Figure 1.21

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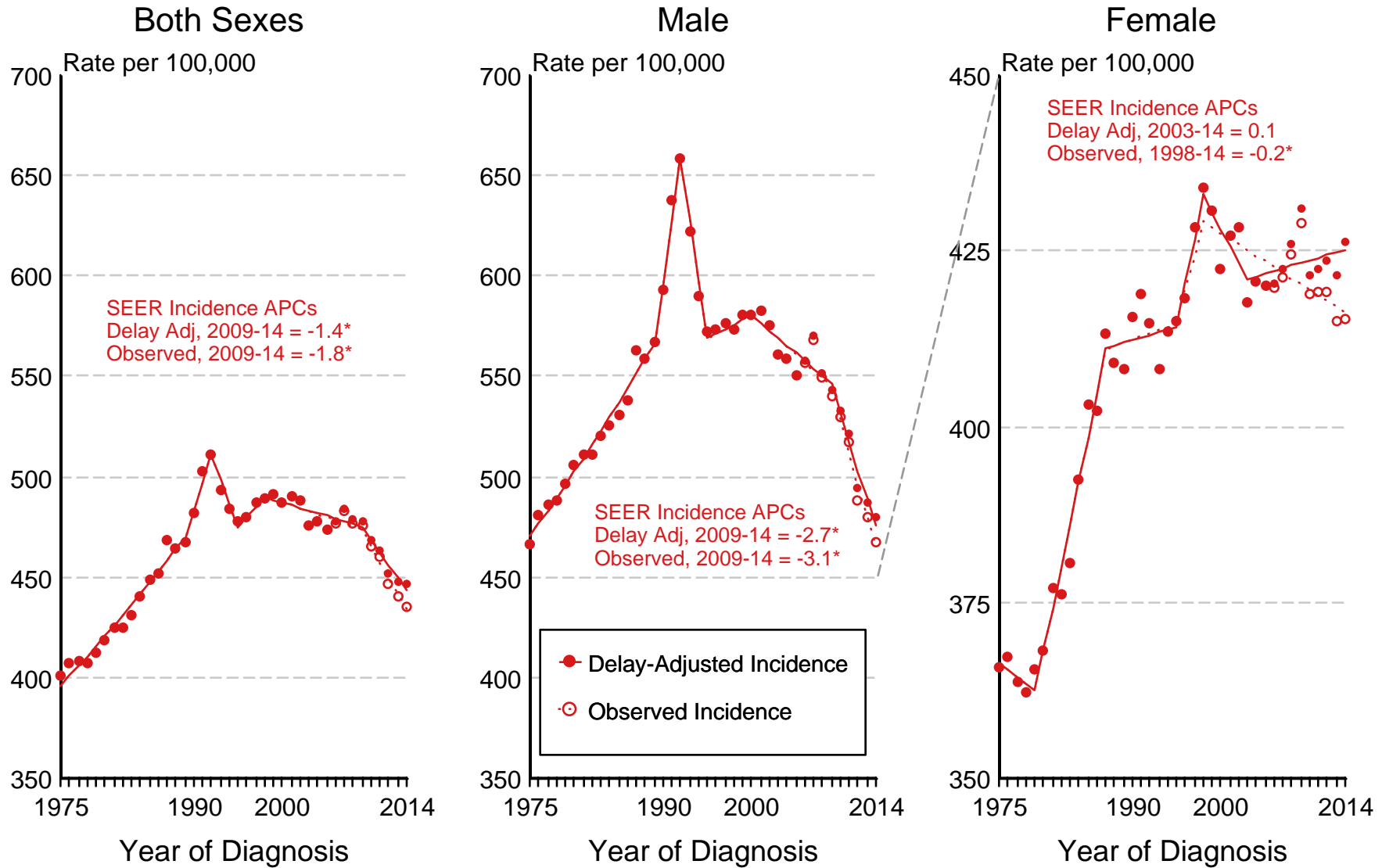
Both Sexes

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2009-14 = -1.4*
Observed, 2009-14 = -1.8*

Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2009-14 = -2.7*
Observed, 2009-14 = -3.1*

- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence

Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2003-14 = 0.1
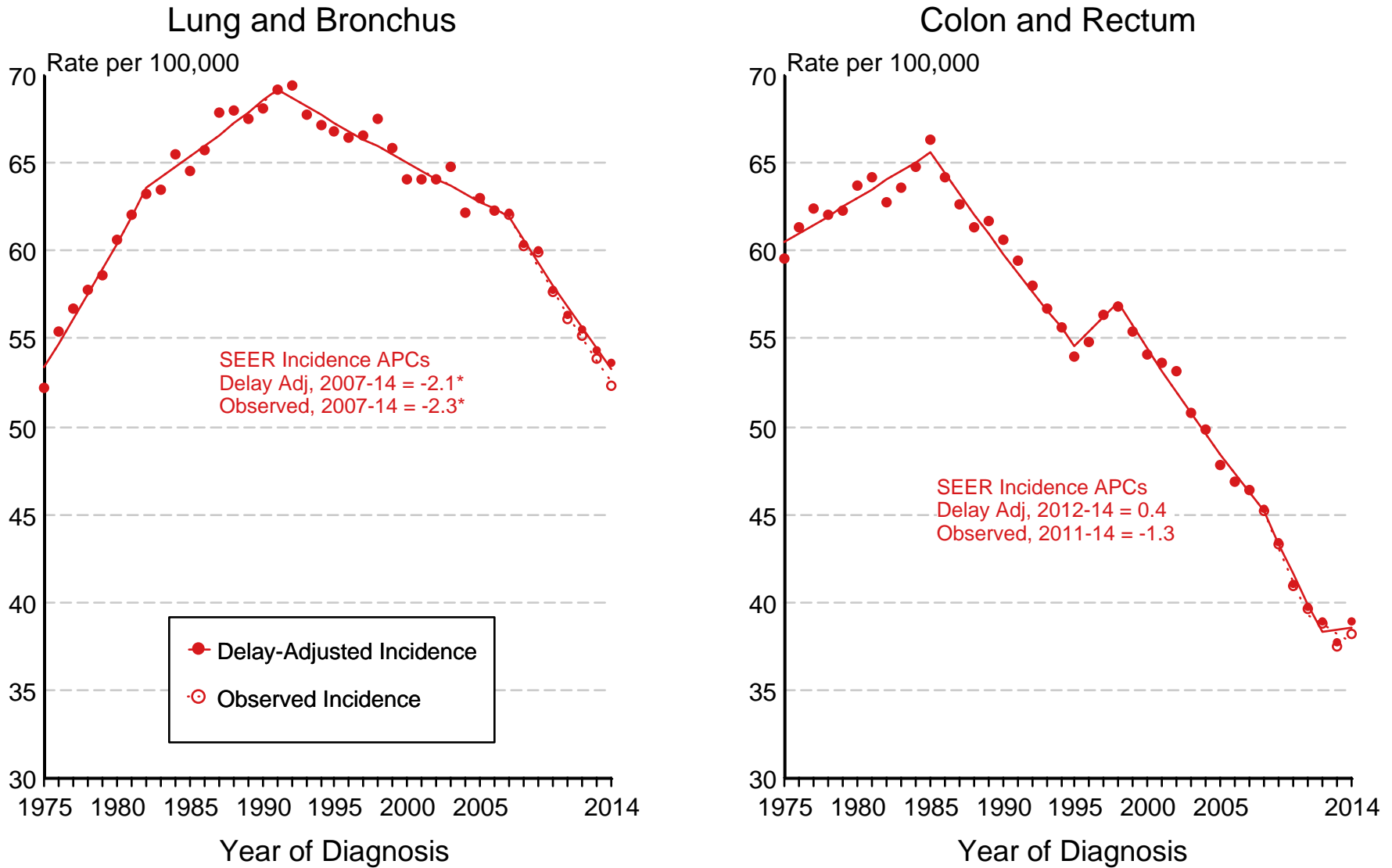Observed, 1998-14 = -0.2*

Year of Diagnosis

Source: SEER 9 areas.
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 4.4, January 2017, 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 1.22

SEER Observed Incidence and Delay Adjusted Incidence Rates [a]
Both Sexes

Lung and Bronchus

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2007-14 = -2.1*
Observed, 2007-14 = -2.3*

— Delay-Adjusted Incidence

⊙ Observed Incidence

Year of Diagnosis

Colon and Rectum

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2012-14 = 0.4
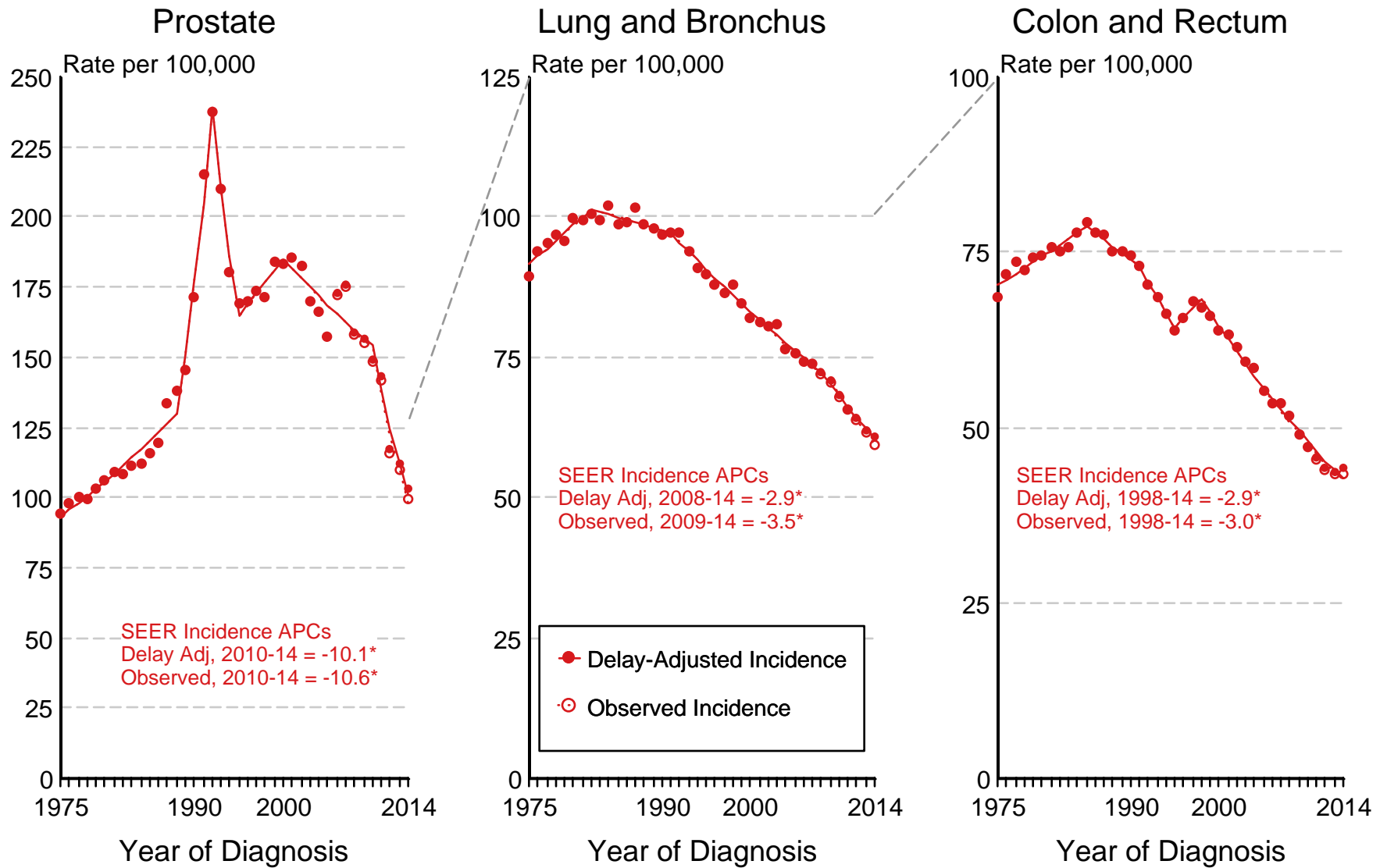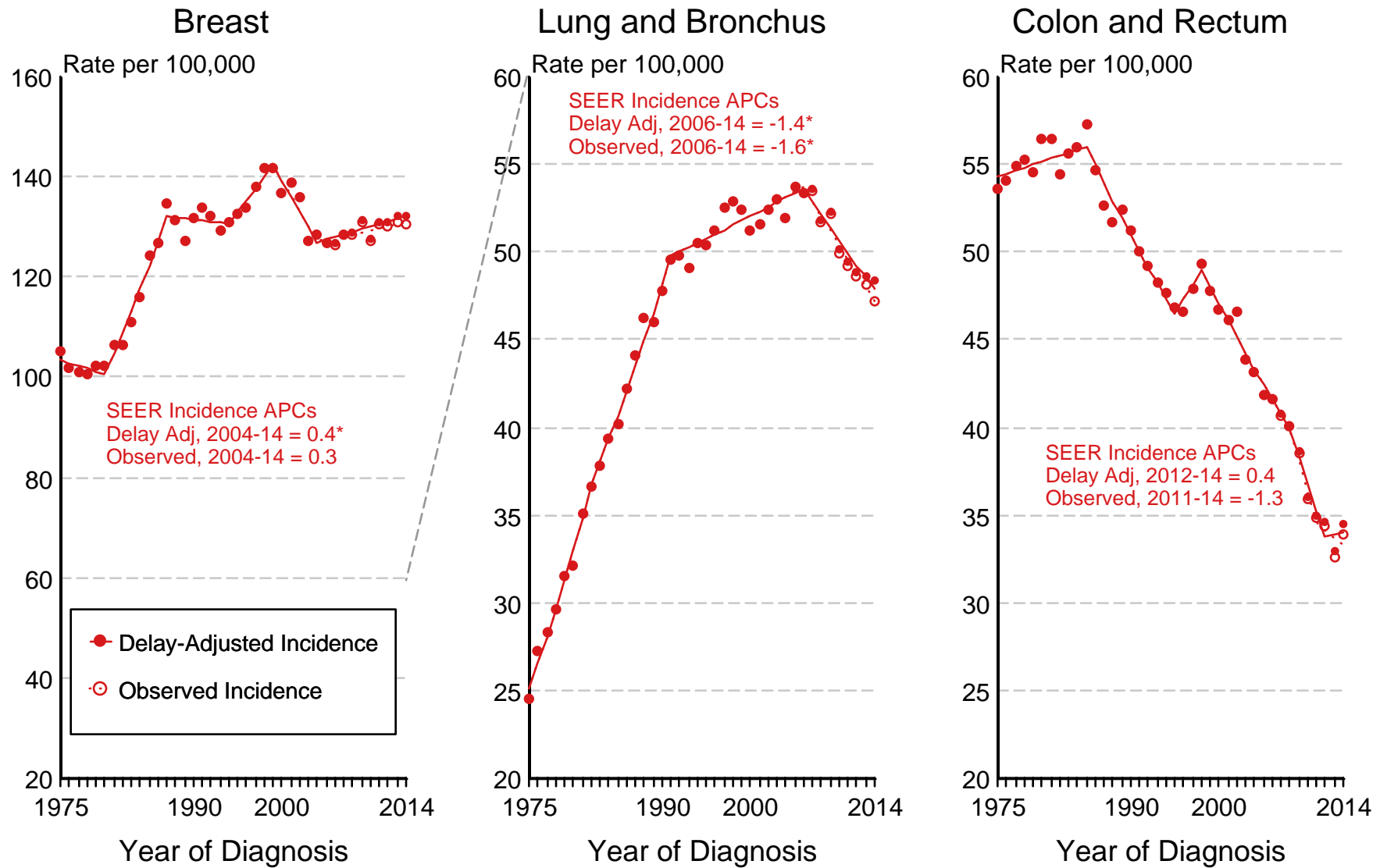Observed, 2011-14 = -1.3

Year of Diagnosis

Source: SEER 9 areas.
[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 4.4, January 2017, 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 1.23

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

Prostate

Rate per 100,000

Lung and Bronchus

Rate per 100,000

Colon and Rectum

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2010-14 = -10.1*
Observed, 2010-14 = -10.6*

SEER Incidence APCs
Delay Adj, 2008-14 = -2.9*
Observed, 2009-14 = -3.5*

SEER Incidence APCs
Delay Adj, 1998-14 = -2.9*
Observed, 1998-14 = -3.0*

Legend:
- ● Delay-Adjusted Incidence
- ⊙ Observed Incidence

Year of Diagnosis

Year of Diagnosis

Year of Diagnosis

Source: SEER 9 areas.

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 4.4, January 2017, 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 1.24

SEER Observed Incidence and Delay Adjusted Incidence Rates[a]
Females

Breast

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2004-14 = 0.4*
Observed, 2004-14 = 0.3

- ●— Delay-Adjusted Incidence
- ○· Observed Incidence

Year of Diagnosis

Lung and Bronchus

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2006-14 = -1.4*
Observed, 2006-14 = -1.6*

Year of Diagnosis

Colon and Rectum

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2012-14 = 0.4
Observed, 2011-14 = -1.3

Year of Diagnosis

Source: SEER 9 areas.

[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 4.4, January 2017, 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-89	1.2*	1989-92	2.8	1992-95	-2.4	1995-98	1.1	1998-09	-0.3*	2009-14	-1.4*	-0.9*	-1.4*
White	1975-82	0.8*	1982-92	1.8*	1992-95	-2.1	1995-98	1.3	1998-09	-0.2*	2009-14	-1.3*	-0.8*	-1.3*
Black	1975-84	1.6*	1984-89	0.4	1989-92	4.2*	1992-05	-0.7*	2005-08	0.8	2008-14	-2.1*	-1.2*	-2.1*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-94	-3.1*	1994-99	0.4	1999-05	-0.7*	2005-08	0.5	2008-14	-1.6*			-0.9*	-1.6*
White	1992-94	-3.1*	1994-01	0.4	2001-04	-1.2	2004-08	0.4	2008-14	-1.5*			-0.9*	-1.5*
Black	1992-11	-0.6*	2011-14	-3.2*									-1.5*	-2.6*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-89	1.2*	1989-92	2.8	1992-95	-2.4	1995-98	1.1	1998-09	-0.3*	2009-14	-1.8*	-1.1*	-1.8*
White	1975-82	0.8*	1982-92	1.8*	1992-95	-2.1	1995-98	1.3	1998-09	-0.3*	2009-14	-1.8*	-1.1*	-1.8*
Black	1975-84	1.6*	1984-89	0.5	1989-92	3.9	1992-09	-0.6*	2009-12	-1.7	2012-14	-4.6*	-1.9*	-3.2*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-94	-3.1*	1994-99	0.4	1999-04	-0.7*	2004-09	-0.1	2009-14	-2.1*			-1.2*	-2.1*
White	1992-94	-3.1*	1994-01	0.4*	2001-04	-1.3	2004-08	0.4	2008-14	-1.9*			-1.1*	-1.9*
White NH[ef]	1992-94	-3.0*	1994-01	0.5*	2001-04	-1.2	2004-08	0.5	2008-14	-1.8*			-1.0*	-1.8*
Black	1992-10	-0.6*	2010-14	-3.4*									-1.9*	-3.4*
Black NH[ef]	1992-10	-0.6*	2010-14	-3.3*									-1.8*	-3.3*
API[e]	1992-10	-0.4*	2010-14	-2.3*									-1.2*	-2.3*
AI/AN[eg]	1992-10	0.3	2010-14	-3.1									-1.2	-3.1
Hispanic[f]	1992-09	-0.1	2009-14	-2.0*									-1.2*	-2.0*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-84	0.5*	1984-91	0.3*	1991-94	-0.5	1994-98	-1.3*	1998-01	-0.8*	2001-14	-1.5*	-1.5*	-1.5*
White	1975-90	0.4*	1990-94	-0.3	1994-98	-1.2*	1998-01	-0.6	2001-14	-1.4*			-1.4*	-1.4*
Black	1975-84	1.3*	1984-92	0.6*	1992-99	-1.3*	1999-14	-2.1*					-2.1*	-2.1*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-01	-1.0*	2001-14	-1.5*									-1.5*	-1.5*
White	1992-94	-0.3	1994-98	-1.2*	1998-01	-0.6	2001-14	-1.4*					-1.4*	-1.4*
White NH[ef]	1992-94	0.2	1994-98	-1.2*	1998-01	-0.5	2001-14	-1.4*					-1.4*	-1.4*
Black	1992-99	-1.3*	1999-14	-2.1*									-2.1*	-2.1*
Black NH[ef]	1992-94	0.0	1994-01	-1.6*	2001-14	-2.0*							-2.0*	-2.0*
API[e]	1992-14	-1.4*											-1.4*	-1.4*
AI/AN[eg]	1992-04	0.4	2004-14	-1.1*									-1.1*	-1.1*
Hispanic[f]	1992-99	0.0	1999-14	-1.3*									-1.3*	-1.3*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 2.2
All Cancer Sites (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-89	1.3*	1989-92	5.2*	1992-95	-4.8*	1995-00	0.4	2000-09	-0.7*	2009-14	-2.7*	-1.8*	-2.7*
White	1975-89	1.4*	1989-92	5.0*	1992-95	-5.2*	1995-99	0.8	1999-08	-0.4*	2008-14	-2.4*	-1.7*	-2.4*
Black	1975-81	2.8*	1981-89	0.6	1989-92	6.8*	1992-05	-1.5*	2005-08	0.8	2008-14	-3.7*	-2.2*	-3.7*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-94	-5.7*	1994-09	-0.5*	2009-14	-3.1*							-2.0*	-3.1*
White	1992-94	-6.3*	1994-08	-0.3*	2008-14	-2.7*							-1.9*	-2.7*
Black	1992-10	-1.3*	2010-14	-4.3*									-2.7*	-4.3*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-89	1.3*	1989-92	5.2*	1992-95	-4.8*	1995-00	0.4	2000-09	-0.7*	2009-14	-3.1*	-2.1*	-3.1*
White	1975-89	1.4*	1989-92	5.0*	1992-95	-5.1*	1995-00	0.7	2000-09	-0.7*	2009-14	-3.1*	-2.0*	-3.1*
Black	1975-81	2.9*	1981-89	0.6	1989-92	7.5*	1992-96	-2.6*	1996-09	-1.1*	2009-14	-4.3*	-2.9*	-4.3*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-94	-5.7*	1994-09	-0.5*	2009-14	-3.5*							-2.2*	-3.5*
White	1992-94	-6.2*	1994-08	-0.3*	2008-14	-3.0*							-2.1*	-3.0*
White NH[e][f]	1992-94	-6.3*	1994-08	-0.2*	2008-14	-2.9*							-2.0*	-2.9*
Black	1992-09	-1.3*	2009-14	-4.4*									-3.1*	-4.4*
Black NH[e][f]	1992-09	-1.3*	2009-14	-4.3*									-3.0*	-4.3*
API[e]	1992-95	-2.7	1995-07	-0.5*	2007-14	-3.0*							-2.5*	-3.0*
AI/AN[e][g]	1992-14	-0.6*											-0.6*	-0.6*
Hispanic[f]	1992-09	-0.5*	2009-14	-4.0*									-2.5*	-4.0*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-79	1.0*	1979-90	0.3*	1990-93	-0.5	1993-01	-1.5*	2001-14	-1.8*			-1.8*	-1.8*
White	1975-79	0.9*	1979-91	0.2*	1991-94	-0.8	1994-97	-1.8*	1997-00	-1.0*	2000-14	-1.7*	-1.7*	-1.7*
Black	1975-82	1.8*	1982-90	1.0*	1990-93	-0.2	1993-01	-2.0*	2001-14	-2.7*			-2.7*	-2.7*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-01	-1.4*	2001-14	-1.8*									-1.8*	-1.8*
White	1992-01	-1.3*	2001-14	-1.7*									-1.7*	-1.7*
White NH[e][f]	1992-94	-0.2	1994-97	-1.8*	1997-00	-0.9	2000-14	-1.6*					-1.6*	-1.6*
Black	1992-94	-0.5	1994-01	-2.1*	2001-14	-2.7*							-2.7*	-2.7*
Black NH[e][f]	1992-94	-0.1	1994-02	-2.1*	2002-14	-2.6*							-2.6*	-2.6*
API[e]	1992-14	-1.7*											-1.7*	-1.7*
AI/AN[e][g]	1992-14	-0.3*											-0.3*	-0.3*
Hispanic[f]	1992-98	0.0	1998-14	-1.6*									-1.6*	-1.6*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.
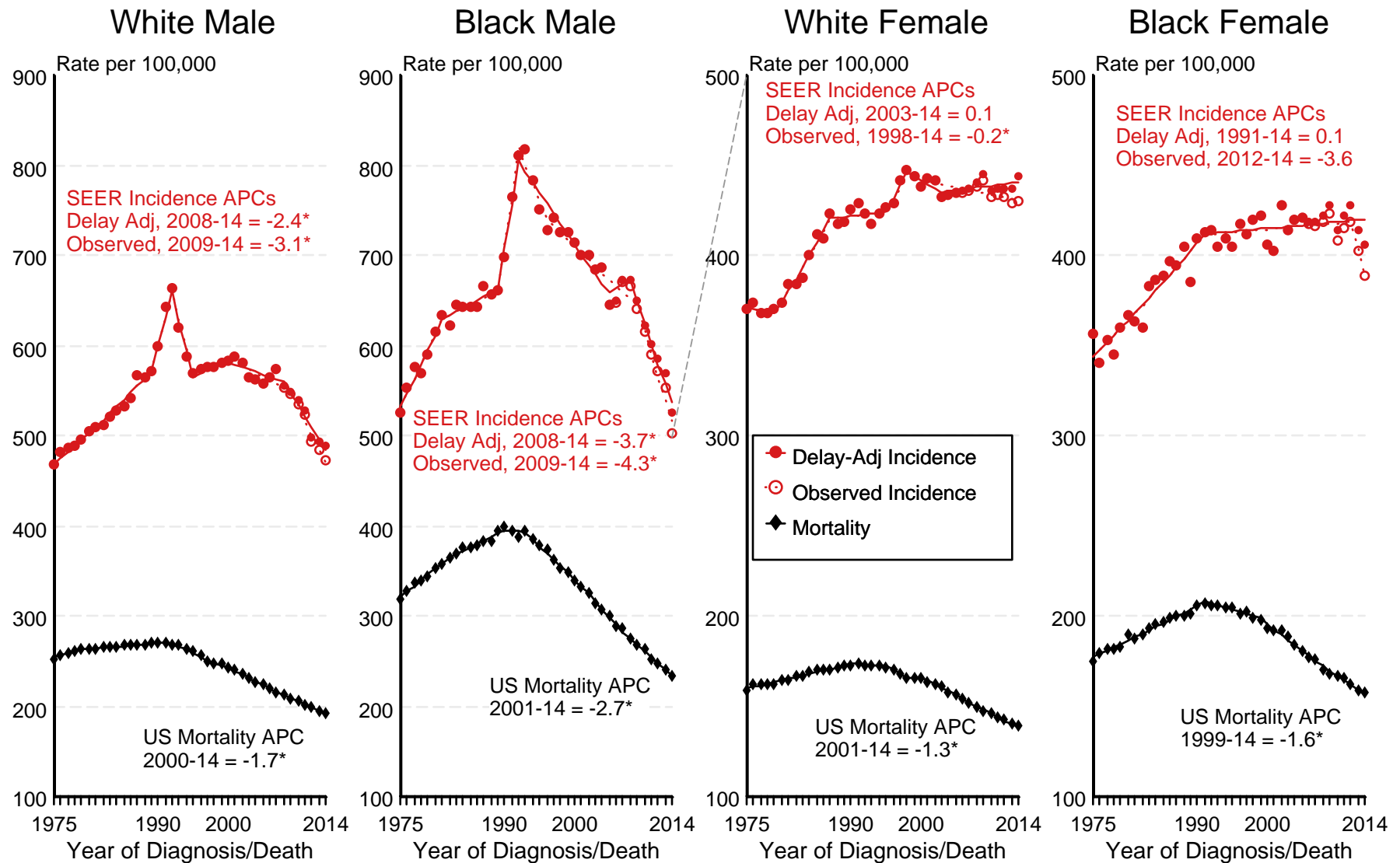
Table 2.3
All Cancer Sites (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-79	-0.3	1979-87	1.6*	1987-95	0.1	1995-98	1.5	1998-03	-0.6	2003-14	0.1	0.1	0.1
White	1975-79	-0.2	1979-87	1.7*	1987-95	0.1	1995-98	1.7	1998-03	-0.5	2003-14	0.1	0.1	0.1
Black	1975-91	1.1*	1991-14	0.1									0.1	0.1
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-98	0.8*	1998-03	-0.6	2003-14	0.0							0.0	0.0
White	1992-94	-0.3	1994-98	1.4*	1998-03	-0.7	2003-14	0.0					0.0	0.0
Black	1992-14	0.1											0.1	0.1
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-79	-0.3	1979-87	1.6*	1987-95	0.1	1995-98	1.2	1998-14	-0.2*			-0.2*	-0.2*
White	1975-79	-0.2	1979-87	1.7*	1987-95	0.1	1995-98	1.4	1998-14	-0.2*			-0.2*	-0.2*
Black	1975-91	1.1*	1991-12	0.1	2012-14	-3.6							-0.7	-1.8
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-94	-0.3	1994-98	1.2*	1998-04	-0.7*	2004-09	0.3	2009-14	-0.8*			-0.3	-0.8*
White	1992-94	-0.3	1994-98	1.4*	1998-04	-0.7*	2004-08	0.4	2008-14	-0.6*			-0.3	-0.6*
White NH[ef]	1992-94	0.0	1994-98	1.6*	1998-04	-0.6*	2004-08	0.5	2008-14	-0.6*			-0.2	-0.6*
Black	1992-11	0.1	2011-14	-2.3*									-0.7*	-1.7*
Black NH[ef]	1992-11	0.1	2011-14	-2.2*									-0.7*	-1.6*
API[e]	1992-14	0.1											0.1	0.1
AI/AN[eg]	1992-14	0.4*											0.4*	0.4*
Hispanic[f]	1992-14	0.1*											0.1*	0.1*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-90	0.6*	1990-94	-0.2	1994-02	-0.8*	2002-14	-1.4*					-1.4*	-1.4*
White	1975-90	0.6*	1990-95	-0.2	1995-98	-1.2*	1998-01	-0.2	2001-14	-1.3*			-1.3*	-1.3*
Black	1975-91	1.0*	1991-99	-0.6*	1999-14	-1.6*							-1.6*	-1.6*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-94	-0.2	1994-02	-0.8*	2002-14	-1.4*							-1.4*	-1.4*
White	1992-95	-0.2	1995-98	-1.2*	1998-01	-0.2	2001-14	-1.3*					-1.3*	-1.3*
White NH[ef]	1992-94	0.6	1994-98	-1.0*	1998-01	-0.2	2001-14	-1.3*					-1.3*	-1.3*
Black	1992-99	-0.6*	1999-14	-1.6*									-1.6*	-1.6*
Black NH[ef]	1992-99	-0.5*	1999-14	-1.5*									-1.5*	-1.5*
API[e]	1992-14	-1.0*											-1.0*	-1.0*
AI/AN[eg]	1992-04	0.7	2004-14	-1.5*									-1.5*	-1.5*
Hispanic[f]	1992-99	0.1	1999-14	-1.0*									-1.0*	-1.0*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Figure 2.1

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

White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2008-14 = -2.4*
Observed, 2009-14 = -3.1*

US Mortality APC
2000-14 = -1.7*

Year of Diagnosis/Death

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2008-14 = -3.7*
Observed, 2009-14 = -4.3*

US Mortality APC
2001-14 = -2.7*

Year of Diagnosis/Death

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2003-14 = 0.1
Observed, 1998-14 = -0.2*

- Delay-Adj Incidence
- Observed Incidence
- Mortality

US Mortality APC
2001-14 = -1.3*

Year of Diagnosis/Death

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1991-14 = 0.1
Observed, 2012-14 = -3.6

US Mortality APC
1999-14 = -1.6*

Year of Diagnosis/Death

Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
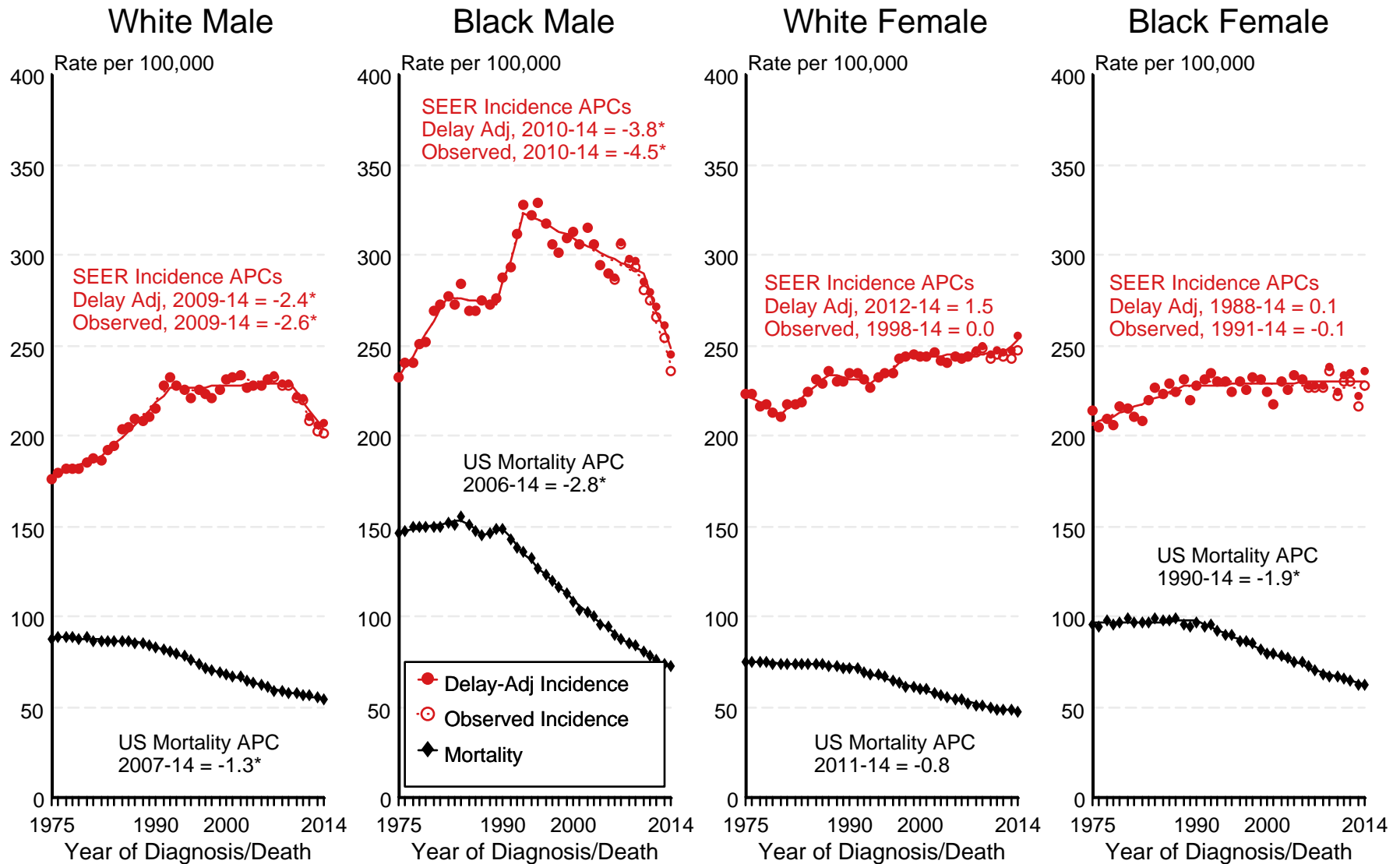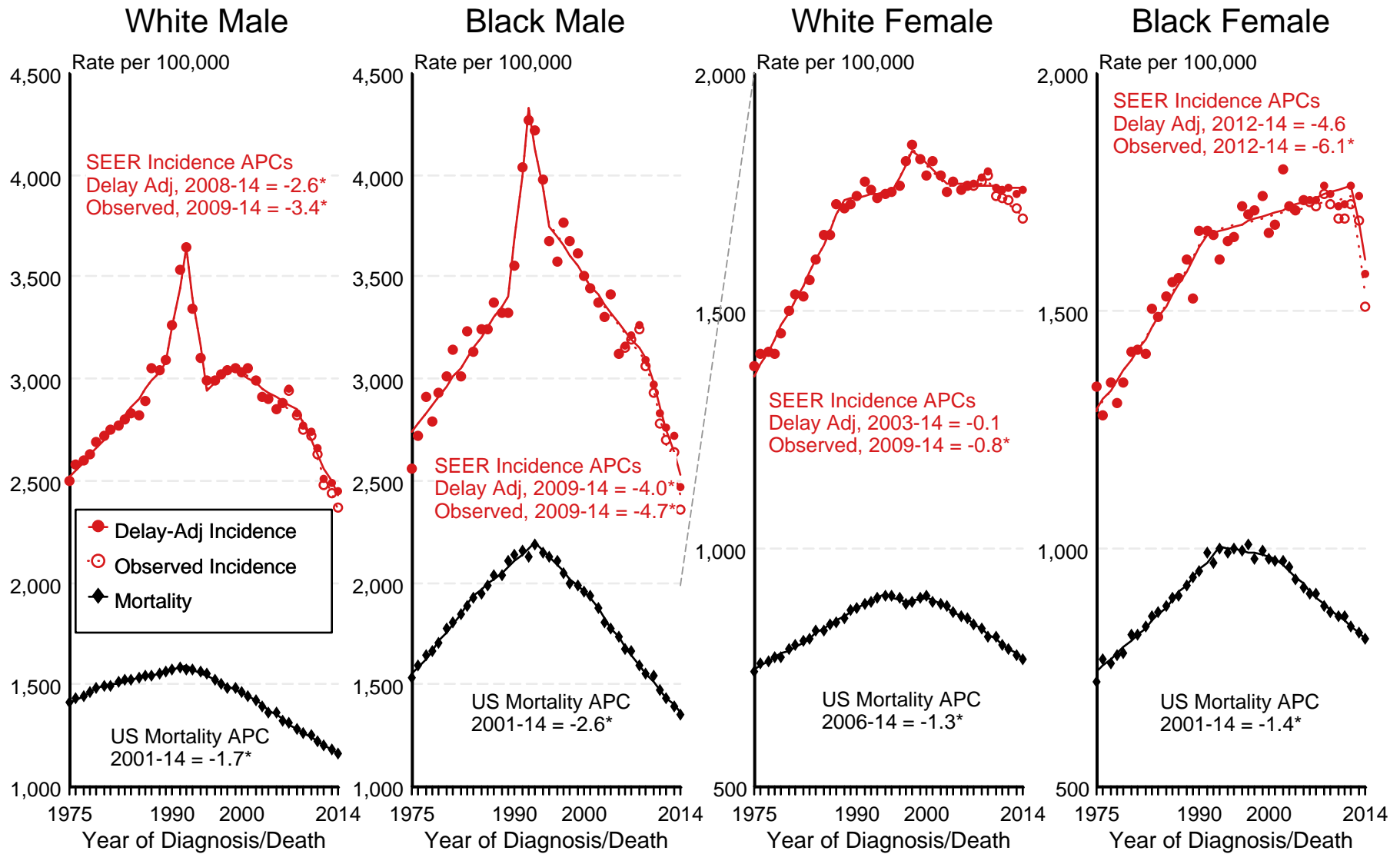[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 2.2

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
All Cancer Sites, Under 65 Years of Age, by Race and Sex

White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2009-14 = -2.4*
Observed, 2009-14 = -2.6*

US Mortality APC
2007-14 = -1.3*

Year of Diagnosis/Death

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2010-14 = -3.8*
Observed, 2010-14 = -4.5*

US Mortality APC
2006-14 = -2.8*

Delay-Adj Incidence
Observed Incidence
Mortality

Year of Diagnosis/Death

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2012-14 = 1.5
Observed, 1998-14 = 0.0

US Mortality APC
2011-14 = -0.8

Year of Diagnosis/Death

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1988-14 = 0.1
Observed, 1991-14 = -0.1

US Mortality APC
1990-14 = -1.9*

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).
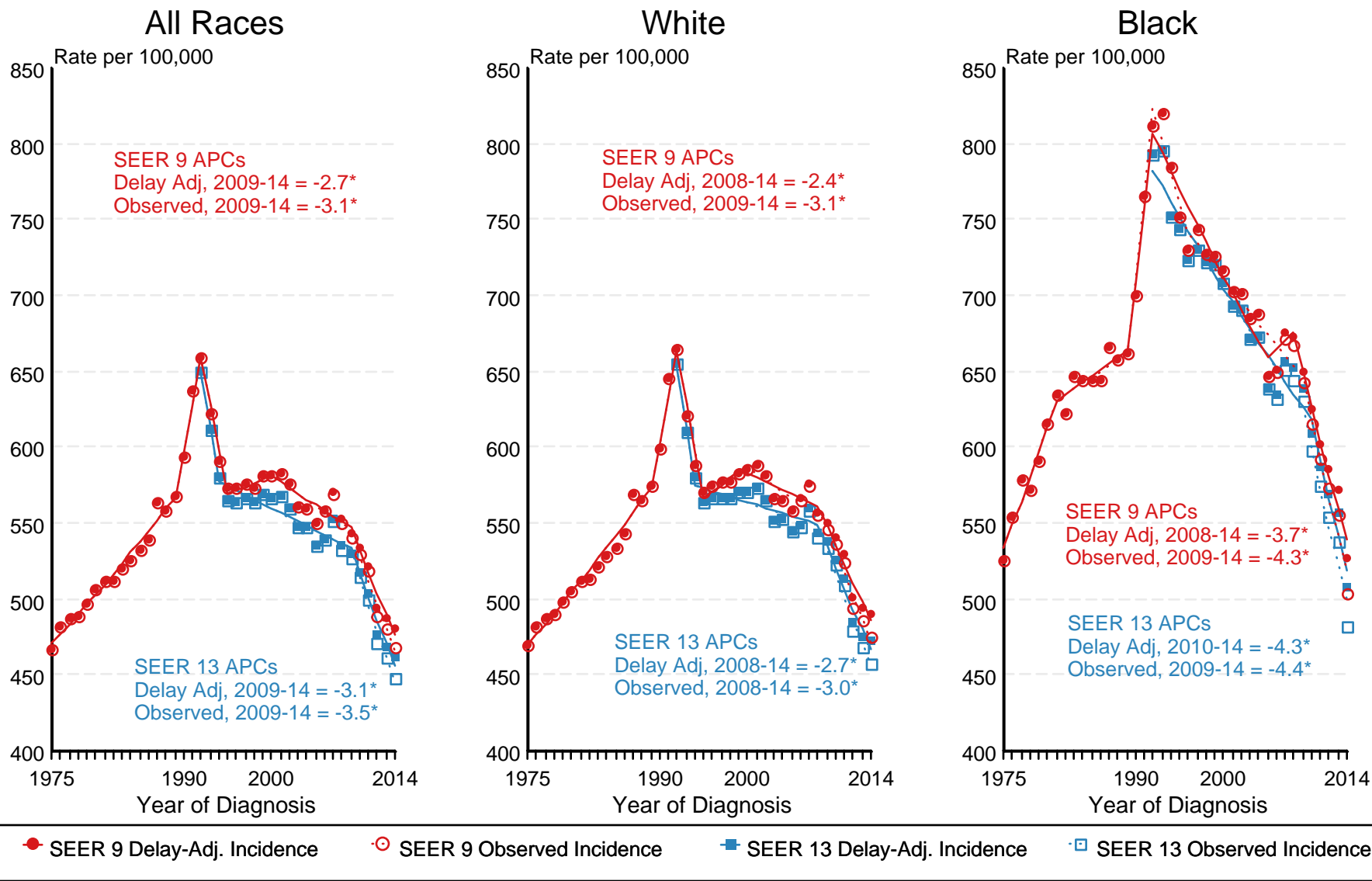   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
     The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
*   The APC is significantly different from zero (p < 0.05).

Figure 2.3

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
All Cancer Sites, Ages 65 and Over, by Race and Sex

White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2008-14 = -2.6*
Observed, 2009-14 = -3.4*

- Delay-Adj Incidence
- Observed Incidence
- Mortality

US Mortality APC
2001-14 = -1.7*

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2009-14 = -4.0*
Observed, 2009-14 = -4.7*

US Mortality APC
2001-14 = -2.6*

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2003-14 = -0.1
Observed, 2009-14 = -0.8*

US Mortality APC
2006-14 = -1.3*

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2012-14 = -4.6
Observed, 2012-14 = -6.1*

US Mortality APC
2001-14 = -1.4*

Year of Diagnosis/Death

Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
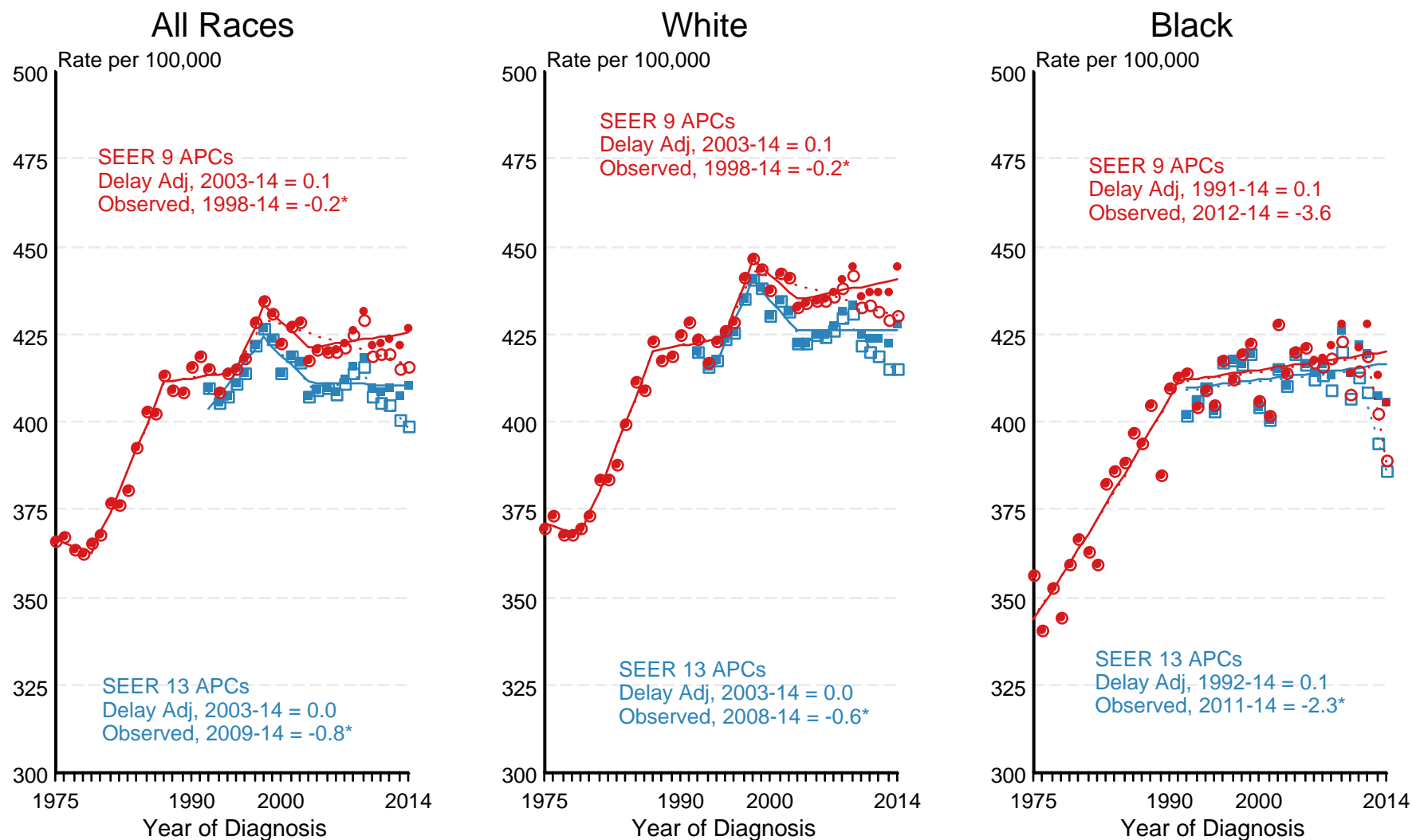[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 2.5

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
All Cancer Sites, Males, by Race

SEER Cancer Statistics Review 1975-2014

National Cancer Institute

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2009-14 = -2.7*
Observed, 2009-14 = -3.1*

SEER 13 APCs
Delay Adj, 2009-14 = -3.1*
Observed, 2009-14 = -3.5*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2008-14 = -2.4*
Observed, 2009-14 = -3.1*

SEER 13 APCs
Delay Adj, 2008-14 = -2.7*
Observed, 2008-14 = -3.0*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 2008-14 = -3.7*
Observed, 2009-14 = -4.3*

SEER 13 APCs
Delay Adj, 2010-14 = -4.3*
Observed, 2009-14 = -4.4*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
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 4.4, January 2017, National Cancer Institute.
   The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 2.6

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
All Cancer Sites, Female, by Race

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2003-14 = 0.1
Observed, 1998-14 = -0.2*

SEER 13 APCs
Delay Adj, 2003-14 = 0.0
Observed, 2009-14 = -0.8*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2003-14 = 0.1
Observed, 1998-14 = -0.2*

SEER 13 APCs
Delay Adj, 2003-14 = 0.0
Observed, 2008-14 = -0.6*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1991-14 = 0.1
Observed, 2012-14 = -3.6

SEER 13 APCs
Delay Adj, 1992-14 = 0.1
Observed, 2011-14 = -2.3*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-87	1.5*	1987-14	-0.2*									-0.2*	-0.2*
White	1975-87	1.6*	1987-14	0.0									0.0	0.0
Black	1975-14	0.2											0.2	0.2
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-0.2*											-0.2*	-0.2*
White	1992-14	-0.1											-0.1	-0.1
Black	1992-14	0.1											0.1	0.1
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-87	1.5*	1987-14	-0.2*									-0.2*	-0.2*
White	1975-87	1.6*	1987-14	-0.1									-0.1	-0.1
Black	1975-14	0.1											0.1	0.1
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-0.3*											-0.3*	-0.3*
White	1992-14	-0.1											-0.1	-0.1
White NH[ef]	1992-14	0.1											0.1	0.1
Black	1992-14	-0.1											-0.1	-0.1
Black NH[ef]	1992-14	0.0											0.0	0.0
API[e]	1992-14	-0.2											-0.2	-0.2
AI/AN[eg]	1992-07	5.0*	2007-14	-9.8*									-6.7	-9.8*
Hispanic[f]	1992-02	1.2	2002-14	-1.6*									-1.6*	-1.6*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-77	3.7	1977-81	-0.7	1981-91	1.3*	1991-07	-1.0*	2007-14	0.6*			0.2	0.6*
White	1975-92	1.0*	1992-07	-0.8*	2007-14	0.7*							0.3	0.7*
Black	1975-91	0.9*	1991-11	-0.9*	2011-14	4.3							0.9	3.0
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-07	-1.0*	2007-14	0.6*									0.2	0.6*
White	1992-07	-0.8*	2007-14	0.7*									0.3	0.7*
White NH[ef]	1992-07	-0.7*	2007-14	0.8*									0.5*	0.8*
Black	1992-11	-0.8*	2011-14	4.3									0.9	3.0
Black NH[ef]	1992-07	-1.1*	2007-14	1.5									0.9	1.5
API[e]	1992-14	0.3											0.3	0.3
AI/AN[eg]	1992-14	1.2*											1.2*	1.2*
Hispanic[f]	1992-14	0.1											0.1	0.1

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).

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

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

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

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

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

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

[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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

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

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

Table 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-89	1.2*	1989-14	-0.3*									-0.3*	-0.3*
White	1975-89	1.3*	1989-14	-0.2									-0.2	-0.2
Black	1975-14	-0.1											-0.1	-0.1
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-0.3*											-0.3*	-0.3*
White	1992-14	-0.2											-0.2	-0.2
Black	1992-14	0.2											0.2	0.2
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-89	1.2*	1989-14	-0.4*									-0.4*	-0.4*
White	1975-91	1.1*	1991-14	-0.3*									-0.3*	-0.3*
Black	1975-14	-0.1											-0.1	-0.1
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-0.4*											-0.4*	-0.4*
White	1992-14	-0.2*											-0.2*	-0.2*
White NH[ef]	1992-14	-0.1											-0.1	-0.1
Black	1992-14	0.1											0.1	0.1
Black NH[ef]	1992-14	0.1											0.1	0.1
API[e]	1992-14	-0.1											-0.1	-0.1
AI/AN[eg]	1992-14	-0.5											-0.5	-0.5
Hispanic[f]	1992-14	-0.3											-0.3	-0.3
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-77	4.4	1977-82	-0.4	1982-91	1.3*	1991-07	-1.0*	2007-14	0.6*			0.2	0.6*
White	1975-77	5.0	1977-81	-0.7	1981-91	1.3*	1991-07	-0.8*	2007-14	0.7*			0.3	0.7*
Black	1975-89	0.6	1989-14	-0.5*									-0.5*	-0.5*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-07	-0.9*	2007-14	0.6*									0.2	0.6*
White	1992-07	-0.8*	2007-14	0.6*									0.3	0.6*
White NH[ef]	1992-07	-0.7*	2007-14	0.8*									0.5*	0.8*
Black	1992-14	-0.4*											-0.4*	-0.4*
Black NH[ef]	1992-10	-0.8*	2010-14	3.2									1.0	3.2
API[e]	1992-14	0.4											0.4	0.4
AI/AN[eg]	1992-14	1.2											1.2	1.2
Hispanic[f]	1992-14	0.0											0.0	0.0

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
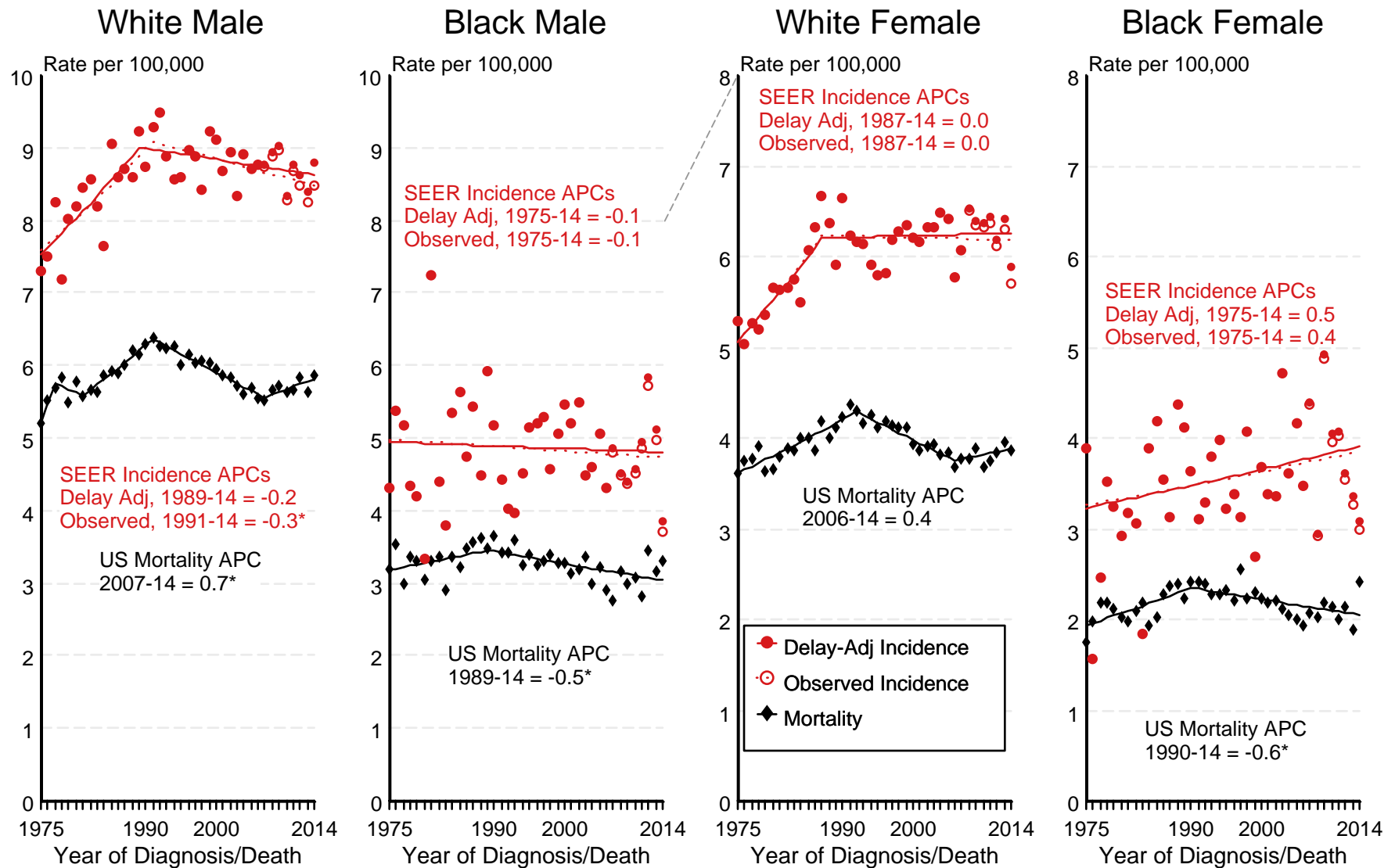[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-87	1.6*	1987-14	-0.1									-0.1	-0.1
White	1975-87	1.7*	1987-14	0.0									0.0	0.0
Black	1975-14	0.5											0.5	0.5
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-0.2											-0.2	-0.2
White	1992-14	0.0											0.0	0.0
Black	1992-14	-0.1											-0.1	-0.1
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-87	1.6*	1987-14	-0.2									-0.2	-0.2
White	1975-87	1.8*	1987-14	0.0									0.0	0.0
Black	1975-14	0.4											0.4	0.4
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-0.2*											-0.2*	-0.2*
White	1992-14	-0.1											-0.1	-0.1
White NH[ef]	1992-14	0.2											0.2	0.2
Black	1992-14	-0.3											-0.3	-0.3
Black NH[ef]	1992-14	-0.2											-0.2	-0.2
API[e]	1992-14	-0.3											-0.3	-0.3
AI/AN[eg]	-	-											-	-
Hispanic[f]	1992-14	-0.8*											-0.8*	-0.8*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-92	1.0*	1992-06	-1.1*	2006-14	0.4							0.2	0.4
White	1975-92	1.0*	1992-06	-1.0*	2006-14	0.4							0.3	0.4
Black	1975-90	1.3*	1990-14	-0.6*									-0.6*	-0.6*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-06	-1.1*	2006-14	0.4									0.2	0.4
White	1992-06	-1.0*	2006-14	0.4									0.3	0.4
White NH[ef]	1992-07	-0.8*	2007-14	0.7									0.4	0.7
Black	1992-14	-0.5*											-0.5*	-0.5*
Black NH[ef]	1992-14	-0.5*											-0.5*	-0.5*
API[e]	1992-14	0.2											0.2	0.2
AI/AN[eg]	1992-14	1.4											1.4	1.4
Hispanic[f]	1992-14	0.1											0.1	0.1

Figure 3.1

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
Black Male
White Female
Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1989-14 = -0.2
Observed, 1991-14 = -0.3*

US Mortality APC
2007-14 = 0.7*

SEER Incidence APCs
Delay Adj, 1975-14 = -0.1
Observed, 1975-14 = -0.1

US Mortality APC
1989-14 = -0.5*

SEER Incidence APCs
Delay Adj, 1987-14 = 0.0
Observed, 1987-14 = 0.0

US Mortality APC
2006-14 = 0.4

SEER Incidence APCs
Delay Adj, 1975-14 = 0.5
Observed, 1975-14 = 0.4

US Mortality APC
1990-14 = -0.6*

Legend:
- Delay-Adj Incidence
- Observed Incidence
- Mortality

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).
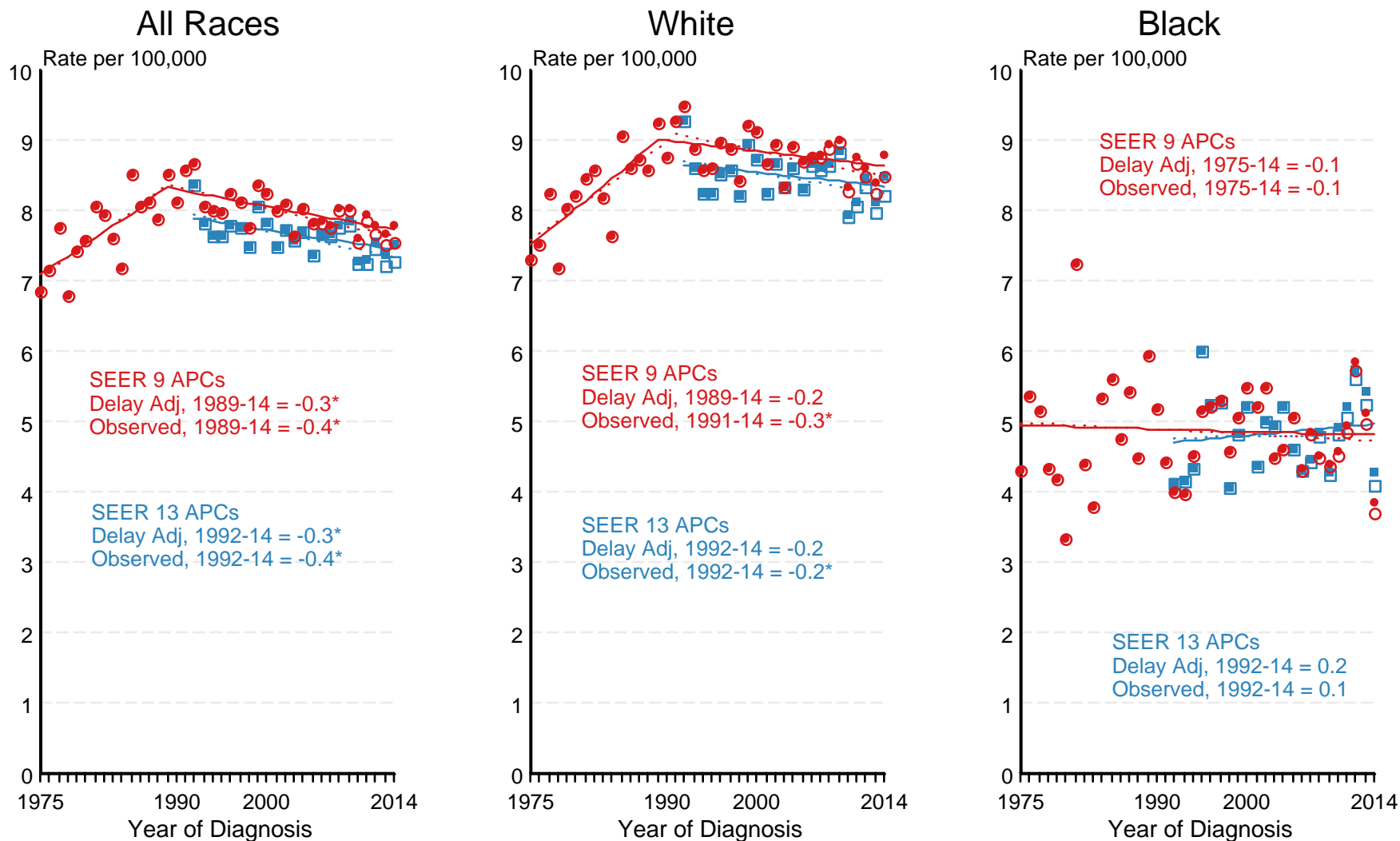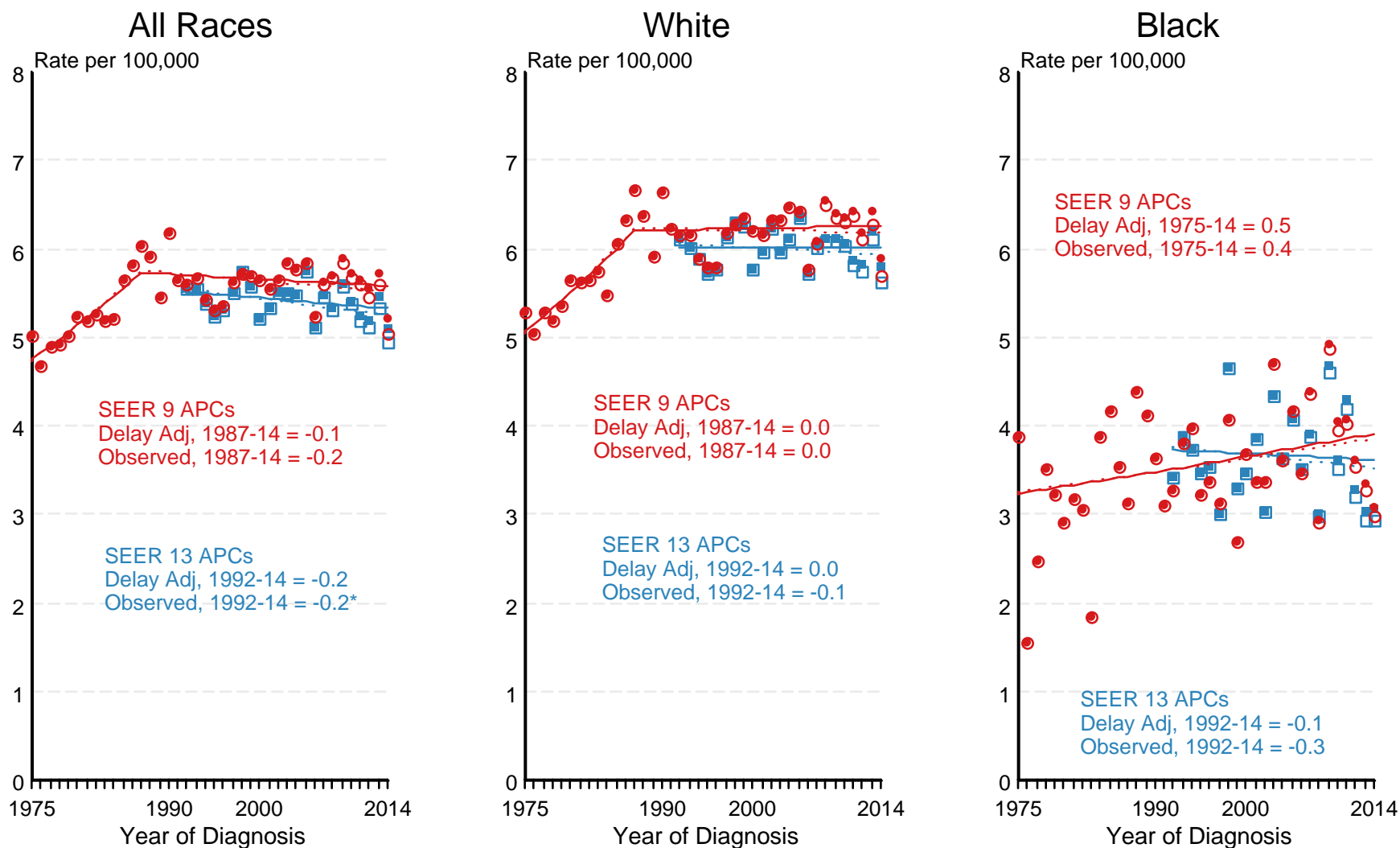   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
    The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
*   The APC is significantly different from zero (p < 0.05).

Figure 3.3

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, 1989-14 = -0.3*
Observed, 1989-14 = -0.4*

SEER 13 APCs
Delay Adj, 1992-14 = -0.3*
Observed, 1992-14 = -0.4*

Year of Diagnosis

White
Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-14 = -0.2
Observed, 1991-14 = -0.3*

SEER 13 APCs
Delay Adj, 1992-14 = -0.2
Observed, 1992-14 = -0.2*

Year of Diagnosis

Black
Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = -0.1
Observed, 1975-14 = -0.1

SEER 13 APCs
Delay Adj, 1992-14 = 0.2
Observed, 1992-14 = 0.1

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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 3.4

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, 1987-14 = -0.1
Observed, 1987-14 = -0.2

SEER 13 APCs
Delay Adj, 1992-14 = -0.2
Observed, 1992-14 = -0.2*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1987-14 = 0.0
Observed, 1987-14 = 0.0

SEER 13 APCs
Delay Adj, 1992-14 = 0.0
Observed, 1992-14 = -0.1

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 0.5
Observed, 1975-14 = 0.4

SEER 13 APCs
Delay Adj, 1992-14 = -0.1
Observed, 1992-14 = -0.3

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-80	-0.5	1980-87	4.0*	1987-94	-0.2	1994-99	1.8*	1999-04	-2.3*	2004-14	0.4*	0.4*	0.4*
White	1975-80	-0.5	1980-87	4.1*	1987-94	-0.2	1994-99	2.0*	1999-04	-2.4*	2004-14	0.2	0.2	0.2
Black	1975-91	2.2*	1991-14	0.3*									0.3*	0.3*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-99	1.3*	1999-04	-2.2*	2004-14	0.3							0.3	0.3
White	1992-99	1.5*	1999-04	-2.4*	2004-14	0.1							0.1	0.1
Black	1992-14	0.3*											0.3*	0.3*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-80	-0.5	1980-87	4.0*	1987-94	-0.2	1994-99	1.8*	1999-04	-2.3*	2004-14	0.3	0.3	0.3
White	1975-80	-0.5	1980-87	4.1*	1987-94	-0.2	1994-99	2.0*	1999-04	-2.4*	2004-14	0.1	0.1	0.1
Black	1975-91	2.3*	1991-14	0.3*									0.3*	0.3*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-99	1.3*	1999-04	-2.2*	2004-14	0.2							0.2	0.2
White	1992-99	1.5*	1999-04	-2.3*	2004-14	0.0							0.0	0.0
White NH[ef]	1992-99	1.7*	1999-04	-2.3*	2004-14	0.1							0.1	0.1
Black	1992-14	0.2*											0.2*	0.2*
Black NH[ef]	1992-14	0.3*											0.3*	0.3*
API[e]	1992-94	-4.6	1994-97	6.9	1997-05	-0.7	2005-14	1.2*					1.2*	1.2*
AI/AN[eg]	1992-14	0.1											0.1	0.1
Hispanic[f]	1992-14	0.2											0.2	0.2
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-90	0.4*	1990-95	-1.8*	1995-98	-3.3*	1998-14	-1.8*					-1.8*	-1.8*
White	1975-90	0.3*	1990-95	-2.0*	1995-98	-3.6*	1998-14	-1.9*					-1.9*	-1.9*
Black	1975-93	1.4*	1993-14	-1.5*									-1.5*	-1.5*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-95	-1.2*	1995-98	-3.6*	1998-03	-1.6*	2003-07	-2.3*	2007-14	-1.6*			-1.8*	-1.6*
White	1992-95	-1.5*	1995-98	-3.7*	1998-14	-1.9*							-1.9*	-1.9*
White NH[ef]	1992-95	-1.2*	1995-98	-3.7*	1998-14	-1.8*							-1.8*	-1.8*
Black	1992-95	0.4	1995-14	-1.5*									-1.5*	-1.5*
Black NH[ef]	1992-95	0.5	1995-14	-1.5*									-1.5*	-1.5*
API[e]	1992-14	-0.9*											-0.9*	-0.9*
AI/AN[eg]	1992-05	0.6	2005-14	-3.1*									-3.1*	-3.1*
Hispanic[f]	1992-96	1.4	1996-99	-4.0	1999-11	-1.5*	2011-14	1.1					-0.6	0.5

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 4.2
Cancer of the Female Breast (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-80	-1.3	1980-87	2.7*	1987-94	-0.8	1994-14	0.3*					0.3*	0.3*
White	1975-80	-1.1	1980-87	2.7*	1987-94	-0.8	1994-14	0.3*					0.3*	0.3*
Black	1975-91	1.2*	1991-14	-0.2									-0.2	-0.2
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	0.2*											0.2*	0.2*
White	1992-14	0.2*											0.2*	0.2*
Black	1992-02	-1.3*	2002-05	3.8	2005-14	-0.6							-0.6	-0.6
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-80	-1.3	1980-87	2.7*	1987-94	-0.8	1994-14	0.2*					0.2*	0.2*
White	1975-80	-1.1	1980-87	2.6*	1987-94	-0.8	1994-14	0.2*					0.2*	0.2*
Black	1975-91	1.3*	1991-14	-0.2									-0.2	-0.2
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	0.2*											0.2*	0.2*
White	1992-14	0.1*											0.1*	0.1*
White NH[e][f]	1992-14	0.4*											0.4*	0.4*
Black	1992-02	-1.3*	2002-05	3.8	2005-14	-0.9*							-0.9*	-0.9*
Black NH[e][f]	1992-02	-1.4*	2002-05	4.3	2005-14	-0.7							-0.7	-0.7
API[e]	1992-14	0.9*											0.9*	0.9*
AI/AN[e][g]	1992-14	-0.2											-0.2	-0.2
Hispanic[f]	1992-14	0.1											0.1	0.1
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-90	-0.4*	1990-07	-3.2*	2007-14	-1.3*							-1.7*	-1.3*
White	1975-90	-0.6*	1990-04	-3.7*	2004-14	-1.7*							-1.7*	-1.7*
Black	1975-87	1.8*	1987-95	-1.2*	1995-14	-2.4*							-2.4*	-2.4*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-07	-3.1*	2007-14	-1.4*									-1.8*	-1.4*
White	1992-04	-3.7*	2004-14	-1.7*									-1.7*	-1.7*
White NH[e][f]	1992-00	-4.1*	2000-14	-2.2*									-2.2*	-2.2*
Black	1992-14	-2.3*											-2.3*	-2.3*
Black NH[e][f]	1992-96	-0.4	1996-99	-4.3	1999-05	-1.2	2005-08	-4.1	2008-14	-1.5*			-2.4*	-1.5*
API[e]	1992-01	-0.8	2001-08	-5.2*	2008-14	1.4							-0.9	1.4
AI/AN[e][g]	1992-14	-2.2*											-2.2*	-2.2*
Hispanic[f]	1992-10	-2.9*	2010-14	2.1									-0.7	2.1

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).

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

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

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

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

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

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

[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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

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

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

Table 4.3
Cancer of the Female Breast (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-82	0.9	1982-87	5.3*	1987-93	-0.3	1993-99	1.9*	1999-05	-2.6*	2005-14	0.6*	0.6*	0.6*
White	1975-82	0.9*	1982-87	5.5*	1987-93	-0.3	1993-00	1.7*	2000-04	-3.9*	2004-14	0.3	0.3	0.3
Black	1975-88	3.2*	1988-14	0.6*									0.6*	0.6*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-99	1.7*	1999-04	-2.9*	2004-14	0.2							0.2	0.2
White	1992-00	1.4*	2000-04	-3.7*	2004-14	0.1							0.1	0.1
Black	1992-14	0.5*											0.5*	0.5*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-82	0.9	1982-87	5.3*	1987-93	-0.3	1993-99	1.9*	1999-05	-2.5*	2005-14	0.5*	0.5*	0.5*
White	1975-82	0.9*	1982-87	5.5*	1987-93	-0.3	1993-00	1.7*	2000-04	-3.8*	2004-14	0.2	0.2	0.2
Black	1975-92	2.6*	1992-14	0.4*									0.4*	0.4*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-99	1.7*	1999-04	-2.8*	2004-14	0.1							0.1	0.1
White	1992-99	1.8*	1999-04	-2.9*	2004-14	-0.1							-0.1	-0.1
White NH[e][f]	1992-01	1.3*	2001-04	-5.0*	2004-14	0.2							0.2	0.2
Black	1992-14	0.4*											0.4*	0.4*
Black NH[e][f]	1992-14	0.4*											0.4*	0.4*
API[e]	1992-99	3.0*	1999-03	-2.5	2003-14	1.1*							1.1*	1.1*
AI/AN[e][g]	1992-14	0.2											0.2	0.2
Hispanic[f]	1992-14	0.2											0.2	0.2
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-90	0.5*	1990-95	-1.6*	1995-98	-3.0*	1998-14	-1.8*					-1.8*	-1.8*
White	1975-89	0.5*	1989-95	-1.4*	1995-98	-3.3*	1998-14	-1.8*					-1.8*	-1.8*
Black	1975-93	1.6*	1993-14	-1.3*									-1.3*	-1.3*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-95	-1.2*	1995-98	-3.1*	1998-14	-1.8*							-1.8*	-1.8*
White	1992-94	-0.6	1994-97	-3.4*	1997-14	-1.8*							-1.8*	-1.8*
White NH[e][f]	1992-94	-0.1	1994-97	-3.3*	1997-14	-1.8*							-1.8*	-1.8*
Black	1992-95	0.8	1995-14	-1.3*									-1.3*	-1.3*
Black NH[e][f]	1992-94	2.4	1994-14	-1.2*									-1.2*	-1.2*
API[e]	1992-14	-0.6*											-0.6*	-0.6*
AI/AN[e][g]	1992-05	1.2	2005-14	-3.3*									-3.3*	-3.3*
Hispanic[f]	1992-96	1.7	1996-00	-3.4	2000-14	-0.9*							-0.9*	-0.9*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[ab] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-81	-3.0	1981-87	24.9*	1987-95	4.2*	1995-98	11.8	1998-14	0.5*			0.5*	0.5*
White	1975-81	-2.9	1981-87	25.4*	1987-95	3.9*	1995-98	11.1	1998-09	0.9*	2009-14	-1.6	-0.5	-1.6
Black	1975-83	6.1	1983-87	23.8*	1987-98	8.2*	1998-14	1.5*					1.5*	1.5*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-99	7.3*	1999-14	0.4									0.4	0.4
White	1992-94	-0.3	1994-98	10.2*	1998-09	0.7*	2009-14	-1.5					-0.5	-1.5
White NH[ef]	1992-94	0.7	1994-99	9.2*	1999-05	-0.8	2005-08	3.6	2008-14	-1.9*			-0.1	-1.9*
Black	1992-98	9.1*	1998-14	1.6*									1.6*	1.6*
Black NH[ef]	1992-98	9.0*	1998-14	1.7*									1.7*	1.7*
API[e]	1992-01	7.6*	2001-14	1.3*									1.3*	1.3*
AI/AN[eg]	1992-14	1.7*											1.7*	1.7*
Hispanic[f]	1992-98	8.5*	1998-14	1.6*									1.6*	1.6*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
[a] The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[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.
The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
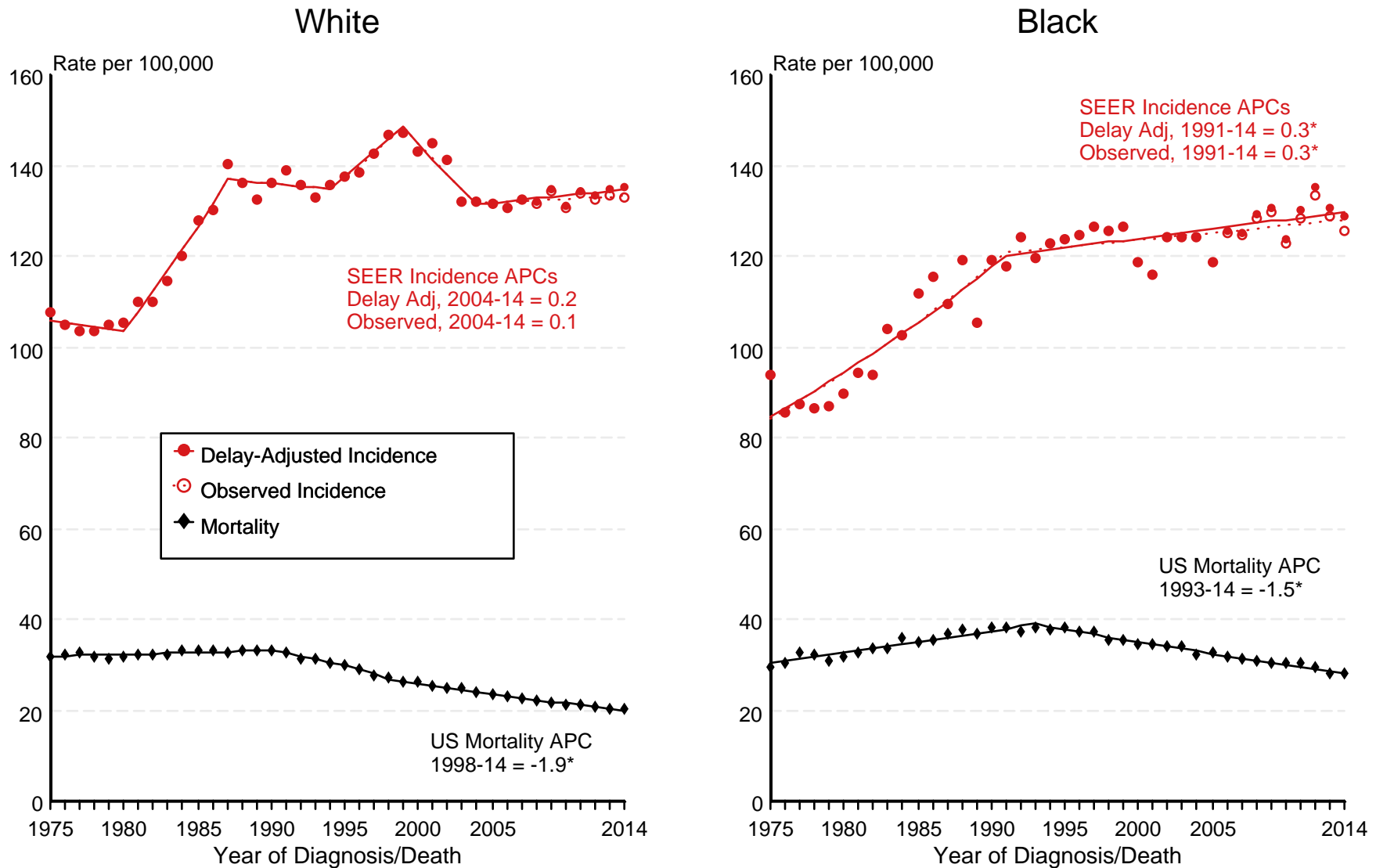* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 4.1

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

White

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2004-14 = 0.2
Observed, 2004-14 = 0.1

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

US Mortality APC
1998-14 = -1.9*

Year of Diagnosis/Death

Black

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1991-14 = 0.3*
Observed, 1991-14 = 0.3*

US Mortality APC
1993-14 = -1.5*

Year of Diagnosis/Death

Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
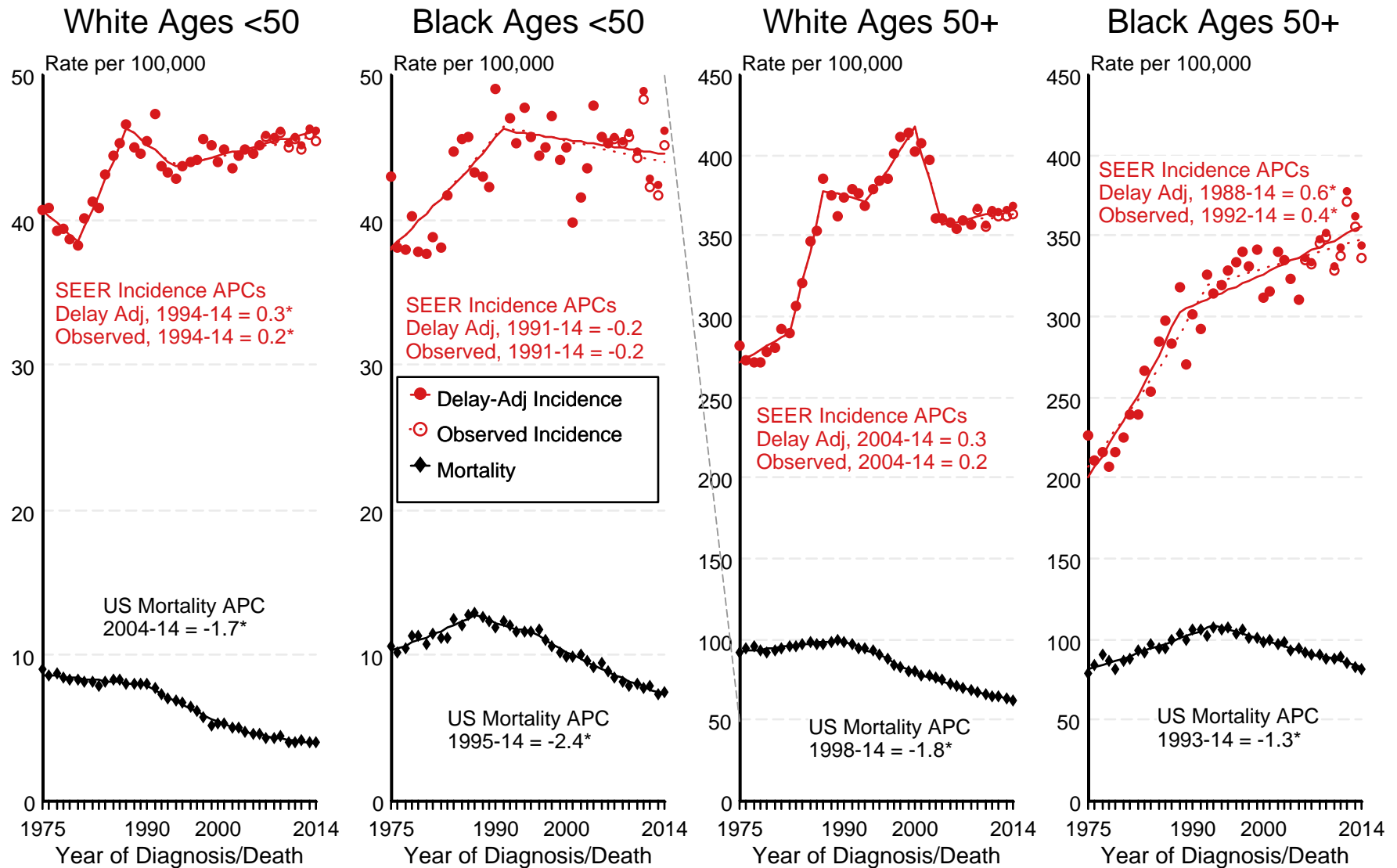[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
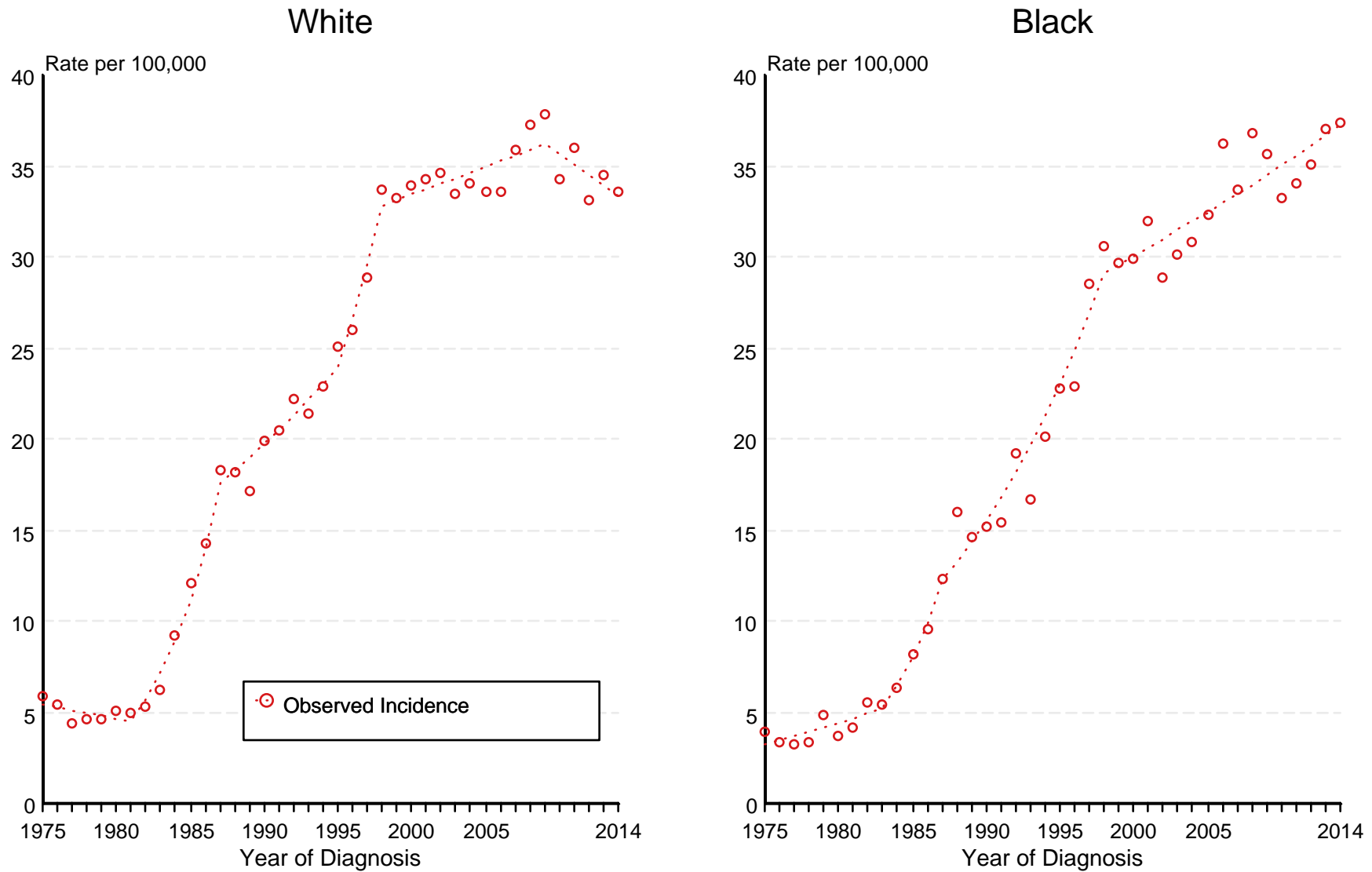Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 4.2

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

White Ages <50

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1994-14 = 0.3*
Observed, 1994-14 = 0.2*

US Mortality APC
2004-14 = -1.7*

1975   1990   2000   2014
Year of Diagnosis/Death

Black Ages <50

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1991-14 = -0.2
Observed, 1991-14 = -0.2

- Delay-Adj Incidence
- Observed Incidence
- Mortality

US Mortality APC
1995-14 = -2.4*

1975   1990   2000   2014
Year of Diagnosis/Death

White Ages 50+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2004-14 = 0.3
Observed, 2004-14 = 0.2

US Mortality APC
1998-14 = -1.8*

1975   1990   2000   2014
Year of Diagnosis/Death

Black Ages 50+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1988-14 = 0.6*
Observed, 1992-14 = 0.4*

US Mortality APC
1993-14 = -1.3*

1975   1990   2000   2014
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 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 4.3

SEER Observed Incidence Rates[a]
Cancer of the Female Breast *(In Situ)*, by Race

White

Black

Rate per 100,000

Rate per 100,000

Year of Diagnosis

Year of Diagnosis

○ Observed Incidence

Source: SEER 9 areas.

[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 4.4, January 2017, 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
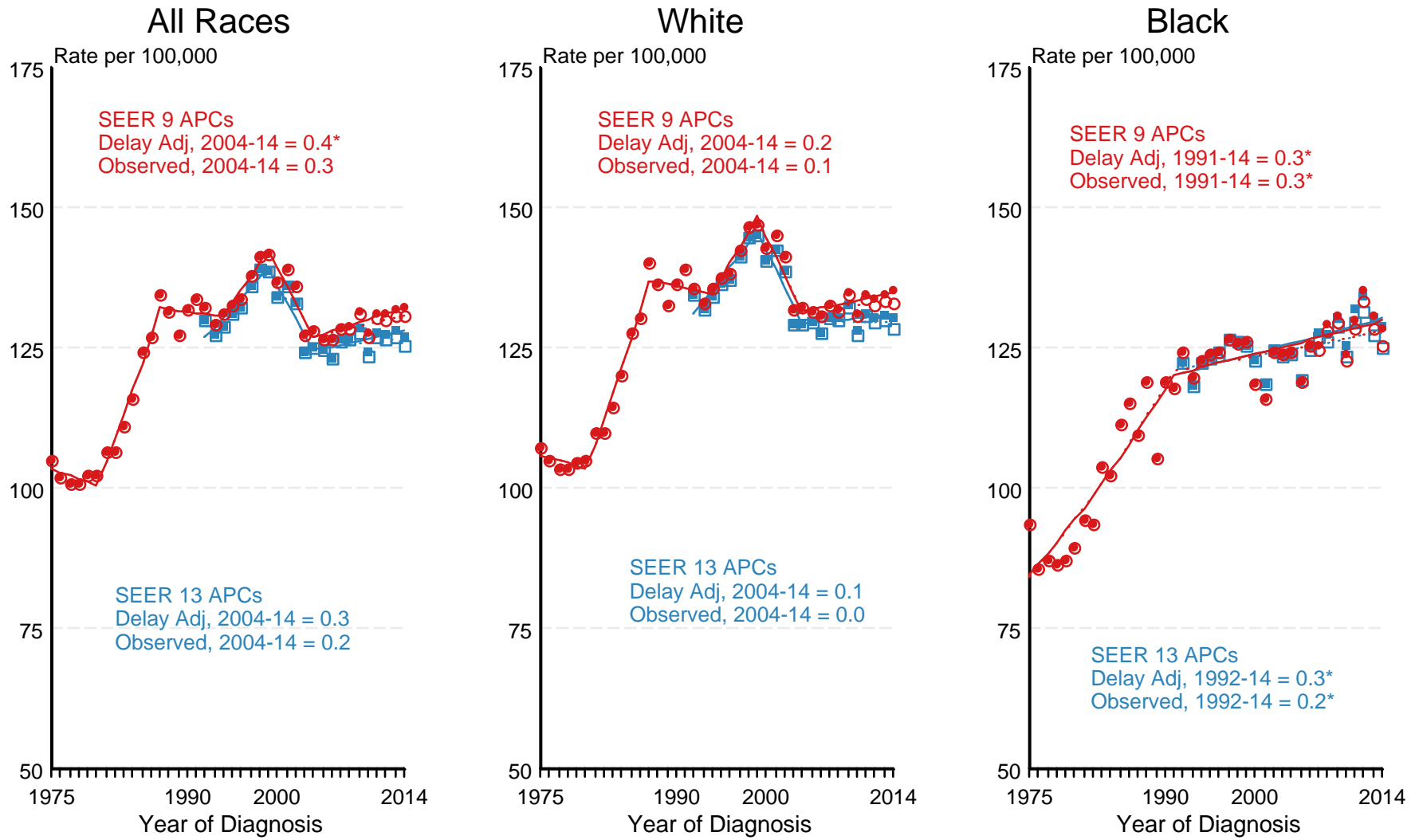## White Females vs Black Females
1975-2014
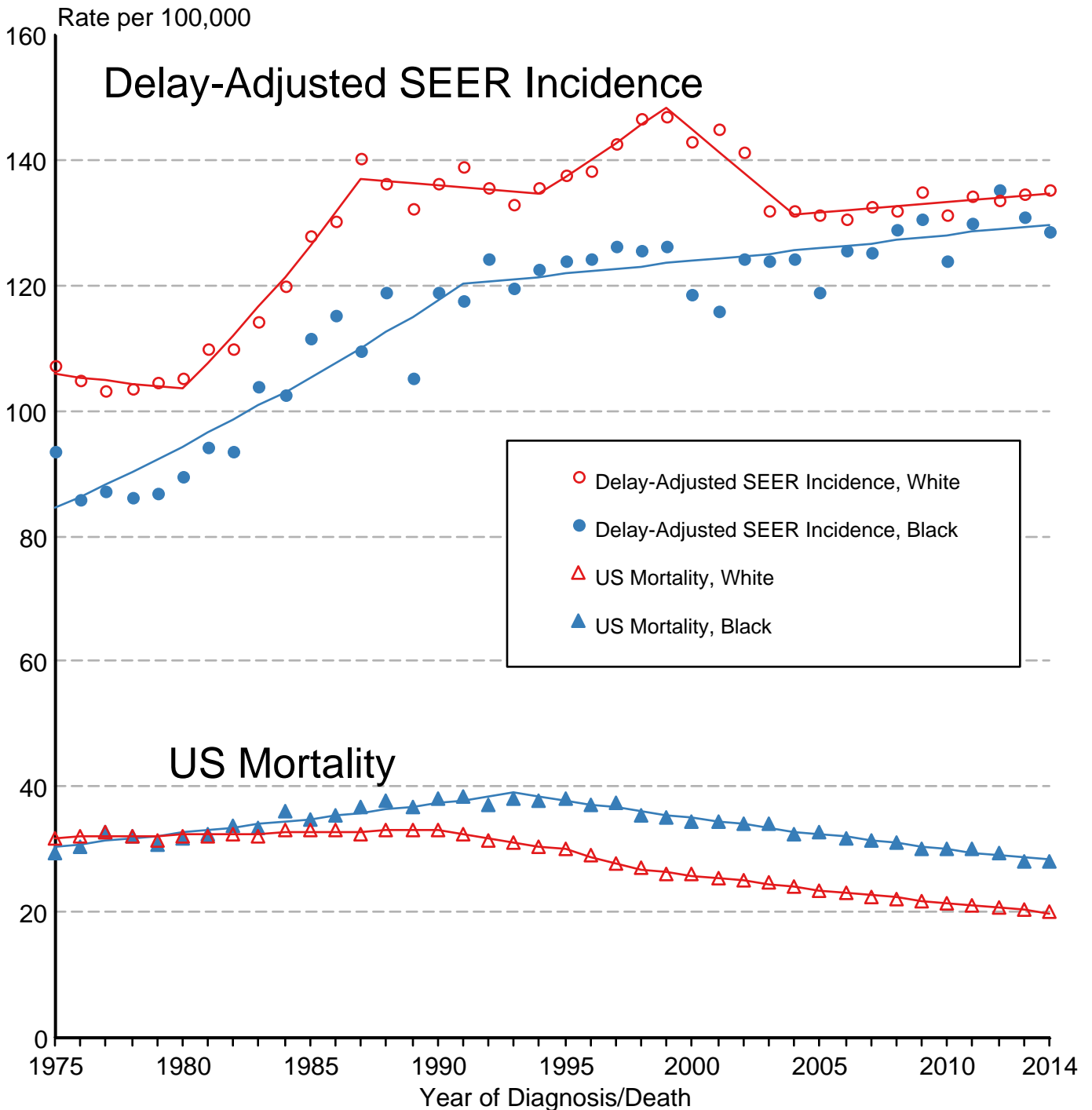
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines are calculated using the Joinpoint Regression Program Version 4.4, January 2017,
National Cancer Institute.

Figure 4.10

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-14 = 0.4*
Observed, 2004-14 = 0.3

SEER 13 APCs
Delay Adj, 2004-14 = 0.3
Observed, 2004-14 = 0.2

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-14 = 0.2
Observed, 2004-14 = 0.1

SEER 13 APCs
Delay Adj, 2004-14 = 0.1
Observed, 2004-14 = 0.0

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1991-14 = 0.3*
Observed, 1991-14 = 0.3*

SEER 13 APCs
Delay Adj, 1992-14 = 0.3*
Observed, 1992-14 = 0.2*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-82	-4.6*	1982-90	0.0	1990-06	-2.7*	2006-14	-0.3					-0.6	-0.3
White	1975-82	-4.8*	1982-90	0.4	1990-05	-2.5*	2005-14	0.0					0.0	0.0
Black	1975-14	-3.6*											-3.6*	-3.6*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-05	-2.7*	2005-14	-1.6*									-1.6*	-1.6*
White	1992-14	-2.0*											-2.0*	-2.0*
Black	1992-14	-3.4*											-3.4*	-3.4*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-82	-4.6*	1982-90	0.0	1990-06	-2.7*	2006-14	-0.4					-0.7	-0.4
White	1975-82	-4.8*	1982-90	0.4	1990-05	-2.5*	2005-14	-0.2					-0.2	-0.2
Black	1975-14	-3.6*											-3.6*	-3.6*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-2.4*											-2.4*	-2.4*
White	1992-14	-2.0*											-2.0*	-2.0*
White NH[e][f]	1992-04	-2.4*	2004-14	-0.7									-0.7	-0.7
Black	1992-14	-3.5*											-3.5*	-3.5*
Black NH[e][f]	1992-14	-3.4*											-3.4*	-3.4*
API[e]	1992-14	-3.9*											-3.9*	-3.9*
AI/AN[e][g]	1992-14	-1.2											-1.2	-1.2
Hispanic[f]	1992-14	-4.1*											-4.1*	-4.1*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-82	-4.4*	1982-96	-1.6*	1996-03	-3.8*	2003-14	-0.8*					-0.8*	-0.8*
White	1975-83	-4.2*	1983-96	-1.2*	1996-03	-3.5*	2003-14	-0.4*					-0.4*	-0.4*
Black	1975-81	-4.8*	1981-93	-2.4*	1993-03	-4.7*	2003-14	-2.1*					-2.1*	-2.1*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-04	-3.2*	2004-14	-0.7*									-0.7*	-0.7*
White	1992-96	-1.3	1996-03	-3.5*	2003-14	-0.4*							-0.4*	-0.4*
White NH[e][f]	1992-96	-1.0	1996-04	-3.4*	2004-14	-0.1							-0.1	-0.1
Black	1992-03	-4.8*	2003-14	-2.1*									-2.1*	-2.1*
Black NH[e][f]	1992-01	-5.2*	2001-14	-2.3*									-2.3*	-2.3*
API[e]	1992-14	-3.5*											-3.5*	-3.5*
AI/AN[e][g]	1992-14	-2.5*											-2.5*	-2.5*
Hispanic[f]	1992-14	-2.7*											-2.7*	-2.7*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

Table 5.2
Cancer of the Cervix Uteri (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-81	-3.7*	1981-98	-0.5	1998-01	-7.5	2001-14	-0.2					-0.2	-0.2
White	1975-82	-4.0*	1982-89	2.1	1989-05	-2.0*	2005-14	0.7					0.7	0.7
Black	1975-14	-3.2*											-3.2*	-3.2*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-04	-2.4*	2004-14	-1.1*									-1.1*	-1.1*
White	1992-14	-1.5*											-1.5*	-1.5*
Black	1992-14	-3.1*											-3.1*	-3.1*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-81	-3.7*	1981-98	-0.5	1998-01	-7.4	2001-14	-0.2					-0.2	-0.2
White	1975-82	-4.0*	1982-89	2.1	1989-05	-2.0*	2005-14	0.5					0.5	0.5
Black	1975-14	-3.2*											-3.2*	-3.2*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-04	-2.4*	2004-14	-1.2*									-1.2*	-1.2*
White	1992-14	-1.5*											-1.5*	-1.5*
White NH[e][f]	1992-04	-1.9*	2004-14	-0.1									-0.1	-0.1
Black	1992-14	-3.1*											-3.1*	-3.1*
Black NH[e][f]	1992-14	-2.9*											-2.9*	-2.9*
API[e]	1992-14	-2.6*											-2.6*	-2.6*
AI/AN[e][g]	1992-14	0.3											0.3	0.3
Hispanic[f]	1992-14	-3.7*											-3.7*	-3.7*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-81	-3.8*	1981-96	-0.7*	1996-03	-3.9*	2003-14	-0.3					-0.3	-0.3
White	1975-80	-4.0*	1980-97	-0.3*	1997-03	-3.9*	2003-14	0.1					0.1	0.1
Black	1975-14	-3.2*											-3.2*	-3.2*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-04	-3.0*	2004-14	-0.3									-0.3	-0.3
White	1992-98	-1.1	1998-03	-4.1*	2003-14	0.1							0.1	0.1
White NH[e][f]	1992-96	0.8	1996-03	-3.7*	2003-14	0.3							0.3	0.3
Black	1992-01	-5.5*	2001-14	-1.8*									-1.8*	-1.8*
Black NH[e][f]	1992-01	-5.4*	2001-14	-1.6*									-1.6*	-1.6*
API[e]	1992-14	-3.0*											-3.0*	-3.0*
AI/AN[e][g]	1992-14	-1.4											-1.4	-1.4
Hispanic[f]	1992-14	-2.8*											-2.8*	-2.8*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Table 5.3
Cancer of the Cervix Uteri (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-83	-4.9*	1983-91	-0.9	1991-05	-3.3*	2005-14	-1.6*					-1.6*	-1.6*
White	1975-85	-4.7*	1985-92	0.3	1992-95	-7.0	1995-14	-2.2*					-2.2*	-2.2*
Black	1975-14	-3.9*											-3.9*	-3.9*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-2.9*											-2.9*	-2.9*
White	1992-14	-2.6*											-2.6*	-2.6*
Black	1992-14	-3.8*											-3.8*	-3.8*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-83	-4.9*	1983-91	-0.9	1991-05	-3.3*	2005-14	-1.7*					-1.7*	-1.7*
White	1975-85	-4.7*	1985-92	0.3	1992-95	-6.9	1995-14	-2.2*					-2.2*	-2.2*
Black	1975-14	-4.0*											-4.0*	-4.0*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-3.0*											-3.0*	-3.0*
White	1992-14	-2.7*											-2.7*	-2.7*
White NH[ef]	1992-14	-2.5*											-2.5*	-2.5*
Black	1992-14	-3.9*											-3.9*	-3.9*
Black NH[ef]	1992-14	-3.9*											-3.9*	-3.9*
API[e]	1992-06	-6.2*	2006-14	-1.7									-2.2	-1.7
AI/AN[eg]	1992-14	-2.9*											-2.9*	-2.9*
Hispanic[f]	1992-14	-4.5*											-4.5*	-4.5*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-84	-4.3*	1984-94	-1.8*	1994-04	-3.4*	2004-14	-0.9*					-0.9*	-0.9*
White	1975-84	-4.6*	1984-96	-1.8*	1996-03	-3.6*	2003-14	-0.7*					-0.7*	-0.7*
Black	1975-79	-5.5*	1979-93	-2.7*	1993-05	-4.5*	2005-14	-1.9*					-1.9*	-1.9*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-04	-3.3*	2004-14	-1.0*									-1.0*	-1.0*
White	1992-04	-3.0*	2004-14	-0.7*									-0.7*	-0.7*
White NH[ef]	1992-04	-3.1*	2004-14	-0.6									-0.6	-0.6
Black	1992-04	-4.7*	2004-14	-2.1*									-2.1*	-2.1*
Black NH[ef]	1992-05	-4.5*	2005-14	-1.8*									-1.8*	-1.8*
API[e]	1992-14	-3.8*											-3.8*	-3.8*
AI/AN[eg]	1992-14	-3.2*											-3.2*	-3.2*
Hispanic[f]	1992-14	-2.6*											-2.6*	-2.6*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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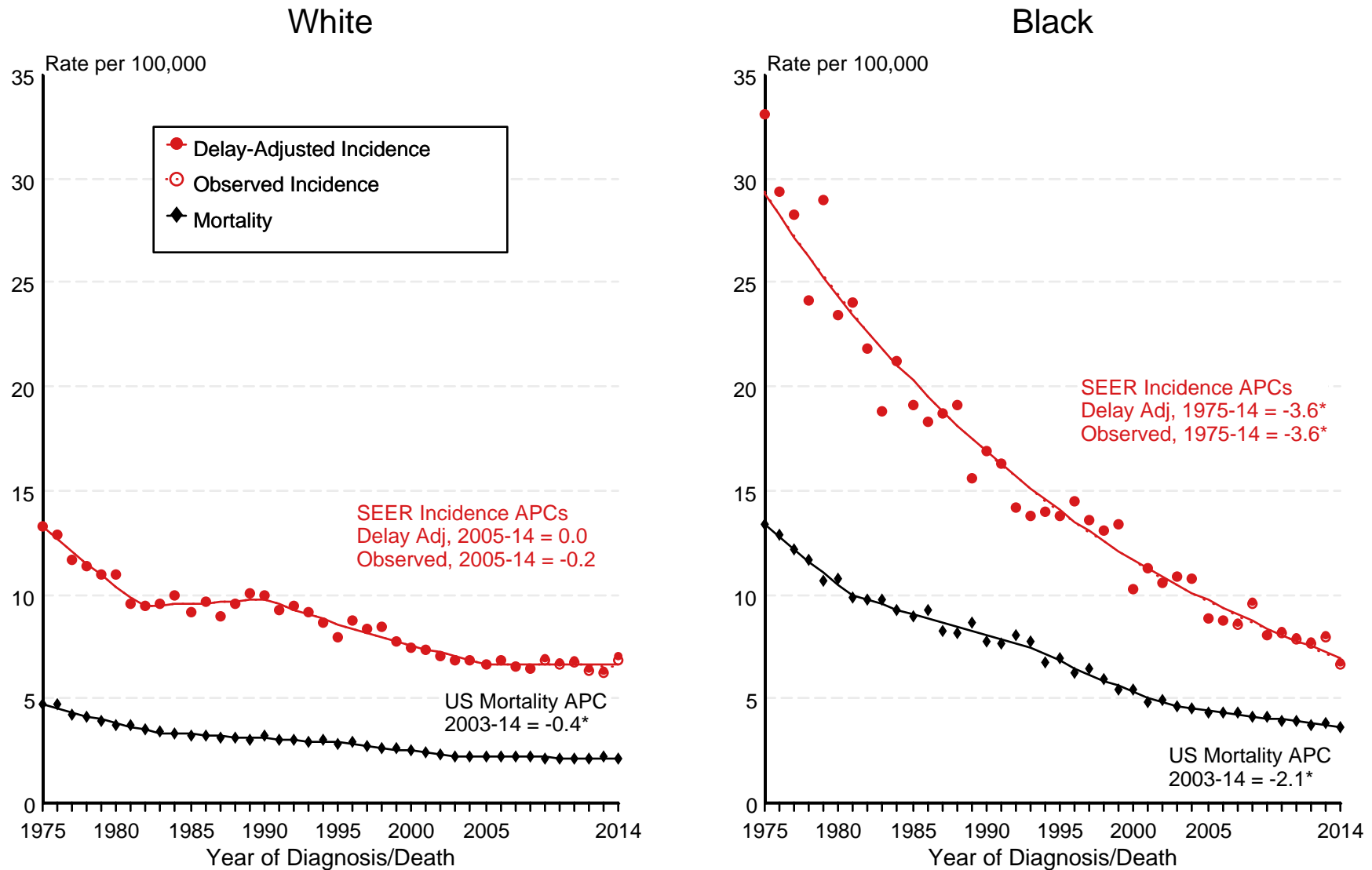[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 5.1

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

White

Rate per 100,000

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

SEER Incidence APCs
Delay Adj, 2005-14 = 0.0
Observed, 2005-14 = -0.2

US Mortality APC
2003-14 = -0.4*

Year of Diagnosis/Death

Black

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = -3.6*
Observed, 1975-14 = -3.6*

US Mortality APC
2003-14 = -2.1*

Year of Diagnosis/Death

Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
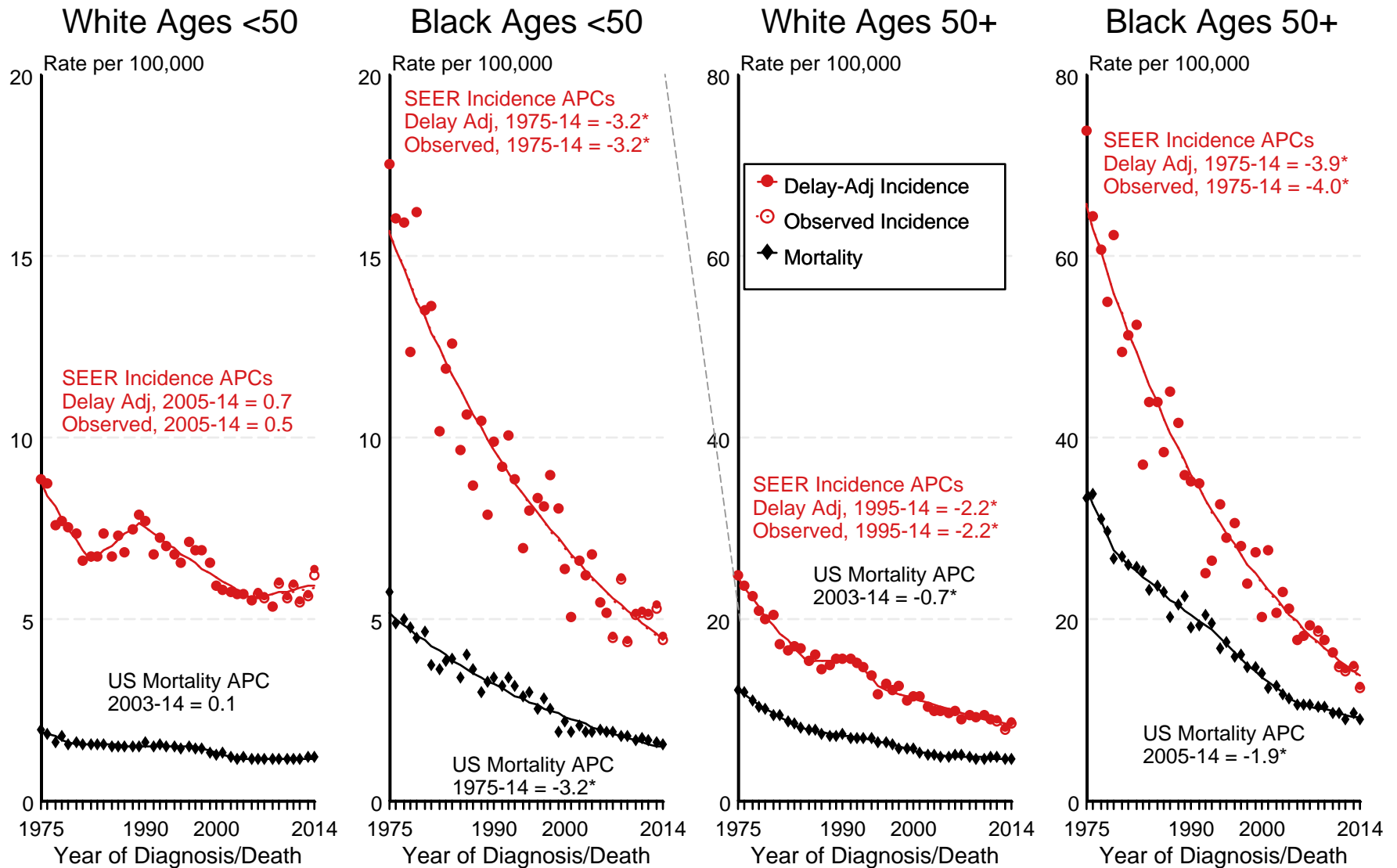a   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
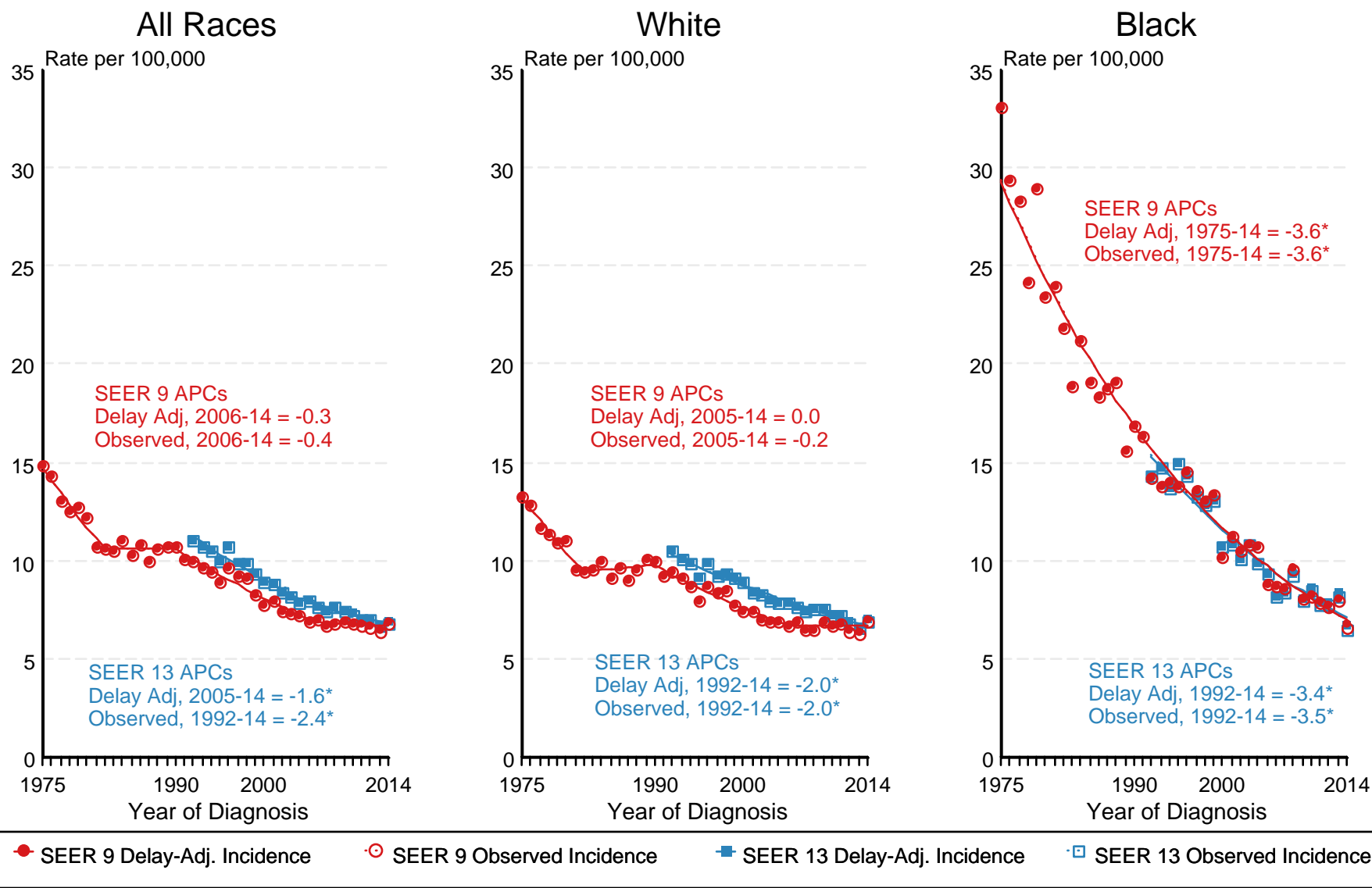   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
    The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
*   The APC is significantly different from zero (p < 0.05).

Figure 5.2

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

White Ages <50

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2005-14 = 0.7
Observed, 2005-14 = 0.5

US Mortality APC
2003-14 = 0.1

Year of Diagnosis/Death

Black Ages <50

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = -3.2*
Observed, 1975-14 = -3.2*

US Mortality APC
1975-14 = -3.2*

Year of Diagnosis/Death

White Ages 50+

Rate per 100,000

Delay-Adj Incidence
Observed Incidence
Mortality

SEER Incidence APCs
Delay Adj, 1995-14 = -2.2*
Observed, 1995-14 = -2.2*

US Mortality APC
2003-14 = -0.7*

Year of Diagnosis/Death

Black Ages 50+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = -3.9*
Observed, 1975-14 = -4.0*

US Mortality APC
2005-14 = -1.9*

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 4.4, January 2017, 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 5.4

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, 2006-14 = -0.3
Observed, 2006-14 = -0.4

SEER 13 APCs
Delay Adj, 2005-14 = -1.6*
Observed, 1992-14 = -2.4*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2005-14 = 0.0
Observed, 2005-14 = -0.2

SEER 13 APCs
Delay Adj, 1992-14 = -2.0*
Observed, 1992-14 = -2.0*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = -3.6*
Observed, 1975-14 = -3.6*

SEER 13 APCs
Delay Adj, 1992-14 = -3.4*
Observed, 1992-14 = -3.5*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Table 6.1
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-85	0.8*	1985-95	-1.8*	1995-98	1.5	1998-08	-2.3*	2008-12	-4.0*	2012-14	0.4	-2.5*	-1.9*
White	1975-85	0.8*	1985-95	-2.0*	1995-98	1.6	1998-08	-2.5*	2008-11	-4.8*	2011-14	-0.6	-2.6*	-1.6*
Black	1975-80	3.3*	1980-04	-0.2	2004-14	-3.3*							-3.3*	-3.3*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-95	-2.1*	1995-98	1.6	1998-08	-2.2*	2008-12	-4.0*	2012-14	-0.4			-2.6*	-2.2*
White	1992-95	-2.2*	1995-98	1.7	1998-08	-2.4*	2008-12	-4.2*	2012-14	0.4			-2.6*	-1.9*
Black	1992-04	-0.1	2004-14	-3.3*									-3.3*	-3.3*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-85	0.8*	1985-95	-1.8*	1995-98	1.5	1998-08	-2.3*	2008-11	-4.6*	2011-14	-1.3	-2.7*	-2.1*
White	1975-85	0.8*	1985-95	-2.0*	1995-98	1.6	1998-08	-2.5*	2008-11	-4.9*	2011-14	-1.0	-2.8*	-2.0*
Black	1975-80	3.3*	1980-04	-0.2	2004-14	-3.5*							-3.5*	-3.5*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-95	-2.1*	1995-98	1.6	1998-08	-2.2*	2008-12	-4.1*	2012-14	-0.9			-2.8*	-2.5*
White	1992-95	-2.2*	1995-98	1.7	1998-08	-2.4*	2008-12	-4.3*	2012-14	-0.2			-2.8*	-2.3*
White NH[ef]	1992-95	-2.2*	1995-98	1.8	1998-08	-2.5*	2008-12	-4.3*	2012-14	0.3			-2.7*	-2.0*
Black	1992-03	-0.1	2003-08	-2.2*	2008-14	-4.6*							-3.8*	-4.6*
Black NH[ef]	1992-03	-0.1	2003-09	-2.3*	2009-14	-4.8*							-3.7*	-4.8*
API[e]	1992-02	-0.3	2002-14	-2.6*									-2.6*	-2.6*
AI/AN[eg]	1992-14	-0.2											-0.2	-0.2
Hispanic[f]	1992-07	0.0	2007-14	-3.1*									-2.4*	-3.1*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-84	-0.5*	1984-02	-1.8*	2002-05	-3.8*	2005-14	-2.5*					-2.5*	-2.5*
White	1975-84	-0.7*	1984-02	-1.9*	2002-05	-3.9*	2005-14	-2.4*					-2.4*	-2.4*
Black	1975-90	0.7*	1990-02	-0.9*	2002-14	-3.1*							-3.1*	-3.1*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-02	-1.8*	2002-05	-3.8*	2005-14	-2.5*							-2.5*	-2.5*
White	1992-02	-1.9*	2002-05	-3.9*	2005-14	-2.4*							-2.4*	-2.4*
White NH[ef]	1992-02	-1.8*	2002-05	-4.0*	2005-14	-2.4*							-2.4*	-2.4*
Black	1992-01	-0.6*	2001-14	-3.0*									-3.0*	-3.0*
Black NH[ef]	1992-01	-0.5*	2001-14	-2.9*									-2.9*	-2.9*
API[e]	1992-14	-1.9*											-1.9*	-1.9*
AI/AN[eg]	1992-96	8.6	1996-14	-0.7									-0.7	-0.7
Hispanic[f]	1992-01	0.3	2001-14	-1.8*									-1.8*	-1.8*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

Table 6.2
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-85	1.1*	1985-91	-1.2*	1991-95	-3.2*	1995-98	2.1	1998-14	-2.9*			-2.9*	-2.9*
White	1975-86	1.1*	1986-95	-2.3*	1995-98	1.3	1998-07	-2.9*	2007-12	-4.1*	2012-14	0.2	-2.9*	-2.0*
Black	1975-80	4.6	1980-03	0.0	2003-14	-3.1*							-3.1*	-3.1*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-95	-2.6*	1995-98	1.4	1998-08	-2.5*	2008-12	-3.9*	2012-14	-0.8			-2.8*	-2.4*
White	1992-95	-2.8*	1995-98	1.4	1998-08	-2.7*	2008-12	-4.3*	2012-14	-0.3			-2.9*	-2.3*
Black	1992-04	-0.2	2004-14	-3.3*									-3.3*	-3.3*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-85	1.1*	1985-91	-1.2*	1991-95	-3.2*	1995-98	2.2	1998-14	-3.0*			-3.0*	-3.0*
White	1975-86	1.1*	1986-95	-2.3*	1995-98	1.3	1998-07	-2.9*	2007-12	-4.2*	2012-14	-0.5	-3.1*	-2.4*
Black	1975-80	4.6	1980-03	0.0	2003-14	-3.3*							-3.3*	-3.3*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-95	-2.6*	1995-98	1.4	1998-08	-2.5*	2008-12	-4.0*	2012-14	-1.4			-2.9*	-2.7*
White	1992-95	-2.8*	1995-98	1.5	1998-08	-2.7*	2008-12	-4.4*	2012-14	-0.9			-3.1*	-2.7*
White NH[ef]	1992-95	-2.9*	1995-98	1.5	1998-08	-2.9*	2008-12	-4.5*	2012-14	-0.2			-3.0*	-2.4*
Black	1992-04	-0.2	2004-14	-3.6*									-3.6*	-3.6*
Black NH[ef]	1992-04	-0.2	2004-14	-3.5*									-3.5*	-3.5*
API[e]	1992-01	-0.4	2001-14	-2.4*									-2.4*	-2.4*
AI/AN[eg]	1992-14	-0.2											-0.2	-0.2
Hispanic[f]	1992-98	1.4	1998-09	-0.9*	2009-14	-4.0*							-2.6*	-4.0*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-78	0.8	1978-85	-0.4*	1985-90	-1.4*	1990-02	-2.0*	2002-05	-4.0*	2005-14	-2.5*	-2.5*	-2.5*
White	1975-79	0.6	1979-87	-0.8*	1987-02	-2.1*	2002-05	-4.2*	2005-14	-2.5*			-2.5*	-2.5*
Black	1975-90	1.2*	1990-02	-0.7*	2002-14	-2.8*							-2.8*	-2.8*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-02	-2.0*	2002-05	-4.0*	2005-14	-2.5*							-2.5*	-2.5*
White	1992-02	-2.1*	2002-05	-4.1*	2005-14	-2.5*							-2.5*	-2.5*
White NH[ef]	1992-02	-2.1*	2002-05	-4.2*	2005-14	-2.5*							-2.5*	-2.5*
Black	1992-02	-0.7*	2002-14	-2.8*									-2.8*	-2.8*
Black NH[ef]	1992-02	-0.7*	2002-14	-2.7*									-2.7*	-2.7*
API[e]	1992-14	-1.9*											-1.9*	-1.9*
AI/AN[eg]	1992-96	14.5	1996-14	-0.8									-0.8	-0.8
Hispanic[f]	1992-98	0.8	1998-14	-1.5*									-1.5*	-1.5*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.
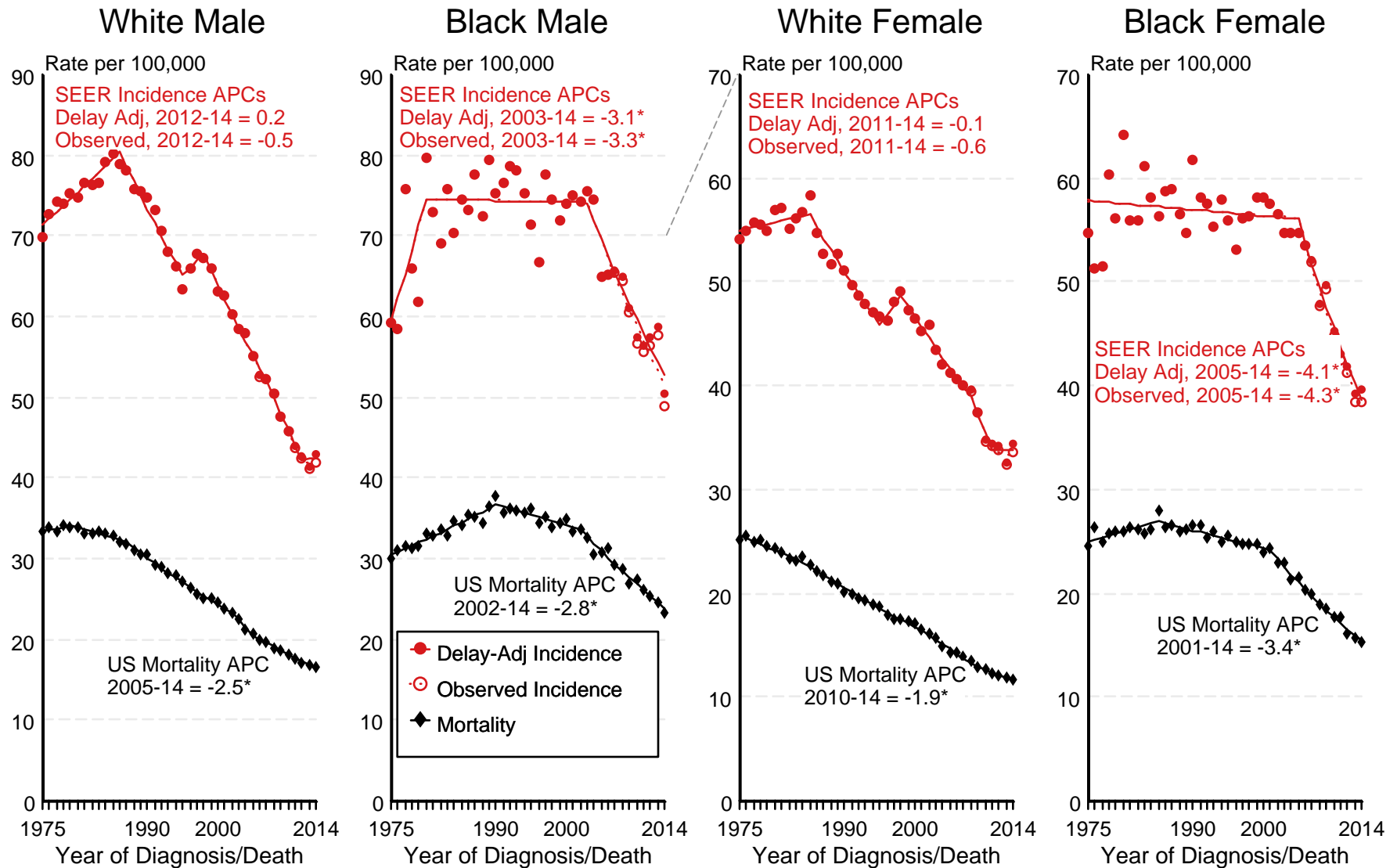
Table 6.3
Cancer of the Colon and Rectum (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-85	0.3	1985-95	-1.9*	1995-98	1.8	1998-08	-2.0*	2008-12	-4.1*	2012-14	0.4	-2.4*	-1.9
White	1975-85	0.3	1985-95	-2.1*	1995-98	2.0	1998-08	-2.2*	2008-11	-4.7*	2011-14	-0.1	-2.3*	-1.3
Black	1975-05	-0.1	2005-14	-4.1*									-4.1*	-4.1*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-95	-1.8*	1995-98	1.8	1998-08	-1.9*	2008-12	-4.1*	2012-14	-0.1			-2.5*	-2.1*
White	1992-95	-1.7	1995-98	1.8	1998-08	-2.1*	2008-12	-4.1*	2012-14	1.1			-2.3*	-1.5
Black	1992-06	-0.3	2006-14	-4.3*									-3.8*	-4.3*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-85	0.3	1985-95	-1.9*	1995-98	1.8	1998-08	-2.0*	2008-11	-4.7*	2011-14	-1.3	-2.7*	-2.1*
White	1975-85	0.3	1985-95	-2.1*	1995-98	2.0	1998-08	-2.2*	2008-11	-4.8*	2011-14	-0.6	-2.5*	-1.6
Black	1975-05	-0.1	2005-14	-4.3*									-4.3*	-4.3*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-95	-1.8*	1995-98	1.8	1998-08	-2.0*	2008-12	-4.2*	2012-14	-0.6			-2.7*	-2.4*
White	1992-95	-1.7	1995-98	1.8	1998-08	-2.1*	2008-12	-4.2*	2012-14	0.5			-2.5*	-1.9
White NH[ef]	1992-95	-1.7	1995-98	1.9	1998-08	-2.2*	2008-11	-4.7	2011-14	-0.7			-2.5*	-1.7
Black	1992-06	-0.3	2006-14	-4.6*									-4.1*	-4.6*
Black NH[ef]	1992-06	-0.2	2006-14	-4.6*									-4.1*	-4.6*
API[e]	1992-09	-0.9*	2009-14	-5.3*									-3.4*	-5.3*
AI/AN[eg]	1992-14	-0.3											-0.3	-0.3
Hispanic[f]	1992-07	0.0	2007-14	-2.8*									-2.2*	-2.8*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-84	-1.0*	1984-01	-1.8*	2001-14	-2.8*							-2.8*	-2.8*
White	1975-84	-1.2*	1984-01	-2.0*	2001-10	-2.9*	2010-14	-1.9*					-2.5*	-1.9*
Black	1975-85	0.7*	1985-01	-0.7*	2001-14	-3.4*							-3.4*	-3.4*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-00	-1.7*	2000-14	-2.8*									-2.8*	-2.8*
White	1992-00	-1.8*	2000-14	-2.7*									-2.7*	-2.7*
White NH[ef]	1992-00	-1.8*	2000-14	-2.7*									-2.7*	-2.7*
Black	1992-01	-0.7*	2001-14	-3.4*									-3.4*	-3.4*
Black NH[ef]	1992-01	-0.6*	2001-14	-3.3*									-3.3*	-3.3*
API[e]	1992-12	-1.5*	2012-14	-8.3									-3.1*	-4.9*
AI/AN[eg]	1992-14	-0.3											-0.3	-0.3
Hispanic[f]	1992-02	0.4	2002-14	-2.3*									-2.3*	-2.3*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]   Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]   Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]   Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]   The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]   API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]   Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
      Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
      The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g]   Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-    Joinpoint regression line analysis could not be performed on data series.

Figure 6.1

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, 2012-14 = 0.2
Observed, 2012-14 = -0.5

US Mortality APC
2005-14 = -2.5*

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2003-14 = -3.1*
Observed, 2003-14 = -3.3*

US Mortality APC
2002-14 = -2.8*

- ● Delay-Adj Incidence
- ◌ Observed Incidence
- ◆ Mortality

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2011-14 = -0.1
Observed, 2011-14 = -0.6

US Mortality APC
2010-14 = -1.9*

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2005-14 = -4.1*
Observed, 2005-14 = -4.3*

US Mortality APC
2001-14 = -3.4*

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).
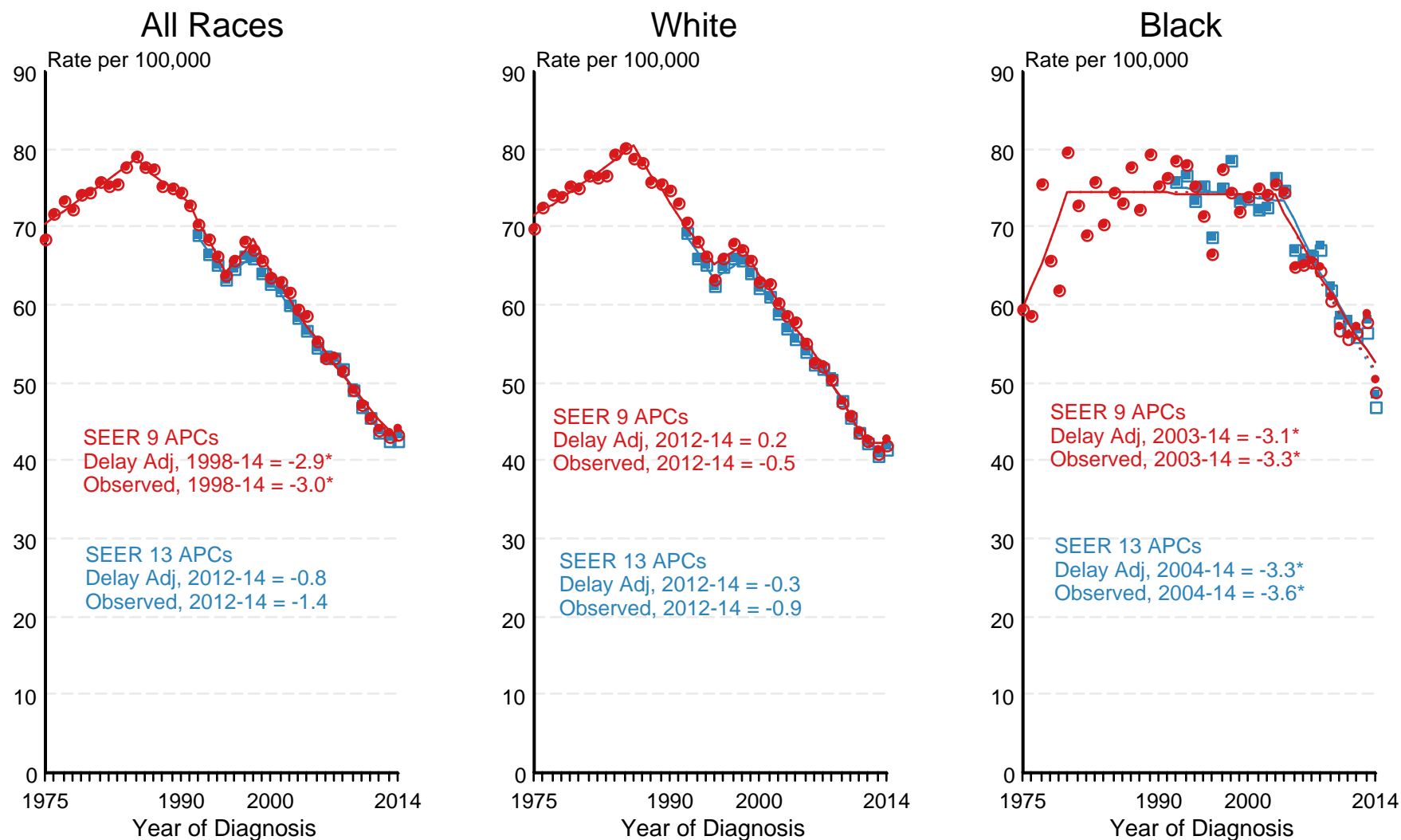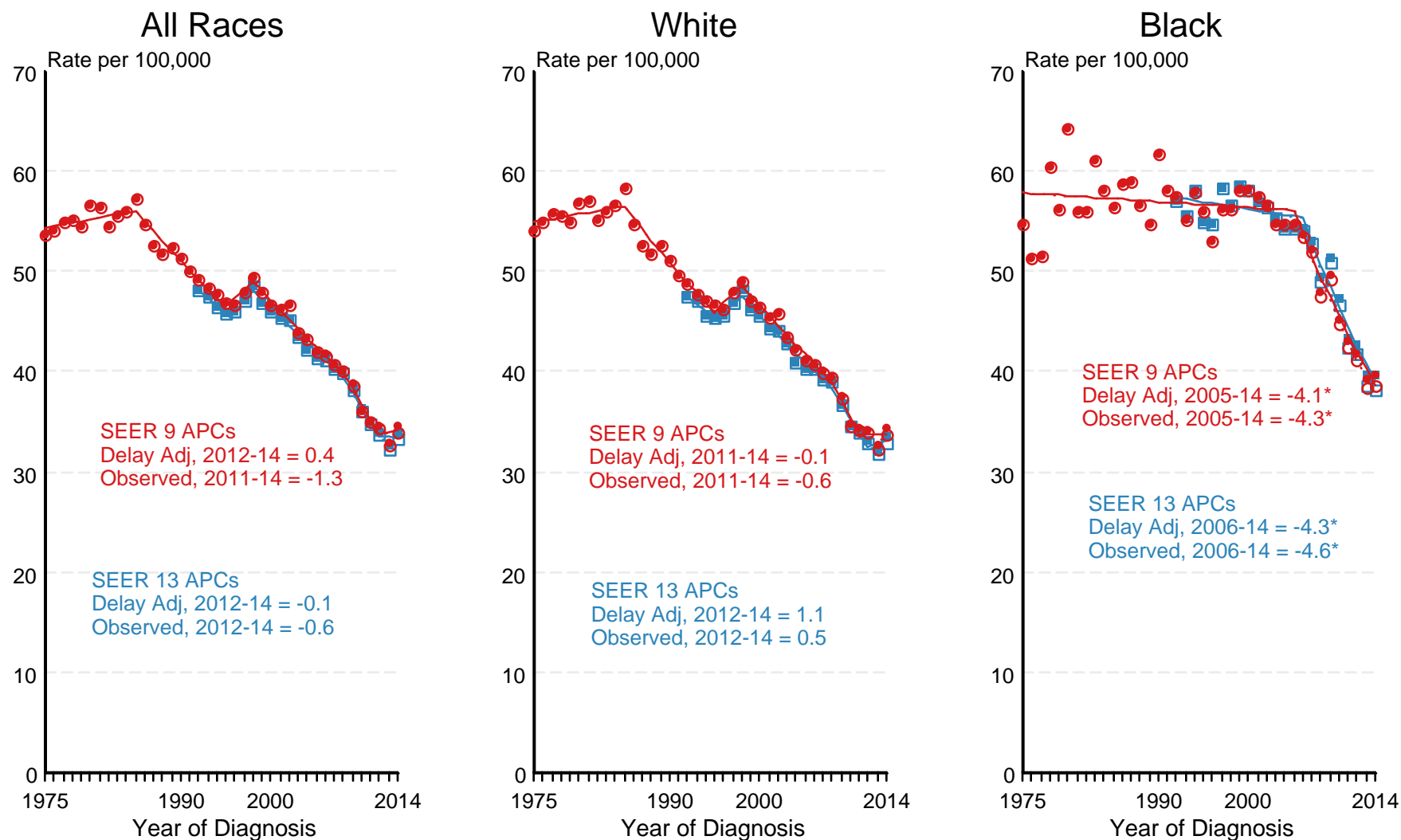   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
    The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
*   The APC is significantly different from zero (p < 0.05).

Figure 6.3

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1998-14 = -2.9*
Observed, 1998-14 = -3.0*

SEER 13 APCs
Delay Adj, 2012-14 = -0.8
Observed, 2012-14 = -1.4

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2012-14 = 0.2
Observed, 2012-14 = -0.5

SEER 13 APCs
Delay Adj, 2012-14 = -0.3
Observed, 2012-14 = -0.9

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 2003-14 = -3.1*
Observed, 2003-14 = -3.3*

SEER 13 APCs
Delay Adj, 2004-14 = -3.3*
Observed, 2004-14 = -3.6*

Year of Diagnosis

● SEER 9 Delay-Adj. Incidence   ◌ SEER 9 Observed Incidence   ■ SEER 13 Delay-Adj. Incidence   ◻ SEER 13 Observed Incidence

Source: SEER 9 areas and SEER 13 areas.

[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 4.4, January 2017, 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 6.4

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2012-14 = 0.4
Observed, 2011-14 = -1.3

SEER 13 APCs
Delay Adj, 2012-14 = -0.1
Observed, 2012-14 = -0.6

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2011-14 = -0.1
Observed, 2011-14 = -0.6

SEER 13 APCs
Delay Adj, 2012-14 = 1.1
Observed, 2012-14 = 0.5

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 2005-14 = -4.1*
Observed, 2005-14 = -4.3*

SEER 13 APCs
Delay Adj, 2006-14 = -4.3*
Observed, 2006-14 = -4.6*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-79	-6.0*	1979-88	-1.7*	1988-97	0.7*	1997-06	-0.4*	2006-09	3.5	2009-14	0.2	1.2*	0.2
White	1975-79	-6.1*	1979-88	-1.6*	1988-98	0.7*	1998-03	-1.1	2003-14	1.0*			1.0*	1.0*
Black	1975-94	-0.4	1994-14	2.5*									2.5*	2.5*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-06	-0.2	2006-09	3.3	2009-14	0.5							1.4	0.5
White	1992-04	-0.3	2004-14	1.1*									1.1*	1.1*
Black	1992-14	2.4*											2.4*	2.4*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-79	-6.0*	1979-88	-1.7*	1988-97	0.7*	1997-06	-0.4*	2006-09	3.5	2009-14	0.1	1.2	0.1
White	1975-79	-6.1*	1979-88	-1.6*	1988-98	0.7*	1998-03	-1.1	2003-14	0.9*			0.9*	0.9*
Black	1975-93	-0.5	1993-14	2.3*									2.3*	2.3*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-06	-0.2	2006-09	3.3	2009-14	0.4							1.3	0.4
White	1992-04	-0.3	2004-14	1.0*									1.0*	1.0*
White NH[ef]	1992-98	0.6	1998-04	-1.3	2004-10	1.7*	2010-14	-0.6					0.7	-0.6
Black	1992-14	2.3*											2.3*	2.3*
Black NH[ef]	1992-14	2.3*											2.3*	2.3*
API[e]	1992-14	1.7*											1.7*	1.7*
AI/AN[eg]	1992-14	2.3*											2.3*	2.3*
Hispanic[f]	1992-07	1.2*	2007-14	3.7*									3.2*	3.7*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-93	-1.5*	1993-08	0.2	2008-14	2.1*							1.4*	2.1*
White	1975-91	-1.7*	1991-07	-0.1	2007-14	1.7*							1.3*	1.7*
Black	1975-97	-0.8*	1997-09	0.7*	2009-14	3.0*							2.0*	3.0*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-08	0.1	2008-14	2.1*									1.4*	2.1*
White	1992-07	0.0	2007-14	1.7*									1.3*	1.7*
White NH[ef]	1992-08	0.1	2008-14	1.8*									1.2*	1.8*
Black	1992-08	0.3	2008-14	2.9*									2.0*	2.9*
Black NH[ef]	1992-08	0.4*	2008-14	3.0*									2.1*	3.0*
API[e]	1992-14	1.8*											1.8*	1.8*
AI/AN[eg]	1992-14	0.8											0.8	0.8
Hispanic[f]	1992-14	0.9*											0.9*	0.9*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-88	-2.6*	1988-14	1.3*									1.3*	1.3*
White	1975-88	-2.6*	1988-14	1.0*									1.0*	1.0*
Black	1975-85	-4.8*	1985-14	2.3*									2.3*	2.3*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	1.6*											1.6*	1.6*
White	1992-14	1.4*											1.4*	1.4*
Black	1992-14	2.0*											2.0*	2.0*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-88	-2.6*	1988-14	1.3*									1.3*	1.3*
White	1975-88	-2.6*	1988-14	1.0*									1.0*	1.0*
Black	1975-85	-4.8*	1985-14	2.3*									2.3*	2.3*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	1.5*											1.5*	1.5*
White	1992-14	1.4*											1.4*	1.4*
White NH[ef]	1992-14	0.8*											0.8*	0.8*
Black	1992-14	1.9*											1.9*	1.9*
Black NH[ef]	1992-14	2.0*											2.0*	2.0*
API[e]	1992-14	1.3*											1.3*	1.3*
AI/AN[eg]	1992-14	1.6											1.6	1.6
Hispanic[f]	1992-08	2.1*	2008-14	5.3*									4.2*	5.3*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-92	-3.2*	1992-14	1.7*									1.7*	1.7*
White	1975-91	-3.2*	1991-14	1.6*									1.6*	1.6*
Black	1975-95	-4.5*	1995-14	2.6*									2.6*	2.6*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	1.7*											1.7*	1.7*
White	1992-14	1.7*											1.7*	1.7*
White NH[ef]	1992-14	1.6*											1.6*	1.6*
Black	1992-14	2.1*											2.1*	2.1*
Black NH[ef]	1992-14	2.3*											2.3*	2.3*
API[e]	1992-14	1.2											1.2	1.2
AI/AN[eg]	–	–											–	–
Hispanic[f]	1992-14	1.5*											1.5*	1.5*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-79	-6.2*	1979-88	-1.7*	1988-97	0.6*	1997-06	-0.7*	2006-09	3.6	2009-14	0.2	1.2	0.2
White	1975-79	-6.2*	1979-88	-1.7*	1988-98	0.7*	1998-03	-1.5	2003-14	1.0*			1.0*	1.0*
Black	1975-99	0.1	1999-14	3.0*									3.0*	3.0*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-97	0.7	1997-06	-0.9*	2006-09	3.9	2009-14	0.3					1.4	0.3
White	1992-97	0.9	1997-03	-1.5*	2003-14	1.0*							1.0*	1.0*
Black	1992-14	2.4*											2.4*	2.4*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-79	-6.2*	1979-88	-1.7*	1988-97	0.6*	1997-06	-0.7*	2006-09	3.6	2009-14	0.1	1.1	0.1
White	1975-79	-6.2*	1979-88	-1.7*	1988-98	0.7*	1998-03	-1.5	2003-14	0.9*			0.9*	0.9*
Black	1975-97	0.0	1997-14	2.6*									2.6*	2.6*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-97	0.7	1997-06	-0.9*	2006-09	3.9	2009-14	0.2					1.3	0.2
White	1992-97	0.9	1997-03	-1.5*	2003-14	1.0*							1.0*	1.0*
White NH[e][f]	1992-97	1.0	1997-03	-1.4	2003-14	0.8*							0.8*	0.8*
Black	1992-14	2.4*											2.4*	2.4*
Black NH[e][f]	1992-14	2.4*											2.4*	2.4*
API[e]	1992-95	6.7	1995-06	0.4	2006-09	7.3	2009-14	-0.1					2.4	-0.1
AI/AN[e][g]	1992-14	2.6*											2.6*	2.6*
Hispanic[f]	1992-06	0.8*	2006-14	3.2*									3.0*	3.2*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-93	-1.4*	1993-08	0.1	2008-14	2.0*							1.4*	2.0*
White	1975-92	-1.6*	1992-08	-0.1	2008-14	1.9*							1.2*	1.9*
Black	1975-04	-0.4*	2004-14	2.0*									2.0*	2.0*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-08	0.0	2008-14	2.1*									1.4*	2.1*
White	1992-07	-0.1	2007-14	1.6*									1.2*	1.6*
White NH[e][f]	1992-08	0.0	2008-14	1.8*									1.2*	1.8*
Black	1992-08	0.2	2008-14	2.8*									2.0*	2.8*
Black NH[e][f]	1992-08	0.3	2008-14	3.0*									2.1*	3.0*
API[e]	1992-14	1.8*											1.8*	1.8*
AI/AN[e][g]	1992-14	0.9											0.9	0.9
Hispanic[f]	1992-14	0.8*											0.8*	0.8*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
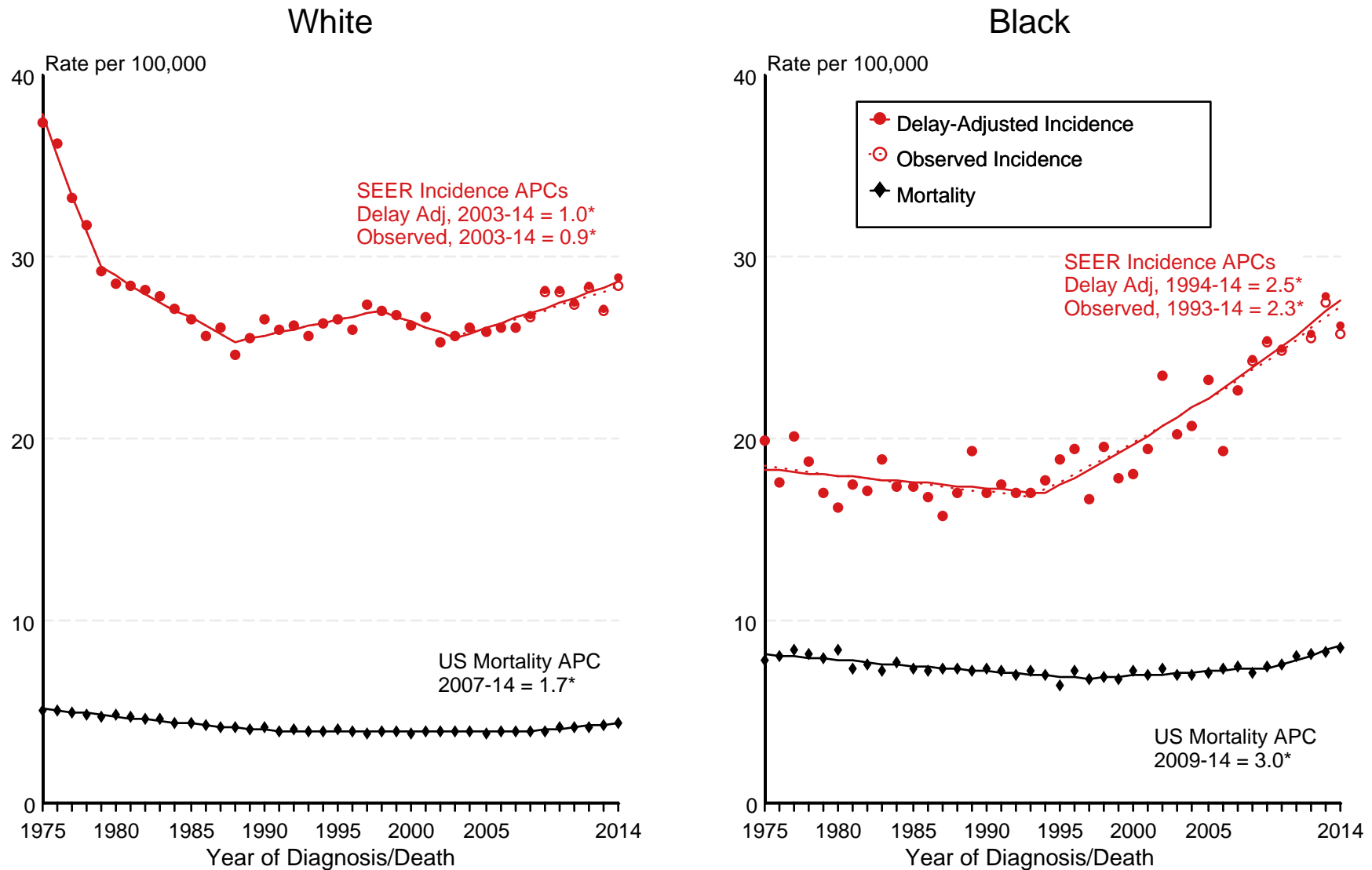[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 7.1

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, 2003-14 = 1.0*
Observed, 2003-14 = 0.9*

US Mortality APC
2007-14 = 1.7*

Year of Diagnosis/Death

Black

Rate per 100,000

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

SEER Incidence APCs
Delay Adj, 1994-14 = 2.5*
Observed, 1993-14 = 2.3*

US Mortality APC
2009-14 = 3.0*

Year of Diagnosis/Death

Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
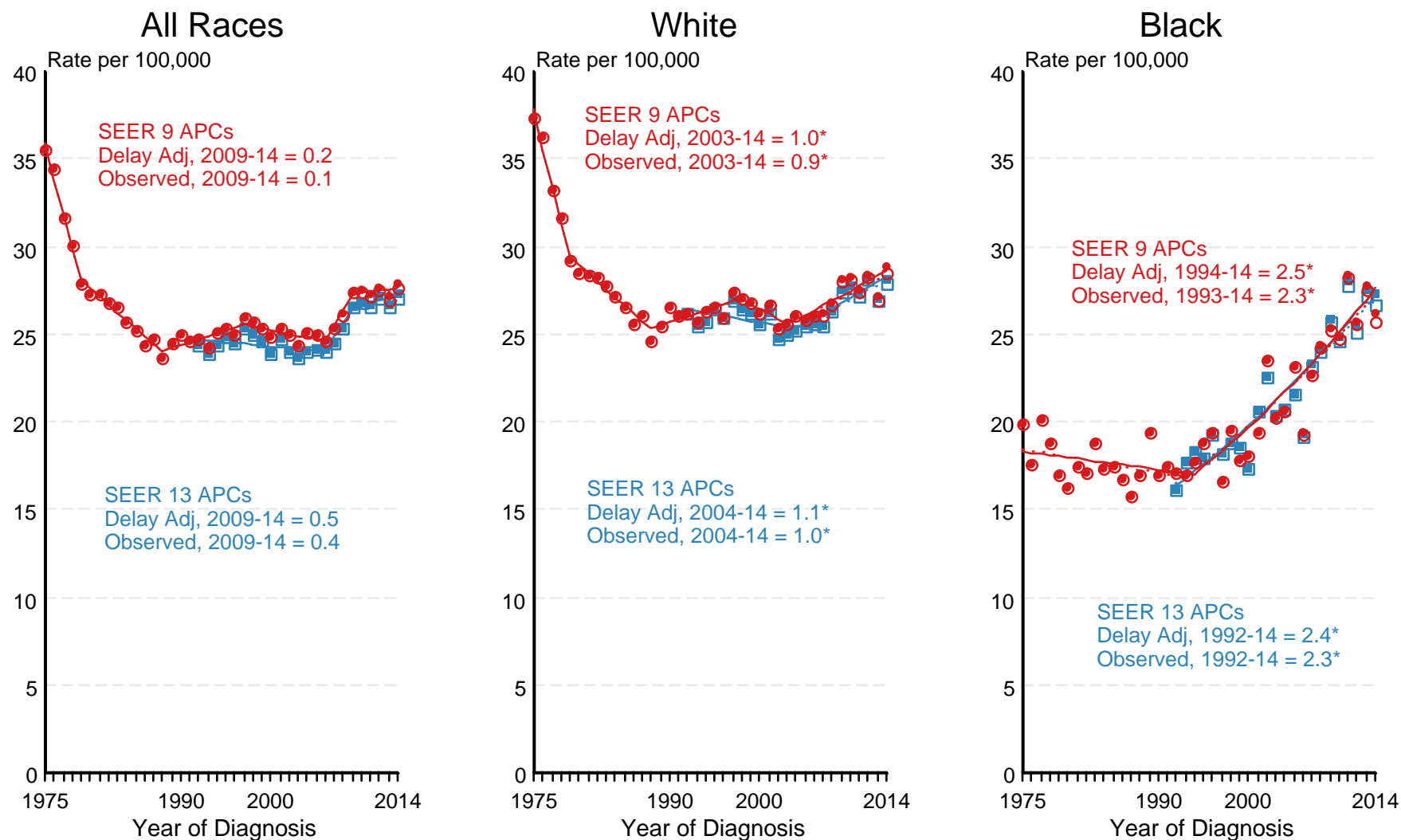[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 7.2

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
Cancer of the Corpus and Uterus, NOS, by Age and Race
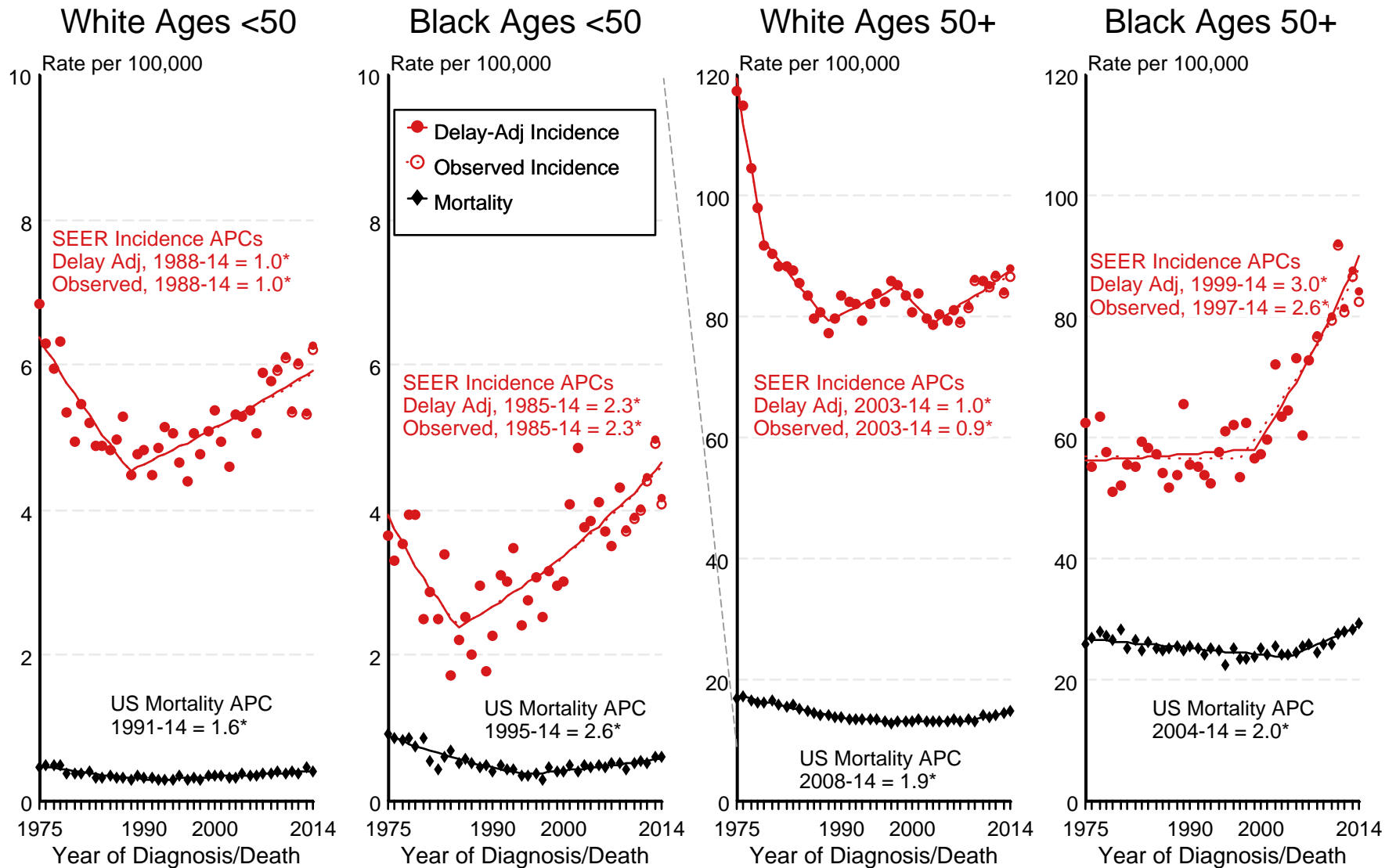
White Ages <50

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1988-14 = 1.0*
Observed, 1988-14 = 1.0*

US Mortality APC
1991-14 = 1.6*

Year of Diagnosis/Death

Black Ages <50

Rate per 100,000

● Delay-Adj Incidence
◎ Observed Incidence
◆ Mortality

SEER Incidence APCs
Delay Adj, 1985-14 = 2.3*
Observed, 1985-14 = 2.3*

US Mortality APC
1995-14 = 2.6*

Year of Diagnosis/Death

White Ages 50+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2003-14 = 1.0*
Observed, 2003-14 = 0.9*

US Mortality APC
2008-14 = 1.9*

Year of Diagnosis/Death

Black Ages 50+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1999-14 = 3.0*
Observed, 1997-14 = 2.6*

US Mortality APC
2004-14 = 2.0*

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 4.4, January 2017, 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 7.4

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2009-14 = 0.2
Observed, 2009-14 = 0.1

SEER 13 APCs
Delay Adj, 2009-14 = 0.5
Observed, 2009-14 = 0.4

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2003-14 = 1.0*
Observed, 2003-14 = 0.9*

SEER 13 APCs
Delay Adj, 2004-14 = 1.1*
Observed, 2004-14 = 1.0*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1994-14 = 2.5*
Observed, 1993-14 = 2.3*

SEER 13 APCs
Delay Adj, 1992-14 = 2.4*
Observed, 1992-14 = 2.3*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.

[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 4.4, January 2017, 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[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-04	0.6*	2004-14	-1.3*									-1.3*	-1.3*
White	1975-04	1.4*	2004-14	-0.6									-0.6	-0.6
Black	1975-86	1.1	1986-14	-4.5*									-4.5*	-4.5*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-0.5*											-0.5*	-0.5*
White	1992-04	1.3*	2004-14	-0.9*									-0.9*	-0.9*
Black	1992-14	-4.5*											-4.5*	-4.5*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-04	0.6*	2004-14	-1.4*									-1.4*	-1.4*
White	1975-04	1.4*	2004-14	-0.7									-0.7	-0.7
Black	1975-86	1.1	1986-14	-4.5*									-4.5*	-4.5*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-04	0.3	2004-14	-1.6*									-1.6*	-1.6*
White	1992-04	1.3*	2004-14	-1.0*									-1.0*	-1.0*
White NH[e][f]	1992-04	1.7*	2004-14	-0.9*									-0.9*	-0.9*
Black	1992-14	-4.6*											-4.6*	-4.6*
Black NH[e][f]	1992-14	-4.5*											-4.5*	-4.5*
API[e]	1992-14	-2.1*											-2.1*	-2.1*
AI/AN[e][g]	1992-14	-1.6											-1.6	-1.6
Hispanic[f]	1992-14	-1.0*											-1.0*	-1.0*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-02	0.7*	2002-14	-0.9*									-0.9*	-0.9*
White	1975-83	0.4*	1983-00	1.7*	2000-05	0.8*	2005-14	-0.6*					-0.6*	-0.6*
Black	1975-82	1.1*	1982-93	-1.6*	1993-14	-4.6*							-4.6*	-4.6*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-05	0.4*	2005-14	-1.2*									-1.2*	-1.2*
White	1992-04	1.4*	2004-14	-0.5*									-0.5*	-0.5*
White NH[e][f]	1992-03	1.8*	2003-14	-0.3*									-0.3*	-0.3*
Black	1992-14	-4.5*											-4.5*	-4.5*
Black NH[e][f]	1992-14	-4.4*											-4.4*	-4.4*
API[e]	1992-14	-1.8*											-1.8*	-1.8*
AI/AN[e][g]	1992-03	4.2*	2003-14	-1.9									-1.9	-1.9
Hispanic[f]	1992-14	-1.0*											-1.0*	-1.0*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 8.2
Cancer of the Esophagus (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-04	0.8*	2004-14	-1.4*									-1.4*	-1.4*
White	1975-04	1.7*	2004-14	-0.8									-0.8	-0.8
Black	1975-86	1.1	1986-14	-4.8*									-4.8*	-4.8*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-04	0.4	2004-14	-1.4*									-1.4*	-1.4*
White	1992-04	1.6*	2004-14	-0.9*									-0.9*	-0.9*
Black	1992-14	-4.6*											-4.6*	-4.6*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-04	0.8*	2004-14	-1.5*									-1.5*	-1.5*
White	1975-04	1.8*	2004-14	-0.9*									-0.9*	-0.9*
Black	1975-86	1.1	1986-14	-4.8*									-4.8*	-4.8*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-04	0.5	2004-14	-1.5*									-1.5*	-1.5*
White	1992-04	1.6*	2004-14	-1.0*									-1.0*	-1.0*
White NH[e][f]	1992-04	1.9*	2004-14	-0.9*									-0.9*	-0.9*
Black	1992-14	-4.7*											-4.7*	-4.7*
Black NH[e][f]	1992-14	-4.7*											-4.7*	-4.7*
API[e]	1992-14	-2.3*											-2.3*	-2.3*
AI/AN[e][g]	1992-14	-2.6											-2.6	-2.6
Hispanic[f]	1992-14	-1.2*											-1.2*	-1.2*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-85	0.7*	1985-94	1.2*	1994-05	0.4*	2005-14	-1.1*					-1.1*	-1.1*
White	1975-82	0.3	1982-99	1.9*	1999-05	1.1*	2005-14	-0.6*					-0.6*	-0.6*
Black	1975-84	0.8*	1984-93	-1.9*	1993-14	-4.7*							-4.7*	-4.7*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-05	0.5*	2005-14	-1.2*									-1.2*	-1.2*
White	1992-05	1.4*	2005-14	-0.7*									-0.7*	-0.7*
White NH[e][f]	1992-05	1.6*	2005-14	-0.6*									-0.6*	-0.6*
Black	1992-14	-4.7*											-4.7*	-4.7*
Black NH[e][f]	1992-14	-4.6*											-4.6*	-4.6*
API[e]	1992-14	-1.8*											-1.8*	-1.8*
AI/AN[e][g]	1992-14	0.3											0.3	0.3
Hispanic[f]	1992-14	-1.0*											-1.0*	-1.0*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Table 8.3
Cancer of the Esophagus (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-04	-0.3	2004-14	-2.0*									-2.0*	-2.0*
White	1975-14	-0.1											-0.1	-0.1
Black	1975-81	8.5*	1981-14	-3.2*									-3.2*	-3.2*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-1.3*											-1.3*	-1.3*
White	1992-14	-0.6*											-0.6*	-0.6*
Black	1992-14	-4.1*											-4.1*	-4.1*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-04	-0.3	2004-14	-2.1*									-2.1*	-2.1*
White	1975-14	-0.1											-0.1	-0.1
Black	1975-81	8.6*	1981-14	-3.3*									-3.3*	-3.3*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-1.3*											-1.3*	-1.3*
White	1992-14	-0.6*											-0.6*	-0.6*
White NH[e][f]	1992-14	-0.4*											-0.4*	-0.4*
Black	1992-14	-4.2*											-4.2*	-4.2*
Black NH[e][f]	1992-14	-4.2*											-4.2*	-4.2*
API[e]	1992-14	-1.0											-1.0	-1.0
AI/AN[e][g]	-	-											-	-
Hispanic[f]	1992-14	-1.1											-1.1	-1.1
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-01	0.0	2001-14	-1.7*									-1.7*	-1.7*
White	1975-03	0.4*	2003-14	-1.3*									-1.3*	-1.3*
Black	1975-92	-0.2	1992-14	-4.1*									-4.1*	-4.1*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-01	0.0	2001-14	-1.7*									-1.7*	-1.7*
White	1992-01	0.9*	2001-14	-1.1*									-1.1*	-1.1*
White NH[e][f]	1992-01	1.0*	2001-14	-1.0*									-1.0*	-1.0*
Black	1992-14	-4.0*											-4.0*	-4.0*
Black NH[e][f]	1992-14	-4.0*											-4.0*	-4.0*
API[e]	1992-14	-1.6*											-1.6*	-1.6*
AI/AN[e][g]	1992-14	1.9											1.9	1.9
Hispanic[f]	1992-96	10.2	1996-14	-2.3*									-2.3*	-2.3*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
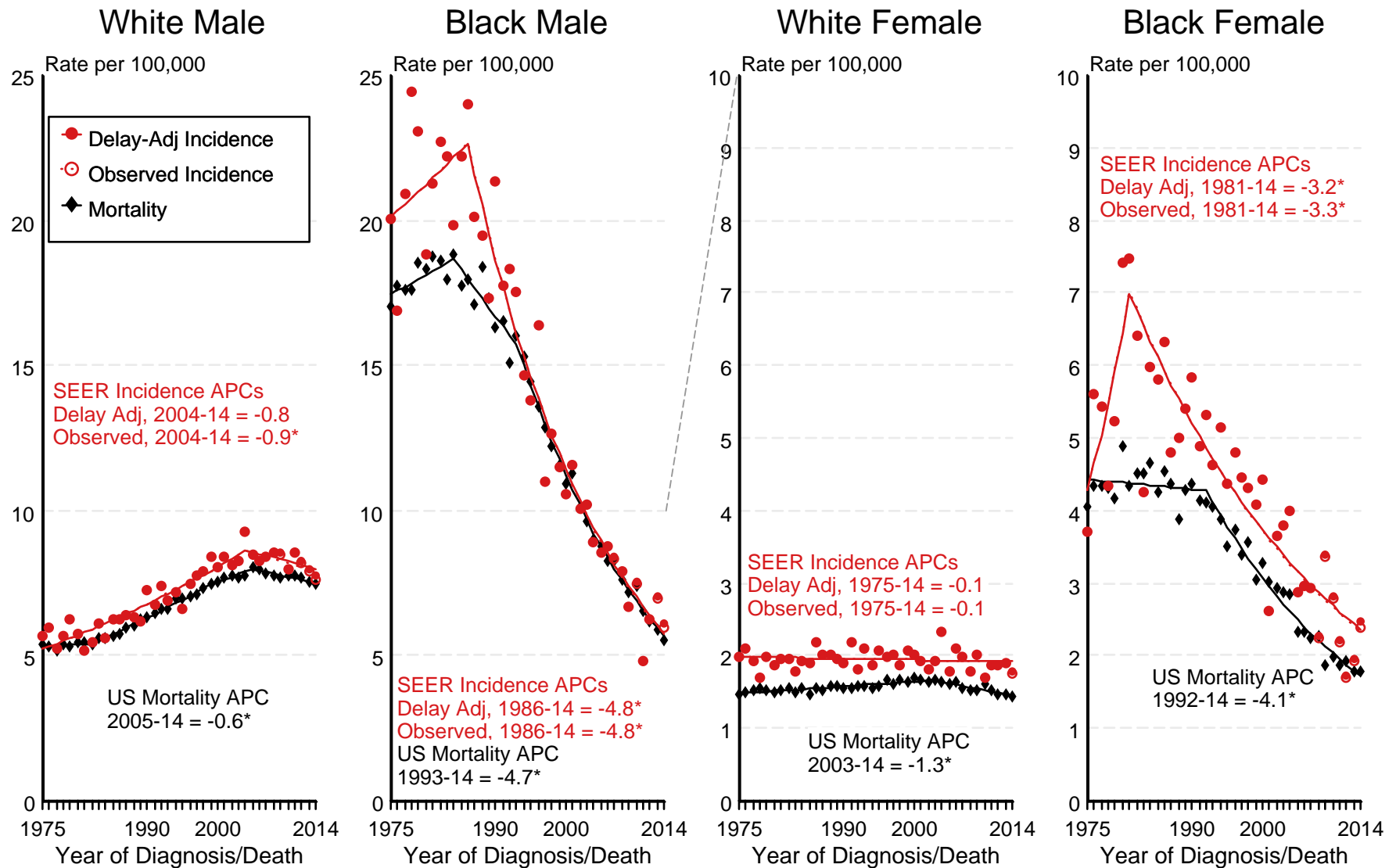* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 8.1

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

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

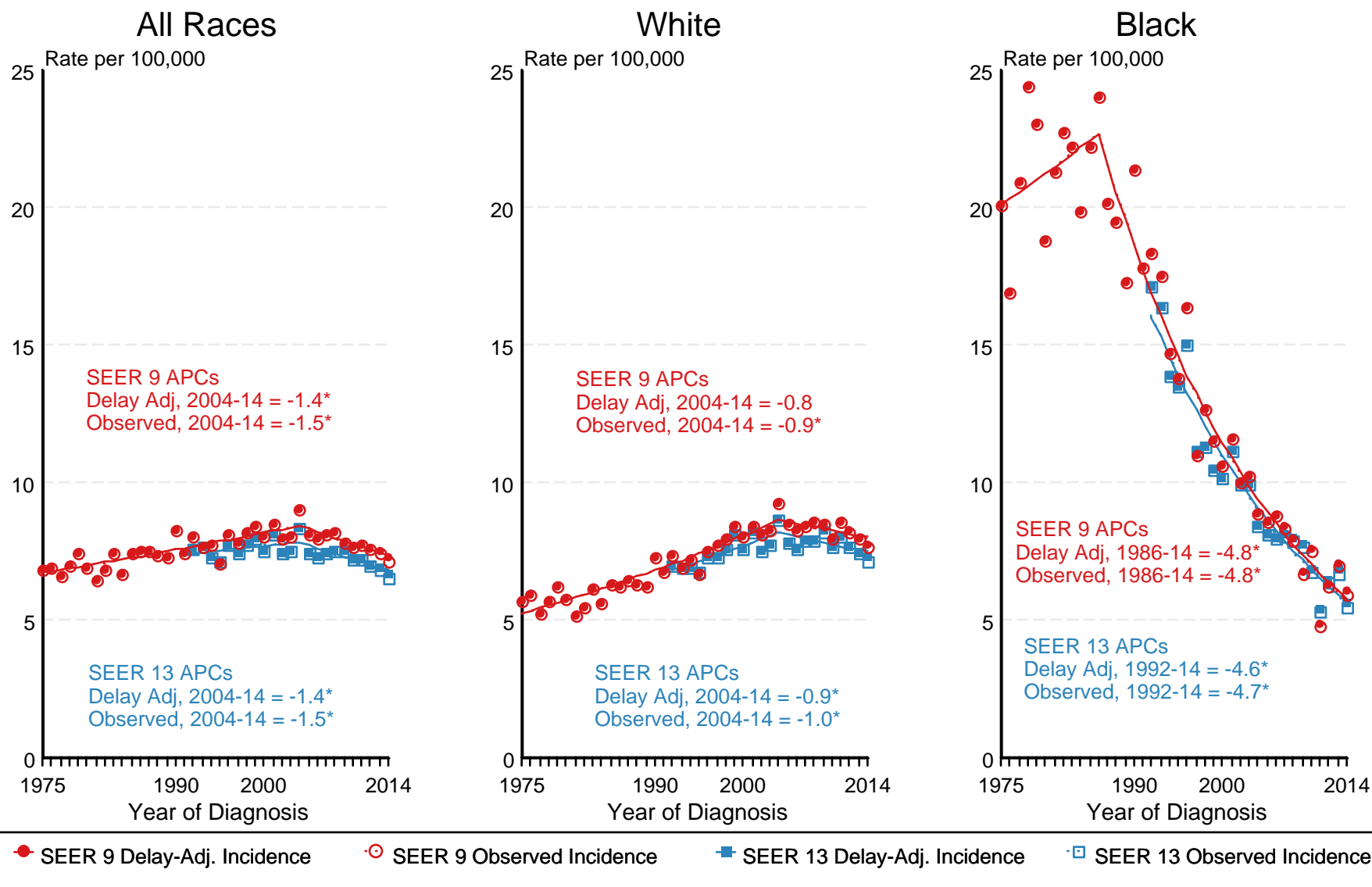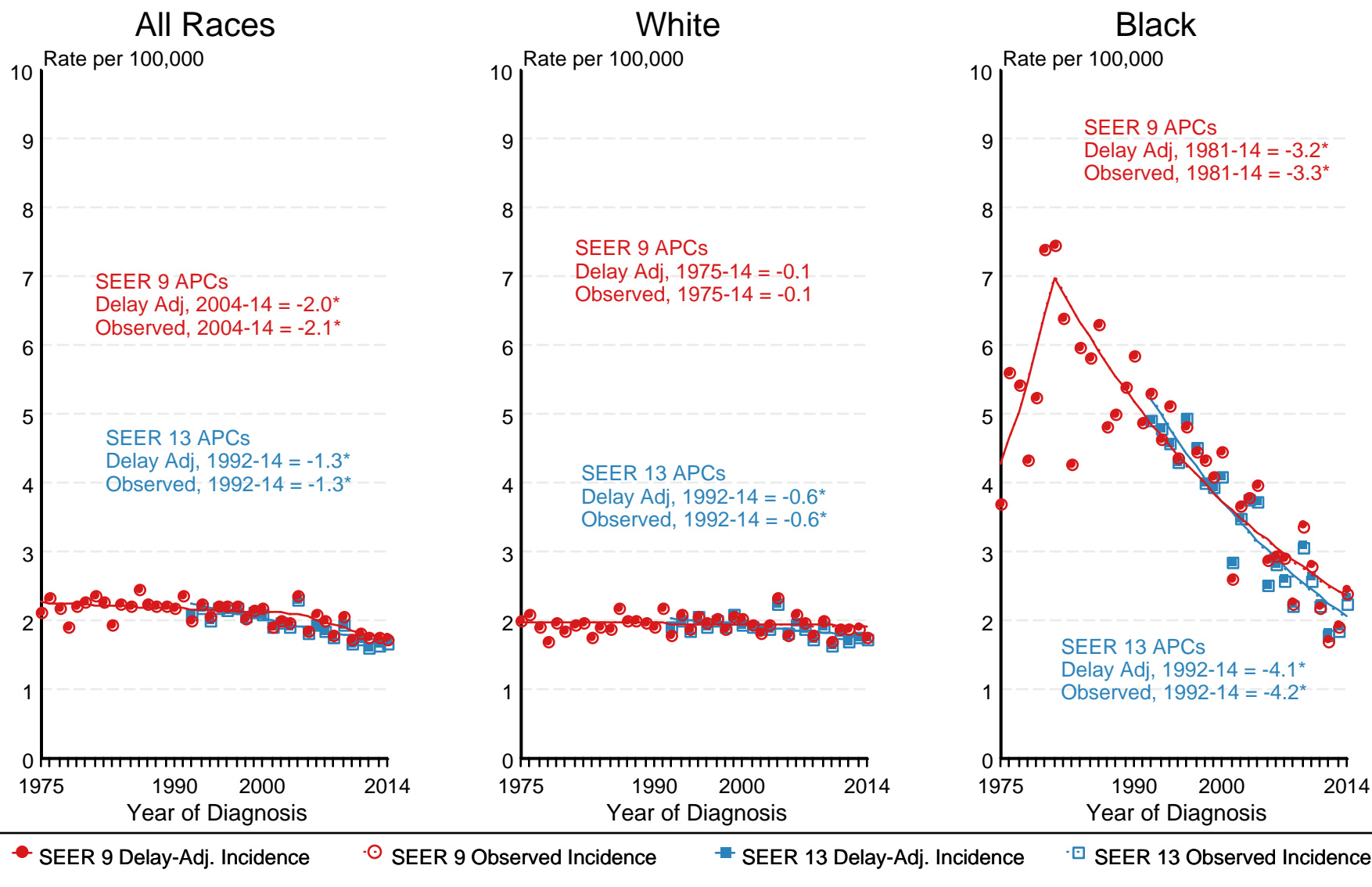[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 8.3

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-14 = -1.4*
Observed, 2004-14 = -1.5*

SEER 13 APCs
Delay Adj, 2004-14 = -1.4*
Observed, 2004-14 = -1.5*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-14 = -0.8
Observed, 2004-14 = -0.9*

SEER 13 APCs
Delay Adj, 2004-14 = -0.9*
Observed, 2004-14 = -1.0*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1986-14 = -4.8*
Observed, 1986-14 = -4.8*

SEER 13 APCs
Delay Adj, 1992-14 = -4.6*
Observed, 1992-14 = -4.7*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.

[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 4.4, January 2017, 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 8.4

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-14 = -2.0*
Observed, 2004-14 = -2.1*

SEER 13 APCs
Delay Adj, 1992-14 = -1.3*
Observed, 1992-14 = -1.3*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = -0.1
Observed, 1975-14 = -0.1

SEER 13 APCs
Delay Adj, 1992-14 = -0.6*
Observed, 1992-14 = -0.6*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1981-14 = -3.2*
Observed, 1981-14 = -3.3*

SEER 13 APCs
Delay Adj, 1992-14 = -4.1*
Observed, 1992-14 = -4.2*

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 4.4, January 2017, 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[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-89	0.3	1989-01	-0.8*	2001-07	2.0	2007-14	-2.0*					-1.1*	-2.0*
White	1975-89	0.6*	1989-01	-1.0*	2001-07	2.1	2007-14	-2.3*					-1.3*	-2.3*
Black	1975-14	1.1*											1.1*	1.1*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-01	-0.2	2001-07	1.4	2007-14	-2.0*							-1.2*	-2.0*
White	1992-02	-0.2	2002-07	1.7	2007-14	-2.4*							-1.5*	-2.4*
Black	1992-14	0.9*											0.9*	0.9*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-03	-0.2*	2003-06	3.1	2006-14	-1.9*							-1.3	-1.9*
White	1975-89	0.6*	1989-01	-1.0*	2001-07	2.0	2007-14	-2.5*					-1.5*	-2.5*
Black	1975-14	1.0*											1.0*	1.0*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-07	0.5*	2007-14	-1.7*									-1.2*	-1.7*
White	1992-02	-0.2	2002-07	1.7	2007-14	-2.6*							-1.7*	-2.6*
White NH[e][f]	1992-07	0.6*	2007-14	-2.5*									-1.8*	-2.5*
Black	1992-14	0.8*											0.8*	0.8*
Black NH[e][f]	1992-14	0.8*											0.8*	0.8*
API[e]	1992-96	-8.6	1996-01	11.0	2001-14	0.1							0.1	0.1
AI/AN[e][g]	-	-											-	-
Hispanic[f]	1992-14	0.0											0.0	0.0
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-79	-6.5*	1979-98	-3.5*	1998-10	-2.3*	2010-14	-5.4*					-3.7*	-5.4*
White	1975-79	-6.3*	1979-97	-3.6*	1997-10	-2.2*	2010-14	-5.6*					-3.7*	-5.6*
Black	1975-14	-2.9*											-2.9*	-2.9*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-94	-7.6	1994-10	-2.4*	2010-14	-5.3*							-3.7*	-5.3*
White	1992-94	-8.2	1994-10	-2.3*	2010-14	-5.5*							-3.7*	-5.5*
White NH[e][f]	1992-10	-2.5*	2010-14	-5.9*									-4.0*	-5.9*
Black	1992-14	-2.8*											-2.8*	-2.8*
Black NH[e][f]	1992-14	-2.7*											-2.7*	-2.7*
API[e]	1992-14	-1.9*											-1.9*	-1.9*
AI/AN[e][g]	-	-											-	-
Hispanic[f]	1992-14	-2.4*											-2.4*	-2.4*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 9.2
Hodgkin Lymphoma

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-98	-0.7*	1998-14	0.2									0.2	0.2
White	1975-14	-0.4*											-0.4*	-0.4*
Black	1975-14	0.6*											0.6*	0.6*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	0.1											0.1	0.1
White	1992-14	0.0											0.0	0.0
Black	1992-14	1.1*											1.1*	1.1*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-14	-0.4*											-0.4*	-0.4*
White	1975-14	-0.4*											-0.4*	-0.4*
Black	1975-14	0.5*											0.5*	0.5*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-07	0.5*	2007-14	-1.3*									-0.9*	-1.3*
White	1992-14	-0.1											-0.1	-0.1
White NH[ef]	1992-14	0.0											0.0	0.0
Black	1992-14	0.9*											0.9*	0.9*
Black NH[ef]	1992-14	1.0*											1.0*	1.0*
API[e]	1992-14	1.6*											1.6*	1.6*
AI/AN[eg]	-	-											-	-
Hispanic[f]	1992-14	-0.4											-0.4	-0.4
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-96	-4.0*	1996-14	-2.5*									-2.5*	-2.5*
White	1975-96	-4.1*	1996-14	-2.4*									-2.4*	-2.4*
Black	1975-14	-3.2*											-3.2*	-3.2*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-94	-10.2	1994-14	-2.5*									-2.5*	-2.5*
White	1992-94	-10.5	1994-14	-2.4*									-2.4*	-2.4*
White NH[ef]	1992-14	-2.7*											-2.7*	-2.7*
Black	1992-14	-3.1*											-3.1*	-3.1*
Black NH[ef]	1992-14	-3.0*											-3.0*	-3.0*
API[e]	1992-14	-2.2											-2.2	-2.2
AI/AN[eg]	-	-											-	-
Hispanic[f]	1992-14	-2.5*											-2.5*	-2.5*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 9.3
Hodgkin Lymphoma

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-07	0.4*	2007-14	-2.0									-1.5	-2.0
White	1975-07	0.4*	2007-14	-2.3									-1.7	-2.3
Black	1975-14	1.7*											1.7*	1.7*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-0.2											-0.2	-0.2
White	1992-08	0.3	2008-14	-2.9*									-1.8*	-2.9*
Black	1992-14	0.5											0.5	0.5
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-07	0.4*	2007-14	-2.2*									-1.6*	-2.2*
White	1975-07	0.4*	2007-14	-2.5*									-1.9*	-2.5*
Black	1975-14	1.7*											1.7*	1.7*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-0.3											-0.3	-0.3
White	1992-08	0.3	2008-14	-3.1*									-2.0*	-3.1*
White NH[ef]	1992-07	0.5	2007-14	-3.2*									-2.4*	-3.2*
Black	1992-14	0.4											0.4	0.4
Black NH[ef]	1992-14	0.5											0.5	0.5
API[e]	1992-14	1.9*											1.9*	1.9*
AI/AN[eg]	–	–											–	–
Hispanic[f]	1992-14	0.5											0.5	0.5
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-84	-4.9*	1984-14	-2.8*									-2.8*	-2.8*
White	1975-85	-4.8*	1985-14	-2.7*									-2.7*	-2.7*
Black	1975-14	-2.5*											-2.5*	-2.5*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	-3.0*											-3.0*	-3.0*
White	1992-14	-2.9*											-2.9*	-2.9*
White NH[ef]	1992-09	-2.5*	2009-14	-6.5*									-4.7*	-6.5*
Black	1992-14	-2.6*											-2.6*	-2.6*
Black NH[ef]	1992-14	-2.4*											-2.4*	-2.4*
API[e]	–	–											–	–
AI/AN[eg]	–	–											–	–
Hispanic[f]	1992-14	-2.3*											-2.3*	-2.3*

Figure 9.1

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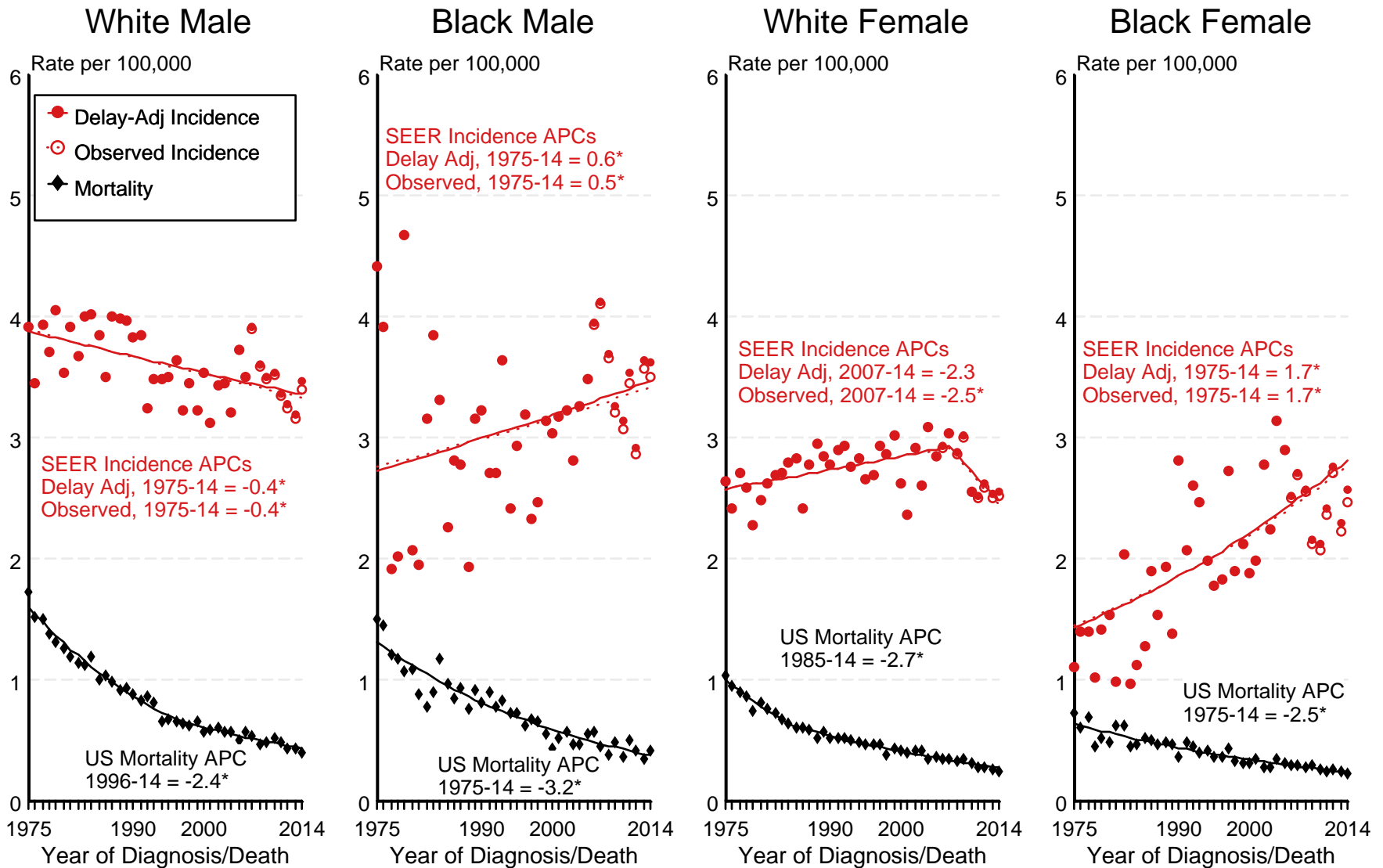
White Male

Rate per 100,000

- ● Delay-Adj Incidence
- ◌ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 1975-14 = -0.4*
Observed, 1975-14 = -0.4*

US Mortality APC
1996-14 = -2.4*

Year of Diagnosis/Death

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = 0.6*
Observed, 1975-14 = 0.5*

US Mortality APC
1975-14 = -3.2*

Year of Diagnosis/Death

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2007-14 = -2.3
Observed, 2007-14 = -2.5*

US Mortality APC
1985-14 = -2.7*

Year of Diagnosis/Death

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = 1.7*
Observed, 1975-14 = 1.7*

US Mortality APC
1975-14 = -2.5*

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).
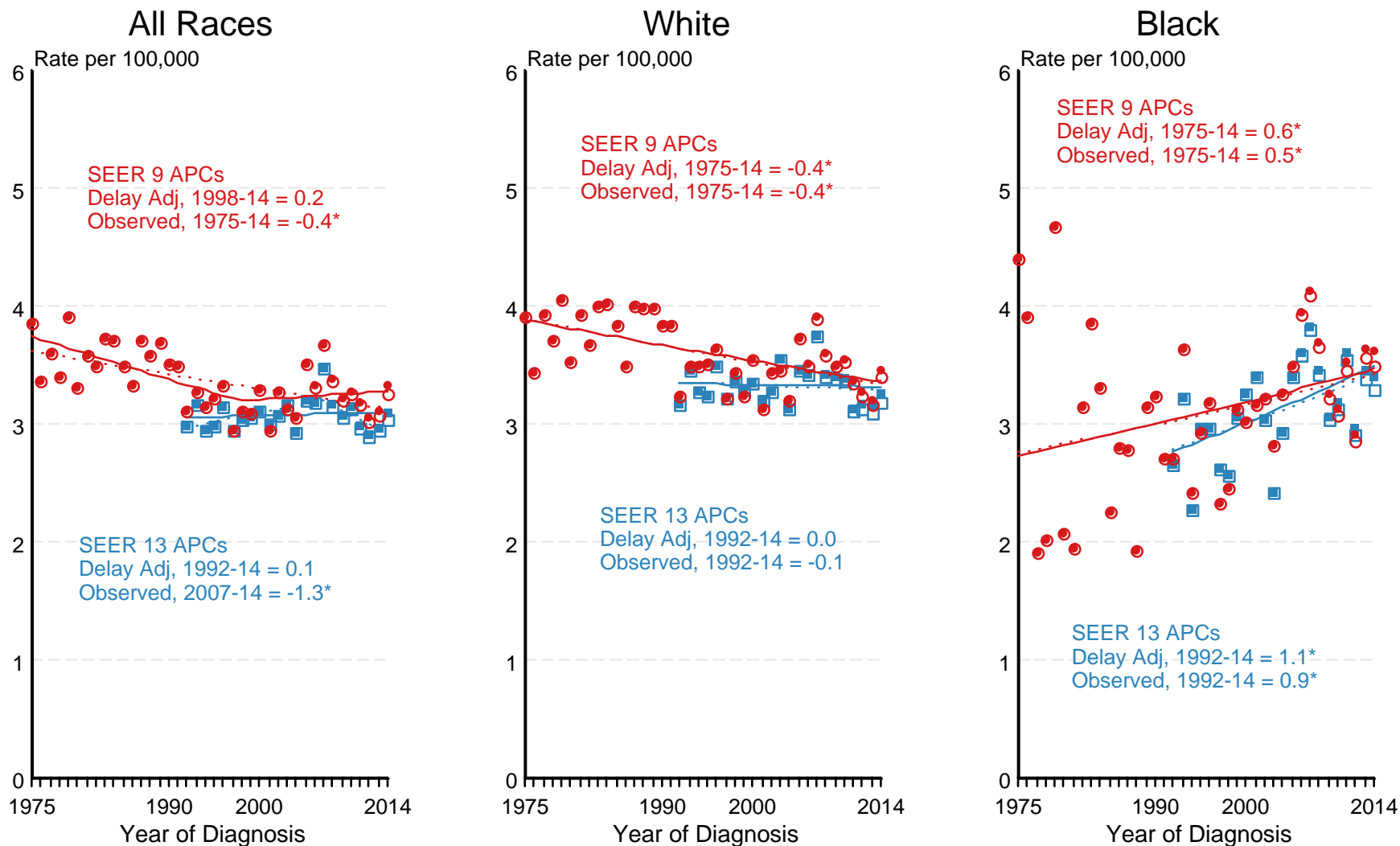Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 9.3

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
Hodgkin Lymphoma, Male, by Race

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1998-14 = 0.2
Observed, 1975-14 = -0.4*

SEER 13 APCs
Delay Adj, 1992-14 = 0.1
Observed, 2007-14 = -1.3*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = -0.4*
Observed, 1975-14 = -0.4*

SEER 13 APCs
Delay Adj, 1992-14 = 0.0
Observed, 1992-14 = -0.1

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 0.6*
Observed, 1975-14 = 0.5*

SEER 13 APCs
Delay Adj, 1992-14 = 1.1*
Observed, 1992-14 = 0.9*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
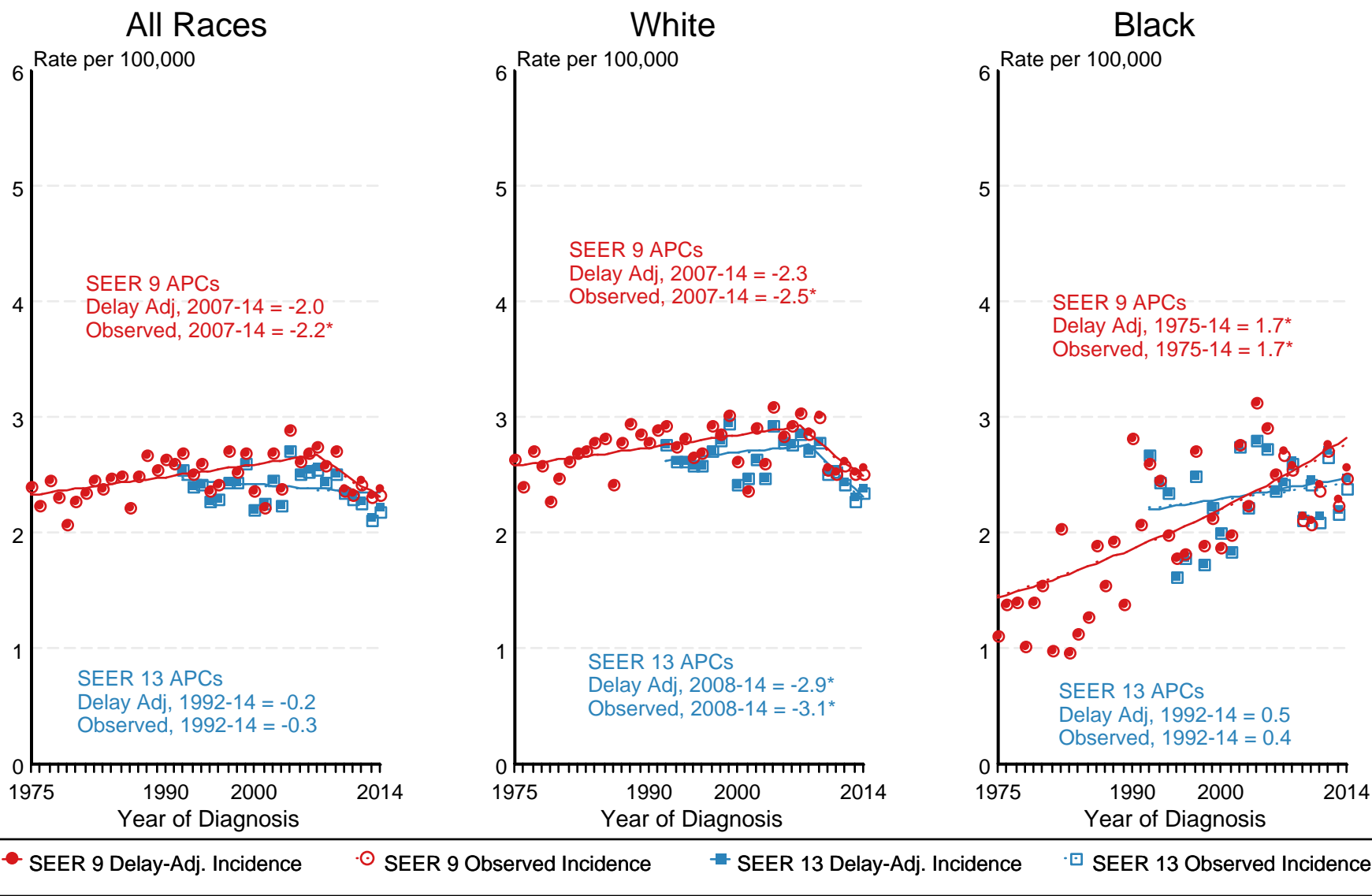   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
   The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero ($p < 0.05$).

Figure 9.4

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
Hodgkin Lymphoma, Female, by Race

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2007-14 = -2.0
Observed, 2007-14 = -2.2*

SEER 13 APCs
Delay Adj, 1992-14 = -0.2
Observed, 1992-14 = -0.3

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2007-14 = -2.3
Observed, 2007-14 = -2.5*

SEER 13 APCs
Delay Adj, 2008-14 = -2.9*
Observed, 2008-14 = -3.1*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 1.7*
Observed, 1975-14 = 1.7*

SEER 13 APCs
Delay Adj, 1992-14 = 0.5
Observed, 1992-14 = 0.4

Year of Diagnosis

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

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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-94	2.3*	1994-97	-0.5	1997-08	3.2*	2008-14	0.0					1.0*	0.0
White	1975-92	2.3*	1992-97	0.3	1997-07	3.3*	2007-14	0.3					0.9*	0.3
Black	1975-14	2.8*											2.8*	2.8*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-99	1.4*	1999-08	3.3*	2008-14	-0.1							1.0*	-0.1
White	1992-97	0.9	1997-08	3.1*	2008-14	-0.1							1.0*	-0.1
Black	1992-09	3.0*	2009-14	0.1									1.4	0.1
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-94	2.3*	1994-97	-0.5	1997-08	3.2*	2008-14	-0.5					0.7*	-0.5
White	1975-92	2.3*	1992-97	0.3	1997-07	3.3*	2007-14	-0.1					0.6*	-0.1
Black	1975-09	3.0*	2009-14	-0.4									1.1	-0.4
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-99	1.4*	1999-08	3.3*	2008-14	-0.6							0.7*	-0.6
White	1992-97	0.9	1997-08	3.1*	2008-14	-0.5							0.7*	-0.5
White NH[ef]	1992-97	0.8	1997-08	3.0*	2008-14	-0.5							0.7*	-0.5
Black	1992-09	2.9*	2009-14	-0.6									0.9	-0.6
Black NH[ef]	1992-09	3.0*	2009-14	-0.5									1.0	-0.5
API[e]	1992-14	2.4*											2.4*	2.4*
AI/AN[eg]	1992-14	0.9											0.9	0.9
Hispanic[f]	1992-08	3.1*	2008-14	-0.6									0.6	-0.6
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-91	1.2*	1991-02	-0.1	2002-14	-0.9*							-0.9*	-0.9*
White	1975-95	0.9*	1995-14	-0.6*									-0.6*	-0.6*
Black	1975-94	2.3*	1994-14	-0.9*									-0.9*	-0.9*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-02	-0.1	2002-14	-0.9*									-0.9*	-0.9*
White	1992-02	-0.1	2002-14	-0.8*									-0.8*	-0.8*
White NH[ef]	1992-02	-0.1	2002-14	-0.8*									-0.8*	-0.8*
Black	1992-95	3.0	1995-14	-0.9*									-0.9*	-0.9*
Black NH[ef]	1992-95	3.0	1995-14	-0.8*									-0.8*	-0.8*
API[e]	1992-14	0.0											0.0	0.0
AI/AN[eg]	1992-14	-0.1											-0.1	-0.1
Hispanic[f]	1992-04	0.8	2004-14	-1.0*									-1.0*	-1.0*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Table 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-04	1.8*	2004-07	4.9	2007-14	0.5							1.4	0.5
White	1975-89	2.2*	1989-97	0.7	1997-08	2.8*	2008-14	0.3					1.1*	0.3
Black	1975-14	2.9*											2.9*	2.9*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-99	1.1*	1999-08	3.2*	2008-14	0.1							1.1*	0.1
White	1992-97	0.8	1997-08	2.9*	2008-14	0.1							1.0*	0.1
Black	1992-14	2.6*											2.6*	2.6*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-04	1.8*	2004-07	4.9	2007-14	0.1							1.1	0.1
White	1975-89	2.2*	1989-97	0.7	1997-08	2.8*	2008-14	-0.2					0.8*	-0.2
Black	1975-14	2.8*											2.8*	2.8*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-99	1.2*	1999-08	3.2*	2008-14	-0.3							0.8*	-0.3
White	1992-97	0.8	1997-08	2.9*	2008-14	-0.4							0.7*	-0.4
White NH[ef]	1992-09	2.4*	2009-14	-0.3									0.9*	-0.3
Black	1992-14	2.4*											2.4*	2.4*
Black NH[ef]	1992-14	2.5*											2.5*	2.5*
API[e]	1992-14	2.3*											2.3*	2.3*
AI/AN[eg]	1992-14	1.0											1.0	1.0
Hispanic[f]	1992-08	3.0*	2008-14	-1.1									0.2	-1.1
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-91	1.1*	1991-01	-0.1	2001-14	-0.8*							-0.8*	-0.8*
White	1975-91	1.0*	1991-01	-0.1	2001-14	-0.7*							-0.7*	-0.7*
Black	1975-91	3.1*	1991-14	-0.6*									-0.6*	-0.6*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-01	-0.1	2001-14	-0.8*									-0.8*	-0.8*
White	1992-01	-0.1	2001-14	-0.7*									-0.7*	-0.7*
White NH[ef]	1992-14	-0.5*											-0.5*	-0.5*
Black	1992-14	-0.6*											-0.6*	-0.6*
Black NH[ef]	1992-14	-0.5*											-0.5*	-0.5*
API[e]	1992-14	0.2											0.2	0.2
AI/AN[eg]	1992-14	-0.3											-0.3	-0.3
Hispanic[f]	1992-14	-0.3											-0.3	-0.3

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-93	2.7*	1993-99	0.7	1999-07	3.9*	2007-14	-0.6					0.4	-0.6
White	1975-92	2.8*	1992-99	0.7	1999-06	4.3*	2006-14	-0.2					0.3	-0.2
Black	1975-08	3.0*	2008-14	-1.1									0.2	-1.1
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-00	1.6*	2000-07	3.7*	2007-14	-0.3							0.6	-0.3
White	1992-99	1.3	1999-07	3.7*	2007-14	-0.3							0.6	-0.3
Black	1992-14	2.1*											2.1*	2.1*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-93	2.7*	1993-99	0.7	1999-07	3.9*	2007-14	-1.0					0.1	-1.0
White	1975-92	2.8*	1992-99	0.7	1999-06	4.4*	2006-14	-0.6					0.0	-0.6
Black	1975-08	3.0*	2008-14	-1.7									-0.1	-1.7
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-98	1.2	1998-08	3.2*	2008-14	-1.1							0.3	-1.1
White	1992-99	1.3	1999-07	3.7*	2007-14	-0.7							0.3	-0.7
White NH[e][f]	1992-97	0.0	1997-07	3.4*	2007-14	-0.9							0.0	-0.9
Black	1992-09	2.8*	2009-14	-2.0									0.1	-2.0
Black NH[e][f]	1992-09	2.9*	2009-14	-2.0									0.1	-2.0
API[e]	1992-14	2.6*											2.6*	2.6*
AI/AN[e][g]	1992-14	0.7											0.7	0.7
Hispanic[f]	1992-12	2.7*	2012-14	-6.4									0.6	-1.9
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-95	1.1*	1995-14	-1.1*									-1.1*	-1.1*
White	1975-95	1.1*	1995-14	-1.0*									-1.0*	-1.0*
Black	1975-95	2.3*	1995-14	-1.2*									-1.2*	-1.2*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-05	-0.4*	2005-14	-1.6*									-1.6*	-1.6*
White	1992-05	-0.4*	2005-14	-1.6*									-1.6*	-1.6*
White NH[e][f]	1992-05	-0.4	2005-14	-1.6*									-1.6*	-1.6*
Black	1992-11	-0.5*	2011-14	-5.8									-2.3*	-4.5
Black NH[e][f]	1992-11	-0.5*	2011-14	-5.5									-2.2	-4.2
API[e]	1992-14	-0.4											-0.4	-0.4
AI/AN[e][g]	1992-14	-0.4											-0.4	-0.4
Hispanic[f]	1992-14	-0.1											-0.1	-0.1

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
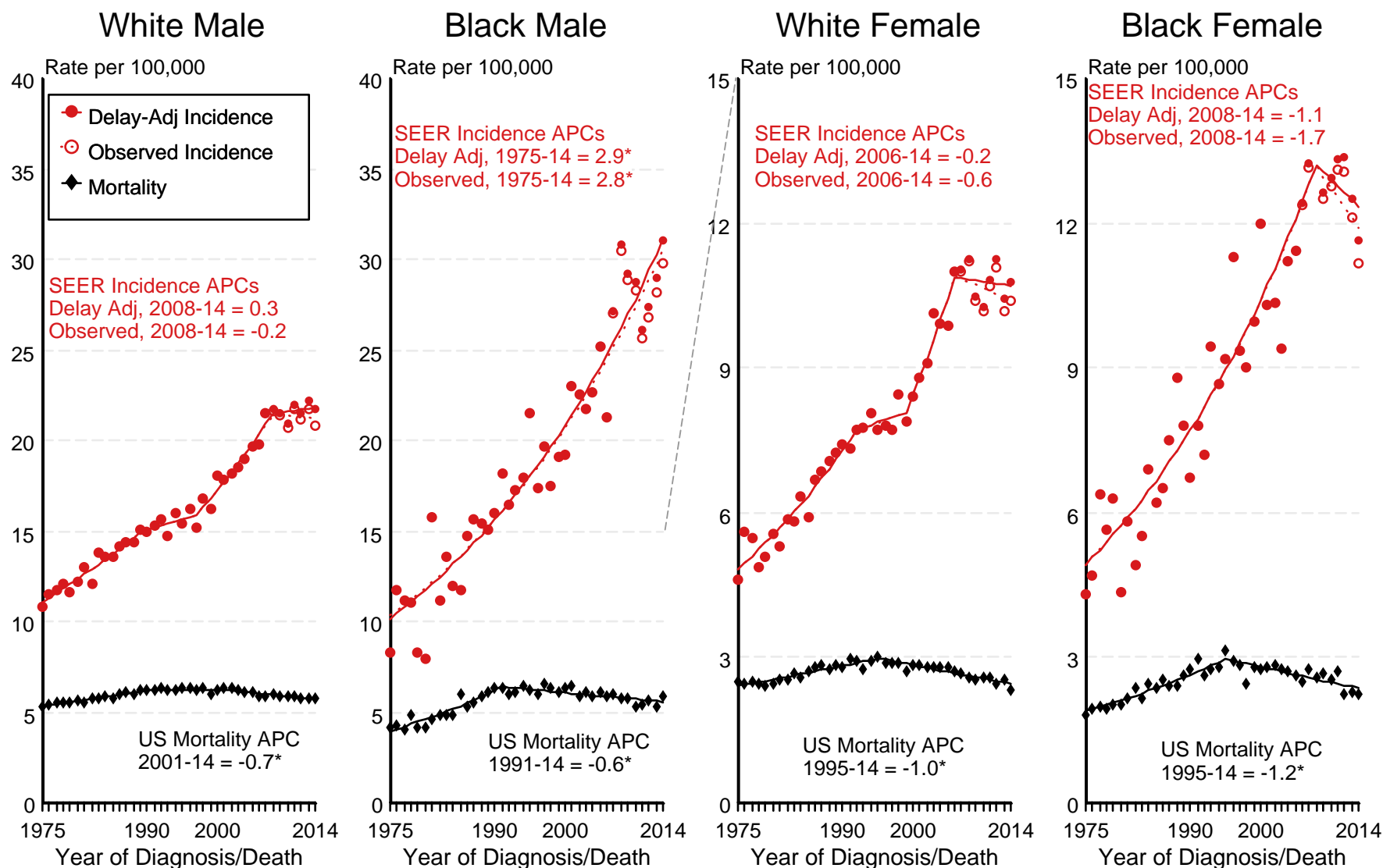[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 11.1

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

White Male

Rate per 100,000

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

SEER Incidence APCs
Delay Adj, 2008-14 = 0.3
Observed, 2008-14 = -0.2

US Mortality APC
2001-14 = -0.7*

Year of Diagnosis/Death

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = 2.9*
Observed, 1975-14 = 2.8*

US Mortality APC
1991-14 = -0.6*

Year of Diagnosis/Death

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2006-14 = -0.2
Observed, 2006-14 = -0.6

US Mortality APC
1995-14 = -1.0*

Year of Diagnosis/Death

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2008-14 = -1.1
Observed, 2008-14 = -1.7

US Mortality APC
1995-14 = -1.2*

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).
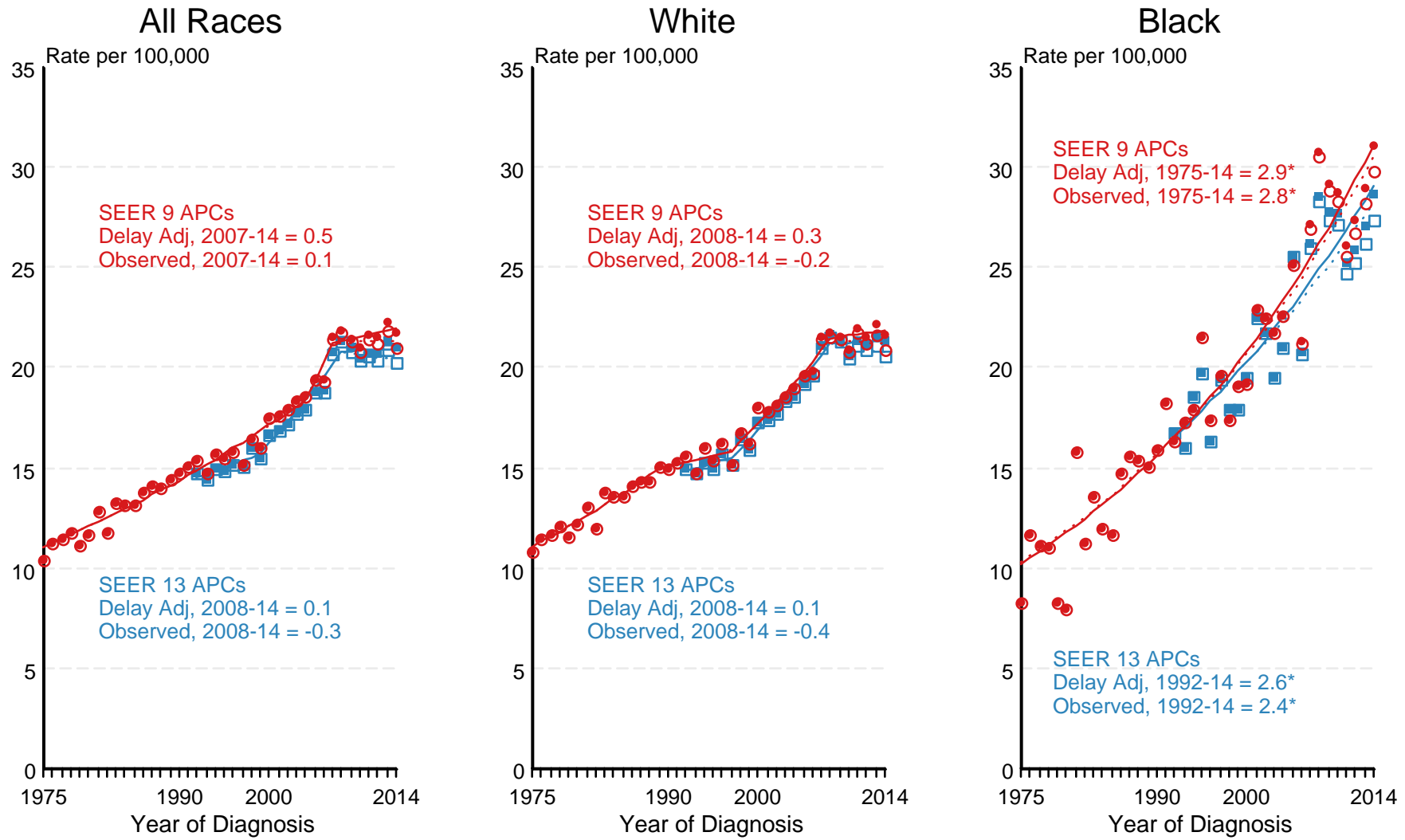Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 11.3

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2007-14 = 0.5
Observed, 2007-14 = 0.1

SEER 13 APCs
Delay Adj, 2008-14 = 0.1
Observed, 2008-14 = -0.3

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2008-14 = 0.3
Observed, 2008-14 = -0.2

SEER 13 APCs
Delay Adj, 2008-14 = 0.1
Observed, 2008-14 = -0.4

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 2.9*
Observed, 1975-14 = 2.8*

SEER 13 APCs
Delay Adj, 1992-14 = 2.6*
Observed, 1992-14 = 2.4*
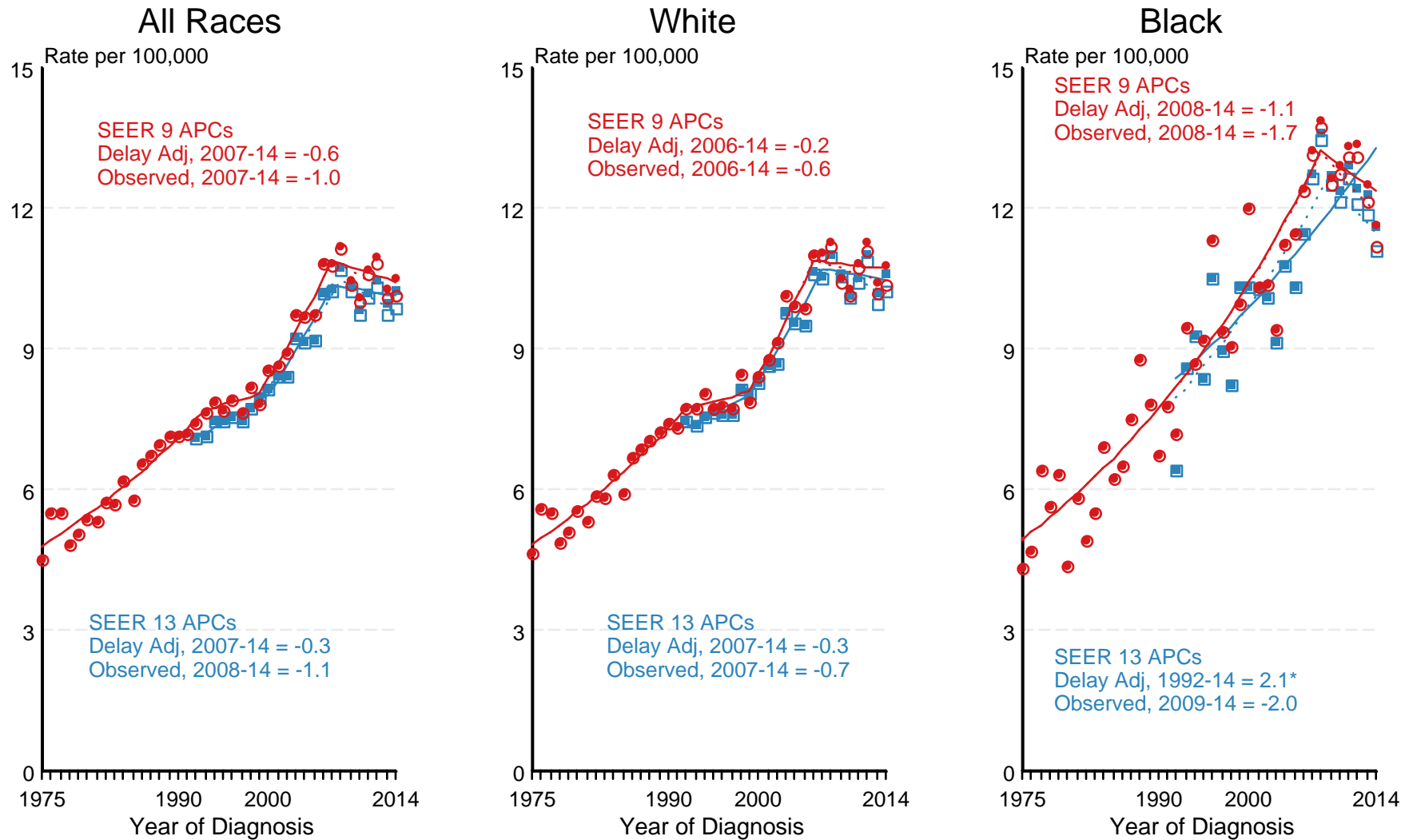
Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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 11.4

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2007-14 = -0.6
Observed, 2007-14 = -1.0

SEER 13 APCs
Delay Adj, 2007-14 = -0.3
Observed, 2008-14 = -1.1

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2006-14 = -0.2
Observed, 2006-14 = -0.6

SEER 13 APCs
Delay Adj, 2007-14 = -0.3
Observed, 2007-14 = -0.7

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 2008-14 = -1.1
Observed, 2008-14 = -1.7

SEER 13 APCs
Delay Adj, 1992-14 = 2.1*
Observed, 2009-14 = -2.0

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-88	0.0	1988-14	-2.4*									-2.4*	-2.4*
White	1975-87	0.1	1987-14	-2.3*									-2.3*	-2.3*
Black	1975-90	1.3*	1990-14	-3.0*									-3.0*	-3.0*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-2.6*											-2.6*	-2.6*
White	1992-14	-2.3*											-2.3*	-2.3*
Black	1992-14	-3.4*											-3.4*	-3.4*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-88	0.0	1988-14	-2.4*									-2.4*	-2.4*
White	1975-87	0.1	1987-14	-2.3*									-2.3*	-2.3*
Black	1975-90	1.3*	1990-14	-3.0*									-3.0*	-3.0*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-2.7*											-2.7*	-2.7*
White	1992-14	-2.4*											-2.4*	-2.4*
White NH[ef]	1992-14	-2.3*											-2.3*	-2.3*
Black	1992-14	-3.4*											-3.4*	-3.4*
Black NH[ef]	1992-14	-3.4*											-3.4*	-3.4*
API[e]	1992-14	-3.3*											-3.3*	-3.3*
AI/AN[eg]	1992-14	-0.2											-0.2	-0.2
Hispanic[f]	1992-14	-1.9*											-1.9*	-1.9*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-94	-0.4*	1994-14	-2.3*									-2.3*	-2.3*
White	1975-94	-0.7*	1994-14	-1.9*									-1.9*	-1.9*
Black	1975-94	1.1*	1994-14	-3.5*									-3.5*	-3.5*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	-2.2*											-2.2*	-2.2*
White	1992-14	-1.9*											-1.9*	-1.9*
White NH[ef]	1992-14	-1.8*											-1.8*	-1.8*
Black	1992-14	-3.4*											-3.4*	-3.4*
Black NH[ef]	1992-14	-3.3*											-3.3*	-3.3*
API[e]	1992-14	-2.2*											-2.2*	-2.2*
AI/AN[eg]	1992-14	-2.4											-2.4	-2.4
Hispanic[f]	1992-14	-2.6*											-2.6*	-2.6*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 12.2
Cancer of the Larynx (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-86	0.0	1986-14	-2.4*									-2.4*	-2.4*
White	1975-85	0.1	1985-14	-2.4*									-2.4*	-2.4*
Black	1975-90	1.0	1990-14	-2.8*									-2.8*	-2.8*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-2.6*											-2.6*	-2.6*
White	1992-02	-3.1*	2002-14	-1.9*									-1.9*	-1.9*
Black	1992-14	-3.4*											-3.4*	-3.4*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-87	-0.2	1987-14	-2.5*									-2.5*	-2.5*
White	1975-85	0.2	1985-14	-2.4*									-2.4*	-2.4*
Black	1975-90	1.0	1990-14	-2.9*									-2.9*	-2.9*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-2.7*											-2.7*	-2.7*
White	1992-03	-3.2*	2003-07	-0.3	2007-14	-2.9*							-2.4*	-2.9*
White NH[e][f]	1992-14	-2.4*											-2.4*	-2.4*
Black	1992-14	-3.4*											-3.4*	-3.4*
Black NH[e][f]	1992-14	-3.4*											-3.4*	-3.4*
API[e]	1992-14	-3.1*											-3.1*	-3.1*
AI/AN[e][g]	1992-14	0.2											0.2	0.2
Hispanic[f]	1992-14	-1.8*											-1.8*	-1.8*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-94	-0.8*	1994-14	-2.5*									-2.5*	-2.5*
White	1975-93	-1.1*	1993-14	-2.2*									-2.2*	-2.2*
Black	1975-94	1.2*	1994-14	-3.6*									-3.6*	-3.6*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	-2.5*											-2.5*	-2.5*
White	1992-14	-2.2*											-2.2*	-2.2*
White NH[e][f]	1992-14	-2.1*											-2.1*	-2.1*
Black	1992-14	-3.4*											-3.4*	-3.4*
Black NH[e][f]	1992-14	-3.3*											-3.3*	-3.3*
API[e]	1992-14	-1.7*											-1.7*	-1.7*
AI/AN[e][g]	1992-14	-1.4											-1.4	-1.4
Hispanic[f]	1992-14	-2.8*											-2.8*	-2.8*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 12.3
Cancer of the Larynx (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-89	1.8*	1989-14	-2.6*									-2.6*	-2.6*
White	1975-89	1.6*	1989-14	-2.3*									-2.3*	-2.3*
Black	1975-89	4.1*	1989-14	-3.0*									-3.0*	-3.0*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-3.1*											-3.1*	-3.1*
White	1992-14	-2.8*											-2.8*	-2.8*
Black	1992-14	-3.3*											-3.3*	-3.3*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-89	1.8*	1989-14	-2.6*									-2.6*	-2.6*
White	1975-89	1.6*	1989-14	-2.4*									-2.4*	-2.4*
Black	1975-89	4.1*	1989-14	-3.1*									-3.1*	-3.1*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-3.1*											-3.1*	-3.1*
White	1992-14	-2.9*											-2.9*	-2.9*
White NH[ef]	1992-14	-2.6*											-2.6*	-2.6*
Black	1992-14	-3.3*											-3.3*	-3.3*
Black NH[ef]	1992-14	-3.3*											-3.3*	-3.3*
API[e]	1992-14	-3.0*											-3.0*	-3.0*
AI/AN[eg]	–	–											–	–
Hispanic[f]	1992-14	-3.0*											-3.0*	-3.0*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-93	1.5*	1993-14	-2.3*									-2.3*	-2.3*
White	1975-92	1.5*	1992-14	-1.8*									-1.8*	-1.8*
Black	1975-93	2.3*	1993-14	-3.3*									-3.3*	-3.3*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	-2.2*											-2.2*	-2.2*
White	1992-14	-1.9*											-1.9*	-1.9*
White NH[ef]	1992-14	-1.7*											-1.7*	-1.7*
Black	1992-14	-3.2*											-3.2*	-3.2*
Black NH[ef]	1992-14	-3.2*											-3.2*	-3.2*
API[e]	1992-14	-4.3*											-4.3*	-4.3*
AI/AN[eg]	–	–											–	–
Hispanic[f]	1992-14	-2.6*											-2.6*	-2.6*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
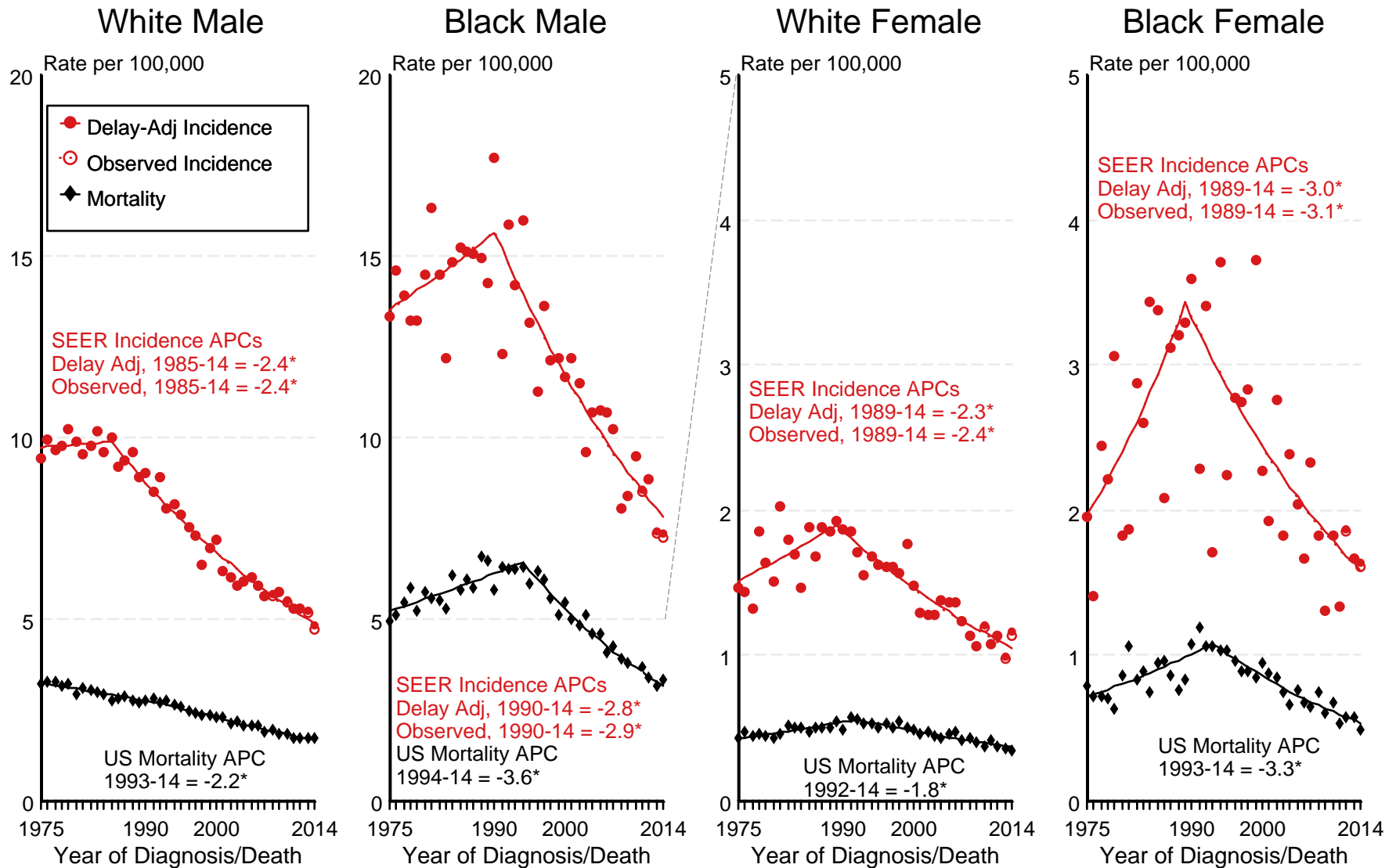[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Figure 12.1

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-Adj Incidence
- ⊙ Observed Incidence
- ◆ Mortality

SEER Incidence APCs
Delay Adj, 1985-14 = -2.4*
Observed, 1985-14 = -2.4*

US Mortality APC
1993-14 = -2.2*

Year of Diagnosis/Death

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1990-14 = -2.8*
Observed, 1990-14 = -2.9*

US Mortality APC
1994-14 = -3.6*

Year of Diagnosis/Death

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1989-14 = -2.3*
Observed, 1989-14 = -2.4*

US Mortality APC
1992-14 = -1.8*

Year of Diagnosis/Death

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1989-14 = -3.0*
Observed, 1989-14 = -3.1*

US Mortality APC
1993-14 = -3.3*

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).
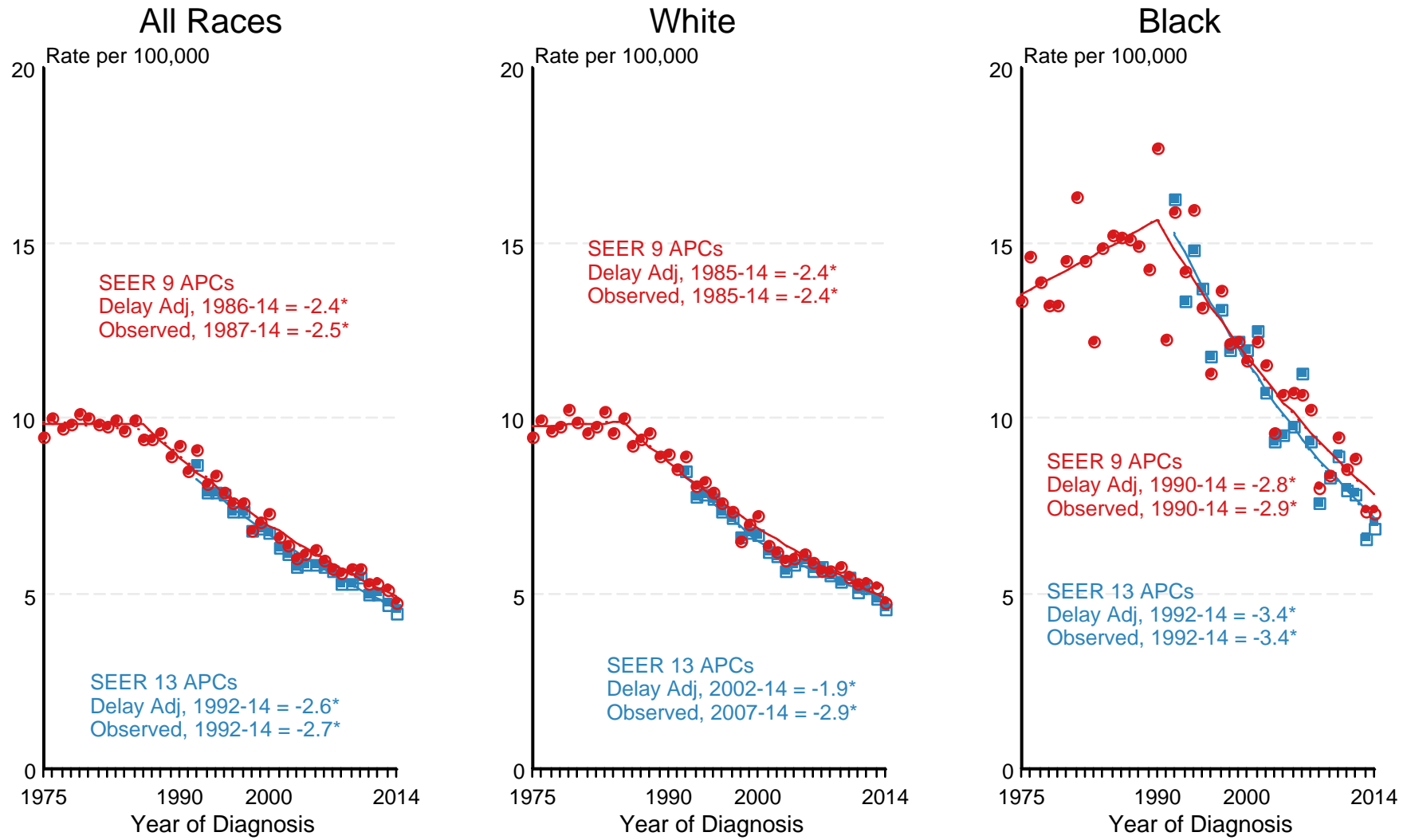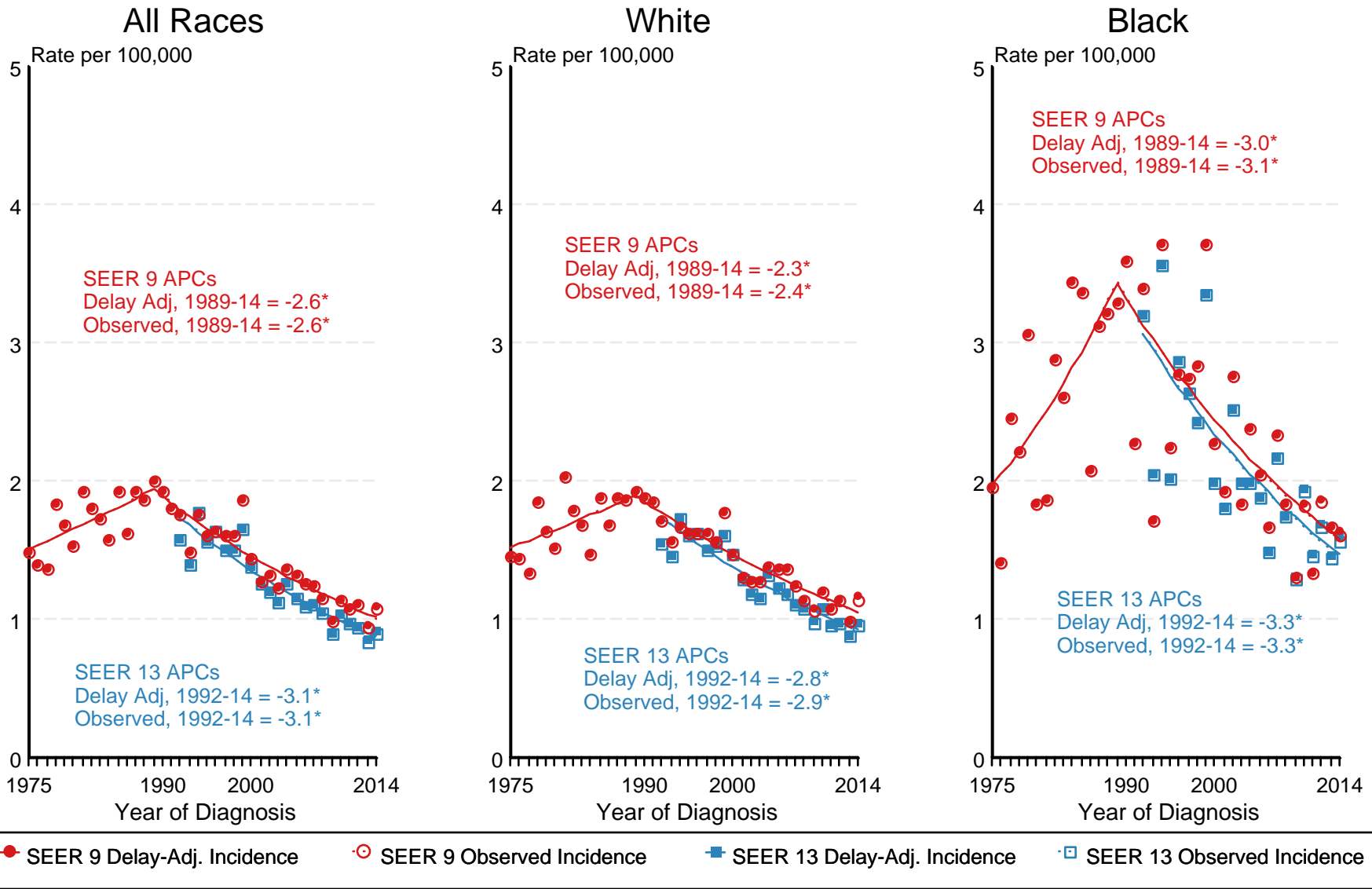   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
    The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
*   The APC is significantly different from zero (p < 0.05).

Figure 12.3

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1986-14 = -2.4*
Observed, 1987-14 = -2.5*

SEER 13 APCs
Delay Adj, 1992-14 = -2.6*
Observed, 1992-14 = -2.7*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1985-14 = -2.4*
Observed, 1985-14 = -2.4*

SEER 13 APCs
Delay Adj, 2002-14 = -1.9*
Observed, 2007-14 = -2.9*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1990-14 = -2.8*
Observed, 1990-14 = -2.9*

SEER 13 APCs
Delay Adj, 1992-14 = -3.4*
Observed, 1992-14 = -3.4*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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 12.4

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-14 = -2.6*
Observed, 1989-14 = -2.6*

SEER 13 APCs
Delay Adj, 1992-14 = -3.1*
Observed, 1992-14 = -3.1*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-14 = -2.3*
Observed, 1989-14 = -2.4*

SEER 13 APCs
Delay Adj, 1992-14 = -2.8*
Observed, 1992-14 = -2.9*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-14 = -3.0*
Observed, 1989-14 = -3.1*

SEER 13 APCs
Delay Adj, 1992-14 = -3.3*
Observed, 1992-14 = -3.3*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.

[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 4.4, January 2017, 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-06	0.3*	2006-14	1.7*									1.6*	1.7*
White	1975-05	0.4*	2005-14	1.7*									1.7*	1.7*
Black	1975-14	0.3											0.3	0.3
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-05	0.3*	2005-14	1.3*									1.3*	1.3*
White	1992-04	0.4*	2004-14	1.4*									1.4*	1.4*
Black	1992-14	0.7*											0.7*	0.7*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-14	0.3*											0.3*	0.3*
White	1975-14	0.4*											0.4*	0.4*
Black	1975-14	0.0											0.0	0.0
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	0.3*											0.3*	0.3*
White	1992-14	0.4*											0.4*	0.4*
White NH[ef]	1992-14	0.5*											0.5*	0.5*
Black	1992-14	0.2											0.2	0.2
Black NH[ef]	1992-14	0.2											0.2	0.2
API[e]	1992-14	-0.1											-0.1	-0.1
AI/AN[eg]	1992-14	1.7											1.7	1.7
Hispanic[f]	1992-14	0.5*											0.5*	0.5*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-80	0.6	1980-88	-0.6*	1988-91	0.7	1991-01	-0.5*	2001-14	-1.0*			-1.0*	-1.0*
White	1975-80	0.5	1980-88	-0.7*	1988-91	0.7	1991-01	-0.4*	2001-14	-0.9*			-0.9*	-0.9*
Black	1975-93	0.5*	1993-14	-1.3*									-1.3*	-1.3*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-01	-0.5*	2001-14	-1.0*									-1.0*	-1.0*
White	1992-01	-0.4*	2001-14	-0.9*									-0.9*	-0.9*
White NH[ef]	1992-01	-0.3*	2001-14	-0.9*									-0.9*	-0.9*
Black	1992-14	-1.3*											-1.3*	-1.3*
Black NH[ef]	1992-14	-1.2*											-1.2*	-1.2*
API[e]	1992-07	-1.4*	2007-11	3.1	2011-14	-5.6							-0.9	-3.5
AI/AN[eg]	1992-14	-0.5											-0.5	-0.5
Hispanic[f]	1992-14	-0.4*											-0.4*	-0.4*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 13.2
Leukemia

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-06	0.2*	2006-14	1.6*									1.5*	1.6*
White	1975-06	0.3*	2006-14	1.7*									1.5*	1.7*
Black	1975-14	0.3											0.3	0.3
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-06	0.2	2006-14	1.3*									1.1*	1.3*
White	1992-14	0.7*											0.7*	0.7*
Black	1992-14	0.8*											0.8*	0.8*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-14	0.2*											0.2*	0.2*
White	1975-14	0.2*											0.2*	0.2*
Black	1975-14	0.0											0.0	0.0
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	0.1											0.1	0.1
White	1992-14	0.2*											0.2*	0.2*
White NH[ef]	1992-14	0.3*											0.3*	0.3*
Black	1992-14	0.2											0.2	0.2
Black NH[ef]	1992-14	0.3											0.3	0.3
API[e]	1992-14	-0.1											-0.1	-0.1
AI/AN[eg]	1992-14	2.4*											2.4*	2.4*
Hispanic[f]	1992-14	0.2											0.2	0.2
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-80	0.5	1980-87	-0.7*	1987-95	0.2	1995-14	-0.9*					-0.9*	-0.9*
White	1975-01	-0.3*	2001-14	-0.9*									-0.9*	-0.9*
Black	1975-91	1.0*	1991-14	-1.3*									-1.3*	-1.3*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-02	-0.6*	2002-14	-1.0*									-1.0*	-1.0*
White	1992-14	-0.7*											-0.7*	-0.7*
White NH[ef]	1992-14	-0.7*											-0.7*	-0.7*
Black	1992-14	-1.3*											-1.3*	-1.3*
Black NH[ef]	1992-14	-1.2*											-1.2*	-1.2*
API[e]	1992-14	-0.7*											-0.7*	-0.7*
AI/AN[eg]	1992-14	-0.2											-0.2	-0.2
Hispanic[f]	1992-14	-0.4*											-0.4*	-0.4*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 13.3
Leukemia

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-99	0.2	1999-14	1.1*									1.1*	1.1*
White	1975-04	0.4*	2004-14	1.7*									1.7*	1.7*
Black	1975-14	0.3											0.3	0.3
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	0.7*											0.7*	0.7*
White	1992-14	0.9*											0.9*	0.9*
Black	1992-14	0.7*											0.7*	0.7*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-14	0.3*											0.3*	0.3*
White	1975-14	0.5*											0.5*	0.5*
Black	1975-14	0.1											0.1	0.1
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	0.3*											0.3*	0.3*
White	1992-14	0.5*											0.5*	0.5*
White NH[ef]	1992-14	0.5*											0.5*	0.5*
Black	1992-14	0.2											0.2	0.2
Black NH[ef]	1992-14	0.2											0.2	0.2
API[e]	1992-14	-0.1											-0.1	-0.1
AI/AN[eg]	1992-14	1.3											1.3	1.3
Hispanic[f]	1992-14	0.7*											0.7*	0.7*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-80	0.7	1980-99	-0.4*	1999-14	-1.2*							-1.2*	-1.2*
White	1975-80	0.7	1980-00	-0.4*	2000-14	-1.1*							-1.1*	-1.1*
Black	1975-93	0.4*	1993-14	-1.3*									-1.3*	-1.3*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-00	-0.5*	2000-14	-1.2*									-1.2*	-1.2*
White	1992-00	-0.4*	2000-14	-1.1*									-1.1*	-1.1*
White NH[ef]	1992-00	-0.3	2000-14	-1.1*									-1.1*	-1.1*
Black	1992-14	-1.2*											-1.2*	-1.2*
Black NH[ef]	1992-14	-1.2*											-1.2*	-1.2*
API[e]	1992-14	-0.8*											-0.8*	-0.8*
AI/AN[eg]	1992-14	-1.0											-1.0	-1.0
Hispanic[f]	1992-14	-0.5*											-0.5*	-0.5*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
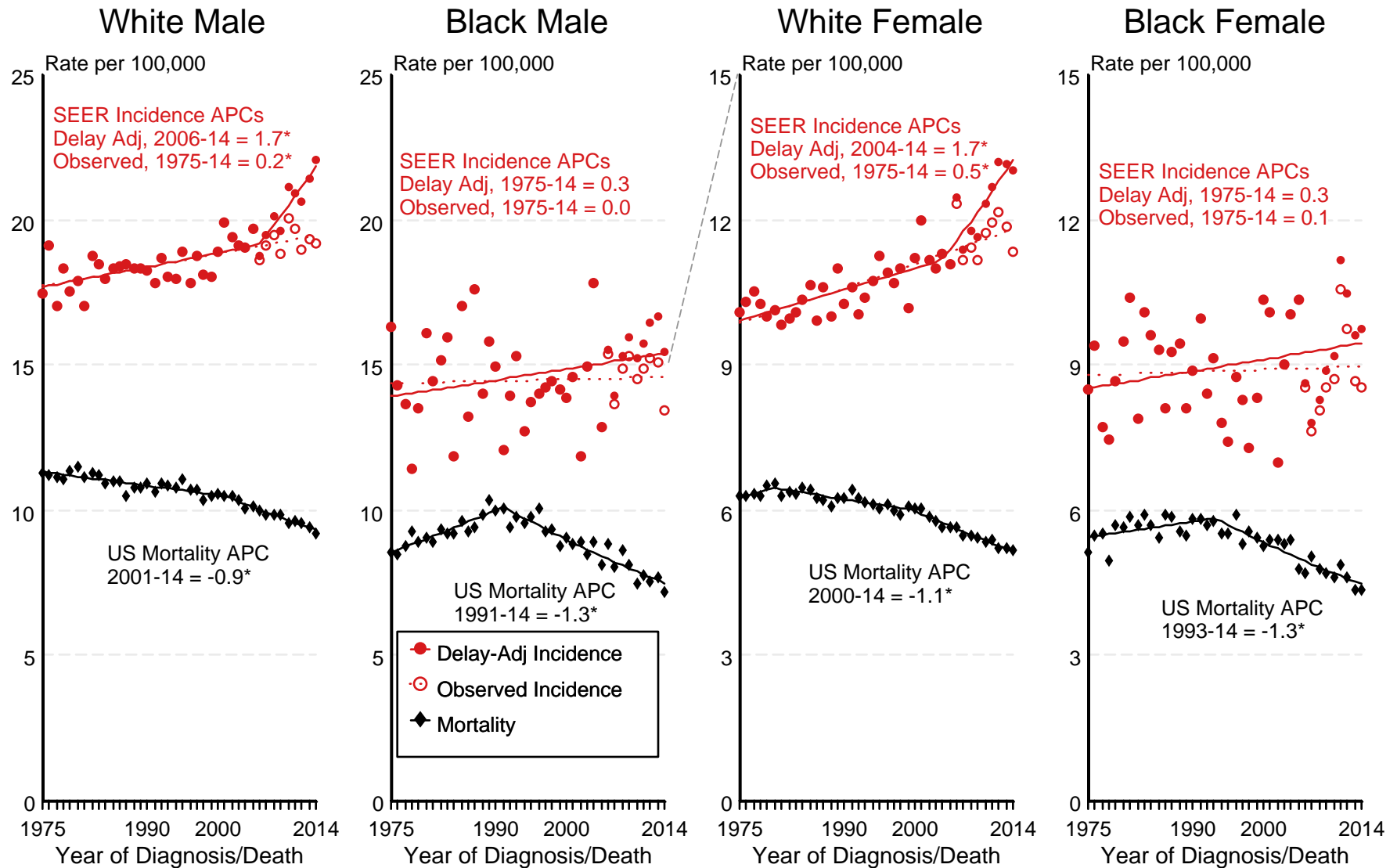The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 13.1

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

White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2006-14 = 1.7*
Observed, 1975-14 = 0.2*

US Mortality APC
2001-14 = -0.9*

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = 0.3
Observed, 1975-14 = 0.0

US Mortality APC
1991-14 = -1.3*

- Delay-Adj Incidence
- Observed Incidence
- Mortality

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2004-14 = 1.7*
Observed, 1975-14 = 0.5*

US Mortality APC
2000-14 = -1.1*

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = 0.3
Observed, 1975-14 = 0.1

US Mortality APC
1993-14 = -1.3*

Year of Diagnosis/Death

Figure 13.4

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
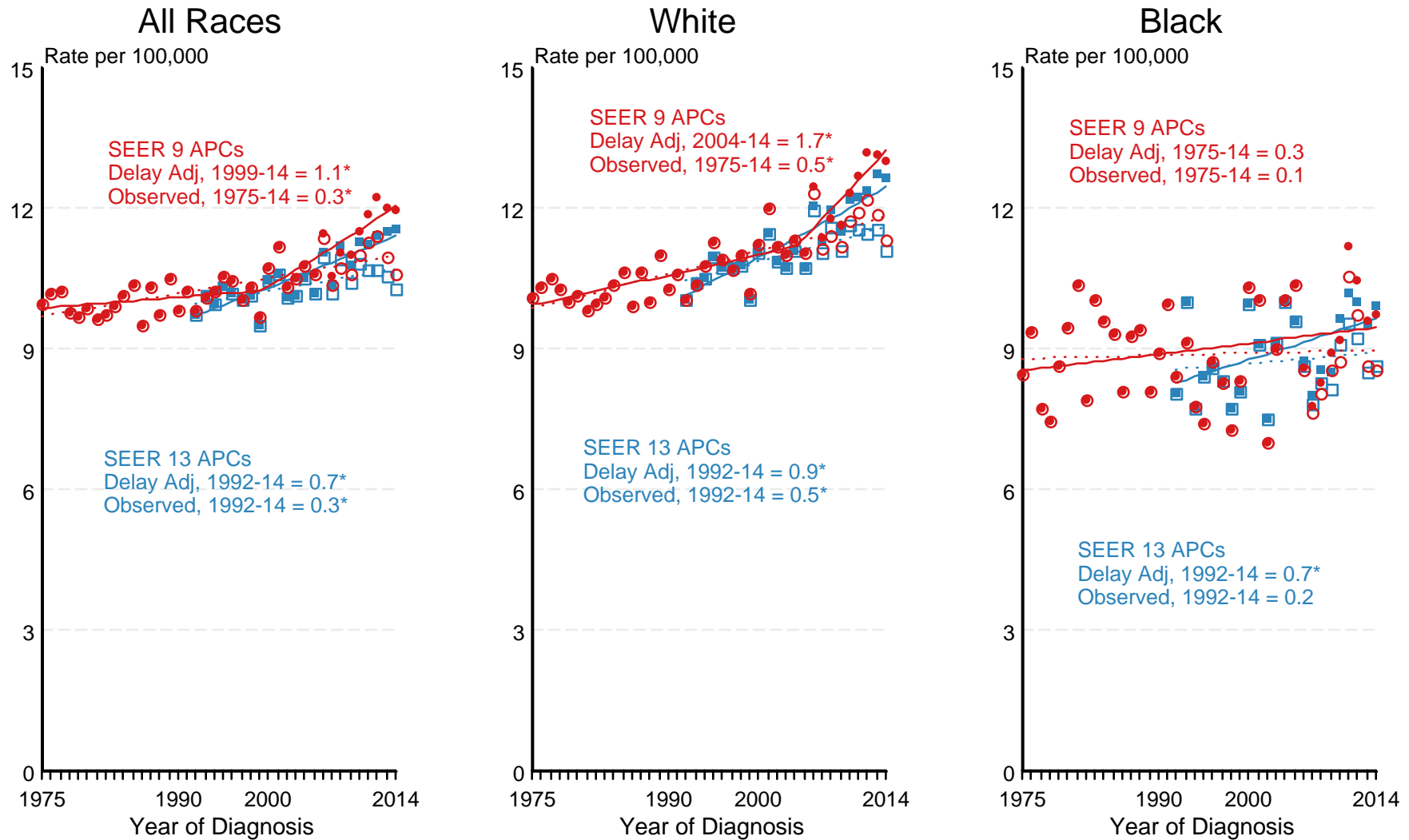## SEER 9 Areas Compared to SEER 13 Areas
Leukemia, Male, by Race
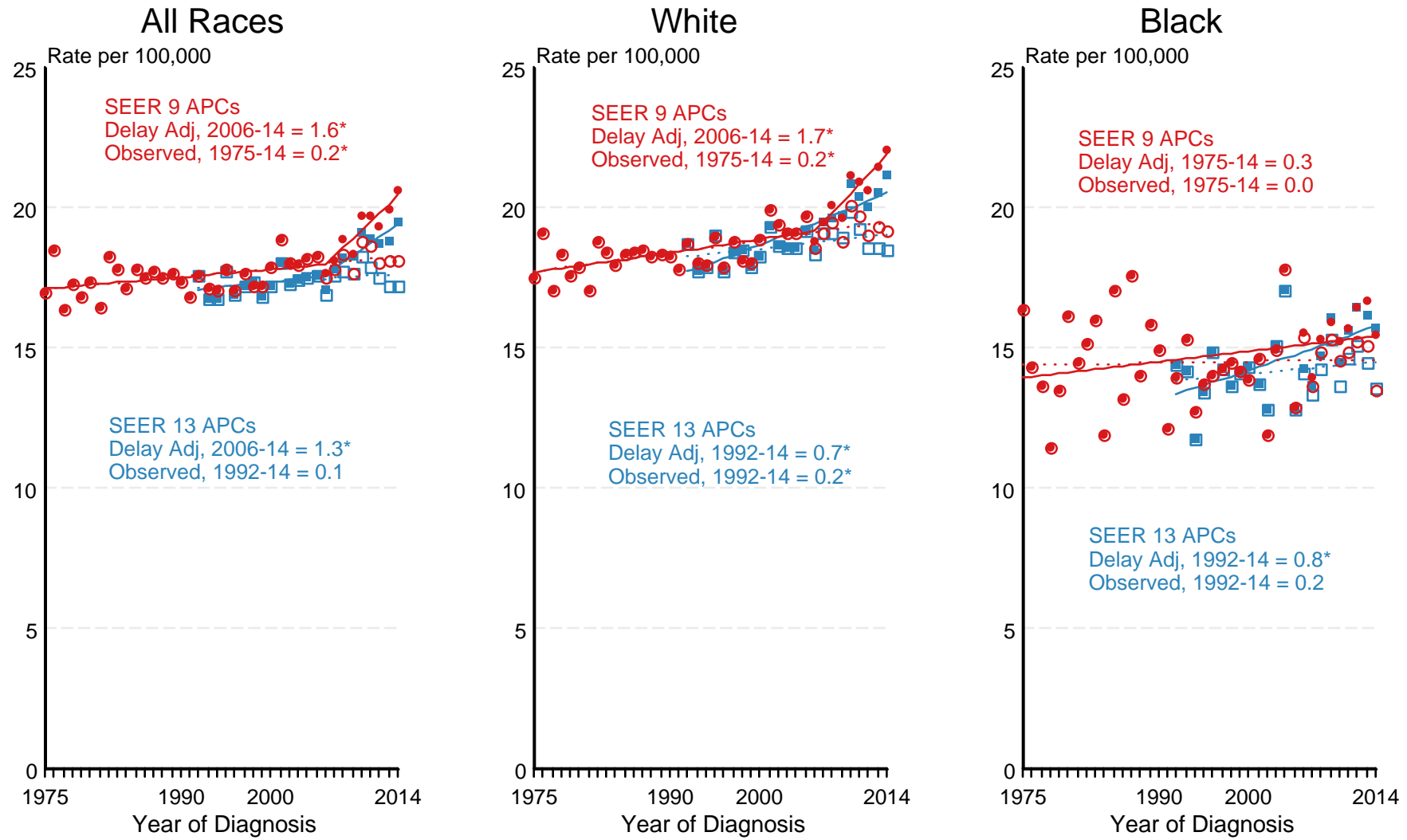
All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2006-14 = 1.6*
Observed, 1975-14 = 0.2*

SEER 13 APCs
Delay Adj, 2006-14 = 1.3*
Observed, 1992-14 = 0.1

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2006-14 = 1.7*
Observed, 1975-14 = 0.2*

SEER 13 APCs
Delay Adj, 1992-14 = 0.7*
Observed, 1992-14 = 0.2*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 0.3
Observed, 1975-14 = 0.0

SEER 13 APCs
Delay Adj, 1992-14 = 0.8*
Observed, 1992-14 = 0.2

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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 13.5

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
Leukemia, Female, by Race

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1999-14 = 1.1*
Observed, 1975-14 = 0.3*

SEER 13 APCs
Delay Adj, 1992-14 = 0.7*
Observed, 1992-14 = 0.3*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-14 = 1.7*
Observed, 1975-14 = 0.5*

SEER 13 APCs
Delay Adj, 1992-14 = 0.9*
Observed, 1992-14 = 0.5*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 0.3
Observed, 1975-14 = 0.1

SEER 13 APCs
Delay Adj, 1992-14 = 0.7*
Observed, 1992-14 = 0.2

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.

[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 4.4, January 2017, 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-84	1.3*	1984-98	4.8*	1998-01	0.2	2001-09	4.7*	2009-14	2.0*			3.2*	2.0*
White	1975-87	1.6*	1987-98	5.3*	1998-01	-0.1	2001-14	4.4*					4.4*	4.4*
Black	1975-02	2.9*	2002-09	6.3*	2009-14	-0.5							2.5*	-0.5
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-99	5.1*	1999-02	0.5	2002-09	4.5*	2009-14	1.1					2.6*	1.1
White	1992-99	5.5*	1999-02	-0.6	2002-09	5.4*	2009-14	2.2*					3.6*	2.2*
Black	1992-12	4.0*	2012-14	-5.0									1.9	-0.6
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-84	1.3	1984-98	4.8*	1998-01	0.6	2001-11	4.3*	2011-14	-0.5			2.7*	0.6
White	1975-87	1.6*	1987-98	5.4*	1998-01	-0.9	2001-11	4.9*	2011-14	0.6			3.4*	1.7
Black	1975-82	-1.2	1982-12	3.9*	2012-14	-6.3							1.5	-1.3
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-99	5.1*	1999-02	0.3	2002-07	4.9*	2007-12	2.5*	2012-14	-2.5			1.9*	-0.1
White	1992-99	5.5*	1999-02	-0.8	2002-07	5.8*	2007-12	3.6*	2012-14	-1.8			2.9*	0.9
White NH[ef]	1992-99	5.3*	1999-02	-2.1	2002-08	5.9*	2008-14	2.2*					3.4*	2.2*
Black	1992-12	3.9*	2012-14	-6.8									1.4	-1.6
Black NH[ef]	1992-12	4.0*	2012-14	-6.7									1.5	-1.5
API[e]	1992-07	1.2*	2007-14	-2.8*									-1.9*	-2.8*
AI/AN[eg]	1992-14	2.4*											2.4*	2.4*
Hispanic[f]	1992-12	3.2*	2012-14	-6.9									0.9	-1.9
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-80	0.2	1980-87	2.0*	1987-96	3.8*	1996-00	0.7	2000-14	2.6*			2.6*	2.6*
White	1975-78	-1.2	1978-87	1.6*	1987-96	3.9*	1996-00	0.6	2000-14	2.7*			2.7*	2.7*
Black	1975-88	0.8*	1988-95	3.2*	1995-00	0.4	2000-14	2.4*					2.4*	2.4*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-96	3.5*	1996-99	0.7	1999-08	2.2*	2008-12	3.3*	2012-14	1.2			2.5*	2.3*
White	1992-96	3.5*	1996-99	0.6	1999-08	2.4*	2008-12	3.5*	2012-14	1.4			2.7*	2.5*
White NH[ef]	1992-96	3.7*	1996-99	0.1	1999-08	2.2*	2008-12	3.6*	2012-14	1.5			2.7*	2.5*
Black	1992-01	1.3*	2001-14	2.4*									2.4*	2.4*
Black NH[ef]	1992-01	1.4*	2001-14	2.5*									2.5*	2.5*
API[e]	1992-14	-0.8*											-0.8*	-0.8*
AI/AN[eg]	1992-14	2.2*											2.2*	2.2*
Hispanic[f]	1992-14	1.8*											1.8*	1.8*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-84	2.2*	1984-11	3.9*	2011-14	0.4							2.7*	1.3
White	1975-84	1.8	1984-14	4.0*									4.0*	4.0*
Black	1975-03	3.2*	2003-09	7.3*	2009-14	-1.0							2.6	-1.0
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-99	4.6*	1999-02	0.6	2002-07	5.2*	2007-12	2.7*	2012-14	-2.4			2.1*	0.1
White	1992-99	4.8*	1999-02	-0.5	2002-06	6.8*	2006-12	3.8*	2012-14	-1.8			2.9*	1.0
Black	1992-12	4.3*	2012-14	-6.7									1.8	-1.3
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-84	2.2*	1984-11	3.9*	2011-14	-0.8							2.3*	0.4
White	1975-87	1.5*	1987-91	6.9	1991-12	3.9*	2012-14	-0.7					2.8*	1.6
Black	1975-12	3.9*	2012-14	-6.4									1.5	-1.4
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-99	4.6*	1999-02	0.6	2002-07	5.2*	2007-12	2.5*	2012-14	-4.3			1.5	-1.0
White	1992-99	4.8*	1999-02	-0.5	2002-06	6.8*	2006-12	3.7*	2012-14	-3.8			2.3*	-0.1
White NH[e][f]	1992-12	3.7*	2012-14	-1.4									2.5*	1.1
Black	1992-12	4.3*	2012-14	-8.5									1.3	-2.3
Black NH[e][f]	1992-12	4.3*	2012-14	-8.3									1.4	-2.2
API[e]	1992-11	0.8*	2011-14	-7.9*									-2.2	-5.8*
AI/AN[e][g]	1992-14	2.8*											2.8*	2.8*
Hispanic[f]	1992-12	3.3*	2012-14	-9.6									0.3	-3.4
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-85	1.5*	1985-96	3.8*	1996-99	0.5	1999-14	2.6*					2.6*	2.6*
White	1975-84	1.1*	1984-95	3.7*	1995-06	2.0*	2006-12	3.4*	2012-14	1.0			2.7*	2.2*
Black	1975-88	0.9*	1988-14	2.3*									2.3*	2.3*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-07	2.2*	2007-12	3.3*	2012-14	0.7							2.5*	2.0*
White	1992-07	2.2*	2007-12	3.5*	2012-14	0.9							2.6*	2.2*
White NH[e][f]	1992-96	3.6*	1996-99	0.6	1999-07	2.3*	2007-12	3.4*	2012-14	1.2			2.7*	2.3*
Black	1992-14	2.3*											2.3*	2.3*
Black NH[e][f]	1992-14	2.4*											2.4*	2.4*
API[e]	1992-14	-0.8*											-0.8*	-0.8*
AI/AN[e][g]	1992-14	2.6*											2.6*	2.6*
Hispanic[f]	1992-14	1.7*											1.7*	1.7*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

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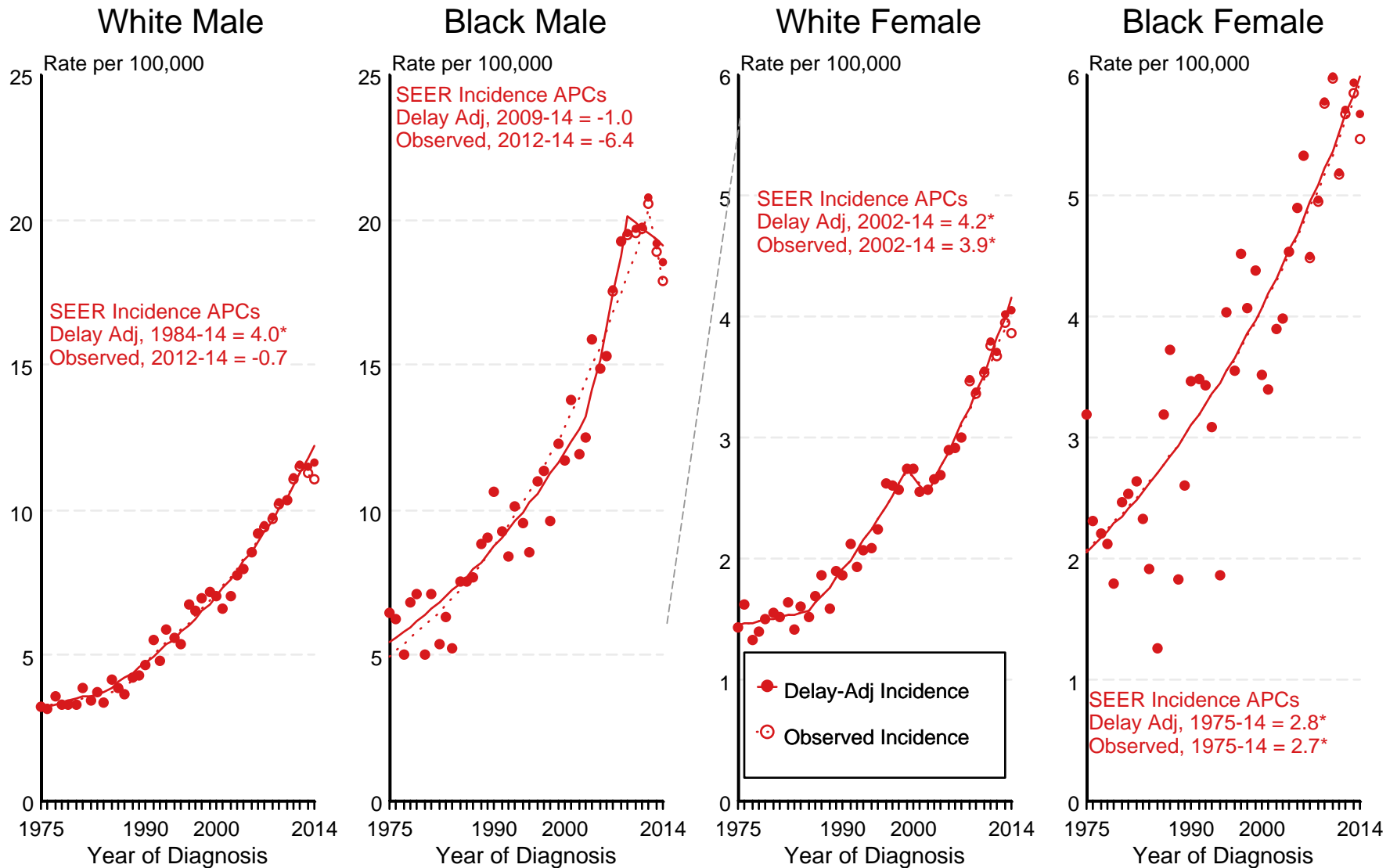Cancer of the Liver and Intrahepatic Bile Duct (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-83	0.6	1983-96	4.1*	1996-14	2.8*							2.8*	2.8*
White	1975-85	0.8	1985-99	4.1*	1999-02	-2.4	2002-14	4.2*					4.2*	4.2*
Black	1975-14	2.8*											2.8*	2.8*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	2.9*											2.9*	2.9*
White	1992-98	6.8*	1998-03	-0.4	2003-14	4.1*							4.1*	4.1*
Black	1992-14	2.8*											2.8*	2.8*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-83	0.6	1983-96	4.2*	1996-14	2.7*							2.7*	2.7*
White	1975-85	0.8	1985-99	4.1*	1999-02	-2.1	2002-14	3.9*					3.9*	3.9*
Black	1975-14	2.7*											2.7*	2.7*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-96	6.8*	1996-14	2.4*									2.4*	2.4*
White	1992-98	6.8*	1998-03	-0.2	2003-14	3.8*							3.8*	3.8*
White NH[ef]	1992-98	6.4*	1998-03	-1.2	2003-14	3.8*							3.8*	3.8*
Black	1992-14	2.7*											2.7*	2.7*
Black NH[ef]	1992-14	2.7*											2.7*	2.7*
API[e]	1992-06	1.1*	2006-14	-2.3*									-1.9*	-2.3*
AI/AN[eg]	1992-14	1.2											1.2	1.2
Hispanic[f]	1992-14	2.5*											2.5*	2.5*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-78	-1.5	1978-88	1.4*	1988-95	3.9*	1995-00	0.4	2000-08	1.5*	2008-14	2.9*	2.4*	2.9*
White	1975-78	-1.9	1978-88	1.2*	1988-96	3.6*	1996-00	-0.4	2000-08	1.8*	2008-14	2.9*	2.5*	2.9*
Black	1975-96	2.0*	1996-07	0.4	2007-14	2.8*							2.2*	2.8*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-95	3.8*	1995-01	0.4	2001-04	2.7	2004-08	0.7	2008-14	3.1*			2.3*	3.1*
White	1992-96	3.1*	1996-00	-0.2	2000-08	1.7*	2008-14	2.9*					2.5*	2.9*
White NH[ef]	1992-96	3.1*	1996-01	-0.6	2001-14	2.2*							2.2*	2.2*
Black	1992-14	1.2*											1.2*	1.2*
Black NH[ef]	1992-14	1.3*											1.3*	1.3*
API[e]	1992-14	-0.6*											-0.6*	-0.6*
AI/AN[eg]	1992-14	1.3											1.3	1.3
Hispanic[f]	1992-14	1.6*											1.6*	1.6*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 14.1

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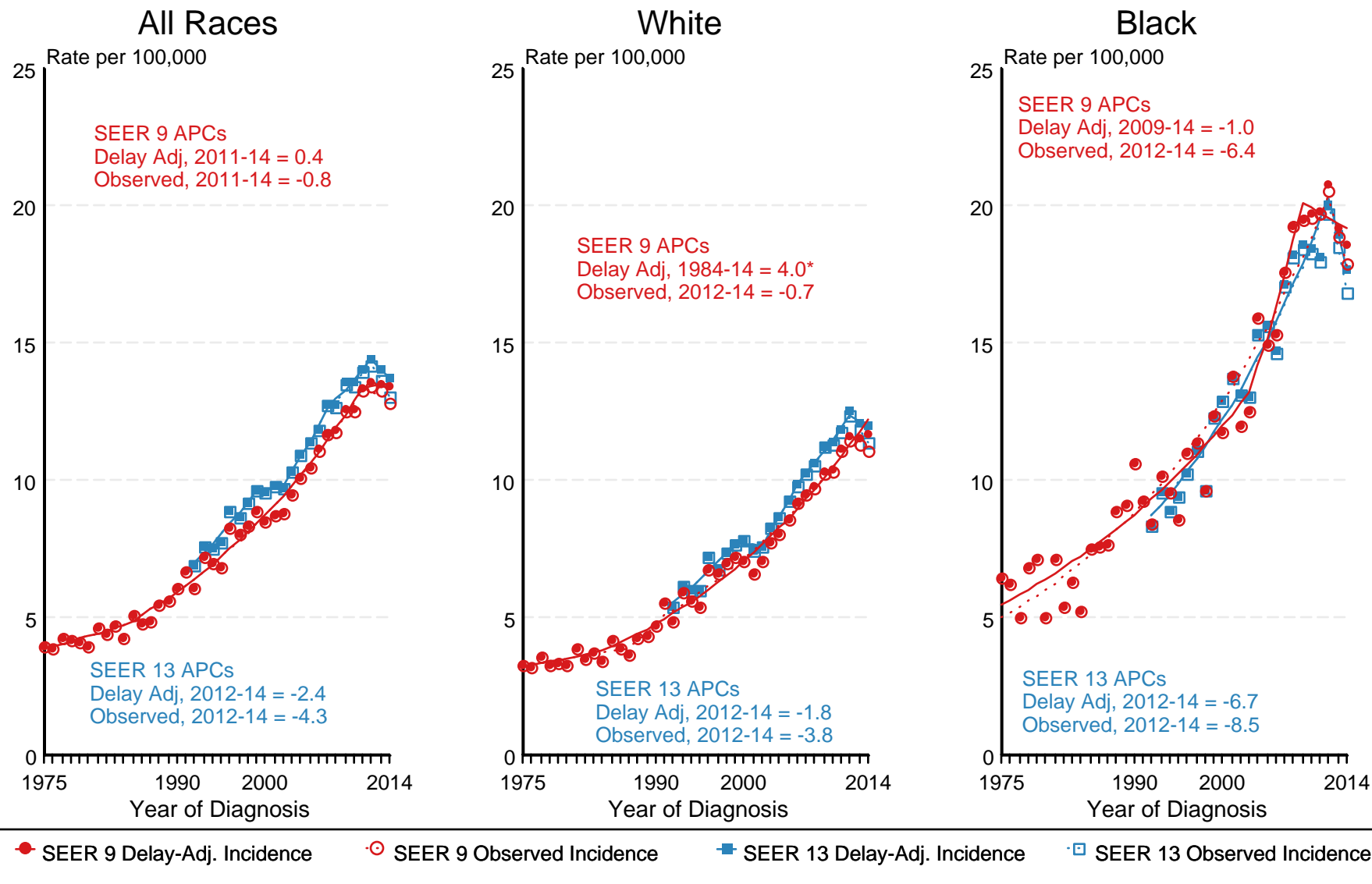## Cancer of the Liver and Intrahepatic Bile Duct, by Race and Sex

SEER Cancer Statistics Review 1975-2014

National Cancer Institute

White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1984-14 = 4.0*
Observed, 2012-14 = -0.7

Year of Diagnosis

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2009-14 = -1.0
Observed, 2012-14 = -6.4

Year of Diagnosis

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2002-14 = 4.2*
Observed, 2002-14 = 3.9*

Delay-Adj Incidence

Observed Incidence

Year of Diagnosis

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = 2.8*
Observed, 1975-14 = 2.7*

Year of Diagnosis

Source: SEER 9 areas.

[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
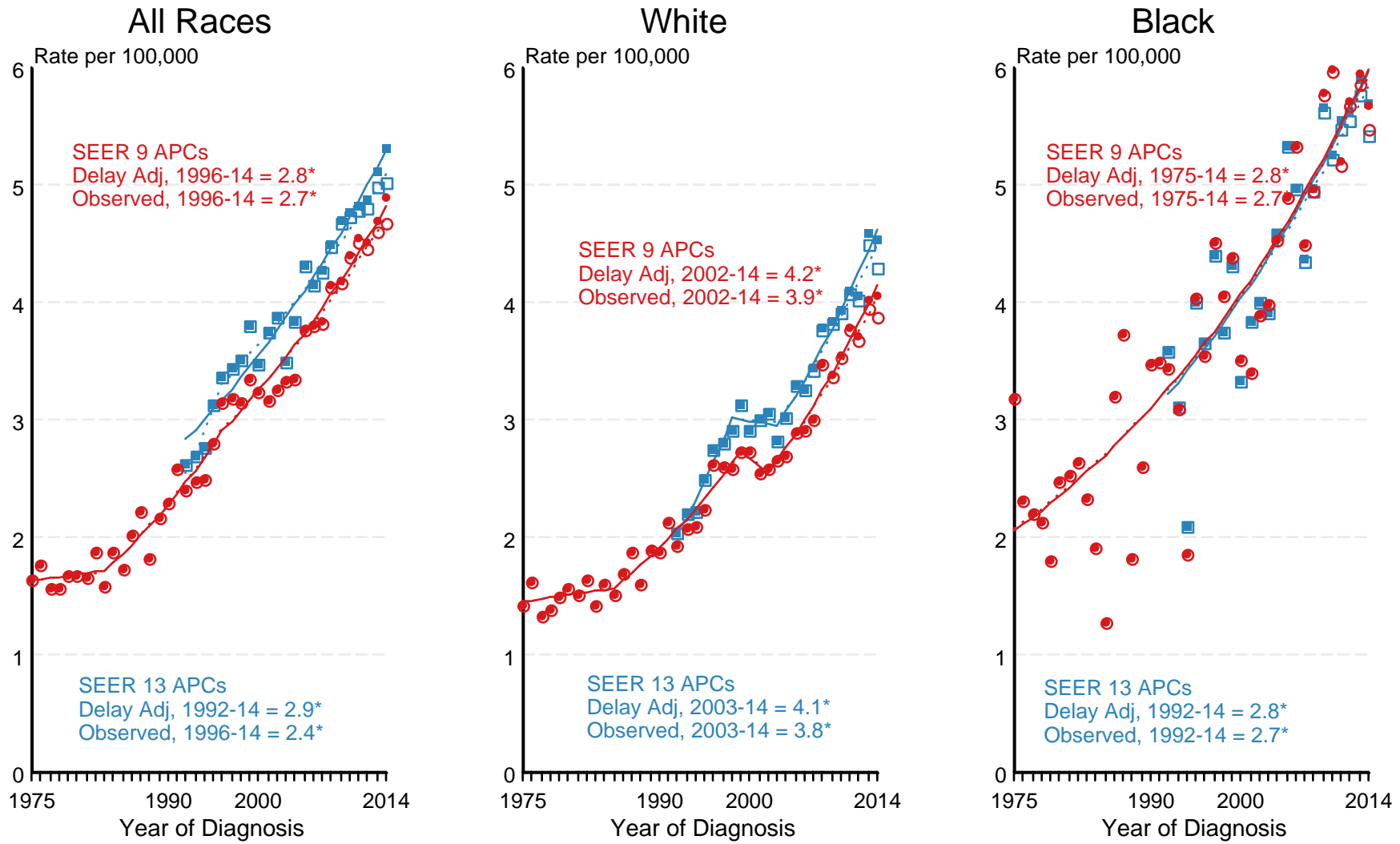Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 14.3

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2011-14 = 0.4
Observed, 2011-14 = -0.8

SEER 13 APCs
Delay Adj, 2012-14 = -2.4
Observed, 2012-14 = -4.3

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1984-14 = 4.0*
Observed, 2012-14 = -0.7

SEER 13 APCs
Delay Adj, 2012-14 = -1.8
Observed, 2012-14 = -3.8

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 2009-14 = -1.0
Observed, 2012-14 = -6.4

SEER 13 APCs
Delay Adj, 2012-14 = -6.7
Observed, 2012-14 = -8.5

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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 14.4

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1996-14 = 2.8*
Observed, 1996-14 = 2.7*

SEER 13 APCs
Delay Adj, 1992-14 = 2.9*
Observed, 1996-14 = 2.4*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2002-14 = 4.2*
Observed, 2002-14 = 3.9*

SEER 13 APCs
Delay Adj, 2003-14 = 4.1*
Observed, 2003-14 = 3.8*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 2.8*
Observed, 1975-14 = 2.7*

SEER 13 APCs
Delay Adj, 1992-14 = 2.8*
Observed, 1992-14 = 2.7*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four Joinpoints,
Both Sexes 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] 2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-82	2.5*	1982-91	0.9*	1991-07	-0.7*	2007-14	-2.1*					-1.8*	-2.1*
White	1975-82	2.6*	1982-91	1.1*	1991-07	-0.6*	2007-14	-2.1*					-1.7*	-2.1*
Black	1975-85	3.2*	1985-08	-0.9*	2008-14	-3.4*							-2.6*	-3.4*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-07	-1.0*	2007-14	-2.3*									-2.0*	-2.3*
White	1992-07	-0.9*	2007-14	-2.3*									-2.0*	-2.3*
Black	1992-09	-1.3*	2009-14	-3.8*									-2.7*	-3.8*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-82	2.5*	1982-91	0.9*	1991-07	-0.7*	2007-14	-2.3*					-2.0*	-2.3*
White	1975-82	2.6*	1982-91	1.1*	1991-07	-0.6*	2007-14	-2.3*					-1.9*	-2.3*
Black	1975-85	3.2*	1985-08	-0.9*	2008-14	-3.7*							-2.8*	-3.7*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-08	-1.0*	2008-14	-2.8*									-2.2*	-2.8*
White	1992-07	-0.9*	2007-14	-2.5*									-2.2*	-2.5*
White NH[ef]	1992-07	-0.7*	2007-14	-2.4*									-2.0*	-2.4*
Black	1992-09	-1.3*	2009-14	-4.3*									-3.0*	-4.3*
Black NH[ef]	1992-09	-1.3*	2009-14	-4.2*									-2.9*	-4.2*
API[e]	1992-05	-0.4	2005-14	-1.7*									-1.7*	-1.7*
AI/AN[eg]	1992-10	-0.3	2010-14	-8.8									-4.1*	-8.8
Hispanic[f]	1992-14	-1.4*											-1.4*	-1.4*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-80	3.0*	1980-90	1.8*	1990-95	-0.2	1995-05	-1.0*	2005-10	-2.2*	2010-14	-2.8*	-2.5*	-2.8*
White	1975-80	2.9*	1980-90	1.8*	1990-95	-0.1	1995-05	-0.8*	2005-10	-2.1*	2010-14	-2.8*	-2.4*	-2.8*
Black	1975-81	3.5*	1981-90	1.9*	1990-95	-0.7*	1995-04	-1.7*	2004-14	-2.7*			-2.7*	-2.7*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-03	-0.8*	2003-08	-1.7*	2008-14	-2.7*							-2.4*	-2.7*
White	1992-03	-0.7*	2003-08	-1.6*	2008-14	-2.6*							-2.3*	-2.6*
White NH[ef]	1992-03	-0.5*	2003-08	-1.5*	2008-14	-2.5*							-2.1*	-2.5*
Black	1992-97	-1.1*	1997-05	-1.8*	2005-14	-2.8*							-2.8*	-2.8*
Black NH[ef]	1992-96	-0.9*	1996-05	-1.7*	2005-14	-2.7*							-2.7*	-2.7*
API[e]	1992-09	-1.1*	2009-14	-2.1*									-1.7*	-2.1*
AI/AN[eg]	1992-14	-0.4											-0.4	-0.4
Hispanic[f]	1992-95	1.5	1995-05	-1.3*	2005-14	-2.6*							-2.6*	-2.6*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 15.2
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-82	1.5*	1982-91	-0.5*	1991-08	-1.7*	2008-14	-2.9*					-2.5*	-2.9*
White	1975-81	1.5*	1981-90	-0.2	1990-08	-1.7*	2008-14	-2.8*					-2.4*	-2.8*
Black	1975-84	2.9*	1984-98	-1.4*	1998-14	-2.8*							-2.8*	-2.8*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-08	-1.9*	2008-14	-3.1*									-2.7*	-3.1*
White	1992-09	-1.9*	2009-14	-3.2*									-2.6*	-3.2*
Black	1992-14	-2.7*											-2.7*	-2.7*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-82	1.5*	1982-91	-0.5*	1991-09	-1.7*	2009-14	-3.5*					-2.7*	-3.5*
White	1975-81	1.5*	1981-90	-0.2	1990-09	-1.7*	2009-14	-3.4*					-2.6*	-3.4*
Black	1975-84	2.9*	1984-98	-1.4*	1998-14	-2.9*							-2.9*	-2.9*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-09	-1.9*	2009-14	-3.7*									-2.9*	-3.7*
White	1992-09	-1.9*	2009-14	-3.6*									-2.8*	-3.6*
White NH[ef]	1992-09	-1.8*	2009-14	-3.4*									-2.7*	-3.4*
Black	1992-09	-2.4*	2009-14	-5.4*									-4.1*	-5.4*
Black NH[ef]	1992-09	-2.4*	2009-14	-5.3*									-4.0*	-5.3*
API[e]	1992-06	-0.8*	2006-14	-2.7*									-2.5*	-2.7*
AI/AN[eg]	1992-14	-1.7*											-1.7*	-1.7*
Hispanic[f]	1992-14	-2.1*											-2.1*	-2.1*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-78	2.4*	1978-84	1.2*	1984-91	0.3*	1991-05	-1.9*	2005-12	-3.0*	2012-14	-3.9*	-3.2*	-3.5*
White	1975-80	1.9*	1980-87	0.7*	1987-91	0.1	1991-05	-1.7*	2005-11	-2.8*	2011-14	-3.6*	-3.1*	-3.4*
Black	1975-77	4.9*	1977-84	2.3*	1984-90	1.2*	1990-94	-1.2*	1994-04	-2.7*	2004-14	-3.5*	-3.5*	-3.5*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-05	-1.9*	2005-14	-3.1*									-3.1*	-3.1*
White	1992-06	-1.8*	2006-14	-3.1*									-3.0*	-3.1*
White NH[ef]	1992-06	-1.6*	2006-14	-3.0*									-2.9*	-3.0*
Black	1992-94	-0.9	1994-04	-2.7*	2004-14	-3.5*							-3.5*	-3.5*
Black NH[ef]	1992-94	-0.6	1994-04	-2.7*	2004-14	-3.4*							-3.4*	-3.4*
API[e]	1992-08	-1.4*	2008-14	-3.0*									-2.5*	-3.0*
AI/AN[eg]	1992-14	-1.2*											-1.2*	-1.2*
Hispanic[f]	1992-94	3.2	1994-05	-1.9*	2005-14	-3.4*							-3.4*	-3.4*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
− Joinpoint regression line analysis could not be performed on data series.
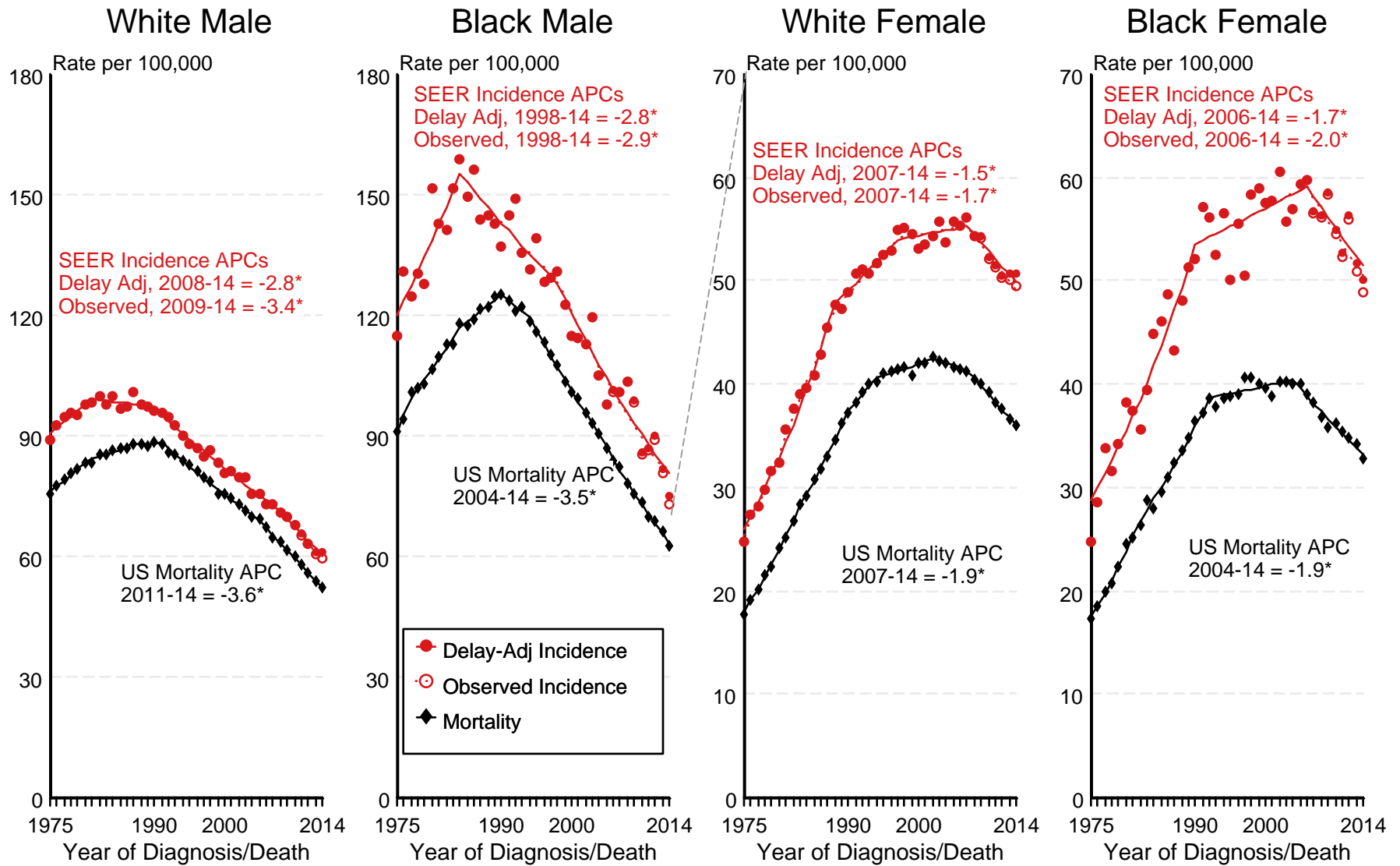
Table 15.3
Cancer of the Lung and Bronchus (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-82	5.6*	1982-91	3.4*	1991-06	0.5*	2006-14	-1.4*					-1.2*	-1.4*
White	1975-88	4.8*	1988-97	1.4*	1997-07	0.2	2007-14	-1.5*					-1.1*	-1.5*
Black	1975-90	4.2*	1990-06	0.6*	2006-14	-1.7*							-1.5*	-1.7*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-06	0.1	2006-14	-1.6*									-1.4*	-1.6*
White	1992-98	0.9*	1998-01	-1.4	2001-07	0.3	2007-12	-2.3*	2012-14	0.0			-1.2*	-1.2
Black	1992-05	0.8*	2005-14	-1.7*									-1.7*	-1.7*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-82	5.6*	1982-91	3.4*	1991-06	0.5*	2006-14	-1.6*					-1.4*	-1.6*
White	1975-82	5.6*	1982-88	4.2*	1988-97	1.5*	1997-07	0.2	2007-14	-1.7*			-1.3*	-1.7*
Black	1975-90	4.2*	1990-06	0.6*	2006-14	-2.0*							-1.7*	-2.0*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-07	0.0	2007-14	-2.1*									-1.6*	-2.1*
White	1992-97	0.8	1997-07	-0.2	2007-14	-2.0*							-1.6*	-2.0*
White NH[ef]	1992-97	1.1	1997-07	0.0	2007-14	-1.8*							-1.4*	-1.8*
Black	1992-05	0.8*	2005-14	-1.9*									-1.9*	-1.9*
Black NH[ef]	1992-05	0.8*	2005-14	-1.9*									-1.9*	-1.9*
API[e]	1992-14	0.1											0.1	0.1
AI/AN[eg]	1992-06	2.3*	2006-14	-5.4*									-4.6*	-5.4*
Hispanic[f]	1992-14	-0.5*											-0.5*	-0.5*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-82	6.0*	1982-90	4.2*	1990-95	1.7*	1995-03	0.3*	2003-07	-0.8	2007-14	-2.0*	-1.7*	-2.0*
White	1975-83	5.8*	1983-90	4.1*	1990-94	2.0*	1994-02	0.5*	2002-07	-0.5	2007-14	-1.9*	-1.6*	-1.9*
Black	1975-82	6.4*	1982-92	3.7*	1992-04	0.4*	2004-14	-1.9*					-1.9*	-1.9*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-95	1.4*	1995-03	0.3*	2003-07	-0.8	2007-14	-2.0*					-1.7*	-2.0*
White	1992-95	1.4*	1995-02	0.5*	2002-07	-0.5	2007-14	-1.9*					-1.6*	-1.9*
White NH[ef]	1992-95	1.7*	1995-03	0.6*	2003-08	-0.7*	2008-14	-1.9*					-1.5*	-1.9*
Black	1992-04	0.4*	2004-14	-2.0*									-2.0*	-2.0*
Black NH[ef]	1992-04	0.5*	2004-14	-1.9*									-1.9*	-1.9*
API[e]	1992-14	-0.4*											-0.4*	-0.4*
AI/AN[eg]	1992-05	2.1*	2005-14	-1.7*									-1.7*	-1.7*
Hispanic[f]	1992-03	0.5	2003-14	-1.3*									-1.3*	-1.3*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 15.1

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

White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2008-14 = -2.8*
Observed, 2009-14 = -3.4*

US Mortality APC
2011-14 = -3.6*

Year of Diagnosis/Death

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1998-14 = -2.8*
Observed, 1998-14 = -2.9*

US Mortality APC
2004-14 = -3.5*

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

Year of Diagnosis/Death

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2007-14 = -1.5*
Observed, 2007-14 = -1.7*

US Mortality APC
2007-14 = -1.9*

Year of Diagnosis/Death

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2006-14 = -1.7*
Observed, 2006-14 = -2.0*

US Mortality APC
2004-14 = -1.9*

Year of Diagnosis/Death

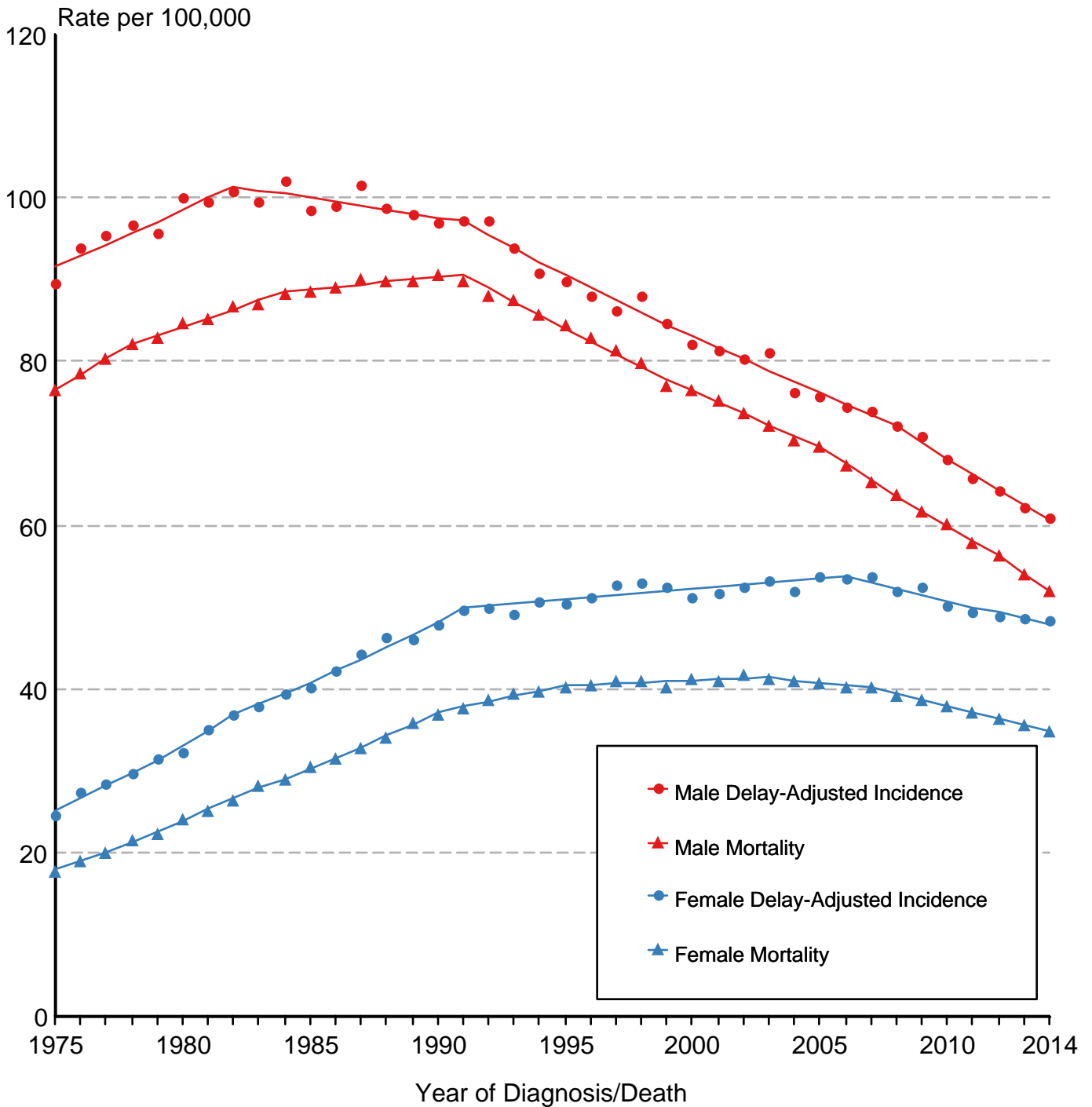Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer 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 15.3

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
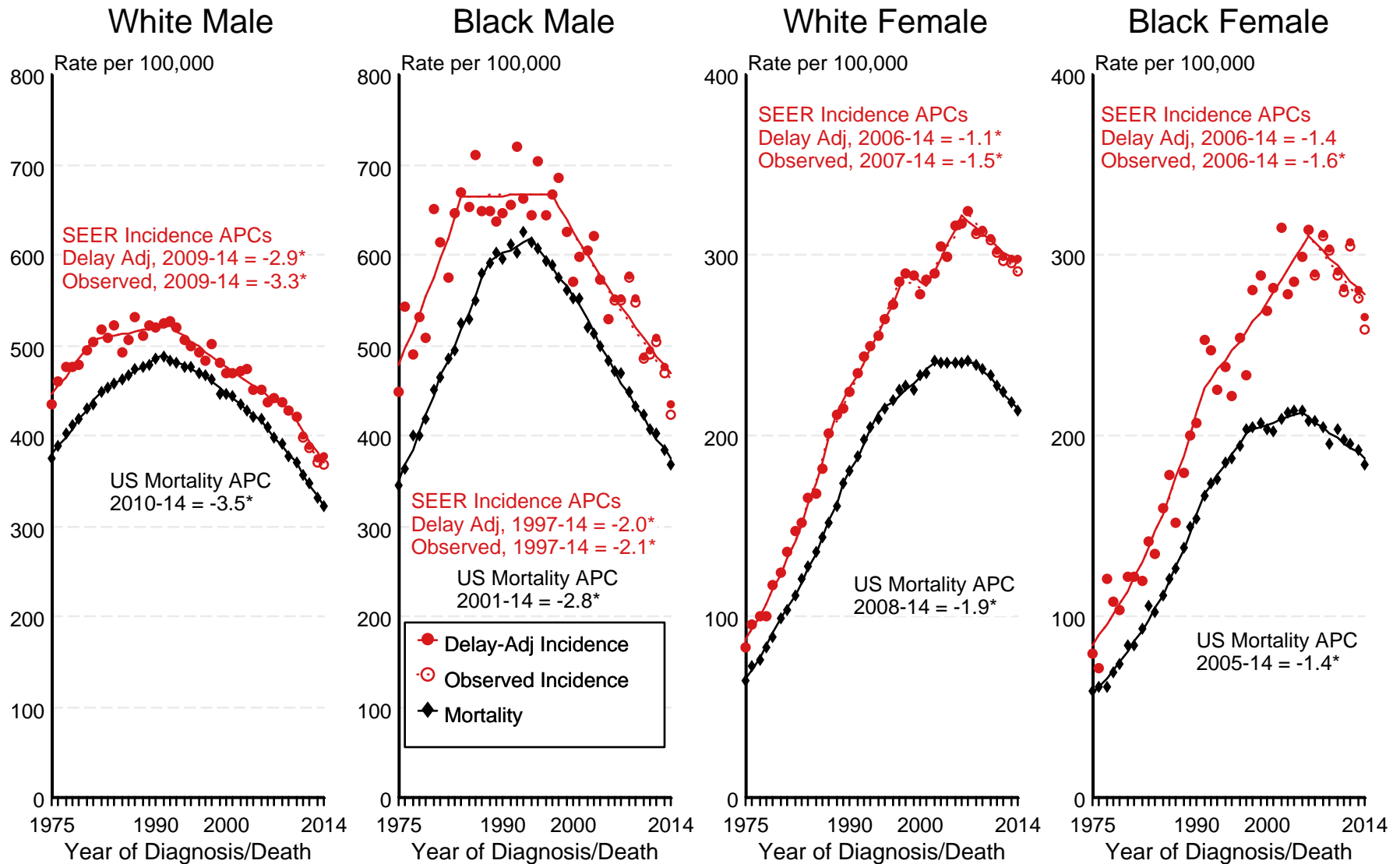
White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2009-14 = -2.9*
Observed, 2009-14 = -3.3*

US Mortality APC
2010-14 = -3.5*

Year of Diagnosis/Death

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1997-14 = -2.0*
Observed, 1997-14 = -2.1*

US Mortality APC
2001-14 = -2.8*

● Delay-Adj Incidence
◉ Observed Incidence
◆ Mortality

Year of Diagnosis/Death

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2006-14 = -1.1*
Observed, 2007-14 = -1.5*

US Mortality APC
2008-14 = -1.9*

Year of Diagnosis/Death

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2006-14 = -1.4
Observed, 2006-14 = -1.6*

US Mortality APC
2005-14 = -1.4*

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 4.4, January 2017, National Cancer Institute.
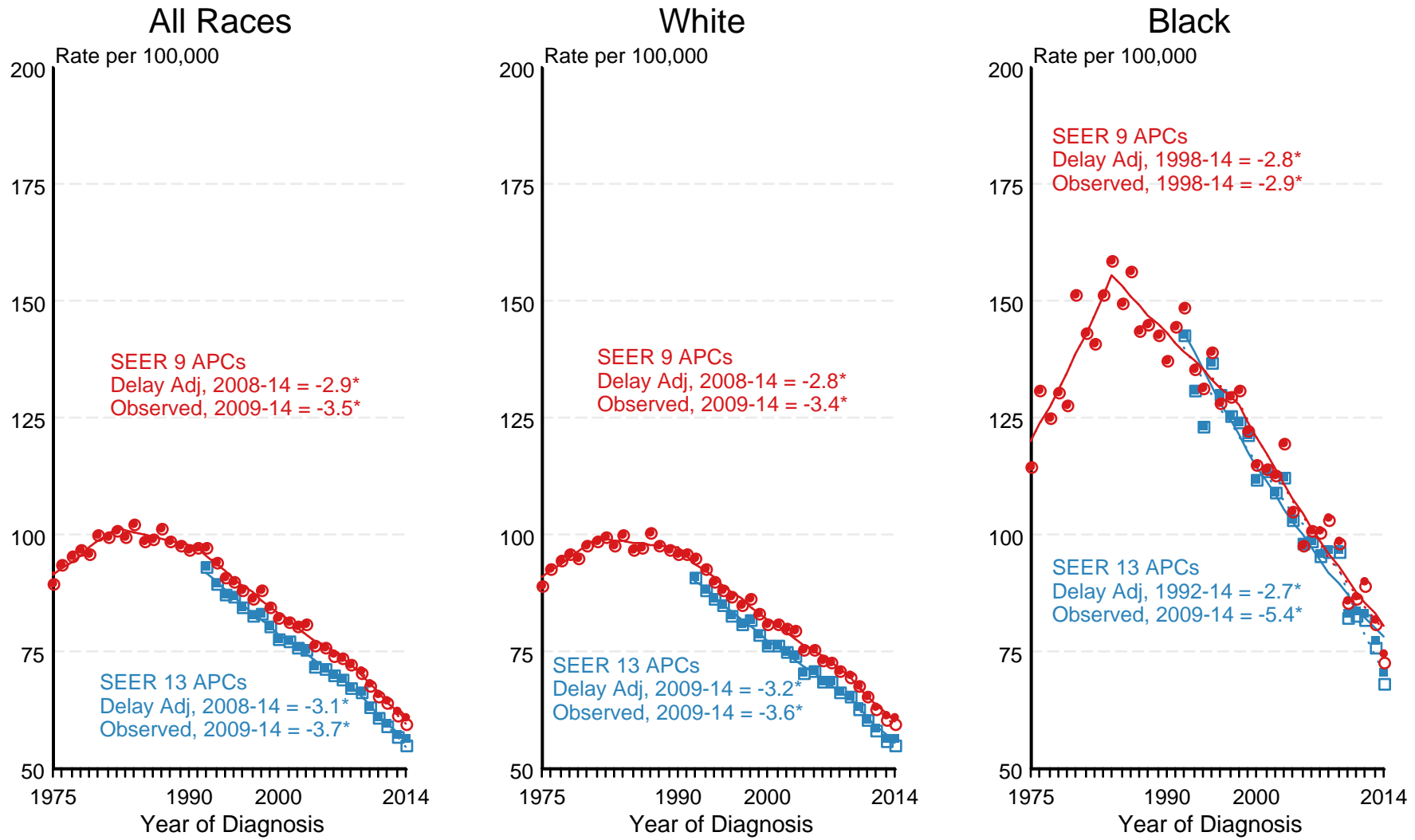The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 15.5

Cancer of the Lung & Bronchus
SEER Delay-Adjusted Incidence & US Death Rates, 1975-2014, All Races, By Sex

Rate per 100,000

Year of Diagnosis/Death

Legend:
- 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 4.4, January 2017, National Cancer Institute.

Figure 15.6

Cancer of the Lung & Bronchus
SEER Delay-Adjusted Incidence, 1975-2014
By Sex and Race
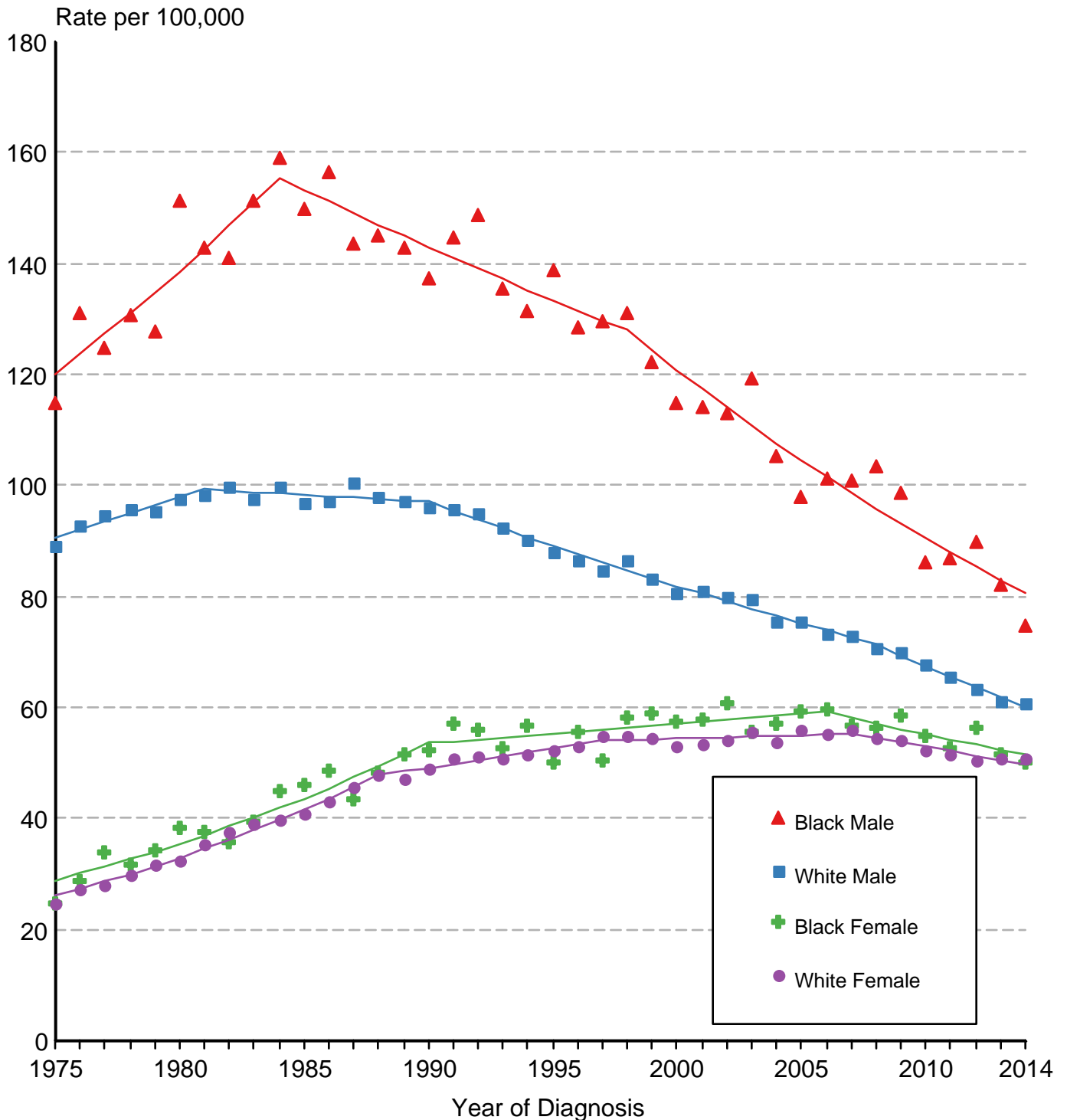
Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.

Figure 15.7

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, 2008-14 = -2.9*
Observed, 2009-14 = -3.5*

SEER 13 APCs
Delay Adj, 2008-14 = -3.1*
Observed, 2009-14 = -3.7*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2008-14 = -2.8*
Observed, 2009-14 = -3.4*

SEER 13 APCs
Delay Adj, 2009-14 = -3.2*
Observed, 2009-14 = -3.6*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1998-14 = -2.8*
Observed, 1998-14 = -2.9*

SEER 13 APCs
Delay Adj, 1992-14 = -2.7*
Observed, 2009-14 = -5.4*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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 15.8

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
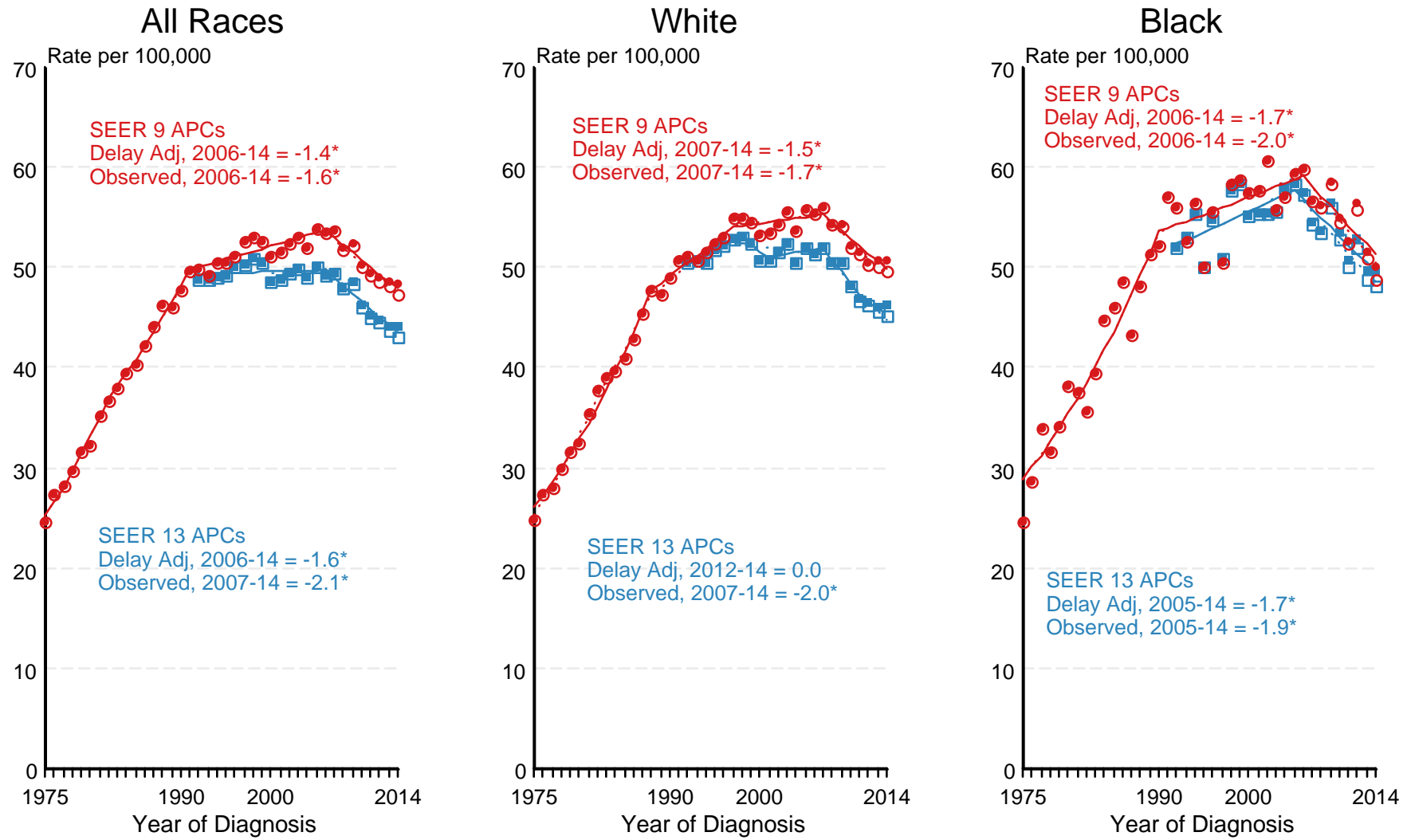
All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2006-14 = -1.4*
Observed, 2006-14 = -1.6*

SEER 13 APCs
Delay Adj, 2006-14 = -1.6*
Observed, 2007-14 = -2.1*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2007-14 = -1.5*
Observed, 2007-14 = -1.7*

SEER 13 APCs
Delay Adj, 2012-14 = 0.0
Observed, 2007-14 = -2.0*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 2006-14 = -1.7*
Observed, 2006-14 = -2.0*

SEER 13 APCs
Delay Adj, 2005-14 = -1.7*
Observed, 2005-14 = -1.9*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-81	5.9*	1981-05	2.9*	2005-14	1.6*							1.6*	1.6*
White	1975-81	6.2*	1981-05	3.2*	2005-14	1.9*							1.9*	1.9*
Black	1975-14	-0.1											-0.1	-0.1
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-96	4.8*	1996-14	1.8*									1.8*	1.8*
White	1992-08	2.9*	2008-12	-0.5	2012-14	6.1							2.1	2.7
Black	1992-95	30.3	1995-01	-6.5	2001-14	0.8							0.8	0.8
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-81	5.9*	1981-05	2.9*	2005-14	1.4*							1.4*	1.4*
White	1975-81	6.2*	1981-05	3.3*	2005-14	1.5*							1.5*	1.5*
Black	1975-14	-0.2											-0.2	-0.2
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-97	4.3*	1997-14	1.6*									1.6*	1.6*
White	1992-05	3.1*	2005-14	1.1*									1.1*	1.1*
White NH[ef]	1992-05	3.6*	2005-14	1.4*									1.4*	1.4*
Black	1992-95	29.3	1995-04	-5.9*	2004-07	14.6	2007-14	-4.5					-0.5	-4.5
Black NH[ef]	1992-95	30.9	1995-00	-7.6	2000-14	0.5							0.5	0.5
API[e]	1992-14	0.5											0.5	0.5
AI/AN[eg]	1992-14	1.9											1.9	1.9
Hispanic[f]	1992-14	0.9*											0.9*	0.9*
U.S. Cancer Mortality[c], 1975-2014														
Note- Alternate mortality trends adjusted for ICD-9/ICD-10 coding change available at: https://surveillance.cancer.gov/joinpoint/jump.html.														
All Races	1975-90	1.5*	1990-02	-0.3	2002-09	0.6	2009-14	-1.3*					-0.4	-1.3*
White	1975-89	1.7*	1989-02	-0.1	2002-09	0.7*	2009-14	-1.0*					-0.2	-1.0*
Black	1975-14	-0.8*											-0.8*	-0.8*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	-0.1											-0.1	-0.1
White	1992-14	0.1											0.1	0.1
White NH[ef]	1992-14	0.4*											0.4*	0.4*
Black	1992-14	-1.1*											-1.1*	-1.1*
Black NH[ef]	1992-14	-1.0*											-1.0*	-1.0*
API[e]	1992-14	-0.9											-0.9	-0.9
AI/AN[eg]	1992-14	0.6											0.6	0.6
Hispanic[f]	1992-14	-0.3											-0.3	-0.3

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Table 16.2
Melanoma of the Skin (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-86	5.4*	1986-05	3.1*	2005-14	1.8*							1.8*	1.8*
White	1975-85	5.9*	1985-05	3.4*	2005-14	2.0*							2.0*	2.0*
Black	1975-14	-0.5											-0.5	-0.5
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-96	5.0*	1996-14	2.0*									2.0*	2.0*
White	1992-05	3.2*	2005-14	1.6*									1.6*	1.6*
Black	1992-95	52.9*	1995-14	-2.6*									-2.6*	-2.6*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-85	5.6*	1985-05	3.2*	2005-14	1.5*							1.5*	1.5*
White	1975-85	5.9*	1985-05	3.5*	2005-14	1.6*							1.6*	1.6*
Black	1975-14	-0.5											-0.5	-0.5
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-96	5.2*	1996-14	1.8*									1.8*	1.8*
White	1992-06	3.1*	2006-14	1.1*									1.3*	1.1*
White NH[ef]	1992-05	3.6*	2005-14	1.6*									1.6*	1.6*
Black	1992-95	53.3*	1995-14	-2.8*									-2.8*	-2.8*
Black NH[ef]	1992-95	53.6*	1995-14	-2.7*									-2.7*	-2.7*
API[e]	1992-14	1.2*											1.2*	1.2*
AI/AN[eg]	1992-14	1.5											1.5	1.5
Hispanic[f]	1992-14	1.4*											1.4*	1.4*

U.S. Cancer Mortality[c], 1975-2014
Note- Alternate mortality trends adjusted for ICD-9/ICD-10 coding change available at: https://surveillance.cancer.gov/joinpoint/jump.html.

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC[d]	
All Races	1975-90	2.2*	1990-02	0.0	2002-09	0.9*	2009-14	-1.3*					-0.3	-1.3*
White	1975-87	2.5*	1987-97	1.0*	1997-00	-1.6	2000-09	1.1*	2009-14	-1.0*			-0.1	-1.0*
Black	1975-14	-0.8*											-0.8*	-0.8*

U.S. Cancer Mortality[c], 1992-2014

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC[d]	
All Races	1992-02	-0.1	2002-09	1.0	2009-14	-1.3*							-0.3	-1.3*
White	1992-02	0.0	2002-09	1.1*	2009-14	-1.1							-0.1	-1.1
White NH[ef]	1992-02	0.2	2002-09	1.4*	2009-14	-0.9							0.1	-0.9
Black	1992-14	-0.3											-0.3	-0.3
Black NH[ef]	1992-14	-0.2											-0.2	-0.2
API[e]	1992-14	-1.8*											-1.8*	-1.8*
AI/AN[eg]	1992-14	2.4											2.4	2.4
Hispanic[f]	1992-14	-0.2											-0.2	-0.2

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 16.3
Melanoma of the Skin (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-86	4.0*	1986-93	0.6	1993-96	5.4	1996-09	2.3*	2009-12	-1.3	2012-14	6.1	1.9	2.3
White	1975-81	6.2*	1981-93	2.1*	1993-05	3.5*	2005-12	0.8	2012-14	5.5			1.9*	3.2*
Black	1975-14	0.0											0.0	0.0
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-97	4.1*	1997-14	1.5*									1.5*	1.5*
White	1992-06	3.0*	2006-12	0.1	2012-14	5.9							1.7	3.0
Black	1992-14	0.1											0.1	0.1
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-86	4.0*	1986-93	0.6	1993-96	5.5	1996-09	2.3*	2009-12	-1.6	2012-14	5.3	1.6	1.8
White	1975-81	6.2*	1981-93	2.1*	1993-05	3.4*	2005-14	1.1*					1.1*	1.1*
Black	1975-14	-0.1											-0.1	-0.1
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-97	4.3*	1997-14	1.4*									1.4*	1.4*
White	1992-05	3.0*	2005-14	0.8									0.8	0.8
White NH[e][f]	1992-05	3.6*	2005-14	1.2*									1.2*	1.2*
Black	1992-14	0.0											0.0	0.0
Black NH[e][f]	1992-14	0.2											0.2	0.2
API[e]	1992-14	-0.3											-0.3	-0.3
AI/AN[e][g]	1992-14	1.8											1.8	1.8
Hispanic[f]	1992-14	0.6											0.6	0.6
U.S. Cancer Mortality[c], 1975-2014														
Note- Alternate mortality trends adjusted for ICD-9/ICD-10 coding change available at: https://surveillance.cancer.gov/joinpoint/jump.html.														
All Races	1975-88	0.8*	1988-14	-0.6*									-0.6*	-0.6*
White	1975-88	0.9*	1988-14	-0.4*									-0.4*	-0.4*
Black	1975-14	-0.9*											-0.9*	-0.9*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	-0.6*											-0.6*	-0.6*
White	1992-14	-0.4*											-0.4*	-0.4*
White NH[e][f]	1992-14	-0.1											-0.1	-0.1
Black	1992-14	-1.7*											-1.7*	-1.7*
Black NH[e][f]	1992-14	-1.6*											-1.6*	-1.6*
API[e]	1992-14	-0.1											-0.1	-0.1
AI/AN[e][g]	-	-											-	-
Hispanic[f]	1992-14	-0.5											-0.5	-0.5

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
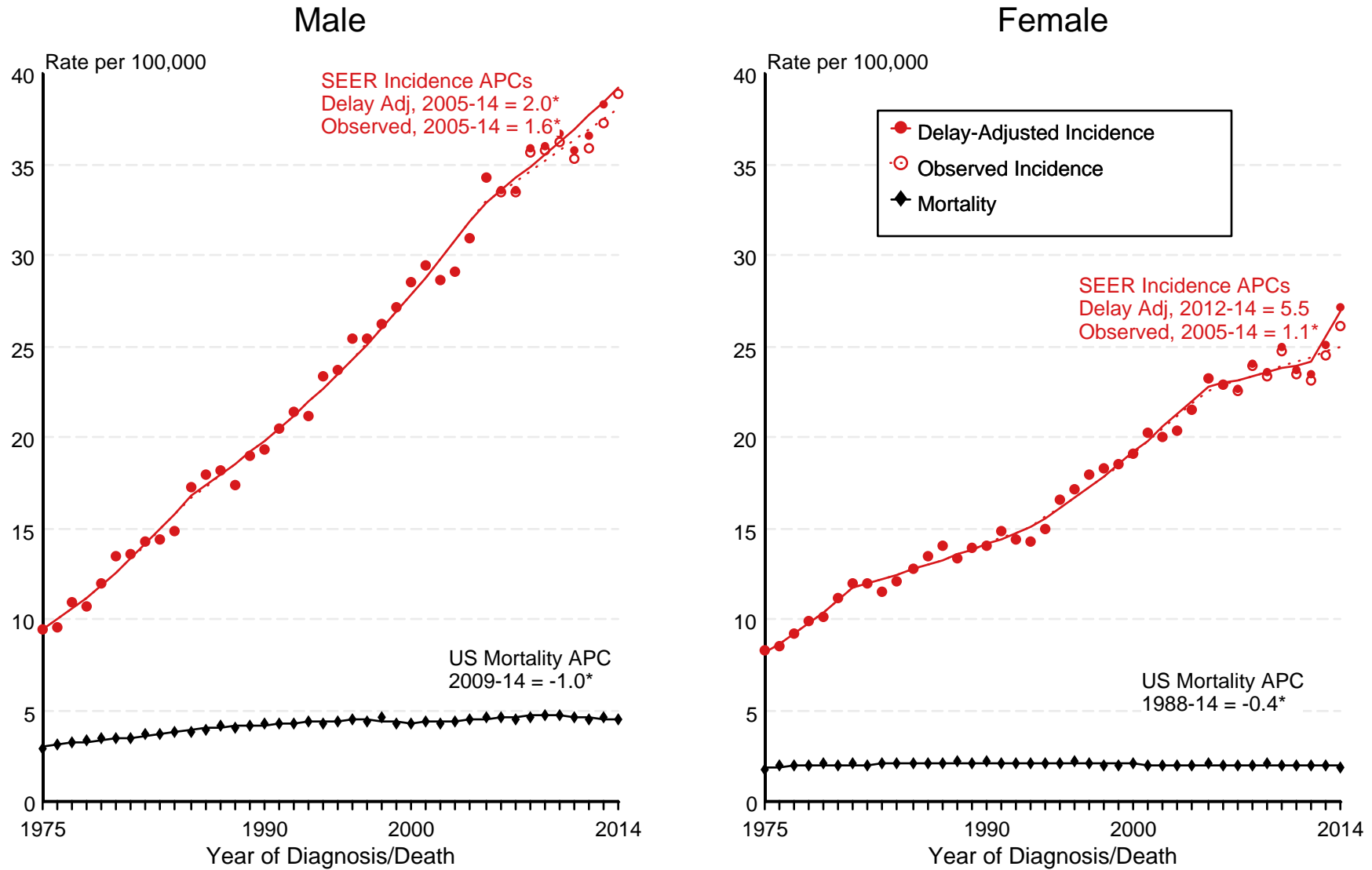[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 16.1

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, 2005-14 = 2.0*
Observed, 2005-14 = 1.6*

US Mortality APC
2009-14 = -1.0*

Year of Diagnosis/Death

Female

Rate per 100,000

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

SEER Incidence APCs
Delay Adj, 2012-14 = 5.5
Observed, 2005-14 = 1.1*

US Mortality APC
1988-14 = -0.4*

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 4.4, January 2017, 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 16.4

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
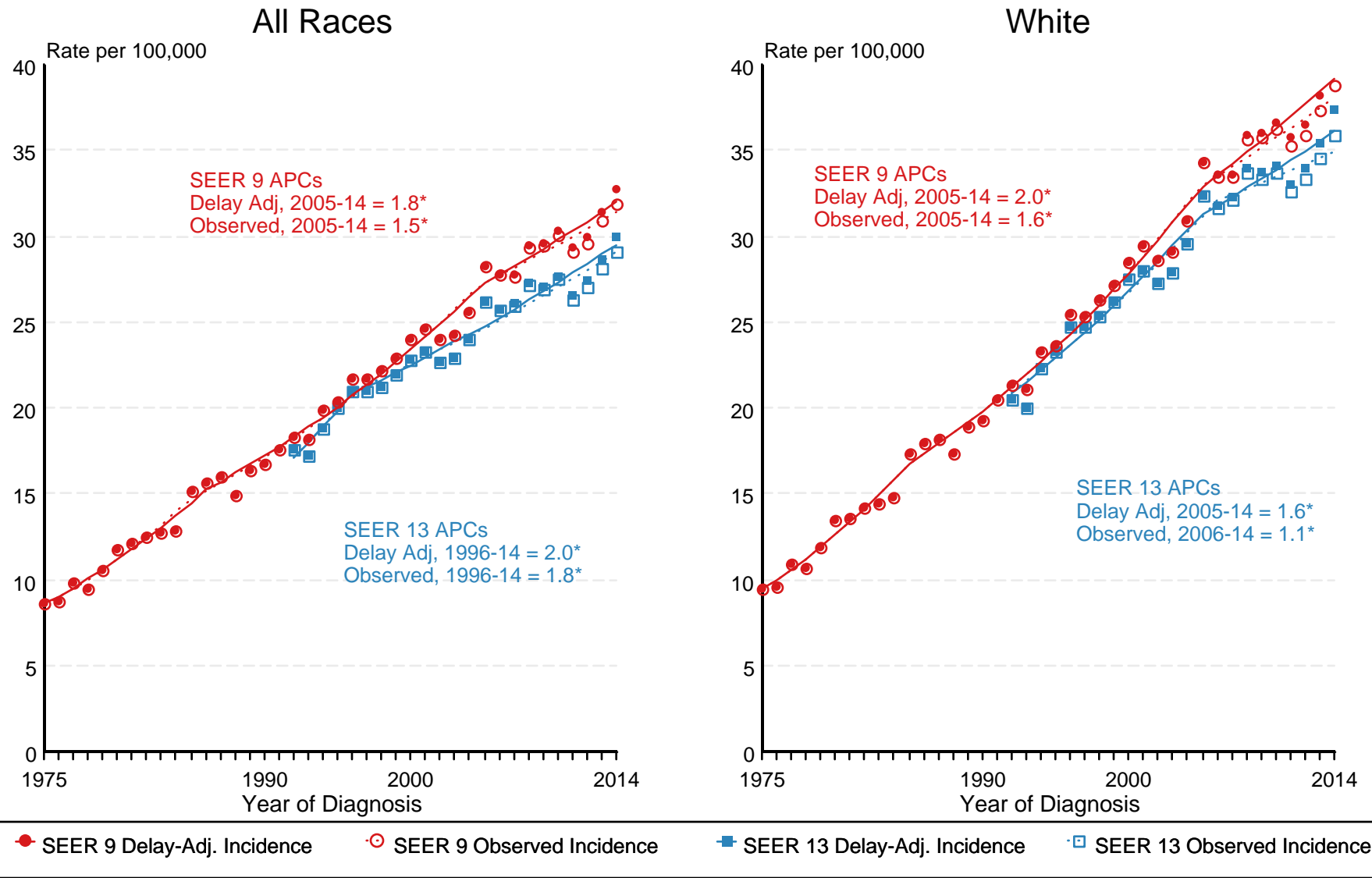
All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2005-14 = 1.8*
Observed, 2005-14 = 1.5*

SEER 13 APCs
Delay Adj, 1996-14 = 2.0*
Observed, 1996-14 = 1.8*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2005-14 = 2.0*
Observed, 2005-14 = 1.6*

SEER 13 APCs
Delay Adj, 2005-14 = 1.6*
Observed, 2006-14 = 1.1*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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 16.5

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
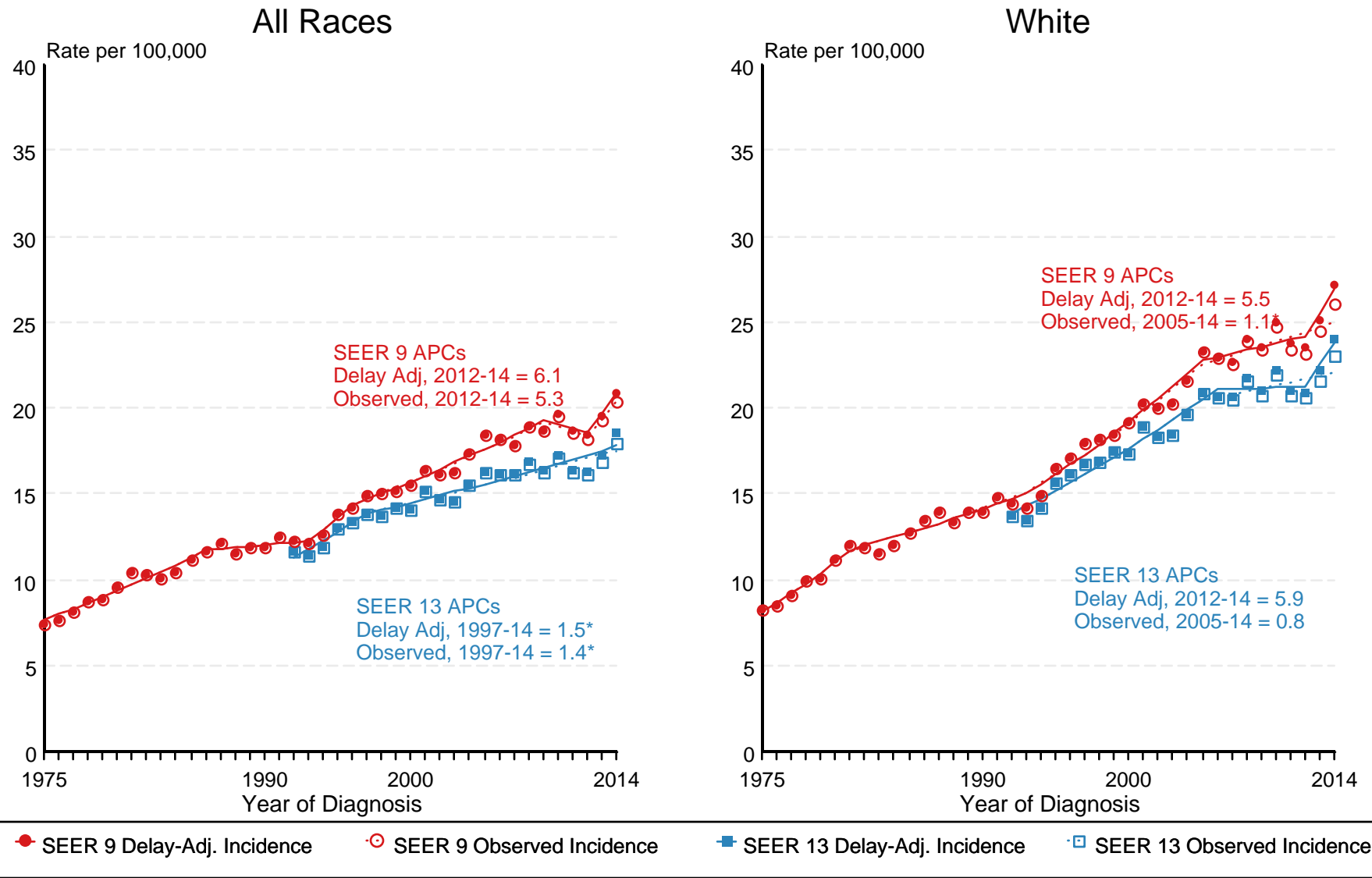
All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2012-14 = 6.1
Observed, 2012-14 = 5.3

SEER 13 APCs
Delay Adj, 1997-14 = 1.5*
Observed, 1997-14 = 1.4*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2012-14 = 5.5
Observed, 2005-14 = 1.1*

SEER 13 APCs
Delay Adj, 2012-14 = 5.9
Observed, 2005-14 = 0.8

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.

[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 4.4, January 2017, 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-06	0.8*	2006-14	2.3*									2.1*	2.3*
White	1975-07	0.8*	2007-14	2.2*									1.9*	2.2*
Black	1975-97	1.3*	1997-00	-4.1	2000-14	2.3*							2.3*	2.3*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-07	0.4*	2007-10	4.5	2010-14	0.2							1.6	0.2
White	1992-06	0.5*	2006-14	2.1*									1.9*	2.1*
Black	1992-14	1.2*											1.2*	1.2*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-91	1.2*	1991-07	0.4*	2007-11	3.5	2011-14	-2.1					0.9	-0.7
White	1975-14	0.8*											0.8*	0.8*
Black	1975-96	1.3*	1996-02	-1.8	2002-11	3.0*	2011-14	-4.3					0.5	-2.6
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-07	0.4*	2007-11	3.0*	2011-14	-2.5							0.6	-1.1
White	1992-14	0.7*											0.7*	0.7*
White NH[ef]	1992-14	0.7*											0.7*	0.7*
Black	1992-14	0.8*											0.8*	0.8*
Black NH[ef]	1992-14	0.8*											0.8*	0.8*
API[e]	1992-14	0.7*											0.7*	0.7*
AI/AN[eg]	1992-14	0.4											0.4	0.4
Hispanic[f]	1992-14	0.2											0.2	0.2
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-94	1.4*	1994-02	-0.7*	2002-09	-1.8*	2009-14	0.3					-0.7*	0.3
White	1975-94	1.4*	1994-02	-0.5*	2002-08	-1.9*	2008-14	-0.1					-0.7*	-0.1
Black	1975-82	3.4*	1982-96	1.2*	1996-09	-1.9*	2009-14	0.7					-0.4	0.7
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-94	2.0	1994-02	-0.7*	2002-09	-1.8*	2009-14	0.3					-0.7*	0.3
White	1992-02	-0.2	2002-08	-2.1*	2008-14	0.0							-0.7*	0.0
White NH[ef]	1992-02	-0.3	2002-09	-1.9*	2009-14	0.3							-0.7*	0.3
Black	1992-98	0.1	1998-09	-2.0*	2009-14	0.9							-0.4	0.9
Black NH[ef]	1992-98	0.2	1998-09	-2.0*	2009-14	1.0							-0.3	1.0
API[e]	1992-14	-0.8*											-0.8*	-0.8*
AI/AN[eg]	1992-14	-1.4											-1.4	-1.4
Hispanic[f]	1992-14	-0.7*											-0.7*	-0.7*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 18.2
Myeloma

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-06	0.8*	2006-14	2.4*									2.2*	2.4*
White	1975-14	1.0*											1.0*	1.0*
Black	1975-14	1.0*											1.0*	1.0*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-05	0.4	2005-14	2.3*									2.3*	2.3*
White	1992-06	0.5*	2006-14	2.4*									2.2*	2.4*
Black	1992-14	1.5*											1.5*	1.5*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-14	0.9*											0.9*	0.9*
White	1975-14	0.9*											0.9*	0.9*
Black	1975-14	0.8*											0.8*	0.8*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-06	0.4*	2006-12	2.4*	2012-14	-3.9							0.7	-0.8
White	1992-14	0.8*											0.8*	0.8*
White NH[e][f]	1992-14	0.9*											0.9*	0.9*
Black	1992-14	1.0*											1.0*	1.0*
Black NH[e][f]	1992-14	1.0*											1.0*	1.0*
API[e]	1992-14	0.7*											0.7*	0.7*
AI/AN[e][g]	1992-14	-0.1											-0.1	-0.1
Hispanic[f]	1992-14	0.4											0.4	0.4
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-94	1.5*	1994-14	-1.0*									-1.0*	-1.0*
White	1975-94	1.5*	1994-14	-0.9*									-0.9*	-0.9*
Black	1975-82	3.7*	1982-94	1.1*	1994-14	-1.4*							-1.4*	-1.4*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-94	2.8	1994-14	-1.0*									-1.0*	-1.0*
White	1992-14	-0.8*											-0.8*	-0.8*
White NH[e][f]	1992-94	3.6	1994-14	-0.9*									-0.9*	-0.9*
Black	1992-94	2.3	1994-12	-1.5*	2012-14	2.0							-0.7	0.2
Black NH[e][f]	1992-94	2.7	1994-12	-1.4*	2012-14	2.3							-0.6	0.4
API[e]	1992-14	-0.4											-0.4	-0.4
AI/AN[e][g]	1992-14	-1.4*											-1.4*	-1.4*
Hispanic[f]	1992-14	-0.7*											-0.7*	-0.7*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 18.3
Myeloma

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-14	0.8*											0.8*	0.8*
White	1975-14	0.6*											0.6*	0.6*
Black	1975-14	1.1*											1.1*	1.1*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	0.7*											0.7*	0.7*
White	1992-14	0.6*											0.6*	0.6*
Black	1992-14	0.8*											0.8*	0.8*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-14	0.7*											0.7*	0.7*
White	1975-14	0.5*											0.5*	0.5*
Black	1975-14	0.9*											0.9*	0.9*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	0.4*											0.4*	0.4*
White	1992-14	0.3											0.3	0.3
White NH[e][f]	1992-14	0.3											0.3	0.3
Black	1992-14	0.4											0.4	0.4
Black NH[e][f]	1992-14	0.5*											0.5*	0.5*
API[e]	1992-14	0.7											0.7	0.7
AI/AN[e][g]	1992-14	0.7											0.7	0.7
Hispanic[f]	1992-14	-0.1											-0.1	-0.1
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-93	1.5*	1993-02	-0.5	2002-08	-2.8*	2008-14	0.2					-0.8*	0.2
White	1975-93	1.4*	1993-02	-0.5	2002-08	-2.7*	2008-14	-0.1					-1.0*	-0.1
Black	1975-96	2.0*	1996-09	-2.2*	2009-14	1.6							-0.1	1.6
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-01	-0.2	2001-08	-2.6*	2008-14	0.1							-0.8*	0.1
White	1992-02	-0.3	2002-08	-2.7*	2008-14	-0.1							-1.0*	-0.1
White NH[e][f]	1992-02	-0.3	2002-08	-2.8*	2008-14	-0.1							-1.0*	-0.1
Black	1992-00	0.1	2000-09	-2.8*	2009-14	2.1							-0.1	2.1
Black NH[e][f]	1992-99	0.5	1999-09	-2.5*	2009-14	2.1							0.0	2.1
API[e]	1992-14	-1.3*											-1.3*	-1.3*
AI/AN[e][g]	1992-14	-1.5											-1.5	-1.5
Hispanic[f]	1992-14	-0.9*											-0.9*	-0.9*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
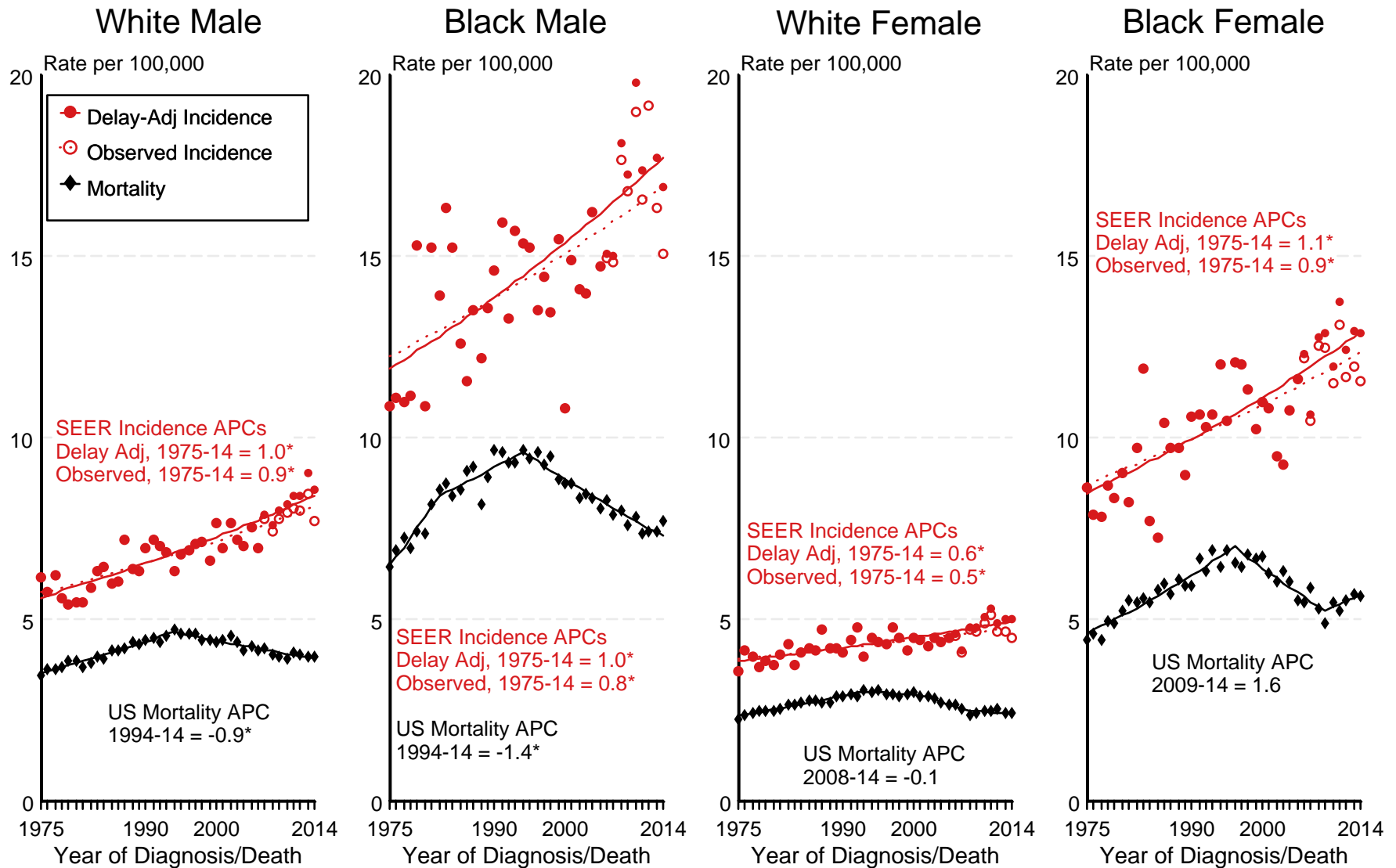[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 18.1

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

White Male

Rate per 100,000

- Delay-Adj Incidence
- Observed Incidence
- Mortality

SEER Incidence APCs
Delay Adj, 1975-14 = 1.0*
Observed, 1975-14 = 0.9*

US Mortality APC
1994-14 = -0.9*

Year of Diagnosis/Death

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = 1.0*
Observed, 1975-14 = 0.8*

US Mortality APC
1994-14 = -1.4*

Year of Diagnosis/Death

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = 0.6*
Observed, 1975-14 = 0.5*

US Mortality APC
2008-14 = -0.1

Year of Diagnosis/Death

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = 1.1*
Observed, 1975-14 = 0.9*

US Mortality APC
2009-14 = 1.6

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 4.4, January 2017, 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 18.3

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
Myeloma, Male, by Race
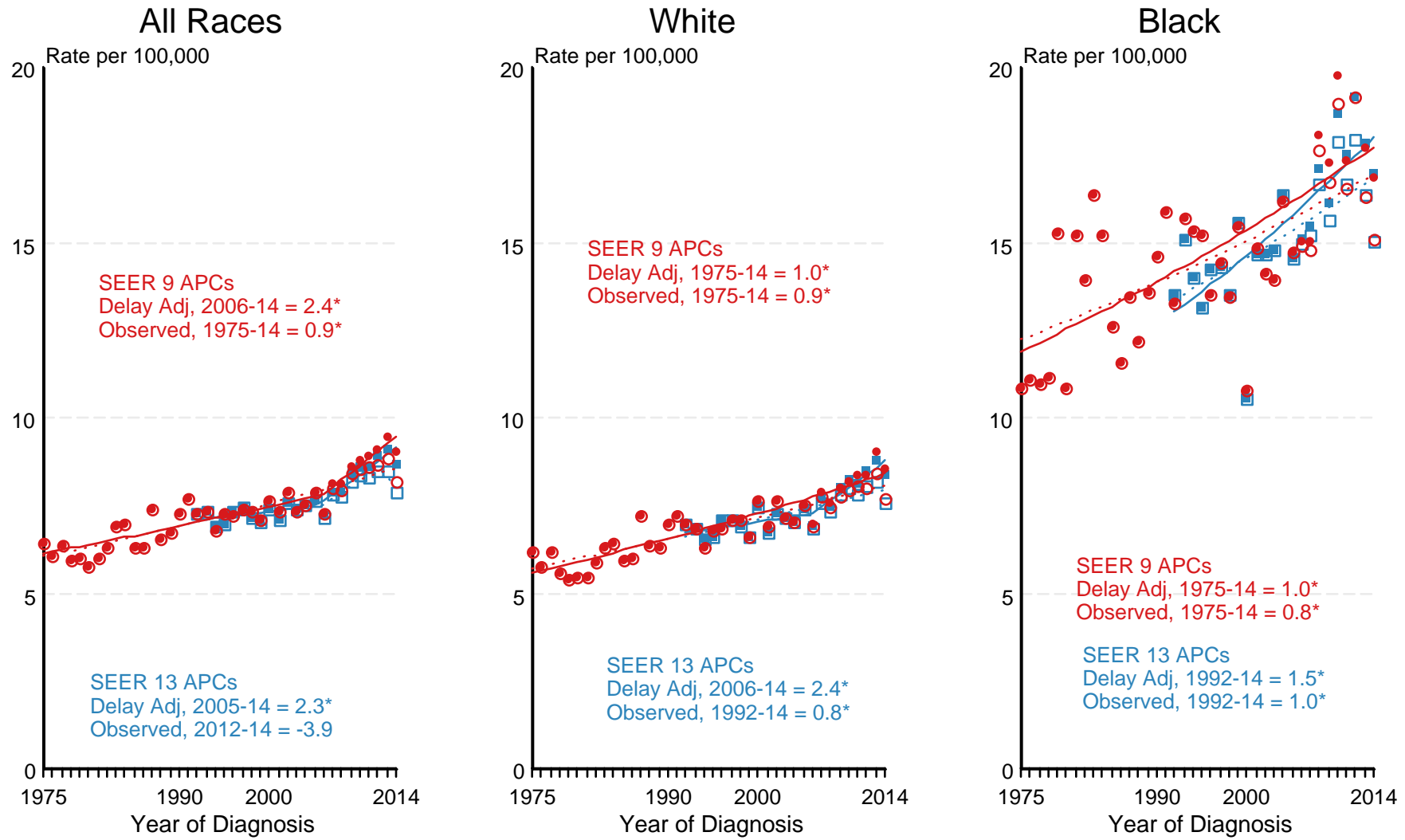
All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2006-14 = 2.4*
Observed, 1975-14 = 0.9*

SEER 13 APCs
Delay Adj, 2005-14 = 2.3*
Observed, 2012-14 = -3.9

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 1.0*
Observed, 1975-14 = 0.9*

SEER 13 APCs
Delay Adj, 2006-14 = 2.4*
Observed, 1992-14 = 0.8*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 1.0*
Observed, 1975-14 = 0.8*

SEER 13 APCs
Delay Adj, 1992-14 = 1.5*
Observed, 1992-14 = 1.0*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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 18.4

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
Myeloma, Female, by Race
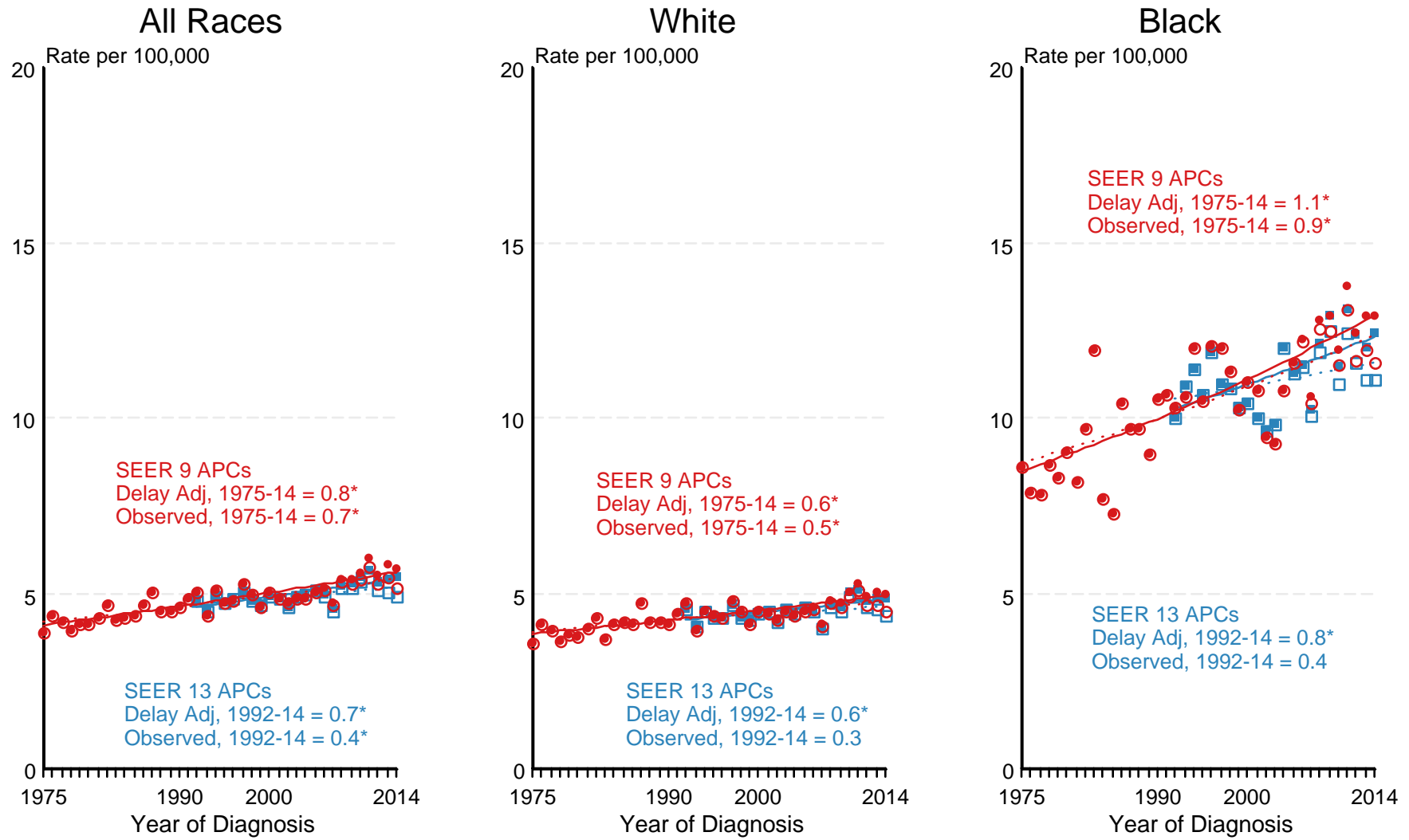
All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 0.8*
Observed, 1975-14 = 0.7*

SEER 13 APCs
Delay Adj, 1992-14 = 0.7*
Observed, 1992-14 = 0.4*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 0.6*
Observed, 1975-14 = 0.5*

SEER 13 APCs
Delay Adj, 1992-14 = 0.6*
Observed, 1992-14 = 0.3

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 1.1*
Observed, 1975-14 = 0.9*

SEER 13 APCs
Delay Adj, 1992-14 = 0.8*
Observed, 1992-14 = 0.4

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-91	3.6*	1991-07	0.7*	2007-14	-0.6							-0.3	-0.6
White	1975-90	3.8*	1990-07	0.8*	2007-14	-0.7*							-0.3	-0.7*
Black	1975-95	4.4*	1995-14	0.2									0.2	0.2
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-09	0.5*	2009-14	-1.0									-0.3	-1.0
White	1992-07	0.7*	2007-14	-0.6									-0.3	-0.6
Black	1992-97	4.0*	1997-00	-4.3	2000-04	3.8	2004-14	-0.6					-0.6	-0.6
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-91	3.6*	1991-08	0.7*	2008-14	-1.2*							-0.6*	-1.2*
White	1975-90	3.8*	1990-07	0.8*	2007-14	-1.1*							-0.7*	-1.1*
Black	1975-95	4.5*	1995-14	0.0									0.0	0.0
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-09	0.5*	2009-14	-1.5*									-0.6	-1.5*
White	1992-09	0.6*	2009-14	-1.5*									-0.6	-1.5*
White NH[ef]	1992-07	0.8*	2007-14	-1.0*									-0.6*	-1.0*
Black	1992-97	4.0*	1997-00	-4.3	2000-04	4.0	2004-14	-1.0*					-1.0*	-1.0*
Black NH[ef]	1992-97	3.8*	1997-00	-4.2	2000-04	4.0	2004-14	-0.8*					-0.8*	-0.8*
API[e]	1992-14	0.2											0.2	0.2
AI/AN[eg]	1992-14	1.3											1.3	1.3
Hispanic[f]	1992-14	0.4*											0.4*	0.4*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-91	2.5*	1991-97	1.6*	1997-06	-3.1*	2006-14	-2.2*					-2.3*	-2.2*
White	1975-91	2.5*	1991-97	1.6*	1997-06	-3.1*	2006-14	-2.2*					-2.3*	-2.2*
Black	1975-96	2.7*	1996-14	-2.3*									-2.3*	-2.3*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-97	1.7*	1997-06	-3.1*	2006-14	-2.2*							-2.3*	-2.2*
White	1992-97	1.7*	1997-06	-3.1*	2006-14	-2.2*							-2.3*	-2.2*
White NH[ef]	1992-97	1.9*	1997-06	-3.1*	2006-14	-2.2*							-2.3*	-2.2*
Black	1992-96	2.5	1996-14	-2.3*									-2.3*	-2.3*
Black NH[ef]	1992-96	2.9	1996-14	-2.2*									-2.2*	-2.2*
API[e]	1992-14	-1.9*											-1.9*	-1.9*
AI/AN[eg]	1992-14	-0.8											-0.8	-0.8
Hispanic[f]	1992-97	3.0*	1997-03	-3.6*	2003-14	-1.3*							-1.3*	-1.3*

Table 19.2
Non-Hodgkin Lymphoma

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-91	4.3*	1991-14	0.3*									0.3*	0.3*
White	1975-90	4.4*	1990-08	0.6*	2008-14	-0.6							-0.2	-0.6
Black	1975-94	5.5*	1994-14	-0.3									-0.3	-0.3
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	0.2											0.2	0.2
White	1992-95	2.7	1995-98	-2.1	1998-09	0.8*	2009-12	-2.1	2012-14	1.8			0.1	-0.2
Black	1992-14	-0.1											-0.1	-0.1
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-91	4.2*	1991-10	0.4*	2010-14	-1.6							-0.5	-1.6
White	1975-90	4.4*	1990-08	0.6*	2008-14	-1.0							-0.5	-1.0
Black	1975-94	5.5*	1994-14	-0.5									-0.5	-0.5
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-10	0.2*	2010-14	-1.3									-0.5	-1.3
White	1992-95	2.7	1995-98	-2.2	1998-07	0.9*	2007-14	-0.9*					-0.5	-0.9*
White NH[e][f]	1992-95	2.9	1995-98	-2.1	1998-07	1.0*	2007-14	-0.9*					-0.5	-0.9*
Black	1992-14	-0.3											-0.3	-0.3
Black NH[e][f]	1992-14	-0.2											-0.2	-0.2
API[e]	1992-14	0.3*											0.3*	0.3*
AI/AN[e][g]	1992-14	0.2											0.2	0.2
Hispanic[f]	1992-14	0.1											0.1	0.1
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-91	2.7*	1991-97	1.6*	1997-06	-2.9*	2006-14	-2.0*					-2.1*	-2.0*
White	1975-91	2.6*	1991-97	1.6*	1997-06	-2.8*	2006-14	-2.0*					-2.1*	-2.0*
Black	1975-96	2.7*	1996-14	-2.4*									-2.4*	-2.4*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-97	1.7*	1997-06	-2.9*	2006-14	-2.0*							-2.1*	-2.0*
White	1992-97	1.7*	1997-06	-2.8*	2006-14	-2.0*							-2.1*	-2.0*
White NH[e][f]	1992-97	1.7*	1997-14	-2.5*									-2.5*	-2.5*
Black	1992-96	2.6	1996-14	-2.3*									-2.3*	-2.3*
Black NH[e][f]	1992-96	2.9	1996-14	-2.2*									-2.2*	-2.2*
API[e]	1992-14	-2.0*											-2.0*	-2.0*
AI/AN[e][g]	1992-14	-0.5											-0.5	-0.5
Hispanic[f]	1992-96	4.5	1996-03	-3.9*	2003-14	-0.9*							-0.9*	-0.9*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.
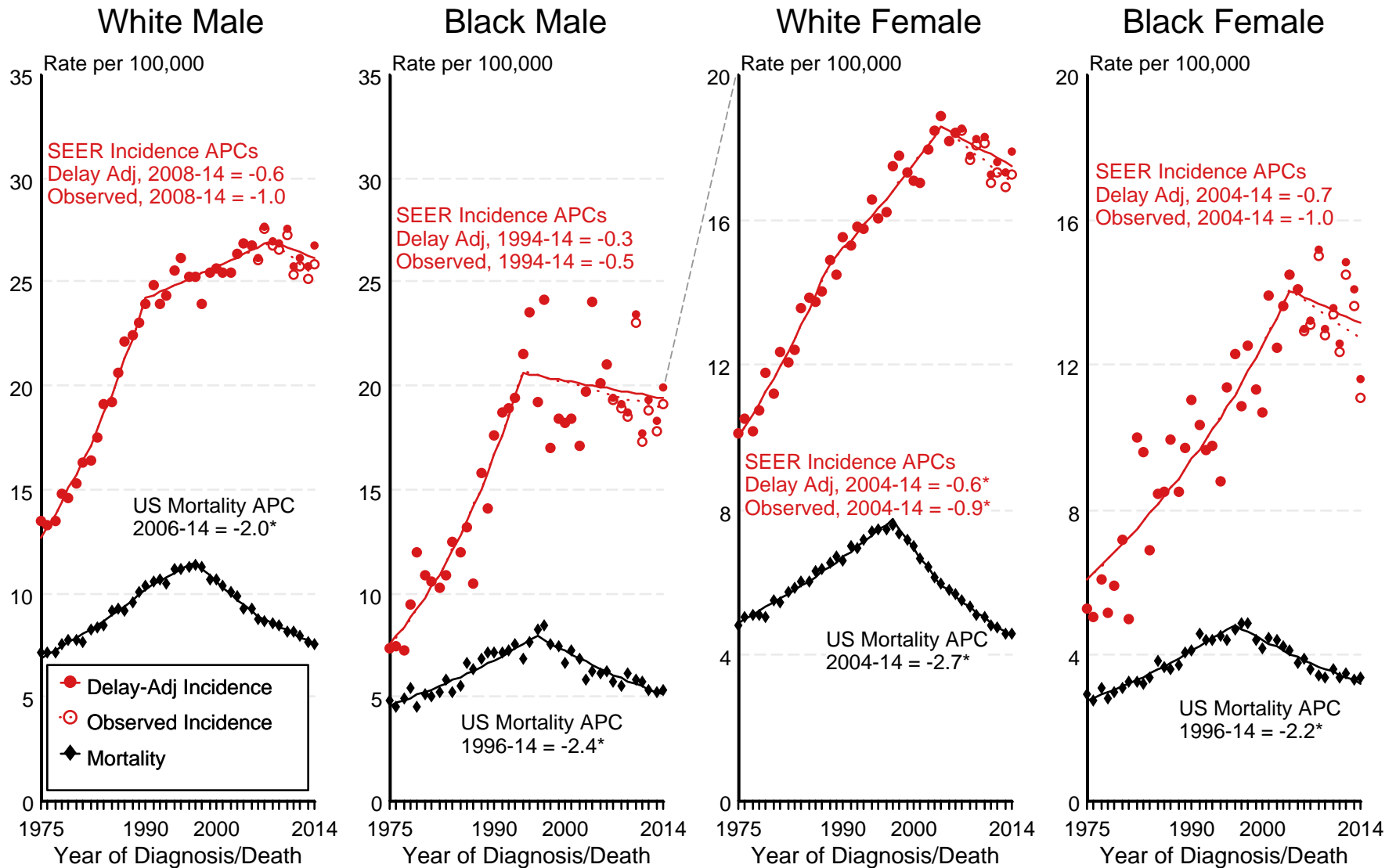
Table 19.3
Non-Hodgkin Lymphoma

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-88	3.0*	1988-04	1.4*	2004-14	-0.6*							-0.6*	-0.6*
White	1975-88	3.1*	1988-04	1.4*	2004-14	-0.6*							-0.6*	-0.6*
Black	1975-04	2.9*	2004-14	-0.7									-0.7	-0.7
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-04	1.3*	2004-14	-0.5*									-0.5*	-0.5*
White	1992-04	1.4*	2004-14	-0.5									-0.5	-0.5
Black	1992-98	5.6*	1998-14	0.5									0.5	0.5
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-88	3.0*	1988-04	1.4*	2004-14	-0.9*							-0.9*	-0.9*
White	1975-88	3.0*	1988-04	1.4*	2004-14	-0.9*							-0.9*	-0.9*
Black	1975-04	2.9*	2004-14	-1.0									-1.0	-1.0
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-04	1.4*	2004-14	-0.8*									-0.8*	-0.8*
White	1992-04	1.4*	2004-14	-0.8*									-0.8*	-0.8*
White NH[e][f]	1992-04	1.5*	2004-14	-0.9*									-0.9*	-0.9*
Black	1992-98	5.8*	1998-14	0.2									0.2	0.2
Black NH[e][f]	1992-03	3.1*	2003-14	-0.4									-0.4	-0.4
API[e]	1992-14	0.2											0.2	0.2
AI/AN[e][g]	1992-14	2.1*											2.1*	2.1*
Hispanic[f]	1992-14	0.8*											0.8*	0.8*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-94	2.2*	1994-97	1.0	1997-09	-3.2*	2009-14	-2.2*					-2.7*	-2.2*
White	1975-97	2.1*	1997-04	-3.8*	2004-14	-2.7*							-2.7*	-2.7*
Black	1975-96	2.7*	1996-14	-2.2*									-2.2*	-2.2*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-94	2.9*	1994-97	1.0	1997-09	-3.2*	2009-14	-2.2*					-2.7*	-2.2*
White	1992-94	3.3*	1994-97	0.6	1997-00	-2.5	2000-03	-4.4*	2003-14	-2.7*			-2.7*	-2.7*
White NH[e][f]	1992-94	3.9*	1994-97	0.9	1997-11	-3.2*	2011-14	-1.6					-2.7*	-2.0*
Black	1992-97	1.7	1997-14	-2.2*									-2.2*	-2.2*
Black NH[e][f]	1992-97	1.9	1997-14	-2.2*									-2.2*	-2.2*
API[e]	1992-14	-1.7*											-1.7*	-1.7*
AI/AN[e][g]	1992-01	5.6*	2001-14	-4.5*									-4.5*	-4.5*
Hispanic[f]	1992-97	3.0	1997-14	-2.1*									-2.1*	-2.1*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
     Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
     The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

Figure 19.1

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

White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2008-14 = -0.6
Observed, 2008-14 = -1.0

US Mortality APC
2006-14 = -2.0*

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

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1994-14 = -0.3
Observed, 1994-14 = -0.5

US Mortality APC
1996-14 = -2.4*

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2004-14 = -0.6*
Observed, 2004-14 = -0.9*

US Mortality APC
2004-14 = -2.7*

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2004-14 = -0.7
Observed, 2004-14 = -1.0

US Mortality APC
1996-14 = -2.2*

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 4.4, January 2017, 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 19.5

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates[a]
SEER 9 Areas Compared to SEER 13 Areas
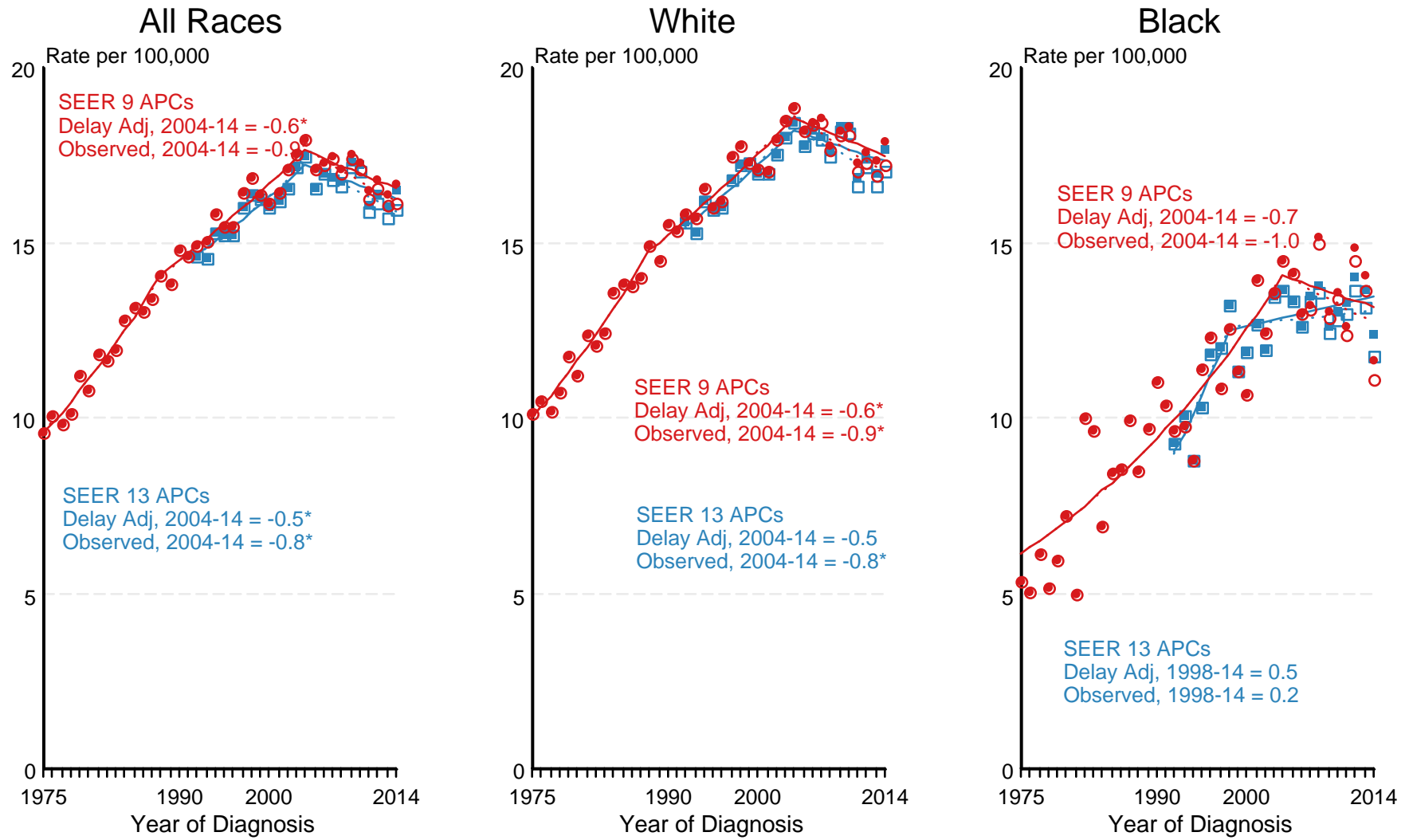## Non-Hodgkin Lymphoma, Male, by Race

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1991-14 = 0.3*
Observed, 2010-14 = -1.6

SEER 13 APCs
Delay Adj, 1992-14 = 0.2
Observed, 2010-14 = -1.3

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2008-14 = -0.6
Observed, 2008-14 = -1.0

SEER 13 APCs
Delay Adj, 2012-14 = 1.8
Observed, 2007-14 = -0.9*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1994-14 = -0.3
Observed, 1994-14 = -0.5

SEER 13 APCs
Delay Adj, 1992-14 = -0.1
Observed, 1992-14 = -0.3

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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 19.6

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, 2004-14 = -0.6*
Observed, 2004-14 = -0.9

SEER 13 APCs
Delay Adj, 2004-14 = -0.5*
Observed, 2004-14 = -0.8*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-14 = -0.6*
Observed, 2004-14 = -0.9*

SEER 13 APCs
Delay Adj, 2004-14 = -0.5
Observed, 2004-14 = -0.8*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-14 = -0.7
Observed, 2004-14 = -1.0

SEER 13 APCs
Delay Adj, 1998-14 = 0.5
Observed, 1998-14 = 0.2

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-81	0.7	1981-03	-1.1*	2003-14	0.8*							0.8*	0.8*
White	1975-03	-0.9*	2003-14	1.2*									1.2*	1.2*
Black	1975-84	2.2*	1984-14	-2.4*									-2.4*	-2.4*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-04	-1.2*	2004-14	0.8*									0.8*	0.8*
White	1992-03	-1.1*	2003-14	1.1*									1.1*	1.1*
Black	1992-14	-2.3*											-2.3*	-2.3*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-81	0.7	1981-03	-1.1*	2003-14	0.6*							0.6*	0.6*
White	1975-03	-0.9*	2003-14	1.0*									1.0*	1.0*
Black	1975-84	2.3*	1984-14	-2.4*									-2.4*	-2.4*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-03	-1.3*	2003-14	0.5*									0.5*	0.5*
White	1992-03	-1.1*	2003-14	0.9*									0.9*	0.9*
White NH[ef]	1992-03	-0.8*	2003-14	1.1*									1.1*	1.1*
Black	1992-14	-2.4*											-2.4*	-2.4*
Black NH[ef]	1992-14	-2.4*											-2.4*	-2.4*
API[e]	1992-14	-0.8*											-0.8*	-0.8*
AI/AN[eg]	1992-14	-1.3											-1.3	-1.3
Hispanic[f]	1992-02	-2.1*	2002-14	0.7									0.7	0.7
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-79	-0.5	1979-93	-1.7*	1993-00	-2.7*	2000-09	-1.3*	2009-14	0.6			-0.3	0.6
White	1975-05	-1.9*	2005-14	0.2									0.2	0.2
Black	1975-80	3.2*	1980-93	-1.5*	1993-09	-4.0*	2009-14	-0.5					-2.1*	-0.5
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-06	-2.1*	2006-14	0.1									-0.2	0.1
White	1992-05	-1.9*	2005-14	0.3									0.3	0.3
White NH[ef]	1992-05	-1.7*	2005-14	0.4									0.4	0.4
Black	1992-09	-3.9*	2009-14	-0.6									-2.1*	-0.6
Black NH[ef]	1992-09	-3.9*	2009-14	-0.6									-2.1*	-0.6
API[e]	1992-14	-2.0*											-2.0*	-2.0*
AI/AN[eg]	1992-14	-1.8*											-1.8*	-1.8*
Hispanic[f]	1992-05	-3.0*	2005-14	-0.5									-0.5	-0.5

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-83	-0.2	1983-03	-1.4*	2003-14	1.0*							1.0*	1.0*
White	1975-03	-1.2*	2003-14	1.4*									1.4*	1.4*
Black	1975-86	2.0*	1986-14	-2.7*									-2.7*	-2.7*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-04	-1.4*	2004-14	1.1*									1.1*	1.1*
White	1992-03	-1.3*	2003-14	1.3*									1.3*	1.3*
Black	1992-10	-3.0*	2010-14	1.1									-1.2	1.1
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-83	-0.2	1983-03	-1.4*	2003-14	0.9*							0.9*	0.9*
White	1975-01	-1.2*	2001-14	0.9*									0.9*	0.9*
Black	1975-87	1.6*	1987-14	-2.9*									-2.9*	-2.9*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-03	-1.6*	2003-14	0.7*									0.7*	0.7*
White	1992-03	-1.2*	2003-14	1.1*									1.1*	1.1*
White NH[ef]	1992-03	-1.0*	2003-14	1.3*									1.3*	1.3*
Black	1992-11	-3.0*	2011-14	1.6									-1.5	0.4
Black NH[ef]	1992-10	-3.0*	2010-14	0.5									-1.4	0.5
API[e]	1992-14	-0.8*											-0.8*	-0.8*
AI/AN[eg]	1992-14	-2.3*											-2.3*	-2.3*
Hispanic[f]	1992-14	-0.5											-0.5	-0.5
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-93	-1.9*	1993-00	-3.0*	2000-09	-1.3*	2009-14	1.1					0.0	1.1
White	1975-05	-2.1*	2005-14	0.8*									0.8*	0.8*
Black	1975-80	3.9*	1980-93	-1.5*	1993-09	-4.1*	2009-14	-0.7					-2.2*	-0.7
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-00	-2.8*	2000-09	-1.3*	2009-14	1.1							0.0	1.1
White	1992-05	-2.0*	2005-14	0.7									0.7	0.7
White NH[ef]	1992-05	-1.8*	2005-14	0.8*									0.8*	0.8*
Black	1992-09	-4.0*	2009-14	-0.8									-2.2*	-0.8
Black NH[ef]	1992-09	-4.0*	2009-14	-0.7									-2.2*	-0.7
API[e]	1992-14	-2.0*											-2.0*	-2.0*
AI/AN[eg]	1992-14	-1.7*											-1.7*	-1.7*
Hispanic[f]	1992-05	-3.7*	2005-14	-0.9*									-0.9*	-0.9*

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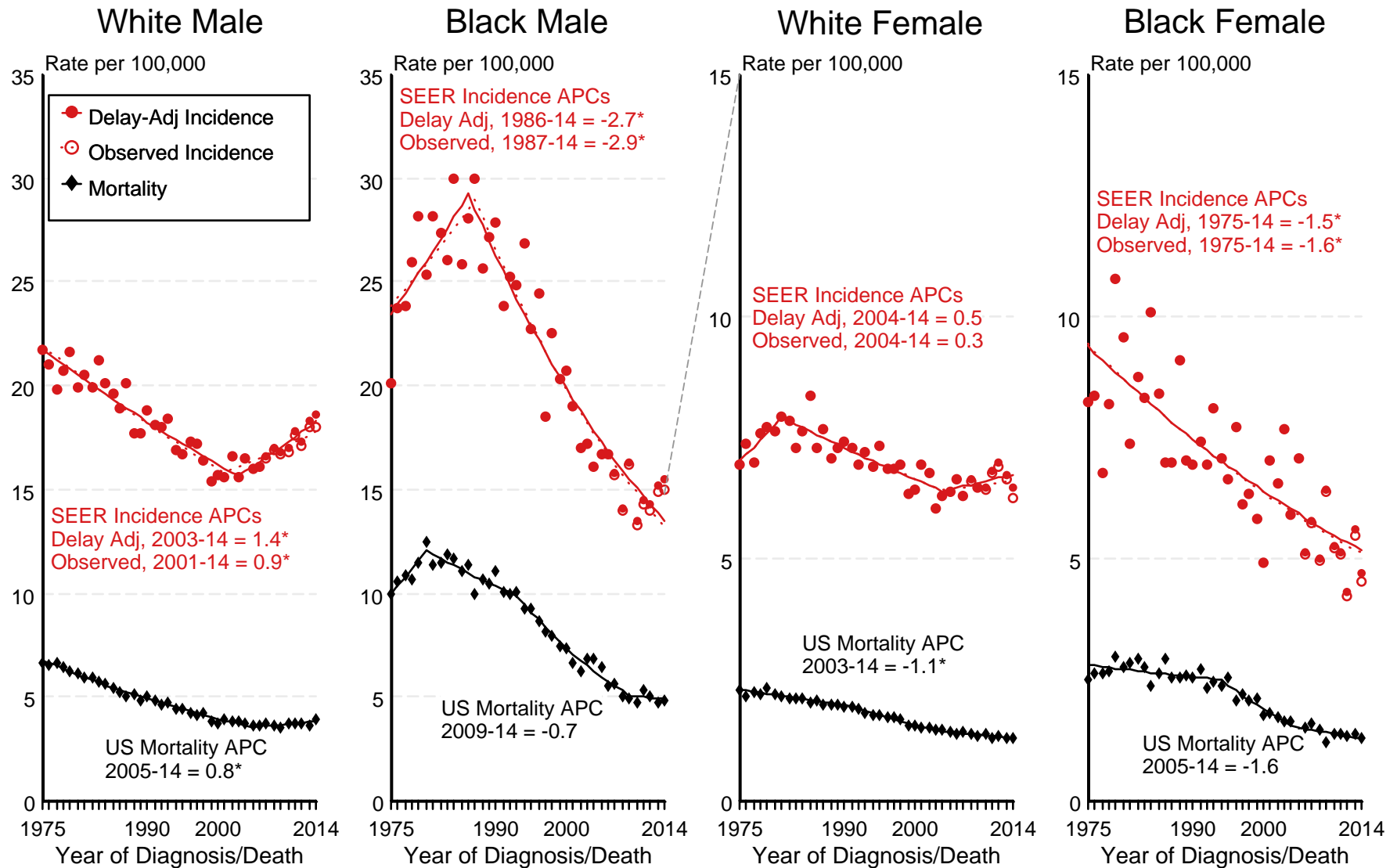Cancer of the Oral Cavity and Pharynx (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-80	2.6*	1980-04	-0.9*	2004-14	0.2							0.2	0.2
White	1975-81	2.1*	1981-04	-0.9*	2004-14	0.5							0.5	0.5
Black	1975-14	-1.5*											-1.5*	-1.5*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-0.6*											-0.6*	-0.6*
White	1992-04	-1.3*	2004-14	0.5									0.5	0.5
Black	1992-14	-1.7*											-1.7*	-1.7*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-79	2.9	1979-14	-0.7*									-0.7*	-0.7*
White	1975-81	2.1*	1981-04	-0.9*	2004-14	0.3							0.3	0.3
Black	1975-14	-1.6*											-1.6*	-1.6*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-0.7*											-0.7*	-0.7*
White	1992-04	-1.3*	2004-14	0.3									0.3	0.3
White NH[ef]	1992-14	-0.4*											-0.4*	-0.4*
Black	1992-14	-1.8*											-1.8*	-1.8*
Black NH[ef]	1992-14	-1.7*											-1.7*	-1.7*
API[e]	1992-14	-0.8*											-0.8*	-0.8*
AI/AN[eg]	1992-14	0.2											0.2	0.2
Hispanic[f]	1992-14	-0.3											-0.3	-0.3
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-90	-0.9*	1990-04	-2.4*	2004-14	-1.2*							-1.2*	-1.2*
White	1975-90	-1.0*	1990-03	-2.3*	2003-14	-1.1*							-1.1*	-1.1*
Black	1975-94	-0.6*	1994-05	-4.5*	2005-14	-1.6							-1.6	-1.6
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-04	-2.4*	2004-14	-1.2*									-1.2*	-1.2*
White	1992-03	-2.3*	2003-14	-1.1*									-1.1*	-1.1*
White NH[ef]	1992-03	-2.2*	2003-14	-1.0*									-1.0*	-1.0*
Black	1992-14	-3.2*											-3.2*	-3.2*
Black NH[ef]	1992-14	-3.2*											-3.2*	-3.2*
API[e]	1992-14	-1.9*											-1.9*	-1.9*
AI/AN[eg]	1992-14	-2.0											-2.0	-2.0
Hispanic[f]	1992-14	-0.9*											-0.9*	-0.9*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 20.1

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

SEER Cancer Statistics Review 1975-2014

National Cancer Institute

White Male

Rate per 100,000

- Delay-Adj Incidence
- Observed Incidence
- Mortality

SEER Incidence APCs
Delay Adj, 2003-14 = 1.4*
Observed, 2001-14 = 0.9*

US Mortality APC
2005-14 = 0.8*

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1986-14 = -2.7*
Observed, 1987-14 = -2.9*

US Mortality APC
2009-14 = -0.7

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2004-14 = 0.5
Observed, 2004-14 = 0.3

US Mortality APC
2003-14 = -1.1*

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = -1.5*
Observed, 1975-14 = -1.6*

US Mortality APC
2005-14 = -1.6

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).
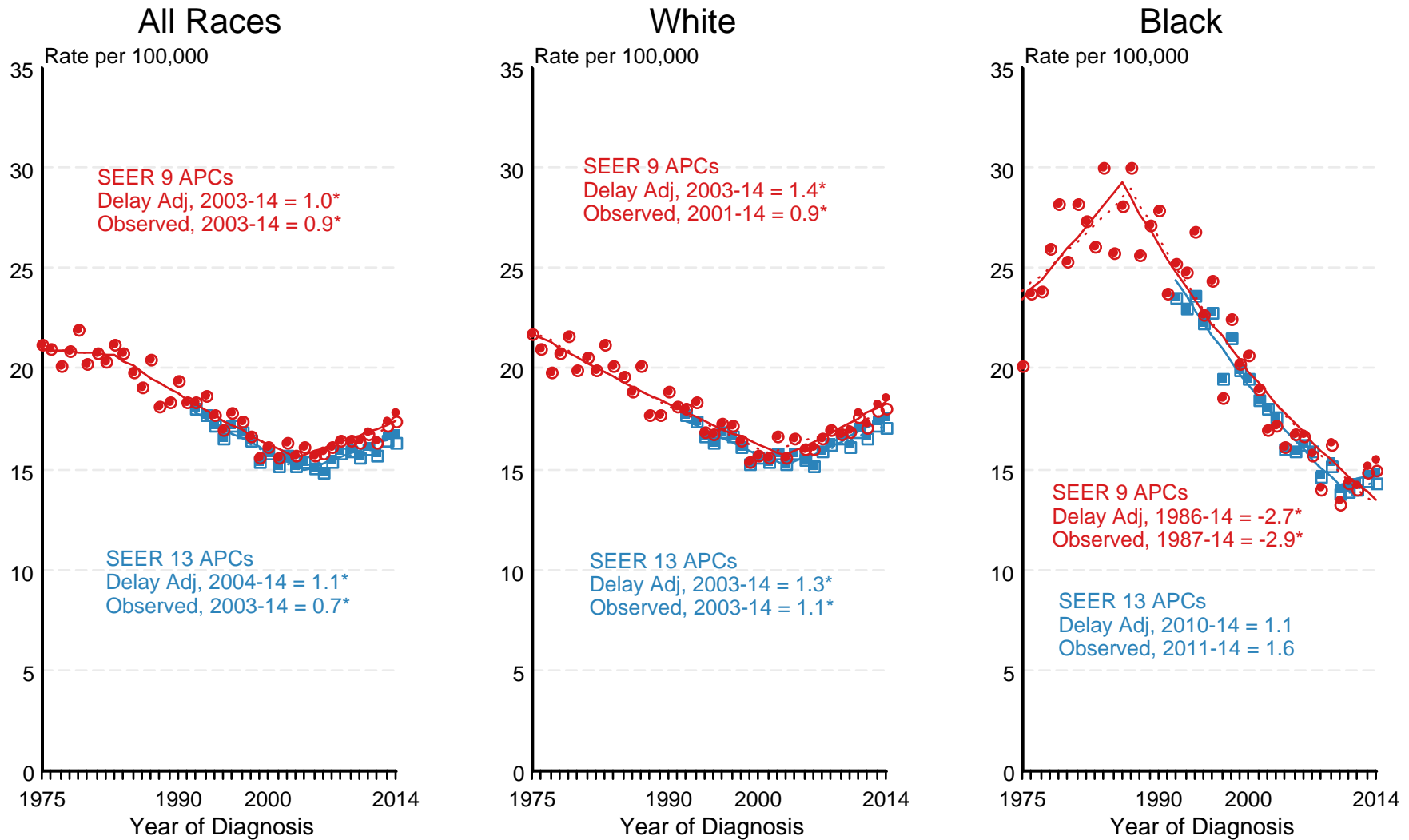   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
    The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
*   The APC is significantly different from zero (p < 0.05).

Figure 20.4

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2003-14 = 1.0*
Observed, 2003-14 = 0.9*

SEER 13 APCs
Delay Adj, 2004-14 = 1.1*
Observed, 2003-14 = 0.7*

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2003-14 = 1.4*
Observed, 2001-14 = 0.9*

SEER 13 APCs
Delay Adj, 2003-14 = 1.3*
Observed, 2003-14 = 1.1*

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1986-14 = -2.7*
Observed, 1987-14 = -2.9*

SEER 13 APCs
Delay Adj, 2010-14 = 1.1
Observed, 2011-14 = 1.6
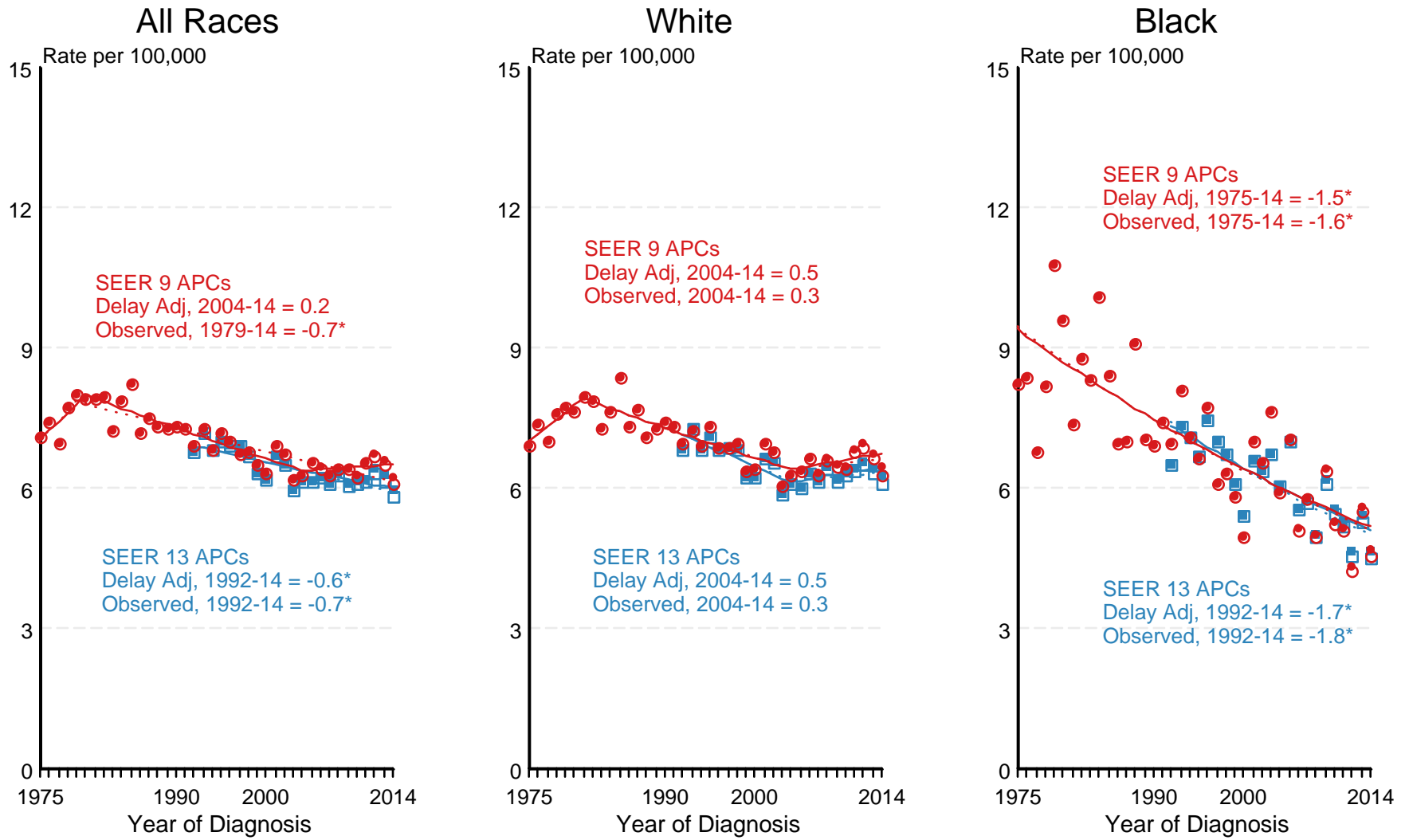
Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
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 4.4, January 2017, 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 20.5

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, 2004-14 = 0.2
Observed, 1979-14 = -0.7*

SEER 13 APCs
Delay Adj, 1992-14 = -0.6*
Observed, 1992-14 = -0.7*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2004-14 = 0.5
Observed, 2004-14 = 0.3

SEER 13 APCs
Delay Adj, 2004-14 = 0.5
Observed, 2004-14 = 0.3

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = -1.5*
Observed, 1975-14 = -1.6*

SEER 13 APCs
Delay Adj, 1992-14 = -1.7*
Observed, 1992-14 = -1.8*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-85	0.2	1985-01	-0.7*	2001-14	-1.3*							-1.3*	-1.3*
White	1975-81	-0.9	1981-84	2.6	1984-10	-0.9*	2010-14	-2.7*					-1.7*	-2.7*
Black	1975-14	-0.4*											-0.4*	-0.4*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-12	-0.9*	2012-14	-3.6									-1.5*	-2.3
White	1992-97	-1.2	1997-01	0.5	2001-04	-3.1	2004-10	-0.3	2010-14	-2.8*			-1.4*	-2.8*
Black	1992-14	-0.4											-0.4	-0.4
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-87	0.1	1987-10	-0.9*	2010-14	-3.1*							-1.9*	-3.1*
White	1975-89	0.1	1989-10	-1.0*	2010-14	-3.1*							-1.9*	-3.1*
Black	1975-14	-0.5*											-0.5*	-0.5*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-12	-1.0*	2012-14	-4.7									-1.8*	-2.9*
White	1992-97	-1.2	1997-01	0.5	2001-04	-3.1	2004-10	-0.3	2010-14	-3.3*			-1.7*	-3.3*
White NH[ef]	1992-09	-0.9*	2009-14	-2.7*									-1.9*	-2.7*
Black	1992-14	-0.5*											-0.5*	-0.5*
Black NH[ef]	1992-14	-0.5*											-0.5*	-0.5*
API[e]	1992-14	-0.5*											-0.5*	-0.5*
AI/AN[eg]	1992-14	-0.5											-0.5	-0.5
Hispanic[f]	1992-14	-0.5*											-0.5*	-0.5*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-82	-1.2*	1982-92	0.3*	1992-98	-1.2*	1998-03	0.6	2003-14	-2.2*			-2.2*	-2.2*
White	1975-81	-1.5*	1981-92	0.3*	1992-98	-1.0*	1998-03	0.6	2003-14	-2.2*			-2.2*	-2.2*
Black	1975-93	0.4*	1993-14	-1.0*									-1.0*	-1.0*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-98	-1.2*	1998-03	0.6	2003-14	-2.2*							-2.2*	-2.2*
White	1992-98	-1.1*	1998-03	0.7	2003-14	-2.2*							-2.2*	-2.2*
White NH[ef]	1992-05	-0.2*	2005-14	-2.4*									-2.4*	-2.4*
Black	1992-14	-1.1*											-1.1*	-1.1*
Black NH[ef]	1992-14	-1.0*											-1.0*	-1.0*
API[e]	1992-14	-0.5*											-0.5*	-0.5*
AI/AN[eg]	1992-14	-0.2											-0.2	-0.2
Hispanic[f]	1992-14	-0.7*											-0.7*	-0.7*

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
[a] The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 21.2
Cancer of the Ovary (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-14	-1.1*											-1.1*	-1.1*
White	1975-14	-1.1*											-1.1*	-1.1*
Black	1975-14	-0.7*											-0.7*	-0.7*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-0.8*											-0.8*	-0.8*
White	1992-14	-1.0*											-1.0*	-1.0*
Black	1992-14	0.0											0.0	0.0
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-14	-1.1*											-1.1*	-1.1*
White	1975-14	-1.1*											-1.1*	-1.1*
Black	1975-14	-0.8*											-0.8*	-0.8*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-0.9*											-0.9*	-0.9*
White	1992-14	-1.0*											-1.0*	-1.0*
White NH[e][f]	1992-14	-1.2*											-1.2*	-1.2*
Black	1992-14	-0.2											-0.2	-0.2
Black NH[e][f]	1992-14	-0.1											-0.1	-0.1
API[e]	1992-14	-0.3											-0.3	-0.3
AI/AN[e][g]	1992-14	-2.0											-2.0	-2.0
Hispanic[f]	1992-14	-0.1											-0.1	-0.1
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-80	-3.2*	1980-99	-1.6*	1999-02	0.5	2002-14	-2.7*					-2.7*	-2.7*
White	1975-80	-3.3*	1980-99	-1.5*	1999-02	0.5	2002-14	-2.7*					-2.7*	-2.7*
Black	1975-96	-1.9*	1996-01	0.8	2001-14	-2.0*							-2.0*	-2.0*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-98	-2.3*	1998-02	0.5	2002-14	-2.7*							-2.7*	-2.7*
White	1992-98	-2.2*	1998-02	0.6	2002-14	-2.7*							-2.7*	-2.7*
White NH[e][f]	1992-05	-1.1*	2005-14	-3.1*									-3.1*	-3.1*
Black	1992-14	-1.3*											-1.3*	-1.3*
Black NH[e][f]	1992-14	-1.2*											-1.2*	-1.2*
API[e]	1992-14	-1.2*											-1.2*	-1.2*
AI/AN[e][g]	1992-14	-1.7											-1.7	-1.7
Hispanic[f]	1992-14	-0.8*											-0.8*	-0.8*

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 21.3
Cancer of the Ovary (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-90	1.5*	1990-14	-1.1*									-1.1*	-1.1*
White	1975-91	1.4*	1991-14	-1.1*									-1.1*	-1.1*
Black	1975-14	-0.2											-0.2	-0.2
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-09	-0.9*	2009-14	-3.0*									-2.1*	-3.0*
White	1992-09	-0.8*	2009-14	-3.0*									-2.0*	-3.0*
Black	1992-14	-0.7											-0.7	-0.7
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-90	1.4*	1990-10	-1.0*	2010-14	-3.9*							-2.3*	-3.9*
White	1975-91	1.4*	1991-14	-1.1*									-1.1*	-1.1*
Black	1975-14	-0.2											-0.2	-0.2
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-10	-1.0*	2010-14	-4.1*									-2.4*	-4.1*
White	1992-10	-0.9*	2010-14	-4.2*									-2.4*	-4.2*
White NH[e][f]	1992-09	-0.8*	2009-14	-3.4*									-2.3*	-3.4*
Black	1992-14	-0.9*											-0.9*	-0.9*
Black NH[e][f]	1992-14	-0.9*											-0.9*	-0.9*
API[e]	1992-14	-0.9*											-0.9*	-0.9*
AI/AN[e][g]	1992-14	0.5											0.5	0.5
Hispanic[f]	1992-14	-1.1*											-1.1*	-1.1*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-84	0.6*	1984-91	1.6*	1991-05	0.0	2005-14	-2.1*					-2.1*	-2.1*
White	1975-84	0.5*	1984-91	1.7*	1991-98	-0.3	1998-04	0.7	2004-14	-2.0*			-2.0*	-2.0*
Black	1975-92	2.3*	1992-14	-0.9*									-0.9*	-0.9*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-05	0.0	2005-14	-2.1*									-2.1*	-2.1*
White	1992-05	0.1	2005-14	-2.1*									-2.1*	-2.1*
White NH[e][f]	1992-05	0.3*	2005-14	-2.1*									-2.1*	-2.1*
Black	1992-14	-0.9*											-0.9*	-0.9*
Black NH[e][f]	1992-14	-0.8*											-0.8*	-0.8*
API[e]	1992-06	1.8*	2006-14	-2.8*									-2.3*	-2.8*
AI/AN[e][g]	1992-14	0.5											0.5	0.5
Hispanic[f]	1992-14	-0.6*											-0.6*	-0.6*

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
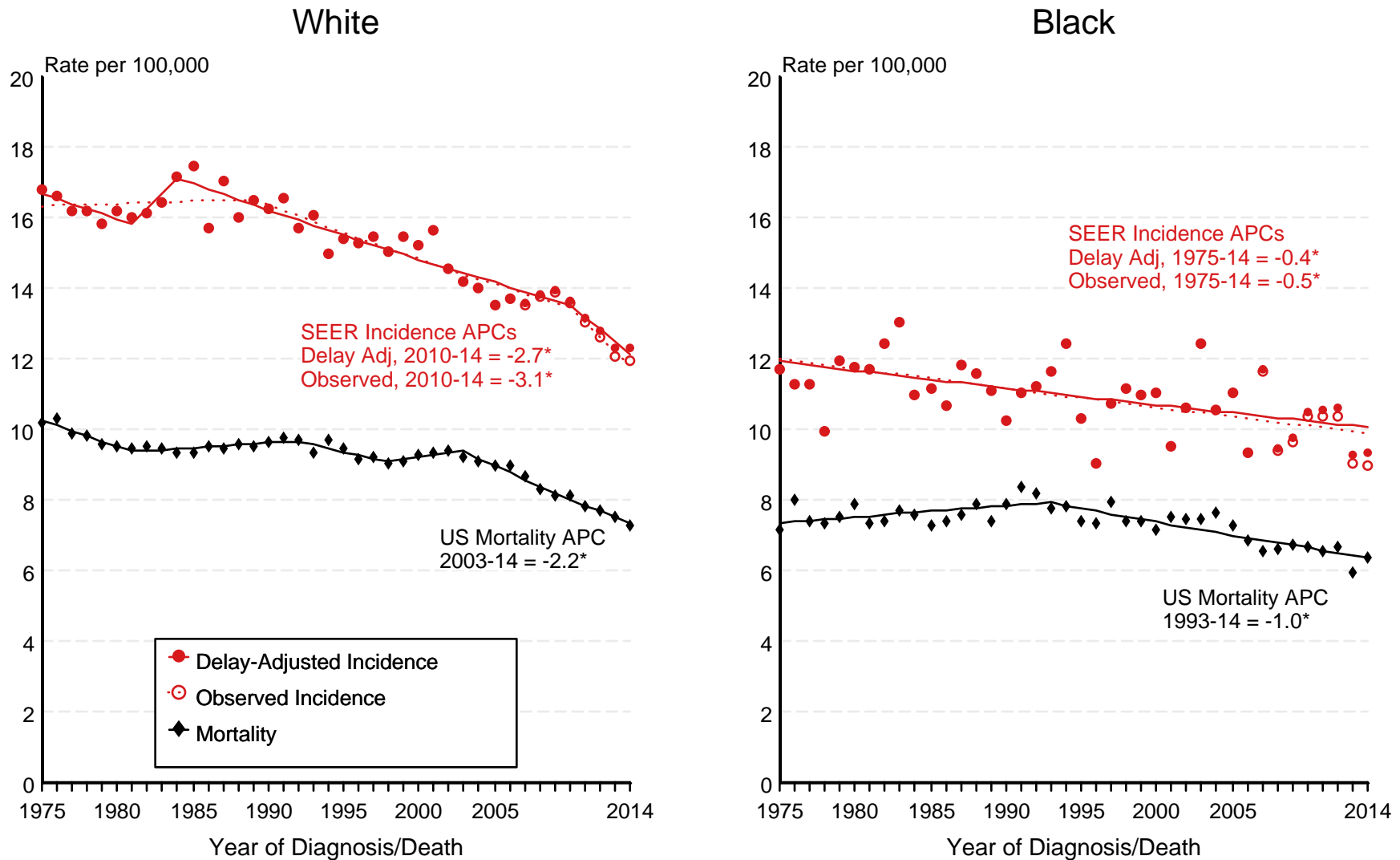[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 21.1

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

White

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2010-14 = -2.7*
Observed, 2010-14 = -3.1*

US Mortality APC
2003-14 = -2.2*

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

1975 1980 1985 1990 1995 2000 2005 2014

Year of Diagnosis/Death

Black

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = -0.4*
Observed, 1975-14 = -0.5*

US Mortality APC
1993-14 = -1.0*

1975 1980 1985 1990 1995 2000 2005 2014

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).
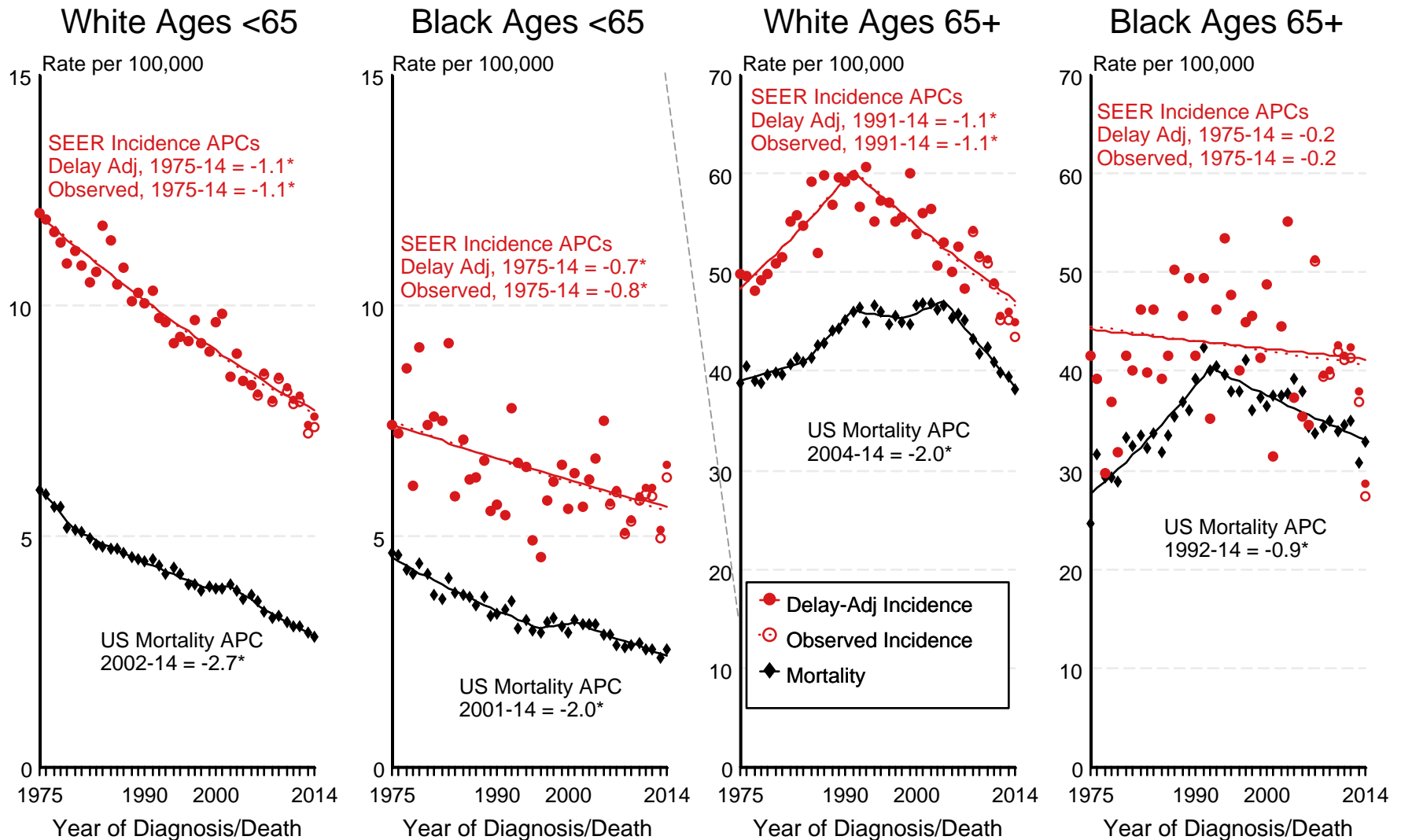   Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
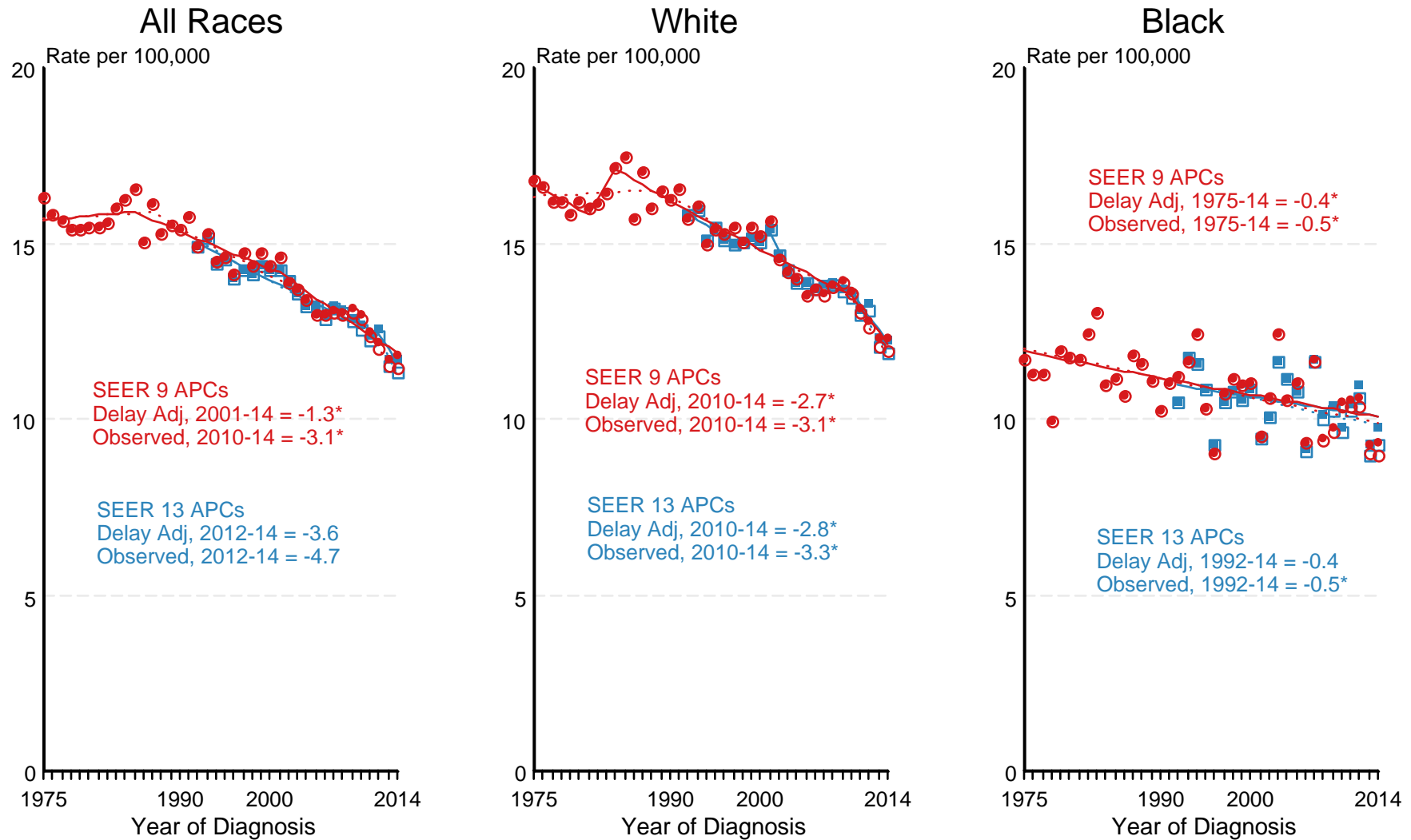   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
   The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 21.2

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

White Ages <65

Rate per 100,000

15

SEER Incidence APCs
Delay Adj, 1975-14 = -1.1*
Observed, 1975-14 = -1.1*

10

5

US Mortality APC
2002-14 = -2.7*

0

1975   1990   2000   2014

Year of Diagnosis/Death

Black Ages <65

Rate per 100,000

15

SEER Incidence APCs
Delay Adj, 1975-14 = -0.7*
Observed, 1975-14 = -0.8*

10

5

US Mortality APC
2001-14 = -2.0*

0

1975   1990   2000   2014

Year of Diagnosis/Death

White Ages 65+

Rate per 100,000

70

SEER Incidence APCs
Delay Adj, 1991-14 = -1.1*
Observed, 1991-14 = -1.1*

60

50

40

US Mortality APC
2004-14 = -2.0*

30

20

Delay-Adj Incidence
Observed Incidence
Mortality

10

0

1975   1990   2000   2014

Year of Diagnosis/Death

Black Ages 65+

Rate per 100,000

70

SEER Incidence APCs
Delay Adj, 1975-14 = -0.2
Observed, 1975-14 = -0.2

60

50

40

US Mortality APC
1992-14 = -0.9*

30

20

10

0

1975   1990   2000   2014

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).
Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
*   The APC is significantly different from zero (p < 0.05).

Figure 21.4

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2001-14 = -1.3*
Observed, 2010-14 = -3.1*

SEER 13 APCs
Delay Adj, 2012-14 = -3.6
Observed, 2012-14 = -4.7

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2010-14 = -2.7*
Observed, 2010-14 = -3.1*

SEER 13 APCs
Delay Adj, 2010-14 = -2.8*
Observed, 2010-14 = -3.3*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = -0.4*
Observed, 1975-14 = -0.5*

SEER 13 APCs
Delay Adj, 1992-14 = -0.4
Observed, 1992-14 = -0.5*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.

[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 4.4, January 2017, 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-78	-2.2	1978-84	1.3	1984-89	-1.5	1989-01	0.0	2001-08	1.7*	2008-14	0.3	0.8*	0.3
White	1975-97	-0.3*	1997-14	1.1*									1.1*	1.1*
Black	1975-14	-0.1											-0.1	-0.1
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-01	-0.1	2001-05	2.0	2005-14	0.6*							0.6*	0.6*
White	1992-99	0.1	1999-14	1.1*									1.1*	1.1*
Black	1992-01	-1.8*	2001-05	2.7	2005-14	-0.6							-0.6	-0.6
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-78	-2.2	1978-84	1.3*	1984-89	-1.4	1989-00	0.0	2000-09	1.5*	2009-14	-0.2	0.5*	-0.2
White	1975-99	-0.3*	1999-07	1.7*	2007-14	0.4							0.6	0.4
Black	1975-14	-0.1											-0.1	-0.1
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-01	-0.1	2001-06	1.8*	2006-14	0.3							0.4*	0.3
White	1992-01	0.2	2001-06	1.9*	2006-14	0.4							0.6*	0.4
White NH[e][f]	1992-00	0.1	2000-06	1.7*	2006-14	0.5*							0.7*	0.5*
Black	1992-01	-1.8*	2001-05	2.8	2005-14	-0.9							-0.9	-0.9
Black NH[e][f]	1992-01	-1.8*	2001-05	2.9	2005-14	-0.8							-0.8	-0.8
API[e]	1992-14	0.6*											0.6*	0.6*
AI/AN[e][g]	1992-97	20.9*	1997-14	-1.1									-1.1	-1.1
Hispanic[f]	1992-14	0.6*											0.6*	0.6*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-02	-0.1*	2002-06	0.9	2006-14	0.0							0.1	0.0
White	1975-96	-0.2*	1996-14	0.4*									0.4*	0.4*
Black	1975-89	1.1*	1989-14	-0.5*									-0.5*	-0.5*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-96	-0.7	1996-10	0.4*	2010-14	-0.1							0.1	-0.1
White	1992-96	-0.4	1996-14	0.4*									0.4*	0.4*
White NH[e][f]	1992-96	-0.2	1996-14	0.5*									0.5*	0.5*
Black	1992-95	-2.4*	1995-14	-0.4*									-0.4*	-0.4*
Black NH[e][f]	1992-14	-0.4*											-0.4*	-0.4*
API[e]	1992-94	8.8	1994-97	-4.4	1997-12	0.5*	2012-14	-3.0					-0.3	-1.3
AI/AN[e][g]	1992-14	1.4*											1.4*	1.4*
Hispanic[f]	1992-14	0.2*											0.2*	0.2*

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

Table 22.2
Cancer of the Pancreas (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-95	-0.8*	1995-14	0.9*									0.9*	0.9*
White	1975-94	-1.0*	1994-14	1.0*									1.0*	1.0*
Black	1975-14	-0.3*											-0.3*	-0.3*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-03	0.0	2003-06	2.7	2006-14	0.5*							0.8*	0.5*
White	1992-14	0.9*											0.9*	0.9*
Black	1992-14	-0.1											-0.1	-0.1
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-93	-0.8*	1993-03	0.2	2003-06	3.0	2006-14	0.2					0.5	0.2
White	1975-94	-1.0*	1994-14	0.9*									0.9*	0.9*
Black	1975-14	-0.4*											-0.4*	-0.4*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-03	0.0	2003-06	2.8	2006-14	0.3							0.5*	0.3
White	1992-14	0.8*											0.8*	0.8*
White NH[ef]	1992-14	0.8*											0.8*	0.8*
Black	1992-14	-0.2											-0.2	-0.2
Black NH[ef]	1992-14	-0.2											-0.2	-0.2
API[e]	1992-14	0.1											0.1	0.1
AI/AN[eg]	1992-14	1.6											1.6	1.6
Hispanic[f]	1992-14	0.7*											0.7*	0.7*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-86	-0.8*	1986-00	-0.3*	2000-14	0.3*							0.3*	0.3*
White	1975-86	-1.0*	1986-97	-0.3*	1997-14	0.4*							0.4*	0.4*
Black	1975-89	0.6*	1989-14	-0.8*									-0.8*	-0.8*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-95	-1.3	1995-14	0.2*									0.2*	0.2*
White	1992-96	-0.6	1996-14	0.4*									0.4*	0.4*
White NH[ef]	1992-14	0.3*											0.3*	0.3*
Black	1992-95	-3.8*	1995-14	-0.6*									-0.6*	-0.6*
Black NH[ef]	1992-14	-0.6*											-0.6*	-0.6*
API[e]	1992-14	-0.4											-0.4	-0.4
AI/AN[eg]	1992-14	1.9*											1.9*	1.9*
Hispanic[f]	1992-14	0.1											0.1	0.1

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
    Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
    The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

Table 22.3
Cancer of the Pancreas (Invasive)

Trends in SEER Incidence[a,b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-84	1.4*	1984-96	-0.5	1996-14	1.0*							1.0*	1.0*
White	1975-84	1.2*	1984-99	-0.3	1999-14	1.3*							1.3*	1.3*
Black	1975-14	0.1											0.1	0.1
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	0.7*											0.7*	0.7*
White	1992-14	0.8*											0.8*	0.8*
Black	1992-14	-0.2											-0.2	-0.2
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-84	1.4*	1984-96	-0.5	1996-14	0.9*							0.9*	0.9*
White	1975-84	1.3*	1984-96	-0.6	1996-14	1.0*							1.0*	1.0*
Black	1975-14	0.1											0.1	0.1
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	0.7*											0.7*	0.7*
White	1992-14	0.8*											0.8*	0.8*
White NH[e,f]	1992-14	0.8*											0.8*	0.8*
Black	1992-14	-0.3											-0.3	-0.3
Black NH[e,f]	1992-14	-0.3											-0.3	-0.3
API[e]	1992-14	1.1*											1.1*	1.1*
AI/AN[e,g]	1992-14	-0.4											-0.4	-0.4
Hispanic[f]	1992-14	0.4											0.4	0.4
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-84	0.8*	1984-02	0.1	2002-08	0.6*	2008-14	-0.2					0.1	-0.2
White	1975-83	0.7*	1983-02	0.1*	2002-08	0.8*	2008-14	-0.1					0.2	-0.1
Black	1975-86	2.5*	1986-14	-0.3*									-0.3*	-0.3*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-97	-0.5	1997-08	0.5*	2008-14	-0.1							0.1	-0.1
White	1992-97	-0.4	1997-08	0.6*	2008-14	0.0							0.2	0.0
White NH[e,f]	1992-14	0.4*											0.4*	0.4*
Black	1992-14	-0.4*											-0.4*	-0.4*
Black NH[e,f]	1992-14	-0.3*											-0.3*	-0.3*
API[e]	1992-14	0.5*											0.5*	0.5*
AI/AN[e,g]	1992-14	0.9											0.9	0.9
Hispanic[f]	1992-14	0.3*											0.3*	0.3*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
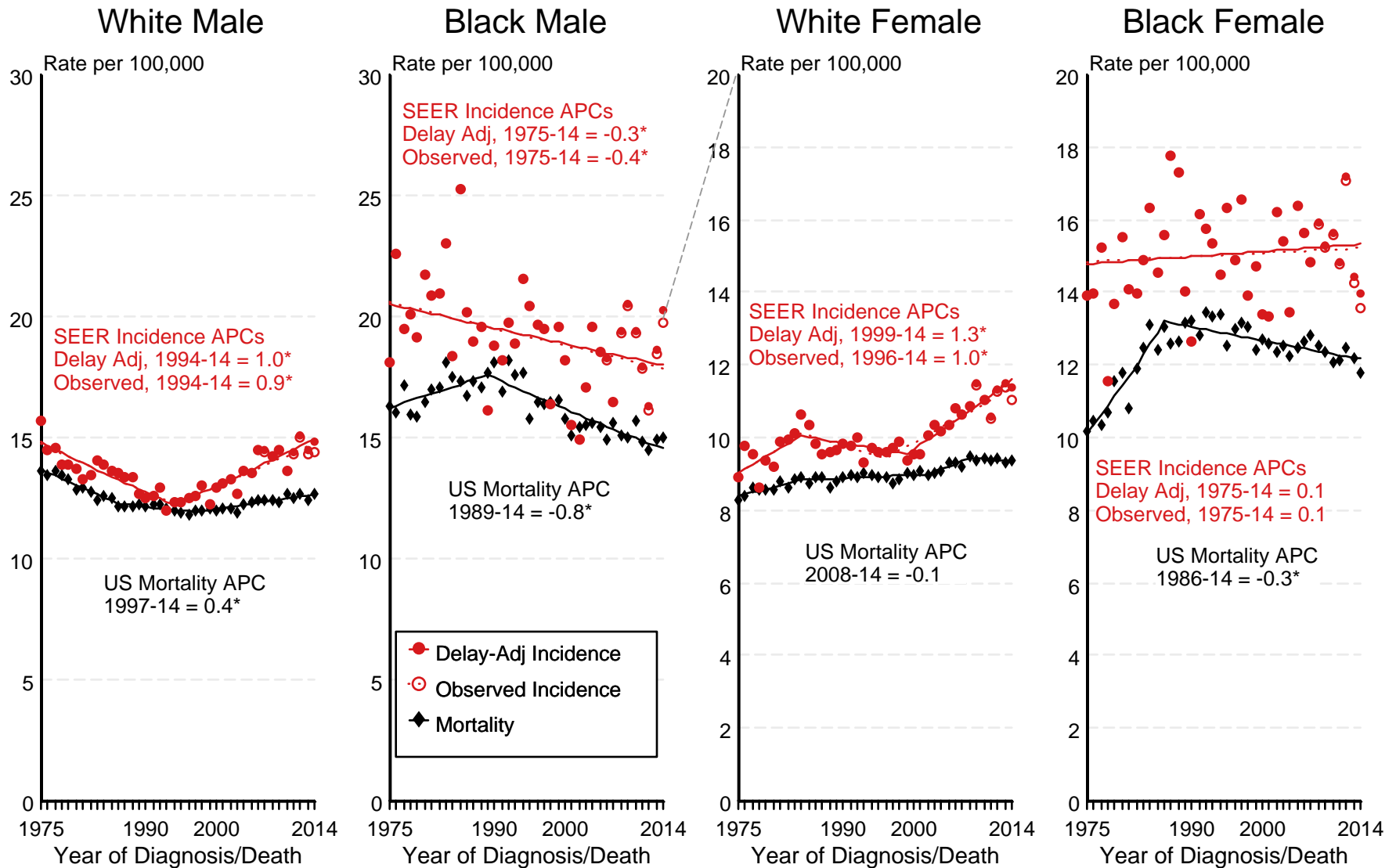[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 22.1

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

White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1994-14 = 1.0*
Observed, 1994-14 = 0.9*

US Mortality APC
1997-14 = 0.4*

Year of Diagnosis/Death

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = -0.3*
Observed, 1975-14 = -0.4*

US Mortality APC
1989-14 = -0.8*

● Delay-Adj Incidence
◉ Observed Incidence
◆ Mortality

Year of Diagnosis/Death

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1999-14 = 1.3*
Observed, 1996-14 = 1.0*

US Mortality APC
2008-14 = -0.1

Year of Diagnosis/Death

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = 0.1
Observed, 1975-14 = 0.1

US Mortality APC
1986-14 = -0.3*

Year of Diagnosis/Death

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

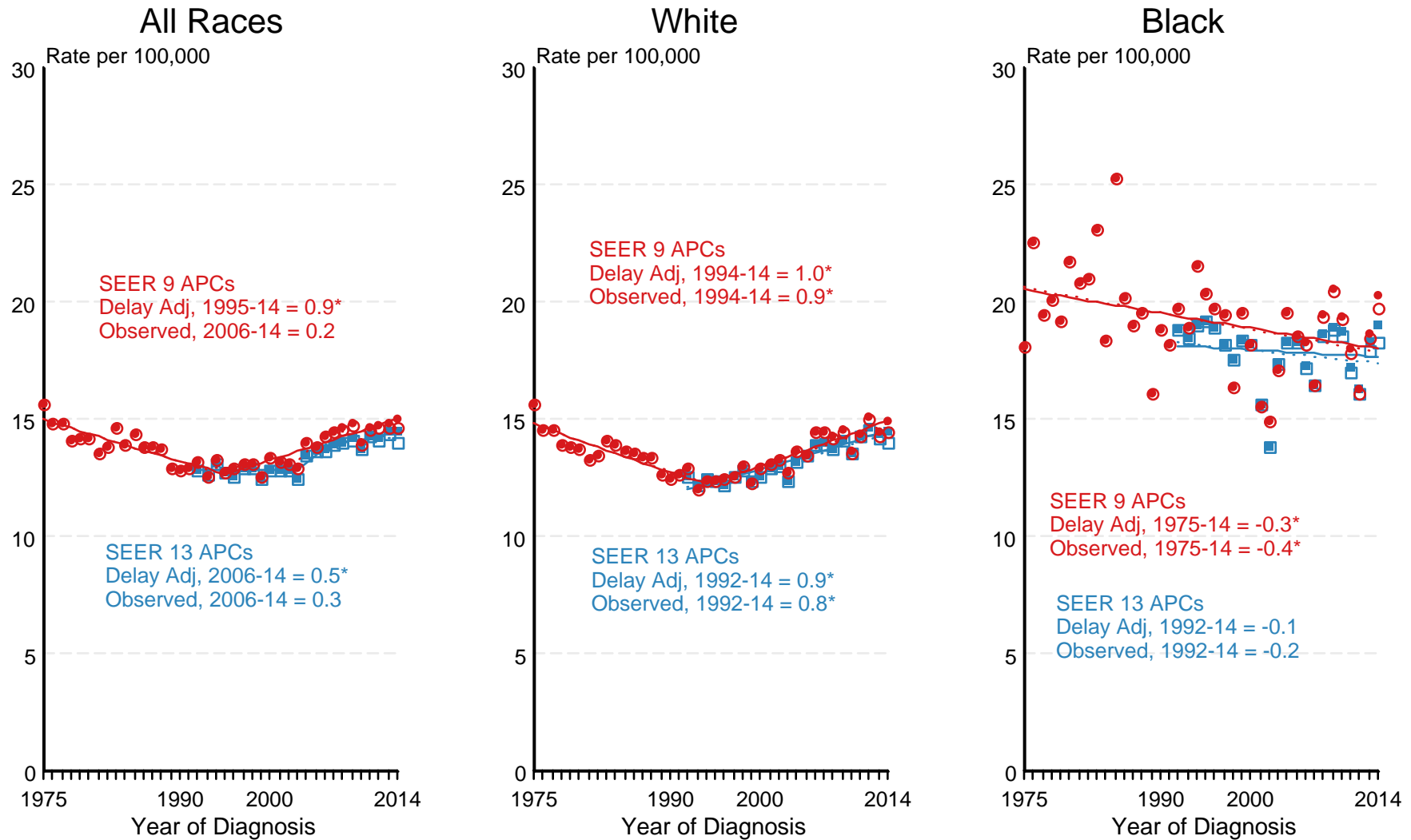[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The 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
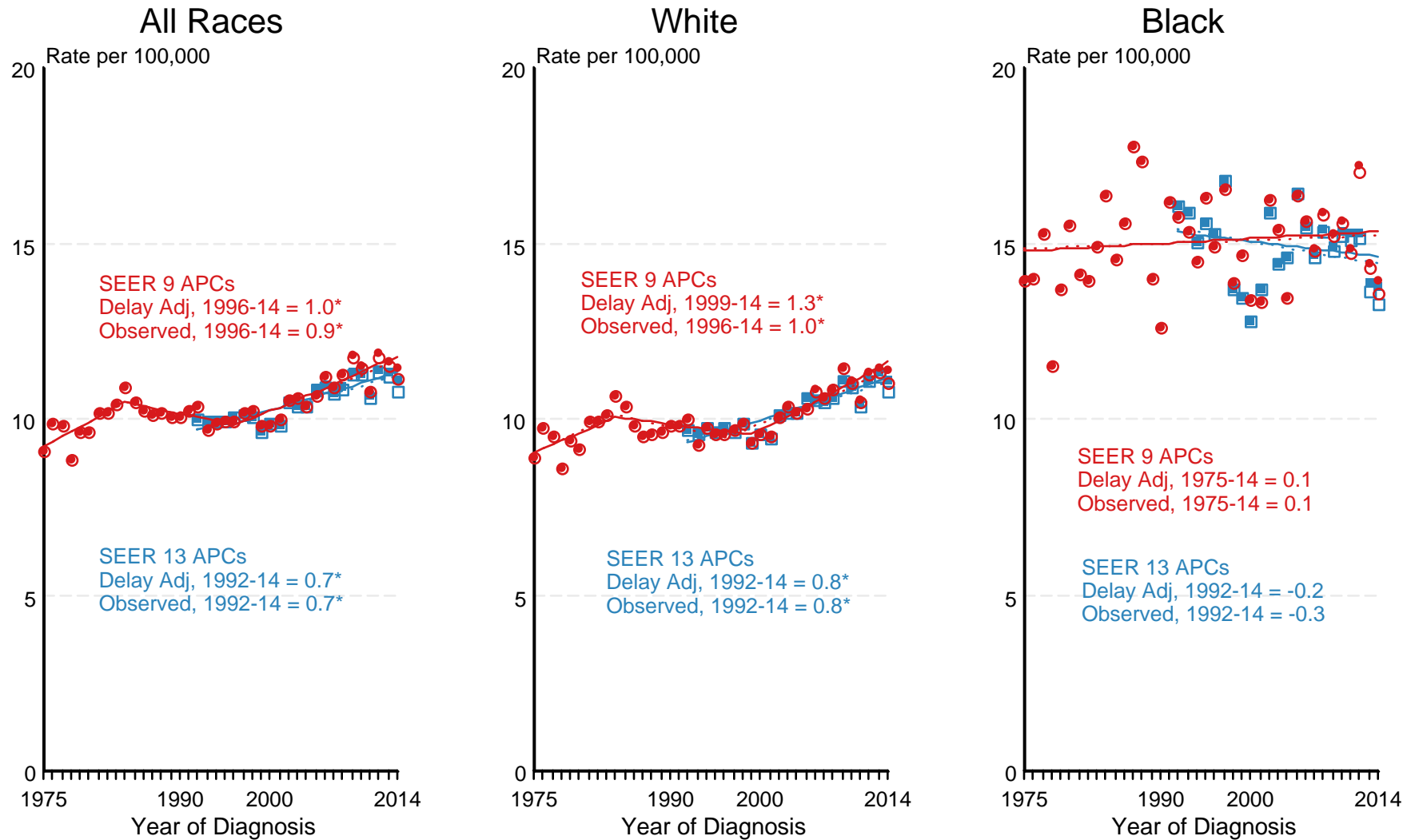Cancer of the Pancreas, Male, by Race

Figure 22.4

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

SEER Cancer Statistics Review 1975-2014

National Cancer Institute

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1996-14 = 1.0*
Observed, 1996-14 = 0.9*

SEER 13 APCs
Delay Adj, 1992-14 = 0.7*
Observed, 1992-14 = 0.7*

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1999-14 = 1.3*
Observed, 1996-14 = 1.0*

SEER 13 APCs
Delay Adj, 1992-14 = 0.8*
Observed, 1992-14 = 0.8*

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 0.1
Observed, 1975-14 = 0.1

SEER 13 APCs
Delay Adj, 1992-14 = -0.2
Observed, 1992-14 = -0.3

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-88	2.6*	1988-92	16.5*	1992-95	-11.6*	1995-00	2.3	2000-10	-1.8*	2010-14	-10.1*	-5.6*	-10.1*
White	1975-88	2.8*	1988-92	16.3*	1992-95	-12.6*	1995-00	2.7	2000-10	-1.9*	2010-14	-10.3*	-5.7*	-10.3*
Black	1975-89	2.1*	1989-92	19.0*	1992-10	-1.6*	2010-14	-9.1*					-5.0*	-9.1*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-95	-11.1*	1995-00	2.1	2000-10	-1.9*	2010-14	-10.0*					-5.6*	-10.0*
White	1992-95	-12.0*	1995-00	2.5	2000-10	-2.0*	2010-14	-10.3*					-5.8*	-10.3*
Black	1992-10	-1.7*	2010-14	-8.8*									-4.9*	-8.8*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-88	2.6*	1988-92	16.5*	1992-95	-11.6*	1995-00	2.3	2000-10	-1.9*	2010-14	-10.6*	-5.8*	-10.6*
White	1975-88	2.8*	1988-92	16.3*	1992-95	-12.6*	1995-00	2.7	2000-10	-2.0*	2010-14	-11.0*	-6.1*	-11.0*
Black	1975-89	2.1*	1989-92	19.2*	1992-10	-1.7*	2010-14	-10.2*					-5.5*	-10.2*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-95	-11.1*	1995-00	2.1	2000-10	-2.0*	2010-14	-10.6*					-5.9*	-10.6*
White	1992-95	-12.0*	1995-00	2.5	2000-10	-2.1*	2010-14	-11.1*					-6.2*	-11.1*
White NH[e][f]	1992-94	-17.2*	1994-01	1.0	2001-10	-2.0*	2010-14	-10.9*					-6.1*	-10.9*
Black	1992-10	-1.8*	2010-14	-10.1*									-5.6*	-10.1*
Black NH[e][f]	1992-10	-1.7*	2010-14	-10.0*									-5.5*	-10.0*
API[e]	1992-97	-6.2*	1997-00	5.7	2000-07	-1.9*	2007-11	-5.7*	2011-14	-12.5*			-7.2*	-10.9*
AI/AN[e][g]	1992-09	-1.4	2009-14	-9.9*									-6.2*	-9.9*
Hispanic[f]	1992-95	-4.8	1995-02	0.8	2002-10	-2.8*	2010-14	-10.4*					-6.3*	-10.4*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-87	0.9*	1987-91	3.0*	1991-94	-0.5	1994-99	-4.1*	1999-14	-3.4*			-3.4*	-3.4*
White	1975-87	0.8*	1987-91	3.1*	1991-94	-0.7	1994-98	-4.5*	1998-12	-3.4*	2012-14	-1.6	-3.0*	-2.5*
Black	1975-88	1.9*	1988-93	3.2*	1993-01	-2.5*	2001-14	-4.2*					-4.2*	-4.2*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-94	-1.7	1994-14	-3.5*									-3.5*	-3.5*
White	1992-94	-0.7	1994-99	-4.4*	1999-14	-3.3*							-3.3*	-3.3*
White NH[e][f]	1992-94	-0.2	1994-98	-4.5*	1998-12	-3.4*	2012-14	-1.3					-3.0*	-2.4*
Black	1992-01	-2.2*	2001-14	-4.3*									-4.3*	-4.3*
Black NH[e][f]	1992-01	-2.1*	2001-14	-4.2*									-4.2*	-4.2*
API[e]	1992-14	-3.4*											-3.4*	-3.4*
AI/AN[e][g]	1992-14	-1.7*											-1.7*	-1.7*
Hispanic[f]	1992-94	4.9	1994-14	-2.8*									-2.8*	-2.8*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 23.2
Cancer of the Prostate (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-88	3.1*	1988-92	23.4*	1992-01	3.3*	2001-09	0.2	2009-14	-8.2*			-4.6*	-8.2*
White	1975-88	3.5*	1988-92	23.1*	1992-01	3.1*	2001-09	0.1	2009-14	-8.6*			-4.8*	-8.6*
Black	1975-89	2.0*	1989-93	26.3*	1993-01	2.7*	2001-11	-0.7	2011-14	-10.4*			-4.0*	-8.0*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-01	3.4*	2001-10	-0.5	2010-14	-9.9*							-4.8*	-9.9*
White	1992-01	3.3*	2001-10	-0.6	2010-14	-10.6*							-5.2*	-10.6*
Black	1992-00	3.7*	2000-10	-0.4	2010-14	-7.9*							-3.8*	-7.9*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-88	3.1*	1988-92	23.4*	1992-01	3.3*	2001-09	0.2	2009-14	-8.5*			-4.8*	-8.5*
White	1975-88	3.5*	1988-92	23.1*	1992-01	3.1*	2001-09	0.1	2009-14	-9.1*			-5.1*	-9.1*
Black	1975-89	2.0*	1989-93	26.2*	1993-01	2.8*	2001-11	-0.9*	2011-14	-11.4*			-4.6*	-8.9*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-01	3.4*	2001-10	-0.6	2010-14	-10.4*							-5.1*	-10.4*
White	1992-01	3.4*	2001-10	-0.7	2010-14	-11.3*							-5.5*	-11.3*
White NH[ef]	1992-01	3.3*	2001-10	-0.6	2010-14	-11.2*							-5.4*	-11.2*
Black	1992-00	3.8*	2000-10	-0.7	2010-14	-8.9*							-4.4*	-8.9*
Black NH[ef]	1992-00	3.7*	2000-10	-0.5	2010-14	-8.9*							-4.3*	-8.9*
API[e]	1992-01	6.1*	2001-09	0.6	2009-14	-8.6*							-4.6*	-8.6*
AI/AN[eg]	1992-09	-0.8	2009-14	-13.6*									-8.2*	-13.6*
Hispanic[f]	1992-02	4.4*	2002-10	-1.4*	2010-14	-8.9*							-4.8*	-8.9*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-87	0.5*	1987-90	3.0	1990-96	-3.1*	1996-00	-5.9*	2000-14	-1.3*			-1.3*	-1.3*
White	1975-87	0.7*	1987-90	3.0	1990-96	-3.6*	1996-00	-6.2*	2000-14	-1.1*			-1.1*	-1.1*
Black	1975-92	0.5*	1992-14	-2.9*									-2.9*	-2.9*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-01	-4.5*	2001-14	-1.3*									-1.3*	-1.3*
White	1992-01	-4.7*	2001-14	-1.1*									-1.1*	-1.1*
White NH[ef]	1992-01	-4.7*	2001-14	-1.1*									-1.1*	-1.1*
Black	1992-04	-3.4*	2004-14	-2.3*									-2.3*	-2.3*
Black NH[ef]	1992-01	-3.7*	2001-14	-2.4*									-2.4*	-2.4*
API[e]	1992-14	-0.7											-0.7	-0.7
AI/AN[eg]	1992-14	-2.3*											-2.3*	-2.3*
Hispanic[f]	1992-14	-2.0*											-2.0*	-2.0*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Table 23.3
Cancer of the Prostate (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-88	2.5*	1988-92	15.1*	1992-95	-14.8*	1995-00	1.3	2000-10	-2.6*	2010-14	-10.1*	-6.0*	-10.1*
White	1975-88	2.7*	1988-92	14.9*	1992-95	-15.8*	1995-00	1.8	2000-10	-2.7*	2010-14	-10.2*	-6.1*	-10.2*
Black	1975-89	2.0*	1989-92	20.2*	1992-95	-9.2*	1995-09	-2.1*	2009-14	-8.5*			-5.7*	-8.5*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-95	-14.1*	1995-00	1.0	2000-10	-2.6*	2010-14	-10.1*					-6.0*	-10.1*
White	1992-95	-15.1*	1995-00	1.5	2000-10	-2.6*	2010-14	-10.2*					-6.1*	-10.2*
Black	1992-95	-8.4*	1995-09	-2.4*	2009-14	-8.1*							-5.6*	-8.1*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-88	2.5*	1988-92	15.1*	1992-95	-14.8*	1995-00	1.3	2000-10	-2.6*	2010-14	-10.6*	-6.3*	-10.6*
White	1975-88	2.7*	1988-92	14.9*	1992-95	-15.8*	1995-00	1.8	2000-10	-2.8*	2010-14	-10.9*	-6.5*	-10.9*
Black	1975-89	2.0*	1989-92	20.2*	1992-95	-9.0*	1995-09	-2.2*	2009-14	-9.4*			-6.3*	-9.4*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-95	-14.2*	1995-00	1.0	2000-10	-2.7*	2010-14	-10.7*					-6.3*	-10.7*
White	1992-95	-15.1*	1995-00	1.5	2000-10	-2.8*	2010-14	-11.0*					-6.5*	-11.0*
White NH[ef]	1992-95	-15.6*	1995-00	1.6	2000-10	-2.7*	2010-14	-10.8*					-6.4*	-10.8*
Black	1992-95	-8.3*	1995-09	-2.5*	2009-14	-9.2*							-6.3*	-9.2*
Black NH[ef]	1992-95	-8.4*	1995-09	-2.5*	2009-14	-9.2*							-6.2*	-9.2*
API[e]	1992-97	-7.7*	1997-00	4.8	2000-07	-2.6*	2007-11	-6.5*	2011-14	-12.9*			-7.9*	-11.3*
AI/AN[eg]	1992-14	-2.6*											-2.6*	-2.6*
Hispanic[f]	1992-96	-6.0*	1996-99	3.2	1999-10	-2.9*	2010-14	-11.4*					-6.8*	-11.4*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-85	0.9*	1985-93	2.0*	1993-14	-3.6*							-3.6*	-3.6*
White	1975-87	0.8*	1987-91	3.2*	1991-94	-0.5	1994-98	-4.3*	1998-12	-3.5*	2012-14	-1.8	-3.1*	-2.7*
Black	1975-88	2.1*	1988-93	3.5*	1993-01	-2.5*	2001-10	-4.0*	2010-14	-5.8*			-4.8*	-5.8*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	-3.5*											-3.5*	-3.5*
White	1992-94	-0.5	1994-98	-4.4*	1998-14	-3.4*							-3.4*	-3.4*
White NH[ef]	1992-94	-0.2	1994-98	-4.3*	1998-12	-3.5*	2012-14	-1.5					-3.1*	-2.5*
Black	1992-01	-2.1*	2001-14	-4.4*									-4.4*	-4.4*
Black NH[ef]	1992-01	-2.0*	2001-14	-4.3*									-4.3*	-4.3*
API[e]	1992-14	-3.5*											-3.5*	-3.5*
AI/AN[eg]	1992-14	-1.6*											-1.6*	-1.6*
Hispanic[f]	1992-94	3.8	1994-07	-2.4*	2007-14	-3.8*							-3.5*	-3.8*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
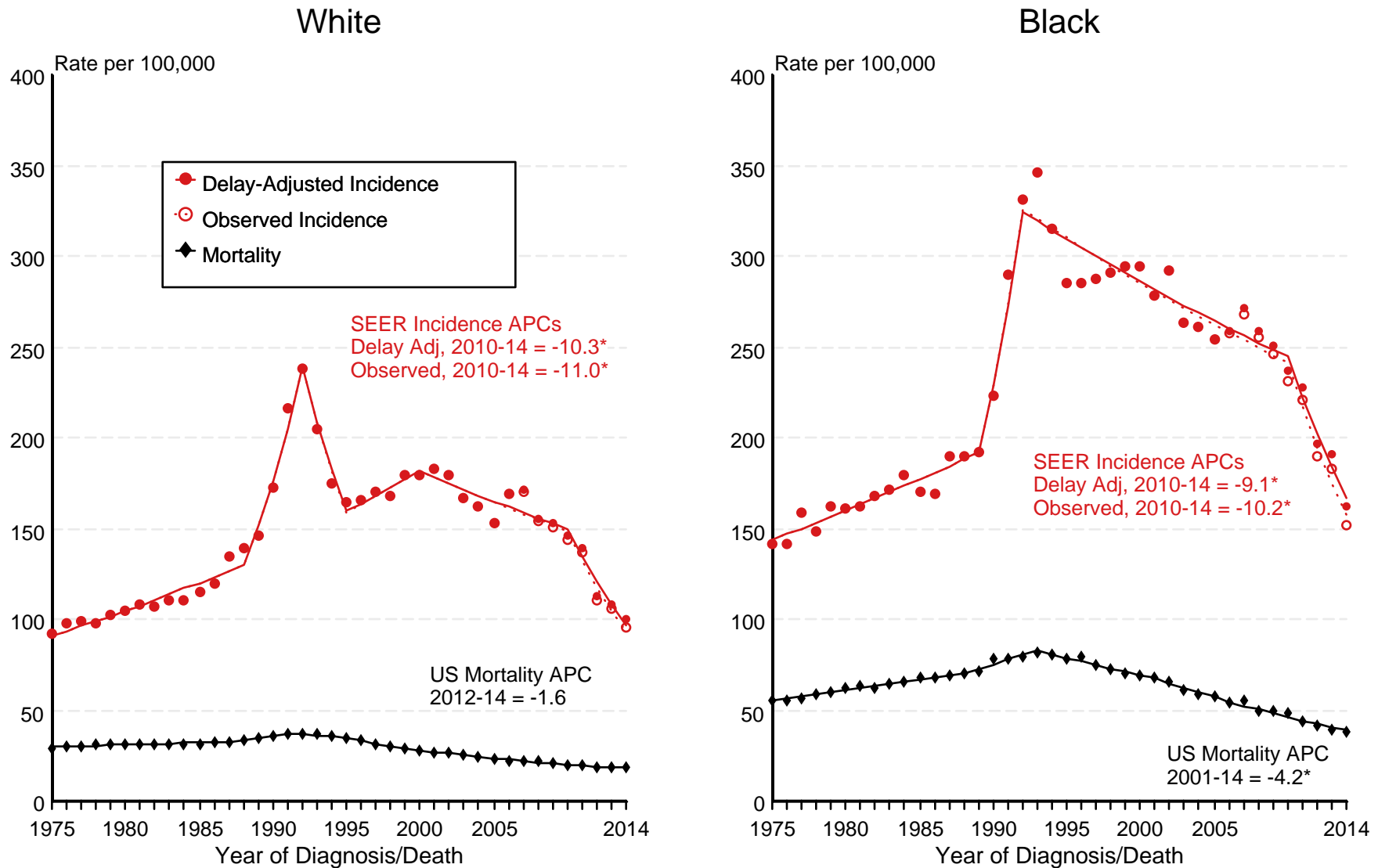* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 23.1

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

White

Rate per 100,000

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

SEER Incidence APCs
Delay Adj, 2010-14 = -10.3*
Observed, 2010-14 = -11.0*

US Mortality APC
2012-14 = -1.6

Black

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2010-14 = -9.1*
Observed, 2010-14 = -10.2*

US Mortality APC
2001-14 = -4.2*

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).
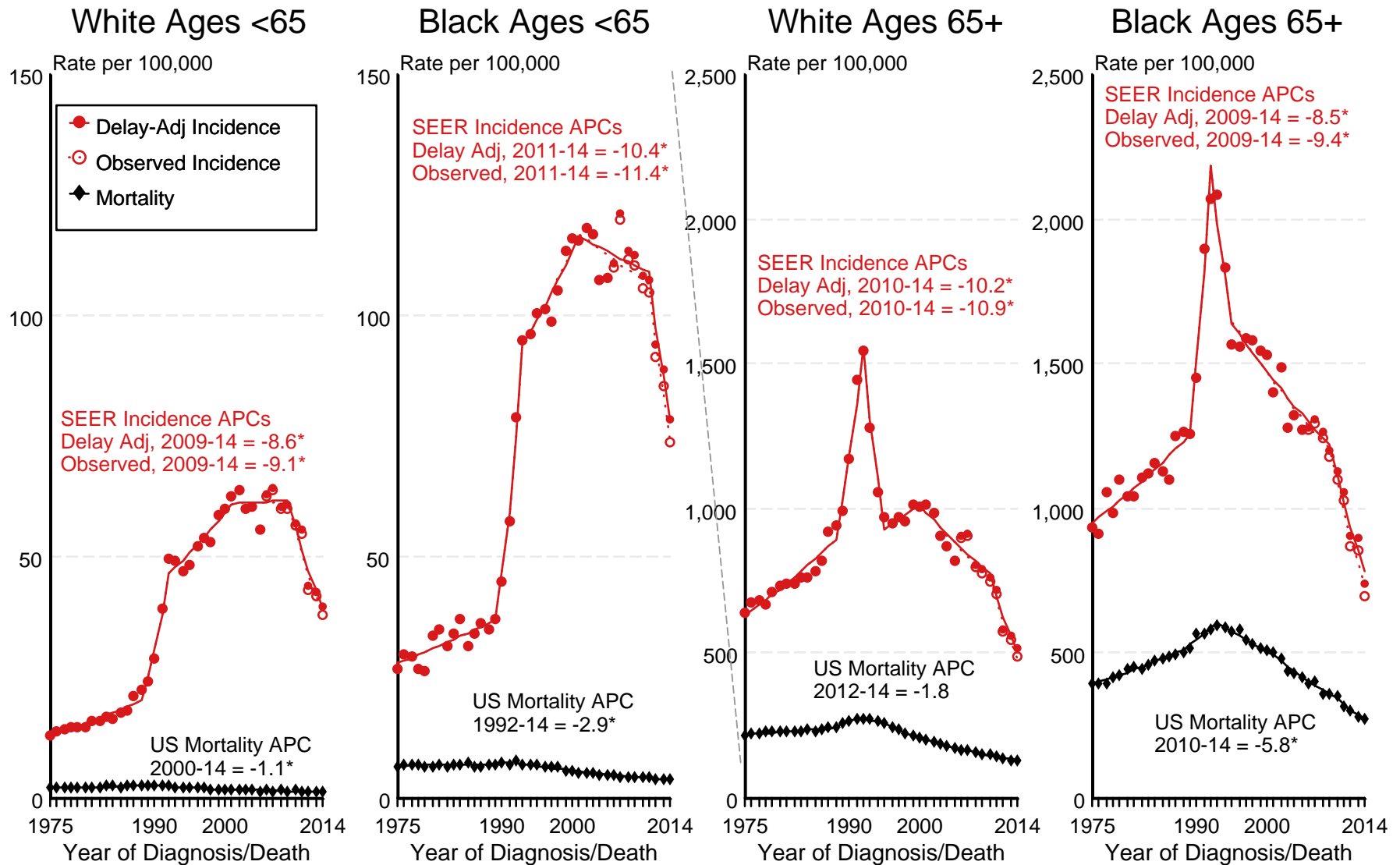   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
    The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
*   The APC is significantly different from zero (p < 0.05).

Figure 23.2

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

White Ages <65

Rate per 100,000

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

SEER Incidence APCs
Delay Adj, 2009-14 = -8.6*
Observed, 2009-14 = -9.1*

US Mortality APC
2000-14 = -1.1*

Year of Diagnosis/Death

Black Ages <65

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2011-14 = -10.4*
Observed, 2011-14 = -11.4*

US Mortality APC
1992-14 = -2.9*

Year of Diagnosis/Death

White Ages 65+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2010-14 = -10.2*
Observed, 2010-14 = -10.9*

US Mortality APC
2012-14 = -1.8

Year of Diagnosis/Death

Black Ages 65+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2009-14 = -8.5*
Observed, 2009-14 = -9.4*

US Mortality APC
2010-14 = -5.8*

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 4.4, January 2017, National Cancer Institute.
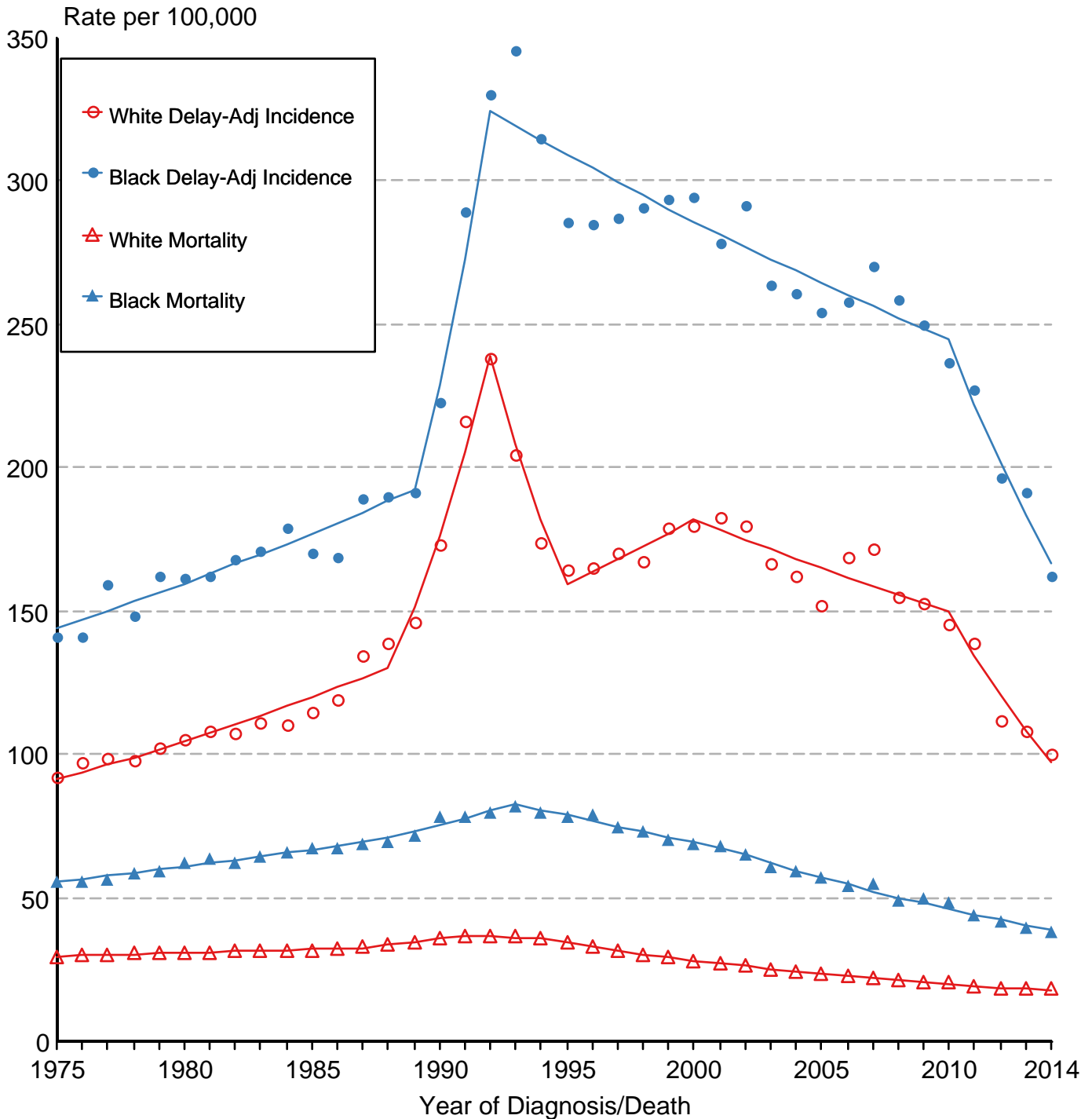The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).
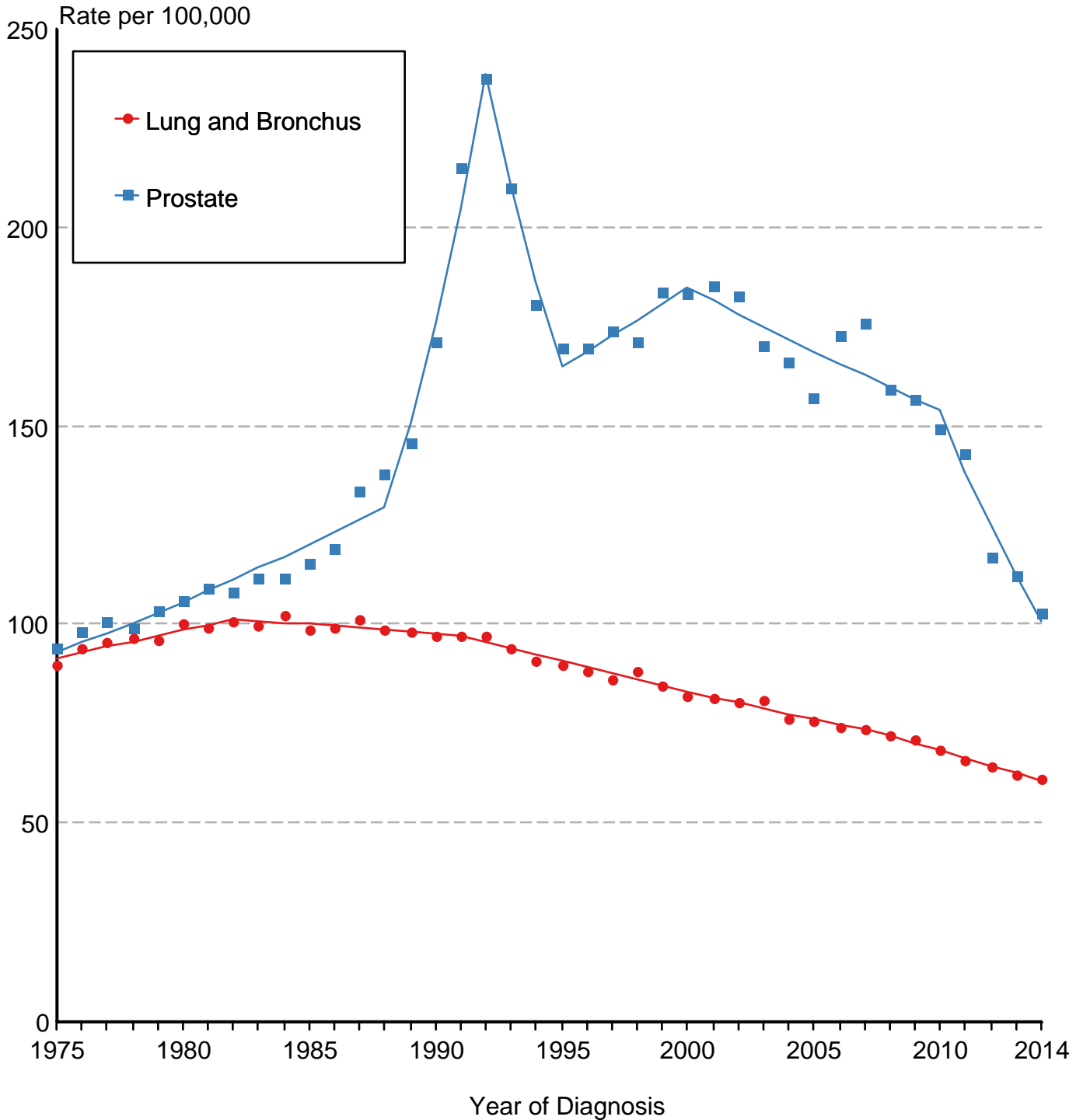
Figure 23.4

Cancer of the Prostate
Delay-Adjusted SEER Incidence & US Mortality
1975-2014

Figure 23.5

Delay-Adjusted Incidence Rates for Cancer of the Prostate and Cancer of the Lung and Bronchus
All Races, Males
1975-2014

Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
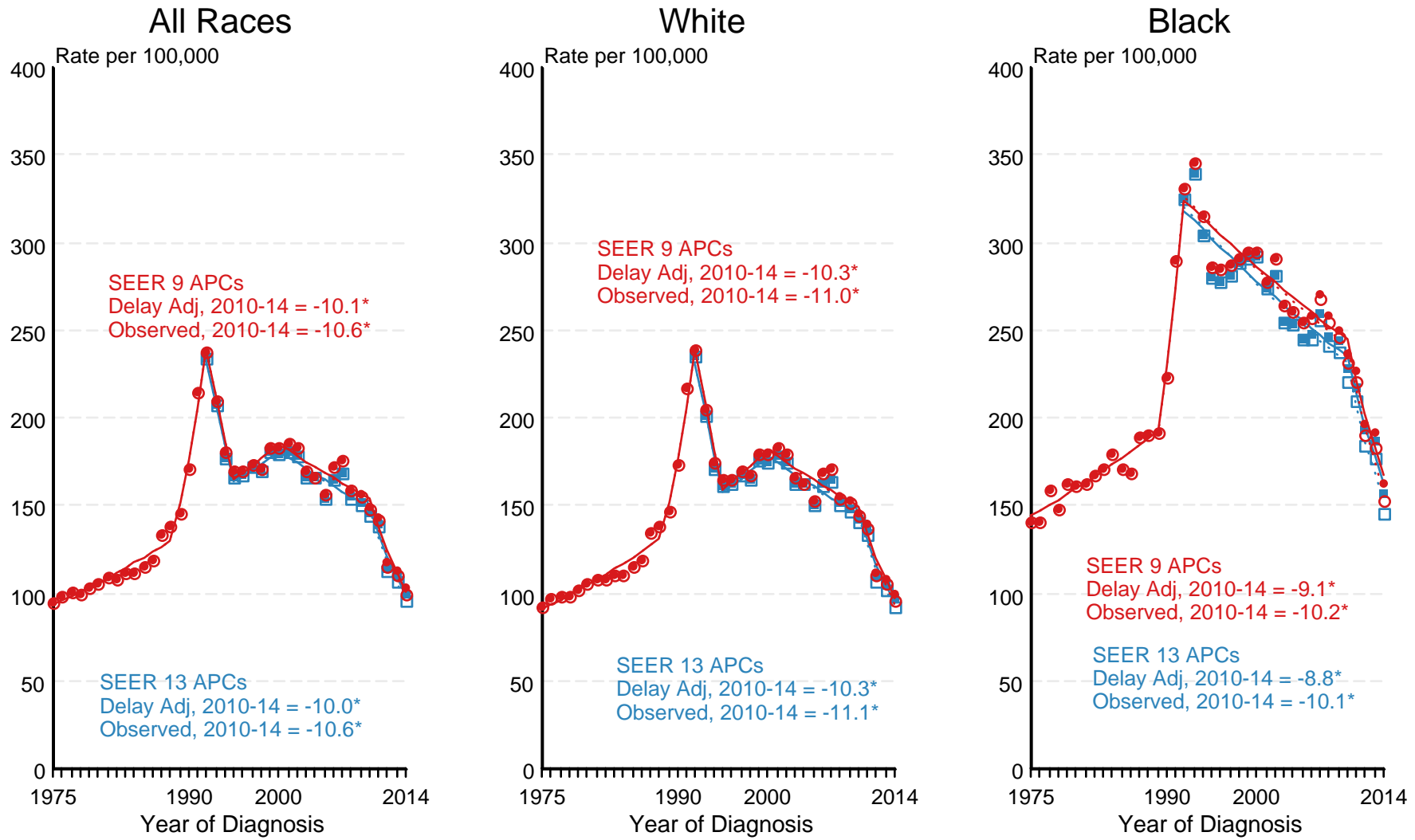
Figure 23.6

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

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-14	-1.5*											-1.5*	-1.5*
White	1975-97	-2.0*	1997-14	-1.2*									-1.2*	-1.2*
Black	1975-14	-1.4*											-1.4*	-1.4*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-1.2*											-1.2*	-1.2*
White	1992-14	-1.1*											-1.1*	-1.1*
Black	1992-14	-1.7*											-1.7*	-1.7*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-14	-1.5*											-1.5*	-1.5*
White	1975-97	-2.0*	1997-14	-1.3*									-1.3*	-1.3*
Black	1975-82	1.2	1982-14	-1.7*									-1.7*	-1.7*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-1.2*											-1.2*	-1.2*
White	1992-14	-1.1*											-1.1*	-1.1*
White NH[e][f]	1992-14	-1.5*											-1.5*	-1.5*
Black	1992-14	-1.8*											-1.8*	-1.8*
Black NH[e][f]	1992-14	-1.7*											-1.7*	-1.7*
API[e]	1992-14	-3.0*											-3.0*	-3.0*
AI/AN[e][g]	1992-14	-0.3											-0.3	-0.3
Hispanic[f]	1992-14	-1.5*											-1.5*	-1.5*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-87	-2.5*	1987-90	-0.3	1990-09	-3.0*	2009-14	-1.9*					-2.4*	-1.9*
White	1975-87	-2.8*	1987-90	-0.8	1990-08	-3.2*	2008-14	-1.9*					-2.3*	-1.9*
Black	1975-95	-1.3*	1995-14	-3.3*									-3.3*	-3.3*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-09	-3.0*	2009-14	-1.9*									-2.4*	-1.9*
White	1992-08	-3.2*	2008-14	-1.9*									-2.3*	-1.9*
White NH[e][f]	1992-94	-1.2	1994-08	-3.6*	2008-14	-2.5*							-2.9*	-2.5*
Black	1992-96	-1.7*	1996-14	-3.3*									-3.3*	-3.3*
Black NH[e][f]	1992-95	-0.7	1995-14	-3.2*									-3.2*	-3.2*
API[e]	1992-14	-3.8*											-3.8*	-3.8*
AI/AN[e][g]	1992-14	-1.9*											-1.9*	-1.9*
Hispanic[f]	1992-14	-2.2*											-2.2*	-2.2*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 24.2
Cancer of the Stomach (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-80	-0.2	1980-14	-1.8*									-1.8*	-1.8*
White	1975-14	-1.8*											-1.8*	-1.8*
Black	1975-82	2.4	1982-14	-2.1*									-2.1*	-2.1*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-1.6*											-1.6*	-1.6*
White	1992-14	-1.5*											-1.5*	-1.5*
Black	1992-14	-2.1*											-2.1*	-2.1*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-80	-0.2	1980-14	-1.8*									-1.8*	-1.8*
White	1975-14	-1.8*											-1.8*	-1.8*
Black	1975-82	2.5	1982-14	-2.1*									-2.1*	-2.1*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-1.7*											-1.7*	-1.7*
White	1992-14	-1.6*											-1.6*	-1.6*
White NH[e][f]	1992-14	-1.8*											-1.8*	-1.8*
Black	1992-14	-2.2*											-2.2*	-2.2*
Black NH[e][f]	1992-14	-2.2*											-2.2*	-2.2*
API[e]	1992-14	-3.0*											-3.0*	-3.0*
AI/AN[e][g]	1992-14	-0.6											-0.6	-0.6
Hispanic[f]	1992-14	-2.0*											-2.0*	-2.0*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-87	-2.3*	1987-91	-1.0	1991-08	-3.5*	2008-14	-2.3*					-2.7*	-2.3*
White	1975-93	-2.3*	1993-08	-3.7*	2008-14	-2.1*							-2.6*	-2.1*
Black	1975-93	-1.1*	1993-14	-3.3*									-3.3*	-3.3*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-94	-1.4	1994-06	-3.6*	2006-14	-2.5*							-2.7*	-2.5*
White	1992-09	-3.6*	2009-14	-1.9*									-2.6*	-1.9*
White NH[e][f]	1992-94	-0.9	1994-08	-4.1*	2008-14	-2.6*							-3.1*	-2.6*
Black	1992-14	-3.2*											-3.2*	-3.2*
Black NH[e][f]	1992-14	-3.2*											-3.2*	-3.2*
API[e]	1992-14	-3.8*											-3.8*	-3.8*
AI/AN[e][g]	1992-14	-1.8*											-1.8*	-1.8*
Hispanic[f]	1992-14	-2.5*											-2.5*	-2.5*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.
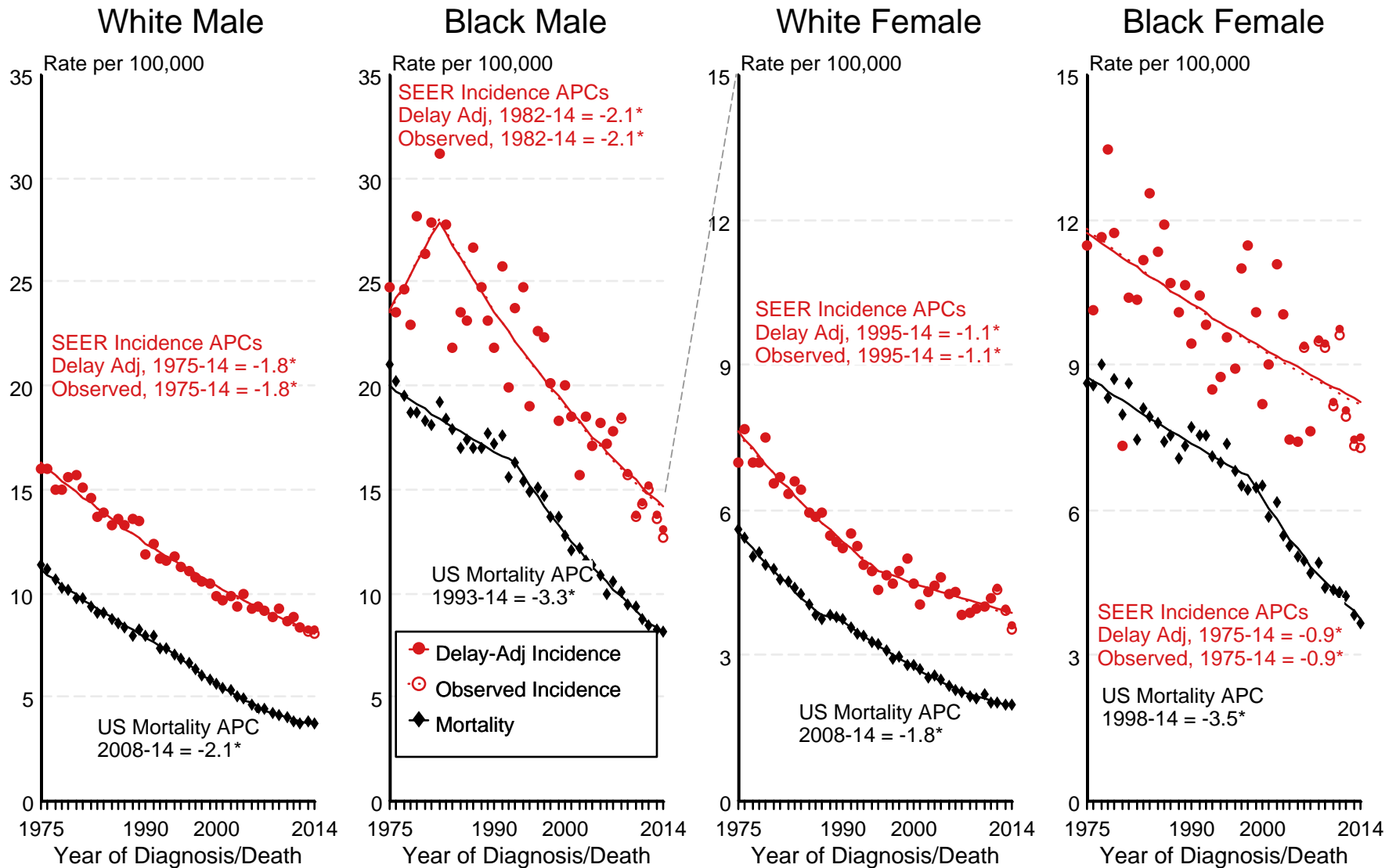
Table 24.3
Cancer of the Stomach (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-95	-1.8*	1995-14	-0.9*									-0.9*	-0.9*
White	1975-95	-2.3*	1995-14	-1.1*									-1.1*	-1.1*
Black	1975-14	-0.9*											-0.9*	-0.9*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	-0.8*											-0.8*	-0.8*
White	1992-14	-0.7*											-0.7*	-0.7*
Black	1992-14	-1.2*											-1.2*	-1.2*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-92	-1.7*	1992-95	-4.9	1995-98	3.4	1998-07	-1.9*	2007-12	1.1	2012-14	-7.6	-1.6	-3.3
White	1975-95	-2.3*	1995-14	-1.1*									-1.1*	-1.1*
Black	1975-14	-0.9*											-0.9*	-0.9*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	-0.8*											-0.8*	-0.8*
White	1992-14	-0.7*											-0.7*	-0.7*
White NH[ef]	1992-14	-1.4*											-1.4*	-1.4*
Black	1992-14	-1.3*											-1.3*	-1.3*
Black NH[ef]	1992-14	-1.2*											-1.2*	-1.2*
API[e]	1992-14	-2.9*											-2.9*	-2.9*
AI/AN[eg]	1992-14	0.3											0.3	0.3
Hispanic[f]	1992-14	-1.0*											-1.0*	-1.0*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-87	-2.8*	1987-90	-0.5	1990-14	-2.6*							-2.6*	-2.6*
White	1975-87	-3.1*	1987-90	-1.0	1990-08	-2.9*	2008-14	-1.8*					-2.1*	-1.8*
Black	1975-98	-1.2*	1998-14	-3.5*									-3.5*	-3.5*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	-2.6*											-2.6*	-2.6*
White	1992-14	-2.7*											-2.7*	-2.7*
White NH[ef]	1992-14	-3.2*											-3.2*	-3.2*
Black	1992-14	-3.1*											-3.1*	-3.1*
Black NH[ef]	1992-14	-3.0*											-3.0*	-3.0*
API[e]	1992-14	-3.7*											-3.7*	-3.7*
AI/AN[eg]	1992-98	6.3	1998-14	-3.6*									-3.6*	-3.6*
Hispanic[f]	1992-14	-2.0*											-2.0*	-2.0*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a]   Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b]   Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c]   Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d]   The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e]   API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f]   Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
      Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
      The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g]   Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-     Joinpoint regression line analysis could not be performed on data series.

Figure 24.1

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, 1975-14 = -1.8*
Observed, 1975-14 = -1.8*

US Mortality APC
2008-14 = -2.1*

Year of Diagnosis/Death

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1982-14 = -2.1*
Observed, 1982-14 = -2.1*

US Mortality APC
1993-14 = -3.3*

● Delay-Adj Incidence
◌ Observed Incidence
◆ Mortality

Year of Diagnosis/Death

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1995-14 = -1.1*
Observed, 1995-14 = -1.1*

US Mortality APC
2008-14 = -1.8*

Year of Diagnosis/Death

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = -0.9*
Observed, 1975-14 = -0.9*

US Mortality APC
1998-14 = -3.5*

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 4.4, January 2017, 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 24.3

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, 1980-14 = -1.8*
Observed, 1980-14 = -1.8*

SEER 13 APCs
Delay Adj, 1992-14 = -1.6*
Observed, 1992-14 = -1.7*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = -1.8*
Observed, 1975-14 = -1.8*

SEER 13 APCs
Delay Adj, 1992-14 = -1.5*
Observed, 1992-14 = -1.6*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1982-14 = -2.1*
Observed, 1982-14 = -2.1*

SEER 13 APCs
Delay Adj, 1992-14 = -2.1*
Observed, 1992-14 = -2.2*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.

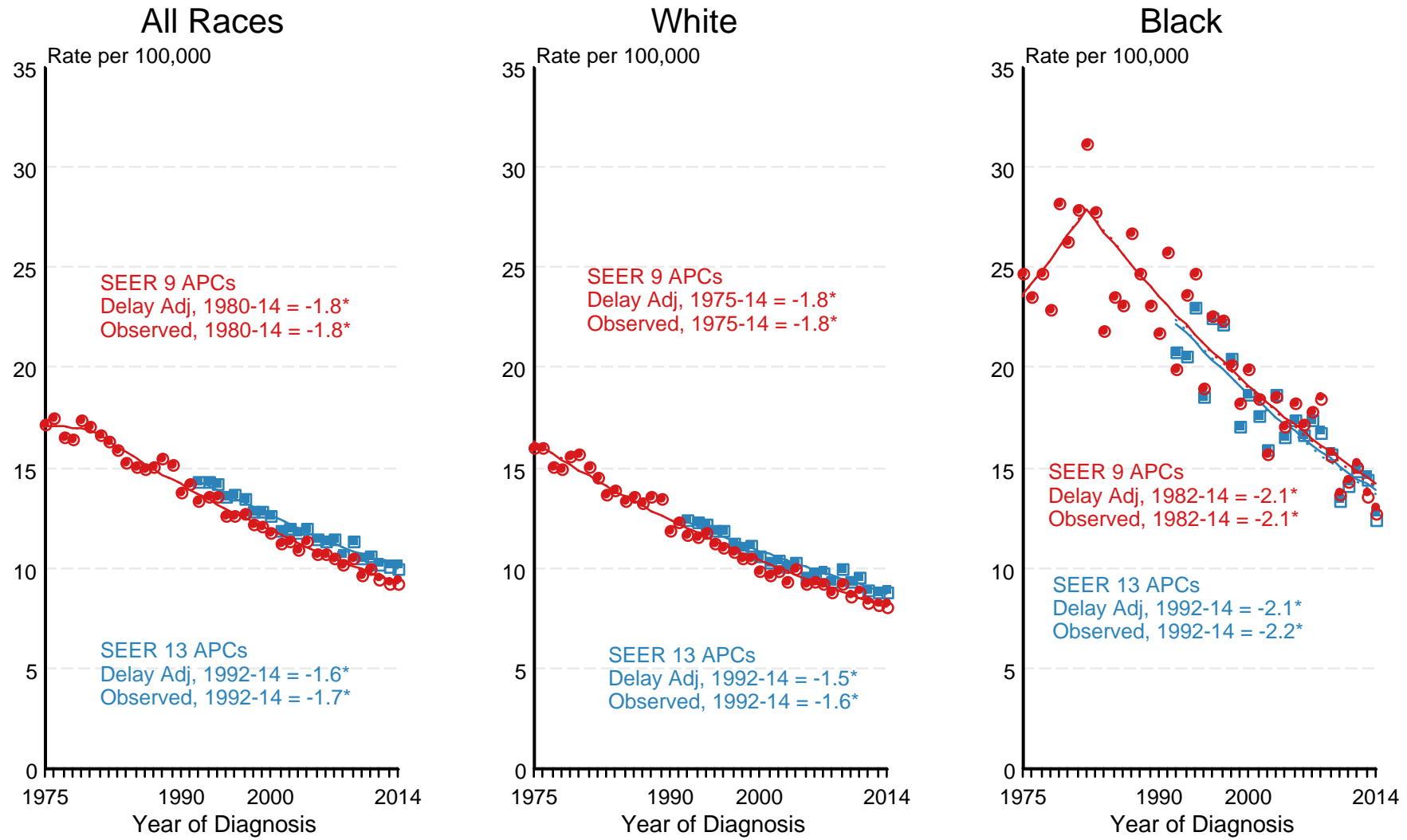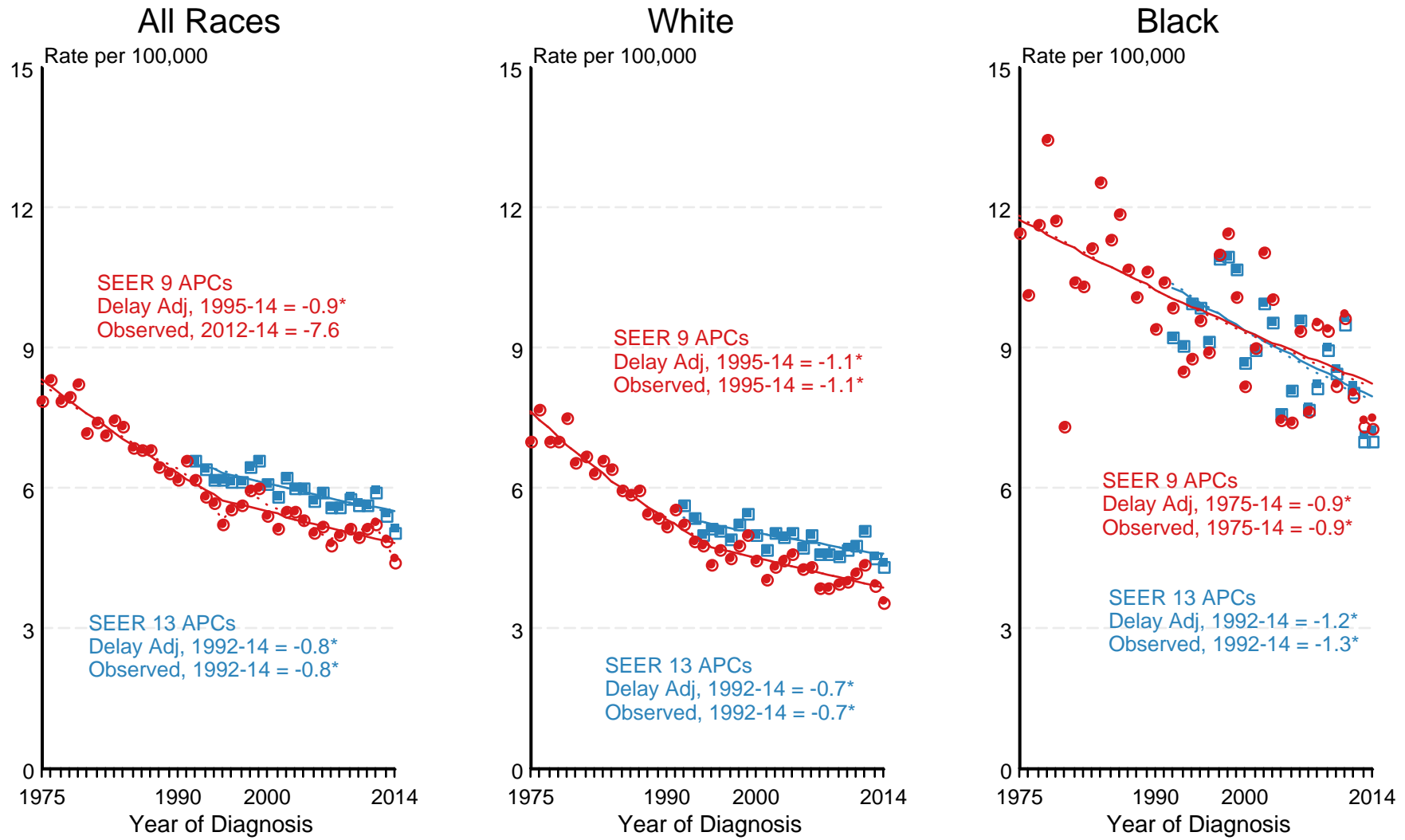[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 24.4

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1995-14 = -0.9*
Observed, 2012-14 = -7.6

SEER 13 APCs
Delay Adj, 1992-14 = -0.8*
Observed, 1992-14 = -0.8*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1995-14 = -1.1*
Observed, 1995-14 = -1.1*

SEER 13 APCs
Delay Adj, 1992-14 = -0.7*
Observed, 1992-14 = -0.7*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = -0.9*
Observed, 1975-14 = -0.9*

SEER 13 APCs
Delay Adj, 1992-14 = -1.2*
Observed, 1992-14 = -1.3*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-89	2.3*	1989-14	0.8*									0.8*	0.8*
White	1975-89	2.6*	1989-14	1.1*									1.1*	1.1*
Black	1975-14	2.1*											2.1*	2.1*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	1.1*											1.1*	1.1*
White	1992-14	1.3*											1.3*	1.3*
Black	1992-94	42.6	1994-01	3.6	2001-04	-13.9	2004-07	14.6	2007-14	0.6			3.6	0.6
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-89	2.3*	1989-14	0.8*									0.8*	0.8*
White	1975-89	2.6*	1989-14	1.0*									1.0*	1.0*
Black	1975-14	2.0*											2.0*	2.0*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	1.1*											1.1*	1.1*
White	1992-14	1.2*											1.2*	1.2*
White NH[ef]	1992-05	1.7*	2005-14	0.0									0.0	0.0
Black	1992-94	42.6	1994-01	3.6	2001-04	-13.9	2004-07	14.7	2007-14	0.4			3.4	0.4
Black NH[ef]	1992-94	43.7	1994-14	1.0									1.0	1.0
API[e]	1992-14	1.5*											1.5*	1.5*
AI/AN[eg]	1992-14	2.9*											2.9*	2.9*
Hispanic[f]	1992-14	2.8*											2.8*	2.8*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-81	-10.5*	1981-95	-3.1*	1995-14	-0.2							-0.2	-0.2
White	1975-81	-10.8*	1981-95	-3.0*	1995-14	0.1							0.1	0.1
Black	1975-14	-1.8*											-1.8*	-1.8*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	-0.4*											-0.4*	-0.4*
White	1992-14	-0.2											-0.2	-0.2
White NH[ef]	1992-14	-0.5*											-0.5*	-0.5*
Black	1992-14	-0.8											-0.8	-0.8
Black NH[ef]	1992-14	-0.8											-0.8	-0.8
API[e]	1992-14	-0.1											-0.1	-0.1
AI/AN[eg]	-	-											-	-
Hispanic[f]	1992-14	0.8											0.8	0.8

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 25.2
Cancer of the Testis (Invasive)

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-89	2.8*	1989-14	0.8*									0.8*	0.8*
White	1975-89	3.1*	1989-14	1.0*									1.0*	1.0*
Black	1975-14	1.9*											1.9*	1.9*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	1.1*											1.1*	1.1*
White	1992-14	1.2*											1.2*	1.2*
Black	1992-14	1.5*											1.5*	1.5*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-89	2.8*	1989-14	0.8*									0.8*	0.8*
White	1975-89	3.1*	1989-14	1.0*									1.0*	1.0*
Black	1975-14	1.9*											1.9*	1.9*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	1.0*											1.0*	1.0*
White	1992-14	1.2*											1.2*	1.2*
White NH[ef]	1992-05	1.8*	2005-14	-0.3									-0.3	-0.3
Black	1992-14	1.4*											1.4*	1.4*
Black NH[ef]	1992-14	1.6*											1.6*	1.6*
API[e]	1992-14	1.4*											1.4*	1.4*
AI/AN[eg]	1992-14	2.9*											2.9*	2.9*
Hispanic[f]	1992-14	2.9*											2.9*	2.9*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-81	-11.3*	1981-95	-2.8*	1995-14	-0.5*							-0.5*	-0.5*
White	1975-81	-11.6*	1981-96	-2.6*	1996-14	-0.2							-0.2	-0.2
Black	1975-14	-1.4*											-1.4*	-1.4*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	-0.7*											-0.7*	-0.7*
White	1992-14	-0.5*											-0.5*	-0.5*
White NH[ef]	1992-14	-1.1*											-1.1*	-1.1*
Black	1992-14	-1.5											-1.5	-1.5
Black NH[ef]	1992-14	-1.7*											-1.7*	-1.7*
API[e]	1992-14	1.3											1.3	1.3
AI/AN[eg]	-	-											-	-
Hispanic[f]	1992-14	1.6*											1.6*	1.6*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 25.3
Cancer of the Testis (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-99	-0.3	1999-14	2.4*									2.4*	2.4*
White	1975-99	-0.3	1999-14	2.5*									2.5*	2.5*
Black	–	–											–	–
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-14	1.6*											1.6*	1.6*
White	1992-14	1.8*											1.8*	1.8*
Black	–	–											–	–
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-99	-0.3	1999-14	2.3*									2.3*	2.3*
White	1975-99	-0.3	1999-14	2.4*									2.4*	2.4*
Black	–	–											–	–
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-14	1.6*											1.6*	1.6*
White	1992-14	1.7*											1.7*	1.7*
White NH[e][f]	1992-14	1.9*											1.9*	1.9*
Black	–	–											–	–
Black NH[e][f]	–	–											–	–
API[e]	1992-14	0.9											0.9	0.9
AI/AN[e][g]	–	–											–	–
Hispanic[f]	1992-14	1.9											1.9	1.9
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-91	-5.8*	1991-14	0.3									0.3	0.3
White	1975-91	-5.8*	1991-14	0.6									0.6	0.6
Black	1975-14	-2.3*											-2.3*	-2.3*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	0.4											0.4	0.4
White	1992-14	0.6											0.6	0.6
White NH[e][f]	1992-14	0.8*											0.8*	0.8*
Black	1992-14	0.2											0.2	0.2
Black NH[e][f]	1992-14	0.3											0.3	0.3
API[e]	–	–											–	–
AI/AN[e][g]	–	–											–	–
Hispanic[f]	1992-14	-1.5											-1.5	-1.5

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
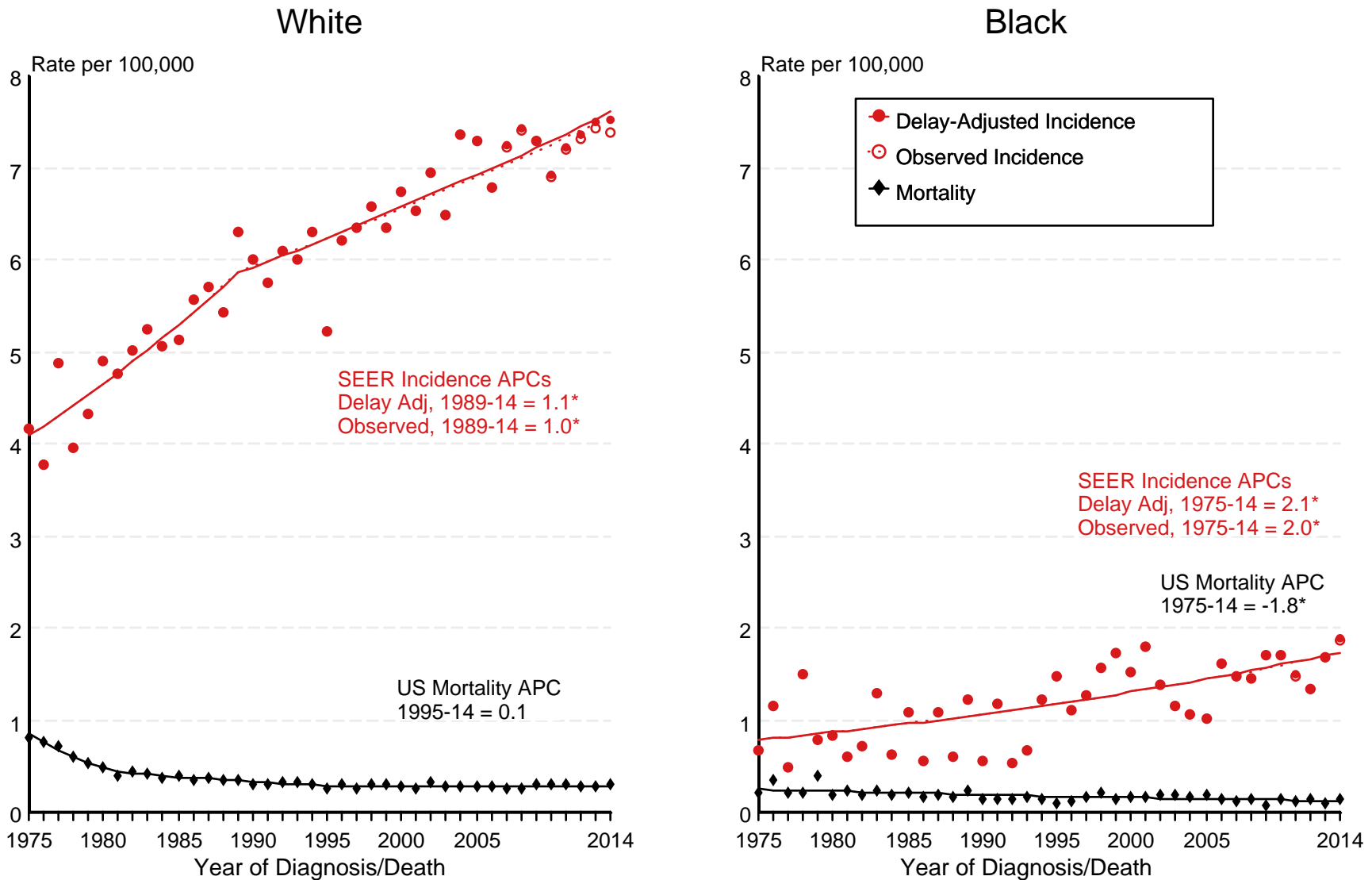[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Figure 25.1

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

White

Black

Rate per 100,000

Rate per 100,000

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

SEER Incidence APCs
Delay Adj, 1989-14 = 1.1*
Observed, 1989-14 = 1.0*

SEER Incidence APCs
Delay Adj, 1975-14 = 2.1*
Observed, 1975-14 = 2.0*

US Mortality APC
1975-14 = -1.8*

US Mortality APC
1995-14 = 0.1

Year of Diagnosis/Death

Year of Diagnosis/Death

Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
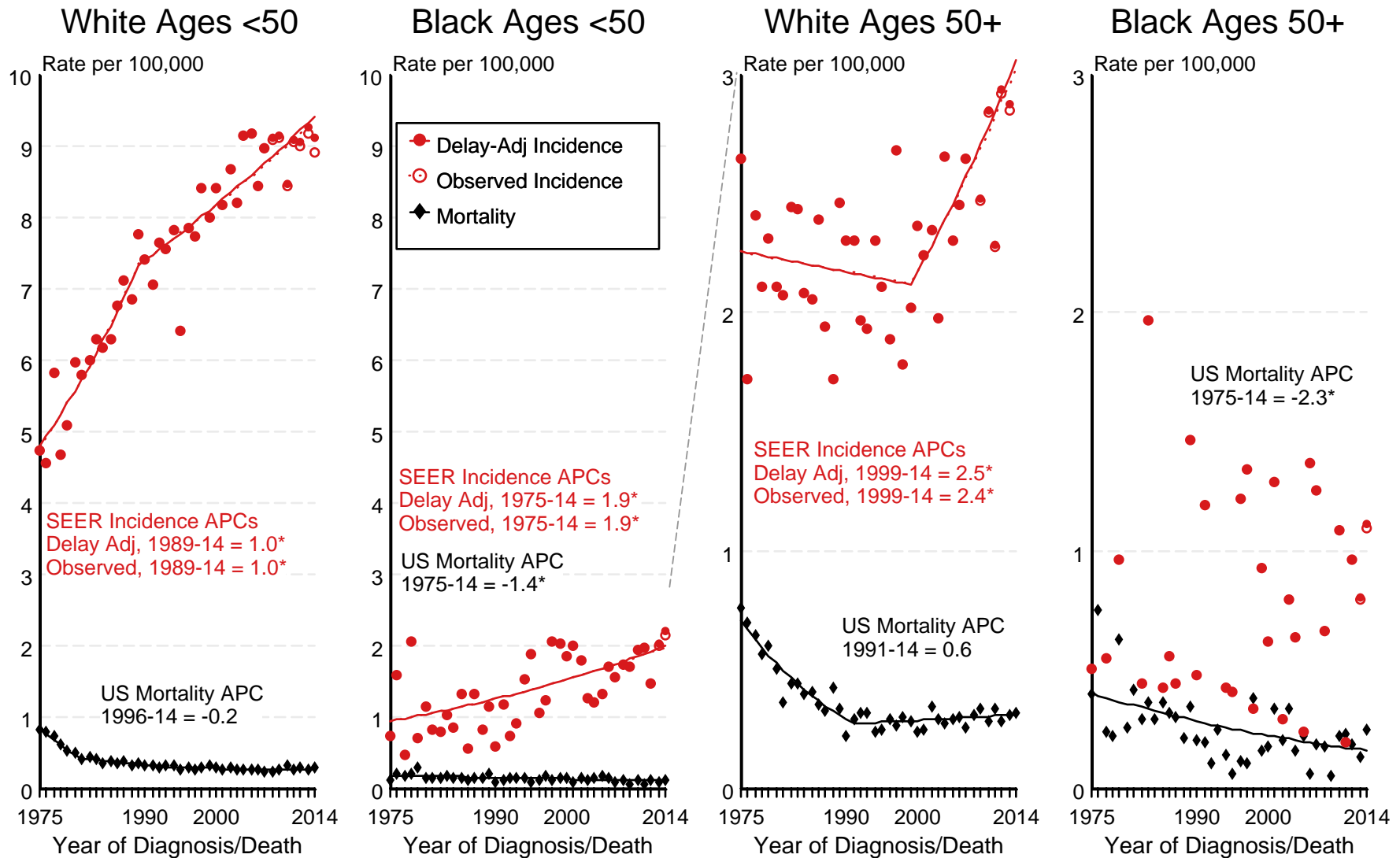[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 25.2

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

SEER Cancer Statistics Review 1975-2014

National Cancer Institute

White Ages <50

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1989-14 = 1.0*
Observed, 1989-14 = 1.0*

US Mortality APC
1996-14 = -0.2

Year of Diagnosis/Death

Black Ages <50

Rate per 100,000

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

SEER Incidence APCs
Delay Adj, 1975-14 = 1.9*
Observed, 1975-14 = 1.9*

US Mortality APC
1975-14 = -1.4*

Year of Diagnosis/Death

White Ages 50+

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1999-14 = 2.5*
Observed, 1999-14 = 2.4*

US Mortality APC
1991-14 = 0.6

Year of Diagnosis/Death

Black Ages 50+

Rate per 100,000

US Mortality APC
1975-14 = -2.3*

Year of Diagnosis/Death

Regression line cannot be calculated for Black Male Age 50+ Incidence and Delay-adjusted Incidence due to years with zero count.
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
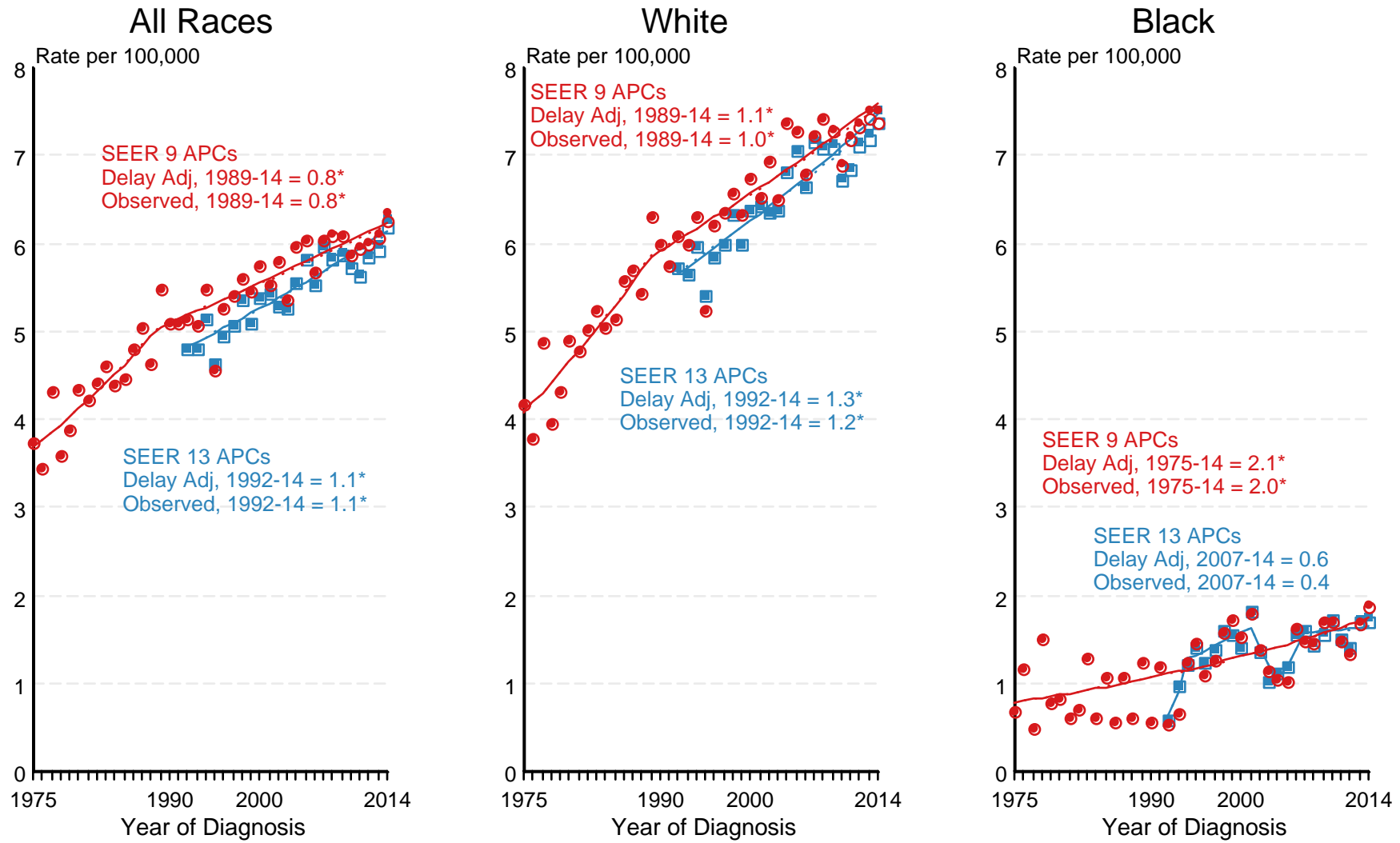a   Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
*   The APC is significantly different from zero (p < 0.05).

Figure 25.4

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-14 = 0.8*
Observed, 1989-14 = 0.8*

SEER 13 APCs
Delay Adj, 1992-14 = 1.1*
Observed, 1992-14 = 1.1*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1989-14 = 1.1*
Observed, 1989-14 = 1.0*

SEER 13 APCs
Delay Adj, 1992-14 = 1.3*
Observed, 1992-14 = 1.2*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 2.1*
Observed, 1975-14 = 2.0*

SEER 13 APCs
Delay Adj, 2007-14 = 0.6
Observed, 2007-14 = 0.4

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.

[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 4.4, January 2017, 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[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-77	6.3	1977-80	-6.6	1980-97	2.4*	1997-09	6.7*	2009-14	1.7*			3.9*	1.7*
White	1975-77	7.5	1977-80	-6.7	1980-97	2.7*	1997-09	7.0*	2009-14	1.5*			3.9*	1.5*
Black	1975-95	1.0	1995-14	5.9*									5.9*	5.9*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-98	2.9*	1998-09	6.6*	2009-14	1.9*							3.9*	1.9*
White	1992-98	3.6*	1998-09	6.8*	2009-14	1.7*							3.9*	1.7*
Black	1992-95	-4.4	1995-11	6.8*	2011-14	0.2							4.5*	1.8
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-77	6.3	1977-80	-6.6	1980-97	2.4*	1997-09	6.7*	2009-14	1.5*			3.8*	1.5*
White	1975-77	7.5	1977-80	-6.7	1980-97	2.7*	1997-09	7.0*	2009-14	1.2*			3.8*	1.2*
Black	1975-89	-1.0	1989-14	5.2*									5.2*	5.2*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-98	3.0*	1998-09	6.6*	2009-14	1.6*							3.8*	1.6*
White	1992-98	3.6*	1998-09	6.8*	2009-14	1.4*							3.7*	1.4*
White NH[e][f]	1992-98	4.3*	1998-09	7.0*	2009-14	1.1							3.7*	1.1
Black	1992-95	-4.2	1995-11	6.7*	2011-14	-0.4							4.3*	1.3
Black NH[e][f]	1992-95	-4.6	1995-11	6.8*	2011-14	-0.3							4.4*	1.5
API[e]	1992-00	0.6	2000-11	5.2*	2011-14	-1.1							3.1*	0.5
AI/AN[e][g]	1992-14	3.9*											3.9*	3.9*
Hispanic[f]	1992-95	-3.8	1995-14	4.7*									4.7*	4.7*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-88	-2.1*	1988-14	0.7*									0.7*	0.7*
White	1975-88	-2.2*	1988-14	0.7*									0.7*	0.7*
Black	1975-14	0.1											0.1	0.1
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	0.7*											0.7*	0.7*
White	1992-14	0.7*											0.7*	0.7*
White NH[e][f]	1992-14	0.7*											0.7*	0.7*
Black	1992-14	1.0*											1.0*	1.0*
Black NH[e][f]	1992-14	1.1*											1.1*	1.1*
API[e]	1992-14	-0.6											-0.6	-0.6
AI/AN[e][g]	1992-14	1.3											1.3	1.3
Hispanic[f]	1992-14	0.0											0.0	0.0

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
     The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
*   The APC/AAPC is significantly different from zero (p<.05).
-   Joinpoint regression line analysis could not be performed on data series.

Table 26.2
Cancer of the Thyroid (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-80	-4.6	1980-97	1.8*	1997-12	5.5*	2012-14	-1.5					3.9*	2.0
White	1975-77	10.3	1977-80	-9.0	1980-97	2.5*	1997-12	5.7*	2012-14	-2.2			3.9*	1.7
Black	1975-14	3.2*											3.2*	3.2*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-96	-1.4	1996-09	5.6*	2009-14	2.7*							4.0*	2.7*
White	1992-96	-0.4	1996-09	5.9*	2009-14	2.2							3.8*	2.2
Black	1992-95	-10.2	1995-14	5.0*									5.0*	5.0*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-80	-4.6	1980-97	1.8*	1997-12	5.5*	2012-14	-1.9					3.8*	1.7
White	1975-77	10.4	1977-80	-9.1	1980-97	2.5*	1997-12	5.6*	2012-14	-2.9			3.7*	1.3
Black	1975-14	3.1*											3.1*	3.1*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-96	-1.3	1996-09	5.6*	2009-14	2.5*							3.9*	2.5*
White	1992-96	-0.4	1996-09	5.9*	2009-14	2.0							3.7*	2.0
White NH[e][f]	1992-96	0.0	1996-09	6.2*	2009-14	1.8							3.8*	1.8
Black	1992-14	4.0*											4.0*	4.0*
Black NH[e][f]	1992-14	4.1*											4.1*	4.1*
API[e]	1992-03	0.6	2003-14	5.6*									5.6*	5.6*
AI/AN[e][g]	1992-14	3.5*											3.5*	3.5*
Hispanic[f]	1992-14	4.1*											4.1*	4.1*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-83	-3.1*	1983-14	1.2*									1.2*	1.2*
White	1975-84	-2.5*	1984-14	1.2*									1.2*	1.2*
Black	1975-14	0.4											0.4	0.4
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	1.4*											1.4*	1.4*
White	1992-14	1.4*											1.4*	1.4*
White NH[e][f]	1992-14	1.4*											1.4*	1.4*
Black	1992-14	1.3*											1.3*	1.3*
Black NH[e][f]	1992-14	1.4*											1.4*	1.4*
API[e]	1992-14	0.0											0.0	0.0
AI/AN[e][g]	–	–											–	–
Hispanic[f]	1992-14	0.9											0.9	0.9

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Table 26.3
Cancer of the Thyroid (Invasive)

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-77	6.6	1977-80	-5.2	1980-93	2.3*	1993-99	4.5*	1999-09	7.1*	2009-14	1.3*	3.9*	1.3*
White	1975-81	-1.1	1981-93	2.4*	1993-99	5.2*	1999-09	7.4*	2009-14	1.2			3.9*	1.2
Black	1975-91	-0.4	1991-14	5.9*									5.9*	5.9*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-99	4.1*	1999-09	6.9*	2009-14	1.7*							4.0*	1.7*
White	1992-98	4.4*	1998-09	7.0*	2009-14	1.6*							4.0*	1.6*
Black	1992-98	2.8	1998-11	7.6*	2011-14	-0.8							4.7*	1.3
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-77	6.6	1977-80	-5.2	1980-93	2.2*	1993-99	4.5*	1999-09	7.1*	2009-14	1.1*	3.7*	1.1*
White	1975-82	-0.9	1982-96	2.8*	1996-09	7.2*	2009-14	1.1					3.7*	1.1
Black	1975-91	-0.3	1991-14	5.8*									5.8*	5.8*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-99	4.1*	1999-09	6.9*	2009-14	1.4*							3.8*	1.4*
White	1992-98	4.4*	1998-09	7.0*	2009-14	1.3*							3.8*	1.3*
White NH[e][f]	1992-99	5.6*	1999-09	7.2*	2009-14	1.0							3.7*	1.0
Black	1992-98	2.9	1998-11	7.4*	2011-14	-1.3							4.4*	0.8
Black NH[e][f]	1992-98	2.7	1998-11	7.6*	2011-14	-1.4							4.6*	0.8
API[e]	1992-99	0.4	1999-11	5.0*	2011-14	-2.2							2.6*	-0.4
AI/AN[e][g]	1992-14	3.9*											3.9*	3.9*
Hispanic[f]	1992-95	-2.4	1995-14	4.8*									4.8*	4.8*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-88	-2.6*	1988-14	0.4*									0.4*	0.4*
White	1975-88	-2.8*	1988-14	0.3*									0.3*	0.3*
Black	1975-95	-1.1*	1995-14	0.9*									0.9*	0.9*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-94	-5.3	1994-14	0.5*									0.5*	0.5*
White	1992-14	0.3*											0.3*	0.3*
White NH[e][f]	1992-14	0.2											0.2	0.2
Black	1992-14	0.9*											0.9*	0.9*
Black NH[e][f]	1992-14	1.1*											1.1*	1.1*
API[e]	1992-03	-4.1*	2003-08	8.0	2008-14	-7.3*							-2.5	-7.3*
AI/AN[e][g]	1992-14	-0.9											-0.9	-0.9
Hispanic[f]	1992-14	-0.5											-0.5	-0.5

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Figure 26.1

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates[a]
Cancer of the Thyroid, by Race and Sex
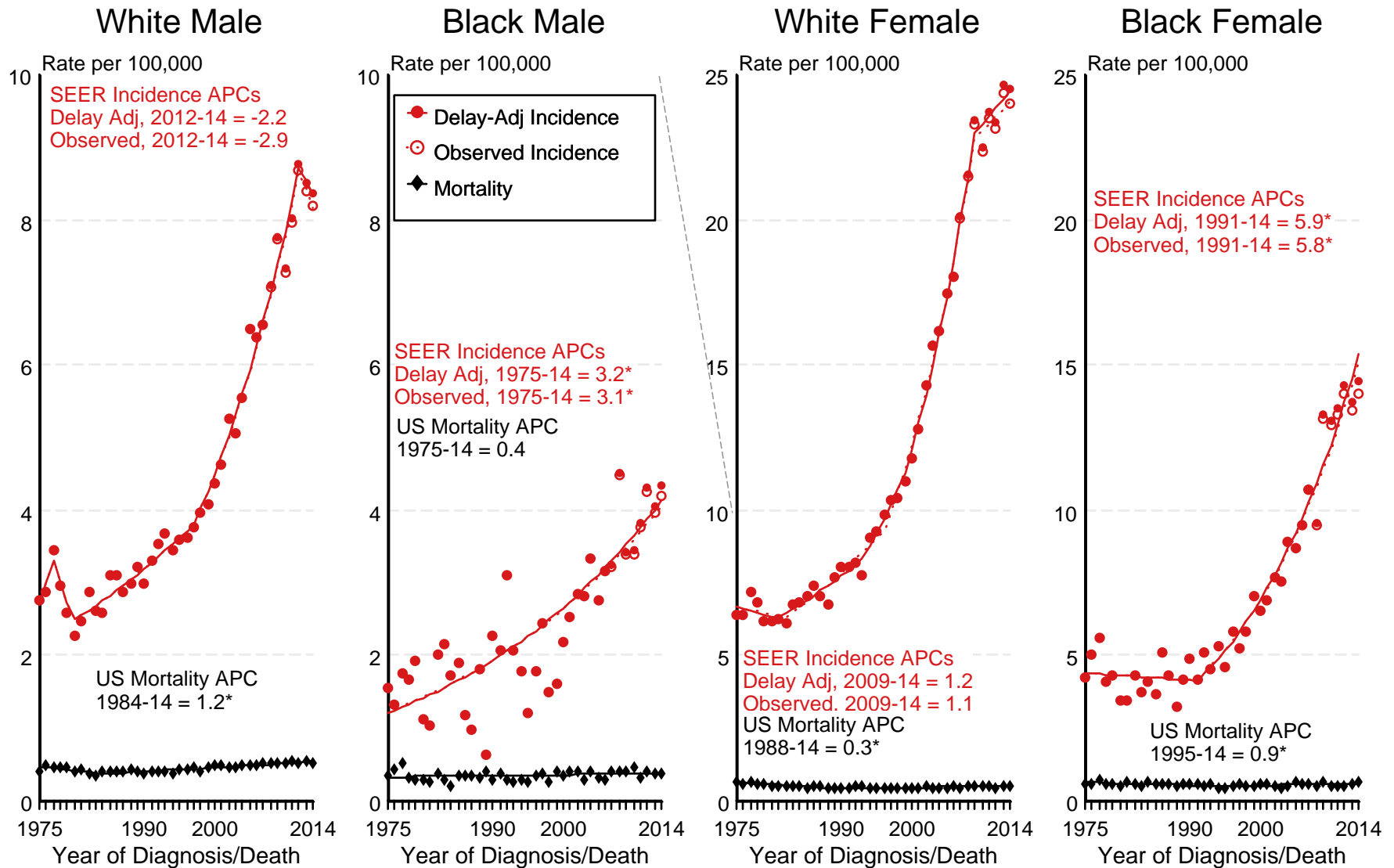
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

[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 4.4, January 2017, 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 26.3

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2012-14 = -1.5
Observed, 2012-14 = -1.9

SEER 13 APCs
Delay Adj, 2009-14 = 2.7*
Observed, 2009-14 = 2.5*

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2012-14 = -2.2
Observed, 2012-14 = -2.9

SEER 13 APCs
Delay Adj, 2009-14 = 2.2
Observed, 2009-14 = 2.0

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 3.2*
Observed, 1975-14 = 3.1*

SEER 13 APCs
Delay Adj, 1995-14 = 5.0*
Observed, 1992-14 = 4.0*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
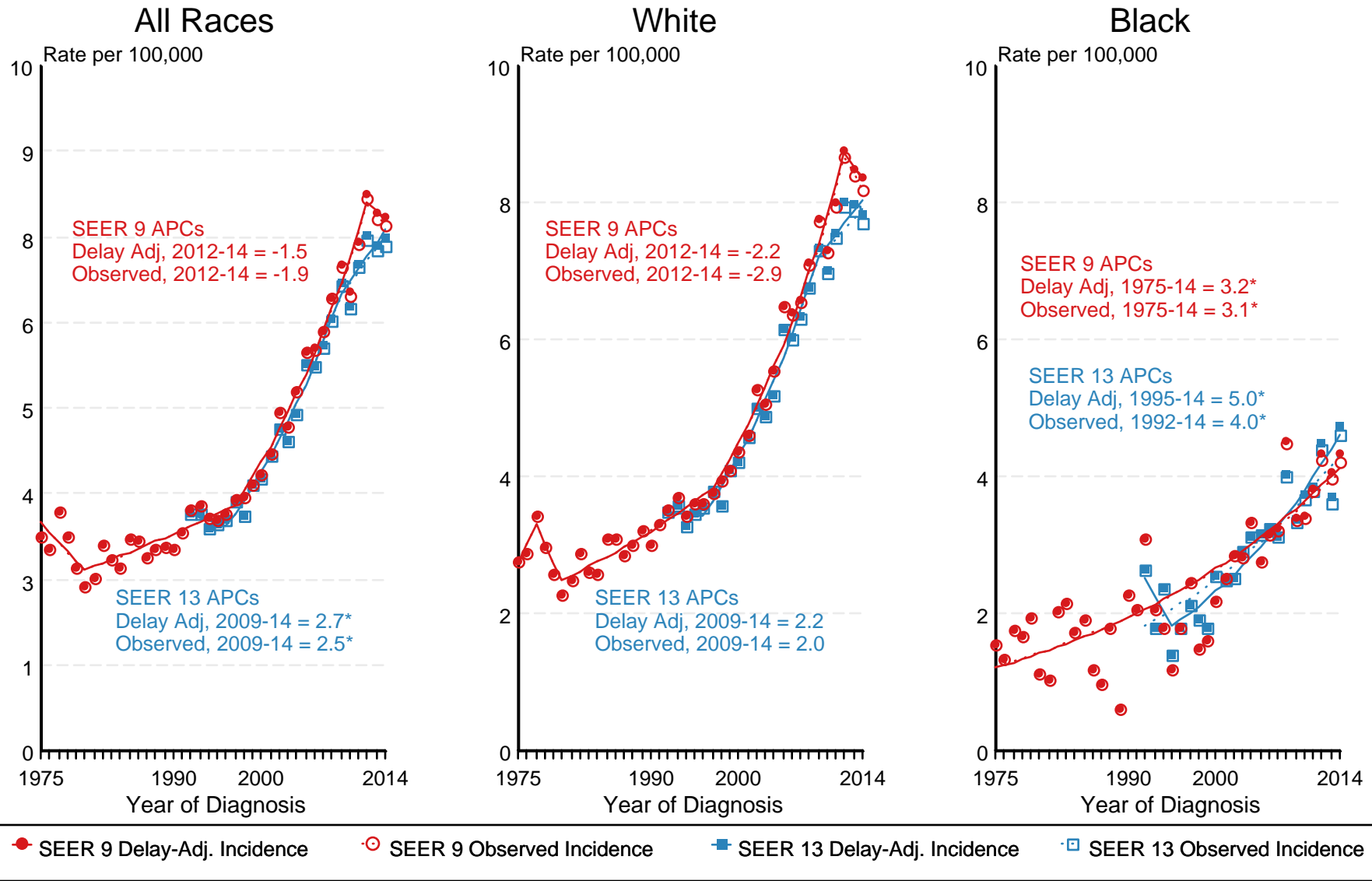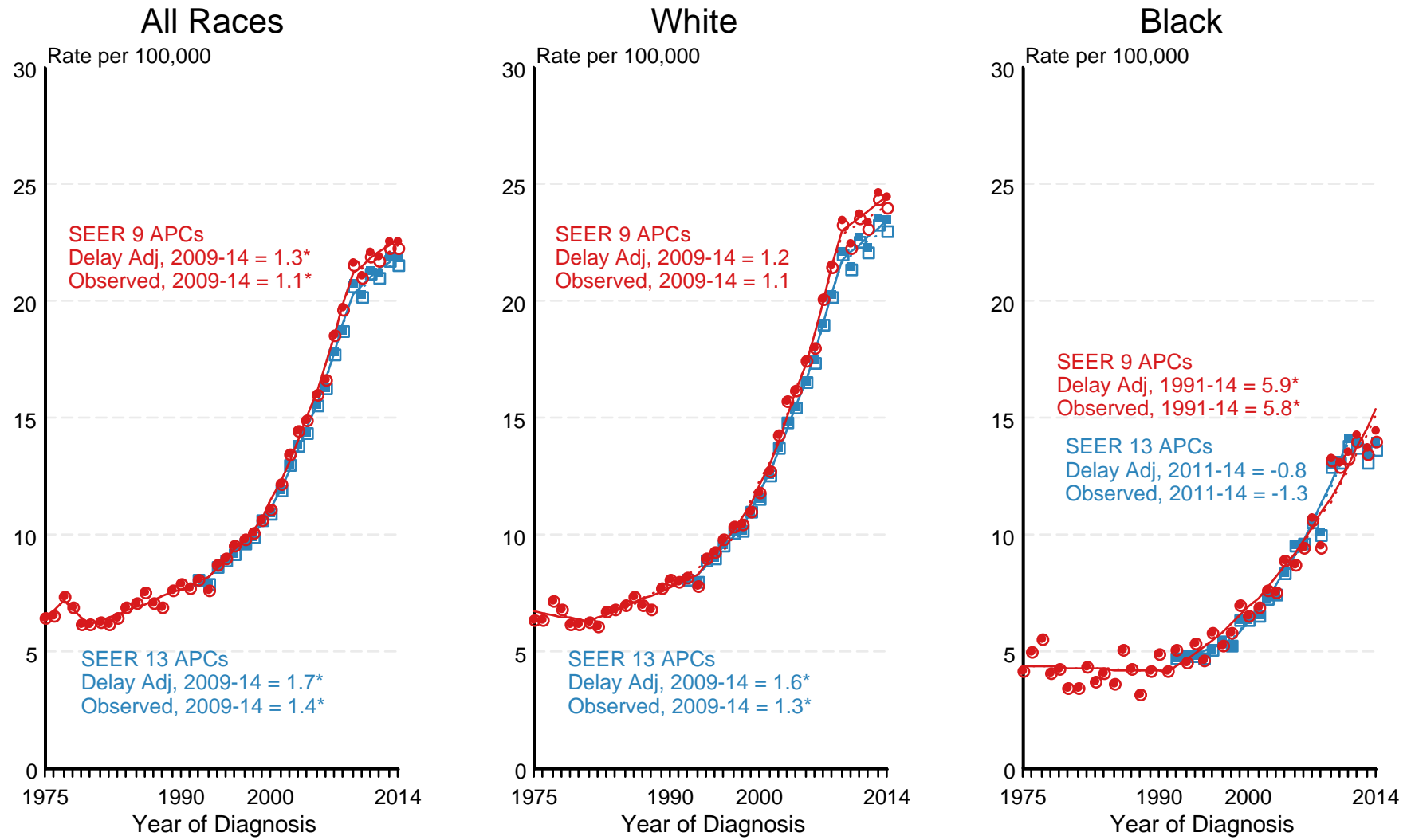   Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
   The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 26.4

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

All Races
Rate per 100,000

SEER 9 APCs
Delay Adj, 2009-14 = 1.3*
Observed, 2009-14 = 1.1*

SEER 13 APCs
Delay Adj, 2009-14 = 1.7*
Observed, 2009-14 = 1.4*

Year of Diagnosis

White
Rate per 100,000

SEER 9 APCs
Delay Adj, 2009-14 = 1.2
Observed, 2009-14 = 1.1

SEER 13 APCs
Delay Adj, 2009-14 = 1.6*
Observed, 2009-14 = 1.3*

Year of Diagnosis

Black
Rate per 100,000

SEER 9 APCs
Delay Adj, 1991-14 = 5.9*
Observed, 1991-14 = 5.8*

SEER 13 APCs
Delay Adj, 2011-14 = -0.8
Observed, 2011-14 = -1.3

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.

[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 4.4, January 2017, 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four Joinpoints,
Both Sexes 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] 2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-86	0.7*	1986-07	0.2*	2007-14	-0.9*							-0.6*	-0.9*
White	1975-86	0.9*	1986-07	0.3*	2007-14	-0.8*							-0.5*	-0.8*
Black	1975-14	0.3*											0.3*	0.3*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-07	0.1	2007-14	-1.2*									-0.9*	-1.2*
White	1992-07	0.2*	2007-14	-1.1*									-0.8*	-1.1*
Black	1992-14	0.4*											0.4*	0.4*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-86	0.7*	1986-07	0.2*	2007-14	-1.2*							-0.9*	-1.2*
White	1975-86	0.9*	1986-07	0.3*	2007-14	-1.1*							-0.8*	-1.1*
Black	1975-14	0.3*											0.3*	0.3*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-07	0.1	2007-14	-1.5*									-1.1*	-1.5*
White	1992-07	0.2*	2007-14	-1.4*									-1.0*	-1.4*
White NH[ef]	1992-07	0.4*	2007-14	-1.2*									-0.9*	-1.2*
Black	1992-14	0.2											0.2	0.2
Black NH[ef]	1992-14	0.2											0.2	0.2
API[e]	1992-08	0.4	2008-14	-2.8*									-1.8*	-2.8*
AI/AN[eg]	1992-14	1.0											1.0	1.0
Hispanic[f]	1992-14	-0.3											-0.3	-0.3
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-77	0.2	1977-87	-2.2*	1987-14	0.0							0.0	0.0
White	1975-77	0.1	1977-87	-2.1*	1987-99	0.0	1999-14	0.2*					0.2*	0.2*
Black	1975-14	-1.0*											-1.0*	-1.0*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	0.0											0.0	0.0
White	1992-14	0.1*											0.1*	0.1*
White NH[ef]	1992-14	0.3*											0.3*	0.3*
Black	1992-14	-0.9*											-0.9*	-0.9*
Black NH[ef]	1992-14	-0.8*											-0.8*	-0.8*
API[e]	1992-14	-0.5											-0.5	-0.5
AI/AN[eg]	1992-14	2.4*											2.4*	2.4*
Hispanic[f]	1992-14	-0.2											-0.2	-0.2

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence[a][b] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-86	0.8*	1986-07	0.1	2007-14	-1.0*							-0.8*	-1.0*
White	1975-86	1.0*	1986-07	0.2	2007-14	-0.9*							-0.7*	-0.9*
Black	1975-14	0.5*											0.5*	0.5*
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-07	0.1	2007-14	-1.4*									-1.1*	-1.4*
White	1992-07	0.2	2007-14	-1.3*									-1.0*	-1.3*
Black	1992-14	0.6*											0.6*	0.6*
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-86	0.8*	1986-07	0.1	2007-14	-1.3*							-1.0*	-1.3*
White	1975-87	1.2*	1987-94	-0.4	1994-07	0.4*	2007-14	-1.5*					-1.1*	-1.5*
Black	1975-14	0.4*											0.4*	0.4*
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-07	0.1	2007-14	-1.7*									-1.3*	-1.7*
White	1992-07	0.2	2007-14	-1.6*									-1.2*	-1.6*
White NH[e][f]	1992-07	0.3*	2007-14	-1.5*									-1.1*	-1.5*
Black	1992-14	0.4*											0.4*	0.4*
Black NH[e][f]	1992-14	0.5*											0.5*	0.5*
API[e]	1992-07	1.0*	2007-14	-2.9*									-2.0*	-2.9*
AI/AN[e][g]	1992-14	1.1											1.1	1.1
Hispanic[f]	1992-14	-0.3											-0.3	-0.3
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-83	-1.4*	1983-87	-2.8*	1987-93	0.2	1993-97	-1.0	1997-14	0.0			0.0	0.0
White	1975-82	-1.4*	1982-87	-2.3*	1987-00	-0.2*	2000-14	0.1					0.1	0.1
Black	1975-14	-0.9*											-0.9*	-0.9*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-97	-0.9*	1997-14	0.0									0.0	0.0
White	1992-14	0.0											0.0	0.0
White NH[e][f]	1992-99	-0.3	1999-14	0.2*									0.2*	0.2*
Black	1992-14	-0.7*											-0.7*	-0.7*
Black NH[e][f]	1992-14	-0.6*											-0.6*	-0.6*
API[e]	1992-14	0.0											0.0	0.0
AI/AN[e][g]	1992-14	2.8*											2.8*	2.8*
Hispanic[f]	1992-14	-0.4											-0.4	-0.4

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Table 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,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
SEER 9 Delay-Adjusted Incidence[a], 1975-2014														
All Races	1975-02	0.2*	2002-14	-0.8*									-0.8*	-0.8*
White	1975-01	0.4*	2001-14	-0.7*									-0.7*	-0.7*
Black	1975-14	0.2											0.2	0.2
SEER 13 Delay-Adjusted Incidence[b], 1992-2014														
All Races	1992-04	-0.2	2004-14	-1.1*									-1.1*	-1.1*
White	1992-03	0.0	2003-14	-0.9*									-0.9*	-0.9*
Black	1992-14	-0.2											-0.2	-0.2
SEER 9 Observed Incidence[a], 1975-2014														
All Races	1975-02	0.2*	2002-14	-1.0*									-1.0*	-1.0*
White	1975-02	0.4*	2002-14	-1.0*									-1.0*	-1.0*
Black	1975-14	0.1											0.1	0.1
SEER 13 Observed Incidence[b], 1992-2014														
All Races	1992-04	-0.2	2004-14	-1.3*									-1.3*	-1.3*
White	1992-04	-0.1	2004-14	-1.2*									-1.2*	-1.2*
White NH[ef]	1992-03	0.2	2003-14	-0.9*									-0.9*	-0.9*
Black	1992-14	-0.4											-0.4	-0.4
Black NH[ef]	1992-14	-0.3											-0.3	-0.3
API[e]	1992-14	-0.2											-0.2	-0.2
AI/AN[eg]	1992-14	3.0											3.0	3.0
Hispanic[f]	1992-14	-0.7*											-0.7*	-0.7*
U.S. Cancer Mortality[c], 1975-2014														
All Races	1975-86	-1.6*	1986-14	-0.4*									-0.4*	-0.4*
White	1975-86	-1.7*	1986-14	-0.3*									-0.3*	-0.3*
Black	1975-14	-1.0*											-1.0*	-1.0*
U.S. Cancer Mortality[c], 1992-2014														
All Races	1992-14	-0.5*											-0.5*	-0.5*
White	1992-14	-0.3*											-0.3*	-0.3*
White NH[ef]	1992-14	-0.2*											-0.2*	-0.2*
Black	1992-14	-1.2*											-1.2*	-1.2*
Black NH[ef]	1992-14	-1.2*											-1.2*	-1.2*
API[e]	1992-14	-1.1*											-1.1*	-1.1*
AI/AN[eg]	–	–											–	–
Hispanic[f]	1992-14	-0.2											-0.2	-0.2

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.
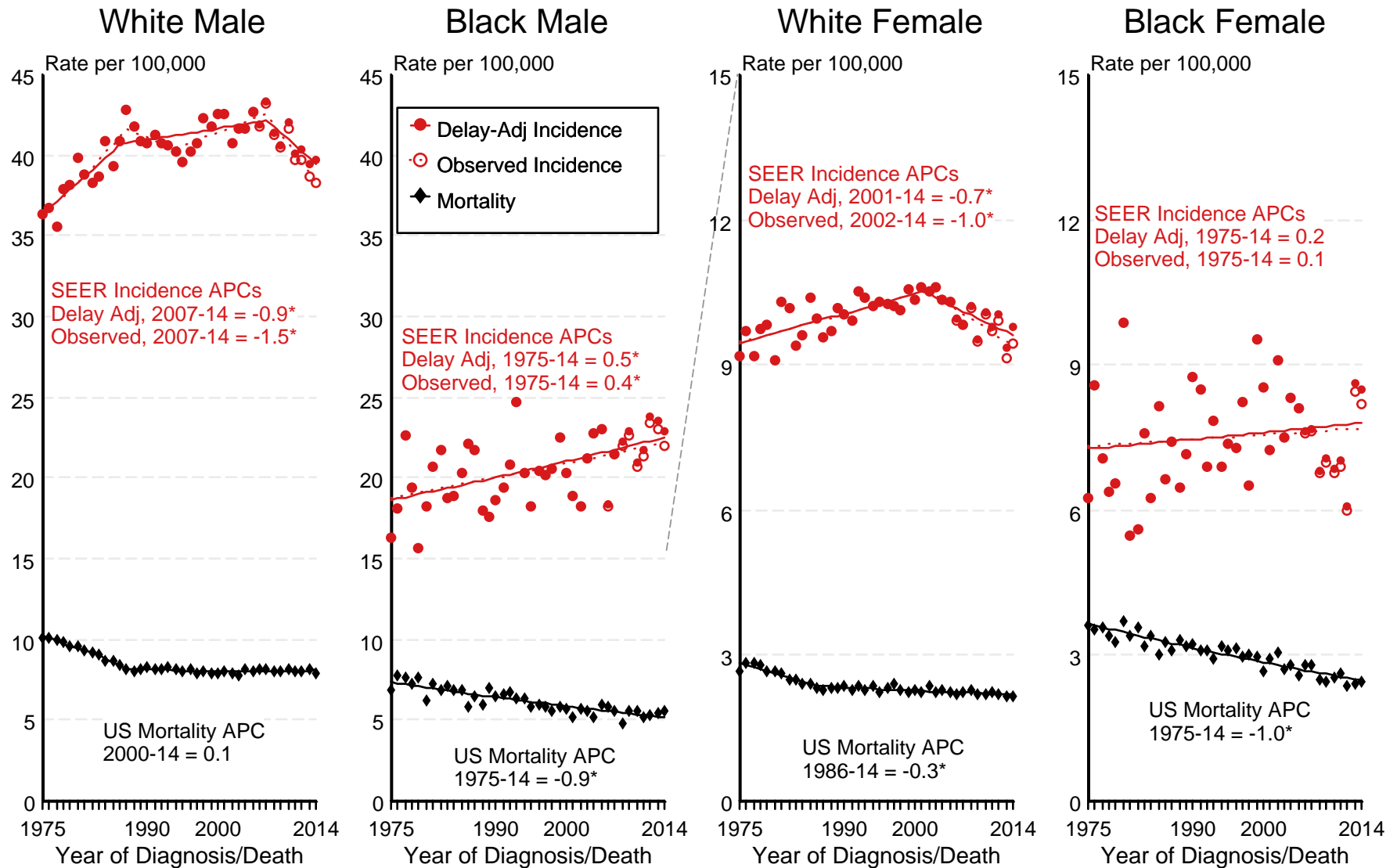[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
– Joinpoint regression line analysis could not be performed on data series.

Figure 27.1

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

White Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2007-14 = -0.9*
Observed, 2007-14 = -1.5*

US Mortality APC
2000-14 = 0.1

Year of Diagnosis/Death

Black Male

Rate per 100,000

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

SEER Incidence APCs
Delay Adj, 1975-14 = 0.5*
Observed, 1975-14 = 0.4*

US Mortality APC
1975-14 = -0.9*

Year of Diagnosis/Death

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 2001-14 = -0.7*
Observed, 2002-14 = -1.0*

US Mortality APC
1986-14 = -0.3*

Year of Diagnosis/Death

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-14 = 0.2
Observed, 1975-14 = 0.1

US Mortality APC
1975-14 = -1.0*

Year of Diagnosis/Death

Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
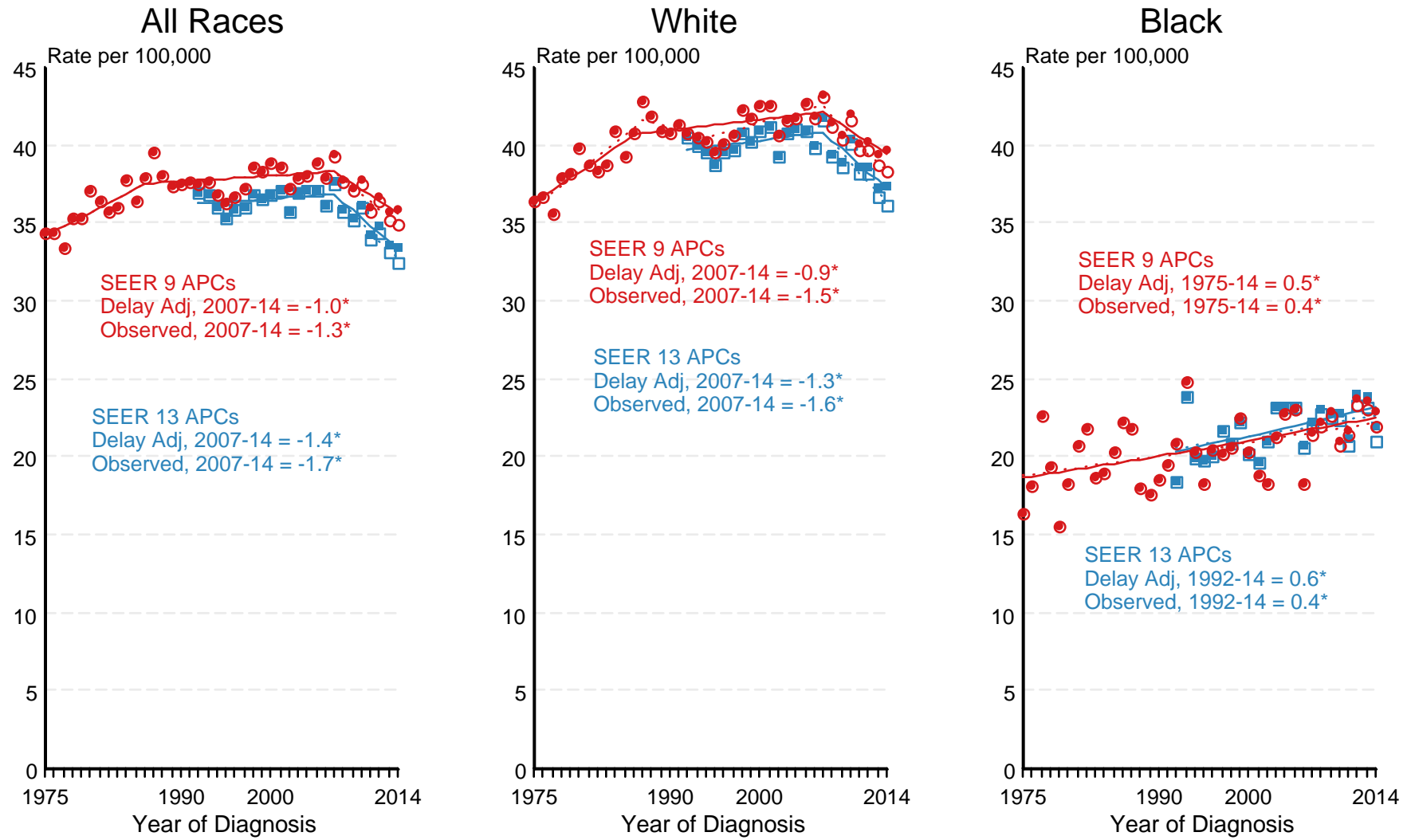[a] Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 27.3

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

SEER Cancer Statistics Review 1975-2014

National Cancer Institute

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2007-14 = -1.0*
Observed, 2007-14 = -1.3*

SEER 13 APCs
Delay Adj, 2007-14 = -1.4*
Observed, 2007-14 = -1.7*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2007-14 = -0.9*
Observed, 2007-14 = -1.5*

SEER 13 APCs
Delay Adj, 2007-14 = -1.3*
Observed, 2007-14 = -1.6*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 0.5*
Observed, 1975-14 = 0.4*

SEER 13 APCs
Delay Adj, 1992-14 = 0.6*
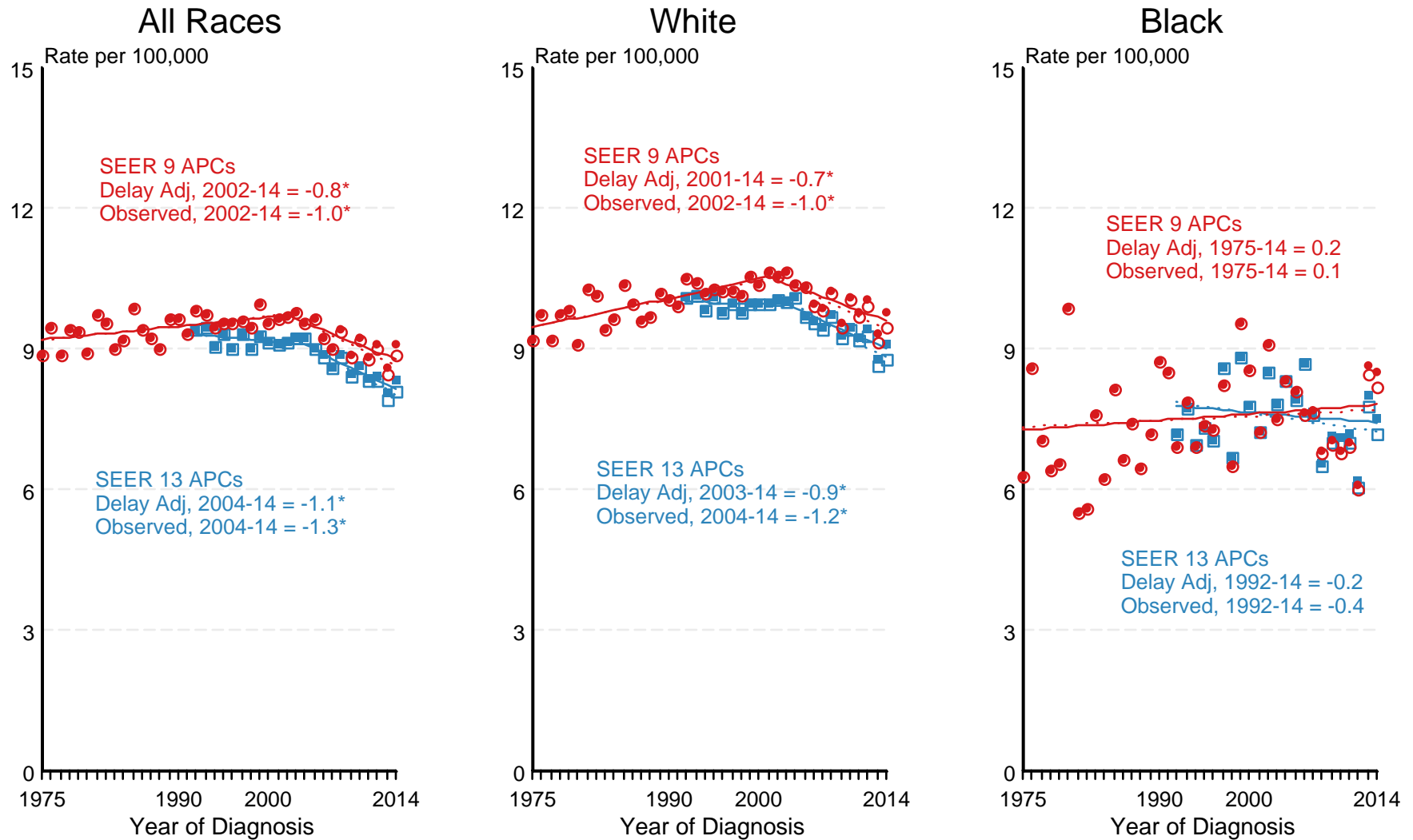Observed, 1992-14 = 0.4*

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.
[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 4.4, January 2017, 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 27.4

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 2002-14 = -0.8*
Observed, 2002-14 = -1.0*

SEER 13 APCs
Delay Adj, 2004-14 = -1.1*
Observed, 2004-14 = -1.3*

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 2001-14 = -0.7*
Observed, 2002-14 = -1.0*

SEER 13 APCs
Delay Adj, 2003-14 = -0.9*
Observed, 2004-14 = -1.2*

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-14 = 0.2
Observed, 1975-14 = 0.1

SEER 13 APCs
Delay Adj, 1992-14 = -0.2
Observed, 1992-14 = -0.4

Year of Diagnosis

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

Source: SEER 9 areas and SEER 13 areas.

[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 4.4, January 2017, 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.

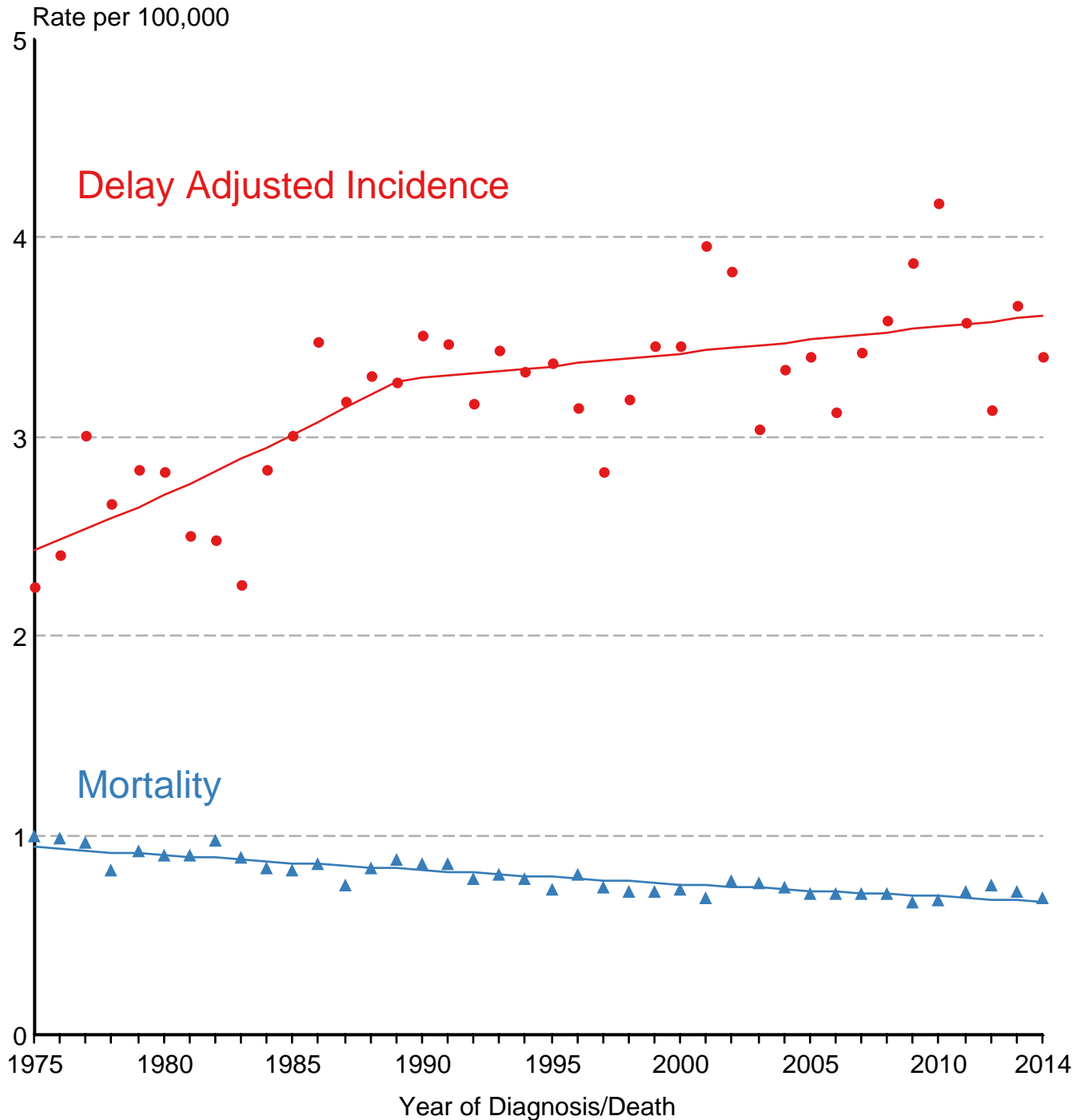* The APC is significantly different from zero (p < 0.05).

Figure 28.1

SEER Delay-Adjusted Incidence and US Mortality
All Childhood Cancers, Under 20 Years of Age
Both Sexes, All Races, 1975-2014
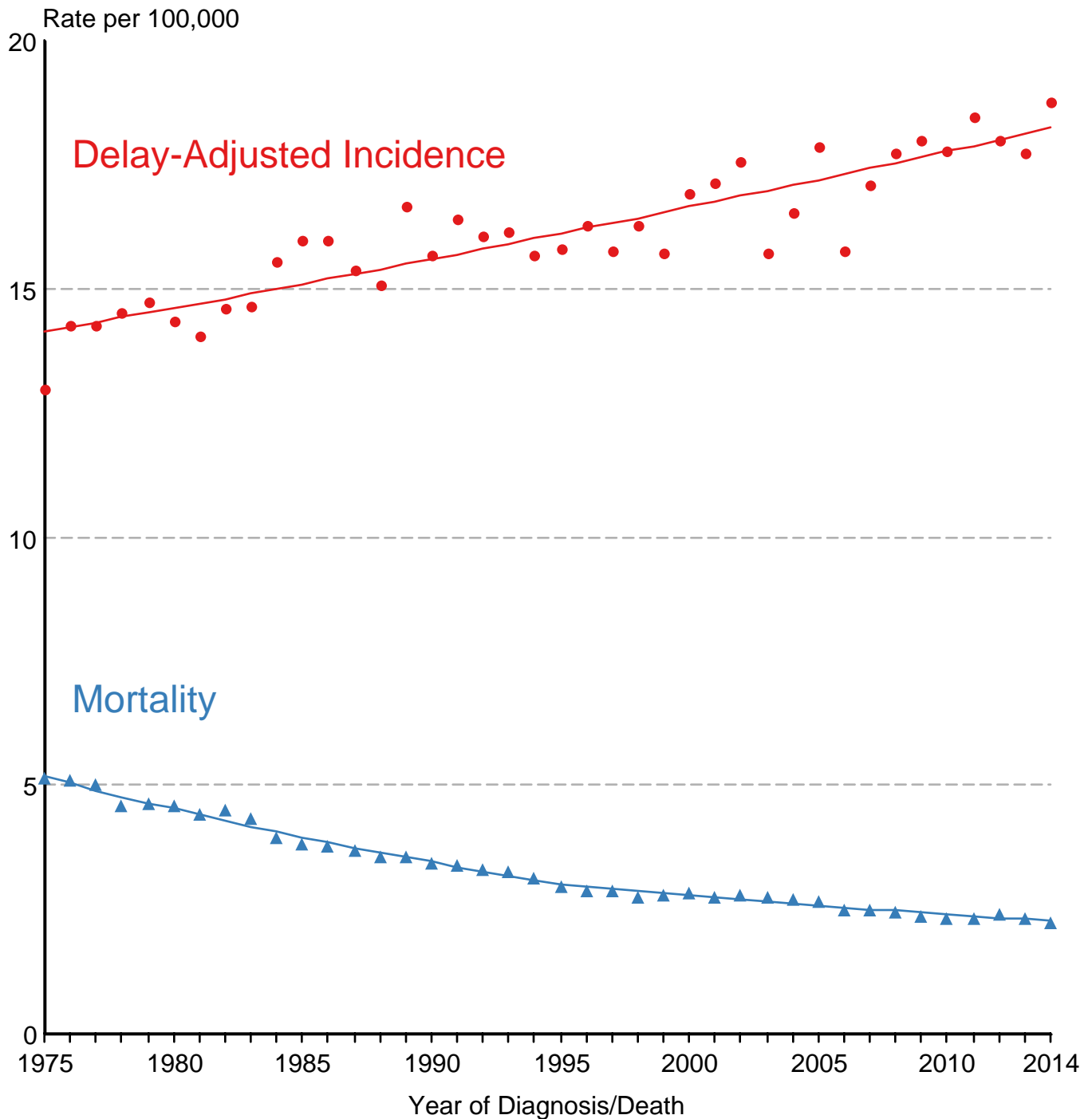
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
 Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines are calculated using the Joinpoint Regression Program Version 4.4, January 2017,
National Cancer Institute.

Figure 28.2

SEER Delay-Adjusted Incidence and US Mortality Brain and CNS, Under 15 Years of Age Both Sexes, All Races, 1975-2014

Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.