

Table XXIII-1
STOMACH CANCER (Invasive)

TRENDS IN SEER INCIDENCE AND U.S. MORTALITY, BY RACE AND SEX

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>INCIDENCE TRENDS (expressed in percents)§:</u>									
<u>1973-93</u>									
All Ages									
Percent Change (PC)	-28.1	-27.3	-29.5	-33.2	-32.3	-36.0	-29.4	-26.3	-30.7
Est. Annual PC (EAPC)	-1.5★	-1.4★	-1.7★	-1.9★	-1.8★	-2.2★	-1.2★	-1.0★	-1.2★
Under 65									
Percent Change (PC)	-24.3	-24.2	-24.6	-27.7	-26.9	-30.9	-34.5	-31.0	-37.7
Est. Annual PC (EAPC)	-1.4★	-1.4★	-1.3★	-1.6★	-1.6★	-1.8★	-1.4★	-1.2★	-1.6★
65 and over									
Percent Change (PC)	-30.2	-28.9	-32.0	-35.9	-34.8	-38.2	-25.9	-23.0	-26.8
Est. Annual PC (EAPC)	-1.6★	-1.4★	-1.9★	-2.0★	-1.9★	-2.3★	-1.1★	-0.9	-1.1
<u>1975-79 - ALL AGES</u>									
Percent Change (PC)	-1.7	-2.9	1.1	-3.8	-5.5	-0.2	9.3	6.2	14.5
Est. Annual PC (EAPC)	-0.2	-0.5	0.6	-0.8	-1.5	0.5	2.6	2.4	2.7
<u>1989-93 - ALL AGES</u>									
Percent Change (PC)	-5.7	-6.4	-5.4	-6.7	-8.4	-4.8	-8.4	-4.9	-14.7
Est. Annual PC (EAPC)	-2.2	-2.4	-2.0	-2.8	-3.3	-1.9	-2.7◇	-0.9	-5.9◇
<u>MORTALITY TRENDS (expressed in percents)δ:</u>									
<u>1973-93</u>									
All Ages									
Percent Change (PC)	-36.7	-36.3	-37.7	-39.3	-38.6	-41.1	-30.1	-28.3	-28.6
Est. Annual PC (EAPC)	-2.3★	-2.2★	-2.5★	-2.5★	-2.4★	-2.8★	-1.6★	-1.4★	-1.6★
Under 65									
Percent Change (PC)	-34.6	-34.3	-36.0	-36.2	-35.3	-39.5	-39.6	-37.5	-41.6
Est. Annual PC (EAPC)	-1.9★	-1.8★	-2.3★	-2.1★	-1.9★	-2.5★	-2.3★	-2.0★	-2.6★
65 and over									
Percent Change (PC)	-37.8	-37.3	-38.5	-40.7	-40.1	-41.9	-23.5	-22.0	-20.2
Est. Annual PC (EAPC)	-2.4★	-2.3★	-2.5★	-2.7★	-2.6★	-2.9★	-1.2★	-1.1★	-1.0★
<u>1975-79 - ALL AGES</u>									
Percent Change (PC)	-8.7	-9.0	-8.1	-9.1	-9.0	-9.4	-7.0	-9.6	-0.6
Est. Annual PC (EAPC)	-3.0★	-3.0★	-2.9★	-3.1★	-3.0★	-3.4★	-2.3★	-3.2★	-0.1
<u>1989-93 - ALL AGES</u>									
Percent Change (PC)	-8.0	-9.3	-6.5	-8.8	-9.6	-8.2	-7.4	-9.8	-3.3
Est. Annual PC (EAPC)	-2.6★	-3.0★	-2.0★	-2.8★	-3.1★	-2.6★	-2.4	-3.1	-1.1

The Est. Annual PC is the Estimated Annual Percent Change (EAPC) over the time interval.

§ SEER Program.

δ NCHS public use tape.

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

◇ The EAPC for 1989-93 is significantly different from the EAPC for 1975-79 ($p < .05$).

◇ The EAPC for 1989-93 is significantly different from the EAPC for 1975-79 ($p < .10$).

- Statistic could not be calculated.

Table XXIII-2
STOMACH 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>									
YEAR OF DIAGNOSIS:									
1973	10.2	15.1	6.6	9.5	14.0	6.2	16.7	25.9	9.5
1974	10.0	14.5	6.5	9.1	13.3	5.9	15.1	21.4	10.0
1975	9.2	13.5	6.1	8.4	12.5	5.4	13.8	19.9	9.2
1976	9.5	13.8	6.3	8.7	12.6	5.7	12.9	19.3	8.0
1977	9.1	13.1	6.0	8.1	11.9	5.3	13.9	20.0	9.1
1978	9.1	13.0	6.2	8.1	11.8	5.4	14.3	19.1	10.5
1979	9.4	13.6	6.3	8.3	12.0	5.7	14.8	22.6	9.2
1980	8.9	13.5	5.4	8.1	12.3	4.9	12.4	21.4	5.9
1981	8.8	13.0	5.6	7.8	11.7	5.1	14.3	22.6	8.1
1982	8.7	13.0	5.5	7.6	11.5	4.8	15.6	25.8	8.1
1983	8.6	12.5	5.7	7.5	10.8	5.0	14.1	22.0	8.5
1984	8.3	12.0	5.6	7.3	10.8	4.8	13.0	17.6	9.5
1985	8.1	11.9	5.4	7.1	10.5	4.7	12.8	18.6	8.5
1986	8.1	11.9	5.3	7.2	10.8	4.5	13.0	18.6	9.0
1987	8.1	11.9	5.3	7.1	10.5	4.6	13.4	20.9	8.3
1988	8.1	12.3	5.0	7.0	10.7	4.2	13.0	20.1	7.8
1989	8.0	12.1	4.9	7.0	10.8	4.1	12.5	18.4	8.3
1990	7.4	10.9	4.8	6.3	9.4	4.0	12.0	18.3	7.5
1991	7.7	11.2	5.2	6.6	9.6	4.3	13.1	20.2	8.1
1992	7.4	10.8	4.7	6.4	9.4	4.0	11.1	16.2	7.3
1993	7.2	10.8	4.5	6.0	9.1	3.7	11.3	18.7	6.2
<u>AGE-ADJUSTED RATES, 1989-93</u>									
AGE AT DIAGNOSIS:									
All ages	7.5	11.1	4.8	6.5	9.6	4.0	12.0	18.3	7.5
Under 65	3.0	4.3	1.9	2.6	3.7	1.5	5.2	7.9	3.0
65 and over	48.5	73.4	31.8	42.0	63.9	27.6	73.4	113.3	48.0
All ages (world std.) ^λ	5.7	8.4	3.6	4.9	7.3	3.0	9.3	14.2	5.6
<u>AGE-SPECIFIC RATES, 1989-93</u>									
AGE AT DIAGNOSIS:									
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	0.0	0.0
15-19	0.1	0.0	0.1	0.0	0.0	0.0	0.2	0.0	0.4
20-24	0.1	0.2	0.0	0.1	0.1	0.0	0.4	0.7	0.2
25-29	0.3	0.3	0.4	0.2	0.3	0.2	0.5	0.0	0.9
30-34	0.7	0.9	0.5	0.5	0.7	0.3	2.0	2.6	1.5
35-39	1.6	2.0	1.2	1.1	1.4	0.8	3.0	3.9	2.3
40-44	2.8	3.8	1.8	2.1	3.0	1.2	5.4	9.0	2.2
45-49	4.6	6.6	2.6	4.0	5.9	2.0	7.1	11.2	3.5
50-54	8.7	11.9	5.7	7.4	10.3	4.6	17.0	24.6	10.5
55-59	14.8	21.4	8.6	12.8	18.8	7.0	24.3	36.3	14.5
60-64	22.2	32.1	13.3	18.8	27.8	10.5	35.5	57.0	18.6
65-69	32.2	47.9	19.3	27.5	41.0	16.2	47.5	77.0	25.2
70-74	45.8	71.3	26.4	39.4	61.2	22.8	76.1	121.4	44.8
75-79	58.0	83.9	40.7	51.0	73.8	35.9	80.0	114.6	59.1
80-84	67.2	101.4	48.4	59.6	89.8	43.5	96.3	140.5	72.9
85+	80.8	130.5	61.5	69.7	114.8	52.9	132.1	207.7	99.6

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

λ SEER Program. Rates are per 100,000 and are age-adjusted to the world standard population.

Table XXIII-3
STOMACH CANCER (Invasive)U.S. MORTALITY RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES^δ, BY RACE AND SEX

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>AGE-ADJUSTED RATES</u>									
YEAR OF DEATH:									
1973	7.0	10.1	4.8	6.5	9.4	4.5	11.8	17.2	7.7
1974	6.8	9.9	4.7	6.3	9.1	4.3	12.0	17.7	7.7
1975	6.6	9.5	4.5	6.1	8.7	4.3	11.2	17.1	6.8
1976	6.4	9.3	4.3	5.9	8.5	4.0	10.8	16.4	6.7
1977	6.1	8.9	4.1	5.6	8.2	3.8	10.7	15.6	7.0
1978	6.0	8.6	4.1	5.5	7.9	3.8	10.2	15.1	6.6
1979	5.9	8.5	4.0	5.4	7.8	3.7	10.3	15.2	6.8
1980	5.7	8.2	3.9	5.2	7.6	3.6	9.7	14.6	6.3
1981	5.6	8.2	3.8	5.1	7.6	3.4	9.9	14.5	6.6
1982	5.5	7.9	3.7	5.0	7.2	3.4	9.7	15.2	5.9
1983	5.3	7.7	3.6	4.8	7.0	3.3	9.8	14.7	6.3
1984	5.3	7.7	3.5	4.8	7.0	3.2	9.4	14.2	6.1
1985	5.1	7.4	3.4	4.6	6.8	3.1	9.1	13.5	5.9
1986	5.0	7.4	3.2	4.5	6.7	2.9	9.0	13.8	5.7
1987	4.8	7.1	3.2	4.4	6.4	2.8	8.9	13.5	5.8
1988	4.7	6.9	3.1	4.3	6.2	2.9	8.7	13.6	5.3
1989	4.8	7.1	3.1	4.3	6.4	2.8	9.1	14.2	5.6
1990	4.7	6.9	3.1	4.2	6.1	2.8	8.9	13.5	5.8
1991	4.7	6.9	3.0	4.2	6.2	2.7	9.1	14.0	5.7
1992	4.4	6.3	3.0	3.9	5.6	2.6	8.4	12.3	5.7
1993	4.4	6.4	2.9	3.9	5.7	2.6	8.3	12.7	5.3
<u>AGE-ADJUSTED RATES, 1989-93</u>									
AGE AT DEATH:									
All ages	4.6	6.7	3.0	4.1	6.0	2.7	8.8	13.3	5.6
Under 65	1.8	2.5	1.1	1.5	2.2	0.9	3.5	5.3	2.0
65 and over	30.4	45.2	20.8	27.6	41.0	19.0	56.9	86.4	38.7
All ages (world std.) ^φ	3.5	5.0	2.2	3.1	4.5	2.0	6.6	10.1	4.2
<u>AGE-SPECIFIC RATES, 1989-93</u>									
AGE AT DEATH:									
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	0.0	0.0
15-19	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1
20-24	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1
25-29	0.2	0.2	0.2	0.1	0.1	0.2	0.4	0.3	0.4
30-34	0.4	0.4	0.4	0.3	0.3	0.3	0.9	0.9	0.8
35-39	0.9	1.1	0.7	0.7	0.8	0.5	1.9	2.6	1.4
40-44	1.5	2.1	1.0	1.3	1.8	0.8	3.0	4.2	1.9
45-49	2.8	3.9	1.7	2.4	3.3	1.5	5.6	8.6	3.1
50-54	5.2	7.4	3.1	4.5	6.4	2.7	9.9	15.8	5.1
55-59	8.4	12.1	4.9	7.2	10.6	4.2	16.8	26.2	9.4
60-64	12.8	18.8	7.6	11.3	16.7	6.5	25.2	39.1	14.7
65-69	18.6	27.8	11.1	16.7	24.9	9.9	35.2	54.7	21.0
70-74	26.3	39.4	16.5	23.6	35.1	14.9	51.6	82.5	31.0
75-79	35.3	52.2	24.3	32.2	47.3	22.3	64.9	101.4	43.4
80-84	46.1	68.7	34.0	42.6	63.4	31.4	84.4	127.6	62.1
85+	63.9	92.7	52.7	58.7	86.6	48.2	114.2	146.3	100.8

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

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

Table XXIII-4
STOMACH 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	-	-	-	11	10	13	8	5	14
1970-73 ^a	-	-	-	13	12	14	13	15	10
1974-76 ^b	15.2	14.0	17.2	14.5	13.3	16.5	16.5	15.8	17.7
1977-79 ^b	16.7	15.3	18.9	16.1	14.4	18.5	15.1	14.6	16.1
1980-82 ^b	17.5	16.4	19.6	16.3	15.3	18.1	19.3	18.5	21.2
1983-85 ^b	17.4	15.9	19.7	16.3	14.6	19.1	18.4	18.0	18.9
1986-92 ^b	20.5 Ω	17.6 Ω	25.3 Ω	19.3 Ω	16.4 Ω	24.2 Ω	20.3	16.3	26.6 Ω
1986-92 ^b									
ALL STAGES	20.5	17.6	25.3	19.3	16.4	24.2	20.3	16.3	26.6
LOCALIZED	60.6	55.5	67.7	58.7	52.4	67.5	57.8	55.4 \uparrow	60.3 \uparrow
REGIONAL	22.6	20.4	26.2	21.0	18.8	24.9	23.6	20.2	28.4
DISTANT	2.2	1.8	3.0	2.1	1.7	2.8	3.4	2.4	5.4
UNSTAGED	12.5	10.3	16.1	11.8	10.8	13.5	12.2	6.7	21.0 \uparrow
<u>STAGE DISTRIBUTION (%) 1986-92^b</u>									
ALL STAGES									
Number of cases	11,858	7,447	4,411	8,985	5,680	3,305	1,450	904	546
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCALIZED	18	17	21	18	16	21	19	16	22
REGIONAL	31	32	30	31	32	29	29	28	30
DISTANT	36	38	32	36	38	33	39	43	32
UNSTAGED	14	13	17	15	13	17	13	12	16
<u>5-YR RELATIVE SURVIVAL RATES, 1986-92^b</u>									
AGE AT DIAGNOSIS:									
<45	22.7	16.4	33.0	20.0	12.9	33.1	27.9	22.5 \uparrow	37.4 \uparrow
45-54	22.2	15.6	36.2	21.8	15.4	36.5	15.4	10.7	26.1 \uparrow
55-64	20.3	17.3	28.1	17.6	15.8	23.3	25.0	19.4	34.1 \uparrow
65-74	21.4	20.5	23.1	20.5	19.2	23.0	21.2	18.3	26.7 \uparrow
75+	18.4	15.0	21.8	18.1	14.3	21.7	12.5	9.0	16.2
Under 65	21.2	16.6	31.3	19.1	15.3	29.0	23.2	17.8	33.5
65 and over	20.0	18.3	22.4	19.4	17.3	22.2	17.5	15.0	21.3

^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 1993.

Ω The difference in rates between 1974-76 and 1986-92 is statistically significant ($p < .05$).

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

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

- Statistic could not be calculated.

Table XXIII-5
STOMACH CANCER (Invasive)

INCIDENCE, MORTALITY, AND SURVIVAL RATES

By Year of Diagnosis/Death

All Races, Males and Females

Year of Diagnosis/Death

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence																					
SEER	10.2	10.0	9.2	9.5	9.1	9.1	9.4	8.9	8.8	8.7	8.6	8.3	8.1	8.1	8.1	8.1	8.0	7.4	7.7	7.4	7.2
Mortality																					
U.S.	7.0	6.8	6.6	6.4	6.1	6.0	5.9	5.7	5.6	5.5	5.3	5.3	5.1	5.0	4.8	4.7	4.8	4.7	4.7	4.4	4.4
SEER	7.5	7.3	7.5	6.6	6.5	6.6	6.6	6.1	6.2	6.1	5.7	5.8	5.6	5.4	5.1	5.1	5.0	5.0	4.9	4.7	4.6
Relative Survival Rates (SEER)																					
1-year	37.1	38.0	37.1	40.5	39.0	41.0	41.8	41.8	41.0	43.2	45.5	41.9	43.8	45.1	43.7	46.9	46.2	46.4	44.8	46.7	
2-year	23.6	23.5	24.7	25.9	24.9	26.0	26.8	26.5	26.0	28.9	29.5	25.4	28.7	29.4	27.2	32.6	31.3	32.5	30.4		
3-year	18.3	18.1	19.4	21.0	19.6	21.1	20.6	20.5	21.6	23.0	22.6	20.5	22.3	23.8	21.7	26.3	25.0	25.7			
4-year	15.7	15.2	17.1	18.6	17.2	18.3	18.5	17.8	18.9	20.5	19.1	18.0	19.6	21.7	19.4	22.6	22.1				
5-year	13.8	14.0	14.9	16.7	15.9	17.0	17.2	16.3	17.4	18.9	17.2	16.8	18.1	20.3	18.5	21.6					
6-year	13.4	13.0	13.4	15.8	15.3	15.7	16.7	15.9	16.4	18.3	16.1	16.3	17.2	19.4	17.9						
7-year	12.9	12.7	13.3	15.1	15.3	15.4	15.6	15.1	15.7	17.6	15.7	15.7	17.0	19.3							
8-year	12.9	11.9	12.5	14.6	14.5	14.9	15.3	14.1	15.1	17.0	15.5	15.0	16.1								
9-year	12.8	11.7	12.2	14.0	14.4	14.6	15.1	13.9	14.7	17.0	15.3	14.5									
10-year	12.3	11.7	11.7	14.0	13.8	14.6	14.8	13.8	14.7	17.0	15.3										
11-year	12.3	11.7	10.7	14.0	13.7	14.0	14.1	13.5	14.1	16.4											
12-year	12.3	11.7	10.2	14.0	13.6	14.0	13.7	12.8	14.1												
13-year	12.3	11.7	9.9	13.7	13.6	13.8	13.6	12.8													
14-year	12.1	11.7	9.9	13.1	13.2	13.7	12.7														
15-year	12.1	11.7	9.1	13.0	12.9	13.3															
16-year	11.5	11.7	9.1	13.0	12.2																
17-year	10.5	11.7	8.8	12.9																	
18-year	10.0	11.5	8.2																		
19-year	10.0	11.2																			
20-year	10.0																				

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 XXIII-6
STOMACH CANCER (Invasive)

INCIDENCE, MORTALITY, AND SURVIVAL RATES

By Year of Diagnosis/Death

All Races, Males

Year of Diagnosis/Death

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence																					
SEER	15.1	14.5	13.5	13.8	13.1	13.0	13.6	13.5	13.0	13.0	12.5	12.0	11.9	11.9	11.9	12.3	12.1	10.9	11.2	10.8	10.8
Mortality																					
U.S.	10.1	9.9	9.5	9.3	8.9	8.6	8.5	8.2	8.2	7.9	7.7	7.7	7.4	7.4	7.1	6.9	7.1	6.9	6.9	6.3	6.4
SEER	10.8	10.5	10.9	9.8	9.2	9.7	9.4	8.7	9.2	8.9	8.0	8.5	8.5	8.0	7.6	7.6	7.5	7.5	7.2	6.8	6.8
Relative Survival Rates (SEER)																					
1-year	37.7	36.5	36.5	40.8	39.5	38.7	41.1	41.3	38.8	45.2	46.5	39.3	43.3	41.9	42.7	45.9	47.1	46.4	43.1	45.7	
2-year	23.7	21.0	24.1	25.1	24.1	23.5	26.9	25.2	24.6	29.4	29.3	23.5	27.9	26.9	24.8	30.5	30.3	31.7	27.1		
3-year	18.9	15.6	17.8	20.7	18.7	18.8	20.1	19.5	21.0	22.9	21.8	18.2	21.2	21.2	19.4	24.0	22.9	24.5			
4-year	16.0	12.8	15.9	17.9	16.6	16.4	17.3	16.4	17.6	20.6	17.8	16.1	18.7	18.9	16.8	20.0	19.1				
5-year	14.2	11.2	14.0	16.7	14.8	14.9	16.2	14.2	16.0	19.0	16.1	15.2	16.4	17.6	15.6	18.5					
6-year	13.6	11.2	12.0	15.5	14.0	13.6	15.9	13.4	14.6	18.8	14.7	14.8	15.4	16.6	15.4						
7-year	13.3	11.0	12.0	14.7	14.0	13.2	14.5	12.9	14.0	18.4	13.7	14.1	14.7	16.5							
8-year	13.3	10.3	11.4	14.3	13.3	13.2	14.1	12.6	13.0	17.5	13.7	13.4	13.9								
9-year	13.3	10.2	11.2	14.3	13.3	13.2	13.7	12.4	12.4	17.5	13.4	13.1									
10-year	13.3	10.2	10.6	14.3	13.0	13.2	13.1	12.1	12.4	17.5	13.4										
11-year	13.3	10.2	9.6	14.3	13.0	13.0	12.9	11.8	12.0	17.5											
12-year	13.3	10.2	8.9	14.3	13.0	13.0	12.6	10.6	11.9												
13-year	13.3	10.2	8.7	13.8	13.0	13.0	12.5	10.6													
14-year	13.3	10.2	8.7	13.6	12.8	12.8	10.9														
15-year	13.3	10.2	7.6	13.0	12.6	12.7															
16-year	13.3	10.2	7.3	13.0	11.7																
17-year	12.3	10.2	6.8	13.0																	
18-year	11.8	10.2	6.4																		
19-year	11.8	10.2																			
20-year	11.8																				

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 XXIII-7
STOMACH CANCER (Invasive)

INCIDENCE, MORTALITY, AND SURVIVAL RATES

By Year of Diagnosis/Death

All Races, Females

Year of Diagnosis/Death

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993
Incidence																					
SEER	6.6	6.5	6.1	6.3	6.0	6.2	6.3	5.4	5.6	5.5	5.7	5.6	5.4	5.3	5.3	5.0	4.9	4.8	5.2	4.7	4.5
Mortality																					
U.S.	4.8	4.7	4.5	4.3	4.1	4.1	4.0	3.9	3.8	3.7	3.6	3.5	3.4	3.2	3.2	3.1	3.1	3.1	3.0	3.0	2.9
SEER	5.1	5.0	5.0	4.3	4.5	4.3	4.6	4.2	4.1	4.0	3.9	3.8	3.6	3.5	3.4	3.2	3.2	3.2	3.1	3.1	2.9
Relative Survival Rates (SEER)																					
1-year	35.9	40.3	37.9	40.2	38.2	44.6	42.9	42.6	44.6	39.9	43.9	45.9	44.7	50.4	45.4	48.6	44.8	46.3	47.5	48.5	
2-year	23.4	27.7	25.6	27.4	26.2	29.8	26.6	29.1	28.2	28.1	29.7	28.3	29.9	33.7	31.3	36.2	33.2	33.9	35.6		
3-year	17.3	22.2	21.9	21.6	21.0	24.8	21.2	22.3	22.6	23.1	23.8	24.1	24.1	28.0	25.5	30.4	28.8	27.6			
4-year	15.2	19.1	19.0	19.7	18.2	21.1	20.3	20.5	21.1	20.3	21.2	20.9	21.2	26.3	23.7	27.3	27.5				
5-year	13.1	18.5	16.3	16.8	17.6	20.2	18.8	20.1	19.8	18.8	19.1	19.2	20.7	24.9	23.4	27.0					
6-year	13.0	16.0	15.5	16.3	17.3	18.9	17.8	20.1	19.2	17.4	18.5	18.7	20.2	24.0	22.1						
7-year	12.1	15.6	15.2	15.7	17.3	18.8	17.2	19.1	18.6	16.4	18.5	18.0	20.2	23.7							
8-year	12.1	14.5	14.2	15.0	16.3	17.1	17.1	17.0	18.5	16.1	18.2	17.3	19.6								
9-year	11.8	14.1	13.7	13.5	15.8	16.1	17.1	16.7	18.3	15.7	18.2	16.6									
10-year	10.9	14.1	13.5	13.3	14.9	16.1	17.1	16.7	18.3	15.3	18.2										
11-year	10.5	14.1	12.3	13.3	14.8	15.6	15.8	16.7	17.5	14.4											
12-year	10.1	14.1	12.2	13.3	13.9	15.4	15.3	16.7	17.5												
13-year	10.0	13.7	11.7	13.3	13.3	15.1	15.1	16.1													
14-year	10.0	12.9	11.7	12.3	13.3	15.0	15.1														
15-year	10.0	12.6	11.4	12.3	13.3	14.1															
16-year	8.9	12.3	11.4	12.3	13.0																
17-year	8.1	12.3	11.4	12.3																	
18-year	7.6	9.8	10.8																		
19-year	7.5	9.8																			
20-year	7.5																				

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 XXIII-8
STOMACH 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

SEER Areas, 1991-93

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	0.00	1.24	0.00	0.00	0.00	0.77
10	0.00	0.00	0.02	1.26	0.00	0.00	0.01	0.78
20	0.00	0.02	0.07	1.27	0.00	0.01	0.03	0.78
30	0.01	0.06	0.21	1.29	0.01	0.03	0.10	0.78
40	0.05	0.20	0.51	1.31	0.02	0.09	0.23	0.78
50	0.15	0.48	0.92	1.31	0.07	0.21	0.45	0.78
60	0.35	0.84	1.17	1.26	0.15	0.40	0.66	0.74

Lifetime Risk of Being Diagnosed = 1.24%
 Lifetime Risk of Dying = 0.81%

Lifetime Risk of Being Diagnosed = 0.77%
 Lifetime Risk of Dying = 0.53%

Whites

Current Age	Males				Females			
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually
0	0.00	0.00	0.00	1.10	0.00	0.00	0.00	0.67
10	0.00	0.00	0.01	1.11	0.00	0.00	0.01	0.67
20	0.00	0.01	0.05	1.11	0.00	0.01	0.02	0.67
30	0.01	0.05	0.18	1.13	0.01	0.02	0.08	0.67
40	0.04	0.17	0.44	1.14	0.01	0.07	0.18	0.67
50	0.13	0.41	0.81	1.14	0.06	0.17	0.39	0.67
60	0.30	0.73	1.03	1.09	0.12	0.35	0.57	0.64

Lifetime Risk of Being Diagnosed = 1.10%
 Lifetime Risk of Dying = 0.72%

Lifetime Risk of Being Diagnosed = 0.67%
 Lifetime Risk of Dying = 0.47%

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	1.47	0.00	0.00	0.01	0.97
10	0.00	0.01	0.03	1.51	0.00	0.01	0.03	0.99
20	0.01	0.03	0.12	1.53	0.01	0.03	0.05	0.99
30	0.02	0.12	0.35	1.59	0.02	0.04	0.14	0.99
40	0.10	0.35	0.78	1.66	0.02	0.12	0.26	0.99
50	0.27	0.75	1.26	1.72	0.10	0.25	0.60	1.02
60	0.58	1.18	1.52	1.74	0.16	0.54	0.83	1.01

Lifetime Risk of Being Diagnosed = 1.47%
 Lifetime Risk of Dying = 1.01%

Lifetime Risk of Being Diagnosed = 0.97%
 Lifetime Risk of Dying = 0.64%

Table XXIII-9
STOMACH CANCER (Invasive)AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY^δ RATES BY STATE, 1989-93

All Races, Males and Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	4.6	0.02							
High Five States									
Hawaii	9.1 ^{⊕*}	0.38	(01)	97.8					
District of Columbia	6.8 ^{⊕*}	0.44	(02)	47.8					
New Jersey	5.9 ^{⊕*}	0.11	(03)	28.3					
Rhode Island	5.8 [*]	0.30	(04)	26.1					
New York	5.7 ^{⊕*}	0.07	(05)	23.9					
Low Five States									
Oregon	3.5 ^{⊕*}	0.14	(47)	-23.9					
Nebraska	3.4 ^{⊕*}	0.18	(48)	-26.1					
Indiana	3.4 ^{⊕*}	0.10	(49)	-26.1					
Idaho	3.2 ^{⊕*}	0.23	(50)	-30.4					
Iowa	3.1 ^{⊕*}	0.13	(51)	-32.6					
Alabama	4.2	0.13	(28)	-8.7	Montana	4.0	0.28	(32)	-13.0
Alaska	5.2	0.62	(07)	13.0	Nebraska	3.4 ^{⊕*}	0.18	(48)	-26.1
Arizona	3.8 ^{⊕*}	0.13	(40)	-17.4	Nevada	3.9 [*]	0.25	(37)	-15.2
Arkansas	4.2	0.16	(25)	-8.7	New Hampshire	3.9 [*]	0.25	(36)	-15.2
California	5.1 [⊕]	0.06	(09)	10.9	New Jersey	5.9 ^{⊕*}	0.11	(03)	28.3
Colorado	4.2	0.16	(27)	-8.7	New Mexico	5.0	0.25	(12)	8.7
Connecticut	5.3 [*]	0.16	(06)	15.2	New York	5.7 ^{⊕*}	0.07	(05)	23.9
Delaware	4.6	0.34	(19)	0.0	North Carolina	4.3	0.10	(24)	-6.5
District of Columbia	6.8 ^{⊕*}	0.44	(02)	47.8	North Dakota	4.9	0.34	(14)	6.5
Florida	4.3	0.07	(23)	-6.5	Ohio	4.2	0.08	(26)	-8.7
Georgia	4.5	0.12	(20)	-2.2	Oklahoma	3.9 [*]	0.14	(38)	-15.2
Hawaii	9.1 ^{⊕*}	0.38	(01)	97.8	Oregon	3.5 ^{⊕*}	0.14	(47)	-23.9
Idaho	3.2 ^{⊕*}	0.23	(50)	-30.4	Pennsylvania	4.9	0.08	(13)	6.5
Illinois	4.9	0.09	(15)	6.5	Rhode Island	5.8 [*]	0.30	(04)	26.1
Indiana	3.4 ^{⊕*}	0.10	(49)	-26.1	South Carolina	4.8	0.16	(17)	4.3
Iowa	3.1 ^{⊕*}	0.13	(51)	-32.6	South Dakota	3.9 [*]	0.30	(35)	-15.2
Kansas	3.6 ^{⊕*}	0.16	(44)	-21.7	Tennessee	3.8 ^{⊕*}	0.11	(41)	-17.4
Kentucky	3.9 [*]	0.13	(34)	-15.2	Texas	4.7	0.07	(18)	2.2
Louisiana	5.1	0.15	(08)	10.9	Utah	3.5 ^{⊕*}	0.22	(46)	-23.9
Maine	4.1	0.23	(29)	-10.9	Vermont	4.0	0.35	(33)	-13.0
Maryland	4.9	0.14	(16)	6.5	Virginia	4.1	0.11	(30)	-10.9
Massachusetts	5.1	0.12	(10)	10.9	Washington	4.0	0.12	(31)	-13.0
Michigan	4.4	0.09	(21)	-4.3	West Virginia	3.8 [*]	0.18	(39)	-17.4
Minnesota	3.8 ^{⊕*}	0.12	(42)	-17.4	Wisconsin	4.4	0.12	(22)	-4.3
Mississippi	5.0	0.18	(11)	8.7	Wyoming	3.6 [*]	0.39	(43)	-21.7
Missouri	3.6 ^{⊕*}	0.11	(45)	-21.7					

^δ 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 15% or more.

⊕ Difference between state rate and total U.S. rate is statistically significant (p<=.0002).

Table XXIII-10
STOMACH CANCER (Invasive)AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY^δ RATES BY STATE, 1989-93

All Races, Males

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	6.7	0.03			Montana	6.2	0.53	(26)	-7.5
High Five States					Nebraska	5.1*	0.35	(48)	-23.9
Hawaii	11.6⊕*	0.63	(01)	73.1	Nevada	5.5*	0.44	(40)	-17.9
District of Columbia	10.2*	0.86	(02)	52.2	New Hampshire	6.2	0.49	(27)	-7.5
New Jersey	8.6⊕*	0.21	(03)	28.4	New Jersey	8.6⊕*	0.21	(03)	28.4
New York	8.5⊕*	0.14	(04)	26.9	New Mexico	7.2	0.45	(15)	7.5
Rhode Island	8.5*	0.57	(05)	26.9	New York	8.5⊕*	0.14	(04)	26.9
Low Five States					North Carolina	6.2	0.20	(24)	-7.5
Indiana	5.1⊕*	0.19	(47)	-23.9	North Dakota	6.7	0.60	(19)	0.0
Nebraska	5.1*	0.35	(48)	-23.9	Ohio	6.4	0.15	(23)	-4.5
Iowa	4.8⊕*	0.25	(49)	-28.4	Oklahoma	5.8	0.26	(35)	-13.4
Utah	4.7⊕*	0.38	(50)	-29.9	Oregon	5.2⊕*	0.26	(45)	-22.4
Idaho	4.3⊕*	0.41	(51)	-35.8	Pennsylvania	7.5	0.15	(07)	11.9
Alabama	6.0	0.24	(32)	-10.4	Rhode Island	8.5*	0.57	(05)	26.9
Alaska	7.4	1.10	(09)	10.4	South Carolina	7.2	0.31	(14)	7.5
Arizona	5.4⊕*	0.24	(42)	-19.4	South Dakota	6.0	0.55	(30)	-10.4
Arkansas	6.0	0.30	(31)	-10.4	Tennessee	5.6*	0.22	(39)	-16.4
California	7.1	0.11	(16)	6.0	Texas	6.8	0.14	(18)	1.5
Colorado	5.9	0.29	(34)	-11.9	Utah	4.7⊕*	0.38	(50)	-29.9
Connecticut	8.2*	0.31	(06)	22.4	Vermont	5.3*	0.63	(44)	-20.9
Delaware	6.9	0.66	(17)	3.0	Virginia	6.0	0.21	(29)	-10.4
District of Columbia	10.2*	0.86	(02)	52.2	Washington	5.9	0.22	(33)	-11.9
Florida	6.2	0.12	(25)	-7.5	West Virginia	5.8	0.33	(36)	-13.4
Georgia	6.6	0.23	(20)	-1.5	Wisconsin	6.4	0.22	(22)	-4.5
Hawaii	11.6⊕*	0.63	(01)	73.1	Wyoming	5.2*	0.71	(46)	-22.4
Idaho	4.3⊕*	0.41	(51)	-35.8					
Illinois	7.3	0.16	(12)	9.0					
Indiana	5.1⊕*	0.19	(47)	-23.9					
Iowa	4.8⊕*	0.25	(49)	-28.4					
Kansas	5.7	0.30	(37)	-14.9					
Kentucky	5.7	0.25	(38)	-14.9					
Louisiana	7.3	0.28	(13)	9.0					
Maine	6.1	0.44	(28)	-9.0					
Maryland	7.3	0.27	(11)	9.0					
Massachusetts	7.4	0.22	(10)	10.4					
Michigan	6.5	0.17	(21)	-3.0					
Minnesota	5.4⊕*	0.22	(43)	-19.4					
Mississippi	7.5	0.35	(08)	11.9					
Missouri	5.4⊕*	0.20	(41)	-19.4					

^δ 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 15% or more.

⊕ Difference between state rate and total U.S. rate is statistically significant (p<=.0002).

Table XXIII-11
STOMACH CANCER (Invasive)AVERAGE ANNUAL AGE-ADJUSTED CANCER MORTALITY^δ RATES BY STATE, 1989-93

All Races, Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	3.0	0.02							
High Five States									
Hawaii	6.8 ^{⊕*}	0.46	(01)	126.7	Montana	2.2*	0.29	(44)	-26.7
District of Columbia	4.5*	0.44	(02)	50.0	Nebraska	2.1*	0.19	(48)	-30.0
Rhode Island	3.9*	0.31	(03)	30.0	Nevada	2.6	0.27	(33)	-13.3
New Jersey	3.9 ^{⊕*}	0.12	(04)	30.0	New Hampshire	2.3*	0.25	(43)	-23.3
New York	3.8 ^{⊕*}	0.08	(05)	26.7	New Jersey	3.9 ^{⊕*}	0.12	(04)	30.0
Low Five States					New Mexico	3.3	0.28	(10)	10.0
Indiana	2.1 ^{⊕*}	0.11	(47)	-30.0	New York	3.8 ^{⊕*}	0.08	(05)	26.7
Nebraska	2.1*	0.19	(48)	-30.0	North Carolina	2.8	0.11	(25)	-6.7
Kansas	2.1 ^{⊕*}	0.16	(49)	-30.0	North Dakota	3.5*	0.40	(07)	16.7
Oregon	2.1 ^{⊕*}	0.14	(50)	-30.0	Ohio	2.7	0.08	(31)	-10.0
Iowa	1.9 ^{⊕*}	0.13	(51)	-36.7	Oklahoma	2.5*	0.15	(39)	-16.7
					Oregon	2.1 ^{⊕*}	0.14	(50)	-30.0
					Pennsylvania	3.1	0.08	(16)	3.3
Alabama	2.9	0.14	(21)	-3.3	Rhode Island	3.9*	0.31	(03)	30.0
Alaska	3.1	0.66	(18)	3.3	South Carolina	3.2	0.17	(14)	6.7
Arizona	2.6	0.14	(34)	-13.3	South Dakota	2.4*	0.31	(42)	-20.0
Arkansas	2.9	0.18	(24)	-3.3	Tennessee	2.5*	0.12	(40)	-16.7
California	3.5 ^{⊕*}	0.06	(08)	16.7	Texas	3.1	0.08	(17)	3.3
Colorado	2.9	0.17	(22)	-3.3	Utah	2.6	0.25	(35)	-13.3
Connecticut	3.3	0.17	(11)	10.0	Vermont	2.9	0.40	(23)	-3.3
Delaware	2.8	0.35	(27)	-6.7	Virginia	2.7	0.12	(30)	-10.0
District of Columbia	4.5*	0.44	(02)	50.0	Washington	2.6	0.13	(36)	-13.3
Florida	2.8	0.07	(26)	-6.7	West Virginia	2.5*	0.19	(38)	-16.7
Georgia	3.0	0.13	(19)	0.0	Wisconsin	2.8	0.13	(28)	-6.7
Hawaii	6.8 ^{⊕*}	0.46	(01)	126.7	Wyoming	2.4*	0.43	(41)	-20.0
Idaho	2.2*	0.26	(46)	-26.7					
Illinois	3.1	0.09	(15)	3.3					
Indiana	2.1 ^{⊕*}	0.11	(47)	-30.0					
Iowa	1.9 ^{⊕*}	0.13	(51)	-36.7					
Kansas	2.1 ^{⊕*}	0.16	(49)	-30.0					
Kentucky	2.7	0.15	(29)	-10.0					
Louisiana	3.6*	0.16	(06)	20.0					
Maine	2.6	0.24	(32)	-13.3					
Maryland	3.2	0.15	(13)	6.7					
Massachusetts	3.4	0.12	(09)	13.3					
Michigan	2.9	0.10	(20)	-3.3					
Minnesota	2.5*	0.13	(37)	-16.7					
Mississippi	3.2	0.19	(12)	6.7					
Missouri	2.2 ^{⊕*}	0.11	(45)	-26.7					

^δ 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 15% or more.

⊕ Difference between state rate and total U.S. rate is statistically significant (p<=.0002).

Table XXIII-12
STOMACH CANCER (Invasive)AGE-ADJUSTED SEER INCIDENCE RATES§, SEER MORTALITY RATESδ, AND 5-YEAR RELATIVE SURVIVAL RATESϕ
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER INCIDENCE RATES§, 1989-93</u>									
REGISTRY									
Standard 9 registries	7.5	11.1	4.8	6.5	9.6	4.0	12.0	18.3	7.5
San Francisco-Oakland	8.5	12.8	5.3	7.1	11.0	4.1	14.2	20.8	9.4
Connecticut	8.3	12.2	5.4	8.0	11.8	5.2	12.7	19.2	8.1
Metropolitan Detroit	8.2	12.5	5.2	7.3	11.3	4.5	11.8	17.7	7.7
Hawaii	15.5	20.3	11.3	8.5	11.1	6.1	-	-	-
Iowa	5.3	8.2	3.1	5.2	8.0	3.1	-	-	-
New Mexico	6.9	9.8	4.7	6.8	9.6	4.5	-	-	-
Seattle-Puget Sound	6.3	9.4	3.8	5.7	8.5	3.4	12.4	17.7	7.6
Utah	5.2	7.2	3.5	5.1	7.1	3.4	-	-	-
Metropolitan Atlanta	6.0	9.0	4.0	4.6	6.6	3.3	10.0	16.8	5.7
San Jose-Monterey	7.9	11.5	5.1	7.3	11.0	4.5	7.7	10.0	6.2
Los Angeles	9.2	13.2	6.3	8.0	11.5	5.4	11.8	16.8	8.2
<u>SEER MORTALITY RATESδ, 1989-93</u>									
REGISTRY									
Standard 9 registries	4.8	7.2	3.1	4.1	6.2	2.7	8.4	13.2	5.0
San Francisco-Oakland	5.5	8.1	3.6	4.7	6.9	3.1	9.1	13.4	6.0
Connecticut	5.3	8.2	3.3	5.2	7.9	3.2	8.3	12.8	5.4
Metropolitan Detroit	5.1	7.8	3.3	4.4	6.7	2.8	7.8	12.2	4.7
Hawaii	9.1	11.6	6.8	5.3	7.9	2.8	-	-	-
Iowa	3.1	4.8	1.9	3.1	4.7	1.9	-	-	-
New Mexico	5.0	7.2	3.3	4.9	7.2	3.1	-	-	-
Seattle-Puget Sound	4.3	6.3	2.6	3.8	5.6	2.3	10.1	15.6	5.3
Utah	3.5	4.7	2.6	3.4	4.5	2.6	-	-	-
Metropolitan Atlanta	4.4	6.8	2.7	3.0	4.6	2.0	9.0	15.7	5.0
San Jose-Monterey	5.1	7.1	3.7	4.8	6.6	3.4	7.8	9.2	6.4
Los Angeles	6.0	8.4	4.3	5.2	7.1	3.9	8.5	12.7	5.6
<u>SURVIVAL RATESϕ, 1986-92</u>									
REGISTRY									
Standard 9 registries	20.5	17.6	25.3	19.3	16.4	24.2	20.3	16.3	26.6
San Francisco-Oakland	19.3	15.4	25.3	18.0	14.6	23.5	25.7	19.2	34.0†
Connecticut	18.9	16.5	23.1	19.0	16.9	22.6	19.1	12.6	30.6†
Metropolitan Detroit	19.5	16.5	24.4	20.1	15.9	26.7	18.0	17.9	18.1
Hawaii	31.5	30.0	33.6	18.8	16.4	22.6†	-	-	-
Iowa	18.6	16.4	22.9	18.5	16.3	22.9	-	-	-
New Mexico	22.1	19.3	26.6	23.6	19.9	29.8	-	-	-
Seattle-Puget Sound	20.4	18.2	24.9	20.5	18.3	24.2	13.0†	11.7†	-
Utah	17.6	15.1	21.5	16.7	14.6	19.9	-	-	-
Metropolitan Atlanta	18.0	13.2	25.8	16.4	13.4	21.8	19.2	10.1	30.3†

Note: San Jose-Monterey and Los Angeles are new SEER areas as of 1992 and their data are only used in this table and not other tables in this section.

§ SEER Program. Incidence rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.

δ NCHS public use tape. Mortality rates are per 100,000 and are age-adjusted to the 1970 U.S. standard population.

ϕ Survival rates are relative rates expressed as percents and are based on follow-up of patients through 1993.

† 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 or populations are inadequate.

SEER Incidence and U.S. Mortality Stomach, Male By Race

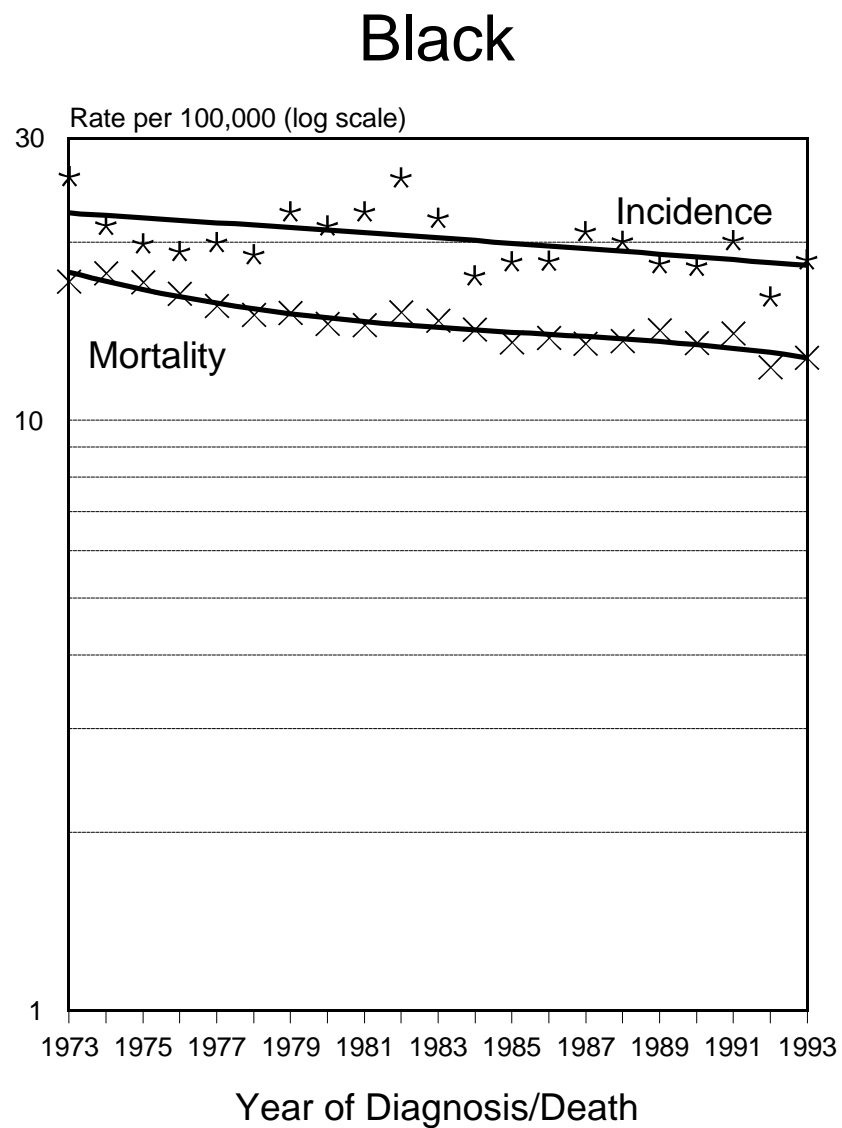
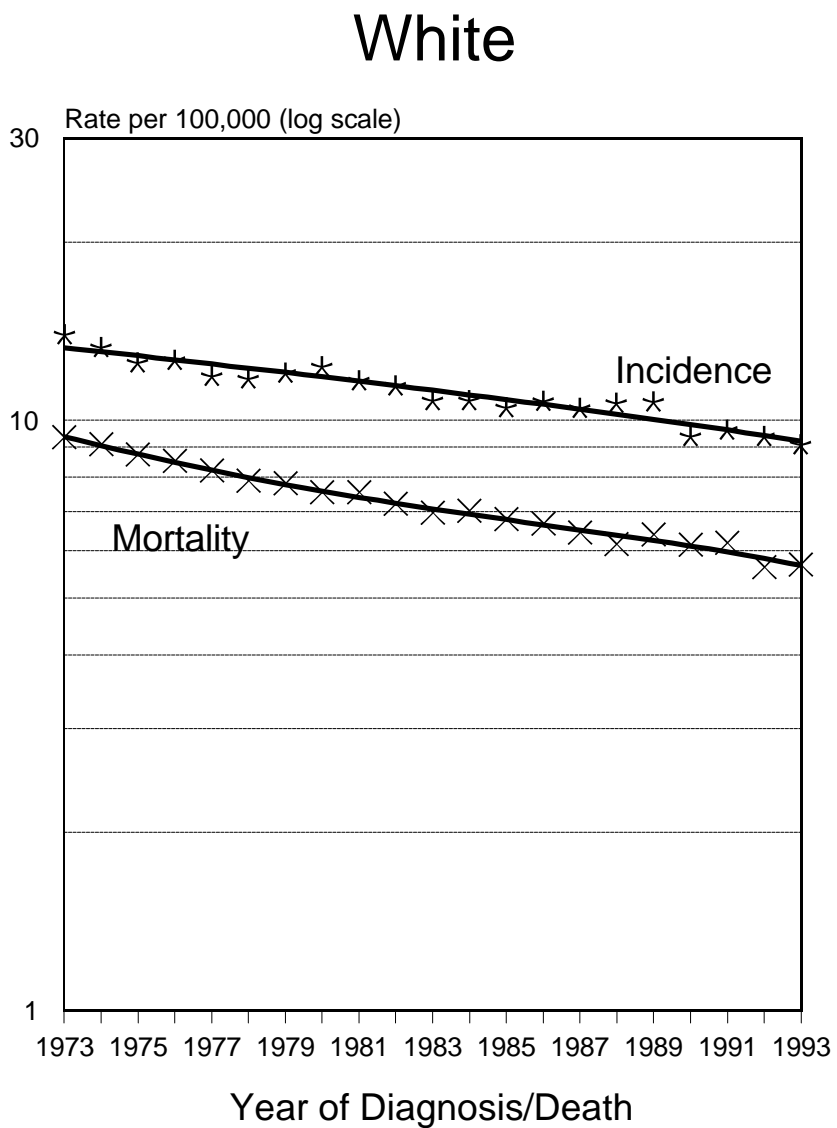


Figure XXIII-1

SEER Incidence and U.S. Mortality Stomach, Female By Race

White

Black

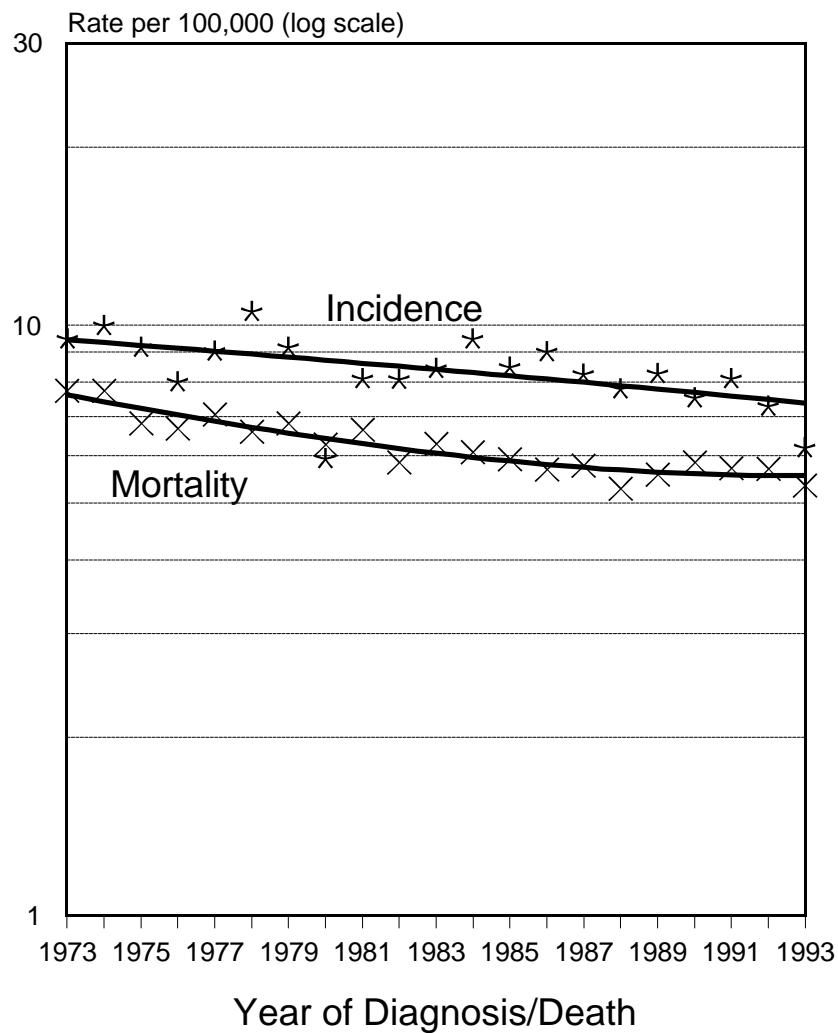
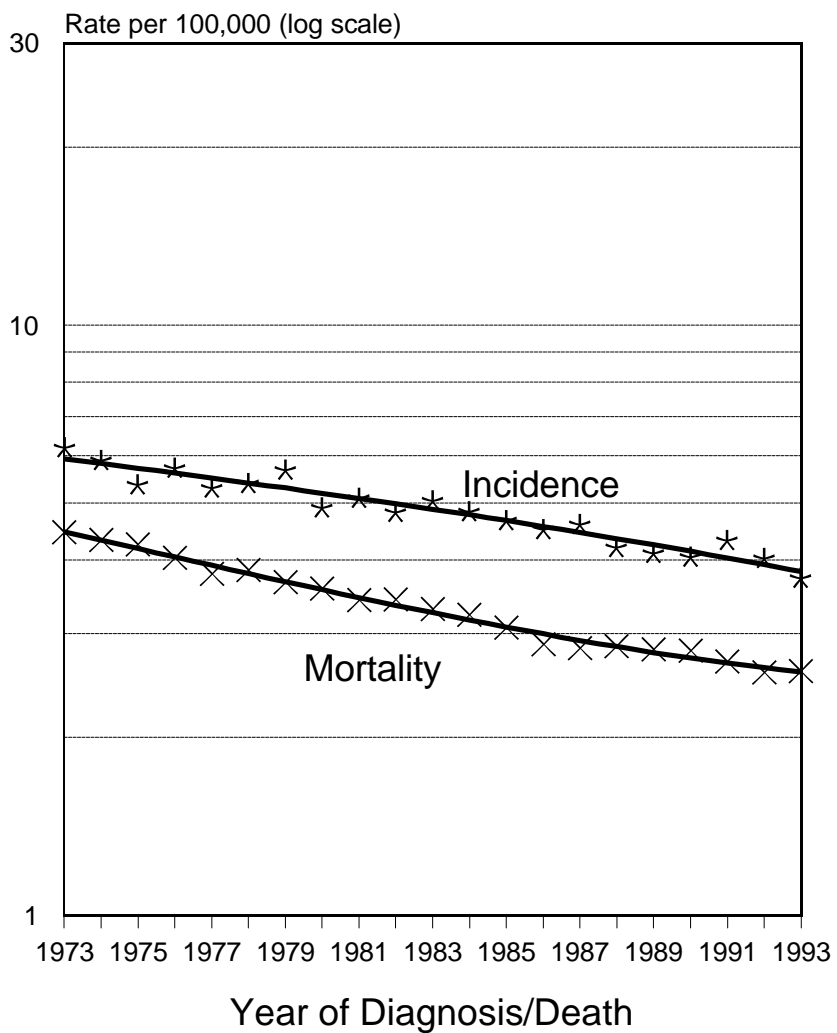


Figure XXIII-2