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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAF	Cd
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-89	1.2*	1989-92	2.8	1992-95	-2.4	1995-98	1.1	1998-08	-0.3*	2008-16	-1.0*	-0.9*	-1.0*
White	1975-82	0.8*	1982-92	1.8*	1992-95	-2.1	1995-98	1.4	1998-08	-0.3	2008-16	-1.0*	-0.9*	-1.0*
Black	1975-84	1.6*	1984-89	0.5	1989-92	3.9*	1992-09	-0.6*	2009-14	-1.9*	2014-16	0.4	-1.1*	-0.8
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-04	-0.9*	2004-07	0.6	2007-16	-1.0*							-1.0*	-1.0*
White	2000-04	-0.9	2004-07	0.7	2007-16	-1.0*							-1.0*	-1.0*
White NH <sup>ef</sup>	2000-04	-0.8	2004-07	0.9	2007-16	-0.9*							-0.9*	-0.9*
Black	2000-06	-0.7*	2006-09	0.5	2009-14	-1.8*	2014-16	0.1					-0.9*	-0.9
Black NH <sup>ef</sup>	2000-05	-0.7*	2005-09	0.3	2009-14	-1.8*	2014-16	0.2					-0.9*	-0.8
API <sup>e</sup>	2000-16	-0.4*											-0.4*	-0.4*
AI/AN <sup>eg</sup>	2000-16	0.1											0.1	0.1
Hispanic <sup>f</sup>	2000-16	-0.6*											-0.6*	-0.6*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-84	0.5*	1984-91	0.3*	1991-94	-0.5	1994-98	-1.3*	1998-01	-0.8*	2001-16	-1.5*	-1.5*	-1.5*
White	1975-90	0.4*	1990-94	-0.3	1994-98	-1.2*	1998-01	-0.6	2001-16	-1.4*			-1.4*	-1.4*
Black	1975-83	1.3*	1983-91	0.7*	1991-95	-0.8*	1995-01	-1.6*	2001-16	-2.1*			-2.1*	-2.1*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	-1.5*											-1.5*	-1.5*
White	2000-16	-1.4*											-1.4*	-1.4*
White NH <sup>ef</sup>	2000-16	-1.4*											-1.4*	-1.4*
Black	2000-16	-2.1*											-2.1*	-2.1*
Black NH <sup>ef</sup>	2000-16	-2.0*											-2.0*	-2.0*
API <sup>e</sup>	2000-16	-1.3*											-1.3*	-1.3*
AI/AN <sup>eg</sup>	2000-16	-0.9*											-0.9*	-0.9*
Hispanic <sup>f</sup>	2000-16	-1.3*											-1.3*	-1.3*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta)
Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAF	Cd
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-89	1.3*	1989-92	5.0*	1992-95	-4.2*	1995-08	-0.3*	2008-13	-2.8*	2013-16	-0.4	-1.7*	-1.0
White	1975-89	1.4*	1989-92	4.9*	1992-95	-4.5*	1995-07	-0.1	2007-13	-2.4*	2013-16	-0.5	-1.8*	-1.0
Black	1975-81	2.8*	1981-89	0.6	1989-92	7.6*	1992-96	-2.5	1996-08	-1.0*	2008-16	-2.8*	-2.6*	-2.8*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-04	-1.4	2004-07	0.5	2007-16	-2.0*							-2.0*	-2.0*
White	2000-04	-1.3	2004-07	0.8	2007-13	-2.3*	2013-16	-1.1					-1.9*	-1.4*
White NH <sup>ef</sup>	2000-04	-1.3*	2004-07	1.0	2007-13	-2.2*	2013-16	-0.8					-1.7*	-1.1
Black	2000-05	-1.7*	2005-09	-0.2	2009-14	-3.5*	2014-16	-0.2					-2.0*	-1.8*
Black NH <sup>ef</sup>	2000-05	-1.6*	2005-09	-0.2	2009-14	-3.5*	2014-16	0.0					-2.0*	-1.7*
API <sup>e</sup>	2000-16	-1.5*											-1.5*	-1.5*
AI/AN <sup>eg</sup>	2000-16	-0.4											-0.4	-0.4
Hispanic <sup>f</sup>	2000-08	-0.7*	2008-16	-2.5*									-2.3*	-2.5*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-79	1.0*	1979-90	0.3*	1990-93	-0.5	1993-01	-1.5*	2001-16	-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*	2000-16	-1.7*	-1.7*	-1.7*
Black	1975-82	1.8*	1982-90	1.0*	1990-93	-0.2	1993-01	-2.0*	2001-16	-2.7*			-2.7*	-2.7*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	-1.8*											-1.8*	-1.8*
White	2000-16	-1.7*											-1.7*	-1.7*
White NH <sup>ef</sup>	2000-16	-1.6*											-1.6*	-1.6*
Black	2000-16	-2.7*											-2.7*	-2.7*
Black NH <sup>ef</sup>	2000-16	-2.6*											-2.6*	-2.6*
API <sup>e</sup>	2000-16	-1.6*											-1.6*	-1.6*
AI/AN <sup>eg</sup>	2000-16	-0.8*											-0.8*	-0.8*
$ exttt{Hispanic}^{ exttt{f}}$	2000-16	-1.6*											-1.6*	-1.6*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	nd 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-79	-0.3	1979-87	1.6*	1987-95	0.1	1995-98	1.5	1998-03	-0.5	2003-16	0.0	0.0	0.0
White	1975-79	-0.2	1979-87	1.7*	1987-95	0.1	1995-98	1.7	1998-03	-0.5	2003-16	0.0	0.0	0.0
Black	1975-91	1.2*	1991-16	0.1									0.1	0.1
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	0.0											0.0	0.0
White	2000-16	0.0											0.0	0.0
White NH <sup>ef</sup>	2000-16	0.1*											0.1*	0.1*
Black	2000-16	0.2*											0.2*	0.2*
Black NH <sup>ef</sup>	2000-16	0.3*											0.3*	0.3*
API <sup>e</sup>	2000-16	0.4*											0.4*	0.4*
AI/AN <sup>eg</sup>	2000-16	0.6*											0.6*	0.6*
Hispanic <sup>f</sup>	2000-16	0.3*											0.3*	0.3*
U.S. Cancer Mortal:	ity <sup>c</sup> , 1975-	2016												
All Races	1975-90	0.6*	1990-94	-0.2	1994-02	-0.8*	2002-16	-1.4*					-1.4*	-1.4*
White	1975-90	0.6*	1990-95	-0.2	1995-98	-1.2*	1998-01	-0.3	2001-16	-1.3*			-1.3*	-1.3*
Black	1975-91	1.0*	1991-99	-0.6*	1999-16	-1.6*							-1.6*	-1.6*
U.S. Cancer Mortal:	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	-1.4*											-1.4*	-1.4*
White	2000-16	-1.3*											-1.3*	-1.3*
White NH <sup>ef</sup>	2000-16	-1.3*											-1.3*	-1.3*
Black	2000-16	-1.6*											-1.6*	-1.6*
Black NH <sup>ef</sup>	2000-16	-1.5*											-1.5*	-1.5*
API <sup>e</sup>	2000-16	-1.0*											-1.0*	-1.0*
AI/AN <sup>eg</sup>	2000-16	-1.2*											-1.2*	-1.2*
Hispanicf	2000-16	-1.0*											-1.0*	-1.0*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

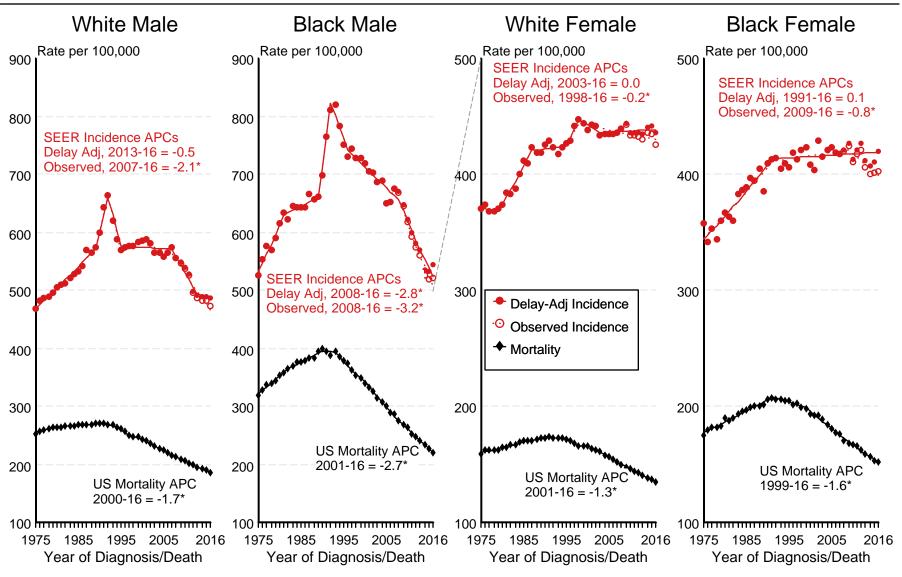
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

Figure 2.1

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



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

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

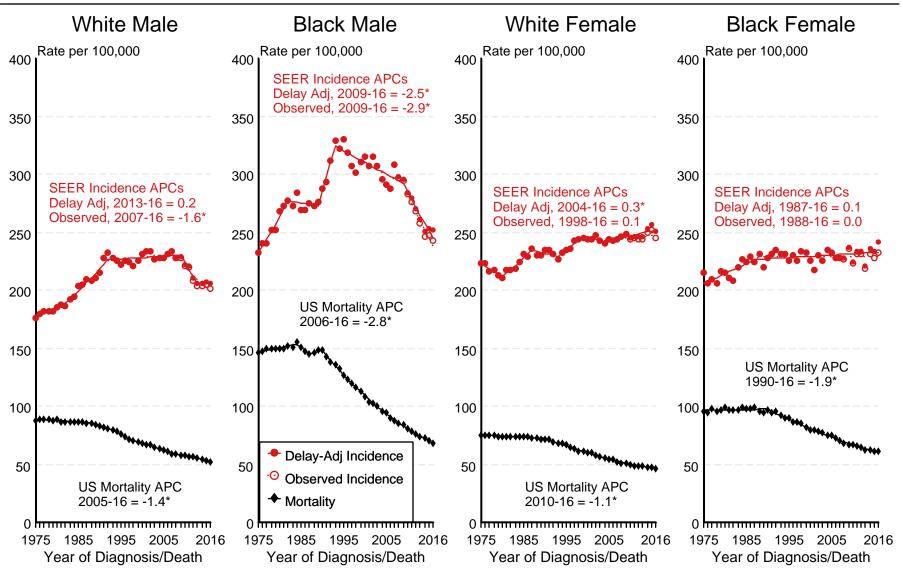
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 2.2

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



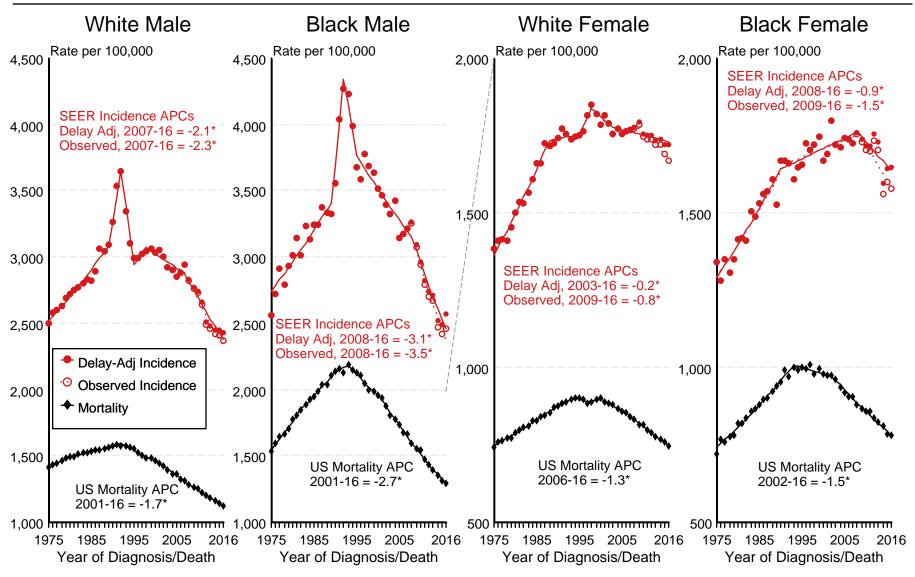
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, 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<sup>a</sup> All Cancer Sites, Ages 65 and Over, by Race and Sex



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

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 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	nd 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-87	1.5*	1987-16	-0.2*									-0.2*	-0.2*
White	1975-87	1.6*	1987-16	0.0									0.0	0.0
Black	1975-16	0.1											0.1	0.1
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	-0.4*											-0.4*	-0.4*
White	2000-16	-0.3*											-0.3*	-0.3*
White NH <sup>ef</sup>	2000-16	0.0											0.0	0.0
Black	2000-16	-0.5											-0.5	-0.5
Black NH <sup>ef</sup>	2000-16	-0.4											-0.4	-0.4
API <sup>e</sup>	2000-16	0.5*											0.5*	0.5*
AI/AN <sup>eg</sup>	2000-16	-0.5											-0.5	-0.5
Hispanic <sup>f</sup>	2000-16	-0.8*											-0.8*	-0.8*
U.S. Cancer Mortal:	ity <sup>c</sup> , 1975-	2016												
All Races	1975-77	3.7	1977-81	-0.7	1981-91	1.3*	1991-07	-1.0*	2007-16	0.6*			0.6*	0.6*
White	1975-92	1.0*	1992-07	-0.9*	2007-16	0.7*							0.7*	0.7*
Black	1975-92	0.9*	1992-07	-1.1*	2007-16	0.9							0.9	0.9
U.S. Cancer Mortal:	ity <sup>c</sup> , 2000-	2016												
All Races	2000-06	-1.2*	2006-16	0.6*									0.6*	0.6*
White	2000-06	-1.1*	2006-16	0.6*									0.6*	0.6*
White NH <sup>ef</sup>	2000-07	-0.7*	2007-16	0.8*									0.8*	0.8*
Black	2000-16	0.1											0.1	0.1
Black NH <sup>ef</sup>	2000-16	0.2											0.2	0.2
API <sup>e</sup>	2000-16	1.2*											1.2*	1.2*
AI/AN <sup>eg</sup>	2000-16	0.7											0.7	0.7
Hispanic <sup>f</sup>	2000-16	0.3											0.3	0.3

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tr	end 4	JP Tre	nd 5	JP Tr	end 6	AAF	Cd
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	sted Incider	nce <sup>a</sup> , 19	75-2016											
All Races	1975-89	1.1*	1989-16	-0.3*									-0.3*	-0.3*
White	1975-89	1.3*	1989-16	-0.2									-0.2	-0.2
Black	1975-16	-0.1											-0.1	-0.1
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	-0.4*											-0.4*	-0.4*
White	2000-16	-0.3*											-0.3*	-0.3*
White NH <sup>ef</sup>	2000-16	-0.1											-0.1	-0.1
Black	2000-16	-0.1											-0.1	-0.1
Black NH <sup>ef</sup>	2000-16	-0.1											-0.1	-0.1
API <sup>e</sup>	2000-16	0.5											0.5	0.5
AI/AN <sup>eg</sup>	2000-16	-0.3											-0.3	-0.3
Hispanic <sup>f</sup>	2000-16	-0.8*											-0.8*	-0.8*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-77	4.4	1977-82	-0.4	1982-91	1.3*	1991-07	-1.0*	2007-16	0.6*			0.6*	0.6*
White	1975-77	4.7	1977-82	-0.3	1982-91	1.4*	1991-07	-0.9*	2007-16	0.7*			0.7*	0.7*
Black	1975-90	0.8*	1990-07	-1.0*	2007-16	0.9							0.9	0.9
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-06	-1.4*	2006-16	0.6*									0.6*	0.6*
White	2000-06	-1.2*	2006-16	0.7*									0.7*	0.7*
White NH <sup>ef</sup>	2000-06	-1.1*	2006-16	0.8*									0.8*	0.8*
Black	2000-16	0.1											0.1	0.1
Black NH <sup>ef</sup>	2000-16	0.2											0.2	0.2
API <sup>e</sup>	2000-16	0.2											0.2	0.2
AI/AN <sup>eg</sup>	2000-16	0.7											0.7	0.7
Hispanic <sup>f</sup>	2000-16	0.1											0.1	0.1

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tr	end 4	JP Tr	end 5	JP Tr	end 6	AAI	PC <sup>d</sup>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adj	usted Incider	nce <sup>a</sup> , 19'	75-2016											
All Races	1975-87	1.6*	1987-16	-0.2									-0.2	-0.2
White	1975-87	1.8*	1987-16	0.0									0.0	0.0
Black	1975-16	0.4											0.4	0.4
SEER 21 Delay-Ad	justed Incide	ence <sup>b</sup> , 2	000-2016											
All Races	2000-16	-0.4*											-0.4*	-0.4*
White	2000-16	-0.3											-0.3	-0.3
White NH <sup>ef</sup>	2000-16	0.0											0.0	0.0
Black	2000-16	-0.8*											-0.8*	-0.8*
Black NH <sup>ef</sup>	2000-16	-0.8											-0.8	-0.8
API <sup>e</sup>	2000-16	0.3											0.3	0.3
AI/AN <sup>eg</sup>	2000-16	-1.3											-1.3	-1.3
$ exttt{Hispanic}^{ ext{f}}$	2000-16	-0.8*											-0.8*	-0.8*
U.S. Cancer Mort	ality <sup>c</sup> , 1975-	2016												
All Races	1975-92	1.0*	1992-07	-1.1*	2007-16	0.6*							0.6*	0.6*
White	1975-92	1.0*	1992-07	-0.9*	2007-16	0.7*							0.7*	0.7*
Black	1975-90	1.2*	1990-16	-0.5*									-0.5*	-0.5*
U.S. Cancer Mort	ality <sup>c</sup> , 2000-	2016												
All Races	2000-06	-1.1*	2006-16	0.5*									0.5*	0.5*
White	2000-10	-0.4*	2010-16	1.1*									0.6*	1.1*
White NH <sup>ef</sup>	2000-10	-0.3	2010-16	1.2*									0.7*	1.2*
Black	2000-16	0.1											0.1	0.1
Black NH <sup>ef</sup>	2000-16	0.2											0.2	0.2
API <sup>e</sup>	2000-16	2.1*											2.1*	2.1*
AI/AN <sup>eg</sup>	2000-16	0.7											0.7	0.7
Hispanic <sup>f</sup>	2000-16	0.4											0.4	0.4

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

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

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

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

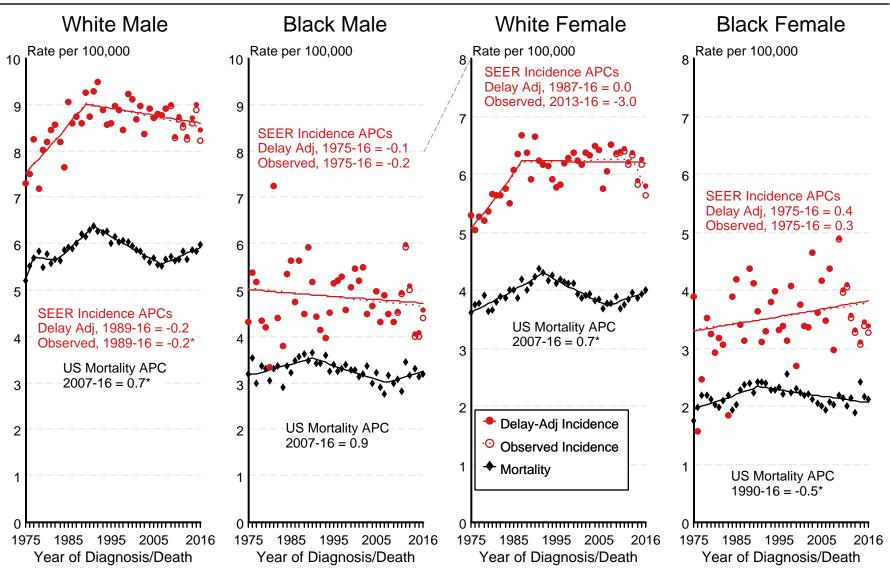
Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Figure 3.1

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



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

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.
 The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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

Trends in SEER Incidence ab and U.S. Mortality Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, All Ages by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	nd 6	AAI	.>C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adju	sted Incide	nce <sup>a</sup> , 19'	75-2016											
All Races	1975-80	-0.5	1980-87	4.0*	1987-94	-0.2	1994-99	1.8*	1999-04	-2.3*	2004-16	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*	2004-16	0.2	0.2	0.2
Black	1975-79	-1.5	1979-86	4.5*	1986-16	0.4*							0.4*	0.4*
SEER 21 Delay-Adj	usted Incide	ence <sup>b</sup> , 2	000-2016											
All Races	2000-04	-2.1*	2004-16	0.3*									0.3*	0.3*
White	2000-04	-2.2*	2004-16	0.2*									0.2*	0.2*
White NH <sup>ef</sup>	2000-04	-2.2*	2004-16	0.3*									0.3*	0.3*
Black	2000-16	0.8*											0.8*	0.8*
Black NH <sup>ef</sup>	2000-16	0.8*											0.8*	0.8*
API <sup>e</sup>	2000-16	1.2*											1.2*	1.2*
AI/AN <sup>eg</sup>	2000-16	0.8*											0.8*	0.8*
Hispanic <sup>f</sup>	2000-16	0.5*											0.5*	0.5*
U.S. Cancer Morta	lity <sup>c</sup> , 1975-	2016												
All Races	1975-90	0.4*	1990-95	-1.7*	1995-98	-3.4*	1998-16	-1.8*					-1.8*	-1.8*
White	1975-90	0.3*	1990-95	-2.0*	1995-98	-3.5*	1998-11	-1.9*	2011-16	-1.3*			-1.6*	-1.3*
Black	1975-93	1.4*	1993-16	-1.5*									-1.5*	-1.5*
U.S. Cancer Morta	lity <sup>c</sup> , 2000-	2016												
All Races	2000-08	-2.1*	2008-16	-1.5*									-1.6*	-1.5*
White	2000-08	-2.1*	2008-16	-1.5*									-1.6*	-1.5*
White NH <sup>ef</sup>	2000-08	-2.1*	2008-16	-1.5*									-1.6*	-1.5*
Black	2000-16	-1.5*											-1.5*	-1.5*
Black NH <sup>ef</sup>	2000-16	-1.4*											-1.4*	-1.4*
API <sup>e</sup>	2000-16	-0.9*											-0.9*	-0.9*
AI/AN <sup>eg</sup>	2000-16	-1.1											-1.1	-1.1
Hispanic <sup>f</sup>	2000-16	-1.1*											-1.1*	-1.1*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

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

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

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

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

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

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

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

Trends in SEER Incidence and U.S. Mortality Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Ages < 50 by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	nd 4	JP Tre	end 5	JP Tre	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ed Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-80	-1.3	1980-87	2.7*	1987-94	-0.8	1994-16	0.3*					0.3*	0.3*
White	1975-80	-1.1	1980-87	2.7*	1987-94	-0.8	1994-16	0.3*					0.3*	0.3*
Black	1975-90	1.3*	1990-16	0.0									0.0	0.0
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	0.4*											0.4*	0.4*
White	2000-16	0.3*											0.3*	0.3*
White NH <sup>ef</sup>	2000-16	0.5*											0.5*	0.5*
Black	2000-16	0.6*											0.6*	0.6*
Black NH <sup>ef</sup>	2000-16	0.6*											0.6*	0.6*
API <sup>e</sup>	2000-16	1.3*											1.3*	1.3*
AI/AN <sup>eg</sup>	2000-16	-0.6											-0.6	-0.6
Hispanic <sup>f</sup>	2000-16	0.5*											0.5*	0.5*
U.S. Cancer Mortali	ty <sup>c</sup> , 1975-	-2016												
All Races	1975-90	-0.4*	1990-07	-3.2*	2007-16	-1.2*							-1.2*	-1.2*
White	1975-90	-0.6*	1990-05	-3.6*	2005-16	-1.4*							-1.4*	-1.4*
Black	1975-89	1.6*	1989-16	-2.2*									-2.2*	-2.2*
U.S. Cancer Mortali	ty <sup>c</sup> , 2000-	-2016												
All Races	2000-08	-2.9*	2008-16	-1.2*									-1.4*	-1.2*
White	2000-07	-3.1*	2007-16	-1.2*									-1.2*	-1.2*
White NH <sup>ef</sup>	2000-07	-3.0*	2007-16	-1.3*									-1.3*	-1.3*
Black	2000-16	-2.3*											-2.3*	-2.3*
Black NH <sup>ef</sup>	2000-16	-2.1*											-2.1*	-2.1*
API <sup>e</sup>	2000-08	-5.2*	2008-16	1.1									0.4	1.1
AI/AN <sup>eg</sup>	2000-16	-1.7											-1.7	-1.7
Hispanic <sup>f</sup>	2000-16	-1.6*											-1.6*	-1.6*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Ages 50+ by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	nd 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ed Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-82	0.8	1982-87	5.4*	1987-93	-0.3	1993-99	1.9*	1999-05	-2.5*	2005-16	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	-3.9*	2004-16	0.2*	0.2*	0.2*
Black	1975-92	2.6*	1992-16	0.4*									0.4*	0.4*
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-04	-2.8*	2004-16	0.3*									0.3*	0.3*
White	2000-04	-3.0*	2004-16	0.2									0.2	0.2
White NH <sup>ef</sup>	2000-04	-3.1*	2004-16	0.3*									0.3*	0.3*
Black	2000-16	0.9*											0.9*	0.9*
Black NH <sup>ef</sup>	2000-16	0.9*											0.9*	0.9*
API <sup>e</sup>	2000-05	-0.5	2005-16	1.6*									1.6*	1.6*
AI/AN <sup>eg</sup>	2000-16	1.2*											1.2*	1.2*
Hispanic <sup>f</sup>	2000-16	0.5*											0.5*	0.5*
U.S. Cancer Mortali	ty <sup>c</sup> , 1975-	2016												
All Races	1975-90	0.5*	1990-95	-1.6*	1995-98	-3.0*	1998-16	-1.7*					-1.7*	-1.7*
White	1975-89	0.5*	1989-95	-1.4*	1995-98	-3.3*	1998-16	-1.8*					-1.8*	-1.8*
Black	1975-93	1.6*	1993-16	-1.3*									-1.3*	-1.3*
U.S. Cancer Mortali	ty <sup>c</sup> , 2000-	2016												
All Races	2000-09	-1.9*	2009-16	-1.5*									-1.6*	-1.5*
White	2000-09	-2.0*	2009-16	-1.5*									-1.6*	-1.5*
White NH <sup>ef</sup>	2000-09	-1.9*	2009-16	-1.5*									-1.6*	-1.5*
Black	2000-16	-1.4*											-1.4*	-1.4*
Black NH <sup>ef</sup>	2000-16	-1.3*											-1.3*	-1.3*
API <sup>e</sup>	2000-16	-0.7*											-0.7*	-0.7*
AI/AN <sup>eg</sup>	2000-16	-1.0											-1.0	-1.0
Hispanic <sup>f</sup>	2000-16	-1.0*											-1.0*	-1.0*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence b Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, All Ages by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tr	end 4	JP Tre	end 5	JP Tre	end 6	AAF	C <sub>q</sub>
-	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Observed In	ncidenceª, 1	L975-2016	5											
All Races	1975-81	-3.1	1981-87	25.2*	1987-94	3.8*	1994-98	9.7*	1998-09	1.1*	2009-16	-1.2*	-0.7	-1.2*
White	1975-81	-2.9	1981-87	25.4*	1987-95	4.0*	1995-98	11.1	1998-09	0.9*	2009-16	-1.8*	-1.2*	-1.8*
Black	1975-83	6.2	1983-88	23.2*	1988-93	3.5	1993-98	11.3*	1998-16	1.1*			1.1*	1.1*
SEER 21 Observed 1	Incidence <sup>b</sup> ,	2000-201	<u>. 6</u>											
All Races	2000-05	0.2	2005-08	4.4	2008-16	-1.2*							-0.6	-1.2*
White	2000-05	0.0	2005-08	4.5	2008-16	-1.8*							-1.2*	-1.8*
White NH <sup>ef</sup>	2000-05	-0.1	2005-08	4.9	2008-16	-1.9*							-1.2*	-1.9*
Black	2000-12	3.0*	2012-16	-0.9									1.2*	-0.9
Black NH <sup>ef</sup>	2000-12	3.0*	2012-16	-0.8									1.3*	-0.8
API <sup>e</sup>	2000-05	0.4	2005-08	6.5	2008-16	0.5							1.1	0.5
AI/AN <sup>eg</sup>	2000-16	0.2											0.2	0.2
Hispanic <sup>f</sup>	2000-13	2.1*	2013-16	-2.2									0.7	-1.1

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint. API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

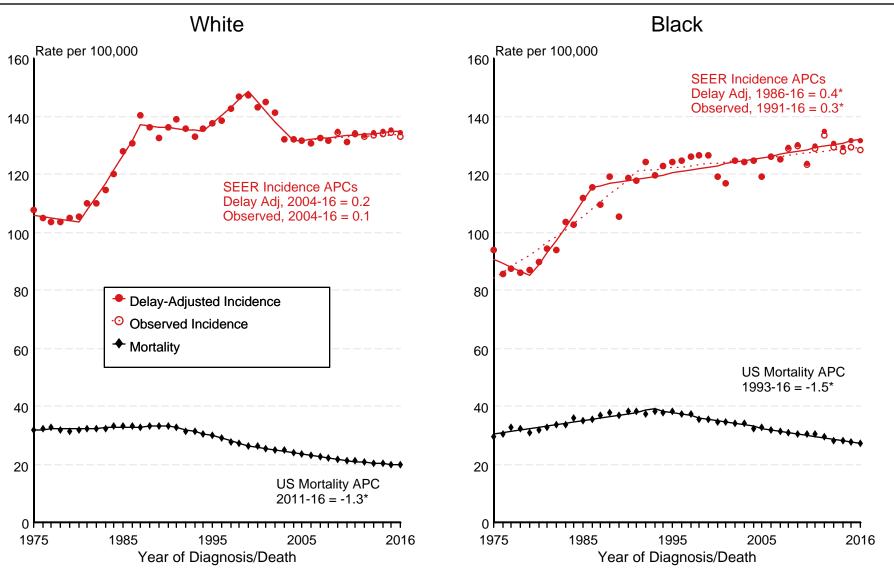
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Data for American Indian/Alaska Native are based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

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

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

Figure 4.1

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



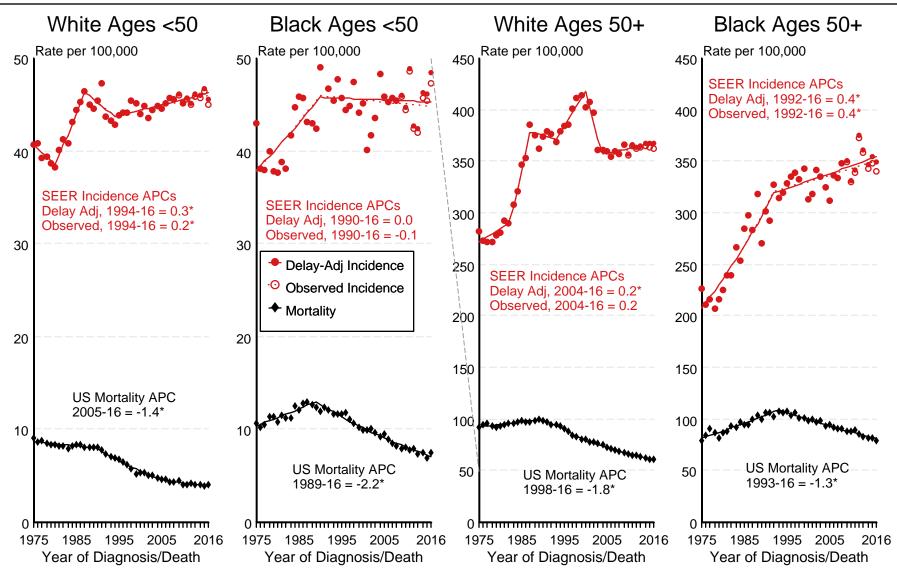
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

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

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.
 The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 4.2



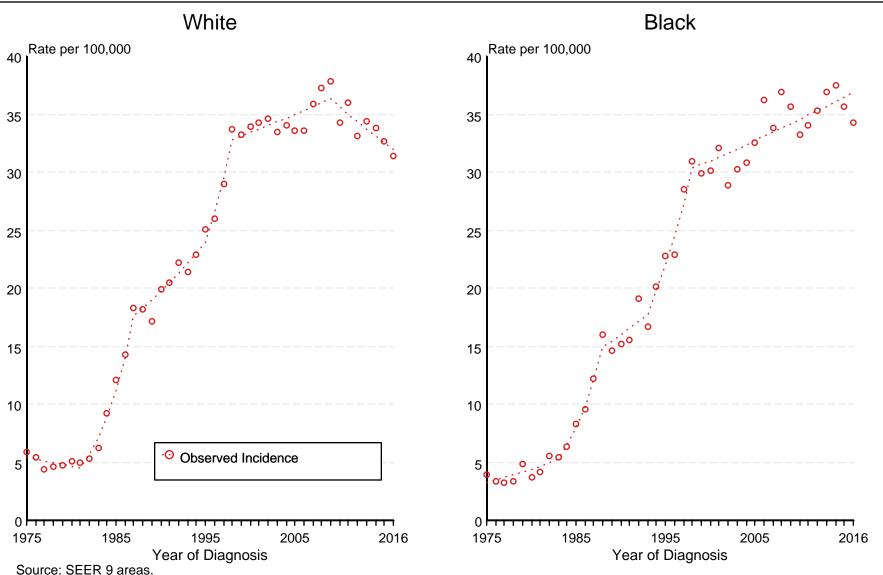
Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

<sup>&</sup>lt;sup>a</sup> 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 4.7, February 2019, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 4.3

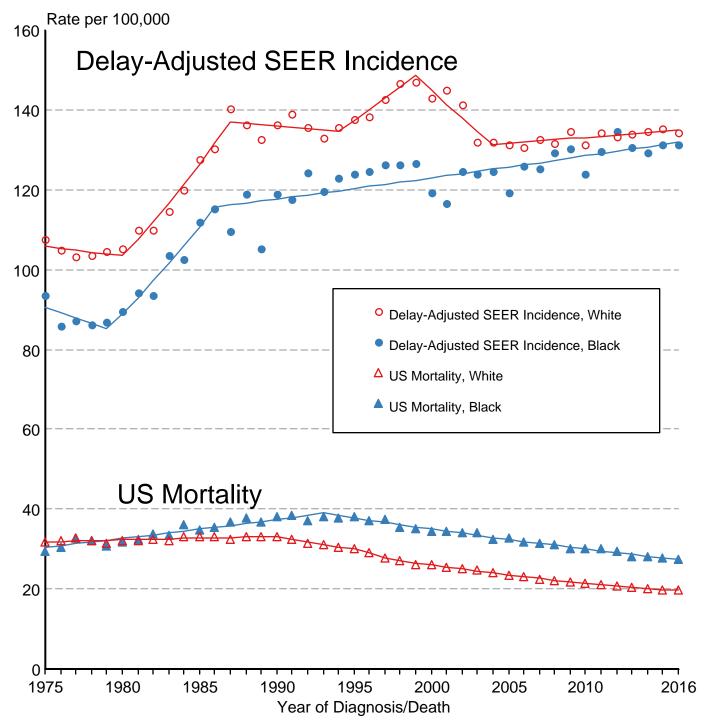
## SEER Observed Incidence Rates<sup>a</sup> Cancer of the Female Breast (In Situ), by Race



Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

# Cancer of the Breast Delay-Adjusted SEER Incidence & US Mortality White Females vs Black Females 1975-2016



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 4.7, February 2019, National Cancer Institute.

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, All Ages by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tr	end 5	JP Tr	end 6	AAI	.5C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adju	sted Incide	nce <sup>a</sup> , 19'	75-2016											
All Races	1975-82	-4.6*	1982-90	0.0	1990-06	-2.7*	2006-16	-0.3					-0.3	-0.3
White	1975-82	-4.8*	1982-90	0.4	1990-05	-2.5*	2005-16	0.0					0.0	0.0
Black	1975-16	-3.6*											-3.6*	-3.6*
SEER 21 Delay-Adj	usted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-03	-3.6*	2003-13	-1.5*	2013-16	1.1							-0.6	0.5
White	2000-03	-4.3*	2003-08	-0.2	2008-13	-2.3*	2013-16	2.7					-0.4	1.4
White NH <sup>ef</sup>	2000-03	-3.5	2003-16	-0.4*									-0.4*	-0.4*
Black	2000-16	-2.8*											-2.8*	-2.8*
Black NH <sup>ef</sup>	2000-16	-2.7*											-2.7*	-2.7*
API <sup>e</sup>	2000-16	-2.1*											-2.1*	-2.1*
AI/AN <sup>eg</sup>	2000-16	1.1											1.1	1.1
Hispanic <sup>f</sup>	2000-13	-4.0*	2013-16	3.0									-1.7*	1.2
U.S. Cancer Morta	lity <sup>c</sup> , 1975-	-2016												
All Races	1975-82	-4.4*	1982-96	-1.6*	1996-03	-3.9*	2003-16	-0.7*					-0.7*	-0.7*
White	1975-83	-4.2*	1983-96	-1.3*	1996-04	-3.3*	2004-16	-0.1					-0.1	-0.1
Black	1975-81	-4.8*	1981-93	-2.3*	1993-01	-5.0*	2001-16	-2.7*					-2.7*	-2.7*
U.S. Cancer Morta	lity <sup>c</sup> , 2000-	-2016												
All Races	2000-03	-4.1*	2003-16	-0.7*									-0.7*	-0.7*
White	2000-03	-3.9*	2003-06	0.2	2006-09	-1.9	2009-16	0.5*					0.0	0.5*
White NH <sup>ef</sup>	2000-04	-3.0*	2004-16	-0.1									-0.1	-0.1
Black	2000-16	-2.7*											-2.7*	-2.7*
Black NH <sup>ef</sup>	2000-16	-2.6*											-2.6*	-2.6*
API <sup>e</sup>	2000-16	-2.7*											-2.7*	-2.7*
AI/AN <sup>eg</sup>	2000-16	-2.7*											-2.7*	-2.7*
Hispanic <sup>f</sup>	2000-02	-10.7*	2002-06	-0.1	2006-11	-3.9*	2011-16	0.7					-1.4*	0.7

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

<sup>\*</sup> The ADC/ADDC is significantly different from gore (pc 0E)

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Ages <50 by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incide	nceª, 197	75-2016											
All Races	1975-81	-3.7*	1981-98	-0.5	1998-01	-7.4	2001-16	-0.2					-0.2	-0.2
White	1975-82	-4.0*	1982-89	2.1	1989-05	-1.9*	2005-16	0.5					0.5	0.5
Black	1975-16	-3.2*											-3.2*	-3.2*
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-04	-2.7*	2004-07	0.2	2007-13	-1.9*	2013-16	2.9*					-0.3	1.7*
White	2000-03	-3.7*	2003-08	0.3	2008-13	-2.2*	2013-16	3.6*					0.0	2.1*
White NH <sup>ef</sup>	2000-16	-0.4*											-0.4*	-0.4*
Black	2000-16	-2.2*											-2.2*	-2.2*
Black NH <sup>ef</sup>	2000-16	-2.1*											-2.1*	-2.1*
API <sup>e</sup>	2000-16	-0.8											-0.8	-0.8
AI/AN <sup>eg</sup>	2000-16	2.0											2.0	2.0
Hispanic <sup>f</sup>	2000-03	-7.6*	2003-14	-2.8*	2014-16	8.6							-0.4	2.7
U.S. Cancer Mortal:	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-81	-3.8*	1981-96	-0.7*	1996-03	-3.9*	2003-16	-0.3					-0.3	-0.3
White	1975-80	-4.1*	1980-97	-0.3	1997-03	-4.0*	2003-16	0.3					0.3	0.3
Black	1975-16	-3.2*											-3.2*	-3.2*
U.S. Cancer Mortal:	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-03	-3.4*	2003-16	-0.4*									-0.4*	-0.4*
White	2000-08	-1.5*	2008-16	1.2*									0.9*	1.2*
White NH <sup>ef</sup>	2000-08	-1.1*	2008-16	1.2*									1.0*	1.2*
Black	2000-13	-1.8*	2013-16	-9.9*									-4.6*	-8.0*
Black NH <sup>ef</sup>	2000-13	-1.6*	2013-16	-9.8*									-4.4*	-7.8*
API <sup>e</sup>	2000-16	-1.4											-1.4	-1.4
AI/AN <sup>eg</sup>	2000-16	-2.3											-2.3	-2.3
Hispanicf	2000-02	-13.4	2002-16	-1.1*									-1.1*	-1.1*

Joinpoint Regression Program Version 4.7, February 2019, 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).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, Califor SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Ages 50+ by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-83	-4.9*	1983-91	-0.9	1991-06	-3.3*	2006-16	-1.1*					-1.1*	-1.1*
White	1975-85	-4.6*	1985-91	0.2	1991-05	-3.4*	2005-16	-0.7					-0.7	-0.7
Black	1975-16	-3.9*											-3.9*	-3.9*
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-03	-5.2*	2003-16	-1.6*									-1.6*	-1.6*
White	2000-16	-1.7*											-1.7*	-1.7*
White NH <sup>ef</sup>	2000-03	-5.4*	2003-16	-0.9*									-0.9*	-0.9*
Black	2000-16	-3.2*											-3.2*	-3.2*
Black NH <sup>ef</sup>	2000-16	-3.3*											-3.3*	-3.3*
API <sup>e</sup>	2000-11	-4.0*	2011-14	3.7	2014-16	-12.9							-3.6	-4.9
AI/AN <sup>eg</sup>	2000-16	-0.4											-0.4	-0.4
Hispanic <sup>f</sup>	2000-16	-3.8*											-3.8*	-3.8*
U.S. Cancer Mortal:	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-84	-4.3*	1984-94	-1.8*	1994-04	-3.4*	2004-16	-0.9*					-0.9*	-0.9*
White	1975-84	-4.6*	1984-96	-1.8*	1996-03	-3.6*	2003-16	-0.6*					-0.6*	-0.6*
Black	1975-93	-3.0*	1993-04	-4.4*	2004-16	-2.4*							-2.4*	-2.4*
U.S. Cancer Mortal:	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-04	-3.6*	2004-16	-0.8*									-0.8*	-0.8*
White	2000-03	-4.2*	2003-16	-0.6*									-0.6*	-0.6*
White NH <sup>ef</sup>	2000-04	-3.5*	2004-16	-0.5*									-0.5*	-0.5*
Black	2000-16	-2.7*											-2.7*	-2.7*
Black NH <sup>ef</sup>	2000-16	-2.7*											-2.7*	-2.7*
API <sup>e</sup>	2000-16	-3.2*											-3.2*	-3.2*
AI/AN <sup>eg</sup>	2000-16	-2.8*											-2.8*	-2.8*
Hispanic <sup>f</sup>	2000-16	-2.3*											-2.3*	-2.3*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

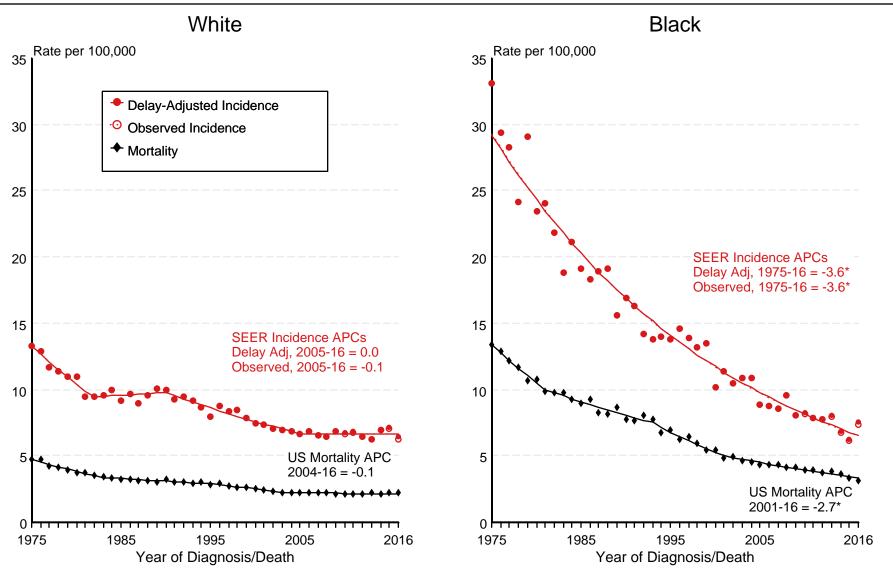
Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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<sup>a</sup> Cancer of the Cervix Uteri, by Race

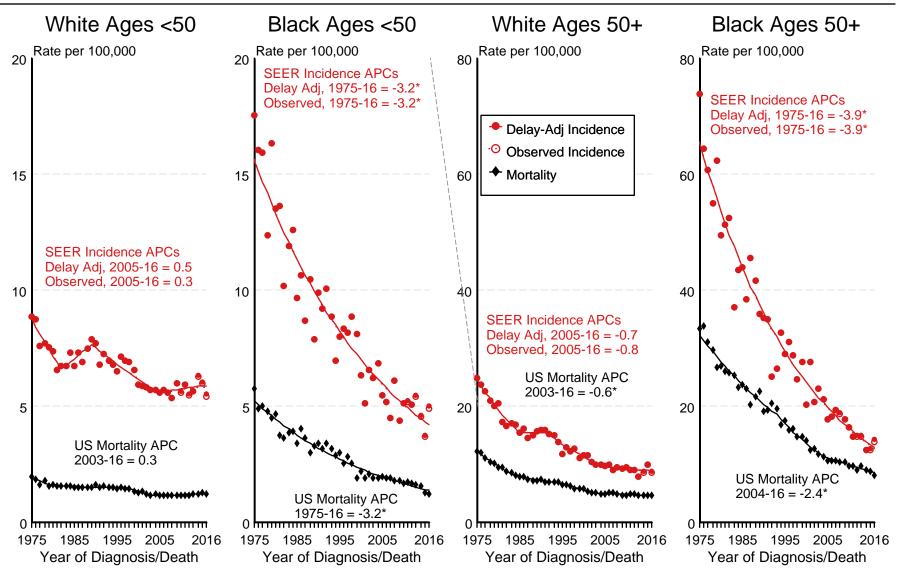


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

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

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.
 The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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



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

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.
 The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAP	'C <sup>d</sup>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ed Incider	nce <sup>a</sup> , 197	<u> 75-2016</u>											
All Races	1975-85	0.8*	1985-95	-1.8*	1995-98	1.5	1998-08	-2.3*	2008-12	-4.0*	2012-16	-0.3	-2.2*	-0.3
White	1975-85	0.8*	1985-95	-2.0*	1995-98	1.6	1998-08	-2.5*	2008-11	-4.9*	2011-16	-0.7	-2.3*	-0.7
Black	1975-80	3.3*	1980-03	-0.1	2003-16	-2.7*							-2.7*	-2.7*
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-08	-2.5*	2008-12	-3.5*	2012-16	-1.0*							-2.3*	-1.0*
White	2000-12	-3.0*	2012-16	-1.3*									-2.2*	-1.3*
White NH <sup>ef</sup>	2000-12	-3.0*	2012-16	-1.1									-2.1*	-1.1
Black	2000-03	0.0	2003-09	-2.1*	2009-12	-3.9*	2012-16	-1.8*					-2.6*	-1.8*
Black NH <sup>ef</sup>	2000-03	0.5	2003-16	-2.5*									-2.5*	-2.5*
API <sup>e</sup>	2000-16	-2.2*											-2.2*	-2.2*
AI/AN <sup>eg</sup>	2000-16	-0.1											-0.1	-0.1
Hispanic <sup>f</sup>	2000-04	-0.1	2004-13	-2.5*	2013-16	-0.1							-1.7*	-0.7
U.S. Cancer Mortali	ty <sup>c</sup> , 1975-	2016												
All Races	1975-78	0.2	1978-85	-0.8*	1985-02	-1.8*	2002-05	-3.8*	2005-12	-2.6*	2012-16	-1.8*	-2.2*	-1.8*
White	1975-78	0.2	1978-85	-1.0*	1985-02	-1.9*	2002-05	-3.8*	2005-12	-2.5*	2012-16	-1.6*	-2.1*	-1.6*
Black	1975-90	0.6*	1990-01	-0.8*	2001-16	-2.9*							-2.9*	-2.9*
U.S. Cancer Mortali	ty <sup>c</sup> , 2000-	2016												
All Races	2000-10	-2.9*	2010-16	-2.0*									-2.3*	-2.0*
White	2000-10	-3.0*	2010-16	-1.8*									-2.2*	-1.8*
White NH <sup>ef</sup>	2000-10	-3.0*	2010-16	-1.7*									-2.2*	-1.7*
Black	2000-16	-2.9*											-2.9*	-2.9*
Black NH <sup>ef</sup>	2000-16	-2.8*											-2.8*	-2.8*
API <sup>e</sup>	2000-16	-2.0*											-2.0*	-2.0*
AI/AN <sup>eg</sup>	2000-16	-0.8											-0.8	-0.8
Hispanic <sup>f</sup>	2000-16	-1.8*											-1.8*	-1.8*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAF	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-85	1.1*	1985-91	-1.2*	1991-95	-3.2*	1995-98	2.3	1998-13	-3.0*	2013-16	-0.6	-2.2*	-1.2
White	1975-86	1.1*	1986-95	-2.3*	1995-98	1.4	1998-07	-2.9*	2007-12	-4.1*	2012-16	-0.4	-2.5*	-0.4
Black	1975-80	4.5	1980-02	0.0	2002-16	-2.7*							-2.7*	-2.7*
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-12	-3.1*	2012-16	-1.6*									-2.4*	-1.6*
White	2000-12	-3.3*	2012-16	-1.4*									-2.5*	-1.4*
White NH <sup>ef</sup>	2000-12	-3.4*	2012-16	-1.2									-2.4*	-1.2
Black	2000-16	-2.3*											-2.3*	-2.3*
Black NH <sup>ef</sup>	2000-16	-2.2*											-2.2*	-2.2*
API <sup>e</sup>	2000-16	-2.2*											-2.2*	-2.2*
AI/AN <sup>eg</sup>	2000-16	-0.3											-0.3	-0.3
Hispanic <sup>f</sup>	2000-08	-1.2*	2008-12	-4.2*	2012-16	-0.6							-2.3*	-0.6
U.S. Cancer Mortali	ity <sup>c</sup> , 1975-	2016												
All Races	1975-79	0.6	1979-87	-0.6*	1987-02	-1.9*	2002-05	-4.2*	2005-16	-2.4*			-2.4*	-2.4*
White	1975-79	0.6	1979-87	-0.8*	1987-02	-2.1*	2002-05	-4.1*	2005-12	-2.6*	2012-16	-1.8*	-2.3*	-1.8*
Black	1975-90	1.2*	1990-02	-0.7*	2002-16	-2.8*							-2.8*	-2.8*
U.S. Cancer Mortali	ity <sup>c</sup> , 2000-	2016												
All Races	2000-02	-2.1*	2002-05	-4.0*	2005-12	-2.6*	2012-16	-2.0*					-2.3*	-2.0*
White	2000-02	-2.1*	2002-05	-4.2*	2005-12	-2.6*	2012-16	-1.8*					-2.3*	-1.8*
White NH <sup>ef</sup>	2000-02	-2.2*	2002-05	-4.1*	2005-12	-2.7*	2012-16	-1.7*					-2.3*	-1.7*
Black	2000-16	-2.7*											-2.7*	-2.7*
Black NH <sup>ef</sup>	2000-16	-2.6*											-2.6*	-2.6*
API <sup>e</sup>	2000-16	-2.2*											-2.2*	-2.2*
AI/AN <sup>eg</sup>	2000-16	-0.7											-0.7	-0.7
Hispanic <sup>f</sup>	2000-16	-1.7*											-1.7*	-1.7*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excl SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incide	nceª, 197	75-2016											
All Races	1975-85	0.3	1985-95	-1.9*	1995-98	1.9	1998-08	-2.1*	2008-13	-3.7*	2013-16	0.8	-2.0*	-0.3
White	1975-85	0.3	1985-95	-2.1*	1995-98	2.0	1998-08	-2.2*	2008-11	-4.6*	2011-16	-0.6	-2.1*	-0.6
Black	1975-05	-0.1	2005-13	-4.3*	2013-16	1.9							-2.3*	0.3
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-08	-2.3*	2008-12	-3.4*	2012-16	-1.0*							-2.2*	-1.0*
White	2000-08	-2.5*	2008-12	-3.3*	2012-16	-0.7							-2.1*	-0.7
White NH <sup>ef</sup>	2000-13	-2.7*	2013-16	-0.4									-1.9*	-1.0
Black	2000-03	0.4	2003-16	-2.7*									-2.7*	-2.7*
Black NH <sup>ef</sup>	2000-02	2.1	2002-16	-2.6*									-2.6*	-2.6*
API <sup>e</sup>	2000-08	-1.3*	2008-16	-3.3*									-3.1*	-3.3*
AI/AN <sup>eg</sup>	2000-02	16.0	2002-09	-2.7	2009-16	2.1							1.0	2.1
Hispanic <sup>f</sup>	2000-04	-0.2	2004-12	-2.4*	2012-16	-0.2							-1.4*	-0.2
U.S. Cancer Mortal:	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-84	-1.0*	1984-01	-1.8*	2001-12	-2.9*	2012-16	-1.6*					-2.3*	-1.6*
White	1975-84	-1.2*	1984-01	-2.0*	2001-10	-2.9*	2010-16	-1.8*					-2.2*	-1.8*
Black	1975-85	0.8*	1985-01	-0.7*	2001-16	-3.3*							-3.3*	-3.3*
U.S. Cancer Mortal:	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-12	-2.9*	2012-16	-1.5*									-2.3*	-1.5*
White	2000-10	-3.0*	2010-16	-1.8*									-2.2*	-1.8*
White NH <sup>ef</sup>	2000-10	-3.0*	2010-16	-1.7*									-2.1*	-1.7*
Black	2000-16	-3.2*											-3.2*	-3.2*
Black NH <sup>ef</sup>	2000-16	-3.1*											-3.1*	-3.1*
API <sup>e</sup>	2000-16	-1.8*											-1.8*	-1.8*
AI/AN <sup>eg</sup>	2000-16	-1.0											-1.0	-1.0
Hispanicf	2000-16	-2.2*											-2.2*	-2.2*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

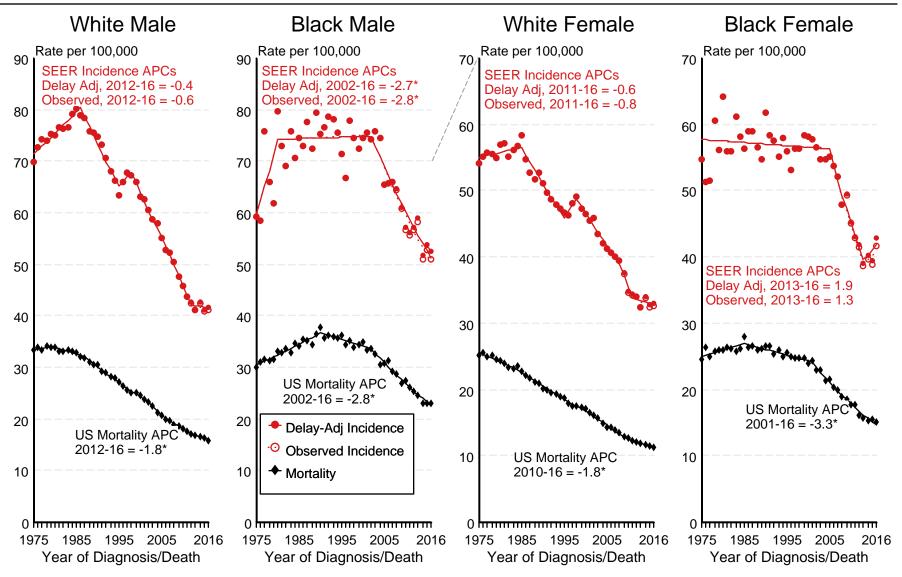
Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Figure 6.1

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



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

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 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, All Ages by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	nd 5	JP Tre	nd 6	AAF	Cd
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	sted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-79	-6.0*	1979-88	-1.7*	1988-97	0.7*	1997-06	-0.4*	2006-09	3.4	2009-16	0.3	1.0*	0.3
White	1975-79	-6.1*	1979-88	-1.7*	1988-98	0.7*	1998-02	-1.4	2002-16	0.8*			0.8*	0.8*
Black	1975-93	-0.5	1993-16	2.3*									2.3*	2.3*
SEER 21 Delay-Adju	usted Incid	ence <sup>b</sup> , 20	000-2016											
All Races	2000-03	-0.5	2003-16	1.2*									1.2*	1.2*
White	2000-03	-0.6	2003-16	1.0*									1.0*	1.0*
White NH <sup>ef</sup>	2000-16	0.8*											0.8*	0.8*
Black	2000-16	2.4*											2.4*	2.4*
Black NH <sup>ef</sup>	2000-16	2.5*											2.5*	2.5*
API <sup>e</sup>	2000-16	2.3*											2.3*	2.3*
AI/AN <sup>eg</sup>	2000-16	1.6*											1.6*	1.6*
Hispanic <sup>f</sup>	2000-16	2.2*											2.2*	2.2*
U.S. Cancer Mortal	lity <sup>c</sup> , 1975-	-2016												
All Races	1975-93	-1.5*	1993-08	0.1	2008-16	2.1*							1.9*	2.1*
White	1975-92	-1.6*	1992-08	0.0	2008-16	2.0*							1.8*	2.0*
Black	1975-97	-0.8*	1997-08	0.6*	2008-16	2.3*							2.1*	2.3*
U.S. Cancer Mortal	lity <sup>c</sup> , 2000-	-2016												
All Races	2000-08	0.2	2008-16	2.1*									1.9*	2.1*
White	2000-09	0.3	2009-16	2.1*									1.7*	2.1*
White NH <sup>ef</sup>	2000-09	0.2	2009-16	2.0*									1.6*	2.0*
Black	2000-08	0.4	2008-16	2.4*									2.2*	2.4*
Black NH <sup>ef</sup>	2000-08	0.5	2008-16	2.5*									2.3*	2.5*
API <sup>e</sup>	2000-16	2.3*											2.3*	2.3*
AI/AN <sup>eg</sup>	2000-16	0.6											0.6	0.6
Hispanic <sup>f</sup>	2000-16	1.8*											1.8*	1.8*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Ages <50 by Race/Ethnicity

	JP Tre	end 1	JP Tre	nd 2	JP Tr	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-88	-2.6*	1988-16	1.3*									1.3*	1.3*
White	1975-88	-2.6*	1988-16	1.1*									1.1*	1.1*
Black	1975-84	-5.7*	1984-16	2.2*									2.2*	2.2*
SEER 21 Delay-Adjus	sted Incid	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	1.6*											1.6*	1.6*
White	2000-16	1.5*											1.5*	1.5*
White NH <sup>ef</sup>	2000-16	1.1*											1.1*	1.1*
Black	2000-16	2.5*											2.5*	2.5*
Black NH <sup>ef</sup>	2000-16	2.6*											2.6*	2.6*
API <sup>e</sup>	2000-16	1.5*											1.5*	1.5*
AI/AN <sup>eg</sup>	2000-16	0.9											0.9	0.9
Hispanic <sup>f</sup>	2000-07	1.1	2007-16	3.5*									3.5*	3.5*
U.S. Cancer Mortal:	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-92	-3.3*	1992-16	1.9*									1.9*	1.9*
White	1975-92	-3.0*	1992-16	1.9*									1.9*	1.9*
Black	1975-95	-4.5*	1995-16	2.7*									2.7*	2.7*
U.S. Cancer Mortal:	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-16	2.2*											2.2*	2.2*
White	2000-16	2.1*											2.1*	2.1*
White NH <sup>ef</sup>	2000-16	1.7*											1.7*	1.7*
Black	2000-16	2.6*											2.6*	2.6*
Black NH <sup>ef</sup>	2000-16	3.0*											3.0*	3.0*
API <sup>e</sup>	2000-16	0.9											0.9	0.9
AI/AN <sup>eg</sup>	_	-											_	-
Hispanic <sup>f</sup>	2000-16	2.7*											2.7*	2.7*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, Califor SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Ages 50+ by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	nd 5	JP Tre	end 6	AAI	PC <sup>d</sup>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adj	usted Incide	nceª, 19'	75-2016											
All Races	1975-79	-6.2*	1979-88	-1.7*	1988-97	0.6*	1997-06	-0.7*	2006-09	3.5	2009-16	0.3	1.0	0.3
White	1975-79	-6.2*	1979-88	-1.7*	1988-98	0.7*	1998-03	-1.4	2003-16	0.7*			0.7*	0.7*
Black	1975-97	0.0	1997-16	2.6*									2.6*	2.6*
SEER 21 Delay-Ad	justed Incid	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	0.9*											0.9*	0.9*
White	2000-16	0.8*											0.8*	0.8*
White NH <sup>ef</sup>	2000-16	0.7*											0.7*	0.7*
Black	2000-16	2.4*											2.4*	2.4*
Black NH <sup>ef</sup>	2000-16	2.4*											2.4*	2.4*
API <sup>e</sup>	2000-16	2.5*											2.5*	2.5*
AI/AN <sup>eg</sup>	2000-16	1.6											1.6	1.6
Hispanic <sup>f</sup>	2000-16	2.1*											2.1*	2.1*
U.S. Cancer Morta	ality <sup>c</sup> , 1975-	-2016												
All Races	1975-93	-1.4*	1993-08	0.0	2008-16	2.1*							1.8*	2.1*
White	1975-92	-1.6*	1992-08	-0.1	2008-16	1.9*							1.7*	1.9*
Black	1975-04	-0.4*	2004-16	1.9*									1.9*	1.9*
U.S. Cancer Morta	ality <sup>c</sup> , 2000-	-2016												
All Races	2000-08	0.1	2008-16	2.0*									1.8*	2.0*
White	2000-09	0.2	2009-16	2.0*									1.6*	2.0*
White NH <sup>ef</sup>	2000-09	0.2	2009-16	2.0*									1.6*	2.0*
Black	2000-08	0.3	2008-16	2.3*									2.1*	2.3*
Black NH <sup>ef</sup>	2000-08	0.4	2008-16	2.4*									2.2*	2.4*
API <sup>e</sup>	2000-16	2.5*											2.5*	2.5*
AI/AN <sup>eg</sup>	2000-16	-0.1											-0.1	-0.1
Hispanic <sup>f</sup>	2000-16	1.7*											1.7*	1.7*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

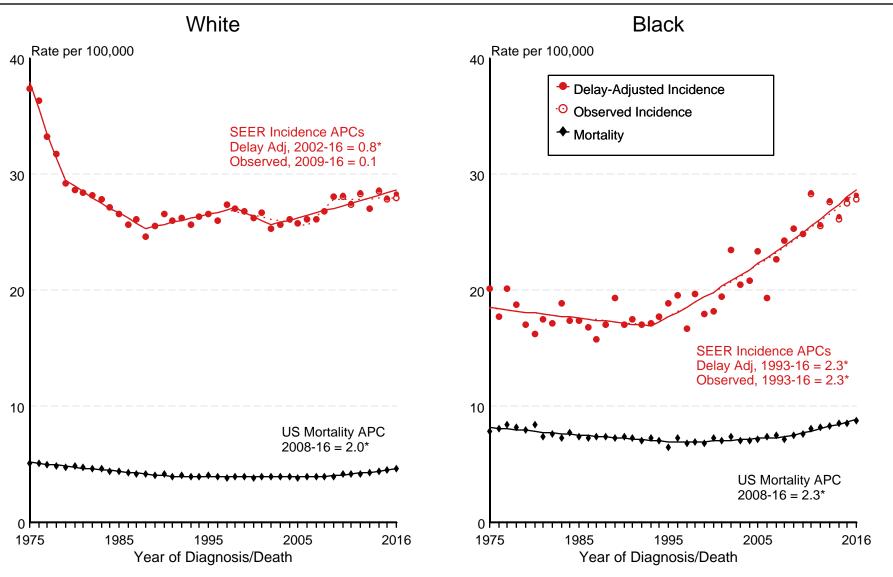
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

Figure 7.1

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

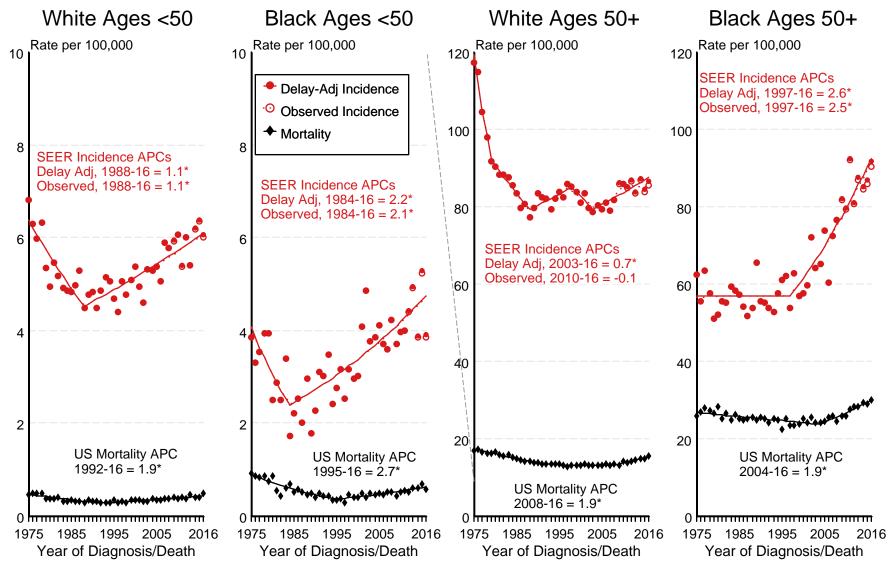


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

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

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.
 The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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



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

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 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-04	0.5*	2004-16	-1.1*									-1.1*	-1.1*
White	1975-04	1.4*	2004-16	-0.6*									-0.6*	-0.6*
Black	1975-86	1.0	1986-16	-4.3*									-4.3*	-4.3*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-04	0.6	2004-16	-1.3*									-1.3*	-1.3*
White	2000-04	1.7	2004-16	-0.8*									-0.8*	-0.8*
White NH <sup>ef</sup>	2000-06	1.1	2006-16	-0.7*									-0.7*	-0.7*
Black	2000-16	-4.4*											-4.4*	-4.4*
Black NH <sup>ef</sup>	2000-16	-4.3*											-4.3*	-4.3*
API <sup>e</sup>	2000-16	-1.5*											-1.5*	-1.5*
AI/AN <sup>eg</sup>	2000-16	-0.8											-0.8	-0.8
Hispanic <sup>f</sup>	2000-16	-1.7*											-1.7*	-1.7*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-02	0.7*	2002-16	-0.9*									-0.9*	-0.9*
White	1975-83	0.4*	1983-00	1.7*	2000-05	0.8*	2005-16	-0.5*					-0.5*	-0.5*
Black	1975-82	1.1*	1982-93	-1.6*	1993-16	-4.6*							-4.6*	-4.6*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-05	0.0	2005-16	-1.0*									-1.0*	-1.0*
White	2000-05	0.8*	2005-16	-0.5*									-0.5*	-0.5*
White NH <sup>ef</sup>	2000-05	0.9*	2005-16	-0.3*									-0.3*	-0.3*
Black	2000-16	-4.7*											-4.7*	-4.7*
Black NH <sup>ef</sup>	2000-16	-4.6*											-4.6*	-4.6*
API <sup>e</sup>	2000-16	-1.4*											-1.4*	-1.4*
AI/AN <sup>eg</sup>	2000-16	-0.9											-0.9	-0.9
Hispanic <sup>f</sup>	2000-16	-1.4*											-1.4*	-1.4*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-04	0.8*	2004-16	-1.1*									-1.1*	-1.1*
White	1975-04	1.7*	2004-16	-0.7*									-0.7*	-0.7*
Black	1975-86	0.9	1986-16	-4.6*									-4.6*	-4.6*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-04	1.1	2004-16	-1.4*									-1.4*	-1.4*
White	2000-07	0.8	2007-16	-1.3*									-1.3*	-1.3*
White NH <sup>ef</sup>	2000-07	1.1*	2007-16	-1.1*									-1.1*	-1.1*
Black	2000-16	-4.5*											-4.5*	-4.5*
Black NH <sup>ef</sup>	2000-16	-4.4*											-4.4*	-4.4*
API <sup>e</sup>	2000-16	-1.1											-1.1	-1.1
AI/AN <sup>eg</sup>	2000-16	-1.7											-1.7	-1.7
Hispanic <sup>f</sup>	2000-16	-2.0*											-2.0*	-2.0*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-85	0.7*	1985-94	1.2*	1994-05	0.4*	2005-16	-1.1*					-1.1*	-1.1*
White	1975-82	0.3	1982-99	1.9*	1999-05	1.1*	2005-16	-0.6*					-0.6*	-0.6*
Black	1975-82	1.4*	1982-93	-1.6*	1993-16	-4.8*							-4.8*	-4.8*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-05	0.3	2005-16	-1.1*									-1.1*	-1.1*
White	2000-05	1.1*	2005-16	-0.6*									-0.6*	-0.6*
White NH <sup>ef</sup>	2000-05	1.2*	2005-16	-0.4*									-0.4*	-0.4*
Black	2000-16	-4.9*											-4.9*	-4.9*
Black NH <sup>ef</sup>	2000-16	-4.8*											-4.8*	-4.8*
API <sup>e</sup>	2000-16	-1.2*											-1.2*	-1.2*
AI/AN <sup>eg</sup>	2000-16	-0.8											-0.8	-0.8
Hispanicf	2000-16	-1.3*											-1.3*	-1.3*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	end 1	JP Tr	end 2	JP Tr	end 3	JP Tr	end 4	JP Tr	end 5	JP Tr	end 6	AAI	∍C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adj	usted Incide	nce <sup>a</sup> , 19	75-2016											
All Races	1975-97	-0.1	1997-16	-1.3*									-1.3*	-1.3*
White	1975-16	-0.1											-0.1	-0.1
Black	1975-81	8.5*	1981-16	-3.3*									-3.3*	-3.3*
SEER 21 Delay-Ad	justed Incide	ence <sup>b</sup> , 2	000-2016											
All Races	2000-16	-1.6*											-1.6*	-1.6*
White	2000-16	-0.9*											-0.9*	-0.9*
White NH <sup>ef</sup>	2000-16	-0.7*											-0.7*	-0.7*
Black	2000-16	-4.3*											-4.3*	-4.3*
Black NH <sup>ef</sup>	2000-16	-4.4*											-4.4*	-4.4*
API <sup>e</sup>	2000-16	-2.7*											-2.7*	-2.7*
AI/AN <sup>eg</sup>	2000-05	32.6*	2005-12	-17.1*	2012-16	31.1*							1.6	31.1*
$ ext{Hispanic}^{ ext{f}}$	2000-16	-1.5*											-1.5*	-1.5*
U.S. Cancer Mort	ality <sup>c</sup> , 1975-	-2016												
All Races	1975-00	0.1	2000-16	-1.5*									-1.5*	-1.5*
White	1975-02	0.4*	2002-16	-1.0*									-1.0*	-1.0*
Black	1975-92	-0.2	1992-16	-4.1*									-4.1*	-4.1*
U.S. Cancer Mort	ality <sup>c</sup> , 2000-	-2016												
All Races	2000-16	-1.6*											-1.6*	-1.6*
White	2000-16	-1.0*											-1.0*	-1.0*
White NH <sup>ef</sup>	2000-16	-0.8*											-0.8*	-0.8*
Black	2000-16	-4.5*											-4.5*	-4.5*
Black NH <sup>ef</sup>	2000-16	-4.4*											-4.4*	-4.4*
API <sup>e</sup>	2000-16	-2.2*											-2.2*	-2.2*
AI/AN <sup>eg</sup>	2000-16	-1.0											-1.0	-1.0
Hispanic <sup>f</sup>	2000-16	-2.4*											-2.4*	-2.4*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

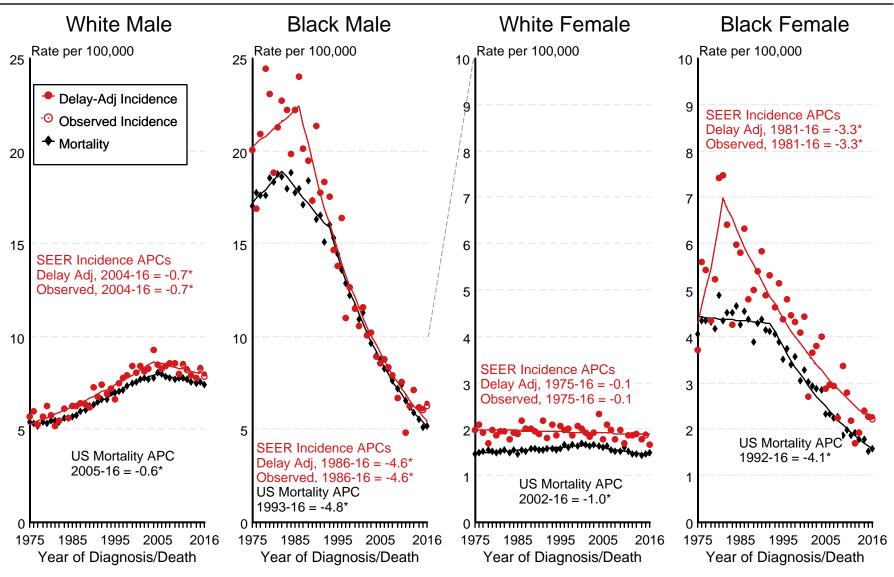
Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Figure 8.1

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



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

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 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

#### Table 9.1 Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-03	-0.2*	2003-06	3.0	2006-16	-1.6*							-1.6*	-1.6*
White	1975-88	0.6*	1988-01	-0.9*	2001-07	1.9	2007-16	-2.1*					-2.1*	-2.1*
Black	1975-16	1.1*											1.1*	1.1*
SEER 21 Delay-Adju	sted Incid	ence <sup>b</sup> , 20	000-2016											
All Races	2000-07	0.8*	2007-16	-1.5*									-1.5*	-1.5*
White	2000-07	0.7	2007-16	-1.7*									-1.7*	-1.7*
White NH <sup>ef</sup>	2000-06	0.9	2006-16	-1.5*									-1.5*	-1.5*
Black	2000-08	2.4*	2008-16	-1.0									-0.6	-1.0
Black NH <sup>ef</sup>	2000-08	2.5*	2008-16	-0.9									-0.5	-0.9
API <sup>e</sup>	2000-16	0.5											0.5	0.5
AI/AN <sup>eg</sup>	2000-16	3.5*											3.5*	3.5*
Hispanic <sup>f</sup>	2000-16	-0.4											-0.4	-0.4
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-79	-6.5*	1979-98	-3.5*	1998-09	-2.2*	2009-16	-4.5*					-4.0*	-4.5*
White	1975-79	-6.2*	1979-96	-3.6*	1996-10	-2.3*	2010-16	-4.8*					-4.0*	-4.8*
Black	1975-16	-3.0*											-3.0*	-3.0*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-06	-1.4	2006-16	-4.0*									-4.0*	-4.0*
White	2000-16	-3.1*											-3.1*	-3.1*
White NH <sup>ef</sup>	2000-16	-3.4*											-3.4*	-3.4*
Black	2000-16	-2.7*											-2.7*	-2.7*
Black NH <sup>ef</sup>	2000-16	-2.6*											-2.6*	-2.6*
API <sup>e</sup>	2000-16	-3.1*											-3.1*	-3.1*
AI/AN <sup>eg</sup>	_												_	_
Hispanicf	2000-16	-1.3*											-1.3*	-1.3*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

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

#### Table 9.2 Hodgkin Lymphoma

Trends in SEER Incidence  $^{ab}$  and U.S. Mortality  $^{c}$  Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tr	end 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-03	-0.7*	2003-07	2.9	2007-16	-1.6*							-1.6*	-1.6*
White	1975-16	-0.4*											-0.4*	-0.4*
Black	1975-16	0.7*											0.7*	0.7*
SEER 21 Delay-Adju	sted Incid	ence <sup>b</sup> , 20	000-2016											
All Races	2000-07	0.8	2007-16	-1.6*									-1.6*	-1.6*
White	2000-06	1.1	2006-16	-1.6*									-1.6*	-1.6*
White NH <sup>ef</sup>	2000-16	-0.6*											-0.6*	-0.6*
Black	2000-16	0.3											0.3	0.3
Black NH <sup>ef</sup>	2000-16	0.5											0.5	0.5
API <sup>e</sup>	2000-16	0.5											0.5	0.5
AI/AN <sup>eg</sup>	2000-16	0.7											0.7	0.7
Hispanic <sup>f</sup>	2000-16	-1.1*											-1.1*	-1.1*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-96	-4.0*	1996-16	-2.6*									-2.6*	-2.6*
White	1975-96	-4.0*	1996-16	-2.5*									-2.5*	-2.5*
Black	1975-16	-3.2*											-3.2*	-3.2*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-16	-2.7*											-2.7*	-2.7*
White	2000-16	-2.7*											-2.7*	-2.7*
White NH <sup>ef</sup>	2000-16	-2.9*											-2.9*	-2.9*
Black	2000-16	-2.7*											-2.7*	-2.7*
Black NH <sup>ef</sup>	2000-16	-2.5*											-2.5*	-2.5*
API <sup>e</sup>	2000-16	-2.1											-2.1	-2.1
AI/AN <sup>eg</sup>	_	_											_	_
Hispanic <sup>f</sup>	2000-16	-1.8*											-1.8*	-1.8*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

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

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

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

Table 9.3 Hodgkin Lymphoma

Trends in SEER Incidence  $^{ab}$  and U.S. Mortality  $^{c}$  Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tr	end 3	JP Tr	end 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-07	0.4*	2007-16	-1.9*									-1.9*	-1.9*
White	1975-07	0.4*	2007-16	-2.2*									-2.2*	-2.2*
Black	1975-16	1.6*											1.6*	1.6*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-04	2.3	2004-16	-1.2*									-1.2*	-1.2*
White	2000-07	0.7	2007-16	-1.8*									-1.8*	-1.8*
White NH <sup>ef</sup>	2000-16	-0.8*											-0.8*	-0.8*
Black	2000-16	0.9											0.9	0.9
Black NH <sup>ef</sup>	2000-16	1.0*											1.0*	1.0*
APIe	2000-16	0.4											0.4	0.4
AI/AN <sup>eg</sup>	_	_											_	-
$ exttt{Hispanic}^{ exttt{f}}$	2000-16	0.5											0.5	0.5
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-85	-4.9*	1985-09	-2.6*	2009-16	-5.2*							-4.6*	-5.2*
White	1975-85	-5.0*	1985-09	-2.5*	2009-16	-5.3*							-4.7*	-5.3*
Black	1975-16	-2.6*											-2.6*	-2.6*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-09	-2.7*	2009-16	-5.2*									-4.6*	-5.2*
White	2000-09	-2.6*	2009-16	-5.3*									-4.7*	-5.3*
White NH <sup>ef</sup>	2000-09	-2.8*	2009-16	-6.0*									-5.3*	-6.0*
Black	2000-16	-2.8*											-2.8*	-2.8*
Black NH <sup>ef</sup>	2000-16	-2.7*											-2.7*	-2.7*
API <sup>e</sup>	2000-13	-8.0*	2013-16	27.0									2.4	17.2
AI/AN <sup>eg</sup>	_												_	_
Hispanicf	2000-16	-0.6											-0.6	-0.6

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

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

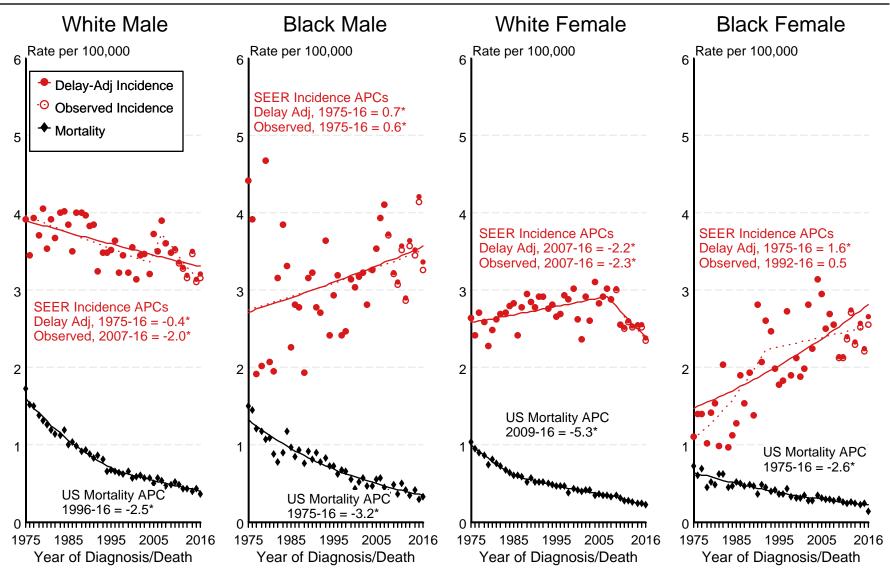
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

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



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

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 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	nd 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-94	2.3*	1994-97	-0.7	1997-07	3.3*	2007-16	0.5*					0.5*	0.5*
White	1975-92	2.3*	1992-97	0.3	1997-07	3.2*	2007-16	0.5					0.5	0.5
Black	1975-08	3.0*	2008-16	0.7									1.0	0.7
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-07	3.4*	2007-16	0.6*									0.6*	0.6*
White	2000-07	3.4*	2007-16	0.5*									0.5*	0.5*
White NH <sup>ef</sup>	2000-07	3.4*	2007-16	0.5*									0.5*	0.5*
Black	2000-08	4.2*	2008-16	0.9*									1.2*	0.9*
Black NH <sup>ef</sup>	2000-08	4.2*	2008-16	0.9*									1.3*	0.9*
API <sup>e</sup>	2000-07	4.7*	2007-16	0.6									0.6	0.6
AI/AN <sup>eg</sup>	2000-16	1.2											1.2	1.2
Hispanic <sup>f</sup>	2000-05	4.7*	2005-16	1.4*									1.4*	1.4*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-91	1.2*	1991-02	-0.1	2002-16	-0.9*							-0.9*	-0.9*
White	1975-95	1.0*	1995-16	-0.6*									-0.6*	-0.6*
Black	1975-94	2.4*	1994-16	-0.9*									-0.9*	-0.9*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	-0.9*											-0.9*	-0.9*
White	2000-16	-0.8*											-0.8*	-0.8*
White NH <sup>ef</sup>	2000-16	-0.8*											-0.8*	-0.8*
Black	2000-16	-1.1*											-1.1*	-1.1*
Black NH <sup>ef</sup>	2000-16	-1.0*											-1.0*	-1.0*
API <sup>e</sup>	2000-16	-0.2											-0.2	-0.2
AI/AN <sup>eg</sup>	2000-16	-1.1											-1.1	-1.1
Hispanic <sup>f</sup>	2000-16	-0.5*											-0.5*	-0.5*

Joinpoint Regression Program Version 4.7, February 2019, 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).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	nd 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-04	1.8*	2004-07	4.8	2007-16	0.5							0.5	0.5
White	1975-89	2.2*	1989-97	0.8	1997-08	2.7*	2008-16	0.5					0.8*	0.5
Black	1975-14	2.9*	2014-16	-8.1									0.3	-2.8
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-07	3.3*	2007-16	0.5*									0.5*	0.5*
White	2000-07	3.2*	2007-16	0.5*									0.5*	0.5*
White NH <sup>ef</sup>	2000-07	3.2*	2007-16	0.6*									0.6*	0.6*
Black	2000-08	4.0*	2008-16	0.8*									1.1*	0.8*
Black NH <sup>ef</sup>	2000-08	4.0*	2008-16	0.9*									1.2*	0.9*
API <sup>e</sup>	2000-16	2.2*											2.2*	2.2*
AI/AN <sup>eg</sup>	2000-16	1.3											1.3	1.3
Hispanic <sup>f</sup>	2000-08	4.1*	2008-11	-2.9	2011-16	3.0*							1.1	3.0*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-94	1.0*	1994-16	-0.6*									-0.6*	-0.6*
White	1975-94	1.0*	1994-16	-0.6*									-0.6*	-0.6*
Black	1975-91	3.1*	1991-16	-0.7*									-0.7*	-0.7*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	-0.8*											-0.8*	-0.8*
White	2000-16	-0.7*											-0.7*	-0.7*
White NH <sup>ef</sup>	2000-16	-0.7*											-0.7*	-0.7*
Black	2000-16	-1.0*											-1.0*	-1.0*
Black NH <sup>ef</sup>	2000-16	-0.9*											-0.9*	-0.9*
API <sup>e</sup>	2000-16	0.2											0.2	0.2
AI/AN <sup>eg</sup>	2000-16	-1.0											-1.0	-1.0
Hispanicf	2000-16	-0.7*											-0.7*	-0.7*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-93	2.7*	1993-99	0.7	1999-06	4.1*	2006-16	0.0					0.0	0.0
White	1975-92	2.8*	1992-99	0.7	1999-06	4.2*	2006-16	-0.1					-0.1	-0.1
Black	1975-08	3.0*	2008-16	0.4									0.7	0.4
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-07	3.4*	2007-16	0.3									0.3	0.3
White	2000-06	3.9*	2006-16	0.5*									0.5*	0.5*
White NH <sup>ef</sup>	2000-06	3.9*	2006-16	0.3									0.3	0.3
Black	2000-08	4.1*	2008-16	0.8									1.1*	0.8
Black NH <sup>ef</sup>	2000-08	4.2*	2008-16	0.8									1.2*	0.8
API <sup>e</sup>	2000-16	1.7*											1.7*	1.7*
AI/AN <sup>eg</sup>	2000-16	0.9											0.9	0.9
Hispanic <sup>f</sup>	2000-16	2.1*											2.1*	2.1*
U.S. Cancer Mortal:	ity <sup>c</sup> , 1975-	2016												
All Races	1975-92	1.2*	1992-05	-0.5*	2005-16	-1.6*							-1.6*	-1.6*
White	1975-92	1.2*	1992-05	-0.4*	2005-16	-1.5*							-1.5*	-1.5*
Black	1975-95	2.4*	1995-16	-1.2*									-1.2*	-1.2*
U.S. Cancer Mortal:	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	-1.4*											-1.4*	-1.4*
White	2000-16	-1.3*											-1.3*	-1.3*
White NH <sup>ef</sup>	2000-16	-1.3*											-1.3*	-1.3*
Black	2000-16	-1.5*											-1.5*	-1.5*
Black NH <sup>ef</sup>	2000-16	-1.4*											-1.4*	-1.4*
API <sup>e</sup>	2000-16	-0.9											-0.9	-0.9
AI/AN <sup>eg</sup>	2000-16	-1.2											-1.2	-1.2
Hispanic <sup>f</sup>	2000-16	-0.5											-0.5	-0.5

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

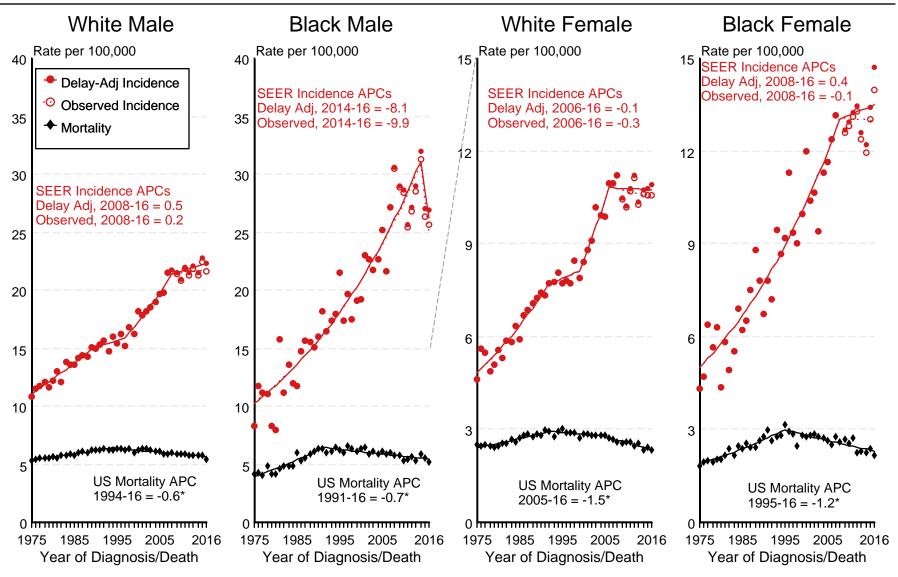
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

## SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Kidney and Renal Pelvis, 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 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 19	75-2016											
All Races	1975-88	0.0	1988-16	-2.4*									-2.4*	-2.4*
White	1975-87	0.1	1987-16	-2.3*									-2.3*	-2.3*
Black	1975-90	1.2*	1990-16	-2.8*									-2.8*	-2.8*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-02	-4.8*	2002-08	-1.6*	2008-16	-2.8*							-2.6*	-2.8*
White	2000-03	-4.1*	2003-06	0.1	2006-16	-2.6*							-2.6*	-2.6*
White NH <sup>ef</sup>	2000-03	-3.8*	2003-06	0.1	2006-16	-2.3*							-2.3*	-2.3*
Black	2000-16	-2.8*											-2.8*	-2.8*
Black NH <sup>ef</sup>	2000-16	-2.7*											-2.7*	-2.7*
API <sup>e</sup>	2000-16	-3.0*											-3.0*	-3.0*
AI/AN <sup>eg</sup>	2000-16	1.1											1.1	1.1
Hispanic <sup>f</sup>	2000-16	-2.8*											-2.8*	-2.8*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-94	-0.4*	1994-16	-2.2*									-2.2*	-2.2*
White	1975-94	-0.7*	1994-16	-1.9*									-1.9*	-1.9*
Black	1975-94	1.1*	1994-16	-3.5*									-3.5*	-3.5*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	-2.3*											-2.3*	-2.3*
White	2000-16	-1.9*											-1.9*	-1.9*
White NH <sup>ef</sup>	2000-16	-1.8*											-1.8*	-1.8*
Black	2000-16	-3.7*											-3.7*	-3.7*
Black NH <sup>ef</sup>	2000-16	-3.6*											-3.6*	-3.6*
API <sup>e</sup>	2000-16	-2.0*											-2.0*	-2.0*
AI/AN <sup>eg</sup>	2000-16	-2.3											-2.3	-2.3
Hispanicf	2000-04	1.3	2004-07	-7.2	2007-11	1.4	2011-16	-5.5*					-2.5*	-5.5*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tr	end 3	JP Tr	end 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 19	75-2016											
All Races	1975-86	0.0	1986-16	-2.5*									-2.5*	-2.5*
White	1975-85	0.1	1985-16	-2.4*									-2.4*	-2.4*
Black	1975-90	0.9	1990-16	-2.7*									-2.7*	-2.7*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-02	-4.9*	2002-09	-1.9*	2009-16	-3.0*							-2.7*	-3.0*
White	2000-16	-2.3*											-2.3*	-2.3*
White NH <sup>ef</sup>	2000-16	-2.2*											-2.2*	-2.2*
Black	2000-16	-3.0*											-3.0*	-3.0*
Black NH <sup>ef</sup>	2000-16	-3.0*											-3.0*	-3.0*
API <sup>e</sup>	2000-16	-3.2*											-3.2*	-3.2*
AI/AN <sup>eg</sup>	2000-16	2.0											2.0	2.0
$ exttt{Hispanic}^{ exttt{f}}$	2000-16	-2.9*											-2.9*	-2.9*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-94	-0.8*	1994-16	-2.5*									-2.5*	-2.5*
White	1975-93	-1.1*	1993-16	-2.2*									-2.2*	-2.2*
Black	1975-94	1.2*	1994-16	-3.6*									-3.6*	-3.6*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	-2.5*											-2.5*	-2.5*
White	2000-16	-2.2*											-2.2*	-2.2*
White NH <sup>ef</sup>	2000-16	-2.1*											-2.1*	-2.1*
Black	2000-16	-3.8*											-3.8*	-3.8*
Black NH <sup>ef</sup>	2000-16	-3.7*											-3.7*	-3.7*
API <sup>e</sup>	2000-16	-2.3*											-2.3*	-2.3*
AI/AN <sup>eg</sup>	2000-16	-1.2											-1.2	-1.2
Hispanicf	2000-16	-2.5*											-2.5*	-2.5*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tr	end 3	JP Tr	end 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-89	1.8*	1989-16	-2.6*									-2.6*	-2.6*
White	1975-89	1.7*	1989-16	-2.4*									-2.4*	-2.4*
Black	1975-89	4.0*	1989-16	-3.0*									-3.0*	-3.0*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	-2.3*											-2.3*	-2.3*
White	2000-16	-2.1*											-2.1*	-2.1*
White NH <sup>ef</sup>	2000-16	-1.8*											-1.8*	-1.8*
Black	2000-16	-2.2*											-2.2*	-2.2*
Black NH <sup>ef</sup>	2000-16	-2.2*											-2.2*	-2.2*
API <sup>e</sup>	2000-16	-1.8											-1.8	-1.8
AI/AN <sup>eg</sup>	_	_											_	_
$ exttt{Hispanic}^{ exttt{f}}$	2000-16	-3.2*											-3.2*	-3.2*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-92	1.6*	1992-16	-2.1*									-2.1*	-2.1*
White	1975-92	1.5*	1992-16	-1.8*									-1.8*	-1.8*
Black	1975-93	2.3*	1993-16	-3.2*									-3.2*	-3.2*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-16	-2.3*											-2.3*	-2.3*
White	2000-16	-2.0*											-2.0*	-2.0*
White NH <sup>ef</sup>	2000-16	-1.8*											-1.8*	-1.8*
Black	2000-16	-3.5*											-3.5*	-3.5*
Black NH <sup>ef</sup>	2000-16	-3.4*											-3.4*	-3.4*
API <sup>e</sup>	2000-16	-1.2											-1.2	-1.2
AI/AN <sup>eg</sup>	_	_											_	_
Hispanic <sup>f</sup>	2000-16	-3.7*											-3.7*	-3.7*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

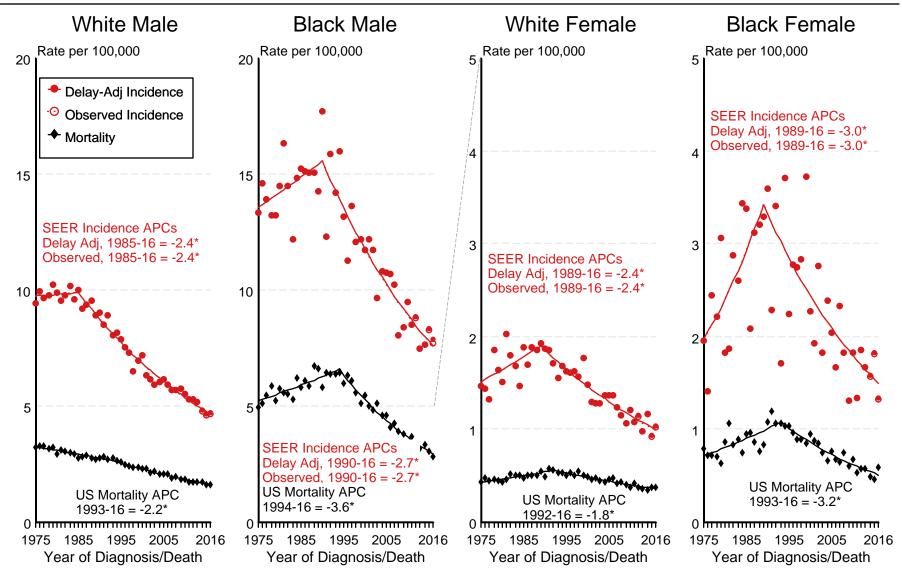
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

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



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

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 4.7, February 2019, 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<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tr	end 4	JP Tre	end 5	JP Tre	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	sted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-98	0.2	1998-16	0.8*									0.8*	0.8*
White	1975-98	0.3*	1998-16	1.0*									1.0*	1.0*
Black	1975-16	0.3*											0.3*	0.3*
SEER 21 Delay-Adju	usted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-07	0.1	2007-11	2.7*	2011-16	0.0							1.2*	0.0
White	2000-08	0.5	2008-11	3.3	2011-16	0.0							1.2	0.0
White NH <sup>ef</sup>	2000-08	0.5	2008-11	3.7	2011-16	0.1							1.3	0.1
Black	2000-07	-1.0	2007-16	2.2*									2.2*	2.2*
Black NH <sup>ef</sup>	2000-07	-1.0	2007-16	2.2*									2.2*	2.2*
API <sup>e</sup>	2000-16	0.7*											0.7*	0.7*
AI/AN <sup>eg</sup>	2000-16	1.9*											1.9*	1.9*
Hispanic <sup>f</sup>	2000-16	0.7*											0.7*	0.7*
U.S. Cancer Mortal	lity <sup>c</sup> , 1975-	2016												
All Races	1975-80	0.6	1980-88	-0.6*	1988-91	0.7	1991-01	-0.6*	2001-13	-1.0*	2013-16	-2.7*	-1.6*	-2.3*
White	1975-00	-0.3*	2000-13	-0.9*	2013-16	-2.6*							-1.4*	-2.2*
Black	1975-93	0.5*	1993-16	-1.4*									-1.4*	-1.4*
U.S. Cancer Mortal	lity <sup>c</sup> , 2000-	2016												
All Races	2000-13	-1.0*	2013-16	-2.7*									-1.6*	-2.3*
White	2000-13	-0.9*	2013-16	-2.6*									-1.4*	-2.2*
White NH <sup>ef</sup>	2000-13	-0.8*	2013-16	-2.5*									-1.4*	-2.1*
Black	2000-16	-1.5*											-1.5*	-1.5*
Black NH <sup>ef</sup>	2000-16	-1.5*											-1.5*	-1.5*
API <sup>e</sup>	2000-12	0.2	2012-16	-4.2*									-1.8*	-4.2*
AI/AN <sup>eg</sup>	2000-16	-1.6*											-1.6*	-1.6*
Hispanic <sup>f</sup>	2000-16	-0.8*											-0.8*	-0.8*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

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

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

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

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

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

Table 13.2 Leukemia

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

_	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	nd 5	JP Tre	end 6	AAF	Cd
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjusted	d Inciden	ceª, 197	5-2016											
All Races	1975-98	0.0	1998-16	0.7*									0.7*	0.7*
White	1975-98	0.1	1998-16	0.8*									0.8*	0.8*
Black	1975-16	0.2											0.2	0.2
SEER 21 Delay-Adjuste	ed Incide	nce <sup>b</sup> , 20	00-2016											
All Races	2000-07	0.0	2007-11	2.6*	2011-16	0.0							1.2*	0.0
White	2000-06	0.1	2006-13	1.9*	2013-16	-0.7							1.0*	-0.1
White NH <sup>ef</sup>	2000-08	0.4	2008-11	3.6	2011-16	0.2							1.3	0.2
Black	2000-16	0.8*											0.8*	0.8*
Black NH <sup>ef</sup>	2000-16	0.9*											0.9*	0.9*
API <sup>e</sup>	2000-16	0.6											0.6	0.6
AI/AN <sup>eg</sup>	2000-16	3.2*											3.2*	3.2*
Hispanic <sup>f</sup>	2000-16	0.5*											0.5*	0.5*
U.S. Cancer Mortality	y <sup>c</sup> , 1975-2	2016												
All Races	1975-96	-0.2*	1996-13	-0.8*	2013-16	-3.3*							-1.7*	-2.7*
White	1975-00	-0.3*	2000-13	-0.8*	2013-16	-3.0*							-1.6*	-2.4*
Black	1975-93	0.8*	1993-16	-1.5*									-1.5*	-1.5*
U.S. Cancer Mortality	y <sup>c</sup> , 2000-2	2016												
All Races	2000-13	-1.0*	2013-16	-3.2*									-1.7*	-2.6*
White	2000-13	-0.9*	2013-16	-3.0*									-1.6*	-2.4*
White NH <sup>ef</sup>	2000-13	-0.8*	2013-16	-3.0*									-1.5*	-2.4*
Black	2000-16	-1.7*											-1.7*	-1.7*
Black NH <sup>ef</sup>	2000-16	-1.6*											-1.6*	-1.6*
	2000-16	-0.7											-0.7	-0.7
	2000-16	-0.5											-0.5	-0.5
	2000-16	-0.9*											-0.9*	-0.9*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

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

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

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

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

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

Table 13.3 Leukemia

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tr	end 4	JP Tre	end 5	JP Tre	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ed Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-98	0.2	1998-16	0.8*									0.8*	0.8*
White	1975-16	0.6*											0.6*	0.6*
Black	1975-16	0.3*											0.3*	0.3*
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-05	-0.2	2005-14	1.6*	2014-16	-2.9							0.6	-0.7
White	2000-16	1.0*											1.0*	1.0*
White NH <sup>ef</sup>	2000-16	1.1*											1.1*	1.1*
Black	2000-06	-1.7*	2006-16	2.2*									2.2*	2.2*
Black NH <sup>ef</sup>	2000-06	-1.8*	2006-16	2.3*									2.3*	2.3*
API <sup>e</sup>	2000-16	0.8*											0.8*	0.8*
AI/AN <sup>eg</sup>	2000-16	0.8											0.8	0.8
Hispanic <sup>f</sup>	2000-16	0.8*											0.8*	0.8*
U.S. Cancer Mortali	ity <sup>c</sup> , 1975-	2016												
All Races	1975-80	0.7	1980-00	-0.4*	2000-16	-1.3*							-1.3*	-1.3*
White	1975-00	-0.3*	2000-16	-1.2*									-1.2*	-1.2*
Black	1975-93	0.4*	1993-16	-1.3*									-1.3*	-1.3*
U.S. Cancer Mortali	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	-1.3*											-1.3*	-1.3*
White	2000-16	-1.2*											-1.2*	-1.2*
White NH <sup>ef</sup>	2000-16	-1.2*											-1.2*	-1.2*
Black	2000-16	-1.5*											-1.5*	-1.5*
Black NH <sup>ef</sup>	2000-16	-1.4*											-1.4*	-1.4*
API <sup>e</sup>	2000-11	0.8	2011-16	-4.7*									-2.3*	-4.7*
AI/AN <sup>eg</sup>	2000-16	-2.8*											-2.8*	-2.8*
Hispanic <sup>f</sup>	2000-16	-0.7*											-0.7*	-0.7*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

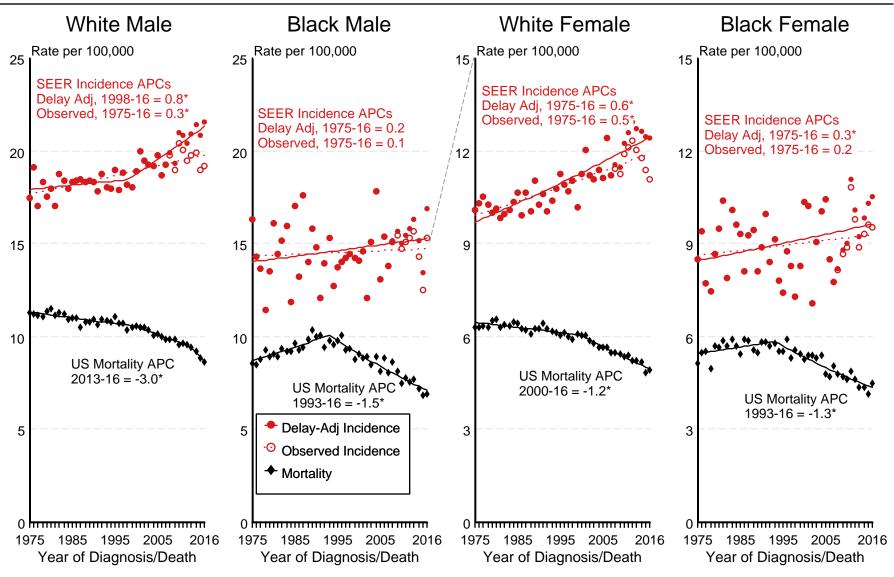
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

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



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

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 4.7, February 2019, 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<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	nd 5	JP Tre	nd 6	AAI	PC <sup>d</sup>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incider	nceª, 197	75-2016											
All Races	1975-84	1.3*	1984-98	4.8*	1998-01	0.6	2001-11	4.3*	2011-16	0.9			2.4*	0.9
White	1975-87	1.6*	1987-98	5.4*	1998-01	-0.8	2001-11	4.9*	2011-16	1.6*			3.0*	1.6*
Black	1975-02	2.9*	2002-09	6.0*	2009-16	0.6							1.8*	0.6
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-02	1.9	2002-07	4.7*	2007-14	2.6*	2014-16	-0.7					1.8*	0.9
White	2000-02	0.6	2002-06	5.6*	2006-14	3.3*	2014-16	-0.9					2.4*	1.2
White NH <sup>ef</sup>	2000-14	3.7*	2014-16	-0.6									2.8*	1.6
Black	2000-09	5.0*	2009-16	1.2									2.1*	1.2
Black NH <sup>ef</sup>	2000-09	4.9*	2009-16	1.3									2.1*	1.3
API <sup>e</sup>	2000-07	0.8	2007-16	-1.9*									-1.9*	-1.9*
AI/AN <sup>eg</sup>	2000-16	3.2*											3.2*	3.2*
Hispanic <sup>f</sup>	2000-14	2.6*	2014-16	-4.5									1.0	-1.0
U.S. Cancer Mortal:	ity <sup>c</sup> , 1975-	2016												
All Races	1975-80	0.2	1980-87	2.0*	1987-95	3.8*	1995-07	1.9*	2007-12	3.3*	2012-16	1.2*	2.4*	1.2*
White	1975-78	-1.2	1978-87	1.6*	1987-96	3.9*	1996-00	0.6	2000-13	2.8*	2013-16	1.7*	2.4*	1.9*
Black	1975-88	0.8*	1988-95	3.2*	1995-00	0.3	2000-13	2.5*	2013-16	0.2			1.7*	0.8
U.S. Cancer Mortal:	ity <sup>c</sup> , 2000-	2016												
All Races	2000-04	2.7*	2004-07	1.5	2007-12	3.3*	2012-16	1.2*					2.4*	1.2*
White	2000-08	2.4*	2008-12	3.5*	2012-16	1.6*							2.5*	1.6*
White NH <sup>ef</sup>	2000-08	2.3*	2008-12	3.6*	2012-16	1.5*							2.5*	1.5*
Black	2000-12	2.6*	2012-16	0.7									1.7*	0.7
Black NH <sup>ef</sup>	2000-13	2.6*	2013-16	0.2									1.8*	0.8
API <sup>e</sup>	2000-16	-1.1*											-1.1*	-1.1*
AI/AN <sup>eg</sup>	2000-16	1.8*											1.8*	1.8*
Hispanic <sup>f</sup>	2000-16	1.4*											1.4*	1.4*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tr	end 3	JP Tr	end 4	JP Tre	nd 5	JP Tr	end 6	AAI	PC <sup>d</sup>
-	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adj	usted Incider	nceª, 19°	75-2016											
All Races	1975-84	2.2*	1984-11	3.9*	2011-16	0.7							2.1*	0.7
White	1975-87	1.8*	1987-98	5.4*	1998-01	-0.7	2001-11	5.0*	2011-16	0.9			2.7*	0.9
Black	1975-02	3.1*	2002-09	6.6*	2009-16	-0.1							1.4	-0.1
SEER 21 Delay-Ad	justed Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-09	4.2*	2009-16	1.4*									2.0*	1.4*
White	2000-02	0.2	2002-06	6.4*	2006-14	2.9*	2014-16	-1.0					2.1*	1.0
White NH <sup>ef</sup>	2000-02	-0.1	2002-08	5.4*	2008-16	2.2*							2.6*	2.2*
Black	2000-09	5.0*	2009-16	1.0									1.8*	1.0
Black NH <sup>ef</sup>	2000-09	4.9*	2009-16	1.1									1.9*	1.1
API <sup>e</sup>	2000-16	-0.9*											-0.9*	-0.9*
AI/AN <sup>eg</sup>	2000-16	3.5*											3.5*	3.5*
$ exttt{Hispanic}^{ exttt{f}}$	2000-10	3.4*	2010-16	-0.2									1.0*	-0.2
U.S. Cancer Morta	ality <sup>c</sup> , 1975-	2016												
All Races	1975-85	1.5*	1985-96	3.8*	1996-99	0.3	1999-13	2.7*	2013-16	0.7			2.0*	1.2*
White	1975-84	1.1*	1984-95	3.7*	1995-06	2.0*	2006-12	3.4*	2012-16	1.2*			2.4*	1.2*
Black	1975-01	1.6*	2001-12	3.0*	2012-16	-0.2							1.5*	-0.2
U.S. Cancer Morta	ality <sup>c</sup> , 2000-	2016												
All Races	2000-13	2.7*	2013-16	0.6									2.0*	1.1*
White	2000-07	2.3*	2007-12	3.4*	2012-16	1.2*							2.4*	1.2*
White NH <sup>ef</sup>	2000-07	2.2*	2007-12	3.5*	2012-16	1.0*							2.4*	1.0*
Black	2000-13	2.8*	2013-16	-1.2									1.5*	-0.2
Black NH <sup>ef</sup>	2000-13	2.9*	2013-16	-1.2									1.5*	-0.2
API <sup>e</sup>	2000-03	0.5	2003-06	-3.4	2006-12	0.3	2012-16	-2.4*					-0.9*	-2.4*
AI/AN <sup>eg</sup>	2000-16	2.3*											2.3*	2.3*
Hispanicf	2000-16	1.4*											1.4*	1.4*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	nd 5	JP Tre	end 6	AAI	.>C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adju	usted Incide	nce <sup>a</sup> , 19	75-2016											
All Races	1975-83	0.6	1983-96	4.2*	1996-16	2.8*							2.8*	2.8*
White	1975-85	0.8	1985-99	4.0*	1999-02	-1.9	2002-16	3.9*					3.9*	3.9*
Black	1975-16	2.9*											2.9*	2.9*
SEER 21 Delay-Ad	justed Incide	ence <sup>b</sup> , 2	000-2016											
All Races	2000-14	3.2*	2014-16	-0.4									2.4*	1.3
White	2000-16	3.3*											3.3*	3.3*
White NH <sup>ef</sup>	2000-16	3.1*											3.1*	3.1*
Black	2000-16	3.2*											3.2*	3.2*
Black NH <sup>ef</sup>	2000-16	3.1*											3.1*	3.1*
API <sup>e</sup>	2000-16	-0.9*											-0.9*	-0.9*
AI/AN <sup>eg</sup>	2000-16	2.5*											2.5*	2.5*
Hispanic <sup>f</sup>	2000-16	2.2*											2.2*	2.2*
U.S. Cancer Morta	ality <sup>c</sup> , 1975-	-2016												
All Races	1975-78	-1.5	1978-88	1.4*	1988-95	3.9*	1995-00	0.4	2000-08	1.6*	2008-16	2.6*	2.5*	2.6*
White	1975-78	-1.9	1978-88	1.2*	1988-96	3.6*	1996-00	-0.4	2000-08	1.8*	2008-16	2.7*	2.6*	2.7*
Black	1975-95	2.0*	1995-07	0.5	2007-16	2.5*							2.5*	2.5*
U.S. Cancer Morta	ality <sup>c</sup> , 2000-	-2016												
All Races	2000-04	2.4*	2004-08	0.6	2008-12	3.5*	2012-16	1.9*					2.5*	1.9*
White	2000-08	1.8*	2008-16	2.7*									2.6*	2.7*
White NH <sup>ef</sup>	2000-16	2.2*											2.2*	2.2*
Black	2000-16	1.8*											1.8*	1.8*
Black NH <sup>ef</sup>	2000-16	1.9*											1.9*	1.9*
API <sup>e</sup>	2000-16	-1.3*											-1.3*	-1.3*
AI/AN <sup>eg</sup>	2000-16	1.0											1.0	1.0
Hispanic <sup>f</sup>	2000-16	1.3*											1.3*	1.3*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

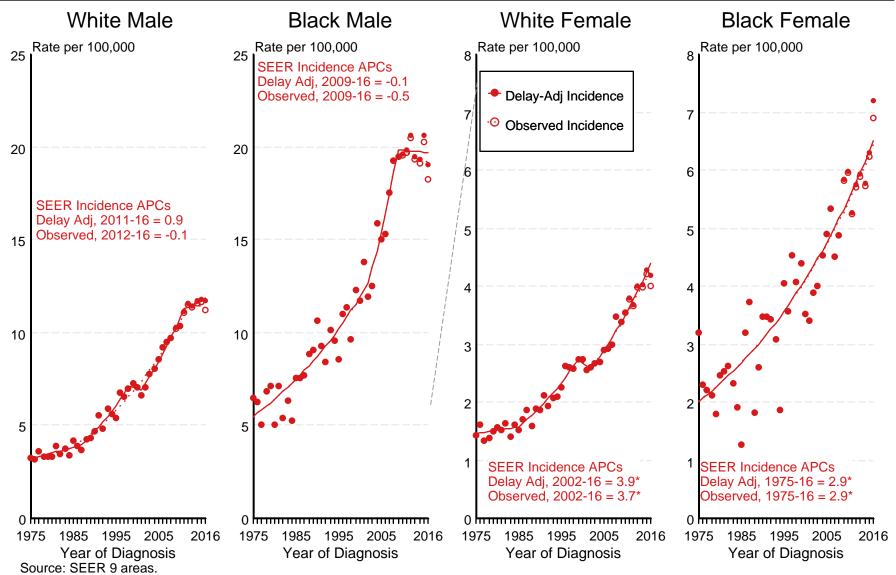
Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Figure 14.1

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



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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tr	end 6	AAI	5C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adju	usted Incider	nce <sup>a</sup> , 19'	75-2016											
All Races	1975-82	2.5*	1982-91	1.0*	1991-07	-0.7*	2007-16	-2.1*					-2.1*	-2.1*
White	1975-82	2.6*	1982-91	1.1*	1991-07	-0.6*	2007-16	-2.1*					-2.1*	-2.1*
Black	1975-84	3.5*	1984-03	-0.6*	2003-16	-2.4*							-2.4*	-2.4*
SEER 21 Delay-Ad	justed Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-08	-0.8*	2008-16	-2.2*									-2.1*	-2.2*
White	2000-08	-0.7*	2008-16	-2.2*									-2.0*	-2.2*
White NH <sup>ef</sup>	2000-07	-0.4*	2007-16	-1.9*									-1.9*	-1.9*
Black	2000-09	-1.2*	2009-16	-2.6*									-2.3*	-2.6*
Black NH <sup>ef</sup>	2000-09	-1.1*	2009-16	-2.6*									-2.3*	-2.6*
API <sup>e</sup>	2000-16	-0.8*											-0.8*	-0.8*
AI/AN <sup>eg</sup>	2000-16	-1.3*											-1.3*	-1.3*
Hispanic <sup>f</sup>	2000-08	-0.7*	2008-16	-2.2*									-2.0*	-2.2*
U.S. Cancer Morta	ality <sup>c</sup> , 1975-	2016												
All Races	1975-80	3.0*	1980-90	1.8*	1990-95	-0.2	1995-05	-1.0*	2005-12	-2.3*	2012-16	-3.7*	-2.9*	-3.7*
White	1975-80	2.9*	1980-90	1.8*	1990-95	-0.1	1995-05	-0.8*	2005-12	-2.2*	2012-16	-3.6*	-2.8*	-3.6*
Black	1975-81	3.5*	1981-90	1.9*	1990-95	-0.7*	1995-04	-1.7*	2004-13	-2.7*	2013-16	-5.0*	-3.5*	-4.4*
U.S. Cancer Morta	ality <sup>c</sup> , 2000-	2016												
All Races	2000-05	-1.1*	2005-10	-2.2*	2010-14	-2.8*	2014-16	-4.5*					-3.0*	-3.7*
White	2000-05	-1.0*	2005-10	-2.0*	2010-14	-2.7*	2014-16	-4.3*					-2.9*	-3.5*
White NH <sup>ef</sup>	2000-05	-0.8*	2005-10	-1.9*	2010-14	-2.6*	2014-16	-4.2*					-2.7*	-3.4*
Black	2000-04	-1.6*	2004-13	-2.7*	2013-16	-5.0*							-3.5*	-4.4*
Black NH <sup>ef</sup>	2000-04	-1.5*	2004-13	-2.6*	2013-16	-5.0*							-3.4*	-4.4*
API <sup>e</sup>	2000-11	-1.2*	2011-16	-2.6*									-1.9*	-2.6*
AI/AN <sup>eg</sup>	2000-16	-1.4*											-1.4*	-1.4*
Hispanic <sup>f</sup>	2000-16	-2.3*											-2.3*	-2.3*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adju	sted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-82	1.5*	1982-91	-0.5*	1991-08	-1.7*	2008-16	-2.8*					-2.7*	-2.8*
White	1975-81	1.4*	1981-89	-0.1	1989-07	-1.6*	2007-16	-2.7*					-2.7*	-2.7*
Black	1975-84	2.9*	1984-98	-1.4*	1998-16	-2.9*							-2.9*	-2.9*
SEER 21 Delay-Adj	justed Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-08	-1.7*	2008-16	-2.9*									-2.8*	-2.9*
White	2000-08	-1.6*	2008-16	-2.9*									-2.8*	-2.9*
White NH <sup>ef</sup>	2000-08	-1.5*	2008-16	-2.7*									-2.5*	-2.7*
Black	2000-16	-2.7*											-2.7*	-2.7*
Black NH <sup>ef</sup>	2000-16	-2.7*											-2.7*	-2.7*
API <sup>e</sup>	2000-16	-1.5*											-1.5*	-1.5*
AI/AN <sup>eg</sup>	2000-16	-1.8*											-1.8*	-1.8*
Hispanic <sup>f</sup>	2000-07	-1.4*	2007-16	-3.2*									-3.2*	-3.2*
U.S. Cancer Morta	ality <sup>c</sup> , 1975-	2016												
All Races	1975-78	2.4*	1978-84	1.2*	1984-91	0.3*	1991-05	-1.9*	2005-12	-2.9*	2012-16	-4.3*	-3.5*	-4.3*
White	1975-80	1.9*	1980-87	0.7*	1987-91	0.1	1991-05	-1.7*	2005-12	-2.9*	2012-16	-4.2*	-3.4*	-4.2*
Black	1975-82	2.9*	1982-90	1.3*	1990-94	-1.3*	1994-03	-2.7*	2003-13	-3.4*	2013-16	-5.6*	-4.1*	-5.1*
U.S. Cancer Morta	ality <sup>c</sup> , 2000-	2016												
All Races	2000-05	-2.0*	2005-10	-2.8*	2010-14	-3.4*	2014-16	-5.0*					-3.6*	-4.2*
White	2000-05	-1.9*	2005-10	-2.7*	2010-14	-3.4*	2014-16	-4.9*					-3.5*	-4.1*
White NH <sup>ef</sup>	2000-05	-1.7*	2005-10	-2.6*	2010-14	-3.3*	2014-16	-4.7*					-3.4*	-4.0*
Black	2000-13	-3.3*	2013-16	-5.8*									-4.1*	-5.2*
Black NH <sup>ef</sup>	2000-13	-3.2*	2013-16	-5.8*									-4.1*	-5.1*
API <sup>e</sup>	2000-08	-1.3*	2008-16	-2.8*									-2.7*	-2.8*
AI/AN <sup>eg</sup>	2000-16	-1.6*											-1.6*	-1.6*
Hispanic <sup>f</sup>	2000-16	-3.1*											-3.1*	-3.1*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tr	end 5	JP Tre	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-82	5.6*	1982-91	3.4*	1991-06	0.5*	2006-16	-1.5*					-1.5*	-1.5*
White	1975-88	4.8*	1988-97	1.4*	1997-07	0.2	2007-16	-1.5*					-1.5*	-1.5*
Black	1975-90	4.2*	1990-06	0.6*	2006-16	-1.9*							-1.9*	-1.9*
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-07	0.3*	2007-16	-1.5*									-1.5*	-1.5*
White	2000-07	0.4*	2007-16	-1.5*									-1.5*	-1.5*
White NH <sup>ef</sup>	2000-07	0.6*	2007-16	-1.3*									-1.3*	-1.3*
Black	2000-09	0.3	2009-16	-2.0*									-1.5*	-2.0*
Black NH <sup>ef</sup>	2000-09	0.4	2009-16	-2.0*									-1.5*	-2.0*
API <sup>e</sup>	2000-16	0.1											0.1	0.1
AI/AN <sup>eg</sup>	2000-16	-0.7											-0.7	-0.7
Hispanic <sup>f</sup>	2000-16	-0.4*											-0.4*	-0.4*
U.S. Cancer Mortal:	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-83	5.9*	1983-92	3.8*	1992-02	0.5*	2002-07	-0.7*	2007-14	-2.0*	2014-16	-4.2*	-2.5*	-3.1*
White	1975-83	5.9*	1983-92	3.8*	1992-02	0.6*	2002-07	-0.6	2007-14	-1.9*	2014-16	-4.0*	-2.4*	-2.9*
Black	1975-82	6.3*	1982-92	3.7*	1992-04	0.4*	2004-13	-1.9*	2013-16	-4.5*			-2.7*	-3.8*
U.S. Cancer Mortal:	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-02	0.6	2002-07	-0.7*	2007-14	-2.0*	2014-16	-4.2*					-2.5*	-3.1*
White	2000-02	0.6	2002-07	-0.6*	2007-14	-1.9*	2014-16	-4.0*					-2.4*	-2.9*
White NH <sup>ef</sup>	2000-02	0.7	2002-07	-0.4	2007-14	-1.8*	2014-16	-3.9*					-2.2*	-2.8*
Black	2000-04	0.6	2004-13	-1.9*	2013-16	-4.5*							-2.7*	-3.8*
Black NH <sup>ef</sup>	2000-05	0.5	2005-08	-2.8	2008-13	-1.4*	2013-16	-4.7*					-2.7*	-3.9*
API <sup>e</sup>	2000-13	-0.3	2013-16	-3.3									-1.3*	-2.6*
AI/AN <sup>eg</sup>	2000-02	10.8	2002-16	-1.7*									-1.7*	-1.7*
Hispanicf	2000-16	-1.1*											-1.1*	-1.1*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

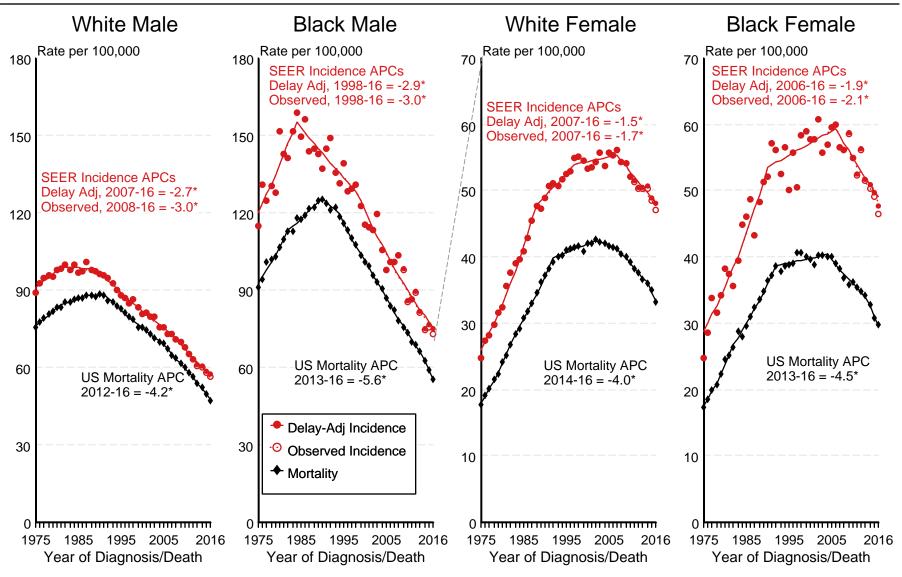
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

Figure 15.1

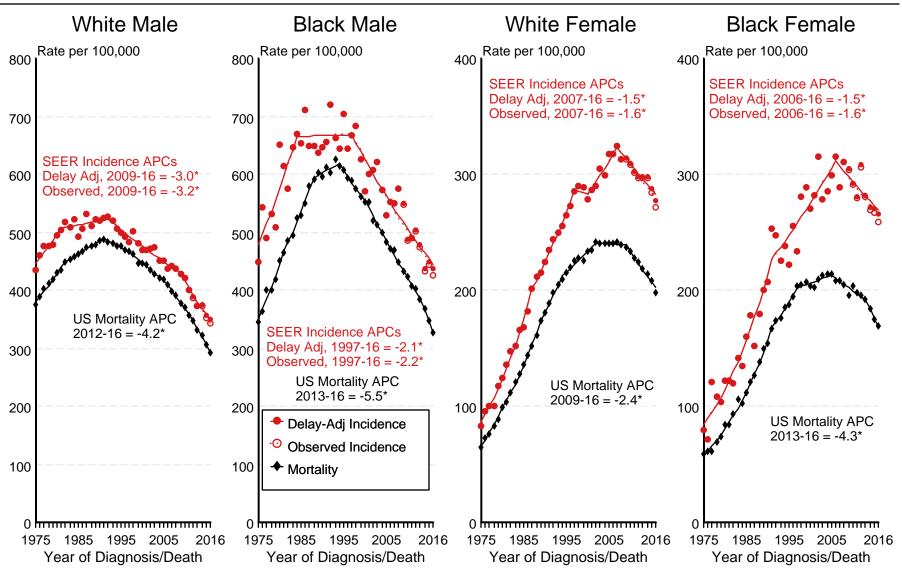


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

<sup>&</sup>lt;sup>a</sup> 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 4.7, February 2019, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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



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

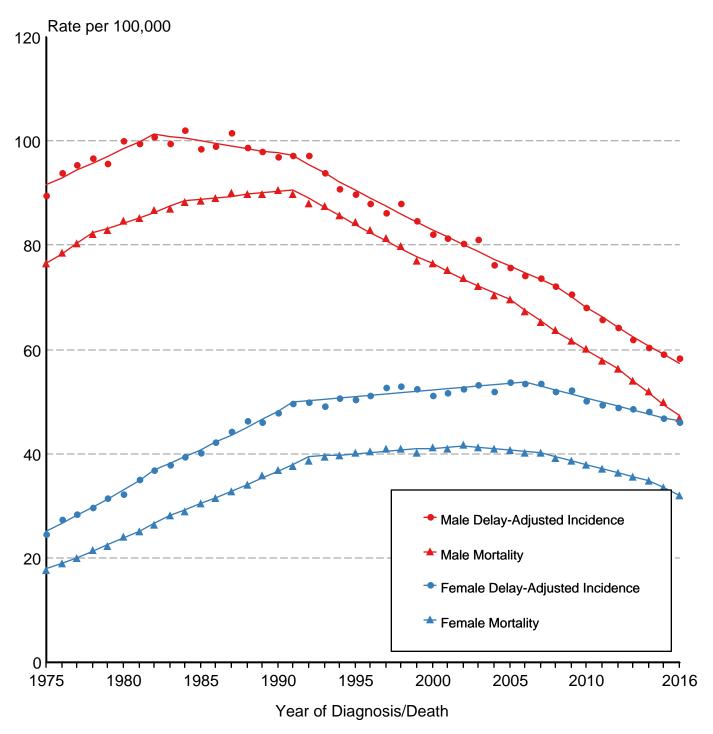
a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

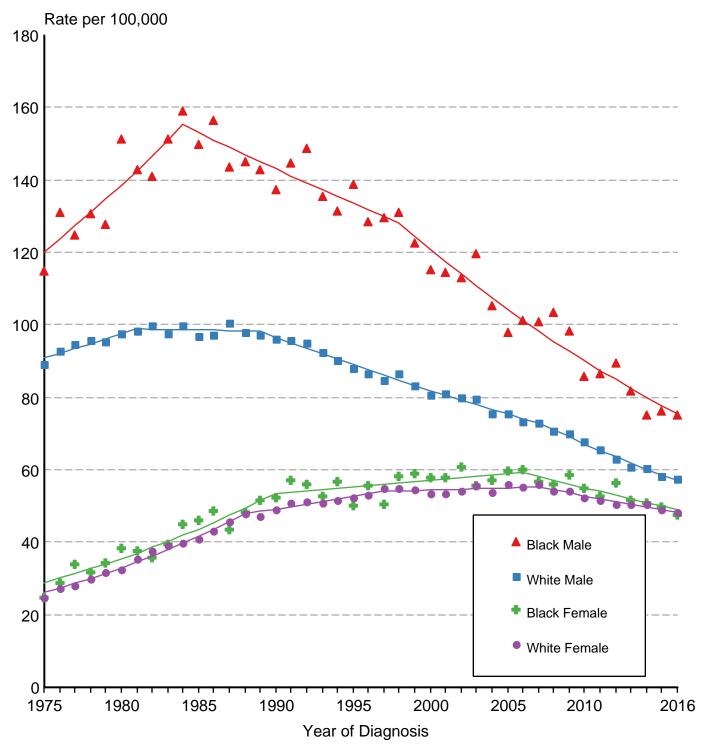
The APC is significantly different from zero (p < 0.05).

### Cancer of the Lung & Bronchus SEER Delay-Adjusted Incidence & US Death Rates, 1975-2016, All Races, By Sex



Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

### Cancer of the Lung & Bronchus SEER Delay-Adjusted Incidence, 1975-2016 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 4.7, February 2019, National Cancer Institute.

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	nd 4	JP Tre	end 5	JP Tre	end 6	AAI	PC <sup>d</sup>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-81	5.9*	1981-05	2.9*	2005-16	1.6*							1.6*	1.6*
White	1975-81	6.2*	1981-05	3.2*	2005-16	1.9*							1.9*	1.9*
Black	1975-16	-0.3											-0.3	-0.3
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-05	3.5*	2005-16	1.3*									1.3*	1.3*
White	2000-05	3.8*	2005-16	1.6*									1.6*	1.6*
White NH <sup>ef</sup>	2000-05	4.3*	2005-16	1.9*									1.9*	1.9*
Black	2000-16	0.0											0.0	0.0
Black NH <sup>ef</sup>	2000-16	0.1											0.1	0.1
API <sup>e</sup>	2000-16	-0.4											-0.4	-0.4
AI/AN <sup>eg</sup>	2000-16	2.7*											2.7*	2.7*
Hispanic <sup>f</sup>	2000-16	0.7											0.7	0.7
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
Note- Alternate mo	rtality tre	ends adj	usted for	ICD-9/IC	D-10 codin	g change	e available	at: <u>ht</u>	tps://surv	eillance	.cancer.go	v/joinpo	oint/table	1.html.
All Races	1975-77	4.7	1977-90	1.4*	1990-02	-0.3	2002-09	0.6	2009-14	-1.2*	2014-16	-8.4*	-2.5*	-4.9*
White	1975-77	5.0	1977-90	1.5*	1990-02	-0.1	2002-09	0.8*	2009-14	-1.0	2014-16	-8.1*	-2.2*	-4.6*
Black	1975-14	-0.8*	2014-16	-17.9									-4.9	-9.8
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-09	0.5*	2009-14	-1.2	2014-16	-8.5*							-2.5*	-4.9*
White	2000-13	0.4*	2013-16	-6.5*									-2.0*	-4.8*
White NH <sup>ef</sup>	2000-13	0.6*	2013-16	-6.3*									-1.8*	-4.6*
Black	2000-14	-1.2*	2014-16	-16.1									-4.7	-9.0
Black NH <sup>ef</sup>	2000-14	-1.2*	2014-16	-16.1									-4.8	-9.0
API <sup>e</sup>	2000-16	-0.9											-0.9	-0.9
AI/AN <sup>eg</sup>	2000-16	-2.9											-2.9	-2.9
Hispanic <sup>f</sup>	2000-16	-0.8											-0.8	-0.8

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	5Cq
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-85	5.6*	1985-05	3.2*	2005-16	1.7*							1.7*	1.7*
White	1975-85	5.9*	1985-05	3.4*	2005-16	1.9*							1.9*	1.9*
Black	1975-16	-0.6											-0.6	-0.6
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-05	3.8*	2005-16	1.4*									1.4*	1.4*
White	2000-05	4.1*	2005-16	1.6*									1.6*	1.6*
White NH <sup>ef</sup>	2000-05	4.3*	2005-16	2.0*									2.0*	2.0*
Black	2000-16	-0.4											-0.4	-0.4
Black NH <sup>ef</sup>	2000-16	-0.5											-0.5	-0.5
API <sup>e</sup>	2000-16	-0.4											-0.4	-0.4
AI/AN <sup>eg</sup>	2000-16	0.4											0.4	0.4
Hispanic <sup>f</sup>	2000-16	0.5											0.5	0.5
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
Note- Alternate mo	rtality tre	ends adj	usted for	ICD-9/IC	D-10 codin	g change	e available	at: ht	tps://surv	eillance	.cancer.go	v/joinpo	oint/table	1.html.
All Races	1975-87	2.4*	1987-97	0.9*	1997-00	-1.7	2000-09	1.0*	2009-14	-1.3*	2014-16	-8.5*	-2.5*	-5.0*
White	1975-87	2.5*	1987-97	1.0*	1997-00	-1.6	2000-09	1.1*	2009-14	-1.0	2014-16	-8.3*	-2.2*	-4.7*
Black	1975-16	-0.9*											-0.9*	-0.9*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-09	1.0*	2009-14	-1.3	2014-16	-8.5*							-2.5*	-5.0*
White	2000-09	1.1*	2009-14	-1.0	2014-16	-8.3*							-2.2*	-4.7*
White NH <sup>ef</sup>	2000-09	1.3*	2009-14	-0.9	2014-16	-8.1*							-2.0*	-4.6*
Black	2000-16	-1.2											-1.2	-1.2
Black NH <sup>ef</sup>	2000-16	-1.1											-1.1	-1.1
API <sup>e</sup>	2000-16	-2.1											-2.1	-2.1
AI/AN <sup>eg</sup>	2000-16	-2.2											-2.2	-2.2
Hispanic <sup>f</sup>	2000-16	-0.5											-0.5	-0.5

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tr	end 6	AAI	. C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	sted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-80	5.5*	1980-05	2.5*	2005-16	1.6*							1.6*	1.6*
White	1975-81	6.2*	1981-93	2.1*	1993-05	3.5*	2005-12	0.9	2012-16	3.6*			2.1*	3.6*
Black	1975-16	-0.2											-0.2	-0.2
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	1.6*											1.6*	1.6*
White	2000-16	1.9*											1.9*	1.9*
White NH <sup>ef</sup>	2000-16	2.3*											2.3*	2.3*
Black	2000-16	0.2											0.2	0.2
Black NH <sup>ef</sup>	2000-16	0.4											0.4	0.4
API <sup>e</sup>	2000-16	-0.5											-0.5	-0.5
AI/AN <sup>eg</sup>	2000-16	5.5*											5.5*	5.5*
$ exttt{Hispanic}^{ exttt{f}}$	2000-16	0.6											0.6	0.6
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
Note- Alternate mo	ortality tre	ends adj	usted for	ICD-9/IC	D-10 codin	g change	available	at: <u>ht</u>	tps://surve	eillance	.cancer.go	v/joinpo	oint/table	<u>1.html</u> .
All Races	1975-88	0.8*	1988-14	-0.6*	2014-16	-9.3*							-2.6*	-5.1*
White	1975-86	1.1*	1986-13	-0.3*	2013-16	-5.7*							-2.1*	-4.4*
Black	1975-97	0.3	1997-16	-2.6*									-2.6*	-2.6*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-14	-0.6*	2014-16	-9.3*									-2.6*	-5.0*
White	2000-13	-0.2	2013-16	-5.9*									-2.2*	-4.5*
White NH <sup>ef</sup>	2000-13	0.0	2013-16	-5.6*									-1.9*	-4.2*
Black	2000-16	-2.7*											-2.7*	-2.7*
Black NH <sup>ef</sup>	2000-16	-2.8*											-2.8*	-2.8*
API <sup>e</sup>	2000-16	-0.1											-0.1	-0.1
AI/AN <sup>eg</sup>	_	-											_	-
Hispanic <sup>f</sup>	2000-16	-1.1											-1.1	-1.1

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, Californ SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

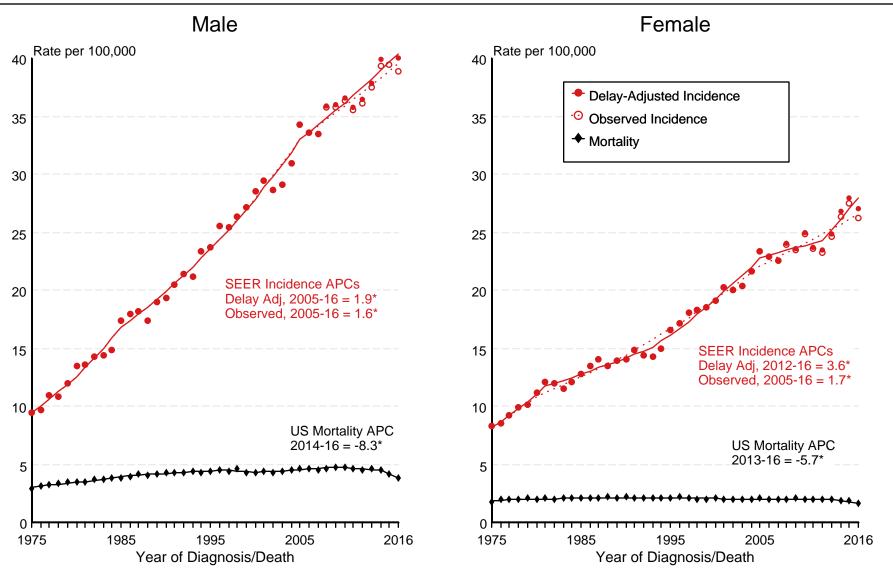
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

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



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

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

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.
 The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

Table 18.1 Myeloma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tr	end 6	AAI	.5C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adj	usted Incider	nce <sup>a</sup> , 19'	75-2016											
All Races	1975-06	0.8*	2006-16	2.0*									2.0*	2.0*
White	1975-07	0.8*	2007-16	2.0*									2.0*	2.0*
Black	1975-96	1.3*	1996-00	-2.4	2000-16	1.9*							1.9*	1.9*
SEER 21 Delay-Ad	ljusted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-07	0.6*	2007-10	4.1*	2010-16	1.0*							2.0*	1.0*
White	2000-07	0.4	2007-10	3.9	2010-16	1.1*							2.0*	1.1*
White NH <sup>ef</sup>	2000-07	0.5	2007-10	4.0	2010-16	1.1*							2.0*	1.1*
Black	2000-16	2.0*											2.0*	2.0*
Black NH <sup>ef</sup>	2000-16	2.0*											2.0*	2.0*
API <sup>e</sup>	2000-16	1.4*											1.4*	1.4*
AI/AN <sup>eg</sup>	2000-16	0.9											0.9	0.9
Hispanic <sup>f</sup>	2000-16	1.0*											1.0*	1.0*
U.S. Cancer Mort	ality <sup>c</sup> , 1975-	2016												
All Races	1975-94	1.4*	1994-02	-0.7*	2002-09	-1.9*	2009-12	1.0	2012-16	-1.2*			-0.6	-1.2*
White	1975-94	1.4*	1994-02	-0.5*	2002-09	-1.9*	2009-12	1.0	2012-16	-1.2*			-0.6	-1.2*
Black	1975-82	3.5*	1982-96	1.2*	1996-09	-1.8*	2009-16	-0.2					-0.6	-0.2
U.S. Cancer Mort	ality <sup>c</sup> , 2000-	2016												
All Races	2000-09	-1.8*	2009-12	0.8	2012-16	-1.2							-0.6	-1.2
White	2000-02	0.0	2002-09	-2.0*	2009-12	1.1	2012-16	-1.2					-0.6	-1.2
White NH <sup>ef</sup>	2000-02	0.0	2002-09	-2.0*	2009-12	1.1	2012-16	-1.2					-0.6	-1.2
Black	2000-09	-1.9*	2009-16	-0.1									-0.5	-0.1
Black NH <sup>ef</sup>	2000-09	-1.8*	2009-16	-0.1									-0.5	-0.1
APIe	2000-16	-0.5											-0.5	-0.5
AI/AN <sup>eg</sup>	2000-16	-1.8											-1.8	-1.8
Hispanic <sup>f</sup>	2000-16	-1.0*											-1.0*	-1.0*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

Table 18.2 Myeloma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tr	end 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-06	0.8*	2006-16	2.0*									2.0*	2.0*
White	1975-16	1.0*											1.0*	1.0*
Black	1975-16	1.0*											1.0*	1.0*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-06	0.6	2006-12	2.9*	2012-16	0.2							1.7*	0.2
White	2000-06	0.3	2006-12	2.8*	2012-16	0.2							1.6*	0.2
White NH <sup>ef</sup>	2000-06	0.5	2006-11	3.0*	2011-16	0.8							1.8*	0.8
Black	2000-16	1.9*											1.9*	1.9*
Black NH <sup>ef</sup>	2000-16	1.9*											1.9*	1.9*
API <sup>e</sup>	2000-16	2.3*											2.3*	2.3*
AI/AN <sup>eg</sup>	2000-16	2.4											2.4	2.4
$ ext{Hispanic}^{ ext{f}}$	2000-07	-1.5	2007-12	4.2*	2012-16	-1.9							1.5	-1.9
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-94	1.4*	1994-16	-0.9*									-0.9*	-0.9*
White	1975-94	1.5*	1994-16	-0.8*									-0.8*	-0.8*
Black	1975-91	2.3*	1991-16	-1.2*									-1.2*	-1.2*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	-0.9*											-0.9*	-0.9*
White	2000-16	-0.8*											-0.8*	-0.8*
White NH <sup>ef</sup>	2000-16	-0.8*											-0.8*	-0.8*
Black	2000-16	-1.1*											-1.1*	-1.1*
Black NH <sup>ef</sup>	2000-16	-1.0*											-1.0*	-1.0*
API <sup>e</sup>	2000-16	0.3											0.3	0.3
AI/AN <sup>eg</sup>	2000-16	-1.9*											-1.9*	-1.9*
Hispanicf	2000-16	-0.7											-0.7	-0.7

Joinpoint Regression Program Version 4.7, February 2019, 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).

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

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

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

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

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

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

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

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

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

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

Table 18.3 Myeloma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tr	end 3	JP Tre	end 4	JP Tr	end 5	JP Tr	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adju	sted Incide	nce <sup>a</sup> , 19	75-2016											
All Races	1975-07	0.6*	2007-16	2.0*									2.0*	2.0*
White	1975-16	0.7*											0.7*	0.7*
Black	1975-16	1.1*											1.1*	1.1*
SEER 21 Delay-Adj	usted Incide	ence <sup>b</sup> , 2	000-2016											
All Races	2000-07	0.2	2007-10	4.0	2010-16	1.1*							2.0*	1.1*
White	2000-16	1.4*											1.4*	1.4*
White NH <sup>ef</sup>	2000-03	-1.6	2003-16	1.7*									1.7*	1.7*
Black	2000-16	1.9*											1.9*	1.9*
Black NH <sup>ef</sup>	2000-16	1.9*											1.9*	1.9*
API <sup>e</sup>	2000-16	0.4											0.4	0.4
AI/AN <sup>eg</sup>	2000-16	-0.4											-0.4	-0.4
Hispanic <sup>f</sup>	2000-16	0.9*											0.9*	0.9*
U.S. Cancer Morta	lity <sup>c</sup> , 1975-	-2016												
All Races	1975-93	1.5*	1993-02	-0.5	2002-09	-2.7*	2009-12	1.8	2012-16	-1.7*			-0.8	-1.7*
White	1975-93	1.4*	1993-02	-0.5	2002-08	-2.6*	2008-16	-0.4					-0.7*	-0.4
Black	1975-93	2.1*	1993-00	-0.1	2000-09	-2.8*	2009-13	2.7	2013-16	-3.7			-0.7	-2.2
U.S. Cancer Morta	lity <sup>c</sup> , 2000-	-2016												
All Races	2000-09	-2.4*	2009-12	1.5	2012-16	-1.7*							-0.8	-1.7*
White	2000-08	-2.4*	2008-16	-0.5									-0.7*	-0.5
White NH <sup>ef</sup>	2000-08	-2.4*	2008-16	-0.4									-0.7*	-0.4
Black	2000-09	-2.8*	2009-13	2.7	2013-16	-3.7							-0.7	-2.2
Black NH <sup>ef</sup>	2000-09	-2.7*	2009-13	2.8	2013-16								-0.7	-2.2
API <sup>e</sup>	2000-16	-1.4											-1.4	-1.4
AI/AN <sup>eg</sup>	2000-16	-1.6											-1.6	-1.6
Hispanic <sup>f</sup>	2000-16	-1.4*											-1.4*	-1.4*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

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

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

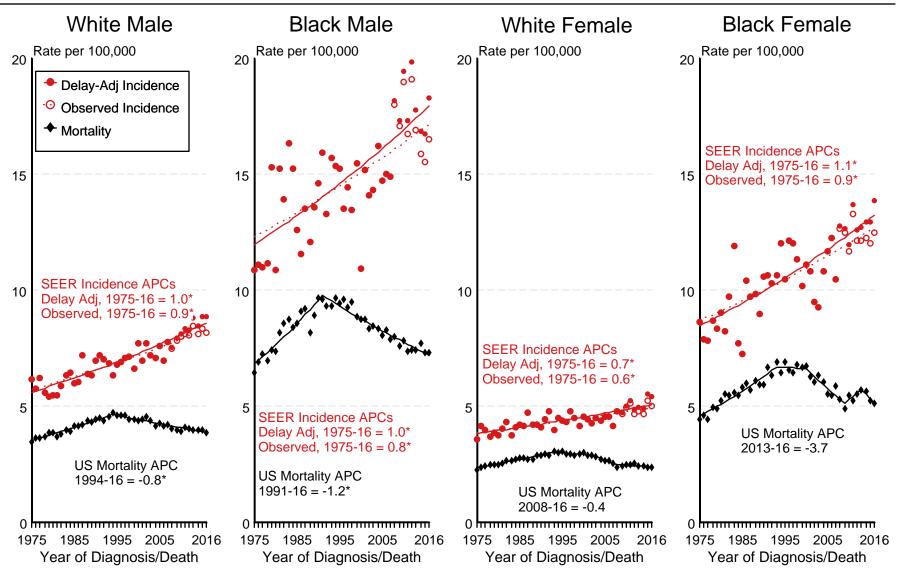
Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding

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

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

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

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



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

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 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

#### Table 19.1 Non-Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjusted Incidence <sup>a</sup> , 1975-2016														
All Races	1975-91	3.6*	1991-07	0.7*	2007-16	-0.6*							-0.6*	-0.6*
White	1975-90	3.8*	1990-07	0.8*	2007-16	-0.7*							-0.7*	-0.7*
Black	1975-95	4.5*	1995-16	0.2									0.2	0.2
SEER 21 Delay-Adjusted Incidence <sup>b</sup> , 2000-2016														
All Races	2000-08	0.7*	2008-16	-0.5*									-0.4*	-0.5*
White	2000-07	1.0*	2007-16	-0.4*									-0.4*	-0.4*
White NH <sup>ef</sup>	2000-07	1.0*	2007-16	-0.4*									-0.4*	-0.4*
Black	2000-16	0.3*											0.3*	0.3*
Black NH <sup>ef</sup>	2000-16	0.4*											0.4*	0.4*
API <sup>e</sup>	2000-16	0.3											0.3	0.3
AI/AN <sup>eg</sup>	2000-16	0.1											0.1	0.1
$ exttt{Hispanic}^{ exttt{f}}$	2000-16	0.2											0.2	0.2
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-91	2.5*	1991-97	1.6*	1997-06	-3.1*	2006-16	-2.2*					-2.2*	-2.2*
White	1975-91	2.5*	1991-97	1.6*	1997-06	-3.1*	2006-16	-2.2*					-2.2*	-2.2*
Black	1975-96	2.6*	1996-16	-2.3*									-2.3*	-2.3*
U.S. Cancer Mortality <sup>c</sup> , 2000-2016														
All Races	2000-05	-3.3*	2005-16	-2.3*									-2.3*	-2.3*
White	2000-04	-3.6*	2004-16	-2.3*									-2.3*	-2.3*
White NH <sup>ef</sup>	2000-05	-3.4*	2005-16	-2.3*									-2.3*	-2.3*
Black	2000-16	-2.0*											-2.0*	-2.0*
Black NH <sup>ef</sup>	2000-16	-1.9*											-1.9*	-1.9*
API <sup>e</sup>	2000-16	-1.7*											-1.7*	-1.7*
AI/AN <sup>eg</sup>	2000-16	-2.1*											-2.1*	-2.1*
Hispanic <sup>f</sup>	2000-16	-1.7*											-1.7*	-1.7*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

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

#### Table 19.2 Non-Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAF	Cd
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	sted Incider	nce <sup>a</sup> , 19	75-2016											
All Races	1975-91	4.2*	1991-10	0.4*	2010-16	-0.9							-0.5	-0.9
White	1975-90	4.4*	1990-08	0.6*	2008-16	-0.7							-0.5	-0.7
Black	1975-94	5.4*	1994-16	-0.2									-0.2	-0.2
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-08	0.9*	2008-16	-0.5*									-0.4*	-0.5*
White	2000-07	1.2*	2007-16	-0.4*									-0.4*	-0.4*
White NH <sup>ef</sup>	2000-07	1.3*	2007-16	-0.3									-0.3	-0.3
Black	2000-16	0.2											0.2	0.2
Black NH <sup>ef</sup>	2000-16	0.2											0.2	0.2
API <sup>e</sup>	2000-16	0.4											0.4	0.4
AI/AN <sup>eg</sup>	2000-16	-0.6											-0.6	-0.6
Hispanic <sup>f</sup>	2000-16	0.0											0.0	0.0
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-91	2.7*	1991-97	1.6*	1997-06	-2.8*	2006-16	-2.0*					-2.0*	-2.0*
White	1975-91	2.6*	1991-97	1.6*	1997-06	-2.8*	2006-16	-2.0*					-2.0*	-2.0*
Black	1975-96	2.7*	1996-16	-2.4*									-2.4*	-2.4*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-06	-2.9*	2006-16	-2.0*									-2.0*	-2.0*
White	2000-06	-3.0*	2006-16	-2.0*									-2.0*	-2.0*
White NH <sup>ef</sup>	2000-06	-3.0*	2006-16	-2.0*									-2.0*	-2.0*
Black	2000-16	-1.9*											-1.9*	-1.9*
Black NH <sup>ef</sup>	2000-16	-1.9*											-1.9*	-1.9*
API <sup>e</sup>	2000-16	-1.5*											-1.5*	-1.5*
AI/AN <sup>eg</sup>	2000-16	-0.4											-0.4	-0.4
Hispanic <sup>f</sup>	2000-16	-1.4*											-1.4*	-1.4*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

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

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

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

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

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

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

#### Table 19.3 Non-Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tr	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-88	3.0*	1988-04	1.4*	2004-16	-0.7*							-0.7*	-0.7*
White	1975-88	3.1*	1988-04	1.4*	2004-16	-0.6*							-0.6*	-0.6*
Black	1975-04	2.9*	2004-16	-0.6									-0.6	-0.6
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-04	1.3*	2004-16	-0.4*									-0.4*	-0.4*
White	2000-06	0.8*	2006-16	-0.5*									-0.5*	-0.5*
White NH <sup>ef</sup>	2000-06	0.8*	2006-16	-0.5*									-0.5*	-0.5*
Black	2000-16	0.5*											0.5*	0.5*
Black NH <sup>ef</sup>	2000-16	0.5*											0.5*	0.5*
API <sup>e</sup>	2000-16	0.3											0.3	0.3
AI/AN <sup>eg</sup>	2000-16	0.7											0.7	0.7
Hispanic <sup>f</sup>	2000-16	0.4*											0.4*	0.4*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-94	2.2*	1994-97	1.0	1997-08	-3.3*	2008-16	-2.5*					-2.6*	-2.5*
White	1975-97	2.1*	1997-04	-3.8*	2004-16	-2.7*							-2.7*	-2.7*
Black	1975-96	2.7*	1996-16	-2.2*									-2.2*	-2.2*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-04	-3.9*	2004-16	-2.7*									-2.7*	-2.7*
White	2000-03	-4.4*	2003-16	-2.7*									-2.7*	-2.7*
White NH <sup>ef</sup>	2000-03	-4.5*	2003-16	-2.7*									-2.7*	-2.7*
Black	2000-16	-2.1*											-2.1*	-2.1*
Black NH <sup>ef</sup>	2000-16	-2.0*											-2.0*	-2.0*
API <sup>e</sup>	2000-16	-1.9*											-1.9*	-1.9*
AI/AN <sup>eg</sup>	2000-16	-3.7*											-3.7*	-3.7*
Hispanicf	2000-16	-2.1*											-2.1*	-2.1*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta)
Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding

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

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

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

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

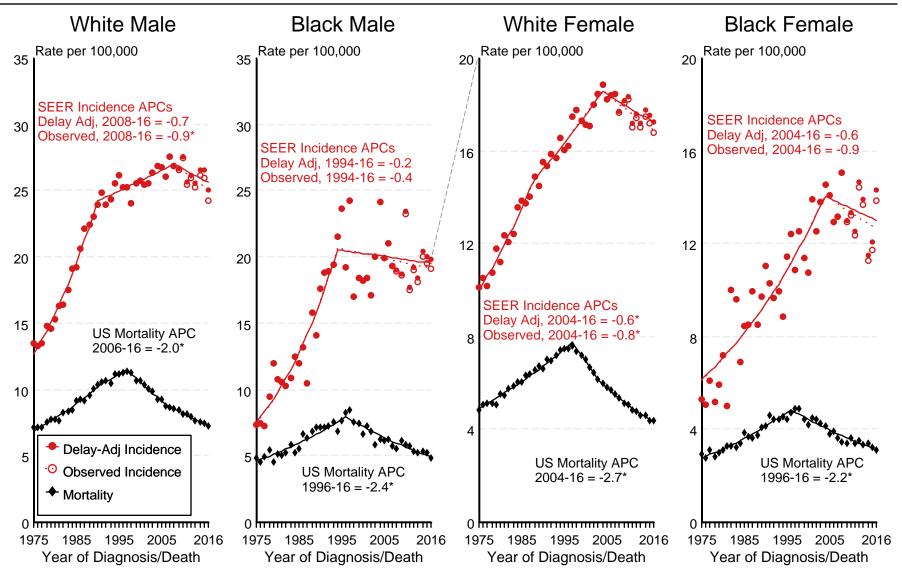
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

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



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

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 4.7, February 2019, 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 Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	.>C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-81	0.7	1981-03	-1.2*	2003-16	0.9*							0.9*	0.9*
White	1975-03	-0.9*	2003-16	1.2*									1.2*	1.2*
Black	1975-84	2.2*	1984-16	-2.3*									-2.3*	-2.3*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-05	-0.2	2005-16	0.9*									0.9*	0.9*
White	2000-03	-0.4	2003-16	1.2*									1.2*	1.2*
White NH <sup>ef</sup>	2000-05	0.4	2005-16	1.6*									1.6*	1.6*
Black	2000-16	-1.6*											-1.6*	-1.6*
Black NH <sup>ef</sup>	2000-16	-1.6*											-1.6*	-1.6*
API <sup>e</sup>	2000-07	-1.6*	2007-16	1.2*									1.2*	1.2*
AI/AN <sup>eg</sup>	2000-16	1.3											1.3	1.3
Hispanic <sup>f</sup>	2000-16	-0.1											-0.1	-0.1
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-79	-0.5	1979-93	-1.7*	1993-00	-2.7*	2000-09	-1.4*	2009-16	0.8*			0.3	0.8*
White	1975-06	-1.9*	2006-16	0.7*									0.7*	0.7*
Black	1975-80	3.3*	1980-93	-1.5*	1993-09	-4.0*	2009-16	-1.3					-1.9*	-1.3
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-09	-1.4*	2009-16	0.8*									0.3	0.8*
White	2000-09	-0.9*	2009-16	1.2*									0.7*	1.2*
White NH <sup>ef</sup>	2000-09	-0.8*	2009-16	1.3*									0.8*	1.3*
Black	2000-16	-2.8*											-2.8*	-2.8*
Black NH <sup>ef</sup>	2000-16	-2.7*											-2.7*	-2.7*
API <sup>e</sup>	2000-09	-3.0*	2009-16	1.6									0.6	1.6
AI/AN <sup>eg</sup>	2000-16	-0.5											-0.5	-0.5
Hispanic <sup>f</sup>	2000-16	-0.8*											-0.8*	-0.8*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence ab and U.S. Mortality  $^{\rm c}$  Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-83	-0.2	1983-03	-1.4*	2003-16	1.0*							1.0*	1.0*
White	1975-03	-1.2*	2003-16	1.4*									1.4*	1.4*
Black	1975-86	2.0*	1986-16	-2.7*									-2.7*	-2.7*
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-05	-0.2	2005-16	1.0*									1.0*	1.0*
White	2000-16	1.1*											1.1*	1.1*
White NH <sup>ef</sup>	2000-16	1.5*											1.5*	1.5*
Black	2000-16	-2.1*											-2.1*	-2.1*
Black NH <sup>ef</sup>	2000-16	-2.0*											-2.0*	-2.0*
API <sup>e</sup>	2000-16	0.4											0.4	0.4
AI/AN <sup>eg</sup>	2000-16	1.3											1.3	1.3
Hispanic <sup>f</sup>	2000-16	-0.4											-0.4	-0.4
U.S. Cancer Mortali	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-93	-1.9*	1993-00	-3.0*	2000-09	-1.2*	2009-16	1.0*					0.5	1.0*
White	1975-05	-2.1*	2005-16	0.9*									0.9*	0.9*
Black	1975-80	3.7*	1980-92	-1.4*	1992-08	-4.0*	2008-16	-2.2*					-2.4*	-2.2*
U.S. Cancer Mortali	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-09	-1.3*	2009-16	1.0*									0.5*	1.0*
White	2000-09	-0.8*	2009-16	1.5*									1.0*	1.5*
White NH <sup>ef</sup>	2000-09	-0.6	2009-16	1.6*									1.1*	1.6*
Black	2000-16	-3.1*											-3.1*	-3.1*
Black NH <sup>ef</sup>	2000-16	-3.0*											-3.0*	-3.0*
API <sup>e</sup>	2000-10	-2.7*	2010-16	2.6									0.8	2.6
AI/AN <sup>eg</sup>	2000-16	0.0											0.0	0.0
Hispanic <sup>f</sup>	2000-08	-2.8*	2008-16	0.3									-0.1	0.3

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

		JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tr	end 6	AAI	C <sub>q</sub>
All Races		Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
Mhite 1975-81 2.0* 1981-05 -0.9* 2005-16 0.8*   Black 1975-16 -1.5*    SEER 21 Delay-Adjusted Incidence b	SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 197	75-2016											
SEER 21 Delay-Adjusted Incidence	All Races	1975-80	2.5	1980-07	-0.9*	2007-16	0.9*							0.9*	0.9*
Name	White	1975-81	2.0*	1981-05	-0.9*	2005-16	0.8*							0.8*	0.8*
All Races 2000-16 0.3* White 2000-16 0.5* White NHef 2000-16 0.5* White NHef 2000-16 0.5* White NHef 2000-16 0.7* Black 2000-16 -0.9* Black NHef 2000-16 -0.9* APIe 2000-16 -0.2* AI/ANP9 2000-16 0.3  U.S. Cancer Mortality*, 1975-2016 All Races 1975-90 -0.9* 1990-04 -2.4* 2004-14 -1.2* 2014-16 4.8 White 1975-94 -0.6* 1994-05 -4.6* 2005-16 -1.4*  U.S. Cancer Mortality*, 2000-16 Black 1975-90 -1.0* 1990-03 -2.3* 2003-14 -1.1* 2014-16 5.3 Black 1975-94 -0.6* 1994-05 -4.6* 2005-16 -1.4*  U.S. Cancer Mortality*, 2000-16 Black 2000-14 -1.4* 2014-16 5.3 Black 2000-14 -1.3* 2014-16 5.3 Black 2000-14 -1.3* 2014-16 5.3 Black 2000-14 -1.2* 2014-16 5.3 Black 2000-14 -1.2* 2014-16 5.8 Black 2000-14 -1.2* 2014-16 5.8 Black 2000-16 -2.1* Black 1976-90 -1.0* 2014-16 5.8 Black 2000-16 -2.1* Black 1976-90 -1.0* 2014-16 5.8 Black 2000-16 -2.1* Black 1976-90 -1.0* 2014-16 5.8 Black 2000-16 -2.0*	Black	1975-16	-1.5*											-1.5*	-1.5*
White NH <sup>ef</sup> 2000-16 0.5* White NH <sup>ef</sup> 2000-16 0.7* Black 2000-16 0.9* Black NH <sup>ef</sup> 2000-16 -0.9* API° 2000-16 0.3  U.S. Cancer Mortality°, 1975-2016 All Races 1975-90 -0.9* Black 1975-90 -0.6* 1994-05 -4.6* 2005-16 -1.4*  U.S. Cancer Mortality°, 2000-206 All Races 2000-16 -0.5* All Races 2000-16 -1.4* All Races 2000-16 -2.1* All Races 2000-16 -2.1* Black 2000-16 -2.0* Alf/AN®9 2000-16 -2.0* Alf/AN®9 2000-16 -2.7*	SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
White NHef   2000-16   0.7*   0.7*   0.7*     Black   2000-16   -0.9*   -0.9*   -0.9*   -0.9*     Black NHef   2000-16   -0.9*   -0.9*   -0.9*   -0.9*   -0.9*     Black NHef   2000-16   -0.2*   -0.2*   -0.2*   -0.2*   -0.2*     AI/AN°9   2000-16   0.6*   -0.2*   -0.2*   -0.2*   -0.2*     AI/AN°9   2000-16   0.3*   -0.5*   -0.2*   -0.2*   -0.2*     AII Races   1975-90   -0.9*   1990-04   -2.4*   2004-14   -1.2*   2014-16   4.8*   -0.1*   -1.4*   -1.4*     Black   1975-90   -0.6*   1994-05   -4.6*   2005-16   -1.4*   -1.1*   2014-16   5.3*   -1.4*     U.S. Cancer Mortality*, 2000-15   -0.6*   1994-05   -4.6*   2005-16   -1.4*   -1.1*   2014-16   5.3*     White   2000-14   -1.4*   2014-16   5.5*   -1.4*   -1.4*     White NHef   2000-14   -1.2*   2014-16   5.5*   -1.4*   -2.1*     Black   2000-16   -2.1*   -2.1*     Black   2000-16   -2.1*   -2.1*   -2.1*     Black   2000-16   -2.1*   -2.1*   -2.1*     Black   2000-16   -2.0*   -2.0*   -2.0*     API*   2000-16   -2.0*   -2.0*   -2.0*   -2.0*     AII/AN*9   2000-16   -2.0*   -2.0*   -2.0*   -2.0*     AII/AN*9   2000-16   -2.0*   -2.0*   -2.0*   -2.0*     AII/AN*9   2000-16   -2.0*   -2.0*   -2.0*   -2.0*   -2.0*     AII/AN*9   2000-16   -2.0*   -2.0*   -2.0*   -2.0*   -2.0*   -2.0*   -2.0*   -2.0*   -2.0*   -2.0*   -2.0*   -2.	All Races	2000-16	0.3*											0.3*	0.3*
Black   2000-16   -0.9*   -0.9*   Black   API*   2000-16   -0.9*   -	White	2000-16	0.5*											0.5*	0.5*
Black NH   F   2000 - 16   -0.9   -0.9   -0.9   -0.9   -0.9   -0.9   -0.9   -0.9   -0.9   -0.9   -0.2   -	White NH <sup>ef</sup>	2000-16	0.7*											0.7*	0.7*
API° 2000-16 -0.2 AI/AN°9 2000-16 0.6 Hispanic¹ 2000-16 0.3  U.S. Cancer Mortality°, 1975-2016  All Races 1975-90 -0.9* 1990-04 -2.4* 2004-14 -1.2* 2014-16 4.8 White 1975-90 -1.0* 1990-03 -2.3* 2005-16 -1.4*  U.S. Cancer Mortality°, 2000-2016  All Races 2000-14 -1.4* 2014-16 5.3  White NH°1 2000-14 -1.3* 2014-16 5.7  Black 2000-14 -1.2* 2014-16 5.8  Black 2000-16 -2.1* Black 2000-16 -2.1* Black 3000-16 -2.0*  API° 2000-16 -1.2  AI/AN°9 2000-16 -2.0*  API° 2000-16 -1.2  AI/AN°9 2000-16 -2.7  AI/AN°9 2000-16 -2.7	Black	2000-16	-0.9*											-0.9*	-0.9*
AI/AN°S 2000-16 0.6 Hispanic 2000-16 0.3    U.S. Cancer Mortality 1975-70   1975-70   1990-04   -2.4*   2004-14   -1.2*   2014-16   4.8	Black NH <sup>ef</sup>	2000-16	-0.9*											-0.9*	-0.9*
Hispanic	API <sup>e</sup>	2000-16	-0.2											-0.2	-0.2
U.S. Cancer Mortality <sup>c</sup> , 1975-2016         All Races       1975-90 -0.9* 1990-04 -2.4* 2004-14 -1.2* 2014-16 4.8       0.1 1.7         White       1975-90 -1.0* 1990-03 -2.3* 2003-14 -1.1* 2014-16 5.3       0.3 2.1         Black       1975-90 -0.6* 1994-05 -4.6* 2005-16 -1.4*       -1.4* -1.4*         U.S. Cancer Mortality <sup>c</sup> , 2000-2016       -2.14* 2014-16 5.3       0.0 1.9         White       2000-14 -1.4* 2014-16 5.3       0.0 1.9         White NH <sup>ef</sup> 2000-14 -1.3* 2014-16 5.8       5.8         Black       2000-16 -2.1* 2014-16 5.8       0.3 2.3         Black NH <sup>ef</sup> 2000-16 -2.0* 2.0* 2.0*         API <sup>e</sup> 2000-16 -2.0* 2.0* 2.0*       -2.0* -2.0* 2.0*         API <sup>e</sup> 2000-16 -2.2. 2.7       -2.7* -2.7*	AI/AN <sup>eg</sup>	2000-16	0.6											0.6	0.6
All Races 1975-90 -0.9* 1990-04 -2.4* 2004-14 -1.2* 2014-16 4.8 0.1 1.7  White 1975-90 -1.0* 1990-03 -2.3* 2003-14 -1.1* 2014-16 5.3 0.3 2.1  Black 1975-94 -0.6* 1994-05 -4.6* 2005-16 -1.4* -1.4*  U.S. Cancer Mortality°, 2000-2016  All Races 2000-14 -1.4* 2014-16 5.3  White NHef 2000-14 -1.3* 2014-16 5.7  White NHef 2000-14 -1.2* 2014-16 5.8  Black 2000-16 -2.1*  Black NHef 2000-16 -2.0*  APIe 2000-16 -2.0*  APIe 2000-16 -2.7  AI/ANeg 2000-16 -2.7	Hispanic <sup>f</sup>	2000-16	0.3											0.3	0.3
White 1975-90 -1.0* 1990-03 -2.3* 2003-14 -1.1* 2014-16 5.3  Black 1975-94 -0.6* 1994-05 -4.6* 2005-16 -1.4*  U.S. Cancer Mortality*, 2000-2016  All Races 2000-14 -1.4* 2014-16 5.3  White 2000-14 -1.3* 2014-16 5.7  White NH** 2000-14 -1.2* 2014-16 5.8  Black 2000-16 -2.1*  Black NH** 2000-16 -2.0*  API** 2000-16 -2.7  AI/AN** 2000-16 -2.7	U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
Black 1975-94 -0.6* 1994-05 -4.6* 2005-16 -1.4*  U.S. Cancer Mortality <sup>c</sup> , 2000-2016  All Races 2000-14 -1.4* 2014-16 5.3  White 2000-14 -1.3* 2014-16 5.7  White NH <sup>ef</sup> 2000-14 -1.2* 2014-16 5.8  Black 2000-16 -2.1*  Black NH <sup>ef</sup> 2000-16 -2.0*  API <sup>e</sup> 2000-16 -1.2  AI/AN <sup>eg</sup> 2000-16 -2.7	All Races	1975-90	-0.9*	1990-04	-2.4*	2004-14	-1.2*	2014-16	4.8					0.1	1.7
U.S. Cancer Mortality <sup>c</sup> , 2000-2016         All Races       2000-14 -1.4* 2014-16 5.3         White       2000-14 -1.3* 2014-16 5.7         White NH <sup>ef</sup> 2000-14 -1.2* 2014-16 5.8         Black       2000-16 -2.1* -2.1* -2.1* -2.1* -2.1* -2.1* -2.1* -2.1* -2.1* -2.1* -2.0* -2.0* -2.0* -2.0* -2.0* -2.0* -2.0* -2.0* -2.0* -2.0* -2.0* -2.0* -2.0* -2.7         API <sup>e</sup> 2000-16 -1.2 -2.7 -2.7	White	1975-90	-1.0*	1990-03	-2.3*	2003-14	-1.1*	2014-16	5.3					0.3	2.1
All Races 2000-14 -1.4* 2014-16 5.3   White 2000-14 -1.3* 2014-16 5.7   White NH <sup>ef</sup> 2000-14 -1.2* 2014-16 5.8   Black 2000-16 -2.1*   Black NH <sup>ef</sup> 2000-16 -2.0*   API <sup>e</sup> 2000-16 -1.2   AI/AN <sup>eg</sup> 2000-16 -2.7   -2.7 -2.7	Black	1975-94	-0.6*	1994-05	-4.6*	2005-16	-1.4*							-1.4*	-1.4*
White 2000-14 -1.3* 2014-16 5.7  White NH <sup>ef</sup> 2000-14 -1.2* 2014-16 5.8  Black 2000-16 -2.1* -2.1*  Black NH <sup>ef</sup> 2000-16 -2.0* -2.0*  API <sup>e</sup> 2000-16 -1.2 -1.2  AI/AN <sup>eg</sup> 2000-16 -2.7	U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
White NH <sup>ef</sup> 2000-14 -1.2* 2014-16 5.8  Black 2000-16 -2.1* -2.1*  Black NH <sup>ef</sup> 2000-16 -2.0* -2.0*  API <sup>e</sup> 2000-16 -1.2 -1.2  AI/AN <sup>eg</sup> 2000-16 -2.7 -2.7	All Races	2000-14	-1.4*	2014-16	5.3									0.0	1.9
Black 2000-16 -2.1* -2.1* Black NH <sup>ef</sup> 2000-16 -2.0* API <sup>e</sup> 2000-16 -1.2 AI/AN <sup>eg</sup> 2000-16 -2.7	White	2000-14	-1.3*	2014-16	5.7									0.2	2.2
Black NH <sup>ef</sup> 2000-16 -2.0*  API <sup>e</sup> 2000-16 -1.2  AI/AN <sup>eg</sup> 2000-16 -2.7	White NH <sup>ef</sup>	2000-14	-1.2*	2014-16	5.8									0.3	2.3
API <sup>e</sup> 2000-16 -1.2 AI/AN <sup>eg</sup> 2000-16 -2.7	Black	2000-16	-2.1*											-2.1*	-2.1*
$AI/AN^{eg}$ 2000-16 -2.7	Black NH <sup>ef</sup>	2000-16	-2.0*											-2.0*	-2.0*
	API <sup>e</sup>	2000-16	-1.2											-1.2	-1.2
	AI/AN <sup>eg</sup>	2000-16	-2.7											-2.7	-2.7
	Hispanic <sup>f</sup>		-0.3											-0.3	-0.3

Joinpoint Regression Program Version 4.7, February 2019, 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).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, Califor SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

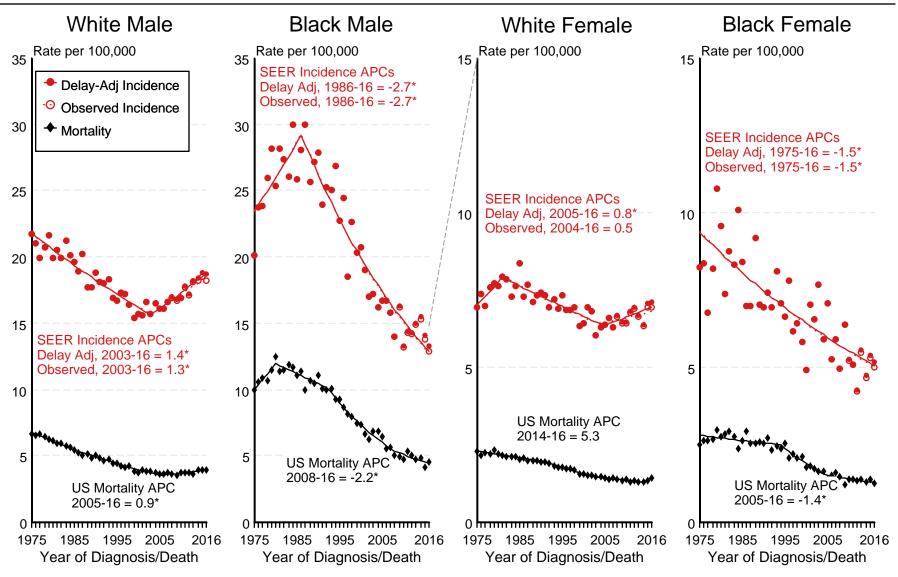
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

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



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

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 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, All Ages by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tr	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-87	0.1	1987-10	-0.9*	2010-16	-2.7*							-2.1*	-2.7*
White	1975-87	0.2	1987-10	-0.9*	2010-16	-2.8*							-2.2*	-2.8*
Black	1975-16	-0.5*											-0.5*	-0.5*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	-1.6*											-1.6*	-1.6*
White	2000-16	-1.7*											-1.7*	-1.7*
White NH <sup>ef</sup>	2000-16	-1.8*											-1.8*	-1.8*
Black	2000-16	-0.7*											-0.7*	-0.7*
Black NH <sup>ef</sup>	2000-16	-0.6*											-0.6*	-0.6*
API <sup>e</sup>	2000-16	-0.3											-0.3	-0.3
AI/AN <sup>eg</sup>	2000-16	-2.8*											-2.8*	-2.8*
Hispanic <sup>f</sup>	2000-16	-0.9*											-0.9*	-0.9*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-82	-1.2*	1982-92	0.3*	1992-98	-1.2*	1998-03	0.6	2003-16	-2.3*			-2.3*	-2.3*
White	1975-81	-1.5*	1981-92	0.3	1992-98	-1.0*	1998-03	0.7	2003-16	-2.3*			-2.3*	-2.3*
Black	1975-02	0.0	2002-16	-1.8*									-1.8*	-1.8*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-04	-0.3	2004-16	-2.3*									-2.3*	-2.3*
White	2000-05	-0.7	2005-16	-2.4*									-2.4*	-2.4*
White NH <sup>ef</sup>	2000-05	-0.6	2005-16	-2.4*									-2.4*	-2.4*
Black	2000-16	-1.6*											-1.6*	-1.6*
Black NH <sup>ef</sup>	2000-04	1.3	2004-07	-4.7	2007-11	0.5	2011-16	-2.9*					-1.4	-2.9*
API <sup>e</sup>	2000-16	-0.9*											-0.9*	-0.9*
AI/AN <sup>eg</sup>	2000-16	-1.2											-1.2	-1.2
Hispanic <sup>f</sup>	2000-16	-1.5*											-1.5*	-1.5*

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

Joinpoint Regression Program Version 4.7, February 2019, 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).

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

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

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

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

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

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

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

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

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

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

#### Table 21.2 Cancer of the Ovary (Invasive)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Ages <65 by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAF	Cd
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-16	-1.1*											-1.1*	-1.1*
White	1975-16	-1.2*											-1.2*	-1.2*
Black	1975-16	-0.6*											-0.6*	-0.6*
SEER 21 Delay-Adju	sted Incid	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	-1.3*											-1.3*	-1.3*
White	2000-16	-1.6*											-1.6*	-1.6*
White NH <sup>ef</sup>	2000-16	-1.9*											-1.9*	-1.9*
Black	2000-16	0.2											0.2	0.2
Black NH <sup>ef</sup>	2000-16	0.3											0.3	0.3
API <sup>e</sup>	2000-16	0.3											0.3	0.3
AI/AN <sup>eg</sup>	2000-16	-2.9											-2.9	-2.9
$ exttt{Hispanic}^{ exttt{f}}$	2000-16	-0.1											-0.1	-0.1
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-80	-3.2*	1980-99	-1.6*	1999-02	0.4	2002-16	-2.6*					-2.6*	-2.6*
White	1975-80	-3.3*	1980-99	-1.5*	1999-02	0.5	2002-16	-2.7*					-2.7*	-2.7*
Black	1975-96	-1.9*	1996-01	0.8	2001-16	-1.9*							-1.9*	-1.9*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-02	1.1	2002-16	-2.6*									-2.6*	-2.6*
White	2000-02	1.2	2002-16	-2.7*									-2.7*	-2.7*
White NH <sup>ef</sup>	2000-02	1.4	2002-16	-2.8*									-2.8*	-2.8*
Black	2000-16	-1.8*											-1.8*	-1.8*
Black NH <sup>ef</sup>	2000-16	-1.7*											-1.7*	-1.7*
API <sup>e</sup>	2000-14	-0.9*	2014-16	7.4									0.9	3.1
AI/AN <sup>eg</sup>	2000-16	-1.9											-1.9	-1.9
Hispanic <sup>f</sup>	2000-16	-1.1*											-1.1*	-1.1*

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

Joinpoint Regression Program Version 4.7, February 2019, 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).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Ages 65+ by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAF	Cq
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	sted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-90	1.4*	1990-10	-1.0*	2010-16	-3.3*							-2.5*	-3.3*
White	1975-90	1.4*	1990-10	-0.9*	2010-16	-3.1*							-2.3*	-3.1*
Black	1975-94	1.3	1994-16	-1.3*									-1.3*	-1.3*
SEER 21 Delay-Adju	usted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	-1.9*											-1.9*	-1.9*
White	2000-16	-1.8*											-1.8*	-1.8*
White NH <sup>ef</sup>	2000-16	-1.7*											-1.7*	-1.7*
Black	2000-16	-1.7*											-1.7*	-1.7*
Black NH <sup>ef</sup>	2000-16	-1.6*											-1.6*	-1.6*
API <sup>e</sup>	2000-16	-1.4*											-1.4*	-1.4*
AI/AN <sup>eg</sup>	2000-16	-3.7											-3.7	-3.7
Hispanic <sup>f</sup>	2000-16	-2.0*											-2.0*	-2.0*
U.S. Cancer Mortal	lity <sup>c</sup> , 1975-	2016												
All Races	1975-84	0.6*	1984-91	1.6*	1991-05	0.0	2005-16	-2.2*					-2.2*	-2.2*
White	1975-84	0.6*	1984-91	1.6*	1991-06	0.0	2006-16	-2.3*					-2.3*	-2.3*
Black	1975-93	2.2*	1993-16	-1.1*									-1.1*	-1.1*
U.S. Cancer Morta	lity <sup>c</sup> , 2000-	2016												
All Races	2000-06	-0.5	2006-16	-2.3*									-2.3*	-2.3*
White	2000-06	-0.4	2006-16	-2.2*									-2.2*	-2.2*
White NH <sup>ef</sup>	2000-06	-0.3	2006-16	-2.2*									-2.2*	-2.2*
Black	2000-16	-1.5*											-1.5*	-1.5*
Black NH <sup>ef</sup>	2000-16	-1.4*											-1.4*	-1.4*
API <sup>e</sup>	2000-16	-1.3*											-1.3*	-1.3*
AI/AN <sup>eg</sup>	2000-16	-1.1											-1.1	-1.1
Hispanic <sup>f</sup>	2000-16	-1.7*											-1.7*	-1.7*

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

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

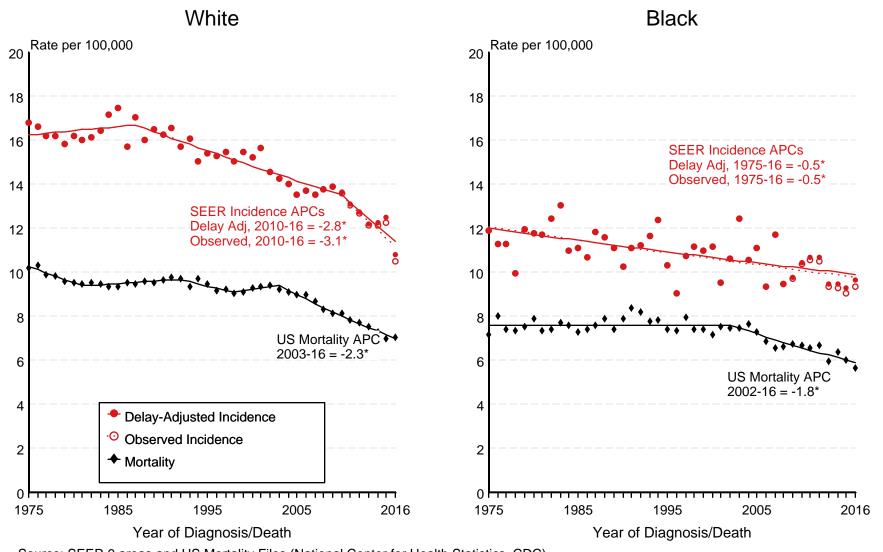
The APC/AAPC is significantly different from zero (p<.05).

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

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

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

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

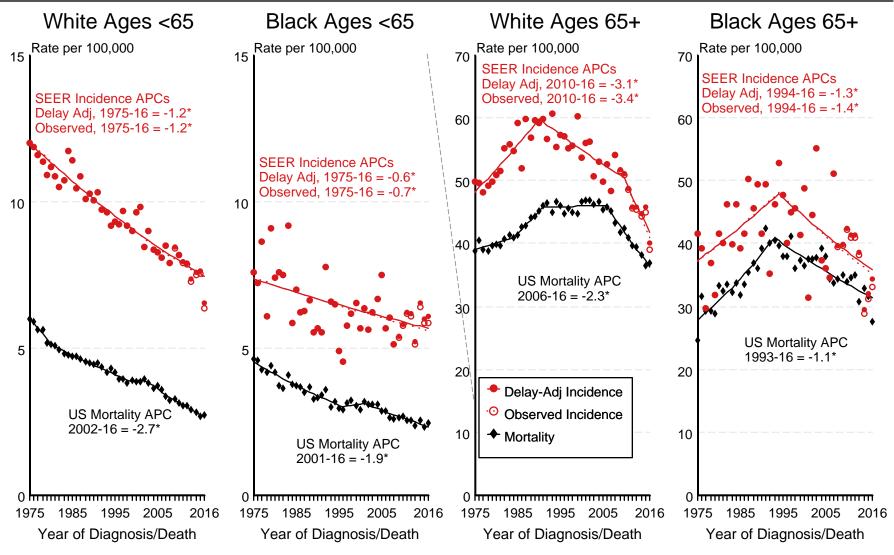


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

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 4.7, February 2019, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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



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

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

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	nd 5	JP Tre	nd 6	AAI	PC <sup>d</sup>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nceª, 19'	75-2016											
All Races	1975-78	-2.2	1978-84	1.3	1984-89	-1.4	1989-00	0.0	2000-08	1.5*	2008-16	0.4	0.5*	0.4
White	1975-79	-1.9	1979-84	1.7	1984-87	-2.5	1987-99	-0.2	1999-06	1.7*	2006-16	0.7*	0.7*	0.7*
Black	1975-16	-0.1											-0.1	-0.1
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 2	000-2016											
All Races	2000-08	1.1*	2008-16	0.5*									0.6*	0.5*
White	2000-08	1.3*	2008-16	0.6*									0.7*	0.6*
White NH <sup>ef</sup>	2000-08	1.4*	2008-16	0.7*									0.8*	0.7*
Black	2000-16	0.3*											0.3*	0.3*
Black NH <sup>ef</sup>	2000-16	0.3*											0.3*	0.3*
API <sup>e</sup>	2000-16	0.6*											0.6*	0.6*
AI/AN <sup>eg</sup>	2000-14	-1.3	2014-16	19.8									3.0	8.7
$ ext{Hispanic}^{ ext{f}}$	2000-16	0.4*											0.4*	0.4*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-02	-0.1*	2002-05	1.0	2005-16	0.1*							0.1*	0.1*
White	1975-96	-0.2*	1996-16	0.4*									0.4*	0.4*
Black	1975-87	1.4*	1987-16	-0.5*									-0.5*	-0.5*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-16	0.3*											0.3*	0.3*
White	2000-16	0.4*											0.4*	0.4*
White NH <sup>ef</sup>	2000-16	0.4*											0.4*	0.4*
Black	2000-16	-0.3*											-0.3*	-0.3*
Black NH <sup>ef</sup>	2000-16	-0.2*											-0.2*	-0.2*
API <sup>e</sup>	2000-16	0.2											0.2	0.2
AI/AN <sup>eg</sup>	2000-16	0.8											0.8	0.8
Hispanic <sup>f</sup>	2000-16	0.0											0.0	0.0

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	nd 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-93	-0.8*	1993-03	0.2	2003-06	3.0	2006-16	0.3					0.3	0.3
White	1975-94	-1.0*	1994-16	0.9*									0.9*	0.9*
Black	1975-16	-0.3*											-0.3*	-0.3*
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-09	1.2*	2009-16	0.4*									0.6*	0.4*
White	2000-16	0.9*											0.9*	0.9*
White NH <sup>ef</sup>	2000-16	1.1*											1.1*	1.1*
Black	2000-16	0.4*											0.4*	0.4*
Black NH <sup>ef</sup>	2000-16	0.5*											0.5*	0.5*
API <sup>e</sup>	2000-16	0.6*											0.6*	0.6*
AI/AN <sup>eg</sup>	2000-16	2.2											2.2	2.2
Hispanic <sup>f</sup>	2000-16	0.5											0.5	0.5
U.S. Cancer Mortal:	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-86	-0.8*	1986-00	-0.3*	2000-16	0.3*							0.3*	0.3*
White	1975-86	-1.0*	1986-96	-0.3*	1996-16	0.3*							0.3*	0.3*
Black	1975-92	0.5*	1992-01	-1.5*	2001-16	-0.3*							-0.3*	-0.3*
U.S. Cancer Mortal:	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-16	0.3*											0.3*	0.3*
White	2000-16	0.4*											0.4*	0.4*
White NH <sup>ef</sup>	2000-16	0.4*											0.4*	0.4*
Black	2000-16	-0.3*											-0.3*	-0.3*
Black NH <sup>ef</sup>	2000-16	-0.3*											-0.3*	-0.3*
API <sup>e</sup>	2000-16	0.1											0.1	0.1
AI/AN <sup>eg</sup>	2000-05	10.0	2005-16	-0.7									-0.7	-0.7
Hispanic <sup>f</sup>	2000-16	0.1											0.1	0.1

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adju	sted Incider	nce <sup>a</sup> , 19	75-2016											
All Races	1975-84	1.4*	1984-96	-0.5	1996-16	1.0*							1.0*	1.0*
White	1975-84	1.3*	1984-97	-0.5	1997-16	1.2*							1.2*	1.2*
Black	1975-16	0.1											0.1	0.1
SEER 21 Delay-Adj	usted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	0.7*											0.7*	0.7*
White	2000-16	0.9*											0.9*	0.9*
White NH <sup>ef</sup>	2000-16	0.9*											0.9*	0.9*
Black	2000-16	0.2											0.2	0.2
Black NH <sup>ef</sup>	2000-16	0.3											0.3	0.3
API <sup>e</sup>	2000-16	0.6*											0.6*	0.6*
AI/AN <sup>eg</sup>	2000-16	-1.8											-1.8	-1.8
Hispanic <sup>f</sup>	2000-16	0.4*											0.4*	0.4*
U.S. Cancer Morta	lity <sup>c</sup> , 1975-	2016												
All Races	1975-84	0.8*	1984-03	0.1	2003-06	1.0	2006-16	0.0					0.0	0.0
White	1975-93	0.4*	1993-97	-0.6	1997-08	0.6*	2008-16	0.1					0.1	0.1
Black	1975-86	2.5*	1986-16	-0.3*									-0.3*	-0.3*
U.S. Cancer Morta	lity <sup>c</sup> , 2000-	2016												
All Races	2000-16	0.2*											0.2*	0.2*
White	2000-16	0.3*											0.3*	0.3*
White NH <sup>ef</sup>	2000-16	0.4*											0.4*	0.4*
Black	2000-16	-0.3*											-0.3*	-0.3*
Black NH <sup>ef</sup>	2000-16	-0.2											-0.2	-0.2
API <sup>e</sup>	2000-16	0.2											0.2	0.2
AI/AN <sup>eg</sup>	2000-16	0.2											0.2	0.2
Hispanic <sup>f</sup>	2000-16	0.0											0.0	0.0

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

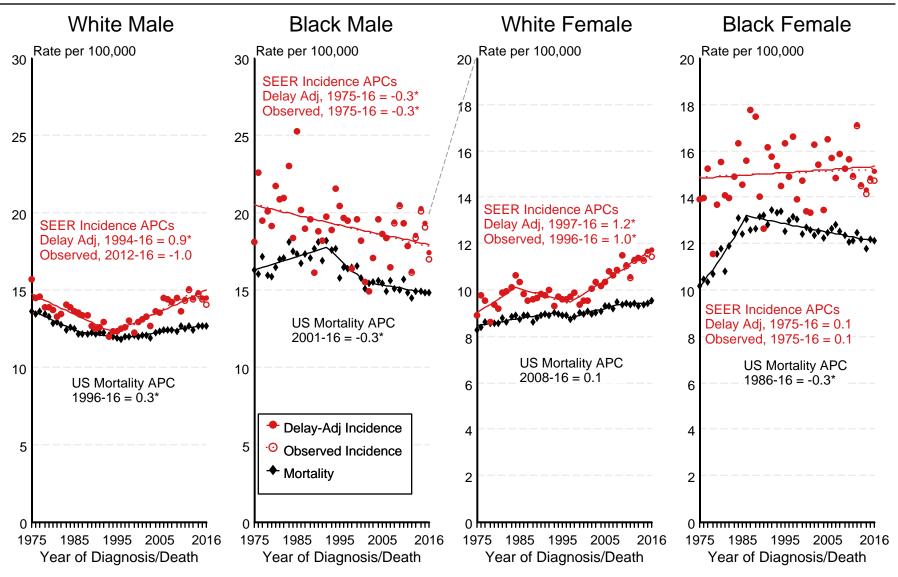
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

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



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

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 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, All Ages by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tr	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAF	Cd
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-88	2.6*	1988-92	16.1*	1992-95	-9.5	1995-08	-0.2	2008-14	-7.9*	2014-16	3.8	-4.6*	-2.2
White	1975-88	2.8*	1988-92	16.3*	1992-95	-12.5	1995-00	2.5	2000-08	-1.7	2008-16	-5.9*	-5.5*	-5.9*
Black	1975-89	2.0*	1989-92	22.0*	1992-95	-4.7	1995-09	-1.1*	2009-14	-7.8*	2014-16	3.7	-3.9*	-2.2
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-10	-1.7*	2010-14	-8.8*	2014-16	3.9							-3.8	-2.7
White	2000-09	-1.5*	2009-14	-7.9*	2014-16	3.0							-4.2	-2.6
White NH <sup>ef</sup>	2000-10	-1.8*	2010-14	-9.1*	2014-16	4.9							-3.7	-2.4
Black	2000-11	-1.8*	2011-14	-9.1*	2014-16	3.4							-3.2*	-3.1
Black NH <sup>ef</sup>	2000-11	-1.8*	2011-14	-9.1*	2014-16	3.8							-3.1	-2.9
API <sup>e</sup>	2000-11	-2.9*	2011-14	-11.2	2014-16	4.8							-4.1	-3.5
AI/AN <sup>eg</sup>	2000-16	-3.0*											-3.0*	-3.0*
Hispanic <sup>f</sup>	2000-09	-1.8*	2009-16	-6.6*									-5.5*	-6.6*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-87	0.9*	1987-91	3.0*	1991-94	-0.5	1994-98	-4.2*	1998-13	-3.5*	2013-16	0.0	-2.4*	-0.9
White	1975-87	0.8*	1987-91	3.1*	1991-94	-0.7	1994-99	-4.3*	1999-13	-3.4*	2013-16	0.3	-2.2*	-0.6
Black	1975-88	1.9*	1988-93	3.3*	1993-01	-2.6*	2001-10	-3.9*	2010-14	-5.6*	2014-16	1.2	-3.5*	-2.2
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-13	-3.5*	2013-16	0.0									-2.4*	-0.9
White	2000-13	-3.4*	2013-16	0.3									-2.2*	-0.6
White NH <sup>ef</sup>	2000-13	-3.4*	2013-16	0.4									-2.1*	-0.6
Black	2000-16	-4.0*											-4.0*	-4.0*
Black NH <sup>ef</sup>	2000-16	-3.9*											-3.9*	-3.9*
API <sup>e</sup>	2000-16	-2.5*											-2.5*	-2.5*
AI/AN <sup>eg</sup>	2000-16	-1.4*											-1.4*	-1.4*
Hispanic <sup>f</sup>	2000-16	-2.8*											-2.8*	-2.8*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, Californi SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Ages <65 by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tr	end 5	JP Tre	end 6	AAF	Cd
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	sted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-88	3.1*	1988-92	23.4*	1992-01	3.3*	2001-09	0.2	2009-14	-8.2*	2014-16	2.4	-4.1*	-3.1
White	1975-88	3.5*	1988-92	22.9*	1992-01	3.2*	2001-10	-0.3	2010-13	-11.9*	2013-16	-1.0	-4.5*	-3.8
Black	1975-89	2.0*	1989-93	26.1*	1993-00	3.0*	2000-10	-0.3	2010-14	-7.6*	2014-16	4.1	-2.7	-1.9
SEER 21 Delay-Adju	usted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-09	0.0	2009-16	-5.7*									-4.4*	-5.7*
White	2000-09	-0.1	2009-16	-6.4*									-5.0*	-6.4*
White NH <sup>ef</sup>	2000-09	0.0	2009-16	-6.2*									-4.8*	-6.2*
Black	2000-11	-0.3	2011-14	-8.3	2014-16	2.8							-2.4	-2.9
Black NH <sup>ef</sup>	2000-11	-0.2	2011-14	-8.2	2014-16	3.3							-2.2	-2.6
API <sup>e</sup>	2000-09	0.6	2009-16	-5.2*									-4.0*	-5.2*
AI/AN <sup>eg</sup>	2000-16	-3.1*											-3.1*	-3.1*
Hispanic <sup>f</sup>	2000-09	-0.1	2009-16	-5.4*									-4.2*	-5.4*
U.S. Cancer Mortal	lity <sup>c</sup> , 1975-	-2016												
All Races	1975-87	0.5*	1987-90	3.1	1990-96	-3.2*	1996-00	-5.8*	2000-13	-1.4*	2013-16	1.1	-0.6	0.4
White	1975-87	0.7*	1987-90	3.6	1990-02	-4.4*	2002-16	-0.8*					-0.8*	-0.8*
Black	1975-92	0.5*	1992-13	-2.9*	2013-16	2.0							-1.3*	0.7
U.S. Cancer Mortal	lity <sup>c</sup> , 2000-	-2016												
All Races	2000-16	-1.1*											-1.1*	-1.1*
White	2000-16	-1.0*											-1.0*	-1.0*
White NH <sup>ef</sup>	2000-16	-1.0*											-1.0*	-1.0*
Black	2000-14	-2.5*	2014-16	3.5									-1.2	0.5
Black NH <sup>ef</sup>	2000-14	-2.4*	2014-16	3.6									-1.1	0.6
API <sup>e</sup>	2000-16	0.2											0.2	0.2
AI/AN <sup>eg</sup>	2000-16	0.2											0.2	0.2
Hispanic <sup>f</sup>	2000-16	-0.6											-0.6	-0.6

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Ages 65+ by Race/Ethnicity

	JP Tre	nd 1	JP Tre	end 2	JP Tr	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	nd 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nce <sup>a</sup> , 197	75-2016											
All Races	1975-88	2.5*	1988-92	14.9*	1992-95	-13.3*	1995-07	-0.8*	2007-14	-7.2*	2014-16	3.9	-4.9*	-1.8
White	1975-87	2.3*	1987-92	12.6*	1992-95	-13.5*	1995-07	-0.7	2007-14	-7.3*	2014-16	3.9	-4.9*	-1.9
Black	1975-89	2.0*	1989-92	20.3*	1992-95	-9.0*	1995-09	-2.1*	2009-14	-8.6*	2014-16	4.0	-4.5*	-2.5
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-10	-2.5*	2010-14	-8.9*	2014-16	4.8							-3.9	-2.3
White	2000-10	-2.6*	2010-14	-9.1*	2014-16	4.9							-4.0	-2.3
White NH <sup>ef</sup>	2000-10	-2.6*	2010-14	-8.9*	2014-16	5.8							-3.7	-1.8
Black	2000-11	-2.7*	2011-14	-9.8*	2014-16	3.8							-3.8*	-3.2
Black NH <sup>ef</sup>	2000-11	-2.7*	2011-14	-9.8*	2014-16	4.2							-3.7*	-3.0
API <sup>e</sup>	2000-11	-3.7*	2011-14	-11.6	2014-16	5.6							-4.5	-3.4
AI/AN <sup>eg</sup>	2000-16	-2.9*											-2.9*	-2.9*
Hispanic <sup>f</sup>	2000-09	-2.4*	2009-16	-7.1*									-6.1*	-7.1*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-85	0.9*	1985-93	2.1*	1993-13	-3.7*	2013-16	-0.1					-2.5*	-1.0
White	1975-87	0.8*	1987-91	3.2*	1991-94	-0.5	1994-98	-4.3*	1998-13	-3.5*	2013-16	0.3	-2.3*	-0.7
Black	1975-88	2.1*	1988-93	3.5*	1993-01	-2.5*	2001-10	-4.0*	2010-14	-5.8*	2014-16	0.9	-3.7*	-2.5
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-13	-3.6*	2013-16	-0.2									-2.5*	-1.0
White	2000-13	-3.5*	2013-16	0.3									-2.3*	-0.7
White NH <sup>ef</sup>	2000-13	-3.5*	2013-16	0.4									-2.2*	-0.6
Black	2000-16	-4.2*											-4.2*	-4.2*
Black NH <sup>ef</sup>	2000-16	-4.1*											-4.1*	-4.1*
API <sup>e</sup>	2000-16	-2.7*											-2.7*	-2.7*
AI/AN <sup>eg</sup>	2000-16	-1.6*											-1.6*	-1.6*
Hispanicf	2000-16	-2.9*											-2.9*	-2.9*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

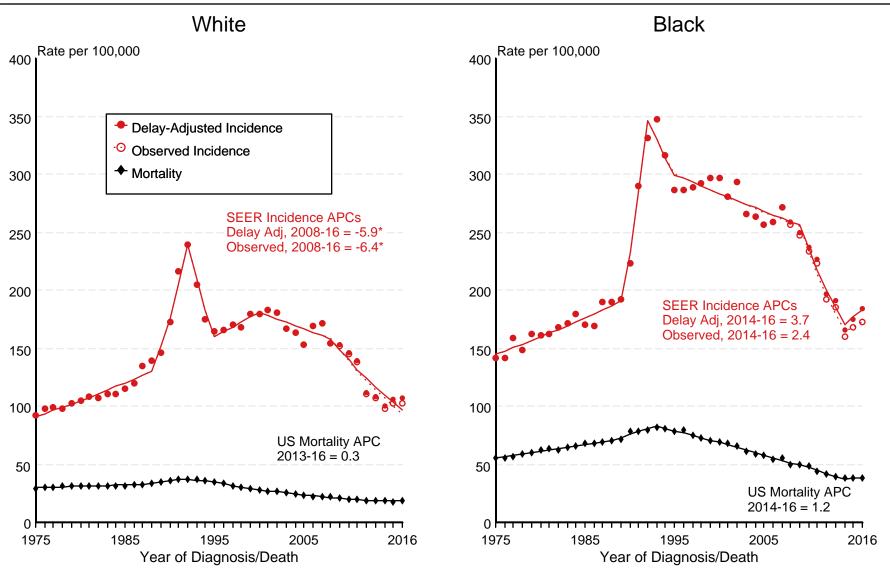
Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

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

Figure 23.1

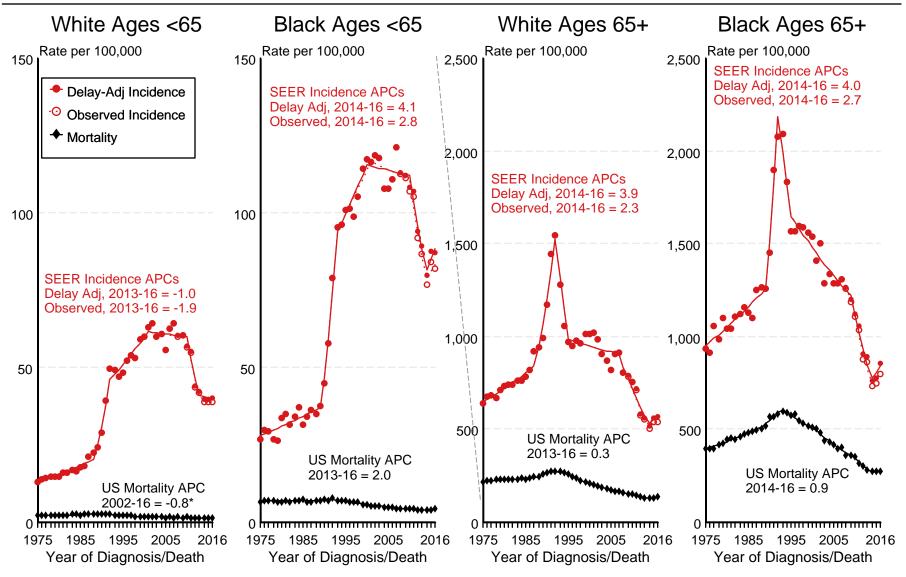


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

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

<sup>&</sup>lt;sup>a</sup> 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 4.7, February 2019, National Cancer Institute. The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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



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

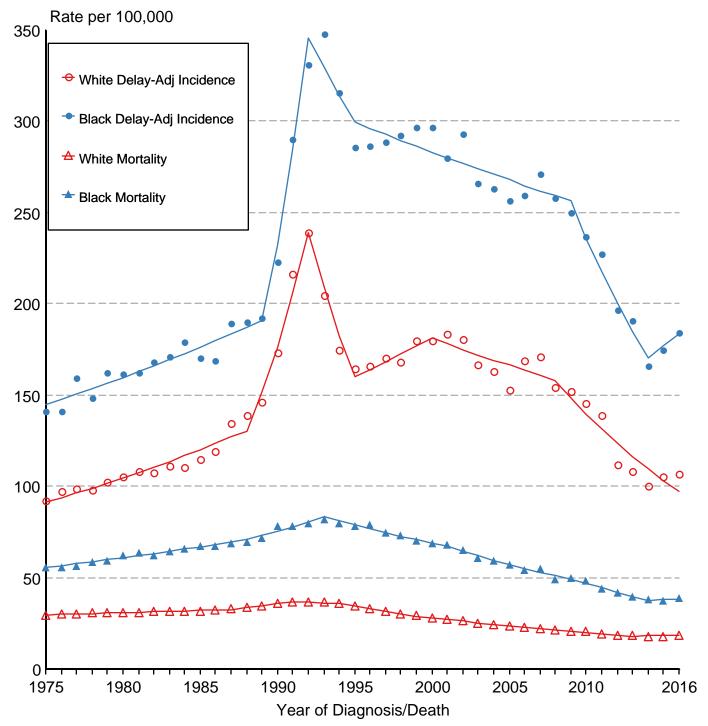
a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

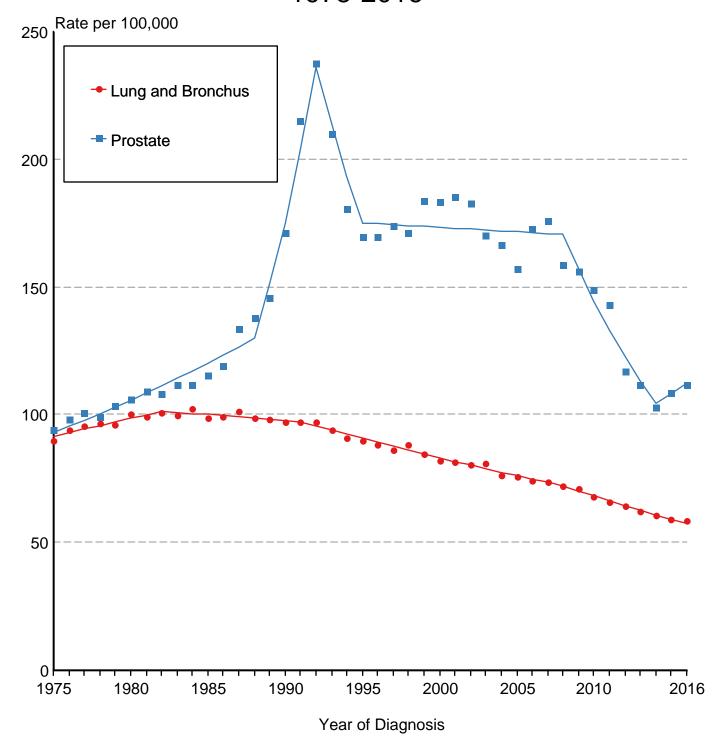
The APC is significantly different from zero (p < 0.05).

# Cancer of the Prostate Delay-Adjusted SEER Incidence & US Mortality 1975-2016



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 4.7, February 2019, National Cancer Institute.

## Delay-Adjusted Incidence Rates for Cancer of the Prostate and Cancer of the Lung and Bronchus All Races, Males 1975-2016



Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tr	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjust	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-16	-1.5*											-1.5*	-1.5*
White	1975-97	-2.0*	1997-16	-1.2*									-1.2*	-1.2*
Black	1975-82	1.1	1982-16	-1.6*									-1.6*	-1.6*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	-1.0*											-1.0*	-1.0*
White	2000-16	-0.9*											-0.9*	-0.9*
White NH <sup>ef</sup>	2000-06	-2.0*	2006-16	-0.8*									-0.8*	-0.8*
Black	2000-16	-1.8*											-1.8*	-1.8*
Black NH <sup>ef</sup>	2000-16	-1.8*											-1.8*	-1.8*
API <sup>e</sup>	2000-16	-2.7*											-2.7*	-2.7*
AI/AN <sup>eg</sup>	2000-16	-2.1*											-2.1*	-2.1*
Hispanic <sup>f</sup>	2000-16	-1.6*											-1.6*	-1.6*
U.S. Cancer Mortal:	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-87		1987-90	-0.3	1990-09	-3.0*	2009-16	-1.8*					-2.1*	-1.8*
White	1975-87	-2.8*	1987-90	-0.8	1990-08	-3.2*	2008-16	-1.9*					-2.0*	-1.9*
Black	1975-95	-1.3*	1995-16	-3.2*									-3.2*	-3.2*
U.S. Cancer Mortal:	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-08	-3.2*	2008-16	-1.9*									-2.1*	-1.9*
White	2000-08	-3.3*	2008-16	-1.9*									-2.0*	-1.9*
White NH <sup>ef</sup>	2000-08	-3.6*	2008-16	-2.5*									-2.6*	-2.5*
Black	2000-16	-3.2*											-3.2*	-3.2*
Black NH <sup>ef</sup>	2000-16	-3.1*											-3.1*	-3.1*
API <sup>e</sup>	2000-14	-3.9*	2014-16	1.4									-2.8*	-1.3
AI/AN <sup>eg</sup>	2000-16	-3.2*											-3.2*	-3.2*
Hispanic <sup>f</sup>	2000-16	-2.4*											-2.4*	-2.4*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

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

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

Trends in SEER Incidence ab and U.S. Mortality  $^{\rm c}$  Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAF	Cd
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-80	-0.2	1980-16	-1.8*									-1.8*	-1.8*
White	1975-16	-1.8*											-1.8*	-1.8*
Black	1975-82	2.4	1982-16	-2.1*									-2.1*	-2.1*
SEER 21 Delay-Adju	sted Incid	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	-1.4*											-1.4*	-1.4*
White	2000-06	-2.1*	2006-14	-0.7*	2014-16	-3.6*							-1.4*	-2.2*
White NH <sup>ef</sup>	2000-06	-2.6*	2006-14	-0.7*	2014-16	-4.1*							-1.5*	-2.4*
Black	2000-16	-2.0*											-2.0*	-2.0*
Black NH <sup>ef</sup>	2000-08	-0.8	2008-11	-6.3	2011-16	0.0							-2.2	0.0
API <sup>e</sup>	2000-16	-2.8*											-2.8*	-2.8*
AI/AN <sup>eg</sup>	2000-16	-2.5*											-2.5*	-2.5*
Hispanic <sup>f</sup>	2000-16	-2.0*											-2.0*	-2.0*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-87	-2.3*	1987-91	-1.0	1991-09	-3.4*	2009-16	-2.1*					-2.4*	-2.1*
White	1975-93	-2.3*	1993-08	-3.6*	2008-16	-2.2*							-2.4*	-2.2*
Black	1975-93	-1.2*	1993-16	-3.2*									-3.2*	-3.2*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-11	-3.2*	2011-16	-1.7*									-2.4*	-1.7*
White	2000-08	-3.6*	2008-16	-2.3*									-2.4*	-2.3*
White NH <sup>ef</sup>	2000-09	-3.8*	2009-16	-2.6*									-2.9*	-2.6*
Black	2000-16	-3.1*											-3.1*	-3.1*
Black NH <sup>ef</sup>	2000-16	-3.0*											-3.0*	-3.0*
API <sup>e</sup>	2000-16	-3.7*											-3.7*	-3.7*
AI/AN <sup>eg</sup>	2000-16	-3.3*											-3.3*	-3.3*
$ ext{Hispanic}^{ ext{f}}$	2000-16	-2.9*											-2.9*	-2.9*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tr	end 3	JP Tr	end 4	JP Tr	end 5	JP Tr	end 6	AAI	∍C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adju	usted Incide	nceª, 19'	75-2016											
All Races	1975-95	-1.9*	1995-16	-0.9*									-0.9*	-0.9*
White	1975-95	-2.4*	1995-16	-0.9*									-0.9*	-0.9*
Black	1975-16	-0.9*											-0.9*	-0.9*
SEER 21 Delay-Ad	justed Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	-0.6*											-0.6*	-0.6*
White	2000-16	-0.6*											-0.6*	-0.6*
White NH <sup>ef</sup>	2000-16	-1.0*											-1.0*	-1.0*
Black	2000-16	-1.6*											-1.6*	-1.6*
Black NH <sup>ef</sup>	2000-16	-1.6*											-1.6*	-1.6*
API <sup>e</sup>	2000-16	-2.6*											-2.6*	-2.6*
AI/AN <sup>eg</sup>	2000-16	-1.9											-1.9	-1.9
$ ext{Hispanic}^{ ext{f}}$	2000-16	-1.2*											-1.2*	-1.2*
U.S. Cancer Morta	ality <sup>c</sup> , 1975-	-2016												
All Races	1975-87	-2.8*	1987-90	-0.4	1990-11	-2.7*	2011-16	-1.4*					-1.9*	-1.4*
White	1975-87	-3.1*	1987-90	-1.0	1990-08	-2.9*	2008-16	-1.6*					-1.7*	-1.6*
Black	1975-98	-1.2*	1998-16	-3.5*									-3.5*	-3.5*
U.S. Cancer Morta	ality <sup>c</sup> , 2000-	-2016												
All Races	2000-08	-3.1*	2008-16	-1.7*									-1.9*	-1.7*
White	2000-08	-3.1*	2008-16	-1.5*									-1.7*	-1.5*
White NH <sup>ef</sup>	2000-16	-3.0*											-3.0*	-3.0*
Black	2000-16	-3.6*											-3.6*	-3.6*
Black NH <sup>ef</sup>	2000-16	-3.5*											-3.5*	-3.5*
API <sup>e</sup>	2000-16	-3.4*											-3.4*	-3.4*
AI/AN <sup>eg</sup>	2000-16	-3.5*											-3.5*	-3.5*
Hispanicf	2000-16	-1.9*											-1.9*	-1.9*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

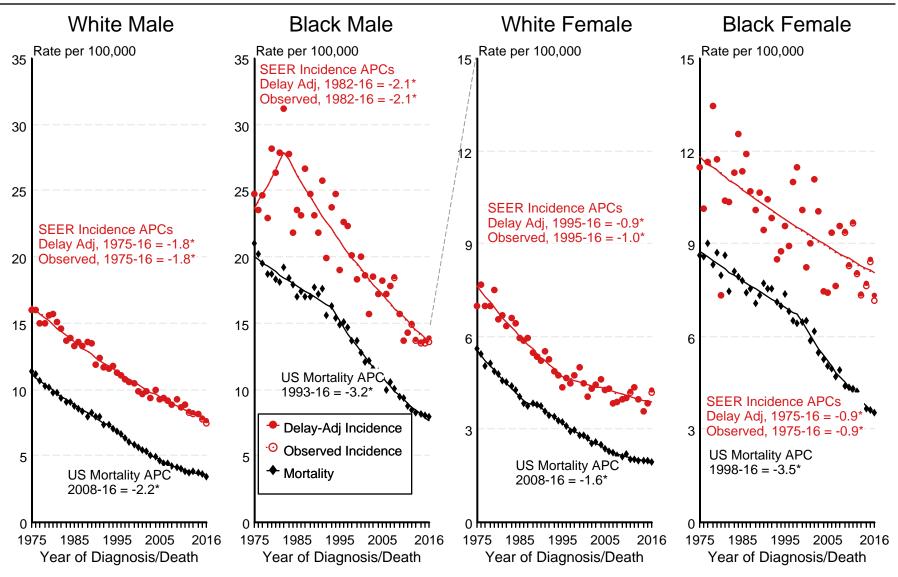
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

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



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

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.
 The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, All Ages by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tr	end 3	JP Tr	end 4	JP Tr	end 5	JP Tr	end 6	AAI	.5C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nce <sup>a</sup> , 19'	75-2016											
All Races	1975-89	2.3*	1989-16	0.8*									0.8*	0.8*
White	1975-89	2.7*	1989-16	1.0*									1.0*	1.0*
Black	1975-16	2.0*											2.0*	2.0*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	0.8*											0.8*	0.8*
White	2000-16	0.8*											0.8*	0.8*
White NH <sup>ef</sup>	2000-16	0.6*											0.6*	0.6*
Black	2000-04	-5.4	2004-16	2.5*									2.5*	2.5*
Black NH <sup>ef</sup>	2000-16	1.2*											1.2*	1.2*
API <sup>e</sup>	2000-16	2.2*											2.2*	2.2*
AI/AN <sup>eg</sup>	2000-16	2.6											2.6	2.6
Hispanic <sup>f</sup>	2000-16	2.7*											2.7*	2.7*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-81	-10.5*	1981-95	-3.1*	1995-16	-0.1							-0.1	-0.1
White	1975-81	-10.8*	1981-95	-3.0*	1995-16	0.1							0.1	0.1
Black	1975-16	-1.8*											-1.8*	-1.8*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-16	0.0											0.0	0.0
White	2000-16	0.4											0.4	0.4
White NH <sup>ef</sup>	2000-16	0.1											0.1	0.1
Black	2000-16	-2.4*											-2.4*	-2.4*
Black NH <sup>ef</sup>	2000-16	-2.4*											-2.4*	-2.4*
API <sup>e</sup>	2000-16	-1.1											-1.1	-1.1
AI/AN <sup>eg</sup>	_	-											-	-
$ exttt{Hispanic}^{ exttt{f}}$	2000-16	0.9											0.9	0.9

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

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

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

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

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

Trends in SEER Incidence ab and U.S. Mortality  $^{\rm c}$  Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Ages <50 by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tr	end 3	JP Tre	end 4	JP Tre	end 5	JP Tre	end 6	AAI	5C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	sted Incider	nce <sup>a</sup> , 19	75-2016											
All Races	1975-89	2.8*	1989-16	0.7*									0.7*	0.7*
White	1975-89	3.2*	1989-16	0.9*									0.9*	0.9*
Black	1975-16	1.8*											1.8*	1.8*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	0.7*											0.7*	0.7*
White	2000-16	0.8*											0.8*	0.8*
White NH <sup>ef</sup>	2000-16	0.4*											0.4*	0.4*
Black	2000-04	-4.9	2004-16	2.2*									2.2*	2.2*
Black NH <sup>ef</sup>	2000-16	0.9											0.9	0.9
API <sup>e</sup>	2000-16	2.5*											2.5*	2.5*
AI/AN <sup>eg</sup>	2000-16	2.4											2.4	2.4
Hispanic <sup>f</sup>	2000-16	2.9*											2.9*	2.9*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-81	-11.3*	1981-95	-2.8*	1995-16	-0.5*							-0.5*	-0.5*
White	1975-81	-11.6*	1981-96	-2.6*	1996-16	-0.2							-0.2	-0.2
Black	1975-16	-1.5*											-1.5*	-1.5*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	-0.4											-0.4	-0.4
White	2000-16	0.0											0.0	0.0
White NH <sup>ef</sup>	2000-16	-0.5											-0.5	-0.5
Black	2000-16	-3.5*											-3.5*	-3.5*
Black NH <sup>ef</sup>	2000-16	-3.6*											-3.6*	-3.6*
API <sup>e</sup>	2000-16	1.1											1.1	1.1
AI/AN <sup>eg</sup>	_	-											_	-
Hispanic <sup>f</sup>	2000-16	1.7*											1.7*	1.7*

Joinpoint Regression Program Version 4.7, February 2019, 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).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Ages 50+ by Race/Ethnicity

	JP Tre	end 1	JP Tre	nd 2	JP Tr	end 3	JP Tr	end 4	JP Tre	end 5	JP Tre	end 6	AAI	C <sub>q</sub>
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nceª, 19	75-2016											
All Races	1975-99	-0.3	1999-16	2.0*									2.0*	2.0*
White	1975-98	-0.2	1998-16	2.0*									2.0*	2.0*
Black	_	-											-	-
SEER 21 Delay-Adju	sted Incid	ence <sup>b</sup> , 2	000-2016											
All Races	2000-16	1.4*											1.4*	1.4*
White	2000-16	1.5*											1.5*	1.5*
White NH <sup>ef</sup>	2000-16	1.9*											1.9*	1.9*
Black	2000-16	2.3											2.3	2.3
Black NH <sup>ef</sup>	2000-16	2.7*											2.7*	2.7*
API <sup>e</sup>	2000-16	-0.2											-0.2	-0.2
AI/AN <sup>eg</sup>	-	-											-	-
Hispanic <sup>f</sup>	2000-16	0.7											0.7	0.7
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-91	-5.9*	1991-16	0.5									0.5	0.5
White	1975-91	-5.9*	1991-16	0.7*									0.7*	0.7*
Black	1975-16	-2.1*											-2.1*	-2.1*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-16	0.9											0.9	0.9
White	2000-16	1.2*											1.2*	1.2*
White NH <sup>ef</sup>	2000-16	1.5*											1.5*	1.5*
Black	2000-16	-0.8											-0.8	-0.8
Black NH <sup>ef</sup>	2000-16	-0.7											-0.7	-0.7
API <sup>e</sup>	_	_											_	_
AI/AN <sup>eg</sup>	_	-											_	-
Hispanic <sup>f</sup>	2000-16	-1.1											-1.1	-1.1

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

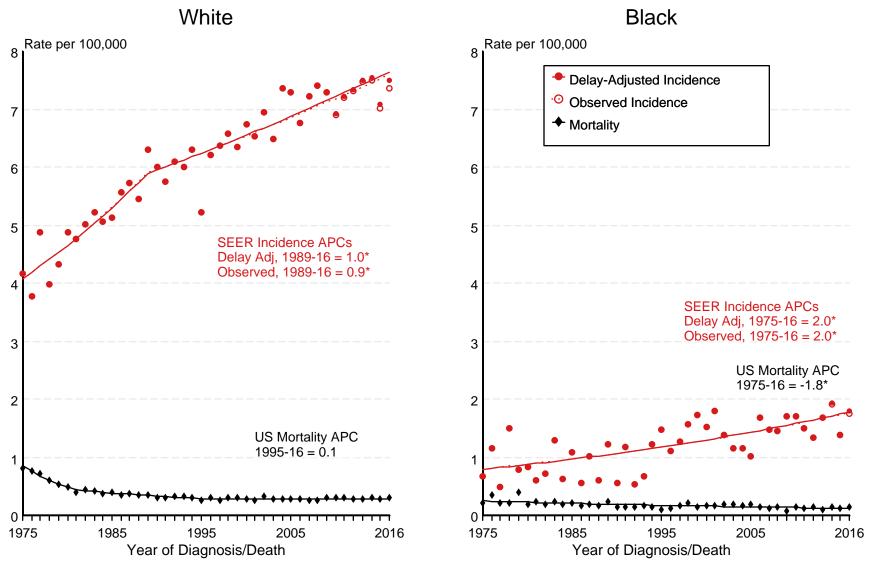
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

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

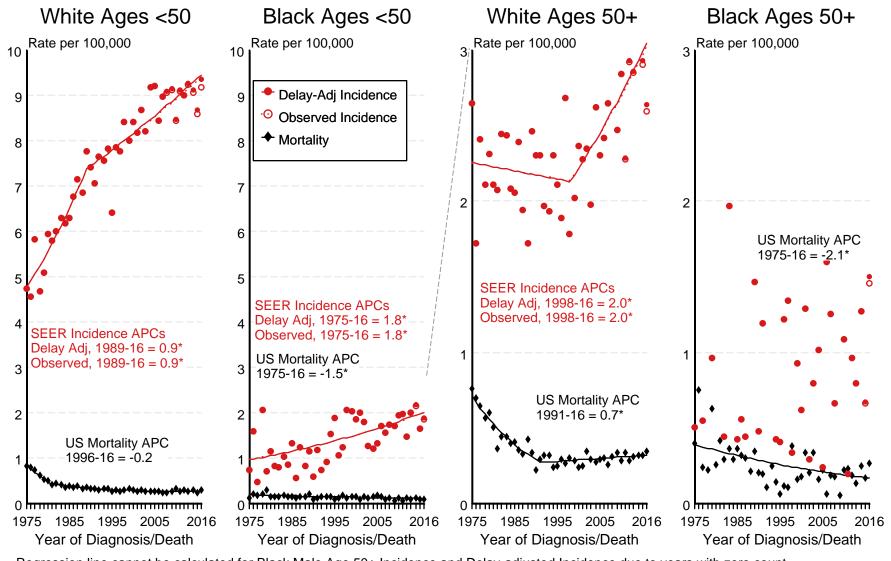


Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

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

Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.
 The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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



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

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, 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<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	nd 5	JP Tre	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nceª, 19	75-2016											
All Races	1975-77	6.3	1977-80	-6.6	1980-97	2.4*	1997-09	6.7*	2009-13	2.1	2013-16	-1.2	2.0*	-0.4
White	1975-77	7.5	1977-80	-6.7	1980-97	2.7*	1997-09	7.0*	2009-14	1.6*	2014-16	-2.6	1.8*	-0.5
Black	1975-95	0.8	1995-12	6.3*	2012-16	-1.9							2.6*	-1.9
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-09	7.4*	2009-14	2.3*	2014-16	-2.5							2.3*	-0.1
White	2000-09	7.6*	2009-14	1.9*	2014-16	-2.4							2.2*	-0.3
White NH <sup>ef</sup>	2000-09	7.8*	2009-14	1.9*	2014-16	-2.9							2.1*	-0.5
Black	2000-14	5.8*	2014-16	-6.5									3.0*	-0.5
Black NH <sup>ef</sup>	2000-14	5.8*	2014-16	-6.5									2.9	-0.5
API <sup>e</sup>	2000-11	6.2*	2011-16	0.3									2.9*	0.3
AI/AN <sup>eg</sup>	2000-02	24.5	2002-06	-1.9	2006-12	9.1*	2012-16	-0.3					4.8*	-0.3
$ ext{ t Hispanic}^{ ext{ t f}}$	2000-10	6.3*	2010-16	2.5*									3.8*	2.5*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-88	-2.1*	1988-16	0.7*									0.7*	0.7*
White	1975-88	-2.2*	1988-16	0.7*									0.7*	0.7*
Black	1975-16	0.1											0.1	0.1
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-16	0.6*											0.6*	0.6*
White	2000-16	0.7*											0.7*	0.7*
White NH <sup>ef</sup>	2000-16	0.6*											0.6*	0.6*
Black	2000-16	0.4											0.4	0.4
Black NH <sup>ef</sup>	2000-16	0.5											0.5	0.5
API <sup>e</sup>	2000-16	-0.2											-0.2	-0.2
AI/AN <sup>eg</sup>	2000-16	-1.1											-1.1	-1.1
Hispanic <sup>f</sup>	2000-16	0.7											0.7	0.7

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	end 4	JP Tre	end 5	JP Tr	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incide	nce <sup>a</sup> , 197	75-2016											
All Races	1975-80	-4.6*	1980-97	1.8*	1997-12	5.5*	2012-16	-1.1					2.5*	-1.1
White	1975-77	10.4	1977-80	-9.0	1980-97	2.6*	1997-12	5.6*	2012-16	-1.3			2.5*	-1.3
Black	1975-16	3.1*											3.1*	3.1*
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-09	7.1*	2009-16	1.9*									3.0*	1.9*
White	2000-09	7.3*	2009-16	1.7*									2.9*	1.7*
White NH <sup>ef</sup>	2000-09	7.8*	2009-16	1.7*									3.0*	1.7*
Black	2000-16	3.9*											3.9*	3.9*
Black NH <sup>ef</sup>	2000-16	4.1*											4.1*	4.1*
API <sup>e</sup>	2000-16	5.3*											5.3*	5.3*
AI/AN <sup>eg</sup>	2000-16	4.3*											4.3*	4.3*
Hispanic <sup>f</sup>	2000-16	4.1*											4.1*	4.1*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	-2016												
All Races	1975-83	-3.1*	1983-16	1.2*									1.2*	1.2*
White	1975-84	-2.5*	1984-16	1.3*									1.3*	1.3*
Black	1975-16	0.5*											0.5*	0.5*
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	-2016												
All Races	2000-16	1.1*											1.1*	1.1*
White	2000-16	1.1*											1.1*	1.1*
White NH <sup>ef</sup>	2000-16	1.1*											1.1*	1.1*
Black	2000-16	0.9											0.9	0.9
Black NH <sup>ef</sup>	2000-16	1.1											1.1	1.1
API <sup>e</sup>	2000-16	1.4											1.4	1.4
AI/AN <sup>eg</sup>	_	-											_	-
Hispanicf	2000-06	4.6	2006-09	-10.9	2009-16	4.3*							0.7	4.3*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

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

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

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

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tre	nd 4	JP Tre	nd 5	JP Tr	end 6	AAI	$C_q$
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjus	ted Incider	nceª, 19	75-2016											
All Races	1975-77	6.8	1977-80	-5.9	1980-97	2.6*	1997-09	7.1*	2009-16	0.7			2.1*	0.7
White	1975-82	-1.1	1982-97	3.0*	1997-09	7.5*	2009-16	0.6					2.1*	0.6
Black	1975-93	0.2	1993-12	6.4*	2012-16	-1.5							2.8*	-1.5
SEER 21 Delay-Adju	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-09	7.6*	2009-14	2.2*	2014-16	-2.7							2.3*	-0.3
White	2000-09	7.8*	2009-14	1.8*	2014-16	-2.5							2.1*	-0.4
White NH <sup>ef</sup>	2000-09	8.0*	2009-14	1.7*	2014-16	-3.0							2.0*	-0.7
Black	2000-14	6.2*	2014-16	-6.5									3.2*	-0.4
Black NH <sup>ef</sup>	2000-14	6.1*	2014-16	-6.5									3.2*	-0.4
API <sup>e</sup>	2000-10	6.5*	2010-16	0.6									2.5*	0.6
AI/AN <sup>eg</sup>	2000-16	5.1*											5.1*	5.1*
Hispanic <sup>f</sup>	2000-10	6.6*	2010-16	2.5*									3.9*	2.5*
U.S. Cancer Mortal	ity <sup>c</sup> , 1975-	2016												
All Races	1975-88	-2.6*	1988-16	0.4*									0.4*	0.4*
White	1975-88	-2.8*	1988-16	0.3*									0.3*	0.3*
Black	1975-16	-0.1											-0.1	-0.1
U.S. Cancer Mortal	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	0.3											0.3	0.3
White	2000-16	0.3											0.3	0.3
White NH <sup>ef</sup>	2000-16	0.1											0.1	0.1
Black	2000-16	0.2											0.2	0.2
Black NH <sup>ef</sup>	2000-16	0.3											0.3	0.3
API <sup>e</sup>	2000-16	-0.9											-0.9	-0.9
AI/AN <sup>eg</sup>	2000-16	-3.5											-3.5	-3.5
Hispanic <sup>f</sup>	2000-16	0.8											0.8	0.8

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

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

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

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

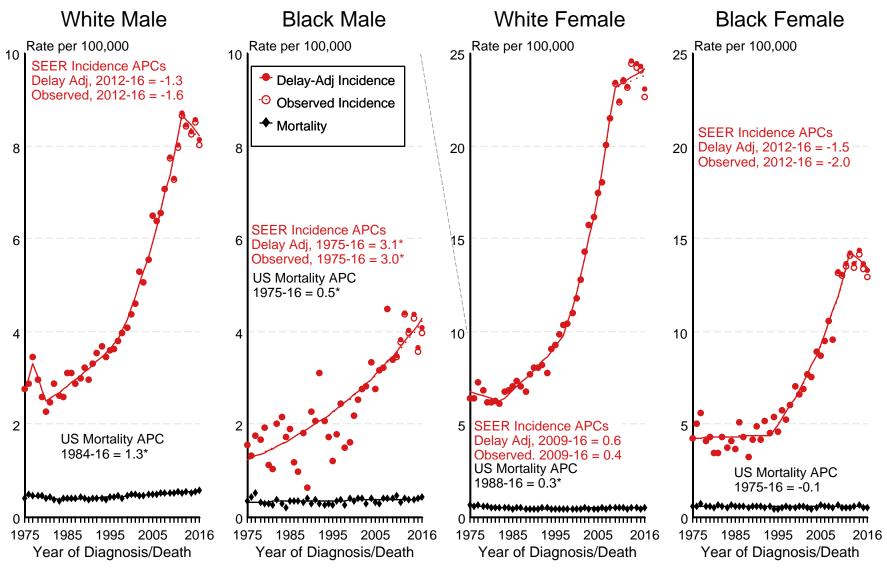
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

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



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

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 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

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

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Both Sexes by Race/Ethnicity

	JP Tre	end 1	JP Tre	end 2	JP Tre	end 3	JP Tr	end 4	JP Tre	end 5	JP Tr	end 6	AAI	Cd
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adju	sted Incider	nce <sup>a</sup> , 19	75-2016											
All Races	1975-86	0.7*	1986-07	0.2*	2007-16	-1.0*							-1.0*	-1.0*
White	1975-86	0.9*	1986-07	0.3*	2007-16	-0.9*							-0.9*	-0.9*
Black	1975-16	0.3*											0.3*	0.3*
SEER 21 Delay-Adj	usted Incide	ence <sup>b</sup> , 2	000-2016											
All Races	2000-05	0.5	2005-16	-1.1*									-1.1*	-1.1*
White	2000-05	0.6	2005-16	-1.0*									-1.0*	-1.0*
White NH <sup>ef</sup>	2000-05	0.7	2005-16	-0.8*									-0.8*	-0.8*
Black	2000-16	-0.1											-0.1	-0.1
Black NH <sup>ef</sup>	2000-16	0.0											0.0	0.0
API <sup>e</sup>	2000-16	-0.5*											-0.5*	-0.5*
AI/AN <sup>eg</sup>	2000-16	1.5											1.5	1.5
$ ext{ t Hispanic}^{ ext{ t f}}$	2000-16	-1.1*											-1.1*	-1.1*
U.S. Cancer Morta	lity <sup>c</sup> , 1975-	-2016												
All Races	1975-77	0.2	1977-87	-2.2*	1987-16	0.0*							0.0*	0.0*
White	1975-77	0.3	1977-87	-2.2*	1987-16	0.1*							0.1*	0.1*
Black	1975-16	-1.0*											-1.0*	-1.0*
U.S. Cancer Morta	lity <sup>c</sup> , 2000-	-2016												
All Races	2000-16	0.0											0.0	0.0
White	2000-16	0.2*											0.2*	0.2*
White NH <sup>ef</sup>	2000-16	0.3*											0.3*	0.3*
Black	2000-16	-0.7*											-0.7*	-0.7*
Black NH <sup>ef</sup>	2000-16	-0.6*											-0.6*	-0.6*
API <sup>e</sup>	2000-16	-0.3											-0.3	-0.3
AI/AN <sup>eg</sup>	2000-16	2.2											2.2	2.2
Hispanicf	2000-16	-0.7*											-0.7*	-0.7*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (<a href="https://surveillance.cancer.gov/joinpoint/">https://surveillance.cancer.gov/joinpoint/</a>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

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

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

SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

The APC/AAPC is significantly different from zero (p<.05).

Joinpoint regression line analysis could not be performed on data series.

#### Table 27.2 Cancer of the Urinary Bladder (Invasive and In Situ)

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjusted Incidence <sup>a</sup> , 1975-2016														
All Races	1975-86	0.8*	1986-07	0.1	2007-16	-1.1*							-1.1*	-1.1*
White	1975-87	1.2*	1987-94	-0.4	1994-06	0.4*	2006-16	-1.0*					-1.0*	-1.0*
Black	1975-16	0.4*											0.4*	0.4*
SEER 21 Delay-Adjusted Incidence <sup>b</sup> , 2000-2016														
All Races	2000-07	0.1	2007-16	-1.5*									-1.5*	-1.5*
White	2000-07	0.1	2007-16	-1.4*									-1.4*	-1.4*
White NH <sup>ef</sup>	2000-07	0.3	2007-16	-1.1*									-1.1*	-1.1*
Black	2000-13	0.5	2013-16	-3.5									-0.9	-2.5
Black NH <sup>ef</sup>	2000-12	0.7*	2012-16	-2.6									-0.8	-2.6
API <sup>e</sup>	2000-16	-0.5*											-0.5*	-0.5*
AI/AN <sup>eg</sup>	2000-16	1.2											1.2	1.2
Hispanic <sup>f</sup>	2000-16	-1.2*											-1.2*	-1.2*
U.S. Cancer Mortality <sup>c</sup> , 1975-2016														
All Races	1975-83	-1.4*	1983-87	-2.8*	1987-93	0.2	1993-97	-1.1	1997-10	0.1	2010-16	-0.4*	-0.3*	-0.4*
White	1975-82	-1.4*	1982-87	-2.3*	1987-03	-0.2*	2003-06	0.8	2006-16	-0.2			-0.2	-0.2
Black	1975-16	-0.9*											-0.9*	-0.9*
U.S. Cancer Mortality <sup>c</sup> , 2000-2016														
All Races	2000-06	0.4	2006-16	-0.3*									-0.3*	-0.3*
White	2000-16	0.0											0.0	0.0
White NH <sup>ef</sup>	2000-16	0.2*											0.2*	0.2*
Black	2000-16	-0.3											-0.3	-0.3
Black NH <sup>ef</sup>	2000-16	-0.2											-0.2	-0.2
API <sup>e</sup>	2000-16	-0.1											-0.1	-0.1
AI/AN <sup>eg</sup>	2000-05	-5.8	2005-08	21.4	2008-14	-8.6*	2014-16	40.1*					3.7	13.1*
Hispanicf	2000-16	-0.8*											-0.8*	-0.8*

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding

SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

d The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

The APC/AAPC is significantly different from zero (p<.05).

Joinpoint regression line analysis could not be performed on data series.

#### Table 27.3 Cancer of the Urinary Bladder (Invasive and In Situ)

Trends in SEER Incidence ab and U.S. Mortality Using the Joinpoint Regression Program, 1975-2016 With up to Five Joinpoints, 2000-2016 With up to Three Joinpoints, Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2007-16	2012-16
SEER 9 Delay-Adjusted Incidence <sup>a</sup> , 1975-2016														
All Races	1975-02	0.2*	2002-16	-1.0*									-1.0*	-1.0*
White	1975-02	0.4*	2002-16	-0.9*									-0.9*	-0.9*
Black	1975-16	0.1											0.1	0.1
SEER 21 Delay-Adjus	sted Incide	ence <sup>b</sup> , 20	000-2016											
All Races	2000-16	-1.0*											-1.0*	-1.0*
White	2000-16	-0.9*											-0.9*	-0.9*
White NH <sup>ef</sup>	2000-16	-0.7*											-0.7*	-0.7*
Black	2000-16	-0.6											-0.6	-0.6
Black NH <sup>ef</sup>	2000-16	-0.5											-0.5	-0.5
API <sup>e</sup>	2000-16	-0.6											-0.6	-0.6
AI/AN <sup>eg</sup>	2000-16	2.6											2.6	2.6
Hispanic <sup>f</sup>	2000-16	-1.5*											-1.5*	-1.5*
U.S. Cancer Mortal:	ity <sup>c</sup> , 1975-	2016												
All Races	1975-86	-1.6*	1986-16	-0.4*									-0.4*	-0.4*
White	1975-86	-1.7*	1986-16	-0.3*									-0.3*	-0.3*
Black	1975-16	-1.0*											-1.0*	-1.0*
U.S. Cancer Mortali	ity <sup>c</sup> , 2000-	2016												
All Races	2000-16	-0.5*											-0.5*	-0.5*
White	2000-16	-0.3*											-0.3*	-0.3*
White NH <sup>ef</sup>	2000-16	-0.2*											-0.2*	-0.2*
Black	2000-16	-1.4*											-1.4*	-1.4*
Black NH <sup>ef</sup>	2000-16	-1.3*											-1.3*	-1.3*
API <sup>e</sup>	2000-16	-0.8											-0.8	-0.8
AI/AN <sup>eg</sup>	_	-											-	-
Hispanic <sup>f</sup>	2000-16	-0.8											-0.8	-0.8

Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute. (https://surveillance.cancer.gov/joinpoint/). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).

Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding

SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic

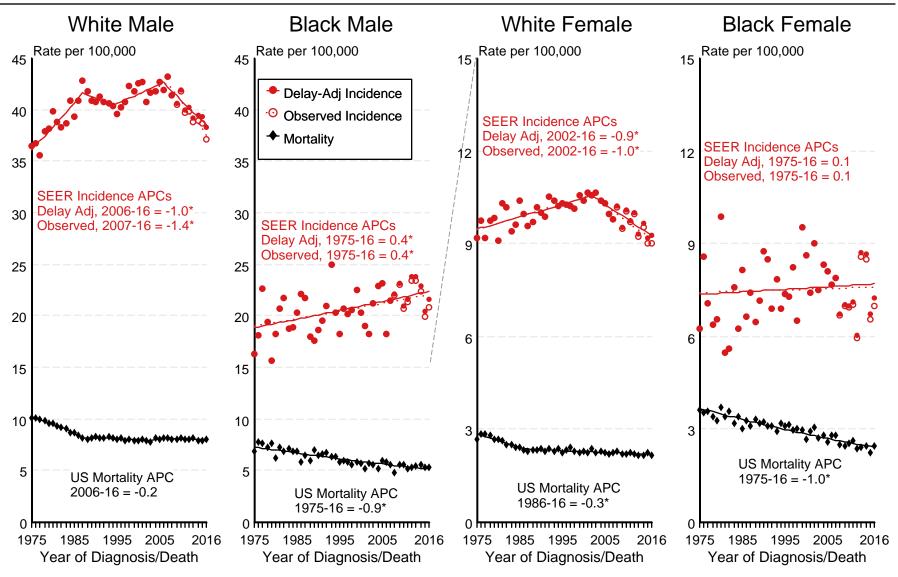
Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

The APC/AAPC is significantly different from zero (p<.05).

Joinpoint regression line analysis could not be performed on data series.

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Cancer of the Urinary Bladder, by Race and Sex



Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC).

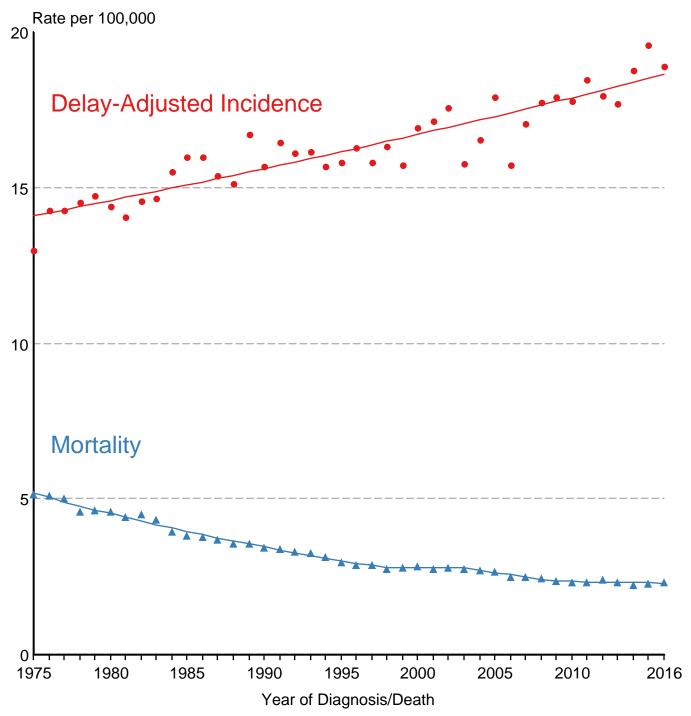
a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.7, February 2019, National Cancer Institute.

The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

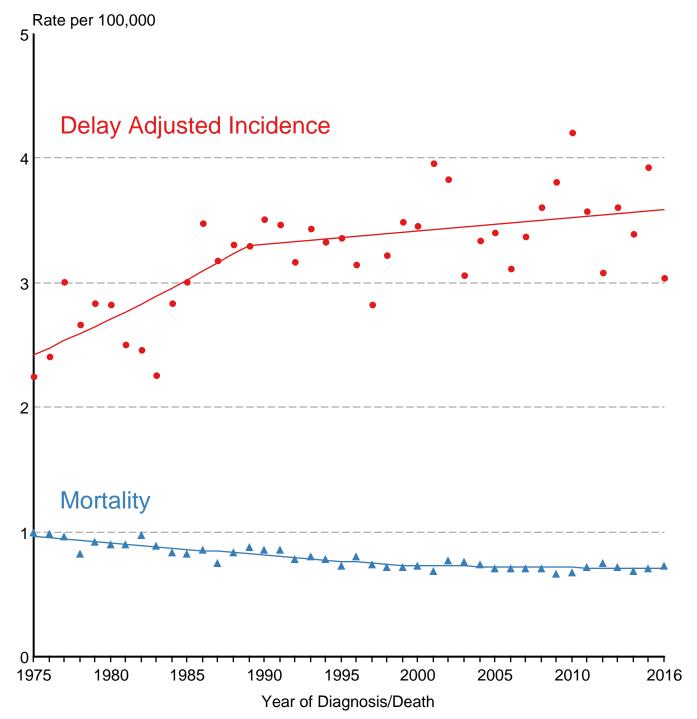
The APC is significantly different from zero (p < 0.05).

## SEER Delay-Adjusted Incidence and US Mortality All Childhood Cancers, Under 20 Years of Age Both Sexes, All Races, 1975-2016



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 4.7, February 2019, National Cancer Institute.

## SEER Delay-Adjusted Incidence and US Mortality Brain and CNS, Under 15 Years of Age Both Sexes, All Races, 1975-2016



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 4.7, February 2019, National Cancer Institute.