

Table 17.1

Mesothelioma

Age-Adjusted SEER Cancer Incidence Rates^a, 1980-2009

By Race, Sex and Year of Diagnosis

Race/Sex	Year of Diagnosis														
	1980- 1981	1982- 1983	1984- 1985	1986- 1987	1988- 1989	1990- 1991	1992- 1993	1994- 1995	1996- 1997	1998- 1999	2000- 2001	2002- 2003	2004- 2005	2006- 2007	2008- 2009
All Races															
Both Sexes	0.9	0.9	1.0	1.0	1.1	1.1	1.1	1.2	1.1	1.1	1.1	1.0	1.1	1.0	0.9
Males															
All Ages	1.6	1.6	1.9	1.7	2.0	2.1	2.3	2.2	2.0	2.1	2.0	1.8	2.0	1.7	1.8
Ages 0-54	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.1
Ages 55-64	3.7	3.7	4.5	3.5	3.1	4.4	3.7	3.3	4.2	3.7	2.6	2.9	2.8	2.5	2.3
Ages 65-74	8.2	7.2	8.6	8.3	11.9	9.5	10.7	10.3	9.0	9.8	9.3	7.8	8.6	7.9	7.2
Ages 75-84	10.0	11.7	12.0	12.6	12.7	17.2	16.1	17.9	15.2	16.8	19.5	17.2	17.7	14.2	15.0
Ages 85+	-	-	-	-	12.8	12.0	20.5	12.4	15.8	15.9	14.4	13.4	19.8	15.3	21.7
Females															
All Ages	0.3	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
Ages 0-54	-	0.1	-	0.1	0.1	0.1	-	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1
Ages 55-64	0.9	1.0	0.8	1.0	-	0.9	0.9	1.2	0.8	-	-	0.9	0.8	0.6	0.7
Ages 65-74	-	2.1	1.4	1.4	1.7	1.4	1.3	1.6	1.5	1.6	1.2	1.5	1.5	1.8	1.4
Ages 75-84	-	2.0	3.1	2.3	1.7	3.0	2.8	2.6	2.3	2.0	2.8	2.6	3.2	3.7	2.2
Ages 85+	-	-	-	-	-	-	-	-	-	-	2.9	-	-	-	3.0
Whites															
Both Sexes	0.9	1.0	1.1	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.2	1.1	1.1
Males	1.7	1.7	2.0	1.8	2.2	2.3	2.5	2.3	2.2	2.3	2.3	2.0	2.2	1.9	2.0
Females	0.3	0.5	0.4	0.5	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4
Blacks															
Both Sexes	-	0.6	0.6	0.6	0.7	0.7	0.7	0.9	0.7	0.7	0.4	0.4	0.5	0.3	0.4
Males	-	-	-	-	-	1.5	1.3	1.8	1.1	1.4	-	-	0.9	-	-
Females	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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

Table 17.2
MesotheliomaAge-adjusted SEER Incidence^a Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2009	1.00	1.87	0.39	1.09	2.03	0.42	0.55	0.99	0.26
1975	0.63	1.00	0.31	0.63	1.00	0.33	-	-	-
1976	0.67	1.13	0.35	0.71	1.21	0.36	-	-	-
1977	0.62	1.05	0.31	0.65	1.06	0.34	-	-	-
1978	0.73	1.37	0.25	0.79	1.50	0.25	-	-	-
1979	0.78	1.51	0.27	0.80	1.60	0.25	-	-	-
1980	0.98	1.83	0.35	1.05	1.97	0.39	-	-	-
1981	0.75	1.42	0.27	0.80	1.50	0.29	-	-	-
1982	0.83	1.42	0.38	0.90	1.53	0.42	-	-	-
1983	1.05	1.86	0.49	1.09	1.95	0.51	-	-	-
1984	1.06	2.04	0.36	1.15	2.24	0.37	-	-	-
1985	0.92	1.67	0.37	0.97	1.73	0.39	-	-	-
1986	0.94	1.67	0.43	1.01	1.79	0.49	-	-	-
1987	0.97	1.73	0.43	1.03	1.82	0.47	-	-	-
1988	0.98	1.85	0.39	1.05	1.98	0.41	-	-	-
1989	1.13	2.21	0.37	1.20	2.36	0.39	-	-	-
1990	1.15	2.14	0.46	1.24	2.31	0.50	-	-	-
1991	1.11	2.10	0.42	1.18	2.21	0.46	-	-	-
1992	1.23	2.49	0.39	1.33	2.73	0.42	-	-	-
1993	1.06	2.04	0.38	1.14	2.24	0.37	-	-	-
1994	1.16	2.17	0.43	1.24	2.32	0.46	1.06	-	-
1995	1.16	2.17	0.46	1.23	2.30	0.48	-	-	-
1996	1.15	2.14	0.45	1.27	2.38	0.50	-	-	-
1997	1.01	1.92	0.37	1.06	2.06	0.35	0.92	-	-
1998	1.08	2.06	0.40	1.18	2.22	0.47	-	-	-
1999	1.12	2.17	0.37	1.20	2.30	0.40	-	-	-
2000	1.08	2.11	0.34	1.22	2.37	0.38	-	-	-
2001	1.06	1.97	0.41	1.17	2.17	0.44	-	-	-
2002	1.03	1.94	0.38	1.16	2.17	0.43	-	-	-
2003	0.95	1.73	0.39	1.04	1.89	0.43	-	-	-
2004	1.10	2.04	0.45	1.22	2.26	0.47	-	-	-
2005	1.05	1.94	0.42	1.19	2.17	0.49	-	-	-
2006	0.96	1.64	0.45	1.06	1.81	0.48	-	-	-
2007	0.98	1.75	0.43	1.11	1.97	0.49	-	-	-
2008	0.94	1.78	0.33	1.03	1.96	0.36	-	-	-
2009	0.96	1.78	0.38	1.12	2.07	0.45	-	-	-

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

Table 17.3
Mesothelioma

SEER Incidence^a Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2005-2009									
All ages	1.0	1.9	0.4	1.2	2.1	0.5	0.6	1.1	0.3
Under 65	0.3	0.4	0.2	0.3	0.4	0.2	0.2	0.3	0.1
65 and over	6.4	12.5	2.3	7.2	13.9	2.6	3.3	7.0	1.1
All ages (IARC world std) ^b	0.6	1.0	0.3	0.7	1.1	0.3	0.3	0.6	0.2
Age-Specific Rates, 2005-2009									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	0.1	-	-	-	-	-	-	-	-
35-39	0.1	0.1	0.1	0.1	-	-	-	-	-
40-44	0.2	0.2	0.1	0.2	0.3	-	-	-	-
45-49	0.3	0.3	0.2	0.3	0.3	0.3	-	-	-
50-54	0.6	0.8	0.5	0.7	0.9	0.6	0.6	-	-
55-59	1.1	1.7	0.6	1.2	1.9	0.6	0.8	1.4	-
60-64	2.2	3.4	1.0	2.4	3.8	1.2	1.4	2.0	-
65-69	3.6	6.0	1.5	4.1	6.9	1.7	1.6	2.9	-
70-74	5.6	9.8	2.1	6.2	10.9	2.3	3.0	5.5	-
75-79	7.7	14.6	2.6	8.6	16.0	3.0	4.4	10.1	-
80-84	9.7	19.7	3.3	10.7	21.7	3.6	4.7	10.3	-
85+	8.5	20.9	2.7	9.2	23.0	2.9	3.8	-	-

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

^b Rates are per 100,000 and are age-adjusted to the IARC world standard population.

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

Table 17.4
Mesothelioma

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year, Stage and Age

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	-	-	-	-	-	-
1970-1973 ^a	-	-	-	-	-	-	-	-	-
1975-1977 ^b	9.7	3.0	26.8	10.4	3.4	27.5 ^f	-	-	-
1978-1980 ^b	6.0	5.5	8.1	5.9	5.2	8.7	-	-	-
1981-1983 ^b	7.7	5.3	15.1	8.1	5.4	16.2	-	-	-
1984-1986 ^b	6.6	4.3	13.9	6.1	3.7	14.1	-	-	-
1987-1989 ^b	6.3	4.6	12.2	6.4	4.8	12.1	4.8	-	-
1990-1992 ^b	7.8	4.4	20.7	7.4	4.1	20.1	12.6 ^f	11.8 ^f	-
1993-1995 ^b	6.5	3.2	18.6	5.9	2.8	17.9	9.0	8.0 ^f	-
1996-1998 ^b	9.9	8.4	15.2	10.1	8.4	16.1	11.7 ^f	-	-
1999-2001 ^b	7.3	5.1	15.5	6.7	4.8	14.1	-	-	-
2002-2008 ^b	7.0	4.8 ^e	13.7	6.8	4.5 ^e	14.2	9.5	14.0 ^f	-
5-Year Period Survival (Percent) ^{cd}									
2008	8.3	5.9	16.3	7.8	5.5	15.6	12.2	9.4	-
5-Year Relative Survival (Percent), 2002-2008 ^c									
Age at Diagnosis:									
Ages <45	40.6	32.3 ^f	50.9 ^f	37.2	28.5 ^f	49.6 ^f	-	-	-
Ages 45-54	15.6	12.6	19.9	16.6	14.1	20.3	12.4 ^f	-	-
Ages 55-64	7.5	7.0	9.4	7.4	6.5	10.5	11.2 ^f	18.3 ^f	-
Ages 65-74	7.1	6.6	9.5	7.1	6.5	10.0	5.8	5.9 ^f	-
Ages 75+	3.2	1.5	8.4	3.3	1.5	8.7	-	-	-
Ages <65	13.4	10.5	20.4	12.8	9.9	20.0	17.0	15.9 ^f	19.9 ^f
Ages 65+	4.8	3.8	8.9	4.9	3.7	9.3	3.8	4.2	-

^a Based on End Results data from a series of hospital registries and one population-based registry.
^b SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).
Based on follow-up of patients into 2009.
^c SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).
Based on follow-up of patients into 2009.
^d Period survival provides a 2008 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2006-2008: 0-1 year survival), (2005-2007: 1-2 year survival), (2004-2006: 2-3 year survival), (2003-2005: 3-4 year survival), (2002-2004: 4-5 years survival).
^e The difference between 1975-1977 and 2002-2008 is statistically significant (p<.05).
^f The standard error is between 5 and 10 percentage points.
^g The standard error is greater than 10 percentage points.
- Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 17.5
MesotheliomaSEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

Survival Time	Year of Diagnosis																						
	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	
1-year	37.3	38.8	37.8	40.6	35.4	40.3	33.0	38.9	36.8	42.9	36.8	39.2	33.6	41.5	42.7	33.0	48.5	39.8	44.7	45.9	43.9	43.7	
2-year	16.5	19.2	17.0	15.8	13.7	19.6	13.7	17.7	13.8	26.1	16.9	22.1	18.0	15.1	24.7	16.9	22.3	16.7	21.1	28.7	20.0		
3-year	10.9	11.9	10.9	10.5	11.5	12.4	8.7	12.3	11.8	17.6	10.3	15.3	12.0	10.5	14.5	6.9	16.4	9.9	13.7	18.7			
4-year	9.4	8.4	8.1	5.9	8.6	10.1	6.1	9.6	9.0	11.9	7.8	12.6	9.7	7.0	10.9	4.7	13.0	8.1	10.2				
5-year	7.9	7.0	6.6	5.9	8.3	8.8	4.0	8.2	7.2	10.2	6.2	12.6	7.9	3.1	10.5	4.3	8.4	5.4					
6-year	6.7	5.7	5.2	4.1	7.4	6.4	4.0	7.9	6.1	10.0	4.7	11.4	7.0	1.3	9.4	3.8	7.4						
7-year	6.2	5.1	4.5	3.0	7.0	6.0	4.0	7.4	5.1	8.6	3.0	11.0	6.5	1.3	7.2	3.2							
8-year	5.6	4.9	4.0	2.5	6.3	6.0	3.0	6.6	5.1	6.6	3.0	8.5	6.5	0.7	7.2								
9-year	5.5	4.6	3.8	2.5	4.7	5.7	3.0	6.6	3.7	5.0	2.5	8.5	5.1	0.7									
10-year	5.2	4.3	3.4	2.5	4.7	4.7	2.5	6.4	3.1	4.4	2.5	7.7	5.1										
11-year	5.0	4.3	3.4	2.5	4.4	4.3	2.5	6.4	3.1	4.0	1.9	7.4											
12-year	4.9	4.1	3.4	2.5	4.4	3.7	2.5	5.5	2.5	3.5	1.9												
13-year	4.7	4.0	3.3	2.5	4.4	3.7	2.0	5.0	2.5	3.0													
14-year	4.7	4.0	3.3	2.5	4.4	3.7	2.0	5.0	2.5														
15-year	4.5	3.5	3.3	2.5	3.0	3.7	2.0	5.0															
16-year	4.1	3.5	3.3	2.5	3.0	3.7	2.0																
17-year	4.0	3.5	3.2	2.3	3.0	3.7																	
18-year	4.0	3.5	3.2	2.3	1.7																		
19-year	4.0	3.5	3.2	2.3																			
20-year	4.0	3.5	3.1																				

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 17.6
MesotheliomaSEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Survival Time																						
1-year	35.8	37.3	36.0	37.0	31.2	36.0	35.1	34.5	36.1	46.3	34.0	35.1	31.7	41.9	38.8	32.2	47.9	38.1	44.4	42.2	42.4	40.9
2-year	11.9	16.3	14.6	12.6	8.5	14.9	13.6	11.3	11.1	25.8	14.3	18.2	13.7	14.2	21.2	16.1	19.3	15.4	17.4	22.9	17.5	
3-year	6.6	9.5	8.5	7.6	7.8	7.7	7.7	6.8	9.0	16.2	8.7	12.4	6.8	9.0	11.6	6.1	14.0	8.9	9.0	12.2		
4-year	5.5	6.7	6.0	4.3	4.2	6.0	5.0	3.8	5.9	11.3	6.2	10.2	4.4	6.7	8.2	3.1	12.8	6.6	6.4			
5-year	4.0	5.1	4.7	4.3	4.2	4.3	2.2	3.3	4.2	10.3	4.2	10.2	3.8	4.0	7.6	3.1	7.2	3.9				
6-year	3.3	4.3	3.2	3.3	4.2	2.6	2.2	3.3	3.5	10.3	2.2	8.2	3.8	1.7	6.8	2.4	6.5					
7-year	2.9	3.4	2.5	1.7	4.2	2.1	2.2	2.7	2.2	9.6	1.5	8.2	3.8	1.7	4.4	1.7						
8-year	2.3	3.3	2.5	0.9	4.2	2.1	0.8	2.1	2.2	6.8	1.5	4.8	3.8	0.9	4.4							
9-year	2.1	3.1	2.3	0.9	2.8	2.1	0.8	2.1	0.9	5.3	0.8	4.8	2.9	0.9								
10-year	2.1	3.1	1.9	0.9	2.8	1.5	0.8	2.1	0.0	4.5	0.8	4.1	2.9									
11-year	2.1	3.1	1.9	0.9	2.2	1.5	0.8	2.1	0.0	3.9	0.0	4.1										
12-year	2.0	3.0	1.9	0.9	2.2	1.5	0.8	1.4	0.0	3.2	0.0											
13-year	1.7	2.8	1.9	0.9	2.2	1.5	0.8	1.4	0.0	2.4												
14-year	1.7	2.8	1.7	0.9	2.2	1.5	0.8	1.4	0.0													
15-year	1.1	2.5	1.6	0.9	2.2	1.5	0.8	1.4														
16-year	1.1	2.5	1.6	0.9	2.2	1.5	0.8															
17-year	1.1	2.4	1.6	0.0	0.0	1.5																
18-year	1.1	2.4	1.6	0.0	0.0																	
19-year	1.1	2.4	1.6	0.0																		
20-year	1.1	2.4	1.6																			

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 17.7
MesotheliomaSEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Survival Time																						
1-year	42.4	43.7	43.9	53.0	50.6	59.9	25.6	57.1	38.9	32.3	48.7	54.6	41.7	39.6	54.2	35.7	50.1	45.1	45.8	56.3	47.9	55.4
2-year	31.1	29.4	25.0	27.0	32.7	40.7	14.2	44.0	23.2	26.8	28.0	37.1	37.0	19.1	34.9	19.4	31.3	20.8	33.3	45.0	26.7	
3-year	24.4	20.0	18.9	20.6	23.9	33.1	12.0	34.9	21.2	21.3	17.2	26.0	34.9	16.8	22.9	9.8	23.0	12.6	29.2	36.6		
4-year	21.5	14.4	15.4	11.6	23.9	28.4	9.8	33.1	19.4	13.7	14.4	21.7	32.9	8.6	18.9	9.8	14.0	12.6	22.8			
5-year	20.1	13.3	13.4	11.6	22.5	28.4	9.8	28.6	17.7	9.9	14.4	21.7	25.6	0.0	18.9	7.9	11.9	10.2				
6-year	17.1	10.6	11.9	7.1	17.9	23.4	9.8	26.7	15.2	7.9	14.4	21.7	20.3	0.0	17.0	7.9	9.8					
7-year	16.4	10.6	10.9	7.1	15.6	23.4	9.8	26.7	15.2	6.0	8.9	20.6	17.6	0.0	15.1	7.9						
8-year	15.8	10.4	8.7	7.1	13.2	23.4	9.8	25.0	15.2	6.0	8.9	20.6	17.6	0.0	15.1							
9-year	15.8	9.5	8.7	7.1	11.3	21.5	9.8	25.0	12.9	4.0	8.9	20.6	15.0	0.0								
10-year	14.5	7.7	8.4	7.1	11.3	19.0	8.6	23.8	12.9	4.0	8.9	20.2	15.0									
11-year	13.8	7.7	8.4	7.1	11.3	16.3	8.6	23.8	12.9	4.0	8.9	18.1										
12-year	13.8	7.7	8.2	7.1	11.3	13.1	8.6	22.1	10.6	4.0	8.9											
13-year	13.8	7.7	8.2	7.1	11.3	13.1	6.0	19.5	10.6	4.0												
14-year	13.8	7.7	8.2	7.1	11.3	13.1	6.0	19.5	10.6													
15-year	13.8	6.8	8.2	7.1	7.0	13.1	6.0	19.5														
16-year	12.9	6.8	8.2	7.1	7.0	13.1	6.0															
17-year	12.3	6.8	8.2	7.1	7.0	13.1																
18-year	12.3	6.8	7.9	7.1	4.0																	
19-year	12.3	6.8	7.9	7.1																		
20-year	12.3	6.5	7.4																			

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Table 17.8
Mesothelioma (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
Lifetime Risk of Dying from Cancer Given Alive at Current Age
Both Sexes, 2007-2009 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.00	0.13	0.10	Asian/ Pacific Islander	0	0.00	0.00	0.00	0.05	0.04
	10	0.00	0.00	0.00	0.13	0.10		10	0.00	0.00	0.00	0.05	0.04
	20	0.00	0.00	0.00	0.13	0.10		20	0.00	0.00	0.00	0.05	0.04
	30	0.00	0.00	0.01	0.13	0.10		30	0.00	0.00	0.00	0.05	0.04
	40	0.00	0.01	0.04	0.13	0.10		40	0.00	0.00	0.01	0.05	0.04
	50	0.01	0.03	0.08	0.13	0.10		50	0.00	0.01	0.03	0.05	0.04
	60	0.03	0.08	0.12	0.13	0.10		60	0.01	0.03	0.04	0.05	0.04
	70	0.06	0.11	-	0.12	0.09		70	0.02	0.04	-	0.04	0.03
80	0.07	-	-	0.08	0.07	80	0.02	-	-	0.03	0.02		
White	0	0.00	0.00	0.00	0.14	0.11	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	0.10	0.07
	10	0.00	0.00	0.00	0.14	0.11		10	0.00	0.00	0.00	0.10	0.07
	20	0.00	0.00	0.00	0.14	0.11		20	0.00	0.00	0.00	0.10	0.07
	30	0.00	0.00	0.01	0.15	0.11		30	0.00	0.00	0.01	0.10	0.07
	40	0.00	0.01	0.04	0.15	0.11		40	0.00	0.01	0.02	0.10	0.07
	50	0.01	0.04	0.09	0.15	0.11		50	0.01	0.01	0.05	0.10	0.07
	60	0.03	0.09	0.14	0.15	0.11		60	0.01	0.05	0.10	0.11	0.07
	70	0.06	0.12	-	0.13	0.10		70	0.05	0.11	-	0.11	0.06
80	0.08	-	-	0.09	0.07	80	0.09	-	-	0.09	0.02		
Black	0	0.00	0.00	0.00	0.05	0.03	Hispanic ^b	0	0.00	0.00	0.00	0.12	0.06
	10	0.00	0.00	0.00	0.05	0.03		10	0.00	0.00	0.00	0.12	0.06
	20	0.00	0.00	0.00	0.05	0.03		20	0.00	0.00	0.00	0.12	0.06
	30	0.00	0.00	0.01	0.05	0.03		30	0.00	0.00	0.01	0.12	0.06
	40	0.00	0.01	0.02	0.05	0.03		40	0.00	0.01	0.03	0.12	0.06
	50	0.01	0.01	0.04	0.05	0.03		50	0.01	0.03	0.07	0.12	0.06
	60	0.01	0.03	0.05	0.05	0.03		60	0.02	0.07	0.11	0.12	0.06
	70	0.03	0.05	-	0.05	0.03		70	0.05	0.10	-	0.10	0.06
80	0.03	-	-	0.03	0.02	80	0.06	-	-	0.07	0.04		

Devcan Version 6.6.1, April 2012, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG). Mortality data are from the NCHS public use data file for the total US.

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

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

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 17.9
Mesothelioma (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
Lifetime Risk of Dying from Cancer Given Alive at Current Age
Males, 2007-2009 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.00	0.21	0.17	Asian/ Pacific Islander	0	0.00	0.00	0.00	0.08	0.06
	10	0.00	0.00	0.00	0.21	0.17		10	0.00	0.00	0.00	0.08	0.06
	20	0.00	0.00	0.00	0.22	0.17		20	0.00	0.00	0.00	0.08	0.06
	30	0.00	0.00	0.02	0.22	0.17		30	0.00	0.00	0.00	0.08	0.06
	40	0.00	0.02	0.05	0.22	0.17		40	0.00	0.00	0.02	0.08	0.06
	50	0.01	0.05	0.13	0.23	0.18		50	0.00	0.02	0.04	0.08	0.06
	60	0.04	0.13	0.21	0.23	0.18		60	0.01	0.04	0.07	0.08	0.06
	70	0.10	0.20	-	0.22	0.18		70	0.03	0.06	-	0.07	0.06
80	0.14	-	-	0.17	0.14	80	0.04	-	-	0.05	0.04		
White	0	0.00	0.00	0.00	0.24	0.18	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	0.12	0.08
	10	0.00	0.00	0.00	0.24	0.18		10	0.00	0.00	0.00	0.12	0.08
	20	0.00	0.00	0.00	0.24	0.19		20	0.00	0.00	0.01	0.12	0.08
	30	0.00	0.00	0.02	0.24	0.19		30	0.00	0.01	0.02	0.12	0.09
	40	0.00	0.02	0.06	0.25	0.19		40	0.01	0.02	0.03	0.13	0.09
	50	0.01	0.06	0.15	0.25	0.19		50	0.01	0.03	0.06	0.13	0.09
	60	0.05	0.15	0.24	0.26	0.20		60	0.01	0.05	0.12	0.12	0.09
	70	0.11	0.22	-	0.24	0.19		70	0.05	0.13	-	0.13	0.07
80	0.16	-	-	0.19	0.15	80	0.12	-	-	0.12	0.01		
Black	0	0.00	0.00	0.00	0.08	0.05	Hispanic ^b	0	0.00	0.00	0.00	0.20	0.10
	10	0.00	0.00	0.00	0.08	0.06		10	0.00	0.00	0.00	0.20	0.10
	20	0.00	0.00	0.00	0.08	0.06		20	0.00	0.00	0.00	0.20	0.11
	30	0.00	0.00	0.01	0.09	0.06		30	0.00	0.00	0.02	0.20	0.11
	40	0.00	0.01	0.02	0.09	0.06		40	0.00	0.02	0.04	0.20	0.11
	50	0.01	0.02	0.06	0.09	0.06		50	0.01	0.04	0.11	0.21	0.11
	60	0.02	0.06	0.09	0.09	0.06		60	0.03	0.10	0.19	0.20	0.11
	70	0.06	0.10	-	0.10	0.06		70	0.08	0.18	-	0.20	0.11
80	0.06	-	-	0.08	0.05	80	0.13	-	-	0.15	0.08		

Devcan Version 6.6.1, April 2012, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG). Mortality data are from the NCHS public use data file for the total US.

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

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

- Statistic could not be calculated.
A percent of 0.00 represents a value that is below 0.005.

Table 17.10
Mesothelioma (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
Lifetime Risk of Dying from Cancer Given Alive at Current Age
Females, 2007-2009 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.00	0.05	0.04	Asian/ Pacific Islander	0	0.00	0.00	0.00	0.02	0.02
	10	0.00	0.00	0.00	0.05	0.04		10	0.00	0.00	0.00	0.02	0.02
	20	0.00	0.00	0.00	0.05	0.04		20	0.00	0.00	0.00	0.02	0.02
	30	0.00	0.00	0.01	0.05	0.04		30	0.00	0.00	0.00	0.02	0.02
	40	0.00	0.01	0.02	0.05	0.04		40	0.00	0.00	0.01	0.02	0.02
	50	0.00	0.02	0.04	0.05	0.04		50	0.00	0.00	0.01	0.02	0.02
	60	0.01	0.03	0.05	0.05	0.04		60	0.00	0.01	0.02	0.02	0.02
	70	0.02	0.04	-	0.04	0.03		70	0.01	0.02	-	0.02	0.02
80	0.02	-	-	0.03	0.02	80	0.01	-	-	0.01	0.01		
White	0	0.00	0.00	0.00	0.06	0.04	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	0.08	0.05
	10	0.00	0.00	0.00	0.06	0.04		10	0.00	0.00	0.00	0.08	0.05
	20	0.00	0.00	0.00	0.06	0.04		20	0.00	0.00	0.00	0.08	0.05
	30	0.00	0.00	0.01	0.06	0.04		30	0.00	0.00	0.00	0.08	0.05
	40	0.00	0.01	0.02	0.06	0.04		40	0.00	0.00	0.00	0.08	0.05
	50	0.01	0.02	0.04	0.06	0.04		50	0.00	0.00	0.04	0.08	0.05
	60	0.02	0.04	0.05	0.06	0.04		60	0.00	0.05	0.09	0.09	0.05
	70	0.02	0.04	-	0.05	0.03		70	0.05	0.09	-	0.10	0.04
80	0.02	-	-	0.03	0.02	80	0.06	-	-	0.07	0.03		
Black	0	0.00	0.00	0.00	0.02	0.01	Hispanic ^b	0	0.00	0.00	0.00	0.05	0.03
	10	0.00	0.00	0.00	0.02	0.01		10	0.00	0.00	0.00	0.05	0.03
	20	0.00	0.00	0.00	0.02	0.01		20	0.00	0.00	0.00	0.05	0.03
	30	0.00	0.00	0.01	0.02	0.01		30	0.00	0.00	0.01	0.05	0.03
	40	0.00	0.00	0.01	0.02	0.01		40	0.00	0.01	0.02	0.05	0.03
	50	0.00	0.01	0.02	0.02	0.01		50	0.00	0.02	0.04	0.05	0.03
	60	0.01	0.01	0.02	0.02	0.01		60	0.02	0.03	0.05	0.05	0.03
	70	0.01	0.02	-	0.02	0.01		70	0.02	0.04	-	0.04	0.02
80	0.01	-	-	0.01	0.01	80	0.02	-	-	0.02	0.01		

Devcan Version 6.6.1, April 2012, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG). Mortality data are from the NCHS public use data file for the total US.

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

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

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 17.11
Mesothelioma

SEER Incidence
Age-Adjusted Rates and Trends^a
By Race/Ethnicity and Sex

SEER Incidence	SEER 18 Areas ^b			SEER 13 Areas ^b			SEER 9 Areas ^b		
	Rate 2005-2009			Trend 2000-2009 ^c			Trend 2000-2009 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	1.0	1.9	0.4	-1.0*	-1.4*	0.0	-1.1*	-1.6*	-0.2
White	1.2	2.1	0.5	-0.6*	-1.1*	0.5	-0.7*	-1.3*	0.7*
White Hispanic ^e	1.0	1.6	0.5	-0.6	-2.3*	-	-	-	-
White Non-Hispanic ^e	1.2	2.2	0.5	-0.5	-0.9*	0.2	-	-	-
Black	0.6	1.1	0.3	-	-	-	-5.9*	-7.0*	-
Asian/Pacific Islander	0.3	0.6	0.2	-	-	-	-	-	-
Amer Ind/Alaska Nat ^f	0.9	-	-	-	-	-	-	-	-
Hispanic ^e	0.9	1.6	0.5	-0.5	-2.2*	-	-	-	-

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

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

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

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

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

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

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

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

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

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

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

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

Table 17.12
MesotheliomaAge-Adjusted SEER Incidence Rates^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates^a, 2005-2009</u>									
California	0.99	1.80	0.41	1.13	2.04	0.47	0.66	1.29	-
Greater Bay Area	1.00	1.84	0.40	1.25	2.31	0.48	-	-	-
San Francisco-Oakland	1.03	1.89	0.41	1.32	2.44	0.50	-	-	-
San Jose-Monterey	0.93	1.72	0.37	1.12	2.07	0.45	-	-	-
Los Angeles	0.86	1.51	0.42	1.06	1.86	0.51	0.42	-	-
Greater California	1.06	1.92	0.42	1.13	2.03	0.46	0.92	2.04	-
Connecticut	1.08	1.94	0.48	1.15	2.06	0.50	-	-	-
Detroit	0.89	1.65	0.39	1.04	1.97	0.42	-	-	-
Georgia	0.70	1.32	0.28	0.81	1.45	0.36	0.31	0.81	-
Atlanta	0.52	0.95	0.24	0.60	0.95	0.37	-	-	-
Rural Georgia	-	-	-	-	-	-	-	-	-
Greater Georgia	0.76	1.48	0.29	0.88	1.64	0.34	0.32	-	-
Hawaii	0.55	1.03	-	-	-	-	-	-	-
Iowa	0.80	1.44	0.35	0.81	1.47	0.36	-	-	-
Kentucky	0.85	1.57	0.34	0.87	1.63	0.33	-	-	-
Louisiana	1.37	2.49	0.59	1.47	2.67	0.61	1.14	2.00	0.57
New Jersey	1.52	2.87	0.64	1.67	3.12	0.71	0.75	1.51	-
New Mexico	0.99	1.50	0.58	0.98	1.50	0.57	-	-	-
Seattle-Puget Sound	1.44	2.62	0.57	1.55	2.82	0.59	-	-	-
Utah	1.02	1.96	-	1.05	2.01	-	-	-	-
9 SEER Areas ^b	0.98	1.78	0.41	1.10	1.99	0.45	0.39	0.65	0.22
11 SEER Areas ^b	0.95	1.72	0.41	1.09	1.97	0.47	0.40	0.69	0.21
13 SEER Areas ^b	0.95	1.71	0.41	1.09	1.97	0.47	0.40	0.70	0.21
18 SEER Areas ^b	1.04	1.91	0.43	1.16	2.11	0.48	0.58	1.11	0.25

^a Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

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

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

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

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

Table 17.13
MesotheliomaEstimated United States Cancer Prevalence Counts^a on January 1, 2009
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <19 ^e	0 to <34 ^e	>=34 ^g	Complete ^h
<u>Race</u>	<u>Sex</u>										
All Races ^b	Both Sexes	3,040	486	385	249	189	107	4,122	4,570	+	+
	Males	2,095	256	116	86	60	58	2,526	2,694	+	+
	Females	945	230	269	163	129	49	1,596	1,876	+	+
White ^b	Both Sexes	2,826	397	350	221	177	95	3,758	4,155	+	+
	Males	1,935	217	104	70	48	46	2,303	2,431	+	+
	Females	891	180	246	151	129	49	1,455	1,724	+	+
Black ^b	Both Sexes	144	56	26	26	12	12	251	298	+	+
	Males	109	34	13	13	12	12	169	205	+	+
	Females	35	22	13	13	0	0	82	93	+	+
Asian/ Pacific Islander ^c	Both Sexes	30	16	4	+	+	+	50	+	+	+
	Males	9	10	4	+	+	+	23	+	+	+
	Females	21	6	0	+	+	+	27	+	+	+
Hispanic ^d	Both Sexes	266	49	26	+	+	+	358	+	+	+
	Males	142	38	21	+	+	+	201	+	+	+
	Females	124	11	5	+	+	+	157	+	+	+

Estimated prevalence percent^a on January 1, 2009, of the SEER 11 population diagnosed in the previous 19 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence		Age Specific (Crude)									Age-Adjusted ^f	
		All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages
<u>Race</u>	<u>Sex</u>											
All Races ^c	Both Sexes	0.0011%	-	-	-	0.0003%	0.0005%	0.0013%	0.0034%	0.0062%	0.0072%	0.0011%
	Males	0.0014%	-	-	-	0.0002%	0.0004%	0.0016%	0.0044%	0.0099%	0.0147%	0.0017%
	Females	0.0008%	-	-	-	0.0004%	0.0007%	0.0010%	0.0025%	0.0033%	0.0030%	0.0008%
White ^c	Both Sexes	0.0013%	-	-	-	0.0003%	0.0006%	0.0015%	0.0039%	0.0070%	0.0078%	0.0013%
	Males	0.0017%	-	-	-	0.0002%	0.0004%	0.0019%	0.0053%	0.0108%	0.0154%	0.0019%
	Females	0.0009%	-	-	-	0.0004%	0.0008%	0.0011%	0.0027%	0.0039%	0.0035%	0.0009%
Black ^c	Both Sexes	0.0005%	-	-	-	-	-	0.0010%	0.0020%	0.0042%	-	0.0007%
	Males	0.0007%	-	-	-	-	-	-	-	0.0089%	-	0.0013%
	Females	0.0003%	-	-	-	-	-	-	-	-	-	0.0003%
Asian/ Pacific Islander ^c	Both Sexes	0.0004%	-	-	-	-	-	-	0.0012%	-	0.0043%	0.0004%
	Males	0.0004%	-	-	-	-	-	-	-	-	0.0097%	0.0005%
	Females	0.0004%	-	-	-	-	-	-	-	-	-	0.0003%
Hispanic ^d	Both Sexes	0.0007%	-	-	-	-	0.0006%	0.0022%	0.0049%	0.0059%	0.0061%	0.0013%
	Males	0.0008%	-	-	-	-	-	0.0034%	0.0062%	0.0064%	0.0124%	0.0017%
	Females	0.0006%	-	-	-	-	-	-	0.0037%	0.0055%	-	0.0010%

^a US 2009 cancer prevalence counts are based on 2009 cancer prevalence proportions from the SEER registries and 1/1/2009 US population estimates based on the average of 2008 and 2009 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

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

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

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

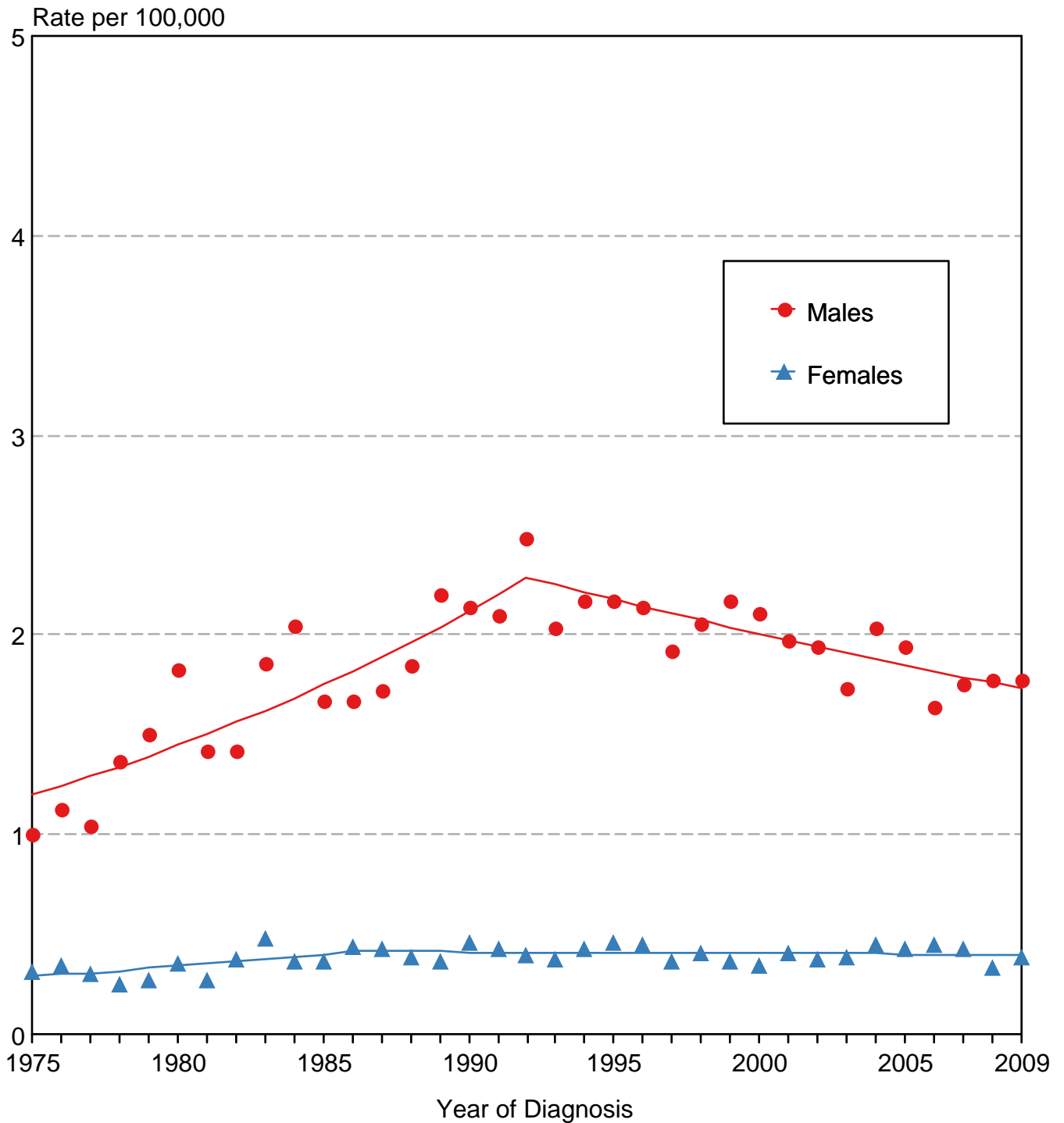
^{g h i} (g) Cases diagnosed more than 34 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (h) Complete prevalence is obtained by summing 0 to <34 and >=34. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.

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

+ Not available.

Figure 17.1

Mesothelioma SEER Incidence, 1975-2009 All Races, By Sex



Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.