#### Table 2.1 All Cancer Sites (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                                  | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tre  | end 6 | AAF     | $C_q$   |
|----------------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|---------|
|                                  | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus               | ted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |       |         |       |         |         |
| All Races                        | 1975-83                  | 0.9*                   | 1983-92  | 1.8*  | 1992-95 | -1.2  | 1995-09 | -0.1  | 2009-13 | -1.8* | 2013-17 | 0.0   | -0.8*   | 0.0     |
| White                            | 1975-82                  | 0.8*                   | 1982-92  | 1.8*  | 1992-95 | -2.1  | 1995-98 | 1.3   | 1998-07 | -0.2  | 2007-17 | -0.8* | -0.8*   | -0.8*   |
| Black                            | 1975-84                  | 1.6*                   | 1984-89  | 0.5   | 1989-92 | 3.9*  | 1992-09 | -0.6* | 2009-14 | -1.9* | 2014-17 | 0.2   | -1.1*   | -0.4    |
| SEER 21 Delay-Adju               | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |         |       |         |         |
| All Races                        | 2000-04                  | -0.9*                  | 2004-08  | 0.4   | 2008-13 | -1.4* | 2013-17 | -0.2  |         |       |         |       | -0.9*   | -0.2    |
| White                            | 2000-04                  | -0.9*                  | 2004-07  | 0.9   | 2007-13 | -1.2* | 2013-17 | -0.2  |         |       |         |       | -0.8*   | -0.2    |
| White NH <sup>ef</sup>           | 2000-04                  | -0.9*                  | 2004-07  | 1.0   | 2007-13 | -1.1* | 2013-17 | -0.1  |         |       |         |       | -0.6*   | -0.1    |
| Black                            | 2000-05                  | -0.8*                  | 2005-09  | 0.2   | 2009-14 | -1.7* | 2014-17 | -0.2  |         |       |         |       | -1.0*   | -0.5    |
| Black NH <sup>ef</sup>           | 2000-05                  | -0.7*                  | 2005-09  | 0.3   | 2009-14 | -1.7* | 2014-17 | -0.1  |         |       |         |       | -0.9*   | -0.5    |
| API <sup>e</sup>                 | 2000-17                  | -0.3*                  |          |       |         |       |         |       |         |       |         |       | -0.3*   | -0.3*   |
| AI/AN <sup>eg</sup>              | 2000-17                  | 0.1                    |          |       |         |       |         |       |         |       |         |       | 0.1     | 0.1     |
| $	ext{	t Hispanic}^{	ext{	t f}}$ | 2000-17                  | -0.6*                  |          |       |         |       |         |       |         |       |         |       | -0.6*   | -0.6*   |
| U.S. Cancer Mortal               | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races                        | 1975-84                  | 0.5*                   | 1984-91  | 0.3*  | 1991-94 | -0.5  | 1994-98 | -1.3* | 1998-01 | -0.8  | 2001-17 | -1.5* | -1.5*   | -1.5*   |
| White                            | 1975-90                  | 0.4*                   | 1990-94  | -0.3  | 1994-98 | -1.2* | 1998-01 | -0.6  | 2001-17 | -1.4* |         |       | -1.4*   | -1.4*   |
| Black                            | 1975-83                  | 1.3*                   | 1983-91  | 0.7*  | 1991-95 | -0.8* | 1995-01 | -1.6* | 2001-17 | -2.1* |         |       | -2.1*   | -2.1*   |
| U.S. Cancer Mortal               | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races                        | 2000-17                  | -1.5*                  |          |       |         |       |         |       |         |       |         |       | -1.5*   | -1.5*   |
| White                            | 2000-17                  | -1.4*                  |          |       |         |       |         |       |         |       |         |       | -1.4*   | -1.4*   |
| White NH <sup>ef</sup>           | 2000-15                  | -1.3*                  | 2015-17  | -1.8* |         |       |         |       |         |       |         |       | -1.5*   | -1.6*   |
| Black                            | 2000-17                  | -2.1*                  |          |       |         |       |         |       |         |       |         |       | -2.1*   | -2.1*   |
| Black NH <sup>ef</sup>           | 2000-17                  | -2.0*                  |          |       |         |       |         |       |         |       |         |       | -2.0*   | -2.0*   |
| API <sup>e</sup>                 | 2000-17                  | -1.3*                  |          |       |         |       |         |       |         |       |         |       | -1.3*   | -1.3*   |
| AI/AN <sup>eg</sup>              | 2000-17                  | -1.0*                  |          |       |         |       |         |       |         |       |         |       | -1.0*   | -1.0*   |
| Hispanic <sup>f</sup>            | 2000-17                  | -1.2*                  |          |       |         |       |         |       |         |       |         |       | -1.2*   | -1.2*   |

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

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 2.2 All Cancer Sites (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tre  | end 6 | AAF     | Cd      |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus     | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-89                  | 1.3*                   | 1989-92  | 5.0*  | 1992-95 | -4.2* | 1995-08 | -0.3* | 2008-13 | -2.8* | 2013-17 | -0.1  | -1.7*   | -0.1    |
| White                  | 1975-89                  | 1.4*                   | 1989-92  | 4.9*  | 1992-95 | -4.5* | 1995-07 | -0.1  | 2007-13 | -2.4* | 2013-17 | -0.3  | -1.5*   | -0.3    |
| Black                  | 1975-81                  | 2.8*                   | 1981-89  | 0.7   | 1989-92 | 6.3*  | 1992-09 | -1.3* | 2009-14 | -3.4* | 2014-17 | 0.5   | -1.9*   | -0.5    |
| SEER 21 Delay-Adju     | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-04                  | -1.4*                  | 2004-07  | 0.7   | 2007-14 | -2.2* | 2014-17 | -0.1  |         |       |         |       | -1.5*   | -0.6    |
| White                  | 2000-04                  | -1.3*                  | 2004-07  | 0.8   | 2007-13 | -2.3* | 2013-17 | -0.6  |         |       |         |       | -1.6*   | -0.6    |
| White NH <sup>ef</sup> | 2000-04                  | -1.3*                  | 2004-07  | 1.0   | 2007-13 | -2.2* | 2013-17 | -0.3  |         |       |         |       | -1.4*   | -0.3    |
| Black                  | 2000-05                  | -1.7*                  | 2005-09  | -0.3  | 2009-14 | -3.4* | 2014-17 | -0.2  |         |       |         |       | -2.0*   | -1.0    |
| Black NH <sup>ef</sup> | 2000-05                  | -1.6*                  | 2005-09  | -0.2  | 2009-14 | -3.4* | 2014-17 | -0.1  |         |       |         |       | -2.0*   | -0.9    |
| API <sup>e</sup>       | 2000-17                  | -1.3*                  |          |       |         |       |         |       |         |       |         |       | -1.3*   | -1.3*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -0.4                   |          |       |         |       |         |       |         |       |         |       | -0.4    | -0.4    |
| Hispanic <sup>f</sup>  | 2000-09                  | -0.7*                  | 2009-13  | -3.2* | 2013-17 | -1.0  |         |       |         |       |         |       | -2.0*   | -1.0    |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-79                  | 1.0*                   | 1979-90  | 0.3*  | 1990-93 | -0.5  | 1993-02 | -1.5* | 2002-17 | -1.8* |         |       | -1.8*   | -1.8*   |
| White                  | 1975-80                  | 0.8*                   | 1980-92  | 0.2*  | 1992-02 | -1.4* | 2002-17 | -1.7* |         |       |         |       | -1.7*   | -1.7*   |
| Black                  | 1975-82                  | 1.8*                   | 1982-90  | 1.0*  | 1990-93 | -0.2  | 1993-01 | -2.0* | 2001-17 | -2.7* |         |       | -2.7*   | -2.7*   |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-17                  | -1.8*                  |          |       |         |       |         |       |         |       |         |       | -1.8*   | -1.8*   |
| White                  | 2000-17                  | -1.7*                  |          |       |         |       |         |       |         |       |         |       | -1.7*   | -1.7*   |
| White NH <sup>ef</sup> | 2000-17                  | -1.6*                  |          |       |         |       |         |       |         |       |         |       | -1.6*   | -1.6*   |
| Black                  | 2000-17                  | -2.7*                  |          |       |         |       |         |       |         |       |         |       | -2.7*   | -2.7*   |
| Black NH <sup>ef</sup> | 2000-17                  | -2.6*                  |          |       |         |       |         |       |         |       |         |       | -2.6*   | -2.6*   |
| API <sup>e</sup>       | 2000-17                  | -1.6*                  |          |       |         |       |         |       |         |       |         |       | -1.6*   | -1.6*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -0.9*                  |          |       |         |       |         |       |         |       |         |       | -0.9*   | -0.9*   |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.6*                  |          |       |         |       |         |       |         |       |         |       | -1.6*   | -1.6*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 2.3 All Cancer Sites (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tre  | end 6 | AAI     | 5Cq     |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus     | ted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-79                  | -0.3                   | 1979-87  | 1.6*  | 1987-95 | 0.1   | 1995-98 | 1.5   | 1998-03 | -0.5  | 2003-17 | 0.0   | 0.0     | 0.0     |
| White                  | 1975-79                  | -0.2                   | 1979-87  | 1.7*  | 1987-95 | 0.1   | 1995-98 | 1.7   | 1998-03 | -0.5  | 2003-17 | 0.0   | 0.0     | 0.0     |
| Black                  | 1975-92                  | 1.1*                   | 1992-17  | 0.0   |         |       |         |       |         |       |         |       | 0.0     | 0.0     |
| SEER 21 Delay-Adju     | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-17                  | 0.0                    |          |       |         |       |         |       |         |       |         |       | 0.0     | 0.0     |
| White                  | 2000-17                  | 0.0                    |          |       |         |       |         |       |         |       |         |       | 0.0     | 0.0     |
| White NH <sup>ef</sup> | 2000-17                  | 0.1*                   |          |       |         |       |         |       |         |       |         |       | 0.1*    | 0.1*    |
| Black                  | 2000-17                  | 0.2*                   |          |       |         |       |         |       |         |       |         |       | 0.2*    | 0.2*    |
| Black NH <sup>ef</sup> | 2000-17                  | 0.2*                   |          |       |         |       |         |       |         |       |         |       | 0.2*    | 0.2*    |
| API <sup>e</sup>       | 2000-17                  | 0.5*                   |          |       |         |       |         |       |         |       |         |       | 0.5*    | 0.5*    |
| AI/AN <sup>eg</sup>    | 2000-17                  | 0.5*                   |          |       |         |       |         |       |         |       |         |       | 0.5*    | 0.5*    |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.4*                   |          |       |         |       |         |       |         |       |         |       | 0.4*    | 0.4*    |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-90                  | 0.6*                   | 1990-94  | -0.2  | 1994-02 | -0.8* | 2002-17 | -1.4* |         |       |         |       | -1.4*   | -1.4*   |
| White                  | 1975-90                  | 0.6*                   | 1990-95  | -0.2  | 1995-98 | -1.2* | 1998-01 | -0.2  | 2001-17 | -1.3* |         |       | -1.3*   | -1.3*   |
| Black                  | 1975-91                  | 1.0*                   | 1991-99  | -0.5* | 1999-17 | -1.6* |         |       |         |       |         |       | -1.6*   | -1.6*   |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-17                  | -1.4*                  |          |       |         |       |         |       |         |       |         |       | -1.4*   | -1.4*   |
| White                  | 2000-17                  | -1.3*                  |          |       |         |       |         |       |         |       |         |       | -1.3*   | -1.3*   |
| White NH <sup>ef</sup> | 2000-17                  | -1.3*                  |          |       |         |       |         |       |         |       |         |       | -1.3*   | -1.3*   |
| Black                  | 2000-17                  | -1.6*                  |          |       |         |       |         |       |         |       |         |       | -1.6*   | -1.6*   |
| Black NH <sup>ef</sup> | 2000-17                  | -1.5*                  |          |       |         |       |         |       |         |       |         |       | -1.5*   | -1.5*   |
| API <sup>e</sup>       | 2000-17                  | -1.0*                  |          |       |         |       |         |       |         |       |         |       | -1.0*   | -1.0*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.2*                  |          |       |         |       |         |       |         |       |         |       | -1.2*   | -1.2*   |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.0*                  |          |       |         |       |         |       |         |       |         |       | -1.0*   | -1.0*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

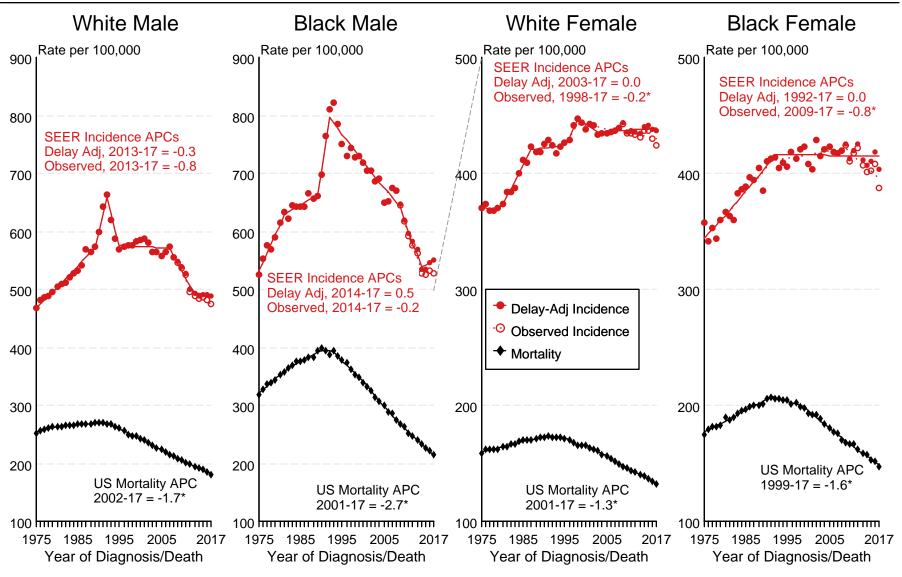
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

Figure 2.1

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> All Cancer Sites, by Race and Sex



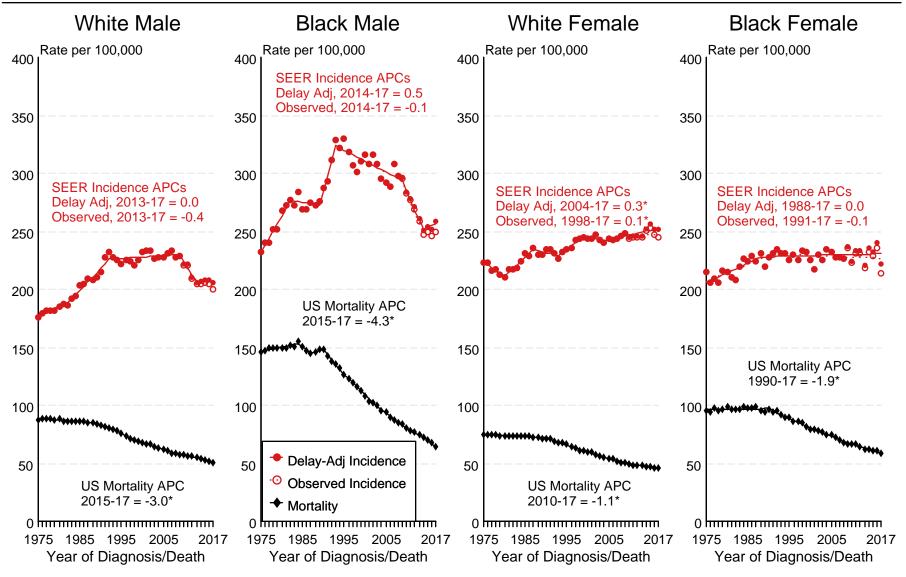
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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 2.2

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> All Cancer Sites, Under 65 Years of Age, by Race and Sex

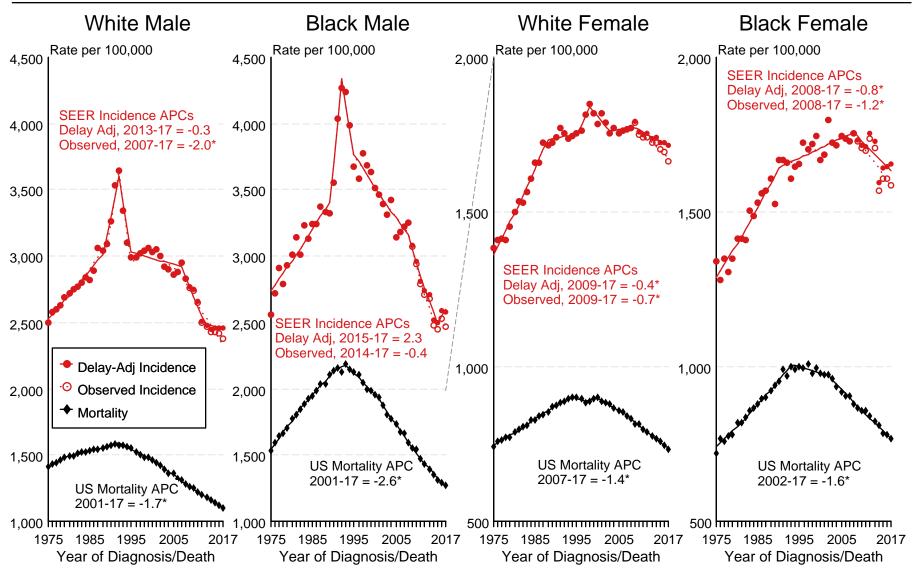


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> All Cancer Sites, Ages 65 and Over, by Race and Sex



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 3.1 Cancer of the Brain and Other Nervous System (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                            | JP Tre                    | end 1                  | JP Tre   | end 2 | JP Tr   | end 3 | JP Tre  | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | Cq      |
|----------------------------|---------------------------|------------------------|----------|-------|---------|-------|---------|-------|--------|-------|--------|-------|---------|---------|
|                            | Years                     | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adju          | sted Incider              | nce <sup>a</sup> , 19' | 75-2017  |       |         |       |         |       |        |       |        |       |         |         |
| All Races                  | 1975-87                   | 1.5*                   | 1987-17  | -0.2* |         |       |         |       |        |       |        |       | -0.2*   | -0.2*   |
| White                      | 1975-87                   | 1.6*                   | 1987-17  | 0.0   |         |       |         |       |        |       |        |       | 0.0     | 0.0     |
| Black                      | 1975-17                   | 0.1                    |          |       |         |       |         |       |        |       |        |       | 0.1     | 0.1     |
| SEER 21 Delay-Adj          | usted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |        |       |        |       |         |         |
| All Races                  | 2000-17                   | -0.3*                  |          |       |         |       |         |       |        |       |        |       | -0.3*   | -0.3*   |
| White                      | 2000-17                   | -0.2*                  |          |       |         |       |         |       |        |       |        |       | -0.2*   | -0.2*   |
| White NH <sup>ef</sup>     | 2000-17                   | 0.0                    |          |       |         |       |         |       |        |       |        |       | 0.0     | 0.0     |
| Black                      | 2000-17                   | -0.4                   |          |       |         |       |         |       |        |       |        |       | -0.4    | -0.4    |
| Black NH <sup>ef</sup>     | 2000-17                   | -0.4                   |          |       |         |       |         |       |        |       |        |       | -0.4    | -0.4    |
| APIe                       | 2000-17                   | 0.5*                   |          |       |         |       |         |       |        |       |        |       | 0.5*    | 0.5*    |
| AI/AN <sup>eg</sup>        | 2000-17                   | 0.7                    |          |       |         |       |         |       |        |       |        |       | 0.7     | 0.7     |
| $	ext{Hispanic}^{	ext{f}}$ | 2000-17                   | -0.6*                  |          |       |         |       |         |       |        |       |        |       | -0.6*   | -0.6*   |
| U.S. Cancer Morta          | lity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races                  | 1975-83                   | 0.4                    | 1983-91  | 1.3*  | 1991-07 | -1.0* | 2007-17 | 0.5*  |        |       |        |       | 0.5*    | 0.5*    |
| White                      | 1975-92                   | 1.0*                   | 1992-07  | -0.8* | 2007-17 | 0.6*  |         |       |        |       |        |       | 0.6*    | 0.6*    |
| Black                      | 1975-92                   | 0.9*                   | 1992-07  | -1.1* | 2007-17 | 0.9*  |         |       |        |       |        |       | 0.9*    | 0.9*    |
| U.S. Cancer Morta          | lity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races                  | 2000-06                   | -1.2*                  | 2006-17  | 0.5*  |         |       |         |       |        |       |        |       | 0.5*    | 0.5*    |
| White                      | 2000-06                   | -1.0*                  | 2006-17  | 0.6*  |         |       |         |       |        |       |        |       | 0.6*    | 0.6*    |
| White NH <sup>ef</sup>     | 2000-06                   | -0.9*                  | 2006-17  | 0.7*  |         |       |         |       |        |       |        |       | 0.7*    | 0.7*    |
| Black                      | 2000-17                   | 0.1                    |          |       |         |       |         |       |        |       |        |       | 0.1     | 0.1     |
| Black NH <sup>ef</sup>     | 2000-17                   | 0.2                    |          |       |         |       |         |       |        |       |        |       | 0.2     | 0.2     |
| APIe                       | 2000-17                   | 1.1*                   |          |       |         |       |         |       |        |       |        |       | 1.1*    | 1.1*    |
| AI/AN <sup>eg</sup>        | 2000-17                   | 1.0                    |          |       |         |       |         |       |        |       |        |       | 1.0     | 1.0     |
| Hispanic <sup>f</sup>      | 2000-10                   | -0.4                   | 2010-17  | 1.5*  |         |       |         |       |        |       |        |       | 1.1*    | 1.5*    |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Table 3.2
Cancer of the Brain and Other Nervous System (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                    | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tr   | end 4 | JP Tre  | end 5 | JP Tre | end 6 | AAI     | C <sub>q</sub> |
|------------------------|---------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|--------|-------|---------|----------------|
|                        | Years                     | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years  | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adju      | sted Incide               | nce <sup>a</sup> , 19  | 75-2017  |       |         |       |         |       |         |       |        |       |         |                |
| All Races              | 1975-89                   | 1.2*                   | 1989-17  | -0.3* |         |       |         |       |         |       |        |       | -0.3*   | -0.3*          |
| White                  | 1975-89                   | 1.3*                   | 1989-17  | -0.2* |         |       |         |       |         |       |        |       | -0.2*   | -0.2*          |
| Black                  | 1975-17                   | -0.1                   |          |       |         |       |         |       |         |       |        |       | -0.1    | -0.1           |
| SEER 21 Delay-Adj      | usted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |        |       |         |                |
| All Races              | 2000-17                   | -0.3*                  |          |       |         |       |         |       |         |       |        |       | -0.3*   | -0.3*          |
| White                  | 2000-17                   | -0.3*                  |          |       |         |       |         |       |         |       |        |       | -0.3*   | -0.3*          |
| White NH <sup>ef</sup> | 2000-17                   | -0.1                   |          |       |         |       |         |       |         |       |        |       | -0.1    | -0.1           |
| Black                  | 2000-17                   | -0.2                   |          |       |         |       |         |       |         |       |        |       | -0.2    | -0.2           |
| Black NH <sup>ef</sup> | 2000-17                   | -0.1                   |          |       |         |       |         |       |         |       |        |       | -0.1    | -0.1           |
| API <sup>e</sup>       | 2000-17                   | 0.7*                   |          |       |         |       |         |       |         |       |        |       | 0.7*    | 0.7*           |
| AI/AN <sup>eg</sup>    | 2000-17                   | 1.2                    |          |       |         |       |         |       |         |       |        |       | 1.2     | 1.2            |
| Hispanic <sup>f</sup>  | 2000-17                   | -0.6*                  |          |       |         |       |         |       |         |       |        |       | -0.6*   | -0.6*          |
| U.S. Cancer Morta      | lity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |        |       |         |                |
| All Races              | 1975-77                   | 4.4                    | 1977-82  | -0.3  | 1982-91 | 1.3*  | 1991-07 | -0.9* | 2007-17 | 0.5*  |        |       | 0.5*    | 0.5*           |
| White                  | 1975-77                   | 4.7                    | 1977-82  | -0.3  | 1982-91 | 1.4*  | 1991-06 | -0.9* | 2006-17 | 0.5*  |        |       | 0.5*    | 0.5*           |
| Black                  | 1975-90                   | 0.8*                   | 1990-07  | -0.9* | 2007-17 | 0.7   |         |       |         |       |        |       | 0.7     | 0.7            |
| U.S. Cancer Morta      | lity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |        |       |         |                |
| All Races              | 2000-06                   | -1.3*                  | 2006-17  | 0.5*  |         |       |         |       |         |       |        |       | 0.5*    | 0.5*           |
| White                  | 2000-06                   | -1.1*                  | 2006-17  | 0.6*  |         |       |         |       |         |       |        |       | 0.6*    | 0.6*           |
| White NH <sup>ef</sup> | 2000-06                   | -1.0*                  | 2006-17  | 0.7*  |         |       |         |       |         |       |        |       | 0.7*    | 0.7*           |
| Black                  | 2000-17                   | 0.1                    |          |       |         |       |         |       |         |       |        |       | 0.1     | 0.1            |
| Black NH <sup>ef</sup> | 2000-17                   | 0.2                    |          |       |         |       |         |       |         |       |        |       | 0.2     | 0.2            |
| API <sup>e</sup>       | 2000-17                   | 0.4                    |          |       |         |       |         |       |         |       |        |       | 0.4     | 0.4            |
| AI/AN <sup>eg</sup>    | 2000-17                   | 0.8                    |          |       |         |       |         |       |         |       |        |       | 0.8     | 0.8            |
| Hispanic <sup>f</sup>  | 2000-17                   | 0.3                    |          |       |         |       |         |       |         |       |        |       | 0.3     | 0.3            |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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. Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Table 3.3
Cancer of the Brain and Other Nervous System (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                    | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tr   | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAF     | C <sub>q</sub> |
|------------------------|---------------------------|------------------------|----------|-------|---------|-------|---------|-------|--------|-------|--------|-------|---------|----------------|
|                        | Years                     | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adju      | sted Incide               | nce <sup>a</sup> , 19  | 75-2017  |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 1975-87                   | 1.6*                   | 1987-17  | -0.2  |         |       |         |       |        |       |        |       | -0.2    | -0.2           |
| White                  | 1975-87                   | 1.7*                   | 1987-17  | 0.0   |         |       |         |       |        |       |        |       | 0.0     | 0.0            |
| Black                  | 1975-17                   | 0.3                    |          |       |         |       |         |       |        |       |        |       | 0.3     | 0.3            |
| SEER 21 Delay-Adj      | usted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 2000-17                   | -0.4*                  |          |       |         |       |         |       |        |       |        |       | -0.4*   | -0.4*          |
| White                  | 2000-17                   | -0.3*                  |          |       |         |       |         |       |        |       |        |       | -0.3*   | -0.3*          |
| White NH <sup>ef</sup> | 2000-17                   | 0.0                    |          |       |         |       |         |       |        |       |        |       | 0.0     | 0.0            |
| Black                  | 2000-17                   | -0.7*                  |          |       |         |       |         |       |        |       |        |       | -0.7*   | -0.7*          |
| Black NH <sup>ef</sup> | 2000-17                   | -0.7                   |          |       |         |       |         |       |        |       |        |       | -0.7    | -0.7           |
| API <sup>e</sup>       | 2000-03                   | 5.0                    | 2003-09  | -2.0  | 2009-14 | 3.6   | 2014-17 | -7.6* |        |       |        |       | -0.9    | -4.9*          |
| AI/AN <sup>eg</sup>    | 2000-17                   | -0.5                   |          |       |         |       |         |       |        |       |        |       | -0.5    | -0.5           |
| Hispanic <sup>f</sup>  | 2000-17                   | -0.6*                  |          |       |         |       |         |       |        |       |        |       | -0.6*   | -0.6*          |
| U.S. Cancer Morta      | lity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 1975-92                   | 0.9*                   | 1992-07  | -1.1* | 2007-17 | 0.6*  |         |       |        |       |        |       | 0.6*    | 0.6*           |
| White                  | 1975-92                   | 1.0*                   | 1992-07  | -0.9* | 2007-17 | 0.6*  |         |       |        |       |        |       | 0.6*    | 0.6*           |
| Black                  | 1975-97                   | 0.9*                   | 1997-05  | -2.3* | 2005-17 | 0.9*  |         |       |        |       |        |       | 0.9*    | 0.9*           |
| U.S. Cancer Morta      | lity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 2000-06                   | -1.1*                  | 2006-17  | 0.5*  |         |       |         |       |        |       |        |       | 0.5*    | 0.5*           |
| White                  | 2000-07                   | -0.8*                  | 2007-17  | 0.6*  |         |       |         |       |        |       |        |       | 0.6*    | 0.6*           |
| White NH <sup>ef</sup> | 2000-07                   | -0.6                   | 2007-17  | 0.7*  |         |       |         |       |        |       |        |       | 0.7*    | 0.7*           |
| Black                  | 2000-17                   | 0.2                    |          |       |         |       |         |       |        |       |        |       | 0.2     | 0.2            |
| Black NH <sup>ef</sup> | 2000-17                   | 0.3                    |          |       |         |       |         |       |        |       |        |       | 0.3     | 0.3            |
| APIe                   | 2000-17                   | 1.8*                   |          |       |         |       |         |       |        |       |        |       | 1.8*    | 1.8*           |
| AI/AN <sup>eg</sup>    | 2000-17                   | 1.3                    |          |       |         |       |         |       |        |       |        |       | 1.3     | 1.3            |
| Hispanic <sup>f</sup>  | 2000-17                   | 0.5*                   |          |       |         |       |         |       |        |       |        |       | 0.5*    | 0.5*           |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

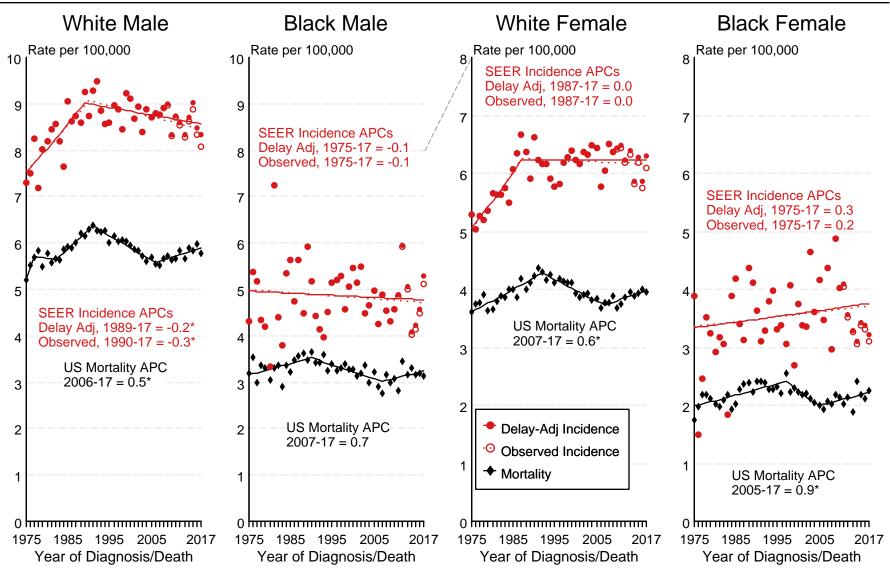
Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

Figure 3.1

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Brain and Other Nervous System, by Race and Sex



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 4.1 Cancer of the Female Breast (Invasive)

Trends in SEER Incidence ab and U.S. Mortality Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, All Ages by Race/Ethnicity

|                        | JP Tre                    | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tre  | nd 6 | AAI     | PC <sub>q</sub> |
|------------------------|---------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|------|---------|-----------------|
| -                      | Years                     | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC  | 2007-17 | 2012-17         |
| SEER 9 Delay-Adju      | sted Incide               | nce <sup>a</sup> , 19' | 75-2017  |       |         |       |         |       |         |       |         |      |         |                 |
| All Races              | 1975-80                   | -0.5                   | 1980-87  | 4.0*  | 1987-94 | -0.2  | 1994-99 | 1.8*  | 1999-04 | -2.3* | 2004-17 | 0.4* | 0.4*    | 0.4*            |
| White                  | 1975-80                   | -0.5                   | 1980-87  | 4.1*  | 1987-94 | -0.2  | 1994-99 | 2.0*  | 1999-04 | -2.5* | 2004-17 | 0.3* | 0.3*    | 0.3*            |
| Black                  | 1975-78                   | -2.4                   | 1978-88  | 3.4*  | 1988-17 | 0.3*  |         |       |         |       |         |      | 0.3*    | 0.3*            |
| SEER 21 Delay-Adj      | usted Incide              | ence <sup>b</sup> , 2  | 000-2017 |       |         |       |         |       |         |       |         |      |         |                 |
| All Races              | 2000-04                   | -2.1*                  | 2004-17  | 0.4*  |         |       |         |       |         |       |         |      | 0.4*    | 0.4*            |
| White                  | 2000-04                   | -2.3*                  | 2004-17  | 0.3*  |         |       |         |       |         |       |         |      | 0.3*    | 0.3*            |
| White NH <sup>ef</sup> | 2000-04                   | -2.3*                  | 2004-17  | 0.4*  |         |       |         |       |         |       |         |      | 0.4*    | 0.4*            |
| Black                  | 2000-17                   | 0.8*                   |          |       |         |       |         |       |         |       |         |      | 0.8*    | 0.8*            |
| Black NH <sup>ef</sup> | 2000-17                   | 0.8*                   |          |       |         |       |         |       |         |       |         |      | 0.8*    | 0.8*            |
| API <sup>e</sup>       | 2000-06                   | 0.1                    | 2006-17  | 1.7*  |         |       |         |       |         |       |         |      | 1.7*    | 1.7*            |
| AI/AN <sup>eg</sup>    | 2000-17                   | 0.8*                   |          |       |         |       |         |       |         |       |         |      | 0.8*    | 0.8*            |
| Hispanic <sup>f</sup>  | 2000-17                   | 0.6*                   |          |       |         |       |         |       |         |       |         |      | 0.6*    | 0.6*            |
| U.S. Cancer Morta      | lity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |         |       |         |      |         |                 |
| All Races              | 1975-90                   | 0.4*                   | 1990-95  | -1.8* | 1995-98 | -3.3* | 1998-11 | -1.9* | 2011-17 | -1.3* |         |      | -1.5*   | -1.3*           |
| White                  | 1975-90                   | 0.3*                   | 1990-95  | -2.0* | 1995-98 | -3.5* | 1998-11 | -1.9* | 2011-17 | -1.3* |         |      | -1.5*   | -1.3*           |
| Black                  | 1975-93                   | 1.4*                   | 1993-17  | -1.5* |         |       |         |       |         |       |         |      | -1.5*   | -1.5*           |
| U.S. Cancer Morta      | lity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |         |       |         |      |         |                 |
| All Races              | 2000-09                   | -2.0*                  | 2009-17  | -1.4* |         |       |         |       |         |       |         |      | -1.5*   | -1.4*           |
| White                  | 2000-08                   | -2.1*                  | 2008-17  | -1.5* |         |       |         |       |         |       |         |      | -1.5*   | -1.5*           |
| White NH <sup>ef</sup> | 2000-08                   | -2.0*                  | 2008-14  | -1.6* | 2014-17 | -0.9* |         |       |         |       |         |      | -1.4*   | -1.1*           |
| Black                  | 2000-17                   | -1.5*                  |          |       |         |       |         |       |         |       |         |      | -1.5*   | -1.5*           |
| Black NH <sup>ef</sup> | 2000-17                   | -1.4*                  |          |       |         |       |         |       |         |       |         |      | -1.4*   | -1.4*           |
| API <sup>e</sup>       | 2000-17                   | -0.7*                  |          |       |         |       |         |       |         |       |         |      | -0.7*   | -0.7*           |
| AI/AN <sup>eg</sup>    | 2000-04                   | 7.5                    | 2004-13  | -3.7* | 2013-17 | 5.2   |         |       |         |       |         |      | 0.1     | 5.2             |
| Hispanic <sup>f</sup>  | 2000-17                   | -1.1*                  |          |       |         |       |         |       |         |       |         |      | -1.1*   | -1.1*           |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 4.2 Cancer of the Female Breast (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Ages <50 by Race/Ethnicity

|                        | JP Tre                     | end 1                 | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tr | end 5 | JP Tr | end 6 | AAI     | PC <sup>d</sup> |
|------------------------|----------------------------|-----------------------|----------|-------|---------|-------|---------|-------|-------|-------|-------|-------|---------|-----------------|
|                        | Years                      | APC                   | Years    | APC   | Years   | APC   | Years   | APC   | Years | APC   | Years | APC   | 2007-17 | 2012-17         |
| SEER 9 Delay-Adju      | usted Incide               | nceª, 19'             | 75-2017  |       |         |       |         |       |       |       |       |       |         |                 |
| All Races              | 1975-80                    | -1.3                  | 1980-87  | 2.7*  | 1987-94 | -0.8  | 1994-17 | 0.3*  |       |       |       |       | 0.3*    | 0.3*            |
| White                  | 1975-80                    | -1.1                  | 1980-87  | 2.7*  | 1987-94 | -0.9  | 1994-17 | 0.3*  |       |       |       |       | 0.3*    | 0.3*            |
| Black                  | 1975-90                    | 1.3*                  | 1990-17  | -0.1  |         |       |         |       |       |       |       |       | -0.1    | -0.1            |
| SEER 21 Delay-Ad       | justed Incid               | ence <sup>b</sup> , 2 | 000-2017 |       |         |       |         |       |       |       |       |       |         |                 |
| All Races              | 2000-17                    | 0.4*                  |          |       |         |       |         |       |       |       |       |       | 0.4*    | 0.4*            |
| White                  | 2000-17                    | 0.4*                  |          |       |         |       |         |       |       |       |       |       | 0.4*    | 0.4*            |
| White NH <sup>ef</sup> | 2000-17                    | 0.5*                  |          |       |         |       |         |       |       |       |       |       | 0.5*    | 0.5*            |
| Black                  | 2000-17                    | 0.5*                  |          |       |         |       |         |       |       |       |       |       | 0.5*    | 0.5*            |
| Black NH <sup>ef</sup> | 2000-17                    | 0.6*                  |          |       |         |       |         |       |       |       |       |       | 0.6*    | 0.6*            |
| API <sup>e</sup>       | 2000-17                    | 1.3*                  |          |       |         |       |         |       |       |       |       |       | 1.3*    | 1.3*            |
| AI/AN <sup>eg</sup>    | 2000-17                    | -0.1                  |          |       |         |       |         |       |       |       |       |       | -0.1    | -0.1            |
| Hispanic <sup>f</sup>  | 2000-06                    | -1.0                  | 2006-17  | 1.3*  |         |       |         |       |       |       |       |       | 1.3*    | 1.3*            |
| U.S. Cancer Morta      | ality <sup>c</sup> , 1975- | -2017                 |          |       |         |       |         |       |       |       |       |       |         |                 |
| All Races              | 1975-90                    | -0.4*                 | 1990-07  | -3.2* | 2007-17 | -1.3* |         |       |       |       |       |       | -1.3*   | -1.3*           |
| White                  | 1975-90                    | -0.6*                 | 1990-05  | -3.6* | 2005-17 | -1.4* |         |       |       |       |       |       | -1.4*   | -1.4*           |
| Black                  | 1975-89                    | 1.6*                  | 1989-17  | -2.2* |         |       |         |       |       |       |       |       | -2.2*   | -2.2*           |
| U.S. Cancer Morta      | ality <sup>c</sup> , 2000- | -2017                 |          |       |         |       |         |       |       |       |       |       |         |                 |
| All Races              | 2000-08                    | -2.9*                 | 2008-17  | -1.2* |         |       |         |       |       |       |       |       | -1.2*   | -1.2*           |
| White                  | 2000-07                    | -3.1*                 | 2007-17  | -1.2* |         |       |         |       |       |       |       |       | -1.2*   | -1.2*           |
| White NH <sup>ef</sup> | 2000-07                    | -3.0*                 | 2007-17  | -1.3* |         |       |         |       |       |       |       |       | -1.3*   | -1.3*           |
| Black                  | 2000-17                    | -2.2*                 |          |       |         |       |         |       |       |       |       |       | -2.2*   | -2.2*           |
| Black NH <sup>ef</sup> | 2000-17                    | -2.1*                 |          |       |         |       |         |       |       |       |       |       | -2.1*   | -2.1*           |
| API <sup>e</sup>       | 2000-08                    | -5.2*                 | 2008-17  | 1.3   |         |       |         |       |       |       |       |       | 1.3     | 1.3             |
| AI/AN <sup>eg</sup>    | 2000-17                    | -1.5                  |          |       |         |       |         |       |       |       |       |       | -1.5    | -1.5            |
| Hispanic <sup>f</sup>  | 2000-17                    | -1.5*                 |          |       |         |       |         |       |       |       |       |       | -1.5*   | -1.5*           |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

#### Table 4.3 Cancer of the Female Breast (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Ages 50+ by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tre  | nd 6 | AAI     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC  | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |       |         |      |         |         |
| All Races              | 1975-82                  | 0.9                    | 1982-87  | 5.3*  | 1987-94 | -0.1  | 1994-99 | 2.3*  | 1999-04 | -3.0* | 2004-17 | 0.3* | 0.3*    | 0.3*    |
| White                  | 1975-82                  | 0.9*                   | 1982-87  | 5.5*  | 1987-93 | -0.3  | 1993-00 | 1.7*  | 2000-04 | -3.9* | 2004-17 | 0.3* | 0.3*    | 0.3*    |
| Black                  | 1975-92                  | 2.6*                   | 1992-17  | 0.4*  |         |       |         |       |         |       |         |      | 0.4*    | 0.4*    |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |         |      |         |         |
| All Races              | 2000-04                  | -2.8*                  | 2004-17  | 0.3*  |         |       |         |       |         |       |         |      | 0.3*    | 0.3*    |
| White                  | 2000-04                  | -3.0*                  | 2004-17  | 0.2*  |         |       |         |       |         |       |         |      | 0.2*    | 0.2*    |
| White NH <sup>ef</sup> | 2000-04                  | -3.1*                  | 2004-17  | 0.3*  |         |       |         |       |         |       |         |      | 0.3*    | 0.3*    |
| Black                  | 2000-17                  | 0.9*                   |          |       |         |       |         |       |         |       |         |      | 0.9*    | 0.9*    |
| Black NH <sup>ef</sup> | 2000-17                  | 0.9*                   |          |       |         |       |         |       |         |       |         |      | 0.9*    | 0.9*    |
| API <sup>e</sup>       | 2000-06                  | -0.2                   | 2006-17  | 1.8*  |         |       |         |       |         |       |         |      | 1.8*    | 1.8*    |
| AI/AN <sup>eg</sup>    | 2000-17                  | 1.0*                   |          |       |         |       |         |       |         |       |         |      | 1.0*    | 1.0*    |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.5*                   |          |       |         |       |         |       |         |       |         |      | 0.5*    | 0.5*    |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |         |      |         |         |
| All Races              | 1975-90                  | 0.6*                   | 1990-08  | -2.0* | 2008-17 | -1.5* |         |       |         |       |         |      | -1.5*   | -1.5*   |
| White                  | 1975-89                  | 0.5*                   | 1989-95  | -1.4* | 1995-98 | -3.4* | 1998-17 | -1.7* |         |       |         |      | -1.7*   | -1.7*   |
| Black                  | 1975-93                  | 1.6*                   | 1993-17  | -1.3* |         |       |         |       |         |       |         |      | -1.3*   | -1.3*   |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |         |      |         |         |
| All Races              | 2000-13                  | -1.8*                  | 2013-17  | -1.1* |         |       |         |       |         |       |         |      | -1.5*   | -1.1*   |
| White                  | 2000-09                  | -2.0*                  | 2009-17  | -1.5* |         |       |         |       |         |       |         |      | -1.5*   | -1.5*   |
| White NH <sup>ef</sup> | 2000-13                  | -1.8*                  | 2013-17  | -1.0* |         |       |         |       |         |       |         |      | -1.5*   | -1.0*   |
| Black                  | 2000-17                  | -1.4*                  |          |       |         |       |         |       |         |       |         |      | -1.4*   | -1.4*   |
| Black NH <sup>ef</sup> | 2000-17                  | -1.3*                  |          |       |         |       |         |       |         |       |         |      | -1.3*   | -1.3*   |
| API <sup>e</sup>       | 2000-17                  | -0.5*                  |          |       |         |       |         |       |         |       |         |      | -0.5*   | -0.5*   |
| AI/AN <sup>eg</sup>    | 2000-04                  | 9.1                    | 2004-13  | -4.0* | 2013-17 | 5.7   |         |       |         |       |         |      | 0.2     | 5.7     |
| Hispanicf              | 2000-17                  | -1.0*                  |          |       |         |       |         |       |         |       |         |      | -1.0*   | -1.0*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

#### Table 4.4 Cancer of the Female Breast (In Situ)

Trends in SEER Incidence<sup>ab</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, All Ages by Race/Ethnicity

|                        | JP Tre                  | end 1    | JP Tre    | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | nd 5 | JP Tre  | end 6 | AAF     | C <sub>d</sub> |
|------------------------|-------------------------|----------|-----------|-------|---------|-------|---------|-------|---------|------|---------|-------|---------|----------------|
|                        | Years                   | APC      | Years     | APC   | Years   | APC   | Years   | APC   | Years   | APC  | Years   | APC   | 2007-17 | 2012-17        |
| SEER 9 Observed In     |                         |          | -         |       |         |       |         |       |         |      |         |       |         |                |
| All Races              | 1975-81                 | -3.1     | 1981-87   | 25.2* | 1987-94 | 3.8*  | 1994-98 | 9.7*  | 1998-09 | 1.1* | 2009-17 | -1.2* | -1.0*   | -1.2*          |
| White                  | 1975-81                 | -2.9     | 1981-87   | 25.4* | 1987-95 | 3.9*  | 1995-98 | 11.1* | 1998-09 | 0.9* | 2009-17 | -1.7* | -1.4*   | -1.7*          |
| Black                  | 1975-83                 | 6.2*     | 1983-88   | 23.2* | 1988-93 | 3.7   | 1993-98 | 10.8* | 1998-14 | 1.3* | 2014-17 | -3.9  | -0.4    | -2.6           |
| SEER 21 Observed I     | ncidence <sup>b</sup> , | 2000-201 | <u>.7</u> |       |         |       |         |       |         |      |         |       |         |                |
| All Races              | 2000-05                 | 0.1      | 2005-08   | 4.5   | 2008-17 | -1.1* |         |       |         |      |         |       | -1.1*   | -1.1*          |
| White                  | 2000-05                 | -0.1     | 2005-08   | 4.6   | 2008-17 | -1.8* |         |       |         |      |         |       | -1.8*   | -1.8*          |
| White NH <sup>ef</sup> | 2000-05                 | -0.2     | 2005-08   | 5.0   | 2008-17 | -1.8* |         |       |         |      |         |       | -1.8*   | -1.8*          |
| Black                  | 2000-12                 | 3.0*     | 2012-17   | -1.1  |         |       |         |       |         |      |         |       | 0.7     | -1.1           |
| Black NH <sup>ef</sup> | 2000-13                 | 2.9*     | 2013-17   | -2.0  |         |       |         |       |         |      |         |       | 0.7     | -2.0           |
| API <sup>e</sup>       | 2000-05                 | 0.4      | 2005-08   | 6.3   | 2008-17 | 0.8   |         |       |         |      |         |       | 0.8     | 0.8            |
| AI/AN <sup>eg</sup>    | 2000-17                 | 0.0      |           |       |         |       |         |       |         |      |         |       | 0.0     | 0.0            |
| Hispanic <sup>f</sup>  | 2000-07                 | 3.1*     | 2007-17   | 0.9*  |         |       |         |       |         |      |         |       | 0.9*    | 0.9*           |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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

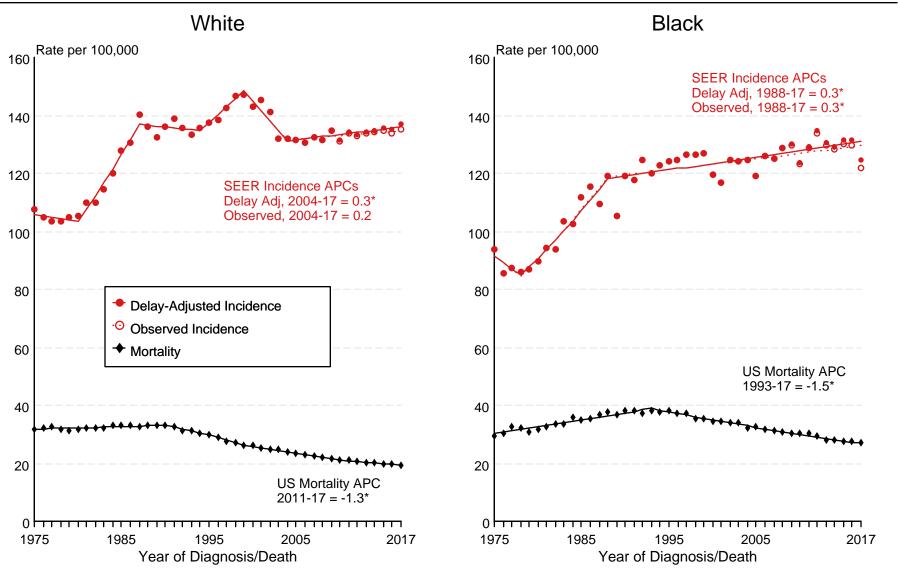
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Figure 4.1

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Female Breast, by Race

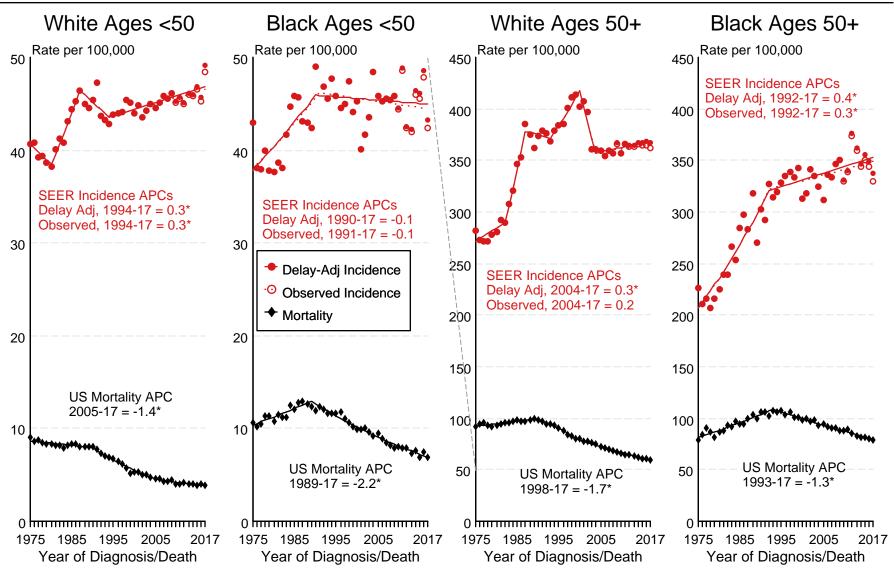


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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.

Figure 4.2

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Female Breast, by Age and Race



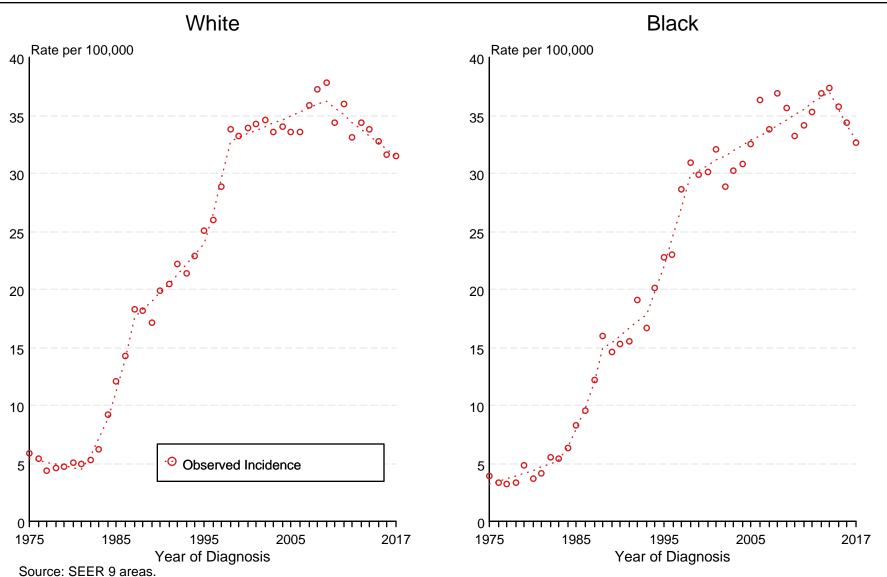
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

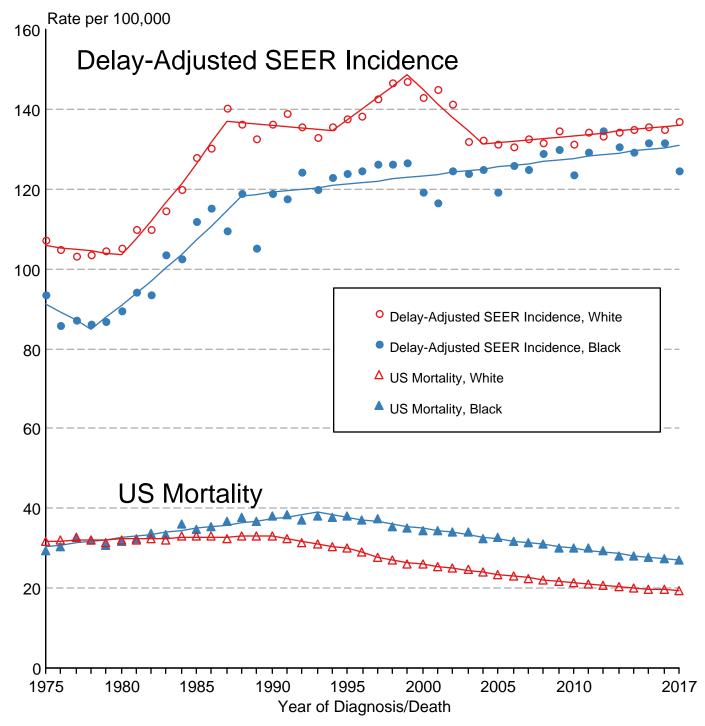
Figure 4.3

### SEER Observed Incidence Rates<sup>a</sup> Cancer of the Female Breast (In Situ), by Race



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 4.8, April 2020, 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.

# Cancer of the Breast Delay-Adjusted SEER Incidence & US Mortality White Females vs Black Females 1975-2017



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). Regression lines are calculated using the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

#### Table 5.1 Cancer of the Cervix Uteri (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, All Ages by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|--------|-------|--------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 1975-82                  | -4.6*                  | 1982-90  | 0.0   | 1990-06 | -2.7* | 2006-17 | -0.4  |        |       |        |       | -0.4    | -0.4    |
| White                  | 1975-82                  | -4.8*                  | 1982-90  | 0.4   | 1990-05 | -2.5* | 2005-17 | -0.1  |        |       |        |       | -0.1    | -0.1    |
| Black                  | 1975-17                  | -3.6*                  |          |       |         |       |         |       |        |       |        |       | -3.6*   | -3.6*   |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 2000-03                  | -4.2*                  | 2003-08  | -0.7  | 2008-11 | -3.2  | 2011-17 | 0.5   |        |       |        |       | -0.7    | 0.5     |
| White                  | 2000-03                  | -4.3*                  | 2003-08  | -0.2  | 2008-13 | -2.1* | 2013-17 | 1.9*  |        |       |        |       | -0.3    | 1.9*    |
| White NH <sup>ef</sup> | 2000-03                  | -3.8*                  | 2003-09  | 0.0   | 2009-13 | -2.1  | 2013-17 | 2.4*  |        |       |        |       | 0.1     | 2.4*    |
| Black                  | 2000-17                  | -2.6*                  |          |       |         |       |         |       |        |       |        |       | -2.6*   | -2.6*   |
| Black NH <sup>ef</sup> | 2000-17                  | -2.6*                  |          |       |         |       |         |       |        |       |        |       | -2.6*   | -2.6*   |
| API <sup>e</sup>       | 2000-11                  | -2.8*                  | 2011-17  | 0.4   |         |       |         |       |        |       |        |       | -0.7    | 0.4     |
| AI/AN <sup>eg</sup>    | 2000-17                  | 0.9                    |          |       |         |       |         |       |        |       |        |       | 0.9     | 0.9     |
| Hispanic <sup>f</sup>  | 2000-11                  | -4.2*                  | 2011-17  | -0.6  |         |       |         |       |        |       |        |       | -1.8*   | -0.6    |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 1975-82                  | -4.4*                  | 1982-96  | -1.6* | 1996-03 | -3.9* | 2003-17 | -0.7* |        |       |        |       | -0.7*   | -0.7*   |
| White                  | 1975-83                  | -4.2*                  | 1983-96  | -1.3* | 1996-04 | -3.3* | 2004-17 | -0.1  |        |       |        |       | -0.1    | -0.1    |
| Black                  | 1975-81                  | -4.8*                  | 1981-93  | -2.3* | 1993-01 | -5.0* | 2001-17 | -2.6* |        |       |        |       | -2.6*   | -2.6*   |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 2000-03                  | -4.2*                  | 2003-17  | -0.7* |         |       |         |       |        |       |        |       | -0.7*   | -0.7*   |
| White                  | 2000-04                  | -3.1*                  | 2004-17  | -0.1  |         |       |         |       |        |       |        |       | -0.1    | -0.1    |
| White NH <sup>ef</sup> | 2000-04                  | -3.0*                  | 2004-17  | -0.1  |         |       |         |       |        |       |        |       | -0.1    | -0.1    |
| Black                  | 2000-17                  | -2.6*                  |          |       |         |       |         |       |        |       |        |       | -2.6*   | -2.6*   |
| Black NH <sup>ef</sup> | 2000-17                  | -2.5*                  |          |       |         |       |         |       |        |       |        |       | -2.5*   | -2.5*   |
| API <sup>e</sup>       | 2000-17                  | -2.4*                  |          |       |         |       |         |       |        |       |        |       | -2.4*   | -2.4*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -2.9*                  |          |       |         |       |         |       |        |       |        |       | -2.9*   | -2.9*   |
| Hispanic <sup>f</sup>  | 2000-02                  | -10.7*                 | 2002-06  | -0.2  | 2006-11 | -3.7* | 2011-17 | 0.3   |        |       |        |       | -1.1    | 0.3     |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 5.2 Cancer of the Cervix Uteri (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Ages <50 by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | C <sub>q</sub> |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|--------|-------|--------|-------|---------|----------------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjust    | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 1975-81                  | -3.7*                  | 1981-98  | -0.5  | 1998-01 | -7.3  | 2001-17 | -0.3  |        |       |        |       | -0.3    | -0.3           |
| White                  | 1975-82                  | -4.0*                  | 1982-89  | 2.1   | 1989-05 | -1.9* | 2005-17 | 0.4   |        |       |        |       | 0.4     | 0.4            |
| Black                  | 1975-17                  | -3.1*                  |          |       |         |       |         |       |        |       |        |       | -3.1*   | -3.1*          |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 2000-13                  | -1.4*                  | 2013-17  | 2.1*  |         |       |         |       |        |       |        |       | 0.1     | 2.1*           |
| White                  | 2000-03                  | -3.7*                  | 2003-08  | 0.4   | 2008-12 | -2.6  | 2012-17 | 1.9*  |        |       |        |       | -0.1    | 1.9*           |
| White NH <sup>ef</sup> | 2000-13                  | -0.7*                  | 2013-17  | 2.4   |         |       |         |       |        |       |        |       | 0.7     | 2.4            |
| Black                  | 2000-17                  | -2.1*                  |          |       |         |       |         |       |        |       |        |       | -2.1*   | -2.1*          |
| Black NH <sup>ef</sup> | 2000-17                  | -2.0*                  |          |       |         |       |         |       |        |       |        |       | -2.0*   | -2.0*          |
| API <sup>e</sup>       | 2000-17                  | -0.6                   |          |       |         |       |         |       |        |       |        |       | -0.6    | -0.6           |
| AI/AN <sup>eg</sup>    | 2000-17                  | 1.9                    |          |       |         |       |         |       |        |       |        |       | 1.9     | 1.9            |
| Hispanic <sup>f</sup>  | 2000-13                  | -3.6*                  | 2013-17  | 3.2   |         |       |         |       |        |       |        |       | -0.6    | 3.2            |
| U.S. Cancer Mortali    | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 1975-81                  | -3.8*                  | 1981-96  | -0.7* | 1996-03 | -3.9* | 2003-17 | -0.3  |        |       |        |       | -0.3    | -0.3           |
| White                  | 1975-80                  | -4.1*                  | 1980-96  | -0.3  | 1996-05 | -3.0* | 2005-17 | 0.7*  |        |       |        |       | 0.7*    | 0.7*           |
| Black                  | 1975-17                  | -3.2*                  |          |       |         |       |         |       |        |       |        |       | -3.2*   | -3.2*          |
| U.S. Cancer Mortali    | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 2000-03                  | -3.5*                  | 2003-17  | -0.3* |         |       |         |       |        |       |        |       | -0.3*   | -0.3*          |
| White                  | 2000-08                  | -1.4*                  | 2008-17  | 1.1*  |         |       |         |       |        |       |        |       | 1.1*    | 1.1*           |
| White NH <sup>ef</sup> | 2000-08                  | -1.1*                  | 2008-17  | 1.0*  |         |       |         |       |        |       |        |       | 1.0*    | 1.0*           |
| Black                  | 2000-17                  | -2.5*                  |          |       |         |       |         |       |        |       |        |       | -2.5*   | -2.5*          |
| Black NH <sup>ef</sup> | 2000-17                  | -2.4*                  |          |       |         |       |         |       |        |       |        |       | -2.4*   | -2.4*          |
| API <sup>e</sup>       | 2000-17                  | -1.1                   |          |       |         |       |         |       |        |       |        |       | -1.1    | -1.1           |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.6                   |          |       |         |       |         |       |        |       |        |       | -1.6    | -1.6           |
| Hispanic <sup>f</sup>  | 2000-11                  | -3.2*                  | 2011-17  | 2.5   |         |       |         |       |        |       |        |       | 0.5     | 2.5            |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 5.3 Cancer of the Cervix Uteri (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Ages 50+ by Race/Ethnicity

|                        | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | C <sub>q</sub> |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|--------|-------|--------|-------|---------|----------------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjus     | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 1975-83                  | -4.9*                  | 1983-91  | -0.9  | 1991-06 | -3.3* | 2006-17 | -1.2* |        |       |        |       | -1.2*   | -1.2*          |
| White                  | 1975-85                  | -4.6*                  | 1985-91  | 0.1   | 1991-05 | -3.4* | 2005-17 | -0.7  |        |       |        |       | -0.7    | -0.7           |
| Black                  | 1975-17                  | -3.9*                  |          |       |         |       |         |       |        |       |        |       | -3.9*   | -3.9*          |
| SEER 21 Delay-Adju     | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 2000-03                  | -5.4*                  | 2003-17  | -1.4* |         |       |         |       |        |       |        |       | -1.4*   | -1.4*          |
| White                  | 2000-03                  | -5.1*                  | 2003-17  | -1.2* |         |       |         |       |        |       |        |       | -1.2*   | -1.2*          |
| White NH <sup>ef</sup> | 2000-03                  | -5.7*                  | 2003-17  | -0.8* |         |       |         |       |        |       |        |       | -0.8*   | -0.8*          |
| Black                  | 2000-03                  | -6.9*                  | 2003-17  | -2.6* |         |       |         |       |        |       |        |       | -2.6*   | -2.6*          |
| Black NH <sup>ef</sup> | 2000-17                  | -3.1*                  |          |       |         |       |         |       |        |       |        |       | -3.1*   | -3.1*          |
| API <sup>e</sup>       | 2000-17                  | -2.7*                  |          |       |         |       |         |       |        |       |        |       | -2.7*   | -2.7*          |
| AI/AN <sup>eg</sup>    | 2000-17                  | -0.7                   |          |       |         |       |         |       |        |       |        |       | -0.7    | -0.7           |
| Hispanic <sup>f</sup>  | 2000-17                  | -3.7*                  |          |       |         |       |         |       |        |       |        |       | -3.7*   | -3.7*          |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 1975-84                  | -4.3*                  | 1984-94  | -1.8* | 1994-04 | -3.4* | 2004-17 | -0.9* |        |       |        |       | -0.9*   | -0.9*          |
| White                  | 1975-84                  | -4.6*                  | 1984-96  | -1.8* | 1996-03 | -3.6* | 2003-17 | -0.7* |        |       |        |       | -0.7*   | -0.7*          |
| Black                  | 1975-79                  | -5.5*                  | 1979-93  | -2.7* | 1993-04 | -4.6* | 2004-17 | -2.3* |        |       |        |       | -2.3*   | -2.3*          |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 2000-04                  | -3.6*                  | 2004-17  | -0.9* |         |       |         |       |        |       |        |       | -0.9*   | -0.9*          |
| White                  | 2000-03                  | -4.1*                  | 2003-17  | -0.6* |         |       |         |       |        |       |        |       | -0.6*   | -0.6*          |
| White NH <sup>ef</sup> | 2000-04                  | -3.4*                  | 2004-17  | -0.5* |         |       |         |       |        |       |        |       | -0.5*   | -0.5*          |
| Black                  | 2000-17                  | -2.6*                  |          |       |         |       |         |       |        |       |        |       | -2.6*   | -2.6*          |
| Black NH <sup>ef</sup> | 2000-17                  | -2.6*                  |          |       |         |       |         |       |        |       |        |       | -2.6*   | -2.6*          |
| API <sup>e</sup>       | 2000-17                  | -2.9*                  |          |       |         |       |         |       |        |       |        |       | -2.9*   | -2.9*          |
| AI/AN <sup>eg</sup>    | 2000-17                  | -3.5*                  |          |       |         |       |         |       |        |       |        |       | -3.5*   | -3.5*          |
| Hispanic <sup>f</sup>  | 2000-17                  | -2.3*                  |          |       |         |       |         |       |        |       |        |       | -2.3*   | -2.3*          |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

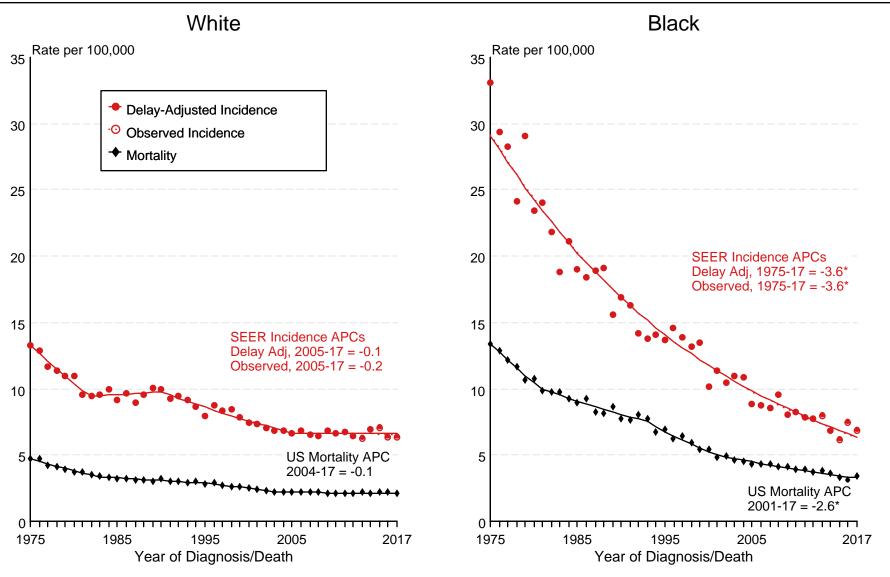
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

Figure 5.1

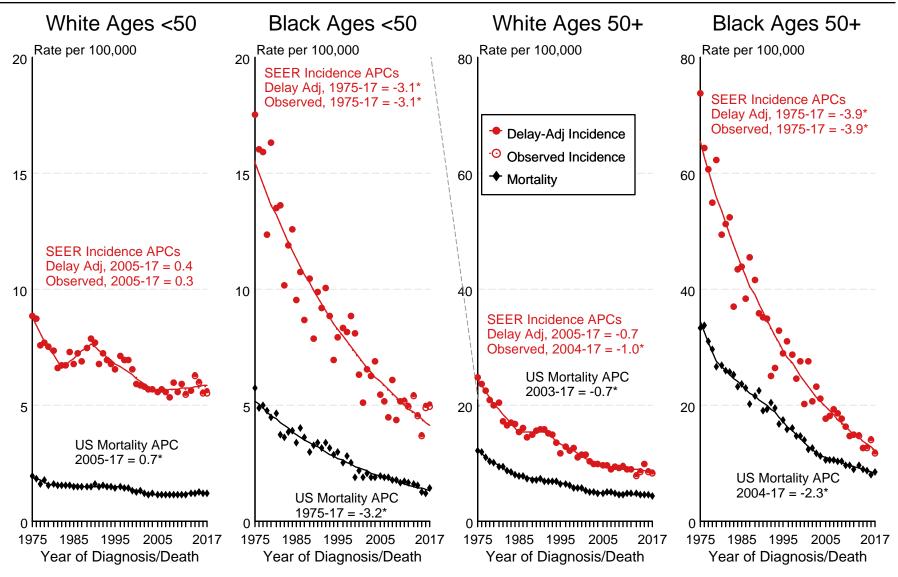
## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Cervix Uteri, by Race



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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.

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Cervix Uteri, by Age and Race



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 6.1 Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tre  | end 6 | AAF     | Cq      |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ted Incider              | nceª, 197              | 5-2017   |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-85                  | 0.8*                   | 1985-95  | -1.8* | 1995-98 | 1.4   | 1998-08 | -2.3* | 2008-11 | -4.6* | 2011-17 | -0.9* | -2.2*   | -0.9*   |
| White                  | 1975-85                  | 0.8*                   | 1985-95  | -2.0* | 1995-98 | 1.6   | 1998-08 | -2.5* | 2008-11 | -4.8* | 2011-17 | -0.8* | -2.1*   | -0.8*   |
| Black                  | 1975-80                  | 3.1*                   | 1980-02  | -0.1  | 2002-17 | -2.5* |         |       |         |       |         |       | -2.5*   | -2.5*   |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-08                  | -2.5*                  | 2008-11  | -3.9* | 2011-17 | -1.3* |         |       |         |       |         |       | -2.2*   | -1.3*   |
| White                  | 2000-12                  | -3.0*                  | 2012-17  | -1.2* |         |       |         |       |         |       |         |       | -2.0*   | -1.2*   |
| White NH <sup>ef</sup> | 2000-12                  | -3.0*                  | 2012-17  | -1.0* |         |       |         |       |         |       |         |       | -1.9*   | -1.0*   |
| Black                  | 2000-03                  | 0.5                    | 2003-17  | -2.6* |         |       |         |       |         |       |         |       | -2.6*   | -2.6*   |
| Black NH <sup>ef</sup> | 2000-03                  | 0.6                    | 2003-17  | -2.5* |         |       |         |       |         |       |         |       | -2.5*   | -2.5*   |
| API <sup>e</sup>       | 2000-17                  | -2.1*                  |          |       |         |       |         |       |         |       |         |       | -2.1*   | -2.1*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -0.3                   |          |       |         |       |         |       |         |       |         |       | -0.3    | -0.3    |
| Hispanic <sup>f</sup>  | 2000-04                  | -0.1                   | 2004-13  | -2.4* | 2013-17 | -0.3  |         |       |         |       |         |       | -1.5*   | -0.3    |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-78                  | 0.2                    | 1978-85  | -0.8* | 1985-02 | -1.8* | 2002-05 | -3.8* | 2005-12 | -2.6* | 2012-17 | -1.8* | -2.1*   | -1.8*   |
| White                  | 1975-78                  | 0.2                    | 1978-85  | -1.0* | 1985-02 | -1.9* | 2002-05 | -3.8* | 2005-12 | -2.5* | 2012-17 | -1.6* | -2.0*   | -1.6*   |
| Black                  | 1975-90                  | 0.6*                   | 1990-01  | -0.8* | 2001-17 | -2.9* |         |       |         |       |         |       | -2.9*   | -2.9*   |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-11                  | -2.9*                  | 2011-17  | -1.8* |         |       |         |       |         |       |         |       | -2.1*   | -1.8*   |
| White                  | 2000-02                  | -2.3*                  | 2002-05  | -3.8* | 2005-12 | -2.5* | 2012-17 | -1.6* |         |       |         |       | -2.0*   | -1.6*   |
| White NH <sup>ef</sup> | 2000-02                  | -2.3*                  | 2002-05  | -3.8* | 2005-12 | -2.5* | 2012-17 | -1.6* |         |       |         |       | -2.0*   | -1.6*   |
| Black                  | 2000-17                  | -2.8*                  |          |       |         |       |         |       |         |       |         |       | -2.8*   | -2.8*   |
| Black NH <sup>ef</sup> | 2000-17                  | -2.7*                  |          |       |         |       |         |       |         |       |         |       | -2.7*   | -2.7*   |
| API <sup>e</sup>       | 2000-17                  | -1.9*                  |          |       |         |       |         |       |         |       |         |       | -1.9*   | -1.9*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -0.7                   |          |       |         |       |         |       |         |       |         |       | -0.7    | -0.7    |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.7*                  |          |       |         |       |         |       |         |       |         |       | -1.7*   | -1.7*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

#### Table 6.2 Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                  | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tre  | end 6 | AAI     | $C_q$   |
|------------------------|-------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|---------|
|                        | Years                   | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ed Incider              | nceª, 197              | 75-2017  |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-85                 | 1.1*                   | 1985-91  | -1.2* | 1991-95 | -3.2* | 1995-98 | 2.3   | 1998-12 | -3.0* | 2012-17 | -1.4* | -2.1*   | -1.4*   |
| White                  | 1975-86                 | 1.1*                   | 1986-95  | -2.3* | 1995-98 | 1.4   | 1998-08 | -2.9* | 2008-11 | -5.0* | 2011-17 | -1.0* | -2.4*   | -1.0*   |
| Black                  | 1975-01                 | 0.4*                   | 2001-17  | -2.6* |         |       |         |       |         |       |         |       | -2.6*   | -2.6*   |
| SEER 21 Delay-Adjus    | sted Incide             | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-12                 | -3.1*                  | 2012-17  | -1.5* |         |       |         |       |         |       |         |       | -2.2*   | -1.5*   |
| White                  | 2000-12                 | -3.3*                  | 2012-17  | -1.4* |         |       |         |       |         |       |         |       | -2.2*   | -1.4*   |
| White NH <sup>ef</sup> | 2000-12                 | -3.4*                  | 2012-17  | -1.1* |         |       |         |       |         |       |         |       | -2.1*   | -1.1*   |
| Black                  | 2000-03                 | 0.4                    | 2003-17  | -2.6* |         |       |         |       |         |       |         |       | -2.6*   | -2.6*   |
| Black NH <sup>ef</sup> | 2000-03                 | 0.7                    | 2003-17  | -2.5* |         |       |         |       |         |       |         |       | -2.5*   | -2.5*   |
| API <sup>e</sup>       | 2000-17                 | -2.1*                  |          |       |         |       |         |       |         |       |         |       | -2.1*   | -2.1*   |
| AI/AN <sup>eg</sup>    | 2000-17                 | -0.6                   |          |       |         |       |         |       |         |       |         |       | -0.6    | -0.6    |
| Hispanic <sup>f</sup>  | 2000-08                 | -1.1*                  | 2008-11  | -4.5  | 2011-17 | -1.3* |         |       |         |       |         |       | -2.4*   | -1.3*   |
| U.S. Cancer Mortali    | ty <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-79                 | 0.6                    | 1979-87  | -0.6* | 1987-02 | -1.9* | 2002-05 | -4.0* | 2005-12 | -2.6* | 2012-17 | -2.0* | -2.2*   | -2.0*   |
| White                  | 1975-79                 | 0.6                    | 1979-87  | -0.8* | 1987-02 | -2.1* | 2002-05 | -4.1* | 2005-12 | -2.6* | 2012-17 | -1.8* | -2.2*   | -1.8*   |
| Black                  | 1975-90                 | 1.2*                   | 1990-02  | -0.7* | 2002-17 | -2.8* |         |       |         |       |         |       | -2.8*   | -2.8*   |
| U.S. Cancer Mortali    | ty <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-02                 | -2.1*                  | 2002-05  | -4.0* | 2005-12 | -2.6* | 2012-17 | -2.0* |         |       |         |       | -2.2*   | -2.0*   |
| White                  | 2000-02                 | -2.1*                  | 2002-05  | -4.2* | 2005-12 | -2.6* | 2012-17 | -1.8* |         |       |         |       | -2.2*   | -1.8*   |
| White NH <sup>ef</sup> | 2000-02                 | -2.2*                  | 2002-05  | -4.2* | 2005-12 | -2.7* | 2012-17 | -1.8* |         |       |         |       | -2.2*   | -1.8*   |
| Black                  | 2000-17                 | -2.7*                  |          |       |         |       |         |       |         |       |         |       | -2.7*   | -2.7*   |
| Black NH <sup>ef</sup> | 2000-17                 | -2.6*                  |          |       |         |       |         |       |         |       |         |       | -2.6*   | -2.6*   |
| API <sup>e</sup>       | 2000-17                 | -2.1*                  |          |       |         |       |         |       |         |       |         |       | -2.1*   | -2.1*   |
| AI/AN <sup>eg</sup>    | 2000-17                 | -0.8                   |          |       |         |       |         |       |         |       |         |       | -0.8    | -0.8    |
| Hispanicf              | 2000-17                 | -1.6*                  |          |       |         |       |         |       |         |       |         |       | -1.6*   | -1.6*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

#### Table 6.3 Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tre  | end 6 | AAI     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ted Incide               | nceª, 197              | 75-2017  |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-85                  | 0.3                    | 1985-95  | -1.9* | 1995-98 | 1.8   | 1998-08 | -2.0* | 2008-11 | -4.7* | 2011-17 | -0.8* | -2.1*   | -0.8*   |
| White                  | 1975-85                  | 0.3                    | 1985-95  | -2.1* | 1995-98 | 2.0   | 1998-08 | -2.2* | 2008-11 | -4.6* | 2011-17 | -0.6  | -2.0*   | -0.6    |
| Black                  | 1975-05                  | -0.1                   | 2005-13  | -4.2* | 2013-17 | 0.3   |         |       |         |       |         |       | -2.2*   | 0.3     |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-08                  | -2.3*                  | 2008-12  | -3.4* | 2012-17 | -1.0* |         |       |         |       |         |       | -2.1*   | -1.0*   |
| White                  | 2000-12                  | -2.7*                  | 2012-17  | -1.0* |         |       |         |       |         |       |         |       | -1.8*   | -1.0*   |
| White NH <sup>ef</sup> | 2000-12                  | -2.7*                  | 2012-17  | -1.1* |         |       |         |       |         |       |         |       | -1.8*   | -1.1*   |
| Black                  | 2000-03                  | 0.4                    | 2003-17  | -2.7* |         |       |         |       |         |       |         |       | -2.7*   | -2.7*   |
| Black NH <sup>ef</sup> | 2000-02                  | 2.2                    | 2002-17  | -2.6* |         |       |         |       |         |       |         |       | -2.6*   | -2.6*   |
| API <sup>e</sup>       | 2000-08                  | -1.0*                  | 2008-13  | -4.1* | 2013-17 | -0.6  |         |       |         |       |         |       | -2.6*   | -0.6    |
| AI/AN <sup>eg</sup>    | 2000-17                  | 0.1                    |          |       |         |       |         |       |         |       |         |       | 0.1     | 0.1     |
| Hispanic <sup>f</sup>  | 2000-04                  | -0.1                   | 2004-12  | -2.4* | 2012-17 | 0.1   |         |       |         |       |         |       | -1.0*   | 0.1     |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-84                  | -1.0*                  | 1984-01  | -1.8* | 2001-12 | -2.9* | 2012-17 | -1.5* |         |       |         |       | -2.1*   | -1.5*   |
| White                  | 1975-84                  | -1.2*                  | 1984-01  | -2.0* | 2001-11 | -2.9* | 2011-17 | -1.5* |         |       |         |       | -2.0*   | -1.5*   |
| Black                  | 1975-85                  | 0.8*                   | 1985-01  | -0.7* | 2001-17 | -3.2* |         |       |         |       |         |       | -3.2*   | -3.2*   |
| U.S. Cancer Mortali    | ity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-12                  | -2.9*                  | 2012-17  | -1.5* |         |       |         |       |         |       |         |       | -2.1*   | -1.5*   |
| White                  | 2000-10                  | -3.0*                  | 2010-17  | -1.7* |         |       |         |       |         |       |         |       | -2.0*   | -1.7*   |
| White NH <sup>ef</sup> | 2000-10                  | -3.0*                  | 2010-17  | -1.6* |         |       |         |       |         |       |         |       | -1.9*   | -1.6*   |
| Black                  | 2000-17                  | -3.1*                  |          |       |         |       |         |       |         |       |         |       | -3.1*   | -3.1*   |
| Black NH <sup>ef</sup> | 2000-17                  | -3.0*                  |          |       |         |       |         |       |         |       |         |       | -3.0*   | -3.0*   |
| API <sup>e</sup>       | 2000-17                  | -1.9*                  |          |       |         |       |         |       |         |       |         |       | -1.9*   | -1.9*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -0.9                   |          |       |         |       |         |       |         |       |         |       | -0.9    | -0.9    |
| Hispanicf              | 2000-17                  | -2.0*                  |          |       |         |       |         |       |         |       |         |       | -2.0*   | -2.0*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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

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.

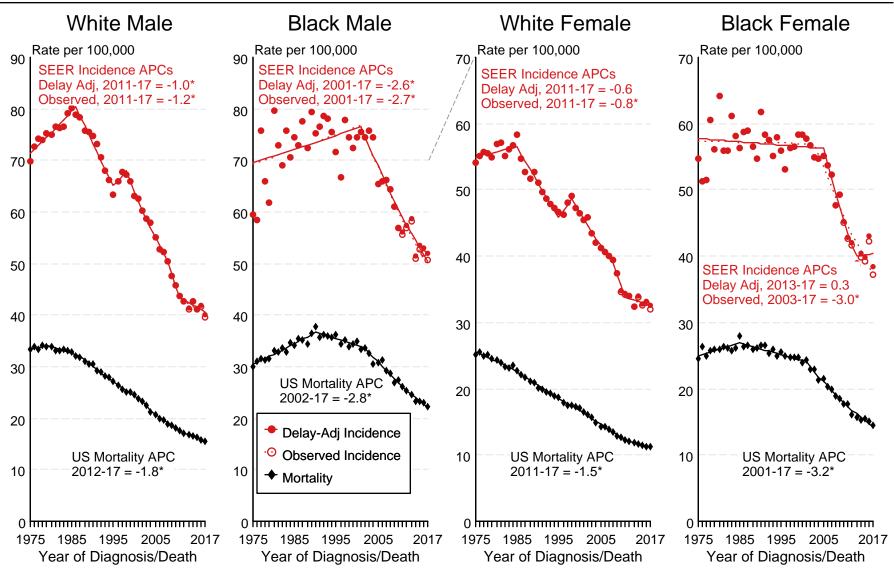
Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Figure 6.1

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Colon and Rectum, by Race and Sex



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 7.1 Cancer of the Corpus and Uterus, NOS (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, All Ages by Race/Ethnicity

|                        | JP Tre                     | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | nd 5 | JP Tre  | nd 6 | AAI     | ⊇C <sub>q</sub> |
|------------------------|----------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|------|---------|------|---------|-----------------|
|                        | Years                      | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC  | Years   | APC  | 2007-17 | 2012-17         |
| SEER 9 Delay-Adj       | usted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |      |         |      |         |                 |
| All Races              | 1975-79                    | -6.0*                  | 1979-88  | -1.7* | 1988-97 | 0.7*  | 1997-06 | -0.4  | 2006-09 | 3.2  | 2009-17 | 0.6* | 0.9*    | 0.6*            |
| White                  | 1975-79                    | -6.1*                  | 1979-88  | -1.7* | 1988-98 | 0.7*  | 1998-02 | -1.4  | 2002-17 | 0.8* |         |      | 0.8*    | 0.8*            |
| Black                  | 1975-93                    | -0.5                   | 1993-17  | 2.3*  |         |       |         |       |         |      |         |      | 2.3*    | 2.3*            |
| SEER 21 Delay-Ad       | justed Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |      |         |      |         |                 |
| All Races              | 2000-03                    | -0.5                   | 2003-17  | 1.2*  |         |       |         |       |         |      |         |      | 1.2*    | 1.2*            |
| White                  | 2000-17                    | 0.9*                   |          |       |         |       |         |       |         |      |         |      | 0.9*    | 0.9*            |
| White NH <sup>ef</sup> | 2000-17                    | 0.8*                   |          |       |         |       |         |       |         |      |         |      | 0.8*    | 0.8*            |
| Black                  | 2000-17                    | 2.4*                   |          |       |         |       |         |       |         |      |         |      | 2.4*    | 2.4*            |
| Black NH <sup>ef</sup> | 2000-17                    | 2.4*                   |          |       |         |       |         |       |         |      |         |      | 2.4*    | 2.4*            |
| API <sup>e</sup>       | 2000-17                    | 2.5*                   |          |       |         |       |         |       |         |      |         |      | 2.5*    | 2.5*            |
| AI/AN <sup>eg</sup>    | 2000-17                    | 1.4*                   |          |       |         |       |         |       |         |      |         |      | 1.4*    | 1.4*            |
| Hispanic <sup>f</sup>  | 2000-17                    | 2.2*                   |          |       |         |       |         |       |         |      |         |      | 2.2*    | 2.2*            |
| U.S. Cancer Morta      | ality <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |         |      |         |      |         |                 |
| All Races              | 1975-93                    | -1.5*                  | 1993-08  | 0.2   | 2008-17 | 2.1*  |         |       |         |      |         |      | 2.1*    | 2.1*            |
| White                  | 1975-92                    | -1.6*                  | 1992-08  | 0.0   | 2008-17 | 2.0*  |         |       |         |      |         |      | 2.0*    | 2.0*            |
| Black                  | 1975-97                    | -0.8*                  | 1997-08  | 0.7*  | 2008-17 | 2.2*  |         |       |         |      |         |      | 2.2*    | 2.2*            |
| U.S. Cancer Morta      | ality <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |         |      |         |      |         |                 |
| All Races              | 2000-08                    | 0.2                    | 2008-17  | 2.1*  |         |       |         |       |         |      |         |      | 2.1*    | 2.1*            |
| White                  | 2000-09                    | 0.3                    | 2009-17  | 2.1*  |         |       |         |       |         |      |         |      | 1.9*    | 2.1*            |
| White NH <sup>ef</sup> | 2000-09                    | 0.3                    | 2009-17  | 1.9*  |         |       |         |       |         |      |         |      | 1.7*    | 1.9*            |
| Black                  | 2000-08                    | 0.4                    | 2008-17  | 2.3*  |         |       |         |       |         |      |         |      | 2.3*    | 2.3*            |
| Black NH <sup>ef</sup> | 2000-08                    | 0.5                    | 2008-17  | 2.4*  |         |       |         |       |         |      |         |      | 2.4*    | 2.4*            |
| API <sup>e</sup>       | 2000-17                    | 2.5*                   |          |       |         |       |         |       |         |      |         |      | 2.5*    | 2.5*            |
| AI/AN <sup>eg</sup>    | 2000-17                    | 0.7                    |          |       |         |       |         |       |         |      |         |      | 0.7     | 0.7             |
| Hispanic <sup>f</sup>  | 2000-07                    | -0.2                   | 2007-17  | 3.0*  |         |       |         |       |         |      |         |      | 3.0*    | 3.0*            |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

#### Table 7.2 Cancer of the Corpus and Uterus, NOS (Invasive)

Trends in SEER Incidence ab and U.S. Mortality  $^{\rm c}$  Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Ages <50 by Race/Ethnicity

|                                | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tr | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | C <sub>q</sub> |
|--------------------------------|--------------------------|------------------------|----------|-------|---------|-------|-------|-------|--------|-------|--------|-------|---------|----------------|
|                                | Years                    | APC                    | Years    | APC   | Years   | APC   | Years | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjus             | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |       |       |        |       |        |       |         |                |
| All Races                      | 1975-88                  | -2.6*                  | 1988-17  | 1.3*  |         |       |       |       |        |       |        |       | 1.3*    | 1.3*           |
| White                          | 1975-89                  | -2.4*                  | 1989-17  | 1.1*  |         |       |       |       |        |       |        |       | 1.1*    | 1.1*           |
| Black                          | 1975-84                  | -5.5*                  | 1984-17  | 2.1*  |         |       |       |       |        |       |        |       | 2.1*    | 2.1*           |
| SEER 21 Delay-Adju             | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |       |       |        |       |        |       |         |                |
| All Races                      | 2000-17                  | 1.6*                   |          |       |         |       |       |       |        |       |        |       | 1.6*    | 1.6*           |
| White                          | 2000-17                  | 1.5*                   |          |       |         |       |       |       |        |       |        |       | 1.5*    | 1.5*           |
| White NH <sup>ef</sup>         | 2000-17                  | 1.1*                   |          |       |         |       |       |       |        |       |        |       | 1.1*    | 1.1*           |
| Black                          | 2000-17                  | 2.4*                   |          |       |         |       |       |       |        |       |        |       | 2.4*    | 2.4*           |
| Black NH <sup>ef</sup>         | 2000-17                  | 2.5*                   |          |       |         |       |       |       |        |       |        |       | 2.5*    | 2.5*           |
| API <sup>e</sup>               | 2000-17                  | 1.7*                   |          |       |         |       |       |       |        |       |        |       | 1.7*    | 1.7*           |
| AI/AN <sup>eg</sup>            | 2000-17                  | 0.7                    |          |       |         |       |       |       |        |       |        |       | 0.7     | 0.7            |
| $	exttt{Hispanic}^{	exttt{f}}$ | 2000-17                  | 2.6*                   |          |       |         |       |       |       |        |       |        |       | 2.6*    | 2.6*           |
| U.S. Cancer Mortal             | ity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |       |       |        |       |        |       |         |                |
| All Races                      | 1975-84                  | -4.7*                  | 1984-96  | -1.2  | 1996-17 | 2.2*  |       |       |        |       |        |       | 2.2*    | 2.2*           |
| White                          | 1975-92                  | -3.0*                  | 1992-17  | 1.9*  |         |       |       |       |        |       |        |       | 1.9*    | 1.9*           |
| Black                          | 1975-95                  | -4.5*                  | 1995-17  | 2.6*  |         |       |       |       |        |       |        |       | 2.6*    | 2.6*           |
| U.S. Cancer Mortal             | ity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |       |       |        |       |        |       |         |                |
| All Races                      | 2000-17                  | 2.3*                   |          |       |         |       |       |       |        |       |        |       | 2.3*    | 2.3*           |
| White                          | 2000-17                  | 2.2*                   |          |       |         |       |       |       |        |       |        |       | 2.2*    | 2.2*           |
| White NH <sup>ef</sup>         | 2000-17                  | 1.7*                   |          |       |         |       |       |       |        |       |        |       | 1.7*    | 1.7*           |
| Black                          | 2000-17                  | 2.5*                   |          |       |         |       |       |       |        |       |        |       | 2.5*    | 2.5*           |
| Black NH <sup>ef</sup>         | 2000-17                  | 2.9*                   |          |       |         |       |       |       |        |       |        |       | 2.9*    | 2.9*           |
| API <sup>e</sup>               | 2000-17                  | 2.0                    |          |       |         |       |       |       |        |       |        |       | 2.0     | 2.0            |
| AI/AN <sup>eg</sup>            | _                        | -                      |          |       |         |       |       |       |        |       |        |       | _       | -              |
| Hispanic <sup>f</sup>          | 2000-17                  | 2.8*                   |          |       |         |       |       |       |        |       |        |       | 2.8*    | 2.8*           |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

#### Table 7.3 Cancer of the Corpus and Uterus, NOS (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Ages 50+ by Race/Ethnicity

|                        | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | nd 5 | JP Tre  | nd 6 | AAI     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|------|---------|------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC  | Years   | APC  | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |      |         |      |         |         |
| All Races              | 1975-79                  | -6.2*                  | 1979-88  | -1.7* | 1988-97 | 0.6*  | 1997-06 | -0.7* | 2006-09 | 3.3  | 2009-17 | 0.5* | 0.8*    | 0.5*    |
| White                  | 1975-79                  | -6.2*                  | 1979-88  | -1.7* | 1988-98 | 0.7*  | 1998-03 | -1.4  | 2003-17 | 0.7* |         |      | 0.7*    | 0.7*    |
| Black                  | 1975-97                  | 0.0                    | 1997-17  | 2.6*  |         |       |         |       |         |      |         |      | 2.6*    | 2.6*    |
| SEER 21 Delay-Adjus    | sted Incid               | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |      |         |      |         |         |
| All Races              | 2000-04                  | -0.2                   | 2004-17  | 1.2*  |         |       |         |       |         |      |         |      | 1.2*    | 1.2*    |
| White                  | 2000-04                  | -0.4                   | 2004-17  | 1.0*  |         |       |         |       |         |      |         |      | 1.0*    | 1.0*    |
| White NH <sup>ef</sup> | 2000-17                  | 0.7*                   |          |       |         |       |         |       |         |      |         |      | 0.7*    | 0.7*    |
| Black                  | 2000-17                  | 2.4*                   |          |       |         |       |         |       |         |      |         |      | 2.4*    | 2.4*    |
| Black NH <sup>ef</sup> | 2000-17                  | 2.4*                   |          |       |         |       |         |       |         |      |         |      | 2.4*    | 2.4*    |
| API <sup>e</sup>       | 2000-17                  | 2.7*                   |          |       |         |       |         |       |         |      |         |      | 2.7*    | 2.7*    |
| AI/AN <sup>eg</sup>    | 2000-17                  | 1.4                    |          |       |         |       |         |       |         |      |         |      | 1.4     | 1.4     |
| Hispanic <sup>f</sup>  | 2000-17                  | 2.1*                   |          |       |         |       |         |       |         |      |         |      | 2.1*    | 2.1*    |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |         |      |         |      |         |         |
| All Races              | 1975-93                  | -1.4*                  | 1993-08  | 0.1   | 2008-17 | 2.0*  |         |       |         |      |         |      | 2.0*    | 2.0*    |
| White                  | 1975-92                  | -1.6*                  | 1992-08  | -0.1  | 2008-17 | 1.9*  |         |       |         |      |         |      | 1.9*    | 1.9*    |
| Black                  | 1975-04                  | -0.4*                  | 2004-17  | 1.9*  |         |       |         |       |         |      |         |      | 1.9*    | 1.9*    |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |         |      |         |      |         |         |
| All Races              | 2000-08                  | 0.1                    | 2008-17  | 2.0*  |         |       |         |       |         |      |         |      | 2.0*    | 2.0*    |
| White                  | 2000-09                  | 0.2                    | 2009-17  | 2.0*  |         |       |         |       |         |      |         |      | 1.8*    | 2.0*    |
| White NH <sup>ef</sup> | 2000-09                  | 0.2                    | 2009-17  | 1.9*  |         |       |         |       |         |      |         |      | 1.7*    | 1.9*    |
| Black                  | 2000-08                  | 0.4                    | 2008-17  | 2.2*  |         |       |         |       |         |      |         |      | 2.2*    | 2.2*    |
| Black NH <sup>ef</sup> | 2000-08                  | 0.4                    | 2008-17  | 2.3*  |         |       |         |       |         |      |         |      | 2.3*    | 2.3*    |
| API <sup>e</sup>       | 2000-17                  | 2.6*                   |          |       |         |       |         |       |         |      |         |      | 2.6*    | 2.6*    |
| AI/AN <sup>eg</sup>    | 2000-17                  | -0.1                   |          |       |         |       |         |       |         |      |         |      | -0.1    | -0.1    |
| Hispanic <sup>f</sup>  | 2000-07                  | -0.5                   | 2007-17  | 3.0*  |         |       |         |       |         |      |         |      | 3.0*    | 3.0*    |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

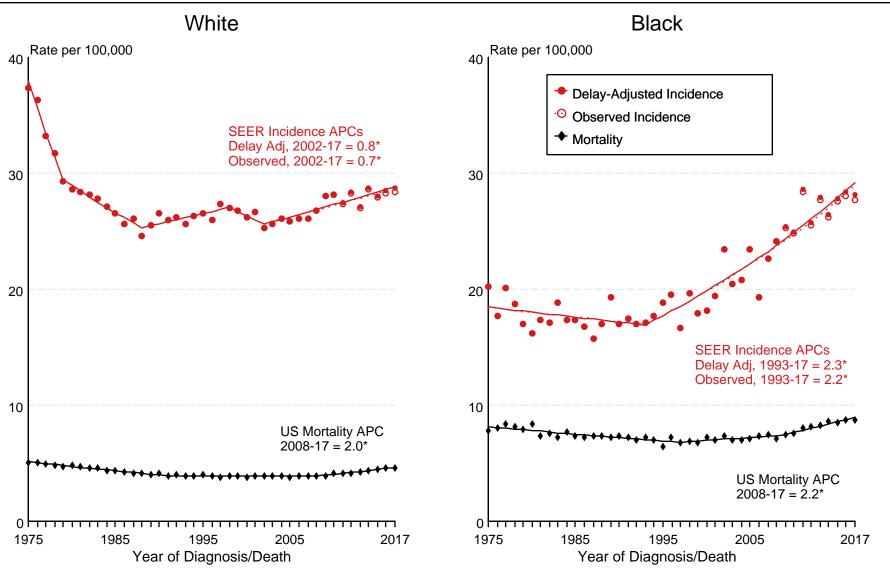
Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

Figure 7.1

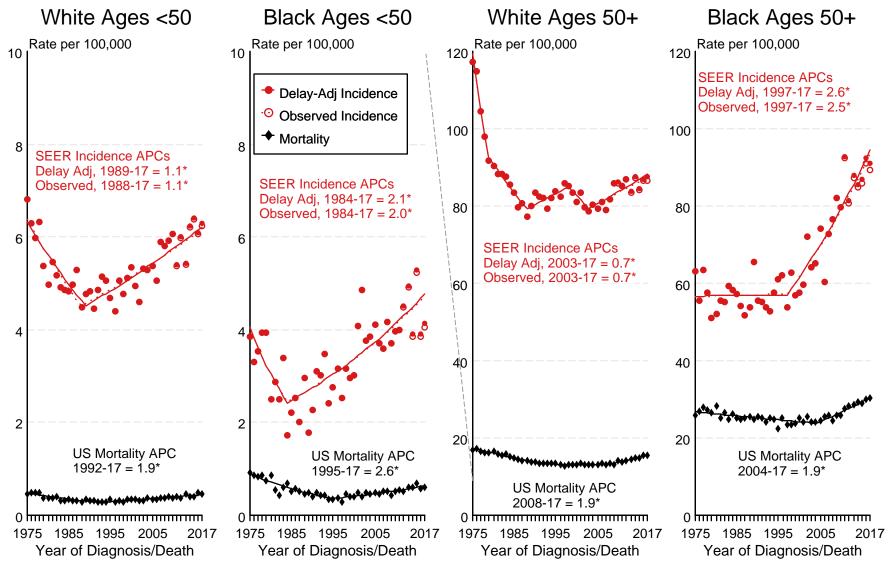
## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Corpus and Uterus, NOS, by Race



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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.

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Corpus and Uterus, NOS, by Age and Race



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).

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 8.1 Cancer of the Esophagus (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                    | nd 1                   | JP Tre   | end 2 | JP Tr   | end 3 | JP Tre  | end 4 | JP Tr | end 5 | JP Tre | end 6 | AAI     | Cq      |
|------------------------|---------------------------|------------------------|----------|-------|---------|-------|---------|-------|-------|-------|--------|-------|---------|---------|
|                        | Years                     | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus     | sted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |       |       |        |       |         |         |
| All Races              | 1975-04                   | 0.5*                   | 2004-17  | -1.0* |         |       |         |       |       |       |        |       | -1.0*   | -1.0*   |
| White                  | 1975-04                   | 1.4*                   | 2004-17  | -0.4  |         |       |         |       |       |       |        |       | -0.4    | -0.4    |
| Black                  | 1975-86                   | 1.0                    | 1986-17  | -4.3* |         |       |         |       |       |       |        |       | -4.3*   | -4.3*   |
| SEER 21 Delay-Adj      | usted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |       |       |        |       |         |         |
| All Races              | 2000-04                   | 0.6                    | 2004-17  | -1.3* |         |       |         |       |       |       |        |       | -1.3*   | -1.3*   |
| White                  | 2000-04                   | 1.7                    | 2004-17  | -0.8* |         |       |         |       |       |       |        |       | -0.8*   | -0.8*   |
| White NH <sup>ef</sup> | 2000-06                   | 1.1                    | 2006-17  | -0.7* |         |       |         |       |       |       |        |       | -0.7*   | -0.7*   |
| Black                  | 2000-17                   | -4.3*                  |          |       |         |       |         |       |       |       |        |       | -4.3*   | -4.3*   |
| Black NH <sup>ef</sup> | 2000-17                   | -4.3*                  |          |       |         |       |         |       |       |       |        |       | -4.3*   | -4.3*   |
| API <sup>e</sup>       | 2000-17                   | -1.2*                  |          |       |         |       |         |       |       |       |        |       | -1.2*   | -1.2*   |
| AI/AN <sup>eg</sup>    | 2000-17                   | -1.0                   |          |       |         |       |         |       |       |       |        |       | -1.0    | -1.0    |
| Hispanic <sup>f</sup>  | 2000-17                   | -1.7*                  |          |       |         |       |         |       |       |       |        |       | -1.7*   | -1.7*   |
| U.S. Cancer Morta      | lity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |       |       |        |       |         |         |
| All Races              | 1975-03                   | 0.7*                   | 2003-17  | -1.0* |         |       |         |       |       |       |        |       | -1.0*   | -1.0*   |
| White                  | 1975-83                   | 0.4                    | 1983-00  | 1.7*  | 2000-05 | 0.9*  | 2005-17 | -0.6* |       |       |        |       | -0.6*   | -0.6*   |
| Black                  | 1975-82                   | 1.1*                   | 1982-93  | -1.6* | 1993-17 | -4.6* |         |       |       |       |        |       | -4.6*   | -4.6*   |
| U.S. Cancer Morta      | lity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |       |       |        |       |         |         |
| All Races              | 2000-05                   | 0.0                    | 2005-17  | -1.1* |         |       |         |       |       |       |        |       | -1.1*   | -1.1*   |
| White                  | 2000-05                   | 0.9*                   | 2005-17  | -0.6* |         |       |         |       |       |       |        |       | -0.6*   | -0.6*   |
| White NH <sup>ef</sup> | 2000-05                   | 1.0*                   | 2005-17  | -0.4* |         |       |         |       |       |       |        |       | -0.4*   | -0.4*   |
| Black                  | 2000-17                   | -4.7*                  |          |       |         |       |         |       |       |       |        |       | -4.7*   | -4.7*   |
| Black NH <sup>ef</sup> | 2000-17                   | -4.6*                  |          |       |         |       |         |       |       |       |        |       | -4.6*   | -4.6*   |
| API <sup>e</sup>       | 2000-17                   | -1.2*                  |          |       |         |       |         |       |       |       |        |       | -1.2*   | -1.2*   |
| AI/AN <sup>eg</sup>    | 2000-17                   | -0.9                   |          |       |         |       |         |       |       |       |        |       | -0.9    | -0.9    |
| Hispanic <sup>f</sup>  | 2000-17                   | -1.4*                  |          |       |         |       |         |       |       |       |        |       | -1.4*   | -1.4*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

#### Table 8.2 Cancer of the Esophagus (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|--------|-------|--------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ed Incider               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 1975-04                  | 0.7*                   | 2004-17  | -1.0* |         |       |         |       |        |       |        |       | -1.0*   | -1.0*   |
| White                  | 1975-04                  | 1.7*                   | 2004-17  | -0.5  |         |       |         |       |        |       |        |       | -0.5    | -0.5    |
| Black                  | 1975-86                  | 0.9                    | 1986-17  | -4.6* |         |       |         |       |        |       |        |       | -4.6*   | -4.6*   |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 2000-04                  | 1.0                    | 2004-17  | -1.3* |         |       |         |       |        |       |        |       | -1.3*   | -1.3*   |
| White                  | 2000-07                  | 0.8                    | 2007-17  | -1.2* |         |       |         |       |        |       |        |       | -1.2*   | -1.2*   |
| White NH <sup>ef</sup> | 2000-07                  | 1.0*                   | 2007-17  | -1.0* |         |       |         |       |        |       |        |       | -1.0*   | -1.0*   |
| Black                  | 2000-17                  | -4.4*                  |          |       |         |       |         |       |        |       |        |       | -4.4*   | -4.4*   |
| Black NH <sup>ef</sup> | 2000-17                  | -4.4*                  |          |       |         |       |         |       |        |       |        |       | -4.4*   | -4.4*   |
| API <sup>e</sup>       | 2000-17                  | -1.0*                  |          |       |         |       |         |       |        |       |        |       | -1.0*   | -1.0*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.6                   |          |       |         |       |         |       |        |       |        |       | -1.6    | -1.6    |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.9*                  |          |       |         |       |         |       |        |       |        |       | -1.9*   | -1.9*   |
| U.S. Cancer Mortali    | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 1975-85                  | 0.7*                   | 1985-94  | 1.2*  | 1994-05 | 0.5*  | 2005-17 | -1.2* |        |       |        |       | -1.2*   | -1.2*   |
| White                  | 1975-82                  | 0.3                    | 1982-99  | 1.9*  | 1999-05 | 1.1*  | 2005-17 | -0.7* |        |       |        |       | -0.7*   | -0.7*   |
| Black                  | 1975-84                  | 0.8*                   | 1984-93  | -1.9* | 1993-17 | -4.8* |         |       |        |       |        |       | -4.8*   | -4.8*   |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 2000-05                  | 0.4                    | 2005-17  | -1.1* |         |       |         |       |        |       |        |       | -1.1*   | -1.1*   |
| White                  | 2000-05                  | 1.1*                   | 2005-17  | -0.7* |         |       |         |       |        |       |        |       | -0.7*   | -0.7*   |
| White NH <sup>ef</sup> | 2000-05                  | 1.2*                   | 2005-17  | -0.5* |         |       |         |       |        |       |        |       | -0.5*   | -0.5*   |
| Black                  | 2000-17                  | -4.8*                  |          |       |         |       |         |       |        |       |        |       | -4.8*   | -4.8*   |
| Black NH <sup>ef</sup> | 2000-17                  | -4.8*                  |          |       |         |       |         |       |        |       |        |       | -4.8*   | -4.8*   |
| API <sup>e</sup>       | 2000-17                  | -1.1*                  |          |       |         |       |         |       |        |       |        |       | -1.1*   | -1.1*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.0                   |          |       |         |       |         |       |        |       |        |       | -1.0    | -1.0    |
| Hispanicf              | 2000-17                  | -1.3*                  |          |       |         |       |         |       |        |       |        |       | -1.3*   | -1.3*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 8.3 Cancer of the Esophagus (Invasive)

Trends in SEER Incidence ab and U.S. Mortality  $^{\rm c}$  Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                    | nd 1                   | JP Tre   | end 2 | JP Tr | end 3 | JP Tr | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAF     | Cq      |
|------------------------|---------------------------|------------------------|----------|-------|-------|-------|-------|-------|--------|-------|--------|-------|---------|---------|
|                        | Years                     | APC                    | Years    | APC   | Years | APC   | Years | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adju      | sted Inciden              | nce <sup>a</sup> , 197 | 75-2017  |       |       |       |       |       |        |       |        |       |         |         |
| All Races              | 1975-97                   | 0.0                    | 1997-17  | -1.3* |       |       |       |       |        |       |        |       | -1.3*   | -1.3*   |
| White                  | 1975-17                   | -0.2                   |          |       |       |       |       |       |        |       |        |       | -0.2    | -0.2    |
| Black                  | 1975-81                   | 8.6*                   | 1981-17  | -3.3* |       |       |       |       |        |       |        |       | -3.3*   | -3.3*   |
| SEER 21 Delay-Adj      | usted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |       |       |       |       |        |       |        |       |         |         |
| All Races              | 2000-17                   | -1.6*                  |          |       |       |       |       |       |        |       |        |       | -1.6*   | -1.6*   |
| White                  | 2000-17                   | -1.0*                  |          |       |       |       |       |       |        |       |        |       | -1.0*   | -1.0*   |
| White NH <sup>ef</sup> | 2000-17                   | -0.8*                  |          |       |       |       |       |       |        |       |        |       | -0.8*   | -0.8*   |
| Black                  | 2000-17                   | -4.2*                  |          |       |       |       |       |       |        |       |        |       | -4.2*   | -4.2*   |
| Black NH <sup>ef</sup> | 2000-17                   | -4.3*                  |          |       |       |       |       |       |        |       |        |       | -4.3*   | -4.3*   |
| API <sup>e</sup>       | 2000-17                   | -2.0*                  |          |       |       |       |       |       |        |       |        |       | -2.0*   | -2.0*   |
| AI/AN <sup>eg</sup>    | 2000-17                   | -1.1                   |          |       |       |       |       |       |        |       |        |       | -1.1    | -1.1    |
| Hispanic <sup>f</sup>  | 2000-17                   | -1.8*                  |          |       |       |       |       |       |        |       |        |       | -1.8*   | -1.8*   |
| U.S. Cancer Morta      | lity <sup>c</sup> , 1975- | 2017                   |          |       |       |       |       |       |        |       |        |       |         |         |
| All Races              | 1975-00                   | 0.1                    | 2000-17  | -1.6* |       |       |       |       |        |       |        |       | -1.6*   | -1.6*   |
| White                  | 1975-02                   | 0.4*                   | 2002-17  | -1.1* |       |       |       |       |        |       |        |       | -1.1*   | -1.1*   |
| Black                  | 1975-92                   | -0.2                   | 1992-17  | -4.1* |       |       |       |       |        |       |        |       | -4.1*   | -4.1*   |
| U.S. Cancer Morta      | lity <sup>c</sup> , 2000- | 2017                   |          |       |       |       |       |       |        |       |        |       |         |         |
| All Races              | 2000-17                   | -1.6*                  |          |       |       |       |       |       |        |       |        |       | -1.6*   | -1.6*   |
| White                  | 2000-17                   | -1.0*                  |          |       |       |       |       |       |        |       |        |       | -1.0*   | -1.0*   |
| White NH <sup>ef</sup> | 2000-17                   | -0.9*                  |          |       |       |       |       |       |        |       |        |       | -0.9*   | -0.9*   |
| Black                  | 2000-17                   | -4.4*                  |          |       |       |       |       |       |        |       |        |       | -4.4*   | -4.4*   |
| Black NH <sup>ef</sup> | 2000-17                   | -4.4*                  |          |       |       |       |       |       |        |       |        |       | -4.4*   | -4.4*   |
| API <sup>e</sup>       | 2000-17                   | -2.1*                  |          |       |       |       |       |       |        |       |        |       | -2.1*   | -2.1*   |
| AI/AN <sup>eg</sup>    | 2000-17                   | -0.7                   |          |       |       |       |       |       |        |       |        |       | -0.7    | -0.7    |
| Hispanic <sup>f</sup>  | 2000-17                   | -2.3*                  |          |       |       |       |       |       |        |       |        |       | -2.3*   | -2.3*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

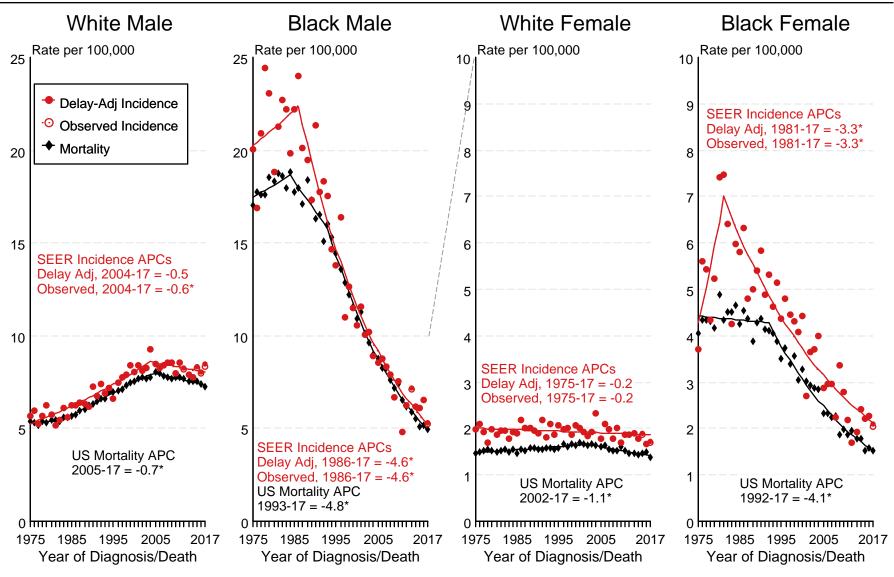
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

Figure 8.1

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Esophagus, by Race and Sex



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).

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 9.1 Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tr | end 5 | JP Trend 6 |     | AAI     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|-------|-------|------------|-----|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years | APC   | Years      | APC | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus     | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |       |       |            |     |         |         |
| All Races              | 1975-03                  | -0.2                   | 2003-07  | 2.3   | 2007-17 | -2.1* |         |       |       |       |            |     | -2.1*   | -2.1*   |
| White                  | 1975-88                  | 0.6*                   | 1988-01  | -0.9* | 2001-07 | 2.0   | 2007-17 | -2.3* |       |       |            |     | -2.3*   | -2.3*   |
| Black                  | 1975-17                  | 1.0*                   |          |       |         |       |         |       |       |       |            |     | 1.0*    | 1.0*    |
| SEER 21 Delay-Adju     | sted Incid               | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |       |       |            |     |         |         |
| All Races              | 2000-07                  | 0.8*                   | 2007-17  | -1.5* |         |       |         |       |       |       |            |     | -1.5*   | -1.5*   |
| White                  | 2000-06                  | 1.1                    | 2006-17  | -1.5* |         |       |         |       |       |       |            |     | -1.5*   | -1.5*   |
| White NH <sup>ef</sup> | 2000-06                  | 0.9                    | 2006-17  | -1.4* |         |       |         |       |       |       |            |     | -1.4*   | -1.4*   |
| Black                  | 2000-08                  | 2.4*                   | 2008-17  | -1.0  |         |       |         |       |       |       |            |     | -1.0    | -1.0    |
| Black NH <sup>ef</sup> | 2000-08                  | 2.6*                   | 2008-17  | -1.1  |         |       |         |       |       |       |            |     | -1.1    | -1.1    |
| API <sup>e</sup>       | 2000-17                  | 0.5                    |          |       |         |       |         |       |       |       |            |     | 0.5     | 0.5     |
| AI/AN <sup>eg</sup>    | 2000-17                  | 3.1*                   |          |       |         |       |         |       |       |       |            |     | 3.1*    | 3.1*    |
| Hispanic <sup>f</sup>  | 2000-17                  | -0.6                   |          |       |         |       |         |       |       |       |            |     | -0.6    | -0.6    |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |       |       |            |     |         |         |
| All Races              | 1975-79                  | -6.5*                  | 1979-98  | -3.5* | 1998-09 | -2.2* | 2009-17 | -4.6* |       |       |            |     | -4.3*   | -4.6*   |
| White                  | 1975-79                  | -6.2*                  | 1979-96  | -3.6* | 1996-10 | -2.3* | 2010-17 | -4.8* |       |       |            |     | -4.2*   | -4.8*   |
| Black                  | 1975-14                  | -2.9*                  | 2014-17  | -10.6 |         |       |         |       |       |       |            |     | -5.5*   | -8.7    |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |       |       |            |     |         |         |
| All Races              | 2000-09                  | -2.1*                  | 2009-17  | -4.6* |         |       |         |       |       |       |            |     | -4.3*   | -4.6*   |
| White                  | 2000-10                  | -2.3*                  | 2010-17  | -4.8* |         |       |         |       |       |       |            |     | -4.2*   | -4.8*   |
| White NH <sup>ef</sup> | 2000-09                  | -2.3*                  | 2009-17  | -5.0* |         |       |         |       |       |       |            |     | -4.7*   | -5.0*   |
| Black                  | 2000-17                  | -3.0*                  |          |       |         |       |         |       |       |       |            |     | -3.0*   | -3.0*   |
| Black NH <sup>ef</sup> | 2000-17                  | -2.9*                  |          |       |         |       |         |       |       |       |            |     | -2.9*   | -2.9*   |
| API <sup>e</sup>       | 2000-17                  | -3.3*                  |          |       |         |       |         |       |       |       |            |     | -3.3*   | -3.3*   |
| AI/AN <sup>eg</sup>    | _                        | _                      |          |       |         |       |         |       |       |       |            |     | _       | -       |
| Hispanicf              | 2000-17                  | -1.6*                  |          |       |         |       |         |       |       |       |            |     | -1.6*   | -1.6*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Table 9.2 Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                                | JP Tre                    | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tr | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | $C_q$   |
|--------------------------------|---------------------------|------------------------|----------|-------|---------|-------|-------|-------|--------|-------|--------|-------|---------|---------|
|                                | Years                     | APC                    | Years    | APC   | Years   | APC   | Years | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adju              | sted Incide               | nce <sup>a</sup> , 19  | 75-2017  |       |         |       |       |       |        |       |        |       |         |         |
| All Races                      | 1975-15                   | -0.3*                  | 2015-17  | -8.8  |         |       |       |       |        |       |        |       | -2.3    | -4.7    |
| White                          | 1975-04                   | -0.6*                  | 2004-07  | 4.0   | 2007-17 | -2.3* |       |       |        |       |        |       | -2.3*   | -2.3*   |
| Black                          | 1975-17                   | 0.6*                   |          |       |         |       |       |       |        |       |        |       | 0.6*    | 0.6*    |
| SEER 21 Delay-Adj              | usted Incid               | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |       |       |        |       |        |       |         |         |
| All Races                      | 2000-07                   | 0.9                    | 2007-17  | -1.7* |         |       |       |       |        |       |        |       | -1.7*   | -1.7*   |
| White                          | 2000-06                   | 1.2                    | 2006-17  | -1.7* |         |       |       |       |        |       |        |       | -1.7*   | -1.7*   |
| White NH <sup>ef</sup>         | 2000-17                   | -0.7*                  |          |       |         |       |       |       |        |       |        |       | -0.7*   | -0.7*   |
| Black                          | 2000-17                   | 0.1                    |          |       |         |       |       |       |        |       |        |       | 0.1     | 0.1     |
| Black NH <sup>ef</sup>         | 2000-14                   | 1.0                    | 2014-17  | -7.1  |         |       |       |       |        |       |        |       | -1.8    | -5.2    |
| API <sup>e</sup>               | 2000-17                   | 0.5                    |          |       |         |       |       |       |        |       |        |       | 0.5     | 0.5     |
| AI/AN <sup>eg</sup>            | 2000-17                   | 0.3                    |          |       |         |       |       |       |        |       |        |       | 0.3     | 0.3     |
| $	exttt{Hispanic}^{	exttt{f}}$ | 2000-17                   | -1.3*                  |          |       |         |       |       |       |        |       |        |       | -1.3*   | -1.3*   |
| U.S. Cancer Morta              | lity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |       |       |        |       |        |       |         |         |
| All Races                      | 1975-97                   | -4.0*                  | 1997-11  | -2.2* | 2011-17 | -4.9* |       |       |        |       |        |       | -4.0*   | -4.9*   |
| White                          | 1975-97                   | -4.1*                  | 1997-10  | -2.0* | 2010-17 | -4.4* |       |       |        |       |        |       | -3.9*   | -4.4*   |
| Black                          | 1975-17                   | -3.3*                  |          |       |         |       |       |       |        |       |        |       | -3.3*   | -3.3*   |
| U.S. Cancer Morta              | lity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |       |       |        |       |        |       |         |         |
| All Races                      | 2000-17                   | -2.9*                  |          |       |         |       |       |       |        |       |        |       | -2.9*   | -2.9*   |
| White                          | 2000-17                   | -2.8*                  |          |       |         |       |       |       |        |       |        |       | -2.8*   | -2.8*   |
| White NH <sup>ef</sup>         | 2000-17                   | -3.0*                  |          |       |         |       |       |       |        |       |        |       | -3.0*   | -3.0*   |
| Black                          | 2000-17                   | -2.9*                  |          |       |         |       |       |       |        |       |        |       | -2.9*   | -2.9*   |
| Black NH <sup>ef</sup>         | 2000-17                   | -2.8*                  |          |       |         |       |       |       |        |       |        |       | -2.8*   | -2.8*   |
| API <sup>e</sup>               | 2000-17                   | -2.2                   |          |       |         |       |       |       |        |       |        |       | -2.2    | -2.2    |
| AI/AN <sup>eg</sup>            | -                         | -                      |          |       |         |       |       |       |        |       |        |       | -       | -       |
| Hispanic <sup>f</sup>          | 2000-17                   | -2.2*                  |          |       |         |       |       |       |        |       |        |       | -2.2*   | -2.2*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

### Table 9.3 Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                                | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tr   | end 3 | JP Tr | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | C <sub>q</sub> |
|--------------------------------|--------------------------|------------------------|----------|-------|---------|-------|-------|-------|--------|-------|--------|-------|---------|----------------|
|                                | Years                    | APC                    | Years    | APC   | Years   | APC   | Years | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjus             | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |       |       |        |       |        |       |         |                |
| All Races                      | 1975-07                  | 0.4*                   | 2007-17  | -2.0* |         |       |       |       |        |       |        |       | -2.0*   | -2.0*          |
| White                          | 1975-07                  | 0.4*                   | 2007-17  | -2.2* |         |       |       |       |        |       |        |       | -2.2*   | -2.2*          |
| Black                          | 1975-92                  | 4.4*                   | 1992-17  | 0.6   |         |       |       |       |        |       |        |       | 0.6     | 0.6            |
| SEER 21 Delay-Adju             | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |       |       |        |       |        |       |         |                |
| All Races                      | 2000-04                  | 2.2                    | 2004-17  | -1.1* |         |       |       |       |        |       |        |       | -1.1*   | -1.1*          |
| White                          | 2000-05                  | 1.4                    | 2005-17  | -1.3* |         |       |       |       |        |       |        |       | -1.3*   | -1.3*          |
| White NH <sup>ef</sup>         | 2000-17                  | -0.8*                  |          |       |         |       |       |       |        |       |        |       | -0.8*   | -0.8*          |
| Black                          | 2000-17                  | 0.8                    |          |       |         |       |       |       |        |       |        |       | 0.8     | 0.8            |
| Black NH <sup>ef</sup>         | 2000-17                  | 0.8                    |          |       |         |       |       |       |        |       |        |       | 0.8     | 0.8            |
| API <sup>e</sup>               | 2000-17                  | 0.4                    |          |       |         |       |       |       |        |       |        |       | 0.4     | 0.4            |
| AI/AN <sup>eg</sup>            | _                        | _                      |          |       |         |       |       |       |        |       |        |       | _       | _              |
| $	exttt{Hispanic}^{	exttt{f}}$ | 2000-17                  | 0.2                    |          |       |         |       |       |       |        |       |        |       | 0.2     | 0.2            |
| U.S. Cancer Mortal             | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |       |       |        |       |        |       |         |                |
| All Races                      | 1975-85                  | -4.9*                  | 1985-09  | -2.6* | 2009-17 | -5.0* |       |       |        |       |        |       | -4.7*   | -5.0*          |
| White                          | 1975-85                  | -5.0*                  | 1985-09  | -2.5* | 2009-17 | -5.0* |       |       |        |       |        |       | -4.8*   | -5.0*          |
| Black                          | 1975-17                  | -2.6*                  |          |       |         |       |       |       |        |       |        |       | -2.6*   | -2.6*          |
| U.S. Cancer Mortal             | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |       |       |        |       |        |       |         |                |
| All Races                      | 2000-17                  | -3.7*                  |          |       |         |       |       |       |        |       |        |       | -3.7*   | -3.7*          |
| White                          | 2000-17                  | -3.7*                  |          |       |         |       |       |       |        |       |        |       | -3.7*   | -3.7*          |
| White NH <sup>ef</sup>         | 2000-17                  | -4.1*                  |          |       |         |       |       |       |        |       |        |       | -4.1*   | -4.1*          |
| Black                          | 2000-17                  | -3.1*                  |          |       |         |       |       |       |        |       |        |       | -3.1*   | -3.1*          |
| Black NH <sup>ef</sup>         | 2000-17                  | -3.0*                  |          |       |         |       |       |       |        |       |        |       | -3.0*   | -3.0*          |
| API <sup>e</sup>               | 2000-17                  | -4.1*                  |          |       |         |       |       |       |        |       |        |       | -4.1*   | -4.1*          |
| AI/AN <sup>eg</sup>            | _                        | -                      |          |       |         |       |       |       |        |       |        |       | _       | -              |
| Hispanic <sup>f</sup>          | 2000-17                  | -0.8                   |          |       |         |       |       |       |        |       |        |       | -0.8    | -0.8           |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

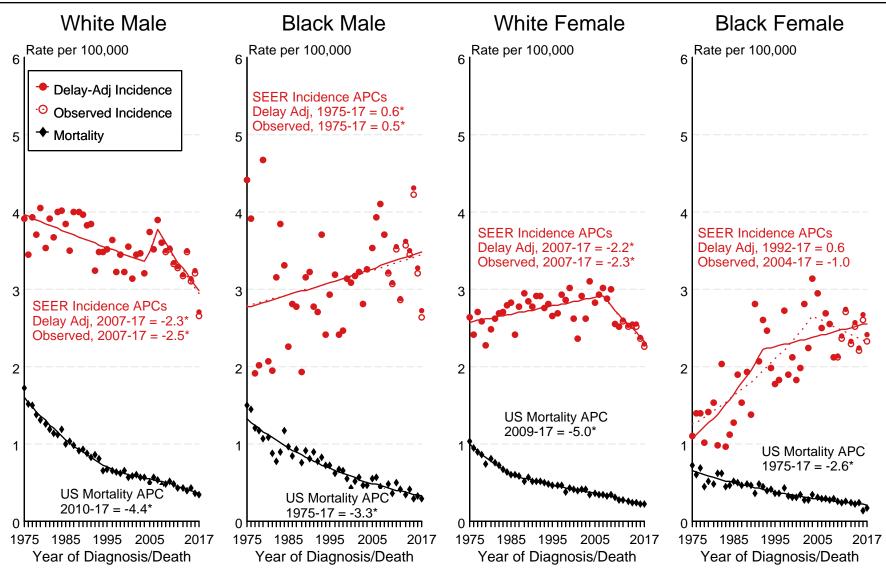
d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Hodgkin Lymphoma, by Race and Sex



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 11.1 Cancer of the Kidney and Renal Pelvis (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | nd 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | C <sub>q</sub> |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|------|--------|-------|--------|-------|---------|----------------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC  | Years  | APC   | Years  | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjust    | ted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 1975-94                  | 2.3*                   | 1994-97  | -0.6  | 1997-07 | 3.3*  | 2007-17 | 0.5* |        |       |        |       | 0.5*    | 0.5*           |
| White                  | 1975-92                  | 2.3*                   | 1992-97  | 0.3   | 1997-07 | 3.2*  | 2007-17 | 0.5* |        |       |        |       | 0.5*    | 0.5*           |
| Black                  | 1975-08                  | 3.0*                   | 2008-17  | 0.6   |         |       |         |      |        |       |        |       | 0.6     | 0.6            |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 2000-07                  | 3.4*                   | 2007-17  | 0.7*  |         |       |         |      |        |       |        |       | 0.7*    | 0.7*           |
| White                  | 2000-06                  | 3.7*                   | 2006-17  | 0.8*  |         |       |         |      |        |       |        |       | 0.8*    | 0.8*           |
| White NH <sup>ef</sup> | 2000-06                  | 3.7*                   | 2006-17  | 0.8*  |         |       |         |      |        |       |        |       | 0.8*    | 0.8*           |
| Black                  | 2000-08                  | 4.2*                   | 2008-17  | 0.7*  |         |       |         |      |        |       |        |       | 0.7*    | 0.7*           |
| Black NH <sup>ef</sup> | 2000-08                  | 4.3*                   | 2008-17  | 0.7*  |         |       |         |      |        |       |        |       | 0.7*    | 0.7*           |
| API <sup>e</sup>       | 2000-17                  | 2.2*                   |          |       |         |       |         |      |        |       |        |       | 2.2*    | 2.2*           |
| AI/AN <sup>eg</sup>    | 2000-17                  | 1.3*                   |          |       |         |       |         |      |        |       |        |       | 1.3*    | 1.3*           |
| Hispanic <sup>f</sup>  | 2000-05                  | 4.6*                   | 2005-17  | 1.4*  |         |       |         |      |        |       |        |       | 1.4*    | 1.4*           |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 1975-92                  | 1.1*                   | 1992-03  | -0.2  | 2003-17 | -1.0* |         |      |        |       |        |       | -1.0*   | -1.0*          |
| White                  | 1975-92                  | 1.0*                   | 1992-03  | -0.1  | 2003-17 | -0.9* |         |      |        |       |        |       | -0.9*   | -0.9*          |
| Black                  | 1975-94                  | 2.4*                   | 1994-17  | -1.0* |         |       |         |      |        |       |        |       | -1.0*   | -1.0*          |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 2000-15                  | -0.8*                  | 2015-17  | -3.2* |         |       |         |      |        |       |        |       | -1.4*   | -2.0*          |
| White                  | 2000-15                  | -0.7*                  | 2015-17  | -3.1  |         |       |         |      |        |       |        |       | -1.3*   | -1.9*          |
| White NH <sup>ef</sup> | 2000-15                  | -0.8*                  | 2015-17  | -3.2  |         |       |         |      |        |       |        |       | -1.3*   | -2.0*          |
| Black                  | 2000-17                  | -1.2*                  |          |       |         |       |         |      |        |       |        |       | -1.2*   | -1.2*          |
| Black NH <sup>ef</sup> | 2000-17                  | -1.0*                  |          |       |         |       |         |      |        |       |        |       | -1.0*   | -1.0*          |
| API <sup>e</sup>       | 2000-04                  | -4.9                   | 2004-07  | 9.3   | 2007-17 | -2.2* |         |      |        |       |        |       | -2.2*   | -2.2*          |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.4*                  |          |       |         |       |         |      |        |       |        |       | -1.4*   | -1.4*          |
| Hispanicf              | 2000-17                  | -0.5*                  |          |       |         |       |         |      |        |       |        |       | -0.5*   | -0.5*          |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 11.2 Cancer of the Kidney and Renal Pelvis (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

| SEER 9 Delay-Adjusted Incidence <sup>a</sup> , 1975-2017  All Races 1975-04 1.8* 2004-07 4.8 2007-17 0.5*  White 1975-03 1.7* 2003-07 3.7 2007-17 0.6* | 0.5*<br>0.6*<br>-0.1 |
|--|----------------------|
| All Races 1975-04 1.8* 2004-07 4.8 2007-17 0.5* 0.5* White 1975-03 1.7* 2003-07 3.7 2007-17 0.6*   | 0.6*                 |
| White 1975-03 1.7* 2003-07 3.7 2007-17 0.6*  | 0.6*                 |
|  |                      |
| Black 1975-09 3.1* 2009-17 -0.1 0.2  | -0.1                 |
|  |                      |
| SEER 21 Delay-Adjusted Incidence <sup>b</sup> , 2000-2017  |                      |
| All Races 2000-08 3.2* 2008-11 -0.8 2011-17 1.1* 0.5   | 1.1*                 |
| White 2000-07 3.2* 2007-17 0.6*  | 0.6*                 |
| White NH <sup>ef</sup> 2000-07 3.2* 2007-17 0.6*   | 0.6*                 |
| Black 2000-08 4.0* 2008-17 0.6   | 0.6                  |
| Black NH <sup>ef</sup> 2000-09 3.9* 2009-12 -1.0 2012-15 2.8 2015-17 -2.6 0.4  | 0.1                  |
| API <sup>e</sup> 2000-17 2.3*  | 2.3*                 |
| AI/AN <sup>eg</sup> 2000-17 1.6*   | 1.6*                 |
| Hispanic <sup>f</sup> 2000-05 5.1* 2005-17 1.1*  | 1.1*                 |
| U.S. Cancer Mortality <sup>c</sup> , 1975-2017   |                      |
| All Races 1975-91 1.1* 1991-01 -0.1 2001-15 -0.7* 2015-17 -3.9* -1.4*  | -2.3*                |
| White 1975-91 1.0* 1991-01 -0.1 2001-15 -0.6* 2015-17 -3.8* -1.3*  | -2.2*                |
| Black 1975-92 2.9* 1992-17 -0.8*   | -0.8*                |
| U.S. Cancer Mortality <sup>c</sup> , 2000-2017   |                      |
| All Races 2000-15 -0.7* 2015-17 -3.8*  | -2.3*                |
| White 2000-15 -0.7* 2015-17 -3.8*  | -2.2*                |
| White NH <sup>ef</sup> 2000-15 -0.6* 2015-17 -4.1*   | -2.4*                |
| Black 2000-17 -1.0*  | -1.0*                |
|  | -0.9*                |
|  | -0.1                 |
|  | -1.2                 |
|  | -0.7*                |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

#### Table 11.3 Cancer of the Kidney and Renal Pelvis (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | nd 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | C <sub>q</sub> |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|------|--------|-------|--------|-------|---------|----------------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC  | Years  | APC   | Years  | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjust    | ted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 1975-93                  | 2.7*                   | 1993-99  | 0.7   | 1999-06 | 4.1*  | 2006-17 | 0.1  |        |       |        |       | 0.1     | 0.1            |
| White                  | 1975-92                  | 2.8*                   | 1992-99  | 0.7   | 1999-06 | 4.1*  | 2006-17 | 0.1  |        |       |        |       | 0.1     | 0.1            |
| Black                  | 1975-07                  | 3.0*                   | 2007-17  | 0.8   |         |       |         |      |        |       |        |       | 0.8     | 0.8            |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 2000-06                  | 3.7*                   | 2006-17  | 0.7*  |         |       |         |      |        |       |        |       | 0.7*    | 0.7*           |
| White                  | 2000-06                  | 3.8*                   | 2006-17  | 0.6*  |         |       |         |      |        |       |        |       | 0.6*    | 0.6*           |
| White NH <sup>ef</sup> | 2000-06                  | 3.7*                   | 2006-17  | 0.5*  |         |       |         |      |        |       |        |       | 0.5*    | 0.5*           |
| Black                  | 2000-08                  | 4.2*                   | 2008-17  | 0.6   |         |       |         |      |        |       |        |       | 0.6     | 0.6            |
| Black NH <sup>ef</sup> | 2000-08                  | 4.3*                   | 2008-17  | 0.6   |         |       |         |      |        |       |        |       | 0.6     | 0.6            |
| API <sup>e</sup>       | 2000-17                  | 1.9*                   |          |       |         |       |         |      |        |       |        |       | 1.9*    | 1.9*           |
| AI/AN <sup>eg</sup>    | 2000-17                  | 0.8                    |          |       |         |       |         |      |        |       |        |       | 0.8     | 0.8            |
| Hispanic <sup>f</sup>  | 2000-17                  | 2.1*                   |          |       |         |       |         |      |        |       |        |       | 2.1*    | 2.1*           |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 1975-92                  | 1.2*                   | 1992-05  | -0.5* | 2005-17 | -1.6* |         |      |        |       |        |       | -1.6*   | -1.6*          |
| White                  | 1975-92                  | 1.2*                   | 1992-05  | -0.4* | 2005-17 | -1.5* |         |      |        |       |        |       | -1.5*   | -1.5*          |
| Black                  | 1975-95                  | 2.4*                   | 1995-17  | -1.3* |         |       |         |      |        |       |        |       | -1.3*   | -1.3*          |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 2000-17                  | -1.4*                  |          |       |         |       |         |      |        |       |        |       | -1.4*   | -1.4*          |
| White                  | 2000-17                  | -1.3*                  |          |       |         |       |         |      |        |       |        |       | -1.3*   | -1.3*          |
| White NH <sup>ef</sup> | 2000-17                  | -1.4*                  |          |       |         |       |         |      |        |       |        |       | -1.4*   | -1.4*          |
| Black                  | 2000-17                  | -1.5*                  |          |       |         |       |         |      |        |       |        |       | -1.5*   | -1.5*          |
| Black NH <sup>ef</sup> | 2000-17                  | -1.4*                  |          |       |         |       |         |      |        |       |        |       | -1.4*   | -1.4*          |
| API <sup>e</sup>       | 2000-17                  | -0.9                   |          |       |         |       |         |      |        |       |        |       | -0.9    | -0.9           |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.7                   |          |       |         |       |         |      |        |       |        |       | -1.7    | -1.7           |
| Hispanic <sup>f</sup>  | 2000-17                  | -0.5                   |          |       |         |       |         |      |        |       |        |       | -0.5    | -0.5           |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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.

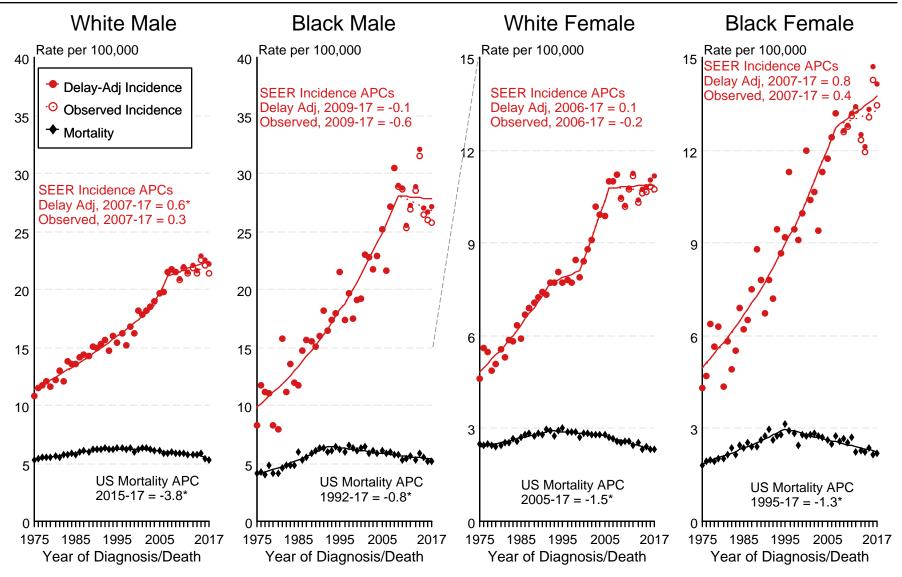
Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Kidney and Renal Pelvis, by Race and Sex



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 12.1 Cancer of the Larynx (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | nd 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | Cd      |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|------|--------|-------|--------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC  | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ed Incide                | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |      |        |       |        |       |         |         |
| All Races              | 1975-88                  | 0.0                    | 1988-17  | -2.4* |         |       |         |      |        |       |        |       | -2.4*   | -2.4*   |
| White                  | 1975-87                  | 0.1                    | 1987-17  | -2.3* |         |       |         |      |        |       |        |       | -2.3*   | -2.3*   |
| Black                  | 1975-90                  | 1.1                    | 1990-17  | -2.7* |         |       |         |      |        |       |        |       | -2.7*   | -2.7*   |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |      |        |       |        |       |         |         |
| All Races              | 2000-02                  | -4.7*                  | 2002-08  | -1.5* | 2008-17 | -2.8* |         |      |        |       |        |       | -2.8*   | -2.8*   |
| White                  | 2000-02                  | -4.9                   | 2002-08  | -1.1  | 2008-17 | -2.8* |         |      |        |       |        |       | -2.8*   | -2.8*   |
| White NH <sup>ef</sup> | 2000-17                  | -2.0*                  |          |       |         |       |         |      |        |       |        |       | -2.0*   | -2.0*   |
| Black                  | 2000-17                  | -2.8*                  |          |       |         |       |         |      |        |       |        |       | -2.8*   | -2.8*   |
| Black NH <sup>ef</sup> | 2000-17                  | -2.8*                  |          |       |         |       |         |      |        |       |        |       | -2.8*   | -2.8*   |
| API <sup>e</sup>       | 2000-07                  | -6.2*                  | 2007-10  | 10.0  | 2010-14 | -11.1 | 2014-17 | 5.6  |        |       |        |       | -1.3    | 1.2     |
| AI/AN <sup>eg</sup>    | 2000-17                  | 0.8                    |          |       |         |       |         |      |        |       |        |       | 0.8     | 0.8     |
| Hispanic <sup>f</sup>  | 2000-17                  | -2.7*                  |          |       |         |       |         |      |        |       |        |       | -2.7*   | -2.7*   |
| U.S. Cancer Mortali    | ty <sup>c</sup> , 1975-  | 2017                   |          |       |         |       |         |      |        |       |        |       |         |         |
| All Races              | 1975-94                  | -0.4*                  | 1994-17  | -2.3* |         |       |         |      |        |       |        |       | -2.3*   | -2.3*   |
| White                  | 1975-94                  | -0.7*                  | 1994-17  | -1.9* |         |       |         |      |        |       |        |       | -1.9*   | -1.9*   |
| Black                  | 1975-94                  | 1.1*                   | 1994-17  | -3.5* |         |       |         |      |        |       |        |       | -3.5*   | -3.5*   |
| U.S. Cancer Mortali    | Lty <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |      |        |       |        |       |         |         |
| All Races              | 2000-17                  | -2.3*                  |          |       |         |       |         |      |        |       |        |       | -2.3*   | -2.3*   |
| White                  | 2000-17                  | -2.0*                  |          |       |         |       |         |      |        |       |        |       | -2.0*   | -2.0*   |
| White NH <sup>ef</sup> | 2000-17                  | -1.9*                  |          |       |         |       |         |      |        |       |        |       | -1.9*   | -1.9*   |
| Black                  | 2000-17                  | -3.5*                  |          |       |         |       |         |      |        |       |        |       | -3.5*   | -3.5*   |
| Black NH <sup>ef</sup> | 2000-17                  | -3.5*                  |          |       |         |       |         |      |        |       |        |       | -3.5*   | -3.5*   |
| API <sup>e</sup>       | 2000-17                  | -2.1*                  |          |       |         |       |         |      |        |       |        |       | -2.1*   | -2.1*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -2.1                   |          |       |         |       |         |      |        |       |        |       | -2.1    | -2.1    |
| Hispanicf              | 2000-17                  | -2.4*                  |          |       |         |       |         |      |        |       |        |       | -2.4*   | -2.4*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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. Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

#### Table 12.2 Cancer of the Larynx (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | nd 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | C <sub>q</sub> |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|------|--------|-------|--------|-------|---------|----------------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC  | Years  | APC   | Years  | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjus     | ted Incide               | nceª, 19°              | 75-2017  |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 1975-87                  | -0.2                   | 1987-17  | -2.5* |         |       |         |      |        |       |        |       | -2.5*   | -2.5*          |
| White                  | 1975-85                  | 0.2                    | 1985-17  | -2.4* |         |       |         |      |        |       |        |       | -2.4*   | -2.4*          |
| Black                  | 1975-90                  | 0.8                    | 1990-17  | -2.6* |         |       |         |      |        |       |        |       | -2.6*   | -2.6*          |
| SEER 21 Delay-Adju     | sted Incid               | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 2000-13                  | -2.4*                  | 2013-17  | -3.6* |         |       |         |      |        |       |        |       | -2.9*   | -3.6*          |
| White                  | 2000-17                  | -2.4*                  |          |       |         |       |         |      |        |       |        |       | -2.4*   | -2.4*          |
| White NH <sup>ef</sup> | 2000-17                  | -2.2*                  |          |       |         |       |         |      |        |       |        |       | -2.2*   | -2.2*          |
| Black                  | 2000-17                  | -3.1*                  |          |       |         |       |         |      |        |       |        |       | -3.1*   | -3.1*          |
| Black NH <sup>ef</sup> | 2000-17                  | -3.0*                  |          |       |         |       |         |      |        |       |        |       | -3.0*   | -3.0*          |
| API <sup>e</sup>       | 2000-07                  | -6.7*                  | 2007-10  | 10.1  | 2010-14 | -11.2 | 2014-17 | 5.9  |        |       |        |       | -1.2    | 1.3            |
| AI/AN <sup>eg</sup>    | 2000-17                  | 1.6                    |          |       |         |       |         |      |        |       |        |       | 1.6     | 1.6            |
| Hispanic <sup>f</sup>  | 2000-17                  | -2.9*                  |          |       |         |       |         |      |        |       |        |       | -2.9*   | -2.9*          |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 1975-94                  | -0.8*                  | 1994-17  | -2.5* |         |       |         |      |        |       |        |       | -2.5*   | -2.5*          |
| White                  | 1975-93                  | -1.1*                  | 1993-17  | -2.2* |         |       |         |      |        |       |        |       | -2.2*   | -2.2*          |
| Black                  | 1975-94                  | 1.2*                   | 1994-17  | -3.6* |         |       |         |      |        |       |        |       | -3.6*   | -3.6*          |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 2000-17                  | -2.5*                  |          |       |         |       |         |      |        |       |        |       | -2.5*   | -2.5*          |
| White                  | 2000-17                  | -2.2*                  |          |       |         |       |         |      |        |       |        |       | -2.2*   | -2.2*          |
| White NH <sup>ef</sup> | 2000-17                  | -2.2*                  |          |       |         |       |         |      |        |       |        |       | -2.2*   | -2.2*          |
| Black                  | 2000-17                  | -3.7*                  |          |       |         |       |         |      |        |       |        |       | -3.7*   | -3.7*          |
| Black NH <sup>ef</sup> | 2000-17                  | -3.6*                  |          |       |         |       |         |      |        |       |        |       | -3.6*   | -3.6*          |
| API <sup>e</sup>       | 2000-17                  | -2.5*                  |          |       |         |       |         |      |        |       |        |       | -2.5*   | -2.5*          |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.3                   |          |       |         |       |         |      |        |       |        |       | -1.3    | -1.3           |
| Hispanicf              | 2000-17                  | -2.5*                  |          |       |         |       |         |      |        |       |        |       | -2.5*   | -2.5*          |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

#### Table 12.3 Cancer of the Larynx (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                                | JP Tre                    | nd 1                   | JP Tre   | end 2 | JP Tr   | end 3 | JP Tr | end 4 | JP Tre | end 5 | JP Tr | end 6 | AAI     | $C_q$   |
|--------------------------------|---------------------------|------------------------|----------|-------|---------|-------|-------|-------|--------|-------|-------|-------|---------|---------|
|                                | Years                     | APC                    | Years    | APC   | Years   | APC   | Years | APC   | Years  | APC   | Years | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adju              | sted Incider              | nce <sup>a</sup> , 19  | 75-2017  |       |         |       |       |       |        |       |       |       |         |         |
| All Races                      | 1975-89                   | 1.8*                   | 1989-17  | -2.5* |         |       |       |       |        |       |       |       | -2.5*   | -2.5*   |
| White                          | 1975-89                   | 1.6*                   | 1989-17  | -2.3* |         |       |       |       |        |       |       |       | -2.3*   | -2.3*   |
| Black                          | 1975-89                   | 4.0*                   | 1989-17  | -3.0* |         |       |       |       |        |       |       |       | -3.0*   | -3.0*   |
| SEER 21 Delay-Adj              | usted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |       |       |        |       |       |       |         |         |
| All Races                      | 2000-17                   |                        |          |       |         |       |       |       |        |       |       |       | -2.3*   | -2.3*   |
| White                          | 2000-17                   | -2.2*                  |          |       |         |       |       |       |        |       |       |       | -2.2*   | -2.2*   |
| White NH <sup>ef</sup>         | 2000-17                   | -1.9*                  |          |       |         |       |       |       |        |       |       |       | -1.9*   | -1.9*   |
| Black                          | 2000-17                   | -2.2*                  |          |       |         |       |       |       |        |       |       |       | -2.2*   | -2.2*   |
| Black NH <sup>ef</sup>         | 2000-17                   | -2.2*                  |          |       |         |       |       |       |        |       |       |       | -2.2*   | -2.2*   |
| API <sup>e</sup>               | 2000-17                   | -1.7                   |          |       |         |       |       |       |        |       |       |       | -1.7    | -1.7    |
| AI/AN <sup>eg</sup>            | _                         | -                      |          |       |         |       |       |       |        |       |       |       | -       | _       |
| $	exttt{Hispanic}^{	exttt{f}}$ | 2000-02                   | -18.7                  | 2002-17  | -1.7* |         |       |       |       |        |       |       |       | -1.7*   | -1.7*   |
| U.S. Cancer Morta              | lity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |       |       |        |       |       |       |         |         |
| All Races                      | 1975-92                   | 1.6*                   | 1992-17  | -2.1* |         |       |       |       |        |       |       |       | -2.1*   | -2.1*   |
| White                          | 1975-92                   | 1.5*                   | 1992-17  | -1.9* |         |       |       |       |        |       |       |       | -1.9*   | -1.9*   |
| Black                          | 1975-93                   | 2.3*                   | 1993-15  | -3.4* | 2015-17 | 10.5  |       |       |        |       |       |       | -0.4    | 3.4     |
| U.S. Cancer Morta              | lity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |       |       |        |       |       |       |         |         |
| All Races                      | 2000-17                   | -2.3*                  |          |       |         |       |       |       |        |       |       |       | -2.3*   | -2.3*   |
| White                          | 2000-17                   | -2.1*                  |          |       |         |       |       |       |        |       |       |       | -2.1*   | -2.1*   |
| White NH <sup>ef</sup>         | 2000-17                   | -1.9*                  |          |       |         |       |       |       |        |       |       |       | -1.9*   | -1.9*   |
| Black                          | 2000-15                   | -3.9*                  | 2015-17  | 12.5  |         |       |       |       |        |       |       |       | -0.4    | 4.0     |
| Black NH <sup>ef</sup>         | 2000-15                   | -3.8*                  | 2015-17  | 12.7  |         |       |       |       |        |       |       |       | -0.4    | 4.1     |
| API <sup>e</sup>               | 2000-17                   | -0.7                   |          |       |         |       |       |       |        |       |       |       | -0.7    | -0.7    |
| AI/AN <sup>eg</sup>            | -                         | -                      |          |       |         |       |       |       |        |       |       |       | -       | -       |
| Hispanic <sup>f</sup>          | 2000-17                   | -3.0*                  |          |       |         |       |       |       |        |       |       |       | -3.0*   | -3.0*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).

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

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

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

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

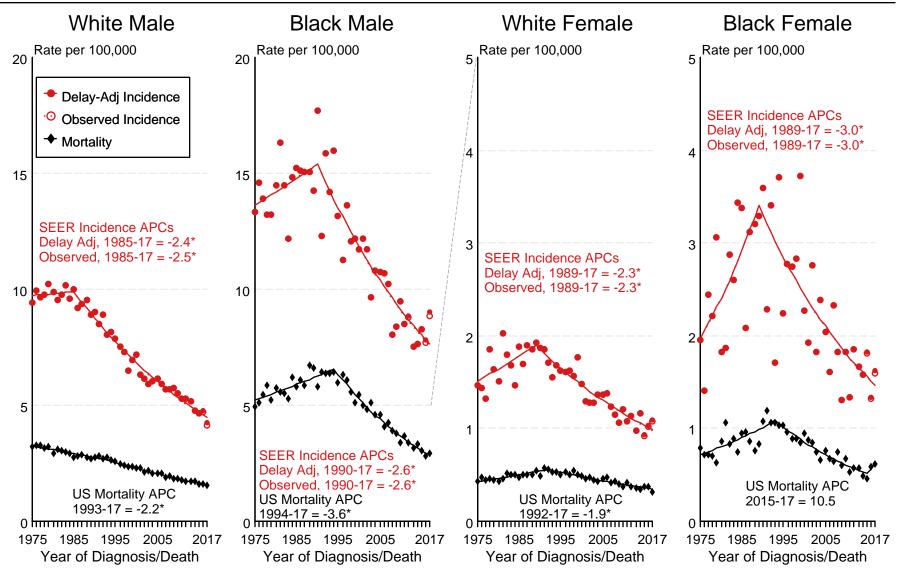
\* The APC/AAPC is significantly different from zero (p<.05).</p>

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Larynx, by Race and Sex



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

Table 13.1 Leukemia

Trends in SEER Incidence ab and U.S. Mortality Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

| White 1975-97 0.3* 1997-17 0.9* 0.3* 0.3* 0.3* 0.3*  |            |
|--|------------|
| All Races 1975-97 0.2 1997-17 0.7* 0.7* 0.9* 0.9* 0.8* 1975-17 0.3* 0.9* 0.3* 0.3* 0.3* 0.3* 0.3* 0.3* | <u>-17</u> |
| White 1975-97 0.3* 1997-17 0.9* 0.3* 0.3* 0.3* 0.3*  |            |
| Black 1975-17 0.3* 0.3*  | 7*         |
|  | 9*         |
|  | 3*         |
| SEER 21 Delay-Adjusted Incidence <sup>b</sup> , 2000-2017  |            |
| All Races 2000-08 0.3 2008-11 3.3 2011-17 -0.1 1.0 -0.   | 1          |
| White 2000-08 0.5 2008-11 3.3 2011-17 0.0 1.1 0.   | 0          |
| White NH <sup>ef</sup> 2000-08 0.5 2008-11 3.6 2011-17 0.1 1.2 0.                                      | 1          |
| Black 2000-08 -1.1 2008-12 4.6 2012-17 -0.4 1.8 -0.  | 4          |
| Black NH <sup>ef</sup> 2000-08 -1.1 2008-12 4.6 2012-17 -0.2 1.9 -0.                                   | 2          |
| API <sup>e</sup> 2000-17 0.8* 0.   | 8*         |
| AI/AN <sup>eg</sup> 2000-17 1.3 1.   | 3          |
| Hispanic <sup>f</sup> $2000-17 0.7*$ 0.7*  | 7*         |
| U.S. Cancer Mortality <sup>c</sup> , 1975-2017   |            |
| All Races 1975-80 0.6 1980-88 -0.6* 1988-91 0.7 1991-01 -0.5* 2001-13 -1.0* 2013-17 -2.4* -1.6* -2.    | 4*         |
| White 1975-00 -0.3* 2000-13 -0.9* 2013-17 -2.2* -1.5* -2.  | 2*         |
| Black 1975-93 0.6* 1993-17 -1.4* -1.   | 4*         |
| U.S. Cancer Mortality <sup>c</sup> , 2000-2017   |            |
| All Races 2000-13 -1.0* 2013-17 -2.4* -1.6* -2.  | 4*         |
| White 2000-13 -0.9* 2013-17 -2.2* -1.5* -2.  | 2*         |
| White NH <sup>ef</sup> 2000-13 -0.9* 2013-17 -2.2*   | 2*         |
| Black 2000-17 -1.6* -1.  | 6*         |
| Black NH <sup>ef</sup> 2000-17 -1.5* -1.   | 5*         |
| API <sup>e</sup> 2000-08 -0.7 2008-11 3.8 2011-15 -5.1* 2015-17 2.5 -0.6 -1.                           | 4          |
| $AI/AN^{eg}$ 2000-17 -1.7* -1.   | 7*         |
| Hispanic <sup>f</sup> $2000-17 -0.9*$ $-0.9*$  | 9*         |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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. Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Table 13.2 Leukemia

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

| White 1975-96 0.1 1996-17 0.7* 0.7*   | .6*<br>.7*<br>.3* |
|---|-------------------|
| All Races 1975-96 0.0 1996-17 0.6*  White 1975-96 0.1 1996-17 0.7*  Black 1975-17 0.3*  SEER 21 Delay-Adjusted Incidence <sup>b</sup> , 2000-2017  All Races 2000-07 0.1 2007-13 2.0* 2013-17 -1.0  0.6* 0 0.7* 0 0.7* 0 0.3* 0 | .7*               |
| White 1975-96 0.1 1996-17 0.7*  Black 1975-17 0.3*  SEER 21 Delay-Adjusted Incidence <sup>b</sup> , 2000-2017  All Races 2000-07 0.1 2007-13 2.0* 2013-17 -1.0  0.7* 0 0.7* 0 0.3* 0 0.3* 0                                     | .7*               |
| Black 1975-17 0.3* 0.3* 0 <u>SEER 21 Delay-Adjusted Incidence<sup>b</sup>, 2000-2017</u> All Races 2000-07 0.1 2007-13 2.0* 2013-17 -1.0 0.6 -1   |                   |
| <u>SEER 21 Delay-Adjusted Incidence<sup>b</sup>, 2000-2017</u> All Races 2000-07 0.1 2007-13 2.0* 2013-17 -1.0 0.6 -1   | .3*               |
| All Races 2000-07 0.1 2007-13 2.0* 2013-17 -1.0 0.6 -1  |                   |
|   |                   |
| White 2000-07 0.3 2007-13 2.0* 2013-17 -0.9 0.7 -0  | . 0               |
|   | . 9               |
| White $NH^{ef}$ 2000-08 0.4 2008-11 3.2 2011-15 0.7 2015-17 -2.0 0.9 -0   | .6                |
| Black 2000-17 0.8* 0  | .8*               |
| Black NH <sup>ef</sup> 2000-17 0.8* 0   | .8*               |
| API <sup>e</sup> 2000-17 0.8* 0   | .8*               |
| $AI/AN^{eg}$ 2000-17 2.6* 2.6*  | .6*               |
| Hispanic <sup>f</sup> 2000-17 0.5* 0.5*   | .5*               |
| U.S. Cancer Mortality <sup>c</sup> , 1975-2017  |                   |
| All Races 1975-96 -0.2* 1996-12 -0.8* 2012-17 -2.4* -1.7* -2  | .4*               |
| White 1975-01 -0.3* 2001-13 -0.9* 2013-17 -2.5* -1.6* -2  | .5*               |
| Black 1975-90 1.1* 1990-08 -1.0* 2008-17 -2.5* -2.5*  | .5*               |
| U.S. Cancer Mortality <sup>c</sup> , 2000-2017  |                   |
| All Races 2000-13 -1.0* 2013-17 -2.7* -1.7* -2  | .7*               |
| White 2000-13 -0.9* 2013-17 -2.5*   | .5*               |
| White NH <sup>ef</sup> 2000-12 -0.8* 2012-17 -2.2*  | .2*               |
| Black 2000-17 -1.8* -1  | .8*               |
| Black NH <sup>ef</sup> 2000-17 -1.7* -1   | .7*               |
| API <sup>e</sup> 2000-17 -0.4 -0  | . 4               |
| AI/AN <sup>eg</sup> 2000-17 -0.8 -0   |                   |
|   | .0*               |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

Table 13.3 Leukemia

Trends in SEER Incidence ab and U.S. Mortality Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tr   | end 3 | JP Tr | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | Cq      |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|-------|-------|--------|-------|--------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |       |       |        |       |        |       |         |         |
| All Races              | 1975-17                  | 0.5*                   |          |       |         |       |       |       |        |       |        |       | 0.5*    | 0.5*    |
| White                  | 1975-17                  | 0.6*                   |          |       |         |       |       |       |        |       |        |       | 0.6*    | 0.6*    |
| Black                  | 1975-17                  | 0.3*                   |          |       |         |       |       |       |        |       |        |       | 0.3*    | 0.3*    |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |       |       |        |       |        |       |         |         |
| All Races              | 2000-08                  | 0.3                    | 2008-11  | 3.1   | 2011-17 | -0.1  |       |       |        |       |        |       | 0.9     | -0.1    |
| White                  | 2000-17                  | 1.0*                   |          |       |         |       |       |       |        |       |        |       | 1.0*    | 1.0*    |
| White NH <sup>ef</sup> | 2000-17                  | 1.1*                   |          |       |         |       |       |       |        |       |        |       | 1.1*    | 1.1*    |
| Black                  | 2000-08                  | -1.0*                  | 2008-13  | 3.9*  | 2013-17 | -0.3  |       |       |        |       |        |       | 2.0*    | -0.3    |
| Black NH <sup>ef</sup> | 2000-07                  | -1.5*                  | 2007-13  | 3.3*  | 2013-17 | 0.2   |       |       |        |       |        |       | 1.9*    | 0.2     |
| API <sup>e</sup>       | 2000-17                  | 0.9*                   |          |       |         |       |       |       |        |       |        |       | 0.9*    | 0.9*    |
| AI/AN <sup>eg</sup>    | 2000-17                  | 0.2                    |          |       |         |       |       |       |        |       |        |       | 0.2     | 0.2     |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.8*                   |          |       |         |       |       |       |        |       |        |       | 0.8*    | 0.8*    |
| U.S. Cancer Mortali    | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |       |       |        |       |        |       |         |         |
| All Races              | 1975-80                  | 0.7                    | 1980-00  | -0.4* | 2000-17 | -1.3* |       |       |        |       |        |       | -1.3*   | -1.3*   |
| White                  | 1975-00                  | -0.3*                  | 2000-17  | -1.2* |         |       |       |       |        |       |        |       | -1.2*   | -1.2*   |
| Black                  | 1975-93                  | 0.4*                   | 1993-17  | -1.3* |         |       |       |       |        |       |        |       | -1.3*   | -1.3*   |
| U.S. Cancer Mortali    | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |       |       |        |       |        |       |         |         |
| All Races              | 2000-17                  | -1.3*                  |          |       |         |       |       |       |        |       |        |       | -1.3*   | -1.3*   |
| White                  | 2000-17                  | -1.2*                  |          |       |         |       |       |       |        |       |        |       | -1.2*   | -1.2*   |
| White NH <sup>ef</sup> | 2000-17                  | -1.3*                  |          |       |         |       |       |       |        |       |        |       | -1.3*   | -1.3*   |
| Black                  | 2000-17                  | -1.5*                  |          |       |         |       |       |       |        |       |        |       | -1.5*   | -1.5*   |
| Black NH <sup>ef</sup> | 2000-17                  | -1.4*                  |          |       |         |       |       |       |        |       |        |       | -1.4*   | -1.4*   |
| API <sup>e</sup>       | 2000-11                  | 0.7                    | 2011-17  | -4.3* |         |       |       |       |        |       |        |       | -2.6*   | -4.3*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -2.7*                  |          |       |         |       |       |       |        |       |        |       | -2.7*   | -2.7*   |
| Hispanic <sup>f</sup>  | 2000-17                  | -0.7*                  |          |       |         |       |       |       |        |       |        |       | -0.7*   | -0.7*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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

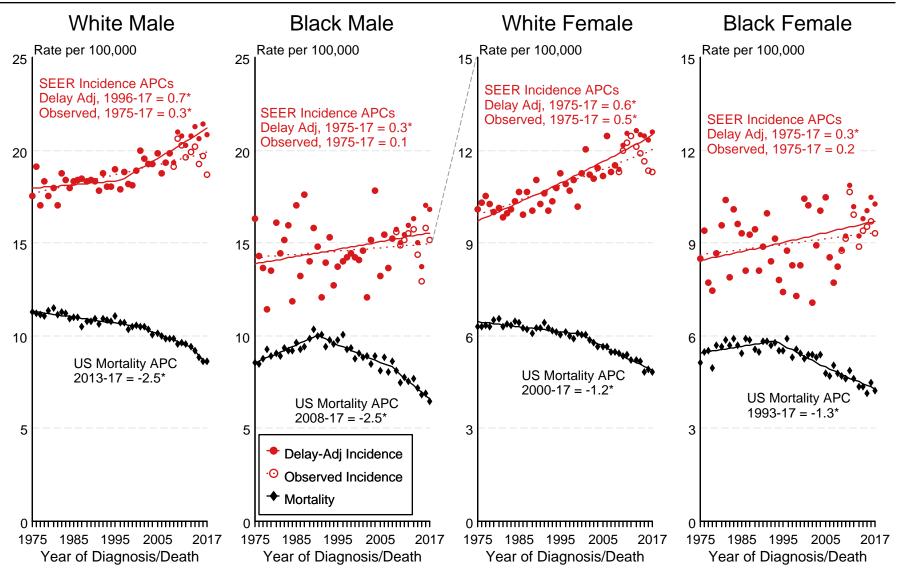
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Leukemia, by Race and Sex



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

Table 14.1 Cancer of the Liver and Intrahepatic Bile Duct (Invasive)

Trends in SEER Incidence ab and U.S. Mortality Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | nd 5 | JP Tre  | nd 6 | AAI     | PC <sup>d</sup> |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|------|---------|------|---------|-----------------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC  | Years   | APC  | 2007-17 | 2012-17         |
| SEER 9 Delay-Adjus     | ted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |      |         |      |         |                 |
| All Races              | 1975-84                  | 1.3*                   | 1984-98  | 4.8*  | 1998-01 | 0.6   | 2001-11 | 4.3*  | 2011-17 | 0.9  |         |      | 2.0*    | 0.9             |
| White                  | 1975-87                  | 1.6*                   | 1987-98  | 5.4*  | 1998-01 | -0.8  | 2001-11 | 4.9*  | 2011-17 | 1.7* |         |      | 2.7*    | 1.7*            |
| Black                  | 1975-02                  | 2.9*                   | 2002-09  | 6.2*  | 2009-17 | 0.4   |         |       |         |      |         |      | 1.0     | 0.4             |
| SEER 21 Delay-Adju     | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |      |         |      |         |                 |
| All Races              | 2000-02                  | 1.9                    | 2002-07  | 4.8*  | 2007-15 | 2.5*  | 2015-17 | -1.4  |         |      |         |      | 1.6*    | 0.5             |
| White                  | 2000-02                  | 0.6                    | 2002-06  | 5.6*  | 2006-14 | 3.4*  | 2014-17 | 0.0   |         |      |         |      | 2.2*    | 0.9             |
| White NH <sup>ef</sup> | 2000-14                  | 3.8*                   | 2014-17  | 0.1   |         |       |         |       |         |      |         |      | 2.5*    | 1.0             |
| Black                  | 2000-12                  | 4.2*                   | 2012-17  | -0.5  |         |       |         |       |         |      |         |      | 1.5*    | -0.5            |
| Black NH <sup>ef</sup> | 2000-09                  | 5.0*                   | 2009-17  | 1.0   |         |       |         |       |         |      |         |      | 1.4*    | 1.0             |
| API <sup>e</sup>       | 2000-07                  | 0.9                    | 2007-17  | -1.9* |         |       |         |       |         |      |         |      | -1.9*   | -1.9*           |
| AI/AN <sup>eg</sup>    | 2000-17                  | 3.4*                   |          |       |         |       |         |       |         |      |         |      | 3.4*    | 3.4*            |
| Hispanic <sup>f</sup>  | 2000-14                  | 2.6*                   | 2014-17  | -2.2  |         |       |         |       |         |      |         |      | 1.0     | -1.0            |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |      |         |      |         |                 |
| All Races              | 1975-80                  | 0.2                    | 1980-87  | 2.0*  | 1987-95 | 3.8*  | 1995-07 | 1.9*  | 2007-13 | 3.2* | 2013-17 | 0.6  | 2.0*    | 0.6             |
| White                  | 1975-78                  | -1.2                   | 1978-87  | 1.6*  | 1987-96 | 3.9*  | 1996-00 | 0.5   | 2000-13 | 2.8* | 2013-17 | 1.4* | 2.2*    | 1.4*            |
| Black                  | 1975-88                  | 0.8*                   | 1988-95  | 3.2*  | 1995-00 | 0.3   | 2000-13 | 2.5*  | 2013-17 | 0.1  |         |      | 1.4*    | 0.1             |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |      |         |      |         |                 |
| All Races              | 2000-04                  | 2.7*                   | 2004-07  | 1.6   | 2007-13 | 3.1*  | 2013-17 | 0.7*  |         |      |         |      | 2.0*    | 0.7*            |
| White                  | 2000-08                  | 2.4*                   | 2008-13  | 3.3*  | 2013-17 | 1.1*  |         |       |         |      |         |      | 2.3*    | 1.1*            |
| White NH <sup>ef</sup> | 2000-08                  | 2.3*                   | 2008-12  | 3.6*  | 2012-17 | 1.3*  |         |       |         |      |         |      | 2.3*    | 1.3*            |
| Black                  | 2000-13                  | 2.5*                   | 2013-17  | 0.1   |         |       |         |       |         |      |         |      | 1.4*    | 0.1             |
| Black NH <sup>ef</sup> | 2000-13                  | 2.6*                   | 2013-17  | 0.1   |         |       |         |       |         |      |         |      | 1.5*    | 0.1             |
| API <sup>e</sup>       | 2000-17                  | -1.2*                  |          |       |         |       |         |       |         |      |         |      | -1.2*   | -1.2*           |
| AI/AN <sup>eg</sup>    | 2000-17                  | 1.8*                   |          |       |         |       |         |       |         |      |         |      | 1.8*    | 1.8*            |
| Hispanicf              | 2000-17                  | 1.4*                   |          |       |         |       |         |       |         |      |         |      | 1.4*    | 1.4*            |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

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

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

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. Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 14.2 Cancer of the Liver and Intrahepatic Bile Duct (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                     | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | nd 5 | JP Tr | end 6 | AAI     | PC <sup>d</sup> |
|------------------------|----------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|------|-------|-------|---------|-----------------|
|                        | Years                      | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC  | Years | APC   | 2007-17 | 2012-17         |
| SEER 9 Delay-Adju      | usted Incider              | nceª, 19'              | 75-2017  |       |         |       |         |       |         |      |       |       |         |                 |
| All Races              | 1975-84                    | 2.2*                   | 1984-11  | 3.9*  | 2011-17 | 0.7   |         |       |         |      |       |       | 1.7*    | 0.7             |
| White                  | 1975-87                    | 1.8*                   | 1987-98  | 5.4*  | 1998-01 | -0.7  | 2001-11 | 5.0*  | 2011-17 | 1.0  |       |       | 2.3*    | 1.0             |
| Black                  | 1975-02                    | 3.1*                   | 2002-09  | 6.6*  | 2009-17 | 0.0   |         |       |         |      |       |       | 0.8     | 0.0             |
| SEER 21 Delay-Ad       | justed Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |      |       |       |         |                 |
| All Races              | 2000-08                    | 4.3*                   | 2008-15  | 2.1*  | 2015-17 | -1.3  |         |       |         |      |       |       | 1.3*    | 0.4             |
| White                  | 2000-02                    | 0.3                    | 2002-06  | 6.3*  | 2006-14 | 3.0*  | 2014-17 | -0.3  |         |      |       |       | 1.9*    | 0.5             |
| White NH <sup>ef</sup> | 2000-02                    | -1.0                   | 2002-05  | 7.0   | 2005-14 | 3.3*  | 2014-17 | -0.1  |         |      |       |       | 2.1*    | 0.7             |
| Black                  | 2000-09                    | 5.0*                   | 2009-17  | 0.9   |         |       |         |       |         |      |       |       | 1.4*    | 0.9             |
| Black NH <sup>ef</sup> | 2000-09                    | 4.9*                   | 2009-17  | 1.0   |         |       |         |       |         |      |       |       | 1.4*    | 1.0             |
| API <sup>e</sup>       | 2000-17                    | -0.9*                  |          |       |         |       |         |       |         |      |       |       | -0.9*   | -0.9*           |
| AI/AN <sup>eg</sup>    | 2000-17                    | 3.8*                   |          |       |         |       |         |       |         |      |       |       | 3.8*    | 3.8*            |
| Hispanic <sup>f</sup>  | 2000-10                    | 3.5*                   | 2010-17  | -0.2  |         |       |         |       |         |      |       |       | 0.6     | -0.2            |
| U.S. Cancer Morta      | ality <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |      |       |       |         |                 |
| All Races              | 1975-85                    | 1.5*                   | 1985-96  | 3.8*  | 1996-99 | 0.3   | 1999-13 | 2.7*  | 2013-17 | 0.6  |       |       | 1.7*    | 0.6             |
| White                  | 1975-85                    | 1.4*                   | 1985-95  | 3.9*  | 1995-06 | 2.0*  | 2006-12 | 3.4*  | 2012-17 | 1.1* |       |       | 2.1*    | 1.1*            |
| Black                  | 1975-01                    | 1.6*                   | 2001-12  | 3.0*  | 2012-17 | -0.2  |         |       |         |      |       |       | 1.2*    | -0.2            |
| U.S. Cancer Morta      | ality <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |      |       |       |         |                 |
| All Races              | 2000-13                    | 2.7*                   | 2013-17  | 0.6   |         |       |         |       |         |      |       |       | 1.7*    | 0.6             |
| White                  | 2000-07                    | 2.3*                   | 2007-12  | 3.5*  | 2012-17 | 1.1*  |         |       |         |      |       |       | 2.1*    | 1.1*            |
| White NH <sup>ef</sup> | 2000-07                    | 2.2*                   | 2007-12  | 3.5*  | 2012-17 | 1.0*  |         |       |         |      |       |       | 2.1*    | 1.0*            |
| Black                  | 2000-12                    | 2.9*                   | 2012-17  | -0.1  |         |       |         |       |         |      |       |       | 1.2*    | -0.1            |
| Black NH <sup>ef</sup> | 2000-12                    | 3.0*                   | 2012-17  | -0.2  |         |       |         |       |         |      |       |       | 1.2*    | -0.2            |
| API <sup>e</sup>       | 2000-03                    | 0.5                    | 2003-06  | -3.3  | 2006-13 | 0.2   | 2013-17 | -3.4* |         |      |       |       | -1.4*   | -3.4*           |
| AI/AN <sup>eg</sup>    | 2000-17                    | 2.3*                   |          |       |         |       |         |       |         |      |       |       | 2.3*    | 2.3*            |
| Hispanic <sup>f</sup>  | 2000-17                    | 1.3*                   |          |       |         |       |         |       |         |      |       |       | 1.3*    | 1.3*            |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 14.3 Cancer of the Liver and Intrahepatic Bile Duct (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                                | JP Tre                     | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tr | end 6 | AAI     | PC <sup>d</sup> |
|--------------------------------|----------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|-------|-------|---------|-----------------|
|                                | Years                      | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years | APC   | 2007-17 | 2012-17         |
| SEER 9 Delay-Adj               | usted Incider              | nce <sup>a</sup> , 19' | 75-2017  |       |         |       |         |       |         |       |       |       |         |                 |
| All Races                      | 1975-83                    | 0.6                    | 1983-96  | 4.2*  | 1996-17 | 2.8*  |         |       |         |       |       |       | 2.8*    | 2.8*            |
| White                          | 1975-85                    | 0.8                    | 1985-99  | 4.0*  | 1999-02 | -1.9  | 2002-17 | 3.9*  |         |       |       |       | 3.9*    | 3.9*            |
| Black                          | 1975-17                    | 2.8*                   |          |       |         |       |         |       |         |       |       |       | 2.8*    | 2.8*            |
| SEER 21 Delay-Ad               | justed Incide              | ence <sup>b</sup> , 2  | 000-2017 |       |         |       |         |       |         |       |       |       |         |                 |
| All Races                      | 2000-14                    | 3.2*                   | 2014-17  | 0.3   |         |       |         |       |         |       |       |       | 2.2*    | 1.0             |
| White                          | 2000-17                    | 3.3*                   |          |       |         |       |         |       |         |       |       |       | 3.3*    | 3.3*            |
| White NH <sup>ef</sup>         | 2000-17                    | 3.1*                   |          |       |         |       |         |       |         |       |       |       | 3.1*    | 3.1*            |
| Black                          | 2000-13                    | 3.9*                   | 2013-17  | -1.6  |         |       |         |       |         |       |       |       | 1.4     | -1.6            |
| Black NH <sup>ef</sup>         | 2000-13                    | 3.8*                   | 2013-17  | -1.8  |         |       |         |       |         |       |       |       | 1.3     | -1.8            |
| API <sup>e</sup>               | 2000-17                    | -1.1*                  |          |       |         |       |         |       |         |       |       |       | -1.1*   | -1.1*           |
| AI/AN <sup>eg</sup>            | 2000-17                    | 2.6*                   |          |       |         |       |         |       |         |       |       |       | 2.6*    | 2.6*            |
| $	exttt{Hispanic}^{	exttt{f}}$ | 2000-17                    | 2.3*                   |          |       |         |       |         |       |         |       |       |       | 2.3*    | 2.3*            |
| U.S. Cancer Morta              | ality <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |       |       |         |                 |
| All Races                      | 1975-84                    | 0.2                    | 1984-95  | 3.1*  | 1995-08 | 1.2*  | 2008-13 | 3.3*  | 2013-17 | 1.3*  |       |       | 2.4*    | 1.3*            |
| White                          | 1975-87                    | 0.6*                   | 1987-96  | 3.5*  | 1996-01 | -0.3  | 2001-17 | 2.3*  |         |       |       |       | 2.3*    | 2.3*            |
| Black                          | 1975-17                    | 1.5*                   |          |       |         |       |         |       |         |       |       |       | 1.5*    | 1.5*            |
| U.S. Cancer Morta              | ality <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |       |       |         |                 |
| All Races                      | 2000-04                    | 2.4*                   | 2004-08  | 0.7   | 2008-13 | 3.3*  | 2013-17 | 1.3*  |         |       |       |       | 2.4*    | 1.3*            |
| White                          | 2000-05                    | 2.4*                   | 2005-08  | 0.7   | 2008-13 | 3.4*  | 2013-17 | 1.7*  |         |       |       |       | 2.6*    | 1.7*            |
| White NH <sup>ef</sup>         | 2000-17                    | 2.2*                   |          |       |         |       |         |       |         |       |       |       | 2.2*    | 2.2*            |
| Black                          | 2000-17                    | 1.7*                   |          |       |         |       |         |       |         |       |       |       | 1.7*    | 1.7*            |
| Black NH <sup>ef</sup>         | 2000-17                    | 1.8*                   |          |       |         |       |         |       |         |       |       |       | 1.8*    | 1.8*            |
| API <sup>e</sup>               | 2000-17                    | -1.4*                  |          |       |         |       |         |       |         |       |       |       | -1.4*   | -1.4*           |
| AI/AN <sup>eg</sup>            | 2000-17                    | 0.8                    |          |       |         |       |         |       |         |       |       |       | 0.8     | 0.8             |
| Hispanic <sup>f</sup>          | 2000-17                    | 1.2*                   |          |       |         |       |         |       |         |       |       |       | 1.2*    | 1.2*            |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

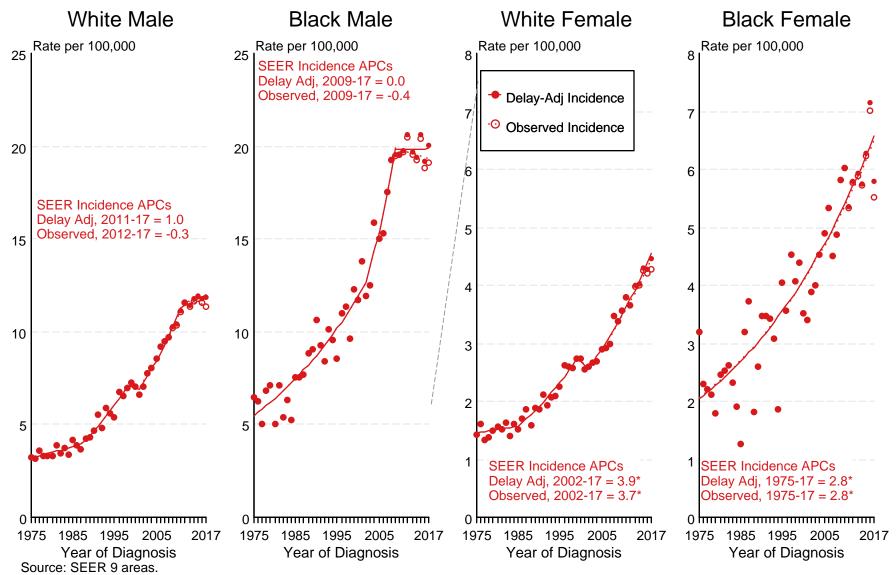
Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Figure 14.1

## SEER Observed Incidence and Delay Adjusted Incidence Rates <sup>a</sup> Cancer of the Liver and Intrahepatic Bile Duct, by Race and Sex



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 4.8, April 2020, 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).

#### Table 15.1 Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                    | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tr   | end 5 | JP Tr   | end 6 | AAI     | .>C <sub>q</sub> |
|------------------------|---------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|------------------|
|                        | Years                     | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC   | 2007-17 | 2012-17          |
| SEER 9 Delay-Adjus     | sted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |       |         |       |         |                  |
| All Races              | 1975-82                   | 2.5*                   | 1982-91  | 1.0*  | 1991-07 | -0.7* | 2007-17 | -2.1* |         |       |         |       | -2.1*   | -2.1*            |
| White                  | 1975-82                   | 2.5*                   | 1982-91  | 1.1*  | 1991-07 | -0.6* | 2007-17 | -2.0* |         |       |         |       | -2.0*   | -2.0*            |
| Black                  | 1975-84                   | 3.5*                   | 1984-03  | -0.6* | 2003-17 | -2.4* |         |       |         |       |         |       | -2.4*   | -2.4*            |
| SEER 21 Delay-Adju     | usted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |         |       |         |                  |
| All Races              | 2000-08                   | -0.7*                  | 2008-11  | -2.7* | 2011-17 | -1.7* |         |       |         |       |         |       | -2.0*   | -1.7*            |
| White                  | 2000-08                   | -0.6*                  | 2008-11  | -2.7* | 2011-17 | -1.7* |         |       |         |       |         |       | -2.0*   | -1.7*            |
| White NH <sup>ef</sup> | 2000-08                   | -0.5*                  | 2008-11  | -2.5* | 2011-17 | -1.4* |         |       |         |       |         |       | -1.8*   | -1.4*            |
| Black                  | 2000-09                   | -1.2*                  | 2009-17  | -2.5* |         |       |         |       |         |       |         |       | -2.4*   | -2.5*            |
| Black NH <sup>ef</sup> | 2000-09                   | -1.1*                  | 2009-17  | -2.6* |         |       |         |       |         |       |         |       | -2.4*   | -2.6*            |
| API <sup>e</sup>       | 2000-17                   | -0.7*                  |          |       |         |       |         |       |         |       |         |       | -0.7*   | -0.7*            |
| AI/AN <sup>eg</sup>    | 2000-17                   | -1.1*                  |          |       |         |       |         |       |         |       |         |       | -1.1*   | -1.1*            |
| Hispanic <sup>f</sup>  | 2000-07                   | -0.6                   | 2007-17  | -1.9* |         |       |         |       |         |       |         |       | -1.9*   | -1.9*            |
| U.S. Cancer Mortal     | lity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |                  |
| All Races              | 1975-80                   | 3.0*                   | 1980-90  | 1.8*  | 1990-95 | -0.2  | 1995-05 | -1.0* | 2005-14 | -2.4* | 2014-17 | -4.9* | -3.3*   | -4.3*            |
| White                  | 1975-80                   | 2.9*                   | 1980-90  | 1.8*  | 1990-95 | -0.1  | 1995-06 | -0.9* | 2006-14 | -2.5* | 2014-17 | -4.6* | -3.2*   | -4.1*            |
| Black                  | 1975-81                   | 3.5*                   | 1981-90  | 1.9*  | 1990-95 | -0.7* | 1995-04 | -1.7* | 2004-13 | -2.7* | 2013-17 | -5.1* | -3.7*   | -5.1*            |
| U.S. Cancer Mortal     | lity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |                  |
| All Races              | 2000-05                   | -1.1*                  | 2005-10  | -2.2* | 2010-14 | -2.8* | 2014-17 | -4.6* |         |       |         |       | -3.3*   | -4.2*            |
| White                  | 2000-05                   | -1.0*                  | 2005-10  | -2.0* | 2010-15 | -2.9* | 2015-17 | -5.2* |         |       |         |       | -3.2*   | -4.0*            |
| White NH <sup>ef</sup> | 2000-05                   | -0.9*                  | 2005-10  | -1.9* | 2010-15 | -2.8* | 2015-17 | -4.9* |         |       |         |       | -3.1*   | -3.9*            |
| Black                  | 2000-04                   | -1.6*                  | 2004-13  | -2.7* | 2013-17 | -5.1* |         |       |         |       |         |       | -3.7*   | -5.1*            |
| Black NH <sup>ef</sup> | 2000-05                   | -1.5*                  | 2005-08  | -3.2* | 2008-13 | -2.3* | 2013-17 | -5.2* |         |       |         |       | -3.6*   | -5.2*            |
| API <sup>e</sup>       | 2000-13                   | -1.3*                  | 2013-17  | -3.4* |         |       |         |       |         |       |         |       | -2.2*   | -3.4*            |
| AI/AN <sup>eg</sup>    | 2000-08                   | 0.6                    | 2008-17  | -3.1* |         |       |         |       |         |       |         |       | -3.1*   | -3.1*            |
| Hispanicf              | 2000-15                   | -2.2*                  | 2015-17  | -7.0* |         |       |         |       |         |       |         |       | -3.3*   | -4.6*            |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 15.2 Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tre  | end 6 | AAF     | C <sub>q</sub> |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|----------------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjust    | ted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |       |         |       |         |                |
| All Races              | 1975-82                  | 1.5*                   | 1982-91  | -0.5* | 1991-07 | -1.7* | 2007-17 | -2.6* |         |       |         |       | -2.6*   | -2.6*          |
| White                  | 1975-81                  | 1.4*                   | 1981-89  | -0.1  | 1989-07 | -1.6* | 2007-17 | -2.6* |         |       |         |       | -2.6*   | -2.6*          |
| Black                  | 1975-84                  | 2.9*                   | 1984-98  | -1.4* | 1998-17 | -2.9* |         |       |         |       |         |       | -2.9*   | -2.9*          |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |         |       |         |                |
| All Races              | 2000-09                  | -1.8*                  | 2009-12  | -3.5* | 2012-17 | -2.3* |         |       |         |       |         |       | -2.7*   | -2.3*          |
| White                  | 2000-08                  | -1.6*                  | 2008-17  | -2.8* |         |       |         |       |         |       |         |       | -2.8*   | -2.8*          |
| White NH <sup>ef</sup> | 2000-09                  | -1.5*                  | 2009-12  | -3.3* | 2012-17 | -2.1* |         |       |         |       |         |       | -2.4*   | -2.1*          |
| Black                  | 2000-17                  | -2.8*                  |          |       |         |       |         |       |         |       |         |       | -2.8*   | -2.8*          |
| Black NH <sup>ef</sup> | 2000-17                  | -2.7*                  |          |       |         |       |         |       |         |       |         |       | -2.7*   | -2.7*          |
| API <sup>e</sup>       | 2000-17                  | -1.4*                  |          |       |         |       |         |       |         |       |         |       | -1.4*   | -1.4*          |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.6*                  |          |       |         |       |         |       |         |       |         |       | -1.6*   | -1.6*          |
| Hispanic <sup>f</sup>  | 2000-17                  | -2.4*                  |          |       |         |       |         |       |         |       |         |       | -2.4*   | -2.4*          |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |                |
| All Races              | 1975-78                  | 2.4*                   | 1978-84  | 1.2*  | 1984-91 | 0.3*  | 1991-05 | -1.9* | 2005-13 | -3.0* | 2013-17 | -4.8* | -3.8*   | -4.8*          |
| White                  | 1975-82                  | 1.7*                   | 1982-91  | 0.4*  | 1991-05 | -1.8* | 2005-13 | -2.9* | 2013-17 | -4.7* |         |       | -3.7*   | -4.7*          |
| Black                  | 1975-81                  | 3.1*                   | 1981-89  | 1.6*  | 1989-93 | -0.6  | 1993-02 | -2.6* | 2002-13 | -3.4* | 2013-17 | -5.7* | -4.4*   | -5.7*          |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |                |
| All Races              | 2000-05                  | -2.0*                  | 2005-12  | -2.9* | 2012-15 | -4.0* | 2015-17 | -5.6* |         |       |         |       | -3.9*   | -4.8*          |
| White                  | 2000-05                  | -1.8*                  | 2005-11  | -2.8* | 2011-15 | -3.7* | 2015-17 | -5.6* |         |       |         |       | -3.8*   | -4.6*          |
| White NH <sup>ef</sup> | 2000-05                  | -1.7*                  | 2005-10  | -2.6* | 2010-14 | -3.2* | 2014-17 | -4.8* |         |       |         |       | -3.6*   | -4.5*          |
| Black                  | 2000-13                  | -3.3*                  | 2013-17  | -5.8* |         |       |         |       |         |       |         |       | -4.4*   | -5.8*          |
| Black NH <sup>ef</sup> | 2000-13                  | -3.2*                  | 2013-17  | -5.8* |         |       |         |       |         |       |         |       | -4.3*   | -5.8*          |
| API <sup>e</sup>       | 2000-08                  | -1.3*                  | 2008-17  | -2.9* |         |       |         |       |         |       |         |       | -2.9*   | -2.9*          |
| AI/AN <sup>eg</sup>    | 2000-08                  | 0.6                    | 2008-17  | -3.6* |         |       |         |       |         |       |         |       | -3.6*   | -3.6*          |
| Hispanic <sup>f</sup>  | 2000-15                  | -3.0*                  | 2015-17  | -7.5* |         |       |         |       |         |       |         |       | -4.0*   | -5.3*          |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

### Table 15.3 Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                     | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tr   | end 6 | AAI     | P.C.d   |
|------------------------|----------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|---------|
|                        | Years                      | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adju      | usted Incide               | nce <sup>a</sup> , 19  | 75-2017  |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-82                    | 5.6*                   | 1982-91  | 3.4*  | 1991-06 | 0.5*  | 2006-17 | -1.4* |         |       |         |       | -1.4*   | -1.4*   |
| White                  | 1975-88                    | 4.8*                   | 1988-97  | 1.4*  | 1997-07 | 0.2   | 2007-17 | -1.4* |         |       |         |       | -1.4*   | -1.4*   |
| Black                  | 1975-90                    | 4.2*                   | 1990-06  | 0.7*  | 2006-17 | -1.9* |         |       |         |       |         |       | -1.9*   | -1.9*   |
| SEER 21 Delay-Ad       | justed Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-08                    | 0.2*                   | 2008-11  | -2.3* | 2011-17 | -1.0* |         |       |         |       |         |       | -1.4*   | -1.0*   |
| White                  | 2000-08                    | 0.3*                   | 2008-11  | -2.3* | 2011-17 | -0.9* |         |       |         |       |         |       | -1.4*   | -0.9*   |
| White NH <sup>ef</sup> | 2000-08                    | 0.5*                   | 2008-11  | -2.1* | 2011-17 | -0.7* |         |       |         |       |         |       | -1.2*   | -0.7*   |
| Black                  | 2000-09                    | 0.3                    | 2009-17  | -2.0* |         |       |         |       |         |       |         |       | -1.7*   | -2.0*   |
| Black NH <sup>ef</sup> | 2000-09                    | 0.3                    | 2009-17  | -2.0* |         |       |         |       |         |       |         |       | -1.7*   | -2.0*   |
| API <sup>e</sup>       | 2000-17                    | 0.3*                   |          |       |         |       |         |       |         |       |         |       | 0.3*    | 0.3*    |
| AI/AN <sup>eg</sup>    | 2000-17                    | -0.6                   |          |       |         |       |         |       |         |       |         |       | -0.6    | -0.6    |
| Hispanic <sup>f</sup>  | 2000-17                    | -0.3*                  |          |       |         |       |         |       |         |       |         |       | -0.3*   | -0.3*   |
| U.S. Cancer Morta      | ality <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-82                    | 6.0*                   | 1982-90  | 4.2*  | 1990-95 | 1.8*  | 1995-05 | 0.2*  | 2005-14 | -1.8* | 2014-17 | -4.4* | -2.7*   | -3.7*   |
| White                  | 1975-83                    | 5.9*                   | 1983-92  | 3.8*  | 1992-02 | 0.6*  | 2002-07 | -0.6  | 2007-14 | -1.9* | 2014-17 | -4.0* | -2.6*   | -3.5*   |
| Black                  | 1975-82                    | 6.3*                   | 1982-92  | 3.7*  | 1992-04 | 0.3*  | 2004-13 | -1.9* | 2013-17 | -4.5* |         |       | -3.1*   | -4.5*   |
| U.S. Cancer Morta      | ality <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-02                    | 0.6                    | 2002-07  | -0.7* | 2007-14 | -2.0* | 2014-17 | -4.2* |         |       |         |       | -2.7*   | -3.7*   |
| White                  | 2000-02                    | 0.6                    | 2002-07  | -0.6* | 2007-14 | -1.9* | 2014-17 | -4.0* |         |       |         |       | -2.6*   | -3.5*   |
| White NH <sup>ef</sup> | 2000-02                    | 0.7                    | 2002-07  | -0.4  | 2007-14 | -1.8* | 2014-17 | -3.9* |         |       |         |       | -2.5*   | -3.3*   |
| Black                  | 2000-04                    | 0.6                    | 2004-13  | -1.8* | 2013-17 | -4.5* |         |       |         |       |         |       | -3.1*   | -4.5*   |
| Black NH <sup>ef</sup> | 2000-05                    | 0.5                    | 2005-08  | -2.8  | 2008-13 | -1.4* | 2013-17 | -4.7* |         |       |         |       | -2.9*   | -4.7*   |
| API <sup>e</sup>       | 2000-14                    | -0.4                   | 2014-17  | -4.6* |         |       |         |       |         |       |         |       | -1.8*   | -3.5*   |
| AI/AN <sup>eg</sup>    | 2000-04                    | 4.0                    | 2004-17  | -2.1* |         |       |         |       |         |       |         |       | -2.1*   | -2.1*   |
| Hispanic <sup>f</sup>  | 2000-15                    | -1.0*                  | 2015-17  | -6.4  |         |       |         |       |         |       |         |       | -2.2*   | -3.7*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

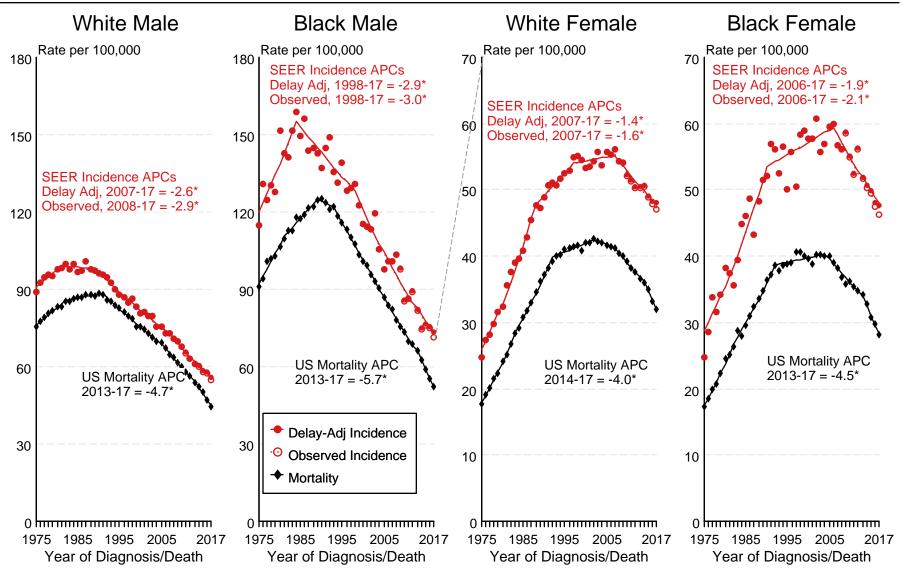
Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding

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

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>-</sup> Joinpoint regression line analysis could not be performed on data series.

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Lung and Bronchus, by Race and Sex

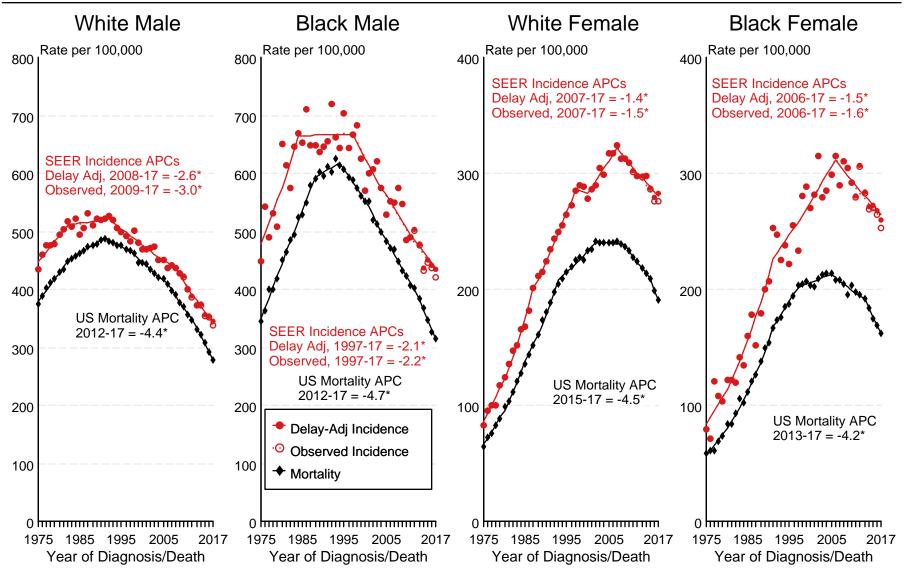


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Lung and Bronchus, Ages 65 and Over, by Race and Sex

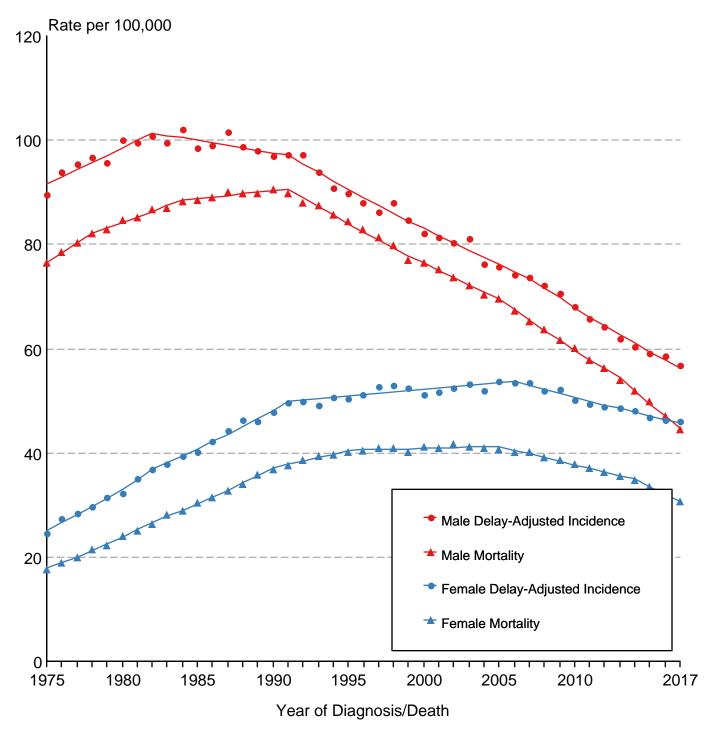


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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.

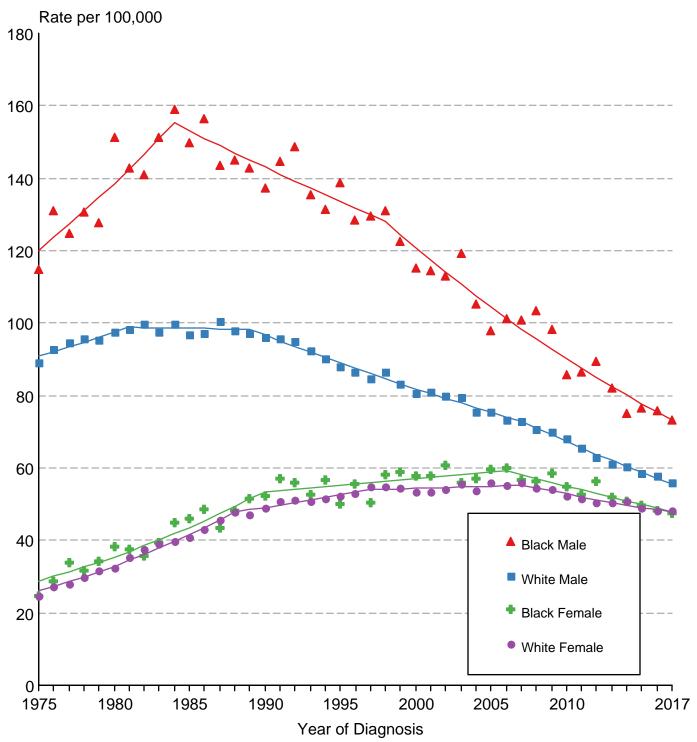
The APC is significantly different from zero (p < 0.05).

### Cancer of the Lung & Bronchus SEER Delay-Adjusted Incidence & US Death Rates, 1975-2017, All Races, By Sex



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). Regression lines are calculated using the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

### Cancer of the Lung & Bronchus SEER Delay-Adjusted Incidence, 1975-2017 By Sex and Race



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 4.8, April 2020, National Cancer Institute.

### Table 16.1 Melanoma of the Skin (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                            | JP Tre                   | nd 1                   | JP Tre    | end 2    | JP Tre     | end 3    | JP Tr     | end 4           | JP Tre     | end 5    | JP Tr       | end 6    | AAI        | C <sub>q</sub> |
|----------------------------|--------------------------|------------------------|-----------|----------|------------|----------|-----------|-----------------|------------|----------|-------------|----------|------------|----------------|
|                            | Years                    | APC                    | Years     | APC      | Years      | APC      | Years     | APC             | Years      | APC      | Years       | APC      | 2007-17    | 2012-17        |
| SEER 9 Delay-Adjus         | ted Incider              | nce <sup>a</sup> , 197 | 75-2017   |          |            |          |           |                 |            |          |             |          |            |                |
| All Races                  | 1975-81                  | 5.9*                   | 1981-05   | 2.9*     | 2005-17    | 1.6*     |           |                 |            |          |             |          | 1.6*       | 1.6*           |
| White                      | 1975-81                  | 6.2*                   | 1981-05   | 3.2*     | 2005-17    | 1.9*     |           |                 |            |          |             |          | 1.9*       | 1.9*           |
| Black                      | 1975-17                  | -0.2                   |           |          |            |          |           |                 |            |          |             |          | -0.2       | -0.2           |
| SEER 21 Delay-Adju         | sted Incide              | ence <sup>b</sup> , 20 | 000-2017  |          |            |          |           |                 |            |          |             |          |            |                |
| All Races                  | 2000-05                  | 3.5*                   | 2005-17   | 1.3*     |            |          |           |                 |            |          |             |          | 1.3*       | 1.3*           |
| White                      | 2000-05                  | 3.8*                   | 2005-17   | 1.6*     |            |          |           |                 |            |          |             |          | 1.6*       | 1.6*           |
| White NH <sup>ef</sup>     | 2000-05                  | 4.2*                   | 2005-17   | 2.0*     |            |          |           |                 |            |          |             |          | 2.0*       | 2.0*           |
| Black                      | 2000-17                  | 0.0                    |           |          |            |          |           |                 |            |          |             |          | 0.0        | 0.0            |
| Black NH <sup>ef</sup>     | 2000-17                  | 0.0                    |           |          |            |          |           |                 |            |          |             |          | 0.0        | 0.0            |
| API <sup>e</sup>           | 2000-17                  | -0.3                   |           |          |            |          |           |                 |            |          |             |          | -0.3       | -0.3           |
| AI/AN <sup>eg</sup>        | 2000-17                  | 1.9                    |           |          |            |          |           |                 |            |          |             |          | 1.9        | 1.9            |
| $	ext{Hispanic}^{	ext{f}}$ | 2000-17                  | 0.7                    |           |          |            |          |           |                 |            |          |             |          | 0.7        | 0.7            |
| U.S. Cancer Mortal         | ity <sup>c</sup> , 1975- | 2017                   |           |          |            |          |           |                 |            |          |             |          |            |                |
| Note- Alternate mo         | rtality tre              | ends adj               | usted for | ICD-9/IC | D-10 codin | g change | available | e at: <u>ht</u> | tps://surv | eillance | e.cancer.go | v/joinpo | oint/table | 1.html.        |
| All Races                  | 1975-88                  | 1.6*                   | 1988-13   | 0.0      | 2013-17    | -6.3*    |           |                 |            |          |             |          | -2.9*      | -6.3*          |
| White                      | 1975-88                  | 1.8*                   | 1988-13   | 0.2*     | 2013-17    | -6.0*    |           |                 |            |          |             |          | -2.6*      | -6.0*          |
| Black                      | 1975-11                  | -0.7*                  | 2011-17   | -5.1*    |            |          |           |                 |            |          |             |          | -3.7*      | -5.1*          |
| U.S. Cancer Mortal         | ity <sup>c</sup> , 2000- | 2017                   |           |          |            |          |           |                 |            |          |             |          |            |                |
| All Races                  | 2000-13                  | 0.2                    | 2013-17   | -6.6*    |            |          |           |                 |            |          |             |          | -2.9*      | -6.6*          |
| White                      | 2000-13                  | 0.4*                   | 2013-17   | -6.3*    |            |          |           |                 |            |          |             |          | -2.7*      | -6.3*          |
| White NH <sup>ef</sup>     | 2000-13                  | 0.6*                   | 2013-17   | -6.2*    |            |          |           |                 |            |          |             |          | -2.5*      | -6.2*          |
| Black                      | 2000-17                  | -2.1*                  |           |          |            |          |           |                 |            |          |             |          | -2.1*      | -2.1*          |
| Black NH <sup>ef</sup>     | 2000-17                  | -2.1*                  |           |          |            |          |           |                 |            |          |             |          | -2.1*      | -2.1*          |
| API <sup>e</sup>           | 2000-17                  | -1.1                   |           |          |            |          |           |                 |            |          |             |          | -1.1       | -1.1           |
| AI/AN <sup>eg</sup>        | 2000-17                  | -2.6                   |           |          |            |          |           |                 |            |          |             |          | -2.6       | -2.6           |
| Hispanic <sup>f</sup>      | 2000-17                  | -1.0*                  |           |          |            |          |           |                 |            |          |             |          | -1.0*      | -1.0*          |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

### Table 16.2 Melanoma of the Skin (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                  | nd 1                   | JP Tre    | end 2    | JP Tre     | end 3    | JP Tre    | nd 4          | JP Tre     | end 5    | JP Tre     | end 6    | AAI        | Cq      |
|------------------------|-------------------------|------------------------|-----------|----------|------------|----------|-----------|---------------|------------|----------|------------|----------|------------|---------|
|                        | Years                   | APC                    | Years     | APC      | Years      | APC      | Years     | APC           | Years      | APC      | Years      | APC      | 2007-17    | 2012-17 |
| SEER 9 Delay-Adjust    | ed Incider              | nce <sup>a</sup> , 197 | 75-2017   |          |            |          |           |               |            |          |            |          |            |         |
| All Races              | 1975-85                 | 5.6*                   | 1985-05   | 3.2*     | 2005-17    | 1.6*     |           |               |            |          |            |          | 1.6*       | 1.6*    |
| White                  | 1975-85                 | 5.9*                   | 1985-05   | 3.5*     | 2005-17    | 1.8*     |           |               |            |          |            |          | 1.8*       | 1.8*    |
| Black                  | 1975-17                 | -0.5                   |           |          |            |          |           |               |            |          |            |          | -0.5       | -0.5    |
| SEER 21 Delay-Adjus    | sted Incide             | ence <sup>b</sup> , 20 | 000-2017  |          |            |          |           |               |            |          |            |          |            |         |
| All Races              | 2000-05                 | 3.8*                   | 2005-17   | 1.4*     |            |          |           |               |            |          |            |          | 1.4*       | 1.4*    |
| White                  | 2000-05                 | 4.1*                   | 2005-17   | 1.6*     |            |          |           |               |            |          |            |          | 1.6*       | 1.6*    |
| White NH <sup>ef</sup> | 2000-05                 | 4.3*                   | 2005-17   | 2.0*     |            |          |           |               |            |          |            |          | 2.0*       | 2.0*    |
| Black                  | 2000-17                 | -0.3                   |           |          |            |          |           |               |            |          |            |          | -0.3       | -0.3    |
| Black NH <sup>ef</sup> | 2000-17                 | -0.5                   |           |          |            |          |           |               |            |          |            |          | -0.5       | -0.5    |
| APIe                   | 2000-17                 | -0.2                   |           |          |            |          |           |               |            |          |            |          | -0.2       | -0.2    |
| AI/AN <sup>eg</sup>    | 2000-17                 | 0.0                    |           |          |            |          |           |               |            |          |            |          | 0.0        | 0.0     |
| Hispanic <sup>f</sup>  | 2000-17                 | 0.3                    |           |          |            |          |           |               |            |          |            |          | 0.3        | 0.3     |
| U.S. Cancer Mortali    | ty <sup>c</sup> , 1975- | 2017                   |           |          |            |          |           |               |            |          |            |          |            |         |
| Note- Alternate mor    | rtality tre             | ends adj               | usted for | ICD-9/IC | D-10 codin | g change | available | at: <u>ht</u> | tps://surv | eillance | .cancer.go | v/joinpo | oint/table | l.html. |
| All Races              | 1975-87                 | 2.4*                   | 1987-97   | 0.9*     | 1997-00    | -1.7     | 2000-09   | 1.0*          | 2009-14    | -1.4*    | 2014-17    | -7.6*    | -3.2*      | -6.1*   |
| White                  | 1975-87                 | 2.5*                   | 1987-97   | 1.0*     | 1997-00    | -1.6     | 2000-09   | 1.1*          | 2009-14    | -1.1     | 2014-17    | -7.4*    | -3.0*      | -5.8*   |
| Black                  | 1975-17                 | -1.0*                  |           |          |            |          |           |               |            |          |            |          | -1.0*      | -1.0*   |
| U.S. Cancer Mortali    | ty <sup>c</sup> , 2000- | 2017                   |           |          |            |          |           |               |            |          |            |          |            |         |
| All Races              | 2000-09                 | 1.0*                   | 2009-14   | -1.4*    | 2014-17    | -7.6*    |           |               |            |          |            |          | -3.2*      | -6.1*   |
| White                  | 2000-09                 | 1.1*                   | 2009-14   | -1.1     | 2014-17    | -7.4*    |           |               |            |          |            |          | -3.0*      | -5.8*   |
| White NH <sup>ef</sup> | 2000-09                 | 1.3*                   | 2009-14   | -1.0     | 2014-17    | -7.2*    |           |               |            |          |            |          | -2.8*      | -5.7*   |
| Black                  | 2000-17                 | -1.6                   |           |          |            |          |           |               |            |          |            |          | -1.6       | -1.6    |
| Black NH <sup>ef</sup> | 2000-17                 | -1.6                   |           |          |            |          |           |               |            |          |            |          | -1.6       | -1.6    |
| API <sup>e</sup>       | 2000-17                 | -2.0*                  |           |          |            |          |           |               |            |          |            |          | -2.0*      | -2.0*   |
| AI/AN <sup>eg</sup>    | 2000-17                 | -1.8                   |           |          |            |          |           |               |            |          |            |          | -1.8       | -1.8    |
| Hispanic <sup>f</sup>  | 2000-17                 | -0.8                   |           |          |            |          |           |               |            |          |            |          | -0.8       | -0.8    |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 16.3 Melanoma of the Skin (Invasive)

Trends in SEER Incidence ab and U.S. Mortality Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                   | end 1                  | JP Tre    | end 2    | JP Tre     | end 3    | JP Tre    | end 4         | JP Tre      | nd 5     | JP Tre      | end 6    | AAI        | $C^d$   |
|------------------------|--------------------------|------------------------|-----------|----------|------------|----------|-----------|---------------|-------------|----------|-------------|----------|------------|---------|
|                        | Years                    | APC                    | Years     | APC      | Years      | APC      | Years     | APC           | Years       | APC      | Years       | APC      | 2007-17    | 2012-17 |
| SEER 9 Delay-Adjust    | ted Incide               | nce <sup>a</sup> , 197 | 75-2017   |          |            |          |           |               |             |          |             |          |            |         |
| All Races              | 1975-80                  | 5.5*                   | 1980-05   | 2.5*     | 2005-17    | 1.6*     |           |               |             |          |             |          | 1.6*       | 1.6*    |
| White                  | 1975-81                  | 6.2*                   | 1981-93   | 2.1*     | 1993-05    | 3.5*     | 2005-12   | 0.9           | 2012-15     | 4.9      | 2015-17     | -1.3     | 1.7        | 1.7     |
| Black                  | 1975-17                  | -0.2                   |           |          |            |          |           |               |             |          |             |          | -0.2       | -0.2    |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017  |          |            |          |           |               |             |          |             |          |            |         |
| All Races              | 2000-17                  | 1.6*                   |           |          |            |          |           |               |             |          |             |          | 1.6*       | 1.6*    |
| White                  | 2000-17                  | 1.9*                   |           |          |            |          |           |               |             |          |             |          | 1.9*       | 1.9*    |
| White NH <sup>ef</sup> | 2000-17                  | 2.3*                   |           |          |            |          |           |               |             |          |             |          | 2.3*       | 2.3*    |
| Black                  | 2000-17                  | 0.2                    |           |          |            |          |           |               |             |          |             |          | 0.2        | 0.2     |
| Black NH <sup>ef</sup> | 2000-17                  | 0.3                    |           |          |            |          |           |               |             |          |             |          | 0.3        | 0.3     |
| API <sup>e</sup>       | 2000-17                  | -0.4                   |           |          |            |          |           |               |             |          |             |          | -0.4       | -0.4    |
| AI/AN <sup>eg</sup>    | 2000-17                  | 4.3*                   |           |          |            |          |           |               |             |          |             |          | 4.3*       | 4.3*    |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.8                    |           |          |            |          |           |               |             |          |             |          | 0.8        | 0.8     |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | 2017                   |           |          |            |          |           |               |             |          |             |          |            |         |
| Note- Alternate mos    | rtality tre              | ends adj               | usted for | ICD-9/IC | D-10 codin | g change | available | at: <u>ht</u> | tps://surve | eillance | e.cancer.go | v/joinpo | oint/table | 1.html. |
| All Races              | 1975-88                  | 0.8*                   | 1988-13   | -0.5*    | 2013-17    | -6.0*    |           |               |             |          |             |          | -3.0*      | -6.0*   |
| White                  | 1975-86                  | 1.1*                   | 1986-13   | -0.3*    | 2013-17    | -5.8*    |           |               |             |          |             |          | -2.8*      | -5.8*   |
| Black                  | 1975-17                  | -1.1*                  |           |          |            |          |           |               |             |          |             |          | -1.1*      | -1.1*   |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 2000- | 2017                   |           |          |            |          |           |               |             |          |             |          |            |         |
| All Races              | 2000-13                  | -0.5*                  | 2013-17   | -6.2*    |            |          |           |               |             |          |             |          | -3.0*      | -6.2*   |
| White                  | 2000-13                  | -0.2                   | 2013-17   | -6.0*    |            |          |           |               |             |          |             |          | -2.8*      | -6.0*   |
| White NH <sup>ef</sup> | 2000-13                  | 0.0                    | 2013-17   | -5.8*    |            |          |           |               |             |          |             |          | -2.6*      | -5.8*   |
| Black                  | 2000-17                  | -2.5*                  |           |          |            |          |           |               |             |          |             |          | -2.5*      | -2.5*   |
| Black NH <sup>ef</sup> | 2000-17                  | -2.4*                  |           |          |            |          |           |               |             |          |             |          | -2.4*      | -2.4*   |
| API <sup>e</sup>       | 2000-17                  | -0.5                   |           |          |            |          |           |               |             |          |             |          | -0.5       | -0.5    |
| AI/AN <sup>eg</sup>    | _                        | -                      |           |          |            |          |           |               |             |          |             |          | _          | -       |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.3*                  |           |          |            |          |           |               |             |          |             |          | -1.3*      | -1.3*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

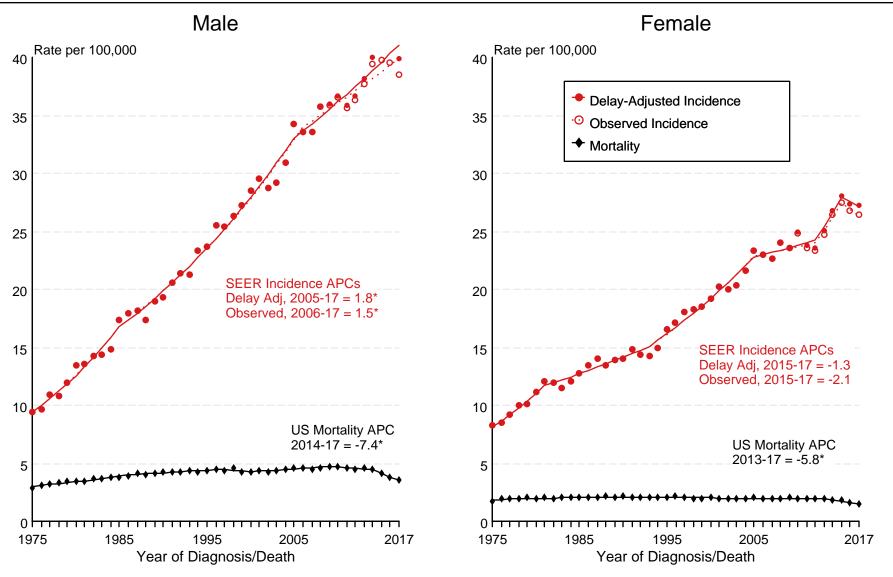
Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding

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

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. Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

### SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Melanoma of the Skin, White, by Sex



Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

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

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 4.8, April 2020, 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.

Table 18.1 Myeloma

Trends in SEER Incidence ab and U.S. Mortality  $^{\rm c}$  Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tr | end 6 | AAF     | C <sub>q</sub> |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|-------|-------|---------|----------------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjus     | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |       |       |       |         |                |
| All Races              | 1975-06                  | 0.8*                   | 2006-17  | 1.8*  |         |       |         |       |         |       |       |       | 1.8*    | 1.8*           |
| White                  | 1975-17                  | 0.9*                   |          |       |         |       |         |       |         |       |       |       | 0.9*    | 0.9*           |
| Black                  | 1975-96                  | 1.3*                   | 1996-00  | -2.3  | 2000-17 | 1.9*  |         |       |         |       |       |       | 1.9*    | 1.9*           |
| SEER 21 Delay-Adju     | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |       |       |         |                |
| All Races              | 2000-07                  | 0.6                    | 2007-10  | 3.9   | 2010-17 | 1.2*  |         |       |         |       |       |       | 1.8*    | 1.2*           |
| White                  | 2000-07                  | 0.4                    | 2007-10  | 3.8   | 2010-17 | 1.1*  |         |       |         |       |       |       | 1.7*    | 1.1*           |
| White NH <sup>ef</sup> | 2000-07                  | 0.5                    | 2007-10  | 3.8   | 2010-17 | 1.2*  |         |       |         |       |       |       | 1.8*    | 1.2*           |
| Black                  | 2000-17                  | 1.9*                   |          |       |         |       |         |       |         |       |       |       | 1.9*    | 1.9*           |
| Black NH <sup>ef</sup> | 2000-17                  | 1.9*                   |          |       |         |       |         |       |         |       |       |       | 1.9*    | 1.9*           |
| API <sup>e</sup>       | 2000-17                  | 1.4*                   |          |       |         |       |         |       |         |       |       |       | 1.4*    | 1.4*           |
| AI/AN <sup>eg</sup>    | 2000-17                  | 1.3                    |          |       |         |       |         |       |         |       |       |       | 1.3     | 1.3            |
| Hispanic <sup>f</sup>  | 2000-17                  | 1.1*                   |          |       |         |       |         |       |         |       |       |       | 1.1*    | 1.1*           |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |       |       |         |                |
| All Races              | 1975-94                  | 1.4*                   | 1994-02  | -0.7* | 2002-09 | -1.9* | 2009-12 | 1.1   | 2012-17 | -1.3* |       |       | -0.6    | -1.3*          |
| White                  | 1975-94                  | 1.4*                   | 1994-02  | -0.5* | 2002-09 | -1.9* | 2009-12 | 1.1   | 2012-17 | -1.4* |       |       | -0.6    | -1.4*          |
| Black                  | 1975-82                  | 3.3*                   | 1982-95  | 1.4*  | 1995-09 | -1.6* | 2009-17 | -0.4  |         |       |       |       | -0.5    | -0.4           |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |       |       |         |                |
| All Races              | 2000-09                  | -1.8*                  | 2009-12  | 0.9   | 2012-17 | -1.3* |         |       |         |       |       |       | -0.6    | -1.3*          |
| White                  | 2000-09                  | -1.7*                  | 2009-12  | 0.9   | 2012-17 | -1.4* |         |       |         |       |       |       | -0.7    | -1.4*          |
| White NH <sup>ef</sup> | 2000-02                  | 0.0                    | 2002-09  | -2.0* | 2009-12 | 1.1   | 2012-17 | -1.4* |         |       |       |       | -0.6    | -1.4*          |
| Black                  | 2000-09                  | -1.8*                  | 2009-17  | -0.3  |         |       |         |       |         |       |       |       | -0.5    | -0.3           |
| Black NH <sup>ef</sup> | 2000-17                  | -1.0*                  |          |       |         |       |         |       |         |       |       |       | -1.0*   | -1.0*          |
| API <sup>e</sup>       | 2000-17                  | -0.4                   |          |       |         |       |         |       |         |       |       |       | -0.4    | -0.4           |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.4                   |          |       |         |       |         |       |         |       |       |       | -1.4    | -1.4           |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.1*                  |          |       |         |       |         |       |         |       |       |       | -1.1*   | -1.1*          |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

Table 18.2 Myeloma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                                  | JP Tre                    | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tr | end 4 | JP Tre | end 5 | JP Tr | end 6 | AAI     | $C_q$   |
|----------------------------------|---------------------------|------------------------|----------|-------|---------|-------|-------|-------|--------|-------|-------|-------|---------|---------|
|                                  | Years                     | APC                    | Years    | APC   | Years   | APC   | Years | APC   | Years  | APC   | Years | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adju                | sted Incide               | nce <sup>a</sup> , 19  | 75-2017  |       |         |       |       |       |        |       |       |       |         |         |
| All Races                        | 1975-06                   | 0.8*                   | 2006-17  | 1.8*  |         |       |       |       |        |       |       |       | 1.8*    | 1.8*    |
| White                            | 1975-17                   | 1.0*                   |          |       |         |       |       |       |        |       |       |       | 1.0*    | 1.0*    |
| Black                            | 1975-17                   | 1.0*                   |          |       |         |       |       |       |        |       |       |       | 1.0*    | 1.0*    |
| SEER 21 Delay-Adj                | usted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |       |       |        |       |       |       |         |         |
| All Races                        | 2000-06                   | 0.6                    | 2006-12  | 2.8*  | 2012-17 | 0.6   |       |       |        |       |       |       | 1.6*    | 0.6     |
| White                            | 2000-06                   | 0.3                    | 2006-12  | 2.8*  | 2012-17 | 0.5   |       |       |        |       |       |       | 1.5*    | 0.5     |
| White NH <sup>ef</sup>           | 2000-17                   | 1.6*                   |          |       |         |       |       |       |        |       |       |       | 1.6*    | 1.6*    |
| Black                            | 2000-17                   | 1.9*                   |          |       |         |       |       |       |        |       |       |       | 1.9*    | 1.9*    |
| Black NH <sup>ef</sup>           | 2000-17                   | 1.9*                   |          |       |         |       |       |       |        |       |       |       | 1.9*    | 1.9*    |
| API <sup>e</sup>                 | 2000-17                   | 2.2*                   |          |       |         |       |       |       |        |       |       |       | 2.2*    | 2.2*    |
| AI/AN <sup>eg</sup>              | 2000-17                   | 3.4*                   |          |       |         |       |       |       |        |       |       |       | 3.4*    | 3.4*    |
| $	ext{	t Hispanic}^{	ext{	t f}}$ | 2000-07                   | -1.4                   | 2007-12  | 4.2*  | 2012-17 | -0.9  |       |       |        |       |       |       | 1.3     | -0.9    |
| U.S. Cancer Morta                | lity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |       |       |        |       |       |       |         |         |
| All Races                        | 1975-94                   | 1.4*                   | 1994-17  | -0.9* |         |       |       |       |        |       |       |       | -0.9*   | -0.9*   |
| White                            | 1975-94                   | 1.5*                   | 1994-17  | -0.8* |         |       |       |       |        |       |       |       | -0.8*   | -0.8*   |
| Black                            | 1975-83                   | 3.5*                   | 1983-94  | 1.0*  | 1994-17 | -1.3* |       |       |        |       |       |       | -1.3*   | -1.3*   |
| U.S. Cancer Morta                | lity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |       |       |        |       |       |       |         |         |
| All Races                        | 2000-17                   | -0.9*                  |          |       |         |       |       |       |        |       |       |       | -0.9*   | -0.9*   |
| White                            | 2000-17                   | -0.9*                  |          |       |         |       |       |       |        |       |       |       | -0.9*   | -0.9*   |
| White NH <sup>ef</sup>           | 2000-17                   | -0.9*                  |          |       |         |       |       |       |        |       |       |       | -0.9*   | -0.9*   |
| Black                            | 2000-17                   | -1.0*                  |          |       |         |       |       |       |        |       |       |       | -1.0*   | -1.0*   |
| Black NH <sup>ef</sup>           | 2000-17                   | -0.9*                  |          |       |         |       |       |       |        |       |       |       | -0.9*   | -0.9*   |
| API <sup>e</sup>                 | 2000-17                   | 0.2                    |          |       |         |       |       |       |        |       |       |       | 0.2     | 0.2     |
| AI/AN <sup>eg</sup>              | 2000-17                   | -1.5                   |          |       |         |       |       |       |        |       |       |       | -1.5    | -1.5    |
| Hispanicf                        | 2000-17                   | -0.9*                  |          |       |         |       |       |       |        |       |       |       | -0.9*   | -0.9*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

Table 18.3 Myeloma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | nd 4 | JP Tre  | end 5 | JP Tre | end 6 | AAI     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|------|---------|-------|--------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC  | Years   | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus     | ted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |      |         |       |        |       |         |         |
| All Races              | 1975-07                  | 0.6*                   | 2007-17  | 1.8*  |         |       |         |      |         |       |        |       | 1.8*    | 1.8*    |
| White                  | 1975-17                  | 0.7*                   |          |       |         |       |         |      |         |       |        |       | 0.7*    | 0.7*    |
| Black                  | 1975-17                  | 1.1*                   |          |       |         |       |         |      |         |       |        |       | 1.1*    | 1.1*    |
| SEER 21 Delay-Adju     | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |      |         |       |        |       |         |         |
| All Races              | 2000-07                  | 0.2                    | 2007-10  | 3.8   | 2010-17 | 1.2*  |         |      |         |       |        |       | 1.8*    | 1.2*    |
| White                  | 2000-03                  | -1.2                   | 2003-17  | 1.6*  |         |       |         |      |         |       |        |       | 1.6*    | 1.6*    |
| White NH <sup>ef</sup> | 2000-03                  | -1.6                   | 2003-17  | 1.7*  |         |       |         |      |         |       |        |       | 1.7*    | 1.7*    |
| Black                  | 2000-17                  | 1.8*                   |          |       |         |       |         |      |         |       |        |       | 1.8*    | 1.8*    |
| Black NH <sup>ef</sup> | 2000-17                  | 1.8*                   |          |       |         |       |         |      |         |       |        |       | 1.8*    | 1.8*    |
| API <sup>e</sup>       | 2000-17                  | 0.6                    |          |       |         |       |         |      |         |       |        |       | 0.6     | 0.6     |
| AI/AN <sup>eg</sup>    | 2000-17                  | -0.5                   |          |       |         |       |         |      |         |       |        |       | -0.5    | -0.5    |
| Hispanic <sup>f</sup>  | 2000-17                  | 1.1*                   |          |       |         |       |         |      |         |       |        |       | 1.1*    | 1.1*    |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |      |         |       |        |       |         |         |
| All Races              | 1975-93                  | 1.5*                   | 1993-02  | -0.5  | 2002-09 | -2.7* | 2009-12 | 1.9  | 2012-17 | -1.9* |        |       | -0.8    | -1.9*   |
| White                  | 1975-93                  | 1.4*                   | 1993-02  | -0.5  | 2002-09 | -2.6* | 2009-12 | 1.4  | 2012-17 | -1.8* |        |       | -0.9    | -1.8*   |
| Black                  | 1975-93                  | 2.1*                   | 1993-00  | -0.1  | 2000-09 | -2.8* | 2009-13 | 2.7  | 2013-17 | -3.6* |        |       | -0.8    | -3.6*   |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |      |         |       |        |       |         |         |
| All Races              | 2000-09                  | -2.5*                  | 2009-12  | 1.7   | 2012-17 | -1.9* |         |      |         |       |        |       | -0.8    | -1.9*   |
| White                  | 2000-09                  | -2.4*                  | 2009-12  | 1.2   | 2012-17 | -1.8* |         |      |         |       |        |       | -0.9    | -1.8*   |
| White NH <sup>ef</sup> | 2000-09                  | -2.4*                  | 2009-12  | 1.2   | 2012-17 | -1.7* |         |      |         |       |        |       | -0.9    | -1.7*   |
| Black                  | 2000-09                  | -2.8*                  | 2009-13  | 2.7   | 2013-17 | -3.6* |         |      |         |       |        |       | -0.8    | -3.6*   |
| Black NH <sup>ef</sup> | 2000-09                  | -2.7*                  | 2009-13  | 2.7   | 2013-17 | -3.5* |         |      |         |       |        |       | -0.7    | -3.5*   |
| API <sup>e</sup>       | 2000-17                  | -1.3                   |          |       |         |       |         |      |         |       |        |       | -1.3    | -1.3    |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.4                   |          |       |         |       |         |      |         |       |        |       | -1.4    | -1.4    |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.4*                  |          |       |         |       |         |      |         |       |        |       | -1.4*   | -1.4*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

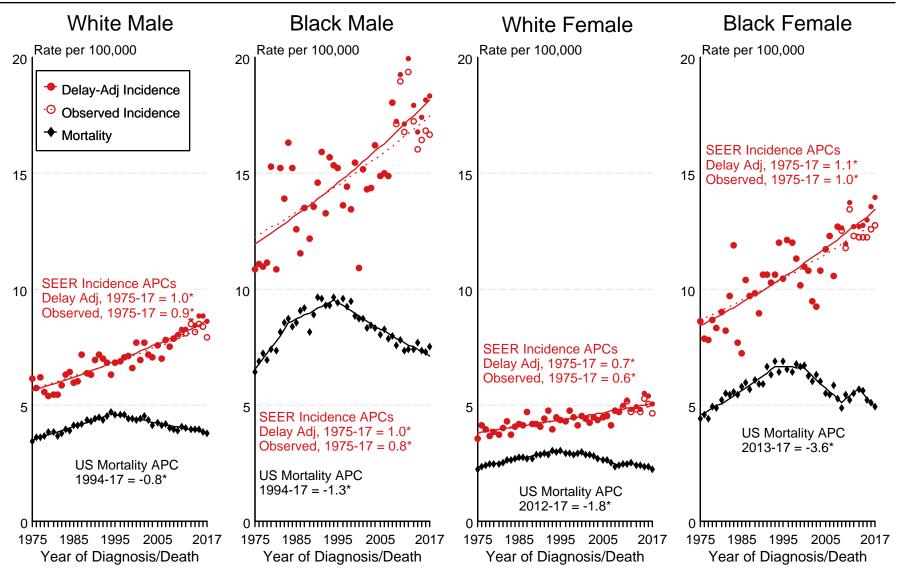
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Myeloma, by Race and Sex



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 19.1 Non-Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                            | JP Trend 1                 |                        | JP Trend 2 |       | JP Trend 3 |       | JP Trend 4 |       | JP Trend 5 |     | JP Trend 6 |     | AAPC <sup>d</sup> |         |
|----------------------------|----------------------------|------------------------|------------|-------|------------|-------|------------|-------|------------|-----|------------|-----|-------------------|---------|
|                            | Years                      | APC                    | Years      | APC   | Years      | APC   | Years      | APC   | Years      | APC | Years      | APC | 2007-17           | 2012-17 |
| SEER 9 Delay-Adju          | usted Incider              | nceª, 19'              | 75-2017    |       |            |       |            |       |            |     |            |     |                   |         |
| All Races                  | 1975-91                    | 3.6*                   | 1991-07    | 0.7*  | 2007-17    | -0.7* |            |       |            |     |            |     | -0.7*             | -0.7*   |
| White                      | 1975-90                    | 3.8*                   | 1990-07    | 0.8*  | 2007-17    | -0.7* |            |       |            |     |            |     | -0.7*             | -0.7*   |
| Black                      | 1975-95                    | 4.5*                   | 1995-17    | 0.2   |            |       |            |       |            |     |            |     | 0.2               | 0.2     |
| SEER 21 Delay-Ad           | justed Incide              | ence <sup>b</sup> , 20 | 000-2017   |       |            |       |            |       |            |     |            |     |                   |         |
| All Races                  | 2000-06                    | 0.9*                   | 2006-15    | -0.2  | 2015-17    | -1.8  |            |       |            |     |            |     | -0.6*             | -1.0    |
| White                      | 2000-07                    | 1.0*                   | 2007-17    | -0.4* |            |       |            |       |            |     |            |     | -0.4*             | -0.4*   |
| White NH <sup>ef</sup>     | 2000-07                    | 1.1*                   | 2007-11    | -0.7  | 2011-15    | 0.4   | 2015-17    | -2.3* |            |     |            |     | -0.6*             | -1.0*   |
| Black                      | 2000-17                    | 0.3*                   |            |       |            |       |            |       |            |     |            |     | 0.3*              | 0.3*    |
| Black NH <sup>ef</sup>     | 2000-17                    | 0.3*                   |            |       |            |       |            |       |            |     |            |     | 0.3*              | 0.3*    |
| API <sup>e</sup>           | 2000-17                    | 0.3                    |            |       |            |       |            |       |            |     |            |     | 0.3               | 0.3     |
| AI/AN <sup>eg</sup>        | 2000-17                    | -0.4                   |            |       |            |       |            |       |            |     |            |     | -0.4              | -0.4    |
| $	ext{Hispanic}^{	ext{f}}$ | 2000-17                    | 0.3*                   |            |       |            |       |            |       |            |     |            |     | 0.3*              | 0.3*    |
| U.S. Cancer Morta          | ality <sup>c</sup> , 1975- | 2017                   |            |       |            |       |            |       |            |     |            |     |                   |         |
| All Races                  | 1975-91                    | 2.5*                   | 1991-97    | 1.6*  | 1997-06    | -3.1* | 2006-17    | -2.2* |            |     |            |     | -2.2*             | -2.2*   |
| White                      | 1975-91                    | 2.5*                   | 1991-97    | 1.6*  | 1997-06    | -3.1* | 2006-17    | -2.2* |            |     |            |     | -2.2*             | -2.2*   |
| Black                      | 1975-96                    | 2.6*                   | 1996-17    | -2.2* |            |       |            |       |            |     |            |     | -2.2*             | -2.2*   |
| U.S. Cancer Morta          | ality <sup>c</sup> , 2000- | 2017                   |            |       |            |       |            |       |            |     |            |     |                   |         |
| All Races                  | 2000-05                    | -3.4*                  | 2005-17    | -2.2* |            |       |            |       |            |     |            |     | -2.2*             | -2.2*   |
| White                      | 2000-05                    | -3.4*                  | 2005-17    | -2.2* |            |       |            |       |            |     |            |     | -2.2*             | -2.2*   |
| White NH <sup>ef</sup>     | 2000-06                    | -3.2*                  | 2006-17    | -2.2* |            |       |            |       |            |     |            |     | -2.2*             | -2.2*   |
| Black                      | 2000-17                    | -1.9*                  |            |       |            |       |            |       |            |     |            |     | -1.9*             | -1.9*   |
| Black NH <sup>ef</sup>     | 2000-17                    | -1.9*                  |            |       |            |       |            |       |            |     |            |     | -1.9*             | -1.9*   |
| API <sup>e</sup>           | 2000-17                    | -1.7*                  |            |       |            |       |            |       |            |     |            |     | -1.7*             | -1.7*   |
| AI/AN <sup>eg</sup>        | 2000-17                    | -2.3*                  |            |       |            |       |            |       |            |     |            |     | -2.3*             | -2.3*   |
| Hispanic <sup>f</sup>      | 2000-17                    | -1.7*                  |            |       |            |       |            |       |            |     |            |     | -1.7*             | -1.7*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

#### Table 19.2 Non-Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|--------|-------|--------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus     | ted Incider              | nce <sup>a</sup> , 19  | 75-2017  |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 1975-91                  | 4.2*                   | 1991-10  | 0.4*  | 2010-17 | -0.9* |         |       |        |       |        |       | -0.6*   | -0.9*   |
| White                  | 1975-90                  | 4.4*                   | 1990-08  | 0.6*  | 2008-17 | -0.6* |         |       |        |       |        |       | -0.6*   | -0.6*   |
| Black                  | 1975-94                  | 5.4*                   | 1994-17  | -0.2  |         |       |         |       |        |       |        |       | -0.2    | -0.2    |
| SEER 21 Delay-Adju     | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 2000-07                  | 0.9*                   | 2007-15  | -0.2  | 2015-17 | -2.3  |         |       |        |       |        |       | -0.6    | -1.2    |
| White                  | 2000-07                  | 1.2*                   | 2007-11  | -0.7  | 2011-14 | 0.9   | 2014-17 | -1.8* |        |       |        |       | -0.6*   | -1.1*   |
| White NH <sup>ef</sup> | 2000-07                  | 1.3*                   | 2007-11  | -0.7  | 2011-15 | 0.8   | 2015-17 | -3.0* |        |       |        |       | -0.6    | -1.1    |
| Black                  | 2000-17                  | 0.1                    |          |       |         |       |         |       |        |       |        |       | 0.1     | 0.1     |
| Black NH <sup>ef</sup> | 2000-17                  | 0.1                    |          |       |         |       |         |       |        |       |        |       | 0.1     | 0.1     |
| API <sup>e</sup>       | 2000-17                  | 0.4*                   |          |       |         |       |         |       |        |       |        |       | 0.4*    | 0.4*    |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.3                   |          |       |         |       |         |       |        |       |        |       | -1.3    | -1.3    |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.1                    |          |       |         |       |         |       |        |       |        |       | 0.1     | 0.1     |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 1975-91                  | 2.7*                   | 1991-97  | 1.6*  | 1997-06 | -2.9* | 2006-17 | -2.0* |        |       |        |       | -2.0*   | -2.0*   |
| White                  | 1975-91                  | 2.6*                   | 1991-97  | 1.6*  | 1997-06 | -2.8* | 2006-17 | -2.0* |        |       |        |       | -2.0*   | -2.0*   |
| Black                  | 1975-96                  | 2.6*                   | 1996-17  | -2.3* |         |       |         |       |        |       |        |       | -2.3*   | -2.3*   |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 2000-06                  | -3.0*                  | 2006-17  | -1.9* |         |       |         |       |        |       |        |       | -1.9*   | -1.9*   |
| White                  | 2000-06                  | -3.0*                  | 2006-17  | -1.9* |         |       |         |       |        |       |        |       | -1.9*   | -1.9*   |
| White NH <sup>ef</sup> | 2000-06                  | -3.0*                  | 2006-17  | -1.9* |         |       |         |       |        |       |        |       | -1.9*   | -1.9*   |
| Black                  | 2000-17                  | -1.8*                  |          |       |         |       |         |       |        |       |        |       | -1.8*   | -1.8*   |
| Black NH <sup>ef</sup> | 2000-17                  | -1.7*                  |          |       |         |       |         |       |        |       |        |       | -1.7*   | -1.7*   |
| APIe                   | 2000-17                  | -1.4*                  |          |       |         |       |         |       |        |       |        |       | -1.4*   | -1.4*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -0.6                   |          |       |         |       |         |       |        |       |        |       | -0.6    | -0.6    |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.5*                  |          |       |         |       |         |       |        |       |        |       | -1.5*   | -1.5*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

#### Table 19.3 Non-Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                     | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tr | end 5 | JP Tr | end 6 | AAI     | .5C <sub>q</sub> |
|------------------------|----------------------------|------------------------|----------|-------|---------|-------|---------|-------|-------|-------|-------|-------|---------|------------------|
|                        | Years                      | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years | APC   | Years | APC   | 2007-17 | 2012-17          |
| SEER 9 Delay-Adj       | usted Incider              | nceª, 19'              | 75-2017  |       |         |       |         |       |       |       |       |       |         |                  |
| All Races              | 1975-90                    | 2.8*                   | 1990-04  | 1.3*  | 2004-17 | -0.6* |         |       |       |       |       |       | -0.6*   | -0.6*            |
| White                  | 1975-88                    | 3.1*                   | 1988-04  | 1.4*  | 2004-17 | -0.6* |         |       |       |       |       |       | -0.6*   | -0.6*            |
| Black                  | 1975-03                    | 3.0*                   | 2003-17  | -0.3  |         |       |         |       |       |       |       |       | -0.3    | -0.3             |
| SEER 21 Delay-Ad       | justed Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |       |       |       |       |         |                  |
| All Races              | 2000-06                    | 0.7*                   | 2006-17  | -0.4* |         |       |         |       |       |       |       |       | -0.4*   | -0.4*            |
| White                  | 2000-06                    | 0.8*                   | 2006-17  | -0.5* |         |       |         |       |       |       |       |       | -0.5*   | -0.5*            |
| White NH <sup>ef</sup> | 2000-06                    | 0.8*                   | 2006-17  | -0.5* |         |       |         |       |       |       |       |       | -0.5*   | -0.5*            |
| Black                  | 2000-17                    | 0.6*                   |          |       |         |       |         |       |       |       |       |       | 0.6*    | 0.6*             |
| Black NH <sup>ef</sup> | 2000-17                    | 0.5*                   |          |       |         |       |         |       |       |       |       |       | 0.5*    | 0.5*             |
| API <sup>e</sup>       | 2000-17                    | 0.2                    |          |       |         |       |         |       |       |       |       |       | 0.2     | 0.2              |
| AI/AN <sup>eg</sup>    | 2000-17                    | 0.4                    |          |       |         |       |         |       |       |       |       |       | 0.4     | 0.4              |
| Hispanic <sup>f</sup>  | 2000-17                    | 0.5*                   |          |       |         |       |         |       |       |       |       |       | 0.5*    | 0.5*             |
| U.S. Cancer Mort       | ality <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |       |       |       |       |         |                  |
| All Races              | 1975-94                    | 2.2*                   | 1994-97  | 1.0   | 1997-08 | -3.3* | 2008-17 | -2.5* |       |       |       |       | -2.5*   | -2.5*            |
| White                  | 1975-97                    | 2.1*                   | 1997-04  | -3.8* | 2004-17 | -2.6* |         |       |       |       |       |       | -2.6*   | -2.6*            |
| Black                  | 1975-96                    | 2.7*                   | 1996-17  | -2.2* |         |       |         |       |       |       |       |       | -2.2*   | -2.2*            |
| U.S. Cancer Mort       | ality <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |       |       |       |       |         |                  |
| All Races              | 2000-04                    | -3.9*                  | 2004-17  | -2.7* |         |       |         |       |       |       |       |       | -2.7*   | -2.7*            |
| White                  | 2000-03                    | -4.5*                  | 2003-17  | -2.7* |         |       |         |       |       |       |       |       | -2.7*   | -2.7*            |
| White NH <sup>ef</sup> | 2000-03                    | -4.3*                  | 2003-11  | -2.9* | 2011-17 | -2.3* |         |       |       |       |       |       | -2.5*   | -2.3*            |
| Black                  | 2000-02                    | 2.5                    | 2002-08  | -3.9* | 2008-14 | -0.5  | 2014-17 | -4.3  |       |       |       |       | -1.8    | -3.4*            |
| Black NH <sup>ef</sup> | 2000-17                    | -2.0*                  |          |       |         |       |         |       |       |       |       |       | -2.0*   | -2.0*            |
| API <sup>e</sup>       | 2000-17                    | -2.1*                  |          |       |         |       |         |       |       |       |       |       | -2.1*   | -2.1*            |
| AI/AN <sup>eg</sup>    | 2000-17                    | -3.9*                  |          |       |         |       |         |       |       |       |       |       | -3.9*   | -3.9*            |
| Hispanic <sup>f</sup>  | 2000-17                    | -2.0*                  |          |       |         |       |         |       |       |       |       |       | -2.0*   | -2.0*            |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

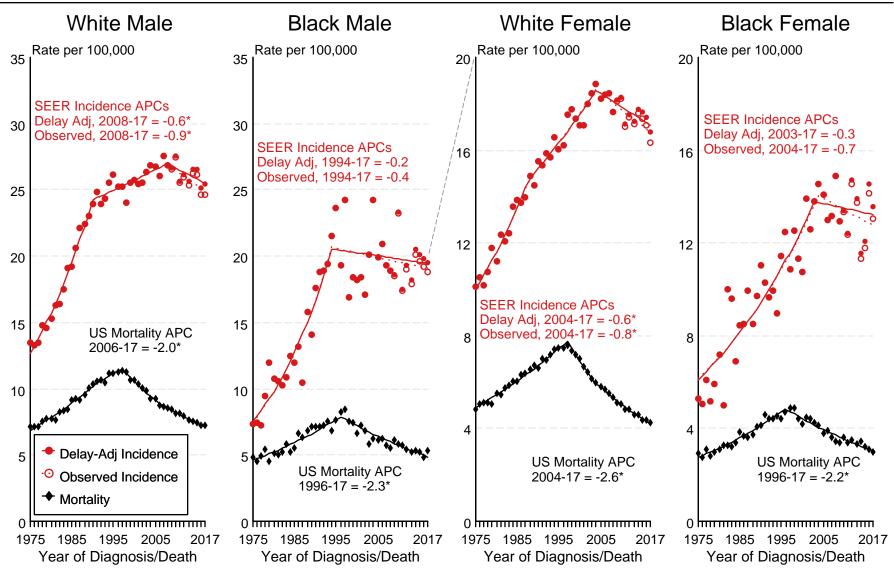
d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Non-Hodgkin Lymphoma, by Race and Sex



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 20.1 Cancer of the Oral Cavity and Pharynx (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                  | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | nd 5 | JP Tre | end 6 | AAI     | $C_q$   |
|------------------------|-------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|------|--------|-------|---------|---------|
|                        | Years                   | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC  | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ed Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |      |        |       |         |         |
| All Races              | 1975-81                 | 0.8                    | 1981-03  | -1.2* | 2003-17 | 0.9*  |         |       |         |      |        |       | 0.9*    | 0.9*    |
| White                  | 1975-03                 | -0.9*                  | 2003-17  | 1.2*  |         |       |         |       |         |      |        |       | 1.2*    | 1.2*    |
| Black                  | 1975-84                 | 2.1*                   | 1984-17  | -2.3* |         |       |         |       |         |      |        |       | -2.3*   | -2.3*   |
| SEER 21 Delay-Adjus    | sted Incide             | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |      |        |       |         |         |
| All Races              | 2000-04                 | -0.4                   | 2004-17  | 0.8*  |         |       |         |       |         |      |        |       | 0.8*    | 0.8*    |
| White                  | 2000-17                 | 1.0*                   |          |       |         |       |         |       |         |      |        |       | 1.0*    | 1.0*    |
| White NH <sup>ef</sup> | 2000-17                 | 1.3*                   |          |       |         |       |         |       |         |      |        |       | 1.3*    | 1.3*    |
| Black                  | 2000-17                 | -1.6*                  |          |       |         |       |         |       |         |      |        |       | -1.6*   | -1.6*   |
| Black NH <sup>ef</sup> | 2000-17                 | -1.6*                  |          |       |         |       |         |       |         |      |        |       | -1.6*   | -1.6*   |
| API <sup>e</sup>       | 2000-07                 | -1.5                   | 2007-17  | 1.2*  |         |       |         |       |         |      |        |       | 1.2*    | 1.2*    |
| AI/AN <sup>eg</sup>    | 2000-17                 | 1.0                    |          |       |         |       |         |       |         |      |        |       | 1.0     | 1.0     |
| Hispanic <sup>f</sup>  | 2000-17                 | -0.1                   |          |       |         |       |         |       |         |      |        |       | -0.1    | -0.1    |
| U.S. Cancer Mortali    | ty <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |      |        |       |         |         |
| All Races              | 1975-79                 | -0.5                   | 1979-93  | -1.7* | 1993-00 | -2.7* | 2000-09 | -1.4* | 2009-17 | 0.7* |        |       | 0.5*    | 0.7*    |
| White                  | 1975-06                 | -1.9*                  | 2006-17  | 0.7*  |         |       |         |       |         |      |        |       | 0.7*    | 0.7*    |
| Black                  | 1975-80                 | 3.3*                   | 1980-93  | -1.5* | 1993-08 | -4.0* | 2008-17 | -1.9* |         |      |        |       | -1.9*   | -1.9*   |
| U.S. Cancer Mortali    | ty <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |      |        |       |         |         |
| All Races              | 2000-09                 | -1.4*                  | 2009-17  | 0.7*  |         |       |         |       |         |      |        |       | 0.5*    | 0.7*    |
| White                  | 2000-09                 | -0.9*                  | 2009-17  | 1.1*  |         |       |         |       |         |      |        |       | 0.9*    | 1.1*    |
| White NH <sup>ef</sup> | 2000-09                 | -0.8*                  | 2009-17  | 1.2*  |         |       |         |       |         |      |        |       | 1.0*    | 1.2*    |
| Black                  | 2000-17                 | -2.8*                  |          |       |         |       |         |       |         |      |        |       | -2.8*   | -2.8*   |
| Black NH <sup>ef</sup> | 2000-17                 | -2.7*                  |          |       |         |       |         |       |         |      |        |       | -2.7*   | -2.7*   |
| API <sup>e</sup>       | 2000-07                 | -3.6*                  | 2007-17  | 0.5   |         |       |         |       |         |      |        |       | 0.5     | 0.5     |
| AI/AN <sup>eg</sup>    | 2000-17                 | -0.8                   |          |       |         |       |         |       |         |      |        |       | -0.8    | -0.8    |
| Hispanicf              | 2000-17                 | -0.6*                  |          |       |         |       |         |       |         |      |        |       | -0.6*   | -0.6*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

#### Table 20.3 Cancer of the Oral Cavity and Pharynx (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                     | end 1                 | JP Tre   | end 2 | JP Tre  | end 3 | JP Tr   | end 4 | JP Tr | end 5 | JP Tr | end 6 | AAI     | PC <sup>d</sup> |
|------------------------|----------------------------|-----------------------|----------|-------|---------|-------|---------|-------|-------|-------|-------|-------|---------|-----------------|
|                        | Years                      | APC                   | Years    | APC   | Years   | APC   | Years   | APC   | Years | APC   | Years | APC   | 2007-17 | 2012-17         |
| SEER 9 Delay-Adj       | usted Incide               | nce <sup>a</sup> , 19 | 75-2017  |       |         |       |         |       |       |       |       |       |         |                 |
| All Races              | 1975-83                    | -0.2                  | 1983-03  | -1.4* | 2003-17 | 1.0*  |         |       |       |       |       |       | 1.0*    | 1.0*            |
| White                  | 1975-03                    | -1.2*                 | 2003-17  | 1.4*  |         |       |         |       |       |       |       |       | 1.4*    | 1.4*            |
| Black                  | 1975-87                    | 1.9*                  | 1987-10  | -3.1* | 2010-17 | 0.1   |         |       |       |       |       |       | -0.6    | 0.1             |
| SEER 21 Delay-Ad       | justed Incid               | ence <sup>b</sup> , 2 | 000-2017 |       |         |       |         |       |       |       |       |       |         |                 |
| All Races              | 2000-17                    | 0.7*                  |          |       |         |       |         |       |       |       |       |       | 0.7*    | 0.7*            |
| White                  | 2000-17                    | 1.1*                  |          |       |         |       |         |       |       |       |       |       | 1.1*    | 1.1*            |
| White NH <sup>ef</sup> | 2000-17                    | 1.4*                  |          |       |         |       |         |       |       |       |       |       | 1.4*    | 1.4*            |
| Black                  | 2000-06                    | -3.6*                 | 2006-17  | -1.2* |         |       |         |       |       |       |       |       | -1.2*   | -1.2*           |
| Black NH <sup>ef</sup> | 2000-06                    | -3.7*                 | 2006-17  | -1.2* |         |       |         |       |       |       |       |       | -1.2*   | -1.2*           |
| API <sup>e</sup>       | 2000-17                    | 0.5                   |          |       |         |       |         |       |       |       |       |       | 0.5     | 0.5             |
| AI/AN <sup>eg</sup>    | 2000-17                    | 1.2                   |          |       |         |       |         |       |       |       |       |       | 1.2     | 1.2             |
| Hispanic <sup>f</sup>  | 2000-17                    | -0.4                  |          |       |         |       |         |       |       |       |       |       | -0.4    | -0.4            |
| U.S. Cancer Mort       | ality <sup>c</sup> , 1975- | -2017                 |          |       |         |       |         |       |       |       |       |       |         |                 |
| All Races              | 1975-93                    | -1.9*                 | 1993-00  | -3.0* | 2000-09 | -1.2* | 2009-17 | 0.9*  |       |       |       |       | 0.7*    | 0.9*            |
| White                  | 1975-05                    | -2.1*                 | 2005-17  | 0.9*  |         |       |         |       |       |       |       |       | 0.9*    | 0.9*            |
| Black                  | 1975-80                    | 3.7*                  | 1980-92  | -1.4* | 1992-08 | -3.9* | 2008-17 | -2.3* |       |       |       |       | -2.3*   | -2.3*           |
| U.S. Cancer Mort       | ality <sup>c</sup> , 2000- | -2017                 |          |       |         |       |         |       |       |       |       |       |         |                 |
| All Races              | 2000-09                    | -1.3*                 | 2009-17  | 1.0*  |         |       |         |       |       |       |       |       | 0.7*    | 1.0*            |
| White                  | 2000-09                    | -0.7*                 | 2009-17  | 1.4*  |         |       |         |       |       |       |       |       | 1.1*    | 1.4*            |
| White NH <sup>ef</sup> | 2000-09                    | -0.6                  | 2009-17  | 1.5*  |         |       |         |       |       |       |       |       | 1.3*    | 1.5*            |
| Black                  | 2000-17                    | -3.0*                 |          |       |         |       |         |       |       |       |       |       | -3.0*   | -3.0*           |
| Black NH <sup>ef</sup> | 2000-17                    | -2.9*                 |          |       |         |       |         |       |       |       |       |       | -2.9*   | -2.9*           |
| API <sup>e</sup>       | 2000-08                    | -3.4*                 | 2008-17  | 1.3   |         |       |         |       |       |       |       |       | 1.3     | 1.3             |
| AI/AN <sup>eg</sup>    | 2000-17                    | -0.6                  |          |       |         |       |         |       |       |       |       |       | -0.6    | -0.6            |
| Hispanic <sup>f</sup>  | 2000-08                    | -2.9*                 | 2008-17  | 0.4   |         |       |         |       |       |       |       |       | 0.4     | 0.4             |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 20.4 Cancer of the Oral Cavity and Pharynx (Invasive)

Trends in SEER Incidence ab and U.S. Mortality  $^{\rm c}$  Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                     | end 1                  | JP Tr    | end 2 | JP Tre  | end 3 | JP Tr | end 4 | JP Tr | end 5 | JP Tr | end 6 | AAI     | ∍C <sub>q</sub> |
|------------------------|----------------------------|------------------------|----------|-------|---------|-------|-------|-------|-------|-------|-------|-------|---------|-----------------|
|                        | Years                      | APC                    | Years    | APC   | Years   | APC   | Years | APC   | Years | APC   | Years | APC   | 2007-17 | 2012-17         |
| SEER 9 Delay-Adj       | usted Incider              | nce <sup>a</sup> , 19' | 75-2017  |       |         |       |       |       |       |       |       |       |         |                 |
| All Races              | 1975-80                    | 2.5                    | 1980-07  | -0.9* | 2007-17 | 1.0*  |       |       |       |       |       |       | 1.0*    | 1.0*            |
| White                  | 1975-81                    | 2.1*                   | 1981-05  | -0.9* | 2005-17 | 0.9*  |       |       |       |       |       |       | 0.9*    | 0.9*            |
| Black                  | 1975-17                    | -1.5*                  |          |       |         |       |       |       |       |       |       |       | -1.5*   | -1.5*           |
| SEER 21 Delay-Ad       | justed Incide              | ence <sup>b</sup> , 2  | 000-2017 |       |         |       |       |       |       |       |       |       |         |                 |
| All Races              | 2000-17                    | 0.3*                   |          |       |         |       |       |       |       |       |       |       | 0.3*    | 0.3*            |
| White                  | 2000-17                    | 0.5*                   |          |       |         |       |       |       |       |       |       |       | 0.5*    | 0.5*            |
| White NH <sup>ef</sup> | 2000-05                    | -0.3                   | 2005-17  | 1.1*  |         |       |       |       |       |       |       |       | 1.1*    | 1.1*            |
| Black                  | 2000-17                    | -1.0*                  |          |       |         |       |       |       |       |       |       |       | -1.0*   | -1.0*           |
| Black NH <sup>ef</sup> | 2000-17                    | -1.0*                  |          |       |         |       |       |       |       |       |       |       | -1.0*   | -1.0*           |
| API <sup>e</sup>       | 2000-17                    | -0.1                   |          |       |         |       |       |       |       |       |       |       | -0.1    | -0.1            |
| AI/AN <sup>eg</sup>    | 2000-17                    | 0.0                    |          |       |         |       |       |       |       |       |       |       | 0.0     | 0.0             |
| Hispanic <sup>f</sup>  | 2000-17                    | 0.2                    |          |       |         |       |       |       |       |       |       |       | 0.2     | 0.2             |
| U.S. Cancer Mort       | ality <sup>c</sup> , 1975- | -2017                  |          |       |         |       |       |       |       |       |       |       |         |                 |
| All Races              | 1975-89                    | -0.9*                  | 1989-09  | -2.2* | 2009-17 | 0.2   |       |       |       |       |       |       | 0.0     | 0.2             |
| White                  | 1975-89                    | -1.0*                  | 1989-09  | -2.0* | 2009-17 | 0.5   |       |       |       |       |       |       | 0.3     | 0.5             |
| Black                  | 1975-94                    | -0.6*                  | 1994-05  | -4.5* | 2005-17 | -1.7* |       |       |       |       |       |       | -1.7*   | -1.7*           |
| U.S. Cancer Mort       | ality <sup>c</sup> , 2000- | -2017                  |          |       |         |       |       |       |       |       |       |       |         |                 |
| All Races              | 2000-11                    | -1.6*                  | 2011-17  | 0.5   |         |       |       |       |       |       |       |       | -0.2    | 0.5             |
| White                  | 2000-13                    | -1.3*                  | 2013-17  | 2.1   |         |       |       |       |       |       |       |       | 0.2     | 2.1             |
| White NH <sup>ef</sup> | 2000-13                    | -1.2*                  | 2013-17  | 2.1   |         |       |       |       |       |       |       |       | 0.3     | 2.1             |
| Black                  | 2000-17                    | -2.2*                  |          |       |         |       |       |       |       |       |       |       | -2.2*   | -2.2*           |
| Black NH <sup>ef</sup> | 2000-17                    | -2.1*                  |          |       |         |       |       |       |       |       |       |       | -2.1*   | -2.1*           |
| API <sup>e</sup>       | 2000-17                    | -1.5*                  |          |       |         |       |       |       |       |       |       |       | -1.5*   | -1.5*           |
| AI/AN <sup>eg</sup>    | 2000-17                    | -2.6                   |          |       |         |       |       |       |       |       |       |       | -2.6    | -2.6            |
| Hispanic <sup>f</sup>  | 2000-17                    | -0.1                   |          |       |         |       |       |       |       |       |       |       | -0.1    | -0.1            |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

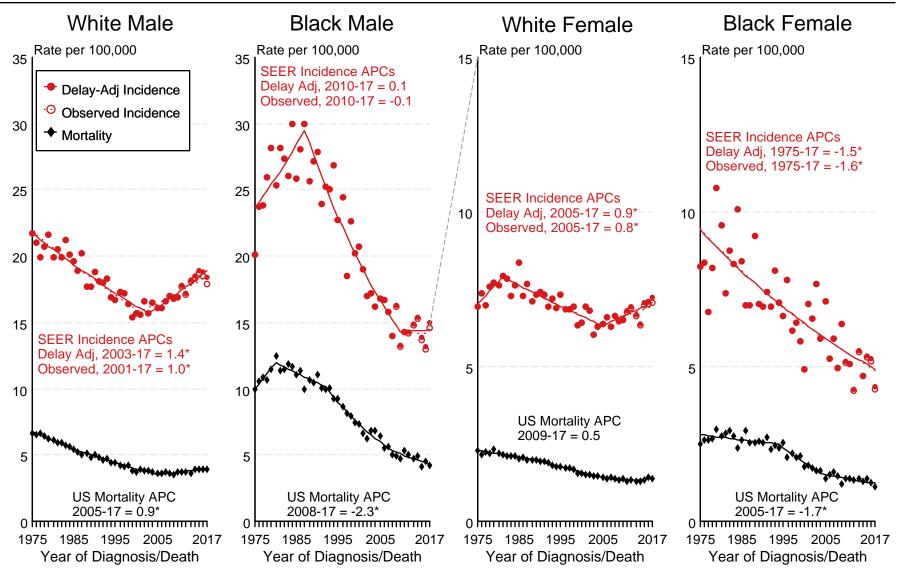
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Oral Cavity and Pharynx, by Race and Sex



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).

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 21.1 Cancer of the Ovary (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, All Ages by Race/Ethnicity

|                        | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tr   | end 5 | JP Tre | end 6 | AAI     | C <sub>q</sub> |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|--------|-------|---------|----------------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years  | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjus     | ted Incide               | nce <sup>a</sup> , 19  | 75-2017  |       |         |       |         |       |         |       |        |       |         |                |
| All Races              | 1975-87                  | 0.1                    | 1987-10  | -0.9* | 2010-17 | -2.7* |         |       |         |       |        |       | -2.3*   | -2.7*          |
| White                  | 1975-87                  | 0.2                    | 1987-10  | -0.9* | 2010-17 | -2.9* |         |       |         |       |        |       | -2.5*   | -2.9*          |
| Black                  | 1975-17                  | -0.5*                  |          |       |         |       |         |       |         |       |        |       | -0.5*   | -0.5*          |
| SEER 21 Delay-Adju     | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |        |       |         |                |
| All Races              | 2000-17                  | -1.6*                  |          |       |         |       |         |       |         |       |        |       | -1.6*   | -1.6*          |
| White                  | 2000-15                  | -1.6*                  | 2015-17  | -4.6  |         |       |         |       |         |       |        |       | -2.3*   | -3.1*          |
| White NH <sup>ef</sup> | 2000-15                  | -1.7*                  | 2015-17  | -5.2* |         |       |         |       |         |       |        |       | -2.5*   | -3.5*          |
| Black                  | 2000-17                  | -0.6*                  |          |       |         |       |         |       |         |       |        |       | -0.6*   | -0.6*          |
| Black NH <sup>ef</sup> | 2000-17                  | -0.6*                  |          |       |         |       |         |       |         |       |        |       | -0.6*   | -0.6*          |
| API <sup>e</sup>       | 2000-17                  | -0.3                   |          |       |         |       |         |       |         |       |        |       | -0.3    | -0.3           |
| AI/AN <sup>eg</sup>    | 2000-17                  | -2.2*                  |          |       |         |       |         |       |         |       |        |       | -2.2*   | -2.2*          |
| Hispanic <sup>f</sup>  | 2000-17                  | -0.8*                  |          |       |         |       |         |       |         |       |        |       | -0.8*   | -0.8*          |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |        |       |         |                |
| All Races              | 1975-82                  | -1.2*                  | 1982-92  | 0.3*  | 1992-98 | -1.2* | 1998-03 | 0.6   | 2003-17 | -2.2* |        |       | -2.2*   | -2.2*          |
| White                  | 1975-81                  | -1.5*                  | 1981-92  | 0.3*  | 1992-98 | -1.0* | 1998-03 | 0.7   | 2003-17 | -2.2* |        |       | -2.2*   | -2.2*          |
| Black                  | 1975-02                  | 0.0                    | 2002-17  | -1.8* |         |       |         |       |         |       |        |       | -1.8*   | -1.8*          |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |        |       |         |                |
| All Races              | 2000-04                  | -0.3                   | 2004-17  | -2.3* |         |       |         |       |         |       |        |       | -2.3*   | -2.3*          |
| White                  | 2000-05                  | -0.7                   | 2005-17  | -2.4* |         |       |         |       |         |       |        |       | -2.4*   | -2.4*          |
| White NH <sup>ef</sup> | 2000-05                  | -0.6                   | 2005-17  | -2.4* |         |       |         |       |         |       |        |       | -2.4*   | -2.4*          |
| Black                  | 2000-17                  | -1.6*                  |          |       |         |       |         |       |         |       |        |       | -1.6*   | -1.6*          |
| Black NH <sup>ef</sup> | 2000-17                  | -1.5*                  |          |       |         |       |         |       |         |       |        |       | -1.5*   | -1.5*          |
| API <sup>e</sup>       | 2000-17                  | -0.8*                  |          |       |         |       |         |       |         |       |        |       | -0.8*   | -0.8*          |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.1                   |          |       |         |       |         |       |         |       |        |       | -1.1    | -1.1           |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.4*                  |          |       |         |       |         |       |         |       |        |       | -1.4*   | -1.4*          |

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

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> 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  $^{\rm c}$  Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Ages <65 by Race/Ethnicity

|                                | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tr   | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tr | end 6 | AAI     | $C_q$   |
|--------------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|-------|-------|---------|---------|
|                                | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus             | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |       |       |       |         |         |
| All Races                      | 1975-17                  | -1.1*                  |          |       |         |       |         |       |         |       |       |       | -1.1*   | -1.1*   |
| White                          | 1975-15                  | -1.1*                  | 2015-17  | -8.0  |         |       |         |       |         |       |       |       | -2.7*   | -4.6    |
| Black                          | 1975-17                  | -0.6*                  |          |       |         |       |         |       |         |       |       |       | -0.6*   | -0.6*   |
| SEER 21 Delay-Adju             | sted Incid               | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |       |       |         |         |
| All Races                      | 2000-17                  | -1.3*                  |          |       |         |       |         |       |         |       |       |       | -1.3*   | -1.3*   |
| White                          | 2000-17                  | -1.7*                  |          |       |         |       |         |       |         |       |       |       | -1.7*   | -1.7*   |
| White NH <sup>ef</sup>         | 2000-17                  | -1.9*                  |          |       |         |       |         |       |         |       |       |       | -1.9*   | -1.9*   |
| Black                          | 2000-17                  | 0.2                    |          |       |         |       |         |       |         |       |       |       | 0.2     | 0.2     |
| Black NH <sup>ef</sup>         | 2000-17                  | 0.3                    |          |       |         |       |         |       |         |       |       |       | 0.3     | 0.3     |
| API <sup>e</sup>               | 2000-17                  | 0.2                    |          |       |         |       |         |       |         |       |       |       | 0.2     | 0.2     |
| AI/AN <sup>eg</sup>            | 2000-17                  | -2.8*                  |          |       |         |       |         |       |         |       |       |       | -2.8*   | -2.8*   |
| $	exttt{Hispanic}^{	exttt{f}}$ | 2000-17                  | -0.2                   |          |       |         |       |         |       |         |       |       |       | -0.2    | -0.2    |
| U.S. Cancer Mortal             | ity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |         |       |       |       |         |         |
| All Races                      | 1975-82                  | -2.9*                  | 1982-94  | -1.3* | 1994-98 | -2.6* | 1998-02 | 0.5   | 2002-17 | -2.5* |       |       | -2.5*   | -2.5*   |
| White                          | 1975-80                  | -3.3*                  | 1980-99  | -1.5* | 1999-02 | 0.4   | 2002-17 | -2.7* |         |       |       |       | -2.7*   | -2.7*   |
| Black                          | 1975-96                  | -1.9*                  | 1996-01  | 0.6   | 2001-17 | -1.8* |         |       |         |       |       |       | -1.8*   | -1.8*   |
| U.S. Cancer Mortal             | ity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |         |       |       |       |         |         |
| All Races                      | 2000-17                  | -2.4*                  |          |       |         |       |         |       |         |       |       |       | -2.4*   | -2.4*   |
| White                          | 2000-02                  | 1.1                    | 2002-17  | -2.7* |         |       |         |       |         |       |       |       | -2.7*   | -2.7*   |
| White NH <sup>ef</sup>         | 2000-02                  | 1.3                    | 2002-17  | -2.8* |         |       |         |       |         |       |       |       | -2.8*   | -2.8*   |
| Black                          | 2000-17                  | -1.7*                  |          |       |         |       |         |       |         |       |       |       | -1.7*   | -1.7*   |
| Black NH <sup>ef</sup>         | 2000-17                  | -1.6*                  |          |       |         |       |         |       |         |       |       |       | -1.6*   | -1.6*   |
| API <sup>e</sup>               | 2000-14                  | -0.8*                  | 2014-17  | 4.8   |         |       |         |       |         |       |       |       | 1.0     | 3.4     |
| AI/AN <sup>eg</sup>            | 2000-17                  | -1.1                   |          |       |         |       |         |       |         |       |       |       | -1.1    | -1.1    |
| Hispanic <sup>f</sup>          | 2000-17                  | -1.0*                  |          |       |         |       |         |       |         |       |       |       | -1.0*   | -1.0*   |

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

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

<sup>\*</sup> The ADC/AADC is significantly different from gove (no 05)

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

#### Table 21.3 Cancer of the Ovary (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Ages 65+ by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | C <sub>q</sub> |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|--------|-------|--------|-------|---------|----------------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjus     | ted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 1975-90                  | 1.4*                   | 1990-10  | -1.0* | 2010-17 | -3.2* |         |       |        |       |        |       | -2.7*   | -3.2*          |
| White                  | 1975-90                  | 1.4*                   | 1990-10  | -0.8* | 2010-17 | -3.2* |         |       |        |       |        |       | -2.7*   | -3.2*          |
| Black                  | 1975-94                  | 1.3                    | 1994-17  | -1.3* |         |       |         |       |        |       |        |       | -1.3*   | -1.3*          |
| SEER 21 Delay-Adju     | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 2000-17                  | -1.9*                  |          |       |         |       |         |       |        |       |        |       | -1.9*   | -1.9*          |
| White                  | 2000-17                  | -1.8*                  |          |       |         |       |         |       |        |       |        |       | -1.8*   | -1.8*          |
| White NH <sup>ef</sup> | 2000-15                  | -1.6*                  | 2015-17  | -6.2  |         |       |         |       |        |       |        |       | -2.6*   | -3.9*          |
| Black                  | 2000-17                  | -1.5*                  |          |       |         |       |         |       |        |       |        |       | -1.5*   | -1.5*          |
| Black NH <sup>ef</sup> | 2000-17                  | -1.5*                  |          |       |         |       |         |       |        |       |        |       | -1.5*   | -1.5*          |
| API <sup>e</sup>       | 2000-17                  | -1.4*                  |          |       |         |       |         |       |        |       |        |       | -1.4*   | -1.4*          |
| AI/AN <sup>eg</sup>    | 2000-17                  | -2.5                   |          |       |         |       |         |       |        |       |        |       | -2.5    | -2.5           |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.6*                  |          |       |         |       |         |       |        |       |        |       | -1.6*   | -1.6*          |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 1975-84                  | 0.6*                   | 1984-91  | 1.6*  | 1991-05 | 0.0   | 2005-17 | -2.2* |        |       |        |       | -2.2*   | -2.2*          |
| White                  | 1975-84                  | 0.6*                   | 1984-91  | 1.6*  | 1991-06 | 0.0   | 2006-17 | -2.3* |        |       |        |       | -2.3*   | -2.3*          |
| Black                  | 1975-93                  | 2.2*                   | 1993-17  | -1.2* |         |       |         |       |        |       |        |       | -1.2*   | -1.2*          |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |        |       |        |       |         |                |
| All Races              | 2000-06                  | -0.5                   | 2006-17  | -2.3* |         |       |         |       |        |       |        |       | -2.3*   | -2.3*          |
| White                  | 2000-06                  | -0.4                   | 2006-17  | -2.2* |         |       |         |       |        |       |        |       | -2.2*   | -2.2*          |
| White NH <sup>ef</sup> | 2000-06                  | -0.3                   | 2006-17  | -2.2* |         |       |         |       |        |       |        |       | -2.2*   | -2.2*          |
| Black                  | 2000-17                  | -1.5*                  |          |       |         |       |         |       |        |       |        |       | -1.5*   | -1.5*          |
| Black NH <sup>ef</sup> | 2000-17                  | -1.4*                  |          |       |         |       |         |       |        |       |        |       | -1.4*   | -1.4*          |
| API <sup>e</sup>       | 2000-17                  | -1.3*                  |          |       |         |       |         |       |        |       |        |       | -1.3*   | -1.3*          |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.3                   |          |       |         |       |         |       |        |       |        |       | -1.3    | -1.3           |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.6*                  |          |       |         |       |         |       |        |       |        |       | -1.6*   | -1.6*          |

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

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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

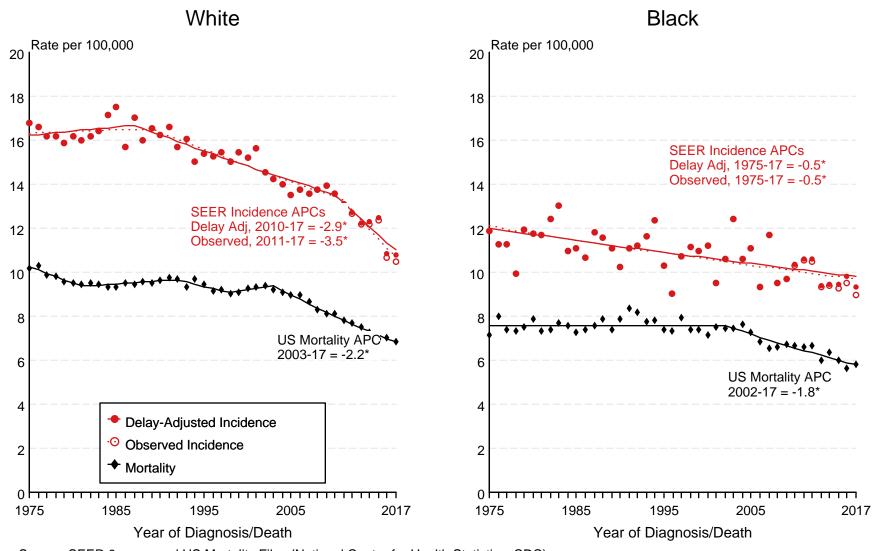
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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. Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Ovary, by Race



Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

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

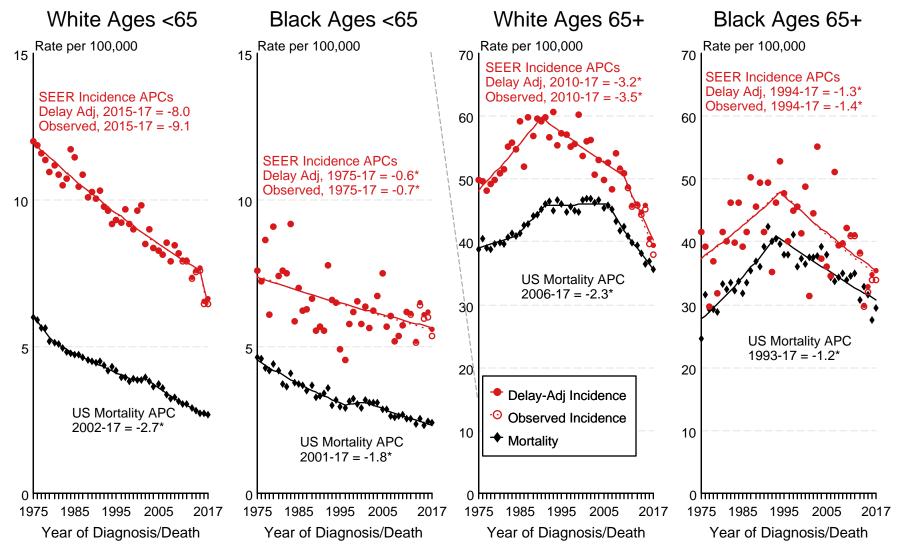
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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.

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Ovary, by Age and Race



Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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.

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.

<sup>\*</sup> The APC is significantly different from zero (p < 0.05).

#### Table 22.1 Cancer of the Pancreas (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | nd 2  | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | nd 5 | JP Tre  | nd 6 | AAI     | PC <sup>d</sup> |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|------|---------|------|---------|-----------------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC  | Years   | APC  | 2007-17 | 2012-17         |
| SEER 9 Delay-Adjust    | ed Incide                | nceª, 19               | 75-2017  |       |         |       |         |       |         |      |         |      |         |                 |
| All Races              | 1975-78                  | -2.2                   | 1978-84  | 1.3*  | 1984-89 | -1.4  | 1989-00 | 0.0   | 2000-08 | 1.5* | 2008-17 | 0.4* | 0.4*    | 0.4*            |
| White                  | 1975-79                  | -1.9                   | 1979-84  | 1.7   | 1984-87 | -2.5  | 1987-99 | -0.2  | 1999-06 | 1.7* | 2006-17 | 0.7* | 0.7*    | 0.7*            |
| Black                  | 1975-17                  | -0.1                   |          |       |         |       |         |       |         |      |         |      | -0.1    | -0.1            |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |      |         |      |         |                 |
| All Races              | 2000-17                  | 0.8*                   |          |       |         |       |         |       |         |      |         |      | 0.8*    | 0.8*            |
| White                  | 2000-08                  | 1.3*                   | 2008-17  | 0.7*  |         |       |         |       |         |      |         |      | 0.7*    | 0.7*            |
| White NH <sup>ef</sup> | 2000-08                  | 1.4*                   | 2008-17  | 0.8*  |         |       |         |       |         |      |         |      | 0.8*    | 0.8*            |
| Black                  | 2000-17                  | 0.4*                   |          |       |         |       |         |       |         |      |         |      | 0.4*    | 0.4*            |
| Black NH <sup>ef</sup> | 2000-17                  | 0.4*                   |          |       |         |       |         |       |         |      |         |      | 0.4*    | 0.4*            |
| API <sup>e</sup>       | 2000-17                  | 0.7*                   |          |       |         |       |         |       |         |      |         |      | 0.7*    | 0.7*            |
| AI/AN <sup>eg</sup>    | 2000-17                  | 0.2                    |          |       |         |       |         |       |         |      |         |      | 0.2     | 0.2             |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.6*                   |          |       |         |       |         |       |         |      |         |      | 0.6*    | 0.6*            |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |      |         |      |         |                 |
| All Races              | 1975-98                  | -0.1*                  | 1998-17  | 0.3*  |         |       |         |       |         |      |         |      | 0.3*    | 0.3*            |
| White                  | 1975-96                  | -0.2*                  | 1996-17  | 0.4*  |         |       |         |       |         |      |         |      | 0.4*    | 0.4*            |
| Black                  | 1975-87                  | 1.4*                   | 1987-17  | -0.5* |         |       |         |       |         |      |         |      | -0.5*   | -0.5*           |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |      |         |      |         |                 |
| All Races              | 2000-17                  | 0.3*                   |          |       |         |       |         |       |         |      |         |      | 0.3*    | 0.3*            |
| White                  | 2000-17                  | 0.4*                   |          |       |         |       |         |       |         |      |         |      | 0.4*    | 0.4*            |
| White NH <sup>ef</sup> | 2000-17                  | 0.4*                   |          |       |         |       |         |       |         |      |         |      | 0.4*    | 0.4*            |
| Black                  | 2000-17                  | -0.3*                  |          |       |         |       |         |       |         |      |         |      | -0.3*   | -0.3*           |
| Black NH <sup>ef</sup> | 2000-17                  | -0.2*                  |          |       |         |       |         |       |         |      |         |      | -0.2*   | -0.2*           |
| API <sup>e</sup>       | 2000-17                  | 0.1                    |          |       |         |       |         |       |         |      |         |      | 0.1     | 0.1             |
| AI/AN <sup>eg</sup>    | 2000-17                  | 0.7                    |          |       |         |       |         |       |         |      |         |      | 0.7     | 0.7             |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.0                    |          |       |         |       |         |       |         |      |         |      | 0.0     | 0.0             |

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

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

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

#### Table 22.2 Cancer of the Pancreas (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | nd 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | C <sub>q</sub> |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|------|--------|-------|--------|-------|---------|----------------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC  | Years  | APC   | Years  | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjust    | ed Incide                | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 1975-93                  | -0.8*                  | 1993-03  | 0.2   | 2003-06 | 2.9   | 2006-17 | 0.3  |        |       |        |       | 0.3     | 0.3            |
| White                  | 1975-94                  | -1.0*                  | 1994-17  | 0.9*  |         |       |         |      |        |       |        |       | 0.9*    | 0.9*           |
| Black                  | 1975-17                  | -0.4*                  |          |       |         |       |         |      |        |       |        |       | -0.4*   | -0.4*          |
| SEER 21 Delay-Adjus    | sted Incid               | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 2000-17                  | 0.9*                   |          |       |         |       |         |      |        |       |        |       | 0.9*    | 0.9*           |
| White                  | 2000-17                  | 1.0*                   |          |       |         |       |         |      |        |       |        |       | 1.0*    | 1.0*           |
| White NH <sup>ef</sup> | 2000-17                  | 1.1*                   |          |       |         |       |         |      |        |       |        |       | 1.1*    | 1.1*           |
| Black                  | 2000-17                  | 0.4*                   |          |       |         |       |         |      |        |       |        |       | 0.4*    | 0.4*           |
| Black NH <sup>ef</sup> | 2000-17                  | 0.5*                   |          |       |         |       |         |      |        |       |        |       | 0.5*    | 0.5*           |
| API <sup>e</sup>       | 2000-17                  | 0.6*                   |          |       |         |       |         |      |        |       |        |       | 0.6*    | 0.6*           |
| AI/AN <sup>eg</sup>    | 2000-17                  | 2.2                    |          |       |         |       |         |      |        |       |        |       | 2.2     | 2.2            |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.6*                   |          |       |         |       |         |      |        |       |        |       | 0.6*    | 0.6*           |
| U.S. Cancer Mortali    | ity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 1975-86                  | -0.8*                  | 1986-00  | -0.3* | 2000-17 | 0.3*  |         |      |        |       |        |       | 0.3*    | 0.3*           |
| White                  | 1975-86                  | -1.0*                  | 1986-97  | -0.3* | 1997-17 | 0.4*  |         |      |        |       |        |       | 0.4*    | 0.4*           |
| Black                  | 1975-92                  | 0.5*                   | 1992-01  | -1.5* | 2001-17 | -0.3* |         |      |        |       |        |       | -0.3*   | -0.3*          |
| U.S. Cancer Mortali    | ity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |      |        |       |        |       |         |                |
| All Races              | 2000-17                  | 0.3*                   |          |       |         |       |         |      |        |       |        |       | 0.3*    | 0.3*           |
| White                  | 2000-17                  | 0.4*                   |          |       |         |       |         |      |        |       |        |       | 0.4*    | 0.4*           |
| White NH <sup>ef</sup> | 2000-17                  | 0.5*                   |          |       |         |       |         |      |        |       |        |       | 0.5*    | 0.5*           |
| Black                  | 2000-17                  | -0.3*                  |          |       |         |       |         |      |        |       |        |       | -0.3*   | -0.3*          |
| Black NH <sup>ef</sup> | 2000-17                  | -0.2*                  |          |       |         |       |         |      |        |       |        |       | -0.2*   | -0.2*          |
| API <sup>e</sup>       | 2000-17                  | 0.1                    |          |       |         |       |         |      |        |       |        |       | 0.1     | 0.1            |
| AI/AN <sup>eg</sup>    | 2000-02                  | -7.4                   | 2002-05  | 24.6  | 2005-09 | -8.0  | 2009-17 | 2.2  |        |       |        |       | 1.0     | 2.2            |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.0                    |          |       |         |       |         |      |        |       |        |       | 0.0     | 0.0            |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

#### Table 22.3 Cancer of the Pancreas (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | nd 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|------|--------|-------|--------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC  | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus     | ted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |      |        |       |        |       |         |         |
| All Races              | 1975-84                  | 1.4*                   | 1984-96  | -0.5  | 1996-17 | 1.0*  |         |      |        |       |        |       | 1.0*    | 1.0*    |
| White                  | 1975-84                  | 1.3*                   | 1984-96  | -0.6  | 1996-17 | 1.1*  |         |      |        |       |        |       | 1.1*    | 1.1*    |
| Black                  | 1975-17                  | 0.1                    |          |       |         |       |         |      |        |       |        |       | 0.1     | 0.1     |
| SEER 21 Delay-Adju     | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |      |        |       |        |       |         |         |
| All Races              | 2000-17                  | 0.8*                   |          |       |         |       |         |      |        |       |        |       | 0.8*    | 0.8*    |
| White                  | 2000-17                  | 0.9*                   |          |       |         |       |         |      |        |       |        |       | 0.9*    | 0.9*    |
| White NH <sup>ef</sup> | 2000-17                  | 0.9*                   |          |       |         |       |         |      |        |       |        |       | 0.9*    | 0.9*    |
| Black                  | 2000-17                  | 0.4*                   |          |       |         |       |         |      |        |       |        |       | 0.4*    | 0.4*    |
| Black NH <sup>ef</sup> | 2000-17                  | 0.4*                   |          |       |         |       |         |      |        |       |        |       | 0.4*    | 0.4*    |
| API <sup>e</sup>       | 2000-17                  | 0.7*                   |          |       |         |       |         |      |        |       |        |       | 0.7*    | 0.7*    |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.9*                  |          |       |         |       |         |      |        |       |        |       | -1.9*   | -1.9*   |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.5*                   |          |       |         |       |         |      |        |       |        |       | 0.5*    | 0.5*    |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |      |        |       |        |       |         |         |
| All Races              | 1975-84                  | 0.8*                   | 1984-03  | 0.1   | 2003-06 | 1.0   | 2006-17 | 0.0  |        |       |        |       | 0.0     | 0.0     |
| White                  | 1975-83                  | 0.7*                   | 1983-02  | 0.1   | 2002-06 | 0.9   | 2006-17 | 0.1  |        |       |        |       | 0.1     | 0.1     |
| Black                  | 1975-86                  | 2.5*                   | 1986-17  | -0.3* |         |       |         |      |        |       |        |       | -0.3*   | -0.3*   |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |      |        |       |        |       |         |         |
| All Races              | 2000-17                  | 0.2*                   |          |       |         |       |         |      |        |       |        |       | 0.2*    | 0.2*    |
| White                  | 2000-17                  | 0.3*                   |          |       |         |       |         |      |        |       |        |       | 0.3*    | 0.3*    |
| White NH <sup>ef</sup> | 2000-17                  | 0.4*                   |          |       |         |       |         |      |        |       |        |       | 0.4*    | 0.4*    |
| Black                  | 2000-17                  | -0.3*                  |          |       |         |       |         |      |        |       |        |       | -0.3*   | -0.3*   |
| Black NH <sup>ef</sup> | 2000-17                  | -0.2*                  |          |       |         |       |         |      |        |       |        |       | -0.2*   | -0.2*   |
| API <sup>e</sup>       | 2000-17                  | 0.1                    |          |       |         |       |         |      |        |       |        |       | 0.1     | 0.1     |
| AI/AN <sup>eg</sup>    | 2000-17                  | -0.1                   |          |       |         |       |         |      |        |       |        |       | -0.1    | -0.1    |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.1                    |          |       |         |       |         |      |        |       |        |       | 0.1     | 0.1     |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

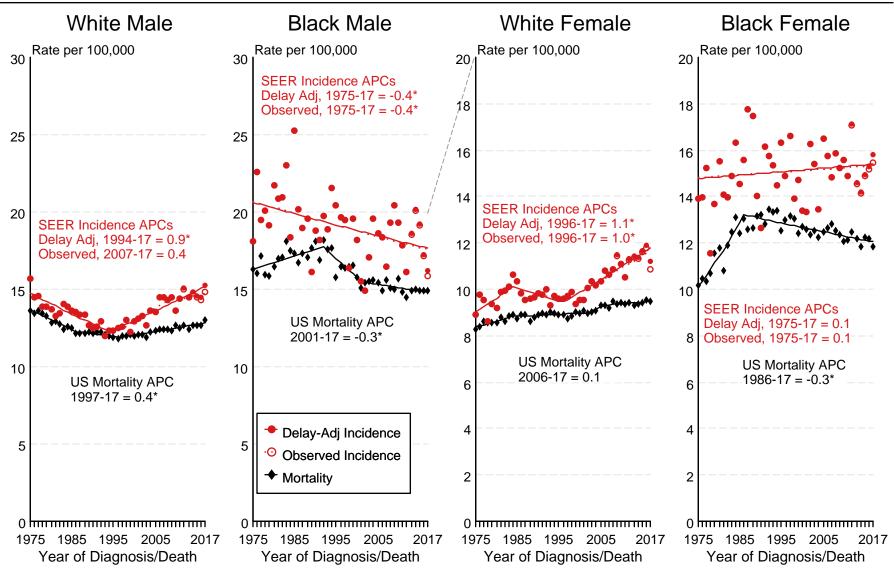
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Pancreas, by Race and Sex



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 23.1 Cancer of the Prostate (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, All Ages by Race/Ethnicity

|                        | JP Tre                     | nd 1                   | JP Tr    | end 2 | JP Tr   | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tre  | end 6 | AAI     | C <sub>q</sub> |
|------------------------|----------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|----------------|
|                        | Years                      | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adju      | usted Incider              | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |       |         |       |         |                |
| All Races              | 1975-88                    | 2.6*                   | 1988-92  | 16.1* | 1992-95 | -9.5  | 1995-08 | -0.2  | 2008-14 | -7.9* | 2014-17 | 4.4   | -4.0*   | 1.2            |
| White                  | 1975-88                    | 2.8*                   | 1988-92  | 16.0* | 1992-95 | -10.6 | 1995-07 | 0.1   | 2007-14 | -7.0* | 2014-17 | 3.2   | -3.7*   | 0.5            |
| Black                  | 1975-89                    | 2.0*                   | 1989-92  | 22.0* | 1992-95 | -4.6  | 1995-09 | -1.1* | 2009-14 | -7.9* | 2014-17 | 4.3*  | -3.2*   | 1.1            |
| SEER 21 Delay-Ad       | justed Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |         |       |         |                |
| All Races              | 2000-10                    | -1.7*                  | 2010-14  | -8.8* | 2014-17 | 4.3   |         |       |         |       |         |       | -3.0    | 0.9            |
| White                  | 2000-10                    | -1.9*                  | 2010-14  | -9.1* | 2014-17 | 4.2   |         |       |         |       |         |       | -3.2    | 0.7            |
| White NH <sup>ef</sup> | 2000-10                    | -1.8*                  | 2010-14  | -9.0* | 2014-17 | 5.0   |         |       |         |       |         |       | -2.9    | 1.3            |
| Black                  | 2000-11                    | -1.9*                  | 2011-14  | -9.0  | 2014-17 | 3.2   |         |       |         |       |         |       | -2.7    | 0.0            |
| Black NH <sup>ef</sup> | 2000-11                    | -1.8*                  | 2011-14  | -9.0  | 2014-17 | 3.5   |         |       |         |       |         |       | -2.6    | 0.2            |
| API <sup>e</sup>       | 2000-11                    | -2.9*                  | 2011-14  | -10.8 | 2014-17 | 5.4   |         |       |         |       |         |       | -3.0    | 1.1            |
| AI/AN <sup>eg</sup>    | 2000-03                    | 6.8                    | 2003-17  | -3.8* |         |       |         |       |         |       |         |       | -3.8*   | -3.8*          |
| Hispanic <sup>f</sup>  | 2000-10                    | -2.0*                  | 2010-14  | -8.7* | 2014-17 | 0.3   |         |       |         |       |         |       | -4.3*   | -2.1           |
| U.S. Cancer Morta      | ality <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |                |
| All Races              | 1975-87                    | 0.9*                   | 1987-91  | 3.0*  | 1991-94 | -0.5  | 1994-98 | -4.2* | 1998-13 | -3.5* | 2013-17 | -0.3  | -2.1*   | -0.3           |
| White                  | 1975-87                    | 0.8*                   | 1987-91  | 3.1*  | 1991-94 | -0.7  | 1994-99 | -4.3* | 1999-13 | -3.3* | 2013-17 | 0.0   | -1.9*   | 0.0            |
| Black                  | 1975-88                    | 1.9*                   | 1988-93  | 3.2*  | 1993-00 | -2.5* | 2000-10 | -3.7* | 2010-13 | -6.2* | 2013-17 | -1.4  | -3.5*   | -1.4           |
| U.S. Cancer Morta      | ality <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |       |         |       |         |       |         |                |
| All Races              | 2000-13                    | -3.5*                  | 2013-17  | -0.3  |         |       |         |       |         |       |         |       | -2.1*   | -0.3           |
| White                  | 2000-13                    | -3.3*                  | 2013-17  | 0.0   |         |       |         |       |         |       |         |       | -1.9*   | 0.0            |
| White NH <sup>ef</sup> | 2000-13                    | -3.3*                  | 2013-17  | 0.1   |         |       |         |       |         |       |         |       | -1.8*   | 0.1            |
| Black                  | 2000-14                    | -4.2*                  | 2014-17  | -1.7  |         |       |         |       |         |       |         |       | -3.3*   | -2.3           |
| Black NH <sup>ef</sup> | 2000-17                    | -3.8*                  |          |       |         |       |         |       |         |       |         |       | -3.8*   | -3.8*          |
| API <sup>e</sup>       | 2000-17                    | -2.3*                  |          |       |         |       |         |       |         |       |         |       | -2.3*   | -2.3*          |
| AI/AN <sup>eg</sup>    | 2000-17                    | -1.7*                  |          |       |         |       |         |       |         |       |         |       | -1.7*   | -1.7*          |
| Hispanic <sup>f</sup>  | 2000-14                    | -3.0*                  | 2014-17  | -0.1  |         |       |         |       |         |       |         |       | -2.0*   | -0.8           |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 23.2 Cancer of the Prostate (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Ages <65 by Race/Ethnicity

|                        | JP Tre                    | end 1                  | JP Tr    | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tre  | end 6 | AAF     | Cq      |
|------------------------|---------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|---------|
|                        | Years                     | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years   | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus     | sted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-88                   | 3.1*                   | 1988-92  | 23.4* | 1992-01 | 3.3*  | 2001-09 | 0.2   | 2009-14 | -8.2* | 2014-17 | 3.0   | -3.7*   | 0.1     |
| White                  | 1975-88                   | 3.5*                   | 1988-92  | 23.0* | 1992-01 | 3.1*  | 2001-09 | 0.1   | 2009-14 | -8.6* | 2014-17 | 2.1   | -4.2*   | -0.7    |
| Black                  | 1975-89                   | 2.0*                   | 1989-93  | 26.4* | 1993-01 | 2.7*  | 2001-10 | -0.5  | 2010-14 | -7.5* | 2014-17 | 4.4   | -2.1    | 1.3     |
| SEER 21 Delay-Adju     | usted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-10                   | -0.1                   | 2010-14  | -8.7* | 2014-17 | 3.0   |         |       |         |       |         |       | -3.1    | -0.1    |
| White                  | 2000-09                   | 0.2                    | 2009-14  | -8.0* | 2014-17 | 1.9   |         |       |         |       |         |       | -3.9*   | -0.7    |
| White NH <sup>ef</sup> | 2000-09                   | 0.3                    | 2009-14  | -7.9* | 2014-17 | 2.7   |         |       |         |       |         |       | -3.6    | 0.0     |
| Black                  | 2000-11                   | -0.3                   | 2011-14  | -8.1  | 2014-17 | 2.5   |         |       |         |       |         |       | -2.1    | -0.3    |
| Black NH <sup>ef</sup> | 2000-11                   | -0.3                   | 2011-14  | -8.1  | 2014-17 | 2.7   |         |       |         |       |         |       | -2.0    | -0.1    |
| API <sup>e</sup>       | 2000-11                   | 0.0                    | 2011-14  | -10.1 | 2014-17 | 3.7   |         |       |         |       |         |       | -2.3    | 0.0     |
| AI/AN <sup>eg</sup>    | 2000-17                   | -2.9*                  |          |       |         |       |         |       |         |       |         |       | -2.9*   | -2.9*   |
| Hispanic <sup>f</sup>  | 2000-09                   | -0.3                   | 2009-17  | -4.7* |         |       |         |       |         |       |         |       | -4.2*   | -4.7*   |
| U.S. Cancer Morta      | lity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 1975-87                   | 0.5*                   | 1987-90  | 3.1   | 1990-96 | -3.2* | 1996-00 | -5.8* | 2000-12 | -1.4* | 2012-17 | -0.1  | -0.7    | -0.1    |
| White                  | 1975-87                   | 0.7*                   | 1987-90  | 3.5   | 1990-02 | -4.3* | 2002-17 | -0.8* |         |       |         |       | -0.8*   | -0.8*   |
| Black                  | 1975-92                   | 0.5*                   | 1992-12  | -2.9* | 2012-17 | 0.0   |         |       |         |       |         |       | -1.3*   | 0.0     |
| U.S. Cancer Morta      | lity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |         |       |         |       |         |         |
| All Races              | 2000-17                   | -1.1*                  |          |       |         |       |         |       |         |       |         |       | -1.1*   | -1.1*   |
| White                  | 2000-17                   | -1.0*                  |          |       |         |       |         |       |         |       |         |       | -1.0*   | -1.0*   |
| White NH <sup>ef</sup> | 2000-17                   | -1.0*                  |          |       |         |       |         |       |         |       |         |       | -1.0*   | -1.0*   |
| Black                  | 2000-17                   | -2.0*                  |          |       |         |       |         |       |         |       |         |       | -2.0*   | -2.0*   |
| Black NH <sup>ef</sup> | 2000-17                   | -1.9*                  |          |       |         |       |         |       |         |       |         |       | -1.9*   | -1.9*   |
| API <sup>e</sup>       | 2000-17                   | 0.2                    |          |       |         |       |         |       |         |       |         |       | 0.2     | 0.2     |
| AI/AN <sup>eg</sup>    | 2000-17                   | -0.1                   |          |       |         |       |         |       |         |       |         |       | -0.1    | -0.1    |
| Hispanic <sup>f</sup>  | 2000-17                   | -0.9*                  |          |       |         |       |         |       |         |       |         |       | -0.9*   | -0.9*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 23.3 Cancer of the Prostate (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Ages 65+ by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tr   | end 3  | JP Tre  | end 4 | JP Tre  | end 5 | JP Tre  | end 6 | AAF     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|--------|---------|-------|---------|-------|---------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC    | Years   | APC   | Years   | APC   | Years   | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |        |         |       |         |       |         |       |         |         |
| All Races              | 1975-88                  | 2.5*                   | 1988-92  | 14.9* | 1992-95 | -13.3* | 1995-07 | -0.8* | 2007-14 | -7.3* | 2014-17 | 4.7   | -3.4*   | 1.6     |
| White                  | 1975-87                  | 2.3*                   | 1987-92  | 12.6* | 1992-95 | -13.5* | 1995-07 | -0.7  | 2007-14 | -7.3* | 2014-17 | 4.7   | -3.5*   | 1.5     |
| Black                  | 1975-89                  | 2.0*                   | 1989-92  | 20.3* | 1992-95 | -9.0*  | 1995-09 | -2.1* | 2009-14 | -8.7* | 2014-17 | 4.5   | -3.7*   | 1.1     |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |        |         |       |         |       |         |       |         |         |
| All Races              | 2000-10                  | -2.5*                  | 2010-14  | -8.9* | 2014-17 | 5.0    |         |       |         |       |         |       | -3.0    | 1.4     |
| White                  | 2000-10                  | -2.6*                  | 2010-14  | -8.9* | 2014-17 | 4.9    |         |       |         |       |         |       | -3.1    | 1.3     |
| White NH <sup>ef</sup> | 2000-10                  | -2.6*                  | 2010-14  | -8.8* | 2014-17 | 5.6    |         |       |         |       |         |       | -2.8    | 1.8     |
| Black                  | 2000-11                  | -2.8*                  | 2011-14  | -9.6* | 2014-17 | 3.8    |         |       |         |       |         |       | -3.0*   | 0.3     |
| Black NH <sup>ef</sup> | 2000-11                  | -2.7*                  | 2011-14  | -9.7* | 2014-17 | 4.0    |         |       |         |       |         |       | -3.0    | 0.4     |
| API <sup>e</sup>       | 2000-11                  | -3.7*                  | 2011-14  | -11.2 | 2014-17 | 6.1    |         |       |         |       |         |       | -3.2    | 1.5     |
| AI/AN <sup>eg</sup>    | 2000-17                  | -3.0*                  |          |       |         |        |         |       |         |       |         |       | -3.0*   | -3.0*   |
| Hispanic <sup>f</sup>  | 2000-10                  | -2.6*                  | 2010-14  | -9.3* | 2014-17 | 0.6    |         |       |         |       |         |       | -4.6*   | -2.0    |
| U.S. Cancer Mortali    | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |        |         |       |         |       |         |       |         |         |
| All Races              | 1975-87                  | 0.9*                   | 1987-90  | 3.3*  | 1990-93 | 1.3    | 1993-13 | -3.6* | 2013-17 | -0.3  |         |       | -2.2*   | -0.3    |
| White                  | 1975-87                  | 0.8*                   | 1987-91  | 3.2*  | 1991-94 | -0.5   | 1994-98 | -4.4* | 1998-13 | -3.5* | 2013-17 | 0.0   | -1.9*   | 0.0     |
| Black                  | 1975-88                  | 2.1*                   | 1988-93  | 3.5*  | 1993-01 | -2.6*  | 2001-10 | -3.9* | 2010-13 | -6.4* | 2013-17 | -1.5  | -3.7*   | -1.5    |
| U.S. Cancer Mortali    | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |        |         |       |         |       |         |       |         |         |
| All Races              | 2000-13                  | -3.6*                  | 2013-17  | -0.4  |         |        |         |       |         |       |         |       | -2.2*   | -0.4    |
| White                  | 2000-13                  | -3.5*                  | 2013-17  | 0.0   |         |        |         |       |         |       |         |       | -1.9*   | 0.0     |
| White NH <sup>ef</sup> | 2000-13                  | -3.5*                  | 2013-17  | 0.1   |         |        |         |       |         |       |         |       | -1.9*   | 0.1     |
| Black                  | 2000-17                  | -4.1*                  |          |       |         |        |         |       |         |       |         |       | -4.1*   | -4.1*   |
| Black NH <sup>ef</sup> | 2000-17                  | -4.0*                  |          |       |         |        |         |       |         |       |         |       | -4.0*   | -4.0*   |
| API <sup>e</sup>       | 2000-17                  | -2.5*                  |          |       |         |        |         |       |         |       |         |       | -2.5*   | -2.5*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -1.8*                  |          |       |         |        |         |       |         |       |         |       | -1.8*   | -1.8*   |
| Hispanicf              | 2000-14                  | -3.1*                  | 2014-17  | 0.0   |         |        |         |       |         |       |         |       | -2.1*   | -0.8    |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

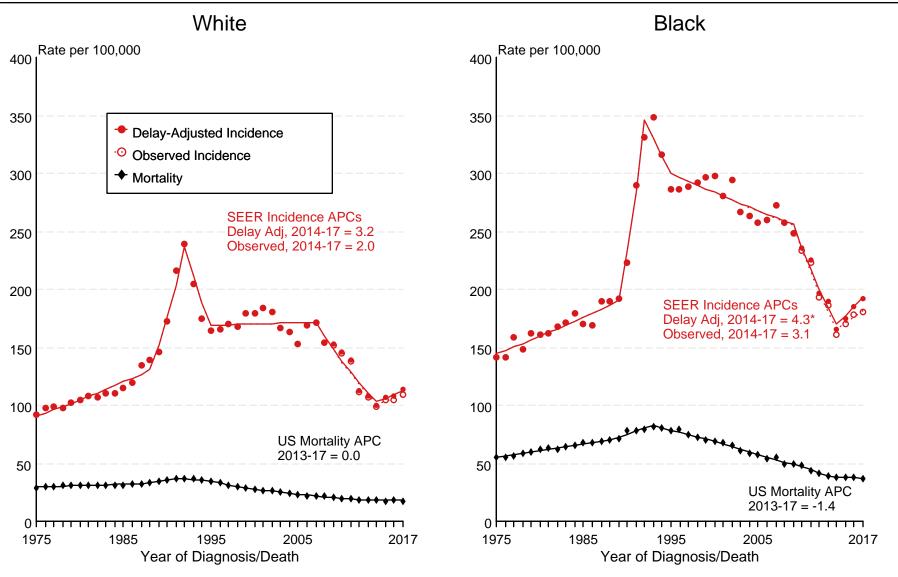
Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Figure 23.1

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Prostate, by Race

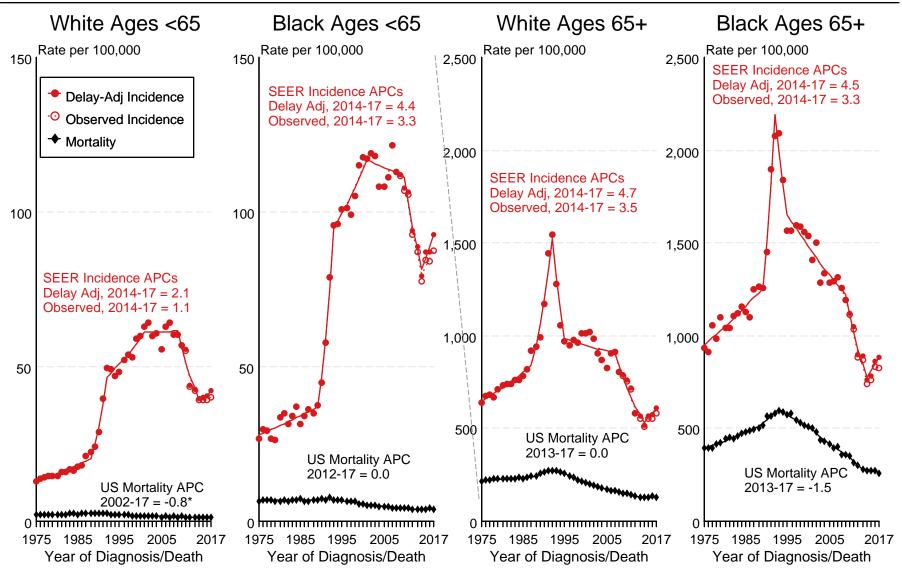


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Prostate, by Age and Race

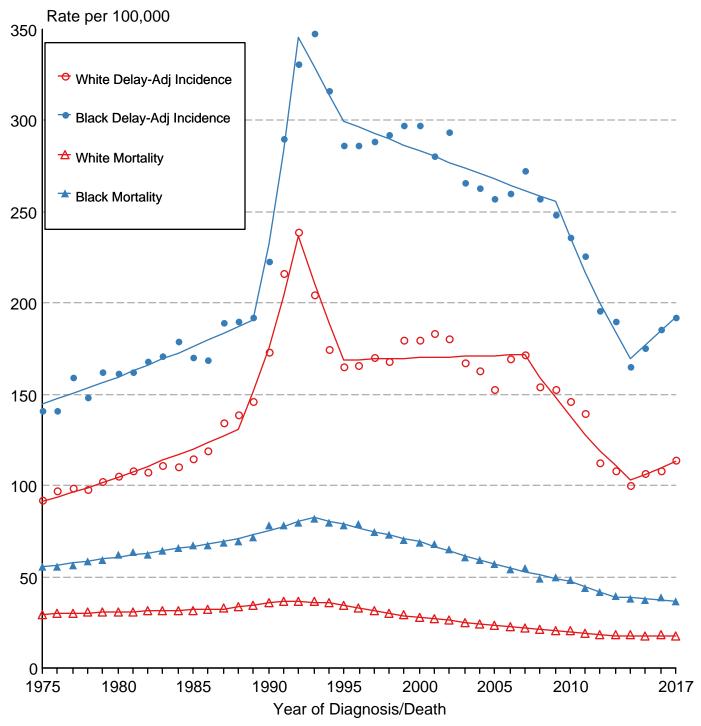


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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.

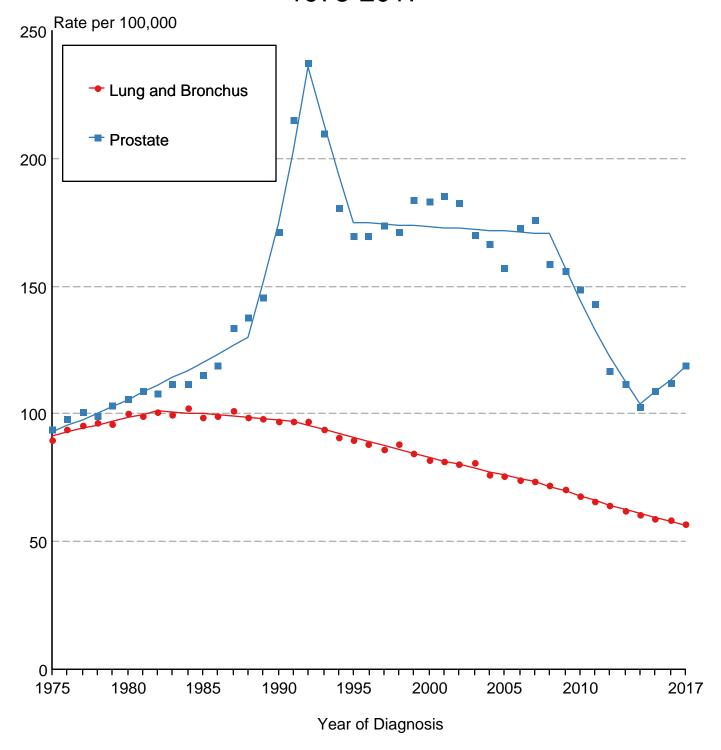
<sup>\*</sup> The APC is significantly different from zero (p < 0.05).

# Cancer of the Prostate Delay-Adjusted SEER Incidence & US Mortality 1975-2017



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). Regression lines are calculated using the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

#### Delay-Adjusted Incidence Rates for Cancer of the Prostate and Cancer of the Lung and Bronchus All Races, Males 1975-2017



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 4.8, April 2020, National Cancer Institute.

#### Table 24.1 Cancer of the Stomach (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tr   | end 3 | JP Tre  | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | o Cq    |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|--------|-------|--------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 1975-17                  | -1.5*                  |          |       |         |       |         |       |        |       |        |       | -1.5*   | -1.5*   |
| White                  | 1975-00                  | -1.9*                  | 2000-17  | -1.0* |         |       |         |       |        |       |        |       | -1.0*   | -1.0*   |
| Black                  | 1975-82                  | 1.2                    | 1982-17  | -1.7* |         |       |         |       |        |       |        |       | -1.7*   | -1.7*   |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 2000-17                  | -1.0*                  |          |       |         |       |         |       |        |       |        |       | -1.0*   | -1.0*   |
| White                  | 2000-06                  | -1.6*                  | 2006-17  | -0.5* |         |       |         |       |        |       |        |       | -0.5*   | -0.5*   |
| White NH <sup>ef</sup> | 2000-06                  | -2.0*                  | 2006-17  | -0.8* |         |       |         |       |        |       |        |       | -0.8*   | -0.8*   |
| Black                  | 2000-17                  | -1.8*                  |          |       |         |       |         |       |        |       |        |       | -1.8*   | -1.8*   |
| Black NH <sup>ef</sup> | 2000-17                  | -1.8*                  |          |       |         |       |         |       |        |       |        |       | -1.8*   | -1.8*   |
| API <sup>e</sup>       | 2000-17                  | -2.6*                  |          |       |         |       |         |       |        |       |        |       | -2.6*   | -2.6*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | -2.2*                  |          |       |         |       |         |       |        |       |        |       | -2.2*   | -2.2*   |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.4*                  |          |       |         |       |         |       |        |       |        |       | -1.4*   | -1.4*   |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 1975-87                  | -2.5*                  | 1987-90  | -0.3  | 1990-09 | -3.0* | 2009-17 | -1.9* |        |       |        |       | -2.0*   | -1.9*   |
| White                  | 1975-87                  | -2.8*                  | 1987-90  | -0.8  | 1990-08 | -3.2* | 2008-17 | -1.9* |        |       |        |       | -1.9*   | -1.9*   |
| Black                  | 1975-95                  | -1.3*                  | 1995-17  | -3.3* |         |       |         |       |        |       |        |       | -3.3*   | -3.3*   |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 2000-07                  | -3.3*                  | 2007-17  | -2.1* |         |       |         |       |        |       |        |       | -2.1*   | -2.1*   |
| White                  | 2000-08                  | -3.2*                  | 2008-17  | -1.9* |         |       |         |       |        |       |        |       | -1.9*   | -1.9*   |
| White NH <sup>ef</sup> | 2000-08                  | -3.6*                  | 2008-17  | -2.6* |         |       |         |       |        |       |        |       | -2.6*   | -2.6*   |
| Black                  | 2000-17                  | -3.3*                  |          |       |         |       |         |       |        |       |        |       | -3.3*   | -3.3*   |
| Black NH <sup>ef</sup> | 2000-17                  | -3.2*                  |          |       |         |       |         |       |        |       |        |       | -3.2*   | -3.2*   |
| API <sup>e</sup>       | 2000-13                  | -3.9*                  | 2013-17  | -1.1  |         |       |         |       |        |       |        |       | -2.7*   | -1.1    |
| AI/AN <sup>eg</sup>    | 2000-17                  | -3.1*                  |          |       |         |       |         |       |        |       |        |       | -3.1*   | -3.1*   |
| Hispanic <sup>f</sup>  | 2000-17                  | -2.3*                  |          |       |         |       |         |       |        |       |        |       | -2.3*   | -2.3*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

#### Table 24.2 Cancer of the Stomach (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                    | end 1                  | JP Tre   | end 2 | JP Tr   | end 3 | JP Tr   | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAE     | $C_q$   |
|------------------------|---------------------------|------------------------|----------|-------|---------|-------|---------|-------|--------|-------|--------|-------|---------|---------|
|                        | Years                     | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adju      | sted Incide               | nce <sup>a</sup> , 197 | 75-2017  |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 1975-80                   | -0.2                   | 1980-17  | -1.8* |         |       |         |       |        |       |        |       | -1.8*   | -1.8*   |
| White                  | 1975-17                   | -1.8*                  |          |       |         |       |         |       |        |       |        |       | -1.8*   | -1.8*   |
| Black                  | 1975-82                   | 2.4                    | 1982-17  | -2.1* |         |       |         |       |        |       |        |       | -2.1*   | -2.1*   |
| SEER 21 Delay-Adj      | usted Incid               | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 2000-17                   | -1.4*                  |          |       |         |       |         |       |        |       |        |       | -1.4*   | -1.4*   |
| White                  | 2000-17                   | -1.3*                  |          |       |         |       |         |       |        |       |        |       | -1.3*   | -1.3*   |
| White NH <sup>ef</sup> | 2000-06                   | -2.6*                  | 2006-13  | -0.6  | 2013-17 | -2.3* |         |       |        |       |        |       | -1.4*   | -2.3*   |
| Black                  | 2000-07                   | -0.4                   | 2007-10  | -5.5  | 2010-17 | -1.3  |         |       |        |       |        |       | -2.2    | -1.3    |
| Black NH <sup>ef</sup> | 2000-08                   | -0.7                   | 2008-11  | -7.0  | 2011-14 | 2.3   | 2014-17 | -4.0  |        |       |        |       | -3.0    | -2.4    |
| API <sup>e</sup>       | 2000-17                   | -2.7*                  |          |       |         |       |         |       |        |       |        |       | -2.7*   | -2.7*   |
| AI/AN <sup>eg</sup>    | 2000-17                   | -2.8*                  |          |       |         |       |         |       |        |       |        |       | -2.8*   | -2.8*   |
| Hispanic <sup>f</sup>  | 2000-17                   | -1.8*                  |          |       |         |       |         |       |        |       |        |       | -1.8*   | -1.8*   |
| U.S. Cancer Morta      | lity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 1975-87                   | -2.3*                  | 1987-91  | -1.0  | 1991-08 | -3.5* | 2008-17 | -2.3* |        |       |        |       | -2.3*   | -2.3*   |
| White                  | 1975-93                   | -2.3*                  | 1993-08  | -3.6* | 2008-17 | -2.3* |         |       |        |       |        |       | -2.3*   | -2.3*   |
| Black                  | 1975-93                   | -1.1*                  | 1993-17  | -3.3* |         |       |         |       |        |       |        |       | -3.3*   | -3.3*   |
| U.S. Cancer Morta      | lity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 2000-06                   | -3.7*                  | 2006-17  | -2.5* |         |       |         |       |        |       |        |       | -2.5*   | -2.5*   |
| White                  | 2000-08                   | -3.6*                  | 2008-17  | -2.3* |         |       |         |       |        |       |        |       | -2.3*   | -2.3*   |
| White NH <sup>ef</sup> | 2000-09                   | -3.8*                  | 2009-17  | -2.7* |         |       |         |       |        |       |        |       | -2.8*   | -2.7*   |
| Black                  | 2000-17                   | -3.2*                  |          |       |         |       |         |       |        |       |        |       | -3.2*   | -3.2*   |
| Black NH <sup>ef</sup> | 2000-17                   | -3.1*                  |          |       |         |       |         |       |        |       |        |       | -3.1*   | -3.1*   |
| API <sup>e</sup>       | 2000-17                   | -3.6*                  |          |       |         |       |         |       |        |       |        |       | -3.6*   | -3.6*   |
| AI/AN <sup>eg</sup>    | 2000-17                   | -3.2*                  |          |       |         |       |         |       |        |       |        |       | -3.2*   | -3.2*   |
| Hispanic <sup>f</sup>  | 2000-17                   | -2.8*                  |          |       |         |       |         |       |        |       |        |       | -2.8*   | -2.8*   |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

#### Table 24.3 Cancer of the Stomach (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                    | end 1                  | JP Tre   | end 2 | JP Tr   | end 3 | JP Tr   | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | Cq      |
|------------------------|---------------------------|------------------------|----------|-------|---------|-------|---------|-------|--------|-------|--------|-------|---------|---------|
|                        | Years                     | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus     | sted Incide               | nce <sup>a</sup> , 19  | 75-2017  |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 1975-95                   | -1.9*                  | 1995-17  | -0.9* |         |       |         |       |        |       |        |       | -0.9*   | -0.9*   |
| White                  | 1975-96                   | -2.3*                  | 1996-17  | -0.8* |         |       |         |       |        |       |        |       | -0.8*   | -0.8*   |
| Black                  | 1975-17                   | -1.0*                  |          |       |         |       |         |       |        |       |        |       | -1.0*   | -1.0*   |
| SEER 21 Delay-Adju     | usted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 2000-17                   | -0.6*                  |          |       |         |       |         |       |        |       |        |       | -0.6*   | -0.6*   |
| White                  | 2000-17                   | -0.5*                  |          |       |         |       |         |       |        |       |        |       | -0.5*   | -0.5*   |
| White NH <sup>ef</sup> | 2000-17                   | -1.0*                  |          |       |         |       |         |       |        |       |        |       | -1.0*   | -1.0*   |
| Black                  | 2000-17                   | -1.6*                  |          |       |         |       |         |       |        |       |        |       | -1.6*   | -1.6*   |
| Black NH <sup>ef</sup> | 2000-17                   | -1.5*                  |          |       |         |       |         |       |        |       |        |       | -1.5*   | -1.5*   |
| API <sup>e</sup>       | 2000-17                   | -2.6*                  |          |       |         |       |         |       |        |       |        |       | -2.6*   | -2.6*   |
| AI/AN <sup>eg</sup>    | 2000-17                   | -1.6                   |          |       |         |       |         |       |        |       |        |       | -1.6    | -1.6    |
| Hispanic <sup>f</sup>  | 2000-17                   | -1.0*                  |          |       |         |       |         |       |        |       |        |       | -1.0*   | -1.0*   |
| U.S. Cancer Mortal     | lity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 1975-87                   | -2.8*                  | 1987-90  | -0.3  | 1990-09 | -2.7* | 2009-17 | -1.8* |        |       |        |       | -1.9*   | -1.8*   |
| White                  | 1975-87                   | -3.1*                  | 1987-90  | -1.0  | 1990-08 | -2.9* | 2008-17 | -1.7* |        |       |        |       | -1.7*   | -1.7*   |
| Black                  | 1975-98                   | -1.2*                  | 1998-17  | -3.6* |         |       |         |       |        |       |        |       | -3.6*   | -3.6*   |
| U.S. Cancer Morta      | lity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |        |       |        |       |         |         |
| All Races              | 2000-08                   | -3.0*                  | 2008-17  | -1.8* |         |       |         |       |        |       |        |       | -1.8*   | -1.8*   |
| White                  | 2000-08                   | -3.1*                  | 2008-17  | -1.6* |         |       |         |       |        |       |        |       | -1.6*   | -1.6*   |
| White NH <sup>ef</sup> | 2000-17                   | -3.0*                  |          |       |         |       |         |       |        |       |        |       | -3.0*   | -3.0*   |
| Black                  | 2000-17                   | -3.6*                  |          |       |         |       |         |       |        |       |        |       | -3.6*   | -3.6*   |
| Black NH <sup>ef</sup> | 2000-17                   | -3.5*                  |          |       |         |       |         |       |        |       |        |       | -3.5*   | -3.5*   |
| API <sup>e</sup>       | 2000-17                   | -3.2*                  |          |       |         |       |         |       |        |       |        |       | -3.2*   | -3.2*   |
| AI/AN <sup>eg</sup>    | 2000-17                   | -3.3*                  |          |       |         |       |         |       |        |       |        |       | -3.3*   | -3.3*   |
| Hispanic <sup>f</sup>  | 2000-17                   | -1.8*                  |          |       |         |       |         |       |        |       |        |       | -1.8*   | -1.8*   |

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

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

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

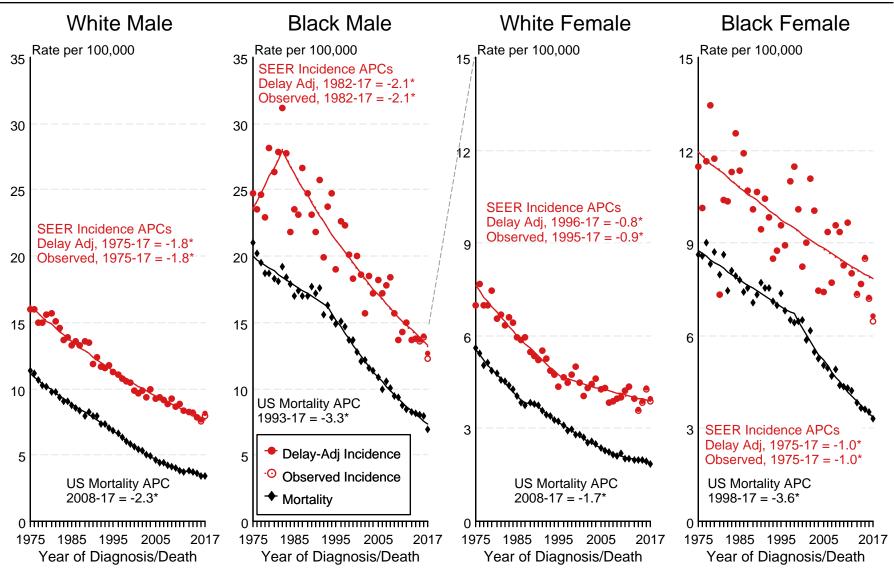
d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

<sup>-</sup> Joinpoint regression line analysis could not be performed on data series.

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Stomach, by Race and Sex



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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 25.1 Cancer of the Testis (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, All Ages by Race/Ethnicity

|                              | JP Tre                    | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre | end 4 | JP Tre | end 5 | JP Tr | end 6 | AAI     | 5Cq     |
|------------------------------|---------------------------|------------------------|----------|-------|---------|-------|--------|-------|--------|-------|-------|-------|---------|---------|
|                              | Years                     | APC                    | Years    | APC   | Years   | APC   | Years  | APC   | Years  | APC   | Years | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus           | sted Incider              | nce <sup>a</sup> , 19  | 75-2017  |       |         |       |        |       |        |       |       |       |         |         |
| All Races                    | 1975-89                   | 2.3*                   | 1989-17  | 0.8*  |         |       |        |       |        |       |       |       | 0.8*    | 0.8*    |
| White                        | 1975-89                   | 2.7*                   | 1989-17  | 1.0*  |         |       |        |       |        |       |       |       | 1.0*    | 1.0*    |
| Black                        | 1975-17                   | 1.9*                   |          |       |         |       |        |       |        |       |       |       | 1.9*    | 1.9*    |
| SEER 21 Delay-Adju           | sted Incide               | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |        |       |        |       |       |       |         |         |
| All Races                    | 2000-17                   | 0.8*                   |          |       |         |       |        |       |        |       |       |       | 0.8*    | 0.8*    |
| White                        | 2000-17                   | 0.9*                   |          |       |         |       |        |       |        |       |       |       | 0.9*    | 0.9*    |
| White NH <sup>ef</sup>       | 2000-17                   | 0.6*                   |          |       |         |       |        |       |        |       |       |       | 0.6*    | 0.6*    |
| Black                        | 2000-04                   | -5.3                   | 2004-17  | 2.5*  |         |       |        |       |        |       |       |       | 2.5*    | 2.5*    |
| Black NH <sup>ef</sup>       | 2000-04                   | -5.5                   | 2004-17  | 2.7*  |         |       |        |       |        |       |       |       | 2.7*    | 2.7*    |
| API <sup>e</sup>             | 2000-17                   | 2.2*                   |          |       |         |       |        |       |        |       |       |       | 2.2*    | 2.2*    |
| AI/AN <sup>eg</sup>          | 2000-17                   | 2.0                    |          |       |         |       |        |       |        |       |       |       | 2.0     | 2.0     |
| $	exttt{Hispanic}^{	ext{f}}$ | 2000-17                   | 2.8*                   |          |       |         |       |        |       |        |       |       |       | 2.8*    | 2.8*    |
| U.S. Cancer Mortal           | lity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |        |       |        |       |       |       |         |         |
| All Races                    | 1975-81                   | -10.5*                 | 1981-95  | -3.1* | 1995-17 | -0.1  |        |       |        |       |       |       | -0.1    | -0.1    |
| White                        | 1975-81                   | -10.8*                 | 1981-95  | -3.0* | 1995-17 | 0.1   |        |       |        |       |       |       | 0.1     | 0.1     |
| Black                        | 1975-17                   | -1.7*                  |          |       |         |       |        |       |        |       |       |       | -1.7*   | -1.7*   |
| U.S. Cancer Mortal           | Lity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |        |       |        |       |       |       |         |         |
| All Races                    | 2000-17                   | 0.1                    |          |       |         |       |        |       |        |       |       |       | 0.1     | 0.1     |
| White                        | 2000-17                   | 0.4                    |          |       |         |       |        |       |        |       |       |       | 0.4     | 0.4     |
| White NH <sup>ef</sup>       | 2000-17                   | 0.1                    |          |       |         |       |        |       |        |       |       |       | 0.1     | 0.1     |
| Black                        | 2000-17                   | -1.7                   |          |       |         |       |        |       |        |       |       |       | -1.7    | -1.7    |
| Black NH <sup>ef</sup>       | 2000-17                   | -1.6                   |          |       |         |       |        |       |        |       |       |       | -1.6    | -1.6    |
| API <sup>e</sup>             | 2000-17                   | -1.7                   |          |       |         |       |        |       |        |       |       |       | -1.7    | -1.7    |
| AI/AN <sup>eg</sup>          | _                         | -                      |          |       |         |       |        |       |        |       |       |       | _       | -       |
| Hispanic <sup>f</sup>        | 2000-17                   | 1.0                    |          |       |         |       |        |       |        |       |       |       | 1.0     | 1.0     |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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

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

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 25.2 Cancer of the Testis (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Ages <50 by Race/Ethnicity

|                        | JP Tre                    | end 1                 | JP Tre   | end 2 | JP Tr   | end 3 | JP Tr | end 4 | JP Tre | end 5 | JP Tre | end 6 | AAI     | $C_q$   |
|------------------------|---------------------------|-----------------------|----------|-------|---------|-------|-------|-------|--------|-------|--------|-------|---------|---------|
|                        | Years                     | APC                   | Years    | APC   | Years   | APC   | Years | APC   | Years  | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adju      | sted Incide               | nce <sup>a</sup> , 19 | 75-2017  |       |         |       |       |       |        |       |        |       |         |         |
| All Races              | 1975-89                   | 2.8*                  | 1989-17  | 0.7*  |         |       |       |       |        |       |        |       | 0.7*    | 0.7*    |
| White                  | 1975-89                   | 3.2*                  | 1989-17  | 0.9*  |         |       |       |       |        |       |        |       | 0.9*    | 0.9*    |
| Black                  | 1975-17                   | 1.8*                  |          |       |         |       |       |       |        |       |        |       | 1.8*    | 1.8*    |
| SEER 21 Delay-Adj      | usted Incide              | ence <sup>b</sup> , 2 | 000-2017 |       |         |       |       |       |        |       |        |       |         |         |
| All Races              | 2000-17                   | 0.7*                  |          |       |         |       |       |       |        |       |        |       | 0.7*    | 0.7*    |
| White                  | 2000-17                   | 0.8*                  |          |       |         |       |       |       |        |       |        |       | 0.8*    | 0.8*    |
| White NH <sup>ef</sup> | 2000-17                   | 0.5*                  |          |       |         |       |       |       |        |       |        |       | 0.5*    | 0.5*    |
| Black                  | 2000-04                   | -4.8                  | 2004-17  | 2.2*  |         |       |       |       |        |       |        |       | 2.2*    | 2.2*    |
| Black NH <sup>ef</sup> | 2000-17                   | 1.2*                  |          |       |         |       |       |       |        |       |        |       | 1.2*    | 1.2*    |
| API <sup>e</sup>       | 2000-17                   | 2.5*                  |          |       |         |       |       |       |        |       |        |       | 2.5*    | 2.5*    |
| AI/AN <sup>eg</sup>    | 2000-17                   | 1.8                   |          |       |         |       |       |       |        |       |        |       | 1.8     | 1.8     |
| Hispanic <sup>f</sup>  | 2000-17                   | 3.0*                  |          |       |         |       |       |       |        |       |        |       | 3.0*    | 3.0*    |
| U.S. Cancer Morta      | lity <sup>c</sup> , 1975- | 2017                  |          |       |         |       |       |       |        |       |        |       |         |         |
| All Races              | 1975-81                   | -11.3*                | 1981-95  | -2.8* | 1995-17 | -0.5* |       |       |        |       |        |       | -0.5*   | -0.5*   |
| White                  | 1975-81                   | -11.6*                | 1981-96  | -2.6* | 1996-17 | -0.1  |       |       |        |       |        |       | -0.1    | -0.1    |
| Black                  | 1975-17                   | -1.4*                 |          |       |         |       |       |       |        |       |        |       | -1.4*   | -1.4*   |
| U.S. Cancer Morta      | lity <sup>c</sup> , 2000- | -2017                 |          |       |         |       |       |       |        |       |        |       |         |         |
| All Races              | 2000-17                   | -0.2                  |          |       |         |       |       |       |        |       |        |       | -0.2    | -0.2    |
| White                  | 2000-17                   | 0.1                   |          |       |         |       |       |       |        |       |        |       | 0.1     | 0.1     |
| White NH <sup>ef</sup> | 2000-17                   | -0.4                  |          |       |         |       |       |       |        |       |        |       | -0.4    | -0.4    |
| Black                  | 2000-17                   | -2.6*                 |          |       |         |       |       |       |        |       |        |       | -2.6*   | -2.6*   |
| Black NH <sup>ef</sup> | 2000-17                   | -2.6*                 |          |       |         |       |       |       |        |       |        |       | -2.6*   | -2.6*   |
| API <sup>e</sup>       | 2000-17                   | 0.5                   |          |       |         |       |       |       |        |       |        |       | 0.5     | 0.5     |
| AI/AN <sup>eg</sup>    | _                         | -                     |          |       |         |       |       |       |        |       |        |       | _       | _       |
| Hispanic <sup>f</sup>  | 2000-17                   | 1.6*                  |          |       |         |       |       |       |        |       |        |       | 1.6*    | 1.6*    |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

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. Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 25.3 Cancer of the Testis (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Ages 50+ by Race/Ethnicity

|                                | JP Tre                   | end 1                  | JP Tre   | nd 2 | JP Tr | end 3 | JP Tr | end 4 | JP Tre | end 5 | JP Tr | end 6 | AAI     | C <sub>q</sub> |
|--------------------------------|--------------------------|------------------------|----------|------|-------|-------|-------|-------|--------|-------|-------|-------|---------|----------------|
|                                | Years                    | APC                    | Years    | APC  | Years | APC   | Years | APC   | Years  | APC   | Years | APC   | 2007-17 | 2012-17        |
| SEER 9 Delay-Adjus             | ted Incide               | nceª, 19'              | 75-2017  |      |       |       |       |       |        |       |       |       |         |                |
| All Races                      | 1975-98                  | -0.3                   | 1998-17  | 1.9* |       |       |       |       |        |       |       |       | 1.9*    | 1.9*           |
| White                          | 1975-98                  | -0.2                   | 1998-17  | 2.0* |       |       |       |       |        |       |       |       | 2.0*    | 2.0*           |
| Black                          | -                        | -                      |          |      |       |       |       |       |        |       |       |       | -       | -              |
| SEER 21 Delay-Adju             | sted Incid               | ence <sup>b</sup> , 20 | 000-2017 |      |       |       |       |       |        |       |       |       |         |                |
| All Races                      | 2000-17                  | 1.3*                   |          |      |       |       |       |       |        |       |       |       | 1.3*    | 1.3*           |
| White                          | 2000-17                  | 1.5*                   |          |      |       |       |       |       |        |       |       |       | 1.5*    | 1.5*           |
| White NH <sup>ef</sup>         | 2000-17                  | 1.8*                   |          |      |       |       |       |       |        |       |       |       | 1.8*    | 1.8*           |
| Black                          | 2000-17                  | 2.3*                   |          |      |       |       |       |       |        |       |       |       | 2.3*    | 2.3*           |
| Black NH <sup>ef</sup>         | 2000-17                  | 2.7*                   |          |      |       |       |       |       |        |       |       |       | 2.7*    | 2.7*           |
| API <sup>e</sup>               | 2000-17                  | 0.1                    |          |      |       |       |       |       |        |       |       |       | 0.1     | 0.1            |
| AI/AN <sup>eg</sup>            | -                        | -                      |          |      |       |       |       |       |        |       |       |       | -       | -              |
| $	exttt{Hispanic}^{	exttt{f}}$ | 2000-17                  | 0.8                    |          |      |       |       |       |       |        |       |       |       | 0.8     | 0.8            |
| U.S. Cancer Mortal             | ity <sup>c</sup> , 1975- | -2017                  |          |      |       |       |       |       |        |       |       |       |         |                |
| All Races                      | 1975-91                  | -5.9*                  | 1991-17  | 0.4  |       |       |       |       |        |       |       |       | 0.4     | 0.4            |
| White                          | 1975-91                  | -5.9*                  | 1991-17  | 0.6* |       |       |       |       |        |       |       |       | 0.6*    | 0.6*           |
| Black                          | 1975-17                  | -1.9*                  |          |      |       |       |       |       |        |       |       |       | -1.9*   | -1.9*          |
| U.S. Cancer Mortal             | ity <sup>c</sup> , 2000- | -2017                  |          |      |       |       |       |       |        |       |       |       |         |                |
| All Races                      | 2000-17                  | 0.8                    |          |      |       |       |       |       |        |       |       |       | 0.8     | 0.8            |
| White                          | 2000-17                  | 1.1*                   |          |      |       |       |       |       |        |       |       |       | 1.1*    | 1.1*           |
| White NH <sup>ef</sup>         | 2000-17                  | 1.3*                   |          |      |       |       |       |       |        |       |       |       | 1.3*    | 1.3*           |
| Black                          | 2000-17                  | -0.5                   |          |      |       |       |       |       |        |       |       |       | -0.5    | -0.5           |
| Black NH <sup>ef</sup>         | 2000-17                  | -0.4                   |          |      |       |       |       |       |        |       |       |       | -0.4    | -0.4           |
| API <sup>e</sup>               | _                        | _                      |          |      |       |       |       |       |        |       |       |       | _       | _              |
| AI/AN <sup>eg</sup>            | _                        | -                      |          |      |       |       |       |       |        |       |       |       | _       | -              |
| Hispanic <sup>f</sup>          | 2000-17                  | -0.9                   |          |      |       |       |       |       |        |       |       |       | -0.9    | -0.9           |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (https://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).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

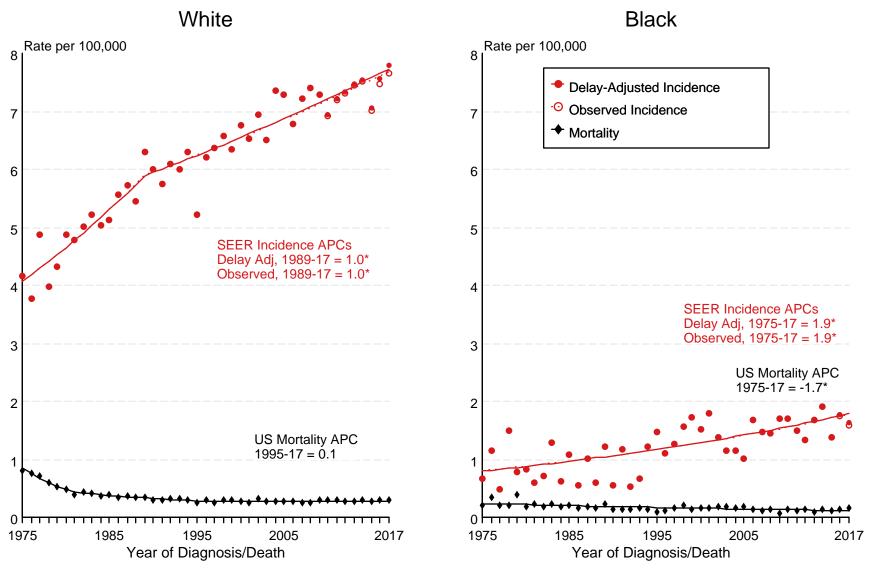
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Testis, by Race



Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

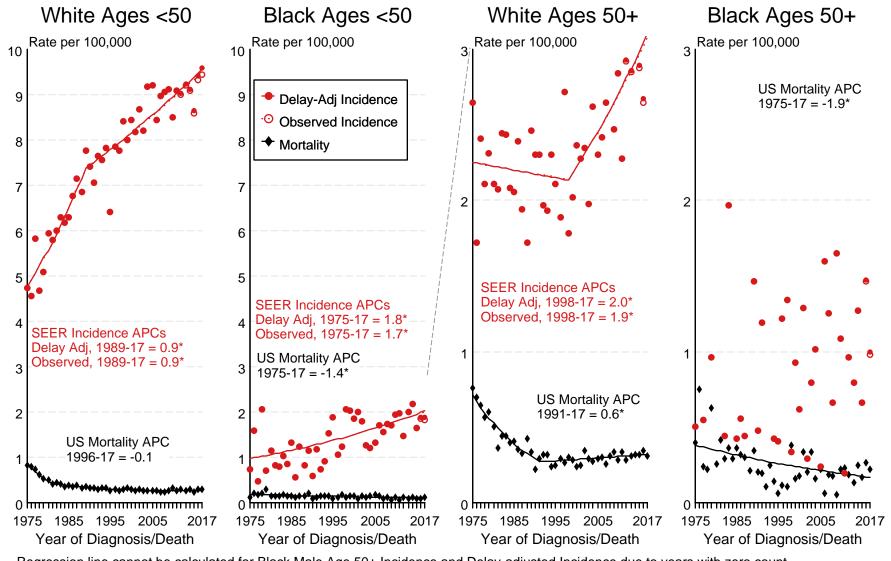
The APC is significantly different from zero (p < 0.05).

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 4.8, April 2020, 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.

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Testis, by Age and Race



Regression line cannot be calculated for Black Male Age 50+ Incidence and Delay-adjusted Incidence due to years with zero count. 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).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).</li>

#### Table 26.1 Cancer of the Thyroid (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | nd 5 | JP Tre  | end 6 | AAI     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|------|---------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC  | Years   | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ted Incide               | nceª, 19               | 75-2017  |       |         |       |         |       |         |      |         |       |         |         |
| All Races              | 1975-77                  | 6.3                    | 1977-80  | -6.5  | 1980-97 | 2.4*  | 1997-09 | 6.7*  | 2009-14 | 1.8* | 2014-17 | -3.3* | 0.6     | -2.0*   |
| White                  | 1975-77                  | 7.6                    | 1977-80  | -6.7  | 1980-97 | 2.7*  | 1997-09 | 7.0*  | 2009-15 | 1.3* | 2015-17 | -6.1* | 0.3     | -2.4    |
| Black                  | 1975-95                  | 0.8                    | 1995-12  | 6.3*  | 2012-17 | -2.0  |         |       |         |      |         |       | 1.6     | -2.0    |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |      |         |       |         |         |
| All Races              | 2000-09                  | 7.5*                   | 2009-15  | 2.0*  | 2015-17 | -5.1* |         |       |         |      |         |       | 1.0*    | -1.6*   |
| White                  | 2000-09                  | 7.6*                   | 2009-15  | 1.7*  | 2015-17 | -5.0* |         |       |         |      |         |       | 0.8*    | -1.7*   |
| White NH <sup>ef</sup> | 2000-09                  | 7.9*                   | 2009-15  | 1.6*  | 2015-17 | -5.5* |         |       |         |      |         |       | 0.6     | -2.0*   |
| Black                  | 2000-14                  | 5.9*                   | 2014-17  | -6.6* |         |       |         |       |         |      |         |       | 1.5     | -3.6    |
| Black NH <sup>ef</sup> | 2000-14                  | 5.8*                   | 2014-17  | -6.7* |         |       |         |       |         |      |         |       | 1.5     | -3.7    |
| API <sup>e</sup>       | 2000-03                  | 2.4                    | 2003-09  | 7.8*  | 2009-15 | 2.4*  | 2015-17 | -3.5  |         |      |         |       | 1.6*    | -0.6    |
| AI/AN <sup>eg</sup>    | 2000-02                  | 24.3                   | 2002-06  | -1.6  | 2006-12 | 8.7*  | 2012-17 | 0.3   |         |      |         |       | 4.0*    | 0.3     |
| Hispanic <sup>f</sup>  | 2000-12                  | 5.9*                   | 2012-17  | 1.0   |         |       |         |       |         |      |         |       | 3.2*    | 1.0     |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |         |      |         |       |         |         |
| All Races              | 1975-88                  | -2.0*                  | 1988-17  | 0.7*  |         |       |         |       |         |      |         |       | 0.7*    | 0.7*    |
| White                  | 1975-88                  | -2.2*                  | 1988-17  | 0.7*  |         |       |         |       |         |      |         |       | 0.7*    | 0.7*    |
| Black                  | 1975-17                  | 0.1                    |          |       |         |       |         |       |         |      |         |       | 0.1     | 0.1     |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |         |      |         |       |         |         |
| All Races              | 2000-17                  | 0.5*                   |          |       |         |       |         |       |         |      |         |       | 0.5*    | 0.5*    |
| White                  | 2000-17                  | 0.5*                   |          |       |         |       |         |       |         |      |         |       | 0.5*    | 0.5*    |
| White NH <sup>ef</sup> | 2000-17                  | 0.4*                   |          |       |         |       |         |       |         |      |         |       | 0.4*    | 0.4*    |
| Black                  | 2000-17                  | 0.2                    |          |       |         |       |         |       |         |      |         |       | 0.2     | 0.2     |
| Black NH <sup>ef</sup> | 2000-17                  | 0.3                    |          |       |         |       |         |       |         |      |         |       | 0.3     | 0.3     |
| API <sup>e</sup>       | 2000-17                  | -0.3                   |          |       |         |       |         |       |         |      |         |       | -0.3    | -0.3    |
| AI/AN <sup>eg</sup>    | 2000-17                  | -0.7                   |          |       |         |       |         |       |         |      |         |       | -0.7    | -0.7    |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.7*                   |          |       |         |       |         |       |         |      |         |       | 0.7*    | 0.7*    |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 26.2 Cancer of the Thyroid (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|                        | JP Tre                    | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tr | end 6 | AAI     | $C_q$   |
|------------------------|---------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|-------|-------|---------|---------|
|                        | Years                     | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus     | sted Incide               | nce <sup>a</sup> , 19  | 75-2017  |       |         |       |         |       |         |       |       |       |         |         |
| All Races              | 1975-80                   | -4.5*                  | 1980-97  | 1.8*  | 1997-12 | 5.4*  | 2012-17 | -0.9  |         |       |       |       | 1.9*    | -0.9    |
| White                  | 1975-77                   | 10.5                   | 1977-80  | -9.0  | 1980-97 | 2.5*  | 1997-12 | 5.6*  | 2012-17 | -1.1  |       |       | 1.8*    | -1.1    |
| Black                  | 1975-17                   | 3.1*                   |          |       |         |       |         |       |         |       |       |       | 3.1*    | 3.1*    |
| SEER 21 Delay-Adj      | usted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |       |       |         |         |
| All Races              | 2000-09                   | 7.0*                   | 2009-15  | 2.5*  | 2015-17 | -3.6  |         |       |         |       |       |       | 1.6*    | -0.6    |
| White                  | 2000-09                   | 7.2*                   | 2009-15  | 2.3*  | 2015-17 | -3.4  |         |       |         |       |       |       | 1.5*    | -0.6    |
| White NH <sup>ef</sup> | 2000-09                   | 7.6*                   | 2009-15  | 2.3*  | 2015-17 | -3.8  |         |       |         |       |       |       | 1.5*    | -0.8    |
| Black                  | 2000-09                   | 6.6*                   | 2009-17  | 0.9   |         |       |         |       |         |       |       |       | 1.6     | 0.9     |
| Black NH <sup>ef</sup> | 2000-02                   | -8.2                   | 2002-05  | 16.0  | 2005-15 | 3.1*  | 2015-17 | -6.8  |         |       |       |       | 0.8     | -2.0    |
| API <sup>e</sup>       | 2000-13                   | 6.3*                   | 2013-17  | 0.1   |         |       |         |       |         |       |       |       | 3.5*    | 0.1     |
| AI/AN <sup>eg</sup>    | 2000-17                   | 3.6*                   |          |       |         |       |         |       |         |       |       |       | 3.6*    | 3.6*    |
| Hispanic <sup>f</sup>  | 2000-17                   | 4.0*                   |          |       |         |       |         |       |         |       |       |       | 4.0*    | 4.0*    |
| U.S. Cancer Morta      | lity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |       |         |       |       |       |         |         |
| All Races              | 1975-83                   | -3.0*                  | 1983-17  | 1.2*  |         |       |         |       |         |       |       |       | 1.2*    | 1.2*    |
| White                  | 1975-83                   | -3.0*                  | 1983-17  | 1.2*  |         |       |         |       |         |       |       |       | 1.2*    | 1.2*    |
| Black                  | 1975-17                   | 0.5*                   |          |       |         |       |         |       |         |       |       |       | 0.5*    | 0.5*    |
| U.S. Cancer Morta      | lity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |         |       |       |       |         |         |
| All Races              | 2000-17                   | 1.0*                   |          |       |         |       |         |       |         |       |       |       | 1.0*    | 1.0*    |
| White                  | 2000-17                   | 1.0*                   |          |       |         |       |         |       |         |       |       |       | 1.0*    | 1.0*    |
| White NH <sup>ef</sup> | 2000-17                   | 1.0*                   |          |       |         |       |         |       |         |       |       |       | 1.0*    | 1.0*    |
| Black                  | 2000-17                   | 0.8                    |          |       |         |       |         |       |         |       |       |       | 0.8     | 0.8     |
| Black NH <sup>ef</sup> | 2000-17                   | 1.0                    |          |       |         |       |         |       |         |       |       |       | 1.0     | 1.0     |
| API <sup>e</sup>       | 2000-17                   | 1.2                    |          |       |         |       |         |       |         |       |       |       | 1.2     | 1.2     |
| AI/AN <sup>eg</sup>    | _                         | -                      |          |       |         |       |         |       |         |       |       |       | _       | _       |
| Hispanic <sup>f</sup>  | 2000-06                   | 4.6                    | 2006-09  | -10.9 | 2009-17 | 4.3*  |         |       |         |       |       |       | 2.5     | 4.3*    |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 26.3 Cancer of the Thyroid (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|                        | JP Tre                   | end 1                  | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | end 4 | JP Tre  | end 5 | JP Tr | end 6 | AAI     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|-------|---------|-------|-------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC   | Years   | APC   | Years | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjust    | ted Incide               | nceª, 19               | 75-2017  |       |         |       |         |       |         |       |       |       |         |         |
| All Races              | 1975-81                  | -1.8                   | 1981-97  | 2.6*  | 1997-09 | 7.0*  | 2009-15 | 1.2   | 2015-17 | -6.1  |       |       | 0.1     | -2.5    |
| White                  | 1975-82                  | -0.9                   | 1982-96  | 2.8*  | 1996-09 | 7.2*  | 2009-15 | 1.2   | 2015-17 | -7.1* |       |       | -0.1    | -3.0    |
| Black                  | 1975-93                  | 0.2                    | 1993-12  | 6.4*  | 2012-17 | -2.3  |         |       |         |       |       |       | 1.5     | -2.3    |
| SEER 21 Delay-Adjus    | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |       |         |       |       |       |         |         |
| All Races              | 2000-09                  | 7.6*                   | 2009-15  | 1.9*  | 2015-17 | -5.6* |         |       |         |       |       |       | 0.8*    | -1.9*   |
| White                  | 2000-09                  | 7.8*                   | 2009-15  | 1.6*  | 2015-17 | -5.5* |         |       |         |       |       |       | 0.6     | -2.0*   |
| White NH <sup>ef</sup> | 2000-09                  | 8.0*                   | 2009-15  | 1.4*  | 2015-17 | -6.1* |         |       |         |       |       |       | 0.3     | -2.5*   |
| Black                  | 2000-14                  | 6.2*                   | 2014-17  | -7.0* |         |       |         |       |         |       |       |       | 1.6     | -3.8    |
| Black NH <sup>ef</sup> | 2000-14                  | 6.2*                   | 2014-17  | -7.0* |         |       |         |       |         |       |       |       | 1.6     | -3.9    |
| API <sup>e</sup>       | 2000-10                  | 6.6*                   | 2010-17  | 0.5   |         |       |         |       |         |       |       |       | 1.8*    | 0.5     |
| AI/AN <sup>eg</sup>    | 2000-17                  | 4.8*                   |          |       |         |       |         |       |         |       |       |       | 4.8*    | 4.8*    |
| Hispanic <sup>f</sup>  | 2000-13                  | 5.9*                   | 2013-17  | -0.2  |         |       |         |       |         |       |       |       | 3.1*    | -0.2    |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 1975- | -2017                  |          |       |         |       |         |       |         |       |       |       |         |         |
| All Races              | 1975-88                  | -2.5*                  | 1988-17  | 0.3*  |         |       |         |       |         |       |       |       | 0.3*    | 0.3*    |
| White                  | 1975-88                  | -2.8*                  | 1988-17  | 0.3*  |         |       |         |       |         |       |       |       | 0.3*    | 0.3*    |
| Black                  | 1975-17                  | -0.1                   |          |       |         |       |         |       |         |       |       |       | -0.1    | -0.1    |
| U.S. Cancer Mortal:    | ity <sup>c</sup> , 2000- | -2017                  |          |       |         |       |         |       |         |       |       |       |         |         |
| All Races              | 2000-17                  | 0.2                    |          |       |         |       |         |       |         |       |       |       | 0.2     | 0.2     |
| White                  | 2000-17                  | 0.2                    |          |       |         |       |         |       |         |       |       |       | 0.2     | 0.2     |
| White NH <sup>ef</sup> | 2000-17                  | 0.0                    |          |       |         |       |         |       |         |       |       |       | 0.0     | 0.0     |
| Black                  | 2000-17                  | -0.2                   |          |       |         |       |         |       |         |       |       |       | -0.2    | -0.2    |
| Black NH <sup>ef</sup> | 2000-17                  | -0.1                   |          |       |         |       |         |       |         |       |       |       | -0.1    | -0.1    |
| API <sup>e</sup>       | 2000-17                  | -1.0                   |          |       |         |       |         |       |         |       |       |       | -1.0    | -1.0    |
| AI/AN <sup>eg</sup>    | 2000-17                  | -2.8                   |          |       |         |       |         |       |         |       |       |       | -2.8    | -2.8    |
| Hispanic <sup>f</sup>  | 2000-17                  | 0.7                    |          |       |         |       |         |       |         |       |       |       | 0.7     | 0.7     |

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

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

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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

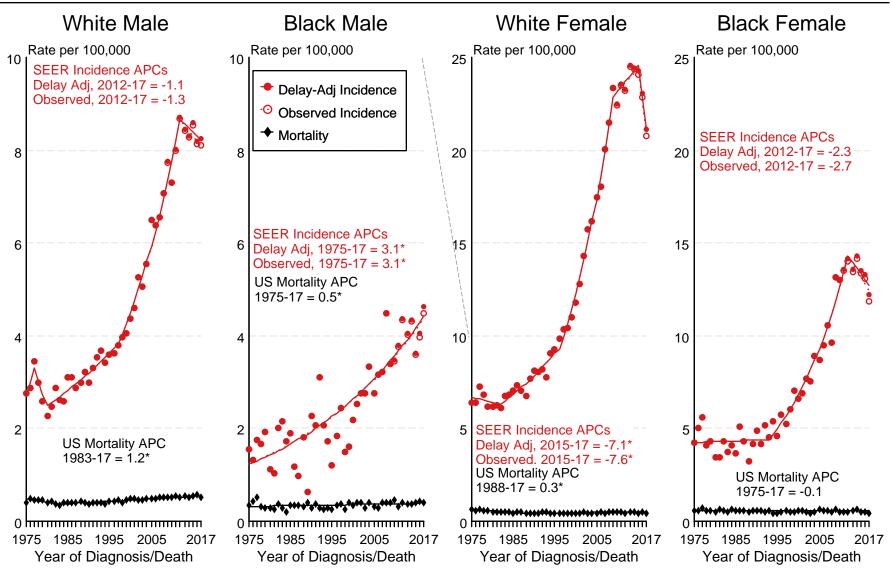
d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Thyroid, by Race and Sex



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).

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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).

#### Table 27.1 Cancer of the Urinary Bladder (Invasive and In Situ)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

|                        | JP Tre                   | nd 1                   | JP Tre   | end 2 | JP Tre  | end 3 | JP Tre  | nd 4 | JP Tre  | end 5 | JP Tre | end 6 | AAI     | $C_q$   |
|------------------------|--------------------------|------------------------|----------|-------|---------|-------|---------|------|---------|-------|--------|-------|---------|---------|
|                        | Years                    | APC                    | Years    | APC   | Years   | APC   | Years   | APC  | Years   | APC   | Years  | APC   | 2007-17 | 2012-17 |
| SEER 9 Delay-Adjus     | ted Incider              | nce <sup>a</sup> , 19  | 75-2017  |       |         |       |         |      |         |       |        |       |         |         |
| All Races              | 1975-86                  | 0.7*                   | 1986-07  | 0.2*  | 2007-17 | -1.0* |         |      |         |       |        |       | -1.0*   | -1.0*   |
| White                  | 1975-86                  | 0.9*                   | 1986-07  | 0.3*  | 2007-17 | -0.9* |         |      |         |       |        |       | -0.9*   | -0.9*   |
| Black                  | 1975-17                  | 0.3*                   |          |       |         |       |         |      |         |       |        |       | 0.3*    | 0.3*    |
| SEER 21 Delay-Adju     | sted Incide              | ence <sup>b</sup> , 20 | 000-2017 |       |         |       |         |      |         |       |        |       |         |         |
| All Races              | 2000-05                  | 0.4                    | 2005-17  | -1.1* |         |       |         |      |         |       |        |       | -1.1*   | -1.1*   |
| White                  | 2000-05                  | 0.5                    | 2005-17  | -0.9* |         |       |         |      |         |       |        |       | -0.9*   | -0.9*   |
| White NH <sup>ef</sup> | 2000-04                  | 1.0*                   | 2004-17  | -0.7* |         |       |         |      |         |       |        |       | -0.7*   | -0.7*   |
| Black                  | 2000-17                  | -0.1                   |          |       |         |       |         |      |         |       |        |       | -0.1    | -0.1    |
| Black NH <sup>ef</sup> | 2000-17                  | -0.1                   |          |       |         |       |         |      |         |       |        |       | -0.1    | -0.1    |
| API <sup>e</sup>       | 2000-17                  | -0.4*                  |          |       |         |       |         |      |         |       |        |       | -0.4*   | -0.4*   |
| AI/AN <sup>eg</sup>    | 2000-17                  | 2.1*                   |          |       |         |       |         |      |         |       |        |       | 2.1*    | 2.1*    |
| Hispanic <sup>f</sup>  | 2000-17                  | -1.1*                  |          |       |         |       |         |      |         |       |        |       | -1.1*   | -1.1*   |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 1975- | 2017                   |          |       |         |       |         |      |         |       |        |       |         |         |
| All Races              | 1975-77                  | 0.0                    | 1977-87  | -2.1* | 1987-00 | -0.2* | 2000-13 | 0.1  | 2013-17 | -0.7* |        |       | -0.3    | -0.7*   |
| White                  | 1975-77                  | 0.1                    | 1977-87  | -2.1* | 1987-00 | 0.0   | 2000-13 | 0.3* | 2013-17 | -0.6  |        |       | -0.1    | -0.6    |
| Black                  | 1975-17                  | -1.0*                  |          |       |         |       |         |      |         |       |        |       | -1.0*   | -1.0*   |
| U.S. Cancer Mortal     | ity <sup>c</sup> , 2000- | 2017                   |          |       |         |       |         |      |         |       |        |       |         |         |
| All Races              | 2000-17                  | 0.0                    |          |       |         |       |         |      |         |       |        |       | 0.0     | 0.0     |
| White                  | 2000-17                  | 0.1*                   |          |       |         |       |         |      |         |       |        |       | 0.1*    | 0.1*    |
| White NH <sup>ef</sup> | 2000-17                  | 0.2*                   |          |       |         |       |         |      |         |       |        |       | 0.2*    | 0.2*    |
| Black                  | 2000-17                  | -0.7*                  |          |       |         |       |         |      |         |       |        |       | -0.7*   | -0.7*   |
| Black NH <sup>ef</sup> | 2000-17                  | -0.6*                  |          |       |         |       |         |      |         |       |        |       | -0.6*   | -0.6*   |
| API <sup>e</sup>       | 2000-17                  | -0.4                   |          |       |         |       |         |      |         |       |        |       | -0.4    | -0.4    |
| AI/AN <sup>eg</sup>    | 2000-17                  | 2.3*                   |          |       |         |       |         |      |         |       |        |       | 2.3*    | 2.3*    |
| Hispanicf              | 2000-17                  | -0.4                   |          |       |         |       |         |      |         |       |        |       | -0.4    | -0.4    |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

#### Table 27.2 Cancer of the Urinary Bladder (Invasive and In Situ)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Males by Race/Ethnicity

|   | JP Trend 1 |       | JP Trend 2 |       | JP Trend 3 |       | JP Trend 4 |       | JP Trend 5 |      | JP Trend 6 |       | AAPC <sup>d</sup> |         |
|---|------------|-------|------------|-------|------------|-------|------------|-------|------------|------|------------|-------|-------------------|---------|
|   | Years      | APC   | Years      | APC   | Years      | APC   | Years      | APC   | Years      | APC  | Years      | APC   | 2007-17           | 2012-17 |
| SEER 9 Delay-Adjusted Incidence <sup>a</sup> , 1975-2017  |            |       |            |       |            |       |            |       |            |      |            |       |                   |         |
| All Races   | 1975-86    | 0.8*  | 1986-07    | 0.1   | 2007-17    | -1.1* |            |       |            |      |            |       | -1.1*             | -1.1*   |
| White   | 1975-87    | 1.2*  | 1987-94    | -0.4  | 1994-07    | 0.4*  | 2007-17    | -1.2* |            |      |            |       | -1.2*             | -1.2*   |
| Black   | 1975-17    | 0.4*  |            |       |            |       |            |       |            |      |            |       | 0.4*              | 0.4*    |
| SEER 21 Delay-Adjusted Incidence <sup>b</sup> , 2000-2017 |            |       |            |       |            |       |            |       |            |      |            |       |                   |         |
| All Races   | 2000-06    | 0.2   | 2006-17    | -1.3* |            |       |            |       |            |      |            |       | -1.3*             | -1.3*   |
| White   | 2000-06    | 0.3   | 2006-17    | -1.2* |            |       |            |       |            |      |            |       | -1.2*             | -1.2*   |
| White NH <sup>ef</sup>                                    | 2000-05    | 0.6*  | 2005-17    | -0.9* |            |       |            |       |            |      |            |       | -0.9*             | -0.9*   |
| Black   | 2000-17    | 0.0   |            |       |            |       |            |       |            |      |            |       | 0.0               | 0.0     |
| Black NH <sup>ef</sup>                                    | 2000-17    | 0.1   |            |       |            |       |            |       |            |      |            |       | 0.1               | 0.1     |
| API <sup>e</sup>  | 2000-17    | -0.4* |            |       |            |       |            |       |            |      |            |       | -0.4*             | -0.4*   |
| AI/AN <sup>eg</sup>                                       | 2000-17    | 1.8*  |            |       |            |       |            |       |            |      |            |       | 1.8*              | 1.8*    |
| Hispanic <sup>f</sup>                                     | 2000-17    | -1.2* |            |       |            |       |            |       |            |      |            |       | -1.2*             | -1.2*   |
| U.S. Cancer Mortality <sup>c</sup> , 1975-2017            |            |       |            |       |            |       |            |       |            |      |            |       |                   |         |
| All Races   | 1975-83    | -1.4* | 1983-87    | -2.8* | 1987-93    | 0.2   | 1993-97    | -1.1  | 1997-13    | 0.0  | 2013-17    | -1.1* | -0.5*             | -1.1*   |
| White   | 1975-83    | -1.4* | 1983-87    | -2.8* | 1987-93    | 0.3   | 1993-97    | -0.9  | 1997-13    | 0.1* | 2013-17    | -0.9* | -0.3*             | -0.9*   |
| Black   | 1975-17    | -0.9* |            |       |            |       |            |       |            |      |            |       | -0.9*             | -0.9*   |
| U.S. Cancer Mortality <sup>c</sup> , 2000-2017            |            |       |            |       |            |       |            |       |            |      |            |       |                   |         |
| All Races   | 2000-13    | 0.0   | 2013-17    | -1.1* |            |       |            |       |            |      |            |       | -0.5*             | -1.1*   |
| White   | 2000-13    | 0.2   | 2013-17    | -1.0* |            |       |            |       |            |      |            |       | -0.3              | -1.0*   |
| White NH <sup>ef</sup>                                    | 2000-13    | 0.3*  | 2013-17    | -0.9  |            |       |            |       |            |      |            |       | -0.2              | -0.9    |
| Black   | 2000-17    | -0.4  |            |       |            |       |            |       |            |      |            |       | -0.4              | -0.4    |
| Black NH <sup>ef</sup>                                    | 2000-17    | -0.3  |            |       |            |       |            |       |            |      |            |       | -0.3              | -0.3    |
| API <sup>e</sup>  | 2000-17    | -0.1  |            |       |            |       |            |       |            |      |            |       | -0.1              | -0.1    |
| AI/AN <sup>eg</sup>                                       | 2000-17    | 2.0   |            |       |            |       |            |       |            |      |            |       | 2.0               | 2.0     |
| Hispanic <sup>f</sup>                                     | 2000-17    | -0.6  |            |       |            |       |            |       |            |      |            |       | -0.6              | -0.6    |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

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.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

#### Table 27.3 Cancer of the Urinary Bladder (Invasive and In Situ)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints, Females by Race/Ethnicity

|   | JP Trend 1 |       | JP Trend 2 |       | JP Trend 3 |     | JP Trend 4 |     | JP Trend 5 |     | JP Trend 6 |     | AAPC <sup>d</sup> |         |
|---|------------|-------|------------|-------|------------|-----|------------|-----|------------|-----|------------|-----|-------------------|---------|
|   | Years      | APC   | Years      | APC   | Years      | APC | Years      | APC | Years      | APC | Years      | APC | 2007-17           | 2012-17 |
| SEER 9 Delay-Adjusted Incidence <sup>a</sup> , 1975-2017  |            |       |            |       |            |     |            |     |            |     |            |     |                   |         |
| All Races   | 1975-03    | 0.2*  | 2003-17    | -1.1* |            |     |            |     |            |     |            |     | -1.1*             | -1.1*   |
| White   | 1975-03    | 0.4*  | 2003-17    | -1.1* |            |     |            |     |            |     |            |     | -1.1*             | -1.1*   |
| Black   | 1975-17    | 0.1   |            |       |            |     |            |     |            |     |            |     | 0.1               | 0.1     |
| SEER 21 Delay-Adjusted Incidence <sup>b</sup> , 2000-2017 |            |       |            |       |            |     |            |     |            |     |            |     |                   |         |
| All Races   | 2000-17    | -1.0* |            |       |            |     |            |     |            |     |            |     | -1.0*             | -1.0*   |
| White   | 2000-17    | -0.9* |            |       |            |     |            |     |            |     |            |     | -0.9*             | -0.9*   |
| White NH <sup>ef</sup>                                    | 2000-17    | -0.7* |            |       |            |     |            |     |            |     |            |     | -0.7*             | -0.7*   |
| Black   | 2000-17    | -0.6* |            |       |            |     |            |     |            |     |            |     | -0.6*             | -0.6*   |
| Black NH <sup>ef</sup>                                    | 2000-17    | -0.6* |            |       |            |     |            |     |            |     |            |     | -0.6*             | -0.6*   |
| API <sup>e</sup>  | 2000-17    | -0.5  |            |       |            |     |            |     |            |     |            |     | -0.5              | -0.5    |
| AI/AN <sup>eg</sup>                                       | 2000-17    | 2.9*  |            |       |            |     |            |     |            |     |            |     | 2.9*              | 2.9*    |
| $	ext{Hispanic}^{	ext{f}}$                                | 2000-17    | -1.5* |            |       |            |     |            |     |            |     |            |     | -1.5*             | -1.5*   |
| U.S. Cancer Mortality <sup>c</sup> , 1975-2017            |            |       |            |       |            |     |            |     |            |     |            |     |                   |         |
| All Races   | 1975-86    | -1.6* | 1986-17    | -0.4* |            |     |            |     |            |     |            |     | -0.4*             | -0.4*   |
| White   | 1975-86    | -1.7* | 1986-17    | -0.3* |            |     |            |     |            |     |            |     | -0.3*             | -0.3*   |
| Black   | 1975-17    | -1.0* |            |       |            |     |            |     |            |     |            |     | -1.0*             | -1.0*   |
| U.S. Cancer Mortality <sup>c</sup> , 2000-2017            |            |       |            |       |            |     |            |     |            |     |            |     |                   |         |
| All Races   | 2000-17    | -0.5* |            |       |            |     |            |     |            |     |            |     | -0.5*             | -0.5*   |
| White   | 2000-17    | -0.3* |            |       |            |     |            |     |            |     |            |     | -0.3*             | -0.3*   |
| White NH <sup>ef</sup>                                    | 2000-17    | -0.2* |            |       |            |     |            |     |            |     |            |     | -0.2*             | -0.2*   |
| Black   | 2000-17    | -1.4* |            |       |            |     |            |     |            |     |            |     | -1.4*             | -1.4*   |
| Black NH <sup>ef</sup>                                    | 2000-17    | -1.3* |            |       |            |     |            |     |            |     |            |     | -1.3*             | -1.3*   |
| API <sup>e</sup>  | 2000-17    | -0.8  |            |       |            |     |            |     |            |     |            |     | -0.8              | -0.8    |
| AI/AN <sup>eg</sup>                                       | _          | -     |            |       |            |     |            |     |            |     |            |     | -                 | _       |
| Hispanic <sup>f</sup>                                     | 2000-17    | -0.5  |            |       |            |     |            |     |            |     |            |     | -0.5              | -0.5    |

Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint">https://surveillance.cancer.gov/joinpoint</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, 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).

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.

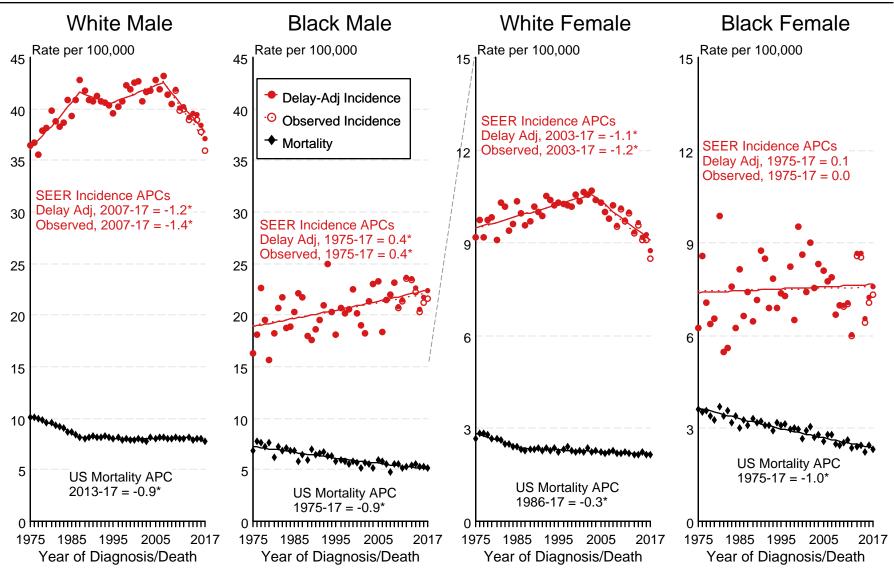
API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

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. Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Urinary Bladder, by Race and Sex

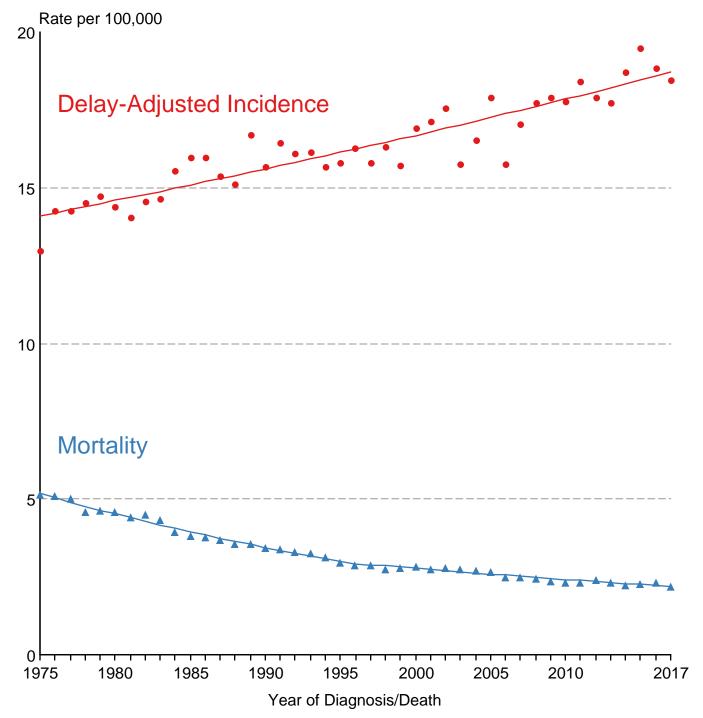


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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.

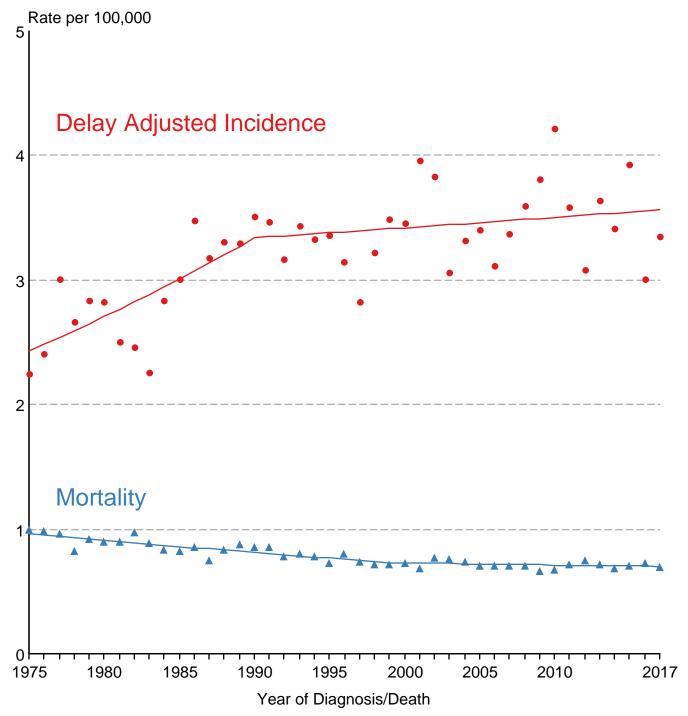
The APC is significantly different from zero (p < 0.05).

### SEER Delay-Adjusted Incidence and US Mortality All Childhood Cancers, Under 20 Years of Age Both Sexes, All Races, 1975-2017



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). Regression lines are calculated using the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

## SEER Delay-Adjusted Incidence and US Mortality Brain and CNS, Under 15 Years of Age Both Sexes, All Races, 1975-2017



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). Regression lines are calculated using the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.