# SEER Observed Incidence and Delay Adjusted Incidence Rates[a]
## All Cancer Sites, By Sex

### Both Sexes

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1998-08 = -0.4*
Observed, 1999-08 = -0.6*

Year of Diagnosis

### Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2000-08 = -0.8*
Observed, 2000-08 = -1.0*

● Delay-Adjusted Incidence
◉ Observed Incidence

Year of Diagnosis

### Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2005-08 = 0.6
Observed, 1998-08 = -0.4*
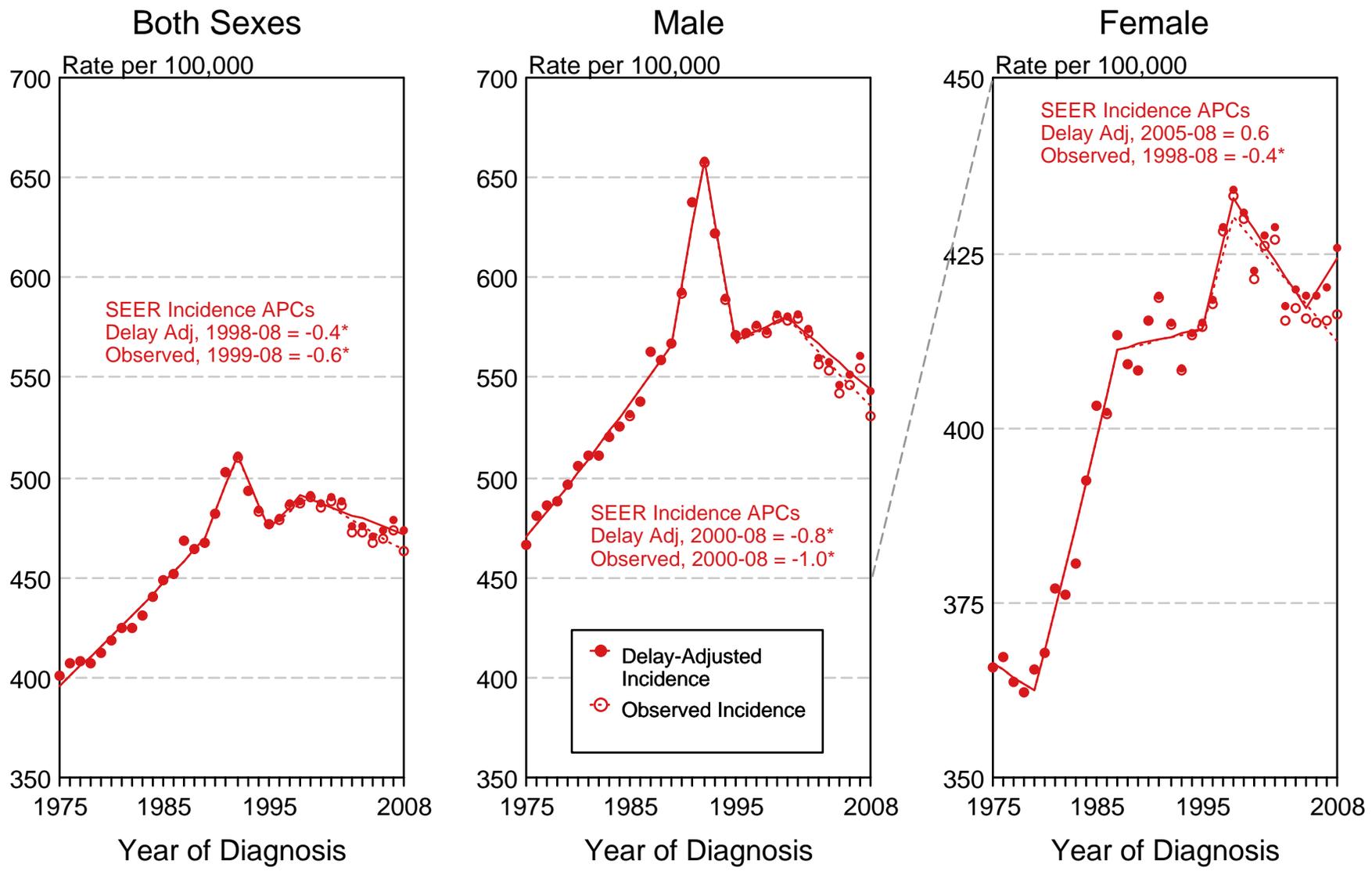
Year of Diagnosis

Figure 1.21

[a] Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and Delay Adjusted Incidence Rates [a]
## Both Sexes

### Lung and Bronchus

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1991-08 = -0.7*
Observed, 1991-08 = -0.8*

● Delay-Adjusted Incidence

⊙ Observed Incidence

Year of Diagnosis

### Colon and Rectum

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1998-08 = -2.4*
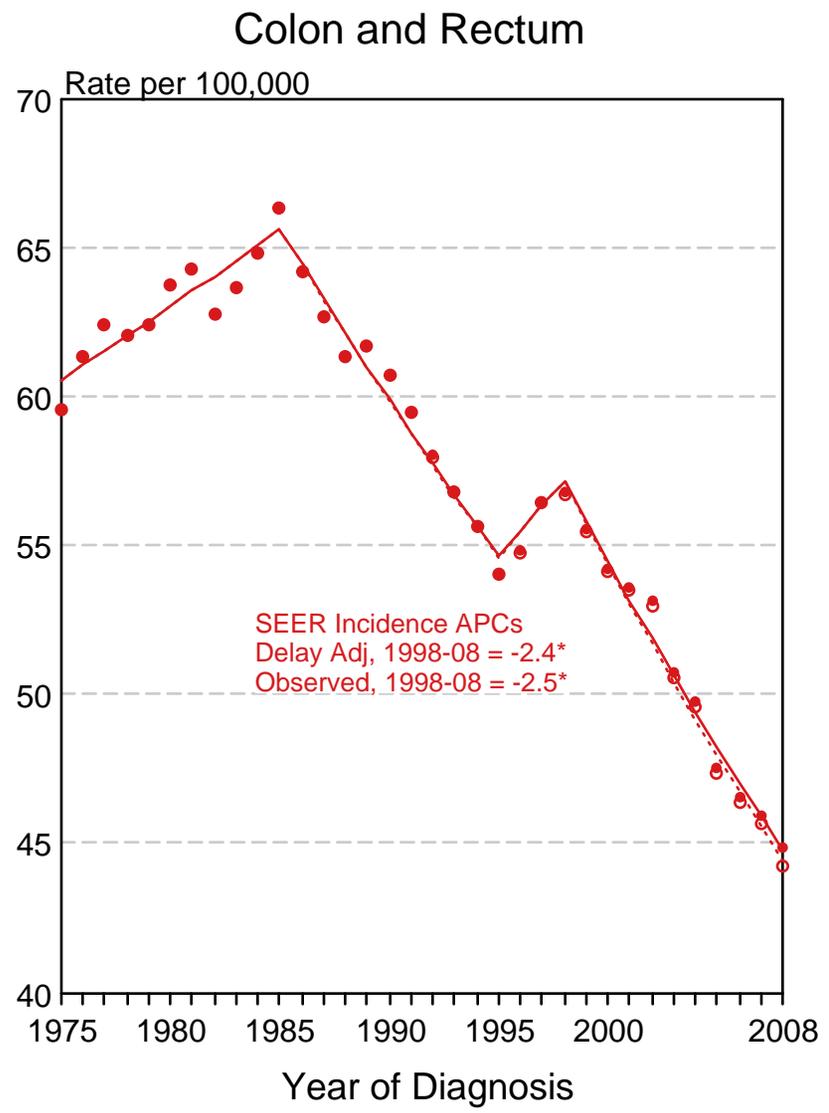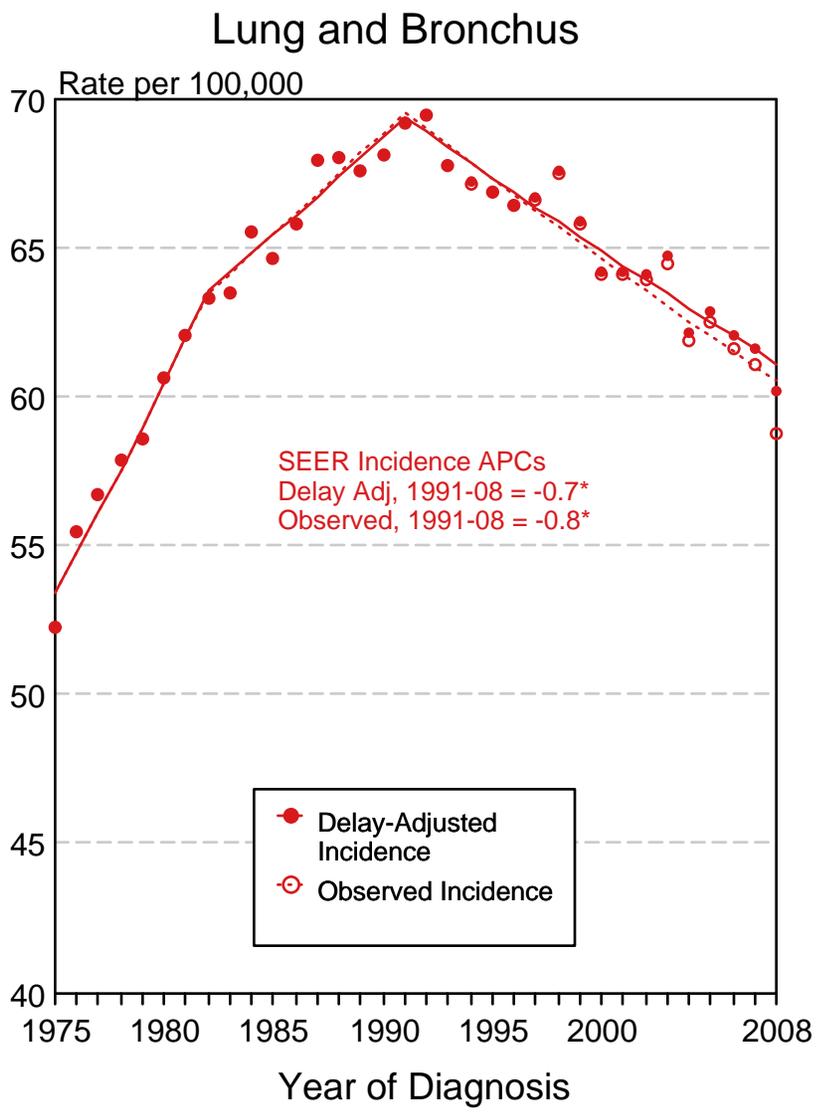Observed, 1998-08 = -2.5*

Year of Diagnosis

Figure 1.22

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

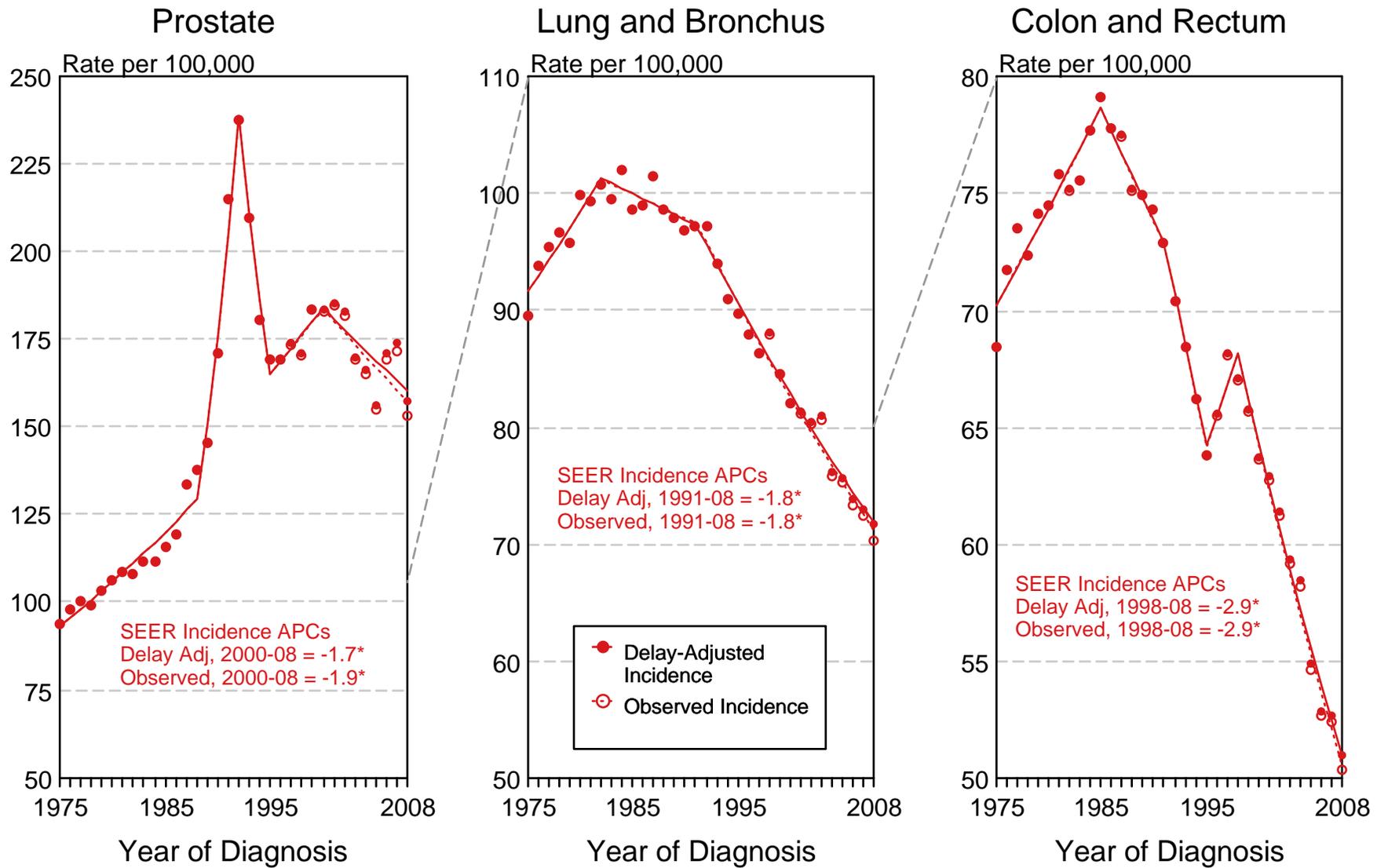# SEER Observed Incidence and Delay Adjusted Incidence Rates[a]
## Males

### Prostate

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2000-08 = -1.7*
Observed, 2000-08 = -1.9*

Year of Diagnosis

### Lung and Bronchus

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1991-08 = -1.8*
Observed, 1991-08 = -1.8*

- ● Delay-Adjusted Incidence
- ⊖ Observed Incidence

Year of Diagnosis

### Colon and Rectum

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1998-08 = -2.9*
Observed, 1998-08 = -2.9*

Year of Diagnosis

[a] Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and Delay Adjusted Incidence Rates[a] Females

## Breast

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2005-08 = 0.9
Observed, 2005-08 = 0.7

- ● Delay-Adjusted Incidence
- ◉ Observed Incidence

Year of Diagnosis

## Lung and Bronchus

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1991-08 = 0.4*
Observed, 2006-08 = -2.3

Year of Diagnosis

## Colon and Rectum

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1998-08 = -2.1*
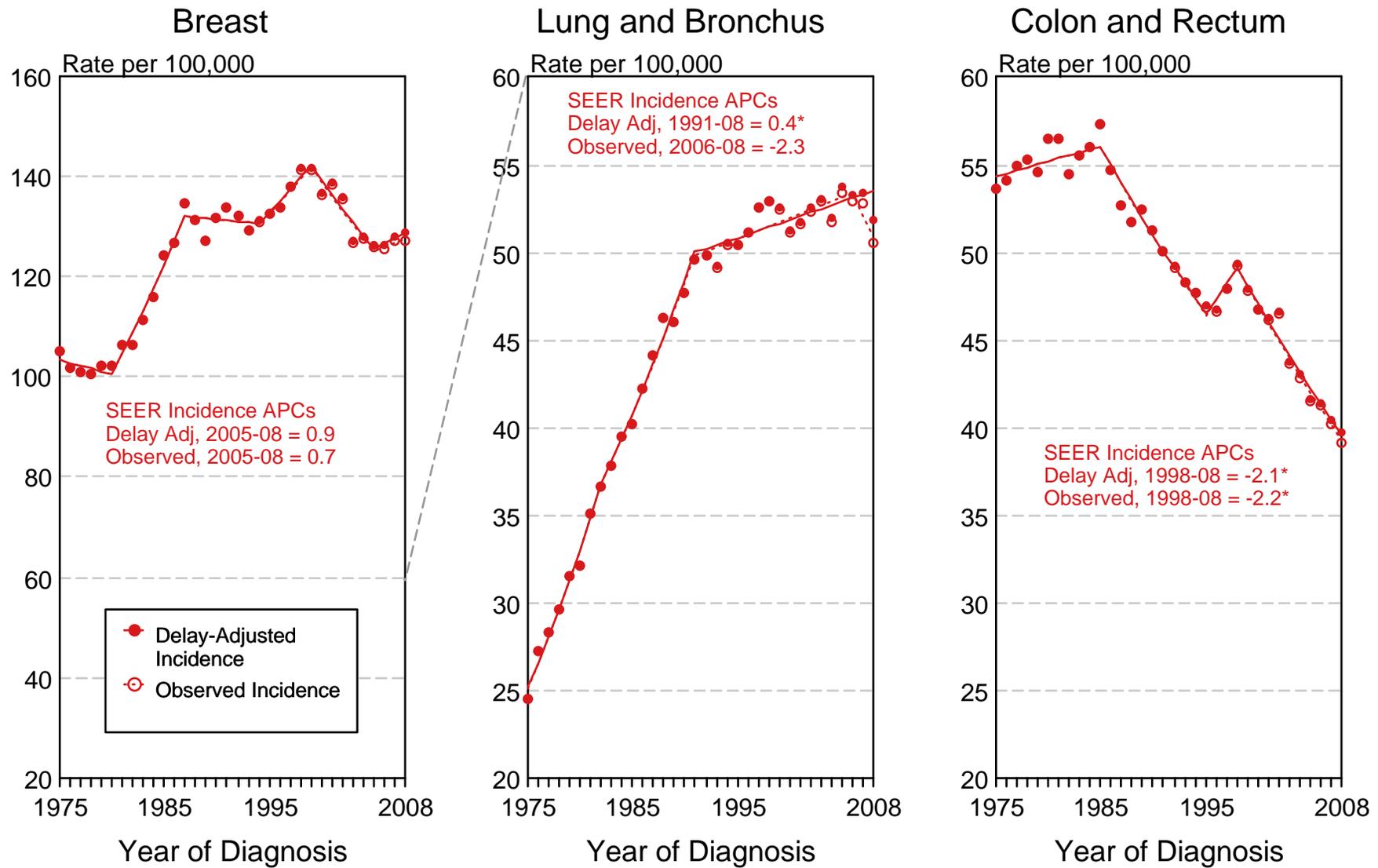Observed, 1998-08 = -2.2*

Year of Diagnosis

Figure 1.24

a   Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
    Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 2.1
All Cancer Sites (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-89 | 1.2* | 1989-92 | 2.8 | 1992-95 | -2.4 | 1995-98 | 1.2 | 1998-08 | -0.4* | | | -0.4* | -0.4* |
| White | 1975-82 | 0.8* | 1982-92 | 1.8* | 1992-95 | -2.1 | 1995-98 | 1.5 | 1998-08 | -0.4* | | | -0.4* | -0.4* |
| Black | 1975-84 | 1.6* | 1984-89 | 0.4 | 1989-92 | 4.1* | 1992-06 | -0.8* | 2006-08 | 1.5 | | | -0.2 | 0.4 |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-94 | -3.2* | 1994-99 | 0.4 | 1999-05 | -0.8* | 2005-08 | 0.1 | | | | | -0.5 | -0.1 |
| White | 1992-94 | -3.1* | 1994-01 | 0.4 | 2001-04 | -1.4 | 2004-08 | 0.1 | | | | | -0.3 | 0.1 |
| Black | 1992-08 | -0.7* | | | | | | | | | | | -0.7* | -0.7* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-89 | 1.2* | 1989-92 | 2.8 | 1992-95 | -2.4 | 1995-99 | 0.8 | 1999-08 | -0.6* | | | -0.6* | -0.6* |
| White | 1975-82 | 0.9* | 1982-92 | 1.8* | 1992-95 | -2.1 | 1995-99 | 1.1 | 1999-08 | -0.7* | | | -0.7* | -0.7* |
| Black | 1975-89 | 1.2* | 1989-92 | 3.4 | 1992-08 | -0.8* | | | | | | | -0.8* | -0.8* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-94 | -3.1* | 1994-99 | 0.3 | 1999-08 | -0.7* | | | | | | | -0.7* | -0.7* |
| White | 1992-94 | -3.3* | 1994-99 | 0.6 | 1999-08 | -0.7* | | | | | | | -0.7* | -0.7* |
| White NH[ef] | 1992-94 | -3.2* | 1994-99 | 0.7 | 1999-08 | -0.6* | | | | | | | -0.6* | -0.6* |
| Black | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| Black NH[ef] | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| API[e] | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| AI/AN[eg] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| Hispanic[f] | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-84 | 0.5* | 1984-91 | 0.3* | 1991-94 | -0.5 | 1994-98 | -1.3* | 1998-01 | -0.8 | 2001-08 | -1.6* | -1.4* | -1.6* |
| White | 1975-90 | 0.4* | 1990-94 | -0.3 | 1994-98 | -1.2* | 1998-01 | -0.6 | 2001-08 | -1.5* | | | -1.3* | -1.5* |
| Black | 1975-83 | 1.3* | 1983-91 | 0.7* | 1991-95 | -0.8* | 1995-02 | -1.6* | 2002-08 | -2.1* | | | -1.9* | -2.1* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-01 | -1.0* | 2001-08 | -1.6* | | | | | | | | | -1.4* | -1.6* |
| White | 1992-01 | -0.9* | 2001-08 | -1.5* | | | | | | | | | -1.3* | -1.5* |
| White NH[ef] | 1992-94 | -0.1 | 1994-97 | -1.4* | 1997-00 | -0.4 | 2000-08 | -1.3* | | | | | -1.2* | -1.3* |
| Black | 1992-94 | -0.4 | 1994-02 | -1.6* | 2002-08 | -2.1* | | | | | | | -1.9* | -2.1* |
| Black NH[ef] | 1992-02 | -1.3* | 2002-08 | -2.1* | | | | | | | | | -1.8* | -2.1* |
| API[e] | 1992-08 | -1.5* | | | | | | | | | | | -1.5* | -1.5* |
| AI/AN[eg] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Hispanic[f] | 1992-00 | -0.4* | 2000-08 | -1.9* | | | | | | | | | -1.8* | -1.9* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

Table 2.2
All Cancer Sites (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | 1.3* | 1989-92 | 5.2* | 1992-95 | -4.8* | 1995-00 | 0.4 | 2000-08 | -0.8* | | | -0.7* | -0.8* |
| White | 1975-89 | 1.4* | 1989-92 | 5.0* | 1992-95 | -5.1* | 1995-00 | 0.7 | 2000-08 | -0.8* | | | -0.6* | -0.8* |
| Black | 1975-81 | 2.8* | 1981-89 | 0.7 | 1989-92 | 6.6* | 1992-06 | -1.5* | 2006-08 | 2.1 | | | -0.7 | 0.3 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-94 | -5.6* | 1994-08 | -0.6* | | | | | | | | | -0.6* | -0.6* |
| White | 1992-94 | -6.6* | 1994-01 | -0.1 | 2001-08 | -0.9* | | | | | | | -0.7* | -0.9* |
| Black | 1992-08 | -1.4* | | | | | | | | | | | -1.4* | -1.4* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | 1.3* | 1989-92 | 5.2* | 1992-95 | -4.8* | 1995-00 | 0.4 | 2000-08 | -1.0* | | | -0.8* | -1.0* |
| White | 1975-89 | 1.4* | 1989-92 | 5.0* | 1992-95 | -5.1* | 1995-00 | 0.7 | 2000-08 | -1.1* | | | -0.9* | -1.1* |
| Black | 1975-81 | 2.8* | 1981-89 | 0.7 | 1989-92 | 6.4 | 1992-08 | -1.5* | | | | | -1.5* | -1.5* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-95 | -4.5* | 1995-00 | 0.2 | 2000-08 | -1.1* | | | | | | | -1.0* | -1.1* |
| White | 1992-94 | -6.7* | 1994-01 | -0.1 | 2001-08 | -1.2* | | | | | | | -0.9* | -1.2* |
| White NH[ef] | 1992-94 | -6.8* | 1994-01 | 0.0 | 2001-08 | -1.0* | | | | | | | -0.8* | -1.0* |
| Black | 1992-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |
| Black NH[ef] | 1992-08 | -1.5* | | | | | | | | | | | -1.5* | -1.5* |
| API[e] | 1992-96 | -2.8* | 1996-00 | 0.5 | 2000-08 | -1.1* | | | | | | | -1.0* | -1.1* |
| AI/AN[eg] | 1992-08 | -0.7 | | | | | | | | | | | -0.7 | -0.7 |
| Hispanic[f] | 1992-04 | -0.7* | 2004-08 | -2.1* | | | | | | | | | -1.4* | -2.1* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-79 | 1.0* | 1979-90 | 0.3* | 1990-93 | -0.5 | 1993-01 | -1.5* | 2001-08 | -1.8* | | | -1.7* | -1.8* |
| White | 1975-79 | 0.9* | 1979-91 | 0.2* | 1991-94 | -0.8 | 1994-97 | -1.7* | 1997-01 | -1.2* | 2001-08 | -1.7* | -1.6* | -1.7* |
| Black | 1975-82 | 1.8* | 1982-90 | 1.0* | 1990-94 | -0.5 | 1994-08 | -2.3* | | | | | -2.3* | -2.3* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-01 | -1.4* | 2001-08 | -1.8* | | | | | | | | | -1.7* | -1.8* |
| White | 1992-01 | -1.3* | 2001-08 | -1.7* | | | | | | | | | -1.6* | -1.7* |
| White NH[ef] | 1992-02 | -1.3* | 2002-08 | -1.6* | | | | | | | | | -1.5* | -1.6* |
| Black | 1992-94 | -0.2 | 1994-08 | -2.3* | | | | | | | | | -2.3* | -2.3* |
| Black NH[ef] | 1992-08 | -2.0* | | | | | | | | | | | -2.0* | -2.0* |
| API[e] | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| AI/AN[eg] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| Hispanic[f] | 1992-98 | -0.1 | 1998-08 | -2.3* | | | | | | | | | -2.3* | -2.3* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
\* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Table 2.3
All Cancer Sites (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-79 | -0.3 | 1979-87 | 1.6* | 1987-95 | 0.1 | 1995-98 | 1.5 | 1998-05 | -0.5* | 2005-08 | 0.6 | -0.2 | 0.3 |
| White | 1975-79 | -0.2 | 1979-87 | 1.7* | 1987-95 | 0.1 | 1995-98 | 1.8 | 1998-05 | -0.5* | 2005-08 | 0.5 | -0.2 | 0.3 |
| Black | 1975-90 | 1.2* | 1990-08 | 0.1 | | | | | | | | | 0.1 | 0.1 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-98 | 0.8* | 1998-06 | -0.5* | 2006-08 | 1.1 | | | | | | | -0.2 | 0.3 |
| White | 1992-94 | -0.3 | 1994-98 | 1.5* | 1998-04 | -0.7* | 2004-08 | 0.3 | | | | | -0.3 | 0.3 |
| Black | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-79 | -0.3 | 1979-87 | 1.6* | 1987-95 | 0.1 | 1995-98 | 1.3 | 1998-08 | -0.4* | | | -0.4* | -0.4* |
| White | 1975-79 | -0.2 | 1979-87 | 1.7* | 1987-95 | 0.1 | 1995-98 | 1.6 | 1998-08 | -0.5* | | | -0.5* | -0.5* |
| Black | 1975-91 | 1.1* | 1991-08 | 0.0 | | | | | | | | | 0.0 | 0.0 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-94 | -0.4 | 1994-98 | 1.2 | 1998-04 | -0.8* | 2004-08 | 0.0 | | | | | -0.4* | 0.0 |
| White | 1992-94 | -0.3 | 1994-98 | 1.4* | 1998-04 | -0.8* | 2004-08 | -0.1 | | | | | -0.5* | -0.1 |
| White NH[ef] | 1992-98 | 1.1* | 1998-08 | -0.4* | | | | | | | | | -0.4* | -0.4* |
| Black | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Black NH[ef] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| API[e] | 1992-08 | 0.3* | | | | | | | | | | | 0.3* | 0.3* |
| AI/AN[eg] | 1992-08 | 0.7* | | | | | | | | | | | 0.7* | 0.7* |
| Hispanic[f] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-91 | 0.6* | 1991-01 | -0.6* | 2001-08 | -1.5* | | | | | | | -1.3* | -1.5* |
| White | 1975-90 | 0.6* | 1990-94 | -0.2 | 1994-02 | -0.8* | 2002-08 | -1.4* | | | | | -1.2* | -1.4* |
| Black | 1975-92 | 1.0* | 1992-02 | -0.9* | 2002-08 | -1.8* | | | | | | | -1.5* | -1.8* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-02 | -0.7* | 2002-08 | -1.6* | | | | | | | | | -1.3* | -1.6* |
| White | 1992-01 | -0.6* | 2001-08 | -1.4* | | | | | | | | | -1.2* | -1.4* |
| White NH[ef] | 1992-94 | 0.3 | 1994-98 | -1.0* | 1998-01 | -0.1 | 2001-08 | -1.3* | | | | | -1.1* | -1.3* |
| Black | 1992-02 | -0.8* | 2002-08 | -1.8* | | | | | | | | | -1.5* | -1.8* |
| Black NH[ef] | 1992-03 | -0.7* | 2003-08 | -2.0* | | | | | | | | | -1.4* | -2.0* |
| API[e] | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| AI/AN[eg] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| Hispanic[f] | 1992-01 | -0.3 | 2001-08 | -1.6* | | | | | | | | | -1.3* | -1.6* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a] All Cancer Sites, by Race and Sex



Figure 2.1

[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[a]
## All Cancer Sites, Under 65 Years of Age, by Race and Sex

### White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2001-08 = -0.4
Observed, 2001-08 = -0.7*

US Mortality APC
1997-08 = -1.8*

Year of Diagnosis/Death

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1993-08 = -0.5*
Observed, 1993-08 = -0.7*

US Mortality APC
2001-08 = -2.3*

- Delay-Adjusted Incidence
- Observed Incidence
- Mortality

Year of Diagnosis/Death

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1998-08 = 0.0
Observed, 1998-08 = -0.2*

US Mortality APC
1990-08 = -1.8*

Year of Diagnosis/Death

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1988-08 = 0.0
Observed, 1991-08 = -0.2*

US Mortality APC
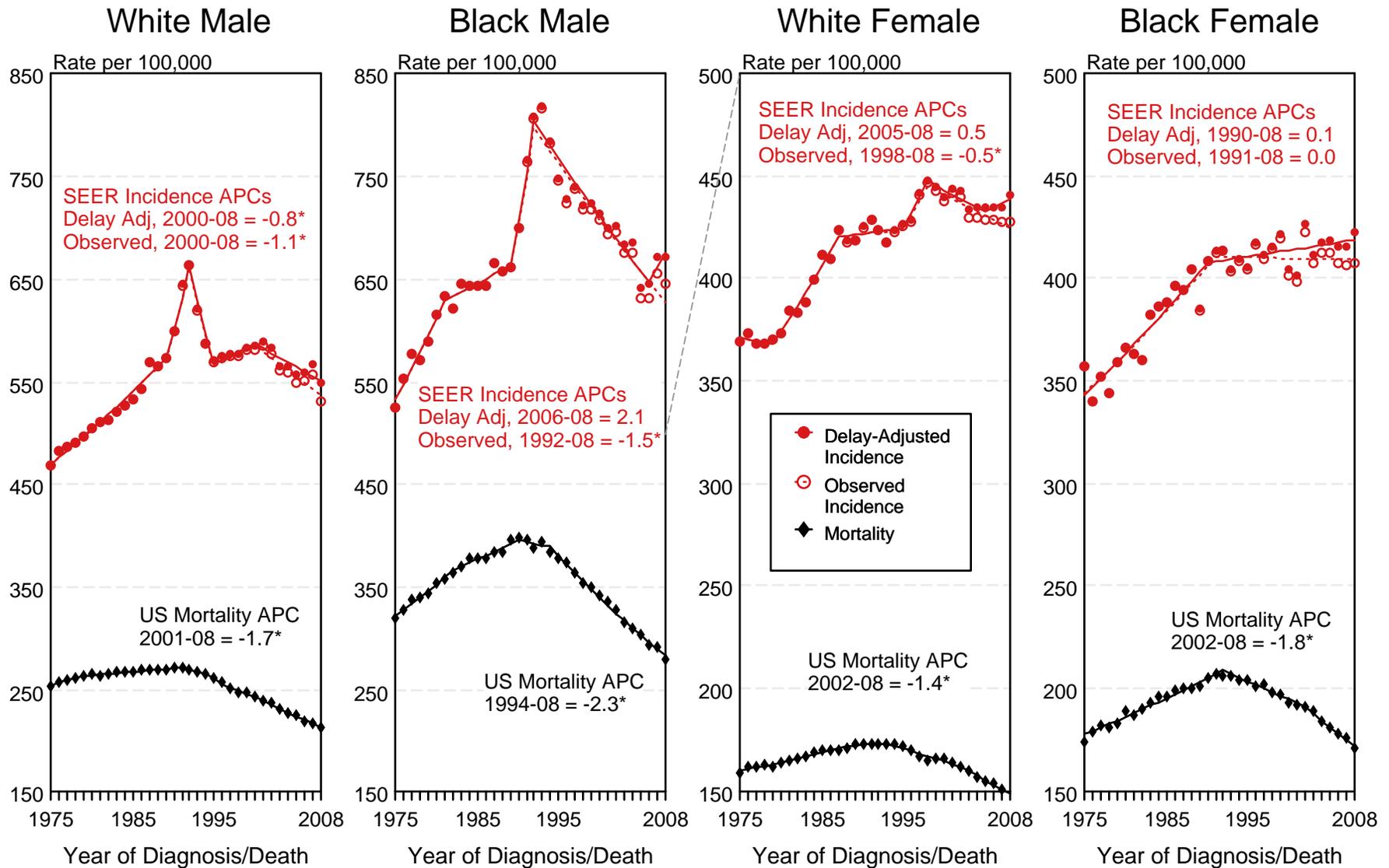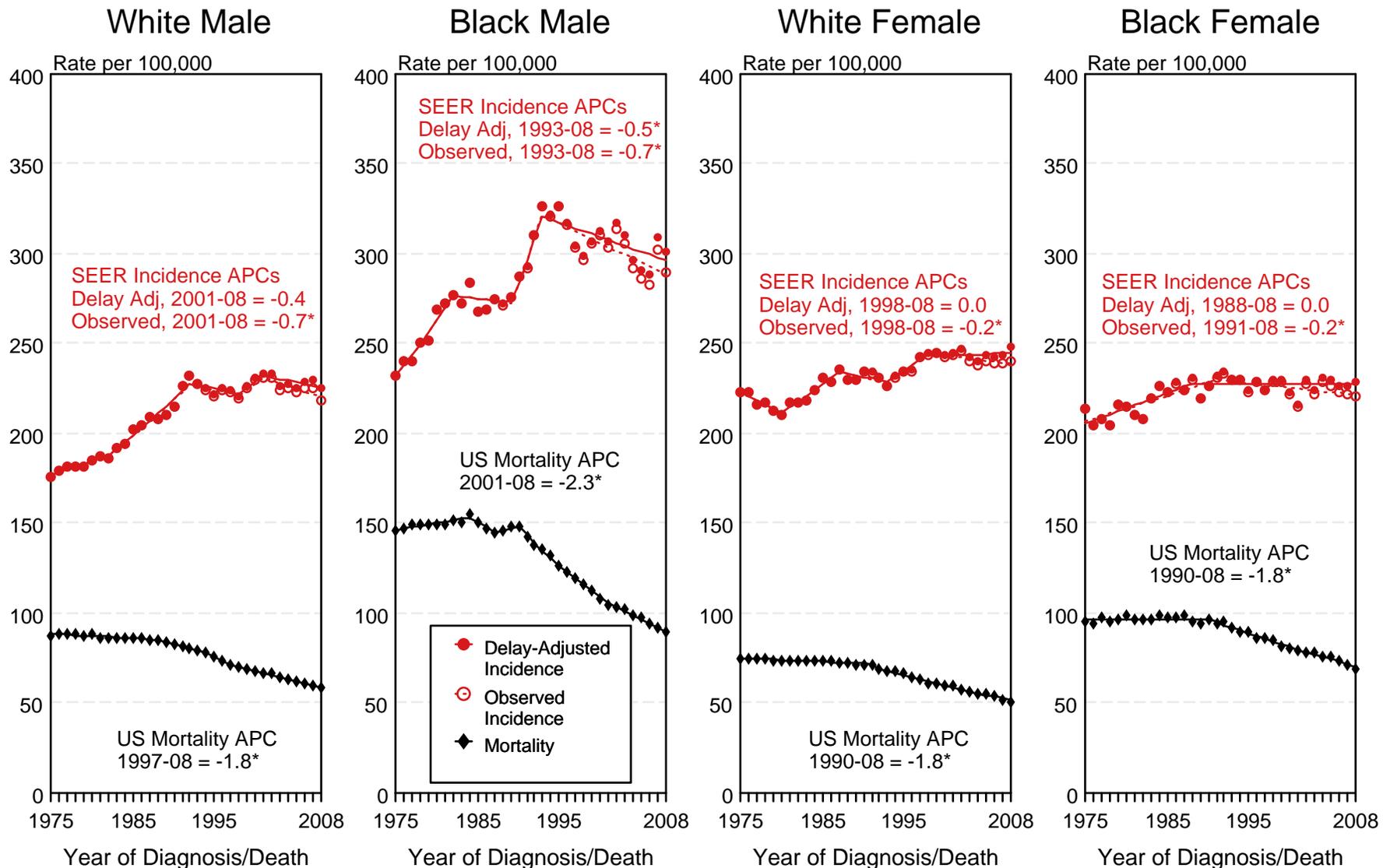1990-08 = -1.8*

Year of Diagnosis/Death

Figure 2.2

[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
  Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
  Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[a]
## All Cancer Sites, Ages 65 and Over, by Race and Sex

Figure 2.3

### White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1999-08 = -1.0*
Observed, 1999-08 = -1.3*

- ● Delay-Adjusted Incidence
- ◉ Observed Incidence
- ◆ Mortality

US Mortality APC
2000-08 = -1.6*

Year of Diagnosis/Death

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1995-08 = -1.4*
Observed, 1995-08 = -1.6*

US Mortality APC
2001-08 = -2.5*

Year of Diagnosis/Death

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1998-08 = -0.5*
Observed, 1998-08 = -0.7*

US Mortality APC
2000-08 = -1.1*

Year of Diagnosis/Death

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1990-08 = 0.3*
Observed, 1991-08 = 0.2
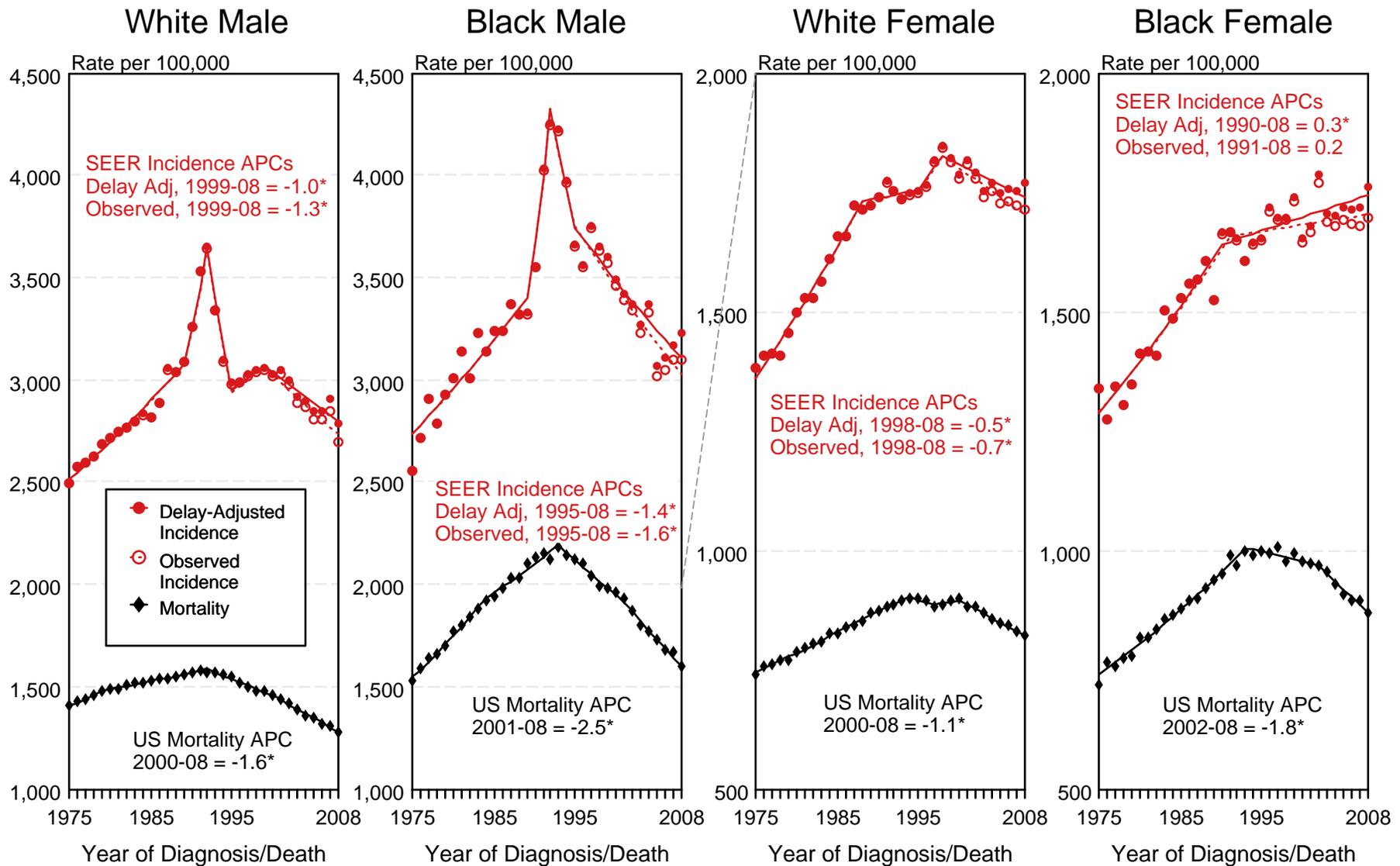
US Mortality APC
2002-08 = -1.8*

Year of Diagnosis/Death

[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
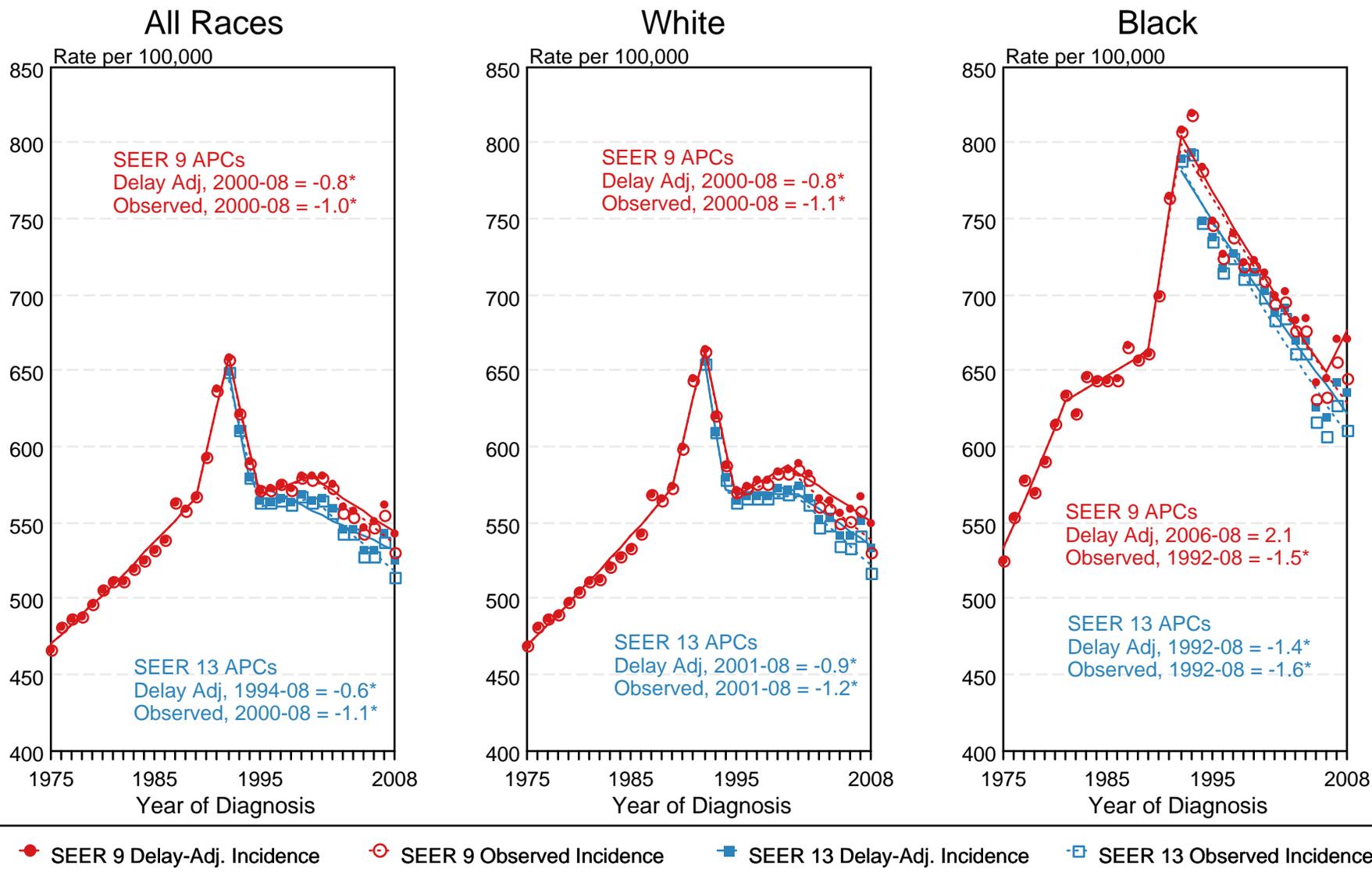SEER 9 Areas Compared to SEER 13 Areas
All Cancer Sites, Males, by Race

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2000-08 = -0.8*
Observed, 2000-08 = -1.0*

SEER 13 APCs
Delay Adj, 1994-08 = -0.6*
Observed, 2000-08 = -1.1*

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2000-08 = -0.8*
Observed, 2000-08 = -1.1*

SEER 13 APCs
Delay Adj, 2001-08 = -0.9*
Observed, 2001-08 = -1.2*

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 2006-08 = 2.1
Observed, 1992-08 = -1.5*

SEER 13 APCs
Delay Adj, 1992-08 = -1.4*
Observed, 1992-08 = -1.6*

Year of Diagnosis

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

[a]  Source: SEER 9 areas and SEER 13 areas.
    Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
    Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
### All Cancer Sites, Female, by Race

Figure 2.6

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2005-08 = 0.6
Observed, 1998-08 = -0.4*

SEER 13 APCs
Delay Adj, 2006-08 = 1.1
Observed, 2004-08 = 0.0

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2005-08 = 0.5
Observed, 1998-08 = -0.5*

SEER 13 APCs
Delay Adj, 2004-08 = 0.3
Observed, 2004-08 = -0.1

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1990-08 = 0.1
Observed, 1991-08 = 0.0

SEER 13 APCs
Delay Adj, 1992-08 = 0.1
Observed, 1992-08 = -0.1

Year of Diagnosis

Legend:
- ● SEER 9 Delay-Adj. Incidence
- ○ SEER 9 Observed Incidence
- ■ SEER 13 Delay-Adj. Incidence
- □ SEER 13 Observed Incidence
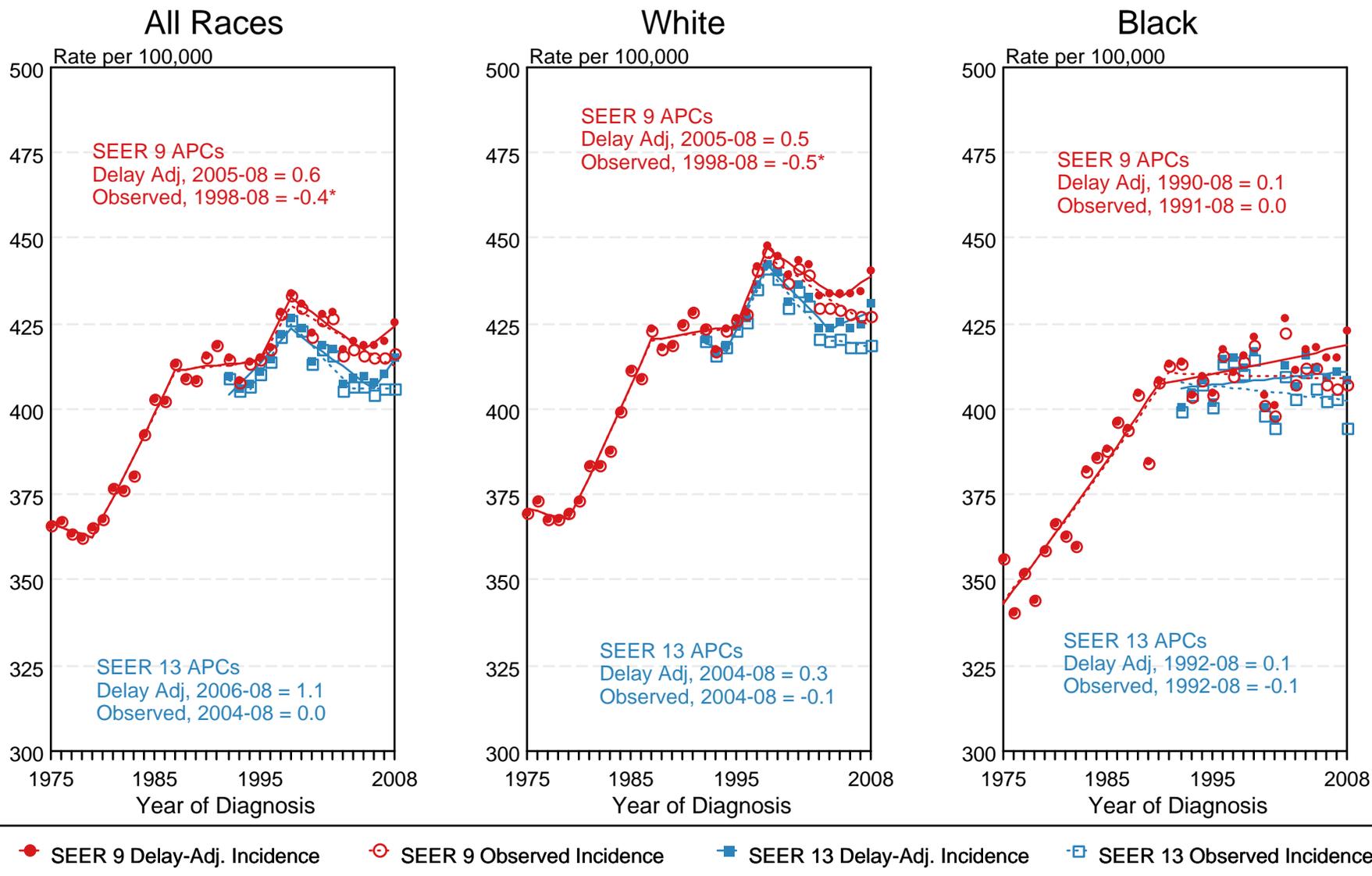
[a] Source: SEER 9 areas and SEER 13 areas.
 Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
 The APC is the Annual Percent Change 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[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-87 | 1.5* | 1987-08 | -0.2 | | | | | | | | | -0.2 | -0.2 |
| White | 1975-87 | 1.6* | 1987-08 | 0.0 | | | | | | | | | 0.0 | 0.0 |
| Black | 1975-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| Black | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-87 | 1.5* | 1987-08 | -0.3* | | | | | | | | | -0.3* | -0.3* |
| White | 1975-87 | 1.6* | 1987-08 | -0.1 | | | | | | | | | -0.1 | -0.1 |
| Black | 1975-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.3* | | | | | | | | | | | -0.3* | -0.3* |
| White | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White NH[e][f] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| Black | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| Black NH[e][f] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| API[e] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| AI/AN[e][g] | 1992-08 | 4.9* | | | | | | | | | | | 4.9* | 4.9* |
| Hispanic[f] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-83 | 0.5 | 1983-91 | 1.3* | 1991-08 | -0.9* | | | | | | | -0.9* | -0.9* |
| White | 1975-92 | 1.0* | 1992-08 | -0.8* | | | | | | | | | -0.8* | -0.8* |
| Black | 1975-91 | 0.9* | 1991-08 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| White | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| White NH[e][f] | 1992-08 | -0.7* | | | | | | | | | | | -0.7* | -0.7* |
| Black | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| Black NH[e][f] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| API[e] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| AI/AN[e][g] | 1992-06 | -0.3 | 2006-08 | 31.0 | | | | | | | | | 6.0 | 14.3 |
| Hispanic[f] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]  Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]  Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]  Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]  The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]  API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]  Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
    Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
    The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]  Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | 1.2* | 1989-08 | -0.3* | | | | | | | | | -0.3* | -0.3* |
| White | 1975-89 | 1.3* | 1989-08 | -0.2 | | | | | | | | | -0.2 | -0.2 |
| Black | 1975-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| White | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Black | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | 1.2* | 1989-08 | -0.5* | | | | | | | | | -0.5* | -0.5* |
| White | 1975-91 | 1.1* | 1991-08 | -0.4* | | | | | | | | | -0.4* | -0.4* |
| Black | 1975-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| White | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| White NH[ef] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| Black | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| Black NH[ef] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| API[e] | 1992-08 | -0.6 | | | | | | | | | | | -0.6 | -0.6 |
| AI/AN[eg] | 1992-08 | 1.5 | | | | | | | | | | | 1.5 | 1.5 |
| Hispanic[f] | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-77 | 4.3 | 1977-82 | -0.3 | 1982-91 | 1.3* | 1991-08 | -0.9* | | | | | -0.9* | -0.9* |
| White | 1975-77 | 5.0 | 1977-81 | -0.7 | 1981-91 | 1.3* | 1991-08 | -0.8* | | | | | -0.8* | -0.8* |
| Black | 1975-90 | 0.7* | 1990-08 | -0.8* | | | | | | | | | -0.8* | -0.8* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| White | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| White NH[ef] | 1992-08 | -0.7* | | | | | | | | | | | -0.7* | -0.7* |
| Black | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| Black NH[ef] | 1992-08 | -0.7* | | | | | | | | | | | -0.7* | -0.7* |
| API[e] | 1992-08 | 0.7 | | | | | | | | | | | 0.7 | 0.7 |
| AI/AN[eg] | 1992-08 | 1.8 | | | | | | | | | | | 1.8 | 1.8 |
| Hispanic[f] | 1992-08 | -0.6 | | | | | | | | | | | -0.6 | -0.6 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.  The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-87 | 1.6* | 1987-08 | -0.1 | | | | | | | | | -0.1 | -0.1 |
| White | 1975-87 | 1.7* | 1987-08 | 0.0 | | | | | | | | | 0.0 | 0.0 |
| Black | 1975-08 | 0.6 | | | | | | | | | | | 0.6 | 0.6 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| White | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| Black | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-87 | 1.6* | 1987-08 | -0.2 | | | | | | | | | -0.2 | -0.2 |
| White | 1975-87 | 1.8* | 1987-08 | -0.1 | | | | | | | | | -0.1 | -0.1 |
| Black | 1975-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| White | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White NH[ef] | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| Black | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| Black NH[ef] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| API[e] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| AI/AN[eg] | - | - | | | | | | | | | | | - | - |
| Hispanic[f] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-92 | 0.9* | 1992-08 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| White | 1975-92 | 1.0* | 1992-08 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| Black | 1975-92 | 1.3* | 1992-08 | -1.1* | | | | | | | | | -1.1* | -1.1* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| White NH[ef] | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| Black | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| Black NH[ef] | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| API[e] | 1992-08 | -1.2 | | | | | | | | | | | -1.2 | -1.2 |
| AI/AN[eg] | 1992-06 | -1.0 | 2006-08 | 44.5 | | | | | | | | | 7.7 | 19.6 |
| Hispanic[f] | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Cancer of the Brain and Other Nervous System, by Race and Sex

### White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1989-08 = -0.2
Observed, 1991-08 = -0.4*

US Mortality APC
1991-08 = -0.8*

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -0.1
Observed, 1975-08 = -0.2

US Mortality APC
1990-08 = -0.8*

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1987-08 = 0.0
Observed, 1987-08 = -0.1

US Mortality APC
1992-08 = -0.9*

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.6
Observed, 1975-08 = 0.5

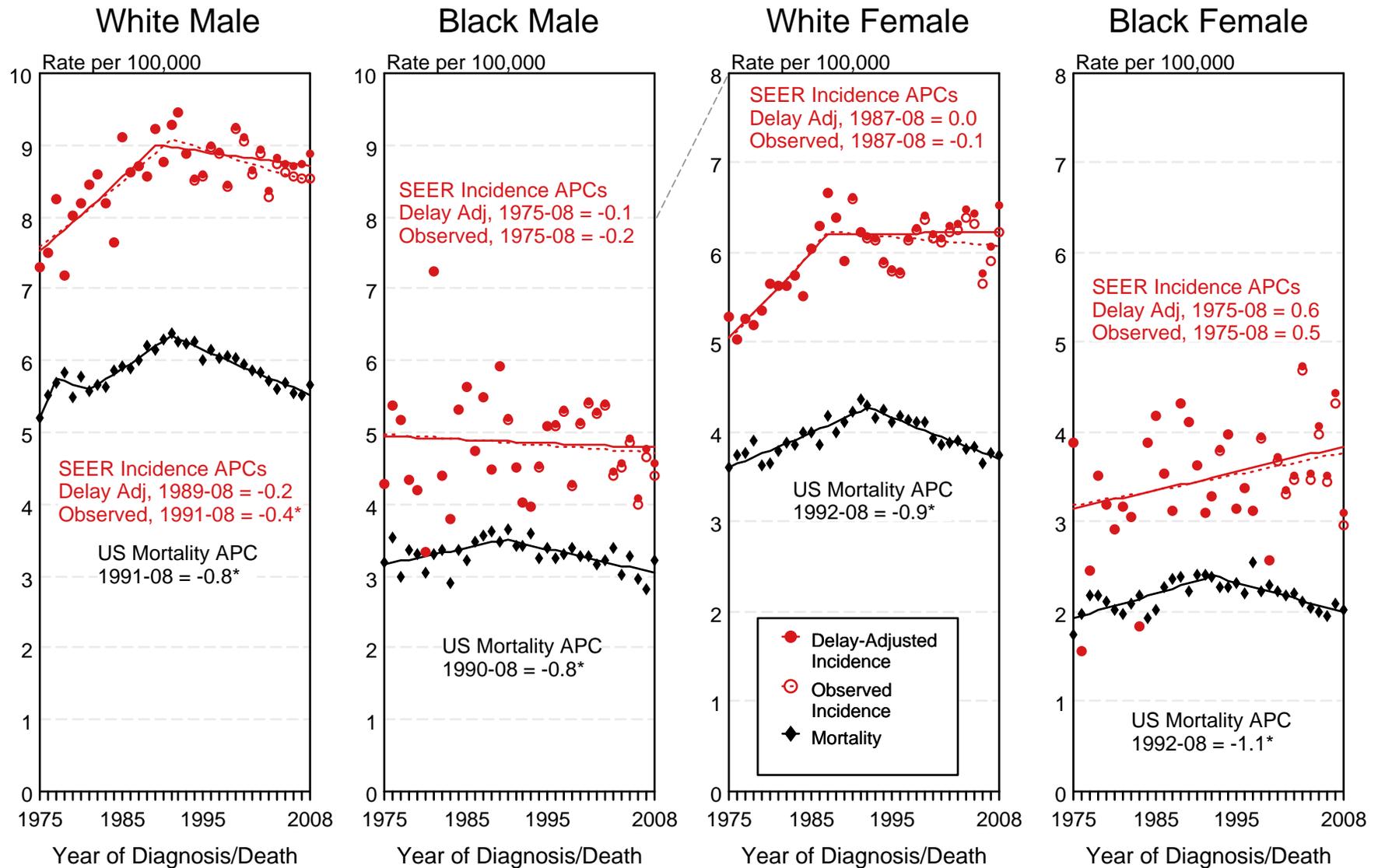US Mortality APC
1992-08 = -1.1*

Year of Diagnosis/Death

Figure 3.1

[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
### Cancer of the Brain and Other Nervous System, Male, by Race

## All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-08 = -0.3*
Observed, 1989-08 = -0.5*

SEER 13 APCs
Delay Adj, 1992-08 = -0.3
Observed, 1992-08 = -0.4*

Year of Diagnosis

## White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-08 = -0.2
Observed, 1991-08 = -0.4*

SEER 13 APCs
Delay Adj, 1992-08 = -0.1
Observed, 1992-08 = -0.3

Year of Diagnosis

## Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = -0.1
Observed, 1975-08 = -0.2

SEER 13 APCs
Delay Adj, 1992-08 = -0.1
Observed, 1992-08 = -0.3

Year of Diagnosis

Figure 3.3

Legend:
- SEER 9 Delay-Adj. Incidence
- SEER 9 Observed Incidence
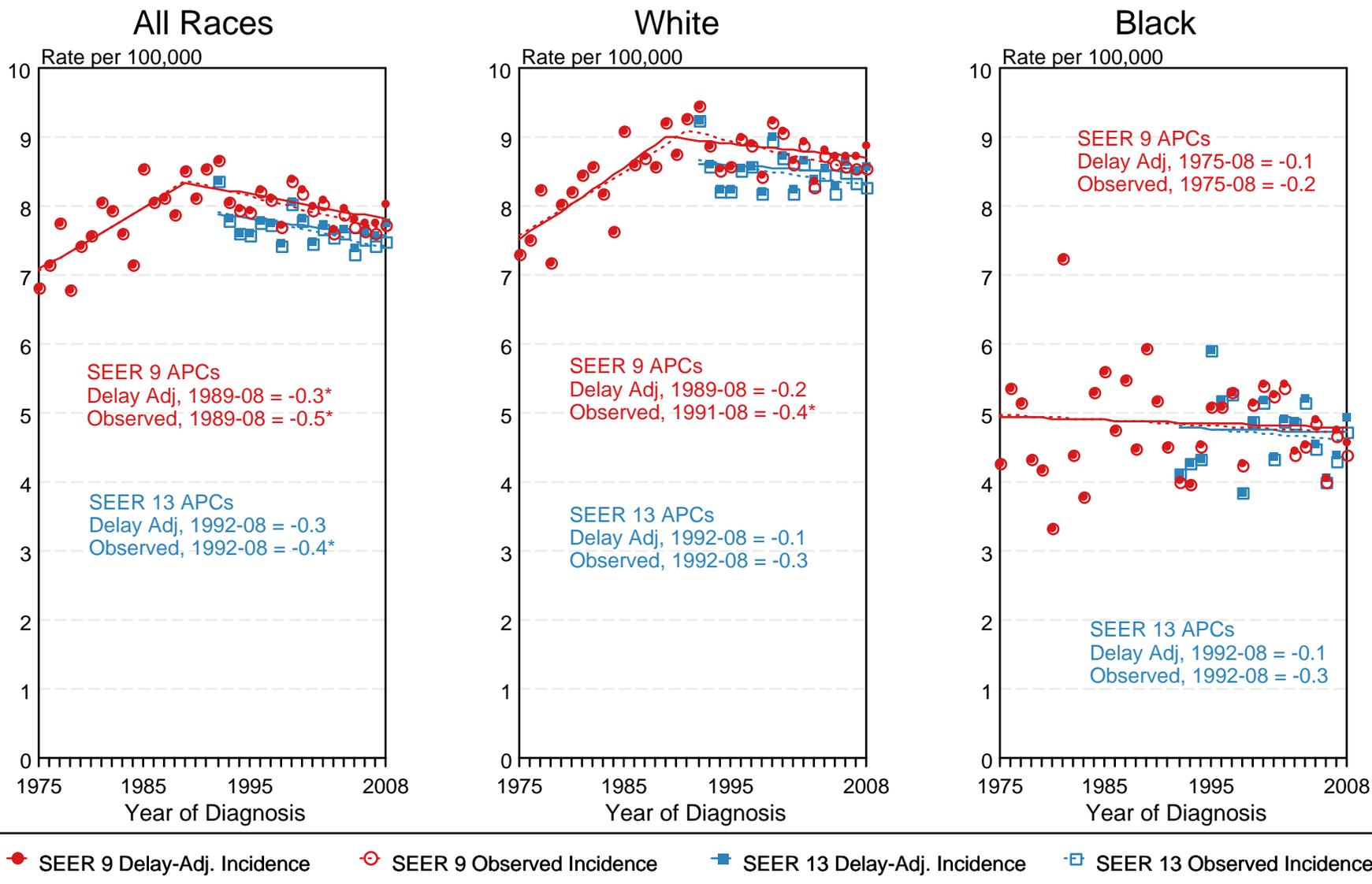- SEER 13 Delay-Adj. Incidence
- SEER 13 Observed Incidence

a   Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Brain and Other Nervous System, Female, by Race



### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1987-08 = -0.1
Observed, 1987-08 = -0.2

SEER 13 APCs
Delay Adj, 1992-08 = 0.0
Observed, 1992-08 = -0.2

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1987-08 = 0.0
Observed, 1987-08 = -0.1

SEER 13 APCs
Delay Adj, 1992-08 = 0.1
Observed, 1992-08 = -0.1

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.6
Observed, 1975-08 = 0.5

SEER 13 APCs
Delay Adj, 1992-08 = 0.1
Observed, 1992-08 = -0.2

Year of Diagnosis

● SEER 9 Delay-Adj. Incidence    ○ SEER 9 Observed Incidence    ■ SEER 13 Delay-Adj. Incidence    ▫ SEER 13 Observed Incidence
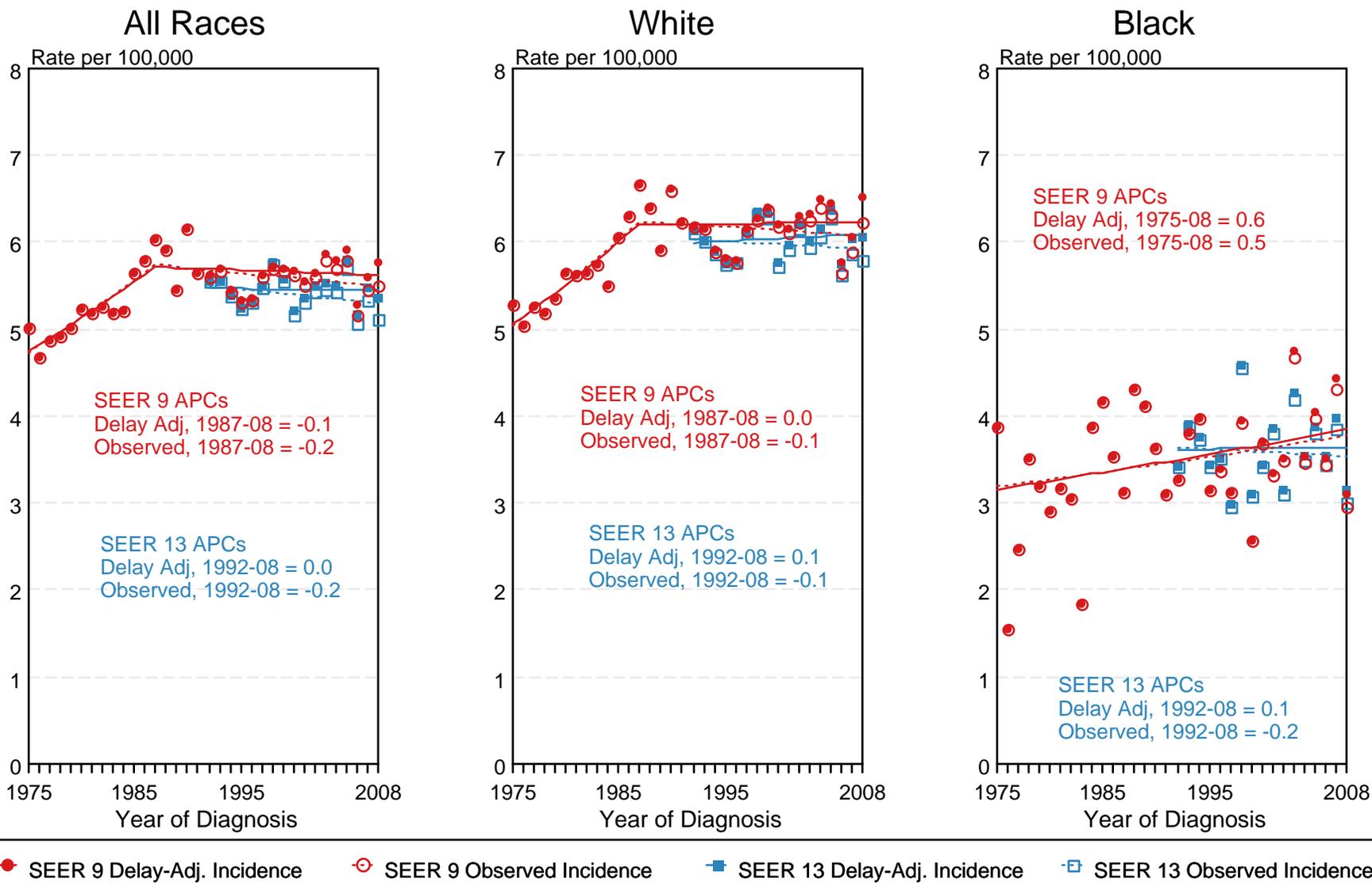
Figure 3.4

a  Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
All Ages by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-80 | -0.5 | 1980-87 | 4.0* | 1987-94 | -0.1 | 1994-99 | 1.7* | 1999-05 | -2.1* | 2005-08 | 0.9 | -1.1* | 0.1 |
| White | 1975-80 | -0.5 | 1980-87 | 4.1* | 1987-94 | -0.2 | 1994-99 | 2.0* | 1999-04 | -2.4* | 2004-08 | -0.2 | -1.4* | -0.2 |
| Black | 1975-92 | 2.2* | 1992-08 | 0.1 | | | | | | | | | 0.1 | 0.1 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-99 | 1.3* | 1999-05 | -2.0* | 2005-08 | 1.1 | | | | | | | -1.0 | 0.3 |
| White | 1992-99 | 1.5* | 1999-04 | -2.4* | 2004-08 | 0.0 | | | | | | | -1.4* | 0.0 |
| Black | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-80 | -0.5 | 1980-87 | 4.0* | 1987-94 | -0.2 | 1994-99 | 1.7* | 1999-05 | -2.1* | 2005-08 | 0.7 | -1.2* | 0.0 |
| White | 1975-80 | -0.5 | 1980-87 | 4.1* | 1987-94 | -0.2 | 1994-99 | 2.0* | 1999-04 | -2.4* | 2004-08 | -0.4 | -1.5* | -0.4 |
| Black | 1975-92 | 2.2* | 1992-08 | 0.0 | | | | | | | | | 0.0 | 0.0 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-99 | 1.3* | 1999-05 | -2.1* | 2005-08 | 0.9 | | | | | | | -1.1* | 0.1 |
| White | 1992-99 | 1.5* | 1999-04 | -2.5* | 2004-08 | -0.2 | | | | | | | -1.5* | -0.2 |
| White NH[ef] | 1992-99 | 1.7* | 1999-04 | -2.4* | 2004-08 | -0.2 | | | | | | | -1.4* | -0.2 |
| Black | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| Black NH[ef] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| API[e] | 1992-94 | -4.8 | 1994-97 | 6.8 | 1997-06 | -0.4 | 2006-08 | 5.0 | | | | | 0.7 | 2.2 |
| AI/AN[eg] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| Hispanic[f] | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-90 | 0.4* | 1990-08 | -2.2* | | | | | | | | | -2.2* | -2.2* |
| White | 1975-90 | 0.3* | 1990-08 | -2.3* | | | | | | | | | -2.3* | -2.3* |
| Black | 1975-92 | 1.5* | 1992-08 | -1.4* | | | | | | | | | -1.4* | -1.4* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-95 | -1.2* | 1995-98 | -3.6* | 1998-03 | -1.7* | 2003-08 | -2.3* | | | | | -2.0* | -2.3* |
| White | 1992-95 | -1.5* | 1995-98 | -3.6* | 1998-08 | -2.0* | | | | | | | -2.0* | -2.0* |
| White NH[ef] | 1992-94 | -0.8 | 1994-97 | -3.6* | 1997-08 | -1.9* | | | | | | | -1.9* | -1.9* |
| Black | 1992-08 | -1.3* | | | | | | | | | | | -1.3* | -1.3* |
| Black NH[ef] | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| API[e] | 1992-08 | -0.7* | | | | | | | | | | | -0.7* | -0.7* |
| AI/AN[eg] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Hispanic[f] | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 4.2
Cancer of the Female Breast (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Ages <50 by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-80 | -1.5 | 1980-85 | 3.2* | 1985-08 | 0.0 | | | | | | | 0.0 | 0.0 |
| White | 1975-80 | -1.1 | 1980-86 | 2.6* | 1986-08 | -0.1 | | | | | | | -0.1 | -0.1 |
| Black | 1975-91 | 1.3* | 1991-08 | -0.4 | | | | | | | | | -0.4 | -0.4 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| White | 1992-94 | -1.0 | 1994-98 | 1.3 | 1998-02 | -1.1 | 2002-08 | 0.5 | | | | | 0.0 | 0.5 |
| Black | 1992-01 | -1.2* | 2001-08 | 1.0 | | | | | | | | | 0.5 | 1.0 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-80 | -1.5 | 1980-85 | 3.3* | 1985-08 | 0.0 | | | | | | | 0.0 | 0.0 |
| White | 1975-80 | -1.1 | 1980-86 | 2.6* | 1986-08 | -0.1 | | | | | | | -0.1 | -0.1 |
| Black | 1975-91 | 1.3* | 1991-08 | -0.5* | | | | | | | | | -0.5* | -0.5* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| White | 1992-94 | -1.0 | 1994-98 | 1.3 | 1998-02 | -1.1 | 2002-08 | 0.3 | | | | | -0.1 | 0.3 |
| White NH[ef] | 1992-08 | 0.2* | | | | | | | | | | | 0.2* | 0.2* |
| Black | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| Black NH[ef] | 1992-01 | -1.4* | 2001-08 | 1.1 | | | | | | | | | 0.5 | 1.1 |
| API[e] | 1992-08 | 1.3* | | | | | | | | | | | 1.3* | 1.3* |
| AI/AN[eg] | 1992-08 | 0.8 | | | | | | | | | | | 0.8 | 0.8 |
| Hispanic[f] | 1992-94 | -5.8 | 1994-00 | 2.2* | 2000-04 | -2.5 | 2004-08 | 2.7* | | | | | 0.3 | 2.7* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-90 | -0.4* | 1990-08 | -3.2* | | | | | | | | | -3.2* | -3.2* |
| White | 1975-90 | -0.6* | 1990-08 | -3.5* | | | | | | | | | -3.5* | -3.5* |
| Black | 1975-88 | 1.8* | 1988-08 | -2.0* | | | | | | | | | -2.0* | -2.0* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -3.1* | | | | | | | | | | | -3.1* | -3.1* |
| White | 1992-08 | -3.5* | | | | | | | | | | | -3.5* | -3.5* |
| White NH[ef] | 1992-08 | -3.4* | | | | | | | | | | | -3.4* | -3.4* |
| Black | 1992-96 | -0.5 | 1996-99 | -4.3 | 1999-05 | -1.3* | 2005-08 | -4.0* | | | | | -2.2* | -3.4* |
| Black NH[ef] | 1992-96 | -0.5 | 1996-99 | -4.3* | 1999-05 | -1.0* | 2005-08 | -4.7* | | | | | -2.3* | -3.8* |
| API[e] | 1992-08 | -2.3* | | | | | | | | | | | -2.3* | -2.3* |
| AI/AN[eg] | 1992-08 | -1.8 | | | | | | | | | | | -1.8 | -1.8 |
| Hispanic[f] | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 4.3
Cancer of the Female Breast (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Ages 50+ by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-82 | 0.9 | 1982-87 | 5.4* | 1987-93 | -0.3 | 1993-99 | 1.9* | 1999-05 | -2.6* | 2005-08 | 0.7 | -1.5* | -0.1 |
| White | 1975-82 | 0.9* | 1982-87 | 5.5* | 1987-93 | -0.3 | 1993-00 | 1.7* | 2000-04 | -3.8* | 2004-08 | -0.2 | -1.6* | -0.2 |
| Black | 1975-92 | 2.6* | 1992-08 | 0.2 | | | | | | | | | 0.2 | 0.2 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-99 | 1.6* | 1999-05 | -2.6* | 2005-08 | 1.0 | | | | | | | -1.4* | 0.1 |
| White | 1992-00 | 1.5* | 2000-04 | -3.8* | 2004-08 | 0.0 | | | | | | | -1.5* | 0.0 |
| Black | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-82 | 0.9 | 1982-87 | 5.3* | 1987-93 | -0.3 | 1993-99 | 1.9* | 1999-05 | -2.7* | 2005-08 | 0.5 | -1.6* | -0.3 |
| White | 1975-82 | 0.9* | 1982-87 | 5.5* | 1987-93 | -0.3 | 1993-00 | 1.7* | 2000-04 | -3.8* | 2004-08 | -0.4 | -1.7* | -0.4 |
| Black | 1975-92 | 2.6* | 1992-08 | 0.1 | | | | | | | | | 0.1 | 0.1 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-99 | 1.7* | 1999-04 | -2.9* | 2004-08 | 0.0 | | | | | | | -1.6* | 0.0 |
| White | 1992-00 | 1.4* | 2000-04 | -3.9* | 2004-08 | -0.2 | | | | | | | -1.6* | -0.2 |
| White NH[ef] | 1992-01 | 1.3* | 2001-04 | -5.4 | 2004-08 | 0.2 | | | | | | | -1.4 | 0.2 |
| Black | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| Black NH[ef] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| API[e] | 1992-94 | -5.5 | 1994-97 | 7.9 | 1997-05 | -1.0 | 2005-08 | 3.2 | | | | | 0.3 | 2.1 |
| AI/AN[eg] | 1992-08 | -0.7 | | | | | | | | | | | -0.7 | -0.7 |
| Hispanic[f] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-90 | 0.6* | 1990-08 | -2.0* | | | | | | | | | -2.0* | -2.0* |
| White | 1975-90 | 0.5* | 1990-08 | -2.1* | | | | | | | | | -2.1* | -2.1* |
| Black | 1975-93 | 1.6* | 1993-08 | -1.2* | | | | | | | | | -1.2* | -1.2* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-95 | -1.1* | 1995-98 | -3.3* | 1998-03 | -1.5* | 2003-08 | -2.1* | | | | | -1.8* | -2.1* |
| White | 1992-94 | -0.6 | 1994-97 | -3.3* | 1997-08 | -1.9* | | | | | | | -1.9* | -1.9* |
| White NH[ef] | 1992-94 | -0.5 | 1994-97 | -3.4* | 1997-08 | -1.7* | | | | | | | -1.7* | -1.7* |
| Black | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| Black NH[ef] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| API[e] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| AI/AN[eg] | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| Hispanic[f] | 1992-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
All Ages by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-81 | -3.0 | 1981-87 | 24.9* | 1987-95 | 4.2* | 1995-98 | 11.8* | 1998-06 | 0.2 | 2006-08 | 5.6 | 1.4 | 2.9 |
| White | 1975-81 | -2.9 | 1981-87 | 25.4* | 1987-95 | 3.9* | 1995-98 | 11.4* | 1998-08 | 0.7 | | | 0.7 | 0.7 |
| Black | 1975-83 | 6.2* | 1983-88 | 23.3* | 1988-93 | 3.5 | 1993-98 | 11.4* | 1998-03 | -0.5 | 2003-08 | 4.3* | 2.1 | 4.3* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-94 | 0.3 | 1994-98 | 10.7* | 1998-06 | 0.3 | 2006-08 | 4.9 | | | | | 1.3* | 2.6* |
| White | 1992-94 | -0.6 | 1994-98 | 10.9* | 1998-06 | 0.1 | 2006-08 | 4.0 | | | | | 0.9 | 2.0 |
| Black | 1992-98 | 8.6* | 1998-08 | 2.0* | | | | | | | | | 2.0* | 2.0* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-81 | -3.1 | 1981-87 | 25.2* | 1987-94 | 3.8* | 1994-98 | 9.8* | 1998-08 | 0.9* | | | 0.9* | 0.9* |
| White | 1975-81 | -2.9 | 1981-87 | 25.4* | 1987-95 | 3.9* | 1995-98 | 11.4* | 1998-08 | 0.6 | | | 0.6 | 0.6 |
| Black | 1975-83 | 6.2* | 1983-88 | 23.3* | 1988-93 | 3.5 | 1993-98 | 11.4* | 1998-03 | -0.6 | 2003-08 | 4.1* | 2.0 | 4.1* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-94 | 0.3 | 1994-98 | 10.7* | 1998-06 | 0.3 | 2006-08 | 4.6 | | | | | 1.2* | 2.4* |
| White | 1992-94 | -0.4 | 1994-98 | 10.4* | 1998-08 | 0.5 | | | | | | | 0.5 | 0.5 |
| White NH[ef] | 1992-94 | 0.8 | 1994-99 | 9.1* | 1999-06 | -0.6 | 2006-08 | 5.0 | | | | | 0.6 | 2.2 |
| Black | 1992-98 | 8.6* | 1998-08 | 2.0* | | | | | | | | | 2.0* | 2.0* |
| Black NH[ef] | 1992-98 | 8.5* | 1998-08 | 2.0* | | | | | | | | | 2.0* | 2.0* |
| API[e] | 1992-02 | 7.9* | 2002-05 | -4.6 | 2005-08 | 8.8* | | | | | | | 3.8 | 5.3* |
| AI/AN[eg] | 1992-08 | 1.6 | | | | | | | | | | | 1.6 | 1.6 |
| Hispanic[f] | 1992-98 | 8.0* | 1998-08 | 2.1* | | | | | | | | | 2.1* | 2.1* |

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).
b   Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
c   Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
d   Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
e   The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
f   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. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
g   Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Cancer of the Female Breast, by Race

Figure 4.1

### White

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2004-08 = -0.2
Observed, 2004-08 = -0.4

- ● Delay-Adjusted Incidence
- ◉ Observed Incidence
- ◆ Mortality

US Mortality APC
1990-08 = -2.3*

Year of Diagnosis/Death

### Black

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1992-08 = 0.1
Observed, 1992-08 = 0.0

US Mortality APC
1992-08 = -1.4*

Year of Diagnosis/Death

[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[a]
## Cancer of the Female Breast, by Age and Race

Figure 4.2

### White Ages <50

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1986-08 = -0.1
Observed, 1986-08 = -0.1

US Mortality APC
1990-08 = -3.5*

Year of Diagnosis/Death

### Black Ages <50

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1991-08 = -0.4
Observed, 1991-08 = -0.5*

● Delay-Adjusted Incidence
⊙ Observed Incidence
◆ Mortality

US Mortality APC
1988-08 = -2.0*

Year of Diagnosis/Death

### White Ages 50+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2004-08 = -0.2
Observed, 2004-08 = -0.4

US Mortality APC
1990-08 = -2.1*

Year of Diagnosis/Death

### Black Ages 50+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1992-08 = 0.2
Observed, 1992-08 = 0.1
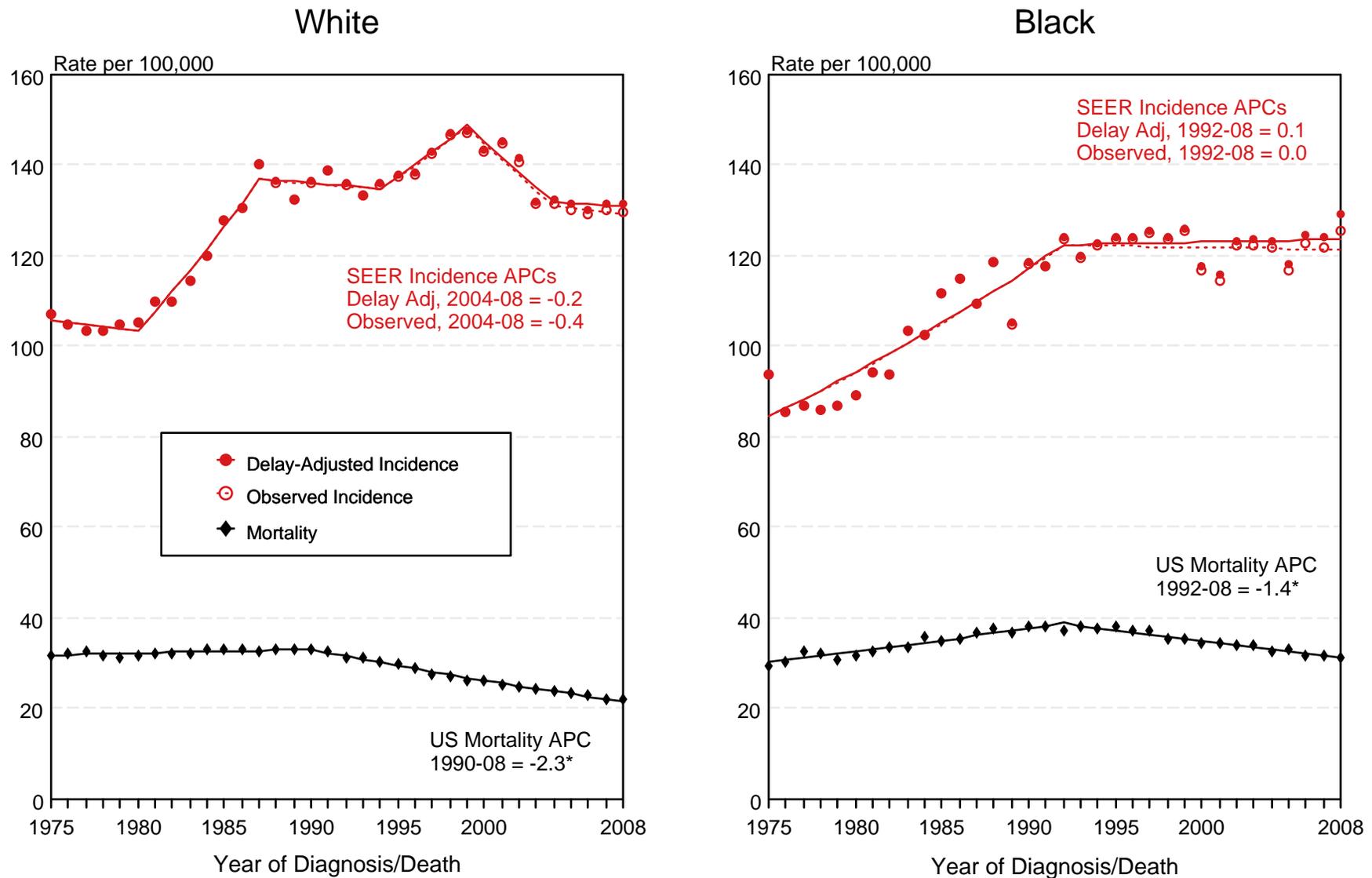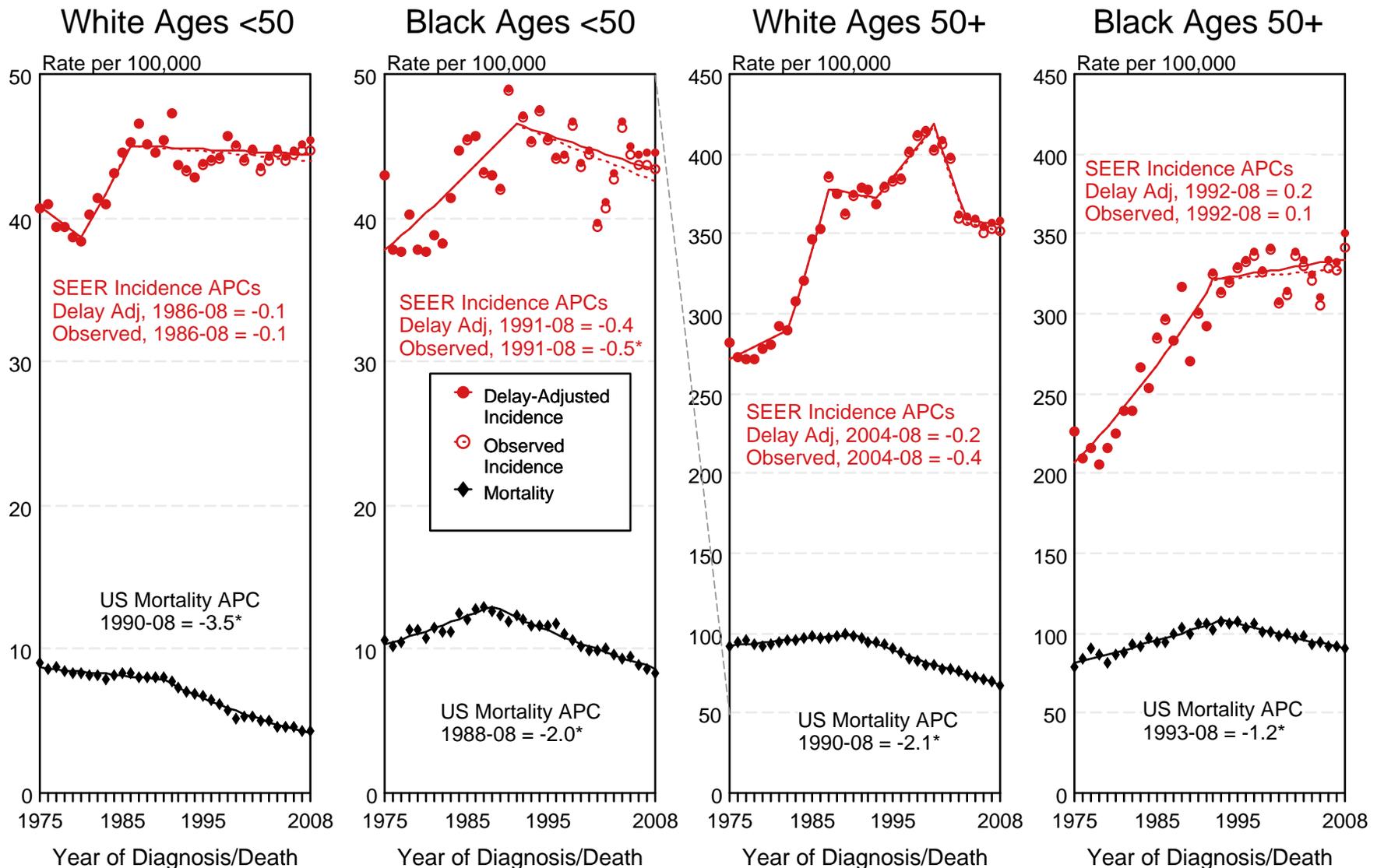
US Mortality APC
1993-08 = -1.2*

Year of Diagnosis/Death

[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and Delay Adjusted Incidence Rates[a]
## Cancer of the Female Breast *(In Situ)*, by Race

### White

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1998-08 = 0.7
Observed, 1998-08 = 0.6

- Delay-Adjusted Incidence
- Observed Incidence

Year of Diagnosis

### Black

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2003-08 = 4.3*
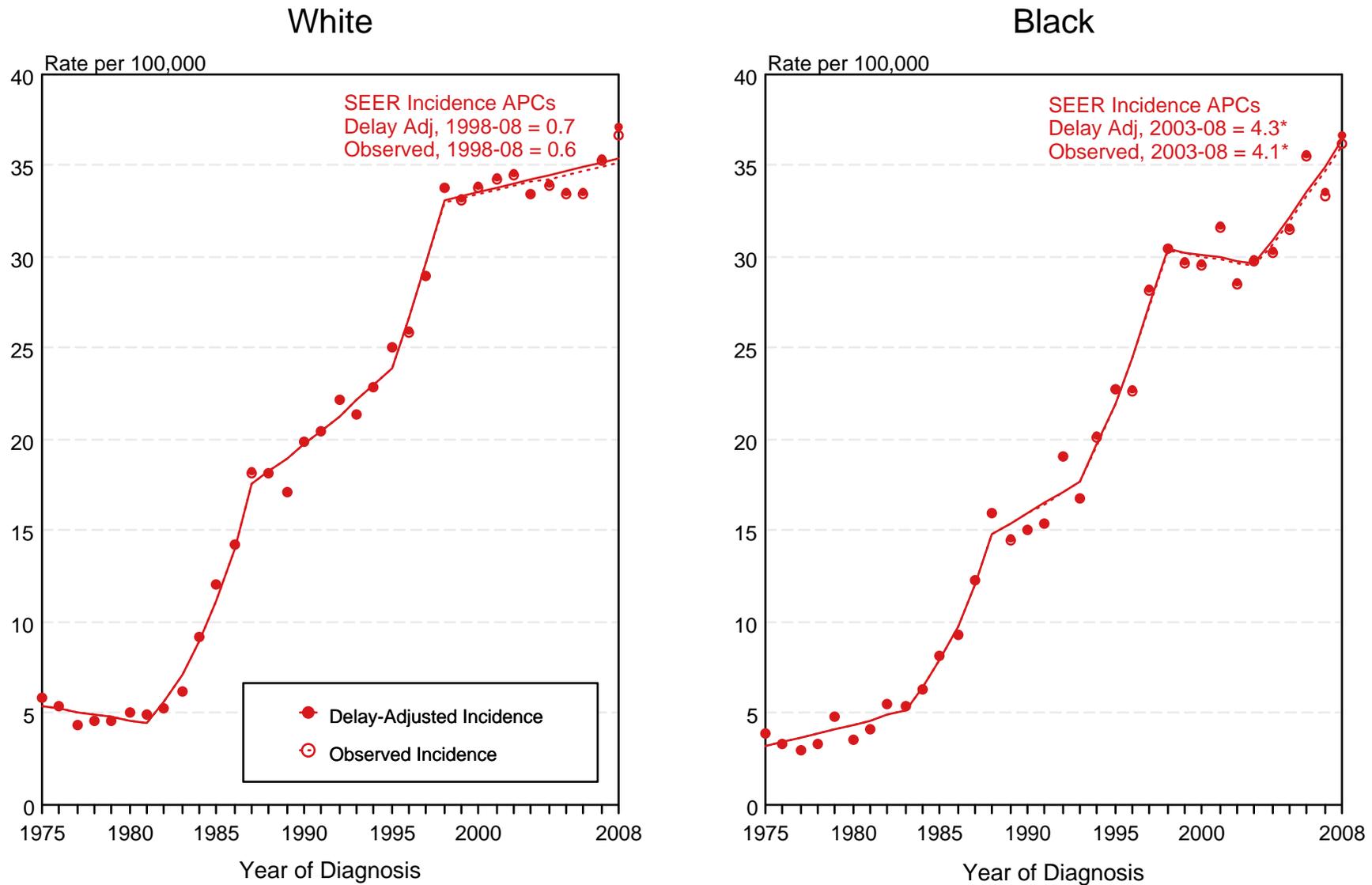Observed, 2003-08 = 4.1*

Year of Diagnosis

Figure 4.3

[a] Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 4.8

# Cancer of the Breast
## Delay-Adjusted SEER Incidence & US Mortality
## White Females vs Black Females
## 1975-2008
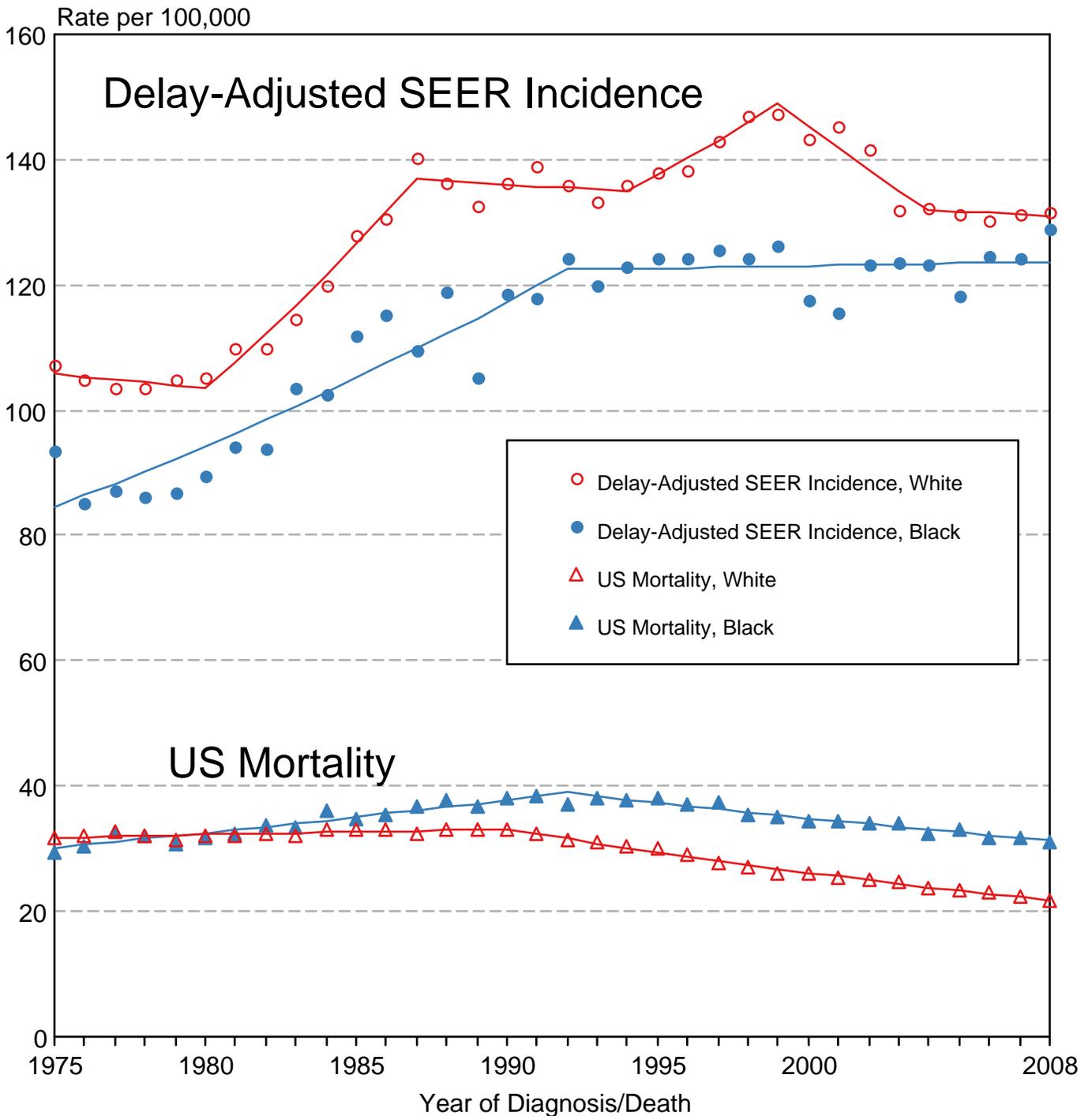
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines are calculated using the Joinpoint Regression Program Version 3.5, April 2011,
National Cancer Institute.

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Female Breast, by Race
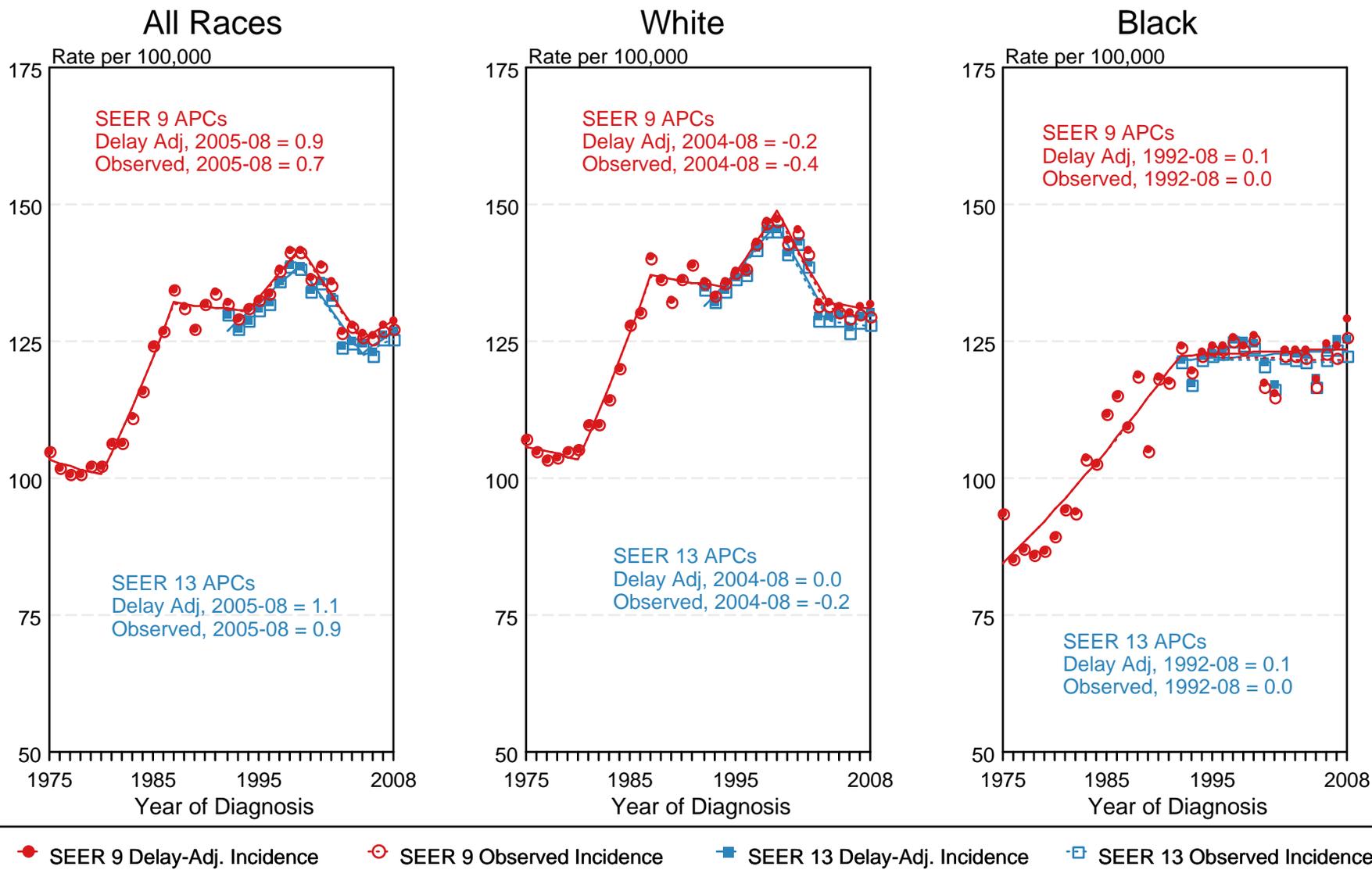
Figure 4.10

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2005-08 = 0.9
Observed, 2005-08 = 0.7

SEER 13 APCs
Delay Adj, 2005-08 = 1.1
Observed, 2005-08 = 0.9

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-08 = -0.2
Observed, 2004-08 = -0.4

SEER 13 APCs
Delay Adj, 2004-08 = 0.0
Observed, 2004-08 = -0.2

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1992-08 = 0.1
Observed, 1992-08 = 0.0

SEER 13 APCs
Delay Adj, 1992-08 = 0.1
Observed, 1992-08 = 0.0

Year of Diagnosis



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

[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 5.1
Cancer of the Cervix Uteri (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
All Ages by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-82 | -4.6* | 1982-90 | -0.1 | 1990-08 | -2.6* | | | | | | | -2.6* | -2.6* |
| White | 1975-82 | -4.7* | 1982-90 | 0.4 | 1990-08 | -2.4* | | | | | | | -2.4* | -2.4* |
| Black | 1975-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |
| White | 1992-08 | -2.2* | | | | | | | | | | | -2.2* | -2.2* |
| Black | 1992-08 | -3.8* | | | | | | | | | | | -3.8* | -3.8* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-82 | -4.6* | 1982-90 | 0.0 | 1990-08 | -2.7* | | | | | | | -2.7* | -2.7* |
| White | 1975-82 | -4.8* | 1982-90 | 0.4 | 1990-08 | -2.5* | | | | | | | -2.5* | -2.5* |
| Black | 1975-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.7* | | | | | | | | | | | -2.7* | -2.7* |
| White | 1992-08 | -2.3* | | | | | | | | | | | -2.3* | -2.3* |
| White NH[ef] | 1992-08 | -2.2* | | | | | | | | | | | -2.2* | -2.2* |
| Black | 1992-08 | -3.9* | | | | | | | | | | | -3.9* | -3.9* |
| Black NH[ef] | 1992-95 | 0.6 | 1995-08 | -4.4* | | | | | | | | | -4.4* | -4.4* |
| API[e] | 1992-08 | -4.5* | | | | | | | | | | | -4.5* | -4.5* |
| AI/AN[eg] | 1992-08 | -1.7 | | | | | | | | | | | -1.7 | -1.7 |
| Hispanic[f] | 1992-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-82 | -4.4* | 1982-96 | -1.6* | 1996-03 | -3.8* | 2003-08 | -0.6 | | | | | -2.0* | -0.6 |
| White | 1975-83 | -4.2* | 1983-96 | -1.3* | 1996-03 | -3.5* | 2003-08 | -0.4 | | | | | -1.8* | -0.4 |
| Black | 1975-81 | -4.8* | 1981-93 | -2.4* | 1993-03 | -4.7* | 2003-08 | -1.8 | | | | | -3.1* | -1.8 |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-97 | -2.4* | 1997-03 | -3.8* | 2003-08 | -0.6 | | | | | | | -2.0* | -0.6 |
| White | 1992-96 | -1.3 | 1996-03 | -3.5* | 2003-08 | -0.4 | | | | | | | -1.8* | -0.4 |
| White NH[ef] | 1992-97 | -1.6* | 1997-04 | -3.5* | 2004-08 | 0.5 | | | | | | | -1.8* | 0.5 |
| Black | 1992-01 | -5.1* | 2001-08 | -2.6* | | | | | | | | | -3.1* | -2.6* |
| Black NH[ef] | 1992-01 | -5.0* | 2001-08 | -2.7* | | | | | | | | | -3.2* | -2.7* |
| API[e] | 1992-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |
| AI/AN[eg] | 1992-08 | -2.4* | | | | | | | | | | | -2.4* | -2.4* |
| Hispanic[f] | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a]  Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]  Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]  Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]  The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]  API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]  Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
     The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]  Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

Table 5.2
Cancer of the Cervix Uteri (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Ages <50 by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-82 | -3.9* | 1982-90 | 0.9 | 1990-08 | -2.2* | | | | | | | -2.2* | -2.2* |
| White | 1975-82 | -4.0* | 1982-89 | 2.1 | 1989-08 | -1.9* | | | | | | | -1.9* | -1.9* |
| Black | 1975-08 | -3.3* | | | | | | | | | | | -3.3* | -3.3* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.1* | | | | | | | | | | | -2.1* | -2.1* |
| White | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| Black | 1992-08 | -3.9* | | | | | | | | | | | -3.9* | -3.9* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-82 | -3.9* | 1982-90 | 0.9 | 1990-08 | -2.3* | | | | | | | -2.3* | -2.3* |
| White | 1975-82 | -4.0* | 1982-89 | 2.1 | 1989-08 | -2.0* | | | | | | | -2.0* | -2.0* |
| Black | 1975-08 | -3.4* | | | | | | | | | | | -3.4* | -3.4* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.2* | | | | | | | | | | | -2.2* | -2.2* |
| White | 1992-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| White NH[ef] | 1992-08 | -1.7* | | | | | | | | | | | -1.7* | -1.7* |
| Black | 1992-08 | -4.0* | | | | | | | | | | | -4.0* | -4.0* |
| Black NH[ef] | 1992-08 | -4.0* | | | | | | | | | | | -4.0* | -4.0* |
| API[e] | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |
| AI/AN[eg] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| Hispanic[f] | 1992-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-81 | -3.8* | 1981-97 | -0.7* | 1997-00 | -6.1 | 2000-08 | -1.4* | | | | | -1.9* | -1.4* |
| White | 1975-80 | -4.2* | 1980-94 | -0.2 | 1994-08 | -2.2* | | | | | | | -2.2* | -2.2* |
| Black | 1975-08 | -3.3* | | | | | | | | | | | -3.3* | -3.3* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-03 | -3.0* | 2003-08 | -0.9 | | | | | | | | | -1.9* | -0.9 |
| White | 1992-08 | -2.1* | | | | | | | | | | | -2.1* | -2.1* |
| White NH[ef] | 1992-08 | -2.0* | | | | | | | | | | | -2.0* | -2.0* |
| Black | 1992-08 | -3.9* | | | | | | | | | | | -3.9* | -3.9* |
| Black NH[ef] | 1992-08 | -3.8* | | | | | | | | | | | -3.8* | -3.8* |
| API[e] | 1992-08 | -3.9* | | | | | | | | | | | -3.9* | -3.9* |
| AI/AN[eg] | 1992-08 | -1.1 | | | | | | | | | | | -1.1 | -1.1 |
| Hispanic[f] | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 5.3
Cancer of the Cervix Uteri (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Ages 50+ by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-83 | -4.9* | 1983-91 | -0.9 | 1991-08 | -3.2* | | | | | | | -3.2* | -3.2* |
| White | 1975-85 | -4.7* | 1985-90 | 0.5 | 1990-08 | -3.1* | | | | | | | -3.1* | -3.1* |
| Black | 1975-08 | -3.9* | | | | | | | | | | | -3.9* | -3.9* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -3.1* | | | | | | | | | | | -3.1* | -3.1* |
| White | 1992-08 | -2.7* | | | | | | | | | | | -2.7* | -2.7* |
| Black | 1992-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-83 | -4.9* | 1983-91 | -0.9 | 1991-08 | -3.3* | | | | | | | -3.3* | -3.3* |
| White | 1975-85 | -4.7* | 1985-90 | 0.5 | 1990-08 | -3.2* | | | | | | | -3.2* | -3.2* |
| Black | 1975-08 | -3.9* | | | | | | | | | | | -3.9* | -3.9* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -3.2* | | | | | | | | | | | -3.2* | -3.2* |
| White | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |
| White NH[ef] | 1992-08 | -3.0* | | | | | | | | | | | -3.0* | -3.0* |
| Black | 1992-08 | -3.8* | | | | | | | | | | | -3.8* | -3.8* |
| Black NH[ef] | 1992-08 | -3.8* | | | | | | | | | | | -3.8* | -3.8* |
| API[e] | 1992-08 | -5.9* | | | | | | | | | | | -5.9* | -5.9* |
| AI/AN[eg] | 1992-08 | -3.4 | | | | | | | | | | | -3.4 | -3.4 |
| Hispanic[f] | 1992-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-84 | -4.3* | 1984-94 | -1.8* | 1994-04 | -3.5* | 2004-08 | -0.1 | | | | | -2.0* | -0.1 |
| White | 1975-84 | -4.6* | 1984-96 | -1.8* | 1996-04 | -3.4* | 2004-08 | 0.5 | | | | | -1.7* | 0.5 |
| Black | 1975-93 | -3.1* | 1993-08 | -4.1* | | | | | | | | | -4.1* | -4.1* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-04 | -3.3* | 2004-08 | -0.3 | | | | | | | | | -2.0* | -0.3 |
| White | 1992-04 | -3.0* | 2004-08 | 0.1 | | | | | | | | | -1.7* | 0.1 |
| White NH[ef] | 1992-04 | -3.2* | 2004-08 | 0.2 | | | | | | | | | -1.7* | 0.2 |
| Black | 1992-08 | -4.2* | | | | | | | | | | | -4.2* | -4.2* |
| Black NH[ef] | 1992-08 | -4.3* | | | | | | | | | | | -4.3* | -4.3* |
| API[e] | 1992-08 | -3.6* | | | | | | | | | | | -3.6* | -3.6* |
| AI/AN[eg] | 1992-08 | -3.4* | | | | | | | | | | | -3.4* | -3.4* |
| Hispanic[f] | 1992-08 | -2.5* | | | | | | | | | | | -2.5* | -2.5* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Cancer of the Cervix Uteri, by Race

Figure 5.1

### White

Rate per 100,000

- Delay-Adjusted Incidence
- Observed Incidence
- Mortality

SEER Incidence APCs
Delay Adj, 1990-08 = -2.4*
Observed, 1990-08 = -2.5*

US Mortality APC
2003-08 = -0.4

Year of Diagnosis/Death

### Black

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -3.7*
Observed, 1975-08 = -3.7*

US Mortality APC
2003-08 = -1.8

Year of Diagnosis/Death

a   Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
    Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
    Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[a]
## Cancer of the Cervix Uteri, by Age and Race

Figure 5.2

### White Ages <50

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1989-08 = -1.9*
Observed, 1989-08 = -2.0*

US Mortality APC
1994-08 = -2.2*

Year of Diagnosis/Death

### Black Ages <50

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -3.3*
Observed, 1975-08 = -3.4*

US Mortality APC
1975-08 = -3.3*

Year of Diagnosis/Death

### White Ages 50+

Rate per 100,000

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 1990-08 = -3.1*
Observed, 1990-08 = -3.2*

US Mortality APC
2004-08 = 0.5

Year of Diagnosis/Death

### Black Ages 50+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -3.9*
Observed, 1975-08 = -3.9*

US Mortality APC
1993-08 = -4.1*

Year of Diagnosis/Death

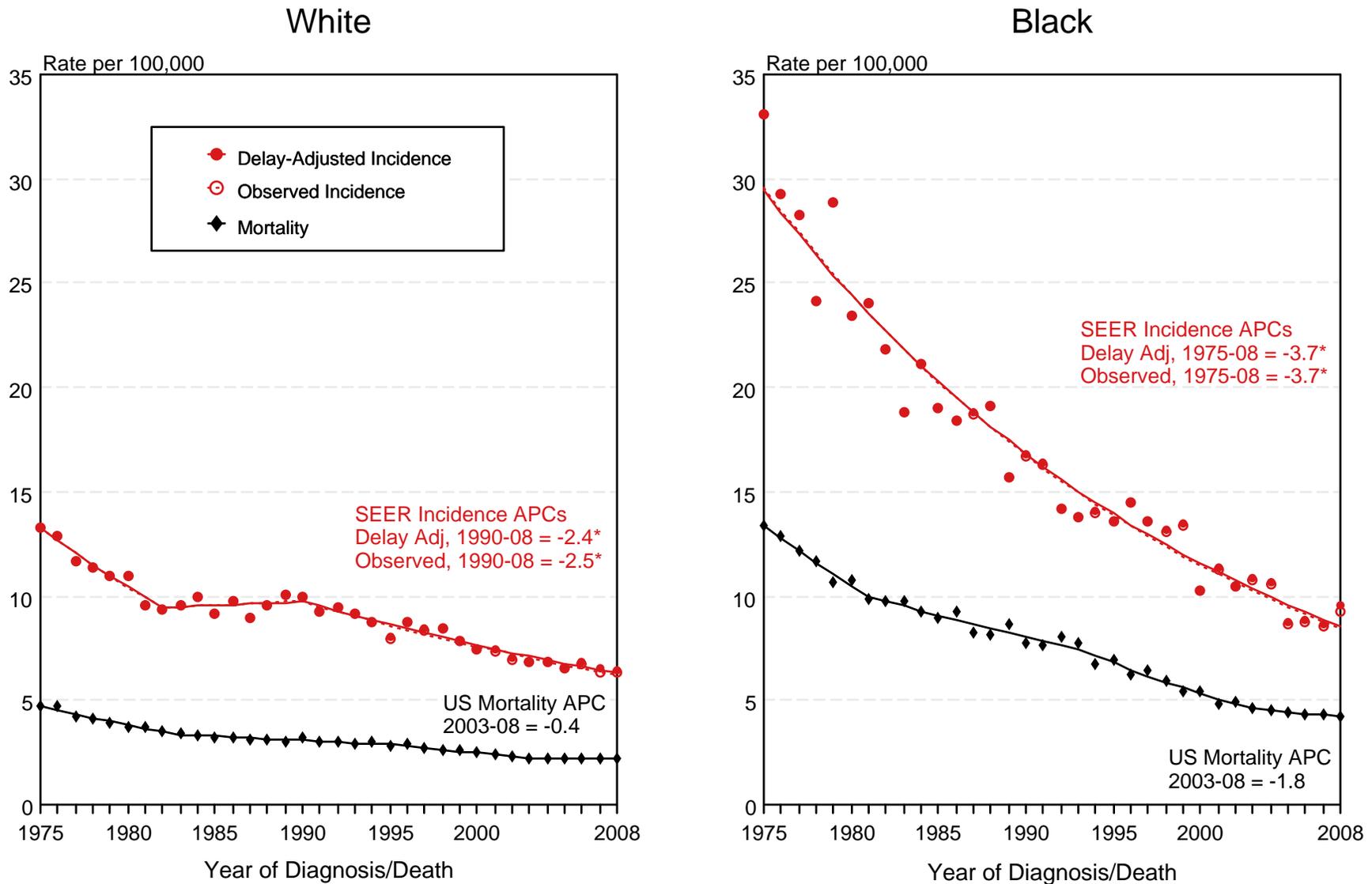[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Cervix Uteri, by Race

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1990-08 = -2.6*
Observed, 1990-08 = -2.7*

SEER 13 APCs
Delay Adj, 1992-08 = -2.6*
Observed, 1992-08 = -2.7*

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1990-08 = -2.4*
Observed, 1990-08 = -2.5*

SEER 13 APCs
Delay Adj, 1992-08 = -2.2*
Observed, 1992-08 = -2.3*

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = -3.7*
Observed, 1975-08 = -3.7*

SEER 13 APCs
Delay Adj, 1992-08 = -3.8*
Observed, 1992-08 = -3.9*

Year of Diagnosis

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

[a]  Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 Cancer Statistics Review 1975-2008

National Cancer Institute

Figure 5.4

Table 6.1
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-85 | 0.8* | 1985-95 | -1.8* | 1995-98 | 1.5 | 1998-08 | -2.4* | | | | | -2.4* | -2.4* |
| White | 1975-85 | 0.8* | 1985-95 | -2.0* | 1995-98 | 1.7 | 1998-08 | -2.6* | | | | | -2.6* | -2.6* |
| Black | 1975-80 | 3.2* | 1980-02 | -0.1 | 2002-08 | -2.3* | | | | | | | -1.5* | -2.3* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-95 | -2.1* | 1995-98 | 1.7 | 1998-08 | -2.3* | | | | | | | -2.3* | -2.3* |
| White | 1992-95 | -2.2* | 1995-98 | 1.9 | 1998-06 | -2.6* | 2006-08 | -1.6 | | | | | -2.4* | -2.1* |
| Black | 1992-03 | -0.1 | 2003-08 | -2.5* | | | | | | | | | -1.4* | -2.5* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-85 | 0.8* | 1985-95 | -1.8* | 1995-98 | 1.6 | 1998-08 | -2.5* | | | | | -2.5* | -2.5* |
| White | 1975-85 | 0.8* | 1985-95 | -2.0* | 1995-98 | 1.7 | 1998-08 | -2.7* | | | | | -2.7* | -2.7* |
| Black | 1975-80 | 3.2* | 1980-02 | -0.1 | 2002-08 | -2.5* | | | | | | | -1.7* | -2.5* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-95 | -2.1* | 1995-98 | 1.7 | 1998-08 | -2.4* | | | | | | | -2.4* | -2.4* |
| White | 1992-95 | -2.2* | 1995-98 | 1.8 | 1998-08 | -2.6* | | | | | | | -2.6* | -2.6* |
| White NH[e][f] | 1992-95 | -2.2* | 1995-98 | 1.9 | 1998-08 | -2.6* | | | | | | | -2.6* | -2.6* |
| Black | 1992-03 | -0.1 | 2003-08 | -2.7* | | | | | | | | | -1.6* | -2.7* |
| Black NH[e][f] | 1992-03 | -0.1 | 2003-08 | -2.6* | | | | | | | | | -1.5* | -2.6* |
| API[e] | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| AI/AN[e][g] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| Hispanic[f] | 1992-98 | 1.1 | 1998-08 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-84 | -0.5* | 1984-02 | -1.8* | 2002-05 | -4.1* | 2005-08 | -2.0* | | | | | -2.6* | -2.5* |
| White | 1975-78 | 0.2 | 1978-85 | -1.0* | 1985-02 | -1.9* | 2002-05 | -4.1* | 2005-08 | -2.0* | | | -2.7* | -2.6* |
| Black | 1975-90 | 0.6* | 1990-01 | -0.8* | 2001-08 | -2.6* | | | | | | | -2.2* | -2.6* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-02 | -1.8* | 2002-05 | -4.1* | 2005-08 | -2.0* | | | | | | | -2.6* | -2.5* |
| White | 1992-02 | -1.9* | 2002-05 | -4.2* | 2005-08 | -2.0* | | | | | | | -2.7* | -2.6* |
| White NH[e][f] | 1992-02 | -1.8* | 2002-05 | -3.9* | 2005-08 | -2.0* | | | | | | | -2.5* | -2.4* |
| Black | 1992-01 | -0.7* | 2001-08 | -2.7* | | | | | | | | | -2.2* | -2.7* |
| Black NH[e][f] | 1992-01 | -0.6* | 2001-08 | -2.5* | | | | | | | | | -2.0* | -2.5* |
| API[e] | 1992-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| AI/AN[e][g] | 1992-95 | 12.9 | 1995-08 | -0.8 | | | | | | | | | -0.8 | -0.8 |
| Hispanic[f] | 1992-99 | 0.4 | 1999-08 | -2.0* | | | | | | | | | -2.0* | -2.0* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
\* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 6.2
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-85 | 1.1* | 1985-91 | -1.2* | 1991-95 | -3.2* | 1995-98 | 2.0 | 1998-08 | -2.9* | | | -2.9* | -2.9* |
| White | 1975-85 | 1.1* | 1985-91 | -1.4* | 1991-95 | -3.3* | 1995-98 | 2.1 | 1998-08 | -3.0* | | | -3.0* | -3.0* |
| Black | 1975-89 | 1.4* | 1989-08 | -0.8* | | | | | | | | | -0.8* | -0.8* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-95 | -2.6* | 1995-98 | 1.5 | 1998-08 | -2.6* | | | | | | | -2.6* | -2.6* |
| White | 1992-95 | -2.8* | 1995-98 | 1.6 | 1998-08 | -2.9* | | | | | | | -2.9* | -2.9* |
| Black | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-85 | 1.1* | 1985-91 | -1.2* | 1991-95 | -3.2* | 1995-98 | 2.1 | 1998-08 | -2.9* | | | -2.9* | -2.9* |
| White | 1975-85 | 1.1* | 1985-91 | -1.4* | 1991-95 | -3.3* | 1995-98 | 2.1 | 1998-08 | -3.1* | | | -3.1* | -3.1* |
| Black | 1975-91 | 1.2* | 1991-08 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-95 | -2.6* | 1995-98 | 1.5 | 1998-08 | -2.7* | | | | | | | -2.7* | -2.7* |
| White | 1992-95 | -2.8* | 1995-98 | 1.6 | 1998-08 | -3.0* | | | | | | | -3.0* | -3.0* |
| White NH[e][f] | 1992-95 | -2.9* | 1995-98 | 1.6 | 1998-08 | -3.0* | | | | | | | -3.0* | -3.0* |
| Black | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black NH[e][f] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| API[e] | 1992-01 | -0.3 | 2001-08 | -2.7* | | | | | | | | | -2.2* | -2.7* |
| AI/AN[e][g] | 1992-08 | -1.1 | | | | | | | | | | | -1.1 | -1.1 |
| Hispanic[f] | 1992-98 | 1.6 | 1998-08 | -1.6* | | | | | | | | | -1.6* | -1.6* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-78 | 0.8 | 1978-84 | -0.4 | 1984-90 | -1.3* | 1990-02 | -2.0* | 2002-05 | -4.0* | 2005-08 | -2.3* | -2.8* | -2.7* |
| White | 1975-79 | 0.5 | 1979-87 | -0.8* | 1987-02 | -2.1* | 2002-05 | -4.2* | 2005-08 | -2.5* | | | -2.9* | -2.9* |
| Black | 1975-90 | 1.2* | 1990-00 | -0.6* | 2000-08 | -1.9* | | | | | | | -1.8* | -1.9* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-02 | -2.0* | 2002-05 | -4.0* | 2005-08 | -2.3* | | | | | | | -2.8* | -2.7* |
| White | 1992-02 | -2.1* | 2002-05 | -4.1* | 2005-08 | -2.5* | | | | | | | -2.9* | -2.9* |
| White NH[e][f] | 1992-02 | -2.1* | 2002-08 | -3.3* | | | | | | | | | -2.9* | -3.3* |
| Black | 1992-00 | -0.6 | 2000-08 | -1.9* | | | | | | | | | -1.8* | -1.9* |
| Black NH[e][f] | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| API[e] | 1992-08 | -2.1* | | | | | | | | | | | -2.1* | -2.1* |
| AI/AN[e][g] | 1992-96 | 15.0 | 1996-08 | -1.1 | | | | | | | | | -1.1 | -1.1 |
| Hispanic[f] | 1992-98 | 0.9 | 1998-08 | -2.2* | | | | | | | | | -2.2* | -2.2* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a]  Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]  Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]  Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]  The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]  API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]  Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]  Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*  The APC/AAPC is significantly different from zero (p<.05).
-  Joinpoint regression line analysis could not be performed on data series.

Table 6.3
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-85 | 0.3 | 1985-95 | -1.9* | 1995-98 | 1.9 | 1998-08 | -2.1* | | | | | -2.1* | -2.1* |
| White | 1975-85 | 0.3 | 1985-95 | -2.0* | 1995-98 | 2.1 | 1998-08 | -2.3* | | | | | -2.3* | -2.3* |
| Black | 1975-02 | 0.0 | 2002-08 | -2.4* | | | | | | | | | -1.6* | -2.4* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-95 | -1.8* | 1995-98 | 1.9 | 1998-08 | -2.0* | | | | | | | -2.0* | -2.0* |
| White | 1992-95 | -1.7 | 1995-98 | 1.8 | 1998-08 | -2.2* | | | | | | | -2.2* | -2.2* |
| Black | 1992-00 | 0.5 | 2000-08 | -1.7* | | | | | | | | | -1.4* | -1.7* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-85 | 0.3 | 1985-95 | -1.9* | 1995-98 | 1.9 | 1998-08 | -2.2* | | | | | -2.2* | -2.2* |
| White | 1975-85 | 0.3 | 1985-95 | -2.1* | 1995-98 | 2.1 | 1998-08 | -2.4* | | | | | -2.4* | -2.4* |
| Black | 1975-02 | 0.0 | 2002-08 | -2.6* | | | | | | | | | -1.8* | -2.6* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-95 | -1.9* | 1995-98 | 1.9 | 1998-08 | -2.1* | | | | | | | -2.1* | -2.1* |
| White | 1992-95 | -1.7 | 1995-98 | 1.8 | 1998-08 | -2.3* | | | | | | | -2.3* | -2.3* |
| White NH[ef] | 1992-95 | -1.7 | 1995-98 | 2.0 | 1998-08 | -2.4* | | | | | | | -2.4* | -2.4* |
| Black | 1992-00 | 0.5 | 2000-08 | -1.9* | | | | | | | | | -1.6* | -1.9* |
| Black NH[ef] | 1992-00 | 0.5 | 2000-08 | -1.8* | | | | | | | | | -1.5* | -1.8* |
| API[e] | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| AI/AN[eg] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| Hispanic[f] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-84 | -1.0* | 1984-01 | -1.8* | 2001-08 | -3.0* | | | | | | | -2.8* | -3.0* |
| White | 1975-84 | -1.2* | 1984-02 | -2.0* | 2002-05 | -4.1* | 2005-08 | -1.9* | | | | | -2.6* | -2.4* |
| Black | 1975-85 | 0.7* | 1985-01 | -0.7* | 2001-08 | -3.3* | | | | | | | -2.7* | -3.3* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-01 | -1.7* | 2001-05 | -3.6* | 2005-08 | -2.1* | | | | | | | -2.7* | -2.5* |
| White | 1992-00 | -1.8* | 2000-08 | -3.0* | | | | | | | | | -2.9* | -3.0* |
| White NH[ef] | 1992-02 | -1.8* | 2002-05 | -4.1* | 2005-08 | -1.4* | | | | | | | -2.4* | -2.1* |
| Black | 1992-01 | -0.7* | 2001-08 | -3.3* | | | | | | | | | -2.7* | -3.3* |
| Black NH[ef] | 1992-01 | -0.6* | 2001-08 | -3.1* | | | | | | | | | -2.6* | -3.1* |
| API[e] | 1992-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |
| AI/AN[eg] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| Hispanic[f] | 1992-01 | 0.2 | 2001-08 | -2.4* | | | | | | | | | -1.9* | -2.4* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Cancer of the Colon and Rectum, by Race and Sex
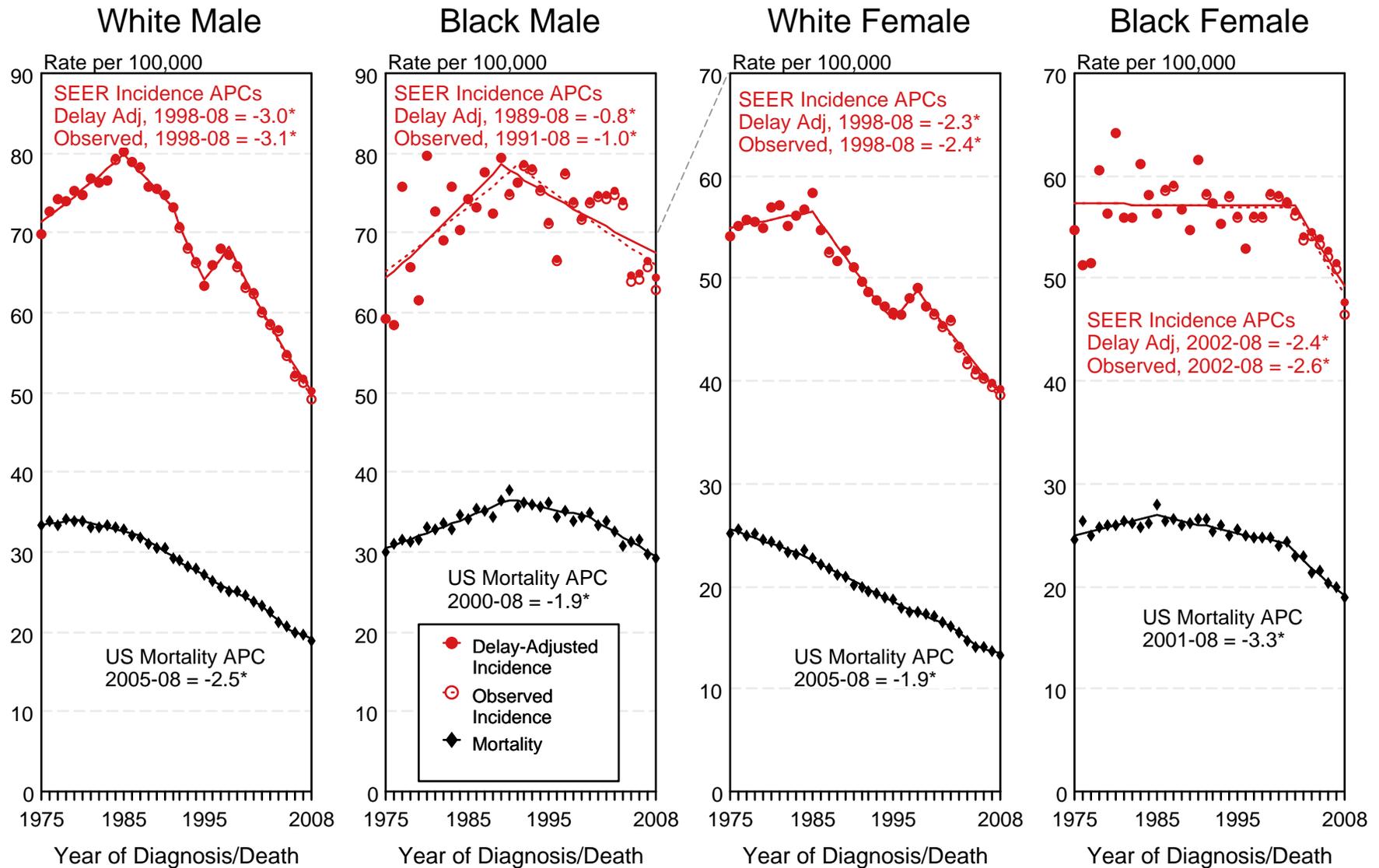
### White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1998-08 = -3.0*
Observed, 1998-08 = -3.1*

US Mortality APC
2005-08 = -2.5*

Year of Diagnosis/Death

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1989-08 = -0.8*
Observed, 1991-08 = -1.0*

US Mortality APC
2000-08 = -1.9*

- ● Delay-Adjusted Incidence
- ◉ Observed Incidence
- ◆ Mortality

Year of Diagnosis/Death

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1998-08 = -2.3*
Observed, 1998-08 = -2.4*

US Mortality APC
2005-08 = -1.9*

Year of Diagnosis/Death

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2002-08 = -2.4*
Observed, 2002-08 = -2.6*

US Mortality APC
2001-08 = -3.3*

Year of Diagnosis/Death

a  Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
### Cancer of the Colon and Rectum, Male, by Race

Figure 6.3

## All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1998-08 = -2.9*
Observed, 1998-08 = -2.9*

SEER 13 APCs
Delay Adj, 1998-08 = -2.6*
Observed, 1998-08 = -2.7*

Year of Diagnosis

## White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1998-08 = -3.0*
Observed, 1998-08 = -3.1*

SEER 13 APCs
Delay Adj, 1998-08 = -2.9*
Observed, 1998-08 = -3.0*

Year of Diagnosis

## Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-08 = -0.8*
Observed, 1991-08 = -1.0*

SEER 13 APCs
Delay Adj, 1992-08 = -0.8*
Observed, 1992-08 = -0.9*

Year of Diagnosis

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

[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
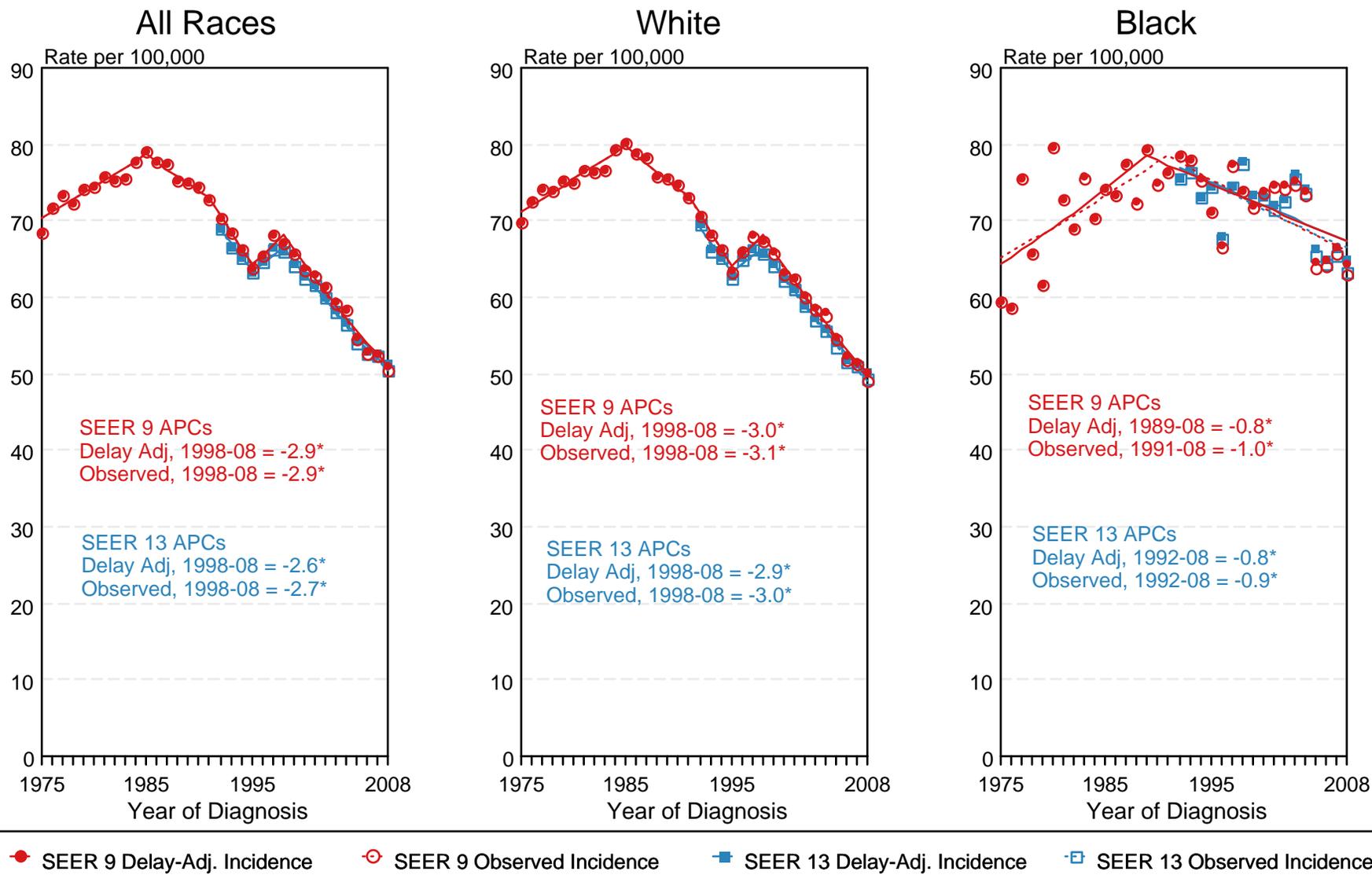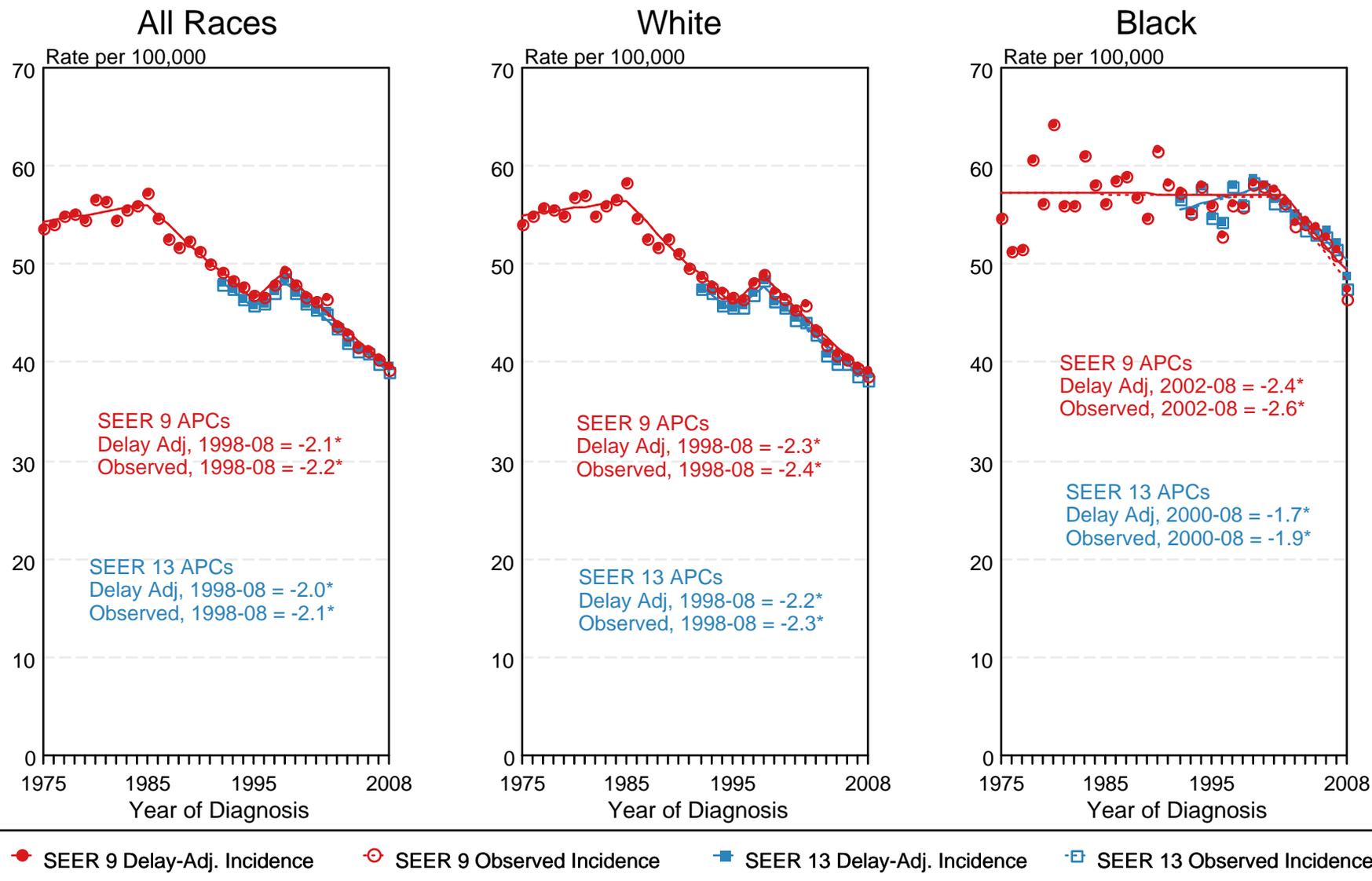Cancer of the Colon and Rectum, Female, by Race

Figure 6.4

**All Races**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1998-08 = -2.1*
Observed, 1998-08 = -2.2*

SEER 13 APCs
Delay Adj, 1998-08 = -2.0*
Observed, 1998-08 = -2.1*

Year of Diagnosis

**White**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1998-08 = -2.3*
Observed, 1998-08 = -2.4*

SEER 13 APCs
Delay Adj, 1998-08 = -2.2*
Observed, 1998-08 = -2.3*

Year of Diagnosis

**Black**

Rate per 100,000

SEER 9 APCs
Delay Adj, 2002-08 = -2.4*
Observed, 2002-08 = -2.6*

SEER 13 APCs
Delay Adj, 2000-08 = -1.7*
Observed, 2000-08 = -1.9*

Year of Diagnosis

● SEER 9 Delay-Adj. Incidence    ◎ SEER 9 Observed Incidence    ■ SEER 13 Delay-Adj. Incidence    ▫ SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
All Ages by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-79 | -6.0* | 1979-88 | -1.7* | 1988-97 | 0.7* | 1997-06 | -0.4* | 2006-08 | 3.2 | | | 0.4 | 1.4 |
| White | 1975-79 | -6.1* | 1979-88 | -1.6* | 1988-98 | 0.7* | 1998-03 | -1.2 | 2003-08 | 0.8 | | | -0.1 | 0.8 |
| Black | 1975-93 | -0.4 | 1993-08 | 2.0* | | | | | | | | | 2.0* | 2.0* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-06 | -0.2 | 2006-08 | 2.7 | | | | | | | | | 0.5 | 1.2 |
| White | 1992-98 | 0.6 | 1998-03 | -1.3 | 2003-08 | 1.0 | | | | | | | -0.1 | 1.0 |
| Black | 1992-08 | 1.9* | | | | | | | | | | | 1.9* | 1.9* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-79 | -6.0* | 1979-88 | -1.7* | 1988-97 | 0.7* | 1997-06 | -0.4* | 2006-08 | 2.8 | | | 0.3 | 1.2 |
| White | 1975-79 | -6.1* | 1979-88 | -1.6* | 1988-98 | 0.7* | 1998-03 | -1.2 | 2003-08 | 0.6 | | | -0.2 | 0.6 |
| Black | 1975-92 | -0.5 | 1992-08 | 1.8* | | | | | | | | | 1.8* | 1.8* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-06 | -0.2 | 2006-08 | 2.3 | | | | | | | | | 0.4 | 1.1 |
| White | 1992-98 | 0.6 | 1998-03 | -1.4 | 2003-08 | 0.8 | | | | | | | -0.2 | 0.8 |
| White NH[ef] | 1992-98 | 0.7 | 1998-04 | -1.3* | 2004-08 | 1.2 | | | | | | | -0.2 | 1.2 |
| Black | 1992-08 | 1.8* | | | | | | | | | | | 1.8* | 1.8* |
| Black NH[ef] | 1992-08 | 1.8* | | | | | | | | | | | 1.8* | 1.8* |
| API[e] | 1992-08 | 1.5* | | | | | | | | | | | 1.5* | 1.5* |
| AI/AN[eg] | 1992-08 | 2.1* | | | | | | | | | | | 2.1* | 2.1* |
| Hispanic[f] | 1992-08 | 1.1* | | | | | | | | | | | 1.1* | 1.1* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | -1.6* | 1989-97 | -0.7* | 1997-08 | 0.3* | | | | | | | 0.3* | 0.3* |
| White | 1975-92 | -1.6* | 1992-08 | 0.0 | | | | | | | | | 0.0 | 0.0 |
| Black | 1975-97 | -0.8* | 1997-08 | 0.7* | | | | | | | | | 0.7* | 0.7* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-97 | -0.7* | 1997-08 | 0.3* | | | | | | | | | 0.3* | 0.3* |
| White | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| White NH[ef] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Black | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| Black NH[ef] | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| API[e] | 1992-08 | 1.4* | | | | | | | | | | | 1.4* | 1.4* |
| AI/AN[eg] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| Hispanic[f] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
\* The APC/AAPC is significantly different from zero (p<.05).
\- Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Ages <50 by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-88 | -2.5* | 1988-08 | 1.2* | | | | | | | | | 1.2* | 1.2* |
| White | 1975-85 | -3.4* | 1985-08 | 0.6* | | | | | | | | | 0.6* | 0.6* |
| Black | 1975-85 | -5.3* | 1985-08 | 2.7* | | | | | | | | | 2.7* | 2.7* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 1.3* | | | | | | | | | | | 1.3* | 1.3* |
| White | 1992-08 | 1.2* | | | | | | | | | | | 1.2* | 1.2* |
| Black | 1992-08 | 2.2* | | | | | | | | | | | 2.2* | 2.2* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-85 | -3.5* | 1985-08 | 1.0* | | | | | | | | | 1.0* | 1.0* |
| White | 1975-85 | -3.4* | 1985-08 | 0.6* | | | | | | | | | 0.6* | 0.6* |
| Black | 1975-85 | -5.3* | 1985-08 | 2.6* | | | | | | | | | 2.6* | 2.6* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 1.3* | | | | | | | | | | | 1.3* | 1.3* |
| White | 1992-08 | 1.2* | | | | | | | | | | | 1.2* | 1.2* |
| White NH[ef] | 1992-08 | 0.8* | | | | | | | | | | | 0.8* | 0.8* |
| Black | 1992-08 | 2.1* | | | | | | | | | | | 2.1* | 2.1* |
| Black NH[ef] | 1992-08 | 2.1* | | | | | | | | | | | 2.1* | 2.1* |
| API[e] | 1992-08 | 1.1* | | | | | | | | | | | 1.1* | 1.1* |
| AI/AN[eg] | 1992-08 | 2.4 | | | | | | | | | | | 2.4 | 2.4 |
| Hispanic[f] | 1992-08 | 2.2* | | | | | | | | | | | 2.2* | 2.2* |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-84 | -4.6* | 1984-94 | -1.5* | 1994-08 | 1.6* | | | | | | | 1.6* | 1.6* |
| White | 1975-88 | -3.9* | 1988-08 | 1.0* | | | | | | | | | 1.0* | 1.0* |
| Black | 1975-95 | -4.5* | 1995-08 | 2.9* | | | | | | | | | 2.9* | 2.9* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 1.5* | | | | | | | | | | | 1.5* | 1.5* |
| White | 1992-08 | 1.4* | | | | | | | | | | | 1.4* | 1.4* |
| White NH[ef] | 1992-08 | 1.3* | | | | | | | | | | | 1.3* | 1.3* |
| Black | 1992-08 | 2.0* | | | | | | | | | | | 2.0* | 2.0* |
| Black NH[ef] | 1992-08 | 2.2* | | | | | | | | | | | 2.2* | 2.2* |
| API[e] | 1992-08 | 1.3 | | | | | | | | | | | 1.3 | 1.3 |
| AI/AN[eg] | – | – | | | | | | | | | | | – | – |
| Hispanic[f] | 1992-98 | -7.2* | 1998-08 | 4.7* | | | | | | | | | 4.7* | 4.7* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Ages 50+ by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-79 | -6.2* | 1979-88 | -1.7* | 1988-98 | 0.6* | 1998-03 | -1.3 | 2003-08 | 0.8 | | | -0.2 | 0.8 |
| White | 1975-79 | -6.2* | 1979-88 | -1.7* | 1988-97 | 0.7* | 1997-08 | -0.6* | | | | | -0.6* | -0.6* |
| Black | 1975-99 | 0.1 | 1999-08 | 2.8* | | | | | | | | | 2.8* | 2.8* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-97 | 0.9 | 1997-03 | -1.4* | 2003-08 | 1.0 | | | | | | | -0.1 | 1.0 |
| White | 1992-97 | 0.9 | 1997-03 | -1.5* | 2003-08 | 0.6 | | | | | | | -0.3 | 0.6 |
| Black | 1992-08 | 1.9* | | | | | | | | | | | 1.9* | 1.9* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-79 | -6.2* | 1979-88 | -1.7* | 1988-98 | 0.6* | 1998-03 | -1.3 | 2003-08 | 0.6 | | | -0.2 | 0.6 |
| White | 1975-79 | -6.2* | 1979-88 | -1.7* | 1988-97 | 0.7* | 1997-08 | -0.6* | | | | | -0.6* | -0.6* |
| Black | 1975-97 | 0.0 | 1997-08 | 2.2* | | | | | | | | | 2.2* | 2.2* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-97 | 0.9 | 1997-03 | -1.4* | 2003-08 | 0.9 | | | | | | | -0.1 | 0.9 |
| White | 1992-97 | 0.9 | 1997-03 | -1.5* | 2003-08 | 0.5 | | | | | | | -0.4 | 0.5 |
| White NH[ef] | 1992-97 | 1.0 | 1997-04 | -1.3* | 2004-08 | 0.8 | | | | | | | -0.4 | 0.8 |
| Black | 1992-08 | 1.7* | | | | | | | | | | | 1.7* | 1.7* |
| Black NH[ef] | 1992-08 | 1.8* | | | | | | | | | | | 1.8* | 1.8* |
| API[e] | 1992-08 | 1.7* | | | | | | | | | | | 1.7* | 1.7* |
| AI/AN[eg] | 1992-08 | 2.0 | | | | | | | | | | | 2.0 | 2.0 |
| Hispanic[f] | 1992-08 | 0.9* | | | | | | | | | | | 0.9* | 0.9* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | -1.5* | 1989-97 | -0.7* | 1997-08 | 0.2 | | | | | | | 0.2 | 0.2 |
| White | 1975-92 | -1.5* | 1992-08 | -0.1 | | | | | | | | | -0.1 | -0.1 |
| Black | 1975-97 | -0.6* | 1997-08 | 0.5 | | | | | | | | | 0.5 | 0.5 |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-97 | -0.8* | 1997-08 | 0.2* | | | | | | | | | 0.2* | 0.2* |
| White | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White NH[ef] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Black | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| Black NH[ef] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| API[e] | 1992-08 | 1.5* | | | | | | | | | | | 1.5* | 1.5* |
| AI/AN[eg] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Hispanic[f] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
\* The APC/AAPC is significantly different from zero (p<.05).
\- Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Cancer of the Corpus and Uterus, NOS, by Race



### White

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2003-08 = 0.8
Observed, 2003-08 = 0.6

US Mortality APC
1992-08 = 0.0

Year of Diagnosis/Death

### Black

Rate per 100,000

- Delay-Adjusted Incidence
- Observed Incidence
- Mortality

SEER Incidence APCs
Delay Adj, 1993-08 = 2.0*
Observed, 1992-08 = 1.8*

US Mortality APC
1997-08 = 0.7*

Year of Diagnosis/Death

Figure 7.1

[a]  Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[a]
## Cancer of the Corpus and Uterus, NOS, by Age and Race

Figure 7.2

### White Ages <50

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1985-08 = 0.6*
Observed, 1985-08 = 0.6*

US Mortality APC
1988-08 = 1.0*

Year of Diagnosis/Death

### Black Ages <50

Rate per 100,000

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 1985-08 = 2.7*
Observed, 1985-08 = 2.6*

US Mortality APC
1995-08 = 2.9*

Year of Diagnosis/Death

### White Ages 50+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1997-08 = -0.6*
Observed, 1997-08 = -0.6*

US Mortality APC
1992-08 = -0.1

Year of Diagnosis/Death

### Black Ages 50+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1999-08 = 2.8*
Observed, 1997-08 = 2.2*

US Mortality APC
1997-08 = 0.5

Year of Diagnosis/Death

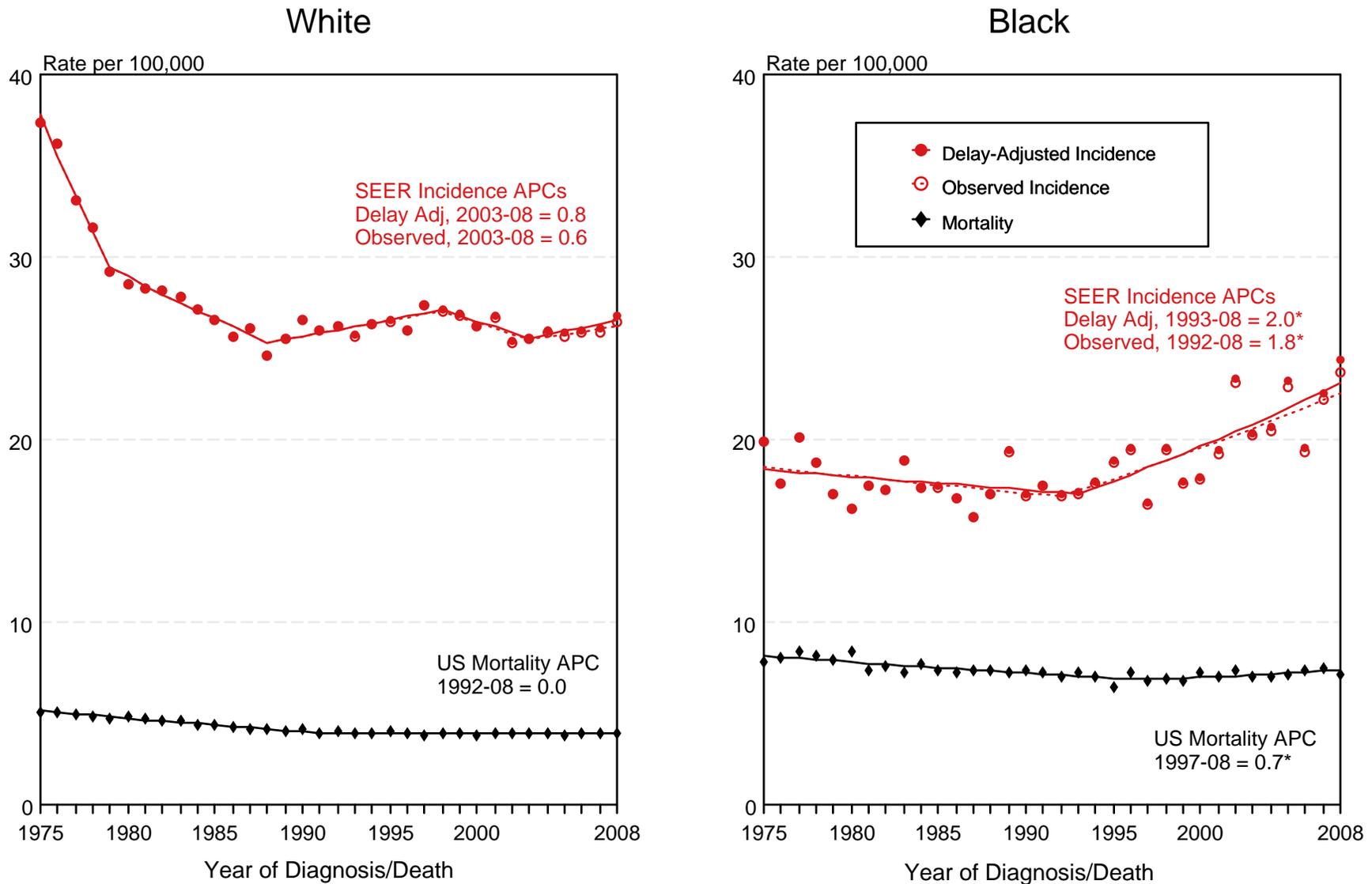[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
  Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
  Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Corpus and Uterus, NOS, by Race

Figure 7.4

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2006-08 = 3.2
Observed, 2006-08 = 2.8

SEER 13 APCs
Delay Adj, 2006-08 = 2.7
Observed, 2006-08 = 2.3

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2003-08 = 0.8
Observed, 2003-08 = 0.6

SEER 13 APCs
Delay Adj, 2003-08 = 1.0
Observed, 2003-08 = 0.8

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1993-08 = 2.0*
Observed, 1992-08 = 1.8*

SEER 13 APCs
Delay Adj, 1992-08 = 1.9*
Observed, 1992-08 = 1.8*

Year of Diagnosis

Legend:
- SEER 9 Delay-Adj. Incidence
- SEER 9 Observed Incidence
- SEER 13 Delay-Adj. Incidence
- SEER 13 Observed Incidence
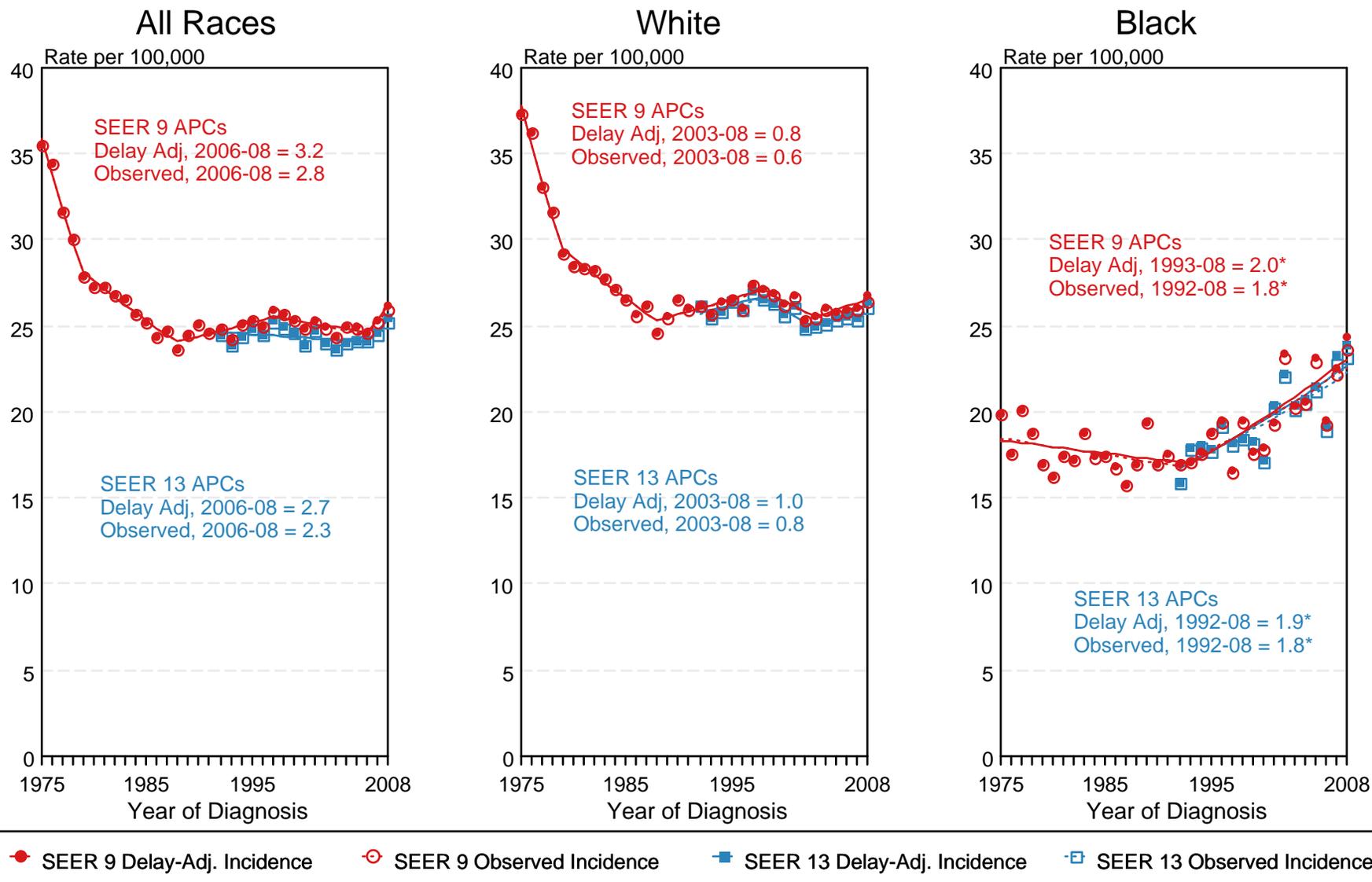
[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
The APC is the Annual Percent Change 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| White | 1975-08 | 1.3* | | | | | | | | | | | 1.3* | 1.3* |
| Black | 1975-86 | 1.1 | 1986-08 | -4.5* | | | | | | | | | -4.5* | -4.5* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| White | 1992-08 | 0.8* | | | | | | | | | | | 0.8* | 0.8* |
| Black | 1992-08 | -4.8* | | | | | | | | | | | -4.8* | -4.8* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| White | 1975-04 | 1.4* | 2004-08 | -1.1 | | | | | | | | | 0.3 | -1.1 |
| Black | 1975-86 | 1.1 | 1986-08 | -4.5* | | | | | | | | | -4.5* | -4.5* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| White | 1992-08 | 0.7* | | | | | | | | | | | 0.7* | 0.7* |
| White NH[ef] | 1992-08 | 1.1* | | | | | | | | | | | 1.1* | 1.1* |
| Black | 1992-08 | -4.8* | | | | | | | | | | | -4.8* | -4.8* |
| Black NH[ef] | 1992-08 | -4.8* | | | | | | | | | | | -4.8* | -4.8* |
| API[e] | 1992-08 | -1.0 | | | | | | | | | | | -1.0 | -1.0 |
| AI/AN[eg] | 1992-08 | 1.7 | | | | | | | | | | | 1.7 | 1.7 |
| Hispanic[f] | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-00 | 0.7* | 2000-06 | 0.0 | 2006-08 | -2.1 | | | | | | | -0.4 | -1.1* |
| White | 1975-83 | 0.4* | 1983-00 | 1.7* | 2000-06 | 0.8* | 2006-08 | -1.9 | | | | | 0.3 | -0.6 |
| Black | 1975-82 | 1.1* | 1982-93 | -1.6* | 1993-08 | -4.5* | | | | | | | -4.5* | -4.5* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-05 | 0.4* | 2005-08 | -1.7* | | | | | | | | | -0.3 | -1.2* |
| White | 1992-00 | 1.7* | 2000-06 | 0.8* | 2006-08 | -1.9 | | | | | | | 0.3 | -0.6 |
| White NH[ef] | 1992-00 | 2.0* | 2000-06 | 1.0* | 2006-08 | -1.9 | | | | | | | 0.4 | -0.5 |
| Black | 1992-08 | -4.3* | | | | | | | | | | | -4.3* | -4.3* |
| Black NH[ef] | 1992-08 | -4.1* | | | | | | | | | | | -4.1* | -4.1* |
| API[e] | 1992-08 | -2.0* | | | | | | | | | | | -2.0* | -2.0* |
| AI/AN[eg] | 1992-08 | 2.2* | | | | | | | | | | | 2.2* | 2.2* |
| Hispanic[f] | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
\* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 8.2
Cancer of the Esophagus (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.6* | | | | | | | | | | | 0.6* | 0.6* |
| White | 1975-08 | 1.6* | | | | | | | | | | | 1.6* | 1.6* |
| Black | 1975-86 | 1.1 | 1986-08 | -4.8* | | | | | | | | | -4.8* | -4.8* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| White | 1992-08 | 0.9* | | | | | | | | | | | 0.9* | 0.9* |
| Black | 1992-08 | -4.9* | | | | | | | | | | | -4.9* | -4.9* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.6* | | | | | | | | | | | 0.6* | 0.6* |
| White | 1975-08 | 1.5* | | | | | | | | | | | 1.5* | 1.5* |
| Black | 1975-86 | 1.1 | 1986-08 | -4.8* | | | | | | | | | -4.8* | -4.8* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| White | 1992-08 | 0.9* | | | | | | | | | | | 0.9* | 0.9* |
| White NH[ef] | 1992-08 | 1.3* | | | | | | | | | | | 1.3* | 1.3* |
| Black | 1992-08 | -5.0* | | | | | | | | | | | -5.0* | -5.0* |
| Black NH[ef] | 1992-08 | -5.0* | | | | | | | | | | | -5.0* | -5.0* |
| API[e] | 1992-08 | -1.5* | | | | | | | | | | | -1.5* | -1.5* |
| AI/AN[eg] | 1992-08 | -1.2 | | | | | | | | | | | -1.2 | -1.2 |
| Hispanic[f] | 1992-08 | -2.1* | | | | | | | | | | | -2.1* | -2.1* |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-85 | 0.7* | 1985-94 | 1.2* | 1994-06 | 0.4* | 2006-08 | -2.2 | | | | | -0.2 | -0.9 |
| White | 1975-82 | 0.3 | 1982-99 | 1.9* | 1999-06 | 1.0* | 2006-08 | -1.8 | | | | | 0.4 | -0.4 |
| Black | 1975-84 | 0.8* | 1984-93 | -1.9* | 1993-08 | -4.6* | | | | | | | -4.6* | -4.6* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-05 | 0.6* | 2005-08 | -1.4 | | | | | | | | | -0.1 | -0.9 |
| White | 1992-05 | 1.5* | 2005-08 | -1.2 | | | | | | | | | 0.6* | -0.5 |
| White NH[ef] | 1992-05 | 1.7* | 2005-08 | -1.1 | | | | | | | | | 0.8* | -0.4 |
| Black | 1992-08 | -4.4* | | | | | | | | | | | -4.4* | -4.4* |
| Black NH[ef] | 1992-08 | -4.2* | | | | | | | | | | | -4.2* | -4.2* |
| API[e] | 1992-08 | -2.2* | | | | | | | | | | | -2.2* | -2.2* |
| AI/AN[eg] | 1992-08 | 2.0* | | | | | | | | | | | 2.0* | 2.0* |
| Hispanic[f] | 1992-08 | -1.2* | | | | | | | | | | | -1.2* | -1.2* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 8.3
Cancer of the Esophagus (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| White | 1975-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| Black | 1975-80 | 10.9 | 1980-08 | -2.9* | | | | | | | | | -2.9* | -2.9* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| Black | 1992-08 | -4.3* | | | | | | | | | | | -4.3* | -4.3* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| White | 1975-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| Black | 1975-80 | 10.9 | 1980-08 | -2.9* | | | | | | | | | -2.9* | -2.9* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| White NH[ef] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Black | 1992-08 | -4.4* | | | | | | | | | | | -4.4* | -4.4* |
| Black NH[ef] | 1992-08 | -4.4* | | | | | | | | | | | -4.4* | -4.4* |
| API[e] | 1992-08 | 1.3 | | | | | | | | | | | 1.3 | 1.3 |
| AI/AN[eg] | – | – | | | | | | | | | | | – | – |
| Hispanic[f] | 1992-08 | -2.0 | | | | | | | | | | | -2.0 | -2.0 |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-01 | 0.0 | 2001-08 | -1.9* | | | | | | | | | -1.5* | -1.9* |
| White | 1975-03 | 0.4* | 2003-08 | -1.8* | | | | | | | | | -0.8* | -1.8* |
| Black | 1975-91 | -0.1 | 1991-08 | -3.7* | | | | | | | | | -3.7* | -3.7* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-01 | 0.0 | 2001-08 | -1.9* | | | | | | | | | -1.5* | -1.9* |
| White | 1992-01 | 0.9* | 2001-08 | -1.4* | | | | | | | | | -0.9* | -1.4* |
| White NH[ef] | 1992-01 | 1.1* | 2001-08 | -1.3* | | | | | | | | | -0.8* | -1.3* |
| Black | 1992-08 | -3.8* | | | | | | | | | | | -3.8* | -3.8* |
| Black NH[ef] | 1992-08 | -3.6* | | | | | | | | | | | -3.6* | -3.6* |
| API[e] | 1992-08 | -1.1 | | | | | | | | | | | -1.1 | -1.1 |
| AI/AN[eg] | 1992-06 | 5.8* | 2006-08 | -43.1 | | | | | | | | | -7.8 | -22.4 |
| Hispanic[f] | 1992-97 | 7.5* | 1997-08 | -3.0* | | | | | | | | | -3.0* | -3.0* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]  Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]  Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]  Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]  The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]  API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]  Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
     Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
     The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]  Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*  The APC/AAPC is significantly different from zero (p<.05).
–  Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Cancer of the Esophagus, by Race and Sex
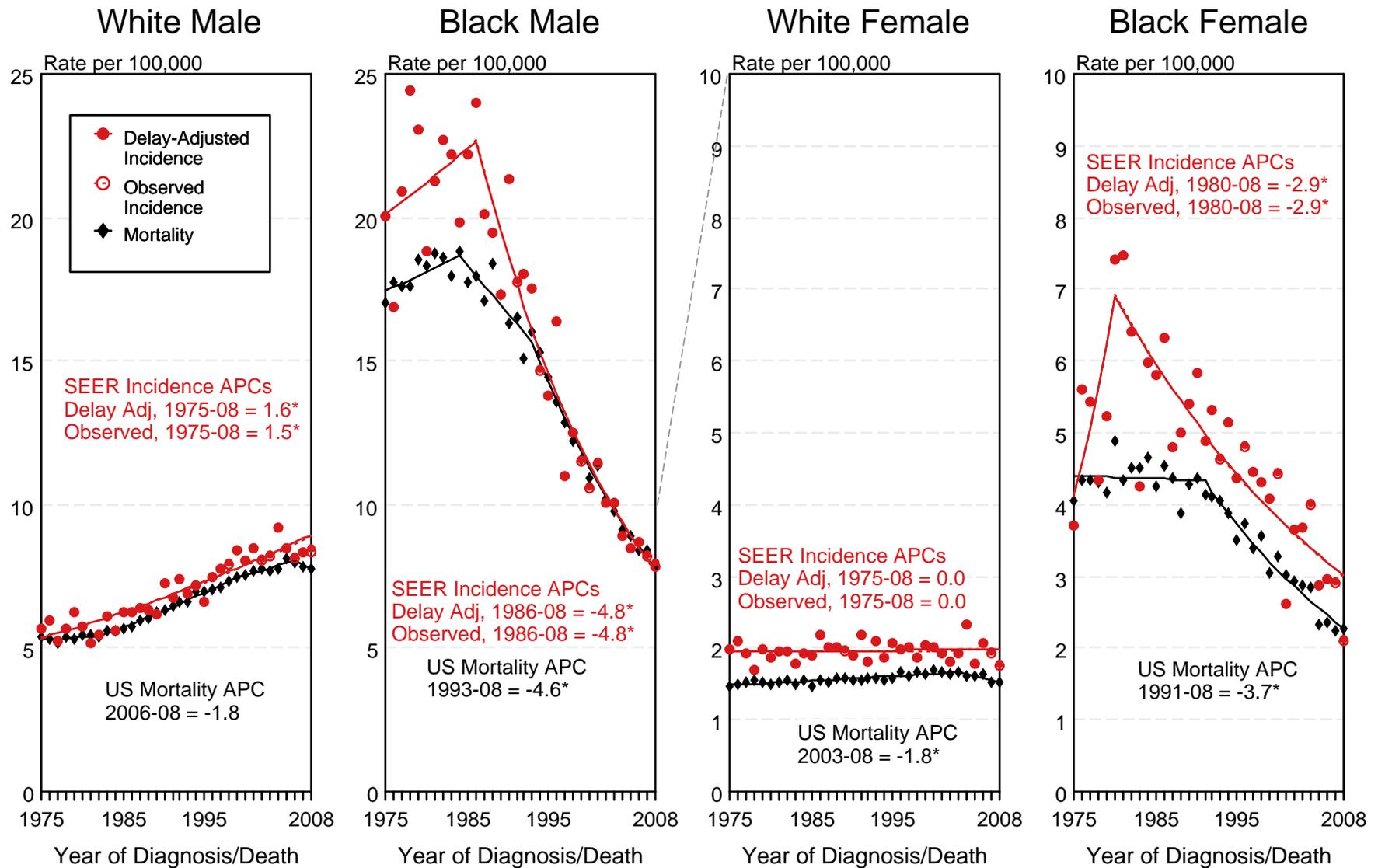
Figure 8.1

### White Male

Rate per 100,000

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 1975-08 = 1.6*
Observed, 1975-08 = 1.5*

US Mortality APC
2006-08 = -1.8

Year of Diagnosis/Death

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1986-08 = -4.8*
Observed, 1986-08 = -4.8*

US Mortality APC
1993-08 = -4.6*

Year of Diagnosis/Death

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.0
Observed, 1975-08 = 0.0

US Mortality APC
2003-08 = -1.8*

Year of Diagnosis/Death

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1980-08 = -2.9*
Observed, 1980-08 = -2.9*

US Mortality APC
1991-08 = -3.7*

Year of Diagnosis/Death

a  Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Esophagus, Male, by Race

Figure 8.3

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.6*
Observed, 1975-08 = 0.6*

SEER 13 APCs
Delay Adj, 1992-08 = 0.0
Observed, 1992-08 = 0.0

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 1.6*
Observed, 1975-08 = 1.5*

SEER 13 APCs
Delay Adj, 1992-08 = 0.9*
Observed, 1992-08 = 0.9*

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1986-08 = -4.8*
Observed, 1986-08 = -4.8*

SEER 13 APCs
Delay Adj, 1992-08 = -4.9*
Observed, 1992-08 = -5.0*

Year of Diagnosis

Legend:
- SEER 9 Delay-Adj. Incidence
- SEER 9 Observed Incidence
- SEER 13 Delay-Adj. Incidence
- SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
### Cancer of the Esophagus, Female, by Race

Figure 8.4

## All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = -0.4*
Observed, 1975-08 = -0.4*

SEER 13 APCs
Delay Adj, 1992-08 = -1.0*
Observed, 1992-08 = -1.0*

Year of Diagnosis

## White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.0
Observed, 1975-08 = 0.0

SEER 13 APCs
Delay Adj, 1992-08 = -0.3
Observed, 1992-08 = -0.4

Year of Diagnosis

## Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1980-08 = -2.9*
Observed, 1980-08 = -2.9*

SEER 13 APCs
Delay Adj, 1992-08 = -4.3*
Observed, 1992-08 = -4.4*

Year of Diagnosis

Legend:
- SEER 9 Delay-Adj. Incidence
- SEER 9 Observed Incidence
- SEER 13 Delay-Adj. Incidence
- SEER 13 Observed Incidence
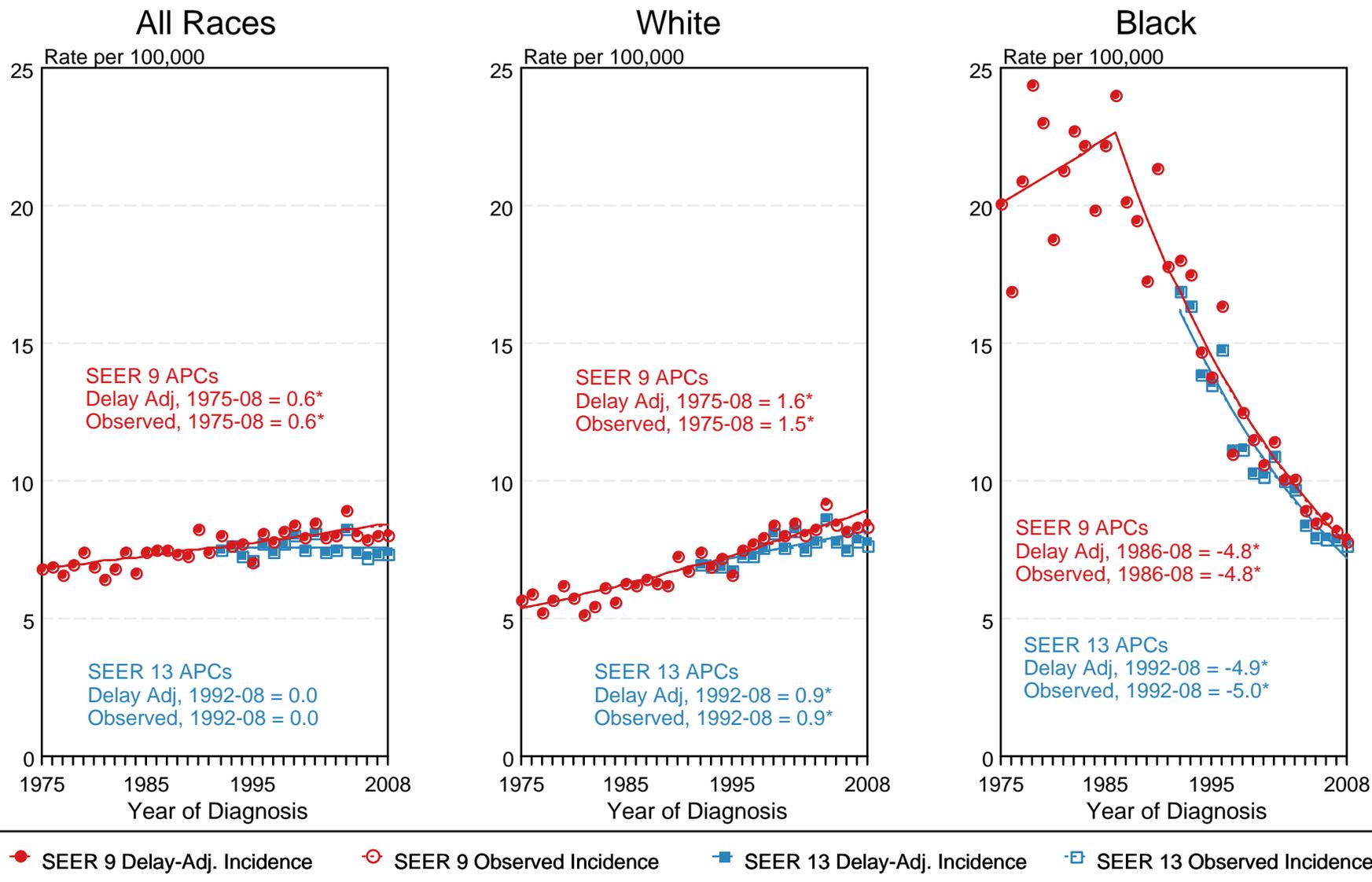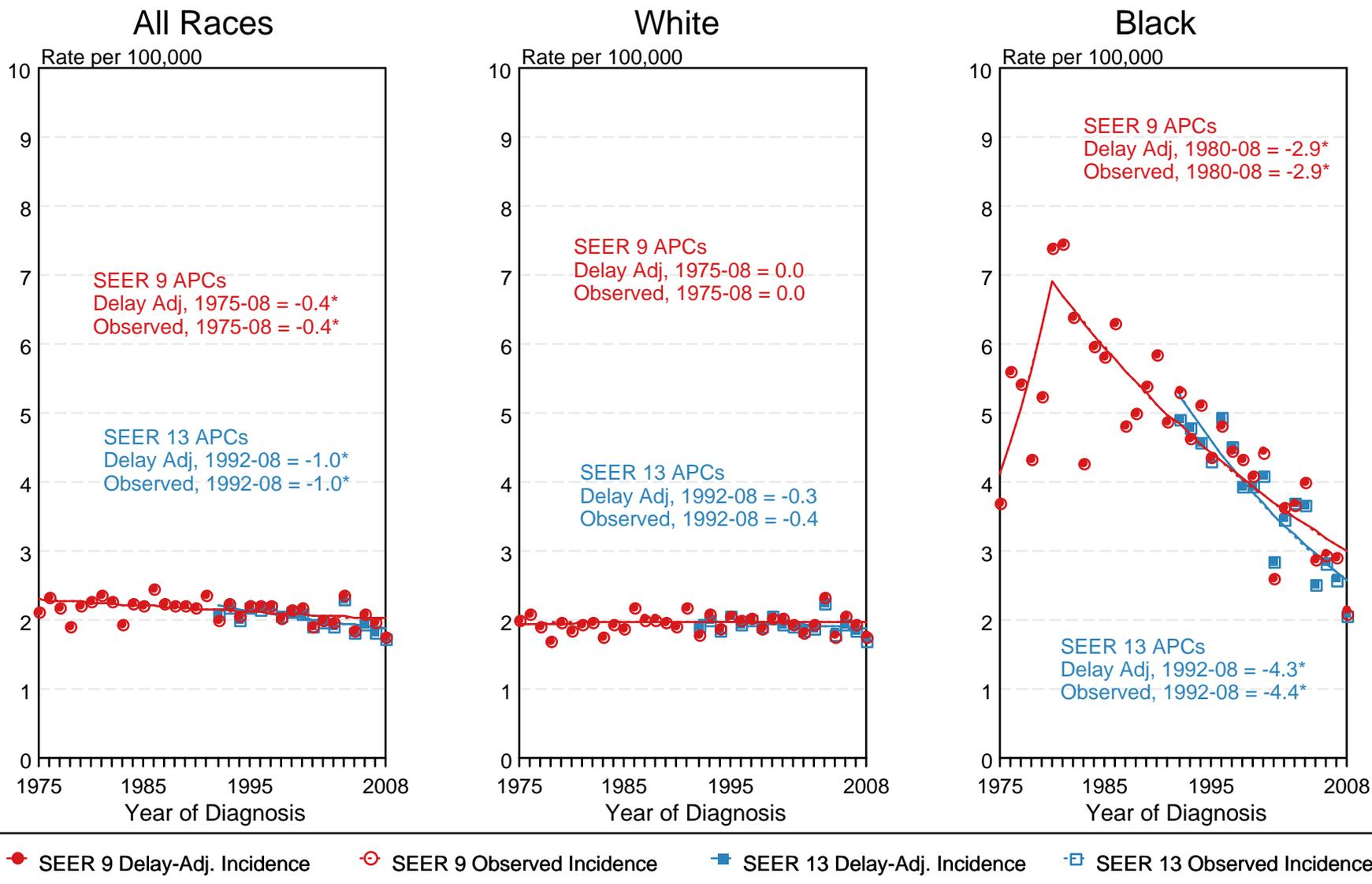
[a] Source: SEER 9 areas and SEER 13 areas.
  Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
  Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
  The APC is the Annual Percent Change 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White | 1975-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Black | 1975-08 | 1.3* | | | | | | | | | | | 1.3* | 1.3* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.3* | | | | | | | | | | | 0.3* | 0.3* |
| White | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| Black | 1992-08 | 1.2* | | | | | | | | | | | 1.2* | 1.2* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White | 1975-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Black | 1975-08 | 1.2* | | | | | | | | | | | 1.2* | 1.2* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| White | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| White NH[ef] | 1992-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| Black | 1992-08 | 1.1* | | | | | | | | | | | 1.1* | 1.1* |
| Black NH[ef] | 1992-08 | 1.2* | | | | | | | | | | | 1.2* | 1.2* |
| API[e] | 1992-08 | 2.9* | | | | | | | | | | | 2.9* | 2.9* |
| AI/AN[eg] | – | – | | | | | | | | | | | – | – |
| Hispanic[f] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-79 | -6.5* | 1979-98 | -3.5* | 1998-08 | -2.3* | | | | | | | -2.3* | -2.3* |
| White | 1975-79 | -6.2* | 1979-96 | -3.6* | 1996-08 | -2.4* | | | | | | | -2.4* | -2.4* |
| Black | 1975-78 | -8.4 | 1978-08 | -2.7* | | | | | | | | | -2.7* | -2.7* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |
| White | 1992-08 | -2.7* | | | | | | | | | | | -2.7* | -2.7* |
| White NH[ef] | 1992-08 | -2.5* | | | | | | | | | | | -2.5* | -2.5* |
| Black | 1992-08 | -3.0* | | | | | | | | | | | -3.0* | -3.0* |
| Black NH[ef] | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |
| API[e] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| AI/AN[eg] | 1992-08 | 3.2 | | | | | | | | | | | 3.2 | 3.2 |
| Hispanic[f] | 1992-08 | -3.2* | | | | | | | | | | | -3.2* | -3.2* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
\* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Table 9.2
Hodgkin Lymphoma

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-01 | -0.7* | 2001-08 | 1.5 | | | | | | | | | 1.0 | 1.5 |
| White | 1975-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| Black | 1975-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| White | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| Black | 1992-08 | 1.5* | | | | | | | | | | | 1.5* | 1.5* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-01 | -0.8* | 2001-08 | 1.4 | | | | | | | | | 0.9 | 1.4 |
| White | 1975-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| Black | 1975-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| White | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| White NH[ef] | 1992-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| Black | 1992-08 | 1.4* | | | | | | | | | | | 1.4* | 1.4* |
| Black NH[ef] | 1992-08 | 1.4* | | | | | | | | | | | 1.4* | 1.4* |
| API[e] | 1992-08 | 2.4* | | | | | | | | | | | 2.4* | 2.4* |
| AI/AN[eg] | - | - | | | | | | | | | | | - | - |
| Hispanic[f] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-97 | -4.0* | 1997-08 | -2.3* | | | | | | | | | -2.3* | -2.3* |
| White | 1975-96 | -4.1* | 1996-08 | -2.3* | | | | | | | | | -2.3* | -2.3* |
| Black | 1975-08 | -3.2* | | | | | | | | | | | -3.2* | -3.2* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-94 | -10.8 | 1994-08 | -2.3* | | | | | | | | | -2.3* | -2.3* |
| White | 1992-94 | -11.2 | 1994-08 | -2.2* | | | | | | | | | -2.2* | -2.2* |
| White NH[ef] | 1992-08 | -2.5* | | | | | | | | | | | -2.5* | -2.5* |
| Black | 1992-08 | -3.5* | | | | | | | | | | | -3.5* | -3.5* |
| Black NH[ef] | 1992-08 | -3.1* | | | | | | | | | | | -3.1* | -3.1* |
| API[e] | 1992-08 | -3.5 | | | | | | | | | | | -3.5 | -3.5 |
| AI/AN[eg] | - | - | | | | | | | | | | | - | - |
| Hispanic[f] | 1992-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 9.3
Hodgkin Lymphoma

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| White | 1975-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| Black | 1975-08 | 2.4* | | | | | | | | | | | 2.4* | 2.4* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| White | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| Black | 1992-08 | 0.9 | | | | | | | | | | | 0.9 | 0.9 |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| White | 1975-08 | 0.3* | | | | | | | | | | | 0.3* | 0.3* |
| Black | 1975-08 | 2.3* | | | | | | | | | | | 2.3* | 2.3* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| White | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| White NH[ef] | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| Black | 1992-08 | 0.8 | | | | | | | | | | | 0.8 | 0.8 |
| Black NH[ef] | 1992-08 | 0.8 | | | | | | | | | | | 0.8 | 0.8 |
| API[e] | 1992-08 | 3.6* | | | | | | | | | | | 3.6* | 3.6* |
| AI/AN[eg] | – | – | | | | | | | | | | | – | – |
| Hispanic[f] | 1992-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-85 | -4.8* | 1985-08 | -2.6* | | | | | | | | | -2.6* | -2.6* |
| White | 1975-85 | -5.0* | 1985-08 | -2.6* | | | | | | | | | -2.6* | -2.6* |
| Black | 1975-08 | -2.5* | | | | | | | | | | | -2.5* | -2.5* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |
| White | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |
| White NH[ef] | 1992-08 | -2.5* | | | | | | | | | | | -2.5* | -2.5* |
| Black | 1992-08 | -2.5* | | | | | | | | | | | -2.5* | -2.5* |
| Black NH[ef] | 1992-08 | -2.1* | | | | | | | | | | | -2.1* | -2.1* |
| API[e] | – | – | | | | | | | | | | | – | – |
| AI/AN[eg] | – | – | | | | | | | | | | | – | – |
| Hispanic[f] | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Hodgkin Lymphoma, by Race and Sex



### White Male

Rate per 100,000

- Delay-Adjusted Incidence
- Observed Incidence
- Mortality

SEER Incidence APCs
Delay Adj, 1975-08 = -0.4*
Observed, 1975-08 = -0.4*

US Mortality APC
1996-08 = -2.3*

Year of Diagnosis/Death

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.5
Observed, 1975-08 = 0.5

US Mortality APC
1975-08 = -3.2*

Year of Diagnosis/Death

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.4*
Observed, 1975-08 = 0.3*

US Mortality APC
1985-08 = -2.6*

Year of Diagnosis/Death

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 2.4*
Observed, 1975-08 = 2.3*

US Mortality APC
1975-08 = -2.5*

Year of Diagnosis/Death

Figure 9.1

[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Hodgkin Lymphoma, Male, by Race

Figure 9.3

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2001-08 = 1.5
Observed, 2001-08 = 1.4

SEER 13 APCs
Delay Adj, 1992-08 = 0.3
Observed, 1992-08 = 0.3

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = -0.4*
Observed, 1975-08 = -0.4*

SEER 13 APCs
Delay Adj, 1992-08 = 0.2
Observed, 1992-08 = 0.2

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.5
Observed, 1975-08 = 0.5

SEER 13 APCs
Delay Adj, 1992-08 = 1.5*
Observed, 1992-08 = 1.4*

Year of Diagnosis

Legend:
- ● SEER 9 Delay-Adj. Incidence
- ◉ SEER 9 Observed Incidence
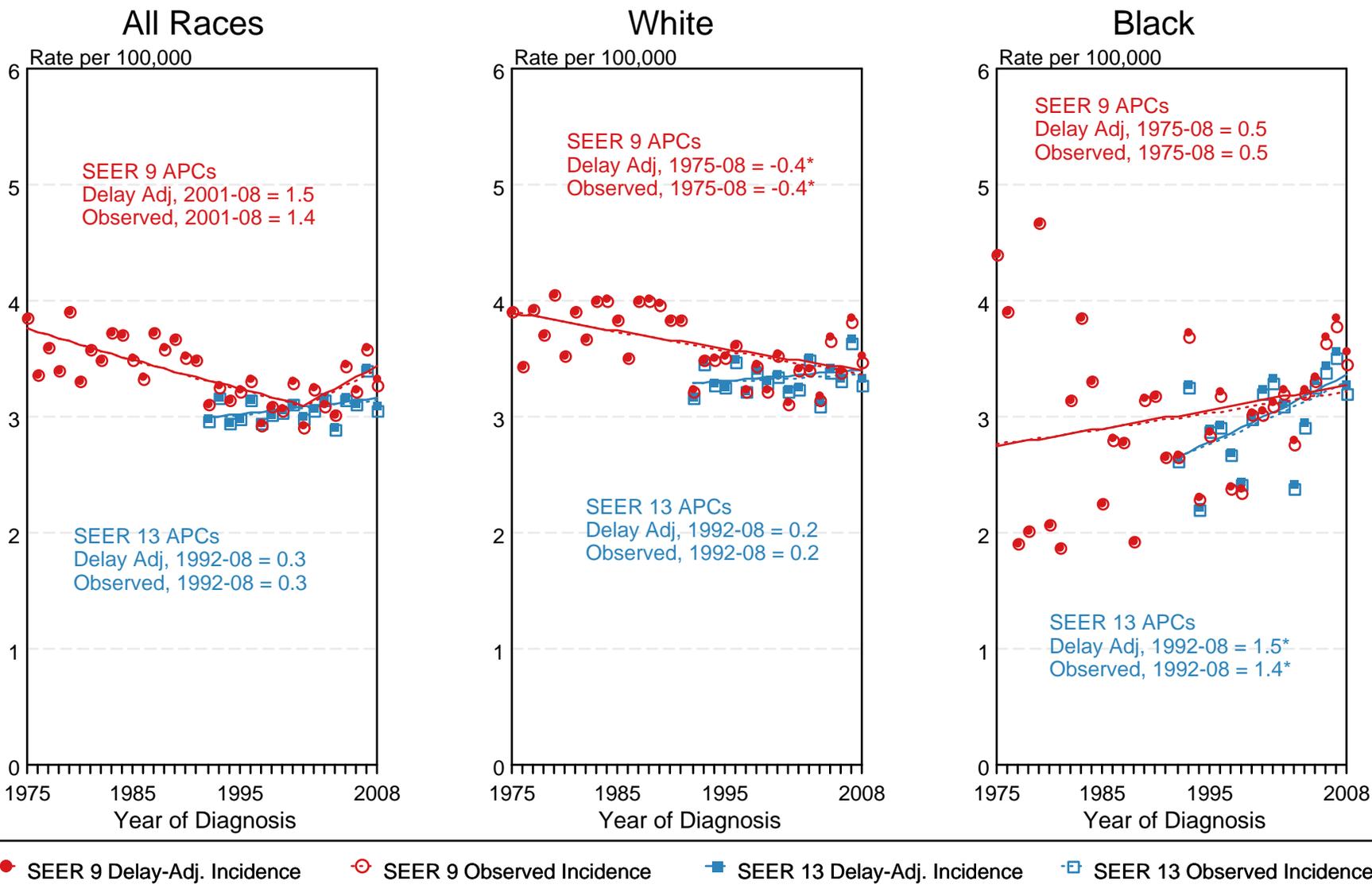- ■ SEER 13 Delay-Adj. Incidence
- ▫ SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
### Hodgkin Lymphoma, Female, by Race

Figure 9.4

## All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.4*
Observed, 1975-08 = 0.4*

SEER 13 APCs
Delay Adj, 1992-08 = 0.3
Observed, 1992-08 = 0.2

Year of Diagnosis

## White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.4*
Observed, 1975-08 = 0.3*

SEER 13 APCs
Delay Adj, 1992-08 = 0.2
Observed, 1992-08 = 0.2

Year of Diagnosis

## Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 2.4*
Observed, 1975-08 = 2.3*

SEER 13 APCs
Delay Adj, 1992-08 = 0.9
Observed, 1992-08 = 0.8

Year of Diagnosis



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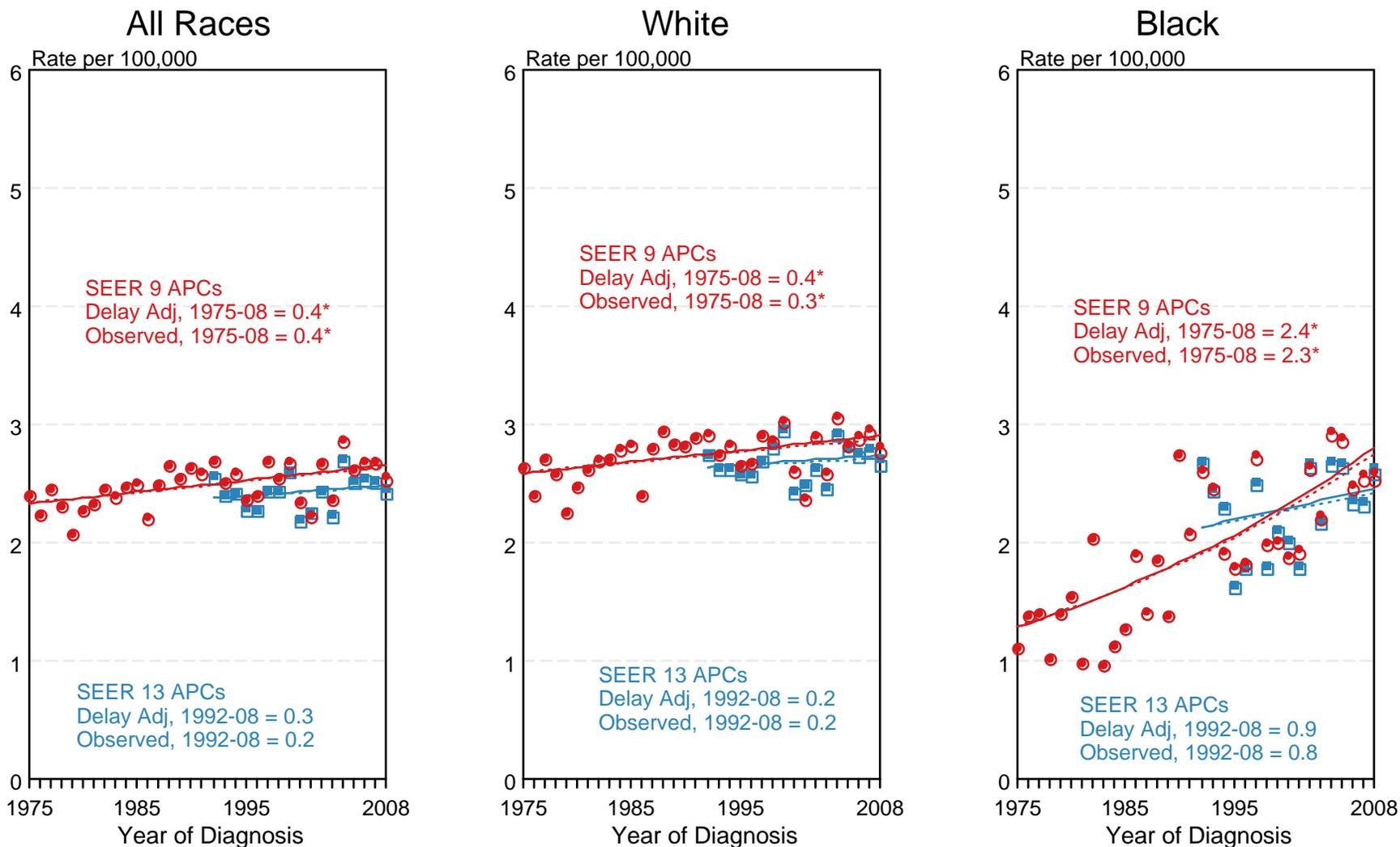- ■ SEER 13 Delay-Adj. Incidence
- ▫ SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-94 | 2.3* | 1994-97 | -0.6 | 1997-08 | 3.2* | | | | | | | 3.2* | 3.2* |
| White | 1975-91 | 2.4* | 1991-97 | 0.7 | 1997-08 | 3.0* | | | | | | | 3.0* | 3.0* |
| Black | 1975-08 | 2.9* | | | | | | | | | | | 2.9* | 2.9* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-97 | 1.1* | 1997-05 | 2.6* | 2005-08 | 4.4* | | | | | | | 3.2* | 3.9* |
| White | 1992-97 | 1.0 | 1997-08 | 3.0* | | | | | | | | | 3.0* | 3.0* |
| Black | 1992-08 | 2.6* | | | | | | | | | | | 2.6* | 2.6* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-94 | 2.3* | 1994-97 | -0.5 | 1997-08 | 3.0* | | | | | | | 3.0* | 3.0* |
| White | 1975-91 | 2.4* | 1991-97 | 0.7 | 1997-08 | 2.8* | | | | | | | 2.8* | 2.8* |
| Black | 1975-08 | 2.9* | | | | | | | | | | | 2.9* | 2.9* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-99 | 1.4* | 1999-08 | 3.0* | | | | | | | | | 3.0* | 3.0* |
| White | 1992-97 | 1.1 | 1997-08 | 2.8* | | | | | | | | | 2.8* | 2.8* |
| White NH[ef] | 1992-97 | 0.9 | 1997-08 | 2.7* | | | | | | | | | 2.7* | 2.7* |
| Black | 1992-08 | 2.5* | | | | | | | | | | | 2.5* | 2.5* |
| Black NH[ef] | 1992-08 | 2.5* | | | | | | | | | | | 2.5* | 2.5* |
| API[e] | 1992-08 | 3.1* | | | | | | | | | | | 3.1* | 3.1* |
| AI/AN[eg] | 1992-08 | 1.2 | | | | | | | | | | | 1.2 | 1.2 |
| Hispanic[f] | 1992-08 | 2.9* | | | | | | | | | | | 2.9* | 2.9* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-94 | 1.0* | 1994-08 | -0.5* | | | | | | | | | -0.5* | -0.5* |
| White | 1975-94 | 1.0* | 1994-08 | -0.5* | | | | | | | | | -0.5* | -0.5* |
| Black | 1975-91 | 2.7* | 1991-08 | -0.3* | | | | | | | | | -0.3* | -0.3* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| White | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| White NH[ef] | 1992-08 | -0.3* | | | | | | | | | | | -0.3* | -0.3* |
| Black | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| Black NH[ef] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| API[e] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| AI/AN[eg] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| Hispanic[f] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.  The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-06 | 1.8* | 2006-08 | 6.6* | | | | | | | | | 2.9* | 4.2* |
| White | 1975-89 | 2.2* | 1989-97 | 0.8 | 1997-08 | 2.6* | | | | | | | 2.6* | 2.6* |
| Black | 1975-08 | 3.0* | | | | | | | | | | | 3.0* | 3.0* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-06 | 2.0* | 2006-08 | 6.2* | | | | | | | | | 2.9* | 4.1* |
| White | 1992-08 | 2.3* | | | | | | | | | | | 2.3* | 2.3* |
| Black | 1992-08 | 2.6* | | | | | | | | | | | 2.6* | 2.6* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-06 | 1.8* | 2006-08 | 5.5 | | | | | | | | | 2.6* | 3.6* |
| White | 1975-08 | 1.8* | | | | | | | | | | | 1.8* | 1.8* |
| Black | 1975-08 | 2.9* | | | | | | | | | | | 2.9* | 2.9* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 2.2* | | | | | | | | | | | 2.2* | 2.2* |
| White | 1992-08 | 2.2* | | | | | | | | | | | 2.2* | 2.2* |
| White NH[ef] | 1992-08 | 2.1* | | | | | | | | | | | 2.1* | 2.1* |
| Black | 1992-08 | 2.5* | | | | | | | | | | | 2.5* | 2.5* |
| Black NH[ef] | 1992-08 | 2.5* | | | | | | | | | | | 2.5* | 2.5* |
| API[e] | 1992-08 | 2.7* | | | | | | | | | | | 2.7* | 2.7* |
| AI/AN[eg] | 1992-08 | 1.2 | | | | | | | | | | | 1.2 | 1.2 |
| Hispanic[f] | 1992-08 | 2.7* | | | | | | | | | | | 2.7* | 2.7* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-92 | 1.1* | 1992-08 | -0.4* | | | | | | | | | -0.4* | -0.4* |
| White | 1975-92 | 1.0* | 1992-08 | -0.4* | | | | | | | | | -0.4* | -0.4* |
| Black | 1975-91 | 2.9* | 1991-08 | -0.3 | | | | | | | | | -0.3 | -0.3 |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| White | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| White NH[ef] | 1992-08 | -0.3* | | | | | | | | | | | -0.3* | -0.3* |
| Black | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| Black NH[ef] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| API[e] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| AI/AN[eg] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Hispanic[f] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-93 | 2.7* | 1993-99 | 0.8 | 1999-08 | 3.8* | | | | | | | 3.8* | 3.8* |
| White | 1975-93 | 2.8* | 1993-97 | -0.5 | 1997-08 | 3.5* | | | | | | | 3.5* | 3.5* |
| Black | 1975-08 | 2.9* | | | | | | | | | | | 2.9* | 2.9* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-98 | 1.1 | 1998-08 | 3.3* | | | | | | | | | 3.3* | 3.3* |
| White | 1992-97 | 0.7 | 1997-08 | 3.3* | | | | | | | | | 3.3* | 3.3* |
| Black | 1992-08 | 2.7* | | | | | | | | | | | 2.7* | 2.7* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-94 | 2.7* | 1994-97 | -0.9 | 1997-08 | 3.3* | | | | | | | 3.3* | 3.3* |
| White | 1975-93 | 2.8* | 1993-97 | -0.4 | 1997-08 | 3.3* | | | | | | | 3.3* | 3.3* |
| Black | 1975-08 | 2.9* | | | | | | | | | | | 2.9* | 2.9* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-98 | 1.2 | 1998-08 | 3.1* | | | | | | | | | 3.1* | 3.1* |
| White | 1992-08 | 2.5* | | | | | | | | | | | 2.5* | 2.5* |
| White NH[ef] | 1992-96 | -0.4 | 1996-08 | 2.9* | | | | | | | | | 2.9* | 2.9* |
| Black | 1992-08 | 2.6* | | | | | | | | | | | 2.6* | 2.6* |
| Black NH[ef] | 1992-08 | 2.6* | | | | | | | | | | | 2.6* | 2.6* |
| API[e] | 1992-08 | 3.9* | | | | | | | | | | | 3.9* | 3.9* |
| AI/AN[eg] | 1992-08 | 1.2 | | | | | | | | | | | 1.2 | 1.2 |
| Hispanic[f] | 1992-08 | 3.1* | | | | | | | | | | | 3.1* | 3.1* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-94 | 1.1* | 1994-08 | -0.8* | | | | | | | | | -0.8* | -0.8* |
| White | 1975-94 | 1.1* | 1994-08 | -0.8* | | | | | | | | | -0.8* | -0.8* |
| Black | 1975-94 | 2.4* | 1994-08 | -0.8* | | | | | | | | | -0.8* | -0.8* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.6* | | | | | | | | | | | -0.6* | -0.6* |
| White | 1992-08 | -0.6* | | | | | | | | | | | -0.6* | -0.6* |
| White NH[ef] | 1992-08 | -0.5* | | | | | | | | | | | -0.5* | -0.5* |
| Black | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| Black NH[ef] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| API[e] | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| AI/AN[eg] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| Hispanic[f] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
\* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Cancer of the Kidney and Renal Pelvis, by Race and Sex

Figure 11.1

### White Male

Rate per 100,000

- Delay-Adjusted Incidence
- Observed Incidence
- Mortality

SEER Incidence APCs
Delay Adj, 1997-08 = 2.6*
Observed, 1975-08 = 1.8*

US Mortality APC
1992-08 = -0.4*

Year of Diagnosis/Death

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 3.0*
Observed, 1975-08 = 2.9*

US Mortality APC
1991-08 = -0.3

Year of Diagnosis/Death

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1997-08 = 3.5*
Observed, 1997-08 = 3.3*

US Mortality APC
1994-08 = -0.8*

Year of Diagnosis/Death

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 2.9*
Observed, 1975-08 = 2.9*
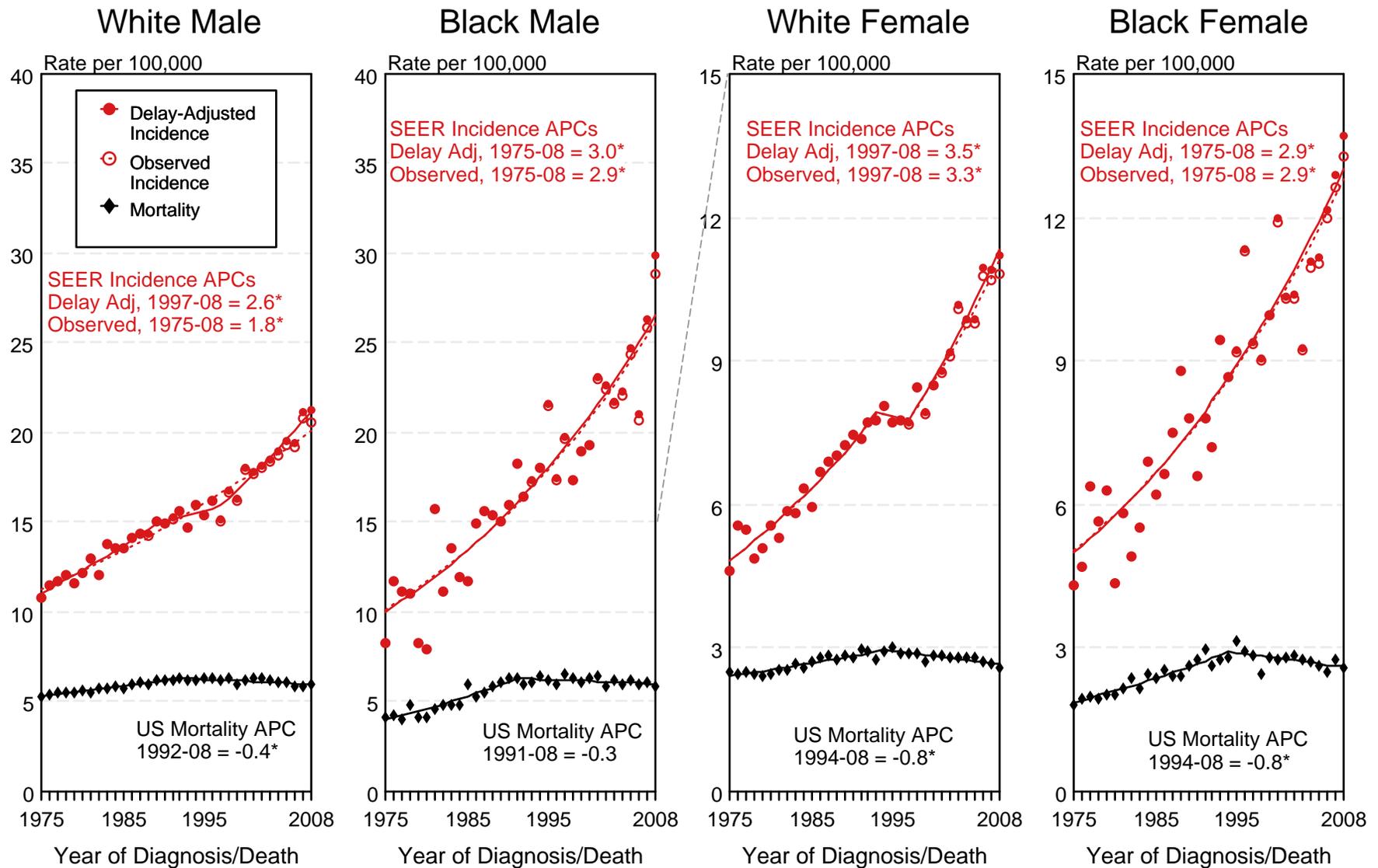
US Mortality APC
1994-08 = -0.8*

Year of Diagnosis/Death

a  Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Kidney and Renal Pelvis, Male, by Race

Figure 11.3

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2006-08 = 6.6*
Observed, 2006-08 = 5.5

SEER 13 APCs
Delay Adj, 2006-08 = 6.2*
Observed, 1992-08 = 2.2*

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1997-08 = 2.6*
Observed, 1975-08 = 1.8*

SEER 13 APCs
Delay Adj, 1992-08 = 2.3*
Observed, 1992-08 = 2.2*

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 3.0*
Observed, 1975-08 = 2.9*

SEER 13 APCs
Delay Adj, 1992-08 = 2.6*
Observed, 1992-08 = 2.5*

Year of Diagnosis

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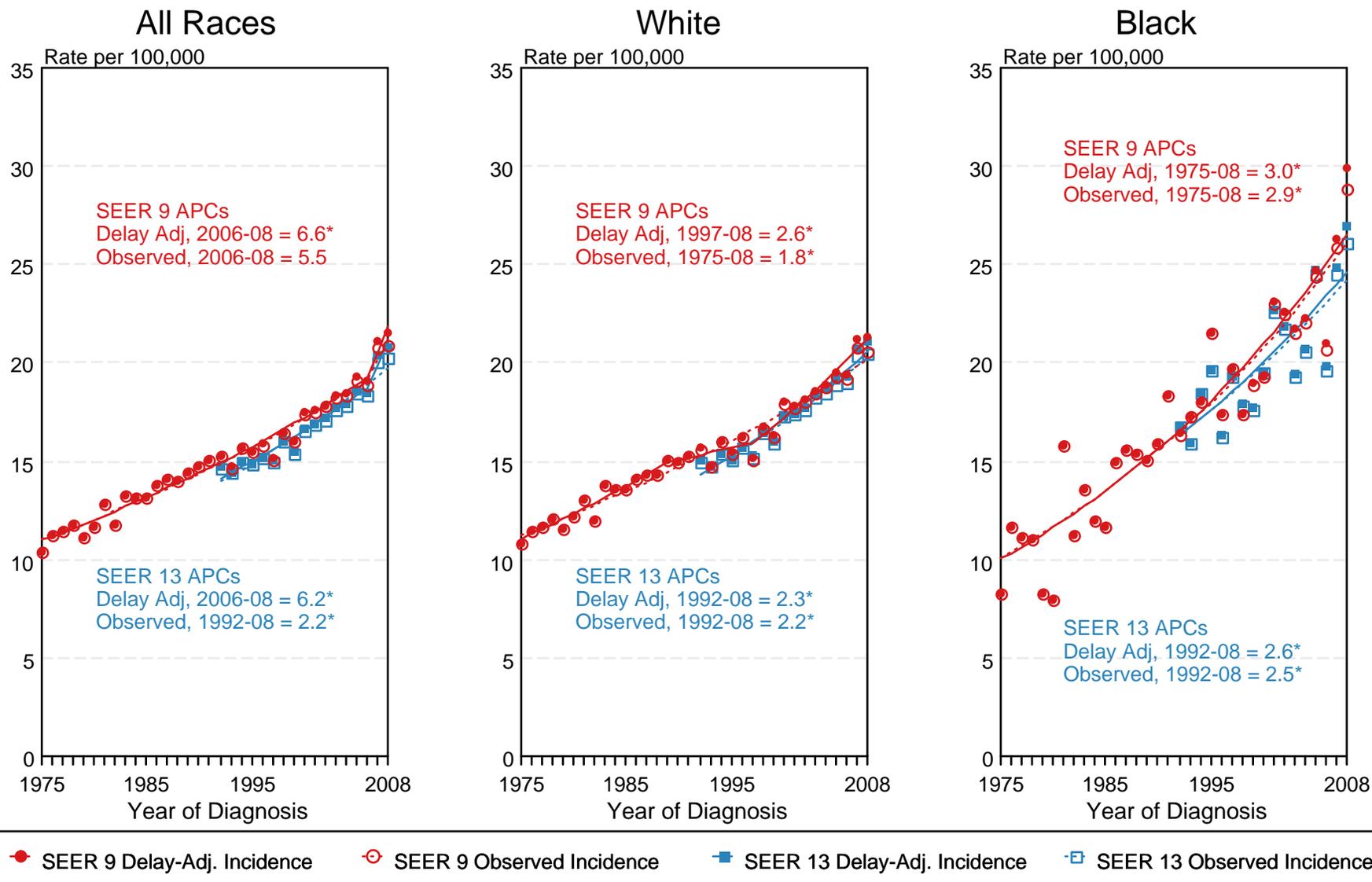- ■ SEER 13 Delay-Adj. Incidence
- ⊡ SEER 13 Observed Incidence

[a]  Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Kidney and Renal Pelvis, Female, by Race

Figure 11.4

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1999-08 = 3.8*
Observed, 1997-08 = 3.3*

SEER 13 APCs
Delay Adj, 1998-08 = 3.3*
Observed, 1998-08 = 3.1*

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1997-08 = 3.5*
Observed, 1997-08 = 3.3*

SEER 13 APCs
Delay Adj, 1997-08 = 3.3*
Observed, 1992-08 = 2.5*

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 2.9*
Observed, 1975-08 = 2.9*

SEER 13 APCs
Delay Adj, 1992-08 = 2.7*
Observed, 1992-08 = 2.6*

Year of Diagnosis

Legend:
- ● SEER 9 Delay-Adj. Incidence
- ○ SEER 9 Observed Incidence
- ■ SEER 13 Delay-Adj. Incidence
- □ SEER 13 Observed Incidence
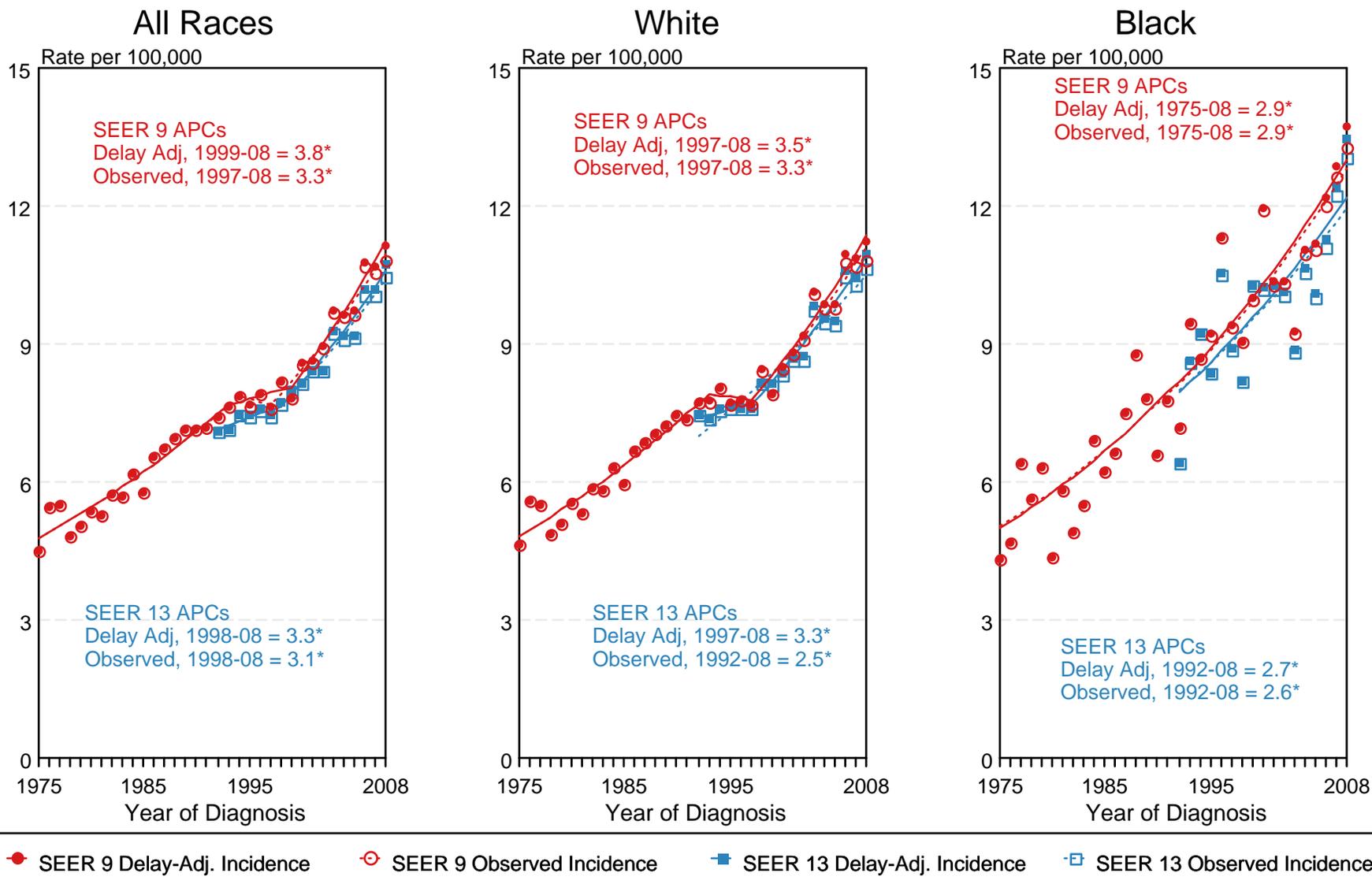
[a] Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
   The APC is the Annual Percent 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[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | 0.1 | 1988-08 | -2.5* | | | | | | | | | -2.5* | -2.5* |
| White | 1975-88 | 0.0 | 1988-08 | -2.5* | | | | | | | | | -2.5* | -2.5* |
| Black | 1975-90 | 1.1* | 1990-08 | -2.7* | | | | | | | | | -2.7* | -2.7* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |
| White | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |
| Black | 1992-08 | -3.3* | | | | | | | | | | | -3.3* | -3.3* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | 0.1 | 1988-08 | -2.6* | | | | | | | | | -2.6* | -2.6* |
| White | 1975-88 | 0.0 | 1988-08 | -2.5* | | | | | | | | | -2.5* | -2.5* |
| Black | 1975-90 | 1.2* | 1990-08 | -2.8* | | | | | | | | | -2.8* | -2.8* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.9* | | | | | | | | | | | -2.9* | -2.9* |
| White | 1992-08 | -2.7* | | | | | | | | | | | -2.7* | -2.7* |
| White NH[e][f] | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |
| Black | 1992-08 | -3.4* | | | | | | | | | | | -3.4* | -3.4* |
| Black NH[e][f] | 1992-08 | -3.4* | | | | | | | | | | | -3.4* | -3.4* |
| API[e] | 1992-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |
| AI/AN[e][g] | 1992-08 | -1.4 | | | | | | | | | | | -1.4 | -1.4 |
| Hispanic[f] | 1992-08 | -2.1* | | | | | | | | | | | -2.1* | -2.1* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-93 | -0.4* | 1993-08 | -2.1* | | | | | | | | | -2.1* | -2.1* |
| White | 1975-93 | -0.7* | 1993-08 | -1.8* | | | | | | | | | -1.8* | -1.8* |
| Black | 1975-93 | 1.3* | 1993-08 | -3.1* | | | | | | | | | -3.1* | -3.1* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.1* | | | | | | | | | | | -2.1* | -2.1* |
| White | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| White NH[e][f] | 1992-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |
| Black | 1992-08 | -3.0* | | | | | | | | | | | -3.0* | -3.0* |
| Black NH[e][f] | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |
| API[e] | 1992-08 | -2.7* | | | | | | | | | | | -2.7* | -2.7* |
| AI/AN[e][g] | 1992-08 | -2.0 | | | | | | | | | | | -2.0 | -2.0 |
| Hispanic[f] | 1992-08 | -3.0* | | | | | | | | | | | -3.0* | -3.0* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 12.2
Cancer of the Larynx (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | -0.3 | 1988-08 | -2.7* | | | | | | | | | -2.7* | -2.7* |
| White | 1975-85 | 0.3 | 1985-08 | -2.6* | | | | | | | | | -2.6* | -2.6* |
| Black | 1975-90 | 0.9 | 1990-08 | -2.6* | | | | | | | | | -2.6* | -2.6* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.9* | | | | | | | | | | | -2.9* | -2.9* |
| White | 1992-08 | -2.7* | | | | | | | | | | | -2.7* | -2.7* |
| Black | 1992-08 | -3.3* | | | | | | | | | | | -3.3* | -3.3* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | -0.3 | 1988-08 | -2.7* | | | | | | | | | -2.7* | -2.7* |
| White | 1975-87 | -0.2 | 1987-08 | -2.7* | | | | | | | | | -2.7* | -2.7* |
| Black | 1975-90 | 0.9 | 1990-08 | -2.7* | | | | | | | | | -2.7* | -2.7* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -3.0* | | | | | | | | | | | -3.0* | -3.0* |
| White | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |
| White NH[ef] | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |
| Black | 1992-08 | -3.4* | | | | | | | | | | | -3.4* | -3.4* |
| Black NH[ef] | 1992-08 | -3.4* | | | | | | | | | | | -3.4* | -3.4* |
| API[e] | 1992-08 | -3.4* | | | | | | | | | | | -3.4* | -3.4* |
| AI/AN[eg] | 1992-08 | -1.7 | | | | | | | | | | | -1.7 | -1.7 |
| Hispanic[f] | 1992-08 | -2.1* | | | | | | | | | | | -2.1* | -2.1* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-94 | -0.8* | 1994-08 | -2.5* | | | | | | | | | -2.5* | -2.5* |
| White | 1975-93 | -1.1* | 1993-08 | -2.1* | | | | | | | | | -2.1* | -2.1* |
| Black | 1975-93 | 1.3* | 1993-08 | -3.1* | | | | | | | | | -3.1* | -3.1* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.4* | | | | | | | | | | | -2.4* | -2.4* |
| White | 1992-08 | -2.2* | | | | | | | | | | | -2.2* | -2.2* |
| White NH[ef] | 1992-08 | -2.0* | | | | | | | | | | | -2.0* | -2.0* |
| Black | 1992-08 | -2.9* | | | | | | | | | | | -2.9* | -2.9* |
| Black NH[ef] | 1992-08 | -2.5* | | | | | | | | | | | -2.5* | -2.5* |
| API[e] | 1992-08 | -2.0 | | | | | | | | | | | -2.0 | -2.0 |
| AI/AN[eg] | 1992-08 | -0.7 | | | | | | | | | | | -0.7 | -0.7 |
| Hispanic[f] | 1992-08 | -3.2* | | | | | | | | | | | -3.2* | -3.2* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 12.3
Cancer of the Larynx (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | 1.8* | 1989-08 | -2.5* | | | | | | | | | -2.5* | -2.5* |
| White | 1975-89 | 1.7* | 1989-08 | -2.3* | | | | | | | | | -2.3* | -2.3* |
| Black | 1975-89 | 3.8* | 1989-08 | -2.7* | | | | | | | | | -2.7* | -2.7* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.9* | | | | | | | | | | | -2.9* | -2.9* |
| White | 1992-08 | -2.7* | | | | | | | | | | | -2.7* | -2.7* |
| Black | 1992-08 | -3.1* | | | | | | | | | | | -3.1* | -3.1* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | 1.8* | 1989-08 | -2.6* | | | | | | | | | -2.6* | -2.6* |
| White | 1975-89 | 1.7* | 1989-08 | -2.4* | | | | | | | | | -2.4* | -2.4* |
| Black | 1975-89 | 3.8* | 1989-08 | -2.8* | | | | | | | | | -2.8* | -2.8* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -3.0* | | | | | | | | | | | -3.0* | -3.0* |
| White | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |
| White NH[ef] | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |
| Black | 1992-08 | -3.2* | | | | | | | | | | | -3.2* | -3.2* |
| Black NH[ef] | 1992-08 | -3.3* | | | | | | | | | | | -3.3* | -3.3* |
| API[e] | 1992-08 | -4.2* | | | | | | | | | | | -4.2* | -4.2* |
| AI/AN[eg] | - | - | | | | | | | | | | | - | - |
| Hispanic[f] | 1992-08 | -2.6 | | | | | | | | | | | -2.6 | -2.6 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-92 | 1.5* | 1992-08 | -1.8* | | | | | | | | | -1.8* | -1.8* |
| White | 1975-92 | 1.4* | 1992-08 | -1.5* | | | | | | | | | -1.5* | -1.5* |
| Black | 1975-93 | 2.2* | 1993-08 | -3.1* | | | | | | | | | -3.1* | -3.1* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| White | 1992-08 | -1.5* | | | | | | | | | | | -1.5* | -1.5* |
| White NH[ef] | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| Black | 1992-08 | -2.9* | | | | | | | | | | | -2.9* | -2.9* |
| Black NH[ef] | 1992-08 | -2.3* | | | | | | | | | | | -2.3* | -2.3* |
| API[e] | 1992-08 | -5.2* | | | | | | | | | | | -5.2* | -5.2* |
| AI/AN[eg] | - | - | | | | | | | | | | | - | - |
| Hispanic[f] | 1992-08 | -3.8* | | | | | | | | | | | -3.8* | -3.8* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]  Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]  Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]  Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]  The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]  API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]  Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
     Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
     The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]  Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Cancer of the Larynx, by Race and Sex

### White Male

Rate per 100,000

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 1985-08 = -2.6*
Observed, 1987-08 = -2.7*

US Mortality APC
1993-08 = -2.1*

Year of Diagnosis/Death

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1990-08 = -2.6*
Observed, 1990-08 = -2.7*

US Mortality APC
1993-08 = -3.1*

Year of Diagnosis/Death

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1989-08 = -2.3*
Observed, 1989-08 = -2.4*

US Mortality APC
1992-08 = -1.5*

Year of Diagnosis/Death

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1989-08 = -2.7*
Observed, 1989-08 = -2.8*

US Mortality APC
1993-08 = -3.1*

Year of Diagnosis/Death
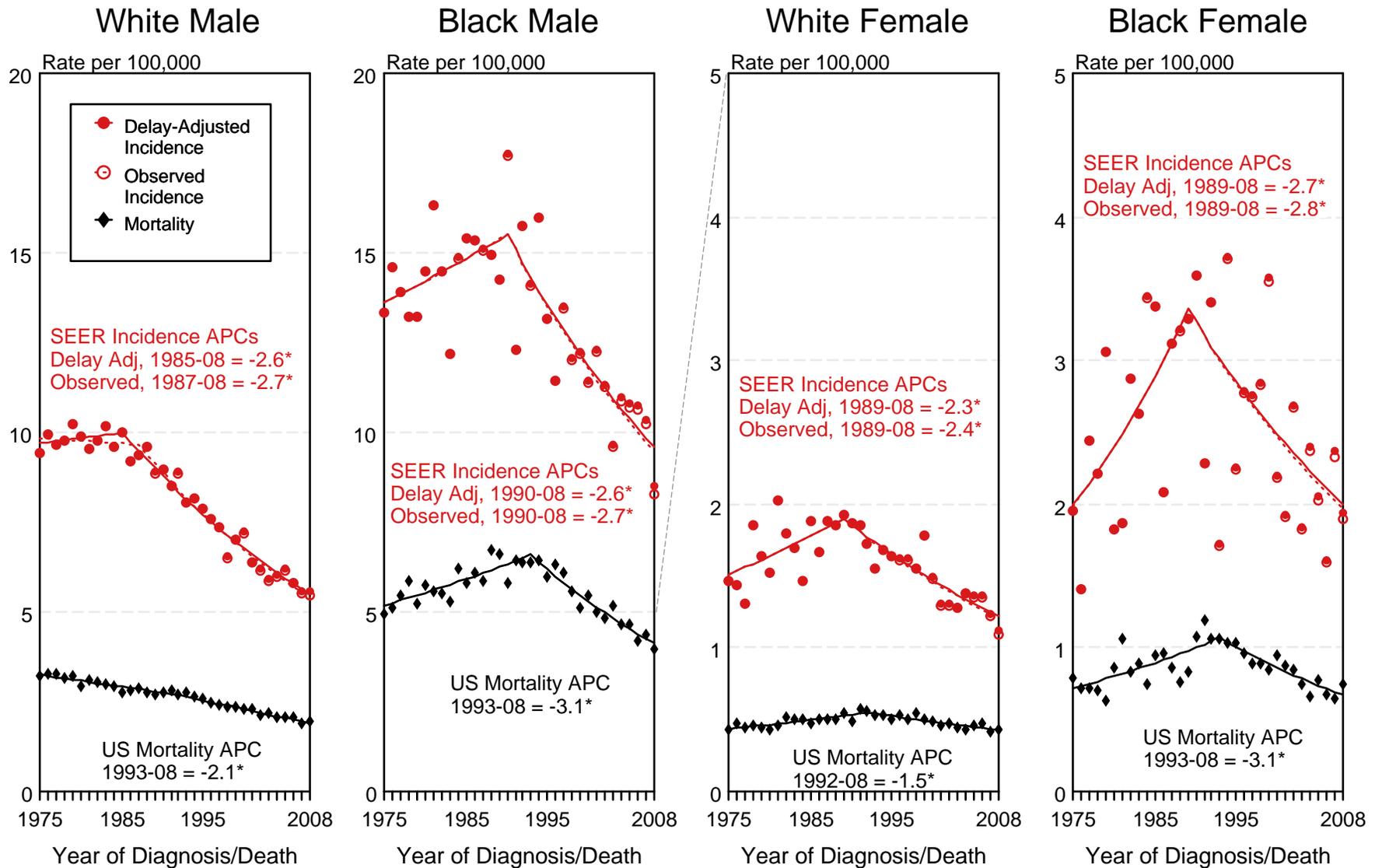


a   Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
    Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
    Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National 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 12.1

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Larynx, Male, by Race

Figure 12.3

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1988-08 = -2.7*
Observed, 1988-08 = -2.7*

SEER 13 APCs
Delay Adj, 1992-08 = -2.9*
Observed, 1992-08 = -3.0*

1975    1985    1995    2008
Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1985-08 = -2.6*
Observed, 1987-08 = -2.7*

SEER 13 APCs
Delay Adj, 1992-08 = -2.7*
Observed, 1992-08 = -2.8*

1975    1985    1995    2008
Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1990-08 = -2.6*
Observed, 1990-08 = -2.7*

SEER 13 APCs
Delay Adj, 1992-08 = -3.3*
Observed, 1992-08 = -3.4*

1975    1985    1995    2008
Year of Diagnosis

SEER 9 Delay-Adj. Incidence     SEER 9 Observed Incidence     SEER 13 Delay-Adj. Incidence     SEER 13 Observed Incidence

[a]  Source: SEER 9 areas and SEER 13 areas.
  Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
  Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
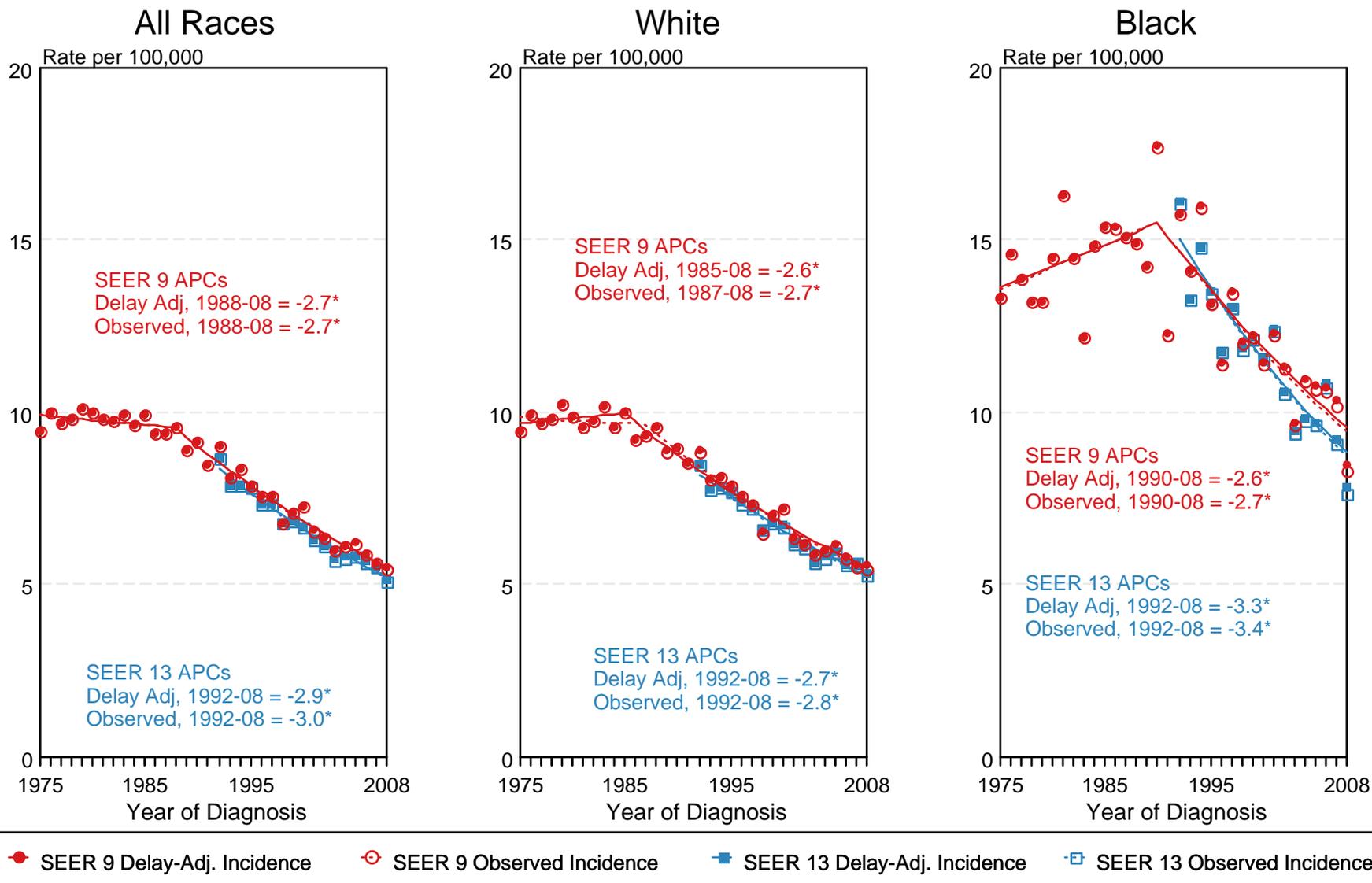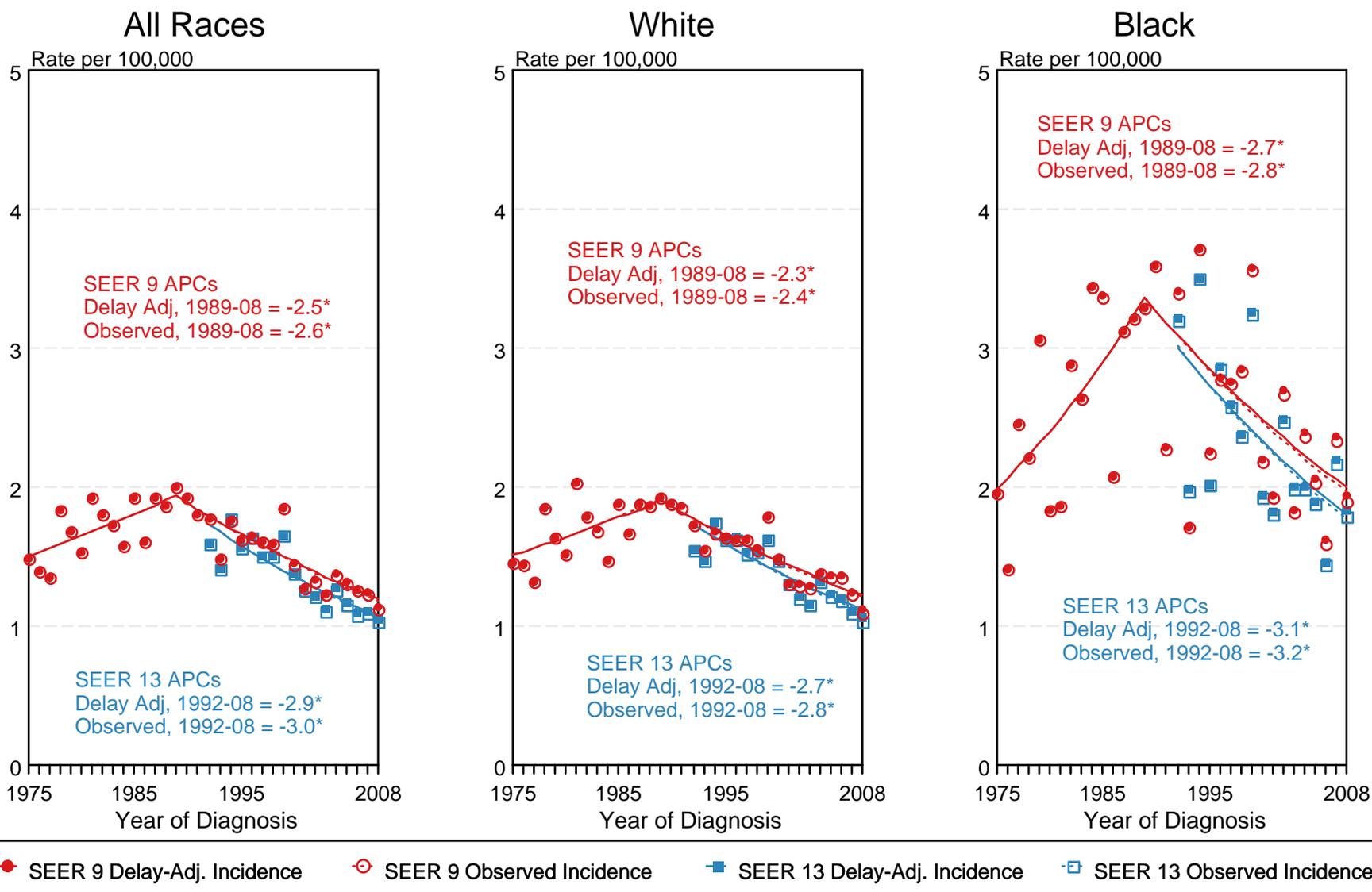Cancer of the Larynx, Female, by Race

Figure 12.4

**All Races**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-08 = -2.5*
Observed, 1989-08 = -2.6*

SEER 13 APCs
Delay Adj, 1992-08 = -2.9*
Observed, 1992-08 = -3.0*

Year of Diagnosis

**White**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-08 = -2.3*
Observed, 1989-08 = -2.4*

SEER 13 APCs
Delay Adj, 1992-08 = -2.7*
Observed, 1992-08 = -2.8*

Year of Diagnosis

**Black**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-08 = -2.7*
Observed, 1989-08 = -2.8*

SEER 13 APCs
Delay Adj, 1992-08 = -3.1*
Observed, 1992-08 = -3.2*

Year of Diagnosis

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

[a]  Source: SEER 9 areas and SEER 13 areas.
    Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
    Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.3* | | | | | | | | | | | 0.3* | 0.3* |
| White | 1975-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| Black | 1975-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.5* | | | | | | | | | | | 0.5* | 0.5* |
| White | 1992-08 | 0.5* | | | | | | | | | | | 0.5* | 0.5* |
| Black | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-04 | 0.1* | 2004-08 | -1.7 | | | | | | | | | -0.7 | -1.7 |
| White | 1975-03 | 0.3* | 2003-08 | -1.4* | | | | | | | | | -0.7 | -1.4* |
| Black | 1975-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| White | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White NH[ef] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Black | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| Black NH[ef] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| API[e] | 1992-08 | -0.5* | | | | | | | | | | | -0.5* | -0.5* |
| AI/AN[eg] | 1992-08 | 2.7 | | | | | | | | | | | 2.7 | 2.7 |
| Hispanic[f] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-80 | 0.6 | 1980-88 | -0.6* | 1988-91 | 0.7 | 1991-01 | -0.5* | 2001-08 | -1.2* | | | -1.0* | -1.2* |
| White | 1975-00 | -0.3* | 2000-08 | -1.1* | | | | | | | | | -1.0* | -1.1* |
| Black | 1975-91 | 0.6* | 1991-08 | -1.1* | | | | | | | | | -1.1* | -1.1* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-01 | -0.5* | 2001-08 | -1.2* | | | | | | | | | -1.0* | -1.2* |
| White | 1992-01 | -0.4* | 2001-08 | -1.1* | | | | | | | | | -0.9* | -1.1* |
| White NH[ef] | 1992-08 | -0.6* | | | | | | | | | | | -0.6* | -0.6* |
| Black | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| Black NH[ef] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| API[e] | 1992-08 | -1.4* | | | | | | | | | | | -1.4* | -1.4* |
| AI/AN[eg] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Hispanic[f] | 1992-97 | 1.5 | 1997-08 | -1.5* | | | | | | | | | -1.5* | -1.5* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]   Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]   Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]   Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]   The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]   API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]   Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
      Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
      The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]   Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*     The APC/AAPC is significantly different from zero (p<.05).
-     Joinpoint regression line analysis could not be performed on data series.

Table 13.2
Leukemia

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.2* | | | | | | | | | | | 0.2* | 0.2* |
| White | 1975-08 | 0.3* | | | | | | | | | | | 0.3* | 0.3* |
| Black | 1975-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.3* | | | | | | | | | | | 0.3* | 0.3* |
| White | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| Black | 1992-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-03 | 0.0 | 2003-08 | -1.6 | | | | | | | | | -0.9* | -1.6 |
| White | 1975-03 | 0.1 | 2003-08 | -1.7* | | | | | | | | | -0.9 | -1.7* |
| Black | 1975-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| White | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| White NH[ef] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| Black | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| Black NH[ef] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| API[e] | 1992-08 | -0.6 | | | | | | | | | | | -0.6 | -0.6 |
| AI/AN[eg] | 1992-08 | 2.8 | | | | | | | | | | | 2.8 | 2.8 |
| Hispanic[f] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-80 | 0.5 | 1980-87 | -0.7* | 1987-95 | 0.1 | 1995-08 | -0.9* | | | | | -0.9* | -0.9* |
| White | 1975-01 | -0.3* | 2001-08 | -1.0* | | | | | | | | | -0.9* | -1.0* |
| Black | 1975-90 | 1.0* | 1990-08 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| White | 1992-08 | -0.7* | | | | | | | | | | | -0.7* | -0.7* |
| White NH[ef] | 1992-08 | -0.6* | | | | | | | | | | | -0.6* | -0.6* |
| Black | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black NH[ef] | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| API[e] | 1992-08 | -1.2* | | | | | | | | | | | -1.2* | -1.2* |
| AI/AN[eg] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Hispanic[f] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]    Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]    Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]    Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]    The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]    API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]    Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
       Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
       The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]    Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*    The APC/AAPC is significantly different from zero (p<.05).
-    Joinpoint regression line analysis could not be performed on data series.

Table 13.3
Leukemia

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| White | 1975-08 | 0.5* | | | | | | | | | | | 0.5* | 0.5* |
| Black | 1975-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.6* | | | | | | | | | | | 0.6* | 0.6* |
| White | 1992-08 | 0.7* | | | | | | | | | | | 0.7* | 0.7* |
| Black | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| White | 1975-08 | 0.2* | | | | | | | | | | | 0.2* | 0.2* |
| Black | 1975-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| White | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| White NH[ef] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| Black | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| Black NH[ef] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| API[e] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| AI/AN[eg] | 1992-08 | 3.0* | | | | | | | | | | | 3.0* | 3.0* |
| Hispanic[f] | 1992-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-80 | 0.8 | 1980-00 | -0.4* | 2000-08 | -1.5* | | | | | | | -1.4* | -1.5* |
| White | 1975-80 | 0.6 | 1980-00 | -0.4* | 2000-08 | -1.4* | | | | | | | -1.3* | -1.4* |
| Black | 1975-93 | 0.4 | 1993-08 | -1.2* | | | | | | | | | -1.2* | -1.2* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-00 | -0.5* | 2000-08 | -1.4* | | | | | | | | | -1.3* | -1.4* |
| White | 1992-00 | -0.4 | 2000-08 | -1.3* | | | | | | | | | -1.2* | -1.3* |
| White NH[ef] | 1992-01 | -0.4* | 2001-08 | -1.4* | | | | | | | | | -1.2* | -1.4* |
| Black | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| Black NH[ef] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| API[e] | 1992-08 | -1.4* | | | | | | | | | | | -1.4* | -1.4* |
| AI/AN[eg] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| Hispanic[f] | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]   Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]   Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]   Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]   The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]   API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]   Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
      Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
      The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]   Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*    The APC/AAPC is significantly different from zero (p<.05).
-    Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
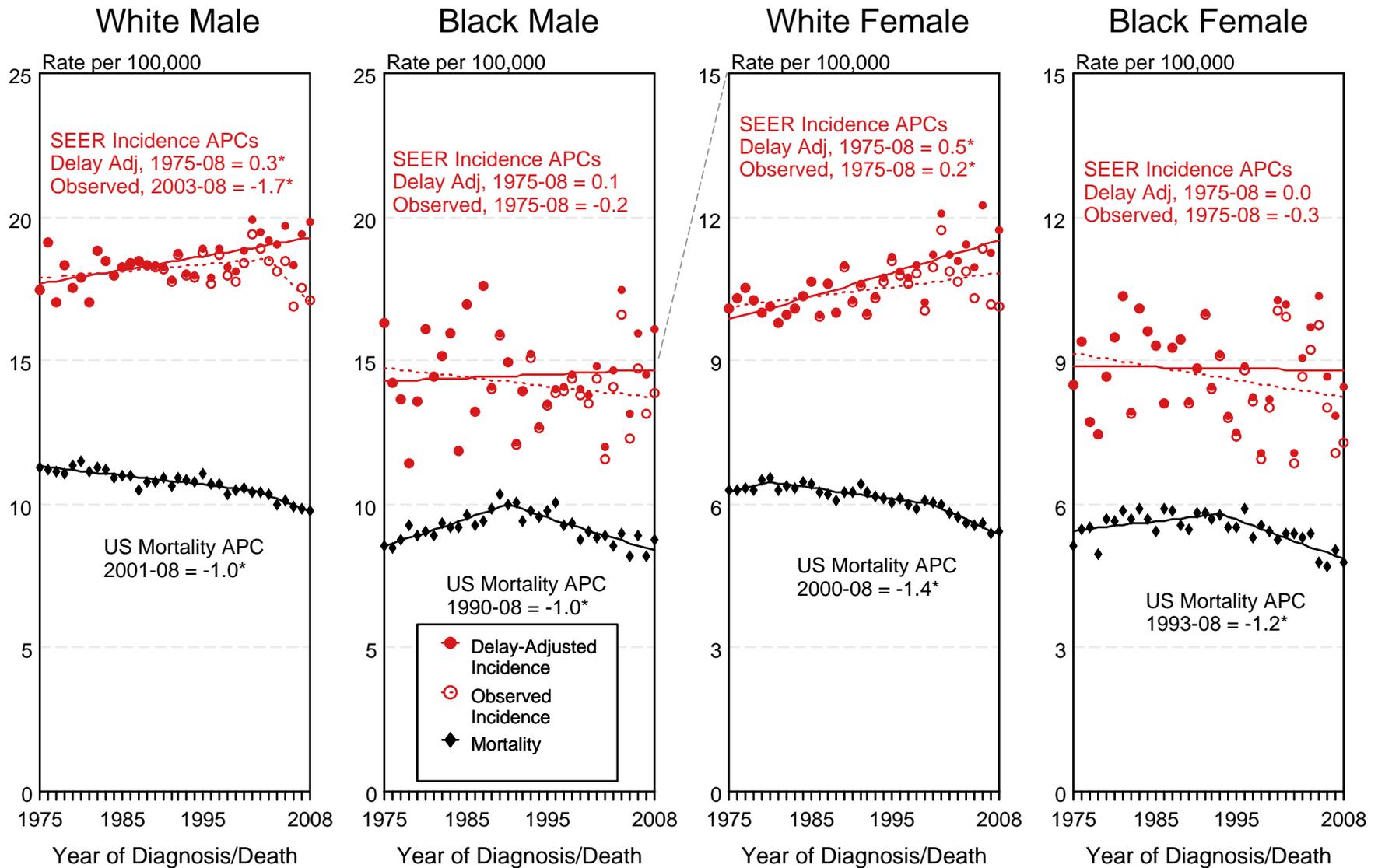## Leukemia, by Race and Sex

**Figure 13.1**

### White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.3*
Observed, 2003-08 = -1.7*

US Mortality APC
2001-08 = -1.0*

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.1
Observed, 1975-08 = -0.2

US Mortality APC
1990-08 = -1.0*

- ● Delay-Adjusted Incidence
- ◉ Observed Incidence
- ◆ Mortality

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.5*
Observed, 1975-08 = 0.2*

US Mortality APC
2000-08 = -1.4*

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.0
Observed, 1975-08 = -0.3

US Mortality APC
1993-08 = -1.2*

Year of Diagnosis/Death

[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
 Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Leukemia, Male, by Race

### All Races
Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.2*
Observed, 2003-08 = -1.6

SEER 13 APCs
Delay Adj, 1992-08 = 0.3*
Observed, 1992-08 = -0.4*

Year of Diagnosis

### White
Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.3*
Observed, 2003-08 = -1.7*

SEER 13 APCs
Delay Adj, 1992-08 = 0.2
Observed, 1992-08 = -0.4*

Year of Diagnosis

### Black
Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.1
Observed, 1975-08 = -0.2

SEER 13 APCs
Delay Adj, 1992-08 = 0.5
Observed, 1992-08 = -0.2

Year of Diagnosis

Figure 13.4

Legend:
- SEER 9 Delay-Adj. Incidence
- SEER 9 Observed Incidence
- SEER 13 Delay-Adj. Incidence
- SEER 13 Observed Incidence
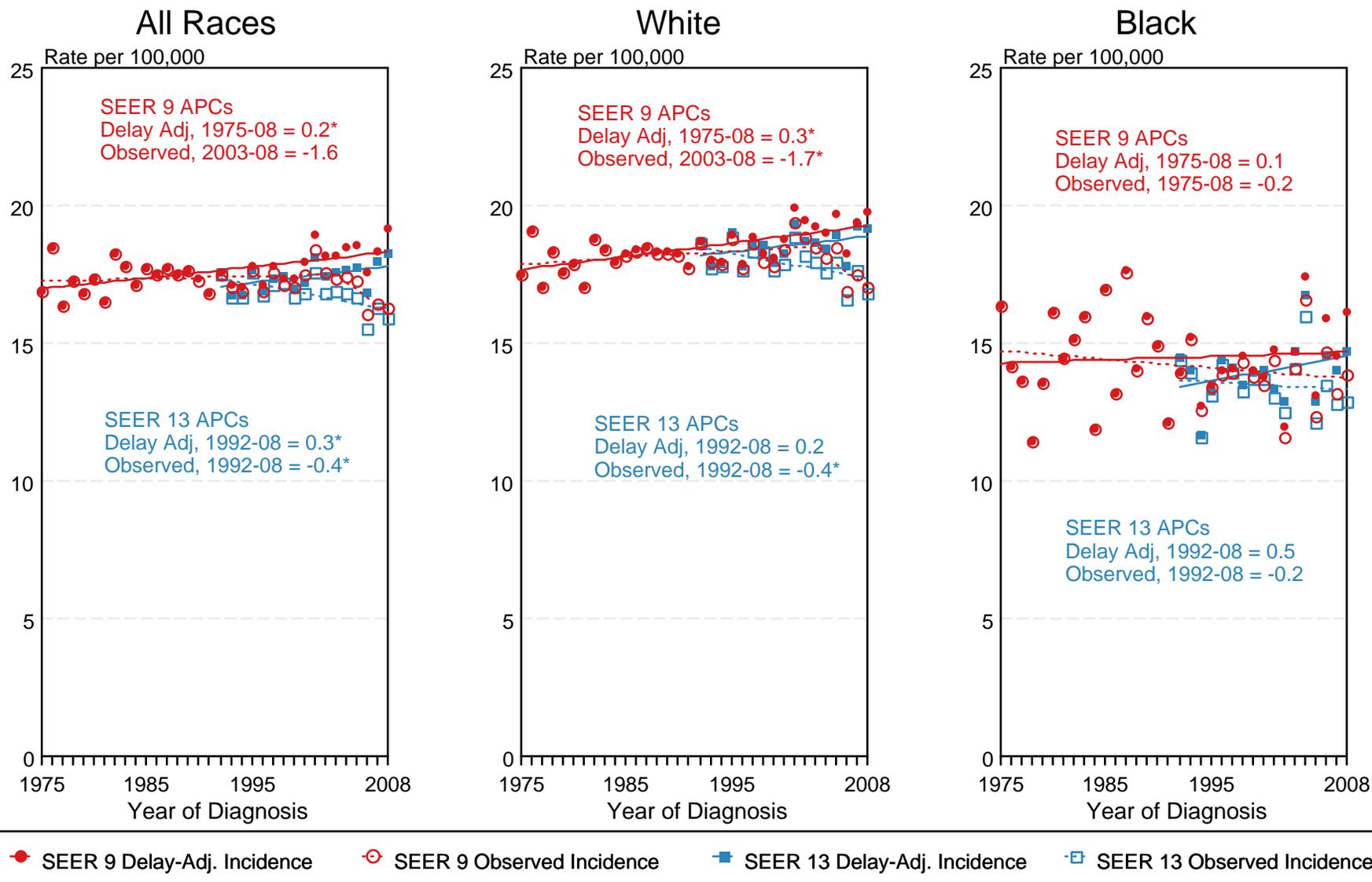
[a]  Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
   The APC is the Annual Percent 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Leukemia, Female, by Race

Figure 13.5

## All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.4*
Observed, 1975-08 = 0.1

SEER 13 APCs
Delay Adj, 1992-08 = 0.6*
Observed, 1992-08 = 0.0

Year of Diagnosis

## White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.5*
Observed, 1975-08 = 0.2*

SEER 13 APCs
Delay Adj, 1992-08 = 0.7*
Observed, 1992-08 = 0.0

Year of Diagnosis

## Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.0
Observed, 1975-08 = -0.3

SEER 13 APCs
Delay Adj, 1992-08 = 0.2
Observed, 1992-08 = -0.4

Year of Diagnosis

- ● SEER 9 Delay-Adj. Incidence
- ○ SEER 9 Observed Incidence
- ■ SEER 13 Delay-Adj. Incidence
- □ SEER 13 Observed Incidence
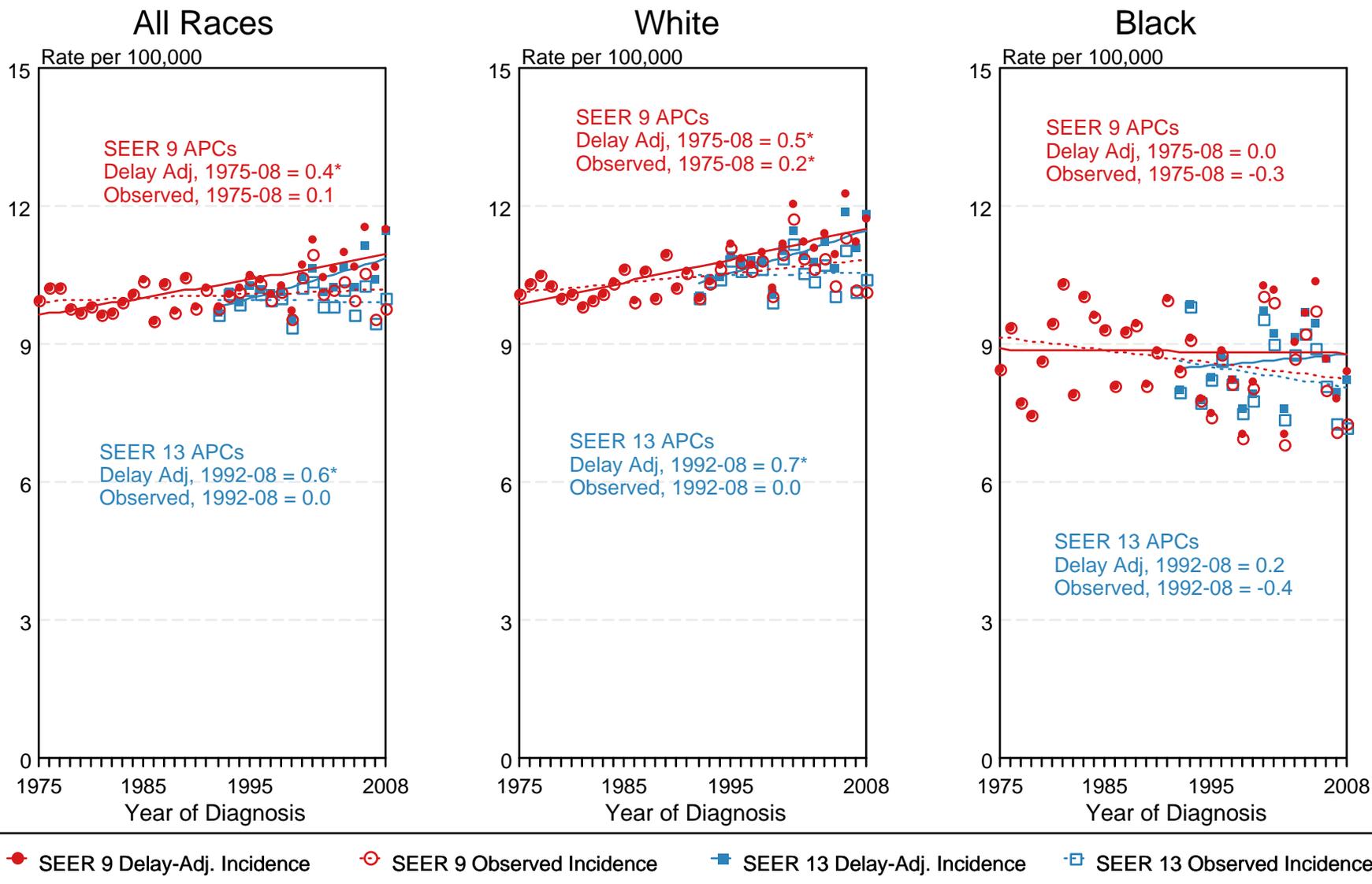
[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
The APC is the Annual Percent Change 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[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-84 | 1.3 | 1984-98 | 4.8* | 1998-01 | 0.2 | 2001-08 | 4.6* | | | | | 3.6* | 4.6* |
| White | 1975-87 | 1.6* | 1987-98 | 5.4* | 1998-01 | -1.4 | 2001-08 | 5.2* | | | | | 3.7* | 5.2* |
| Black | 1975-82 | -1.0 | 1982-08 | 3.8* | | | | | | | | | 3.8* | 3.8* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-99 | 5.1* | 1999-02 | 0.5 | 2002-08 | 4.4* | | | | | | | 3.1* | 4.4* |
| White | 1992-99 | 5.6* | 1999-02 | -0.9 | 2002-08 | 5.6* | | | | | | | 3.4* | 5.6* |
| Black | 1992-08 | 4.1* | | | | | | | | | | | 4.1* | 4.1* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-84 | 1.3 | 1984-96 | 4.7* | 1996-08 | 3.1* | | | | | | | 3.1* | 3.1* |
| White | 1975-87 | 1.6* | 1987-98 | 5.4* | 1998-01 | -1.1 | 2001-08 | 4.6* | | | | | 3.3* | 4.6* |
| Black | 1975-08 | 3.3* | | | | | | | | | | | 3.3* | 3.3* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 3.4* | | | | | | | | | | | 3.4* | 3.4* |
| White | 1992-99 | 5.6* | 1999-02 | -0.6 | 2002-08 | 4.8* | | | | | | | 3.0* | 4.8* |
| White NH[ef] | 1992-99 | 5.4* | 1999-02 | -2.0 | 2002-08 | 5.1* | | | | | | | 2.7 | 5.1* |
| Black | 1992-08 | 3.9* | | | | | | | | | | | 3.9* | 3.9* |
| Black NH[ef] | 1992-08 | 3.9* | | | | | | | | | | | 3.9* | 3.9* |
| API[e] | 1992-08 | 0.8* | | | | | | | | | | | 0.8* | 0.8* |
| AI/AN[eg] | 1992-08 | 2.3 | | | | | | | | | | | 2.3 | 2.3 |
| Hispanic[f] | 1992-08 | 2.9* | | | | | | | | | | | 2.9* | 2.9* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-80 | 0.2 | 1980-87 | 2.0* | 1987-96 | 3.8* | 1996-99 | 0.5 | 1999-08 | 2.2* | | | 2.2* | 2.2* |
| White | 1975-78 | -1.2 | 1978-87 | 1.6* | 1987-96 | 3.9* | 1996-99 | 0.4 | 1999-08 | 2.4* | | | 2.4* | 2.4* |
| Black | 1975-85 | 0.7 | 1985-08 | 2.0* | | | | | | | | | 2.0* | 2.0* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-96 | 3.5* | 1996-99 | 0.6 | 1999-08 | 2.2* | | | | | | | 2.2* | 2.2* |
| White | 1992-96 | 3.5* | 1996-99 | 0.6 | 1999-08 | 2.3* | | | | | | | 2.3* | 2.3* |
| White NH[ef] | 1992-96 | 3.6* | 1996-99 | 0.1 | 1999-08 | 2.2* | | | | | | | 2.2* | 2.2* |
| Black | 1992-08 | 1.8* | | | | | | | | | | | 1.8* | 1.8* |
| Black NH[ef] | 1992-08 | 2.0* | | | | | | | | | | | 2.0* | 2.0* |
| API[e] | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| AI/AN[eg] | 1992-08 | 1.9* | | | | | | | | | | | 1.9* | 1.9* |
| Hispanic[f] | 1992-08 | 1.6* | | | | | | | | | | | 1.6* | 1.6* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-08 | 3.7* | | | | | | | | | | | 3.7* | 3.7* |
| White | 1975-87 | 1.8* | 1987-98 | 5.5* | 1998-01 | -1.4 | 2001-08 | 5.5* | | | | | 3.9* | 5.5* |
| Black | 1975-08 | 3.7* | | | | | | | | | | | 3.7* | 3.7* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 3.6* | | | | | | | | | | | 3.6* | 3.6* |
| White | 1992-08 | 3.8* | | | | | | | | | | | 3.8* | 3.8* |
| Black | 1992-08 | 4.7* | | | | | | | | | | | 4.7* | 4.7* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-08 | 3.6* | | | | | | | | | | | 3.6* | 3.6* |
| White | 1975-84 | 1.9 | 1984-08 | 3.9* | | | | | | | | | 3.9* | 3.9* |
| Black | 1975-08 | 3.6* | | | | | | | | | | | 3.6* | 3.6* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 3.4* | | | | | | | | | | | 3.4* | 3.4* |
| White | 1992-08 | 3.6* | | | | | | | | | | | 3.6* | 3.6* |
| White NH[ef] | 1992-08 | 3.3* | | | | | | | | | | | 3.3* | 3.3* |
| Black | 1992-08 | 4.5* | | | | | | | | | | | 4.5* | 4.5* |
| Black NH[ef] | 1992-08 | 4.5* | | | | | | | | | | | 4.5* | 4.5* |
| API[e] | 1992-08 | 0.9* | | | | | | | | | | | 0.9* | 0.9* |
| AI/AN[eg] | 1992-08 | 2.7 | | | | | | | | | | | 2.7 | 2.7 |
| Hispanic[f] | 1992-08 | 2.7* | | | | | | | | | | | 2.7* | 2.7* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-85 | 1.5* | 1985-96 | 3.8* | 1996-99 | 0.6 | 1999-08 | 2.5* | | | | | 2.5* | 2.5* |
| White | 1975-85 | 1.4* | 1985-96 | 3.9* | 1996-99 | 0.6 | 1999-08 | 2.5* | | | | | 2.5* | 2.5* |
| Black | 1975-01 | 1.6* | 2001-08 | 3.5* | | | | | | | | | 3.1* | 3.5* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 2.2* | | | | | | | | | | | 2.2* | 2.2* |
| White | 1992-08 | 2.3* | | | | | | | | | | | 2.3* | 2.3* |
| White NH[ef] | 1992-08 | 2.2* | | | | | | | | | | | 2.2* | 2.2* |
| Black | 1992-08 | 2.3* | | | | | | | | | | | 2.3* | 2.3* |
| Black NH[ef] | 1992-08 | 2.6* | | | | | | | | | | | 2.6* | 2.6* |
| API[e] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| AI/AN[eg] | 1992-08 | 1.9* | | | | | | | | | | | 1.9* | 1.9* |
| Hispanic[f] | 1992-08 | 1.4* | | | | | | | | | | | 1.4* | 1.4* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
   Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
   The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-83 | 0.6 | 1983-97 | 4.2* | 1997-08 | 2.3* | | | | | | | 2.3* | 2.3* |
| White | 1975-85 | 0.8 | 1985-99 | 4.0* | 1999-04 | -0.9 | 2004-08 | 6.8* | | | | | 2.5 | 6.8* |
| Black | 1975-08 | 2.7* | | | | | | | | | | | 2.7* | 2.7* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 3.0* | | | | | | | | | | | 3.0* | 3.0* |
| White | 1992-99 | 6.2* | 1999-03 | -2.1 | 2003-08 | 5.5* | | | | | | | 2.0* | 5.5* |
| Black | 1992-08 | 2.8* | | | | | | | | | | | 2.8* | 2.8* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-83 | 0.5 | 1983-97 | 4.2* | 1997-08 | 2.1* | | | | | | | 2.1* | 2.1* |
| White | 1975-85 | 0.8 | 1985-99 | 4.1* | 1999-02 | -2.9 | 2002-08 | 4.1* | | | | | 1.7 | 4.1* |
| Black | 1975-08 | 2.6* | | | | | | | | | | | 2.6* | 2.6* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-96 | 7.2* | 1996-08 | 2.0* | | | | | | | | | 2.0* | 2.0* |
| White | 1992-99 | 6.1* | 1999-03 | -2.0 | 2003-08 | 4.5* | | | | | | | 1.6 | 4.5* |
| White NH[ef] | 1992-98 | 6.4* | 1998-04 | -1.3 | 2004-08 | 5.7* | | | | | | | 1.7* | 5.7* |
| Black | 1992-08 | 2.6* | | | | | | | | | | | 2.6* | 2.6* |
| Black NH[ef] | 1992-08 | 2.6* | | | | | | | | | | | 2.6* | 2.6* |
| API[e] | 1992-08 | 0.6 | | | | | | | | | | | 0.6 | 0.6 |
| AI/AN[eg] | 1992-08 | 1.4 | | | | | | | | | | | 1.4 | 1.4 |
| Hispanic[f] | 1992-08 | 2.6* | | | | | | | | | | | 2.6* | 2.6* |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-78 | -1.5 | 1978-88 | 1.4* | 1988-95 | 3.9* | 1995-01 | 0.3 | 2001-04 | 2.7 | 2004-08 | 0.4 | 1.1 | 0.4 |
| White | 1975-78 | -1.9 | 1978-88 | 1.2* | 1988-96 | 3.6* | 1996-00 | -0.4 | 2000-08 | 1.7* | | | 1.4* | 1.7* |
| Black | 1975-96 | 2.0* | 1996-08 | 0.4 | | | | | | | | | 0.4 | 0.4 |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-95 | 3.8* | 1995-01 | 0.3 | 2001-04 | 2.7 | 2004-08 | 0.4 | | | | | 1.1 | 0.4 |
| White | 1992-96 | 3.2* | 1996-00 | -0.5 | 2000-06 | 2.1* | 2006-08 | -0.5 | | | | | 1.2* | 0.8 |
| White NH[ef] | 1992-96 | 3.3* | 1996-00 | -1.1 | 2000-06 | 1.9* | 2006-08 | -1.0 | | | | | 0.9 | 0.4 |
| Black | 1992-08 | 0.6* | | | | | | | | | | | 0.6* | 0.6* |
| Black NH[ef] | 1992-08 | 0.7* | | | | | | | | | | | 0.7* | 0.7* |
| API[e] | 1992-08 | -0.6 | | | | | | | | | | | -0.6 | -0.6 |
| AI/AN[eg] | 1992-08 | 1.4 | | | | | | | | | | | 1.4 | 1.4 |
| Hispanic[f] | 1992-08 | 1.3* | | | | | | | | | | | 1.3* | 1.3* |

    Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
    The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]   Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]   Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]   Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]   The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]   API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]   Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
    Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
    The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]   Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence and Delay Adjusted Incidence Rates [a]
## Cancer of the Liver and Intrahepatic Bile Duct, by Race and Sex

Figure 14.1

### White Male
Rate per 100,000

SEER Incidence APCs
Delay Adj, 2001-08 = 5.5*
Observed, 1984-08 = 3.9*

Year of Diagnosis

### Black Male
Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 3.7*
Observed, 1975-08 = 3.6*

Delay-Adjusted
Incidence

Observed
Incidence

Year of Diagnosis

### White Female
Rate per 100,000

SEER Incidence APCs
Delay Adj, 2004-08 = 6.8*
Observed, 2002-08 = 4.1*

Year of Diagnosis

### Black Female
Rate per 100,000

SEER Incidence APCs
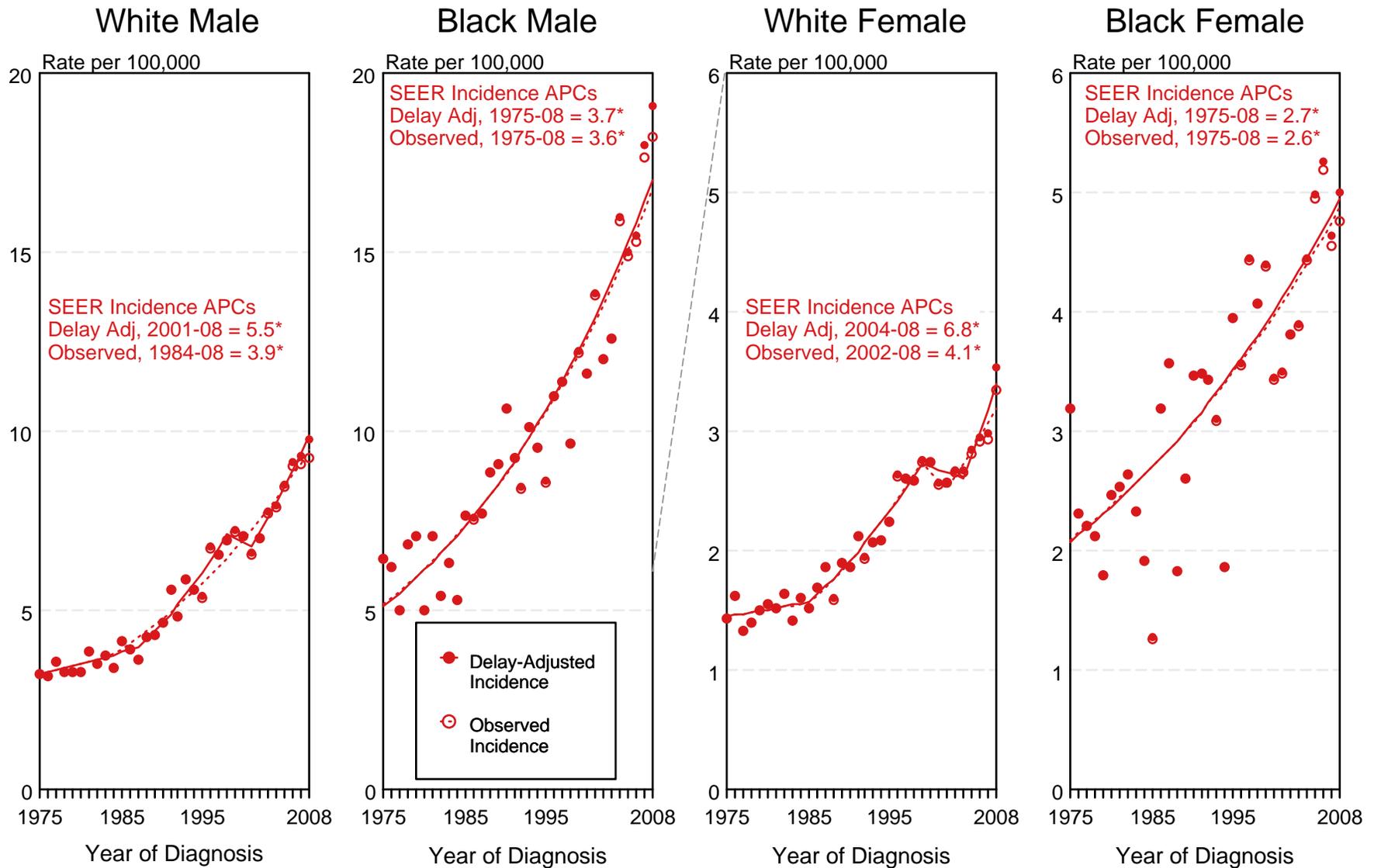Delay Adj, 1975-08 = 2.7*
Observed, 1975-08 = 2.6*

Year of Diagnosis

[a]  Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
### Cancer of the Liver and Intrahepatic Bile Duct, Male, by Race

Figure 14.3

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 3.7*
Observed, 1975-08 = 3.6*

SEER 13 APCs
Delay Adj, 1992-08 = 3.6*
Observed, 1992-08 = 3.4*

1975    1985    1995    2008
Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2001-08 = 5.5*
Observed, 1984-08 = 3.9*

SEER 13 APCs
Delay Adj, 1992-08 = 3.8*
Observed, 1992-08 = 3.6*

1975    1985    1995    2008
Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 3.7*
Observed, 1975-08 = 3.6*

SEER 13 APCs
Delay Adj, 1992-08 = 4.7*
Observed, 1992-08 = 4.5*

1975    1985    1995    2008
Year of Diagnosis

● SEER 9 Delay-Adj. Incidence    ○ SEER 9 Observed Incidence    ■ SEER 13 Delay-Adj. Incidence    □ SEER 13 Observed Incidence
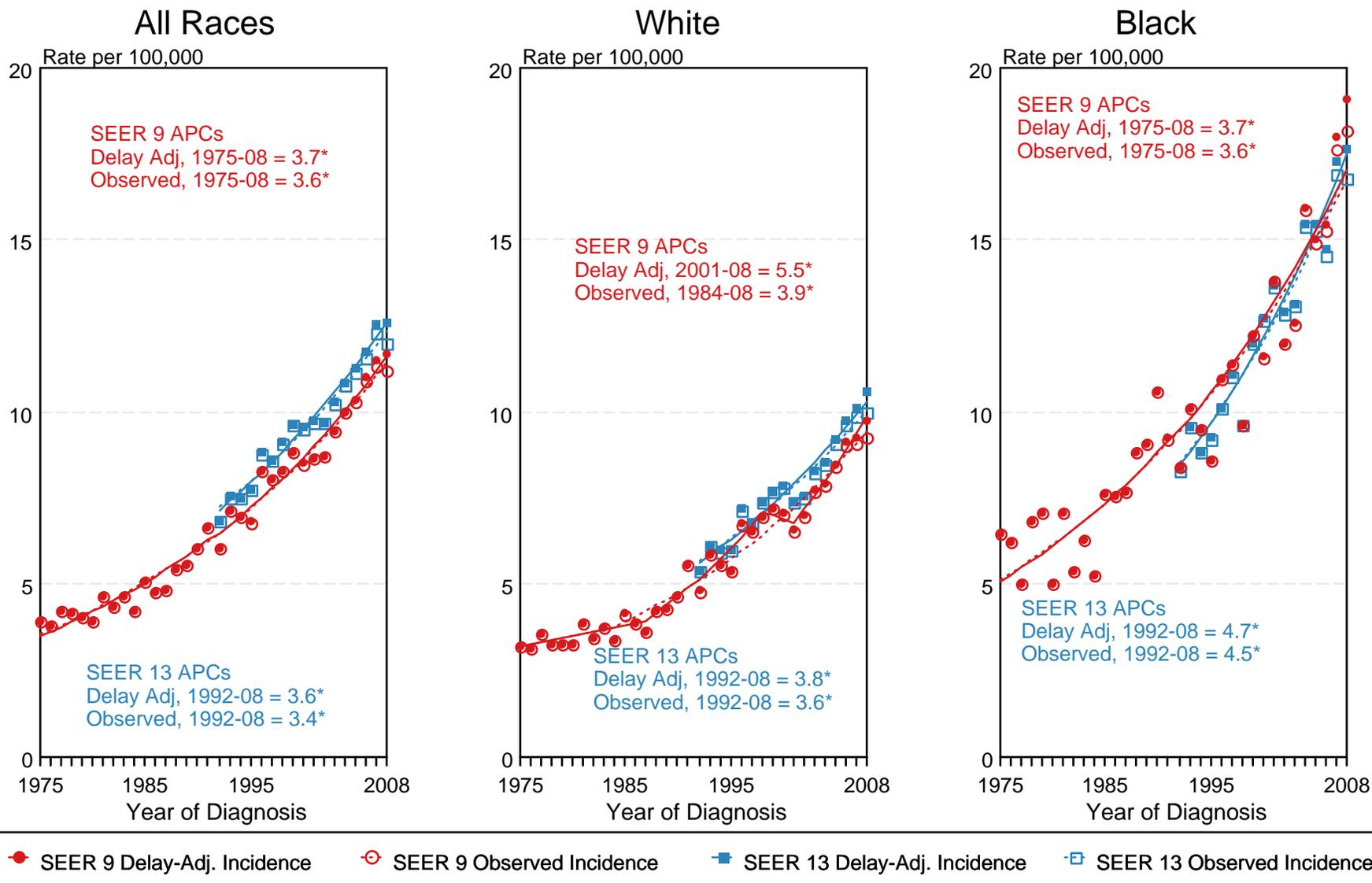
[a]  Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
   The APC is the Annual Percent 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Liver and Intrahepatic Bile Duct, Female, by Race

Figure 14.4

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1997-08 = 2.3*
Observed, 1997-08 = 2.1*

SEER 13 APCs
Delay Adj, 1992-08 = 3.0*
Observed, 1996-08 = 2.0*

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-08 = 6.8*
Observed, 2002-08 = 4.1*

SEER 13 APCs
Delay Adj, 2003-08 = 5.5*
Observed, 2003-08 = 4.5*

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 2.7*
Observed, 1975-08 = 2.6*

SEER 13 APCs
Delay Adj, 1992-08 = 2.8*
Observed, 1992-08 = 2.6*

Year of Diagnosis

● SEER 9 Delay-Adj. Incidence    ○ SEER 9 Observed Incidence    ■ SEER 13 Delay-Adj. Incidence    □ SEER 13 Observed Incidence
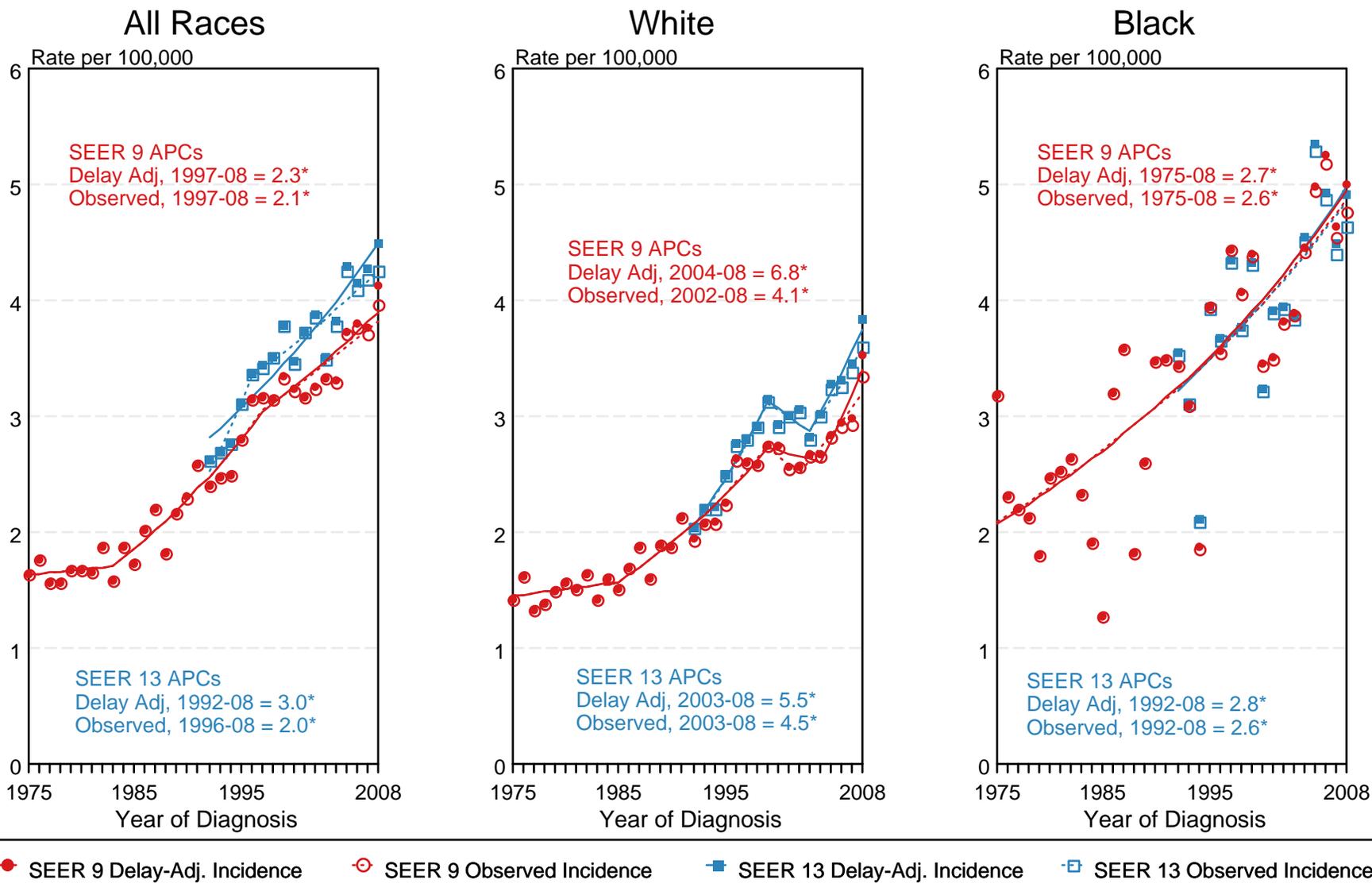
[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
The APC is the Annual Percent Change 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-82 | 2.5* | 1982-91 | 1.0* | 1991-08 | -0.7* | | | | | | | -0.7* | -0.7* |
| White | 1975-82 | 2.5* | 1982-91 | 1.1* | 1991-08 | -0.7* | | | | | | | -0.7* | -0.7* |
| Black | 1975-85 | 3.2* | 1985-08 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black | 1992-08 | -1.3* | | | | | | | | | | | -1.3* | -1.3* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-82 | 2.5* | 1982-91 | 1.0* | 1991-08 | -0.8* | | | | | | | -0.8* | -0.8* |
| White | 1975-87 | 2.0* | 1987-98 | -0.1 | 1998-08 | -1.0* | | | | | | | -1.0* | -1.0* |
| Black | 1975-85 | 3.3* | 1985-08 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| White | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| White NH[ef] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black | 1992-08 | -1.4* | | | | | | | | | | | -1.4* | -1.4* |
| Black NH[ef] | 1992-08 | -1.4* | | | | | | | | | | | -1.4* | -1.4* |
| API[e] | 1992-94 | -4.6 | 1994-05 | -0.1 | 2005-08 | -2.8 | | | | | | | -1.0* | -2.1* |
| AI/AN[eg] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| Hispanic[f] | 1992-08 | -1.4* | | | | | | | | | | | -1.4* | -1.4* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-80 | 3.0* | 1980-90 | 1.8* | 1990-95 | -0.2 | 1995-05 | -1.0* | 2005-08 | -2.2* | | | -1.4* | -1.9* |
| White | 1975-82 | 2.6* | 1982-91 | 1.7* | 1991-02 | -0.6* | 2002-08 | -1.5* | | | | | -1.2* | -1.5* |
| Black | 1975-81 | 3.5* | 1981-90 | 1.9* | 1990-95 | -0.7* | 1995-05 | -1.7* | 2005-08 | -3.0* | | | -2.1* | -2.7* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-03 | -0.8* | 2003-08 | -1.8* | | | | | | | | | -1.3* | -1.8* |
| White | 1992-03 | -0.7* | 2003-08 | -1.6* | | | | | | | | | -1.2* | -1.6* |
| White NH[ef] | 1992-03 | -0.5* | 2003-08 | -1.5* | | | | | | | | | -1.0* | -1.5* |
| Black | 1992-97 | -1.2* | 1997-05 | -1.7* | 2005-08 | -3.0* | | | | | | | -2.1* | -2.6* |
| Black NH[ef] | 1992-05 | -1.4* | 2005-08 | -3.1* | | | | | | | | | -1.9* | -2.6* |
| API[e] | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| AI/AN[eg] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| Hispanic[f] | 1992-97 | 0.4 | 1997-08 | -2.1* | | | | | | | | | -2.1* | -2.1* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 15.2
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-82 | 1.5* | 1982-91 | -0.5* | 1991-08 | -1.8* | | | | | | | -1.8* | -1.8* |
| White | 1975-81 | 1.5* | 1981-90 | -0.2 | 1990-08 | -1.7* | | | | | | | -1.7* | -1.7* |
| Black | 1975-84 | 3.3* | 1984-08 | -1.9* | | | | | | | | | -1.9* | -1.9* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| White | 1992-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| Black | 1992-08 | -2.4* | | | | | | | | | | | -2.4* | -2.4* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-82 | 1.4* | 1982-91 | -0.4 | 1991-08 | -1.8* | | | | | | | -1.8* | -1.8* |
| White | 1975-81 | 1.5* | 1981-90 | -0.2 | 1990-08 | -1.8* | | | | | | | -1.8* | -1.8* |
| Black | 1975-85 | 2.8* | 1985-08 | -2.0* | | | | | | | | | -2.0* | -2.0* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.0* | | | | | | | | | | | -2.0* | -2.0* |
| White | 1992-08 | -2.0* | | | | | | | | | | | -2.0* | -2.0* |
| White NH[e][f] | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| Black | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |
| Black NH[e][f] | 1992-08 | -2.5* | | | | | | | | | | | -2.5* | -2.5* |
| API[e] | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| AI/AN[e][g] | 1992-08 | -1.5 | | | | | | | | | | | -1.5 | -1.5 |
| Hispanic[f] | 1992-08 | -2.1* | | | | | | | | | | | -2.1* | -2.1* |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-78 | 2.5* | 1978-84 | 1.2* | 1984-90 | 0.4* | 1990-93 | -1.1 | 1993-05 | -1.9* | 2005-08 | -2.7* | -2.2* | -2.5* |
| White | 1975-82 | 1.7* | 1982-91 | 0.4* | 1991-05 | -1.8* | 2005-08 | -2.7* | | | | | -2.1* | -2.4* |
| Black | 1975-77 | 4.9* | 1977-84 | 2.3* | 1984-90 | 1.2* | 1990-95 | -1.4* | 1995-08 | -2.8* | | | -2.8* | -2.8* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-05 | -1.9* | 2005-08 | -2.8* | | | | | | | | | -2.2* | -2.6* |
| White | 1992-05 | -1.7* | 2005-08 | -2.7* | | | | | | | | | -2.1* | -2.5* |
| White NH[e][f] | 1992-05 | -1.6* | 2005-08 | -2.5* | | | | | | | | | -1.9* | -2.3* |
| Black | 1992-94 | -0.8 | 1994-08 | -2.8* | | | | | | | | | -2.8* | -2.8* |
| Black NH[e][f] | 1992-08 | -2.5* | | | | | | | | | | | -2.5* | -2.5* |
| API[e] | 1992-08 | -1.4* | | | | | | | | | | | -1.4* | -1.4* |
| AI/AN[e][g] | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| Hispanic[f] | 1992-97 | 0.1 | 1997-08 | -3.1* | | | | | | | | | -3.1* | -3.1* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
   Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
   The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 15.3
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-82 | 5.5* | 1982-91 | 3.5* | 1991-08 | 0.4* | | | | | | | 0.4* | 0.4* |
| White | 1975-88 | 4.8* | 1988-97 | 1.4* | 1997-08 | 0.2 | | | | | | | 0.2 | 0.2 |
| Black | 1975-90 | 4.3* | 1990-08 | 0.5* | | | | | | | | | 0.5* | 0.5* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-97 | 0.7 | 1997-08 | -0.3* | | | | | | | | | -0.3* | -0.3* |
| White | 1992-97 | 0.9 | 1997-08 | -0.3 | | | | | | | | | -0.3 | -0.3 |
| Black | 1992-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-82 | 5.6* | 1982-91 | 3.4* | 1991-06 | 0.5* | 2006-08 | -2.3 | | | | | -0.2 | -1.0 |
| White | 1975-88 | 4.8* | 1988-97 | 1.4* | 1997-08 | 0.0 | | | | | | | 0.0 | 0.0 |
| Black | 1975-90 | 4.3* | 1990-08 | 0.4 | | | | | | | | | 0.4 | 0.4 |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-98 | 0.8* | 1998-01 | -1.3 | 2001-05 | 0.5 | 2005-08 | -1.8* | | | | | -0.7 | -1.2* |
| White | 1992-97 | 1.0 | 1997-08 | -0.5* | | | | | | | | | -0.5* | -0.5* |
| White NH[ef] | 1992-97 | 1.2* | 1997-08 | -0.2 | | | | | | | | | -0.2 | -0.2 |
| Black | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| Black NH[ef] | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| API[e] | 1992-06 | 0.7* | 2006-08 | -5.4 | | | | | | | | | -0.7 | -2.4 |
| AI/AN[eg] | 1992-08 | 1.3 | | | | | | | | | | | 1.3 | 1.3 |
| Hispanic[f] | 1992-08 | -0.6* | | | | | | | | | | | -0.6* | -0.6* |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-82 | 6.0* | 1982-90 | 4.2* | 1990-95 | 1.7* | 1995-03 | 0.3* | 2003-08 | -1.0* | | | -0.4* | -1.0* |
| White | 1975-83 | 5.8* | 1983-90 | 4.1* | 1990-94 | 2.1* | 1994-03 | 0.5* | 2003-08 | -1.0* | | | -0.3* | -1.0* |
| Black | 1975-81 | 6.8* | 1981-92 | 3.8* | 1992-05 | 0.3* | 2005-08 | -2.9* | | | | | -0.8* | -2.1* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-02 | 0.6* | 2002-08 | -0.9* | | | | | | | | | -0.4* | -0.9* |
| White | 1992-02 | 0.7* | 2002-08 | -0.8* | | | | | | | | | -0.3* | -0.8* |
| White NH[ef] | 1992-02 | 0.9* | 2002-08 | -0.7* | | | | | | | | | -0.1 | -0.7* |
| Black | 1992-05 | 0.3* | 2005-08 | -2.9* | | | | | | | | | -0.8 | -2.1* |
| Black NH[ef] | 1992-05 | 0.6* | 2005-08 | -3.0* | | | | | | | | | -0.6 | -2.1* |
| API[e] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| AI/AN[eg] | 1992-08 | 1.5* | | | | | | | | | | | 1.5* | 1.5* |
| Hispanic[f] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Cancer of the Lung and Bronchus, by Race and Sex

Figure 15.1

### White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1990-08 = -1.7*
Observed, 1990-08 = -1.8*

US Mortality APC
2005-08 = -2.7*

Year of Diagnosis/Death

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1984-08 = -1.9*
Observed, 1985-08 = -2.0*

US Mortality APC
1995-08 = -2.8*

Delay-Adjusted Incidence
Observed Incidence
Mortality

Year of Diagnosis/Death

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1997-08 = 0.2
Observed, 1997-08 = 0.0

US Mortality APC
2003-08 = -1.0*

Year of Diagnosis/Death

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1990-08 = 0.5*
Observed, 1990-08 = 0.4

US Mortality APC
2005-08 = -2.9*

Year of Diagnosis/Death
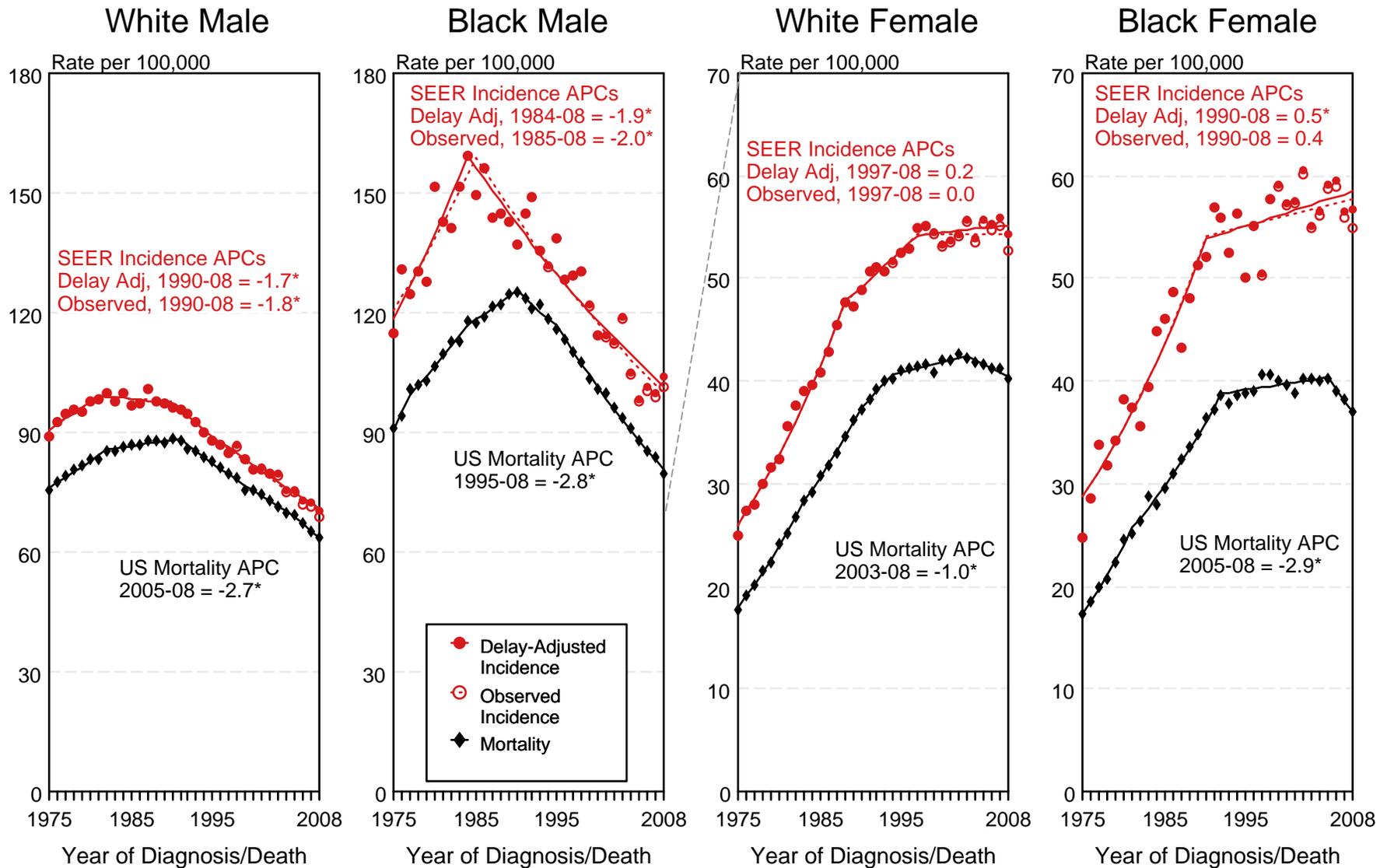
a  Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National 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[a]
## Cancer of the Lung and Bronchus, Ages 65 and Over, by Race and Sex



**White Male**

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1992-08 = -1.2*
Observed, 1992-08 = -1.2*

US Mortality APC
2005-08 = -2.1*

Year of Diagnosis/Death

**Black Male**

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1986-08 = -1.0*
Observed, 1986-08 = -1.1*
US Mortality APC
1995-08 = -2.3*

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

Year of Diagnosis/Death

**White Female**

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1997-08 = 1.2*
Observed, 1997-08 = 1.0*

US Mortality APC
2002-08 = -0.1

Year of Diagnosis/Death

**Black Female**

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1991-08 = 1.9*
Observed, 1991-08 = 1.8*

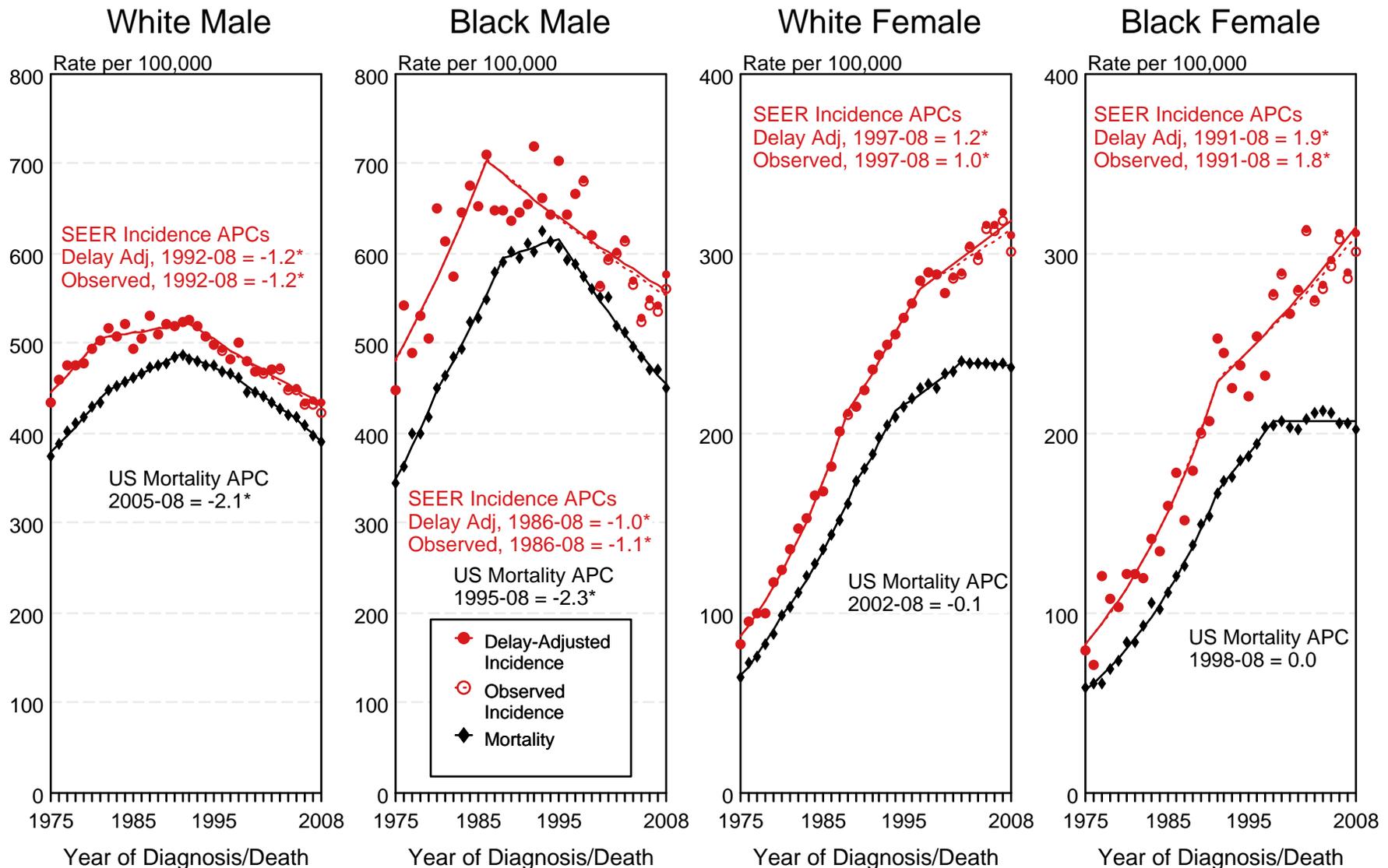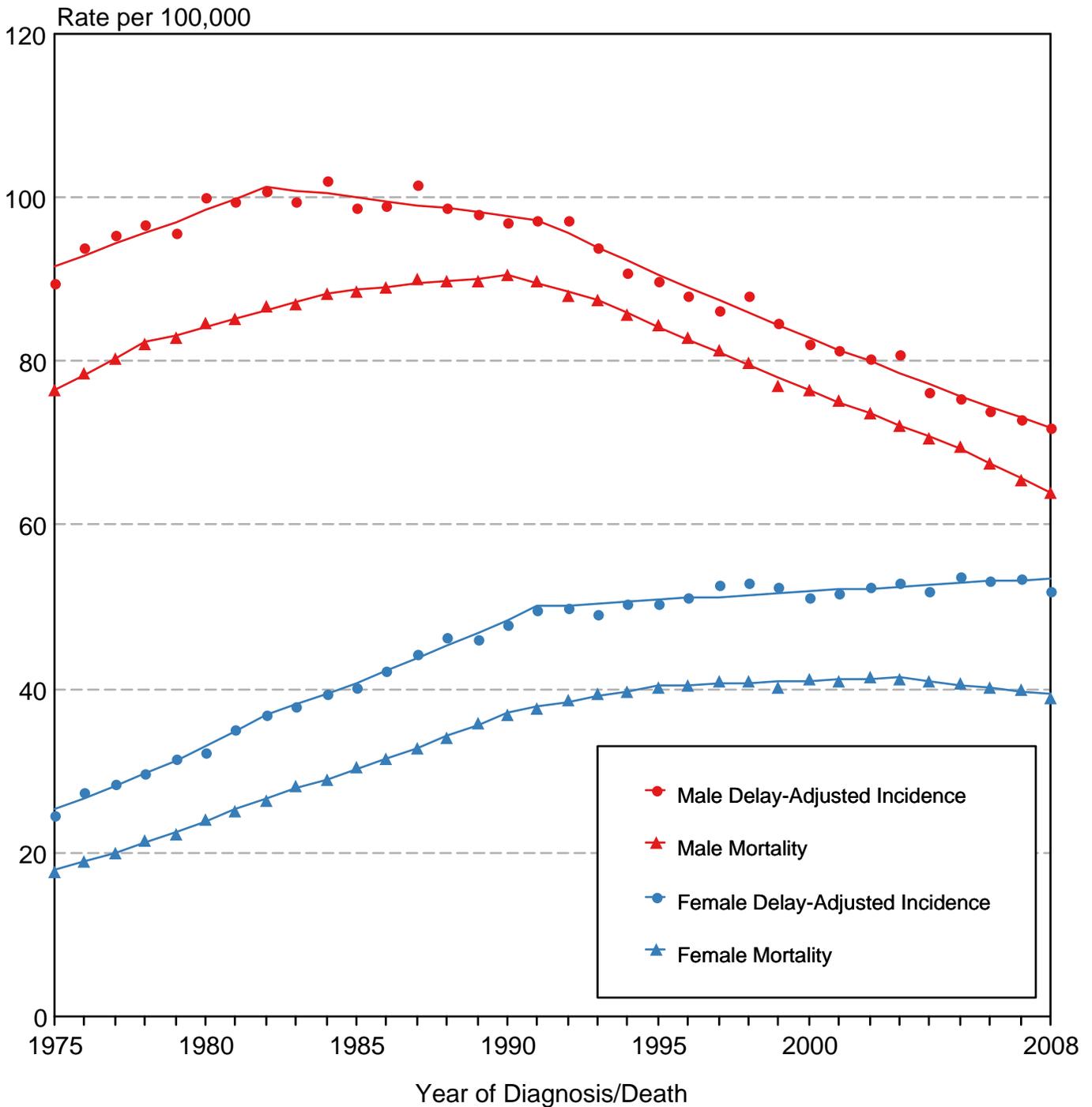US Mortality APC
1998-08 = 0.0

Year of Diagnosis/Death

Figure 15.3

[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 15.5

# Cancer of the Lung & Bronchus
## SEER Delay-Adjusted Incidence & US Death Rates, 1975-2008, All Races, By Sex

Rate per 100,000

Year of Diagnosis/Death

- ● Male Delay-Adjusted Incidence
- ▲ Male Mortality
- ● Female Delay-Adjusted Incidence
- ▲ Female Mortality

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 3.5, April 2011, National Cancer Institute.

Figure 15.6

# Cancer of the Lung & Bronchus
# SEER Delay-Adjusted Incidence, 1975-2008
# By Sex and Race
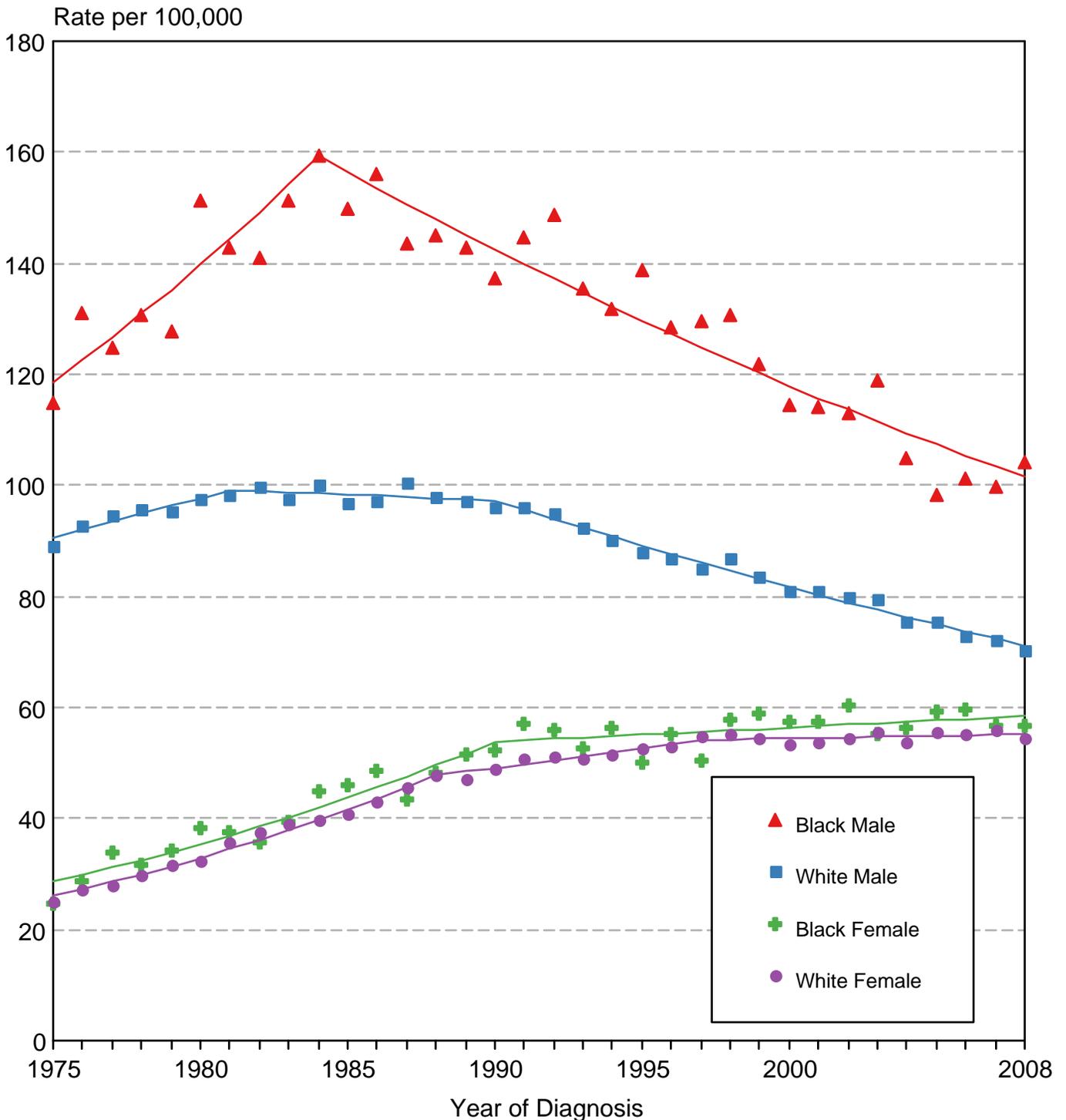
Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
### Cancer of the Lung and Bronchus, Male, by Race



**All Races**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1991-08 = -1.8*
Observed, 1991-08 = -1.8*

SEER 13 APCs
Delay Adj, 1992-08 = -1.9*
Observed, 1992-08 = -2.0*

Year of Diagnosis

**White**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1990-08 = -1.7*
Observed, 1990-08 = -1.8*

SEER 13 APCs
Delay Adj, 1992-08 = -1.9*
Observed, 1992-08 = -2.0*

Year of Diagnosis

**Black**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1984-08 = -1.9*
Observed, 1985-08 = -2.0*

SEER 13 APCs
Delay Adj, 1992-08 = -2.4*
Observed, 1992-08 = -2.6*

Year of Diagnosis

Figure 15.7

Legend:
- ● SEER 9 Delay-Adj. Incidence
- ○ SEER 9 Observed Incidence
- ■ SEER 13 Delay-Adj. Incidence
- □ SEER 13 Observed Incidence
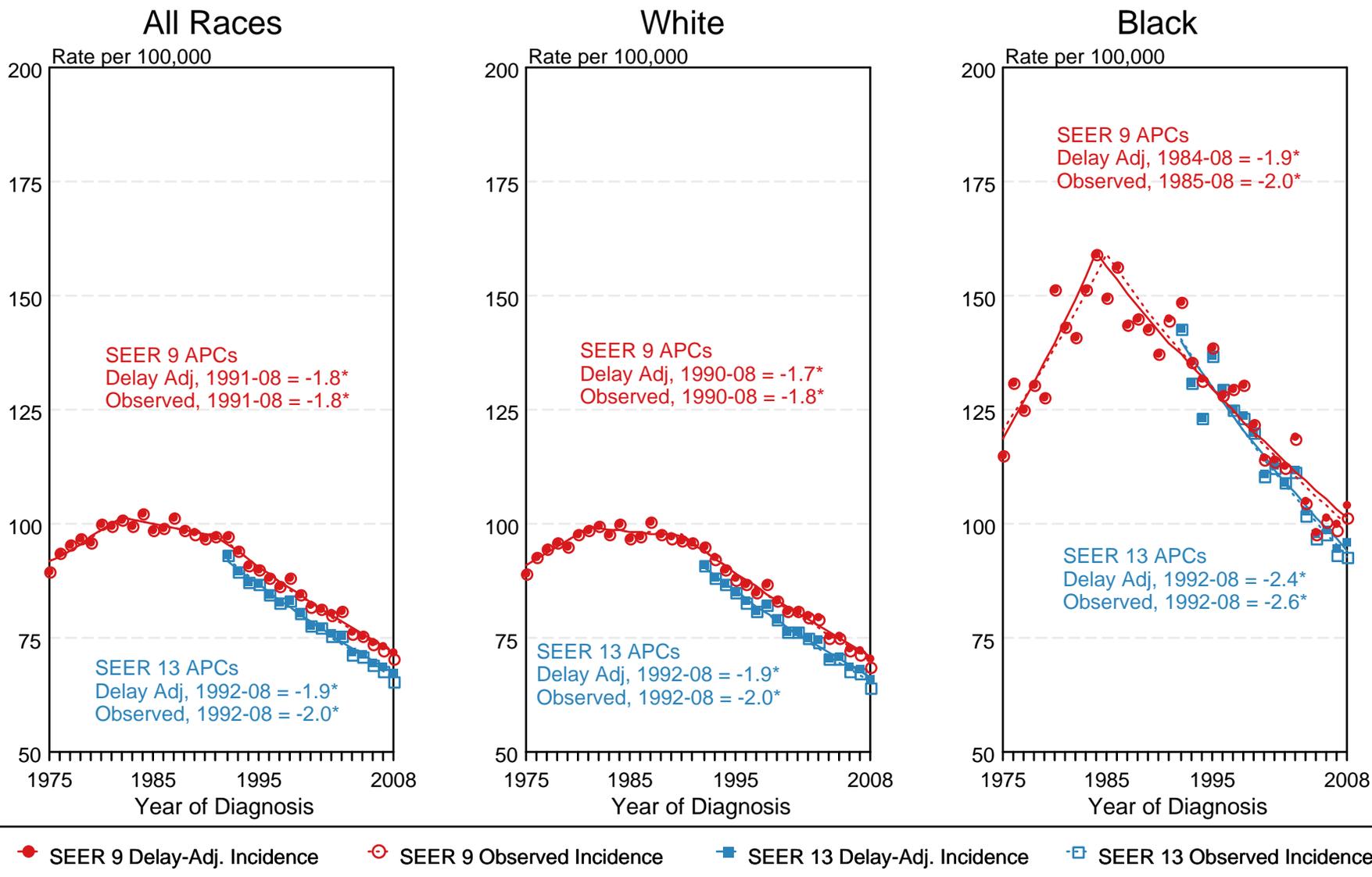
[a] Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
   The APC is the Annual Percent 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Lung and Bronchus, Female, by Race

Figure 15.8

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1991-08 = 0.4*
Observed, 2006-08 = -2.3

SEER 13 APCs
Delay Adj, 1997-08 = -0.3*
Observed, 2005-08 = -1.8*

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1997-08 = 0.2
Observed, 1997-08 = 0.0

SEER 13 APCs
Delay Adj, 1997-08 = -0.3
Observed, 1997-08 = -0.5*

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1990-08 = 0.5*
Observed, 1990-08 = 0.4

SEER 13 APCs
Delay Adj, 1992-08 = 0.4
Observed, 1992-08 = 0.3

Year of Diagnosis

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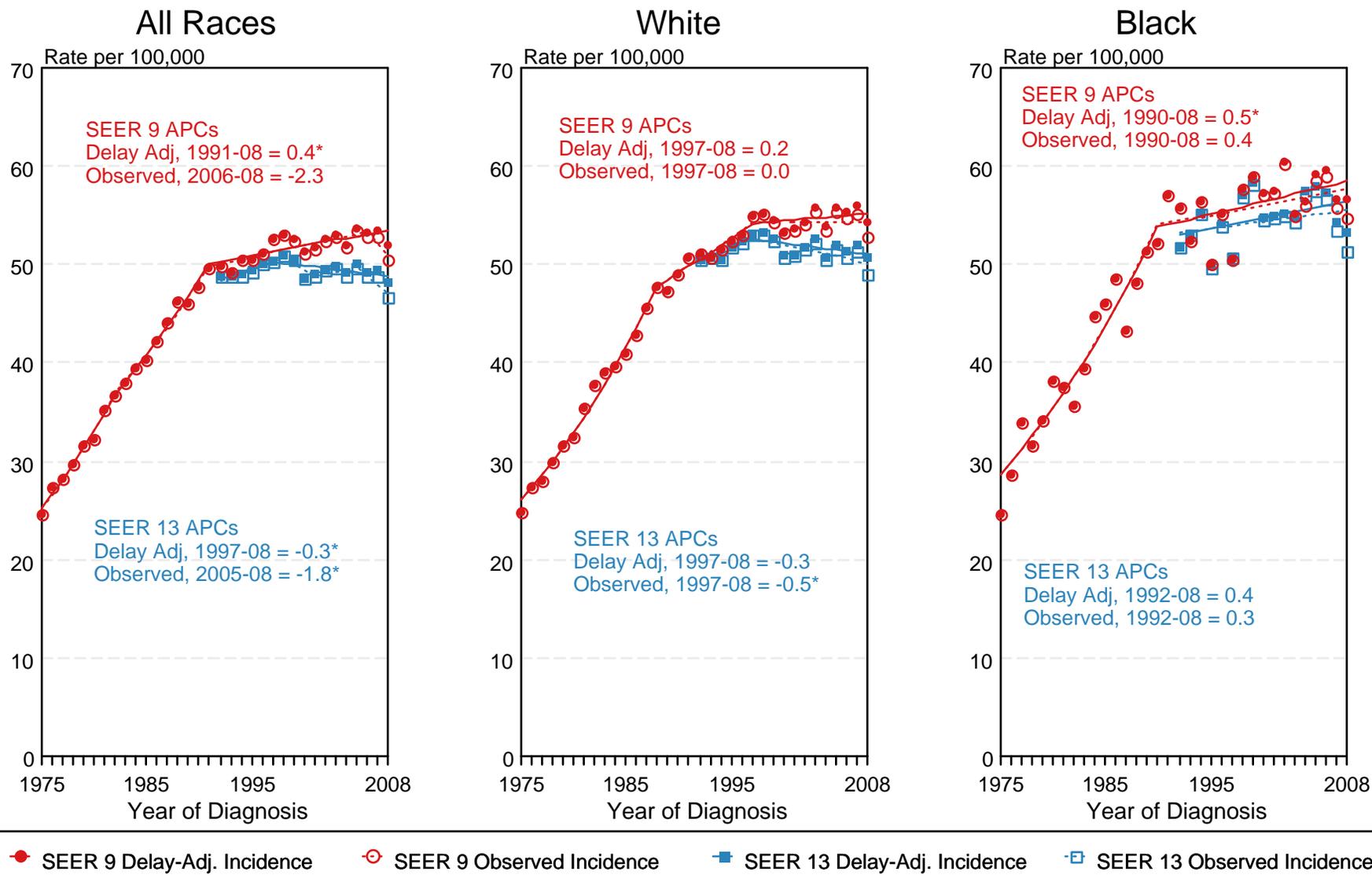- ■ SEER 13 Delay-Adj. Incidence
- □ SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
  Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
  Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 16.1
Melanoma of the Skin (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-81 | 6.1* | 1981-08 | 2.8* | | | | | | | | | 2.8* | 2.8* |
| White | 1975-81 | 6.5* | 1981-08 | 3.2* | | | | | | | | | 3.2* | 3.2* |
| Black | – | – | | | | | | | | | | | – | – |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 2.3* | | | | | | | | | | | 2.3* | 2.3* |
| White | 1992-08 | 2.9* | | | | | | | | | | | 2.9* | 2.9* |
| Black | – | – | | | | | | | | | | | – | – |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-85 | 4.6* | 1985-08 | 2.6* | | | | | | | | | 2.6* | 2.6* |
| White | 1975-81 | 6.6* | 1981-08 | 3.1* | | | | | | | | | 3.1* | 3.1* |
| Black | 1975-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-96 | 4.5* | 1996-08 | 1.9* | | | | | | | | | 1.9* | 1.9* |
| White | 1992-96 | 5.2* | 1996-08 | 2.3* | | | | | | | | | 2.3* | 2.3* |
| White NH[ef] | 1992-08 | 3.2* | | | | | | | | | | | 3.2* | 3.2* |
| Black | 1992-95 | 33.6 | 1995-04 | -5.7* | 2004-08 | 9.9 | | | | | | | 1.0 | 9.9 |
| Black NH[ef] | 1992-95 | 34.7 | 1995-03 | -6.6 | 2003-08 | 7.7 | | | | | | | 1.1 | 7.7 |
| API[e] | 1992-08 | 1.3 | | | | | | | | | | | 1.3 | 1.3 |
| AI/AN[eg] | 1992-08 | 0.7 | | | | | | | | | | | 0.7 | 0.7 |
| Hispanic[f] | 1992-08 | 1.1* | | | | | | | | | | | 1.1* | 1.1* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | 1.6* | 1989-08 | -0.1 | | | | | | | | | -0.1 | -0.1 |
| White | 1975-88 | 1.8* | 1988-08 | 0.1 | | | | | | | | | 0.1 | 0.1 |
| Black | 1975-08 | -0.7* | | | | | | | | | | | -0.7* | -0.7* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| White NH[ef] | 1992-08 | 0.3* | | | | | | | | | | | 0.3* | 0.3* |
| Black | 1992-08 | -1.0 | | | | | | | | | | | -1.0 | -1.0 |
| Black NH[ef] | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| API[e] | 1992-08 | -0.9 | | | | | | | | | | | -0.9 | -0.9 |
| AI/AN[eg] | 1992-08 | 2.5 | | | | | | | | | | | 2.5 | 2.5 |
| Hispanic[f] | 1992-08 | -0.6 | | | | | | | | | | | -0.6 | -0.6 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Table 16.2
Melanoma of the Skin (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-86 | 5.5* | 1986-08 | 3.0* | | | | | | | | | 3.0* | 3.0* |
| White | 1975-86 | 5.8* | 1986-08 | 3.3* | | | | | | | | | 3.3* | 3.3* |
| Black | – | – | | | | | | | | | | | – | – |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 2.5* | | | | | | | | | | | 2.5* | 2.5* |
| White | 1992-08 | 2.9* | | | | | | | | | | | 2.9* | 2.9* |
| Black | – | – | | | | | | | | | | | – | – |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-86 | 5.6* | 1986-08 | 2.9* | | | | | | | | | 2.9* | 2.9* |
| White | 1975-86 | 5.9* | 1986-08 | 3.1* | | | | | | | | | 3.1* | 3.1* |
| Black | 1975-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 2.4* | | | | | | | | | | | 2.4* | 2.4* |
| White | 1992-08 | 2.8* | | | | | | | | | | | 2.8* | 2.8* |
| White NH[ef] | 1992-08 | 3.2* | | | | | | | | | | | 3.2* | 3.2* |
| Black | 1992-95 | 75.1* | 1995-04 | -8.6* | 2004-08 | 9.2 | | | | | | | -1.1 | 9.2 |
| Black NH[ef] | 1992-95 | 75.8* | 1995-04 | -8.4* | 2004-08 | 9.8 | | | | | | | -0.7 | 9.8 |
| API[e] | 1992-08 | 1.7 | | | | | | | | | | | 1.7 | 1.7 |
| AI/AN[eg] | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| Hispanic[f] | 1992-08 | 1.5* | | | | | | | | | | | 1.5* | 1.5* |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-89 | 2.3* | 1989-08 | 0.3* | | | | | | | | | 0.3* | 0.3* |
| White | 1975-89 | 2.4* | 1989-08 | 0.4* | | | | | | | | | 0.4* | 0.4* |
| Black | 1975-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.3* | | | | | | | | | | | 0.3* | 0.3* |
| White | 1992-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| White NH[ef] | 1992-08 | 0.6* | | | | | | | | | | | 0.6* | 0.6* |
| Black | 1992-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| Black NH[ef] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| API[e] | 1992-08 | -0.6 | | | | | | | | | | | -0.6 | -0.6 |
| AI/AN[eg] | 1992-08 | 4.9 | | | | | | | | | | | 4.9 | 4.9 |
| Hispanic[f] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Table 16.3
Melanoma of the Skin (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-80 | 5.5* | 1980-08 | 2.4* | | | | | | | | | 2.4* | 2.4* |
| White | 1975-81 | 6.1* | 1981-92 | 2.2* | 1992-08 | 3.2* | | | | | | | 3.2* | 3.2* |
| Black | – | – | | | | | | | | | | | – | – |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 2.2* | | | | | | | | | | | 2.2* | 2.2* |
| White | 1992-08 | 2.8* | | | | | | | | | | | 2.8* | 2.8* |
| Black | – | – | | | | | | | | | | | – | – |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-81 | 5.0* | 1981-08 | 2.4* | | | | | | | | | 2.4* | 2.4* |
| White | 1975-81 | 6.3* | 1981-94 | 2.0* | 1994-97 | 5.6 | 1997-08 | 2.4* | | | | | 2.4* | 2.4* |
| Black | 1975-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 2.1* | | | | | | | | | | | 2.1* | 2.1* |
| White | 1992-97 | 4.6* | 1997-08 | 2.2* | | | | | | | | | 2.2* | 2.2* |
| White NH[ef] | 1992-08 | 3.2* | | | | | | | | | | | 3.2* | 3.2* |
| Black | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| Black NH[ef] | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| API[e] | 1992-08 | 1.1 | | | | | | | | | | | 1.1 | 1.1 |
| AI/AN[eg] | 1992-08 | 1.1 | | | | | | | | | | | 1.1 | 1.1 |
| Hispanic[f] | 1992-08 | 1.0 | | | | | | | | | | | 1.0 | 1.0 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | 0.9* | 1988-08 | -0.6* | | | | | | | | | -0.6* | -0.6* |
| White | 1975-88 | 1.0* | 1988-08 | -0.5* | | | | | | | | | -0.5* | -0.5* |
| Black | 1975-08 | -0.6 | | | | | | | | | | | -0.6 | -0.6 |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.6* | | | | | | | | | | | -0.6* | -0.6* |
| White | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| White NH[ef] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| Black | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| Black NH[ef] | 1992-08 | -1.7 | | | | | | | | | | | -1.7 | -1.7 |
| API[e] | 1992-08 | -1.1 | | | | | | | | | | | -1.1 | -1.1 |
| AI/AN[eg] | – | – | | | | | | | | | | | – | – |
| Hispanic[f] | 1992-08 | -0.9 | | | | | | | | | | | -0.9 | -0.9 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]  Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]  Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]  Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]  The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]  API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]  Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
     Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
     The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]  Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
–   Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Melanoma of the Skin, White, by Sex



### Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1986-08 = 3.3*
Observed, 1986-08 = 3.1*

US Mortality APC
1989-08 = 0.4*

Year of Diagnosis/Death

### Female

Rate per 100,000

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 1992-08 = 3.2*
Observed, 1997-08 = 2.4*

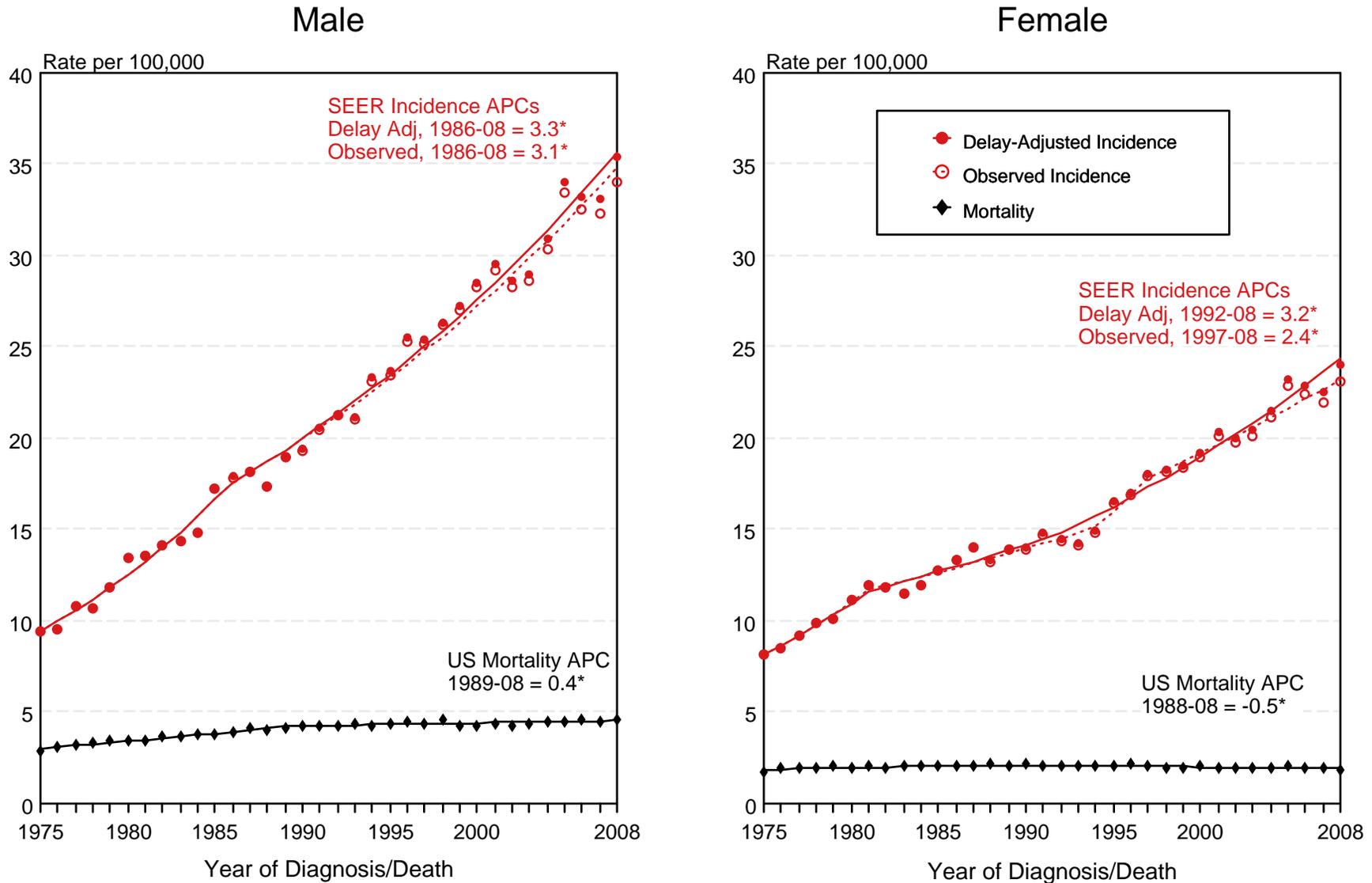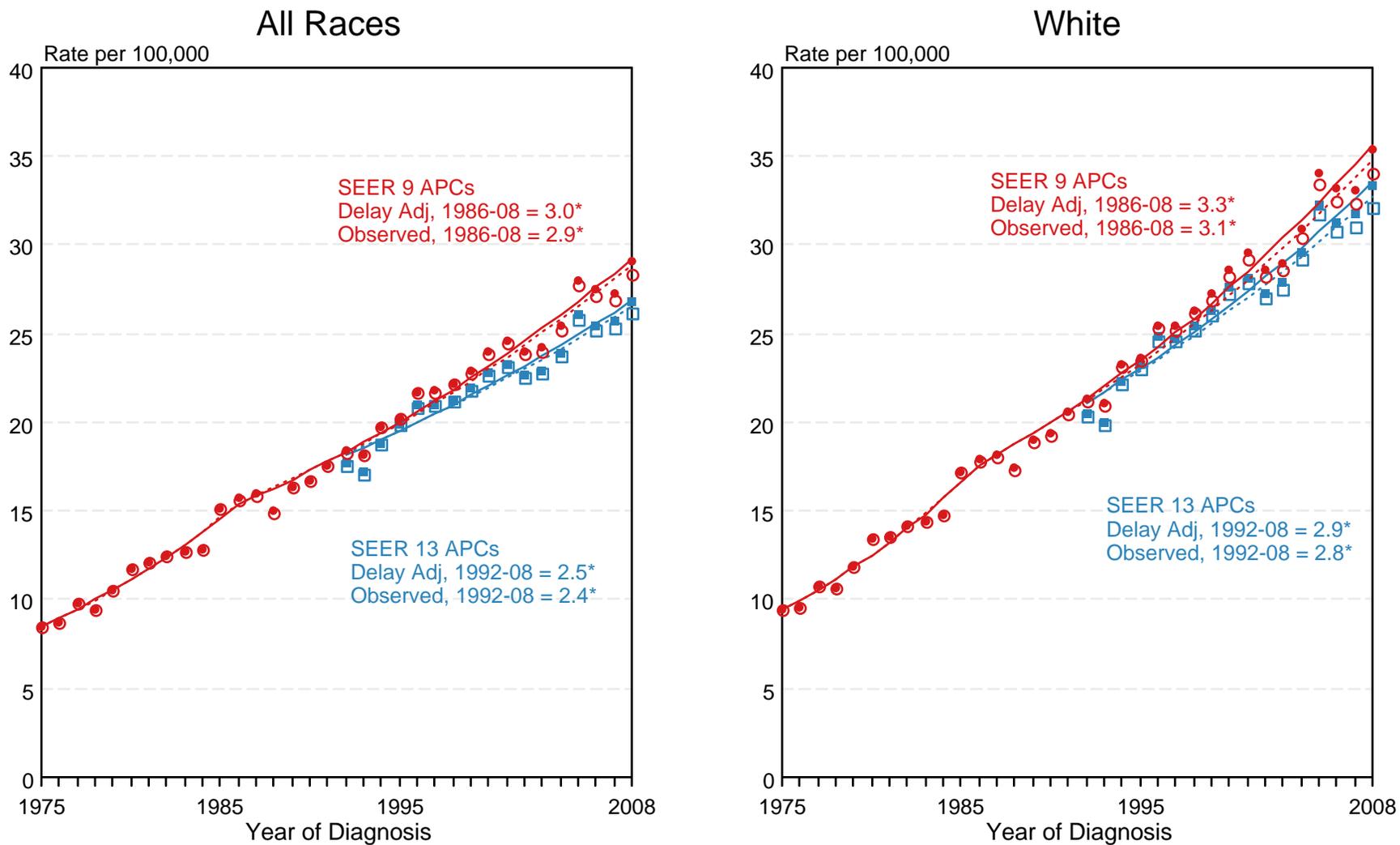US Mortality APC
1988-08 = -0.5*

Year of Diagnosis/Death

Figure 16.1

a   Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
    Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
    Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
Melanoma of the Skin, Male, by Race

Figure 16.4

**All Races**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1986-08 = 3.0*
Observed, 1986-08 = 2.9*

SEER 13 APCs
Delay Adj, 1992-08 = 2.5*
Observed, 1992-08 = 2.4*

Year of Diagnosis

**White**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1986-08 = 3.3*
Observed, 1986-08 = 3.1*

SEER 13 APCs
Delay Adj, 1992-08 = 2.9*
Observed, 1992-08 = 2.8*

Year of Diagnosis

● SEER 9 Delay-Adj. Incidence    ⊙ SEER 9 Observed Incidence    ■ SEER 13 Delay-Adj. Incidence    ⊡ SEER 13 Observed Incidence

[a]  Source: SEER 9 areas and SEER 13 areas.
    Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
    Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Melanoma of the Skin, Female, by Race

Figure 16.5

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1980-08 = 2.4*
Observed, 1981-08 = 2.4*

SEER 13 APCs
Delay Adj, 1992-08 = 2.2*
Observed, 1992-08 = 2.1*

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1992-08 = 3.2*
Observed, 1997-08 = 2.4*

SEER 13 APCs
Delay Adj, 1992-08 = 2.8*
Observed, 1997-08 = 2.2*

Year of Diagnosis

● SEER 9 Delay-Adj. Incidence    ◉ SEER 9 Observed Incidence    ■ SEER 13 Delay-Adj. Incidence    ▫ SEER 13 Observed Incidence
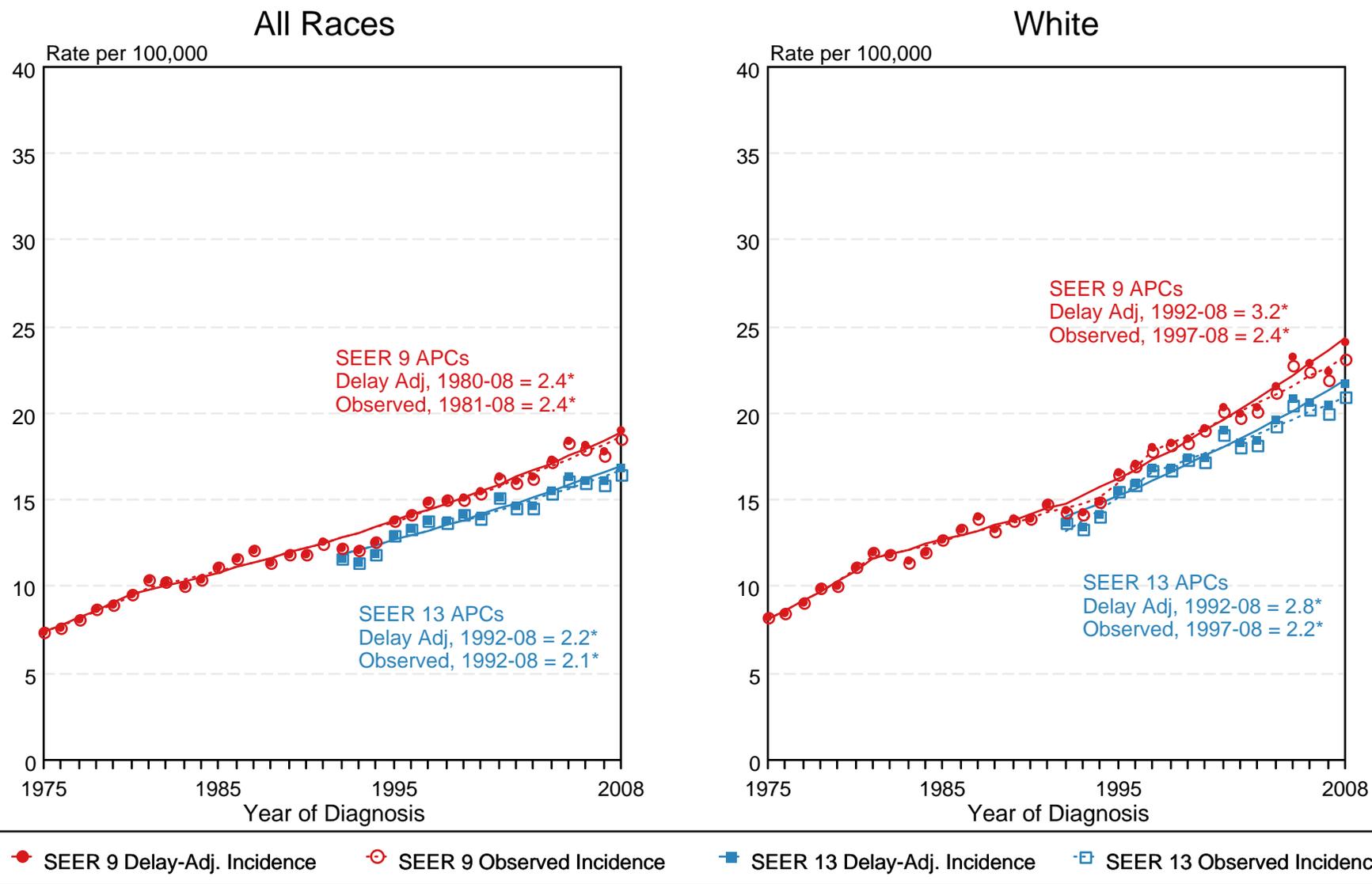
[a] Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
   The APC is the Annual Percent 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 18.1
Myeloma

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-91 | 1.2* | 1991-08 | 0.3* | | | | | | | | | 0.3* | 0.3* |
| White | 1975-08 | 0.7* | | | | | | | | | | | 0.7* | 0.7* |
| Black | 1975-08 | 0.7* | | | | | | | | | | | 0.7* | 0.7* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.3* | | | | | | | | | | | 0.3* | 0.3* |
| White | 1992-08 | 0.3* | | | | | | | | | | | 0.3* | 0.3* |
| Black | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-92 | 1.2* | 1992-08 | 0.0 | | | | | | | | | 0.0 | 0.0 |
| White | 1975-97 | 1.0* | 1997-08 | -0.3 | | | | | | | | | -0.3 | -0.3 |
| Black | 1975-08 | 0.5* | | | | | | | | | | | 0.5* | 0.5* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White NH[ef] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| Black | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Black NH[ef] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| API[e] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| AI/AN[eg] | 1992-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| Hispanic[f] | 1992-05 | 0.5 | 2005-08 | -7.7* | | | | | | | | | -2.3* | -5.7* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-94 | 1.4* | 1994-02 | -0.7* | 2002-08 | -1.9* | | | | | | | -1.5* | -1.9* |
| White | 1975-94 | 1.4* | 1994-02 | -0.6* | 2002-08 | -1.9* | | | | | | | -1.5* | -1.9* |
| Black | 1975-82 | 3.3* | 1982-95 | 1.4* | 1995-08 | -1.6* | | | | | | | -1.6* | -1.6* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-94 | 2.0 | 1994-02 | -0.7* | 2002-08 | -1.9* | | | | | | | -1.5* | -1.9* |
| White | 1992-94 | 2.0 | 1994-02 | -0.5* | 2002-08 | -2.0* | | | | | | | -1.5* | -2.0* |
| White NH[ef] | 1992-02 | -0.2 | 2002-08 | -2.1* | | | | | | | | | -1.4* | -2.1* |
| Black | 1992-98 | 0.0 | 1998-08 | -1.9* | | | | | | | | | -1.9* | -1.9* |
| Black NH[ef] | 1992-96 | 1.6 | 1996-08 | -1.7* | | | | | | | | | -1.7* | -1.7* |
| API[e] | 1992-08 | -0.8 | | | | | | | | | | | -0.8 | -0.8 |
| AI/AN[eg] | 1992-08 | -1.7 | | | | | | | | | | | -1.7 | -1.7 |
| Hispanic[f] | 1992-02 | 1.0 | 2002-08 | -3.9* | | | | | | | | | -2.3* | -3.9* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]   Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]   Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]   Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]   The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]   API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]   Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
      Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
      The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]   Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*     The APC/AAPC is significantly different from zero (p<.05).
-     Joinpoint regression line analysis could not be performed on data series.

Table 18.2
Myeloma

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.7* | | | | | | | | | | | 0.7* | 0.7* |
| White | 1975-08 | 0.8* | | | | | | | | | | | 0.8* | 0.8* |
| Black | 1975-08 | 0.6* | | | | | | | | | | | 0.6* | 0.6* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| White | 1992-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| Black | 1992-08 | 0.7 | | | | | | | | | | | 0.7 | 0.7 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-91 | 1.3* | 1991-08 | 0.1 | | | | | | | | | 0.1 | 0.1 |
| White | 1975-08 | 0.7* | | | | | | | | | | | 0.7* | 0.7* |
| Black | 1975-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| White | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| White NH[ef] | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| Black | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| Black NH[ef] | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| API[e] | 1992-08 | -0.8 | | | | | | | | | | | -0.8 | -0.8 |
| AI/AN[eg] | 1992-08 | -1.9 | | | | | | | | | | | -1.9 | -1.9 |
| Hispanic[f] | 1992-08 | -0.6 | | | | | | | | | | | -0.6 | -0.6 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-94 | 1.5* | 1994-08 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| White | 1975-94 | 1.5* | 1994-08 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| Black | 1975-82 | 3.7* | 1982-94 | 1.2* | 1994-08 | -1.4* | | | | | | | -1.4* | -1.4* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-94 | 3.1 | 1994-08 | -1.1* | | | | | | | | | -1.1* | -1.1* |
| White | 1992-94 | 3.5 | 1994-08 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| White NH[ef] | 1992-94 | 4.2 | 1994-08 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| Black | 1992-08 | -1.2* | | | | | | | | | | | -1.2* | -1.2* |
| Black NH[ef] | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| API[e] | 1992-08 | -0.8 | | | | | | | | | | | -0.8 | -0.8 |
| AI/AN[eg] | 1992-08 | -0.6 | | | | | | | | | | | -0.6 | -0.6 |
| Hispanic[f] | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]  Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]  Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]  Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]  The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]  API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]  Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
     Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
     The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]  Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

Table 18.3
Myeloma

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.6* | | | | | | | | | | | 0.6* | 0.6* |
| White | 1975-08 | 0.5* | | | | | | | | | | | 0.5* | 0.5* |
| Black | 1975-08 | 0.9* | | | | | | | | | | | 0.9* | 0.9* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| White | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| Black | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-94 | 1.0* | 1994-08 | -0.3 | | | | | | | | | -0.3 | -0.3 |
| White | 1975-92 | 1.0* | 1992-08 | -0.4 | | | | | | | | | -0.4 | -0.4 |
| Black | 1975-08 | 0.7* | | | | | | | | | | | 0.7* | 0.7* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| White | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| White NH[e][f] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| Black | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| Black NH[e][f] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| API[e] | 1992-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| AI/AN[e][g] | 1992-08 | 2.4 | | | | | | | | | | | 2.4 | 2.4 |
| Hispanic[f] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-93 | 1.5* | 1993-02 | -0.5* | 2002-08 | -2.9* | | | | | | | -2.1* | -2.9* |
| White | 1975-93 | 1.4* | 1993-02 | -0.5 | 2002-08 | -2.8* | | | | | | | -2.1* | -2.8* |
| Black | 1975-95 | 2.1* | 1995-08 | -1.8* | | | | | | | | | -1.8* | -1.8* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-01 | -0.2 | 2001-08 | -2.6* | | | | | | | | | -2.1* | -2.6* |
| White | 1992-02 | -0.4 | 2002-08 | -2.9* | | | | | | | | | -2.1* | -2.9* |
| White NH[e][f] | 1992-02 | -0.3 | 2002-08 | -3.0* | | | | | | | | | -2.1* | -3.0* |
| Black | 1992-99 | 0.3 | 1999-08 | -2.4* | | | | | | | | | -2.4* | -2.4* |
| Black NH[e][f] | 1992-98 | 1.0 | 1998-08 | -2.3* | | | | | | | | | -2.3* | -2.3* |
| API[e] | 1992-08 | -0.7 | | | | | | | | | | | -0.7 | -0.7 |
| AI/AN[e][g] | 1992-08 | -2.9 | | | | | | | | | | | -2.9 | -2.9 |
| Hispanic[f] | 1992-97 | 5.8 | 1997-08 | -2.2* | | | | | | | | | -2.2* | -2.2* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Myeloma, by Race and Sex

### White Male

Rate per 100,000

- Delay-Adjusted Incidence
- Observed Incidence
- Mortality

SEER Incidence APCs
Delay Adj, 1975-08 = 0.8*
Observed, 1975-08 = 0.7*

US Mortality APC
1994-08 = -0.9*

Year of Diagnosis/Death

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.6*
Observed, 1975-08 = 0.4*

US Mortality APC
1994-08 = -1.4*

Year of Diagnosis/Death

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.5*
Observed, 1992-08 = -0.4

US Mortality APC
2002-08 = -2.8*

Year of Diagnosis/Death

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.9*
Observed, 1975-08 = 0.7*

US Mortality APC
1995-08 = -1.8*
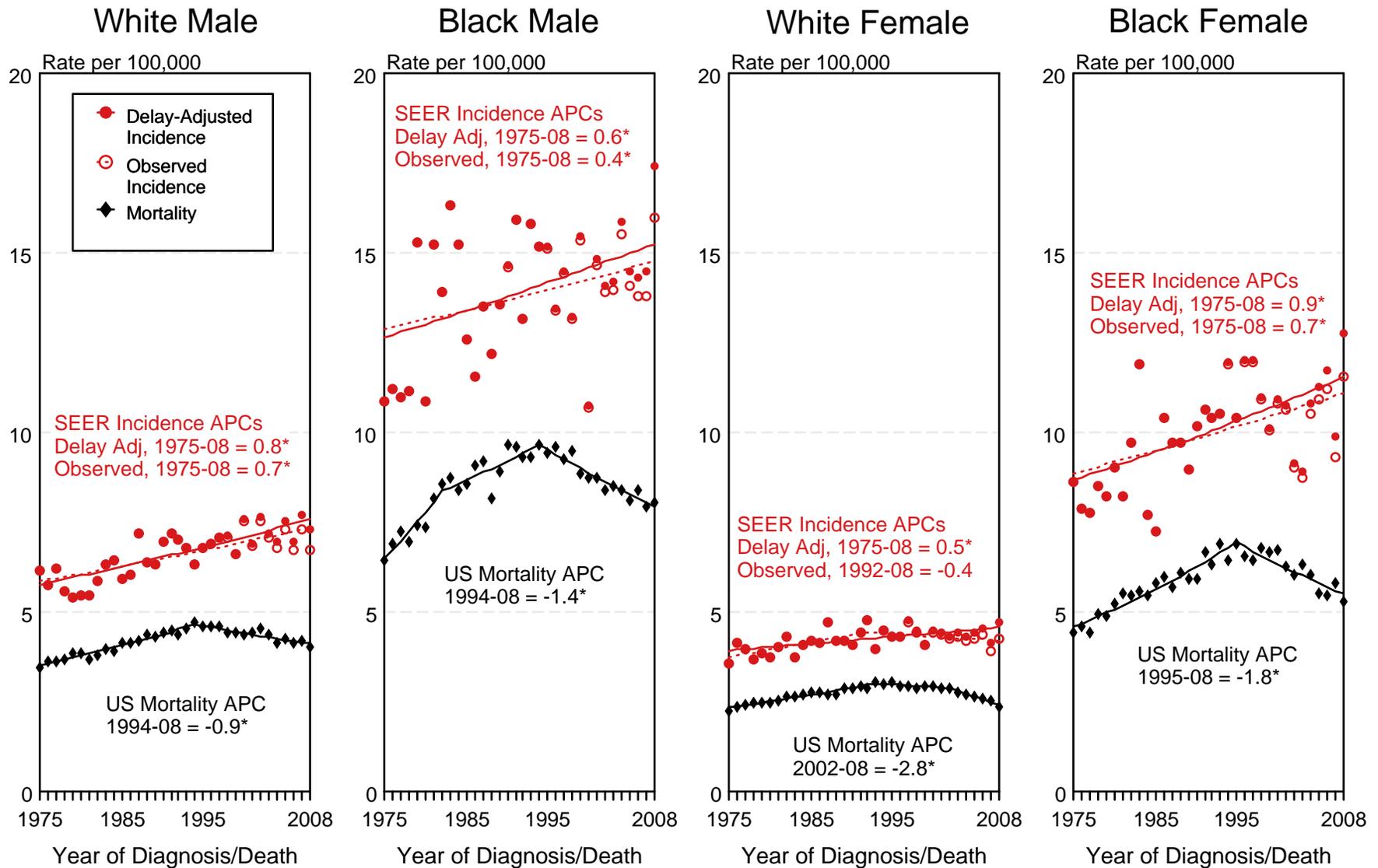
Year of Diagnosis/Death

Figure 18.1

[a]  Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Myeloma, Male, by Race

### All Races
Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.7*
Observed, 1991-08 = 0.1

SEER 13 APCs
Delay Adj, 1992-08 = 0.4*
Observed, 1992-08 = 0.0

Year of Diagnosis

### White
Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.8*
Observed, 1975-08 = 0.7*

SEER 13 APCs
Delay Adj, 1992-08 = 0.4*
Observed, 1992-08 = 0.1

Year of Diagnosis

### Black
Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.6*
Observed, 1975-08 = 0.4*

SEER 13 APCs
Delay Adj, 1992-08 = 0.7
Observed, 1992-08 = 0.3

Year of Diagnosis

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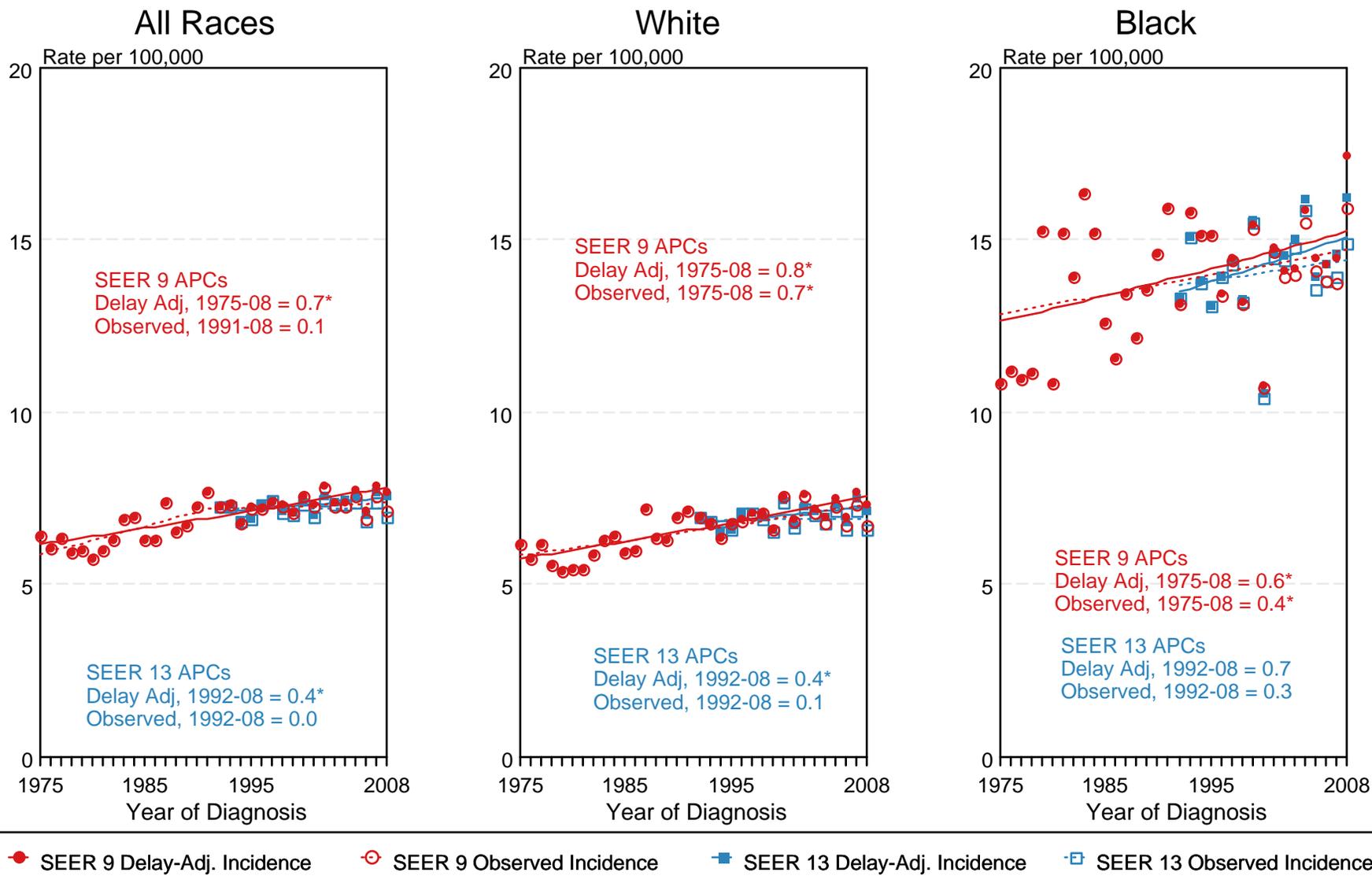- ■ SEER 13 Delay-Adj. Incidence
- ▫ SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Myeloma, Female, by Race

Figure 18.4

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.6*
Observed, 1994-08 = -0.3

SEER 13 APCs
Delay Adj, 1992-08 = 0.2
Observed, 1992-08 = -0.2

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.5*
Observed, 1992-08 = -0.4

SEER 13 APCs
Delay Adj, 1992-08 = 0.0
Observed, 1992-08 = -0.4

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.9*
Observed, 1975-08 = 0.7*

SEER 13 APCs
Delay Adj, 1992-08 = 0.1
Observed, 1992-08 = -0.4

Year of Diagnosis

Legend:
- SEER 9 Delay-Adj. Incidence
- SEER 9 Observed Incidence
- SEER 13 Delay-Adj. Incidence
- SEER 13 Observed Incidence
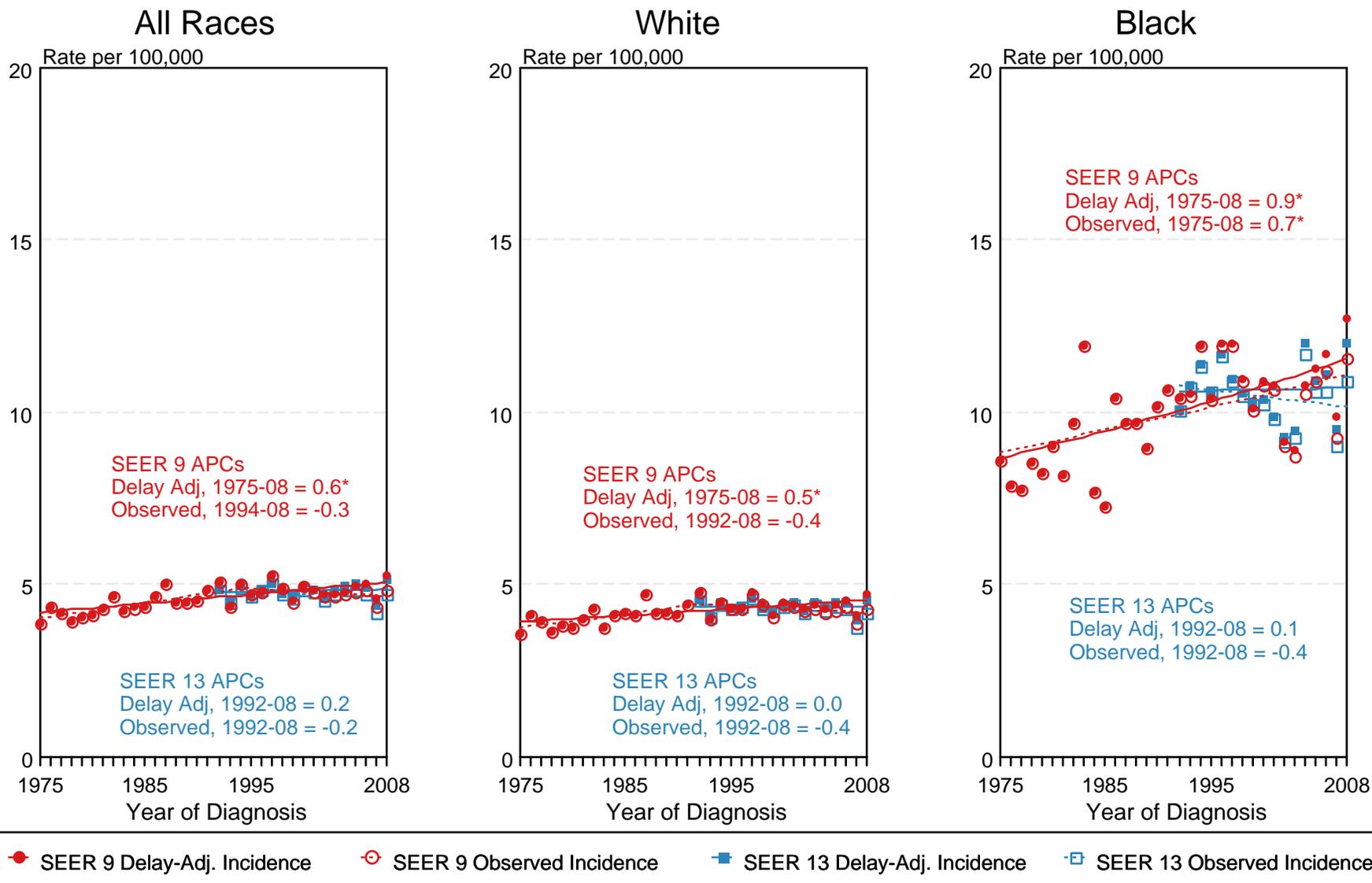
[a]  Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
   The APC is the Annual Percent 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-91 | 3.6* | 1991-08 | 0.6* | | | | | | | | | 0.6* | 0.6* |
| White | 1975-90 | 3.8* | 1990-08 | 0.7* | | | | | | | | | 0.7* | 0.7* |
| Black | 1975-93 | 4.7* | 1993-08 | 0.8* | | | | | | | | | 0.8* | 0.8* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.5* | | | | | | | | | | | 0.5* | 0.5* |
| White | 1992-08 | 0.5* | | | | | | | | | | | 0.5* | 0.5* |
| Black | 1992-97 | 3.8* | 1997-00 | -4.0 | 2000-04 | 4.3 | 2004-08 | -2.2 | | | | | 0.4 | -2.2 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-91 | 3.6* | 1991-08 | 0.5* | | | | | | | | | 0.5* | 0.5* |
| White | 1975-91 | 3.7* | 1991-08 | 0.5* | | | | | | | | | 0.5* | 0.5* |
| Black | 1975-93 | 4.7* | 1993-08 | 0.6 | | | | | | | | | 0.6 | 0.6 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| White | 1992-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| White NH[ef] | 1992-08 | 0.5* | | | | | | | | | | | 0.5* | 0.5* |
| Black | 1992-97 | 3.8* | 1997-00 | -4.1 | 2000-04 | 4.1 | 2004-08 | -2.9* | | | | | 0.0 | -2.9* |
| Black NH[ef] | 1992-97 | 3.7* | 1997-00 | -4.1 | 2000-04 | 4.1 | 2004-08 | -2.7 | | | | | 0.1 | -2.7 |
| API[e] | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| AI/AN[eg] | 1992-08 | 2.4 | | | | | | | | | | | 2.4 | 2.4 |
| Hispanic[f] | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-91 | 2.5* | 1991-97 | 1.6* | 1997-08 | -3.1* | | | | | | | -3.1* | -3.1* |
| White | 1975-91 | 2.5* | 1991-97 | 1.6* | 1997-08 | -3.1* | | | | | | | -3.1* | -3.1* |
| Black | 1975-96 | 2.8* | 1996-08 | -2.7* | | | | | | | | | -2.7* | -2.7* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-97 | 1.6* | 1997-08 | -3.1* | | | | | | | | | -3.1* | -3.1* |
| White | 1992-97 | 1.6* | 1997-08 | -3.1* | | | | | | | | | -3.1* | -3.1* |
| White NH[ef] | 1992-97 | 1.9* | 1997-08 | -3.0* | | | | | | | | | -3.0* | -3.0* |
| Black | 1992-97 | 2.1 | 1997-08 | -2.9* | | | | | | | | | -2.9* | -2.9* |
| Black NH[ef] | 1992-97 | 2.7 | 1997-08 | -2.7* | | | | | | | | | -2.7* | -2.7* |
| API[e] | 1992-08 | -2.1* | | | | | | | | | | | -2.1* | -2.1* |
| AI/AN[eg] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| Hispanic[f] | 1992-97 | 2.6* | 1997-08 | -3.1* | | | | | | | | | -3.1* | -3.1* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 19.2
Non-Hodgkin Lymphoma

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-91 | 4.2* | 1991-08 | 0.4* | | | | | | | | | 0.4* | 0.4* |
| White | 1975-90 | 4.5* | 1990-08 | 0.5* | | | | | | | | | 0.5* | 0.5* |
| Black | 1975-94 | 5.5* | 1994-08 | -0.5 | | | | | | | | | -0.5 | -0.5 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| White | 1992-08 | 0.3* | | | | | | | | | | | 0.3* | 0.3* |
| Black | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-91 | 4.2* | 1991-08 | 0.3* | | | | | | | | | 0.3* | 0.3* |
| White | 1975-90 | 4.5* | 1990-08 | 0.4* | | | | | | | | | 0.4* | 0.4* |
| Black | 1975-94 | 5.5* | 1994-08 | -0.7 | | | | | | | | | -0.7 | -0.7 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| White | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| White NH[ef] | 1992-08 | 0.3* | | | | | | | | | | | 0.3* | 0.3* |
| Black | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| Black NH[ef] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| API[e] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| AI/AN[eg] | 1992-08 | 1.8 | | | | | | | | | | | 1.8 | 1.8 |
| Hispanic[f] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-91 | 2.7* | 1991-97 | 1.6* | 1997-08 | -2.8* | | | | | | | -2.8* | -2.8* |
| White | 1975-96 | 2.5* | 1996-08 | -2.6* | | | | | | | | | -2.6* | -2.6* |
| Black | 1975-96 | 2.8* | 1996-08 | -2.9* | | | | | | | | | -2.9* | -2.9* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-97 | 1.6* | 1997-08 | -2.8* | | | | | | | | | -2.8* | -2.8* |
| White | 1992-97 | 1.6* | 1997-08 | -2.8* | | | | | | | | | -2.8* | -2.8* |
| White NH[ef] | 1992-97 | 2.0* | 1997-08 | -2.6* | | | | | | | | | -2.6* | -2.6* |
| Black | 1992-97 | 2.2 | 1997-08 | -3.1* | | | | | | | | | -3.1* | -3.1* |
| Black NH[ef] | 1992-96 | 4.0 | 1996-08 | -2.7* | | | | | | | | | -2.7* | -2.7* |
| API[e] | 1992-08 | -2.2* | | | | | | | | | | | -2.2* | -2.2* |
| AI/AN[eg] | 1992-08 | -1.3 | | | | | | | | | | | -1.3 | -1.3 |
| Hispanic[f] | 1992-96 | 4.0 | 1996-08 | -3.3* | | | | | | | | | -3.3* | -3.3* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 19.3
Non-Hodgkin Lymphoma

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-90 | 2.8* | 1990-04 | 1.3* | 2004-08 | -0.6 | | | | | | | 0.4 | -0.6 |
| White | 1975-88 | 3.1* | 1988-04 | 1.4* | 2004-08 | -0.8 | | | | | | | 0.4 | -0.8 |
| Black | 1975-08 | 2.6* | | | | | | | | | | | 2.6* | 2.6* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-04 | 1.3* | 2004-08 | -0.9 | | | | | | | | | 0.3 | -0.9 |
| White | 1992-04 | 1.3* | 2004-08 | -0.8 | | | | | | | | | 0.4 | -0.8 |
| Black | 1992-08 | 2.1* | | | | | | | | | | | 2.1* | 2.1* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-90 | 2.8* | 1990-04 | 1.2* | 2004-08 | -1.1 | | | | | | | 0.2 | -1.1 |
| White | 1975-88 | 3.1* | 1988-04 | 1.4* | 2004-08 | -1.5 | | | | | | | 0.1 | -1.5 |
| Black | 1975-08 | 2.5* | | | | | | | | | | | 2.5* | 2.5* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-04 | 1.3* | 2004-08 | -1.3 | | | | | | | | | 0.1 | -1.3 |
| White | 1992-04 | 1.3* | 2004-08 | -1.3 | | | | | | | | | 0.1 | -1.3 |
| White NH[ef] | 1992-04 | 1.4* | 2004-08 | -1.4 | | | | | | | | | 0.1 | -1.4 |
| Black | 1992-08 | 1.9* | | | | | | | | | | | 1.9* | 1.9* |
| Black NH[ef] | 1992-08 | 2.0* | | | | | | | | | | | 2.0* | 2.0* |
| API[e] | 1992-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| AI/AN[eg] | 1992-08 | 3.0 | | | | | | | | | | | 3.0 | 3.0 |
| Hispanic[f] | 1992-08 | 0.7* | | | | | | | | | | | 0.7* | 0.7* |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-94 | 2.2* | 1994-97 | 1.1 | 1997-08 | -3.4* | | | | | | | -3.4* | -3.4* |
| White | 1975-97 | 2.1* | 1997-08 | -3.6* | | | | | | | | | -3.6* | -3.6* |
| Black | 1975-97 | 2.6* | 1997-08 | -2.8* | | | | | | | | | -2.8* | -2.8* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-97 | 1.6* | 1997-08 | -3.4* | | | | | | | | | -3.4* | -3.4* |
| White | 1992-97 | 1.6* | 1997-08 | -3.4* | | | | | | | | | -3.4* | -3.4* |
| White NH[ef] | 1992-94 | 3.9* | 1994-98 | 0.0 | 1998-08 | -3.5* | | | | | | | -3.5* | -3.5* |
| Black | 1992-97 | 2.2 | 1997-08 | -2.7* | | | | | | | | | -2.7* | -2.7* |
| Black NH[ef] | 1992-97 | 3.1 | 1997-08 | -2.6* | | | | | | | | | -2.6* | -2.6* |
| API[e] | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| AI/AN[eg] | 1992-08 | 0.7 | | | | | | | | | | | 0.7 | 0.7 |
| Hispanic[f] | 1992-97 | 3.1 | 1997-08 | -2.7* | | | | | | | | | -2.7* | -2.7* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
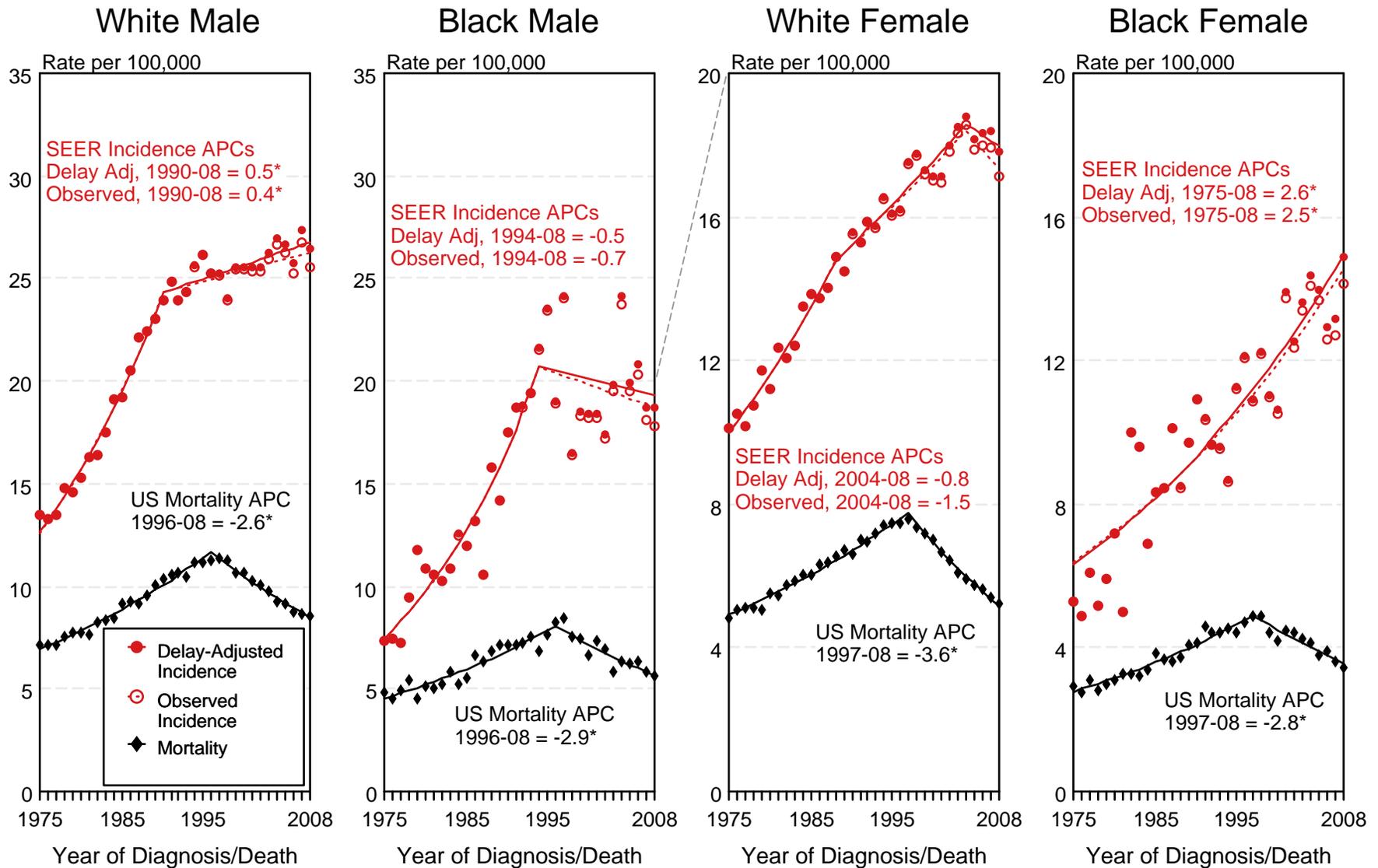Non-Hodgkin Lymphoma, by Race and Sex

Figure 19.1

### White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1990-08 = 0.5*
Observed, 1990-08 = 0.4*

US Mortality APC
1996-08 = -2.6*

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

Year of Diagnosis/Death

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1994-08 = -0.5
Observed, 1994-08 = -0.7

US Mortality APC
1996-08 = -2.9*

Year of Diagnosis/Death

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2004-08 = -0.8
Observed, 2004-08 = -1.5

US Mortality APC
1997-08 = -3.6*

Year of Diagnosis/Death

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 2.6*
Observed, 1975-08 = 2.5*

US Mortality APC
1997-08 = -2.8*

Year of Diagnosis/Death

[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Non-Hodgkin Lymphoma, Male, by Race

Figure 19.5



### All Races
Rate per 100,000

SEER 9 APCs
Delay Adj, 1991-08 = 0.4*
Observed, 1991-08 = 0.3*

SEER 13 APCs
Delay Adj, 1992-08 = 0.2
Observed, 1992-08 = 0.1

Year of Diagnosis

### White
Rate per 100,000

SEER 9 APCs
Delay Adj, 1990-08 = 0.5*
Observed, 1990-08 = 0.4*

SEER 13 APCs
Delay Adj, 1992-08 = 0.3*
Observed, 1992-08 = 0.1

Year of Diagnosis

### Black
Rate per 100,000

SEER 9 APCs
Delay Adj, 1994-08 = -0.5
Observed, 1994-08 = -0.7

SEER 13 APCs
Delay Adj, 1992-08 = -0.2
Observed, 1992-08 = -0.4

Year of Diagnosis

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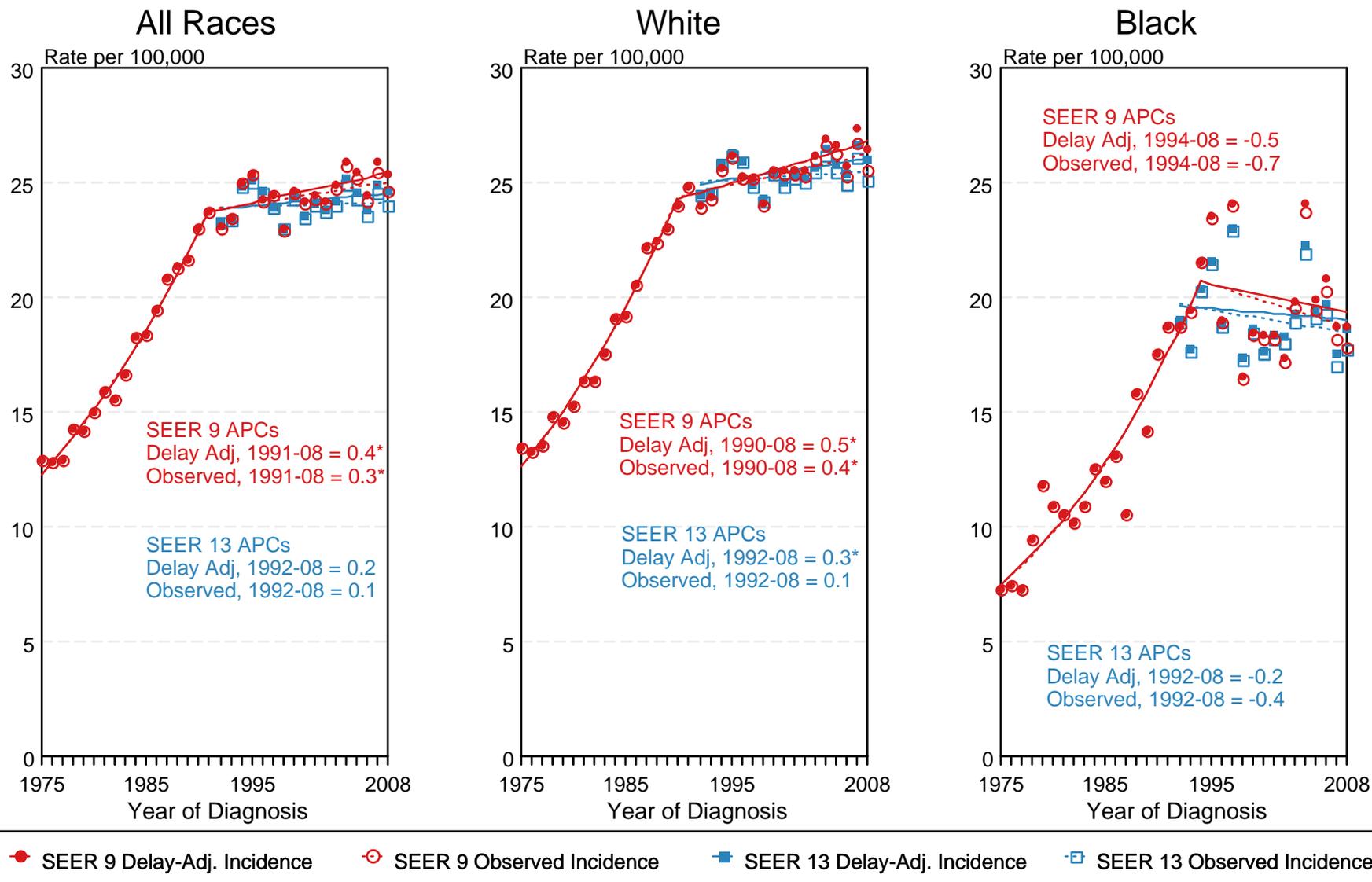- ■ SEER 13 Delay-Adj. Incidence
- ▫ SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
 Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
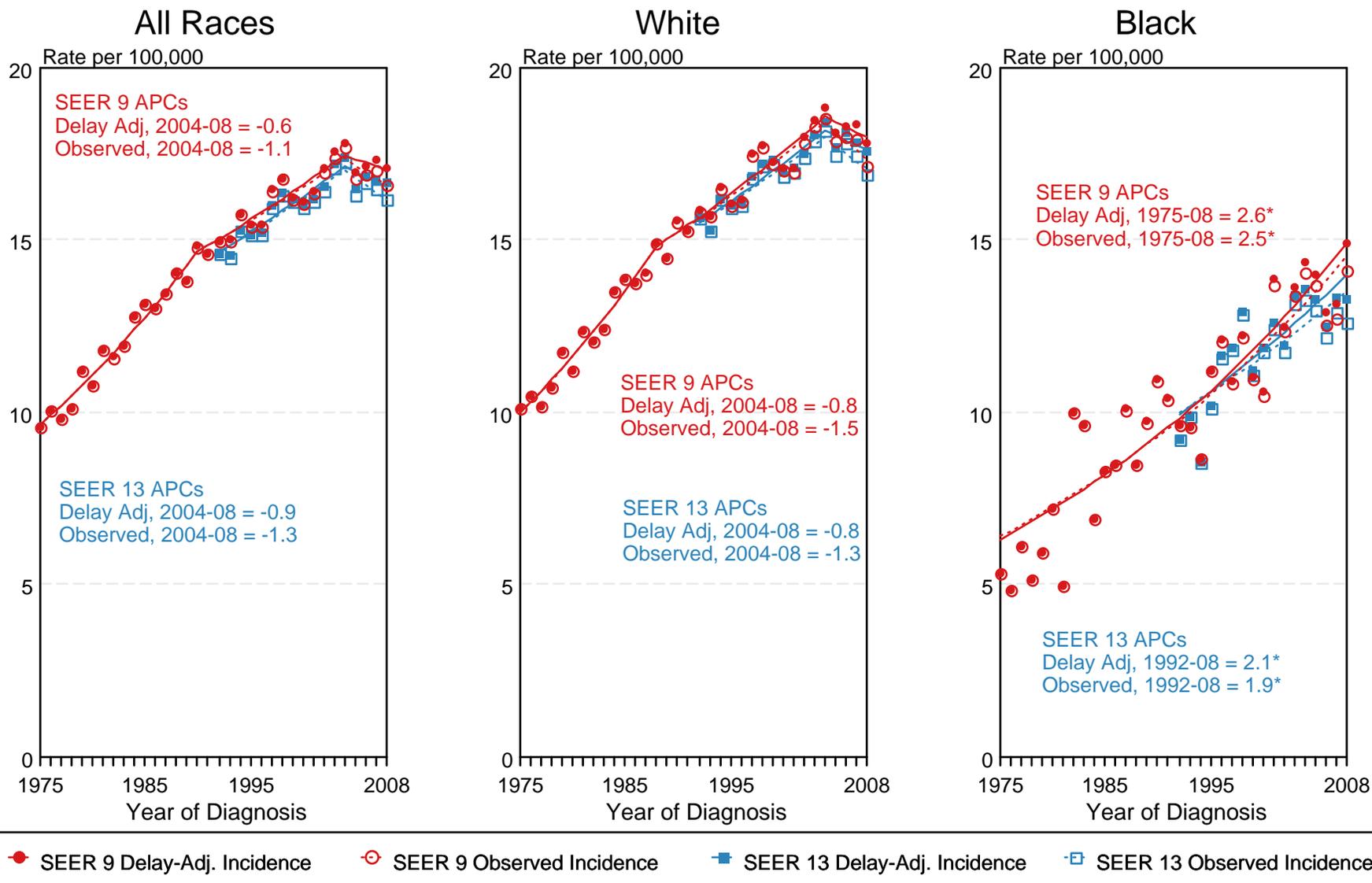Non-Hodgkin Lymphoma, Female, by Race

**All Races**

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-08 = -0.6
Observed, 2004-08 = -1.1

SEER 13 APCs
Delay Adj, 2004-08 = -0.9
Observed, 2004-08 = -1.3

Year of Diagnosis

**White**

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-08 = -0.8
Observed, 2004-08 = -1.5

SEER 13 APCs
Delay Adj, 2004-08 = -0.8
Observed, 2004-08 = -1.3

Year of Diagnosis

**Black**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 2.6*
Observed, 1975-08 = 2.5*

SEER 13 APCs
Delay Adj, 1992-08 = 2.1*
Observed, 1992-08 = 1.9*

Year of Diagnosis

SEER 9 Delay-Adj. Incidence    SEER 9 Observed Incidence    SEER 13 Delay-Adj. Incidence    SEER 13 Observed Incidence

[a]  Source: SEER 9 areas and SEER 13 areas.
    Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
    Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-81 | 0.7 | 1981-03 | -1.1* | 2003-08 | 0.4 | | | | | | | -0.3 | 0.4 |
| White | 1975-03 | -0.9* | 2003-08 | 0.8 | | | | | | | | | 0.1 | 0.8 |
| Black | 1975-84 | 2.5* | 1984-08 | -2.6* | | | | | | | | | -2.6* | -2.6* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-06 | -1.2* | 2006-08 | 3.0 | | | | | | | | | -0.2 | 0.9 |
| White | 1992-06 | -0.9* | 2006-08 | 3.8 | | | | | | | | | 0.1 | 1.4 |
| Black | 1992-08 | -2.6* | | | | | | | | | | | -2.6* | -2.6* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-79 | 1.4 | 1979-08 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| White | 1975-83 | 0.1 | 1983-00 | -1.2* | 2000-08 | 0.1 | | | | | | | 0.0 | 0.1 |
| Black | 1975-84 | 2.5* | 1984-08 | -2.6* | | | | | | | | | -2.6* | -2.6* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| White NH[ef] | 1992-08 | -0.5* | | | | | | | | | | | -0.5* | -0.5* |
| Black | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |
| Black NH[ef] | 1992-08 | -2.7* | | | | | | | | | | | -2.7* | -2.7* |
| API[e] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| AI/AN[eg] | 1992-08 | -3.5* | | | | | | | | | | | -3.5* | -3.5* |
| Hispanic[f] | 1992-06 | -1.9* | 2006-08 | 5.8 | | | | | | | | | -0.3 | 1.9 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-79 | -0.5 | 1979-93 | -1.7* | 1993-00 | -2.7* | 2000-08 | -1.3* | | | | | -1.5* | -1.3* |
| White | 1975-05 | -1.9* | 2005-08 | 0.1 | | | | | | | | | -1.2* | -0.4 |
| Black | 1975-80 | 3.3* | 1980-93 | -1.5* | 1993-08 | -3.9* | | | | | | | -3.9* | -3.9* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-00 | -2.6* | 2000-08 | -1.3* | | | | | | | | | -1.5* | -1.3* |
| White | 1992-00 | -2.3* | 2000-08 | -0.9* | | | | | | | | | -1.1* | -0.9* |
| White NH[ef] | 1992-00 | -2.1* | 2000-08 | -0.6* | | | | | | | | | -0.8* | -0.6* |
| Black | 1992-08 | -3.8* | | | | | | | | | | | -3.8* | -3.8* |
| Black NH[ef] | 1992-08 | -3.5* | | | | | | | | | | | -3.5* | -3.5* |
| API[e] | 1992-08 | -2.4* | | | | | | | | | | | -2.4* | -2.4* |
| AI/AN[eg] | 1992-08 | -2.0* | | | | | | | | | | | -2.0* | -2.0* |
| Hispanic[f] | 1992-08 | -2.9* | | | | | | | | | | | -2.9* | -2.9* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]   Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]   Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]   Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]   The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]   API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]   Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
      Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
      The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]   Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*    The APC/AAPC is significantly different from zero (p<.05).
-    Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-83 | -0.1 | 1983-01 | -1.5* | 2001-08 | 0.1 | | | | | | | -0.3 | 0.1 |
| White | 1975-01 | -1.2* | 2001-08 | 0.5 | | | | | | | | | 0.1 | 0.5 |
| Black | 1975-87 | 1.9* | 1987-08 | -3.2* | | | | | | | | | -3.2* | -3.2* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-06 | -1.4* | 2006-08 | 3.8 | | | | | | | | | -0.2 | 1.2 |
| White | 1992-06 | -1.0* | 2006-08 | 4.3 | | | | | | | | | 0.1 | 1.6 |
| Black | 1992-08 | -3.1* | | | | | | | | | | | -3.1* | -3.1* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-83 | -0.1 | 1983-01 | -1.5* | 2001-08 | -0.1 | | | | | | | -0.4 | -0.1 |
| White | 1975-01 | -1.2* | 2001-08 | 0.2 | | | | | | | | | -0.1 | 0.2 |
| Black | 1975-87 | 1.9* | 1987-08 | -3.2* | | | | | | | | | -3.2* | -3.2* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-06 | -1.4* | 2006-08 | 3.0 | | | | | | | | | -0.4 | 0.8 |
| White | 1992-06 | -1.1* | 2006-08 | 3.3 | | | | | | | | | -0.1 | 1.1 |
| White NH[ef] | 1992-99 | -1.5* | 1999-08 | 0.1 | | | | | | | | | 0.1 | 0.1 |
| Black | 1992-08 | -3.2* | | | | | | | | | | | -3.2* | -3.2* |
| Black NH[ef] | 1992-08 | -3.2* | | | | | | | | | | | -3.2* | -3.2* |
| API[e] | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| AI/AN[eg] | 1992-08 | -5.9* | | | | | | | | | | | -5.9* | -5.9* |
| Hispanic[f] | 1992-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-93 | -1.9* | 1993-00 | -3.0* | 2000-08 | -1.2* | | | | | | | -1.4* | -1.2* |
| White | 1975-00 | -2.2* | 2000-08 | -1.0* | | | | | | | | | -1.1* | -1.0* |
| Black | 1975-80 | 3.7* | 1980-93 | -1.4* | 1993-01 | -4.8* | 2001-04 | 0.7 | 2004-08 | -6.7* | | | -3.9* | -6.7* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-00 | -2.8* | 2000-08 | -1.2* | | | | | | | | | -1.4* | -1.2* |
| White | 1992-00 | -2.6* | 2000-08 | -0.7* | | | | | | | | | -0.9* | -0.7* |
| White NH[ef] | 1992-00 | -2.4* | 2000-08 | -0.4 | | | | | | | | | -0.6* | -0.4 |
| Black | 1992-08 | -3.8* | | | | | | | | | | | -3.8* | -3.8* |
| Black NH[ef] | 1992-08 | -3.5* | | | | | | | | | | | -3.5* | -3.5* |
| API[e] | 1992-08 | -2.7* | | | | | | | | | | | -2.7* | -2.7* |
| AI/AN[eg] | 1992-08 | -2.4 | | | | | | | | | | | -2.4 | -2.4 |
| Hispanic[f] | 1992-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]  Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]  Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]  Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]  The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]  API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]  Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
     Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
     The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]  Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*    The APC/AAPC is significantly different from zero (p<.05).
-    Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-80 | 2.4 | 1980-08 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| White | 1975-81 | 1.9 | 1981-08 | -0.8* | | | | | | | | | -0.8* | -0.8* |
| Black | 1975-08 | -1.4* | | | | | | | | | | | -1.4* | -1.4* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| Black | 1992-08 | -1.5* | | | | | | | | | | | -1.5* | -1.5* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-80 | 2.5* | 1980-08 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| White | 1975-81 | 2.0 | 1981-08 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| Black | 1975-08 | -1.5* | | | | | | | | | | | -1.5* | -1.5* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| White NH[ef] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black | 1992-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |
| Black NH[ef] | 1992-08 | -1.5* | | | | | | | | | | | -1.5* | -1.5* |
| API[e] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| AI/AN[eg] | 1992-08 | 0.7 | | | | | | | | | | | 0.7 | 0.7 |
| Hispanic[f] | 1992-08 | -0.9 | | | | | | | | | | | -0.9 | -0.9 |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-89 | -0.9* | 1989-08 | -2.2* | | | | | | | | | -2.2* | -2.2* |
| White | 1975-89 | -1.0* | 1989-08 | -2.1* | | | | | | | | | -2.1* | -2.1* |
| Black | 1975-91 | -0.3 | 1991-08 | -3.6* | | | | | | | | | -3.6* | -3.6* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.2* | | | | | | | | | | | -2.2* | -2.2* |
| White | 1992-08 | -2.0* | | | | | | | | | | | -2.0* | -2.0* |
| White NH[ef] | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| Black | 1992-08 | -3.5* | | | | | | | | | | | -3.5* | -3.5* |
| Black NH[ef] | 1992-08 | -3.3* | | | | | | | | | | | -3.3* | -3.3* |
| API[e] | 1992-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |
| AI/AN[eg] | 1992-08 | -0.7 | | | | | | | | | | | -0.7 | -0.7 |
| Hispanic[f] | 1992-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]   Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]   Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]   Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]   The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]   API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]   Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
      Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
      The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]   Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*    The APC/AAPC is significantly different from zero (p<.05).
-    Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Cancer of the Oral Cavity and Pharynx, by Race and Sex

Figure 20.1

### White Male

Rate per 100,000

- ● Delay-Adjusted Incidence
- ◉ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 2001-08 = 0.5
Observed, 2001-08 = 0.2

US Mortality APC
2000-08 = -1.0*

### Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1987-08 = -3.2*
Observed, 1987-08 = -3.2*

US Mortality APC
2004-08 = -6.7*

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1981-08 = -0.8*
Observed, 1981-08 = -0.9*

US Mortality APC
1989-08 = -2.1*

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -1.4*
Observed, 1975-08 = -1.5*
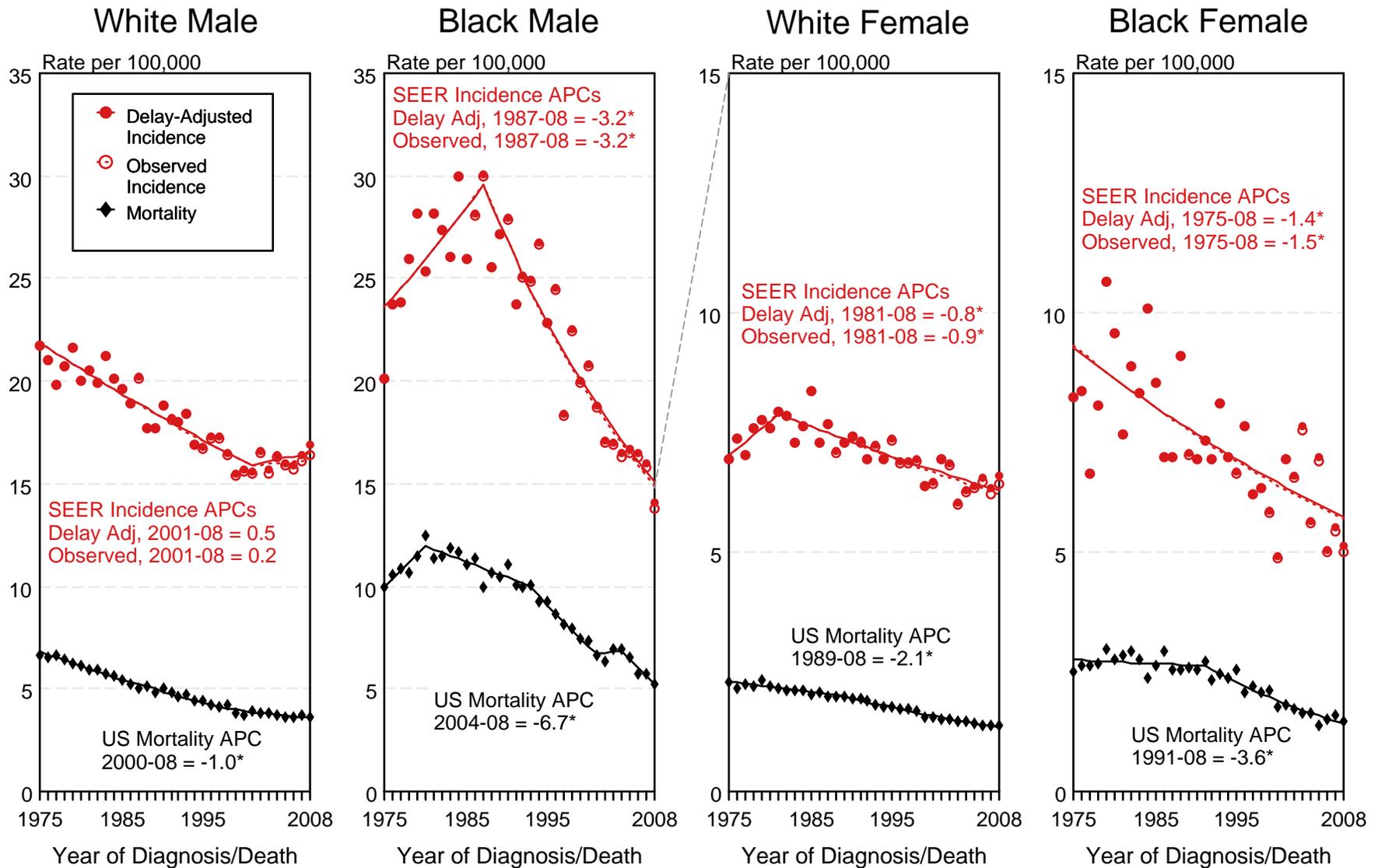
US Mortality APC
1991-08 = -3.6*

Year of Diagnosis/Death

a  Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Oral Cavity and Pharynx, Male, by Race

Figure 20.4

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2001-08 = 0.1
Observed, 2001-08 = -0.1

SEER 13 APCs
Delay Adj, 2006-08 = 3.8
Observed, 2006-08 = 3.0

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2001-08 = 0.5
Observed, 2001-08 = 0.2

SEER 13 APCs
Delay Adj, 2006-08 = 4.3
Observed, 2006-08 = 3.3

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1987-08 = -3.2*
Observed, 1987-08 = -3.2*

SEER 13 APCs
Delay Adj, 1992-08 = -3.1*
Observed, 1992-08 = -3.2*

Year of Diagnosis

- ● SEER 9 Delay-Adj. Incidence
- ⊙ SEER 9 Observed Incidence
- ■ SEER 13 Delay-Adj. Incidence
- ⊡ SEER 13 Observed Incidence
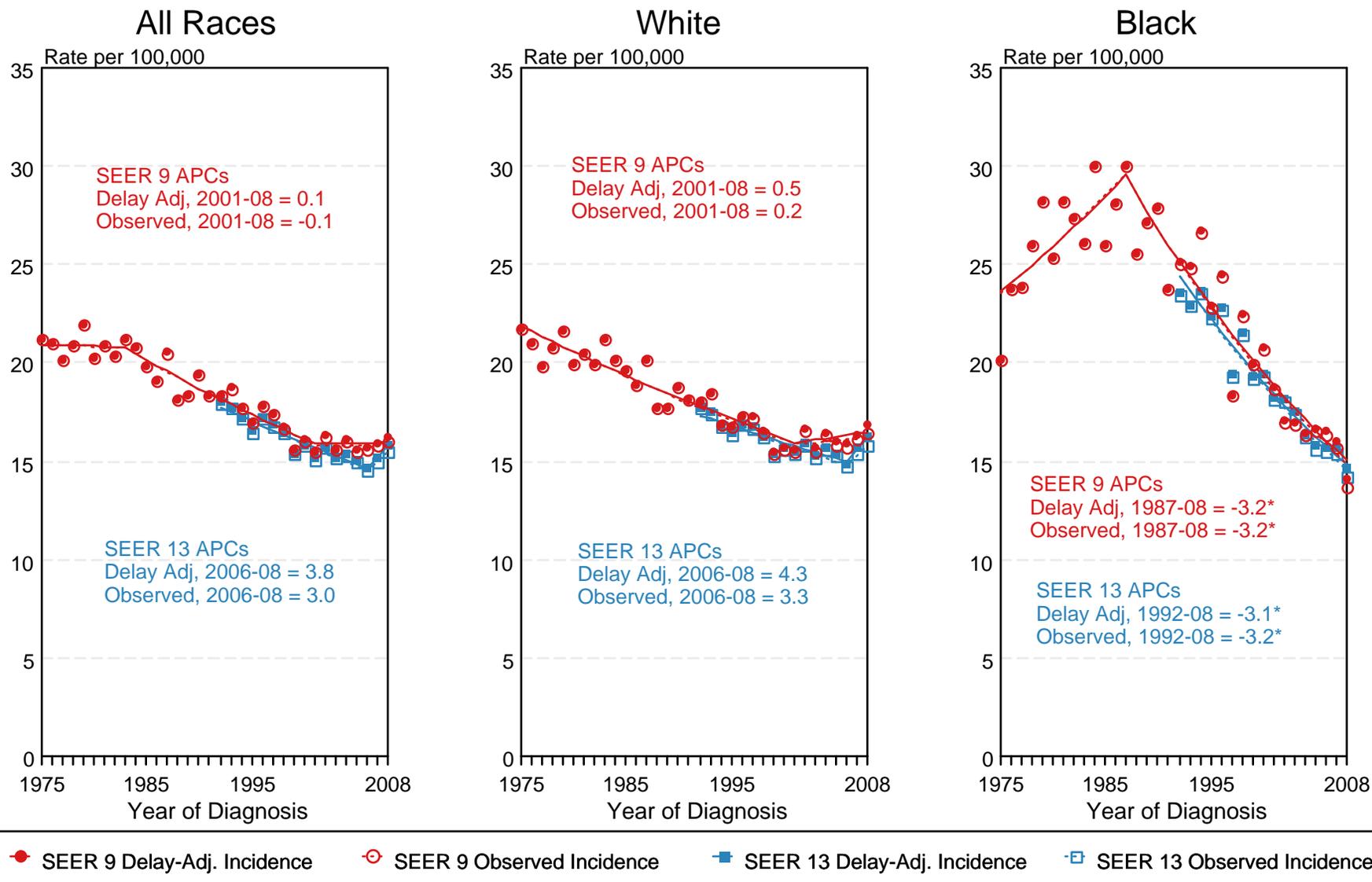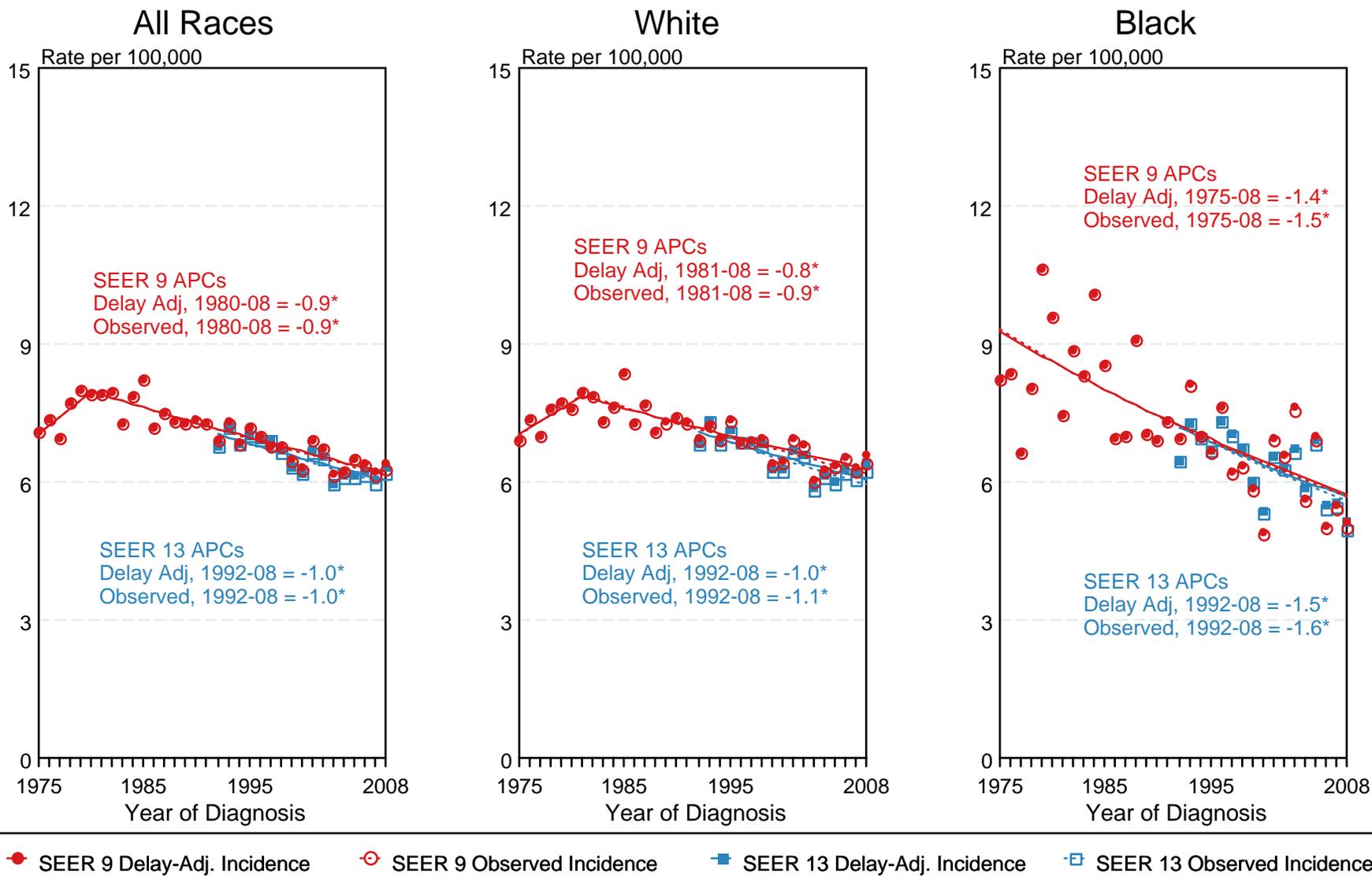
[a] Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
   The APC is the Annual Percent 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 and SEER Delay Adjusted Incidence Rates [a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Oral Cavity and Pharynx, Female, by Race

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1980-08 = -0.9*
Observed, 1980-08 = -0.9*

SEER 13 APCs
Delay Adj, 1992-08 = -1.0*
Observed, 1992-08 = -1.0*

1975    1985    1995    2008
Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1981-08 = -0.8*
Observed, 1981-08 = -0.9*

SEER 13 APCs
Delay Adj, 1992-08 = -1.0*
Observed, 1992-08 = -1.1*

1975    1985    1995    2008
Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = -1.4*
Observed, 1975-08 = -1.5*

SEER 13 APCs
Delay Adj, 1992-08 = -1.5*
Observed, 1992-08 = -1.6*

1975    1985    1995    2008
Year of Diagnosis

Figure 20.5

Legend:
- ● SEER 9 Delay-Adj. Incidence
- ⊙ SEER 9 Observed Incidence
- ■ SEER 13 Delay-Adj. Incidence
- ☐ SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
  Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
  Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
All Ages by Race/Ethnicity

| | JP Trend 1 Years | APC | JP Trend 2 Years | APC | JP Trend 3 Years | APC | JP Trend 4 Years | APC | JP Trend 5 Years | APC | JP Trend 6 Years | APC | AAPC[d] 1999-08 | 2004-08 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-79 | -1.7 | 1979-84 | 1.4 | 1984-08 | -0.9* | | | | | | | -0.9* | -0.9* |
| White | 1975-89 | 0.1 | 1989-08 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| Black | 1975-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-96 | -1.6 | 1996-01 | 0.2 | 2001-04 | -2.6 | 2004-08 | -0.3 | | | | | -1.0 | -0.3 |
| White | 1992-97 | -1.1* | 1997-01 | 0.6 | 2001-04 | -3.3 | 2004-08 | 0.0 | | | | | -1.0 | 0.0 |
| Black | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-85 | 0.2 | 1985-01 | -0.7* | 2001-08 | -1.8* | | | | | | | -1.6* | -1.8* |
| White | 1975-85 | 0.3 | 1985-01 | -0.7* | 2001-08 | -2.0* | | | | | | | -1.7* | -2.0* |
| Black | 1975-08 | -0.5* | | | | | | | | | | | -0.5* | -0.5* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-96 | -1.6 | 1996-01 | 0.1 | 2001-04 | -2.7 | 2004-08 | -0.8 | | | | | -1.2 | -0.8 |
| White | 1992-97 | -1.1* | 1997-01 | 0.5 | 2001-04 | -3.3 | 2004-08 | -0.7 | | | | | -1.3 | -0.7 |
| White NH[e][f] | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| Black | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| Black NH[e][f] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| API[e] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| AI/AN[e][g] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| Hispanic[f] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-82 | -1.2* | 1982-92 | 0.3 | 1992-98 | -1.2* | 1998-02 | 1.0 | 2002-08 | -1.9* | | | -1.0* | -1.9* |
| White | 1975-81 | -1.4* | 1981-94 | 0.2 | 1994-98 | -1.7 | 1998-02 | 1.2 | 2002-08 | -1.9* | | | -0.9* | -1.9* |
| Black | 1975-04 | 0.0 | 2004-08 | -3.8* | | | | | | | | | -1.7* | -3.8* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-98 | -1.2* | 1998-02 | 1.0 | 2002-08 | -1.9* | | | | | | | -1.0* | -1.9* |
| White | 1992-98 | -1.1* | 1998-02 | 1.0 | 2002-08 | -1.9* | | | | | | | -0.9* | -1.9* |
| White NH[e][f] | 1992-06 | -0.3 | 2006-08 | -4.4 | | | | | | | | | -1.2* | -2.4 |
| Black | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black NH[e][f] | 1992-08 | -0.7* | | | | | | | | | | | -0.7* | -0.7* |
| API[e] | 1992-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| AI/AN[e][g] | 1992-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| Hispanic[f] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 21.2
Cancer of the Ovary (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Ages <65 by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| White | 1975-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| Black | 1975-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| White | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| White | 1975-08 | -1.2* | | | | | | | | | | | -1.2* | -1.2* |
| Black | 1975-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| White NH[ef] | 1992-08 | -1.2* | | | | | | | | | | | -1.2* | -1.2* |
| Black | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| Black NH[ef] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| API[e] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| AI/AN[eg] | 1992-08 | -2.4 | | | | | | | | | | | -2.4 | -2.4 |
| Hispanic[f] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-82 | -2.9* | 1982-94 | -1.3* | 1994-98 | -2.6* | 1998-02 | 0.7 | 2002-06 | -2.1* | 2006-08 | -5.1* | -1.9* | -3.6* |
| White | 1975-82 | -2.9* | 1982-94 | -1.2* | 1994-98 | -2.7* | 1998-02 | 0.6 | 2002-06 | -2.1 | 2006-08 | -5.4* | -2.0* | -3.8* |
| Black | 1975-96 | -1.9* | 1996-04 | 0.5 | 2004-08 | -4.3* | | | | | | | -1.7 | -4.3* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-98 | -2.3* | 1998-02 | 0.8 | 2002-08 | -2.9* | | | | | | | -1.7* | -2.9* |
| White | 1992-06 | -1.2* | 2006-08 | -6.0 | | | | | | | | | -2.2* | -3.6* |
| White NH[ef] | 1992-06 | -1.0* | 2006-08 | -6.5 | | | | | | | | | -2.2* | -3.8* |
| Black | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black NH[ef] | 1992-04 | 0.1 | 2004-08 | -4.0 | | | | | | | | | -1.7* | -4.0 |
| API[e] | 1992-08 | -1.0 | | | | | | | | | | | -1.0 | -1.0 |
| AI/AN[eg] | 1992-08 | -1.0 | | | | | | | | | | | -1.0 | -1.0 |
| Hispanic[f] | 1992-08 | -0.6* | | | | | | | | | | | -0.6* | -0.6* |

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
\* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Table 21.3
Cancer of the Ovary (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Ages 65+ by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-90 | 1.4* | 1990-08 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| White | 1975-90 | 1.5* | 1990-08 | -0.8* | | | | | | | | | -0.8* | -0.8* |
| Black | 1975-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| White | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| Black | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-90 | 1.4* | 1990-08 | -1.1* | | | | | | | | | -1.1* | -1.1* |
| White | 1975-90 | 1.5* | 1990-08 | -1.0* | | | | | | | | | -1.0* | -1.0* |
| Black | 1975-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| White | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White NH[ef] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| Black NH[ef] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| API[e] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| AI/AN[eg] | 1992-08 | 1.8 | | | | | | | | | | | 1.8 | 1.8 |
| Hispanic[f] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-84 | 0.6* | 1984-91 | 1.6* | 1991-04 | 0.0 | 2004-08 | -1.7* | | | | | -0.8* | -1.7* |
| White | 1975-84 | 0.6* | 1984-91 | 1.6* | 1991-06 | 0.0 | 2006-08 | -3.2 | | | | | -0.7 | -1.6 |
| Black | 1975-92 | 2.3* | 1992-08 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-04 | 0.0 | 2004-08 | -1.7* | | | | | | | | | -0.8* | -1.7* |
| White | 1992-04 | 0.1 | 2004-08 | -1.6 | | | | | | | | | -0.6 | -1.6 |
| White NH[ef] | 1992-04 | 0.3 | 2004-08 | -1.6 | | | | | | | | | -0.6 | -1.6 |
| Black | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black NH[ef] | 1992-08 | -0.7* | | | | | | | | | | | -0.7* | -0.7* |
| API[e] | 1992-08 | 1.5* | | | | | | | | | | | 1.5* | 1.5* |
| AI/AN[eg] | 1992-08 | 1.2 | | | | | | | | | | | 1.2 | 1.2 |
| Hispanic[f] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

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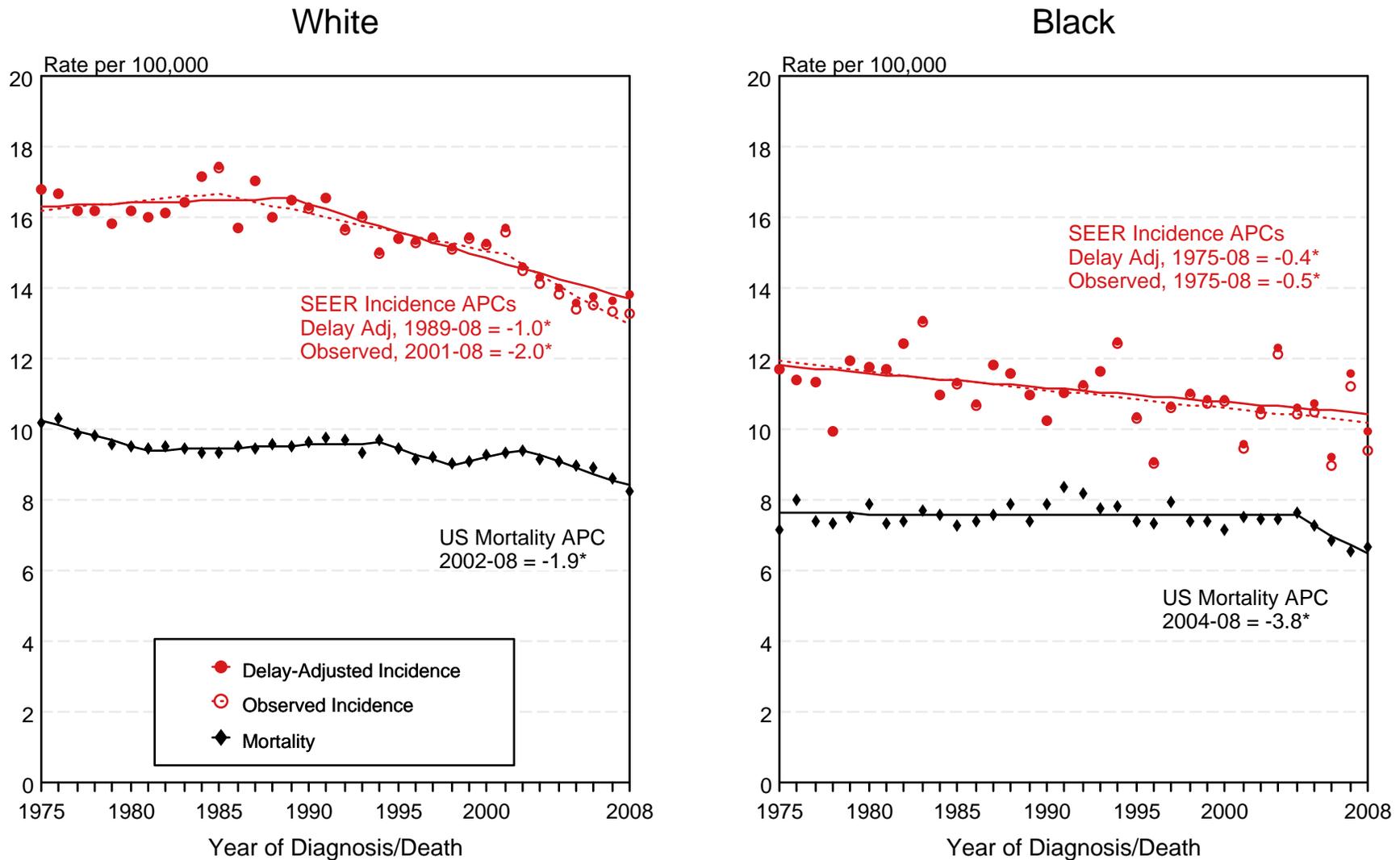Cancer of the Ovary, by Race

Figure 21.1

**White**

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1989-08 = -1.0*
Observed, 2001-08 = -2.0*

US Mortality APC
2002-08 = -1.9*

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

Year of Diagnosis/Death

**Black**

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -0.4*
Observed, 1975-08 = -0.5*

US Mortality APC
2004-08 = -3.8*

Year of Diagnosis/Death

a   Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
    Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
    Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
    Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[a]
## Cancer of the Ovary, by Age and Race

### White Ages <65

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -1.1*
Observed, 1975-08 = -1.2*

US Mortality APC
2006-08 = -5.4*

Year of Diagnosis/Death

### Black Ages <65

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -0.9*
Observed, 1975-08 = -1.0*

US Mortality APC
2004-08 = -4.3*

Year of Diagnosis/Death

### White Ages 65+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1990-08 = -0.8*
Observed, 1990-08 = -1.0*

US Mortality APC
2006-08 = -3.2

● Delay-Adjusted Incidence
◉ Observed Incidence
◆ Mortality

Year of Diagnosis/Death

### Black Ages 65+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.2
Observed, 1975-08 = 0.1

US Mortality APC
1992-08 = -0.9*
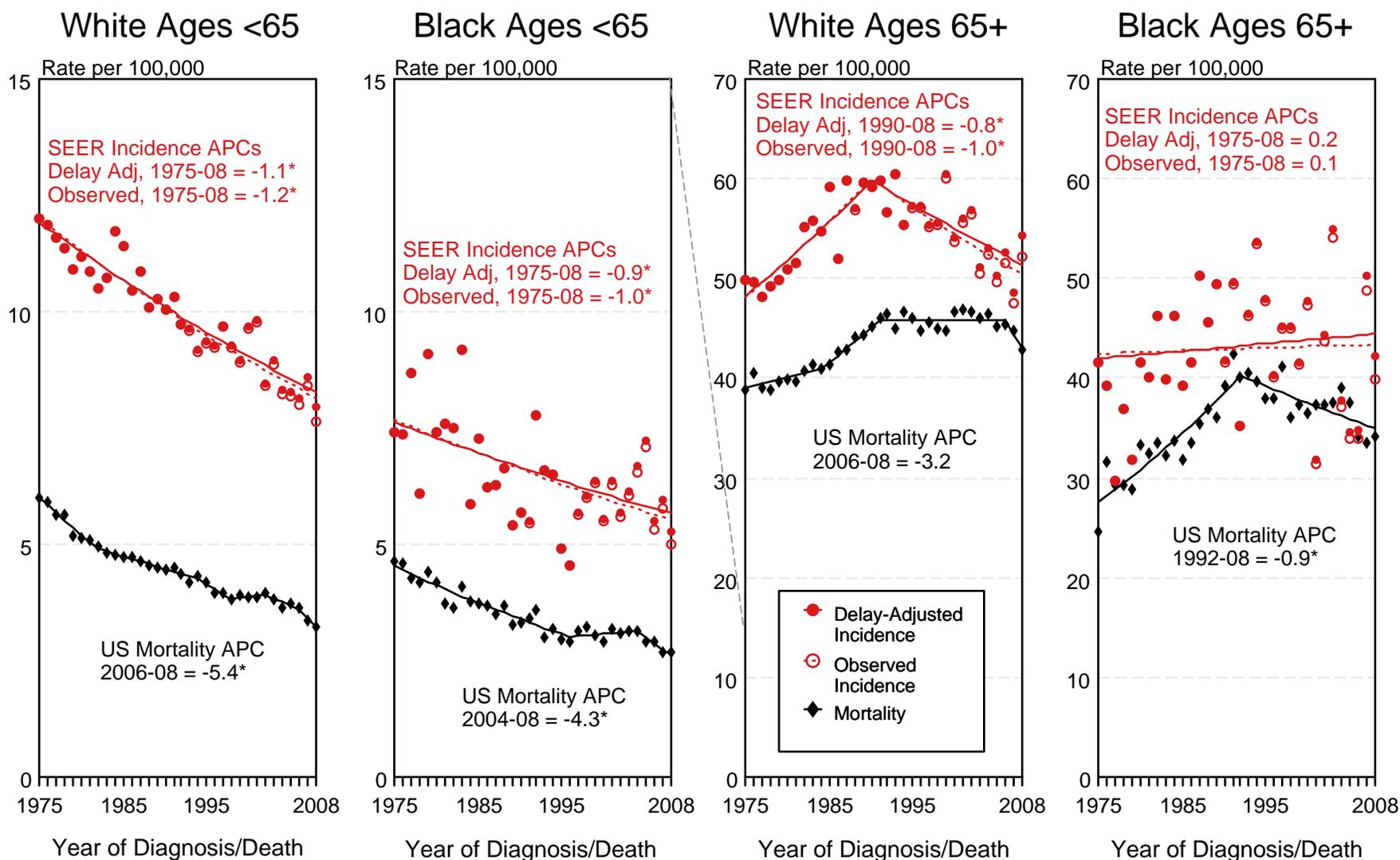
Year of Diagnosis/Death

Figure 21.2

[a]  Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
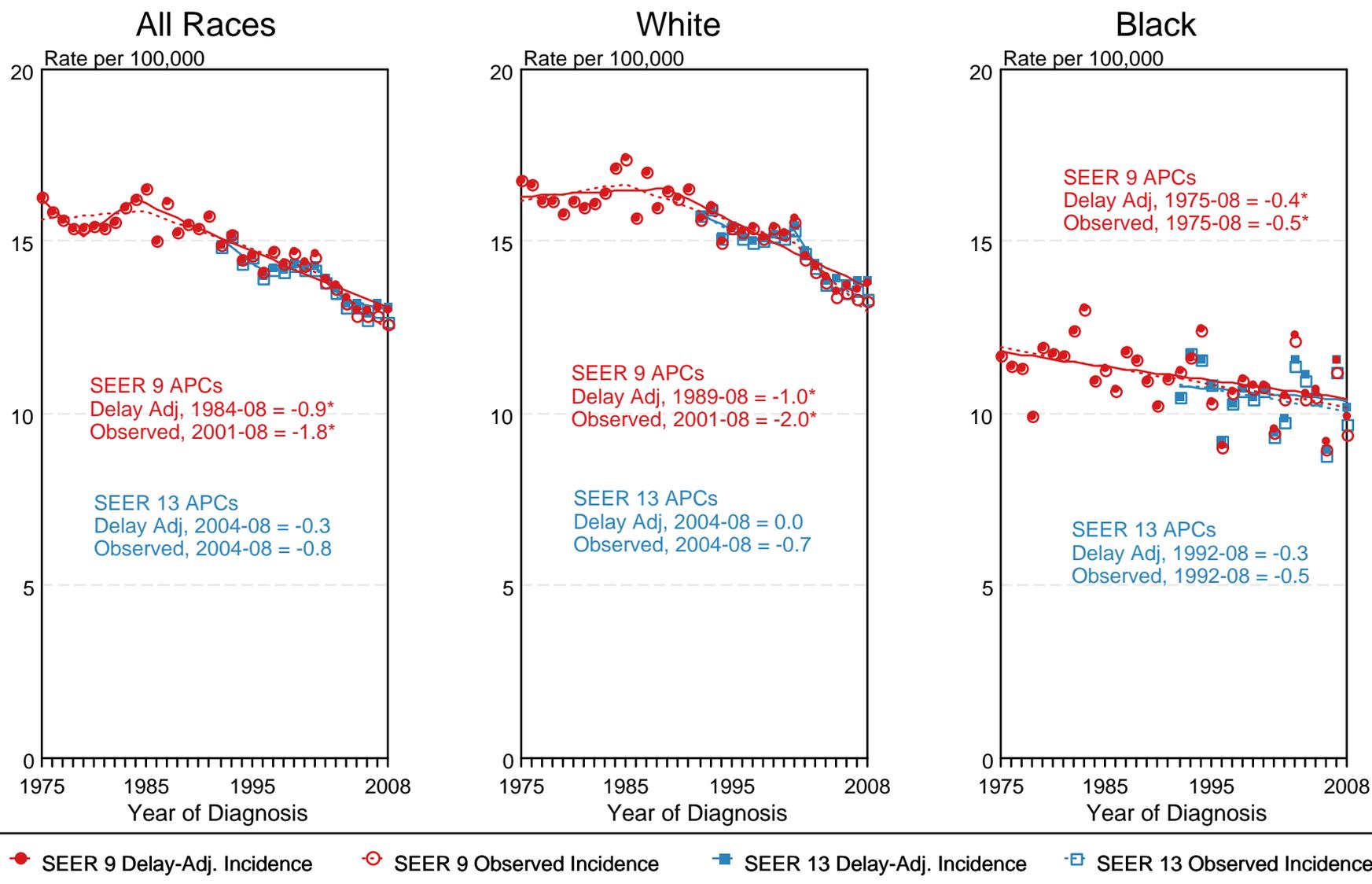## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Ovary, by Race

Figure 21.4

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1984-08 = -0.9*
Observed, 2001-08 = -1.8*

SEER 13 APCs
Delay Adj, 2004-08 = -0.3
Observed, 2004-08 = -0.8

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-08 = -1.0*
Observed, 2001-08 = -2.0*

SEER 13 APCs
Delay Adj, 2004-08 = 0.0
Observed, 2004-08 = -0.7

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = -0.4*
Observed, 1975-08 = -0.5*

SEER 13 APCs
Delay Adj, 1992-08 = -0.3
Observed, 1992-08 = -0.5

Year of Diagnosis

Legend:
- SEER 9 Delay-Adj. Incidence
- SEER 9 Observed Incidence
- SEER 13 Delay-Adj. Incidence
- SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 22.1
Cancer of the Pancreas (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-78 | -2.2 | 1978-84 | 1.3* | 1984-89 | -1.5 | 1989-01 | 0.0 | 2001-08 | 1.7* | | | 1.3* | 1.7* |
| White | 1975-79 | -1.9 | 1979-84 | 1.7 | 1984-87 | -2.5 | 1987-99 | -0.1 | 1999-08 | 1.6* | | | 1.6* | 1.6* |
| Black | 1975-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-01 | 0.0 | 2001-08 | 1.5* | | | | | | | | | 1.2* | 1.5* |
| White | 1992-00 | 0.1 | 2000-08 | 1.4* | | | | | | | | | 1.2* | 1.4* |
| Black | 1992-01 | -1.7* | 2001-08 | 1.5 | | | | | | | | | 0.8 | 1.5 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-78 | -2.2 | 1978-84 | 1.3* | 1984-89 | -1.4 | 1989-00 | 0.0 | 2000-08 | 1.3* | | | 1.1* | 1.3* |
| White | 1975-78 | -2.5 | 1978-84 | 1.0 | 1984-95 | -0.8* | 1995-08 | 1.0* | | | | | 1.0* | 1.0* |
| Black | 1975-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-00 | -0.1 | 2000-08 | 1.1* | | | | | | | | | 0.9* | 1.1* |
| White | 1992-08 | 0.6* | | | | | | | | | | | 0.6* | 0.6* |
| White NH[e][f] | 1992-08 | 0.7* | | | | | | | | | | | 0.7* | 0.7* |
| Black | 1992-01 | -1.6* | 2001-08 | 1.1 | | | | | | | | | 0.5 | 1.1 |
| Black NH[e][f] | 1992-01 | -1.6* | 2001-08 | 1.3 | | | | | | | | | 0.6 | 1.3 |
| API[e] | 1992-08 | 0.5* | | | | | | | | | | | 0.5* | 0.5* |
| AI/AN[e][g] | 1992-08 | 3.1* | | | | | | | | | | | 3.1* | 3.1* |
| Hispanic[f] | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-02 | -0.1* | 2002-08 | 0.7* | | | | | | | | | 0.4* | 0.7* |
| White | 1975-88 | -0.3* | 1988-91 | 0.5 | 1991-97 | -0.4 | 1997-08 | 0.5* | | | | | 0.5* | 0.5* |
| Black | 1975-89 | 1.2* | 1989-08 | -0.6* | | | | | | | | | -0.6* | -0.6* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-97 | -0.5* | 1997-08 | 0.4* | | | | | | | | | 0.4* | 0.4* |
| White | 1992-97 | -0.4 | 1997-08 | 0.5* | | | | | | | | | 0.5* | 0.5* |
| White NH[e][f] | 1992-97 | -0.4* | 1997-00 | 1.0 | 2000-03 | 0.1 | 2003-08 | 1.0* | | | | | 0.7* | 1.0* |
| Black | 1992-08 | -0.6* | | | | | | | | | | | -0.6* | -0.6* |
| Black NH[e][f] | 1992-08 | -0.6* | | | | | | | | | | | -0.6* | -0.6* |
| API[e] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| AI/AN[e][g] | 1992-08 | 2.2* | | | | | | | | | | | 2.2* | 2.2* |
| Hispanic[f] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 22.2
Cancer of the Pancreas (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-93 | -0.9* | 1993-03 | 0.3 | 2003-08 | 2.2* | | | | | | | 1.4* | 2.2* |
| White | 1975-95 | -1.0* | 1995-08 | 1.2* | | | | | | | | | 1.2* | 1.2* |
| Black | 1975-08 | -0.5* | | | | | | | | | | | -0.5* | -0.5* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-02 | 0.0 | 2002-08 | 1.8* | | | | | | | | | 1.2* | 1.8* |
| White | 1992-08 | 0.8* | | | | | | | | | | | 0.8* | 0.8* |
| Black | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-81 | -1.8* | 1981-85 | 1.2 | 1985-90 | -2.2 | 1990-02 | 0.1 | 2002-08 | 1.6* | | | 1.1* | 1.6* |
| White | 1975-95 | -0.9* | 1995-08 | 1.1* | | | | | | | | | 1.1* | 1.1* |
| Black | 1975-08 | -0.6* | | | | | | | | | | | -0.6* | -0.6* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-02 | 0.0 | 2002-08 | 1.4* | | | | | | | | | 0.9* | 1.4* |
| White | 1992-08 | 0.7* | | | | | | | | | | | 0.7* | 0.7* |
| White NH[ef] | 1992-08 | 0.8* | | | | | | | | | | | 0.8* | 0.8* |
| Black | 1992-08 | -0.6 | | | | | | | | | | | -0.6 | -0.6 |
| Black NH[ef] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| API[e] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| AI/AN[eg] | 1992-08 | 3.4* | | | | | | | | | | | 3.4* | 3.4* |
| Hispanic[f] | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-86 | -0.8* | 1986-01 | -0.3* | 2001-08 | 0.6* | | | | | | | 0.4* | 0.6* |
| White | 1975-86 | -1.0* | 1986-00 | -0.2* | 2000-08 | 0.6* | | | | | | | 0.5* | 0.6* |
| Black | 1975-90 | 0.5* | 1990-08 | -0.9* | | | | | | | | | -0.9* | -0.9* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-96 | -1.0* | 1996-08 | 0.3* | | | | | | | | | 0.3* | 0.3* |
| White | 1992-96 | -0.8 | 1996-08 | 0.4* | | | | | | | | | 0.4* | 0.4* |
| White NH[ef] | 1992-96 | -1.0 | 1996-08 | 0.6* | | | | | | | | | 0.6* | 0.6* |
| Black | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black NH[ef] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| API[e] | 1992-01 | -2.0* | 2001-08 | 1.1 | | | | | | | | | 0.4 | 1.1 |
| AI/AN[eg] | 1992-08 | 3.3* | | | | | | | | | | | 3.3* | 3.3* |
| Hispanic[f] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 22.3
Cancer of the Pancreas (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-84 | 1.3* | 1984-00 | -0.3 | 2000-08 | 1.7* | | | | | | | 1.4* | 1.7* |
| White | 1975-84 | 1.2* | 1984-99 | -0.4* | 1999-08 | 1.6* | | | | | | | 1.6* | 1.6* |
| Black | 1975-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-00 | -0.1 | 2000-08 | 1.4* | | | | | | | | | 1.2* | 1.4* |
| White | 1992-00 | 0.0 | 2000-08 | 1.4* | | | | | | | | | 1.3* | 1.4* |
| Black | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-84 | 1.3* | 1984-99 | -0.4* | 1999-08 | 1.2* | | | | | | | 1.2* | 1.2* |
| White | 1975-84 | 1.2* | 1984-99 | -0.4 | 1999-08 | 1.3* | | | | | | | 1.3* | 1.3* |
| Black | 1975-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.5* | | | | | | | | | | | 0.5* | 0.5* |
| White | 1992-01 | -0.1 | 2001-05 | 2.2 | 2005-08 | -0.8 | | | | | | | 0.7 | 0.0 |
| White NH[ef] | 1992-08 | 0.6* | | | | | | | | | | | 0.6* | 0.6* |
| Black | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| Black NH[ef] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| API[e] | 1992-08 | 1.1* | | | | | | | | | | | 1.1* | 1.1* |
| AI/AN[eg] | 1992-08 | 2.7 | | | | | | | | | | | 2.7 | 2.7 |
| Hispanic[f] | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-84 | 0.8* | 1984-03 | 0.1 | 2003-08 | 0.6* | | | | | | | 0.4* | 0.6* |
| White | 1975-84 | 0.6* | 1984-02 | 0.1 | 2002-08 | 0.7* | | | | | | | 0.5* | 0.7* |
| Black | 1975-86 | 2.4* | 1986-08 | -0.2* | | | | | | | | | -0.2* | -0.2* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-97 | -0.5 | 1997-08 | 0.4* | | | | | | | | | 0.4* | 0.4* |
| White | 1992-97 | -0.4 | 1997-08 | 0.5* | | | | | | | | | 0.5* | 0.5* |
| White NH[ef] | 1992-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| Black | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| Black NH[ef] | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| API[e] | 1992-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| AI/AN[eg] | 1992-08 | 1.6 | | | | | | | | | | | 1.6 | 1.6 |
| Hispanic[f] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a] Cancer of the Pancreas, by Race and Sex
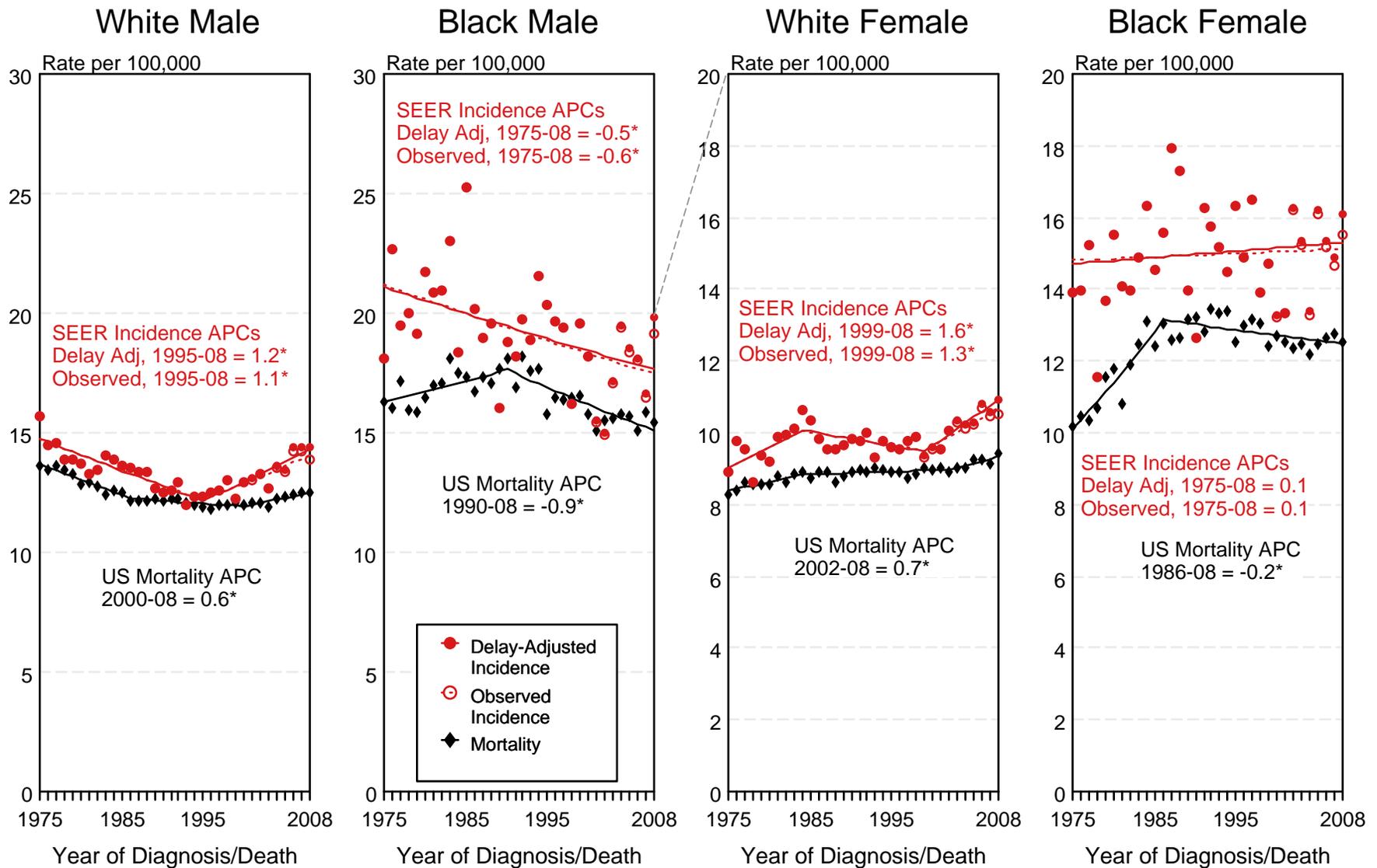
Figure 22.1

## White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1995-08 = 1.2*
Observed, 1995-08 = 1.1*

US Mortality APC
2000-08 = 0.6*

## Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -0.5*
Observed, 1975-08 = -0.6*

US Mortality APC
1990-08 = -0.9*

● Delay-Adjusted Incidence
⊙ Observed Incidence
◆ Mortality

## White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1999-08 = 1.6*
Observed, 1999-08 = 1.3*

US Mortality APC
2002-08 = 0.7*

## Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.1
Observed, 1975-08 = 0.1

US Mortality APC
1986-08 = -0.2*

Year of Diagnosis/Death

a   Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Pancreas, Male, by Race

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2003-08 = 2.2*
Observed, 2002-08 = 1.6*

SEER 13 APCs
Delay Adj, 2002-08 = 1.8*
Observed, 2002-08 = 1.4*

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1995-08 = 1.2*
Observed, 1995-08 = 1.1*

SEER 13 APCs
Delay Adj, 1992-08 = 0.8*
Observed, 1992-08 = 0.7*

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = -0.5*
Observed, 1975-08 = -0.6*

SEER 13 APCs
Delay Adj, 1992-08 = -0.5
Observed, 1992-08 = -0.6

Year of Diagnosis

Legend:
- SEER 9 Delay-Adj. Incidence
- SEER 9 Observed Incidence
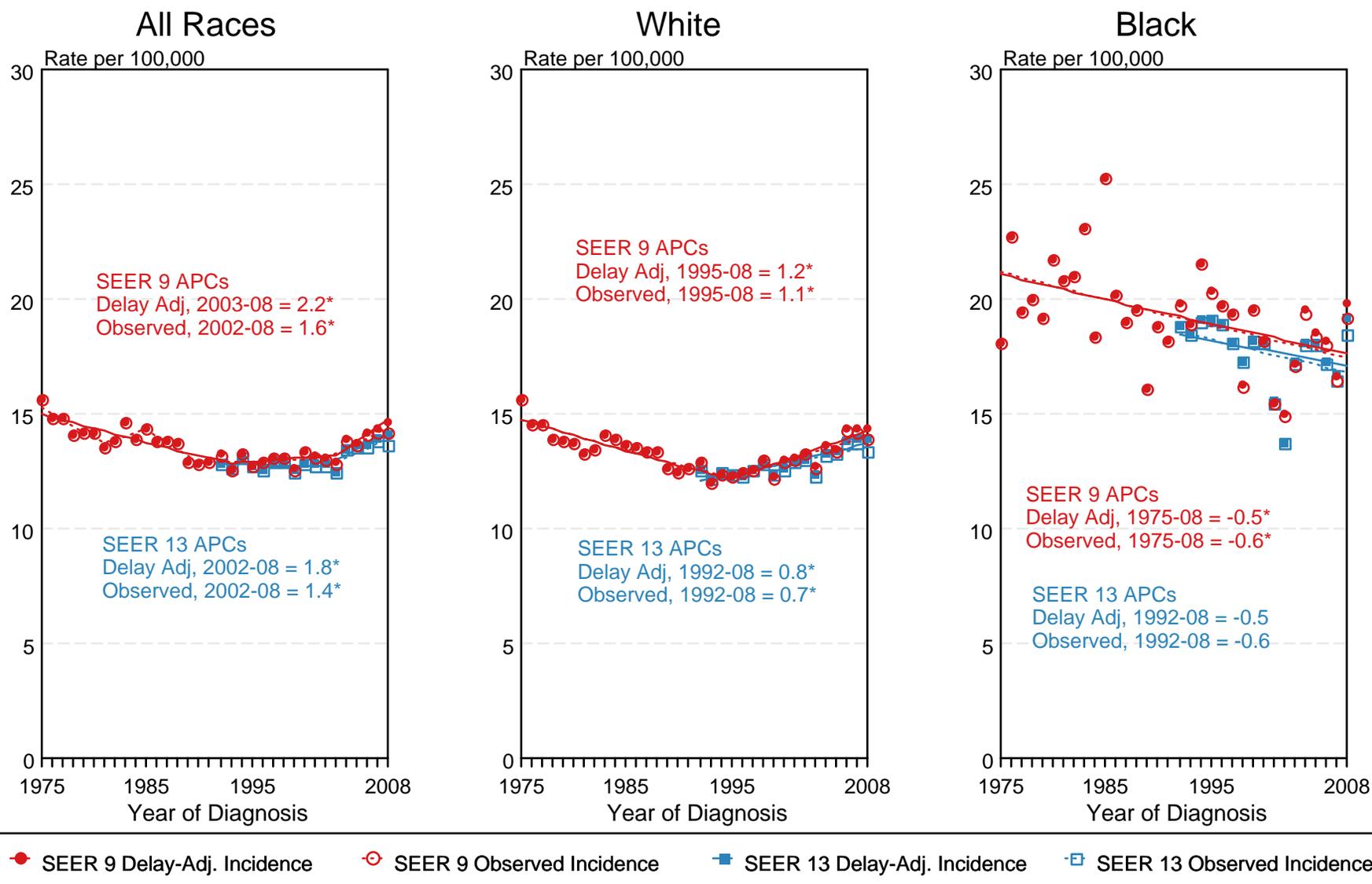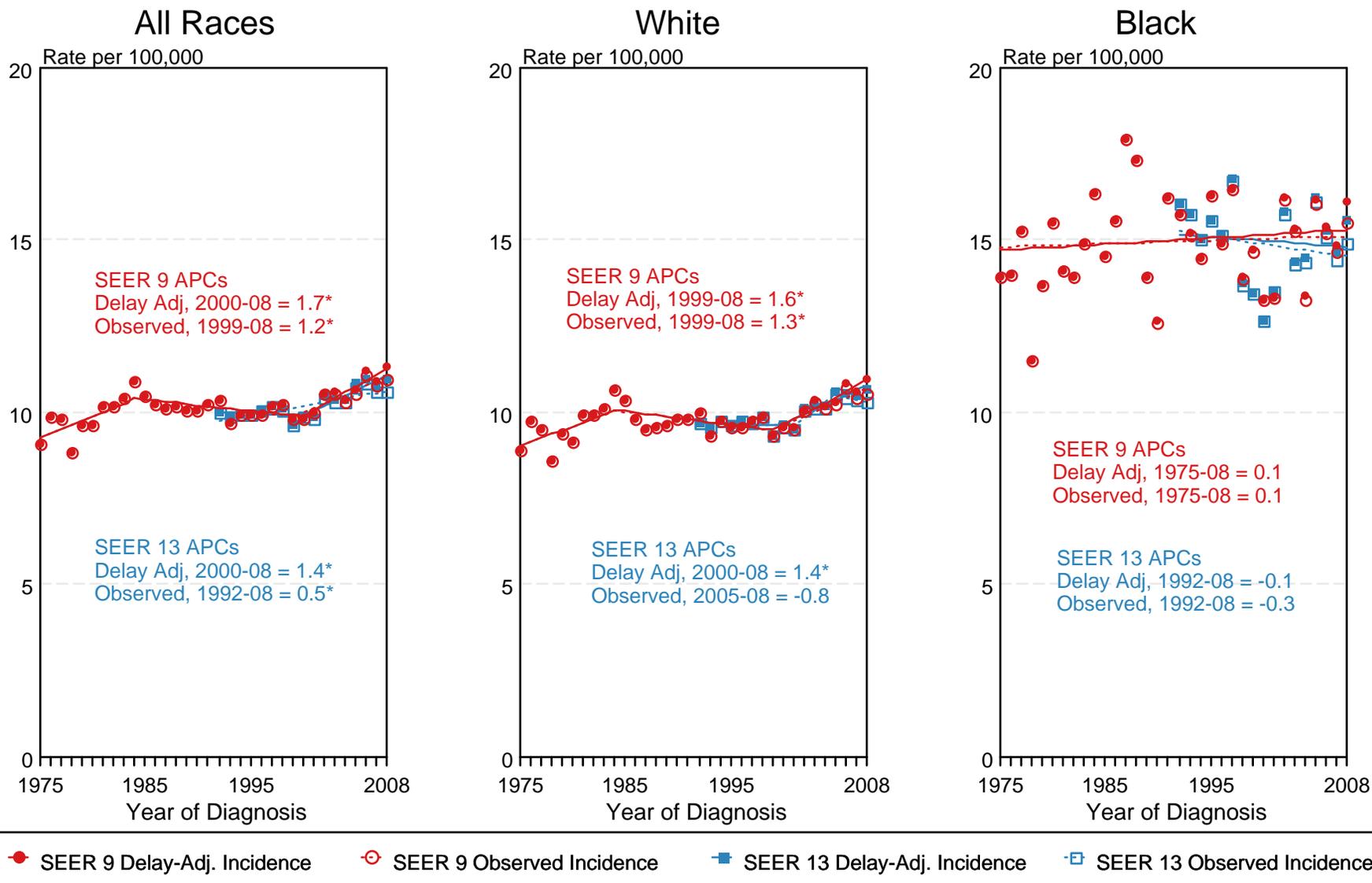- SEER 13 Delay-Adj. Incidence
- SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 22.3

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Pancreas, Female, by Race

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2000-08 = 1.7*
Observed, 1999-08 = 1.2*

SEER 13 APCs
Delay Adj, 2000-08 = 1.4*
Observed, 1992-08 = 0.5*

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1999-08 = 1.6*
Observed, 1999-08 = 1.3*

SEER 13 APCs
Delay Adj, 2000-08 = 1.4*
Observed, 2005-08 = -0.8

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.1
Observed, 1975-08 = 0.1

SEER 13 APCs
Delay Adj, 1992-08 = -0.1
Observed, 1992-08 = -0.3

Year of Diagnosis

Figure 22.4

- SEER 9 Delay-Adj. Incidence
- SEER 9 Observed Incidence
- SEER 13 Delay-Adj. Incidence
- SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
All Ages by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | 2.6* | 1988-92 | 16.5* | 1992-95 | -11.5* | 1995-00 | 2.2 | 2000-08 | -1.7* | | | -1.3* | -1.7* |
| White | 1975-88 | 2.8* | 1988-92 | 16.3* | 1992-95 | -12.6* | 1995-00 | 2.7 | 2000-08 | -1.9* | | | -1.4* | -1.9* |
| Black | 1975-89 | 2.0* | 1989-92 | 21.9* | 1992-95 | -5.0 | 1995-08 | -1.0* | | | | | -1.0* | -1.0* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-95 | -11.1* | 1995-00 | 2.0 | 2000-08 | -1.9* | | | | | | | -1.5* | -1.9* |
| White | 1992-95 | -12.0* | 1995-00 | 2.5 | 2000-08 | -2.0* | | | | | | | -1.5* | -2.0* |
| Black | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | 2.6* | 1988-92 | 16.5* | 1992-95 | -11.6* | 1995-00 | 2.2 | 2000-08 | -1.9* | | | -1.4* | -1.9* |
| White | 1975-88 | 2.8* | 1988-92 | 16.3* | 1992-95 | -12.6* | 1995-00 | 2.7 | 2000-08 | -2.3* | | | -1.7* | -2.3* |
| Black | 1975-89 | 2.1* | 1989-92 | 19.1* | 1992-08 | -1.8* | | | | | | | -1.8* | -1.8* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-95 | -11.2* | 1995-00 | 2.1 | 2000-08 | -2.1* | | | | | | | -1.7* | -2.1* |
| White | 1992-95 | -12.0* | 1995-00 | 2.5 | 2000-08 | -2.4* | | | | | | | -1.9* | -2.4* |
| White NH[ef] | 1992-94 | -17.2* | 1994-01 | 0.9 | 2001-08 | -2.3* | | | | | | | -1.6* | -2.3* |
| Black | 1992-08 | -2.0* | | | | | | | | | | | -2.0* | -2.0* |
| Black NH[ef] | 1992-08 | -2.0* | | | | | | | | | | | -2.0* | -2.0* |
| API[e] | 1992-96 | -7.8* | 1996-01 | 2.7 | 2001-08 | -2.6* | | | | | | | -1.4 | -2.6* |
| AI/AN[eg] | 1992-08 | -2.3* | | | | | | | | | | | -2.3* | -2.3* |
| Hispanic[f] | 1992-95 | -4.9 | 1995-02 | 0.5 | 2002-08 | -3.7* | | | | | | | -2.3* | -3.7* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-87 | 0.9* | 1987-91 | 3.1* | 1991-94 | -0.7 | 1994-04 | -3.9* | 2004-08 | -3.1* | | | -3.5* | -3.1* |
| White | 1975-87 | 0.8* | 1987-91 | 3.1* | 1991-94 | -0.7 | 1994-99 | -4.3* | 1999-08 | -3.4* | | | -3.4* | -3.4* |
| Black | 1975-88 | 1.9* | 1988-93 | 3.2* | 1993-01 | -2.6* | 2001-08 | -4.0* | | | | | -3.7* | -4.0* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-94 | -1.3 | 1994-08 | -3.7* | | | | | | | | | -3.7* | -3.7* |
| White | 1992-94 | -0.7 | 1994-98 | -4.4* | 1998-06 | -3.6* | 2006-08 | -2.3 | | | | | -3.3* | -3.0* |
| White NH[ef] | 1992-94 | -1.1 | 1994-04 | -4.0* | 2004-08 | -2.7* | | | | | | | -3.4* | -2.7* |
| Black | 1992-96 | -0.7 | 1996-08 | -3.5* | | | | | | | | | -3.5* | -3.5* |
| Black NH[ef] | 1992-96 | -0.7 | 1996-08 | -3.3* | | | | | | | | | -3.3* | -3.3* |
| API[e] | 1992-08 | -3.9* | | | | | | | | | | | -3.9* | -3.9* |
| AI/AN[eg] | 1992-08 | -2.3* | | | | | | | | | | | -2.3* | -2.3* |
| Hispanic[f] | 1992-94 | 3.9 | 1994-08 | -3.5* | | | | | | | | | -3.5* | -3.5* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
   The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 23.2
Cancer of the Prostate (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Ages <65 by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | 3.1* | 1988-92 | 23.3* | 1992-01 | 3.3* | 2001-08 | 0.1 | | | | | 0.8 | 0.1 |
| White | 1975-88 | 3.5* | 1988-92 | 23.0* | 1992-01 | 3.2* | 2001-08 | -0.1 | | | | | 0.6 | -0.1 |
| Black | 1975-89 | 2.0* | 1989-93 | 26.0* | 1993-01 | 2.7* | 2001-08 | 0.0 | | | | | 0.6 | 0.0 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-01 | 3.4* | 2001-08 | -0.4 | | | | | | | | | 0.4 | -0.4 |
| White | 1992-01 | 3.3* | 2001-08 | -0.5 | | | | | | | | | 0.3 | -0.5 |
| Black | 1992-00 | 3.9* | 2000-08 | -0.4 | | | | | | | | | 0.1 | -0.4 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | 3.1* | 1988-92 | 23.3* | 1992-01 | 3.3* | 2001-08 | -0.2 | | | | | 0.6 | -0.2 |
| White | 1975-88 | 3.5* | 1988-92 | 23.0* | 1992-01 | 3.2* | 2001-08 | -0.5 | | | | | 0.3 | -0.5 |
| Black | 1975-89 | 2.0* | 1989-93 | 26.0* | 1993-01 | 2.7* | 2001-08 | -0.5 | | | | | 0.2 | -0.5 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-01 | 3.4* | 2001-08 | -0.6 | | | | | | | | | 0.2 | -0.6 |
| White | 1992-01 | 3.3* | 2001-08 | -0.9 | | | | | | | | | 0.0 | -0.9 |
| White NH[ef] | 1992-01 | 3.3* | 2001-08 | -0.7 | | | | | | | | | 0.2 | -0.7 |
| Black | 1992-00 | 3.9* | 2000-08 | -0.9 | | | | | | | | | -0.4 | -0.9 |
| Black NH[ef] | 1992-00 | 3.8* | 2000-08 | -0.7 | | | | | | | | | -0.2 | -0.7 |
| API[e] | 1992-01 | 6.3* | 2001-08 | 0.8 | | | | | | | | | 2.0* | 0.8 |
| AI/AN[eg] | 1992-08 | -0.8 | | | | | | | | | | | -0.8 | -0.8 |
| Hispanic[f] | 1992-02 | 4.6* | 2002-08 | -2.4* | | | | | | | | | -0.1 | -2.4* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-87 | 0.5* | 1987-90 | 3.1 | 1990-96 | -3.2* | 1996-00 | -5.7* | 2000-08 | -1.3* | | | -1.8* | -1.3* |
| White | 1975-87 | 0.7* | 1987-90 | 3.0 | 1990-96 | -3.6* | 1996-00 | -6.2* | 2000-08 | -1.0* | | | -1.6* | -1.0* |
| Black | 1975-92 | 0.5* | 1992-08 | -2.8* | | | | | | | | | -2.8* | -2.8* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-01 | -4.4* | 2001-08 | -1.2* | | | | | | | | | -1.9* | -1.2* |
| White | 1992-95 | -2.7 | 1995-00 | -5.9* | 2000-08 | -1.0* | | | | | | | -1.6* | -1.0* |
| White NH[ef] | 1992-01 | -4.8* | 2001-08 | -0.6 | | | | | | | | | -1.5* | -0.6 |
| Black | 1992-08 | -2.9* | | | | | | | | | | | -2.9* | -2.9* |
| Black NH[ef] | 1992-08 | -2.9* | | | | | | | | | | | -2.9* | -2.9* |
| API[e] | 1992-08 | -0.7 | | | | | | | | | | | -0.7 | -0.7 |
| AI/AN[eg] | 1992-08 | -3.8* | | | | | | | | | | | -3.8* | -3.8* |
| Hispanic[f] | 1992-00 | -5.2* | 2000-08 | -0.1 | | | | | | | | | -0.7 | -0.1 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
\* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 23.3
Cancer of the Prostate (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Ages 65+ by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | 2.5* | 1988-92 | 15.1* | 1992-95 | -14.8* | 1995-00 | 1.2 | 2000-08 | -2.6* | | | -2.1* | -2.6* |
| White | 1975-88 | 2.7* | 1988-92 | 14.9* | 1992-95 | -15.8* | 1995-00 | 1.8 | 2000-08 | -2.7* | | | -2.2* | -2.7* |
| Black | 1975-89 | 2.0* | 1989-92 | 20.1* | 1992-95 | -9.1* | 1995-08 | -2.2* | | | | | -2.2* | -2.2* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-95 | -14.1* | 1995-00 | 0.9 | 2000-08 | -2.7* | | | | | | | -2.3* | -2.7* |
| White | 1992-95 | -15.1* | 1995-00 | 1.5 | 2000-08 | -2.8* | | | | | | | -2.3* | -2.8* |
| Black | 1992-08 | -3.4* | | | | | | | | | | | -3.4* | -3.4* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | 2.5* | 1988-92 | 15.1* | 1992-95 | -14.8* | 1995-00 | 1.2 | 2000-08 | -2.8* | | | -2.3* | -2.8* |
| White | 1975-88 | 2.7* | 1988-92 | 14.9* | 1992-95 | -15.9* | 1995-00 | 1.8 | 2000-08 | -3.1* | | | -2.6* | -3.1* |
| Black | 1975-89 | 2.0* | 1989-92 | 20.0* | 1992-95 | -8.9* | 1995-08 | -2.6* | | | | | -2.6* | -2.6* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-95 | -14.2* | 1995-00 | 1.0 | 2000-08 | -2.9* | | | | | | | -2.5* | -2.9* |
| White | 1992-95 | -15.2* | 1995-00 | 1.5 | 2000-08 | -3.1* | | | | | | | -2.6* | -3.1* |
| White NH[ef] | 1992-95 | -15.6* | 1995-00 | 1.5 | 2000-08 | -3.0* | | | | | | | -2.5* | -3.0* |
| Black | 1992-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |
| Black NH[ef] | 1992-08 | -3.6* | | | | | | | | | | | -3.6* | -3.6* |
| API[e] | 1992-97 | -7.9* | 1997-00 | 4.8 | 2000-08 | -3.2* | | | | | | | -2.3* | -3.2* |
| AI/AN[eg] | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |
| Hispanic[f] | 1992-96 | -6.1* | 1996-99 | 2.9 | 1999-08 | -3.6* | | | | | | | -3.6* | -3.6* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-87 | 0.9* | 1987-91 | 3.2* | 1991-94 | -0.6 | 1994-08 | -3.8* | | | | | -3.8* | -3.8* |
| White | 1975-87 | 0.8* | 1987-91 | 3.2* | 1991-94 | -0.8 | 1994-06 | -3.9* | 2006-08 | -2.1 | | | -3.5* | -3.0* |
| Black | 1975-94 | 2.3* | 1994-01 | -2.7* | 2001-08 | -4.0* | | | | | | | -3.7* | -4.0* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-94 | -1.0 | 1994-08 | -3.8* | | | | | | | | | -3.8* | -3.8* |
| White | 1992-94 | -1.1 | 1994-06 | -3.9* | 2006-08 | -2.2 | | | | | | | -3.5* | -3.0* |
| White NH[ef] | 1992-94 | -1.0 | 1994-04 | -4.0* | 2004-08 | -3.0* | | | | | | | -3.5* | -3.0* |
| Black | 1992-96 | -0.4 | 1996-08 | -3.5* | | | | | | | | | -3.5* | -3.5* |
| Black NH[ef] | 1992-96 | -0.3 | 1996-08 | -3.3* | | | | | | | | | -3.3* | -3.3* |
| API[e] | 1992-08 | -4.0* | | | | | | | | | | | -4.0* | -4.0* |
| AI/AN[eg] | 1992-08 | -2.2* | | | | | | | | | | | -2.2* | -2.2* |
| Hispanic[f] | 1992-95 | 1.6 | 1995-08 | -3.6* | | | | | | | | | -3.6* | -3.6* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
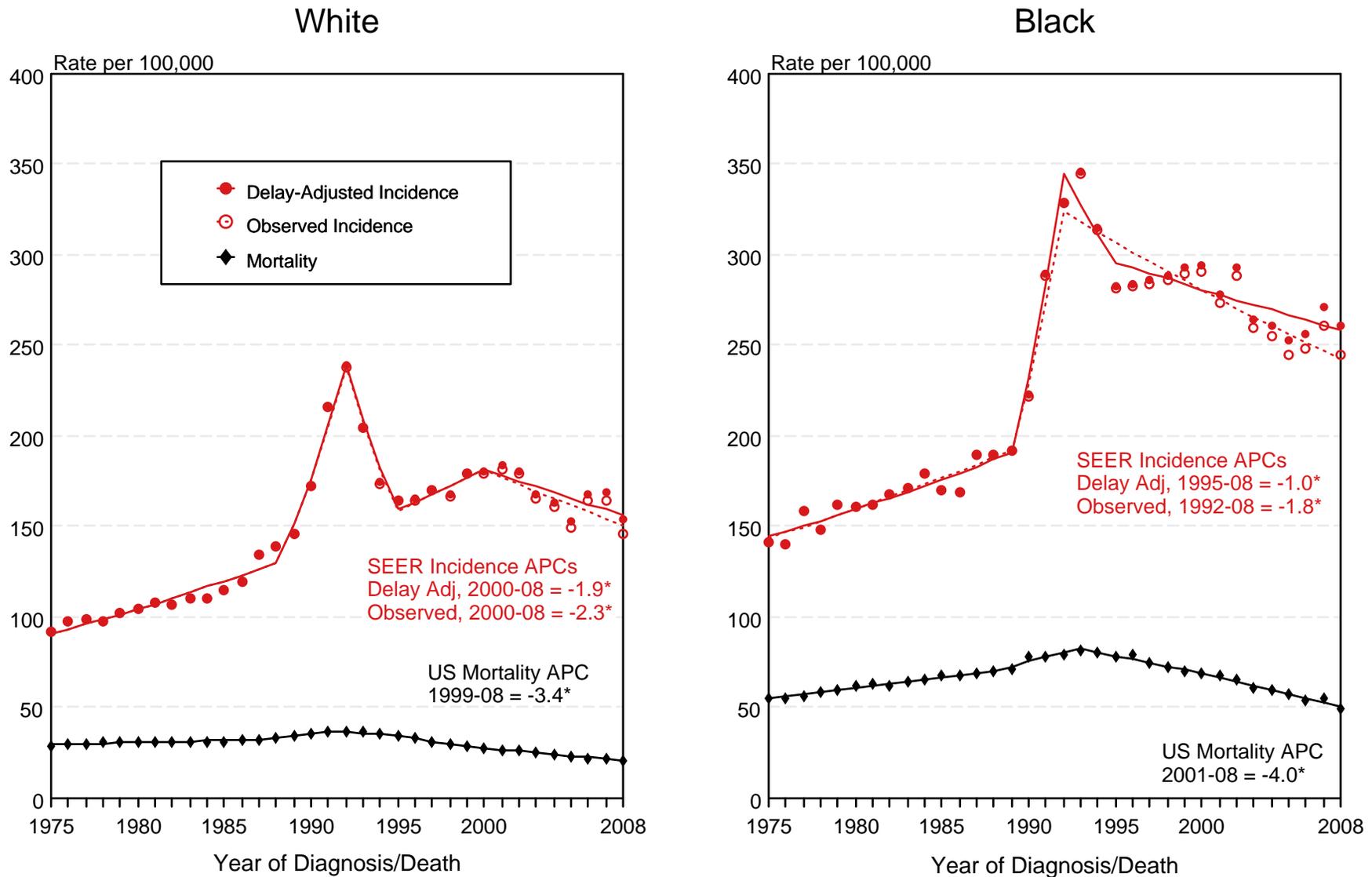## Cancer of the Prostate, by Race

Figure 23.1

### White

Rate per 100,000

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 2000-08 = -1.9*
Observed, 2000-08 = -2.3*

US Mortality APC
1999-08 = -3.4*

Year of Diagnosis/Death

### Black

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1995-08 = -1.0*
Observed, 1992-08 = -1.8*

US Mortality APC
2001-08 = -4.0*

Year of Diagnosis/Death

[a]  Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[a]
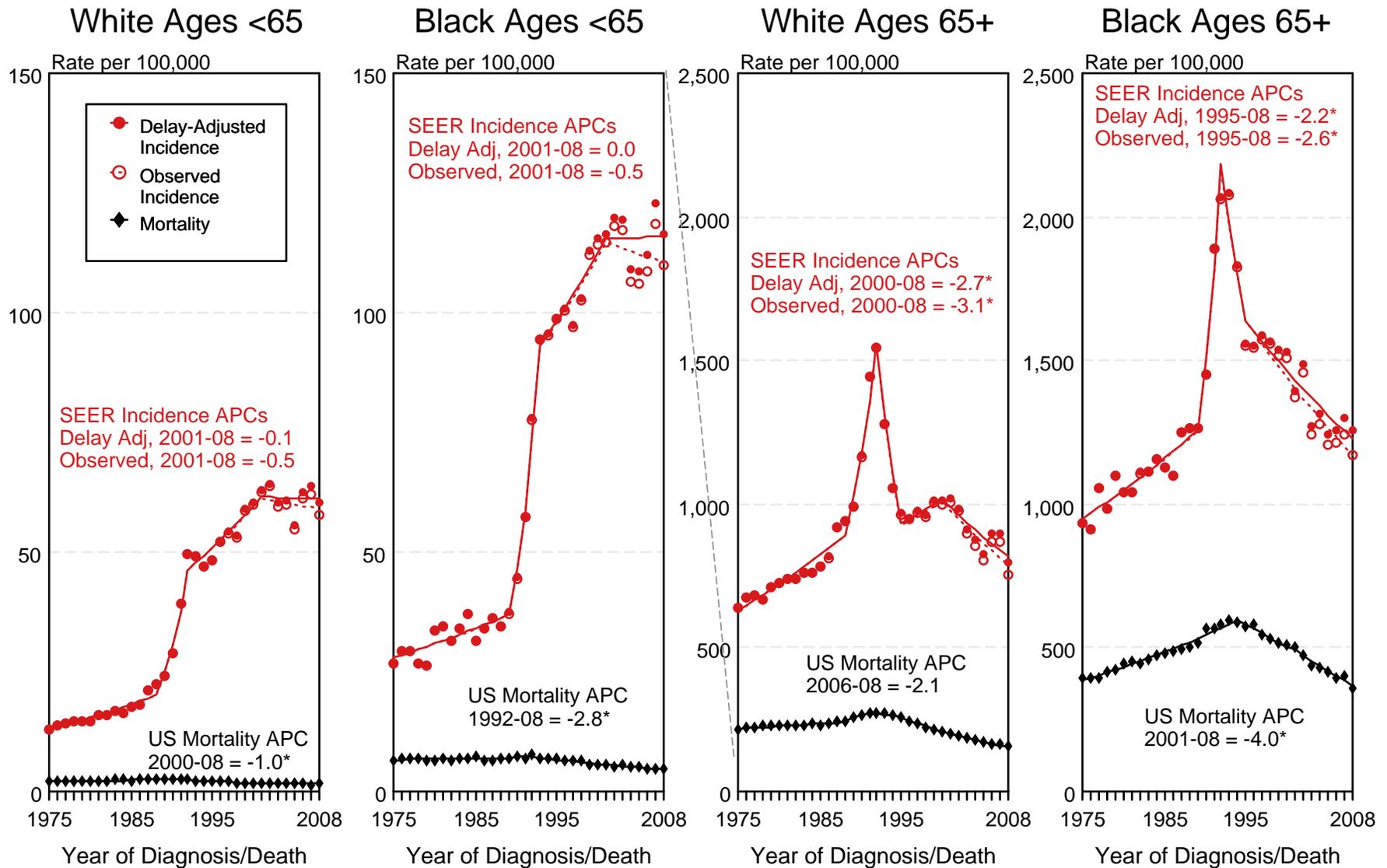## Cancer of the Prostate, by Age and Race

Figure 23.2

### White Ages <65

Rate per 100,000

- ● Delay-Adjusted Incidence
- ○ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 2001-08 = -0.1
Observed, 2001-08 = -0.5

US Mortality APC
2000-08 = -1.0*

Year of Diagnosis/Death

### Black Ages <65

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2001-08 = 0.0
Observed, 2001-08 = -0.5

US Mortality APC
1992-08 = -2.8*

Year of Diagnosis/Death

### White Ages 65+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2000-08 = -2.7*
Observed, 2000-08 = -3.1*

US Mortality APC
2006-08 = -2.1

Year of Diagnosis/Death

### Black Ages 65+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1995-08 = -2.2*
Observed, 1995-08 = -2.6*

US Mortality APC
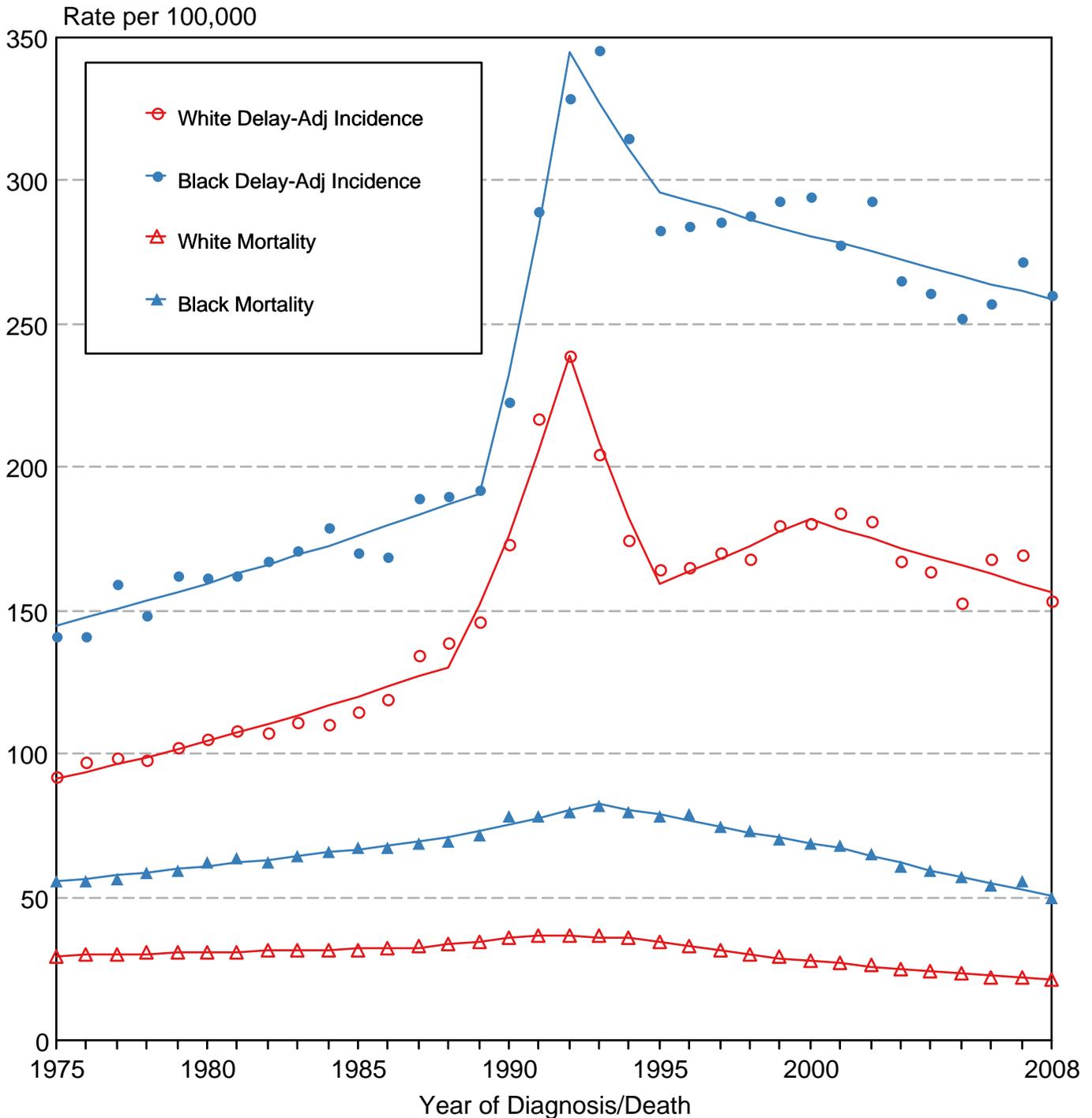2001-08 = -4.0*

Year of Diagnosis/Death

[a]  Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
 Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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).
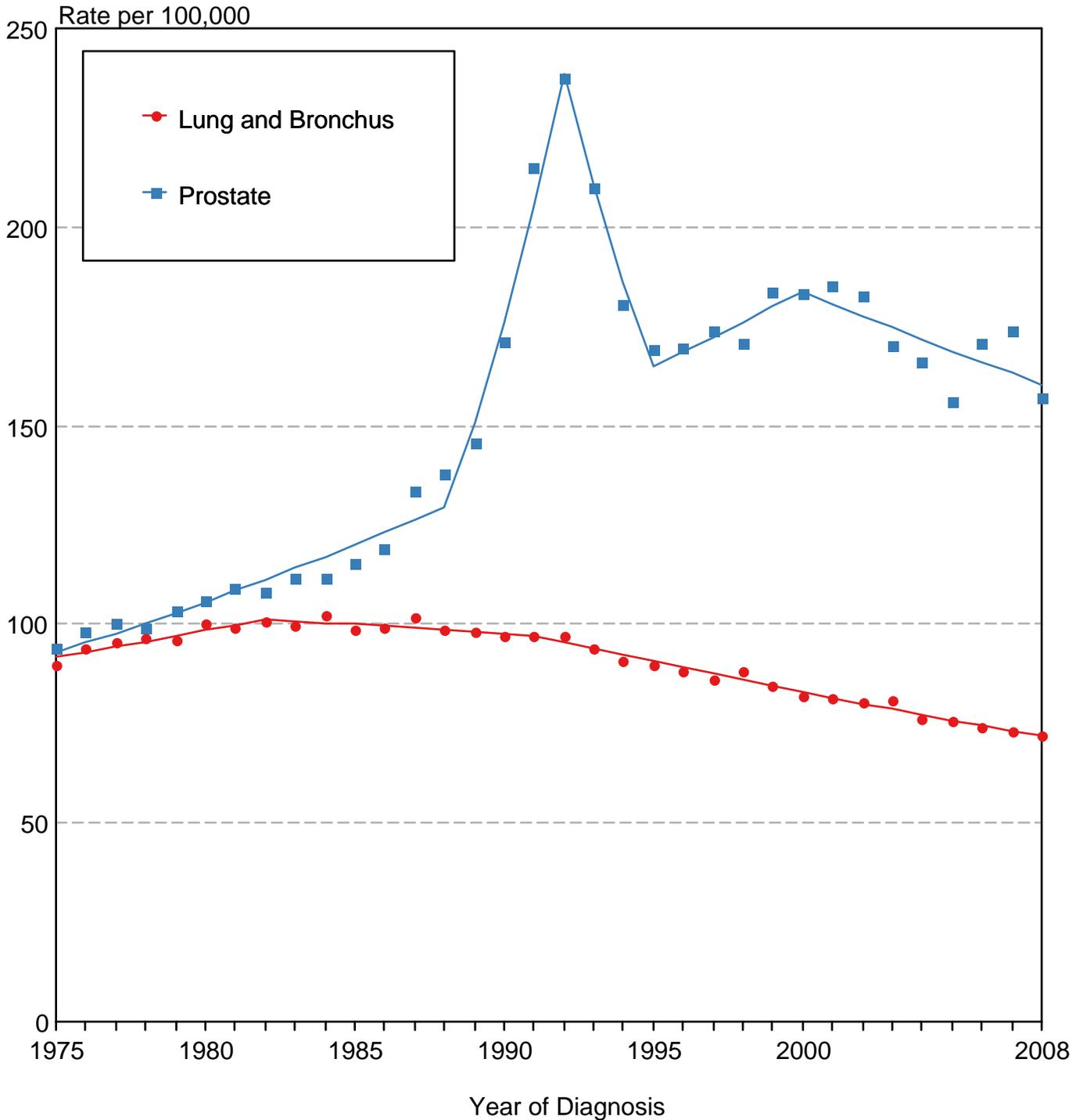
Figure 23.4

# Cancer of the Prostate
# Delay-Adjusted SEER Incidence & US Mortality
# 1975-2008

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 3.5, April 2011,
National Cancer Institute.

Figure 23.5

# Delay-Adjusted Incidence Rates for Cancer of the Prostate and Cancer of the Lung and Bronchus
# All Races, Males
# 1975-2008



Rate per 100,000

Legend:
- Lung and Bronchus
- Prostate

Year of Diagnosis

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

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Prostate, by Race

Figure 23.6



**All Races**

Rate per 100,000

SEER 9 APCs
Delay Adj, 2000-08 = -1.7*
Observed, 2000-08 = -1.9*

SEER 13 APCs
Delay Adj, 2000-08 = -1.9*
Observed, 2000-08 = -2.1*

Year of Diagnosis

**White**

Rate per 100,000

SEER 9 APCs
Delay Adj, 2000-08 = -1.9*
Observed, 2000-08 = -2.3*

SEER 13 APCs
Delay Adj, 2000-08 = -2.0*
Observed, 2000-08 = -2.4*

Year of Diagnosis

**Black**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1995-08 = -1.0*
Observed, 1992-08 = -1.8*

SEER 13 APCs
Delay Adj, 1992-08 = -1.8*
Observed, 1992-08 = -2.0*

Year of Diagnosis

Legend:
- ● SEER 9 Delay-Adj. Incidence
- ○ SEER 9 Observed Incidence
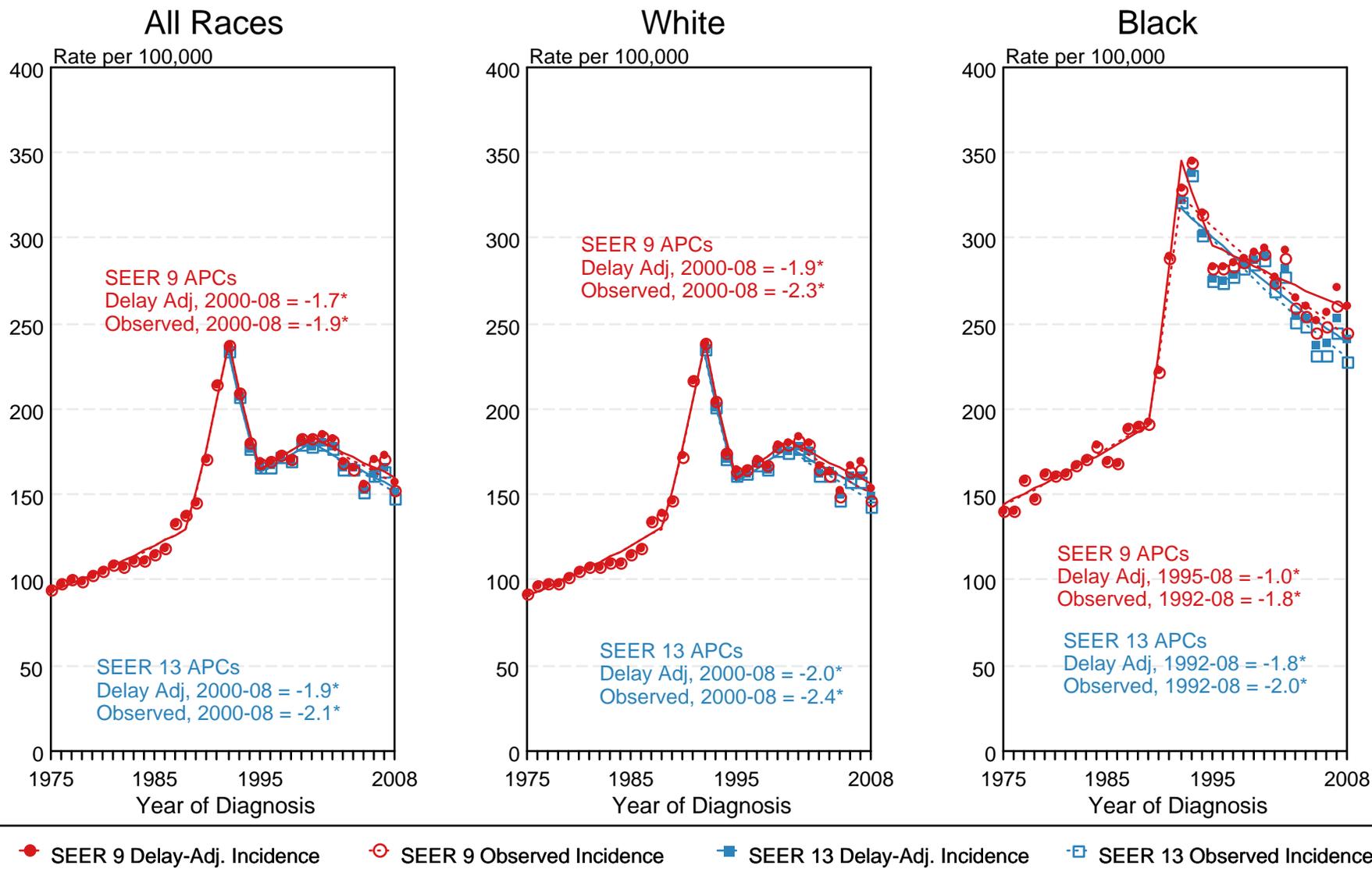- ■ SEER 13 Delay-Adj. Incidence
- ▫ SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 24.1
Cancer of the Stomach (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |
| White | 1975-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| Black | 1975-08 | -1.3* | | | | | | | | | | | -1.3* | -1.3* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.3* | | | | | | | | | | | -1.3* | -1.3* |
| White | 1992-08 | -1.3* | | | | | | | | | | | -1.3* | -1.3* |
| Black | 1992-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |
| White | 1975-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| Black | 1975-08 | -1.3* | | | | | | | | | | | -1.3* | -1.3* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.4* | | | | | | | | | | | -1.4* | -1.4* |
| White | 1992-08 | -1.4* | | | | | | | | | | | -1.4* | -1.4* |
| White NH[ef] | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| Black | 1992-08 | -1.7* | | | | | | | | | | | -1.7* | -1.7* |
| Black NH[ef] | 1992-08 | -1.7* | | | | | | | | | | | -1.7* | -1.7* |
| API[e] | 1992-08 | -3.0* | | | | | | | | | | | -3.0* | -3.0* |
| AI/AN[eg] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| Hispanic[f] | 1992-08 | -1.5* | | | | | | | | | | | -1.5* | -1.5* |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-87 | -2.6* | 1987-90 | -0.2 | 1990-08 | -3.0* | | | | | | | -3.0* | -3.0* |
| White | 1975-87 | -2.8* | 1987-90 | -0.7 | 1990-08 | -3.2* | | | | | | | -3.2* | -3.2* |
| Black | 1975-87 | -1.6* | 1987-91 | 0.6 | 1991-08 | -3.0* | | | | | | | -3.0* | -3.0* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -3.1* | | | | | | | | | | | -3.1* | -3.1* |
| White | 1992-08 | -3.2* | | | | | | | | | | | -3.2* | -3.2* |
| White NH[ef] | 1992-94 | -1.4 | 1994-08 | -3.6* | | | | | | | | | -3.6* | -3.6* |
| Black | 1992-99 | -2.2* | 1999-06 | -3.9* | 2006-08 | -0.4 | | | | | | | -3.1* | -2.2 |
| Black NH[ef] | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |
| API[e] | 1992-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |
| AI/AN[eg] | 1992-02 | 0.9 | 2002-08 | -7.0* | | | | | | | | | -4.5* | -7.0* |
| Hispanic[f] | 1992-04 | -1.9* | 2004-08 | -5.2* | | | | | | | | | -3.4* | -5.2* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 24.2
Cancer of the Stomach (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-80 | -0.1 | 1980-08 | -1.8* | | | | | | | | | -1.8* | -1.8* |
| White | 1975-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| Black | 1975-08 | -1.5* | | | | | | | | | | | -1.5* | -1.5* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| White | 1992-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| Black | 1992-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | -1.2* | 1988-08 | -2.0* | | | | | | | | | -2.0* | -2.0* |
| White | 1975-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| Black | 1975-08 | -1.5* | | | | | | | | | | | -1.5* | -1.5* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| White | 1992-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| White NH[e][f] | 1992-08 | -2.2* | | | | | | | | | | | -2.2* | -2.2* |
| Black | 1992-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| Black NH[e][f] | 1992-08 | -1.9* | | | | | | | | | | | -1.9* | -1.9* |
| API[e] | 1992-08 | -2.9* | | | | | | | | | | | -2.9* | -2.9* |
| AI/AN[e][g] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| Hispanic[f] | 1992-08 | -2.1* | | | | | | | | | | | -2.1* | -2.1* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-87 | -2.3* | 1987-91 | -1.0 | 1991-08 | -3.4* | | | | | | | -3.4* | -3.4* |
| White | 1975-93 | -2.3* | 1993-08 | -3.7* | | | | | | | | | -3.7* | -3.7* |
| Black | 1975-93 | -1.2* | 1993-08 | -3.2* | | | | | | | | | -3.2* | -3.2* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -3.4* | | | | | | | | | | | -3.4* | -3.4* |
| White | 1992-08 | -3.6* | | | | | | | | | | | -3.6* | -3.6* |
| White NH[e][f] | 1992-94 | -0.6 | 1994-08 | -4.0* | | | | | | | | | -4.0* | -4.0* |
| Black | 1992-08 | -3.0* | | | | | | | | | | | -3.0* | -3.0* |
| Black NH[e][f] | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |
| API[e] | 1992-08 | -3.6* | | | | | | | | | | | -3.6* | -3.6* |
| AI/AN[e][g] | 1992-08 | -1.8 | | | | | | | | | | | -1.8 | -1.8 |
| Hispanic[f] | 1992-04 | -2.2* | 2004-08 | -6.0* | | | | | | | | | -3.9* | -6.0* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]   Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]   Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]   Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]   The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]   API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]   Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
      Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
      The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]   Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*    The APC/AAPC is significantly different from zero (p<.05).
-    Joinpoint regression line analysis could not be performed on data series.

Table 24.3
Cancer of the Stomach (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |
| White | 1975-08 | -2.0* | | | | | | | | | | | -2.0* | -2.0* |
| Black | 1975-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| White | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| Black | 1992-08 | -1.2* | | | | | | | | | | | -1.2* | -1.2* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |
| White | 1975-08 | -2.0* | | | | | | | | | | | -2.0* | -2.0* |
| Black | 1975-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| White | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White NH[ef] | 1992-08 | -1.7* | | | | | | | | | | | -1.7* | -1.7* |
| Black | 1992-08 | -1.3* | | | | | | | | | | | -1.3* | -1.3* |
| Black NH[ef] | 1992-08 | -1.3* | | | | | | | | | | | -1.3* | -1.3* |
| API[e] | 1992-08 | -2.7* | | | | | | | | | | | -2.7* | -2.7* |
| AI/AN[eg] | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| Hispanic[f] | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-87 | -2.8* | 1987-90 | -0.3 | 1990-08 | -2.7* | | | | | | | -2.7* | -2.7* |
| White | 1975-87 | -3.1* | 1987-90 | -0.9 | 1990-08 | -2.9* | | | | | | | -2.9* | -2.9* |
| Black | 1975-96 | -1.0* | 1996-08 | -3.2* | | | | | | | | | -3.2* | -3.2* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |
| White | 1992-08 | -2.9* | | | | | | | | | | | -2.9* | -2.9* |
| White NH[ef] | 1992-08 | -3.2* | | | | | | | | | | | -3.2* | -3.2* |
| Black | 1992-08 | -2.9* | | | | | | | | | | | -2.9* | -2.9* |
| Black NH[ef] | 1992-08 | -2.7* | | | | | | | | | | | -2.7* | -2.7* |
| API[e] | 1992-08 | -3.7* | | | | | | | | | | | -3.7* | -3.7* |
| AI/AN[eg] | 1992-98 | 8.2 | 1998-08 | -5.9* | | | | | | | | | -5.9* | -5.9* |
| Hispanic[f] | 1992-08 | -2.1* | | | | | | | | | | | -2.1* | -2.1* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Cancer of the Stomach, by Race and Sex



**White Male**

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -1.9*
Observed, 1975-08 = -1.9*

US Mortality APC
1993-08 = -3.7*

Year of Diagnosis/Death

**Black Male**

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -1.5*
Observed, 1975-08 = -1.5*

US Mortality APC
1993-08 = -3.2*

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

Year of Diagnosis/Death

**White Female**

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -2.0*
Observed, 1975-08 = -2.0*

US Mortality APC
1990-08 = -2.9*

Year of Diagnosis/Death

**Black Female**

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = -0.8*
Observed, 1975-08 = -0.9*

US Mortality APC
1996-08 = -3.2*
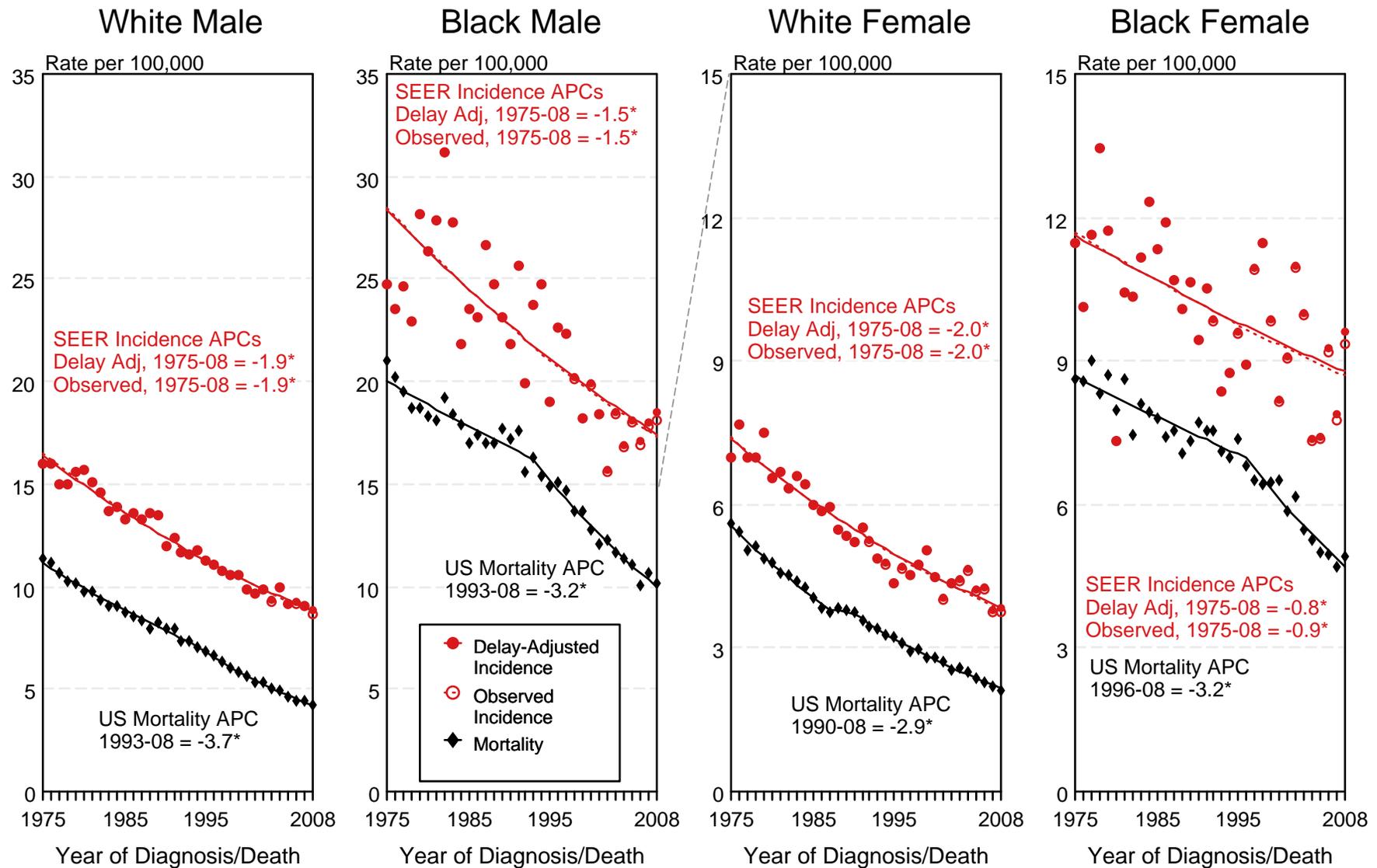
Year of Diagnosis/Death

Figure 24.1

[a]  Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
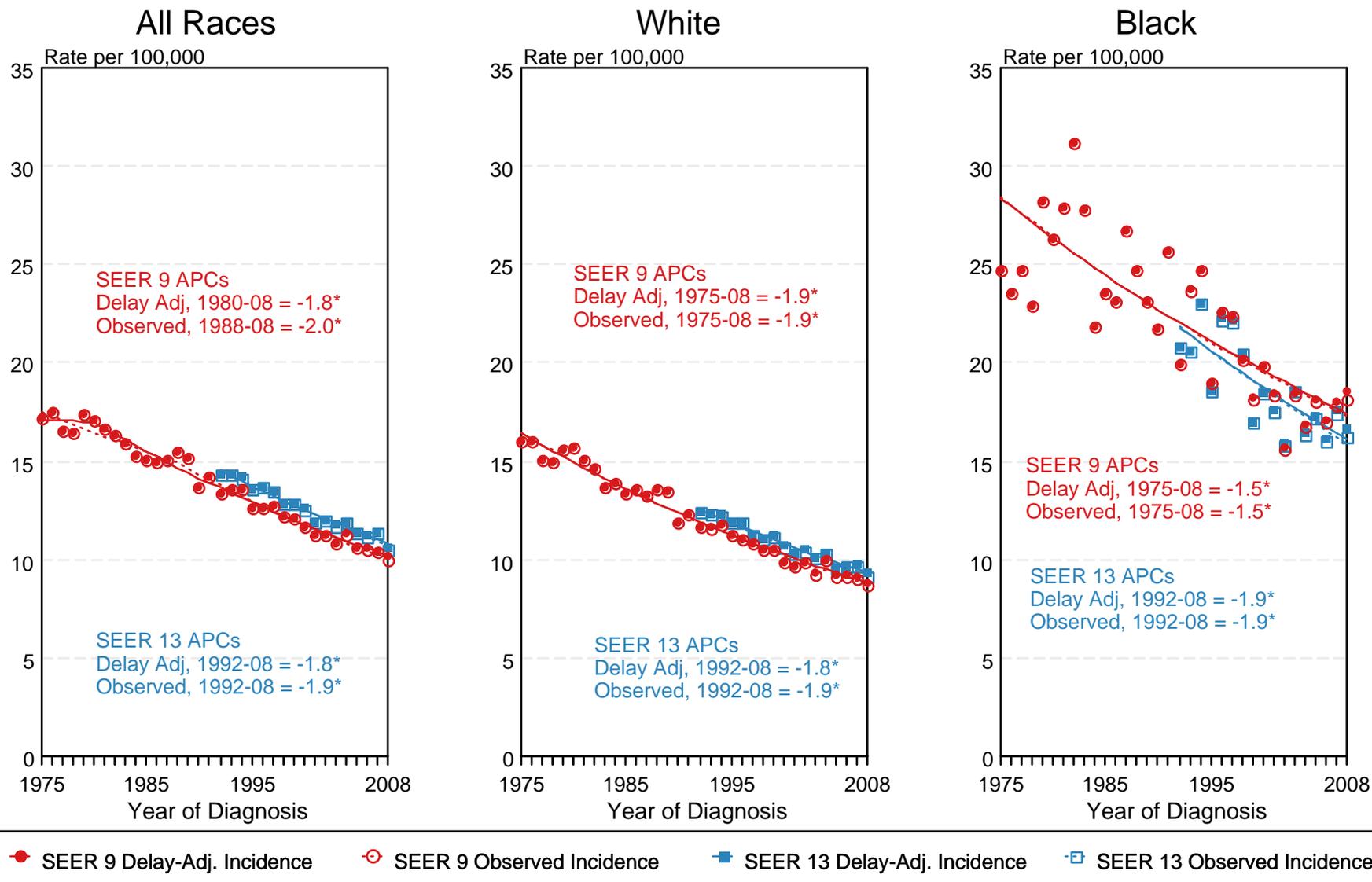Cancer of the Stomach, Male, by Race

**All Races**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1980-08 = -1.8*
Observed, 1988-08 = -2.0*

SEER 13 APCs
Delay Adj, 1992-08 = -1.8*
Observed, 1992-08 = -1.9*

Year of Diagnosis

**White**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = -1.9*
Observed, 1975-08 = -1.9*

SEER 13 APCs
Delay Adj, 1992-08 = -1.8*
Observed, 1992-08 = -1.9*

Year of Diagnosis

**Black**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = -1.5*
Observed, 1975-08 = -1.5*

SEER 13 APCs
Delay Adj, 1992-08 = -1.9*
Observed, 1992-08 = -1.9*

Year of Diagnosis

- ● SEER 9 Delay-Adj. Incidence
- ◎ SEER 9 Observed Incidence
- ■ SEER 13 Delay-Adj. Incidence
- ▫ SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
  Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
  Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 Cancer Statistics Review 1975-2008

National Cancer Institute

Figure 24.3

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Stomach, Female, by Race

Figure 24.4



### All Races
Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = -1.6*
Observed, 1975-08 = -1.6*

SEER 13 APCs
Delay Adj, 1992-08 = -0.8*
Observed, 1992-08 = -0.9*

### White
Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = -2.0*
Observed, 1975-08 = -2.0*

SEER 13 APCs
Delay Adj, 1992-08 = -0.9*
Observed, 1992-08 = -1.0*

### Black
Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = -0.8*
Observed, 1975-08 = -0.9*

SEER 13 APCs
Delay Adj, 1992-08 = -1.2*
Observed, 1992-08 = -1.3*

Year of Diagnosis

- ● SEER 9 Delay-Adj. Incidence
- ○ SEER 9 Observed Incidence
- ■ SEER 13 Delay-Adj. Incidence
- ▫ SEER 13 Observed Incidence
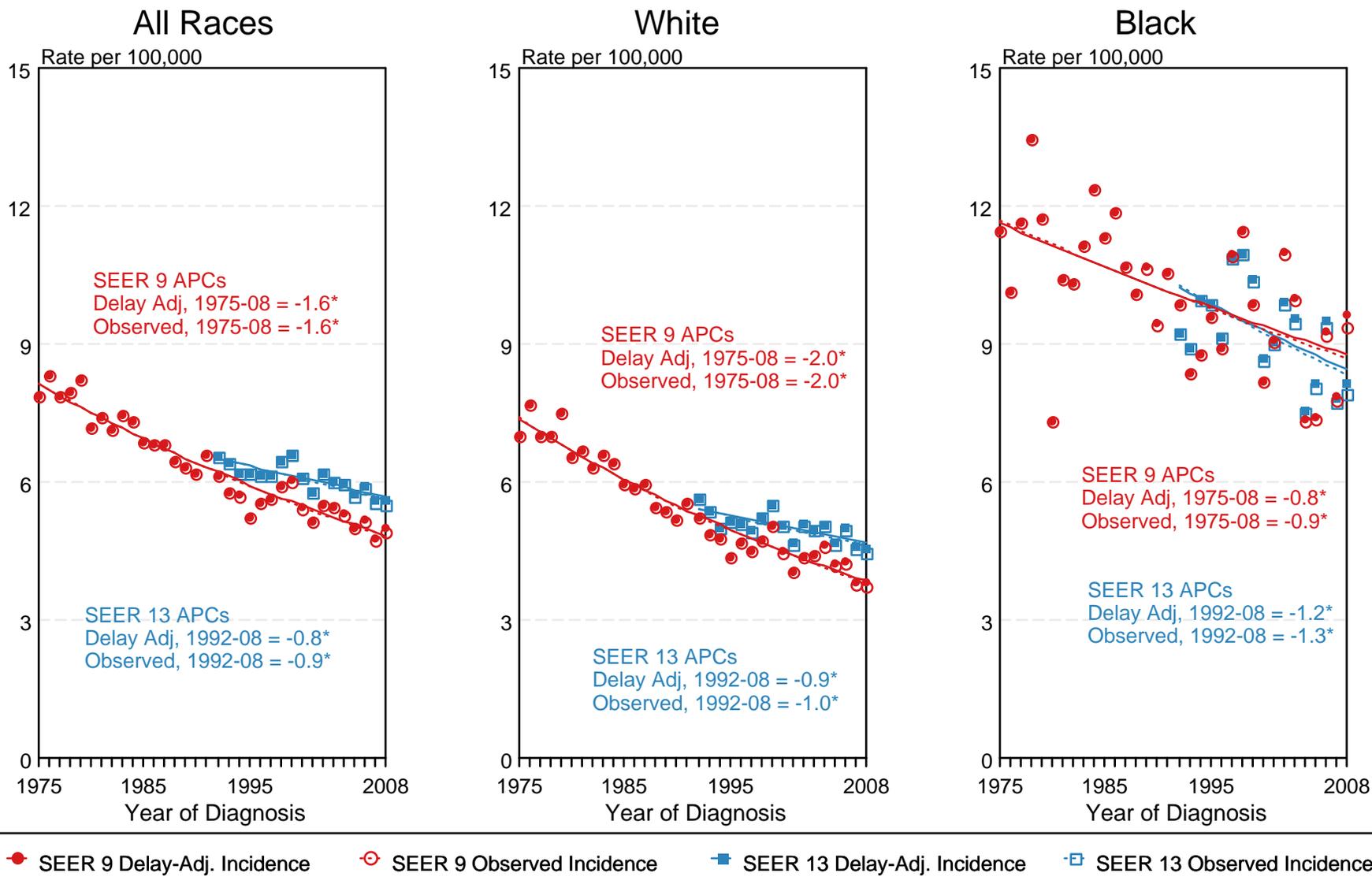
[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
The APC is the Annual Percent Change 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[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
All Ages by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | 2.3* | 1989-08 | 0.8* | | | | | | | | | 0.8* | 0.8* |
| White | 1975-87 | 2.8* | 1987-08 | 1.1* | | | | | | | | | 1.1* | 1.1* |
| Black | 1975-08 | 2.0* | | | | | | | | | | | 2.0* | 2.0* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 1.1* | | | | | | | | | | | 1.1* | 1.1* |
| White | 1992-08 | 1.3* | | | | | | | | | | | 1.3* | 1.3* |
| Black | 1992-94 | 53.8 | 1994-08 | -0.1 | | | | | | | | | -0.1 | -0.1 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | 2.3* | 1989-08 | 0.8* | | | | | | | | | 0.8* | 0.8* |
| White | 1975-89 | 2.6* | 1989-08 | 1.0* | | | | | | | | | 1.0* | 1.0* |
| Black | 1975-08 | 1.9* | | | | | | | | | | | 1.9* | 1.9* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 1.1* | | | | | | | | | | | 1.1* | 1.1* |
| White | 1992-08 | 1.2* | | | | | | | | | | | 1.2* | 1.2* |
| White NH[e][f] | 1992-08 | 1.4* | | | | | | | | | | | 1.4* | 1.4* |
| Black | 1992-94 | 54.1 | 1994-08 | -0.3 | | | | | | | | | -0.3 | -0.3 |
| Black NH[e][f] | 1992-94 | 51.1 | 1994-08 | -0.2 | | | | | | | | | -0.2 | -0.2 |
| API[e] | 1992-08 | 0.9 | | | | | | | | | | | 0.9 | 0.9 |
| AI/AN[e][g] | 1992-08 | 1.8 | | | | | | | | | | | 1.8 | 1.8 |
| Hispanic[f] | 1992-08 | 2.4* | | | | | | | | | | | 2.4* | 2.4* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-81 | -10.5* | 1981-94 | -3.1* | 1994-08 | -0.7 | | | | | | | -0.7 | -0.7 |
| White | 1975-81 | -10.6* | 1981-91 | -3.3* | 1991-08 | -1.0* | | | | | | | -1.0* | -1.0* |
| Black | 1975-08 | -1.8* | | | | | | | | | | | -1.8* | -1.8* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| White | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| White NH[e][f] | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| Black | 1992-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| Black NH[e][f] | 1992-08 | 0.8 | | | | | | | | | | | 0.8 | 0.8 |
| API[e] | 1992-08 | 5.0* | | | | | | | | | | | 5.0* | 5.0* |
| AI/AN[e][g] | – | – | | | | | | | | | | | – | – |
| Hispanic[f] | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]   Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]   Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]   Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]   The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]   API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]   Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
      Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
      The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]   Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*    The APC/AAPC is significantly different from zero (p<.05).
–    Joinpoint regression line analysis could not be performed on data series.

Table 25.2
Cancer of the Testis (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Ages <50 by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | 2.7* | 1989-08 | 0.8* | | | | | | | | | 0.8* | 0.8* |
| White | 1975-87 | 3.4* | 1987-08 | 1.1* | | | | | | | | | 1.1* | 1.1* |
| Black | 1975-08 | 1.8* | | | | | | | | | | | 1.8* | 1.8* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 1.1* | | | | | | | | | | | 1.1* | 1.1* |
| White | 1992-08 | 1.3* | | | | | | | | | | | 1.3* | 1.3* |
| Black | 1992-08 | 0.8 | | | | | | | | | | | 0.8 | 0.8 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-89 | 2.8* | 1989-08 | 0.7* | | | | | | | | | 0.7* | 0.7* |
| White | 1975-89 | 3.1* | 1989-08 | 1.0* | | | | | | | | | 1.0* | 1.0* |
| Black | 1975-08 | 1.7* | | | | | | | | | | | 1.7* | 1.7* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 1.0* | | | | | | | | | | | 1.0* | 1.0* |
| White | 1992-08 | 1.2* | | | | | | | | | | | 1.2* | 1.2* |
| White NH[ef] | 1992-08 | 1.3* | | | | | | | | | | | 1.3* | 1.3* |
| Black | 1992-08 | 0.6 | | | | | | | | | | | 0.6 | 0.6 |
| Black NH[ef] | 1992-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| API[e] | 1992-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| AI/AN[eg] | 1992-08 | 1.9 | | | | | | | | | | | 1.9 | 1.9 |
| Hispanic[f] | 1992-08 | 2.6* | | | | | | | | | | | 2.6* | 2.6* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-83 | -9.8* | 1983-08 | -1.7* | | | | | | | | | -1.7* | -1.7* |
| White | 1975-82 | -10.9* | 1982-08 | -1.8* | | | | | | | | | -1.8* | -1.8* |
| Black | 1975-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -1.3* | | | | | | | | | | | -1.3* | -1.3* |
| White | 1992-08 | -1.4* | | | | | | | | | | | -1.4* | -1.4* |
| White NH[ef] | 1992-08 | -1.6* | | | | | | | | | | | -1.6* | -1.6* |
| Black | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| Black NH[ef] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| API[e] | 1992-08 | 6.5* | | | | | | | | | | | 6.5* | 6.5* |
| AI/AN[eg] | – | – | | | | | | | | | | | – | – |
| Hispanic[f] | 1992-08 | 1.3 | | | | | | | | | | | 1.3 | 1.3 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Table 25.3
Cancer of the Testis (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 With up to Three Joinpoints,
Ages 50+ by Race/Ethnicity

| | JP Trend 1 | | JP Trend 2 | | JP Trend 3 | | JP Trend 4 | | JP Trend 5 | | JP Trend 6 | | AAPC[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| White | 1975-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| Black | – | – | | | | | | | | | | | – | – |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 1.8* | | | | | | | | | | | 1.8* | 1.8* |
| White | 1992-08 | 1.7* | | | | | | | | | | | 1.7* | 1.7* |
| Black | – | – | | | | | | | | | | | – | – |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| White | 1975-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| Black | – | – | | | | | | | | | | | – | – |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 1.7* | | | | | | | | | | | 1.7* | 1.7* |
| White | 1992-08 | 1.6* | | | | | | | | | | | 1.6* | 1.6* |
| White NH[ef] | 1992-08 | 2.0* | | | | | | | | | | | 2.0* | 2.0* |
| Black | – | – | | | | | | | | | | | – | – |
| Black NH[ef] | – | – | | | | | | | | | | | – | – |
| API[e] | 1992-08 | 4.0 | | | | | | | | | | | 4.0 | 4.0 |
| AI/AN[eg] | – | – | | | | | | | | | | | – | – |
| Hispanic[f] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-91 | -5.7* | 1991-08 | 0.1 | | | | | | | | | 0.1 | 0.1 |
| White | 1975-90 | -6.0* | 1990-08 | 0.0 | | | | | | | | | 0.0 | 0.0 |
| Black | 1975-08 | -2.8* | | | | | | | | | | | -2.8* | -2.8* |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| White | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| White NH[ef] | 1992-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| Black | 1992-08 | 0.8 | | | | | | | | | | | 0.8 | 0.8 |
| Black NH[ef] | 1992-08 | 2.5 | | | | | | | | | | | 2.5 | 2.5 |
| API[e] | – | – | | | | | | | | | | | – | – |
| AI/AN[eg] | – | – | | | | | | | | | | | – | – |
| Hispanic[f] | 1992-08 | -3.2 | | | | | | | | | | | -3.2 | -3.2 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://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).
[b] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[c] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[d] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[e] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[f] 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.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
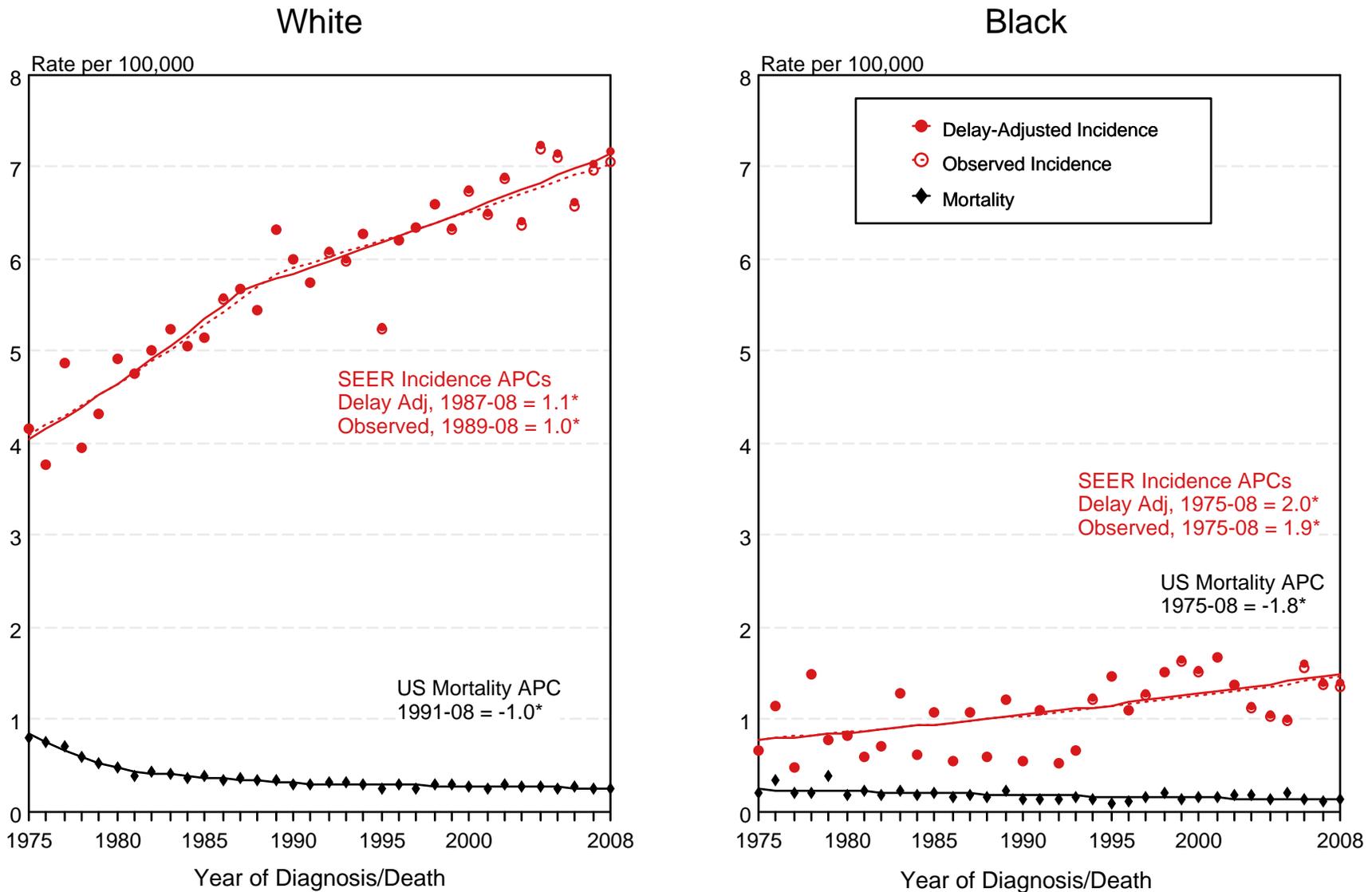## Cancer of the Testis, by Race

### White

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1987-08 = 1.1*
Observed, 1989-08 = 1.0*

US Mortality APC
1991-08 = -1.0*

Year of Diagnosis/Death

### Black

Rate per 100,000

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 1975-08 = 2.0*
Observed, 1975-08 = 1.9*

US Mortality APC
1975-08 = -1.8*

Year of Diagnosis/Death

[a]  Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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[a]
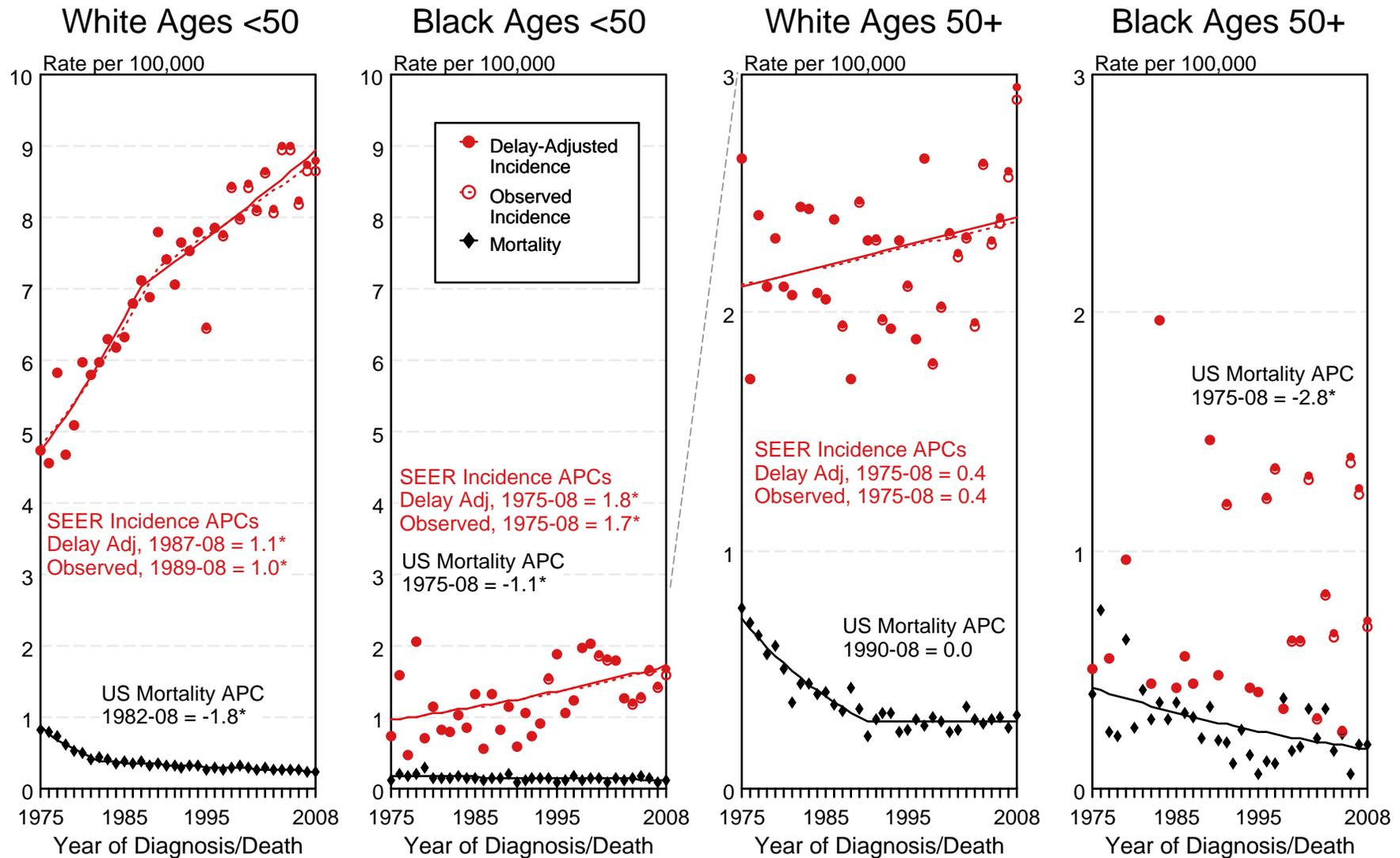## Cancer of the Testis, by Age and Race

Figure 25.2

### White Ages <50

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1987-08 = 1.1*
Observed, 1989-08 = 1.0*

US Mortality APC
1982-08 = -1.8*

Year of Diagnosis/Death

### Black Ages <50

Rate per 100,000

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 1975-08 = 1.8*
Observed, 1975-08 = 1.7*

US Mortality APC
1975-08 = -1.1*

Year of Diagnosis/Death

### White Ages 50+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.4
Observed, 1975-08 = 0.4

US Mortality APC
1990-08 = 0.0

Year of Diagnosis/Death

### Black Ages 50+

Rate per 100,000

US Mortality APC
1975-08 = -2.8*

Year of Diagnosis/Death

Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
[a]  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 3.5, April 2011, 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).
*  Regression line cannot be calculated for Black Male Age 50+ Incidence and Delay-adjusted Incidence due to years with zero count.

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
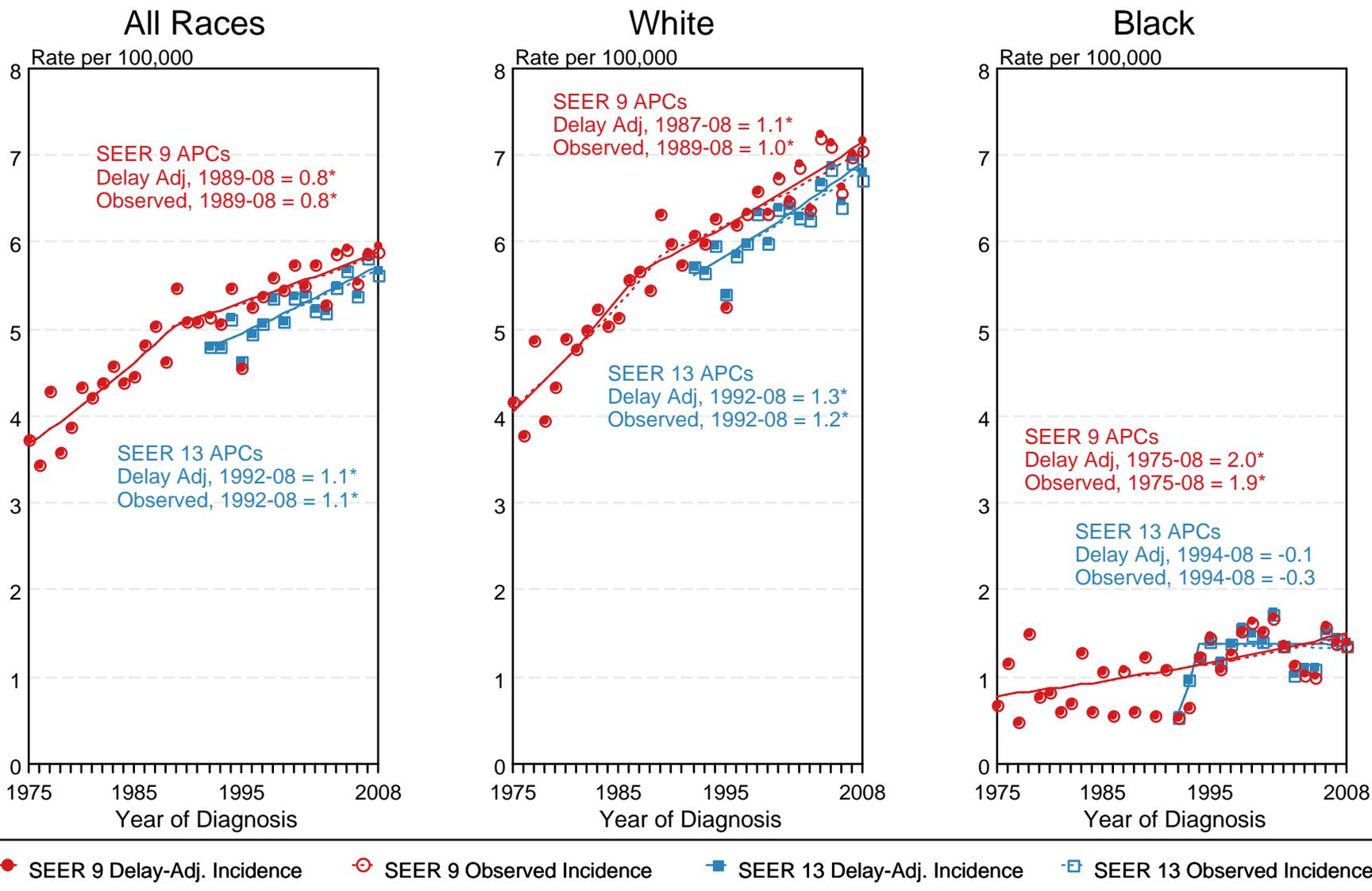SEER 9 Areas Compared to SEER 13 Areas
Cancer of the Testis, by Race

Figure 25.4

**All Races**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-08 = 0.8*
Observed, 1989-08 = 0.8*

SEER 13 APCs
Delay Adj, 1992-08 = 1.1*
Observed, 1992-08 = 1.1*

**White**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1987-08 = 1.1*
Observed, 1989-08 = 1.0*

SEER 13 APCs
Delay Adj, 1992-08 = 1.3*
Observed, 1992-08 = 1.2*

**Black**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 2.0*
Observed, 1975-08 = 1.9*

SEER 13 APCs
Delay Adj, 1994-08 = -0.1
Observed, 1994-08 = -0.3

Year of Diagnosis

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

[a] Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 26.1
Cancer of the Thyroid (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-77 | 6.1 | 1977-80 | -6.6 | 1980-97 | 2.4* | 1997-08 | 6.6* | | | | | 6.6* | 6.6* |
| White | 1975-77 | 7.3 | 1977-80 | -6.7 | 1980-97 | 2.8* | 1997-08 | 6.9* | | | | | 6.9* | 6.9* |
| Black | 1975-88 | -1.2 | 1988-08 | 4.8* | | | | | | | | | 4.8* | 4.8* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-98 | 3.1* | 1998-08 | 6.4* | | | | | | | | | 6.4* | 6.4* |
| White | 1992-98 | 3.7* | 1998-08 | 6.6* | | | | | | | | | 6.6* | 6.6* |
| Black | 1992-95 | -3.7 | 1995-08 | 6.5* | | | | | | | | | 6.5* | 6.5* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-77 | 6.1 | 1977-80 | -6.6 | 1980-97 | 2.4* | 1997-08 | 6.4* | | | | | 6.4* | 6.4* |
| White | 1975-77 | 7.3 | 1977-80 | -6.7 | 1980-97 | 2.7* | 1997-08 | 6.8* | | | | | 6.8* | 6.8* |
| Black | 1975-88 | -1.1 | 1988-08 | 4.7* | | | | | | | | | 4.7* | 4.7* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-98 | 3.1* | 1998-08 | 6.3* | | | | | | | | | 6.3* | 6.3* |
| White | 1992-98 | 3.7* | 1998-08 | 6.5* | | | | | | | | | 6.5* | 6.5* |
| White NH[ef] | 1992-98 | 4.4* | 1998-08 | 6.7* | | | | | | | | | 6.7* | 6.7* |
| Black | 1992-95 | -3.7 | 1995-08 | 6.3* | | | | | | | | | 6.3* | 6.3* |
| Black NH[ef] | 1992-95 | -4.0 | 1995-08 | 6.4* | | | | | | | | | 6.4* | 6.4* |
| API[e] | 1992-97 | -1.7 | 1997-08 | 4.7* | | | | | | | | | 4.7* | 4.7* |
| AI/AN[eg] | 1992-08 | 2.3* | | | | | | | | | | | 2.3* | 2.3* |
| Hispanic[f] | 1992-95 | -4.6 | 1995-08 | 5.0* | | | | | | | | | 5.0* | 5.0* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | -2.1* | 1988-08 | 0.7* | | | | | | | | | 0.7* | 0.7* |
| White | 1975-88 | -2.2* | 1988-08 | 0.7* | | | | | | | | | 0.7* | 0.7* |
| Black | 1975-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.8* | | | | | | | | | | | 0.8* | 0.8* |
| White | 1992-08 | 0.8* | | | | | | | | | | | 0.8* | 0.8* |
| White NH[ef] | 1992-08 | 0.9* | | | | | | | | | | | 0.9* | 0.9* |
| Black | 1992-08 | 1.0* | | | | | | | | | | | 1.0* | 1.0* |
| Black NH[ef] | 1992-08 | 1.1* | | | | | | | | | | | 1.1* | 1.1* |
| API[e] | 1992-03 | -3.9* | 2003-08 | 8.4 | | | | | | | | | 2.8 | 8.4 |
| AI/AN[eg] | 1992-08 | 2.1 | | | | | | | | | | | 2.1 | 2.1 |
| Hispanic[f] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 26.2
Cancer of the Thyroid (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| SEER 9 Delay-Adjusted Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-80 | -4.7* | 1980-98 | 1.9* | 1998-08 | 6.0* | | | | | | | 6.0* | 6.0* |
| White | 1975-77 | 10.0 | 1977-80 | -9.1 | 1980-98 | 2.6* | 1998-08 | 6.1* | | | | | 6.1* | 6.1* |
| Black | 1975-08 | 3.0* | | | | | | | | | | | 3.0* | 3.0* |
| SEER 13 Delay-Adjusted Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-96 | -1.2 | 1996-08 | 5.5* | | | | | | | | | 5.5* | 5.5* |
| White | 1992-96 | -0.1 | 1996-08 | 5.7* | | | | | | | | | 5.7* | 5.7* |
| Black | 1992-95 | -13.6 | 1995-08 | 6.4* | | | | | | | | | 6.4* | 6.4* |
| SEER 9 Observed Incidence[a], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-80 | -4.7* | 1980-98 | 1.9* | 1998-08 | 5.8* | | | | | | | 5.8* | 5.8* |
| White | 1975-77 | 10.0 | 1977-80 | -9.1 | 1980-98 | 2.6* | 1998-08 | 5.9* | | | | | 5.9* | 5.9* |
| Black | 1975-08 | 2.9* | | | | | | | | | | | 2.9* | 2.9* |
| SEER 13 Observed Incidence[b], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-96 | -1.2 | 1996-08 | 5.3* | | | | | | | | | 5.3* | 5.3* |
| White | 1992-95 | -2.0 | 1995-08 | 5.4* | | | | | | | | | 5.4* | 5.4* |
|  White NH[ef] | 1992-96 | 0.3 | 1996-08 | 5.9* | | | | | | | | | 5.9* | 5.9* |
| Black | 1992-95 | -13.5 | 1995-08 | 6.2* | | | | | | | | | 6.2* | 6.2* |
|  Black NH[ef] | 1992-95 | -13.3 | 1995-08 | 6.1* | | | | | | | | | 6.1* | 6.1* |
| API[e] | 1992-08 | 2.1* | | | | | | | | | | | 2.1* | 2.1* |
| AI/AN[eg] | 1992-08 | 1.9 | | | | | | | | | | | 1.9 | 1.9 |
| Hispanic[f] | 1992-08 | 3.5* | | | | | | | | | | | 3.5* | 3.5* |
| U.S. Cancer Mortality[c], 1975-2008 | | | | | | | | | | | | | | |
| All Races | 1975-83 | -3.1* | 1983-08 | 1.2* | | | | | | | | | 1.2* | 1.2* |
| White | 1975-84 | -2.6* | 1984-08 | 1.3* | | | | | | | | | 1.3* | 1.3* |
| Black | 1975-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| U.S. Cancer Mortality[c], 1992-2008 | | | | | | | | | | | | | | |
| All Races | 1992-08 | 1.6* | | | | | | | | | | | 1.6* | 1.6* |
| White | 1992-08 | 1.7* | | | | | | | | | | | 1.7* | 1.7* |
|  White NH[ef] | 1992-08 | 1.7* | | | | | | | | | | | 1.7* | 1.7* |
| Black | 1992-08 | 1.7* | | | | | | | | | | | 1.7* | 1.7* |
|  Black NH[ef] | 1992-08 | 1.6 | | | | | | | | | | | 1.6 | 1.6 |
| API[e] | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| AI/AN[eg] | – | – | | | | | | | | | | | – | – |
| Hispanic[f] | 1992-08 | 2.4* | | | | | | | | | | | 2.4* | 2.4* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Table 26.3
Cancer of the Thyroid (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-77 | 6.8 | 1977-80 | -6.0 | 1980-97 | 2.7* | 1997-08 | 6.9* | | | | | 6.9* | 6.9* |
| White | 1975-81 | -1.1 | 1981-93 | 2.4* | 1993-99 | 5.1* | 1999-08 | 7.4* | | | | | 7.4* | 7.4* |
| Black | 1975-88 | -1.4 | 1988-08 | 5.0* | | | | | | | | | 5.0* | 5.0* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-98 | 3.8* | 1998-08 | 6.6* | | | | | | | | | 6.6* | 6.6* |
| White | 1992-98 | 4.4* | 1998-08 | 6.9* | | | | | | | | | 6.9* | 6.9* |
| Black | 1992-08 | 5.9* | | | | | | | | | | | 5.9* | 5.9* |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-77 | 6.6 | 1977-80 | -5.6 | 1980-96 | 2.5* | 1996-08 | 6.6* | | | | | 6.6* | 6.6* |
| White | 1975-81 | -1.1 | 1981-93 | 2.4* | 1993-99 | 5.1* | 1999-08 | 7.2* | | | | | 7.2* | 7.2* |
| Black | 1975-88 | -1.3 | 1988-08 | 4.9* | | | | | | | | | 4.9* | 4.9* |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-98 | 3.8* | 1998-08 | 6.5* | | | | | | | | | 6.5* | 6.5* |
| White | 1992-98 | 4.4* | 1998-08 | 6.8* | | | | | | | | | 6.8* | 6.8* |
| White NH[ef] | 1992-98 | 5.3* | 1998-08 | 6.9* | | | | | | | | | 6.9* | 6.9* |
| Black | 1992-08 | 5.8* | | | | | | | | | | | 5.8* | 5.8* |
| Black NH[ef] | 1992-08 | 5.9* | | | | | | | | | | | 5.9* | 5.9* |
| API[e] | 1992-99 | 0.4 | 1999-08 | 5.5* | | | | | | | | | 5.5* | 5.5* |
| AI/AN[eg] | 1992-08 | 2.7 | | | | | | | | | | | 2.7 | 2.7 |
| Hispanic[f] | 1992-98 | 0.9 | 1998-08 | 5.9* | | | | | | | | | 5.9* | 5.9* |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-88 | -2.6* | 1988-08 | 0.4* | | | | | | | | | 0.4* | 0.4* |
| White | 1975-88 | -2.8* | 1988-08 | 0.3* | | | | | | | | | 0.3* | 0.3* |
| Black | 1975-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-94 | -6.1 | 1994-08 | 0.8* | | | | | | | | | 0.8* | 0.8* |
| White | 1992-94 | -5.4 | 1994-08 | 0.6* | | | | | | | | | 0.6* | 0.6* |
| White NH[ef] | 1992-08 | 0.5* | | | | | | | | | | | 0.5* | 0.5* |
| Black | 1992-08 | 0.9 | | | | | | | | | | | 0.9 | 0.9 |
| Black NH[ef] | 1992-08 | 1.0 | | | | | | | | | | | 1.0 | 1.0 |
| API[e] | 1992-03 | -4.1* | 2003-08 | 7.7 | | | | | | | | | 2.3 | 7.7 |
| AI/AN[eg] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| Hispanic[f] | 1992-08 | -1.4* | | | | | | | | | | | -1.4* | -1.4* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude ca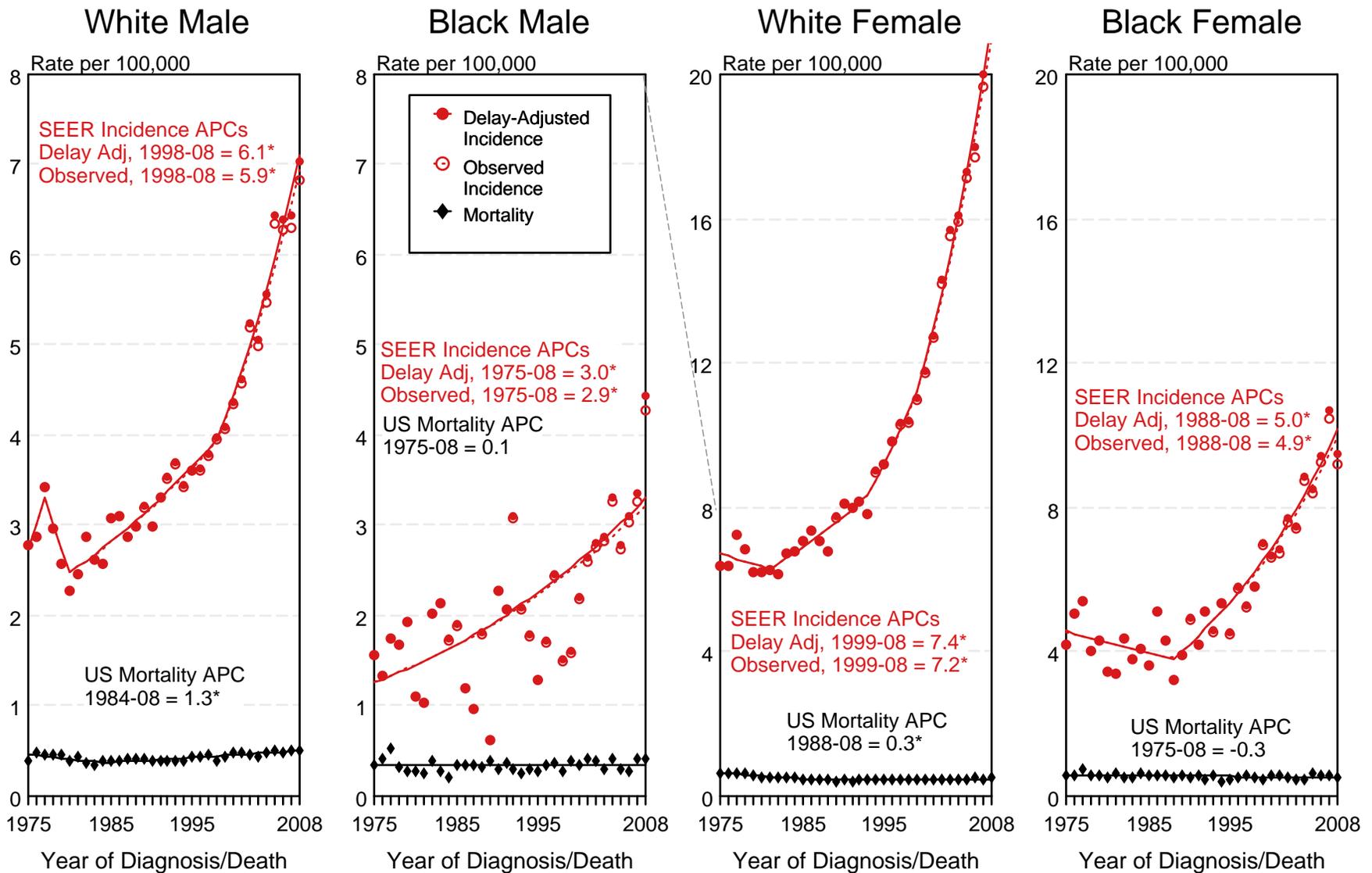ses from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
## Cancer of the Thyroid, by Race and Sex

### White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1998-08 = 6.1*
Observed, 1998-08 = 5.9*

US Mortality APC
1984-08 = 1.3*

Year of Diagnosis/Death

### Black Male

Rate per 100,000

- ● Delay-Adjusted Incidence
- ◎ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 1975-08 = 3.0*
Observed, 1975-08 = 2.9*

US Mortality APC
1975-08 = 0.1

Year of Diagnosis/Death

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1999-08 = 7.4*
Observed, 1999-08 = 7.2*

US Mortality APC
1988-08 = 0.3*

Year of Diagnosis/Death

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1988-08 = 5.0*
Observed, 1988-08 = 4.9*

US Mortality APC
1975-08 = -0.3

Year of Diagnosis/Death

a   Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
    Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
    Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
### Cancer of the Thyroid, Male, by Race

Figure 26.3



**All Races**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1998-08 = 6.0*
Observed, 1998-08 = 5.8*

SEER 13 APCs
Delay Adj, 1996-08 = 5.5*
Observed, 1996-08 = 5.3*

Year of Diagnosis

**White**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1998-08 = 6.1*
Observed, 1998-08 = 5.9*

SEER 13 APCs
Delay Adj, 1996-08 = 5.7*
Observed, 1995-08 = 5.4*

Year of Diagnosis

**Black**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 3.0*
Observed, 1975-08 = 2.9*

SEER 13 APCs
Delay Adj, 1995-08 = 6.4*
Observed, 1995-08 = 6.2*

Year of Diagnosis

Legend:
- SEER 9 Delay-Adj. Incidence
- SEER 9 Observed Incidence
- SEER 13 Delay-Adj. Incidence
- SEER 13 Observed Incidence
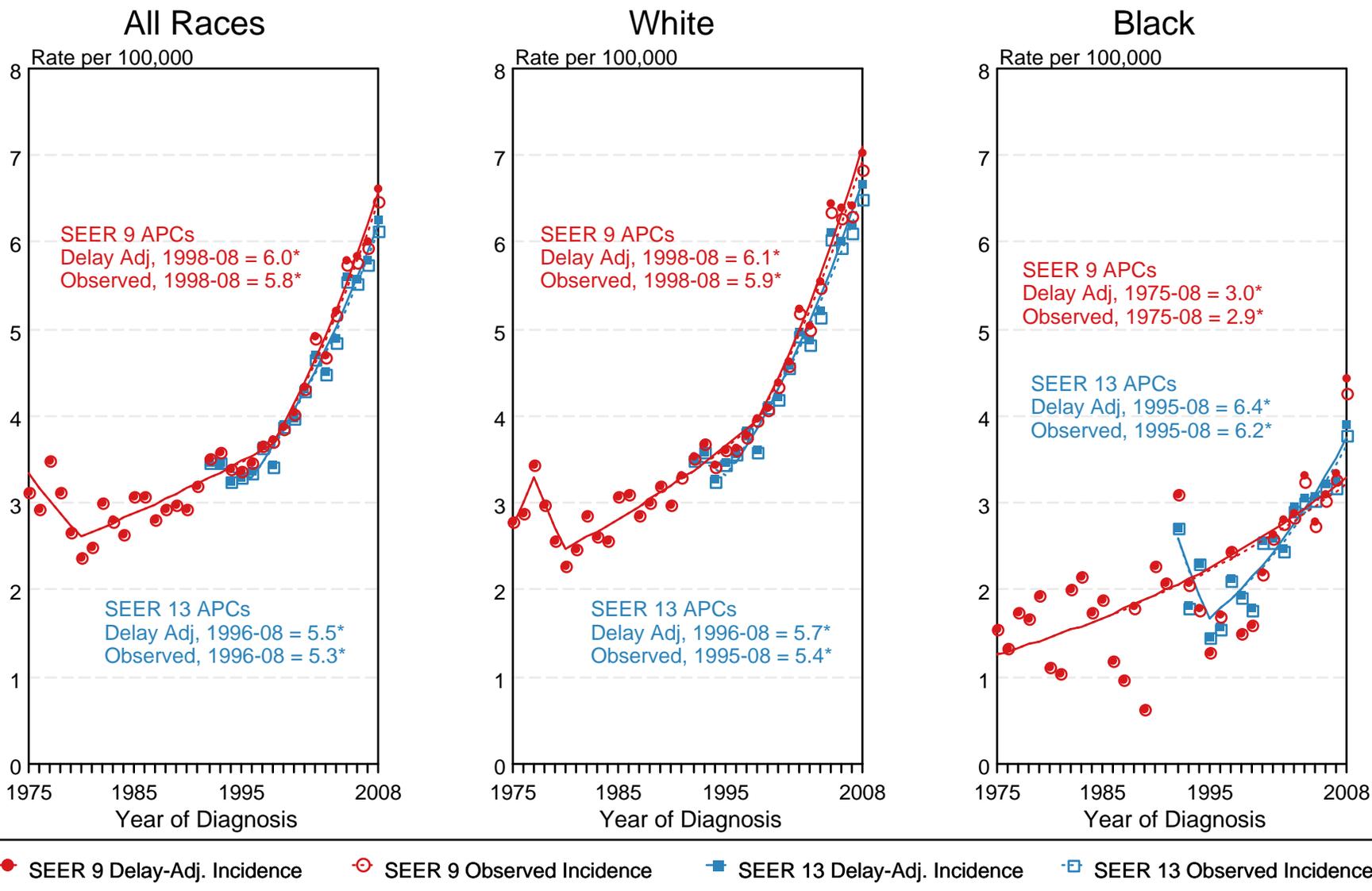
[a]  Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
   The APC is the Annual Percent 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Thyroid, Female, by Race

Figure 26.4

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1997-08 = 6.9*
Observed, 1996-08 = 6.6*

SEER 13 APCs
Delay Adj, 1998-08 = 6.6*
Observed, 1998-08 = 6.5*

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1999-08 = 7.4*
Observed, 1999-08 = 7.2*

SEER 13 APCs
Delay Adj, 1998-08 = 6.9*
Observed, 1998-08 = 6.8*

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1988-08 = 5.0*
Observed, 1988-08 = 4.9*

SEER 13 APCs
Delay Adj, 1992-08 = 5.9*
Observed, 1992-08 = 5.8*

Year of Diagnosis

Legend:
- SEER 9 Delay-Adj. Incidence
- SEER 9 Observed Incidence
- SEER 13 Delay-Adj. Incidence
- SEER 13 Observed Incidence
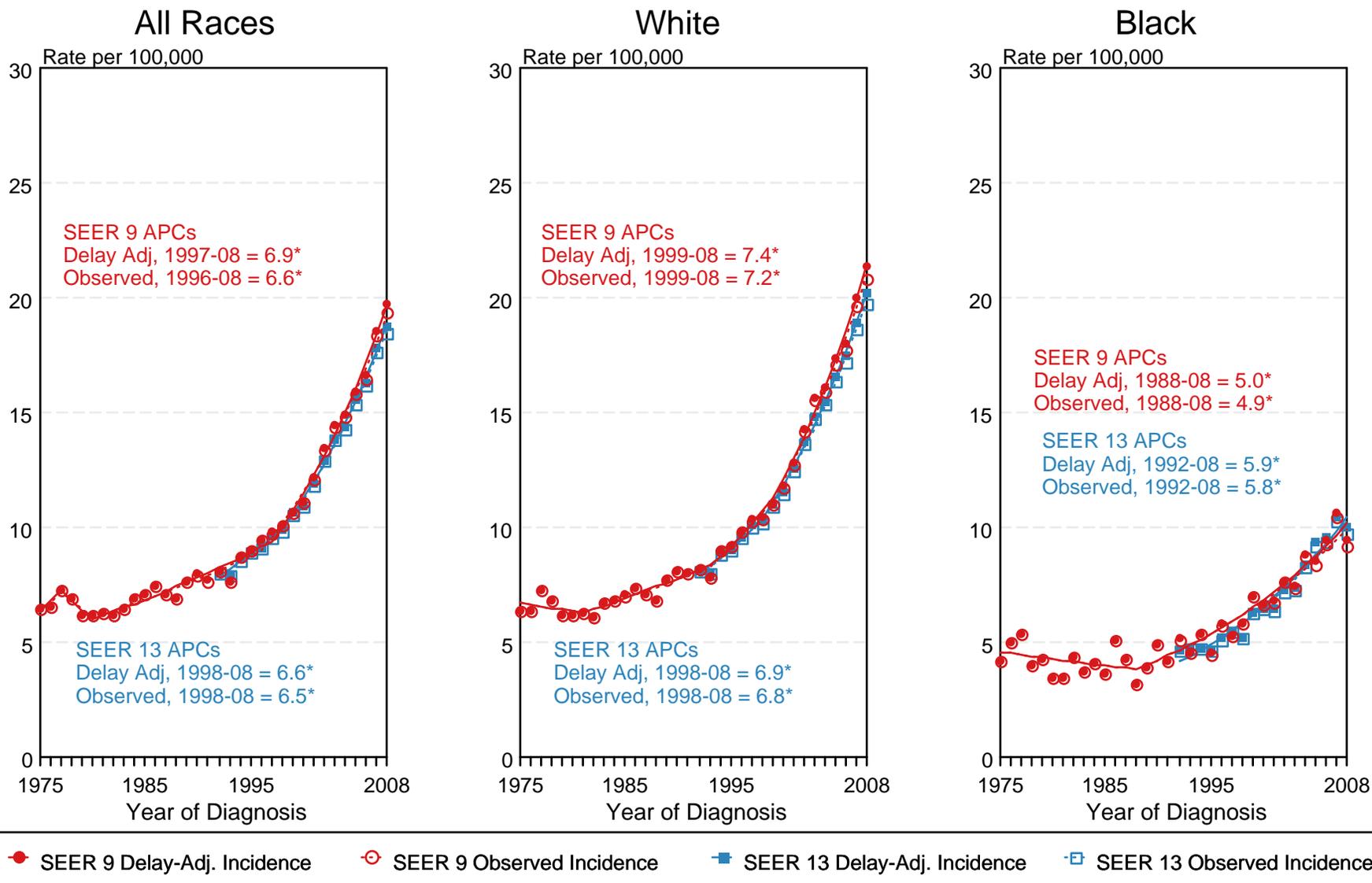
[a] Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
   The APC is the Annual Percent 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-87 | 0.8* | 1987-96 | -0.2 | 1996-99 | 1.6 | 1999-08 | -0.2 | | | | | -0.2 | -0.2 |
| White | 1975-87 | 1.0* | 1987-96 | -0.1 | 1996-99 | 1.8 | 1999-08 | -0.1 | | | | | -0.1 | -0.1 |
| Black | 1975-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| White | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| Black | 1992-08 | 0.6 | | | | | | | | | | | 0.6 | 0.6 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-87 | 0.8* | 1987-96 | -0.2 | 1996-99 | 1.6 | 1999-08 | -0.4* | | | | | -0.4* | -0.4* |
| White | 1975-87 | 1.0* | 1987-96 | -0.1 | 1996-00 | 1.4 | 2000-08 | -0.5* | | | | | -0.3 | -0.5* |
| Black | 1975-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-04 | 0.1 | 2004-08 | -1.1 | | | | | | | | | -0.4 | -1.1 |
| White | 1992-04 | 0.3* | 2004-08 | -1.3 | | | | | | | | | -0.4 | -1.3 |
| White NH[ef] | 1992-04 | 0.5* | 2004-08 | -1.0 | | | | | | | | | -0.2 | -1.0 |
| Black | 1992-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| Black NH[ef] | 1992-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| API[e] | 1992-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| AI/AN[eg] | 1992-08 | 2.0 | | | | | | | | | | | 2.0 | 2.0 |
| Hispanic[f] | 1992-08 | -0.4 | | | | | | | | | | | -0.4 | -0.4 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-77 | 0.1 | 1977-87 | -2.2* | 1987-08 | -0.1* | | | | | | | -0.1* | -0.1* |
| White | 1975-77 | 0.2 | 1977-87 | -2.2* | 1987-08 | 0.0 | | | | | | | 0.0 | 0.0 |
| Black | 1975-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.1* | | | | | | | | | | | -0.1* | -0.1* |
| White | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| White NH[ef] | 1992-99 | -0.1 | 1999-08 | 0.5* | | | | | | | | | 0.5* | 0.5* |
| Black | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| Black NH[ef] | 1992-08 | -0.7* | | | | | | | | | | | -0.7* | -0.7* |
| API[e] | 1992-08 | -1.2* | | | | | | | | | | | -1.2* | -1.2* |
| AI/AN[eg] | 1992-08 | 3.6* | | | | | | | | | | | 3.6* | 3.6* |
| Hispanic[f] | 1992-08 | -0.7 | | | | | | | | | | | -0.7 | -0.7 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]  Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]  Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]  Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]  The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]  API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]  Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
     Natives.  Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
     The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g]  Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*    The APC/AAPC is significantly different from zero (p<.05).
-    Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-86 | 0.9* | 1986-08 | 0.1 | | | | | | | | | 0.1 | 0.1 |
| White | 1975-87 | 1.0* | 1987-08 | 0.1 | | | | | | | | | 0.1 | 0.1 |
| Black | 1975-08 | 0.4* | | | | | | | | | | | 0.4* | 0.4* |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | 0.0 | | | | | | | | | | | 0.0 | 0.0 |
| White | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| Black | 1992-08 | 0.7 | | | | | | | | | | | 0.7 | 0.7 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-86 | 0.9* | 1986-08 | 0.0 | | | | | | | | | 0.0 | 0.0 |
| White | 1975-87 | 1.0* | 1987-08 | 0.0 | | | | | | | | | 0.0 | 0.0 |
| Black | 1975-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White NH[ef] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| Black | 1992-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| Black NH[ef] | 1992-08 | 0.5 | | | | | | | | | | | 0.5 | 0.5 |
| API[e] | 1992-08 | 0.8* | | | | | | | | | | | 0.8* | 0.8* |
| AI/AN[eg] | 1992-08 | 1.6 | | | | | | | | | | | 1.6 | 1.6 |
| Hispanic[f] | 1992-08 | -0.6 | | | | | | | | | | | -0.6 | -0.6 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-83 | -1.4* | 1983-87 | -2.8* | 1987-93 | 0.2 | 1993-97 | -1.1 | 1997-08 | 0.0 | | | 0.0 | 0.0 |
| White | 1975-82 | -1.4* | 1982-87 | -2.3* | 1987-02 | -0.2* | 2002-08 | 0.3 | | | | | 0.1 | 0.3 |
| Black | 1975-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-00 | -0.6* | 2000-08 | 0.1 | | | | | | | | | 0.1 | 0.1 |
| White | 1992-08 | -0.1 | | | | | | | | | | | -0.1 | -0.1 |
| White NH[ef] | 1992-99 | -0.5 | 1999-08 | 0.5* | | | | | | | | | 0.5* | 0.5* |
| Black | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |
| Black NH[ef] | 1992-08 | -0.7* | | | | | | | | | | | -0.7* | -0.7* |
| API[e] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| AI/AN[eg] | 1992-08 | 5.5* | | | | | | | | | | | 5.5* | 5.5* |
| Hispanic[f] | 1992-08 | -1.0* | | | | | | | | | | | -1.0* | -1.0* |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
\* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2008 With up to Five Joinpoints, 1992-2008 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[d] | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | Years | APC | 1999-08 | 2004-08 |
| **SEER 9 Delay-Adjusted Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-03 | 0.2* | 2003-08 | -1.3 | | | | | | | | | -0.6 | -1.3 |
| White | 1975-02 | 0.4* | 2002-08 | -1.0 | | | | | | | | | -0.5 | -1.0 |
| Black | 1975-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| **SEER 13 Delay-Adjusted Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.3* | | | | | | | | | | | -0.3* | -0.3* |
| White | 1992-08 | -0.2* | | | | | | | | | | | -0.2* | -0.2* |
| Black | 1992-08 | 0.4 | | | | | | | | | | | 0.4 | 0.4 |
| **SEER 9 Observed Incidence[a], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-03 | 0.2* | 2003-08 | -1.7* | | | | | | | | | -0.9* | -1.7* |
| White | 1975-02 | 0.4* | 2002-08 | -1.5* | | | | | | | | | -0.9* | -1.5* |
| Black | 1975-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| **SEER 13 Observed Incidence[b], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-04 | -0.2 | 2004-08 | -1.7* | | | | | | | | | -0.9* | -1.7* |
| White | 1992-03 | 0.0 | 2003-08 | -1.4* | | | | | | | | | -0.8* | -1.4* |
| White NH[ef] | 1992-03 | 0.2 | 2003-08 | -1.4* | | | | | | | | | -0.7* | -1.4* |
| Black | 1992-08 | 0.2 | | | | | | | | | | | 0.2 | 0.2 |
| Black NH[ef] | 1992-08 | 0.3 | | | | | | | | | | | 0.3 | 0.3 |
| API[e] | 1992-08 | 0.1 | | | | | | | | | | | 0.1 | 0.1 |
| AI/AN[eg] | 1992-08 | 5.1 | | | | | | | | | | | 5.1 | 5.1 |
| Hispanic[f] | 1992-08 | -0.3 | | | | | | | | | | | -0.3 | -0.3 |
| **U.S. Cancer Mortality[c], 1975-2008** | | | | | | | | | | | | | | |
| All Races | 1975-86 | -1.7* | 1986-08 | -0.4* | | | | | | | | | -0.4* | -0.4* |
| White | 1975-86 | -1.7* | 1986-08 | -0.3* | | | | | | | | | -0.3* | -0.3* |
| Black | 1975-08 | -0.9* | | | | | | | | | | | -0.9* | -0.9* |
| **U.S. Cancer Mortality[c], 1992-2008** | | | | | | | | | | | | | | |
| All Races | 1992-08 | -0.5* | | | | | | | | | | | -0.5* | -0.5* |
| White | 1992-08 | -0.4* | | | | | | | | | | | -0.4* | -0.4* |
| White NH[ef] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| Black | 1992-08 | -1.1* | | | | | | | | | | | -1.1* | -1.1* |
| Black NH[ef] | 1992-08 | -0.8* | | | | | | | | | | | -0.8* | -0.8* |
| API[e] | 1992-08 | -2.3* | | | | | | | | | | | -2.3* | -2.3* |
| AI/AN[eg] | 1992-08 | -0.2 | | | | | | | | | | | -0.2 | -0.2 |
| Hispanic[f] | 1992-08 | -0.5 | | | | | | | | | | | -0.5 | -0.5 |

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
\* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
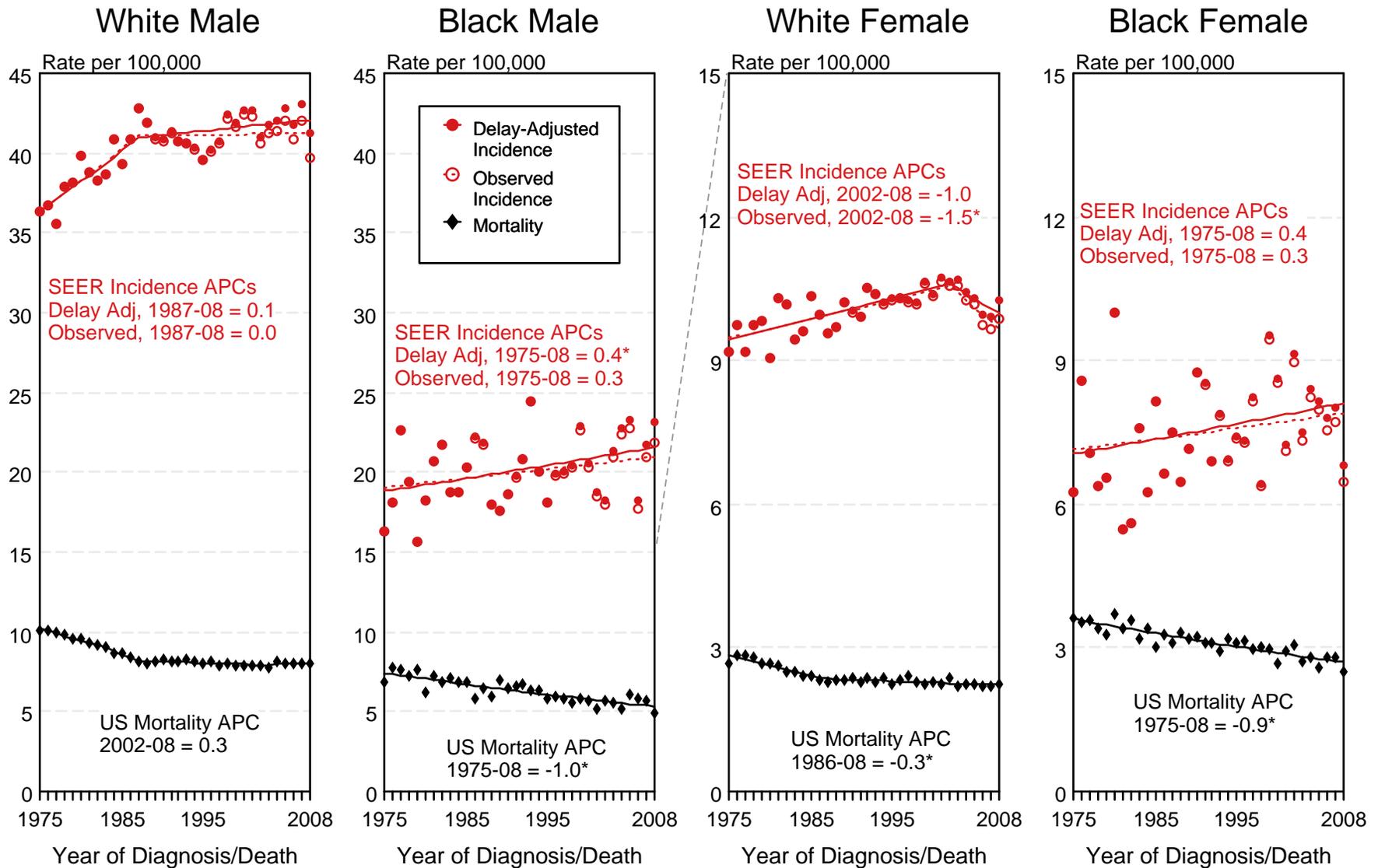Cancer of the Urinary Bladder, by Race and Sex

Figure 27.1

### White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1987-08 = 0.1
Observed, 1987-08 = 0.0

US Mortality APC
2002-08 = 0.3

Year of Diagnosis/Death

### Black Male

Rate per 100,000

- ● Delay-Adjusted Incidence
- ○ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 1975-08 = 0.4*
Observed, 1975-08 = 0.3

US Mortality APC
1975-08 = -1.0*

Year of Diagnosis/Death

### White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2002-08 = -1.0
Observed, 2002-08 = -1.5*

US Mortality APC
1986-08 = -0.3*

Year of Diagnosis/Death

### Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-08 = 0.4
Observed, 1975-08 = 0.3

US Mortality APC
1975-08 = -0.9*

Year of Diagnosis/Death

[a] Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
## Cancer of the Urinary Bladder, Male, by Race

Figure 27.3

### All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1986-08 = 0.1
Observed, 1986-08 = 0.0

SEER 13 APCs
Delay Adj, 1992-08 = 0.0
Observed, 1992-08 = -0.1

Year of Diagnosis

### White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1987-08 = 0.1
Observed, 1987-08 = 0.0

SEER 13 APCs
Delay Adj, 1992-08 = 0.1
Observed, 1992-08 = -0.1

Year of Diagnosis

### Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.4*
Observed, 1975-08 = 0.3

SEER 13 APCs
Delay Adj, 1992-08 = 0.7
Observed, 1992-08 = 0.5

Year of Diagnosis

Legend:
- ● SEER 9 Delay-Adj. Incidence
- ○ SEER 9 Observed Incidence
- ■ SEER 13 Delay-Adj. Incidence
- ▫ SEER 13 Observed Incidence
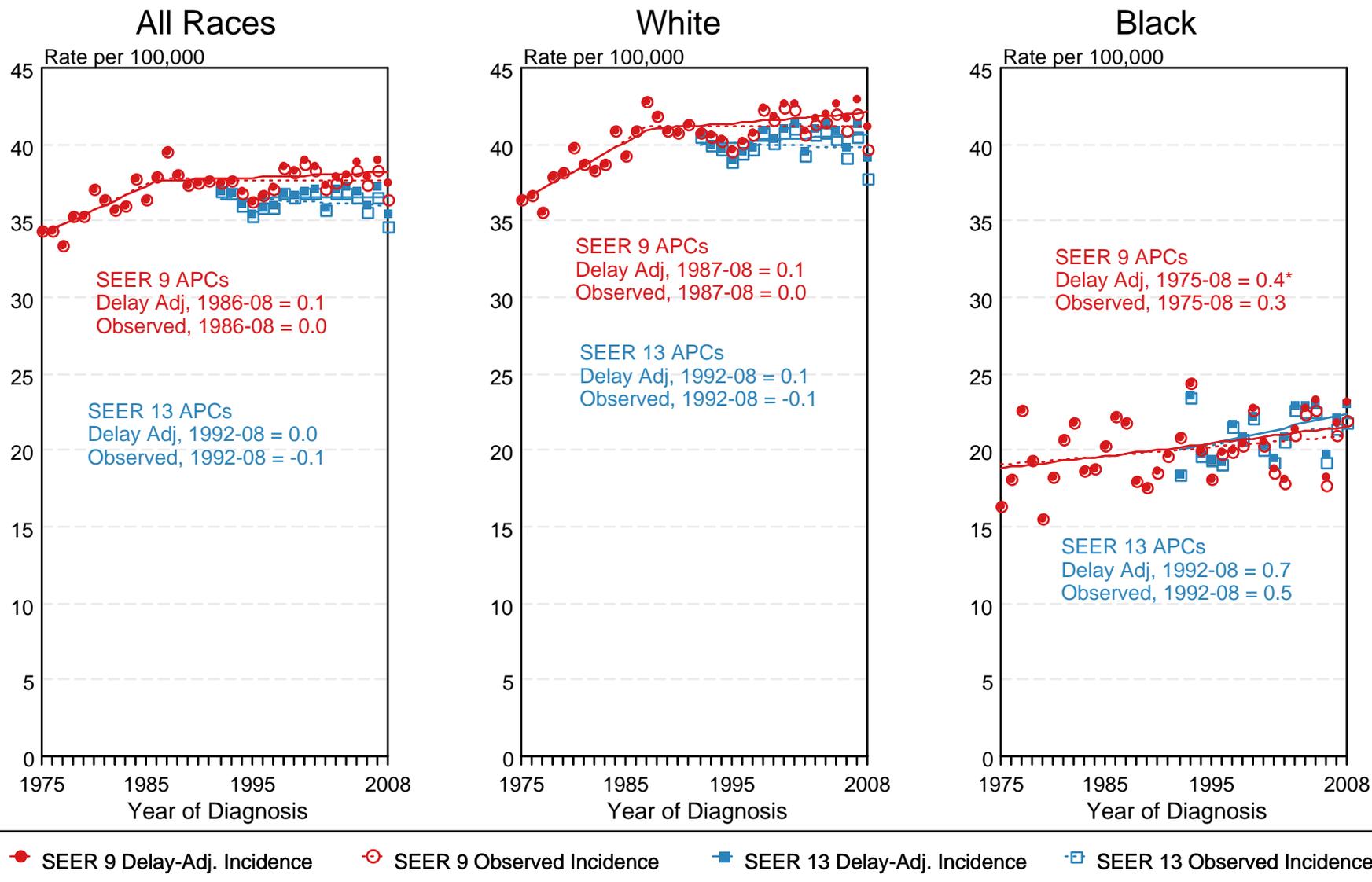
[a] Source: SEER 9 areas and SEER 13 areas.
  Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
  Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
  The APC is the Annual Percent Change 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 and SEER Delay Adjusted Incidence Rates[a]
## SEER 9 Areas Compared to SEER 13 Areas
### Cancer of the Urinary Bladder, Female, by Race

Figure 27.4

**All Races**

Rate per 100,000

SEER 9 APCs
Delay Adj, 2003-08 = -1.3
Observed, 2003-08 = -1.7*

SEER 13 APCs
Delay Adj, 1992-08 = -0.3*
Observed, 2004-08 = -1.7*

Year of Diagnosis

**White**

Rate per 100,000

SEER 9 APCs
Delay Adj, 2002-08 = -1.0
Observed, 2002-08 = -1.5*

SEER 13 APCs
Delay Adj, 1992-08 = -0.2*
Observed, 2003-08 = -1.4*

Year of Diagnosis

**Black**

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-08 = 0.4
Observed, 1975-08 = 0.3

SEER 13 APCs
Delay Adj, 1992-08 = 0.4
Observed, 1992-08 = 0.2

Year of Diagnosis

● SEER 9 Delay-Adj. Incidence     ○ SEER 9 Observed Incidence     ■ SEER 13 Delay-Adj. Incidence     □ SEER 13 Observed Incidence
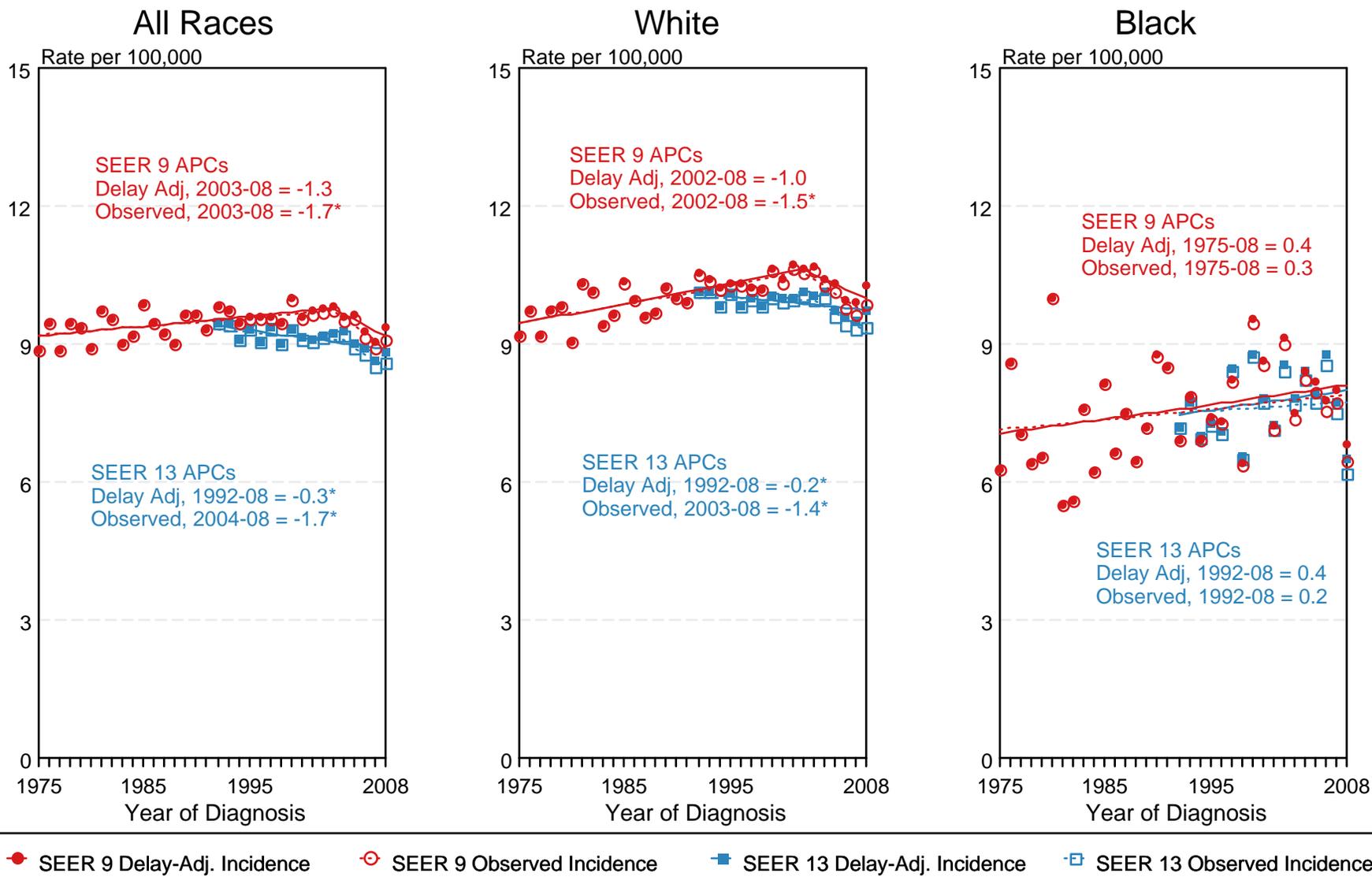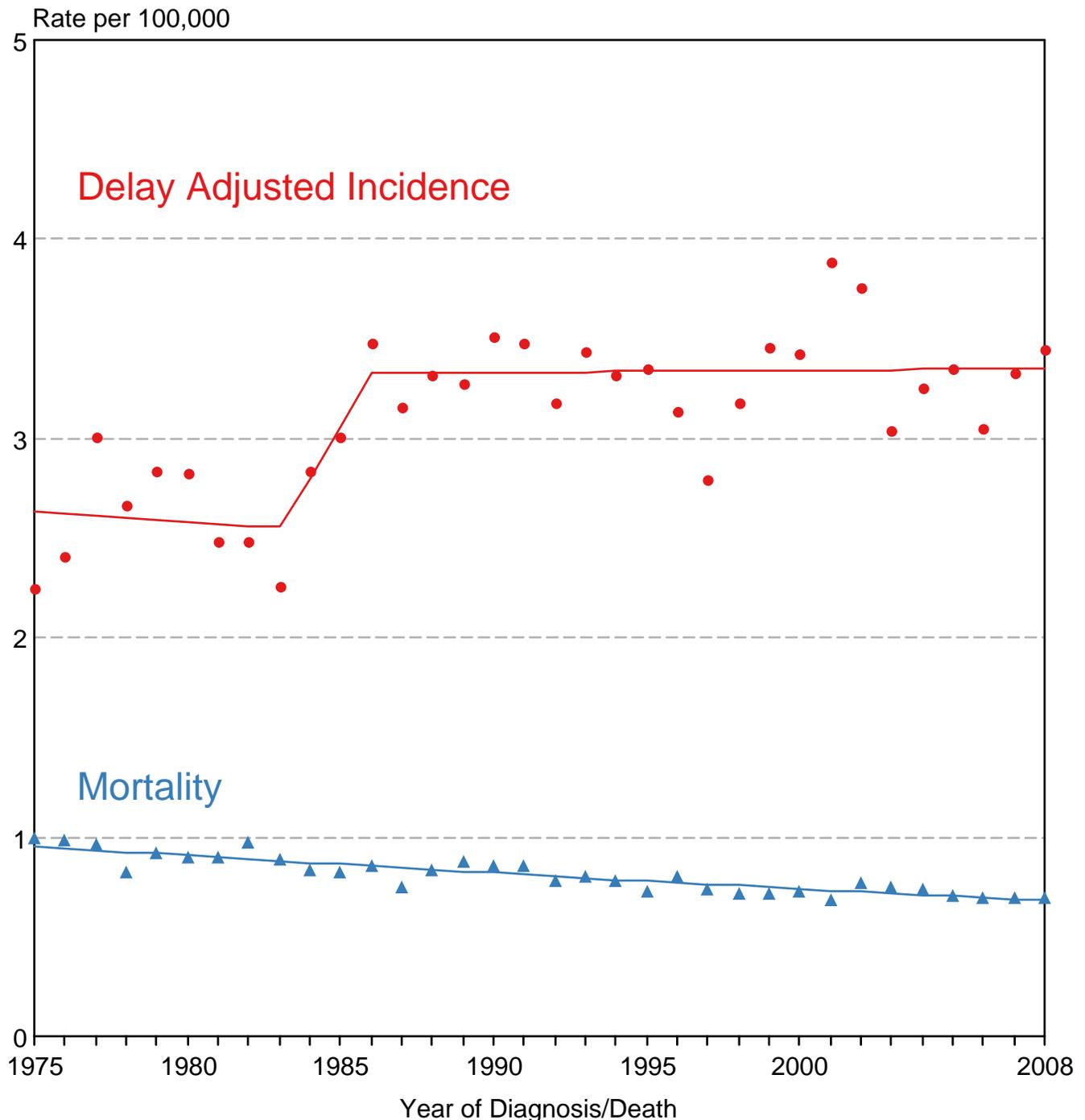
[a]  Source: SEER 9 areas and SEER 13 areas.
   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
   The APC is the Annual Percent 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 28.1

SEER Delay-Adjusted Incidence and US Mortality
All Childhood Cancers, Under 20 Years of Age
Both Sexes, All Races, 1975-2008

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 3.5, April 2011,
National Cancer Institute.

Figure 28.2

# SEER Delay-Adjusted Incidence and US Mortality
# Brain and CNS, Under 15 Years of Age
# Both Sexes, All Races, 1975-2008

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 3.5, April 2011,
National Cancer Institute.