

Table 17.1

## Mesothelioma

Age-Adjusted SEER Cancer Incidence Rates<sup>a</sup>, 1980-2016

By Race, Sex and Year of Diagnosis

## Year of Diagnosis

Race/Sex	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	2010-2011	2012-2014	2015-2016
<b>All Races</b>																		
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	0.9	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	1.8	1.6	1.6
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	0.1	0.1
Ages 55-64	3.7	3.7	4.5	3.5	3.1	4.4	3.6	3.3	4.2	3.7	2.6	3.0	2.8	2.4	2.4	2.1	1.2	1.2
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	6.7	6.2
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	17.8	14.4	15.3	19.3	14.5	15.1
Ages 85+	-	-	-	-	12.8	12.0	20.5	12.4	15.8	15.9	14.4	13.5	19.8	15.6	22.8	15.7	19.6	21.0
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	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	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	0.6	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	1.3	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	2.7	3.2	3.8	2.4	3.0	2.5	2.6
Ages 85+	-	-	-	-	-	-	-	-	-	-	2.9	-	-	3.1	2.9	2.9	2.2	
<b>Whites</b>																		
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	1.0	1.0
Males	1.7	1.7	2.0	1.8	2.2	2.3	2.5	2.3	2.2	2.3	2.3	2.1	2.2	1.9	2.1	2.0	1.8	1.8
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	0.4	0.4	0.5	0.4	0.4
<b>Blacks</b>																		
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	0.4	0.4
Males	-	-	-	-	-	1.5	1.3	1.8	1.1	1.4	-	-	1.0	-	-	-	0.8	0.7
Females	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<sup>a</sup> 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  
Mesothelioma

Age-adjusted SEER Incidence<sup>a</sup> Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>Year of Diagnosis:</b>									
1975-2016	0.98	1.83	0.39	1.08	2.00	0.42	0.51	0.92	0.25
1975-1979	0.69	1.21	0.30	0.71	1.28	0.31	0.39	0.49	-
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	1.12	2.11	0.42	1.18	2.21	0.46	-	-	-
1992	1.23	2.48	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	1.18	2.19	0.45	-	-	-
2002	1.04	1.96	0.38	1.17	2.19	0.43	-	-	-
2003	0.96	1.74	0.40	1.06	1.91	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	1.84	0.48	-	-	-
2007	0.98	1.77	0.43	1.11	2.00	0.48	-	-	-
2008	0.96	1.81	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	0.97	1.72	0.40	1.10	1.92	0.47	-	-	-
2012	0.95	1.68	0.41	1.11	1.90	0.52	-	-	-
2013	0.83	1.50	0.35	0.94	1.65	0.42	-	-	-
2014	0.93	1.61	0.43	1.02	1.72	0.49	-	-	-
2015	0.90	1.70	0.32	1.03	1.95	0.34	-	-	-
2016	0.86	1.53	0.37	0.97	1.70	0.41	-	-	-

<sup>a</sup> Individual rates for diagnosis years 1975-1979 available in web browser version of [Cancer Statistics Review](#). 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<sup>a</sup> 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, 2012-2016									
All ages	0.9	1.6	0.4	1.0	1.8	0.5	0.4	0.8	0.2
Under 65	0.2	0.3	0.2	0.2	0.3	0.2	0.1	0.2	0.1
65 and over	5.8	10.9	2.1	6.5	12.1	2.4	2.6	5.5	1.0
All ages (WHO world std) <sup>b</sup>	0.6	1.0	0.3	0.7	1.1	0.3	0.3	0.5	0.2
Age-Specific Rates, 2012-2016									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	0.0	-	-	-	-	-	-	-	-
30-34	0.1	-	0.1	0.1	-	0.1	-	-	-
35-39	0.1	0.2	0.1	0.2	0.2	0.1	-	-	-
40-44	0.1	0.2	0.1	0.1	0.1	0.1	-	-	-
45-49	0.3	0.3	0.3	0.3	0.4	0.3	-	-	-
50-54	0.5	0.5	0.4	0.5	0.6	0.5	-	-	-
55-59	0.9	1.1	0.7	1.0	1.2	0.7	0.6	-	-
60-64	1.4	2.2	0.8	1.6	2.4	0.9	0.9	1.2	-
65-69	2.7	4.4	1.2	3.1	4.9	1.4	1.6	2.8	-
70-74	4.8	8.3	1.9	5.5	9.3	2.1	2.3	4.0	-
75-79	7.3	13.2	2.7	8.4	15.0	3.1	3.0	5.1	-
80-84	8.6	16.9	2.9	9.8	19.0	3.4	3.0	7.5	-
85+	8.4	19.2	2.8	9.2	21.0	3.1	4.4	12.9	-

<sup>a</sup> SEER 21 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

<sup>b</sup> Rates are per 100,000 and are age-adjusted to the world (WHO 2000-2025) standard million.

- 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
<b>5-Year Relative Survival (Percent)</b>									
<b>Year of Diagnosis:</b>									
1960-1963 <sup>a</sup>	-	-	-	-	-	-	-	-	-
1970-1973 <sup>a</sup>	-	-	-	-	-	-	-	-	-
1975-1977 <sup>b</sup>	9.7	3.0	26.7	10.4	3.3	27.4 <sup>f</sup>	-	-	-
1978-1980 <sup>b</sup>	6.0	5.5	8.1	5.9	5.2	8.7	-	-	-
1981-1983 <sup>b</sup>	7.7	5.3	15.1	8.1	5.4	16.2	-	-	-
1984-1986 <sup>b</sup>	6.6	4.3	13.9	6.1	3.7	14.1	-	-	-
1987-1989 <sup>b</sup>	6.2	4.6	12.2	6.3	4.8	12.1	4.8	-	-
1990-1992 <sup>b</sup>	7.7	4.2	20.6	7.4	4.1	20.1	10.2 <sup>f</sup>	8.5 <sup>f</sup>	-
1993-1995 <sup>b</sup>	6.5	3.2	18.7	5.9	2.8	18.0	9.0	8.0 <sup>f</sup>	-
1996-1998 <sup>b</sup>	9.8	8.2	15.2	9.8	8.0	16.2	11.4 <sup>f</sup>	-	-
1999-2001 <sup>b</sup>	7.6	5.3	15.9	6.7	5.0	13.0	-	-	-
2002-2004 <sup>b</sup>	6.6	4.9	11.6	6.1	4.5	10.9	7.9 <sup>f</sup>	-	-
2005-2008 <sup>b</sup>	9.4	7.0	17.0	10.1	7.2	19.7	4.3	-	-
2009-2015 <sup>b</sup>	10.6	7.6 <sup>e</sup>	19.7	10.0	7.3 <sup>e</sup>	18.5	16.8 <sup>f</sup>	0.0	-
<b>5-Year Period Survival (Percent)<sup>cd</sup></b>									
2015	10.1	7.8	16.6	9.4	7.4	15.6	18.6	13.2	26.5
<b>5-Year Relative Survival (Percent), 2009-2015<sup>c</sup></b>									
<b>Age at Diagnosis:</b>									
Ages <45	46.6	35.2 <sup>f</sup>	58.8 <sup>f</sup>	44.5 <sup>f</sup>	35.0 <sup>f</sup>	56.7 <sup>f</sup>	-	-	-
Ages 45-54	21.1	14.1	32.4 <sup>f</sup>	19.5	13.6	30.5 <sup>f</sup>	26.0 <sup>f</sup>	-	-
Ages 55-64	15.2	14.2	17.8	14.5	13.6	16.9	19.2 <sup>f</sup>	15.4 <sup>f</sup>	-
Ages 65-74	9.4	7.8	15.6	9.5	8.0	15.4	10.1	8.6 <sup>f</sup>	-
Ages 75+	4.3	3.5	6.7	4.1	3.1	7.0	5.1	3.3	-
Ages <65	20.2	16.2	28.2	18.9	15.6	25.7	28.3 <sup>f</sup>	16.5 <sup>f</sup>	41.9 <sup>f</sup>
Ages 65+	6.5	5.3	10.2	6.4	5.2	10.3	7.6	6.0	10.4 <sup>f</sup>

<sup>a</sup> Based on End Results data from a series of hospital registries and one population-based registry.

<sup>b</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

<sup>c</sup> Based on follow-up of patients into 2016. Expected survival rates are derived from the U.S. Annual Life Tables.

<sup>d</sup> 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

<sup>e</sup> Based on follow-up of patients into 2016.

<sup>f</sup> Period survival provides a 2015 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).

The difference between 1975-1977 and 2009-2015 is statistically significant ( $p<.05$ ).

The standard error is between 5 and 10 percentage points.

The standard error is greater than 10 percentage points.

<sup>g</sup> Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 17.5  
Mesothelioma

SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>Survival Time</b>																													
1-year	34.8	37.7	35.7	35.9	35.8	41.9	35.3	37.4	31.7	40.5	40.4	32.1	46.6	39.5	40.4	44.5	42.3	45.3	45.4	33.5	47.3	40.7	41.5	40.2	43.8				
2-year	15.9	18.7	16.5	15.8	13.8	25.1	16.9	21.2	18.6	14.6	24.0	16.1	22.3	16.6	19.6	28.4	18.7	21.1	26.1	16.5	26.1	24.9	25.8	21.1					
3-year	10.8	11.7	10.8	11.0	11.8	17.5	10.3	14.7	12.8	10.5	13.8	7.4	16.8	10.4	12.7	19.6	11.5	14.9	16.3	8.5	17.1	15.0	19.0						
4-year	9.2	8.4	8.0	8.2	8.9	11.4	7.8	12.6	10.5	7.0	11.4	5.2	13.5	8.5	10.2	14.8	7.1	12.5	14.3	6.0	14.9	10.6							
5-year	7.9	7.0	6.6	7.1	7.1	10.2	5.7	12.6	8.2	3.1	10.9	4.8	9.0	6.0	9.2	12.6	4.8	10.4	12.8	4.9	12.6								
6-year	6.7	5.7	5.2	6.0	6.1	10.0	4.6	11.3	7.8	1.3	9.9	4.3	8.0	6.0	9.2	11.3	4.3	8.5	11.2	3.9									
7-year	6.0	5.1	4.5	5.6	5.1	8.6	3.0	10.6	7.4	1.3	7.7	3.8	6.9	4.6	9.1	10.3	3.7	7.3	10.7										
8-year	5.6	4.8	4.0	5.0	5.1	6.5	3.0	8.5	7.4	0.7	7.7	3.8	5.7	4.1	8.2	9.2	3.7	7.3											
9-year	5.3	4.6	3.8	4.7	3.0	4.9	2.5	8.5	6.0	0.7	7.7	3.8	5.7	3.5	8.2	6.9	3.7												
10-year	5.2	4.3	3.4	4.3	3.0	4.4	2.5	7.7	6.0	0.7	6.8	3.7	4.0	3.5	8.2	6.9													
11-year	5.0	4.3	3.4	4.1	3.0	4.0	1.9	7.4	5.6	0.7	5.0	3.7	4.0	3.5	8.2														
12-year	4.9	4.1	3.4	3.8	2.5	3.5	1.9	5.6	5.6	0.7	5.0	3.3	4.0	3.1															
13-year	4.7	4.0	3.3	3.6	2.5	3.0	1.9	5.6	5.6	0.7	5.0	2.8	3.5																
14-year	4.7	4.0	3.3	3.6	2.5	3.0	1.9	5.6	5.1	0.7	4.0	2.8																	
15-year	4.3	3.5	3.2	3.6	2.5	3.0	1.9	5.6	5.1	0.7	4.0	3.2																	
16-year	4.1	3.5	3.2	3.6	2.5	3.0	1.9	5.6	4.6	0.0																			
17-year	4.0	3.5	3.2	3.6	2.5	2.9	1.9	5.4	4.6																				
18-year	4.0	3.5	3.2	3.2	2.5	2.0	1.9	4.8																					
19-year	4.0	3.5	3.2	2.4	2.5	2.0	1.9																						
20-year	4.0	3.5	3.1	2.4	2.5	2.0																							

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

Table 17.6  
Mesothelioma

SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015			
<b>Survival Time</b>																																
1-year	32.9	36.0	33.8	32.8	34.9	45.0	32.7	32.8	28.8	41.3	36.5	31.0	44.9	37.5	40.2	39.9	40.7	42.2	46.2	30.9	45.8	40.4	41.1	40.3	40.8							
2-year	11.1	15.9	14.2	11.8	11.1	24.5	14.3	17.6	13.7	13.5	20.3	15.1	18.5	14.7	17.2	22.0	15.2	19.8	25.6	16.0	22.4	22.7	24.2	18.8								
3-year	6.6	9.5	8.4	7.5	8.9	16.2	8.7	11.7	6.8	9.0	10.8	6.7	13.9	8.9	8.9	12.8	10.5	14.2	13.9	6.2	13.8	11.7	14.8									
4-year	5.2	6.6	5.8	4.7	5.9	11.3	6.2	10.1	4.4	6.7	8.8	3.8	12.6	6.6	6.3	9.4	5.9	11.8	11.1	3.5	10.8	6.7										
5-year	4.0	5.1	4.6	3.6	4.2	10.3	3.6	10.1	3.8	4.0	8.2	3.8	7.1	3.9	6.3	7.6	4.3	9.2	8.9	2.9	9.6											
6-year	3.3	4.3	3.2	3.1	3.5	10.3	2.2	8.2	3.8	1.7	7.5	3.2	6.5	3.9	6.3	6.3	4.3	7.6	7.4	2.2												
7-year	2.6	3.4	2.5	2.6	2.2	9.5	1.5	7.8	3.8	1.7	5.1	2.4	5.7	2.5	6.3	6.3	3.5	7.6	6.7													
8-year	2.3	3.3	2.5	2.1	2.2	6.7	1.5	4.8	3.8	0.9	5.1	2.4	5.7	2.5	6.1	5.1	3.5	7.6														
9-year	2.1	3.1	2.2	1.8	0.0	5.2	0.8	4.8	2.8	0.9	5.1	2.4	5.7	1.8	6.1	5.1	3.5															
10-year	2.1	3.1	1.9	1.7	0.0	4.5	0.8	4.1	2.8	0.9	5.1	2.4	4.5	1.8	6.1	5.1																
11-year	2.1	3.1	1.9	1.6	0.0	3.9	0.0	4.1	2.2	0.9	2.8	2.4	4.5	1.8	5.7																	
12-year	1.9	2.9	1.9	1.4	0.0	3.2	0.0	3.6	2.2	0.9	2.8	1.9	4.5	1.8																		
13-year	1.7	2.8	1.8	1.4	0.0	2.3	0.0	3.6	2.2	0.9	2.8	1.9	3.8																			
14-year	1.4	2.8	1.7	1.4	0.0	2.3	0.0	3.6	1.6	0.9	1.9	1.9																				
15-year	1.1	2.5	1.6	1.4	0.0	2.3	0.0	3.6	1.6	0.0	1.9																					
16-year	1.1	2.5	1.6	1.4	0.0	2.3	0.0	3.6	1.6	0.0	0.0																					
17-year	1.1	2.4	1.6	1.2	0.0	1.8	0.0	3.6	1.6																							
18-year	1.1	2.4	1.6	1.2	0.0	1.8	0.0	3.6																								
19-year	1.1	2.4	1.6	0.7	0.0	1.8	0.0																									
20-year	1.1	2.4	1.6	0.7	0.0	1.8																										

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

Table 17.7  
Mesothelioma

SEER<sup>a</sup> Relative Survival (Percent)  
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975-	1980-	1985-	1990-	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Survival Time	1979	1984	1989	1994																						
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	41.9	42.7	39.9	54.9	
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	31.8	30.4	27.0		
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	28.1	25.4	30.4			
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	14.2	28.1	23.1				
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	23.0	12.0	22.5					
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	12.2	22.2	9.7						
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	4.3	4.3	22.2							
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	20.5	4.3	4.3								
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	15.5	11.7	4.3									
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	8.4	15.5	11.7										
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	2.9	8.4	15.5											
12-year	13.7	7.7	8.1	12.7	10.5	4.0	8.9	12.6	19.0	0.0	11.1	6.8	2.9	6.6												
13-year	13.7	7.7	8.1	11.8	10.5	4.0	8.9	12.6	19.0	0.0	11.1	5.1	2.9													
14-year	13.7	7.7	8.1	11.8	10.5	4.0	8.9	12.6	19.0	0.0	9.6	5.1														
15-year	13.7	6.8	8.1	11.6	10.5	4.0	8.9	12.6	19.0	0.0	7.3															
16-year	12.9	6.8	8.1	11.6	10.5	4.0	8.9	12.6	16.9	0.0																
17-year	12.3	6.8	8.1	11.6	10.5	4.0	8.9	9.7	16.9	0.0																
18-year	12.3	6.8	7.9	10.5	10.5	2.2	8.9	6.5																		
19-year	12.3	6.8	7.9	8.7	10.5	2.2	8.9																			
20-year	12.3	6.5	7.4	8.7	10.5	2.2																				

<sup>a</sup> Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

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, 2014-2016 By Race/Ethnicity

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

Devcan 6.7.7, April 2019, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). Mortality data are from the NCHS public use data file for the total US.

<sup>a</sup> Underlying incidence and mortality data for American Indian/Alaska Native are based on the PRCD(A(Purchased/Referred Care Delivery Areas) counties.

<sup>b</sup> 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, 2014-2016 By Race/Ethnicity

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

Devcan 6.7.7, April 2019, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). Mortality data are from the NCHS public use data file for the total US.

<sup>a</sup> Underlying incidence and mortality data for American Indian/Alaska Native are based on the PRCD(A(Purchased/Referred Care Delivery Areas) counties.

<sup>b</sup> 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, 2014-2016 By Race/Ethnicity

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

Devcan 6.7.7, April 2019, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). Mortality data are from the NCHS public use data file for the total US.

<sup>a</sup> Underlying incidence and mortality data for American Indian/Alaska Native are based on the PRCD (Purchased/Referred Care Delivery Areas) counties.

<sup>b</sup> 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<sup>a</sup>  
By Race/Ethnicity and Sex

Race/Ethnicity	SEER Incidence			SEER 21 Areas <sup>b</sup>			SEER 21 Areas <sup>b</sup>			SEER 9 Areas <sup>b</sup>		
	Rate 2012-2016			Trend 2007-2016 <sup>c</sup>			AAPC (%)			Trend 2007-2016 <sup>d</sup>		
	Total	Males	Females	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	0.9	1.6	0.4	-1.6*	-2.1*	-0.3	-1.1*	-1.5*	-0.3	-	-	-
White	1.0	1.8	0.5	-1.4*	-2.0*	0.0	-0.8*	-1.3*	0.0	-	-	-
White Hispanic <sup>e</sup>	0.8	1.3	0.4	-2.6*	-3.0*	-1.8	-	-	-	-	-	-
White Non-Hispanic <sup>e</sup>	1.1	1.8	0.5	-1.2*	-1.9*	0.1	-	-	-	-	-	-
Black	0.4	0.8	0.2	-1.7	-1.9	-1.0	-3.9*	-3.9*	-	-	-	-
Asian/Pacific Islander	0.3	0.6	0.1	-0.4	0.1	-2.1	-	-	-	-	-	-
Amer Ind/Alaska Nat <sup>f</sup>	0.5	-	-	-	-	-	-	-	-	-	-	-
Hispanic <sup>e</sup>	0.8	1.3	0.4	-2.4*	-2.8*	-1.5	-	-	-	-	-	-

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

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

<sup>a</sup> Trend based on less than 10 cases for at least one year within the time interval.

<sup>b</sup> 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).

<sup>c</sup> The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta.

<sup>d</sup> The SEER 21 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts.

<sup>e</sup> The 2007-2016 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 2000-2016.

<sup>f</sup> The 2007-2016 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2016.

<sup>e</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 are based on NHIA and exclude cases from the Alaska Native Registry.

<sup>f</sup> Incidence data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

Table 17.12  
Mesothelioma

Age-Adjusted SEER Incidence Rates<sup>a</sup>  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<b>SEER Incidence Rates<sup>a</sup>, 2012-2016</b>									
California	0.85	1.46	0.41	1.00	1.68	0.48	0.55	1.09	-
Greater Bay Area	0.89	1.49	0.46	1.13	1.85	0.59	0.78	-	-
San Francisco-Oakland	0.95	1.61	0.48	1.22	1.98	0.66	-	-	-
San Jose-Monterey	0.78	1.25	0.41	0.98	1.62	0.47	-	-	-
Los Angeles	0.70	1.15	0.37	0.86	1.41	0.45	0.40	-	-
Greater California	0.91	1.58	0.41	1.01	1.73	0.46	0.61	1.27	-
Connecticut	0.94	1.81	0.32	1.01	1.95	0.32	-	-	-
Detroit	0.87	1.59	0.38	1.01	1.85	0.41	0.38	-	-
Georgia	0.61	1.09	0.26	0.72	1.28	0.29	0.24	0.39	-
Atlanta	0.57	1.09	0.23	0.73	1.32	-	-	-	-
Rural Georgia	-	-	-	-	-	-	-	-	-
Greater Georgia	0.63	1.09	0.28	0.72	1.26	0.29	0.28	-	-
Hawaii	0.47	0.90	-	-	-	-	-	-	-
Idaho	1.19	2.04	0.46	1.22	2.08	0.47	-	-	-
Iowa	0.93	1.55	0.47	0.95	1.58	0.47	-	-	-
Kentucky	0.74	1.37	0.30	0.77	1.40	0.31	-	-	-
Louisiana	1.29	2.20	0.66	1.42	2.36	0.73	0.95	1.73	0.50
Massachusetts	1.10	1.94	0.51	1.17	2.05	0.54	-	-	-
New Jersey	1.13	1.97	0.54	1.26	2.22	0.59	0.52	0.82	-
New Mexico	0.74	1.30	0.30	0.75	1.28	0.33	-	-	-
New York	0.89	1.60	0.39	1.01	1.78	0.46	0.36	0.77	-
Seattle-Puget Sound	1.25	2.26	0.50	1.33	2.38	0.54	-	-	-
Utah	0.77	1.32	0.32	0.78	1.31	0.33	-	-	-
SEER 9 Areas <sup>b</sup>	0.89	1.60	0.38	1.01	1.78	0.44	0.38	0.71	0.20
SEER 13 Areas <sup>b</sup>	0.84	1.48	0.38	0.98	1.70	0.44	0.38	0.70	0.20
SEER 18 Areas <sup>b</sup>	0.89	1.56	0.41	1.01	1.75	0.46	0.48	0.87	0.25
SEER 21 Areas <sup>b</sup>	0.91	1.60	0.41	1.02	1.78	0.47	0.45	0.84	0.22

<sup>a</sup> Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)  
<sup>b</sup> 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.  
The SEER 21 areas comprise the SEER 18 areas plus Idaho, New York and Massachusetts.  
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 17.13  
MesotheliomaEstimated United States Cancer Prevalence Counts<sup>a</sup> on January 1, 2016  
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 <24	0 to <24 <sup>b</sup>	>=24 <sup>d</sup>	Complete <sup>e</sup>
Race	Sex								
All Races	Both Sexes	4,257	693	358	285	174	5,767	+	+
	Males	2,983	368	172	109	55	3,687	+	+
	Females	1,274	324	186	176	120	2,080	+	+
White	Both Sexes	3,946	658	302	237	153	5,296	+	+
	Males	2,776	368	152	101	51	3,449	+	+
	Females	1,170	290	150	136	102	1,847	+	+
Black	Both Sexes	184	34	26	35	9	289	+	+
	Males	112	0	9	8	0	129	+	+
	Females	72	34	17	27	9	160	+	+
Asian/ Pacific Islander	Both Sexes	57	0	17	3	3	81	+	+
	Males	40	0	7	0	3	50	+	+
	Females	17	0	10	3	0	30	+	+
Hispanic	Both Sexes	354	66	14	48	5	487	+	+
	Males	245	25	3	38	0	310	+	+
	Females	109	41	11	11	5	177	+	+

Estimated prevalence percent<sup>a</sup> on January 1, 2016, of the SEER population diagnosed in the previous 24 years  
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	All Ages	Age Specific (Crude)								Age-Adjusted <sup>c</sup> All Ages	
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79		
Race	Both Sexes	0.0018	-	-	0.0001	0.0004	0.0009	0.0016	0.0038	0.0095	0.0104
	Males	0.0023	-	-	0.0000	0.0003	0.0007	0.0015	0.0050	0.0153	0.0196
	Females	0.0013	-	-	0.0001	0.0005	0.0010	0.0016	0.0027	0.0048	0.0048
All Races	Both Sexes	0.0021	-	-	0.0001	0.0004	0.0010	0.0018	0.0042	0.0103	0.0112
	Males	0.0028	-	-	0.0000	0.0003	0.0008	0.0017	0.0056	0.0168	0.0210
	Females	0.0015	-	-	0.0001	0.0005	0.0012	0.0019	0.0028	0.0048	0.0051
White	Both Sexes	0.0021	-	-	0.0001	0.0004	0.0010	0.0018	0.0042	0.0103	0.0112
	Males	0.0028	-	-	0.0000	0.0003	0.0008	0.0017	0.0056	0.0168	0.0210
	Females	0.0015	-	-	0.0001	0.0005	0.0012	0.0019	0.0028	0.0048	0.0051
Black	Both Sexes	0.0006	-	-	-	0.0001	0.0006	0.0003	0.0016	0.0054	0.0069
	Males	0.0006	-	-	-	0.0003	0.0006	0.0003	0.0015	0.0035	0.0127
	Females	0.0007	-	-	-	-	0.0006	0.0003	0.0016	0.0066	0.0040
Asian/ Pacific Islander	Both Sexes	0.0004	-	-	-	0.0003	0.0003	0.0004	0.0013	0.0024	0.0014
	Males	0.0005	-	-	-	-	0.0005	-	0.0021	0.0048	-
	Females	0.0003	-	-	-	0.0006	-	0.0005	0.0006	-	0.0003
Hispanic	Both Sexes	0.0009	-	-	0.0001	0.0003	0.0009	0.0015	0.0034	0.0079	0.0075
	Males	0.0011	-	-	-	0.0001	0.0006	0.0013	0.0059	0.0149	0.0159
	Females	0.0006	-	-	0.0002	0.0004	0.0013	0.0016	0.0012	0.0025	0.0023

<sup>a</sup> US 2016 cancer prevalence counts are based on 2016 cancer prevalence proportions from the SEER 13 Areas (excluding the Alaska Native Registry) and 1/1/2016 US population estimates based on the average of 2015 and 2016 population estimates from the US Bureau of the Census.

<sup>b</sup> Prevalence was calculated using the first invasive tumor for each cancer site diagnosed during the previous 24 years.

<sup>c</sup> Maximum limited-duration prevalence is 24 years for 1992-2016 data.

<sup>d</sup> Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.

<sup>e</sup> Cases diagnosed more than 24 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000).

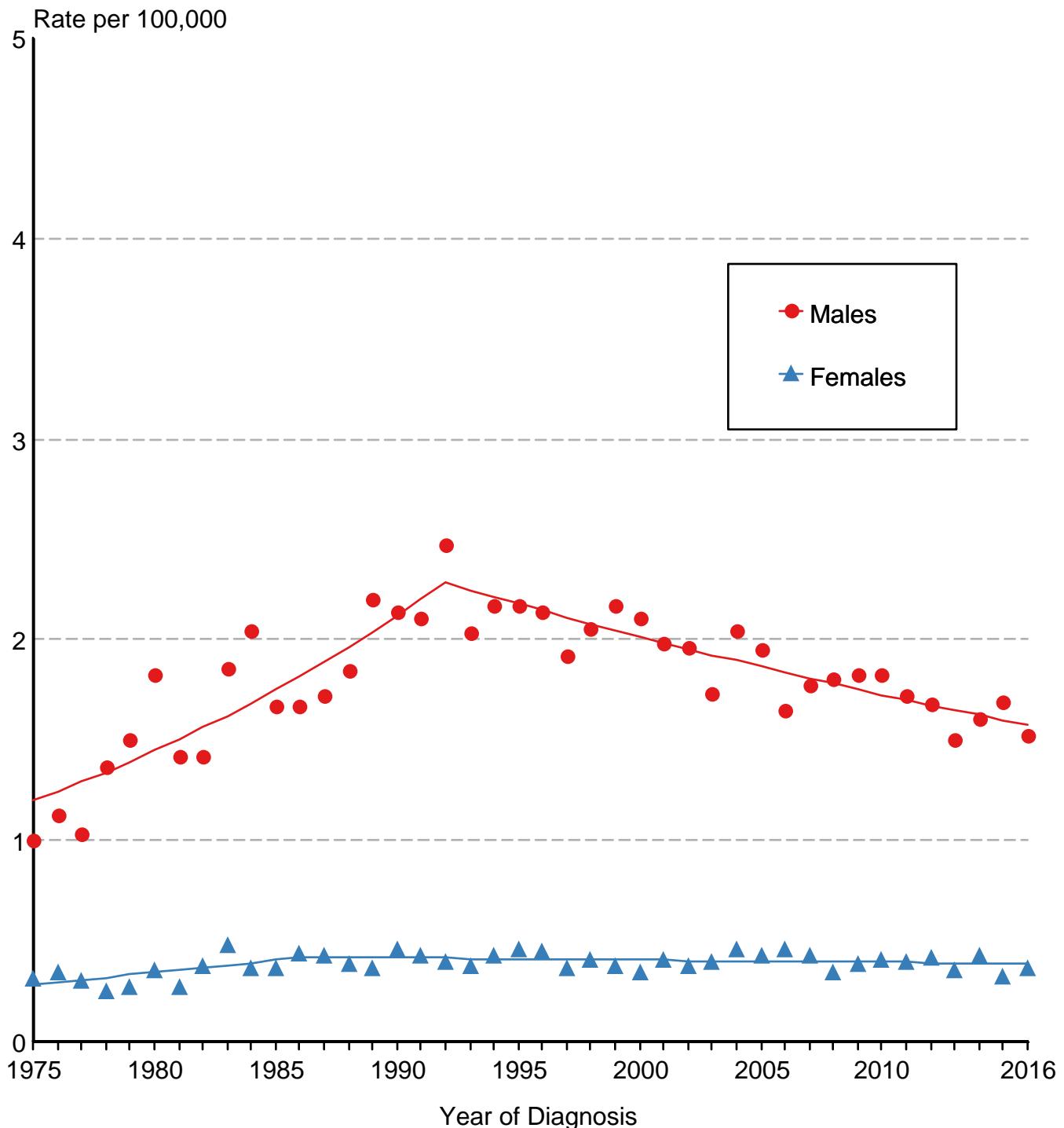
- Complete prevalence is obtained by summing 0 to <24 and >=24.

+ 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, 1975-2016 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 4.7, February 2019, National Cancer Institute.