0.76	(02)	15.7					
Maryland	19.5⊕*	0.27	(03)	13.4					
Pennsylvania	19.4⊕*	0.15	(04)	12.8					
New Hampshire	19.3*	0.55	(05)	12.2					
Low Five States									
Colorado	14.4⊕*	0.27	(47)	-16.3					
New Mexico	14.3⊕*	0.40	(48)	-16.9					
Idaho	13.8⊕*	0.46	(49)	-19.8					
Hawaii	13.7⊕*	0.45	(50)	-20.3					
Utah	12.3⊕*	0.38	(51)	-28.5					
Alabama	14.9⊕*	0.24	(45)	-13.4	Montana	15.9	0.54	(39)	-7.6
Alaska	17.6	1.06	(21)	2.3	Nebraska	18.1	0.42	(19)	5.2
Arizona	14.6⊕*	0.24	(46)	-15.1	Nevada	17.1	0.45	(27)	-0.6
Arkansas	16.6	0.32	(32)	-3.5	New Hampshire	19.3*	0.55	(05)	12.2
California	15.0⊕*	0.10	(44)	-12.8	New Jersey	20.0⊕*	0.20	(01)	16.3
Colorado	14.4⊕*	0.27	(47)	-16.3	New Mexico	14.3⊕*	0.40	(48)	-16.9
Connecticut	16.7	0.28	(30)	-2.9	New York	18.9⊕	0.13	(12)	9.9
Delaware	19.0*	0.67	(09)	10.5	North Carolina	16.7	0.20	(29)	-2.9
District of Columbia	19.9*	0.76	(02)	15.7	North Dakota	17.4	0.64	(22)	1.2
Florida	16.1⊕	0.12	(36)	-6.4	Ohio	18.9⊕	0.16	(11)	9.9
Georgia	15.6⊕	0.21	(40)	-9.3	Oklahoma	16.1	0.28	(38)	-6.4
Hawaii	13.7⊕*	0.45	(50)	-20.3	Oregon	15.4⊕*	0.28	(42)	-10.5
Idaho	13.8⊕*	0.46	(49)	-19.8	Pennsylvania	19.4⊕*	0.15	(04)	12.8
Illinois	18.8⊕	0.16	(13)	9.3	Rhode Island	19.0*	0.53	(10)	10.5
Indiana	18.5⊕	0.23	(14)	7.6	South Carolina	17.1	0.28	(28)	-0.6
Iowa	18.5	0.31	(16)	7.6	South Dakota	17.2	0.61	(26)	0.0
Kansas	16.2	0.32	(35)	-5.8	Tennessee	17.4	0.23	(23)	1.2
Kentucky	19.1⊕*	0.29	(08)	11.0	Texas	16.1⊕	0.13	(37)	-6.4
Louisiana	18.5	0.28	(15)	7.6	Utah	12.3⊕*	0.38	(51)	-28.5
Maine	19.3*	0.49	(06)	12.2	Vermont	18.4	0.74	(17)	7.0
Maryland	19.5⊕*	0.27	(03)	13.4	Virginia	17.3	0.22	(24)	0.6
Massachusetts	19.1⊕*	0.22	(07)	11.0	Washington	15.2⊕*	0.22	(43)	-11.6
Michigan	17.3	0.17	(25)	0.6	West Virginia	18.4	0.38	(18)	7.0
Minnesota	15.5⊕	0.24	(41)	-9.9	Wisconsin	16.6	0.23	(31)	-3.5
Mississippi	16.4	0.33	(34)	-4.7	Wyoming	16.5	0.79	(33)	-4.1
Missouri	17.9	0.23	(20)	4.1					

* NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
 SE Standard error of the rate.
 PD Percent difference between state rate and total U.S. rate.
 * Absolute difference between state rate and total U.S. rate is 10% or more.
 ⊕ Difference between state rate and total U.S. rate is statistically significant (p<=.0002).

Table VI-18
 COLON AND RECTUM CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY* RATES BY STATE, 1993-97

All Races, Males

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	21.0	0.06							
High Five States									
New Jersey	24.8⊕*	0.34	(01)	18.1					
Rhode Island	24.3*	0.94	(02)	15.7					
District of Columbia	24.1*	1.33	(03)	14.8					
Maryland	24.0⊕*	0.46	(04)	14.3					
Pennsylvania	23.9⊕*	0.26	(05)	13.8					
Low Five States									
New Mexico	17.4⊕*	0.66	(47)	-17.1					
Colorado	17.2⊕*	0.46	(48)	-18.1					
Idaho	17.0⊕*	0.76	(49)	-19.0					
Hawaii	16.7⊕*	0.73	(50)	-20.5					
Utah	14.1⊕*	0.61	(51)	-32.9					
Alabama	18.2⊕*	0.41	(42)	-13.3	Montana	19.8	0.90	(36)	-5.7
Alaska	20.2	1.69	(33)	-3.8	Nebraska	23.3*	0.72	(11)	11.0
Arizona	17.6⊕*	0.39	(46)	-16.2	Nevada	21.0	0.75	(25)	0.0
Arkansas	20.4	0.54	(30)	-2.9	New Hampshire	21.6	0.89	(20)	2.9
California	18.0⊕*	0.16	(45)	-14.3	New Jersey	24.8⊕*	0.34	(01)	18.1
Colorado	17.2⊕*	0.46	(48)	-18.1	New Mexico	17.4⊕*	0.66	(47)	-17.1
Connecticut	20.7	0.48	(28)	-1.4	New York	23.3⊕*	0.22	(10)	11.0
Delaware	22.8	1.14	(13)	8.6	North Carolina	20.3	0.34	(31)	-3.3
District of Columbia	24.1*	1.33	(03)	14.8	North Dakota	22.4	1.08	(15)	6.7
Florida	19.5⊕	0.20	(37)	-7.1	Ohio	23.5⊕*	0.29	(07)	11.9
Georgia	18.9⊕*	0.36	(40)	-10.0	Oklahoma	19.4	0.47	(38)	-7.6
Hawaii	16.7⊕*	0.73	(50)	-20.5	Oregon	18.3⊕*	0.46	(41)	-12.9
Idaho	17.0⊕*	0.76	(49)	-19.0	Pennsylvania	23.9⊕*	0.26	(05)	13.8
Illinois	23.3⊕*	0.28	(09)	11.0	Rhode Island	24.3*	0.94	(02)	15.7
Indiana	22.3	0.39	(16)	6.2	South Carolina	21.4	0.50	(23)	1.9
Iowa	22.1	0.51	(17)	5.2	South Dakota	20.9	1.00	(26)	-0.5
Kansas	20.0	0.54	(35)	-4.8	Tennessee	21.2	0.40	(24)	1.0
Kentucky	23.5⊕*	0.49	(08)	11.9	Texas	20.1	0.23	(34)	-4.3
Louisiana	22.8	0.48	(14)	8.6	Utah	14.1⊕*	0.61	(51)	-32.9
Maine	22.9	0.82	(12)	9.0	Vermont	21.4	1.22	(22)	1.9
Maryland	24.0⊕*	0.46	(04)	14.3	Virginia	20.8	0.38	(27)	-1.0
Massachusetts	23.7⊕*	0.39	(06)	12.9	Washington	18.1⊕*	0.37	(44)	-13.8
Michigan	21.5	0.30	(21)	2.4	West Virginia	21.8	0.64	(18)	3.8
Minnesota	19.0	0.41	(39)	-9.5	Wisconsin	20.6	0.39	(29)	-1.9
Mississippi	20.2	0.56	(32)	-3.8	Wyoming	18.1*	1.25	(43)	-13.8
Missouri	21.8	0.39	(19)	3.8					

* NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
 SE Standard error of the rate.
 PD Percent difference between state rate and total U.S. rate.
 * Absolute difference between state rate and total U.S. rate is 10% or more.
 ⊕ Difference between state rate and total U.S. rate is statistically significant (p<=.0002).

Table VI-19
COLON AND RECTUM CANCER (Invasive)

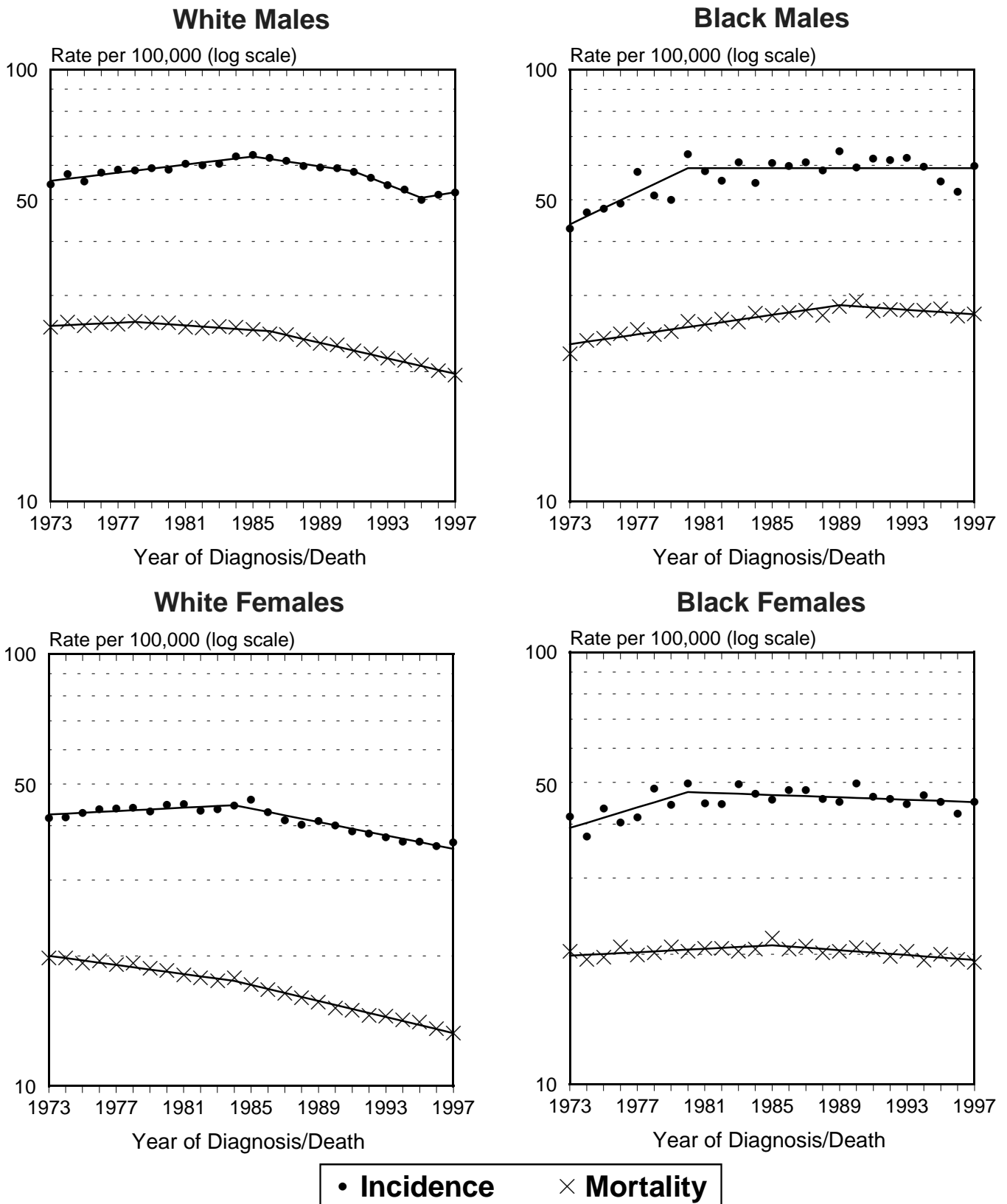
AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY* RATES BY STATE, 1993-97

All Races, Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	14.4	0.04							
High Five States									
New Hampshire	17.3*	0.69	(01)	20.1					
District of Columbia	17.1*	0.92	(02)	18.8					
Maine	16.7*	0.61	(03)	16.0					
New Jersey	16.5⊕*	0.24	(04)	14.6					
Maryland	16.3⊕*	0.32	(05)	13.2					
Low Five States									
Colorado	12.2⊕*	0.33	(47)	-15.3					
New Mexico	11.7⊕*	0.48	(48)	-18.8					
Idaho	11.4⊕*	0.57	(49)	-20.8					
Hawaii	11.0⊕*	0.55	(50)	-23.6					
Utah	10.8⊕*	0.48	(51)	-25.0					
Alabama	12.7⊕*	0.29	(43)	-11.8	Montana	12.7*	0.65	(42)	-11.8
Alaska	15.2	1.35	(20)	5.6	Nebraska	14.2	0.50	(26)	-1.4
Arizona	12.2⊕*	0.29	(46)	-15.3	Nevada	13.7	0.55	(31)	-4.9
Arkansas	13.7	0.39	(30)	-4.9	New Hampshire	17.3*	0.69	(01)	20.1
California	12.7⊕*	0.12	(44)	-11.8	New Jersey	16.5⊕*	0.24	(04)	14.6
Colorado	12.2⊕*	0.33	(47)	-15.3	New Mexico	11.7⊕*	0.48	(48)	-18.8
Connecticut	13.7	0.34	(32)	-4.9	New York	15.8⊕	0.15	(13)	9.7
Delaware	16.0*	0.81	(08)	11.1	North Carolina	14.2	0.24	(25)	-1.4
District of Columbia	17.1*	0.92	(02)	18.8	North Dakota	13.8	0.78	(29)	-4.2
Florida	13.4⊕	0.15	(36)	-6.9	Ohio	15.7⊕	0.20	(15)	9.0
Georgia	13.3	0.25	(38)	-7.6	Oklahoma	13.6	0.34	(34)	-5.6
Hawaii	11.0⊕*	0.55	(50)	-23.6	Oregon	12.9*	0.34	(40)	-10.4
Idaho	11.4⊕*	0.57	(49)	-20.8	Pennsylvania	16.2⊕*	0.18	(06)	12.5
Illinois	15.6⊕	0.20	(16)	8.3	Rhode Island	15.5	0.64	(17)	7.6
Indiana	15.7	0.28	(14)	9.0	South Carolina	14.1	0.34	(28)	-2.1
Iowa	15.8	0.38	(12)	9.7	South Dakota	14.3	0.75	(24)	-0.7
Kansas	13.4	0.39	(37)	-6.9	Tennessee	14.7	0.28	(23)	2.1
Kentucky	15.9*	0.34	(10)	10.4	Texas	13.0⊕	0.15	(39)	-9.7
Louisiana	15.4	0.33	(18)	6.9	Utah	10.8⊕*	0.48	(51)	-25.0
Maine	16.7*	0.61	(03)	16.0	Vermont	16.2*	0.91	(07)	12.5
Maryland	16.3⊕*	0.32	(05)	13.2	Virginia	14.8	0.27	(22)	2.8
Massachusetts	15.9⊕*	0.27	(09)	10.4	Washington	12.9⊕*	0.28	(41)	-10.4
Michigan	14.2	0.21	(27)	-1.4	West Virginia	15.9*	0.46	(11)	10.4
Minnesota	12.6⊕*	0.29	(45)	-12.5	Wisconsin	13.6	0.27	(35)	-5.6
Mississippi	13.7	0.39	(33)	-4.9	Wyoming	15.2	1.01	(19)	5.6
Missouri	15.0	0.28	(21)	4.2					

* NCHS public use tape. Rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.
SE Standard error of the rate.
PD Percent difference between state rate and total U.S. rate.
* Absolute difference between state rate and total U.S. rate is 10% or more.
⊕ Difference between state rate and total U.S. rate is statistically significant (p<=.0002).

SEER Incidence and U.S. Mortality Rates⁺ Colon & Rectum



• Incidence × Mortality

⁺ Rates are age-adjusted to the 1970 U.S. standard million population. Regression lines are calculated using the Joinpoint Regression Program.