

Table 21.1
Cancer of the Ovary (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,
All Ages by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC ^d | |
|--|------------|-------|------------|-------|------------|-------|------------|------|------------|-------|------------|-----|-------------------|---------|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 2002-11 | 2007-11 |
| <u>SEER 9 Delay-Adjusted Incidence^a, 1975-2011</u> | | | | | | | | | | | | | | |
| All Races | 1975-87 | 0.1 | 1987-11 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| White | 1975-89 | 0.1 | 1989-11 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| Black | 1975-11 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| <u>SEER 13 Delay-Adjusted Incidence^b, 1992-2011</u> | | | | | | | | | | | | | | |
| All Races | 1992-11 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| White | 1992-97 | -1.1* | 1997-01 | 0.5 | 2001-04 | -2.9 | 2004-11 | -0.6 | | | | | -1.1* | -0.6 |
| Black | 1992-11 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| <u>SEER 9 Observed Incidence^a, 1975-2011</u> | | | | | | | | | | | | | | |
| All Races | 1975-90 | -0.1 | 1990-11 | -1.1* | | | | | | | | | -1.1* | -1.1* |
| White | 1975-89 | 0.1 | 1989-11 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| Black | 1975-11 | -0.5* | | | | | | | | | | | -0.5* | -0.5* |
| <u>SEER 13 Observed Incidence^b, 1992-2011</u> | | | | | | | | | | | | | | |
| All Races | 1992-11 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White | 1992-11 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White NH ^{ef} | 1992-11 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| Black | 1992-11 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| Black NH ^{ef} | 1992-11 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| API ^e | 1992-11 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| AI/AN ^{eg} | 1992-11 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| Hispanic ^f | 1992-11 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| <u>U.S. Cancer Mortality^c, 1975-2011</u> | | | | | | | | | | | | | | |
| All Races | 1975-82 | -1.2* | 1982-92 | 0.3* | 1992-98 | -1.2* | 1998-02 | 1.1 | 2002-11 | -2.0* | | | -2.0* | -2.0* |
| White | 1975-81 | -1.4* | 1981-94 | 0.2 | 1994-98 | -1.7 | 1998-02 | 1.3 | 2002-11 | -2.0* | | | -2.0* | -2.0* |
| Black | 1975-89 | 0.1 | 1989-92 | 3.0 | 1992-95 | -3.6 | 1995-04 | 0.1 | 2004-07 | -4.1 | 2007-11 | 0.1 | -1.3 | 0.1 |
| <u>U.S. Cancer Mortality^c, 1992-2011</u> | | | | | | | | | | | | | | |
| All Races | 1992-98 | -1.3* | 1998-02 | 1.1 | 2002-11 | -2.0* | | | | | | | -2.0* | -2.0* |
| White | 1992-98 | -1.2* | 1998-02 | 1.2 | 2002-11 | -2.0* | | | | | | | -2.0* | -2.0* |
| White NH ^{ef} | 1992-05 | -0.2 | 2005-11 | -2.5* | | | | | | | | | -1.7* | -2.5* |
| Black | 1992-95 | -3.0 | 1995-04 | 0.1 | 2004-07 | -4.1 | 2007-11 | 0.1 | | | | | -1.3 | 0.1 |
| Black NH ^{ef} | 1992-00 | -1.0* | 2000-04 | 1.4 | 2004-07 | -4.8 | 2007-11 | 0.4 | | | | | -1.1 | 0.4 |
| API ^e | 1992-11 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| AI/AN ^{eg} | 1992-11 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| Hispanic ^f | 1992-06 | 0.0 | 2006-11 | -2.5 | | | | | | | | | -1.4 | -2.5 |

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

^b Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

^c Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

^e API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

^f 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.

The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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

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

- Joinpoint regression line analysis could not be performed on data series.

Table 21.2
Cancer of the Ovary (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,
Ages <65 by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC ^d | |
|--|------------|-------|------------|-------|------------|-------|------------|-------|------------|-----|------------|-----|-------------------|---------|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 2002-11 | 2007-11 |
| <u>SEER 9 Delay-Adjusted Incidence^a, 1975-2011</u> | | | | | | | | | | | | | | |
| All Races | 1975-11 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| White | 1975-11 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| Black | 1975-11 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| <u>SEER 13 Delay-Adjusted Incidence^b, 1992-2011</u> | | | | | | | | | | | | | | |
| All Races | 1992-11 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| White | 1992-11 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black | 1992-11 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| <u>SEER 9 Observed Incidence^a, 1975-2011</u> | | | | | | | | | | | | | | |
| All Races | 1975-11 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| White | 1975-11 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| Black | 1975-11 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| <u>SEER 13 Observed Incidence^b, 1992-2011</u> | | | | | | | | | | | | | | |
| All Races | 1992-11 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White | 1992-11 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White NH ^{ef} | 1992-11 | -1.2* | | | | | | | | | | | -1.2* | -1.2* |
| Black | 1992-11 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| Black NH ^{ef} | 1992-11 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| API ^e | 1992-11 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| AI/AN ^{eg} | 1992-11 | -1.7 | | | | | | | | | | | -1.7 | -1.7 |
| Hispanic ^f | 1992-11 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| <u>U.S. Cancer Mortality^c, 1975-2011</u> | | | | | | | | | | | | | | |
| All Races | 1975-80 | -3.2* | 1980-99 | -1.6* | 1999-02 | 0.6 | 2002-11 | -2.8* | | | | | -2.8* | -2.8* |
| White | 1975-80 | -3.3* | 1980-99 | -1.5* | 1999-02 | 0.6 | 2002-11 | -2.8* | | | | | -2.8* | -2.8* |
| Black | 1975-96 | -1.9* | 1996-02 | 0.6 | 2002-11 | -2.4* | | | | | | | -2.4* | -2.4* |
| <u>U.S. Cancer Mortality^c, 1992-2011</u> | | | | | | | | | | | | | | |
| All Races | 1992-98 | -2.3* | 1998-02 | 0.6 | 2002-11 | -2.8* | | | | | | | -2.8* | -2.8* |
| White | 1992-98 | -2.2* | 1998-02 | 0.6 | 2002-11 | -2.8* | | | | | | | -2.8* | -2.8* |
| White NH ^{ef} | 1992-05 | -1.0* | 2005-11 | -3.4* | | | | | | | | | -2.6* | -3.4* |
| Black | 1992-11 | -1.2* | | | | | | | | | | | -1.2* | -1.2* |
| Black NH ^{ef} | 1992-11 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| API ^e | 1992-11 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| AI/AN ^{eg} | 1992-11 | -1.1 | | | | | | | | | | | -1.1 | -1.1 |
| Hispanic ^f | 1992-11 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

^b Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

^c Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

^e API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

^f 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.

The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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

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

- Joinpoint regression line analysis could not be performed on data series.

Table 21.3
Cancer of the Ovary (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2011 With up to Five Joinpoints, 1992-2011 With up to Three Joinpoints,
Ages 65+ by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC ^d | |
|--|------------|-------|------------|-------|------------|-----|------------|-------|------------|-----|------------|-----|-------------------|---------|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 2002-11 | 2007-11 |
| <u>SEER 9 Delay-Adjusted Incidence^a, 1975-2011</u> | | | | | | | | | | | | | | |
| All Races | 1975-90 | 1.4* | 1990-11 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| White | 1975-90 | 1.4* | 1990-11 | -0.8* | | | | | | | | | -0.8* | -0.8* |
| Black | 1975-11 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| <u>SEER 13 Delay-Adjusted Incidence^b, 1992-2011</u> | | | | | | | | | | | | | | |
| All Races | 1992-11 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White | 1992-11 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black | 1992-11 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| <u>SEER 9 Observed Incidence^a, 1975-2011</u> | | | | | | | | | | | | | | |
| All Races | 1975-90 | 1.4* | 1990-11 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| White | 1975-90 | 1.5* | 1990-11 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| Black | 1975-11 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| <u>SEER 13 Observed Incidence^b, 1992-2011</u> | | | | | | | | | | | | | | |
| All Races | 1992-11 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| White | 1992-11 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White NH ^{ef} | 1992-11 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black | 1992-11 | -0.7 | | | | | | | | | | | -0.7 | -0.7 |
| Black NH ^{ef} | 1992-11 | -0.7 | | | | | | | | | | | -0.7 | -0.7 |
| API ^e | 1992-11 | -0.8 | | | | | | | | | | | -0.8 | -0.8 |
| AI/AN ^{eg} | 1992-11 | 0.7 | | | | | | | | | | | 0.7 | 0.7 |
| Hispanic ^f | 1992-11 | -0.9 | | | | | | | | | | | -0.9 | -0.9 |
| <u>U.S. Cancer Mortality^c, 1975-2011</u> | | | | | | | | | | | | | | |
| All Races | 1975-84 | 0.6* | 1984-91 | 1.6* | 1991-05 | 0.0 | 2005-11 | -2.1* | | | | | -1.4* | -2.1* |
| White | 1975-84 | 0.6* | 1984-91 | 1.6* | 1991-06 | 0.0 | 2006-11 | -2.4* | | | | | -1.3* | -2.4* |
| Black | 1975-92 | 2.2* | 1992-11 | -0.8* | | | | | | | | | -0.8* | -0.8* |
| <u>U.S. Cancer Mortality^c, 1992-2011</u> | | | | | | | | | | | | | | |
| All Races | 1992-05 | 0.0 | 2005-11 | -2.1* | | | | | | | | | -1.4* | -2.1* |
| White | 1992-05 | 0.1 | 2005-11 | -2.1* | | | | | | | | | -1.3* | -2.1* |
| White NH ^{ef} | 1992-04 | 0.3* | 2004-11 | -1.7* | | | | | | | | | -1.3* | -1.7* |
| Black | 1992-11 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| Black NH ^{ef} | 1992-11 | -0.7* | | | | | | | | | | | -0.7* | -0.7* |
| API ^e | 1992-08 | 1.6* | 2008-11 | -7.1 | | | | | | | | | -1.4 | -5.0 |
| AI/AN ^{eg} | 1992-11 | 1.2 | | | | | | | | | | | 1.2 | 1.2 |
| Hispanic ^f | 1992-11 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

^b Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).

^c Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

^d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

^e API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

^f 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.

The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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

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

- Joinpoint regression line analysis could not be performed on data series.

Table 21.4
Cancer of the Ovary (Invasive)

Delay-adjusted SEER Incidence^a Rates by Year, Race and Age

| | All Races, Females | | | White Females | | | Black Females | | |
|--------------------|--------------------|-------|-------|---------------|-------|-------|---------------|------|-------|
| | All | <65 | 65+ | All | <65 | 65+ | All | <65 | 65+ |
| Year of Diagnosis: | | | | | | | | | |
| 1975 | 16.32 | 11.61 | 48.88 | 16.77 | 12.00 | 49.79 | 11.72 | 7.40 | 41.58 |
| 1976 | 15.86 | 11.23 | 47.86 | 16.64 | 11.88 | 49.55 | 11.41 | 7.37 | 39.32 |
| 1977 | 15.62 | 11.20 | 46.15 | 16.19 | 11.58 | 48.07 | 11.34 | 8.69 | 29.65 |
| 1978 | 15.39 | 10.79 | 47.18 | 16.17 | 11.37 | 49.31 | 9.96 | 6.07 | 36.83 |
| 1979 | 15.39 | 10.71 | 47.71 | 15.84 | 10.93 | 49.83 | 11.94 | 9.07 | 31.79 |
| 1980 | 15.46 | 10.65 | 48.68 | 16.21 | 11.18 | 50.95 | 11.73 | 7.41 | 41.60 |
| 1981 | 15.42 | 10.49 | 49.53 | 16.01 | 10.88 | 51.47 | 11.68 | 7.58 | 40.08 |
| 1982 | 15.59 | 10.11 | 53.43 | 16.14 | 10.50 | 55.14 | 12.40 | 7.50 | 46.24 |
| 1983 | 15.97 | 10.45 | 54.14 | 16.42 | 10.74 | 55.71 | 13.06 | 9.18 | 39.90 |
| 1984 | 16.26 | 10.98 | 52.79 | 17.15 | 11.72 | 54.71 | 10.98 | 5.87 | 46.32 |
| 1985 | 16.55 | 10.79 | 56.42 | 17.46 | 11.43 | 59.15 | 11.17 | 7.11 | 39.29 |
| 1986 | 15.02 | 9.87 | 50.57 | 15.70 | 10.45 | 51.92 | 10.70 | 6.25 | 41.49 |
| 1987 | 16.15 | 10.15 | 57.66 | 17.04 | 10.84 | 59.89 | 11.83 | 6.26 | 50.30 |
| 1988 | 15.29 | 9.59 | 54.72 | 16.02 | 10.10 | 56.97 | 11.57 | 6.64 | 45.69 |
| 1989 | 15.52 | 9.54 | 56.84 | 16.50 | 10.27 | 59.56 | 11.00 | 5.43 | 49.50 |
| 1990 | 15.41 | 9.45 | 56.58 | 16.28 | 10.06 | 59.26 | 10.24 | 5.69 | 41.70 |
| 1991 | 15.78 | 9.71 | 57.71 | 16.57 | 10.32 | 59.79 | 11.05 | 5.48 | 49.54 |
| 1992 | 14.94 | 9.35 | 53.57 | 15.68 | 9.74 | 56.74 | 11.25 | 7.78 | 35.22 |
| 1993 | 15.27 | 9.15 | 57.59 | 16.09 | 9.64 | 60.69 | 11.64 | 6.61 | 46.43 |
| 1994 | 14.47 | 8.87 | 53.19 | 15.00 | 9.16 | 55.32 | 12.46 | 6.50 | 53.66 |
| 1995 | 14.61 | 8.77 | 54.95 | 15.38 | 9.33 | 57.18 | 10.33 | 4.90 | 47.82 |
| 1996 | 14.15 | 8.44 | 53.61 | 15.31 | 9.26 | 57.15 | 9.06 | 4.55 | 40.23 |
| 1997 | 14.75 | 9.23 | 52.96 | 15.45 | 9.69 | 55.26 | 10.71 | 5.75 | 45.05 |
| 1998 | 14.37 | 8.84 | 52.60 | 15.10 | 9.23 | 55.62 | 10.98 | 6.04 | 45.16 |
| 1999 | 14.76 | 8.77 | 56.18 | 15.47 | 8.99 | 60.27 | 10.93 | 6.50 | 41.56 |
| 2000 | 14.37 | 9.09 | 50.94 | 15.24 | 9.64 | 53.90 | 10.94 | 5.52 | 48.41 |
| 2001 | 14.64 | 9.22 | 52.15 | 15.66 | 9.81 | 56.13 | 9.52 | 6.32 | 31.66 |
| 2002 | 13.94 | 8.10 | 54.31 | 14.57 | 8.47 | 56.75 | 10.56 | 5.69 | 44.26 |
| 2003 | 13.78 | 8.54 | 50.01 | 14.30 | 9.01 | 50.88 | 12.36 | 6.21 | 54.85 |
| 2004 | 13.41 | 8.17 | 49.60 | 14.03 | 8.35 | 53.27 | 10.57 | 6.64 | 37.70 |
| 2005 | 13.04 | 8.18 | 46.66 | 13.61 | 8.30 | 50.28 | 10.95 | 7.36 | 35.80 |
| 2006 | 13.06 | 7.73 | 49.91 | 13.77 | 8.11 | 52.88 | 9.30 | 5.70 | 34.23 |
| 2007 | 13.12 | 8.21 | 47.10 | 13.63 | 8.54 | 48.79 | 11.64 | 6.04 | 50.31 |
| 2008 | 13.02 | 7.58 | 50.60 | 13.82 | 7.93 | 54.52 | 9.62 | 5.19 | 40.21 |
| 2009 | 13.12 | 8.10 | 47.81 | 13.89 | 8.41 | 51.79 | 9.80 | 5.35 | 40.56 |
| 2010 | 12.92 | 7.81 | 48.24 | 13.63 | 8.17 | 51.32 | 10.15 | 5.70 | 40.88 |
| 2011 | 12.46 | 7.64 | 45.82 | 13.26 | 8.00 | 49.66 | 10.34 | 6.05 | 39.97 |

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Additional information on the model used to delay-adjust SEER Incidence rates can be found at <http://surveillance.cancer.gov/delay/>.

^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).
- Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 21.5
Cancer of the Ovary (Invasive)

Age-adjusted SEER Incidence^a Rates by Year, Race and Age

| | All Races, Females | | | White Females | | | Black Females | | |
|--------------------|--------------------|-------|-------|---------------|-------|-------|---------------|------|-------|
| | All | <65 | 65+ | All | <65 | 65+ | All | <65 | 65+ |
| Year of Diagnosis: | | | | | | | | | |
| 1975-2011 | 14.52 | 9.13 | 51.77 | 15.29 | 9.63 | 54.45 | 10.84 | 6.28 | 42.36 |
| 1975 | 16.32 | 11.61 | 48.88 | 16.77 | 12.00 | 49.79 | 11.72 | 7.40 | 41.58 |
| 1976 | 15.86 | 11.23 | 47.86 | 16.64 | 11.88 | 49.55 | 11.41 | 7.37 | 39.32 |
| 1977 | 15.62 | 11.20 | 46.15 | 16.19 | 11.58 | 48.07 | 11.34 | 8.69 | 29.65 |
| 1978 | 15.39 | 10.79 | 47.18 | 16.17 | 11.37 | 49.31 | 9.96 | 6.07 | 36.83 |
| 1979 | 15.39 | 10.71 | 47.71 | 15.84 | 10.93 | 49.83 | 11.94 | 9.07 | 31.79 |
| 1980 | 15.46 | 10.65 | 48.68 | 16.21 | 11.18 | 50.95 | 11.73 | 7.41 | 41.60 |
| 1981 | 15.42 | 10.49 | 49.53 | 16.01 | 10.88 | 51.47 | 11.68 | 7.58 | 40.08 |
| 1982 | 15.59 | 10.11 | 53.43 | 16.14 | 10.50 | 55.14 | 12.40 | 7.50 | 46.23 |
| 1983 | 15.97 | 10.45 | 54.13 | 16.42 | 10.74 | 55.71 | 13.06 | 9.18 | 39.89 |
| 1984 | 16.26 | 10.98 | 52.78 | 17.15 | 11.72 | 54.70 | 10.98 | 5.87 | 46.31 |
| 1985 | 16.55 | 10.78 | 56.41 | 17.46 | 11.43 | 59.13 | 11.17 | 7.10 | 39.27 |
| 1986 | 15.01 | 9.87 | 50.55 | 15.69 | 10.45 | 51.91 | 10.69 | 6.24 | 41.47 |
| 1987 | 16.15 | 10.14 | 57.64 | 17.03 | 10.84 | 59.87 | 11.82 | 6.26 | 50.27 |
| 1988 | 15.29 | 9.58 | 54.69 | 16.02 | 10.10 | 56.95 | 11.56 | 6.63 | 45.65 |
| 1989 | 15.51 | 9.53 | 56.80 | 16.49 | 10.27 | 59.53 | 10.99 | 5.42 | 49.45 |
| 1990 | 15.40 | 9.45 | 56.54 | 16.27 | 10.06 | 59.22 | 10.23 | 5.68 | 41.65 |
| 1991 | 15.77 | 9.70 | 57.66 | 16.56 | 10.31 | 59.74 | 11.03 | 5.48 | 49.47 |
| 1992 | 14.93 | 9.34 | 53.52 | 15.67 | 9.73 | 56.69 | 11.23 | 7.77 | 35.16 |
| 1993 | 15.25 | 9.14 | 57.53 | 16.07 | 9.63 | 60.63 | 11.62 | 6.59 | 46.34 |
| 1994 | 14.46 | 8.86 | 53.14 | 14.98 | 9.15 | 55.25 | 12.44 | 6.49 | 53.54 |
| 1995 | 14.58 | 8.76 | 54.86 | 15.36 | 9.32 | 57.10 | 10.30 | 4.89 | 47.70 |
| 1996 | 14.12 | 8.42 | 53.51 | 15.29 | 9.24 | 57.06 | 9.03 | 4.53 | 40.11 |
| 1997 | 14.72 | 9.21 | 52.84 | 15.42 | 9.68 | 55.16 | 10.68 | 5.73 | 44.91 |
| 1998 | 14.34 | 8.82 | 52.49 | 15.07 | 9.22 | 55.51 | 10.94 | 6.02 | 45.00 |
| 1999 | 14.71 | 8.74 | 56.00 | 15.43 | 8.96 | 60.11 | 10.88 | 6.47 | 41.36 |
| 2000 | 14.32 | 9.05 | 50.76 | 15.19 | 9.62 | 53.74 | 10.88 | 5.49 | 48.15 |
| 2001 | 14.59 | 9.18 | 51.94 | 15.61 | 9.78 | 55.94 | 9.47 | 6.28 | 31.47 |
| 2002 | 13.88 | 8.06 | 54.07 | 14.51 | 8.43 | 56.53 | 10.49 | 5.65 | 43.96 |
| 2003 | 13.71 | 8.49 | 49.76 | 14.24 | 8.97 | 50.65 | 12.26 | 6.16 | 54.43 |
| 2004 | 13.33 | 8.13 | 49.32 | 13.96 | 8.31 | 52.99 | 10.47 | 6.58 | 37.37 |
| 2005 | 12.96 | 8.12 | 46.36 | 13.52 | 8.25 | 49.98 | 10.84 | 7.29 | 35.44 |
| 2006 | 12.96 | 7.67 | 49.54 | 13.67 | 8.05 | 52.51 | 9.20 | 5.63 | 33.84 |
| 2007 | 13.01 | 8.14 | 46.71 | 13.52 | 8.47 | 48.40 | 11.48 | 5.96 | 49.65 |
| 2008 | 12.90 | 7.51 | 50.12 | 13.69 | 7.85 | 54.01 | 9.48 | 5.12 | 39.61 |
| 2009 | 12.95 | 8.00 | 47.21 | 13.71 | 8.30 | 51.12 | 9.61 | 5.25 | 39.76 |
| 2010 | 12.69 | 7.67 | 47.38 | 13.37 | 8.02 | 50.34 | 9.86 | 5.54 | 39.74 |
| 2011 | 12.09 | 7.41 | 44.46 | 12.82 | 7.73 | 47.98 | 9.85 | 5.77 | 38.10 |

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

^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 21.6
Cancer of the Ovary (Invasive)

Age-adjusted U.S. Death^a Rates by Year, Race and Age

| Year of Death: | All Races, Females | | | White Females | | | Black Females | | |
|----------------|--------------------|------|-------|---------------|------|-------|---------------|------|-------|
| | All | <65 | 65+ | All | <65 | 65+ | All | <65 | 65+ |
| 1975-2011 | 8.93 | 4.03 | 42.76 | 9.24 | 4.21 | 43.99 | 7.37 | 3.25 | 35.89 |
| 1975 | 9.84 | 5.83 | 37.55 | 10.16 | 6.01 | 38.81 | 7.16 | 4.64 | 24.58 |
| 1976 | 10.02 | 5.73 | 39.66 | 10.28 | 5.90 | 40.58 | 8.01 | 4.61 | 31.52 |
| 1977 | 9.58 | 5.47 | 38.05 | 9.87 | 5.65 | 39.08 | 7.41 | 4.25 | 29.21 |
| 1978 | 9.55 | 5.44 | 37.97 | 9.83 | 5.62 | 38.88 | 7.35 | 4.17 | 29.33 |
| 1979 | 9.33 | 5.10 | 38.58 | 9.56 | 5.20 | 39.70 | 7.53 | 4.43 | 28.94 |
| 1980 | 9.29 | 4.97 | 39.15 | 9.52 | 5.11 | 39.96 | 7.85 | 4.18 | 33.21 |
| 1981 | 9.23 | 4.94 | 38.89 | 9.48 | 5.10 | 39.75 | 7.36 | 3.74 | 32.36 |
| 1982 | 9.22 | 4.80 | 39.81 | 9.49 | 4.97 | 40.72 | 7.41 | 3.64 | 33.45 |
| 1983 | 9.20 | 4.70 | 40.34 | 9.43 | 4.80 | 41.38 | 7.67 | 4.11 | 32.25 |
| 1984 | 9.11 | 4.63 | 40.08 | 9.36 | 4.79 | 40.93 | 7.55 | 3.76 | 33.80 |
| 1985 | 9.08 | 4.57 | 40.23 | 9.34 | 4.72 | 41.29 | 7.30 | 3.74 | 31.87 |
| 1986 | 9.24 | 4.57 | 41.55 | 9.52 | 4.73 | 42.63 | 7.42 | 3.66 | 33.43 |
| 1987 | 9.18 | 4.46 | 41.86 | 9.46 | 4.64 | 42.82 | 7.55 | 3.52 | 35.45 |
| 1988 | 9.31 | 4.41 | 43.16 | 9.55 | 4.56 | 44.08 | 7.87 | 3.67 | 36.88 |
| 1989 | 9.21 | 4.30 | 43.20 | 9.52 | 4.49 | 44.27 | 7.41 | 3.26 | 36.16 |
| 1990 | 9.33 | 4.26 | 44.35 | 9.61 | 4.46 | 45.23 | 7.86 | 3.32 | 39.24 |
| 1991 | 9.51 | 4.32 | 45.37 | 9.74 | 4.48 | 46.13 | 8.36 | 3.43 | 42.46 |
| 1992 | 9.46 | 4.24 | 45.51 | 9.70 | 4.38 | 46.49 | 8.19 | 3.59 | 39.99 |
| 1993 | 9.08 | 4.02 | 44.06 | 9.34 | 4.19 | 44.93 | 7.74 | 3.02 | 40.42 |
| 1994 | 9.38 | 4.14 | 45.64 | 9.67 | 4.32 | 46.70 | 7.82 | 3.20 | 39.72 |
| 1995 | 9.12 | 3.96 | 44.77 | 9.47 | 4.17 | 46.07 | 7.37 | 2.93 | 38.04 |
| 1996 | 8.86 | 3.82 | 43.70 | 9.13 | 3.97 | 44.80 | 7.32 | 2.89 | 37.92 |
| 1997 | 8.94 | 3.77 | 44.70 | 9.21 | 3.94 | 45.59 | 7.93 | 3.11 | 41.19 |
| 1998 | 8.73 | 3.68 | 43.64 | 9.02 | 3.81 | 45.03 | 7.37 | 3.22 | 36.06 |
| 1999 | 8.77 | 3.73 | 43.57 | 9.07 | 3.90 | 44.83 | 7.38 | 3.05 | 37.31 |
| 2000 | 8.89 | 3.67 | 45.00 | 9.25 | 3.85 | 46.58 | 7.15 | 2.90 | 36.50 |
| 2001 | 9.00 | 3.73 | 45.47 | 9.32 | 3.87 | 46.95 | 7.52 | 3.19 | 37.47 |
| 2002 | 9.04 | 3.78 | 45.36 | 9.39 | 3.96 | 46.89 | 7.43 | 3.09 | 37.49 |
| 2003 | 8.87 | 3.66 | 44.84 | 9.19 | 3.82 | 46.28 | 7.46 | 3.09 | 37.69 |
| 2004 | 8.78 | 3.52 | 45.17 | 9.09 | 3.64 | 46.72 | 7.65 | 3.10 | 39.16 |
| 2005 | 8.66 | 3.55 | 44.00 | 9.00 | 3.72 | 45.44 | 7.28 | 2.85 | 37.87 |
| 2006 | 8.56 | 3.44 | 43.98 | 8.95 | 3.61 | 45.82 | 6.85 | 2.87 | 34.40 |
| 2007 | 8.25 | 3.18 | 43.33 | 8.64 | 3.35 | 45.24 | 6.56 | 2.62 | 33.79 |
| 2008 | 7.98 | 3.10 | 41.69 | 8.28 | 3.23 | 43.22 | 6.63 | 2.61 | 34.39 |
| 2009 | 7.85 | 3.13 | 40.45 | 8.15 | 3.28 | 41.82 | 6.75 | 2.65 | 35.08 |
| 2010 | 7.80 | 3.02 | 40.84 | 8.11 | 3.13 | 42.52 | 6.64 | 2.68 | 34.04 |
| 2011 | 7.53 | 2.94 | 39.30 | 7.82 | 3.05 | 40.83 | 6.58 | 2.53 | 34.56 |

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
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 21.7
Cancer of the Ovary (Invasive)

SEER Incidence^a and U.S. Death^b Rates, Age-Adjusted and Age-Specific Rates, by Race

| | SEER Incidence ^a | | | U.S. Mortality ^b | | |
|--|-----------------------------|------------------|------------------|-----------------------------|------------------|------------------|
| | All Races Females | White Females | Black Females | All Races Females | White Females | Black Females |
| <u>Age-Adjusted Rates, 2007-2011</u> | | | | | | |
| Age at Diagnosis/Death: | | | | | | |
| All ages | 12.3 | 13.0 | 9.8 | 7.9 | 8.2 | 6.6 |
| Under 65 | 7.5 | 7.9 | 5.4 | 3.1 | 3.2 | 2.6 |
| 65 and over | 45.3 | 48.0 | 40.0 | 41.1 | 42.7 | 34.4 |
| All ages (IARC world std) ^c | 8.8 | 9.3 | 6.8 | 4.9 | 5.1 | 4.2 |
| <u>Age-Specific Rates, 2007-2011</u> | | | | | | |
| Age at Diagnosis/Death: | | | | | | |
| <1 | - | - | - | - | - | - |
| 1-4 | - | - | - | - | - | - |
| 5-9 | 0.3 | 0.2 | - | - | - | - |
| 10-14 | 0.8 | 0.8 | 0.7 | - | - | - |
| 15-19 | 1.3 | 1.4 | 0.9 | 0.1 | 0.1 | - |
| 20-24 | 1.7 | 1.8 | 1.4 | 0.1 | 0.1 | - |
| 25-29 | 2.3 | 2.5 | 2.2 | 0.3 | 0.3 | 0.4 |
| 30-34 | 3.2 | 3.3 | 2.7 | 0.6 | 0.6 | 0.6 |
| 35-39 | 5.0 | 5.2 | 3.6 | 1.1 | 1.1 | 1.1 |
| 40-44 | 9.0 | 9.5 | 5.8 | 2.3 | 2.3 | 2.2 |
| 45-49 | 14.3 | 15.0 | 9.4 | 4.7 | 5.0 | 4.0 |
| 50-54 | 20.4 | 21.4 | 13.5 | 8.8 | 9.2 | 7.1 |
| 55-59 | 25.5 | 27.3 | 18.0 | 13.7 | 14.3 | 11.2 |
| 60-64 | 31.4 | 33.4 | 24.9 | 20.1 | 21.0 | 16.7 |
| 65-69 | 38.0 | 40.8 | 33.1 | 28.3 | 29.5 | 24.9 |
| 70-74 | 45.2 | 48.4 | 39.2 | 36.9 | 38.6 | 32.4 |
| 75-79 | 48.0 | 50.8 | 40.9 | 44.9 | 46.7 | 37.5 |
| 80-84 | 50.8 | 53.4 | 47.1 | 53.9 | 55.8 | 44.4 |
| 85+ | 50.3 | 52.2 | 47.0 | 56.4 | 58.3 | 42.3 |

^a Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473. 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 US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^c 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 21.8
Cancer of the Ovary(Invasive)

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

| | All Races, Females | | | White Females | | | Black Females | | |
|--|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------|-------------------|-------------------|
| | All | <65 | 65+ | All | <65 | 65+ | All | <65 | 65+ |
| 5-Year Relative Survival (Percent) | | | | | | | | | |
| Year of Diagnosis: | | | | | | | | | |
| 1960-1963 ^a | - | - | - | 32 | - | - | 32 | - | - |
| 1970-1973 ^a | - | - | - | 36 | - | - | 32 | - | - |
| 1975-1977 ^b | 36.0 | 44.2 | 21.4 | 35.3 | 43.5 | 21.1 | 41.8 | 48.9 | 24.9 ^g |
| 1978-1980 ^b | 37.7 | 47.3 | 22.1 | 36.8 | 46.5 | 22.3 | 38.8 | 49.2 | 12.8 |
| 1981-1983 ^b | 38.8 | 50.2 | 23.1 | 38.5 | 50.2 | 23.1 | 37.5 | 45.4 | 22.6 |
| 1984-1986 ^b | 38.4 | 49.4 | 24.1 | 37.5 | 48.5 | 23.7 | 39.4 | 52.2 | 21.2 |
| 1987-1989 ^b | 38.2 | 51.1 | 23.6 | 38.1 | 51.2 | 23.9 | 33.7 | 46.9 | 17.1 |
| 1990-1992 ^b | 40.5 | 55.3 | 24.2 | 40.3 | 55.9 | 24.1 | 35.6 | 49.1 | 16.9 |
| 1993-1995 ^b | 41.4 | 55.7 | 26.5 | 40.5 | 55.4 | 25.9 | 41.5 | 54.8 | 26.9 |
| 1996-1998 ^b | 43.8 | 57.0 | 28.4 | 43.2 | 56.5 | 28.4 | 39.1 | 53.1 | 20.6 |
| 1999-2003 ^b | 43.7 | 56.4 | 27.9 | 43.3 | 56.5 | 28.0 | 35.7 | 46.0 | 19.9 |
| 2004-2010 ^b | 44.6 ^f | 57.4 ^f | 27.5 ^f | 44.3 ^f | 57.7 ^f | 27.9 ^f | 36.4 | 45.3 | 21.6 |
| 5-Year Period Survival (Percent) ^{cd} | | | | | | | | | |
| 2010 | 45.3 | 58.6 | 27.7 | 45.2 | 59.0 | 28.1 | 35.0 | 45.6 | 20.4 |
| Stage Distribution (%) 2004-2010 ^{ee} | | | | | | | | | |
| All Stages | | | | | | | | | |
| Number of cases | 33,841 | 19,018 | 14,823 | 28,189 | 15,336 | 12,853 | 2,790 | 1,646 | 1,144 |
| Percent | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |
| Localized | 15 | 20 | 7 | 14 | 20 | 7 | 15 | 20 | 8 |
| Regional | 18 | 22 | 13 | 18 | 22 | 14 | 15 | 17 | 11 |
| Distant | 61 | 54 | 69 | 61 | 55 | 69 | 62 | 58 | 69 |
| Unstaged | 6 | 3 | 10 | 6 | 3 | 10 | 8 | 6 | 12 |
| 5-Year Relative Survival (Percent), 2004-2010 ^c | | | | | | | | | |
| Age at Diagnosis: | | | | | | | | | |
| Ages <45 | 74.9 | - | - | 75.8 | - | - | 65.2 | - | - |
| Ages 45-54 | 58.0 | - | - | 59.0 | - | - | 39.6 | - | - |
| Ages 55-64 | 47.4 | - | - | 48.1 | - | - | 33.1 | - | - |
| Ages 65-74 | 37.1 | - | - | 38.0 | - | - | 24.8 | - | - |
| Ages 75+ | 19.1 | - | - | 19.1 | - | - | 16.8 | - | - |
| Ages <65 | 57.5 | - | - | 57.9 | - | - | 44.9 | - | - |
| Ages 65+ | 27.3 | - | - | 27.7 | - | - | 21.1 | - | - |
| Stage ^{ee} : | | | | | | | | | |
| All Stages | 44.6 | 57.5 | 27.3 | 44.4 | 57.9 | 27.7 | 35.3 | 44.9 | 21.1 |
| Localized | 92.3 | 93.3 | 87.9 | 92.4 | 93.8 | 87.2 | 87.4 | 87.6 | 86.0 ^g |
| Regional | 71.7 | 79.2 | 55.3 | 72.1 | 79.8 | 56.6 | 54.1 | 62.2 | 36.6 ^g |
| Distant | 27.4 | 36.1 | 18.2 | 27.7 | 37.1 | 18.6 | 19.5 | 24.6 | 13.3 |
| Unstaged | 21.8 | 50.8 | 8.9 | 20.8 | 49.9 | 9.3 | 25.4 | 50.5 ^g | 6.3 |

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

^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 2011.

^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 2011.

^d Period survival provides a 2010 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2007-2009: 0-1 year survival), (2006-2008: 1-2 year survival), (2005-2007: 2-3 year survival), (2004-2006: 3-4 year survival), (2003-2005: 4-5 years survival).^e Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.^f The difference between 1975-1977 and 2004-2010 is statistically significant (p<.05).^g The standard error is between 5 and 10 percentage points.^h 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 21.9
Cancer of the Ovary (Invasive)

SEER^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 |
|---------------|---------------|---------------|---------------|---------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Survival Time | | | | | | | | | | | | | | | | | | | | |
| 1-year | 64.1 | 69.5 | 69.6 | 71.9 | 72.9 | 73.7 | 76.7 | 75.0 | 73.9 | 76.8 | 76.0 | 75.4 | 75.9 | 75.2 | 75.1 | 75.4 | 75.2 | 75.7 | 75.8 | 76.6 |
| 2-year | 48.9 | 53.1 | 54.1 | 58.6 | 60.0 | 61.4 | 65.2 | 64.0 | 61.5 | 63.6 | 65.2 | 63.4 | 65.9 | 64.6 | 64.3 | 63.9 | 63.9 | 64.6 | 66.8 | |
| 3-year | 42.2 | 45.7 | 46.4 | 49.7 | 51.0 | 52.8 | 56.6 | 54.9 | 52.8 | 54.5 | 55.8 | 54.3 | 58.3 | 56.3 | 55.7 | 55.5 | 55.5 | 56.0 | | |
| 4-year | 38.6 | 41.5 | 41.4 | 44.3 | 46.0 | 46.2 | 48.7 | 50.0 | 47.4 | 47.5 | 50.2 | 47.9 | 49.9 | 49.5 | 49.6 | 49.5 | 48.7 | | | |
| 5-year | 36.6 | 38.8 | 38.1 | 40.7 | 42.1 | 42.1 | 44.1 | 45.1 | 42.7 | 43.0 | 45.6 | 42.7 | 44.3 | 44.0 | 44.1 | 45.2 | | | | |
| 6-year | 35.2 | 37.0 | 36.0 | 38.2 | 38.8 | 38.9 | 40.4 | 42.2 | 40.0 | 39.9 | 42.7 | 39.3 | 40.9 | 40.9 | 40.6 | | | | | |
| 7-year | 33.9 | 36.1 | 34.7 | 36.7 | 36.8 | 37.3 | 38.1 | 40.4 | 37.9 | 37.4 | 40.1 | 37.3 | 38.1 | 38.8 | | | | | | |
| 8-year | 33.0 | 34.6 | 33.7 | 35.5 | 34.9 | 36.2 | 36.7 | 38.4 | 36.2 | 35.7 | 37.7 | 35.5 | 36.6 | | | | | | | |
| 9-year | 32.3 | 33.6 | 33.0 | 34.3 | 33.4 | 35.4 | 35.3 | 36.6 | 34.7 | 34.3 | 35.9 | 34.6 | | | | | | | | |
| 10-year | 32.0 | 32.8 | 32.4 | 33.5 | 32.6 | 34.4 | 34.2 | 35.6 | 33.9 | 33.1 | 34.8 | | | | | | | | | |
| 11-year | 31.6 | 32.4 | 32.0 | 32.8 | 31.8 | 33.7 | 33.0 | 34.8 | 32.3 | 32.3 | | | | | | | | | | |
| 12-year | 30.9 | 31.8 | 31.3 | 32.3 | 31.7 | 33.2 | 32.2 | 34.2 | 31.3 | | | | | | | | | | | |
| 13-year | 30.6 | 31.2 | 30.8 | 31.8 | 31.2 | 32.6 | 31.6 | 32.9 | | | | | | | | | | | | |
| 14-year | 30.1 | 30.7 | 30.3 | 31.6 | 31.2 | 31.8 | 31.3 | | | | | | | | | | | | | |
| 15-year | 29.6 | 30.6 | 30.2 | 31.1 | 30.6 | 31.3 | | | | | | | | | | | | | | |
| 16-year | 29.2 | 30.3 | 30.2 | 30.9 | 30.3 | | | | | | | | | | | | | | | |
| 17-year | 28.8 | 29.9 | 30.0 | 30.6 | | | | | | | | | | | | | | | | |
| 18-year | 28.7 | 29.8 | 29.9 | | | | | | | | | | | | | | | | | |
| 19-year | 28.4 | 29.5 | 29.8 | | | | | | | | | | | | | | | | | |
| 20-year | 28.2 | 29.2 | 29.5 | | | | | | | | | | | | | | | | | |

^a Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

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

Table 21.10
Cancer of the Ovary (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, 2009-2011 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 | 0.01 | 0.03 | 1.33 | 0.98 | Asian/ Pacific Islander | 0 | 0.00 | 0.02 | 0.04 | 1.03 | 0.69 |
| | 10 | 0.01 | 0.03 | 0.07 | 1.34 | 0.99 | | 10 | 0.02 | 0.03 | 0.08 | 1.04 | 0.69 |
| | 20 | 0.02 | 0.06 | 0.18 | 1.33 | 0.99 | | 20 | 0.02 | 0.07 | 0.19 | 1.03 | 0.69 |
| | 30 | 0.04 | 0.16 | 0.37 | 1.32 | 1.00 | | 30 | 0.05 | 0.17 | 0.36 | 1.01 | 0.69 |
| | 40 | 0.12 | 0.33 | 0.63 | 1.29 | 1.00 | | 40 | 0.12 | 0.31 | 0.49 | 0.97 | 0.69 |
| | 50 | 0.22 | 0.52 | 0.87 | 1.20 | 0.98 | | 50 | 0.19 | 0.38 | 0.59 | 0.85 | 0.66 |
| | 60 | 0.32 | 0.69 | 0.95 | 1.02 | 0.91 | | 60 | 0.19 | 0.41 | 0.58 | 0.68 | 0.59 |
| | 70 | 0.40 | 0.69 | - | 0.78 | 0.76 | | 70 | 0.23 | 0.41 | - | 0.51 | 0.48 |
| 80 | 0.37 | - | - | 0.48 | 0.52 | 80 | 0.21 | - | - | 0.33 | 0.34 | | |
| White | 0 | 0.00 | 0.01 | 0.03 | 1.41 | 1.02 | American Indian/ Alaska Native ^a | 0 | 0.00 | 0.00 | 0.01 | 1.13 | 0.83 |
| | 10 | 0.01 | 0.03 | 0.08 | 1.42 | 1.03 | | 10 | 0.00 | 0.01 | 0.04 | 1.14 | 0.84 |
| | 20 | 0.02 | 0.06 | 0.18 | 1.41 | 1.03 | | 20 | 0.01 | 0.04 | 0.15 | 1.14 | 0.84 |
| | 30 | 0.04 | 0.16 | 0.39 | 1.39 | 1.04 | | 30 | 0.03 | 0.14 | 0.35 | 1.14 | 0.85 |
| | 40 | 0.12 | 0.35 | 0.67 | 1.36 | 1.04 | | 40 | 0.12 | 0.33 | 0.55 | 1.14 | 0.86 |
| | 50 | 0.23 | 0.56 | 0.93 | 1.27 | 1.02 | | 50 | 0.22 | 0.45 | 0.71 | 1.05 | 0.87 |
| | 60 | 0.34 | 0.73 | 1.00 | 1.08 | 0.95 | | 60 | 0.24 | 0.52 | 0.70 | 0.88 | 0.80 |
| | 70 | 0.43 | 0.73 | - | 0.81 | 0.79 | | 70 | 0.31 | 0.51 | - | 0.71 | 0.69 |
| 80 | 0.39 | - | - | 0.50 | 0.54 | 80 | 0.26 | - | - | 0.52 | 0.52 | | |
| Black | 0 | 0.00 | 0.01 | 0.03 | 0.99 | 0.76 | Hispanic ^b | 0 | 0.00 | 0.02 | 0.04 | 1.26 | 0.82 |
| | 10 | 0.01 | 0.03 | 0.06 | 1.00 | 0.77 | | 10 | 0.01 | 0.04 | 0.08 | 1.26 | 0.82 |
| | 20 | 0.02 | 0.05 | 0.13 | 1.00 | 0.77 | | 20 | 0.02 | 0.07 | 0.16 | 1.25 | 0.82 |
| | 30 | 0.03 | 0.11 | 0.25 | 0.98 | 0.78 | | 30 | 0.04 | 0.14 | 0.34 | 1.23 | 0.83 |
| | 40 | 0.08 | 0.22 | 0.46 | 0.96 | 0.78 | | 40 | 0.10 | 0.30 | 0.56 | 1.20 | 0.82 |
| | 50 | 0.15 | 0.39 | 0.67 | 0.92 | 0.77 | | 50 | 0.20 | 0.47 | 0.77 | 1.11 | 0.80 |
| | 60 | 0.26 | 0.56 | 0.77 | 0.83 | 0.73 | | 60 | 0.27 | 0.59 | 0.84 | 0.94 | 0.74 |
| | 70 | 0.34 | 0.59 | - | 0.65 | 0.62 | | 70 | 0.34 | 0.61 | - | 0.72 | 0.63 |
| 80 | 0.33 | - | - | 0.43 | 0.43 | 80 | 0.33 | - | - | 0.46 | 0.47 | | |

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

Devcan 6.8.0, August 2014, 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 21.11
Cancer of the Ovary (Invasive)

SEER Incidence and U.S. Mortality
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 2007-2011 | Trend 2002-2011 ^c | Trend 2002-2011 ^d |
| | Rate per 100,000 persons | AAPC (%) | AAPC (%) |
| RACE/ETHNICITY | Females | Females | Females |
| All Races | 12.3 | -1.0* | -1.1* |
| White | 13.0 | -1.0* | -1.0* |
| White Hispanic ^e | 11.5 | -0.4 | - |
| White Non-Hispanic ^e | 13.2 | -1.0* | - |
| Black | 9.8 | -0.5 | -0.5* |
| Asian/Pacific Islander | 9.3 | -0.5 | - |
| Amer Ind/Alaska Nat ^f | 9.8 | - | - |
| Hispanic ^e | 10.9 | -0.5 | - |
| <u>U.S. Mortality^g</u> | | | |
| | Rate 2007-2011 | Trend 2002-2011 ^h | |
| | Rate per 100,000 persons | AAPC (%) | |
| RACE/ETHNICITY | Females | Females | |
| All Races | 7.9 | -2.0* | |
| White | 8.2 | -2.0* | |
| White Hispanic ^e | 5.9 | -0.5 | |
| White Non-Hispanic ^e | 8.4 | -1.7* | |
| Black | 6.6 | -1.3 | |
| Asian/Pacific Islander | 4.7 | -0.1 | |
| Amer Ind/Alaska Nat | | | |
| Total U.S. | 5.2 | -0.1 | |
| CHSDA Counties | 6.9 | 0.5 | |
| Non-CHSDA Counties | 3.3 | - | |
| Hispanic ^e | 5.6 | -1.4 | |

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.1.0, April 2014, 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 2002-2011 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2011.

^d The 2002-2011 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2011.

^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. The 2002-2011 Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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

^g US Mortality Files, National Center for Health Statistics, CDC.

^h The 2002-2011 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2011.

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

Table 21.12
Cancer of the Ovary (Invasive)

Age-Adjusted SEER Incidence Rates^a
By Registry, Race and Age

| | All Races | | | Whites | | | Blacks | | |
|--|-----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | All Ages | Ages <65 | Ages 65+ | All Ages | Ages <65 | Ages 65+ | All Ages | Ages <65 | Ages 65+ |
| <u>SEER Incidence Rates^a, 2007-2011</u> | | | | | | | | | |
| California | 12.18 | 7.68 | 43.27 | 12.99 | 8.05 | 47.18 | 9.89 | 5.66 | 39.13 |
| Greater Bay Area | 12.35 | 8.14 | 41.46 | 13.41 | 8.49 | 47.41 | 10.83 | 6.55 | 40.38 |
| San Francisco-Oakland | 12.85 | 8.50 | 42.87 | 14.06 | 8.88 | 49.83 | 10.56 | 6.12 | 41.23 |
| San Jose-Monterey | 11.41 | 7.46 | 38.70 | 12.27 | 7.80 | 43.16 | 11.91 | - | - |
| Los Angeles | 12.41 | 8.11 | 42.18 | 13.51 | 8.49 | 48.27 | 10.11 | 6.27 | 36.60 |
| Greater California | 12.00 | 7.31 | 44.42 | 12.66 | 7.73 | 46.73 | 9.29 | 4.59 | 41.79 |
| Connecticut | 12.39 | 7.48 | 46.35 | 12.80 | 7.79 | 47.42 | 7.47 | 3.48 | 35.02 |
| Detroit | 13.84 | 8.65 | 49.78 | 15.01 | 9.52 | 52.93 | 10.19 | 6.17 | 37.93 |
| Georgia | 12.69 | 7.19 | 50.71 | 13.74 | 7.91 | 54.05 | 10.26 | 5.72 | 41.65 |
| Atlanta | 13.45 | 7.31 | 55.94 | 15.31 | 8.72 | 60.89 | 11.49 | 5.71 | 51.38 |
| Rural Georgia | 15.20 | 8.36 | 62.49 | 16.80 | 7.82 | 78.86 | 11.18 | - | - |
| Greater Georgia | 12.35 | 7.14 | 48.36 | 13.13 | 7.60 | 51.36 | 9.58 | 5.67 | 36.57 |
| Hawaii | 10.19 | 7.47 | 28.97 | 10.84 | 7.49 | 33.98 | - | - | - |
| Iowa | 12.54 | 7.24 | 49.23 | 12.67 | 7.30 | 49.77 | - | - | - |
| Kentucky | 11.18 | 6.85 | 41.12 | 11.49 | 7.11 | 41.82 | 7.50 | 4.26 | 29.90 |
| Louisiana | 9.91 | 5.55 | 40.07 | 10.12 | 5.80 | 39.96 | 9.57 | 4.92 | 41.70 |
| New Jersey | 13.24 | 8.25 | 47.73 | 13.97 | 8.88 | 49.16 | 10.02 | 5.18 | 43.48 |
| New Mexico | 11.74 | 7.22 | 42.97 | 11.66 | 7.13 | 42.99 | - | - | - |
| Seattle-Puget Sound | 13.67 | 7.84 | 53.97 | 14.18 | 8.00 | 56.92 | 9.16 | 4.96 | - |
| Utah | 11.30 | 6.77 | 42.67 | 11.45 | 6.88 | 43.01 | - | - | - |
| 9 SEER Areas ^b | 12.72 | 7.74 | 47.16 | 13.41 | 8.07 | 50.37 | 10.04 | 5.52 | 41.29 |
| 11 SEER Areas ^b | 12.59 | 7.82 | 45.60 | 13.40 | 8.17 | 49.57 | 10.05 | 5.73 | 39.91 |
| 13 SEER Areas ^b | 12.60 | 7.82 | 45.68 | 13.41 | 8.17 | 49.65 | 10.06 | 5.75 | 39.80 |
| 18 SEER Areas ^b | 12.30 | 7.53 | 45.26 | 12.99 | 7.92 | 48.00 | 9.77 | 5.40 | 39.98 |

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

^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 21.13
Cancer of the Ovary (Invasive)

Age-Adjusted SEER Death Rates^a
By Registry, Race and Age

| | All Races | | | Whites | | | Blacks | | |
|--|-----------|----------|----------|----------|----------|----------|----------|----------|----------|
| | All Ages | Ages <65 | Ages 65+ | All Ages | Ages <65 | Ages 65+ | All Ages | Ages <65 | Ages 65+ |
| <u>SEER Death Rates^a, 2007-2011</u> | | | | | | | | | |
| California | 7.85 | 3.06 | 40.98 | 8.47 | 3.20 | 44.89 | 7.35 | 3.02 | 37.31 |
| Greater Bay Area | 7.51 | 3.03 | 38.48 | 8.52 | 3.30 | 44.55 | 7.50 | 3.16 | 37.51 |
| San Francisco-Oakland | 7.76 | 3.14 | 39.70 | 8.77 | 3.32 | 46.42 | 7.85 | 3.45 | 38.26 |
| San Jose-Monterey | 7.03 | 2.84 | 36.04 | 8.06 | 3.27 | 41.15 | - | - | - |
| Los Angeles | 7.95 | 3.21 | 40.71 | 8.85 | 3.37 | 46.70 | 7.44 | 3.18 | 36.91 |
| Greater California | 7.93 | 3.00 | 42.00 | 8.31 | 3.10 | 44.31 | 7.20 | 2.74 | 38.06 |
| Connecticut | 7.73 | 3.01 | 40.36 | 8.04 | 3.21 | 41.39 | 5.35 | 1.82 | 29.75 |
| Detroit | 7.96 | 3.19 | 40.91 | 8.68 | 3.52 | 44.37 | 5.97 | 2.52 | 29.82 |
| Georgia | 8.26 | 3.00 | 44.63 | 8.86 | 3.17 | 48.20 | 6.78 | 2.72 | 34.80 |
| Atlanta | 8.38 | 2.68 | 47.81 | 9.15 | 2.69 | 53.84 | 7.30 | 2.74 | 38.84 |
| Rural Georgia | 10.11 | - | 67.36 | 12.23 | - | 86.10 | - | - | - |
| Greater Georgia | 8.22 | 3.22 | 42.77 | 8.73 | 3.41 | 45.54 | 6.54 | 2.75 | 32.76 |
| Hawaii | 5.81 | 2.56 | 28.26 | 7.22 | 2.51 | 39.76 | - | - | - |
| Iowa | 8.96 | 3.34 | 47.86 | 9.06 | 3.39 | 48.29 | - | - | - |
| Kentucky | 7.71 | 3.03 | 40.02 | 7.95 | 3.20 | 40.79 | 4.94 | - | 30.71 |
| Louisiana | 7.32 | 2.63 | 39.75 | 7.62 | 2.71 | 41.55 | 6.65 | 2.49 | 35.38 |
| New Jersey | 8.53 | 3.44 | 43.69 | 9.12 | 3.72 | 46.42 | 6.33 | 2.70 | 31.47 |
| New Mexico | 7.77 | 3.24 | 39.07 | 7.67 | 3.15 | 38.88 | - | - | - |
| Seattle-Puget Sound | 9.25 | 3.45 | 49.36 | 9.80 | 3.63 | 52.44 | 4.85 | - | - |
| Utah | 7.33 | 2.96 | 37.54 | 7.45 | 2.99 | 38.29 | - | - | - |
| 9 SEER Areas ^b | 8.06 | 3.11 | 42.29 | 8.64 | 3.29 | 45.64 | 6.61 | 2.68 | 33.76 |
| 11 SEER Areas ^b | 7.98 | 3.12 | 41.59 | 8.65 | 3.31 | 45.61 | 6.78 | 2.77 | 34.53 |
| 13 SEER Areas ^b | 7.97 | 3.11 | 41.63 | 8.64 | 3.29 | 45.61 | 6.78 | 2.76 | 34.57 |
| 18 SEER Areas ^b | 7.99 | 3.10 | 41.85 | 8.53 | 3.27 | 44.87 | 6.64 | 2.66 | 34.18 |
| Total U.S. | 7.88 | 3.07 | 41.09 | 8.19 | 3.20 | 42.69 | 6.63 | 2.62 | 34.37 |

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. 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.

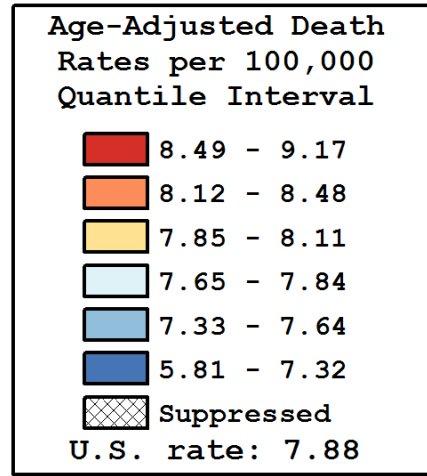
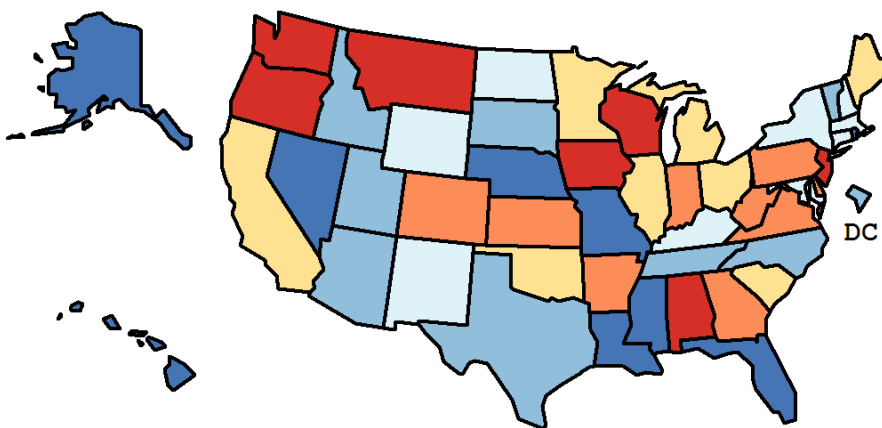
Table 21.14
Cancer of the Ovary (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2007-2011

Females

| State | Rate | SE | Rank | PD |
|------------------|-------------------|------|------|---------------------|
| TOTAL U.S. | 7.88 | 0.03 | | |
| High Five States | | | | |
| Washington | 9.17 ^b | 0.22 | (01) | 16.38 ^c |
| Oregon | 9.10 ^b | 0.28 | (02) | 15.54 ^c |
| Iowa | 8.96 ^b | 0.31 | (03) | 13.82 |
| Alabama | 8.94 ^b | 0.25 | (04) | 13.52 |
| Montana | 8.85 | 0.53 | (05) | 12.34 |
| Low Five States | | | | |
| Missouri | 7.07 ^b | 0.20 | (47) | -10.21 |
| Nevada | 6.86 | 0.32 | (48) | -12.96 |
| Alaska | 6.85 | 0.75 | (49) | -12.98 |
| Rhode Island | 6.75 | 0.44 | (50) | -14.34 |
| Hawaii | 5.81 ^b | 0.38 | (51) | -26.25 ^c |

| State | Rate | SE | Rank | PD | State | Rate | SE | Rank | PD |
|---------------|-------------------|------|------|---------------------|----------------|-------------------|------|------|--------------------|
| Alabama | 8.94 ^b | 0.25 | (04) | 13.52 | Montana | 8.85 | 0.53 | (05) | 12.34 |
| Alaska | 6.85 | 0.75 | (49) | -12.98 | Nebraska | 7.11 | 0.36 | (45) | -9.69 |
| Arizona | 7.62 | 0.21 | (36) | -3.26 | Nevada | 6.86 | 0.32 | (48) | -12.96 |
| Arkansas | 8.39 | 0.31 | (11) | 6.49 | New Hampshire | 7.67 | 0.44 | (33) | -2.64 |
| California | 7.85 | 0.09 | (23) | -0.29 | New Jersey | 8.53 ^b | 0.18 | (07) | 8.24 |
| Colorado | 8.48 | 0.26 | (09) | 7.71 | New Mexico | 7.77 | 0.37 | (28) | -1.35 |
| Connecticut | 7.73 | 0.26 | (29) | -1.85 | New York | 7.83 | 0.11 | (26) | -0.54 |
| Delaware | 8.18 | 0.54 | (14) | 3.84 | North Carolina | 7.46 | 0.16 | (38) | -5.25 |
| D.C. | 7.36 | 0.68 | (41) | -6.58 | North Dakota | 7.68 | 0.61 | (32) | -2.55 |
| Florida | 7.17 ^b | 0.11 | (44) | -8.94 | Ohio | 8.01 | 0.15 | (18) | 1.69 |
| Georgia | 8.26 | 0.19 | (12) | 4.91 | Oklahoma | 7.85 | 0.27 | (22) | -0.27 |
| Hawaii | 5.81 ^b | 0.38 | (51) | -26.25 ^c | Oregon | 9.10 ^b | 0.28 | (02) | 15.54 ^c |
| Idaho | 7.51 | 0.43 | (37) | -4.60 | Pennsylvania | 8.48 ^b | 0.14 | (08) | 7.71 |
| Illinois | 7.93 | 0.15 | (20) | 0.74 | Rhode Island | 6.75 | 0.44 | (50) | -14.34 |
| Indiana | 8.14 | 0.21 | (15) | 3.37 | South Carolina | 8.00 | 0.24 | (19) | 1.54 |
| Iowa | 8.96 ^b | 0.31 | (03) | 13.82 | South Dakota | 7.42 | 0.54 | (39) | -5.77 |
| Kansas | 8.12 | 0.32 | (16) | 3.05 | Tennessee | 7.62 | 0.20 | (35) | -3.21 |
| Kentucky | 7.71 | 0.24 | (30) | -2.12 | Texas | 7.38 ^b | 0.11 | (40) | -6.26 |
| Louisiana | 7.32 | 0.24 | (43) | -7.07 | Utah | 7.33 | 0.37 | (42) | -6.95 |
| Maine | 7.89 | 0.41 | (21) | 0.18 | Vermont | 7.64 | 0.63 | (34) | -2.97 |
| Maryland | 7.70 | 0.22 | (31) | -2.26 | Virginia | 8.21 | 0.19 | (13) | 4.21 |
| Massachusetts | 7.84 | 0.20 | (25) | -0.46 | Washington | 9.17 ^b | 0.22 | (01) | 16.38 ^c |
| Michigan | 8.11 | 0.16 | (17) | 2.97 | West Virginia | 8.40 | 0.36 | (10) | 6.68 |
| Minnesota | 7.85 | 0.23 | (24) | -0.37 | Wisconsin | 8.71 ^b | 0.23 | (06) | 10.63 |
| Mississippi | 7.11 | 0.29 | (46) | -9.78 | Wyoming | 7.78 | 0.72 | (27) | -1.25 |
| Missouri | 7.07 ^b | 0.20 | (47) | -10.21 | | | | | |



^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
^b Difference between state rate and total U.S. rate is statistically significant (p<=.0002).
^c Absolute percent difference between state rate and total U.S. rate is 15% or more.
SE Standard error of the rate.
PD Percent difference between state rate and total U.S. rate.
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 21.15
Cancer of the Ovary (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2011
By Race/Ethnicity 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 <36 ^e | >=36 ^g | Complete ^h |
|-------------------------------------|---------|----------|-----------|-----------|-----------|-----------|-----------------------|-----------------------|-------------------|-----------------------|
| <u>Race</u> | | | | | | | | | | |
| All Races ^b | 58,762 | 31,186 | 23,873 | 19,562 | 16,098 | 13,217 | 137,024 | 173,192 | 15,675 | 188,867 |
| White ^b | 50,895 | 27,153 | 20,890 | 17,129 | 14,675 | 11,819 | 119,489 | 151,815 | 13,345 | 165,160 |
| Black ^b | 4,161 | 2,084 | 1,566 | 1,401 | 914 | 883 | 9,341 | 11,883 | 1,518 | 13,401 |
| Asian/Pacific Islander ^c | 2,565 | 1,531 | 1,040 | + | + | + | 5,734 | + | + | + |
| Hispanic ^d | 5,381 | 2,750 | 1,715 | + | + | + | 10,980 | + | + | + |

Estimated prevalence percent^a on January 1, 2011, of the SEER^c population diagnosed in the previous 19 years
By Age at Prevalence and Race/Ethnicity

| Age at Prevalence | Age Specific (Crude) | | | | | | | | | | Age-Adjusted ^f All Ages | |
|-------------------------------------|----------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------------------------------|--|
| | All Ages | 0-9 | 10-19 | 20-29 | 30-39 | 40-49 | 50-59 | 60-69 | 70-79 | 80+ | | |
| <u>Race</u> | | | | | | | | | | | | |
| All Races ^c | 0.0788% | 0.0002% | 0.0065% | 0.0175% | 0.0321% | 0.0682% | 0.1477% | 0.2194% | 0.2370% | 0.1928% | 0.0713% | |
| White ^c | 0.0870% | 0.0003% | 0.0068% | 0.0187% | 0.0328% | 0.0710% | 0.1557% | 0.2398% | 0.2609% | 0.2050% | 0.0762% | |
| Black ^c | 0.0417% | - | 0.0044% | 0.0118% | 0.0261% | 0.0458% | 0.0864% | 0.1155% | 0.1403% | 0.1392% | 0.0442% | |
| Asian/Pacific Islander ^c | 0.0692% | - | 0.0079% | 0.0168% | 0.0338% | 0.0705% | 0.1529% | 0.1779% | 0.1634% | 0.1366% | 0.0632% | |
| Hispanic ^d | 0.0447% | - | 0.0089% | 0.0202% | 0.0318% | 0.0546% | 0.1123% | 0.1660% | 0.1883% | 0.1847% | 0.0591% | |

- ^a Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
^a US 2011 cancer prevalence counts are based on 2011 cancer prevalence proportions from the SEER registries and 1/1/2011 US population estimates based on the average of 2010 and 2011 population estimates from the US Bureau of the Census.
^{b c d} Prevalence was calculated using the First Malignant Primary Only for a person. 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: 36 years for 1975-2011 SEER 9 data; 19 years for 1992-2011 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 36 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 <36 and >=36. (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.

Table 21.16

Cancer of the Ovary (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2007-2011
Females by Race

| Histology ^a | All Races | | White | | Black | | Asian/Pacific Islander | | American Indian/ Alaska Native ^b | | Hispanic ^c | |
|---|-----------|---------|--------|---------|-------|---------|------------------------|---------|--|---------|-----------------------|---------|
| | Count | Percent | Count | Percent | Count | Percent | Count | Percent | Count | Percent | Count | Percent |
| Carcinoma | 24,578 | 91.7% | 20,563 | 92.2% | 1,912 | 88.3% | 1,824 | 90.3% | 116 | 92.8% | 2,859 | 87.3% |
| Epidermoid carcinoma ^d (8051-8131) | 191 | 0.7% | 149 | 0.7% | 18 | 0.8% | 21 | 1.0% | - | - | 28 | 0.9% |
| Adenocarcinoma ^e | 22,524 | 84.0% | 18,946 | 84.9% | 1,650 | 76.2% | 1,680 | 83.1% | 105 | 84.0% | 2,560 | 78.1% |
| Adenocarcinoma, NOS (8140) | 3,291 | 12.3% | 2,679 | 12.0% | 403 | 18.6% | 183 | 9.1% | - | - | 323 | 9.9% |
| Papillary adenocarcinoma, NOS (8050,8260) | 404 | 1.5% | 350 | 1.6% | 34 | 1.6% | - | - | - | - | 47 | 1.4% |
| Clear cell adenocarcinoma (8310,9110) | 1,407 | 5.2% | 1,089 | 4.9% | 51 | 2.4% | 257 | 12.7% | - | - | 146 | 4.5% |
| Endometrioid carcinoma (8380-8383,8570) | 2,593 | 9.7% | 2,186 | 9.8% | 121 | 5.6% | 245 | 12.1% | - | - | 353 | 10.8% |
| Cystadenocarcinoma, NOS (8440,8450) | 110 | 0.4% | 88 | 0.4% | - | - | - | - | - | - | - | - |
| Serous cystadenocarcinoma (8441) | 5,601 | 20.9% | 4,798 | 21.5% | 383 | 17.7% | 346 | 17.1% | 35 | 28.0% | 593 | 18.1% |
| Papillary serous cystadenocarcinoma (8460-8462) | 6,307 | 23.5% | 5,435 | 24.4% | 463 | 21.4% | 357 | 17.7% | 30 | 24.0% | 699 | 21.3% |
| Mucinous cystadenocarcinoma (8470-8473) | 403 | 1.5% | 332 | 1.5% | 29 | 1.3% | 35 | 1.7% | - | - | 66 | 2.0% |
| Mucinous adenocarcinoma (8480,8482) | 949 | 3.5% | 756 | 3.4% | 80 | 3.7% | 101 | 5.0% | - | - | 137 | 4.2% |
| Mucin-producing adenocarcinoma(8481) | 48 | 0.2% | 39 | 0.2% | - | - | - | - | - | - | - | - |
| Other adenocarcinoma ^f | 1,411 | 5.3% | 1,194 | 5.4% | 64 | 3.0% | 133 | 6.6% | - | - | 174 | 5.3% |
| Other specific carcinomas ^g | 617 | 2.3% | 448 | 2.0% | 120 | 5.5% | 37 | 1.8% | - | - | 103 | 3.1% |
| Stromal cell tumor (8620-8631,8650) | 425 | 1.6% | 294 | 1.3% | 97 | 4.5% | 22 | 1.1% | - | - | 70 | 2.1% |
| Other ^h | 192 | 0.7% | 154 | 0.7% | 23 | 1.1% | - | - | - | - | 33 | 1.0% |
| Unspecified, Carcinoma, NOS (8010,8020-8022) | 1,246 | 4.6% | 1,020 | 4.6% | 124 | 5.7% | 86 | 4.3% | - | - | 168 | 5.1% |

Source: 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).
Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

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

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^d Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^e Epidermoid carcinoma includes squamous, basal, and transitional cell carcinomas.

^f Adenocarcinoma includes histologies 8050,8140-8147,8160-8162,8180-8221,8250-8507,8514,8520-8551,8560,8570-8574,8576,8940-8941,9110.

^g Other adenocarcinoma includes histologies 8141-8147,8160-8162,8180-8221,8250-8259,8261-8309,8311-8379,8384-8439,8442-8449,8451-8459,8463-8469,8474-8479,8483-8507,8514,8520-8551,8560,8571-8574,8576,8940-8941.

^h Other specific carcinomas includes histologies 8011-8015,8030-8046,8150-8155,8170-8175,8230-8231,8247-8249,8508,8510-8513,8561-8562,8575,8580-8671.

ⁱ Other subgroup of other specific carcinomas includes histologies 8011-8015,8030-8046,8150-8155,8170-8175,8230-8231,8247-8249,8508,8510-8513,8561-8562,8575,8580-8619,8632-8649,8651-8671.

- Statistic not shown due to fewer than 16 cases during the time period.

Table 21.16 - continued

Cancer of the Ovary (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2007-2011
Females by Race

| Histology ^a | <u>All Races</u> | | <u>White</u> | | <u>Black</u> | | <u>Asian/Pacific Islander</u> | | <u>American Indian/ Alaska Native^b</u> | | <u>Hispanic^c</u> | |
|---|------------------|---------|--------------|---------|--------------|---------|-----------------------------------|---------|---|---------|-----------------------------|---------|
| | Count | Percent | Count | Percent | Count | Percent | Count | Percent | Count | Percent | Count | Percent |
| Sarcoma and other soft tissue tumors (8680-8713,8800-8921, 8990-8991,9040-9044, 9120-9136,9141-9340, 9540-9582) | 96 | 0.4% | 66 | 0.3% | 20 | 0.9% | - | - | - | - | 20 | 0.6% |
| Other specific types (8240-8246,8720-8790, 8930-8936,8950-8983, 9000-9030,9060-9105, 9350-9364,9380-9513, 9530-9539) | 1,852 | 6.9% | 1,452 | 6.5% | 204 | 9.4% | 168 | 8.3% | - | - | 361 | 11.0% |
| Mullerian mixed tumor (8950-8951,8980) | 806 | 3.0% | 674 | 3.0% | 73 | 3.4% | 49 | 2.4% | - | - | 65 | 2.0% |
| Teratoma, malignant (9080-9085,9102) | 411 | 1.5% | 296 | 1.3% | 54 | 2.5% | 54 | 2.7% | - | - | 146 | 4.5% |
| Other | 635 | 2.4% | 482 | 2.2% | 77 | 3.6% | 65 | 3.2% | - | - | 150 | 4.6% |
| Unspecified (8000-8005) | 286 | 1.1% | 232 | 1.0% | 29 | 1.3% | 19 | 0.9% | - | - | 36 | 1.1% |
| Total ^d | 26,812 | 100.0% | 22,313 | 100.0% | 2,165 | 100.0% | 2,021 | 100.0% | 125 | 100.0% | 3,276 | 100.0% |

Source: 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).

Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

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

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

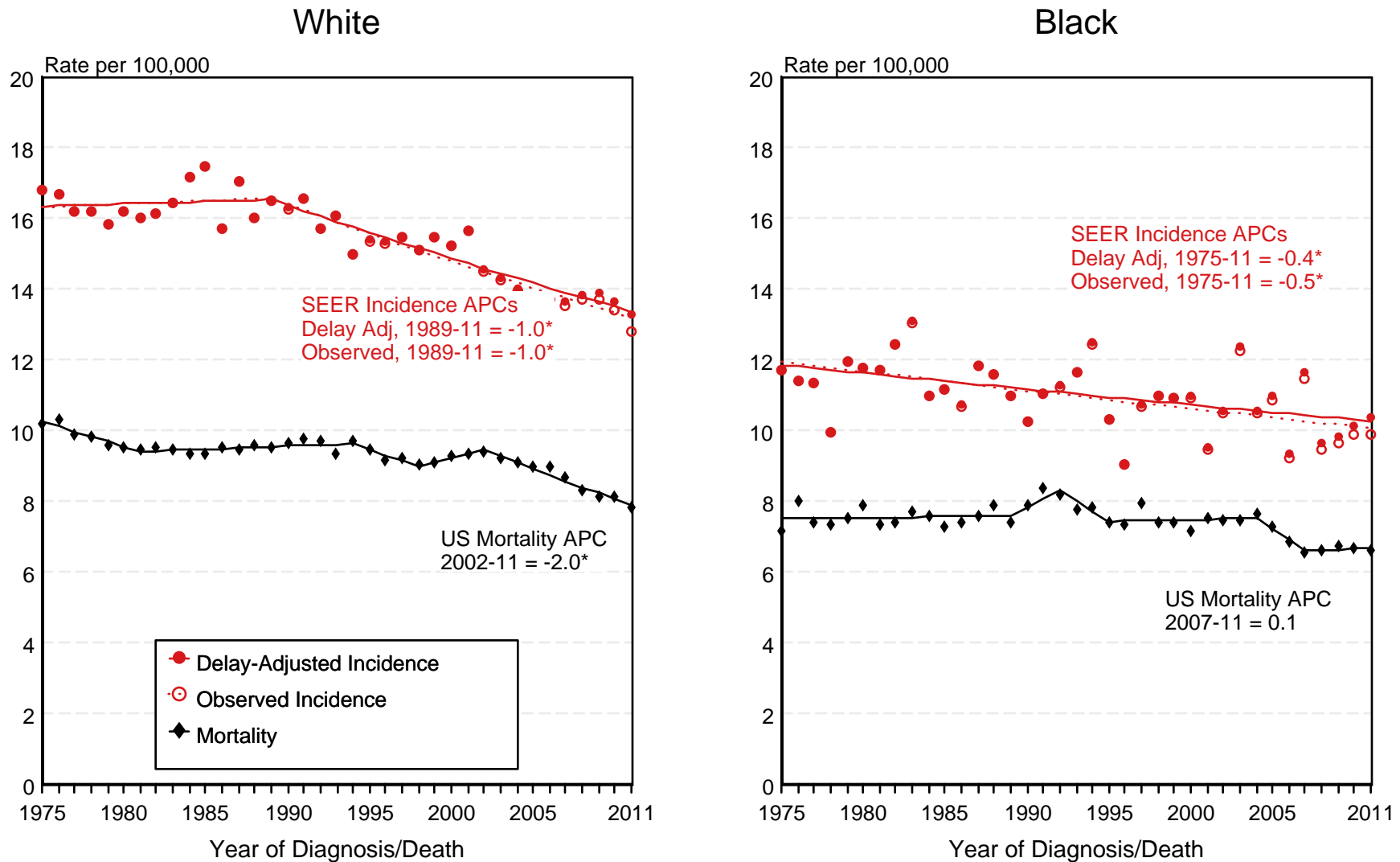
Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^d Total includes carcinoma cases from the previous page.

- Statistic not shown due to fewer than 16 cases during the time period.

Figure 21.1

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Ovary, by Race

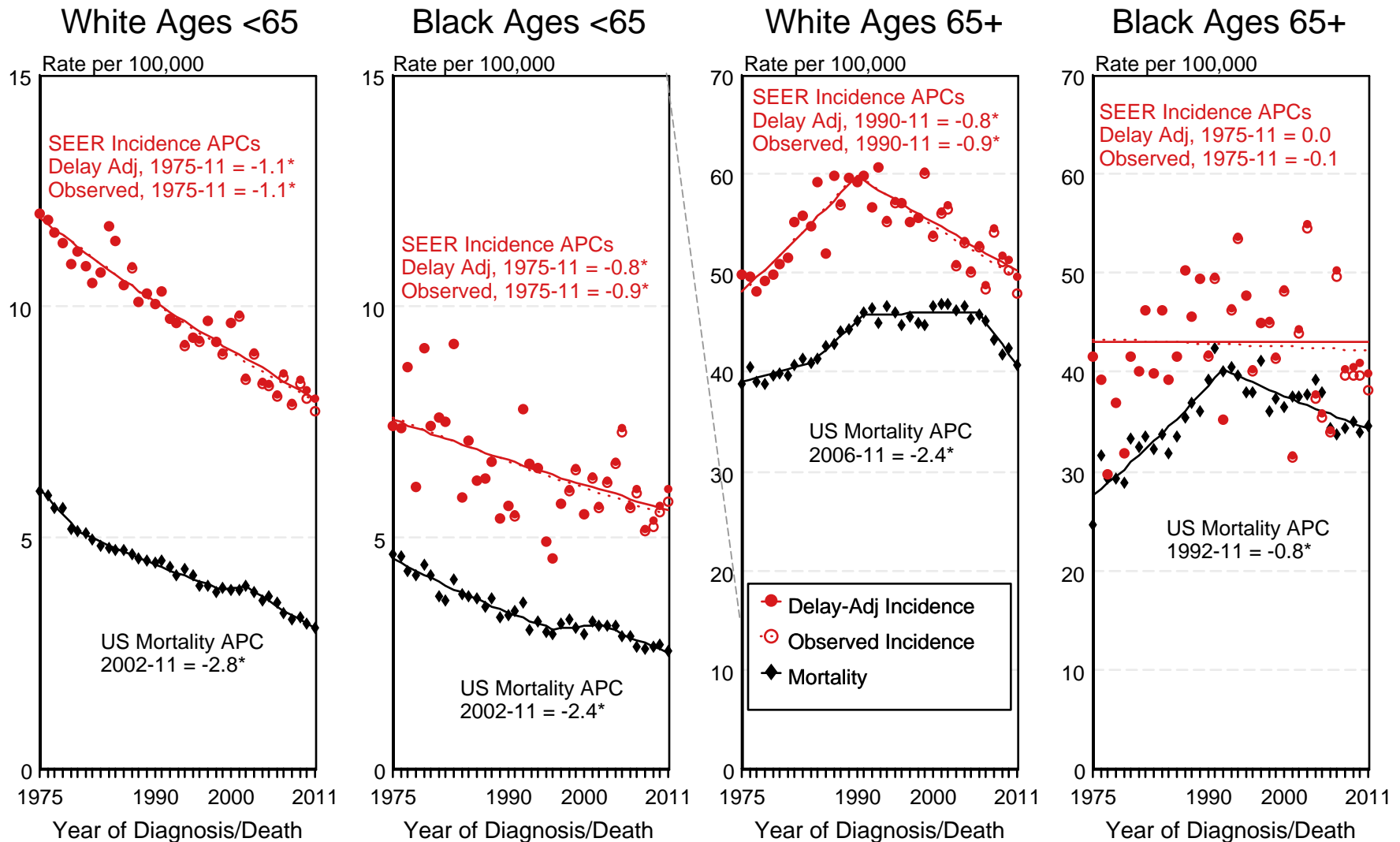


^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473. Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

Figure 21.2

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Ovary, by Age and Race



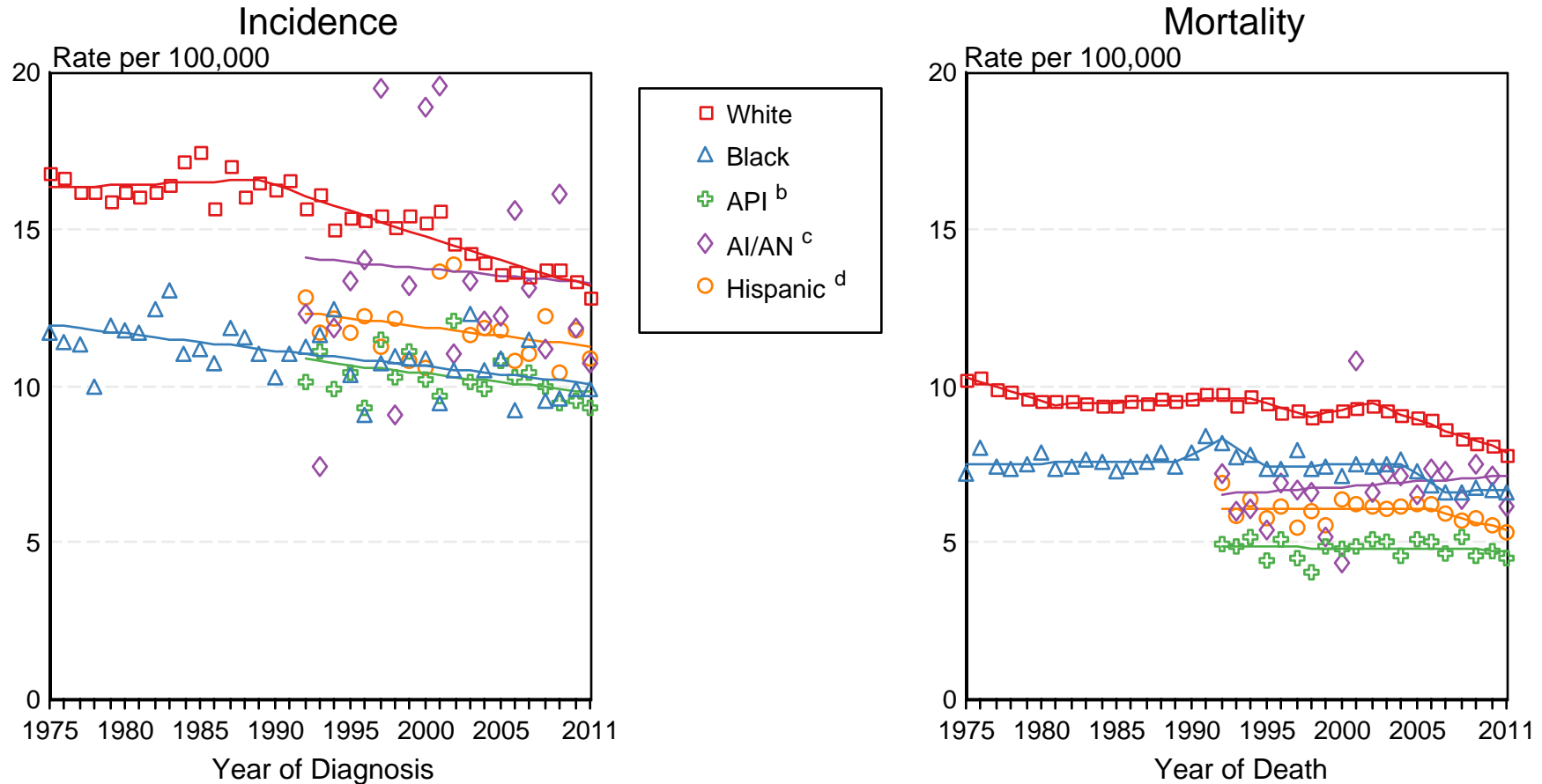
^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473. Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

* The APC is significantly different from zero ($p < 0.05$).

Figure 21.3

SEER Incidence and US Death Rates^a Cancer of the Ovary

Joinpoint Analyses for Whites and Blacks from 1975-2011
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2011

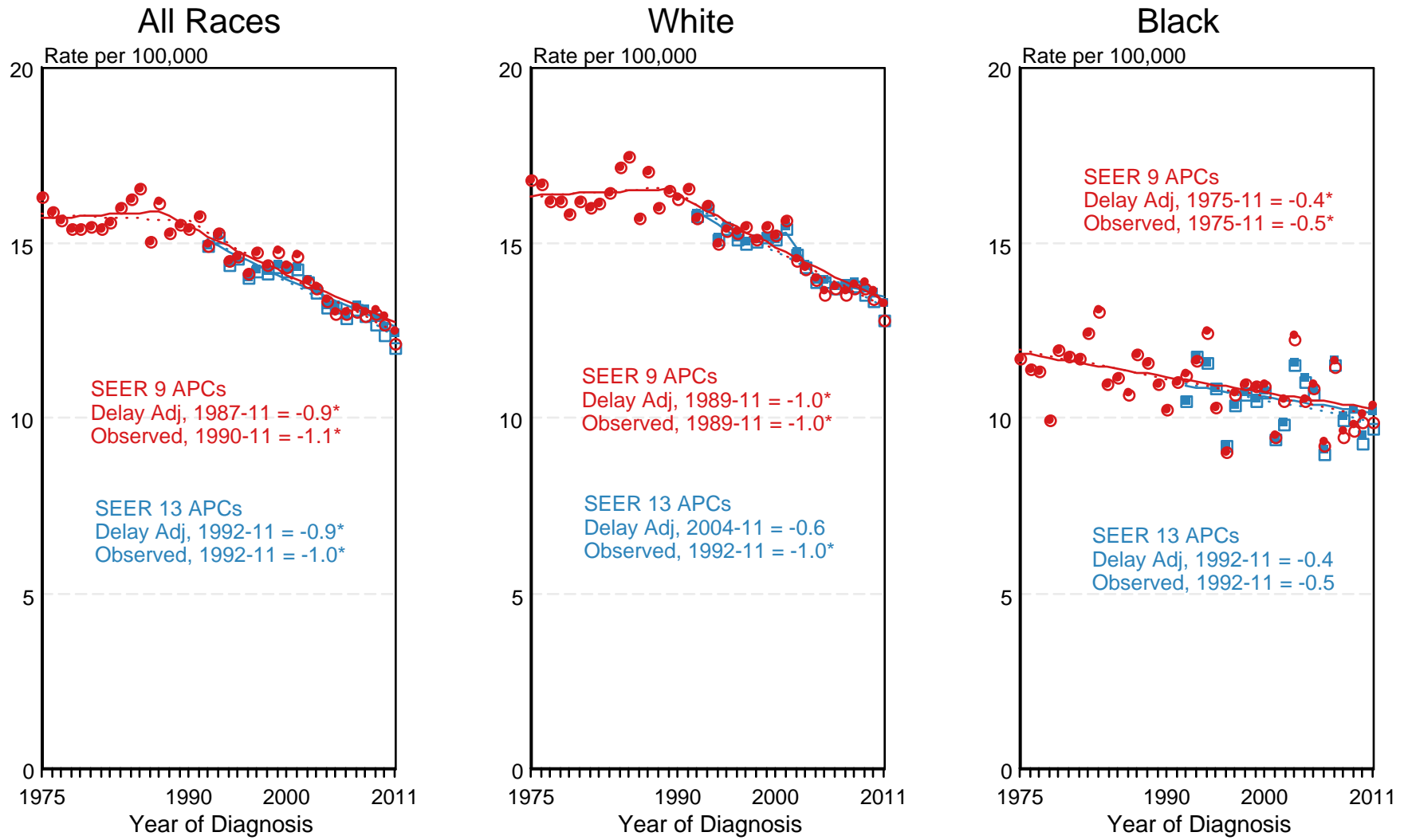


Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.

- ^a Mortality data are from US Mortality Files, National Center for Health Statistics, CDC. 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 4.1.0, April 2014, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2011 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2011 allow a maximum of 3 joinpoints.
- ^b API = Asian/Pacific Islander.
- ^c AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties. Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from New Hampshire and Oklahoma.

Figure 21.4

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Cancer of the Ovary, by Race

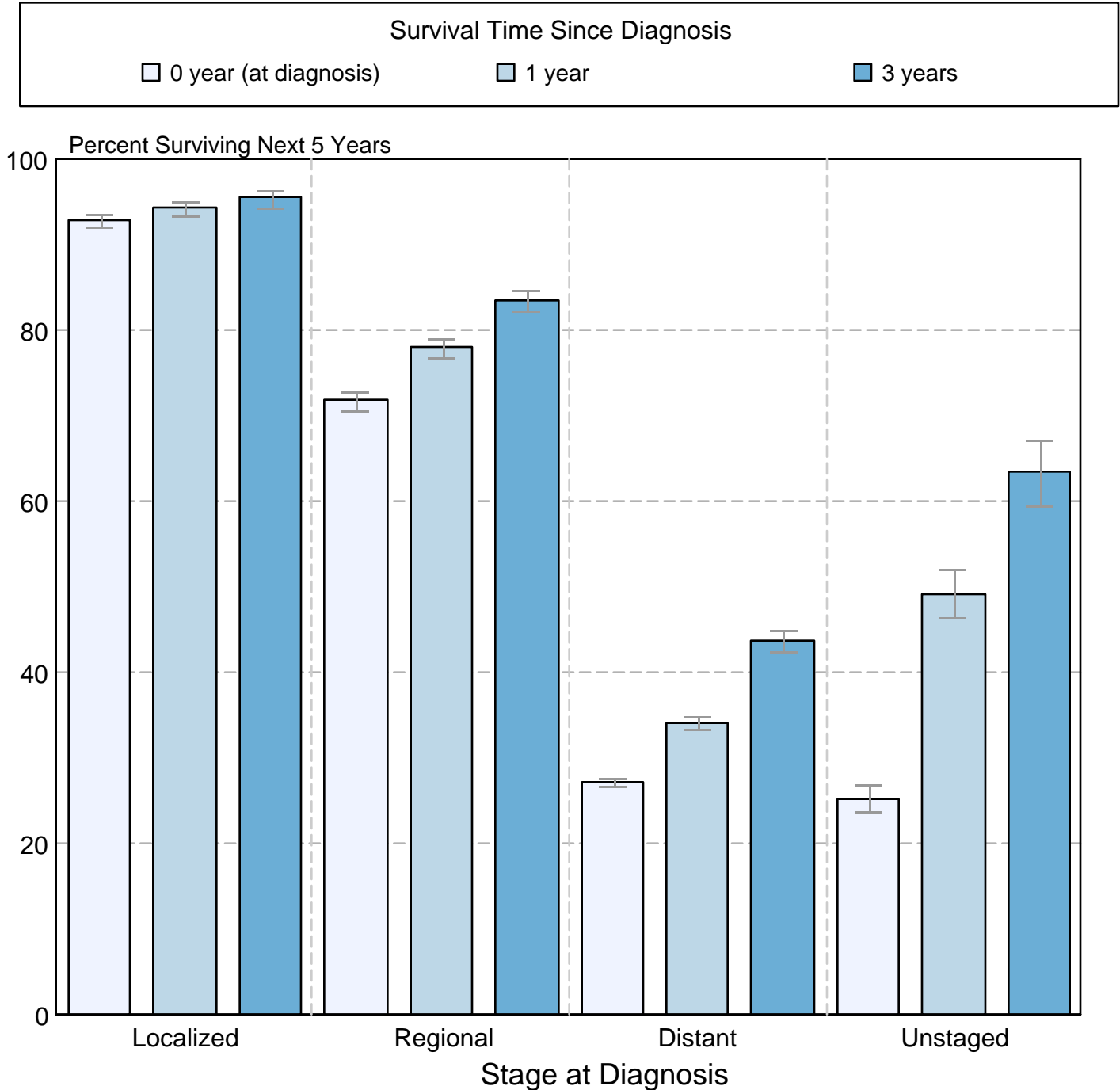


● SEER 9 Delay-Adj. Incidence
 ○ SEER 9 Observed Incidence
 ■ SEER 13 Delay-Adj. Incidence
 □ SEER 13 Observed Incidence

^a Source: SEER 9 areas and SEER 13 areas.
 Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.1.0, April 2014, National Cancer Institute.
 The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
 * The APC is significantly different from zero ($p < 0.05$).

Figure 21.5

Cancer of the Ovary
5-Year SEER Conditional Relative Survival and
95% Confidence Intervals
 Probability of surviving the next 5 years given the cohort
 has already survived 0, 1, or 3 years
 1998-2010 by stage at diagnosis



Source: 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). California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG contribute cases for diagnosis years 2000-2009. The remaining 13 SEER Areas contribute cases for the entire period 1998-2010. Percent surviving is not shown if based on less than 25 cases. Confidence intervals are not shown if length of the confidence interval is greater than 5 times the standard error.