

Table 17.1

Mesothelioma

Age-Adjusted SEER Cancer Incidence Rates^a, 1980-2013

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	2010- 2012
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	1.0	1.0
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	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	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	3.0	2.8	2.4	2.4	2.1
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	8.7	8.0	7.3	6.1
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	17.8	14.4	15.4	19.2
Ages 85+	-	-	-	-	12.8	12.0	20.5	12.4	15.8	15.9	14.4	13.5	19.8	15.6	22.8	15.5
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	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	0.1
Ages 55-64	0.9	1.0	0.8	1.0	-	0.9	0.9	1.1	0.8	-	-	0.9	0.8	0.6	0.7	0.6
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	1.8
Ages 75-84	-	2.0	3.1	2.3	1.7	3.0	2.8	2.6	2.3	2.0	2.8	2.7	3.2	3.8	2.4	3.0
Ages 85+	-	-	-	-	-	-	-	-	-	-	2.9	-	-	-	3.1	2.9
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	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	2.1	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	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	0.6	0.3	0.4	0.4
Males	-	-	-	-	-	1.5	1.3	1.8	1.1	1.4	-	-	1.0	-	-	-
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
1975-2013	0.99	1.85	0.39	1.08	2.02	0.43	0.53	0.95	0.25
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	0.61	1.03	0.31	0.64	1.04	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	0.42	1.24	2.32	0.45	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	1.16	2.19	0.46	-	-	-
1999	1.12	2.17	0.38	1.20	2.30	0.40	-	-	-
2000	1.08	2.11	0.34	1.21	2.36	0.38	-	-	-
2001	1.06	1.98	0.41	1.17	2.19	0.45	-	-	-
2002	1.03	1.95	0.38	1.16	2.18	0.43	-	-	-
2003	0.96	1.74	0.40	1.05	1.90	0.44	-	-	-
2004	1.11	2.05	0.45	1.22	2.26	0.49	-	-	-
2005	1.05	1.95	0.43	1.19	2.18	0.50	-	-	-
2006	0.97	1.65	0.46	1.07	1.83	0.48	-	-	-
2007	0.98	1.77	0.43	1.11	2.00	0.48	-	-	-
2008	0.96	1.82	0.35	1.07	2.00	0.38	-	-	-
2009	0.99	1.83	0.39	1.16	2.12	0.46	-	-	-
2010	1.00	1.83	0.41	1.11	2.06	0.42	-	-	-
2011	0.96	1.71	0.40	1.09	1.90	0.47	-	-	-
2012	0.94	1.67	0.40	1.10	1.90	0.51	-	-	-
2013	0.81	1.45	0.35	0.93	1.61	0.43	-	-	-

^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, 2009-2013									
All ages	1.0	1.8	0.4	1.1	2.0	0.5	0.5	1.0	0.3
Under 65	0.2	0.3	0.1	0.3	0.3	0.2	0.2	0.2	0.1
65 and over	6.1	11.8	2.1	6.9	13.1	2.4	3.1	6.4	1.2
All ages (IARC world std) ^b	0.5	0.9	0.2	0.6	1.0	0.3	0.3	0.5	0.2
Age-Specific Rates, 2009-2013									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	0.1	-	-	0.1	-	-	-	-	-
35-39	0.1	-	0.1	0.1	-	-	-	-	-
40-44	0.1	0.1	-	0.1	0.2	-	-	-	-
45-49	0.3	0.3	0.2	0.3	0.4	0.3	-	-	-
50-54	0.5	0.7	0.4	0.6	0.8	0.4	0.6	-	-
55-59	0.9	1.2	0.6	1.0	1.3	0.7	0.6	-	-
60-64	1.7	2.6	0.9	2.0	3.0	1.0	1.0	1.6	-
65-69	3.2	5.5	1.1	3.6	6.1	1.3	1.7	3.1	-
70-74	5.1	8.8	1.9	5.8	9.9	2.2	2.8	5.1	-
75-79	7.6	14.0	2.7	8.4	15.4	3.0	4.4	9.0	-
80-84	9.5	19.2	3.0	10.8	21.6	3.4	3.6	-	-
85+	8.6	19.6	2.9	9.3	21.4	3.2	3.9	12.0	-

^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	26.7	10.4	3.3	27.4 ^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	6.2	4.6	12.2	6.3	4.8	12.1	4.8	-	-
1990-1992 ^b	7.7	4.2	20.6	7.4	4.1	20.1	10.2 ^f	8.5 ^f	-
1993-1995 ^b	6.5	3.2	18.7	5.9	2.8	18.0	9.0	8.0 ^f	-
1996-1998 ^b	9.8	8.2	15.2	9.8	8.0	16.2	11.4 ^f	-	-
1999-2001 ^b	7.6	5.3	15.9	6.7	5.0	13.1	-	-	-
2002-2005 ^b	7.2	5.2	13.5	7.0	5.0	13.5	6.0	-	-
2006-2012 ^b	9.2	6.6 ^e	17.0	9.4	6.6 ^e	18.2	5.2	5.1	-
5-Year Period Survival (Percent) ^{cd}									
2012	9.3	7.1	16.0	9.3	7.2	15.9	11.5	6.3	30.0
5-Year Relative Survival (Percent), 2006-2012 ^c									
Age at Diagnosis:									
Ages <45	48.1	42.7 ^f	54.4 ^f	46.7 ^f	42.0 ^f	53.3 ^f	-	-	-
Ages 45-54	19.7	15.2	26.6	19.9	15.7	26.2 ^f	23.4 ^f	-	-
Ages 55-64	11.9	9.7	18.5	12.6	9.8	20.9	8.3 ^f	11.5 ^f	-
Ages 65-74	8.7	7.1	14.4	9.1	7.6	14.5	6.4	5.6	-
Ages 75+	4.0	3.6	4.8	3.8	3.2	5.2	4.2	5.6	-
Ages <65	18.0	13.9	26.9	18.1	14.1	27.4	22.3	16.9 ^f	30.9 ^f
Ages 65+	6.0	5.1	8.6	6.0	5.1	8.9	5.4	5.6	-

^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 2013.

^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 2013.

^d Period survival provides a 2012 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).^e The difference between 1975-1977 and 2006-2012 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

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Survival Time																						
1-year	34.8	37.7	35.7	35.9	35.8	41.9	35.3	37.4	31.7	40.5	40.4	31.7	46.6	39.5	40.6	44.5	42.3	45.0	45.4	33.5	47.3	40.1
2-year	15.9	18.7	16.5	15.7	13.8	25.1	16.9	21.2	18.6	14.6	24.0	15.6	22.3	16.6	19.7	28.4	18.7	20.7	26.1	16.5	26.1	
3-year	10.8	11.7	10.8	10.9	11.8	17.5	10.3	14.7	12.8	10.5	13.8	6.9	16.8	10.4	12.7	19.6	11.5	14.5	16.3	8.5		
4-year	9.2	8.4	8.0	8.2	8.9	11.4	7.8	12.6	10.5	7.0	11.4	4.7	13.5	8.5	10.3	14.8	7.1	11.9	14.3			
5-year	7.9	7.0	6.6	7.1	7.1	10.2	5.7	12.6	8.2	3.1	10.9	4.2	9.0	6.0	9.3	12.6	4.8	9.8				
6-year	6.7	5.7	5.2	6.0	6.1	10.0	4.6	11.3	7.8	1.3	9.9	3.7	8.0	6.0	9.3	11.3	4.2					
7-year	6.0	5.1	4.5	5.6	5.1	8.6	3.0	10.6	7.4	1.3	7.7	3.2	6.9	4.4	9.1	10.3						
8-year	5.6	4.8	4.0	5.0	5.1	6.5	3.0	8.5	7.4	0.7	7.7	3.2	5.7	3.8	8.3							
9-year	5.3	4.6	3.8	4.7	3.0	4.9	2.5	8.5	6.0	0.7	7.7	3.2	5.7	3.2								
10-year	5.2	4.3	3.4	4.3	3.0	4.4	2.5	7.7	6.0	0.7	6.8	3.0	4.0									
11-year	5.0	4.3	3.4	4.1	3.0	4.0	1.9	7.4	5.6	0.7	5.0	3.0										
12-year	4.9	4.1	3.4	3.8	2.5	3.5	1.9	5.6	5.6	0.7	5.0											
13-year	4.7	4.0	3.3	3.6	2.5	3.0	1.9	5.6	5.6	0.7												
14-year	4.7	4.0	3.3	3.6	2.5	3.0	1.9	5.6	5.1													
15-year	4.3	3.5	3.2	3.6	2.5	3.0	1.9	5.6														
16-year	4.1	3.5	3.2	3.6	2.5	3.0	1.9															
17-year	4.0	3.5	3.2	3.6	2.5	2.9																
18-year	4.0	3.5	3.2	3.2	2.5																	
19-year	4.0	3.5	3.2	2.4																		
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- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Survival Time																						
1-year	32.9	36.0	33.8	32.8	34.9	45.0	32.7	32.8	28.8	41.3	36.5	30.6	44.9	37.5	40.5	39.9	40.7	41.8	46.2	30.9	45.8	40.0
2-year	11.1	15.9	14.2	11.7	11.1	24.5	14.3	17.6	13.7	13.5	20.3	14.5	18.5	14.7	17.3	22.0	15.2	19.3	25.6	16.0	22.4	
3-year	6.6	9.5	8.4	7.4	8.9	16.2	8.7	11.7	6.8	9.0	10.8	6.0	13.9	8.9	8.9	12.8	10.5	13.6	13.9	6.2		
4-year	5.2	6.6	5.8	4.7	5.9	11.3	6.2	10.1	4.4	6.7	8.8	3.1	12.6	6.6	6.3	9.4	5.9	11.2	11.0			
5-year	4.0	5.1	4.6	3.6	4.2	10.3	3.6	10.1	3.8	4.0	8.2	3.1	7.1	3.9	6.3	7.6	4.3	8.5				
6-year	3.3	4.3	3.2	3.1	3.5	10.3	2.2	8.2	3.8	1.7	7.5	2.4	6.5	3.9	6.3	6.3	4.3					
7-year	2.6	3.4	2.5	2.6	2.2	9.5	1.5	7.8	3.8	1.7	5.1	1.6	5.7	2.1	6.3	6.3						
8-year	2.3	3.3	2.5	2.1	2.2	6.7	1.5	4.8	3.8	0.9	5.1	1.6	5.7	2.1	6.2							
9-year	2.1	3.1	2.2	1.8	0.0	5.2	0.8	4.8	2.8	0.9	5.1	1.6	5.7	1.1								
10-year	2.1	3.1	1.9	1.7	0.0	4.5	0.8	4.1	2.8	0.9	5.1	1.6	4.5									
11-year	2.1	3.1	1.9	1.6	0.0	3.9	0.0	4.1	2.2	0.9	2.8	1.6										
12-year	1.9	2.9	1.9	1.4	0.0	3.2	0.0	3.6	2.2	0.9	2.8											
13-year	1.7	2.8	1.8	1.4	0.0	2.3	0.0	3.6	2.2	0.9												
14-year	1.4	2.8	1.7	1.4	0.0	2.3	0.0	3.6	1.6													
15-year	1.1	2.5	1.6	1.4	0.0	2.3	0.0	3.6														
16-year	1.1	2.5	1.6	1.4	0.0	2.3	0.0															
17-year	1.1	2.4	1.6	1.2	0.0	1.8																
18-year	1.1	2.4	1.6	1.2	0.0																	
19-year	1.1	2.4	1.6	0.7																		
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- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Survival Time																						
1-year	40.8	43.7	42.3	48.0	38.8	32.3	46.3	54.5	43.7	37.1	52.3	35.7	51.2	46.0	41.0	57.0	46.7	57.8	42.9	42.5	52.3	40.6
2-year	31.1	28.3	24.5	31.2	23.1	26.8	27.9	34.8	39.3	19.0	34.8	19.4	32.9	22.3	27.9	45.8	27.9	26.1	27.2	18.4	38.4	
3-year	24.4	19.4	18.9	24.4	21.2	21.3	17.2	26.0	37.4	16.7	22.8	9.8	24.8	14.3	25.9	37.8	14.3	17.8	23.0	16.5		
4-year	21.5	14.4	15.4	21.3	19.3	11.8	14.4	21.6	35.4	8.6	18.8	9.8	16.0	14.3	23.7	29.3	10.3	15.2	23.0			
5-year	20.1	13.3	13.4	20.2	17.6	9.8	14.4	21.6	26.2	0.0	18.8	7.8	14.2	12.4	19.3	26.0	6.3	15.2				
6-year	17.1	10.5	11.9	16.9	15.2	7.9	14.4	21.6	23.8	0.0	16.9	7.8	12.2	12.4	19.3	24.9	4.3					
7-year	16.3	10.5	10.8	16.5	15.2	6.0	8.9	20.5	21.4	0.0	15.0	7.8	10.2	10.4	17.6	21.1						
8-year	15.7	9.9	8.7	15.8	15.2	6.0	8.9	20.5	21.4	0.0	15.0	7.8	5.2	8.4	15.5							
9-year	15.2	9.5	8.7	15.3	12.9	4.0	8.9	20.5	19.0	0.0	15.0	7.8	5.2	8.4								
10-year	14.4	7.7	8.4	14.0	12.9	4.0	8.9	20.1	19.0	0.0	11.1	6.8	2.9									
11-year	13.7	7.7	8.4	13.7	12.9	4.0	8.9	18.1	19.0	0.0	11.1	6.8										
12-year	13.7	7.7	8.1	12.7	10.5	4.0	8.9	12.6	19.0	0.0	11.1											
13-year	13.7	7.7	8.1	11.8	10.5	4.0	8.9	12.6	19.0	0.0												
14-year	13.7	7.7	8.1	11.8	10.5	4.0	8.9	12.6	19.0													
15-year	13.7	6.8	8.1	11.6	10.5	4.0	8.9	12.6														
16-year	12.9	6.8	8.1	11.6	10.5	4.0	8.9															
17-year	12.3	6.8	8.1	11.6	10.5	4.0																
18-year	12.3	6.8	7.9	10.5	10.5																	
19-year	12.3	6.8	7.9	8.7																		
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, 2011-2013 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	0.04	0.10	Asian/ Pacific Islander	0	0.00	0.00	0.00	0.02	0.04
	10	0.00	0.00	0.01	0.04	0.10		10	0.00	0.00	0.00	0.02	0.04
	20	0.00	0.01	0.02	0.04	0.10		20	0.00	0.00	0.01	0.02	0.04
	30	0.01	0.02	0.02	0.04	0.10		30	0.00	0.01	0.01	0.02	0.04
	40	0.01	0.01	0.02	0.03	0.10		40	0.00	0.00	0.01	0.01	0.04
	50	0.00	0.01	0.01	0.02	0.10		50	0.00	0.00	0.01	0.01	0.04
	60	0.00	0.01	0.02	0.02	0.10		60	0.00	0.00	0.01	0.01	0.04
	70	0.01	0.01	-	0.02	0.10		70	0.00	0.01	-	0.01	0.04
80	0.01	-	-	0.02	0.07	80	0.00	-	-	0.01	0.03		
White	0	0.00	0.00	0.00	0.04	0.11	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	0.01	0.09
	10	0.00	0.00	0.01	0.04	0.11		10	0.00	0.00	0.00	0.01	0.09
	20	0.00	0.01	0.01	0.04	0.11		20	0.00	0.00	0.00	0.01	0.09
	30	0.01	0.01	0.02	0.03	0.11		30	0.00	0.00	0.01	0.01	0.10
	40	0.01	0.01	0.02	0.03	0.11		40	0.00	0.01	0.01	0.01	0.10
	50	0.00	0.01	0.01	0.02	0.11		50	0.00	0.01	0.01	0.01	0.10
	60	0.00	0.01	0.02	0.02	0.11		60	0.01	0.01	0.01	0.01	0.11
	70	0.01	0.02	-	0.02	0.11		70	0.00	0.00	-	0.00	0.11
80	0.01	-	-	0.02	0.08	80	0.00	-	-	0.00	0.11		
Black	0	0.00	0.00	0.02	0.08	0.04	Hispanic ^b	0	0.00	0.00	0.00	0.07	0.06
	10	0.00	0.02	0.04	0.08	0.04		10	0.00	0.00	0.01	0.07	0.06
	20	0.02	0.04	0.06	0.08	0.04		20	0.00	0.01	0.02	0.07	0.06
	30	0.02	0.05	0.05	0.06	0.04		30	0.01	0.02	0.02	0.07	0.06
	40	0.02	0.03	0.03	0.04	0.04		40	0.01	0.01	0.02	0.06	0.06
	50	0.01	0.01	0.02	0.02	0.04		50	0.01	0.01	0.02	0.06	0.06
	60	0.00	0.01	0.01	0.01	0.04		60	0.01	0.02	0.04	0.05	0.06
	70	0.00	0.01	-	0.01	0.03		70	0.01	0.03	-	0.05	0.05
80	0.01	-	-	0.01	0.02	80	0.02	-	-	0.04	0.04		

Devcan 6.7.4, August 2016, 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.

- 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, 2011-2013 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	0.01	0.07	0.16	Asian/ Pacific Islander	0	0.00	0.00	0.00	0.03	0.06
	10	0.00	0.01	0.02	0.08	0.16		10	0.00	0.00	0.01	0.03	0.06
	20	0.01	0.02	0.04	0.08	0.17		20	0.00	0.01	0.01	0.03	0.06
	30	0.01	0.03	0.04	0.07	0.17		30	0.01	0.01	0.02	0.03	0.06
	40	0.02	0.03	0.03	0.05	0.17		40	0.01	0.01	0.01	0.02	0.06
	50	0.01	0.02	0.03	0.04	0.17		50	0.00	0.01	0.01	0.02	0.07
	60	0.01	0.02	0.03	0.03	0.18		60	0.00	0.01	0.01	0.01	0.07
	70	0.01	0.02	-	0.03	0.18		70	0.00	0.01	-	0.01	0.06
80	0.02	-	-	0.02	0.14	80	0.01	-	-	0.01	0.05		
White	0	0.00	0.00	0.00	0.06	0.18	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	0.03	0.16
	10	0.00	0.00	0.01	0.06	0.18		10	0.00	0.00	0.00	0.03	0.16
	20	0.00	0.01	0.03	0.06	0.18		20	0.00	0.00	0.01	0.03	0.16
	30	0.01	0.02	0.03	0.06	0.18		30	0.00	0.01	0.01	0.03	0.17
	40	0.01	0.02	0.03	0.05	0.18		40	0.01	0.01	0.02	0.03	0.17
	50	0.01	0.02	0.02	0.04	0.19		50	0.01	0.02	0.02	0.02	0.19
	60	0.01	0.02	0.03	0.03	0.20		60	0.01	0.02	0.02	0.02	0.20
	70	0.01	0.02	-	0.03	0.19		70	0.00	0.00	-	0.00	0.20
80	0.02	-	-	0.02	0.15	80	0.00	-	-	0.00	0.25		
Black	0	0.00	0.00	0.04	0.15	0.06	Hispanic ^b	0	0.00	0.00	0.01	0.10	0.10
	10	0.00	0.04	0.08	0.15	0.07		10	0.00	0.01	0.02	0.10	0.10
	20	0.03	0.08	0.12	0.15	0.07		20	0.01	0.02	0.04	0.10	0.10
	30	0.05	0.09	0.10	0.12	0.07		30	0.01	0.03	0.04	0.09	0.10
	40	0.04	0.06	0.07	0.08	0.07		40	0.02	0.03	0.04	0.08	0.10
	50	0.02	0.03	0.03	0.04	0.07		50	0.01	0.02	0.04	0.07	0.10
	60	0.01	0.01	0.02	0.02	0.07		60	0.01	0.03	0.04	0.06	0.10
	70	0.01	0.01	-	0.01	0.07		70	0.02	0.03	-	0.05	0.09
80	0.01	-	-	0.01	0.05	80	0.02	-	-	0.05	0.07		

Devcan 6.7.4, August 2016, 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.

- 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, 2011-2013 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	0.01	0.04	Asian/ Pacific Islander	0	0.00	0.00	0.00	0.01	0.02
	10	0.00	0.00	0.00	0.01	0.04		10	0.00	0.00	0.00	0.01	0.02
	20	0.00	0.00	0.00	0.01	0.04		20	0.00	0.00	0.00	0.01	0.02
	30	0.00	0.00	0.00	0.01	0.04		30	0.00	0.00	0.00	0.01	0.02
	40	0.00	0.00	0.00	0.01	0.04		40	0.00	0.00	0.00	0.01	0.02
	50	0.00	0.00	0.00	0.01	0.04		50	0.00	0.00	0.00	0.01	0.02
	60	0.00	0.00	0.01	0.01	0.04		60	0.00	0.00	0.00	0.01	0.02
	70	0.00	0.01	-	0.01	0.03		70	0.00	0.00	-	0.01	0.02
80	0.01	-	-	0.01	0.03	80	0.00	-	-	0.01	0.01		
White	0	0.00	0.00	0.00	0.01	0.04	American Indian/ Alaska Native ^a	0	0.00	0.00	0.00	0.00	0.04
	10	0.00	0.00	0.00	0.01	0.04		10	0.00	0.00	0.00	0.00	0.04
	20	0.00	0.00	0.00	0.01	0.04		20	0.00	0.00	0.00	0.00	0.04
	30	0.00	0.00	0.00	0.01	0.04		30	0.00	0.00	0.00	0.00	0.04
	40	0.00	0.00	0.00	0.01	0.04		40	0.00	0.00	0.00	0.00	0.05
	50	0.00	0.00	0.00	0.01	0.04		50	0.00	0.00	0.00	0.00	0.05
	60	0.00	0.00	0.01	0.01	0.04		60	0.00	0.00	0.00	0.00	0.05
	70	0.00	0.01	-	0.01	0.04		70	0.00	0.00	-	0.00	0.05
80	0.01	-	-	0.01	0.03	80	0.00	-	-	0.00	0.04		
Black	0	0.00	0.00	0.00	0.01	0.01	Hispanic ^b	0	0.00	0.00	0.00	0.05	0.03
	10	0.00	0.00	0.00	0.01	0.01		10	0.00	0.00	0.00	0.05	0.03
	20	0.00	0.00	0.01	0.01	0.01		20	0.00	0.00	0.00	0.05	0.03
	30	0.00	0.01	0.01	0.01	0.01		30	0.00	0.00	0.00	0.05	0.03
	40	0.00	0.01	0.01	0.01	0.01		40	0.00	0.00	0.00	0.05	0.03
	50	0.00	0.00	0.00	0.01	0.01		50	0.00	0.00	0.01	0.05	0.03
	60	0.00	0.00	0.00	0.00	0.01		60	0.00	0.01	0.03	0.05	0.03
	70	0.00	0.00	-	0.00	0.01		70	0.01	0.03	-	0.05	0.02
80	0.00	-	-	0.00	0.01	80	0.03	-	-	0.04	0.02		

Devcan 6.7.4, August 2016, 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.

- 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 2009-2013			Trend 2004-2013 ^c			Trend 2004-2013 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	1.0	1.8	0.4	-1.2*	-1.6*	-0.2	-1.1*	-1.6*	-0.2
White	1.1	2.0	0.5	-0.8*	-1.3*	0.3	-0.7*	-1.3*	0.7*
White Hispanic ^e	0.9	1.5	0.4	-5.3*	-2.3*	-1.4	-	-	-
White Non-Hispanic ^e	1.1	2.0	0.5	-0.7*	-1.2*	0.4	-	-	-
Black	0.5	1.0	0.3	-3.5*	-3.7*	-2.4	-4.7*	-4.5*	-
Asian/Pacific Islander	0.3	0.6	0.2	-1.3	-1.1	-0.9	-	-	-
Amer Ind/Alaska Nat ^f	-	-	-	-	-	-	-	-	-
Hispanic ^e	0.8	1.5	0.4	-5.4*	-2.2*	-1.5	-	-	-

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.3.0.0, April 2016, 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 2004-2013 AAPC estimates are based on a Joinpoint analysis with up to 4 Joinpoints over diagnosis years 1992-2013.

^d The 2004-2013 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2013.

^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, 2009-2013</u>									
California	0.94	1.67	0.40	1.08	1.91	0.46	0.62	1.23	-
Greater Bay Area	0.96	1.68	0.46	1.21	2.14	0.54	-	-	-
San Francisco-Oakland	1.00	1.71	0.51	1.32	2.27	0.64	-	-	-
San Jose-Monterey	0.89	1.61	0.36	1.02	1.91	0.35	-	-	-
Los Angeles	0.77	1.32	0.37	0.94	1.59	0.45	0.46	-	-
Greater California	1.01	1.83	0.39	1.10	1.97	0.44	0.83	1.80	-
Connecticut	1.07	1.98	0.43	1.15	2.12	0.47	-	-	-
Detroit	0.90	1.71	0.34	1.06	2.04	0.35	0.37	-	-
Georgia	0.61	1.12	0.25	0.72	1.28	0.29	0.31	0.66	-
Atlanta	0.50	0.95	-	0.66	1.15	-	-	-	-
Rural Georgia	-	-	-	-	-	-	-	-	-
Greater Georgia	0.66	1.19	0.28	0.73	1.31	0.30	0.37	-	-
Hawaii	0.49	0.92	-	0.81	-	-	-	-	-
Iowa	0.88	1.52	0.43	0.89	1.53	0.43	-	-	-
Kentucky	0.79	1.38	0.37	0.81	1.45	0.36	-	-	-
Louisiana	1.35	2.32	0.64	1.50	2.56	0.69	0.95	1.69	0.51
New Jersey	1.28	2.45	0.48	1.44	2.71	0.55	0.57	1.17	-
New Mexico	0.78	1.40	0.30	0.81	1.43	0.32	-	-	-
Seattle-Puget Sound	1.34	2.41	0.54	1.44	2.55	0.59	-	-	-
Utah	0.81	1.44	0.29	0.81	1.43	0.29	-	-	-
SEER 9 Areas ^b	0.94	1.69	0.39	1.08	1.91	0.45	0.37	0.62	0.23
SEER 13 Areas ^b	0.90	1.60	0.38	1.04	1.85	0.44	0.40	0.68	0.23
SEER 18 Areas ^b	0.97	1.75	0.40	1.09	1.95	0.45	0.54	0.99	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 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.

- 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, 2013
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 <21 ^e	0 to <38 ^e	>=38 ^g	Complete ^h
<u>Race</u>	<u>Sex</u>										
All Races ^b	Both Sexes	3,073	635	368	190	202	132	4,394	4,738	+	+
	Males	2,172	354	157	24	52	48	2,744	2,854	+	+
	Females	901	281	211	166	150	84	1,650	1,884	+	+
White ^b	Both Sexes	2,928	589	286	166	186	120	4,084	4,389	+	+
	Males	2,072	331	122	24	48	36	2,585	2,667	+	+
	Females	856	258	164	142	138	84	1,499	1,722	+	+
Black ^b	Both Sexes	82	26	58	13	12	12	192	228	+	+
	Males	47	15	35	0	0	12	97	122	+	+
	Females	35	11	23	13	12	0	95	106	+	+
Asian/ Pacific Islander ^c	Both Sexes	38	19	5	+	+	+	69	+	+	+
	Males	24	8	2	+	+	+	41	+	+	+
	Females	14	11	3	+	+	+	28	+	+	+
Hispanic ^d	Both Sexes	223	64	52	+	+	+	339	+	+	+
	Males	142	31	41	+	+	+	214	+	+	+
	Females	81	33	11	+	+	+	125	+	+	+

Estimated prevalence percent^a on January 1, 2013, of the SEER^c population diagnosed in the previous 21 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	0.0012%	-	-	-	0.0003%	0.0006%	0.0013%	0.0037%	0.0056%	0.0071%	0.0011%
	Males	0.0015%	-	-	-	0.0002%	0.0005%	0.0014%	0.0053%	0.0083%	0.0139%	0.0016%
	Females	0.0009%	-	-	-	0.0004%	0.0006%	0.0012%	0.0023%	0.0033%	0.0030%	0.0008%
White ^c	Both Sexes	0.0015%	-	-	-	0.0003%	0.0007%	0.0014%	0.0044%	0.0065%	0.0080%	0.0013%
	Males	0.0019%	-	-	-	0.0003%	0.0007%	0.0015%	0.0060%	0.0099%	0.0152%	0.0019%
	Females	0.0010%	-	-	-	0.0004%	0.0008%	0.0014%	0.0028%	0.0037%	0.0037%	0.0009%
Black ^c	Both Sexes	0.0005%	-	-	-	-	-	0.0010%	0.0017%	0.0038%	-	0.0006%
	Males	0.0006%	-	-	-	-	-	-	0.0033%	-	-	0.0008%
	Females	0.0004%	-	-	-	-	-	-	-	-	-	0.0005%
Asian/ Pacific Islander ^c	Both Sexes	0.0004%	-	-	-	-	-	0.0007%	0.0013%	-	0.0026%	0.0004%
	Males	0.0006%	-	-	-	-	-	-	0.0025%	-	0.0069%	0.0006%
	Females	0.0003%	-	-	-	-	-	-	-	-	-	0.0003%
Hispanic ^d	Both Sexes	0.0007%	-	-	-	-	0.0006%	0.0017%	0.0038%	0.0024%	0.0077%	0.0010%
	Males	0.0008%	-	-	-	-	-	0.0020%	0.0057%	0.0047%	0.0150%	0.0015%
	Females	0.0005%	-	-	-	-	-	0.0014%	0.0021%	-	-	0.0006%

^a US 2013 cancer prevalence counts are based on 2013 cancer prevalence proportions from the SEER registries and 1/1/2013 US population estimates based on the average of 2012 and 2013 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 13 Areas excluding the Alaska Native Registry

(d) NHIA for Hispanic for SEER 13 Areas excluding the Alaska Native Registry.

^e Maximum limited-duration prevalence: 38 years for 1975-2013 SEER 9 data; 21 years for 1992-2013 SEER 13 data (excluding the Alaska Native Registry) 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.

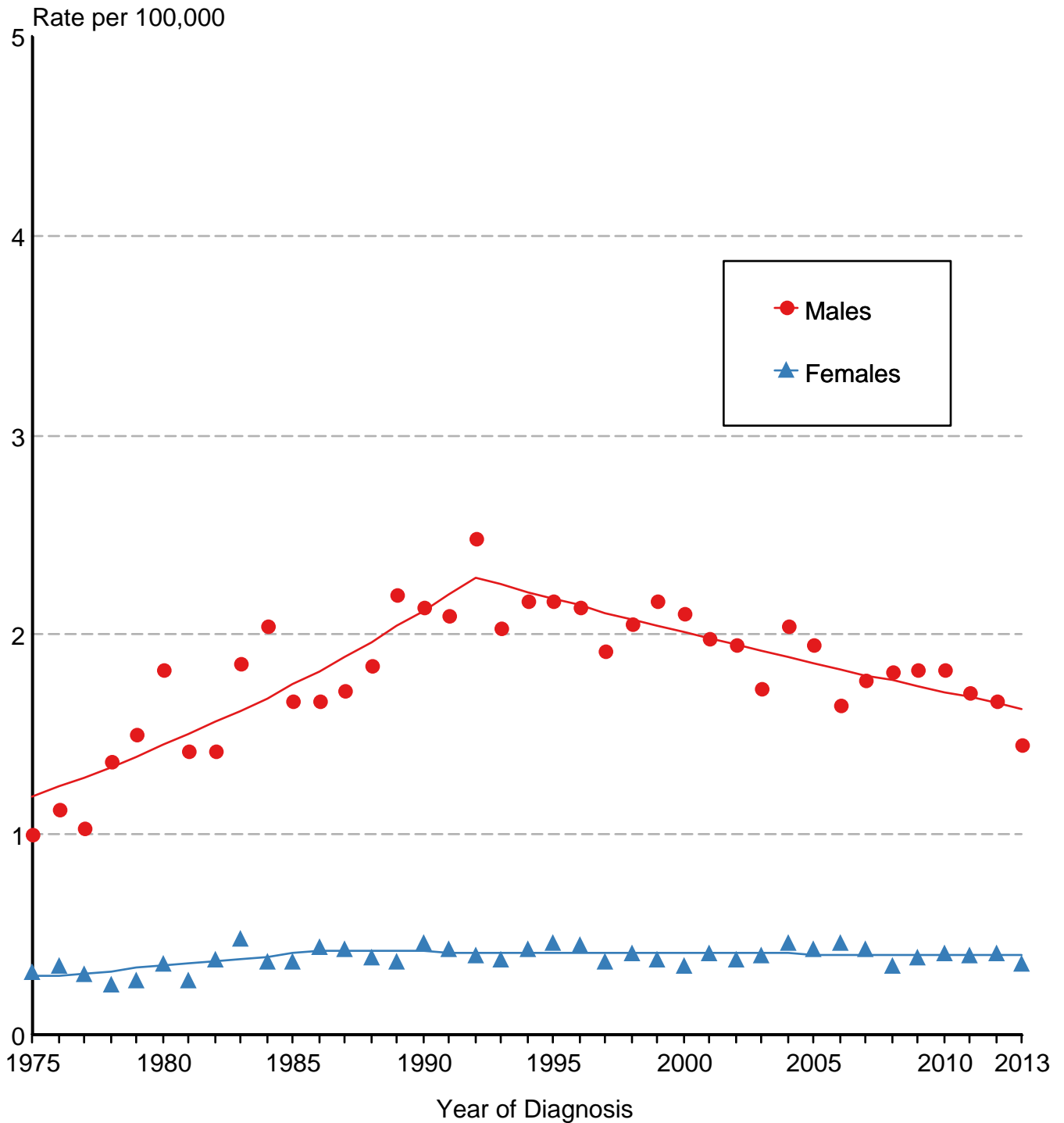
^{g h i} (g) Cases diagnosed more than 38 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000). (h) Complete prevalence is obtained by summing 0 to <38 and >=38. (i) Age-specific completeness index was approximated using empirical data from historical 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, 1975-2013 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 4.3.0.0, April 2016, National Cancer Institute.