

Table XXV-1  
THYROID CANCER (Invasive)

TRENDS IN SEER INCIDENCE<sup>a</sup> AND U.S. MORTALITY<sup>b</sup> USING THE JOINPOINT REGRESSION PROGRAM, 1975-2000  
WITH UP TO THREE JOINPOINTS BY RACE AND SEX

		<u>Joinpoint Segment 1</u>		<u>Joinpoint Segment 2</u>		<u>Joinpoint Segment 3</u>		<u>Joinpoint Segment 4</u>	
		Year	APC	Year	APC	Year	APC	Year	APC
<u>SEER Cancer Incidence<sup>a</sup></u>									
All Races	Male and Female	1975-1977	6.0	1977-1980	-6.1	1980-1993	2.1 <sup>c</sup>	1993-2000	3.6 <sup>c</sup>
All Races	Male	1975-1980	-4.9 <sup>c</sup>	1980-2000	1.9 <sup>c</sup>				
All Races	Female	1975-1981	-1.3	1981-1993	2.2 <sup>c</sup>	1993-2000	4.3 <sup>c</sup>		
White	Male and Female	1975-1977	7.1	1977-1980	-6.1	1980-1993	2.4 <sup>c</sup>	1993-2000	4.0 <sup>c</sup>
White	Male	1975-1977	9.6	1977-1980	-9.2	1980-2000	2.6 <sup>c</sup>		
White	Female	1975-1981	-1.1	1981-1993	2.4 <sup>c</sup>	1993-2000	4.7 <sup>c</sup>		
Black	Male and Female	1975-2000	1.5 <sup>c</sup>						
Black	Male	1975-2000	1.3						
Black	Female	1975-1988	-1.1	1988-2000	4.2 <sup>c</sup>				
<u>U.S. Cancer Mortality<sup>b</sup></u>									
All Races	Male and Female	1975-1985	-2.6 <sup>c</sup>	1985-2000	0.2				
All Races	Male	1975-1983	-2.8 <sup>c</sup>	1983-2000	1.0 <sup>c</sup>				
All Races	Female	1975-1987	-2.6 <sup>c</sup>	1987-2000	0.0				
White	Male and Female	1975-1985	-2.8 <sup>c</sup>	1985-2000	0.2				
White	Male	1975-1983	-2.8 <sup>c</sup>	1983-2000	1.0 <sup>c</sup>				
White	Female	1975-1988	-2.7 <sup>c</sup>	1988-2000	0.1				
Black	Male and Female	1975-2000	-0.6 <sup>c</sup>						
Black	Male	1975-2000	-0.5						
Black	Female	1975-2000	-0.8 <sup>c</sup>						

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 U.S. standard population by 5-year age groups using the Joinpoint Regression Program.

<sup>a</sup> Trends are from the SEER 9 areas.

<sup>b</sup> Trends are from the NCHS public use data file.

<sup>c</sup> The APC is significantly different from zero (p<.05).

Table XXV-2  
 THYROID CANCER (Invasive)

SEER INCIDENCE RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES<sup>a</sup>, 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:									
1975	4.8	3.1	6.4	4.6	2.8	6.3	2.9	-	4.2
1976	4.8	2.9	6.6	4.7	2.9	6.4	3.4	-	5.0
1977	5.4	3.5	7.3	5.4	3.4	7.2	3.7	-	5.3
1978	5.1	3.1	6.9	4.9	3.0	6.8	2.9	-	4.0
1979	4.5	2.7	6.2	4.4	2.6	6.2	3.2	-	4.3
1980	4.3	2.4	6.1	4.3	2.3	6.2	2.3	-	3.4
1981	4.4	2.5	6.2	4.4	2.5	6.2	2.5	-	3.6
1982	4.6	3.0	6.1	4.5	2.9	6.1	3.3	-	4.3
1983	4.7	2.8	6.5	4.7	2.6	6.7	3.0	-	3.7
1984	4.8	2.6	6.9	4.7	2.6	6.8	3.0	-	4.0
1985	5.1	3.1	7.1	5.1	3.1	7.0	2.8	-	3.6
1986	5.3	3.1	7.5	5.2	3.1	7.4	3.3	-	5.0
1987	5.0	2.8	7.1	5.0	2.9	7.1	2.8	-	4.3
1988	4.9	3.0	6.9	4.9	3.0	6.8	2.5	-	3.2
1989	5.3	3.0	7.6	5.5	3.2	7.7	2.5	-	3.9
1990	5.5	2.9	7.9	5.5	2.9	8.0	3.8	-	5.0
1991	5.5	3.2	7.6	5.6	3.3	7.9	3.1	-	4.1
1992	5.8	3.5	8.1	5.9	3.5	8.2	4.1	3.1	5.0
1993	5.6	3.6	7.6	5.7	3.7	7.7	3.3	-	4.3
1994	6.1	3.4	8.7	6.2	3.4	8.9	3.8	-	5.3
1995	6.2	3.4	8.9	6.4	3.6	9.2	2.9	-	4.3
1996	6.4	3.4	9.4	6.7	3.6	9.8	3.7	-	5.5
1997	6.7	3.6	9.7	7.0	3.7	10.2	3.9	2.3	5.2
1998	6.9	3.7	9.9	7.1	3.9	10.2	3.8	-	5.6
1999	7.2	3.8	10.5	7.4	4.0	10.7	4.5	-	6.8
2000	7.4	4.0	10.8	7.8	4.2	11.4	4.5	-	6.4
<u>AGE-ADJUSTED RATES, 1996-2000</u>									
AGE AT DIAGNOSIS:									
All ages	6.9	3.7	10.1	7.2	3.9	10.5	4.1	1.9	5.9
Under 65	6.4	3.1	9.8	6.8	3.3	10.3	3.5	1.3	5.4
65 and over	10.3	7.8	12.2	10.1	7.8	11.7	8.0	-	9.4
All ages (world std.) <sup>b</sup>	5.7	2.9	8.4	6.0	3.1	8.8	3.2	1.4	4.8
<u>AGE-SPECIFIC RATES, 1996-2000</u>									
AGE AT DIAGNOSIS:									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	0.4	-	0.7	0.4	-	-	-	-	-
15-19	1.8	0.6	3.0	2.0	-	3.4	-	-	-
20-24	4.4	1.2	7.7	4.9	1.5	8.5	-	-	-
25-29	7.1	2.8	11.5	7.8	3.0	12.9	2.8	-	4.3
30-34	8.1	2.7	13.5	8.5	2.9	14.4	4.4	-	7.0
35-39	9.6	3.8	15.4	10.6	4.3	17.1	3.9	-	6.5
40-44	10.1	4.3	15.7	10.6	4.8	16.5	4.8	-	7.5
45-49	10.9	5.6	16.1	11.4	6.0	16.8	5.6	-	8.6
50-54	11.7	6.8	16.4	11.9	7.3	16.4	7.5	-	11.2
55-59	11.9	8.0	15.7	11.9	8.2	15.4	8.7	-	11.6
60-64	11.6	8.1	14.7	11.2	8.2	14.0	10.1	-	16.3
65-69	11.8	9.3	13.9	11.7	10.0	13.2	-	-	-
70-74	10.5	7.1	13.1	10.0	7.0	12.4	9.5	-	-
75-79	10.6	7.8	12.6	10.9	8.2	12.8	-	-	-
80-84	8.9	6.8	10.2	8.3	6.0	9.6	-	-	-
85+	7.8	6.9	8.1	7.2	6.3	7.5	-	-	-

<sup>a</sup> SEER 9 areas. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups, unless noted.

<sup>b</sup> SEER 9 areas. Rates are per 100,000 and are age-adjusted to the world standard population.

- Statistic not shown. Rate based on less than 25 cases for the time interval.

Table XXV-3  
 THYROID CANCER (Invasive)

U.S. DEATH RATES, AGE-ADJUSTED AND AGE-SPECIFIC RATES<sup>a</sup>, 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>									
1975	0.5	0.4	0.6	0.5	0.4	0.6	0.5	-	0.6
1976	0.6	0.5	0.6	0.6	0.5	0.6	0.5	0.4	0.6
1977	0.6	0.5	0.6	0.6	0.5	0.6	0.7	0.5	0.7
1978	0.5	0.4	0.6	0.6	0.5	0.6	0.5	-	0.6
1979	0.5	0.4	0.6	0.5	0.5	0.6	0.5	-	0.6
1980	0.5	0.4	0.5	0.5	0.4	0.5	0.4	-	0.5
1981	0.5	0.4	0.5	0.5	0.4	0.5	0.5	-	0.6
1982	0.5	0.4	0.5	0.5	0.4	0.5	0.5	0.4	0.5
1983	0.4	0.3	0.5	0.4	0.3	0.5	0.4	-	0.5
1984	0.5	0.4	0.5	0.5	0.4	0.5	0.5	-	0.6
1985	0.4	0.4	0.5	0.4	0.4	0.5	0.5	0.3	0.6
1986	0.5	0.4	0.5	0.5	0.4	0.5	0.5	0.3	0.6
1987	0.5	0.4	0.5	0.4	0.4	0.5	0.5	0.3	0.6
1988	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.3	0.5
1989	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.4	0.6
1990	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.3	0.5
1991	0.4	0.4	0.5	0.4	0.4	0.4	0.5	0.4	0.6
1992	0.5	0.4	0.5	0.5	0.4	0.5	0.4	0.3	0.5
1993	0.5	0.4	0.5	0.5	0.4	0.5	0.5	-	0.6
1994	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4
1995	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.5
1996	0.5	0.4	0.5	0.5	0.4	0.5	0.4	0.3	0.5
1997	0.5	0.4	0.5	0.5	0.5	0.4	0.5	0.4	0.6
1998	0.4	0.4	0.5	0.4	0.4	0.5	0.4	0.3	0.5
1999	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.4	0.5
2000	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.3	0.6
<u>AGE-ADJUSTED RATES, 1996-2000</u>									
<u>AGE AT DEATH:</u>									
All ages	0.5	0.4	0.5	0.5	0.4	0.5	0.5	0.3	0.5
Under 65	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2
65 and over	2.7	2.4	2.7	2.6	2.5	2.7	2.6	1.7	3.1
All ages (world std.) <sup>b</sup>	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3
<u>AGE-SPECIFIC RATES, 1996-2000</u>									
<u>AGE AT DEATH:</u>									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	0.0	-	-	0.0	-	-	-	-	-
35-39	0.1	0.1	0.1	0.1	-	-	-	-	-
40-44	0.1	0.1	0.1	0.1	0.1	0.1	-	-	-
45-49	0.2	0.2	0.2	0.2	0.2	0.2	-	-	-
50-54	0.4	0.4	0.3	0.3	0.4	0.3	0.5	-	-
55-59	0.6	0.6	0.6	0.6	0.7	0.6	0.6	-	-
60-64	1.0	1.0	1.0	1.0	1.1	0.9	1.0	-	1.1
65-69	1.5	1.6	1.4	1.5	1.7	1.3	1.5	-	1.7
70-74	2.0	1.9	2.0	1.9	2.0	1.9	2.1	1.7	2.3
75-79	2.9	2.6	3.0	2.8	2.7	2.9	3.2	-	4.1
80-84	3.8	3.3	4.1	3.8	3.3	4.0	3.0	-	3.6
85+	4.9	4.0	5.3	4.9	4.0	5.3	4.6	-	5.2

<sup>a</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups, unless noted.

<sup>b</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the world standard population.

- Statistic not shown. Rate based on less than 25 cases for the time interval.

Table XXV-4  
 THYROID 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:									
1960-1963 <sup>a</sup>	-	-	-	83	75	87	-	-	-
1970-1973 <sup>a</sup>	-	-	-	86	82	87	-	-	-
1974-1976 <sup>b</sup>	92.2	90.6	92.7	92.2	90.8	92.6	87.9	76.8 <sup>e</sup>	90.8
1977-1979 <sup>b</sup>	92.5	89.8	93.4	92.3	90.4	92.9	91.8	67.2 <sup>e</sup>	96.7
1980-1982 <sup>b</sup>	94.4	91.8	95.2	93.9	91.2	94.8	94.4	93.6 <sup>d</sup>	94.0
1983-1985 <sup>b</sup>	93.5	89.9	94.6	93.4	89.1	94.5	91.5	92.5 <sup>d</sup>	90.6
1986-1988 <sup>b</sup>	95.4	93.7	95.9	95.2	93.6	95.7	92.7	89.3 <sup>d</sup>	93.0
1989-1991 <sup>b</sup>	95.2	91.1	96.4	95.4	92.0	96.4	88.0	84.6 <sup>d</sup>	88.8
1992-1999 <sup>b</sup>	95.8 <sup>c</sup>	92.4	96.9 <sup>c</sup>	96.1 <sup>c</sup>	92.7	97.2 <sup>c</sup>	93.9	87.6	95.0
1992-1999 <sup>b</sup>									
ALL STAGES	95.8	92.4	96.9	96.1	92.7	97.2	93.9	87.6	95.0
LOCALIZED	99.3	98.5	99.5	99.5	99.1	99.6	97.1	93.4 <sup>d</sup>	97.8
REGIONAL	95.5	93.5	96.3	95.6	93.7	96.4	96.0	94.6 <sup>d</sup>	95.8
DISTANT	59.9	55.6	62.7	61.8	55.2	66.3	55.2 <sup>d</sup>	-	53.4 <sup>e</sup>
UNSTAGED	85.1	72.7 <sup>d</sup>	88.5	84.5	68.8 <sup>d</sup>	88.7	85.2 <sup>d</sup>	-	-
<u>STAGE DISTRIBUTION (%) 1992-1999<sup>b</sup></u>									
ALL STAGES									
Number of cases	11,462	2,857	8,605	9,507	2,463	7,044	643	126	517
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
LOCALIZED	56	45	59	56	46	60	55	46	57
REGIONAL	36	43	33	35	43	33	33	32	33
DISTANT	6	9	5	5	8	4	8	14	6
UNSTAGED	3	3	3	3	3	3	5	8	4
<u>5-YR RELATIVE SURVIVAL RATES, 1992-1999<sup>b</sup></u>									
AGE AT DIAGNOSIS:									
<45	99.2	97.6	99.6	99.2	97.9	99.5	98.6	91.2	99.8
45-54	97.6	94.6	98.8	98.3	95.5	99.4	91.0	87.2 <sup>d</sup>	91.8
55-64	92.8	88.9	94.8	92.8	89.1	94.8	92.4	-	96.0
65-74	89.9	87.2	91.2	90.6	87.1	92.3	90.0 <sup>d</sup>	-	89.6 <sup>d</sup>
75+	64.6	58.3 <sup>d</sup>	66.8	65.1	52.5 <sup>d</sup>	69.3	49.6 <sup>e</sup>	-	50.2 <sup>e</sup>
Under 65	98.0	95.0	98.9	98.1	95.5	99.0	96.0	88.9	97.6
65 and over	82.0	79.6	83.1	82.9	78.7	84.8	77.6 <sup>d</sup>	84.0 <sup>e</sup>	73.7 <sup>d</sup>

<sup>a</sup> Rates are based on End Results data from a series of hospital registries and one population-based registry.  
<sup>b</sup> Rates are from the SEER 9 areas. 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 into 2000.  
<sup>c</sup> The difference in rates between 1974-1976 and 1992-1999 is statistically significant (p<.05).  
<sup>d</sup> The standard error of the survival rate is between 5 and 10 percentage points.  
<sup>e</sup> The standard error of the survival rate is greater than 10 percentage points.  
 - Statistic could not be calculated.

Table XXV-5  
THYROID CANCER (Invasive)

INCIDENCE, DEATH, AND SURVIVAL RATES<sup>c</sup>

By Year of Diagnosis/Death

All Races, Males and Females

Year of Diagnosis/Death

	1975- 1979	1980- 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Incidence																		
SEER <sup>a</sup>	4.9	4.6	5.1	5.3	5.0	4.9	5.3	5.5	5.5	5.8	5.6	6.1	6.2	6.4	6.7	6.9	7.2	7.4
Mortality																		
U.S. <sup>b</sup>	0.6	0.5	0.4	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.5	0.5
SEER <sup>a</sup>	0.5	0.5	0.4	0.5	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5
Relative Survival Rates (SEER <sup>a</sup> )																		
1-year	94.9	95.2	96.2	96.1	96.0	96.2	95.9	96.5	96.7	95.5	95.3	97.5	96.8	97.0	96.5	97.8	97.2	
2-year	93.7	94.8	95.1	95.5	95.9	95.8	95.3	96.2	96.1	94.8	95.1	97.1	96.3	96.8	96.5	97.2		
3-year	93.2	94.2	93.9	95.5	95.7	95.8	94.6	95.7	95.8	94.5	95.1	96.6	96.2	96.3	96.5			
4-year	93.1	94.1	93.7	95.2	95.7	95.3	94.2	95.7	95.5	94.2	95.1	96.5	96.2	95.9				
5-year	92.9	94.1	93.1	94.8	95.7	95.3	94.2	95.7	94.9	93.6	95.1	96.3	96.2					
6-year	92.9	94.1	93.0	94.6	95.6	95.3	94.2	95.7	94.8	93.6	95.1	95.9						
7-year	92.9	93.8	93.0	93.6	95.2	95.3	94.2	95.6	94.8	93.6	95.1							
8-year	92.7	93.8	93.0	93.5	95.2	95.3	94.2	95.6	94.8	93.6								
9-year	92.6	93.8	92.4	93.5	95.2	95.3	94.2	95.6	94.8									
10-year	92.6	93.5	92.3	93.3	95.1	95.0	94.2	95.0										
11-year	92.6	93.3	92.3	93.3	95.1	95.0	94.2											
12-year	92.6	93.1	92.3	93.0	95.0	95.0												
13-year	92.6	93.1	92.3	93.0	95.0													
14-year	92.6	93.1	92.3	92.7														
15-year	92.6	92.7	92.3															
16-year	92.6	92.7																
17-year	92.6																	
18-year	92.6																	
19-year	92.6																	
20-year	92.6																	

<sup>a</sup> Rates are from the SEER 9 areas.

<sup>b</sup> Rates are from the NCHS public use data file.

<sup>c</sup> Incidence and death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups. Survival rates are relative rates expressed as percents.

Table XXV-6  
THYROID CANCER (Invasive)

INCIDENCE, DEATH, AND SURVIVAL RATES<sup>c</sup>

By Year of Diagnosis/Death

All Races, Males

Year of Diagnosis/Death

	1975- 1979	1980- 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	
Incidence																			
SEER <sup>a</sup>	3.1	2.7	3.1	3.1	2.8	3.0	3.0	2.9	3.2	3.5	3.6	3.4	3.4	3.4	3.6	3.7	3.8	4.0	
Mortality																			
U.S. <sup>b</sup>	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	
SEER <sup>a</sup>	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.5	0.4	0.5	0.5	0.4	0.4	0.5	0.4	0.5	0.5	
Relative Survival Rates (SEER <sup>a</sup> )																			
1-year	94.7	92.6	94.7	96.7	97.6	91.9	94.6	93.9	95.3	93.9	94.0	96.8	93.7	94.2	92.1	97.2	97.1		
2-year	92.9	92.3	94.2	94.6	97.6	91.2	93.4	92.7	92.7	92.8	93.1	95.7	92.2	94.2	91.4	95.6			
3-year	92.2	91.4	92.8	94.6	97.4	90.9	93.4	91.9	91.5	92.3	92.9	95.3	92.2	93.2	91.4				
4-year	91.5	91.1	91.9	94.6	97.2	89.3	90.8	91.9	91.5	91.9	91.4	95.3	92.2	92.9					
5-year	91.4	91.1	89.6	94.2	97.2	89.3	90.8	91.9	90.0	91.4	91.4	94.8	92.2						
6-year	91.3	91.0	89.5	93.7	96.3	89.3	90.8	91.9	89.2	91.4	91.4	94.7							
7-year	91.3	90.7	89.5	91.9	92.8	89.3	90.8	91.9	88.9	91.4	91.4								
8-year	91.3	90.7	88.3	91.9	92.8	88.8	90.8	91.9	88.9	91.4									
9-year	91.3	90.3	87.6	90.5	92.0	88.0	90.8	91.9	88.9										
10-year	91.3	89.8	87.6	90.5	89.7	88.0	90.8	91.9											
11-year	90.6	89.6	87.6	90.5	89.7	88.0	90.8												
12-year	90.6	88.8	87.6	90.5	89.7	88.0													
13-year	90.6	88.8	87.6	90.5	89.7														
14-year	90.6	88.8	87.6	90.0															
15-year	90.6	88.3	87.6																
16-year	90.6	88.3																	
17-year	90.6																		
18-year	90.6																		
19-year	90.6																		
20-year	90.6																		

<sup>a</sup> Rates are from the SEER 9 areas.

<sup>b</sup> Rates are from the NCHS public use data file.

<sup>c</sup> Incidence and death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups. Survival rates are relative rates expressed as percents.

Table XXV-7  
 THYROID CANCER (Invasive)

INCIDENCE, DEATH, AND SURVIVAL RATES<sup>c</sup>

By Year of Diagnosis/Death

All Races, Females

Year of Diagnosis/Death

	1975- 1979	1980- 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Incidence																		
SEER <sup>a</sup>	6.7	6.4	7.1	7.5	7.1	6.9	7.6	7.9	7.6	8.1	7.6	8.7	8.9	9.4	9.7	9.9	10.5	10.8
Mortality																		
U.S. <sup>b</sup>	0.6	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.4	0.4	0.5	0.5	0.5	0.5	0.5
SEER <sup>a</sup>	0.6	0.5	0.5	0.6	0.4	0.5	0.4	0.4	0.5	0.5	0.6	0.4	0.4	0.5	0.4	0.5	0.5	0.5
Relative Survival Rates (SEER <sup>a</sup> )																		
1-year	95.0	96.1	96.8	95.9	95.5	97.7	96.3	97.3	97.2	96.1	95.8	97.7	97.8	97.9	97.8	98.0	97.3	
2-year	94.0	95.6	95.4	95.8	95.4	97.3	95.9	97.3	97.2	95.5	95.8	97.5	97.6	97.6	97.8	97.7		
3-year	93.6	95.1	94.3	95.5	95.2	97.3	95.0	96.8	97.2	95.3	95.8	97.0	97.5	97.3	97.8			
4-year	93.6	95.1	94.3	95.3	95.2	97.3	95.0	96.8	96.7	95.1	95.8	96.8	97.5	96.8				
5-year	93.5	95.0	94.3	95.1	95.2	97.1	95.0	96.8	96.5	94.4	95.8	96.8	97.5					
6-year	93.4	95.0	94.3	94.9	95.2	97.1	95.0	96.8	96.5	94.2	95.8	96.2						
7-year	93.4	94.8	94.3	94.1	95.2	97.1	95.0	96.3	96.5	94.2	95.8							
8-year	93.1	94.8	94.3	94.0	95.2	97.1	95.0	96.3	96.5	94.2								
9-year	93.1	94.8	94.1	94.0	95.2	97.1	95.0	96.3	96.5									
10-year	93.1	94.7	93.4	94.0	95.2	96.7	95.0	95.6										
11-year	93.1	94.4	93.3	94.0	95.2	96.6	95.0											
12-year	93.1	94.4	93.1	93.8	95.2	96.5												
13-year	93.1	94.4	93.1	93.8	95.2													
14-year	93.1	94.4	93.1	93.6														
15-year	93.1	94.2	93.1															
16-year	93.1	94.1																
17-year	93.1																	
18-year	93.1																	
19-year	93.1																	
20-year	93.1																	

<sup>a</sup> Rates are from the SEER 9 areas.

<sup>b</sup> Rates are from the NCHS public use data file.

<sup>c</sup> Incidence and death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups. Survival rates are relative rates expressed as percents.

Table XXV-8  
THYROID 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 (12 SEER Areas) With Cancer and  
 Lifetime Risk (Percent) of Dying (Total U.S.) From Cancer

1998-2000

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	0.30	0.00	0.02	0.10	0.84
10	0.00	0.02	0.05	0.31	0.02	0.10	0.24	0.86
20	0.02	0.05	0.10	0.30	0.09	0.23	0.39	0.84
30	0.03	0.08	0.15	0.29	0.14	0.30	0.46	0.76
40	0.05	0.12	0.19	0.26	0.16	0.32	0.46	0.62
50	0.07	0.14	0.20	0.22	0.16	0.30	0.41	0.47
60	0.08	0.13	0.16	0.16	0.14	0.26	0.31	0.32

Lifetime Risk of Being Diagnosed = 0.30%  
 Lifetime Risk of Dying = 0.04%

Lifetime Risk of Being Diagnosed = 0.84%  
 Lifetime Risk of Dying = 0.06%

Whites

Current Age	Males				Females			
	+10 yrs	+20 yrs	+30 yrs	Eventually	+10 yrs	+20 yrs	+30 yrs	Eventually
0	0.00	0.00	0.02	0.32	0.00	0.02	0.12	0.87
10	0.00	0.02	0.06	0.32	0.02	0.12	0.27	0.88
20	0.02	0.05	0.10	0.32	0.09	0.25	0.42	0.86
30	0.03	0.09	0.16	0.30	0.15	0.32	0.48	0.77
40	0.05	0.12	0.20	0.27	0.17	0.33	0.46	0.62
50	0.07	0.15	0.20	0.23	0.16	0.30	0.40	0.46
60	0.08	0.14	0.16	0.16	0.14	0.25	0.30	0.31

Lifetime Risk of Being Diagnosed = 0.32%  
 Lifetime Risk of Dying = 0.04%

Lifetime Risk of Being Diagnosed = 0.87%  
 Lifetime Risk of Dying = 0.06%

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	0.14	0.00	0.01	0.03	0.46
10	0.00	0.01	0.02	0.15	0.01	0.03	0.10	0.47
20	0.01	0.02	0.04	0.15	0.02	0.09	0.17	0.47
30	0.01	0.04	0.07	0.14	0.07	0.14	0.25	0.45
40	0.02	0.06	0.09	0.14	0.08	0.18	0.27	0.39
50	0.04	0.07	0.10	0.12	0.11	0.20	0.27	0.32
60	0.04	0.07	0.09	0.09	0.09	0.17	0.21	0.23

Lifetime Risk of Being Diagnosed = 0.14%  
 Lifetime Risk of Dying = 0.02%

Lifetime Risk of Being Diagnosed = 0.46%  
 Lifetime Risk of Dying = 0.05%



Table XXV-9  
THYROID CANCER (Invasive)

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

By Race/Ethnicity and Sex

Incidence<sup>a</sup>

RACE/ETHNICITY	Rate 1996-2000			Trend 1992-2000		
	Rate per 100,000 persons			APC (%)		
	Total	Males	Females	Total	Males	Females
All Races	6.8	3.6	9.9	3.4 <sup>d</sup>	1.8 <sup>d</sup>	4.0 <sup>d</sup>
White	7.1	3.8	10.3	3.8 <sup>d</sup>	2.3 <sup>d</sup>	4.5 <sup>d</sup>
White Hispanic <sup>b</sup>	6.4	2.7	10.0	0.9	-2.4	1.8
White Non-Hispanic <sup>b</sup>	7.2	4.0	10.5	4.2 <sup>d</sup>	2.9 <sup>d</sup>	4.8 <sup>d</sup>
Black	3.9	2.0	5.6	3.1 <sup>d</sup>	-0.9	4.3 <sup>d</sup>
Asian/Pacific Islander	7.8	3.7	11.5	0.8	-0.3	1.1
Amer Ind/Alaska Nat	3.8	-	5.9	2.6	-	-
Hispanic <sup>b</sup>	6.2	2.6	9.6	1.1	-2.3	2.1

Mortality<sup>c</sup>

RACE/ETHNICITY	Rate 1996-2000			Trend 1992-2000		
	Rate per 100,000 persons			APC (%)		
	Total	Males	Females	Total	Males	Females
All Races	0.5	0.4	0.5	0.4	2.4 <sup>d</sup>	-0.4
White	0.5	0.4	0.5	0.2	2.3 <sup>d</sup>	-0.7
White Hispanic <sup>b</sup>	0.6	0.5	0.7	-1.1	3.0	-2.4
White Non-Hispanic <sup>b</sup>	0.4	0.4	0.4	0.5	2.7 <sup>d</sup>	-0.6
Black	0.5	0.3	0.5	2.2	3.3	1.7
Asian/Pacific Islander	0.7	0.5	0.8	-2.2	-	-2.7
Amer Ind/Alaska Nat	-	-	-	-	-	-
Hispanic <sup>b</sup>	0.6	0.5	0.7	-0.8	3.2	-2.2

The APC is the 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.

<sup>a</sup> Incidence data are from the 12 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, and Alaska Native Registry).

<sup>b</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 do not include cases from Detroit, Hawaii and Alaska Native Registry. For mortality, information is included for all states except Connecticut, Oklahoma, New York, and New Hampshire.

<sup>c</sup> Mortality data are analyzed from a public use file provided by the National Center for Health Statistics (NCHS).

<sup>d</sup> The APC is significantly different from zero (p<.05).

Table XXV-10  
THYROID CANCER (Invasive)AGE-ADJUSTED SEER INCIDENCE RATES<sup>a</sup> AND SEER DEATH RATES<sup>b</sup>  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER INCIDENCE RATES<sup>a</sup>, 1996-2000</u>									
REGISTRY									
12 registries	6.8	3.6	9.9	7.1	3.8	10.3	3.9	2.0	5.6
11 registries	6.8	3.6	9.9	7.1	3.8	10.3	3.9	2.0	5.6
9 registries	6.9	3.7	10.1	7.2	3.9	10.5	4.1	1.9	5.9
San Francisco-Oakland	5.9	3.1	8.7	5.9	3.3	8.6	2.9	-	4.1
Connecticut	7.1	4.3	9.8	7.3	4.5	10.0	3.7	-	5.5
Metropolitan Detroit	7.2	3.9	10.3	7.9	4.3	11.4	4.9	2.3	7.0
Hawaii	8.2	4.5	11.9	6.9	4.3	9.8	-	-	-
Iowa	6.9	3.5	10.2	6.9	3.5	10.2	-	-	-
New Mexico	7.4	3.7	10.9	7.8	3.9	11.5	-	-	-
Seattle-Puget Sound	7.2	3.6	10.9	7.2	3.6	10.8	4.5	-	-
Utah	8.1	4.0	12.2	8.3	4.1	12.4	-	-	-
Metropolitan Atlanta	5.8	3.3	8.2	6.8	4.0	9.8	3.6	-	5.4
San Jose-Monterey	6.8	3.9	9.9	6.8	4.1	9.7	-	-	-
Los Angeles	6.5	3.4	9.5	6.9	3.5	10.2	3.5	2.1	4.6
<u>SEER DEATH RATES<sup>b</sup>, 1996-2000</u>									
REGISTRY									
12 registries	0.5	0.5	0.5	0.5	0.5	0.5	0.3	-	0.4
11 registries	0.5	0.5	0.5	0.5	0.5	0.5	0.3	-	0.4
9 registries	0.5	0.4	0.5	0.4	0.4	0.4	0.3	-	-
San Francisco-Oakland	0.5	0.4	0.5	0.4	0.4	0.4	-	-	-
Connecticut	0.5	0.6	0.4	0.5	0.6	0.4	-	-	-
Metropolitan Detroit	0.4	0.4	0.4	0.4	0.4	0.5	-	-	-
Hawaii	0.7	-	-	-	-	-	-	-	-
Iowa	0.5	0.4	0.5	0.5	0.4	0.5	-	-	-
New Mexico	0.6	-	0.7	0.6	-	0.7	-	-	-
Seattle-Puget Sound	0.4	0.4	0.3	0.4	0.4	0.4	-	-	-
Utah	0.5	-	-	0.4	-	-	-	-	-
Metropolitan Atlanta	0.3	-	-	-	-	-	-	-	-
San Jose-Monterey	0.7	-	0.7	0.7	-	0.7	-	-	-
Los Angeles	0.6	0.5	0.7	0.6	0.5	0.7	-	-	-

Note: San Jose-Monterey and Los Angeles are new SEER areas as of 1992 and their data are only used in tables where indicated.

<sup>a</sup> SEER 9 areas. Incidence rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.<sup>b</sup> NCHS public use data file. Death rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

- Statistic could not be calculated or populations are inadequate.

Table XXV-11  
 THYROID CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH<sup>a</sup> RATES BY STATE, 1996-2000

All Races, Males and Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	0.5	0.01							
High Five States									
Hawaii	0.7 <sup>b</sup>	0.11	(01)	40.0					
District of Columbia	0.6 <sup>b</sup>	0.15	(02)	20.0					
New Mexico	0.6 <sup>b</sup>	0.08	(03)	20.0					
Kentucky	0.6 <sup>b</sup>	0.05	(04)	20.0					
New York	0.5	0.02	(05)	0.0					
Low Five States									
Nevada	0.4 <sup>b</sup>	0.07	(47)	-20.0					
Washington	0.4 <sup>b</sup>	0.04	(48)	-20.0					
New Hampshire	0.4 <sup>b</sup>	0.08	(49)	-20.0					
Oklahoma	0.3 <sup>b</sup>	0.04	(50)	-40.0					
Idaho	0.3 <sup>b</sup>	0.08	(51)	-40.0					
Alabama	0.4 <sup>b</sup>	0.04	(41)	-20.0	Montana	0.5	0.10	(29)	0.0
Alaska	0.4 <sup>b</sup>	0.18	(35)	-20.0	Nebraska	0.4 <sup>b</sup>	0.06	(46)	-20.0
Arizona	0.4 <sup>b</sup>	0.04	(40)	-20.0	Nevada	0.4 <sup>b</sup>	0.07	(47)	-20.0
Arkansas	0.4 <sup>b</sup>	0.05	(45)	-20.0	New Hampshire	0.4 <sup>b</sup>	0.08	(49)	-20.0
California	0.5	0.02	(11)	0.0	New Jersey	0.5	0.03	(18)	0.0
Colorado	0.5	0.06	(09)	0.0	New Mexico	0.6 <sup>b</sup>	0.08	(03)	20.0
Connecticut	0.5	0.05	(12)	0.0	New York	0.5	0.02	(05)	0.0
Delaware	0.4 <sup>b</sup>	0.11	(33)	-20.0	North Carolina	0.4 <sup>b</sup>	0.03	(36)	-20.0
District of Columbia	0.6 <sup>b</sup>	0.15	(02)	20.0	North Dakota	0.5	0.12	(06)	0.0
Florida	0.4 <sup>b</sup>	0.02	(38)	-20.0	Ohio	0.5	0.03	(25)	0.0
Georgia	0.4 <sup>b</sup>	0.03	(43)	-20.0	Oklahoma	0.3 <sup>b</sup>	0.04	(50)	-40.0
Hawaii	0.7 <sup>b</sup>	0.11	(01)	40.0	Oregon	0.5	0.05	(21)	0.0
Idaho	0.3 <sup>b</sup>	0.08	(51)	-40.0	Pennsylvania	0.5	0.03	(19)	0.0
Illinois	0.4 <sup>b</sup>	0.03	(32)	-20.0	Rhode Island	0.5	0.10	(07)	0.0
Indiana	0.5	0.04	(08)	0.0	South Carolina	0.4 <sup>b</sup>	0.05	(42)	-20.0
Iowa	0.5	0.05	(23)	0.0	South Dakota	0.5	0.11	(10)	0.0
Kansas	0.5	0.06	(26)	0.0	Tennessee	0.4 <sup>b</sup>	0.04	(44)	-20.0
Kentucky	0.6 <sup>b</sup>	0.05	(04)	20.0	Texas	0.5	0.02	(27)	0.0
Louisiana	0.5	0.05	(17)	0.0	Utah	0.5	0.08	(24)	0.0
Maine	0.5	0.08	(16)	0.0	Vermont	0.5	0.13	(14)	0.0
Maryland	0.4 <sup>b</sup>	0.04	(39)	-20.0	Virginia	0.4 <sup>b</sup>	0.04	(31)	-20.0
Massachusetts	0.5	0.04	(28)	0.0	Washington	0.4 <sup>b</sup>	0.04	(48)	-20.0
Michigan	0.5	0.03	(22)	0.0	West Virginia	0.4 <sup>b</sup>	0.06	(37)	-20.0
Minnesota	0.5	0.05	(13)	0.0	Wisconsin	0.5	0.04	(15)	0.0
Mississippi	0.5	0.06	(20)	0.0	Wyoming	0.4 <sup>b</sup>	0.14	(30)	-20.0
Missouri	0.4 <sup>b</sup>	0.04	(34)	-20.0					

<sup>a</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

<sup>b</sup> Absolute percent difference between state rate and total U.S. rate is 15% or more.

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

SE Standard error of the rate.

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

Table XXV-12  
 THYROID CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH<sup>a</sup> RATES BY STATE, 1996-2000

All Races, Males

State	Rate	SE	Rank	PD
TOTAL U.S.	0.4	0.01		
High Five States				
District of Columbia	0.7 <sup>b</sup>	0.25	(01)	75.0
Alaska	0.7 <sup>b</sup>	0.34	(02)	75.0
Rhode Island	0.7 <sup>b</sup>	0.17	(03)	75.0
Hawaii	0.6 <sup>b</sup>	0.16	(04)	50.0
Montana	0.6 <sup>b</sup>	0.18	(05)	50.0
Low Five States				
Nebraska	0.3 <sup>b</sup>	0.10	(47)	-25.0
Oklahoma	0.3 <sup>b</sup>	0.07	(48)	-25.0
Georgia	0.3 <sup>b</sup>	0.05	(49)	-25.0
New Hampshire	0.2 <sup>b</sup>	0.09	(50)	-50.0
Idaho	0.2 <sup>b</sup>	0.09	(51)	-50.0

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	0.4	0.07	(33)	0.0	Montana	0.6 <sup>b</sup>	0.18	(05)	50.0
Alaska	0.7 <sup>b</sup>	0.34	(02)	75.0	Nebraska	0.3 <sup>b</sup>	0.10	(47)	-25.0
Arizona	0.5 <sup>b</sup>	0.07	(15)	25.0	Nevada	0.5 <sup>b</sup>	0.12	(22)	25.0
Arkansas	0.4	0.08	(32)	0.0	New Hampshire	0.2 <sup>b</sup>	0.09	(50)	-50.0
California	0.5 <sup>b</sup>	0.03	(18)	25.0	New Jersey	0.4	0.05	(36)	0.0
Colorado	0.5 <sup>b</sup>	0.09	(17)	25.0	New Mexico	0.4	0.10	(39)	0.0
Connecticut	0.6 <sup>b</sup>	0.09	(06)	50.0	New York	0.5 <sup>b</sup>	0.04	(19)	25.0
Delaware	0.5 <sup>b</sup>	0.20	(11)	25.0	North Carolina	0.4	0.06	(27)	0.0
District of Columbia	0.7 <sup>b</sup>	0.25	(01)	75.0	North Dakota	0.4	0.16	(40)	0.0
Florida	0.4	0.03	(37)	0.0	Ohio	0.5 <sup>b</sup>	0.05	(12)	25.0
Georgia	0.3 <sup>b</sup>	0.05	(49)	-25.0	Oklahoma	0.3 <sup>b</sup>	0.07	(48)	-25.0
Hawaii	0.6 <sup>b</sup>	0.16	(04)	50.0	Oregon	0.4	0.07	(41)	0.0
Idaho	0.2 <sup>b</sup>	0.09	(51)	-50.0	Pennsylvania	0.4	0.04	(38)	0.0
Illinois	0.4	0.04	(26)	0.0	Rhode Island	0.7 <sup>b</sup>	0.17	(03)	75.0
Indiana	0.5 <sup>b</sup>	0.06	(21)	25.0	South Carolina	0.4	0.07	(46)	0.0
Iowa	0.4	0.08	(28)	0.0	South Dakota	0.6 <sup>b</sup>	0.18	(09)	50.0
Kansas	0.6 <sup>b</sup>	0.10	(08)	50.0	Tennessee	0.4	0.06	(44)	0.0
Kentucky	0.5 <sup>b</sup>	0.08	(14)	25.0	Texas	0.4	0.04	(35)	0.0
Louisiana	0.4	0.07	(30)	0.0	Utah	0.5 <sup>b</sup>	0.12	(23)	25.0
Maine	0.6 <sup>b</sup>	0.15	(07)	50.0	Vermont	0.5 <sup>b</sup>	0.20	(10)	25.0
Maryland	0.4	0.07	(42)	0.0	Virginia	0.4	0.05	(45)	0.0
Massachusetts	0.5 <sup>b</sup>	0.06	(24)	25.0	Washington	0.4	0.06	(43)	0.0
Michigan	0.4	0.05	(34)	0.0	West Virginia	0.5 <sup>b</sup>	0.11	(13)	25.0
Minnesota	0.4	0.07	(25)	0.0	Wisconsin	0.4	0.06	(29)	0.0
Mississippi	0.5 <sup>b</sup>	0.10	(16)	25.0	Wyoming	0.4	0.22	(31)	0.0
Missouri	0.5 <sup>b</sup>	0.06	(20)	25.0					

<sup>a</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

<sup>b</sup> Absolute percent difference between state rate and total U.S. rate is 15% or more.

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

SE Standard error of the rate.

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

Table XXV-13  
 THYROID CANCER (Invasive)

AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH<sup>a</sup> RATES BY STATE, 1996-2000

All Races, Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	0.5	0.01							
High Five States									
Hawaii	0.8 <sup>b</sup>	0.15	(01)	60.0					
New Mexico	0.7 <sup>b</sup>	0.12	(02)	40.0					
Kentucky	0.6 <sup>b</sup>	0.07	(03)	20.0					
North Dakota	0.6 <sup>b</sup>	0.16	(04)	20.0					
New York	0.6 <sup>b</sup>	0.03	(05)	20.0					
Low Five States									
Arizona	0.3 <sup>b</sup>	0.05	(47)	-40.0					
Oklahoma	0.3 <sup>b</sup>	0.06	(48)	-40.0					
Arkansas	0.3 <sup>b</sup>	0.06	(49)	-40.0					
Nevada	0.3 <sup>b</sup>	0.08	(50)	-40.0					
Alaska	0.2 <sup>b</sup>	0.17	(51)	-60.0					
Alabama	0.4 <sup>b</sup>	0.05	(43)	-20.0	Montana	0.3 <sup>b</sup>	0.11	(46)	-40.0
Alaska	0.2 <sup>b</sup>	0.17	(51)	-60.0	Nebraska	0.4 <sup>b</sup>	0.09	(35)	-20.0
Arizona	0.3 <sup>b</sup>	0.05	(47)	-40.0	Nevada	0.3 <sup>b</sup>	0.08	(50)	-40.0
Arkansas	0.3 <sup>b</sup>	0.06	(49)	-40.0	New Hampshire	0.4 <sup>b</sup>	0.11	(24)	-20.0
California	0.5	0.03	(10)	0.0	New Jersey	0.5	0.05	(11)	0.0
Colorado	0.6 <sup>b</sup>	0.08	(06)	20.0	New Mexico	0.7 <sup>b</sup>	0.12	(02)	40.0
Connecticut	0.4 <sup>b</sup>	0.06	(25)	-20.0	New York	0.6 <sup>b</sup>	0.03	(05)	20.0
Delaware	0.4 <sup>b</sup>	0.14	(34)	-20.0	North Carolina	0.4 <sup>b</sup>	0.04	(36)	-20.0
District of Columbia	0.6 <sup>b</sup>	0.19	(07)	20.0	North Dakota	0.6 <sup>b</sup>	0.16	(04)	20.0
Florida	0.4 <sup>b</sup>	0.03	(33)	-20.0	Ohio	0.4 <sup>b</sup>	0.04	(29)	-20.0
Georgia	0.4 <sup>b</sup>	0.05	(41)	-20.0	Oklahoma	0.3 <sup>b</sup>	0.06	(48)	-40.0
Hawaii	0.8 <sup>b</sup>	0.15	(01)	60.0	Oregon	0.5	0.07	(12)	0.0
Idaho	0.4 <sup>b</sup>	0.12	(30)	-20.0	Pennsylvania	0.5	0.04	(14)	0.0
Illinois	0.4 <sup>b</sup>	0.04	(28)	-20.0	Rhode Island	0.4 <sup>b</sup>	0.11	(38)	-20.0
Indiana	0.5	0.06	(09)	0.0	South Carolina	0.4 <sup>b</sup>	0.06	(39)	-20.0
Iowa	0.5	0.07	(23)	0.0	South Dakota	0.4 <sup>b</sup>	0.13	(32)	-20.0
Kansas	0.4 <sup>b</sup>	0.07	(40)	-20.0	Tennessee	0.4 <sup>b</sup>	0.05	(42)	-20.0
Kentucky	0.6 <sup>b</sup>	0.07	(03)	20.0	Texas	0.5	0.03	(17)	0.0
Louisiana	0.5	0.07	(15)	0.0	Utah	0.5	0.11	(21)	0.0
Maine	0.4 <sup>b</sup>	0.11	(26)	-20.0	Vermont	0.5	0.17	(18)	0.0
Maryland	0.4 <sup>b</sup>	0.05	(31)	-20.0	Virginia	0.5	0.05	(19)	0.0
Massachusetts	0.4 <sup>b</sup>	0.05	(27)	-20.0	Washington	0.3 <sup>b</sup>	0.05	(45)	-40.0
Michigan	0.5	0.04	(16)	0.0	West Virginia	0.4 <sup>b</sup>	0.08	(44)	-20.0
Minnesota	0.5	0.06	(08)	0.0	Wisconsin	0.5	0.06	(13)	0.0
Mississippi	0.5	0.08	(20)	0.0	Wyoming	0.5	0.19	(22)	0.0
Missouri	0.4 <sup>b</sup>	0.05	(37)	-20.0					

<sup>a</sup> NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 U.S. standard population by 5-year age groups.

<sup>b</sup> Absolute percent difference between state rate and total U.S. rate is 15% or more.

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

SE Standard error of the rate.

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

Table XXV-14  
THYROID CANCER (Invasive)

Estimated United States Cancer Prevalence Counts<sup>a</sup> on January 1, 2000  
 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	0 to <10	0 to <25	>=25 <sup>f</sup>	Complete <sup>g</sup>
<u>Race/Sex</u>									
All Races <sup>b</sup>	78,174	57,487	44,328	33,818	31,359	135,661	245,166	47,389	292,555
Males	18,056	13,957	9,935	7,230	7,218	32,013	56,396	8,626 <sup>h</sup>	65,022
Females	60,118	43,530	34,393	26,588	24,141	103,648	188,770	38,763 <sup>h</sup>	227,533
White <sup>b</sup>	68,647	51,024	39,765	30,601	28,239	119,671	218,276	39,915	258,191
Males	16,396	12,668	9,164	6,474	6,702	29,064	51,404	7,449 <sup>h</sup>	58,853
Females	52,251	38,356	30,601	24,127	21,537	90,607	166,872	32,466 <sup>h</sup>	199,338
Black <sup>b</sup>	4,501	3,298	1,994	1,596	1,588	7,799	12,977	+	+
Males	686	719	336	356	-	1,405	2,284	+	+
Females	3,815	2,579	1,658	1,240	1,401	6,394	10,693	+	+
Asian/Pacific Islander <sup>c</sup>	3,412	2,331	+	+	+	5,743	+	+	+
Males	626	430	+	+	+	1,056	+	+	+
Females	2,786	1,901	+	+	+	4,687	+	+	+
Hispanic <sup>d</sup>	5,908	4,379	+	+	+	10,287	+	+	+
Males	1,057	867	+	+	+	1,924	+	+	+
Females	4,851	3,512	+	+	+	8,363	+	+	+

Estimated prevalence percent<sup>a</sup> on January 1, 2000, of the SEER 11 population diagnosed in the previous 10 years  
 By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	Age Specific (Crude)										Age-Adjusted <sup>e</sup>
	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages
<u>Race/Sex</u>											
All Races <sup>c</sup>	0.0469%	-	0.0033%	0.0266%	0.0607%	0.0815%	0.0905%	0.0858%	0.0749%	0.0497%	0.0481%
Males	0.0219%	-	0.0012%	0.0078%	0.0207%	0.0355%	0.0488%	0.0570%	0.0543%	0.0350%	0.0237%
Females	0.0714%	-	0.0055%	0.0461%	0.1017%	0.1267%	0.1302%	0.1111%	0.0903%	0.0573%	0.0716%
White <sup>c</sup>	0.0499%	-	0.0036%	0.0292%	0.0662%	0.0862%	0.0929%	0.0869%	0.0726%	0.0472%	0.0502%
Males	0.0240%	-	-	0.0086%	0.0226%	0.0389%	0.0520%	0.0603%	0.0547%	0.0324%	0.0252%
Females	0.0756%	-	0.0061%	0.0513%	0.1125%	0.1342%	0.1327%	0.1110%	0.0861%	0.0547%	0.0751%
Black <sup>c</sup>	0.0208%	-	-	0.0103%	0.0232%	0.0369%	0.0555%	0.0484%	0.0590%	-	0.0249%
Males	0.0085%	-	-	-	0.0082%	0.0135%	0.0269%	0.0254%	0.0452%	-	0.0115%
Females	0.0320%	-	-	0.0181%	0.0366%	0.0573%	0.0795%	0.0666%	0.0682%	-	0.0360%
Asian/Pacific Islander <sup>c</sup>	0.0522%	-	-	0.0253%	0.0585%	0.0893%	0.1017%	0.1037%	0.1017%	0.0917%	0.0544%
Males	0.0203%	-	-	-	0.0188%	0.0316%	0.0414%	0.0537%	0.0566%	0.0704%	0.0231%
Females	0.0822%	-	-	0.0430%	0.0957%	0.1409%	0.1553%	0.1444%	0.1359%	0.1067%	0.0820%
Hispanic <sup>d</sup>	0.0299%	-	0.0031%	0.0183%	0.0438%	0.0702%	0.0802%	0.0745%	0.0847%	0.0699%	0.0422%
Males	0.0106%	-	-	0.0052%	0.0108%	0.0244%	0.0347%	0.0481%	0.0568%	-	0.0181%
Females	0.0500%	-	0.0054%	0.0335%	0.0807%	0.1161%	0.1216%	0.0961%	0.1045%	0.0897%	0.0653%

<sup>a</sup> US 2000 cancer prevalence counts are based on 2000 cancer prevalence proportions from the SEER registries and 1/1/2000 US population estimates based on the average of 1999 and 2000 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

<sup>b c d</sup> Statistics based on b) SEER 9 Areas c) SEER 11 Areas d) SEER 11 Areas excluding Hawaii and Detroit.

<sup>e</sup> Percentages are age-adjusted to the 2000 US standard population by 5-year age groups.

<sup>f g h</sup> (f) Cases diagnosed 25 years or more ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (g) Complete prevalence is obtained by summing 0 to <25 with >=25. (h) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.

- Statistics not shown. Rate based on less than 25 cases estimated alive for the time interval.

+ Not available.

# SEER Incidence and US Death Rates+ Thyroid Cancer, by Race and Sex

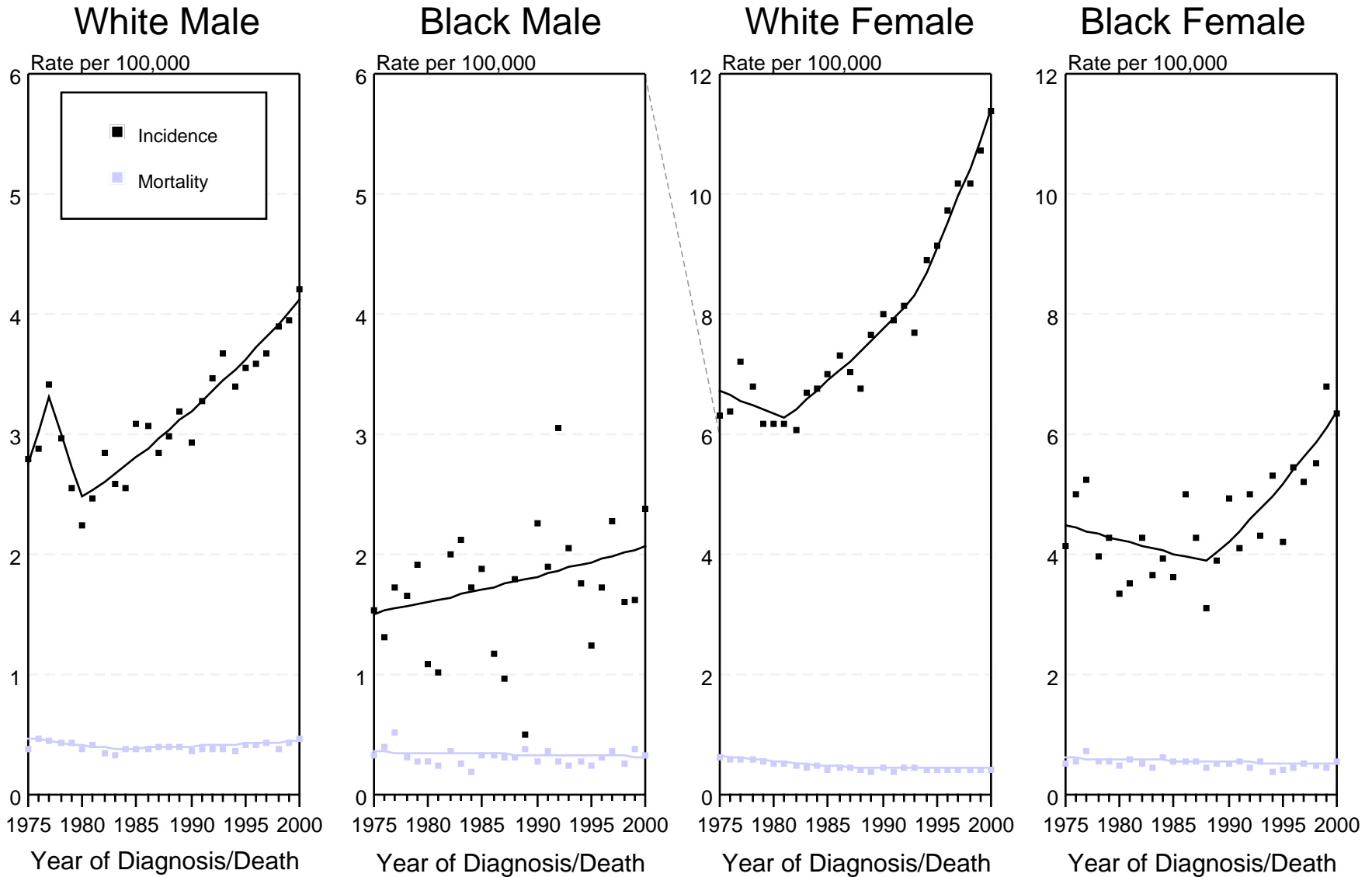


Figure XXV-1

+ Source: SEER 9 areas and NCHS public use data file. Rates are age-adjusted to the 2000 US standard million population by 5-year age groups. Regression lines are calculated using the Joinpoint Regression Program.