

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

Trends in SEER Incidence^{a,b} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2007 With up to Four Joinpoints, 1992-2007 With up to Two Joinpoints,
Both Sexes by Race/Ethnicity

	<u>Joinpoint Trend 1</u> Years	<u>Joinpoint Trend 1</u> APC	<u>Joinpoint Trend 2</u> Years	<u>Joinpoint Trend 2</u> APC	<u>Joinpoint Trend 3</u> Years	<u>Joinpoint Trend 3</u> APC	<u>Joinpoint Trend 4</u> Years	<u>Joinpoint Trend 4</u> APC	<u>Joinpoint Trend 5</u> Years	<u>Joinpoint Trend 5</u> APC	<u>AAPC^d</u> 1998-2007	<u>AAPC^d</u> 2003-2007
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2007</u>												
All Races	1975-1992	2.4*	1992-1997	0.6	1997-2007	2.9*					2.9*	2.9*
White	1975-1991	2.4*	1991-1997	0.7	1997-2007	2.9*					2.9*	2.9*
Black	1975-2007	2.8*									2.8*	2.8*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2007</u>												
All Races	1992-1997	1.0	1997-2007	2.7*							2.7*	2.7*
White	1992-1997	1.1	1997-2007	2.8*							2.8*	2.8*
Black	1992-2007	2.1*									2.1*	2.1*
<u>SEER 9 Observed Incidence^a, 1975-2007</u>												
All Races	1975-1991	2.4*	1991-1997	0.9	1997-2007	2.6*					2.6*	2.6*
White	1975-1991	2.4*	1991-1997	0.8	1997-2007	2.7*					2.7*	2.7*
Black	1975-2007	2.7*									2.7*	2.7*
<u>SEER 13 Observed Incidence^b, 1992-2007</u>												
All Races	1992-1997	1.1*	1997-2007	2.5*							2.5*	2.5*
White	1992-2007	2.2*									2.2*	2.2*
White NH ^{e,f}	1992-2007	2.2*									2.2*	2.2*
Black	1992-2007	2.0*									2.0*	2.0*
Black NH ^{e,f}	1992-2007	2.0*									2.0*	2.0*
API ^e	1992-2007	2.6*									2.6*	2.6*
AI/AN ^{g,g}	1992-2007	0.8									0.8	0.8
Hispanic ^f	1992-2007	2.5*									2.5*	2.5*
<u>U.S. Cancer Mortality^c, 1975-2007</u>												
All Races	1975-1994	1.0*	1994-2007	-0.5*							-0.5*	-0.5*
White	1975-1994	1.0*	1994-2007	-0.5*							-0.5*	-0.5*
Black	1975-1991	2.7*	1991-2007	-0.3							-0.3	-0.3
<u>U.S. Cancer Mortality^c, 1992-2007</u>												
All Races	1992-2007	-0.4*									-0.4*	-0.4*
White	1992-2007	-0.3*									-0.3*	-0.3*
White NH ^{e,f}	1992-2007	-0.3*									-0.3*	-0.3*
Black	1992-2007	-0.3									-0.3	-0.3
Black NH ^{e,f}	1992-2007	-0.2									-0.2	-0.2
API ^e	1992-1997	5.3	1997-2004	-4.2	2004-2007	9.7					0.2	6.0
AI/AN ^{g,g}	1992-2007	-0.4									-0.4	-0.4
Hispanic ^f	1992-2007	0.1									0.1	0.1

Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. (<http://srab.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 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). 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.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

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

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

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

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

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2007 With up to Four Joinpoints, 1992-2007 With up to Two Joinpoints,
Males by Race/Ethnicity

	<u>Joinpoint Trend 1</u> Years	<u>Joinpoint Trend 1</u> APC	<u>Joinpoint Trend 2</u> Years	<u>Joinpoint Trend 2</u> APC	<u>Joinpoint Trend 3</u> Years	<u>Joinpoint Trend 3</u> APC	<u>Joinpoint Trend 4</u> Years	<u>Joinpoint Trend 4</u> APC	<u>Joinpoint Trend 5</u> Years	<u>Joinpoint Trend 5</u> APC	<u>AAPC^d</u> 1998-2007	<u>AAPC^d</u> 2003-2007
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2007</u>												
All Races	1975-2007	1.8*									1.8*	1.8*
White	1975-2007	1.8*									1.8*	1.8*
Black	1975-2007	2.7*									2.7*	2.7*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2007</u>												
All Races	1992-2007	2.0*									2.0*	2.0*
White	1992-2007	2.1*									2.1*	2.1*
Black	1992-2007	2.0*									2.0*	2.0*
<u>SEER 9 Observed Incidence^a, 1975-2007</u>												
All Races	1975-2007	1.8*									1.8*	1.8*
White	1975-2007	1.7*									1.7*	1.7*
Black	1975-2007	2.6*									2.6*	2.6*
<u>SEER 13 Observed Incidence^b, 1992-2007</u>												
All Races	1992-2007	1.9*									1.9*	1.9*
White	1992-2007	1.9*									1.9*	1.9*
White NH ^{ef}	1992-2007	1.9*									1.9*	1.9*
Black	1992-2007	1.8*									1.8*	1.8*
Black NH ^{ef}	1992-2007	1.8*									1.8*	1.8*
API ^e	1992-2007	2.1*									2.1*	2.1*
AI/AN ^{eg}	1992-2007	0.2									0.2	0.2
Hispanic ^f	1992-2007	2.2*									2.2*	2.2*
<u>U.S. Cancer Mortality^c, 1975-2007</u>												
All Races	1975-1991	1.1*	1991-2002	-0.1	2002-2007	-1.3*					-0.8*	-1.3*
White	1975-1991	1.0*	1991-2002	0.0	2002-2007	-1.3*					-0.8*	-1.3*
Black	1975-1991	3.0*	1991-2007	-0.3							-0.3	-0.3
<u>U.S. Cancer Mortality^c, 1992-2007</u>												
All Races	1992-2002	-0.1	2002-2007	-1.3*							-0.8*	-1.3*
White	1992-2002	0.0	2002-2007	-1.3*							-0.8*	-1.3*
White NH ^{ef}	1992-2003	0.1	2003-2007	-1.8*							-0.8*	-1.8*
Black	1992-2007	-0.3									-0.3	-0.3
Black NH ^{ef}	1992-2007	-0.2									-0.2	-0.2
API ^e	1992-2007	-0.3									-0.3	-0.3
AI/AN ^{eg}	1992-2007	0.0									0.0	0.0
Hispanic ^f	1992-2007	0.1									0.1	0.1

Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. (<http://srab.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 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). 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.

The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.

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

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

^a ^b ^c ^d ^e ^f ^g * - Joinpoint regression line analysis could not be performed on data series.

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

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2007 With up to Four Joinpoints, 1992-2007 With up to Two Joinpoints,
Females by Race/Ethnicity

	<u>Joinpoint Trend 1</u> Years	<u>Joinpoint Trend 1</u> APC	<u>Joinpoint Trend 2</u> Years	<u>Joinpoint Trend 2</u> APC	<u>Joinpoint Trend 3</u> Years	<u>Joinpoint Trend 3</u> APC	<u>Joinpoint Trend 4</u> Years	<u>Joinpoint Trend 4</u> APC	<u>Joinpoint Trend 5</u> Years	<u>Joinpoint Trend 5</u> APC	<u>AAPC^d</u> 1998-2007	<u>AAPC^d</u> 2003-2007
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2007</u>												
All Races	1975-1993	2.7*	1993-1999	0.8	1999-2007	3.7*					3.4*	3.7*
White	1975-1993	2.8*	1993-1997	-0.5	1997-2007	3.5*					3.5*	3.5*
Black	1975-2007	2.9*									2.9*	2.9*
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2007</u>												
All Races	1992-1998	1.2	1998-2007	3.0*							3.0*	3.0*
White	1992-1997	0.7	1997-2007	3.1*							3.1*	3.1*
Black	1992-2007	2.3*									2.3*	2.3*
<u>SEER 9 Observed Incidence^a, 1975-2007</u>												
All Races	1975-2007	2.3*									2.3*	2.3*
White	1975-1993	2.8*	1993-1997	-0.4	1997-2007	3.3*					3.3*	3.3*
Black	1975-2007	2.8*									2.8*	2.8*
<u>SEER 13 Observed Incidence^b, 1992-2007</u>												
All Races	1992-2007	2.3*									2.3*	2.3*
White	1992-2007	2.4*									2.4*	2.4*
White NH ^{ef}	1992-1996	-0.3	1996-2007	2.8*							2.8*	2.8*
Black	1992-2007	2.1*									2.1*	2.1*
Black NH ^{ef}	1992-2007	2.2*									2.2*	2.2*
API ^e	1992-2007	3.5*									3.5*	3.5*
AI/AN ^{eg}	1992-2007	1.3									1.3	1.3
Hispanic ^f	1992-2007	2.7*									2.7*	2.7*
<u>U.S. Cancer Mortality^c, 1975-2007</u>												
All Races	1975-1992	1.3*	1992-2007	-0.6*							-0.6*	-0.6*
White	1975-1992	1.2*	1992-2007	-0.5*							-0.5*	-0.5*
Black	1975-1994	2.4*	1994-2007	-0.8*							-0.8*	-0.8*
<u>U.S. Cancer Mortality^c, 1992-2007</u>												
All Races	1992-2007	-0.6*									-0.6*	-0.6*
White	1992-2007	-0.5*									-0.5*	-0.5*
White NH ^{ef}	1992-2007	-0.5*									-0.5*	-0.5*
Black	1992-2007	-0.5									-0.5	-0.5
Black NH ^{ef}	1992-2007	-0.3									-0.3	-0.3
API ^e	1992-2007	0.4									0.4	0.4
AI/AN ^{eg}	1992-2007	-1.7									-1.7	-1.7
Hispanic ^f	1992-2007	-0.1									-0.1	-0.1

Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. (<http://srab.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 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
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.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, OK and VT.
Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 11.4
Cancer of the Kidney and Renal Pelvis (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975	7.08	10.34	4.52	7.33	10.82	4.63	6.17	8.24	4.31
1976	7.96	11.20	5.47	8.12	11.48	5.58	7.75	11.68	4.69
1977	8.06	11.42	5.49	8.13	11.68	5.48	8.51	11.10	6.39
1978	7.84	11.81	4.83	7.96	12.08	4.88	8.01	11.01	5.65
1979	7.63	11.12	5.05	7.84	11.58	5.10	7.26	8.22	6.30
1980	8.06	11.69	5.38	8.36	12.21	5.55	5.97	7.95	4.36
1981	8.49	12.83	5.30	8.57	13.03	5.32	10.00	15.77	5.82
1982	8.35	11.82	5.72	8.52	12.02	5.87	7.59	11.20	4.90
1983	8.94	13.24	5.67	9.24	13.77	5.81	8.81	13.54	5.52
1984	9.19	13.12	6.20	9.48	13.61	6.33	9.02	12.01	6.90
1985	8.95	13.14	5.77	9.23	13.61	5.94	8.63	11.70	6.23
1986	9.67	13.84	6.57	9.84	14.10	6.68	10.13	14.98	6.63
1987	9.91	14.07	6.75	10.09	14.36	6.89	11.07	15.61	7.51
1988	9.93	14.00	6.96	10.10	14.32	7.04	11.60	15.37	8.78
1989	10.30	14.47	7.14	10.58	15.03	7.22	10.79	15.07	7.82
1990	10.44	14.72	7.14	10.71	14.99	7.45	10.52	15.96	6.61
1991	10.65	15.07	7.19	10.82	15.24	7.36	12.31	18.33	7.80
1992	10.80	15.33	7.42	11.11	15.65	7.74	11.00	16.41	7.19
1993	10.76	14.69	7.64	10.86	14.76	7.74	12.80	17.33	9.46
1994	11.30	15.66	7.88	11.56	16.00	8.07	12.74	18.05	8.68
1995	11.13	15.50	7.67	11.15	15.45	7.72	14.25	21.58	9.22
1996	11.38	15.87	7.93	11.48	16.25	7.78	13.93	17.44	11.34
1997	10.96	15.13	7.63	11.02	15.14	7.71	13.71	19.66	9.41
1998	11.82	16.45	8.19	12.11	16.75	8.46	12.73	17.41	9.09
1999	11.48	16.04	7.84	11.70	16.34	7.93	13.79	19.03	10.00
2000	12.52	17.46	8.58	12.79	18.03	8.51	14.89	19.38	11.92
2001	12.60	17.54	8.62	12.82	17.77	8.81	15.66	23.10	10.34
2002	12.89	17.79	8.90	13.16	18.05	9.12	15.39	22.49	10.39
2003	13.50	18.22	9.67	13.87	18.45	10.11	14.55	21.68	9.27
2004	13.53	18.34	9.61	13.89	18.79	9.83	15.78	22.07	11.04
2005	13.88	19.06	9.66	14.11	19.31	9.80	16.45	23.84	11.21
2006	14.36	18.77	10.67	14.67	19.16	10.84	15.60	20.62	11.83
2007	15.18	20.58	10.66	15.38	20.68	10.89	17.99	24.58	12.99

^a Additional information on the model used to delay-adjust SEER Incidence rates can be found at (<http://srab.cancer.gov/delay/>). SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). - Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 11.5
Cancer of the Kidney and Renal Pelvis (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975	7.08	10.34	4.52	7.33	10.82	4.63	6.17	8.24	4.31
1976	7.96	11.20	5.47	8.12	11.48	5.58	7.75	11.68	4.69
1977	8.06	11.42	5.49	8.13	11.68	5.48	8.51	11.10	6.39
1978	7.84	11.81	4.83	7.96	12.08	4.88	8.01	11.01	5.65
1979	7.63	11.12	5.05	7.84	11.58	5.10	7.26	8.22	6.30
1980	8.06	11.69	5.38	8.36	12.21	5.55	5.97	7.95	4.36
1981	8.49	12.83	5.30	8.57	13.03	5.32	10.00	15.77	5.82
1982	8.35	11.82	5.72	8.52	12.02	5.87	7.59	11.20	4.90
1983	8.94	13.24	5.67	9.24	13.77	5.81	8.81	13.53	5.52
1984	9.19	13.12	6.20	9.47	13.61	6.33	9.02	12.01	6.90
1985	8.95	13.14	5.77	9.23	13.61	5.93	8.63	11.69	6.22
1986	9.67	13.84	6.57	9.84	14.09	6.68	10.12	14.97	6.62
1987	9.91	14.07	6.75	10.09	14.35	6.89	11.06	15.60	7.51
1988	9.93	13.99	6.95	10.10	14.31	7.03	11.59	15.36	8.77
1989	10.29	14.47	7.14	10.58	15.02	7.21	10.78	15.06	7.82
1990	10.43	14.71	7.14	10.70	14.98	7.45	10.51	15.94	6.61
1991	10.64	15.06	7.18	10.81	15.22	7.35	12.29	18.30	7.79
1992	10.79	15.31	7.41	11.09	15.63	7.73	10.98	16.39	7.18
1993	10.75	14.68	7.64	10.84	14.74	7.73	12.77	17.29	9.44
1994	11.29	15.64	7.87	11.54	15.97	8.05	12.71	18.01	8.66
1995	11.11	15.48	7.65	11.13	15.42	7.70	14.21	21.51	9.19
1996	11.35	15.83	7.91	11.45	16.21	7.76	13.89	17.38	11.30
1997	10.93	15.09	7.61	10.99	15.10	7.68	13.66	19.58	9.37
1998	11.79	16.40	8.16	12.07	16.69	8.43	12.67	17.33	9.05
1999	11.44	15.98	7.81	11.64	16.26	7.89	13.71	18.92	9.94
2000	12.47	17.38	8.54	12.72	17.94	8.46	14.78	19.24	11.83
2001	12.53	17.44	8.57	12.74	17.65	8.75	15.52	22.90	10.24
2002	12.80	17.66	8.84	13.05	17.91	9.05	15.23	22.25	10.29
2003	13.39	18.06	9.59	13.73	18.27	10.01	14.36	21.41	9.16
2004	13.39	18.15	9.51	13.72	18.56	9.71	15.54	21.73	10.87
2005	13.71	18.82	9.54	13.90	19.03	9.65	16.15	23.40	11.00
2006	14.13	18.48	10.50	14.40	18.82	10.65	15.25	20.16	11.57
2007	14.70	19.93	10.32	14.84	19.95	10.51	17.24	23.56	12.45
1975-2007	10.86	15.21	7.46	10.99	15.43	7.53	12.30	17.30	8.62

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). - Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 11.6
Cancer of the Kidney and Renal Pelvis (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Death:									
1975	3.61	5.18	2.43	3.70	5.30	2.49	2.81	4.15	1.82
1976	3.61	5.23	2.41	3.69	5.35	2.45	2.92	4.24	1.92
1977	3.68	5.35	2.45	3.78	5.51	2.50	2.88	4.03	1.99
1978	3.69	5.43	2.41	3.76	5.52	2.46	3.17	4.83	1.93
1979	3.63	5.32	2.40	3.71	5.46	2.43	2.95	4.17	2.04
1980	3.68	5.46	2.38	3.77	5.61	2.44	2.96	4.19	2.01
1981	3.73	5.40	2.51	3.80	5.50	2.56	3.18	4.60	2.14
1982	3.85	5.68	2.54	3.92	5.80	2.56	3.40	4.83	2.37
1983	3.85	5.57	2.60	3.93	5.69	2.67	3.26	4.85	2.15
1984	3.90	5.75	2.57	3.96	5.88	2.60	3.45	4.86	2.45
1985	3.96	5.76	2.66	4.00	5.79	2.71	3.83	6.00	2.35
1986	4.05	5.83	2.78	4.11	5.94	2.82	3.68	5.34	2.52
1987	4.14	6.04	2.77	4.23	6.15	2.83	3.66	5.49	2.42
1988	4.03	5.86	2.71	4.09	5.93	2.76	3.78	5.82	2.41
1989	4.16	6.08	2.79	4.22	6.15	2.83	3.99	6.05	2.64
1990	4.19	6.16	2.77	4.23	6.22	2.79	4.20	6.35	2.76
1991	4.30	6.18	2.95	4.34	6.24	2.98	4.34	6.35	2.97
1992	4.29	6.24	2.88	4.37	6.33	2.94	3.97	5.94	2.61
1993	4.16	6.09	2.75	4.22	6.18	2.77	4.07	6.09	2.75
1994	4.27	6.20	2.89	4.32	6.25	2.92	4.24	6.40	2.81
1995	4.34	6.19	2.99	4.39	6.28	3.01	4.38	6.26	3.14
1996	4.27	6.19	2.84	4.33	6.29	2.88	4.15	5.93	2.93
1997	4.27	6.19	2.86	4.32	6.23	2.91	4.32	6.55	2.84
1998	4.26	6.19	2.81	4.34	6.27	2.88	4.01	6.28	2.46
1999	4.06	5.90	2.68	4.10	5.96	2.71	4.15	6.10	2.82
2000	4.21	6.14	2.79	4.29	6.23	2.84	4.13	6.28	2.74
2001	4.27	6.22	2.80	4.33	6.31	2.83	4.26	6.43	2.82
2002	4.22	6.14	2.76	4.32	6.28	2.80	4.06	5.84	2.84
2003	4.18	6.07	2.73	4.27	6.18	2.78	4.10	6.09	2.73
2004	4.12	5.92	2.72	4.22	6.06	2.78	3.98	5.86	2.70
2005	4.11	5.93	2.72	4.20	6.01	2.80	4.04	6.11	2.59
2006	3.98	5.74	2.63	4.07	5.83	2.70	3.87	5.87	2.49
2007	4.00	5.79	2.63	4.06	5.85	2.67	4.09	5.99	2.76
1975-2007	4.07	5.91	2.71	4.13	6.00	2.75	3.84	5.67	2.57

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 11.7
Cancer of the Kidney and Renal Pelvis (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
SEER Incidence									
Age at Diagnosis									
All ages	14.1	19.2	9.9	14.5	19.7	10.2	15.4	21.8	10.7
Under 65	7.4	9.8	5.2	7.6	10.0	5.4	8.5	12.0	5.6
65 and over	59.9	84.3	42.2	62.0	87.4	43.4	63.2	89.4	46.3
All ages (IARC world std) ^c	9.8	13.2	6.9	10.2	13.6	7.2	11.0	15.5	7.5
Age-Specific Rates, 2003-2007									
<1	1.2	1.2	1.3	1.4	1.3	1.4	-	-	-
1-4	1.8	1.7	1.8	1.8	1.7	2.0	1.7	1.9	1.4
5-9	0.5	0.4	0.6	0.5	0.4	0.6	0.6	-	-
10-14	0.1	-	0.2	0.1	-	0.2	-	-	-
15-19	0.2	0.1	0.2	0.2	-	0.2	-	-	-
20-24	0.3	0.3	0.3	0.3	0.3	0.3	-	-	-
25-29	0.9	0.9	0.8	0.9	0.9	0.8	1.2	1.4	1.0
30-34	2.0	2.1	1.8	2.1	2.2	2.0	1.9	2.6	1.3
35-39	3.7	4.6	2.8	3.8	4.6	3.0	4.4	5.6	3.2
40-44	7.3	9.1	5.4	7.5	9.3	5.6	8.4	11.5	5.6
45-49	12.5	16.5	8.5	12.8	16.7	8.8	14.3	19.9	9.2
50-54	19.6	26.7	12.9	20.0	26.9	13.3	23.6	34.7	14.2
55-59	29.6	39.8	20.0	30.4	40.4	20.7	35.3	50.2	22.9
60-64	42.0	57.8	27.5	43.9	59.8	29.0	46.0	66.8	29.5
65-69	54.1	75.3	35.7	55.5	76.7	36.7	63.6	94.2	40.4
70-74	60.5	82.0	43.2	63.2	85.6	44.6	63.0	84.1	48.1
75-79	69.2	97.5	48.8	71.7	101.2	50.0	74.6	99.8	59.0
80-84	64.5	92.3	47.1	67.1	96.1	48.9	58.8	87.4	43.0
85+	50.1	77.0	37.4	51.5	80.3	38.0	48.3	73.9	37.5
U.S. Mortality									
Age at Death									
All ages	4.1	5.9	2.7	4.2	6.0	2.7	4.0	6.0	2.7
Under 65	1.4	2.1	0.8	1.5	2.1	0.9	1.6	2.5	0.9
65 and over	22.2	32.2	15.4	22.8	32.9	15.7	20.5	30.1	14.6
All ages (IARC world std) ^c	2.5	3.6	1.6	2.6	3.7	1.6	2.5	3.8	1.6
Age-Specific Rates, 2003-2007									
<1	0.1	-	-	-	-	-	-	-	-
1-4	0.1	0.1	0.1	0.1	0.1	0.1	-	-	-
5-9	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-
10-14	0.0	0.0	0.0	0.0	-	0.0	0.1	-	-
15-19	0.0	0.1	0.0	0.0	0.0	0.0	-	-	-
20-24	0.1	0.1	0.0	0.0	0.0	-	0.2	0.2	-
25-29	0.1	0.1	0.1	0.1	0.1	0.1	0.3	0.4	-
30-34	0.2	0.2	0.1	0.1	0.2	0.1	0.4	0.8	-
35-39	0.4	0.5	0.3	0.3	0.4	0.2	0.6	0.7	0.4
40-44	0.9	1.2	0.5	0.9	1.2	0.5	1.2	2.0	0.6
45-49	2.0	2.9	1.2	2.1	2.9	1.2	2.4	3.7	1.4
50-54	3.9	5.7	2.2	4.0	5.7	2.2	4.3	6.6	2.4
55-59	6.6	9.6	3.8	6.8	9.8	3.8	6.9	10.5	4.0
60-64	10.6	15.6	6.0	10.8	15.8	6.2	10.6	16.7	5.7
65-69	14.6	20.9	9.1	15.1	21.4	9.4	13.4	20.6	8.0
70-74	19.0	26.9	12.6	19.6	27.5	13.0	17.2	26.4	11.0
75-79	24.4	34.7	16.9	24.9	35.4	17.2	23.2	33.3	17.1
80-84	29.9	43.6	21.5	30.7	44.7	21.9	26.4	39.2	19.6
85+	33.2	50.2	25.5	33.8	51.6	25.7	31.3	42.7	26.7

^a SEER 17 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

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

Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^c Rates are per 100,000 and are age-adjusted to the IARC world standard population.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 11.8
Cancer of the Kidney and Renal Pelvis (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	37	36	39	38	38	37
1970-1973 ^a	-	-	-	46	44	50	44	40	49
1975-1977 ^b	51.1	51.2	51.0	50.8	51.1	50.4	49.8	48.4	52.2 ^f
1978-1980 ^b	54.0	53.7	54.5	53.7	53.9	53.2	57.5	52.0	64.5 ^f
1981-1983 ^b	51.3	52.2	49.9	51.2	52.3	49.3	51.9	51.7	52.0
1984-1986 ^b	55.9	56.4	55.1	56.1	56.7	55.1	54.1	50.8	59.1
1987-1989 ^b	57.9	58.2	57.5	58.5	59.2	57.5	55.9	53.4	58.6
1990-1992 ^b	61.4	61.4	61.3	62.0	62.2	61.6	57.6	55.7	59.7
1993-1995 ^b	62.8	62.7	63.0	63.3	63.8	62.6	58.6	55.5	63.1
1996-1998 ^b	64.0	64.0	63.9	63.5	63.7	63.2	67.6	68.2	65.9
1999-2006 ^b	69.6 ^e	69.0 ^e	70.6 ^e	69.9 ^e	69.4 ^e	70.6 ^e	67.0 ^e	65.2 ^e	69.5 ^e
5-Year Period Survival (Percent)^{cd}									
Year of Diagnosis:									
1999-2006	71.6	71.4	71.9	71.9	71.6	72.4	68.1	68.5	67.5
Stage Distribution (%) 1999-2006^c									
All Stages									
Number of cases	55,831	34,199	21,632	47,017	28,893	18,124	5,416	3,224	2,192
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	59	58	61	59	58	61	64	63	66
Regional	18	18	17	18	19	17	13	13	13
Distant	19	20	17	19	20	17	18	19	17
Unstaged	4	4	5	4	4	5	5	4	5
5-Year Relative Survival (Percent), 1999-2006^c									
Age at Diagnosis:									
Ages <45	81.7	80.0	84.2	82.9	81.1	85.5	73.7	70.1	77.9
Ages 45-54	75.0	72.9	79.1	75.2	72.9	79.9	70.8	69.6	73.2
Ages 55-64	69.6	68.7	71.4	70.2	69.3	72.0	65.2	63.7	68.2
Ages 65-74	65.5	64.9	66.4	65.4	64.8	66.5	64.7	65.2	63.5
Ages 75+	55.3	56.9	53.8	56.1	57.9	54.3	48.9	47.6	49.5
Ages <65	74.0	72.3	77.1	74.4	72.7	77.7	69.5	67.4	73.0
Ages 65+	61.4	62.0	60.5	61.6	62.3	60.7	59.1	60.2	57.7
Stage:									
All Stages	68.8	68.5	69.4	69.0	68.7	69.6	66.3	65.5	67.4
Localized	90.3	90.2	90.4	90.9	90.8	91.0	85.2	85.2	85.1
Regional	62.7	64.4	59.6	63.0	64.8	59.9	57.6	58.8	55.4
Distant	10.6	11.4	9.3	10.2	11.1	8.5	12.0	10.7	13.9
Unstaged	37.8	38.5	36.4	36.5	38.1	34.0	38.9	35.2	42.0 ^f

^a Based on End Results data from a series of hospital registries and one population-based registry.

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

^c Based on follow-up of patients into 2007.

^d Based on the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2006. The remaining 13 SEER Areas contribute cases for the entire period 1999-2006. Based on follow-up of patients into 2007.

^e Period survival provides a more up-to-date estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2004-2006: 0-1 year survival), (2003-2005: 1-2 year survival), (2002-2004: 2-3 year survival), (2001-2003: 3-4 year survival), (2000-2002: 4-5 years survival).

^f The difference between 1975-1977 and 1999-2006 is statistically significant ($p<.05$).

^g The standard error is between 5 and 10 percentage points.

⁻ The standard error is greater than 10 percentage points.

Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 11.9
Cancer of the Kidney and Renal Pelvis (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975-1979	1980-1984	1985-1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Survival Time																				
1-year	69.8	71.3	73.6	76.4	77.2	77.6	76.8	77.1	77.5	77.7	77.0	78.5	78.4	80.3	81.8	80.1	82.3	85.5	84.3	85.3
2-year	61.0	62.3	65.7	68.7	69.3	69.4	71.3	70.1	70.2	71.2	70.5	71.7	72.3	74.6	74.6	75.4	76.8	80.1	80.4	
3-year	57.1	57.8	61.5	66.1	65.1	66.7	67.4	67.7	66.2	68.2	66.7	68.5	68.3	70.2	71.7	72.1	74.1	77.2		
4-year	53.8	54.9	58.8	63.7	62.9	63.8	64.1	65.9	64.4	65.5	64.4	65.8	65.4	68.5	69.4	70.2	72.1			
5-year	51.9	53.3	57.0	61.0	61.4	61.7	62.4	63.2	62.7	64.0	63.0	64.8	63.6	66.8	67.9	68.8				
6-year	50.6	51.2	55.4	59.1	59.5	60.5	60.9	62.2	60.9	62.6	61.3	63.3	61.9	65.6	66.5					
7-year	48.9	50.4	54.1	57.0	58.9	58.2	60.6	60.9	59.7	61.2	59.9	61.7	60.6	64.1						
8-year	47.9	49.4	53.2	56.3	58.1	57.5	59.2	59.5	58.8	60.9	58.0	60.4	59.1							
9-year	47.0	48.4	52.1	55.4	56.8	56.4	58.4	59.1	57.6	60.5	56.5	59.6								
10-year	46.1	47.5	50.6	54.7	55.1	55.9	56.1	57.3	56.8	58.8	55.7									
11-year	45.6	46.5	49.4	53.8	54.0	54.0	55.0	56.1	54.9	58.0										
12-year	44.9	45.9	48.6	52.2	53.2	53.0	54.9	54.7	53.4											
13-year	44.5	45.5	47.9	51.5	52.9	51.8	54.2	53.5												
14-year	43.7	45.1	46.9	50.2	51.8	51.3	53.1													
15-year	43.1	45.1	46.3	48.7	51.8	50.7														
16-year	42.9	45.0	45.7	48.7	51.3															
17-year	42.8	44.8	45.1	48.4																
18-year	42.0	44.5	44.7																	
19-year	41.2	43.9																		
20-year	40.9	43.4																		

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

Table 11.10
Cancer of the Kidney and Renal Pelvis (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Survival Time																				
1-year	70.5	71.4	74.1	78.0	78.8	78.8	78.0	77.0	79.8	78.6	78.6	79.0	77.9	79.6	81.2	80.5	81.2	86.0	84.3	85.0
2-year	61.4	62.5	66.1	69.7	69.8	69.7	71.6	69.3	71.6	72.5	71.4	72.4	71.4	73.5	74.1	75.6	76.6	81.0	80.7	
3-year	57.1	58.1	62.2	67.1	66.2	66.9	67.8	66.6	67.6	68.9	67.3	68.8	67.4	68.4	71.0	71.5	74.3	78.0		
4-year	53.7	55.3	59.2	64.1	64.5	63.3	64.3	64.9	64.9	65.9	64.7	65.9	64.3	66.6	68.3	69.2	71.8			
5-year	52.0	53.6	57.4	61.0	62.7	60.6	62.2	62.5	63.1	64.3	62.7	64.8	62.4	64.0	66.7	68.2				
6-year	50.6	51.5	55.3	58.4	60.0	59.8	60.4	61.8	60.3	63.5	60.3	62.8	60.1	63.0	64.9					
7-year	48.6	50.5	53.9	56.2	59.1	57.4	60.0	60.5	59.5	62.0	58.9	60.9	58.7	61.2						
8-year	47.3	49.6	52.7	55.3	57.7	56.7	58.9	59.1	58.2	61.1	55.7	59.0	57.1							
9-year	46.5	48.5	51.1	54.4	56.7	55.8	58.0	58.9	57.3	60.8	54.1	58.4								
10-year	45.3	47.6	49.9	53.5	54.9	55.1	55.5	57.4	56.1	58.4	53.5									
11-year	44.6	46.6	48.1	52.0	53.3	53.2	54.8	56.1	54.9	57.8										
12-year	43.7	46.0	46.9	50.3	52.7	52.2	54.8	54.8	52.5											
13-year	43.2	45.7	46.0	49.7	52.4	50.7	53.6	53.2												
14-year	42.3	44.8	45.1	48.8	50.5	50.0	52.4													
15-year	41.4	44.8	44.6	47.4	50.4	49.2														
16-year	41.1	44.3	43.6	47.4	49.0															
17-year	41.0	44.3	43.1	47.4																
18-year	40.3	44.2	42.6																	
19-year	39.6	43.5																		
20-year	39.0	42.8																		

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

Table 11.11
Cancer of the Kidney and Renal Pelvis (Invasive)

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975-1979	1980-1984	1985-1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Survival Time																				
1-year	68.7	71.2	72.8	73.9	74.7	75.8	75.1	77.4	73.9	76.3	74.5	77.6	79.3	81.5	82.8	79.4	84.1	84.8	84.3	85.7
2-year	60.4	62.0	65.0	67.2	68.5	68.9	70.7	71.2	68.0	69.1	69.1	70.6	73.8	76.5	75.4	75.2	77.2	78.6	80.0	
3-year	57.0	57.2	60.5	64.5	63.3	66.4	66.7	69.1	64.0	67.2	65.9	68.2	69.8	72.9	72.9	73.1	73.7	76.0		
4-year	54.1	54.2	58.2	63.1	60.4	64.6	63.9	67.3	63.6	64.7	64.0	65.8	67.3	71.7	70.8	71.8	72.5			
5-year	51.8	52.7	56.4	61.0	59.4	63.5	62.7	64.3	61.9	63.5	63.0	64.8	65.4	71.5	69.8	69.9				
6-year	50.6	50.8	55.5	60.3	58.8	61.7	61.3	62.9	61.5	61.2	62.7	64.0	64.8	69.7	69.1					
7-year	49.4	50.1	54.5	58.1	58.6	59.3	61.1	61.4	60.1	60.0	61.6	62.9	63.1	68.7						
8-year	48.8	49.1	54.0	57.7	58.4	58.5	59.6	60.0	59.4	59.9	61.0	62.4	62.2							
9-year	47.6	48.2	53.6	56.9	56.8	57.2	59.1	59.1	57.7	59.9	60.3	61.3								
10-year	47.5	47.5	51.8	56.1	55.4	57.0	56.7	57.2	57.7	59.3	58.9									
11-year	47.2	46.4	51.4	56.1	54.8	55.1	55.2	55.9	55.0	58.5										
12-year	46.9	45.8	51.0	55.0	54.1	54.0	54.8	54.6	54.7											
13-year	46.7	45.3	50.8	54.2	53.7	53.3	54.7	53.8												
14-year	45.9	45.1	49.6	51.7	53.7	53.2	54.0													
15-year	45.7	45.1	48.8	50.4	53.7	52.6														
16-year	45.5	45.1	48.8	49.2	53.7															
17-year	45.3	45.1	48.0	47.4																
18-year	44.5	45.1	47.7																	
19-year	43.7	44.3																		
20-year	43.7	44.2																		

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

Table 11.12

Cancer of the Kidney and Renal Pelvis (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
 Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
 Lifetime Risk of Dying from Cancer Given Alive at Current Age
 Both Sexes, 2005-2007 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer						Risk of Being Diagnosed with Cancer						Risk of Dying from Cancer		Risk of Dying from Cancer		
		+10 yrs			+20 yrs			+30 yrs			Ever							
All Races	0	0.01	0.01	0.02	1.49	0.47		Asian/	0	0.01	0.01	0.01	0.95	0.34				
	10	0.00	0.01	0.04	1.50	0.47		Pacific	10	0.00	0.01	0.02	0.95	0.34				
	20	0.01	0.04	0.13	1.50	0.47		Islander	20	0.00	0.02	0.07	0.95	0.34				
	30	0.03	0.13	0.36	1.51	0.48			30	0.01	0.07	0.19	0.95	0.34				
	40	0.10	0.33	0.74	1.50	0.48			40	0.05	0.17	0.41	0.95	0.34				
	50	0.24	0.66	1.13	1.44	0.48			50	0.12	0.36	0.64	0.91	0.34				
	60	0.45	0.94	1.22	1.27	0.46			60	0.24	0.54	0.75	0.81	0.33				
	70	0.57	0.88	-	0.95	0.39			70	0.32	0.55	-	0.62	0.30				
	80	0.44	-	-	0.53	0.29			80	0.28	-	-	0.36	0.24				
White	0	0.01	0.01	0.02	1.55	0.48		American	0	0.01	0.02	0.04	1.68	0.60				
	10	0.00	0.01	0.04	1.55	0.49		Indian/	10	0.01	0.03	0.08	1.69	0.61				
	20	0.01	0.04	0.14	1.56	0.49		Alaska	20	0.02	0.07	0.19	1.70	0.62				
	30	0.03	0.13	0.37	1.57	0.49		Native ^a	30	0.05	0.17	0.42	1.71	0.63				
	40	0.10	0.34	0.77	1.55	0.50			40	0.12	0.38	0.85	1.70	0.64				
	50	0.25	0.68	1.17	1.49	0.49			50	0.27	0.76	1.33	1.65	0.65				
	60	0.46	0.98	1.26	1.32	0.47			60	0.53	1.14	1.45	1.49	0.62				
	70	0.59	0.91	-	0.98	0.40			70	0.71	1.07	-	1.12	0.54				
	80	0.45	-	-	0.54	0.30			80	0.51	-	-	0.57	0.39				
Black	0	0.01	0.01	0.02	1.34	0.38		Hispanic ^b	0	0.01	0.01	0.02	1.55	0.48				
	10	0.00	0.01	0.04	1.36	0.39			10	0.00	0.01	0.03	1.56	0.49				
	20	0.01	0.04	0.14	1.37	0.39			20	0.01	0.03	0.12	1.56	0.49				
	30	0.03	0.14	0.39	1.38	0.39			30	0.03	0.11	0.32	1.57	0.49				
	40	0.11	0.37	0.77	1.38	0.40			40	0.09	0.30	0.70	1.56	0.50				
	50	0.27	0.70	1.12	1.34	0.40			50	0.22	0.63	1.12	1.51	0.49				
	60	0.48	0.94	1.15	1.19	0.38			60	0.43	0.95	1.28	1.35	0.47				
	70	0.58	0.84	-	0.89	0.34			70	0.57	0.94	-	1.03	0.41				
	80	0.40	-	-	0.48	0.27			80	0.48	-	-	0.59	0.31				

Devcan Version 6.5.0, June 2010, National Cancer Institute (<http://srab.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Mortality data are from the NCHS public use data file for the total US.

^a Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire and North Dakota. Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 11.13

Cancer of the Kidney and Renal Pelvis (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
 Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
 Lifetime Risk of Dying from Cancer Given Alive at Current Age
 Males, 2005-2007 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer						Risk of Being Diagnosed with Cancer						Risk of Dying from Cancer		Risk of Being Diagnosed with Cancer						
		+10 yrs			+20 yrs			+30 yrs			Ever					+10 yrs			+20 yrs			
All Races	0	0.01	0.01	0.02	1.88	0.60		Asian/	0	0.01	0.01	0.01	1.20	0.41		0.01	0.01	0.01	1.20	0.41		
	10	0.00	0.01	0.04	1.89	0.60		Pacific	10	0.00	0.01	0.02	1.21	0.41		0.00	0.01	0.02	1.21	0.41		
	20	0.01	0.04	0.17	1.90	0.61		Islander	20	0.01	0.02	0.10	1.21	0.42		0.01	0.02	0.10	1.21	0.42		
	30	0.04	0.16	0.47	1.92	0.62			30	0.02	0.09	0.25	1.21	0.42		0.02	0.09	0.25	1.21	0.42		
	40	0.13	0.44	0.98	1.92	0.62			40	0.08	0.24	0.56	1.21	0.42		0.08	0.24	0.56	1.21	0.42		
	50	0.32	0.88	1.48	1.85	0.62			50	0.17	0.49	0.87	1.15	0.42		0.17	0.49	0.87	1.15	0.42		
	60	0.60	1.25	1.59	1.65	0.60			60	0.34	0.74	0.97	1.03	0.40		0.34	0.74	0.97	1.03	0.40		
	70	0.76	1.16	-	1.24	0.52			70	0.44	0.69	-	0.76	0.35		0.44	0.69	-	0.76	0.35		
	80	0.60	-	-	0.71	0.40			80	0.33	-	-	0.42	0.27		0.33	-	-	0.42	0.27		
White	0	0.01	0.01	0.02	1.95	0.62		American	0	0.01	0.02	0.04	1.86	0.80		0.01	0.02	0.04	1.86	0.80		
	10	0.00	0.01	0.04	1.96	0.62		Indian/	10	0.01	0.03	0.09	1.88	0.82		0.01	0.03	0.09	1.88	0.82		
	20	0.01	0.04	0.17	1.97	0.63		Alaska	20	0.02	0.09	0.22	1.89	0.83		0.02	0.09	0.22	1.89	0.83		
	30	0.04	0.17	0.48	1.99	0.63		Native ^a	30	0.07	0.20	0.51	1.92	0.85		0.07	0.20	0.51	1.92	0.85		
	40	0.13	0.45	1.01	1.99	0.64			40	0.14	0.46	1.02	1.92	0.88		0.14	0.46	1.02	1.92	0.88		
	50	0.33	0.91	1.53	1.92	0.64			50	0.34	0.94	1.61	1.89	0.90		0.34	0.94	1.61	1.89	0.90		
	60	0.62	1.29	1.64	1.71	0.61			60	0.66	1.40	1.69	1.70	0.89		0.66	1.40	1.69	1.70	0.89		
	70	0.79	1.21	-	1.28	0.53			70	0.89	1.25	-	1.26	0.84		0.89	1.25	-	1.26	0.84		
	80	0.62	-	-	0.74	0.40			80	0.52	-	-	0.54	0.64		0.52	-	-	0.54	0.64		
Black	0	0.01	0.01	0.02	1.64	0.48		Hispanic ^b	0	0.01	0.01	0.01	1.88	0.63		0.01	0.01	0.01	1.88	0.63		
	10	0.00	0.01	0.05	1.67	0.49			10	0.00	0.01	0.03	1.89	0.63		0.00	0.01	0.03	1.89	0.63		
	20	0.01	0.05	0.19	1.69	0.49			20	0.01	0.03	0.13	1.90	0.64		0.01	0.03	0.13	1.90	0.64		
	30	0.04	0.18	0.53	1.72	0.50			30	0.03	0.13	0.40	1.92	0.64		0.03	0.13	0.40	1.92	0.64		
	40	0.15	0.50	1.06	1.73	0.51			40	0.10	0.38	0.91	1.92	0.65		0.10	0.38	0.91	1.92	0.65		
	50	0.38	0.97	1.44	1.68	0.51			50	0.29	0.83	1.45	1.87	0.65		0.29	0.83	1.45	1.87	0.65		
	60	0.68	1.23	1.48	1.50	0.49			60	0.58	1.24	1.64	1.69	0.62		0.58	1.24	1.64	1.69	0.62		
	70	0.73	1.05	-	1.09	0.43			70	0.76	1.22	-	1.27	0.55		0.76	1.22	-	1.27	0.55		
	80	0.57	-	-	0.63	0.35			80	0.63	-	-	0.71	0.40		0.63	-	-	0.71	0.40		

Devcan Version 6.5.0, June 2010, National Cancer Institute (<http://srab.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Mortality data are from the NCHS public use data file for the total US.

^a Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire and North Dakota.

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 11.14

Cancer of the Kidney and Renal Pelvis (Invasive)

Risk of Being Diagnosed With Cancer in 10, 20 and 30 Years,
 Lifetime Risk of Being Diagnosed with Cancer Given Alive and Cancer-Free at Current Age, and
 Lifetime Risk of Dying from Cancer Given Alive at Current Age
 Females, 2005-2007 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.01	0.01	0.02	1.13	0.35	Asian/ Pacific Islander	0	0.00	0.00	0.01	0.73	0.27	
	10	0.00	0.01	0.03	1.13	0.35		10	0.00	0.01	0.01	0.73	0.27	
	20	0.01	0.03	0.10	1.14	0.35		20	0.00	0.01	0.05	0.73	0.27	
	30	0.02	0.09	0.25	1.13	0.35		30	0.01	0.04	0.12	0.73	0.27	
	40	0.07	0.23	0.51	1.12	0.36		40	0.03	0.12	0.27	0.72	0.27	
	50	0.16	0.45	0.80	1.07	0.35		50	0.08	0.24	0.45	0.70	0.27	
	60	0.30	0.67	0.90	0.95	0.34		60	0.16	0.38	0.57	0.63	0.27	
	70	0.41	0.67	-	0.73	0.30		70	0.23	0.44	-	0.50	0.26	
	80	0.33	-	-	0.41	0.23		80	0.24	-	-	0.32	0.22	
White	0	0.01	0.02	0.02	1.17	0.36	American Indian/ Alaska Native ^a	0	0.01	0.02	0.04	1.50	0.42	
	10	0.00	0.01	0.04	1.17	0.36		10	0.00	0.03	0.06	1.50	0.42	
	20	0.01	0.03	0.11	1.17	0.36		20	0.02	0.05	0.16	1.50	0.42	
	30	0.03	0.10	0.26	1.17	0.36		30	0.03	0.14	0.33	1.50	0.43	
	40	0.07	0.24	0.53	1.15	0.37		40	0.10	0.30	0.69	1.49	0.43	
	50	0.17	0.47	0.83	1.10	0.36		50	0.21	0.60	1.07	1.43	0.43	
	60	0.31	0.69	0.93	0.98	0.35		60	0.42	0.91	1.23	1.29	0.41	
	70	0.42	0.68	-	0.74	0.31		70	0.56	0.93	-	1.00	0.31	
	80	0.34	-	-	0.42	0.23		80	0.49	-	-	0.59	0.24	
Black	0	0.01	0.01	0.02	1.07	0.30	Hispanic ^b	0	0.01	0.01	0.02	1.25	0.36	
	10	0.00	0.01	0.03	1.08	0.30		10	0.00	0.01	0.03	1.25	0.36	
	20	0.01	0.03	0.10	1.08	0.30		20	0.01	0.03	0.10	1.25	0.36	
	30	0.02	0.09	0.27	1.09	0.30		30	0.03	0.09	0.24	1.25	0.36	
	40	0.07	0.25	0.52	1.08	0.31		40	0.07	0.22	0.50	1.23	0.36	
	50	0.18	0.47	0.84	1.05	0.31		50	0.15	0.44	0.82	1.18	0.36	
	60	0.31	0.71	0.89	0.94	0.30		60	0.30	0.69	0.97	1.07	0.34	
	70	0.47	0.69	-	0.74	0.28		70	0.43	0.73	-	0.84	0.31	
	80	0.31	-	-	0.39	0.23		80	0.38	-	-	0.51	0.24	

Devcan Version 6.5.0, June 2010, National Cancer Institute (<http://srab.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey). Mortality data are from the NCHS public use data file for the total US.

^a Underlying incidence and mortality data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^b Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

Underlying mortality data for Hispanics exclude deaths from the District of Columbia, Minnesota, New Hampshire and North Dakota.

- Statistic could not be calculated.

A percent of 0.00 represents a value that is below 0.005.

Table 11.15
Cancer of the Kidney and Renal Pelvis (Invasive)

SEER Incidence and U.S. Mortality
Age-Adjusted Rates and Trends^a
By Race/Ethnicity and Sex

SEER Incidence	SEER 17 Areas ^b			SEER 13 Areas ^b			SEER 9 Areas ^b		
	Rate 2003-2007			Trend 1998-2007 ^c			Trend 1998-2007 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	14.1	19.2	9.9	2.5*	1.9*	2.3*	2.6*	1.8*	2.3*
White	14.5	19.7	10.2	2.2*	1.9*	2.4*	2.7*	1.7*	3.3*
White Hispanic ^e	13.8	18.1	10.3	2.4*	2.0*	2.7*	-	-	-
White Non-Hispanic ^e	14.7	20.1	10.2	2.2*	1.9*	2.8*	-	-	-
Black	15.4	21.8	10.7	2.0*	1.8*	2.1*	2.7*	2.6*	2.8*
Asian/Pacific Islander	7.3	10.2	5.1	2.6*	2.1*	3.5*	-	-	-
Amer Ind/Alaska Nat ^f	17.4	21.2	14.1	0.8	0.2	-	-	-	-
Hispanic ^e	13.3	17.5	10.0	2.5*	2.2*	2.7*	-	-	-
U.S. Mortality ^g	Rate 2003-2007			Trend 1998-2007 ^h			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	4.1	5.9	2.7	-0.4*	-0.8*	-0.6*			
White	4.2	6.0	2.7	-0.3*	-0.8*	-0.5*			
White Hispanic ^e	3.8	5.4	2.5	0.1	0.1	-0.2			
White Non-Hispanic ^e	4.2	6.0	2.8	-0.3*	-0.8*	-0.5*			
Black	4.0	6.0	2.7	-0.3	-0.3	-0.5			
Asian/Pacific Islander	1.8	2.6	1.2	0.2	-0.3	0.4			
Amer Ind/Alaska Nat									
Total U.S.	4.4	6.5	2.7	-0.8	-0.1	-2.6*			
CHSDA Counties	6.0	8.8	3.8	-0.4	0.0	-1.7			
Non-CHSDA Counties	2.4	3.7	1.4	-	-	-			
Hispanic ^e	3.6	5.2	2.4	0.1	0.1	-0.1			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute.

* Statistic not shown. Rate based on less than 16 cases for the time interval.

Trend based on less than 10 cases for at least one year within the time interval.

^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

^c The 1998-2007 AAPC estimates are based on a Joinpoint analysis with up to 2 Joinpoints over diagnosis years 1992-2007.

^d The 1998-2007 AAPC estimates are based on a Joinpoint analysis with up to 4 Joinpoints over diagnosis years 1975-2007.

^e Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2003-2007 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, New Hampshire, and North Dakota. The 1998-2007 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma and Vermont.

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

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

^h The 1998-2007 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2007.

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

Table 11.16
Cancer of the Kidney and Renal Pelvis (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
SEER Incidence Rates^a, 2003-2007									
Atlanta & Rural Georgia	12.03	16.20	8.77	11.94	16.37	8.38	13.21	17.35	10.24
Atlanta	12.10	16.24	8.85	11.87	16.20	8.36	13.72	18.13	10.61
Rural Georgia	11.26	15.97	7.72	13.78	19.76	9.32	6.69	-	-
California	12.66	17.52	8.65	13.45	18.51	9.22	14.51	20.62	9.74
Greater Bay Area	11.72	16.11	8.07	12.63	17.22	8.74	15.71	21.26	11.37
San Francisco-Oakland	11.66	15.90	8.17	12.54	17.12	8.64	15.70	21.18	11.57
San Jose-Monterey	11.83	16.53	7.88	12.80	17.47	8.91	15.10	20.60	-
Los Angeles	11.83	16.51	8.08	12.81	17.89	8.66	12.78	18.31	8.86
Greater California	13.42	18.53	9.15	13.97	19.18	9.60	15.76	22.73	9.72
Connecticut	14.92	20.36	10.56	15.04	20.33	10.77	14.21	21.10	9.06
Detroit	15.70	21.16	11.40	15.27	20.40	11.17	17.54	24.70	12.41
Hawaii	11.73	16.60	7.45	13.07	18.37	7.74	18.67	-	-
Iowa	16.32	21.93	11.68	16.07	21.56	11.55	20.15	32.93	-
Kentucky	17.35	23.43	12.49	17.25	23.20	12.47	20.33	29.12	13.79
Louisiana	18.06	23.99	13.33	18.68	24.56	13.82	16.81	22.79	12.54
New Jersey	15.20	21.24	10.43	15.65	21.78	10.75	14.41	20.98	9.82
New Mexico	12.64	16.56	9.27	12.32	16.21	8.95	8.65	-	-
Seattle-Puget Sound	15.38	20.80	10.76	15.49	20.85	10.89	20.28	29.75	10.60
Utah	10.76	13.91	8.04	10.94	14.11	8.20	-	-	-
9 SEER Areas ^b	13.87	18.70	9.90	14.12	18.93	10.10	15.75	22.09	11.05
11 SEER Areas ^b	13.29	18.08	9.37	13.76	18.62	9.73	15.04	21.17	10.51
13 SEER Areas ^b	13.30	18.08	9.38	13.77	18.62	9.73	14.92	20.99	10.43
17 SEER Areas ^b	14.05	19.19	9.86	14.52	19.74	10.21	15.43	21.78	10.74

^a Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130)
^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 11.17
Cancer of the Kidney and Renal Pelvis (Invasive)

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
SEER Death Rates^a, 2003-2007									
Atlanta & Rural Georgia	3.56	5.29	2.36	3.54	5.32	2.28	3.95	5.75	2.77
Atlanta	3.58	5.33	2.35	3.51	5.27	2.23	4.18	6.17	2.89
Rural Georgia	3.18	-	-	3.95	-	-	-	-	-
California	3.65	5.32	2.35	3.90	5.66	2.51	3.97	5.99	2.47
Greater Bay Area	3.06	4.45	1.98	3.43	5.00	2.21	3.57	4.78	2.58
San Francisco-Oakland	3.07	4.45	2.00	3.45	4.98	2.27	3.56	4.95	2.46
San Jose-Monterey	3.07	4.47	1.97	3.42	5.04	2.14	-	-	-
Los Angeles	3.48	5.07	2.26	3.65	5.27	2.40	4.06	6.54	2.35
Greater California	3.95	5.76	2.54	4.14	6.02	2.66	4.06	6.06	2.46
Connecticut	3.49	4.97	2.41	3.48	4.99	2.38	4.09	5.38	3.15
Detroit	3.92	5.58	2.75	4.01	5.69	2.81	3.73	5.26	2.72
Hawaii	2.59	3.70	1.67	2.97	4.55	-	-	-	-
Iowa	4.87	6.82	3.37	4.93	6.91	3.39	-	-	-
Kentucky	4.71	7.03	2.95	4.78	7.17	2.95	3.94	5.23	3.15
Louisiana	5.27	7.44	3.60	5.26	7.40	3.59	5.47	7.78	3.82
New Jersey	3.63	5.31	2.40	3.77	5.46	2.52	3.18	5.32	1.78
New Mexico	4.45	6.21	3.00	4.33	5.91	3.02	-	-	-
Seattle-Puget Sound	3.91	5.58	2.62	3.99	5.63	2.72	4.15	5.56	-
Utah	3.23	4.34	2.27	3.25	4.37	2.29	-	-	-
9 SEER Areas ^b	3.74	5.31	2.55	3.90	5.52	2.66	3.86	5.45	2.74
11 SEER Areas ^b	3.65	5.21	2.45	3.83	5.44	2.58	3.90	5.69	2.64
13 SEER Areas ^b	3.65	5.22	2.45	3.83	5.44	2.58	3.86	5.63	2.62
17 SEER Areas ^b	3.87	5.59	2.56	4.04	5.80	2.67	4.06	5.99	2.71
Total U.S.	4.08	5.89	2.69	4.16	5.98	2.74	4.01	5.98	2.65

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.
The SEER 11 areas comprise the SEER 9 areas plus San Jose-Monterey and Los Angeles.

The SEER 13 areas comprise the SEER 11 areas plus the Alaska Native Registry and Rural Georgia.

The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

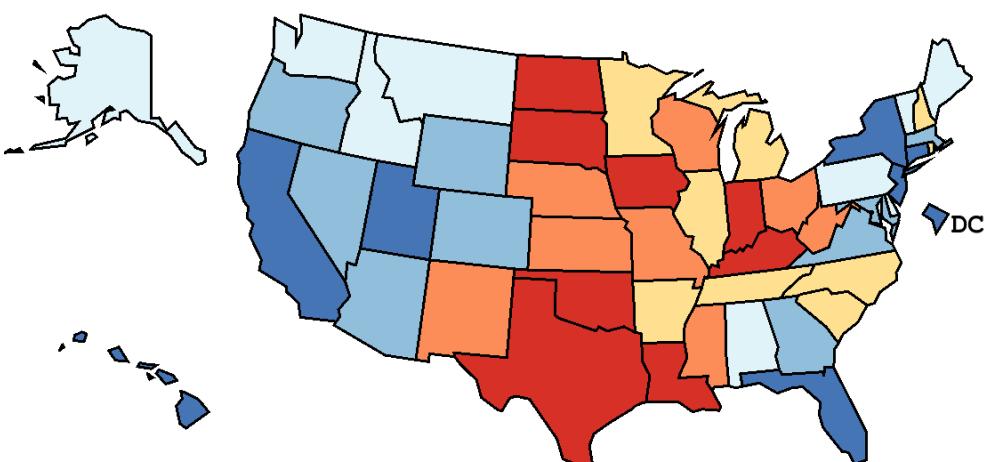
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 11.18
Cancer of the Kidney and Renal Pelvis (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2003-2007

Males and Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	4.08	0.02							
High Five States									
Louisiana	5.27 ^b	0.16	(01)	29.22 ^c					
North Dakota	5.15	0.38	(02)	26.22 ^c					
Oklahoma	5.09 ^b	0.16	(03)	24.96 ^c					
South Dakota	4.89	0.33	(04)	19.96 ^c					
Iowa	4.87 ^b	0.17	(05)	19.45 ^c					
Low Five States									
Connecticut	3.49 ^b	0.13	(47)	-14.40					
New York	3.44 ^b	0.06	(48)	-15.60 ^c					
Utah	3.23 ^b	0.19	(49)	-20.87 ^c					
D.C.	2.91 ^b	0.32	(50)	-28.62 ^c					
Hawaii	2.59 ^b	0.19	(51)	-36.48 ^c					



Age-Adjusted Death
Rates per 100,000
Quantile Interval

- 4.61 - 5.27
- 4.44 - 4.60
- 4.21 - 4.43
- 3.98 - 4.20
- 3.66 - 3.97
- 2.59 - 3.65

U. S. Rate: 4.08

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b Difference between state rate and total U.S. rate is statistically significant ($p \leq .0002$).

^c Absolute percent difference between state rate and total U.S. rate is 15% or more.

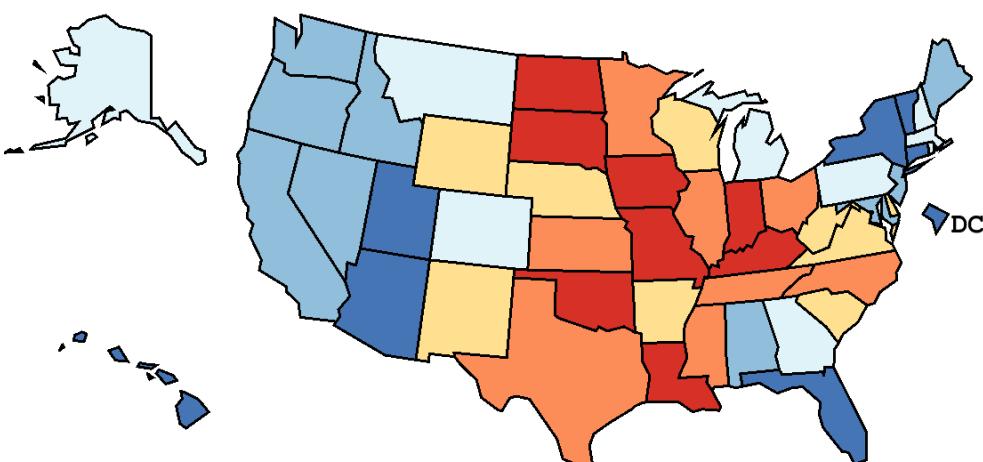
SE Standard error of the rate.

PD Percent difference between state rate and total U.S. rate.

Table 11.19
Cancer of the Kidney and Renal Pelvis (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2003-2007

Males									
State	Rate	SE	Rank	PD					
TOTAL U.S.	5.89	0.03							
High Five States									
North Dakota	7.46	0.68	(01)	26.80 ^c					
Louisiana	7.44 ^b	0.29	(02)	26.39 ^c					
South Dakota	7.42	0.62	(03)	26.06 ^c					
Oklahoma	7.25 ^b	0.30	(04)	23.10 ^c					
Kentucky	7.03 ^b	0.28	(05)	19.37 ^c					
Low Five States									
New York	5.06 ^b	0.11	(47)	-14.08					
Connecticut	4.97 ^b	0.25	(48)	-15.54 ^c					
Utah	4.34 ^b	0.32	(49)	-26.26 ^c					
D.C.	3.98	0.58	(50)	-32.45 ^c					
Hawaii	3.70 ^b	0.34	(51)	-37.12 ^c					
State	Rate	SE	Rank	PD	State				
Alabama	5.66	0.24	(37)	-3.79	Montana	5.79	0.50	(32)	-1.62
Alaska	5.99	0.85	(27)	1.70	Nebraska	6.14	0.39	(22)	4.33
Arizona	5.27	0.19	(44)	-10.44	Nevada	5.56	0.33	(39)	-5.59
Arkansas	6.09	0.30	(24)	3.38	New Hampshire	5.85	0.46	(31)	-0.59
California	5.32 ^b	0.09	(42)	-9.54	New Jersey	5.31	0.17	(43)	-9.84
Colorado	5.73	0.26	(34)	-2.69	New Mexico	6.21	0.38	(20)	5.54
Connecticut	4.97 ^b	0.25	(48)	-15.54 ^c	New York	5.06 ^b	0.11	(47)	-14.08
Delaware	6.21	0.57	(19)	5.55	North Carolina	6.43	0.19	(13)	9.30
D.C.	3.98	0.58	(50)	-32.45 ^c	North Dakota	7.46	0.68	(01)	26.80 ^c
Florida	5.12 ^b	0.10	(46)	-12.98	Ohio	6.54 ^b	0.16	(11)	11.16
Georgia	5.78	0.20	(33)	-1.80	Oklahoma	7.25 ^b	0.30	(04)	23.10 ^c
Hawaii	3.70 ^b	0.34	(51)	-37.12 ^c	Oregon	5.45	0.25	(41)	-7.34
Idaho	5.65	0.43	(38)	-4.05	Pennsylvania	5.90	0.14	(29)	0.26
Illinois	6.33	0.16	(15)	7.57	Rhode Island	5.88	0.49	(30)	-0.10
Indiana	6.67	0.22	(08)	13.23	South Carolina	6.20	0.26	(21)	5.41
Iowa	6.82	0.30	(06)	15.92 ^c	South Dakota	7.42	0.62	(03)	26.06 ^c
Kansas	6.64	0.33	(10)	12.76	Tennessee	6.45	0.23	(12)	9.58
Kentucky	7.03 ^b	0.28	(05)	19.37 ^c	Texas	6.66 ^b	0.13	(09)	13.13
Louisiana	7.44 ^b	0.29	(02)	26.39 ^c	Utah	4.34 ^b	0.32	(49)	-26.26 ^c
Maine	5.70	0.41	(35)	-3.09	Vermont	5.23	0.60	(45)	-11.21
Maryland	5.54	0.22	(40)	-5.90	Virginia	6.04	0.20	(25)	2.59
Massachusetts	5.97	0.20	(28)	1.50	Washington	5.67	0.21	(36)	-3.72
Michigan	5.99	0.17	(26)	1.76	West Virginia	6.11	0.36	(23)	3.88
Minnesota	6.32	0.24	(16)	7.31	Wisconsin	6.29	0.22	(17)	6.85
Mississippi	6.40	0.33	(14)	8.76	Wyoming	6.26	0.73	(18)	6.28
Missouri	6.70 ^b	0.23	(07)	13.84					



Age-Adjusted Death
Rates per 100,000
Quantile Interval

- 6.67 - 7.46
- 6.30 - 6.66
- 6.00 - 6.29
- 5.71 - 5.99
- 5.28 - 5.70
- 3.70 - 5.27

U. S. Rate: 5.89

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b Difference between state rate and total U.S. rate is statistically significant ($p \leq .0002$).

^c Absolute percent difference between state rate and total U.S. rate is 15% or more.

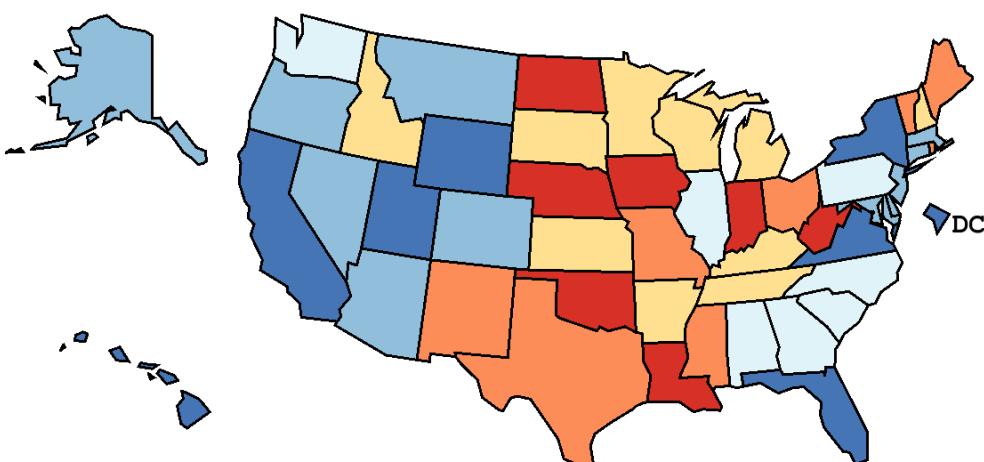
SE Standard error of the rate.

PD Percent difference between state rate and total U.S. rate.

Table 11.20
Cancer of the Kidney And Renal Pelvis (Invasive)

Age-Adjusted Cancer Death^a Rates By State, All Races, 2003-2007

Females				
State	Rate	SE	Rank	PD
TOTAL U.S.	2.69	0.02		
High Five States				
Louisiana	3.60 ^b	0.17	(01)	34.08 ^c
Iowa	3.37 ^b	0.19	(02)	25.29 ^c
Oklahoma	3.34 ^b	0.18	(03)	24.38 ^c
North Dakota	3.34	0.42	(04)	24.29 ^c
Indiana	3.28 ^b	0.13	(05)	22.17 ^c
Low Five States				
New York	2.26 ^b	0.06	(47)	-15.80 ^c
Florida	2.19 ^b	0.06	(48)	-18.64 ^c
D.C.	1.98	0.34	(49)	-26.14 ^c
Hawaii	1.67 ^b	0.21	(50)	-37.82 ^c
Wyoming	1.60	0.34	(51)	-40.52 ^c
State	Rate	SE	Rank	PD
Alabama	2.67	0.14	(31)	-0.57
Alaska	2.56	0.52	(34)	-4.72
Arizona	2.50	0.12	(37)	-6.84
Arkansas	2.92	0.18	(21)	8.79
California	2.35 ^b	0.05	(44)	-12.48
Colorado	2.44	0.15	(39)	-9.16
Connecticut	2.41	0.15	(41)	-10.12
Delaware	2.56	0.32	(33)	-4.57
D.C.	1.98	0.34	(49)	-26.14 ^c
Florida	2.19 ^b	0.06	(48)	-18.64 ^c
Georgia	2.70	0.11	(30)	0.70
Hawaii	1.67 ^b	0.21	(50)	-37.82 ^c
Idaho	2.82	0.28	(25)	5.05
Illinois	2.75	0.09	(28)	2.52
Indiana	3.28 ^b	0.13	(05)	22.17 ^c
Iowa	3.37 ^b	0.19	(02)	25.29 ^c
Kansas	2.92	0.19	(20)	8.88
Kentucky	2.95	0.15	(19)	9.82
Louisiana	3.60 ^b	0.17	(01)	34.08 ^c
Maine	3.02	0.27	(14)	12.33
Maryland	2.52	0.13	(36)	-6.13
Massachusetts	2.41	0.11	(40)	-10.11
Michigan	2.96	0.10	(18)	10.24
Minnesota	2.91	0.14	(22)	8.28
Mississippi	3.10	0.19	(09)	15.45 ^c
Missouri	3.06	0.13	(13)	13.76
Montana	2.56	0.30	(35)	-4.72
Nebraska	3.25	0.25	(06)	21.13 ^c
Nevada	2.50	0.21	(38)	-6.85
New Hampshire	2.98	0.28	(17)	10.82
New Jersey	2.40	0.09	(43)	-10.65
New Mexico	3.00	0.24	(15)	11.69
New York	2.26 ^b	0.06	(47)	-15.80 ^c
North Carolina	2.67	0.10	(32)	-0.74
North Dakota	3.34	0.42	(04)	24.29 ^c
Ohio	3.10 ^b	0.09	(08)	15.57 ^c
Oklahoma	3.34 ^b	0.18	(03)	24.38 ^c
Oregon	2.40	0.15	(42)	-10.63
Pennsylvania	2.80	0.08	(26)	4.18
Rhode Island	3.08	0.30	(11)	14.68
South Carolina	2.80	0.15	(27)	4.12
South Dakota	2.85	0.35	(23)	6.15
Tennessee	2.82	0.13	(24)	5.14
Texas	3.10 ^b	0.08	(10)	15.43 ^c
Utah	2.27	0.21	(46)	-15.45 ^c
Vermont	3.08	0.41	(12)	14.68
Virginia	2.33	0.11	(45)	-13.21
Washington	2.73	0.13	(29)	1.55
West Virginia	3.19	0.22	(07)	18.73 ^c
Wisconsin	2.98	0.13	(16)	10.94
Wyoming	1.60	0.34	(51)	-40.52 ^c



Age-Adjusted Death
Rates per 100,000
Quantile Interval

- 3.11 - 3.60
- 2.99 - 3.10
- 2.81 - 2.98
- 2.57 - 2.80
- 2.36 - 2.56
- 1.60 - 2.35

U. S. Rate: 2.69

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b Difference between state rate and total U.S. rate is statistically significant ($p \leq .0002$).

^c Absolute percent difference between state rate and total U.S. rate is 15% or more.

SE Standard error of the rate.

PD Percent difference between state rate and total U.S. rate.

Table 11.21
Cancer of the Kidney And Renal Pelvis (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2007
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <17 ^e	0 to <32 ^e	>=32 ^g	Complete ^h
<u>Race</u>											
All Races ^b	Both Sexes	118,493	64,286	40,411	24,112	13,710	7,600	234,402	270,625	10,865	281,490
	Males	70,932	37,501	23,644	13,686	8,044	3,972	138,797	158,850	5,989	164,839
	Females	47,561	26,785	16,767	10,426	5,666	3,628	95,605	111,775	4,876	116,651
White ^b	Both Sexes	101,449	55,278	34,902	21,540	12,276	6,674	201,547	234,006	12,430	246,436
	Males	60,840	32,703	20,849	12,378	7,347	3,589	120,399	138,699	5,639	144,338
	Females	40,609	22,575	14,053	9,162	4,929	3,085	81,148	95,307	6,791	102,098
Black ^b	Both Sexes	11,896	6,735	4,232	2,038	1,170	772	23,848	26,947	1,928	28,875
	Males	7,010	3,421	2,082	1,028	526	314	13,064	14,444	653	15,097
	Females	4,886	3,314	2,150	1,010	644	458	10,784	12,503	1,275	13,778
Asian/ Pacific	Both Sexes	2,648	1,260	648	+	+	+	4,697	+	+	+
	Males	1,640	762	408	+	+	+	2,881	+	+	+
Islander ^c	Females	1,008	498	240	+	+	+	1,816	+	+	+
Hispanic ^d	Both Sexes	9,278	4,670	2,396	+	+	+	17,119	+	+	+
	Males	5,458	2,684	1,299	+	+	+	9,831	+	+	+
	Females	3,820	1,986	1,097	+	+	+	7,288	+	+	+

Estimated prevalence percent^a on January 1, 2007, of the SEER 11 population diagnosed in the previous 17 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	Age Specific (Crude)								Age-Adjusted ^f			
	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+		
<u>Race</u>												
All Races ^c	Both Sexes	0.0662%	0.0063%	0.0087%	0.0027%	0.0107%	0.0421%	0.1127%	0.2256%	0.3102%	0.2689%	0.0669%
	Males	0.0802%	0.0061%	0.0076%	0.0027%	0.0112%	0.0511%	0.1498%	0.3067%	0.4132%	0.3819%	0.0880%
	Females	0.0524%	0.0066%	0.0099%	0.0028%	0.0103%	0.0330%	0.0772%	0.1522%	0.2301%	0.2059%	0.0495%
White ^c	Both Sexes	0.0723%	0.0067%	0.0092%	0.0027%	0.0116%	0.0441%	0.1166%	0.2391%	0.3272%	0.2832%	0.0704%
	Males	0.0875%	0.0065%	0.0083%	0.0026%	0.0119%	0.0528%	0.1535%	0.3221%	0.4369%	0.4068%	0.0924%
	Females	0.0572%	0.0068%	0.0102%	0.0028%	0.0112%	0.0350%	0.0802%	0.1618%	0.2397%	0.2149%	0.0519%
Black ^c	Both Sexes	0.0553%	0.0073%	0.0104%	0.0038%	0.0112%	0.0449%	0.1309%	0.2245%	0.3063%	0.2456%	0.0689%
	Males	0.0653%	0.0065%	0.0074%	0.0038%	0.0114%	0.0544%	0.1825%	0.3187%	0.3875%	0.3199%	0.0898%
	Females	0.0462%	0.0081%	0.0134%	0.0037%	0.0111%	0.0366%	0.0880%	0.1516%	0.2518%	0.2095%	0.0536%
Asian/ Pacific	Both Sexes	0.0363%	0.0028%	0.0030%	0.0007%	0.0047%	0.0235%	0.0635%	0.1206%	0.1844%	0.1624%	0.0373%
	Males	0.0459%	0.0024%	0.0028%	-	0.0051%	0.0321%	0.0881%	0.1697%	0.2508%	0.2313%	0.0512%
Islander ^c	Females	0.0272%	0.0032%	0.0033%	-	0.0044%	0.0155%	0.0419%	0.0788%	0.1356%	0.1177%	0.0263%
Hispanic ^d	Both Sexes	0.0369%	0.0050%	0.0066%	0.0020%	0.0095%	0.0347%	0.1010%	0.2138%	0.3092%	0.2853%	0.0636%
	Males	0.0410%	0.0051%	0.0049%	0.0019%	0.0087%	0.0395%	0.1258%	0.2869%	0.4241%	0.3553%	0.0813%
	Females	0.0324%	0.0049%	0.0084%	0.0020%	0.0104%	0.0296%	0.0773%	0.1512%	0.2251%	0.2445%	0.0496%

^a US 2007 cancer prevalence counts are based on 2007 cancer prevalence proportions from the SEER registries and 1/1/2007 US population estimates based on the average of 2006 and 2007 population estimates from the US Bureau of the Census.

^{b c d} Prevalence was calculated using the First Malignant Primary Only for a person.

Statistics based on (b) SEER 9 Areas (c) SEER 11 Areas and Rural Georgia (d) NHIA for Hispanic for SEER 11 Areas and Rural Georgia.

^e Maximum limited-duration prevalence: 32 years for 1975-2007 SEER 9 data; 17 years for 1990-2007 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

^{f g h i} Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups. (g) Cases diagnosed more than 32 years ago were estimated using the completeness index method (Capocaccia et al. 1997, Merrill et al. 2000). (h) Complete prevalence is obtained by summing 0 to <32 and >=32. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.

- Statistic not shown. Statistic based on fewer than 5 cases estimated alive in SEER for the time interval.

+ Not available.

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

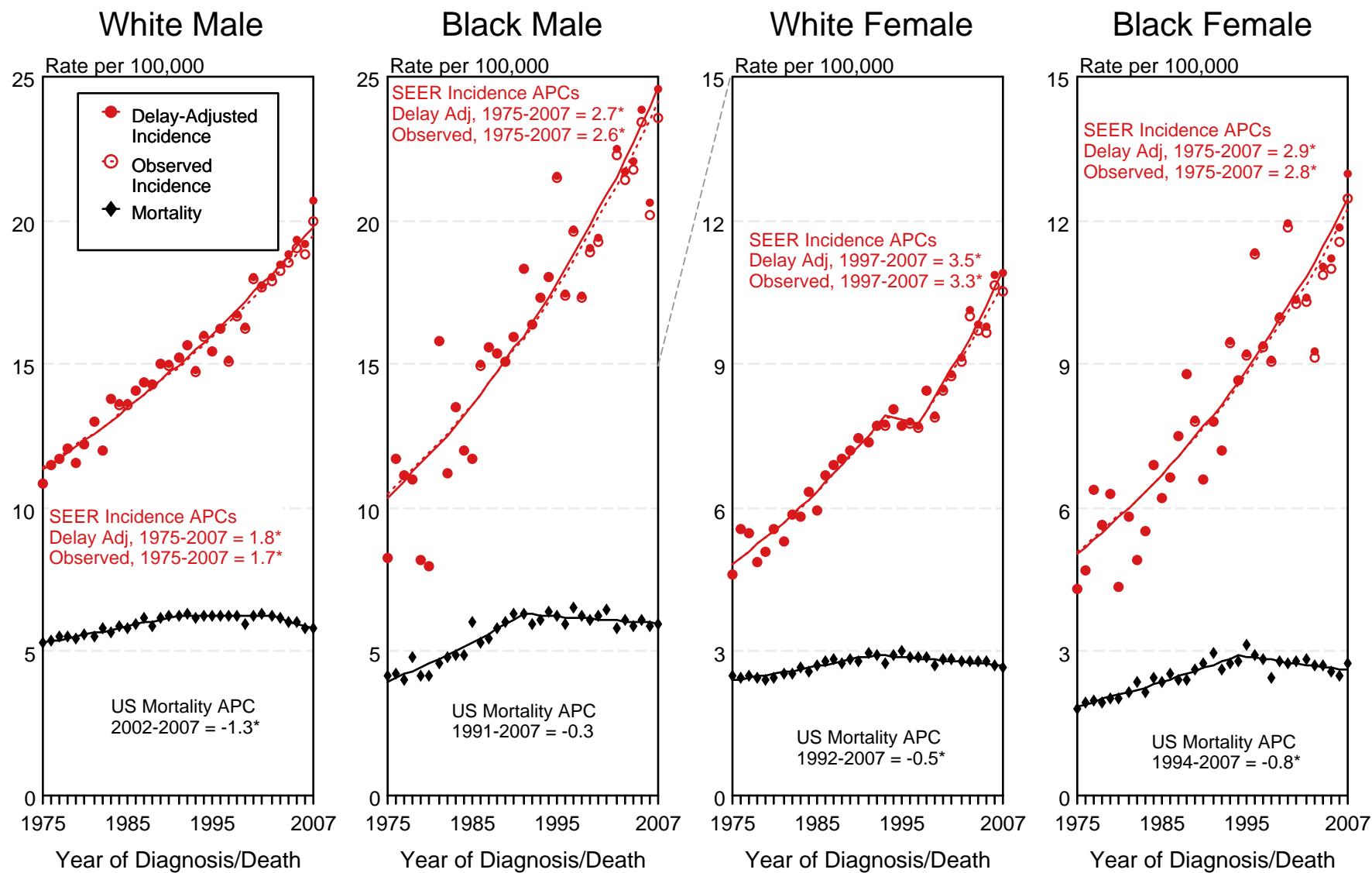


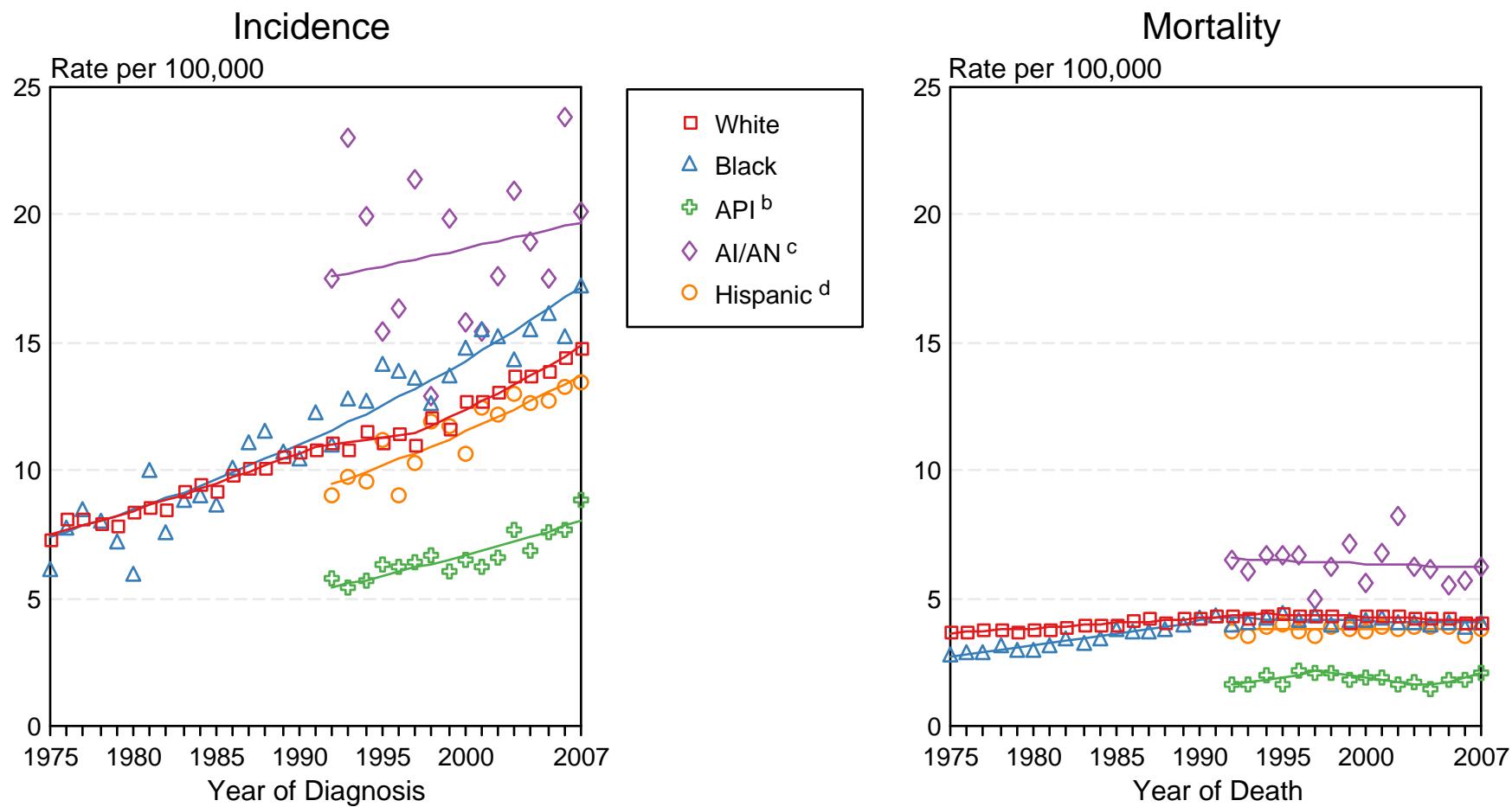
Figure 11.1

^a Source: SEER 9 areas and US Mortality Files (National Center for Health Statistics, CDC). Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103). Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.4.3, April 2010, 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 Incidence and US Death Rates^a

Cancer of the Kidney and Renal Pelvis, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2007
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2007



Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from 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 are calculated using the Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2007 period allow a maximum of 4 joinpoints. Analyses for other ethnic groups during the period 1992-2007 allow a maximum of 2 joinpoints.

^b API = Asian/Pacific Islander.

^c AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.

^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, and Vermont.

Figure 11.2

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a

SEER 9 Areas Compared to SEER 13 Areas

Cancer of the Kidney and Renal Pelvis, Male, by Race

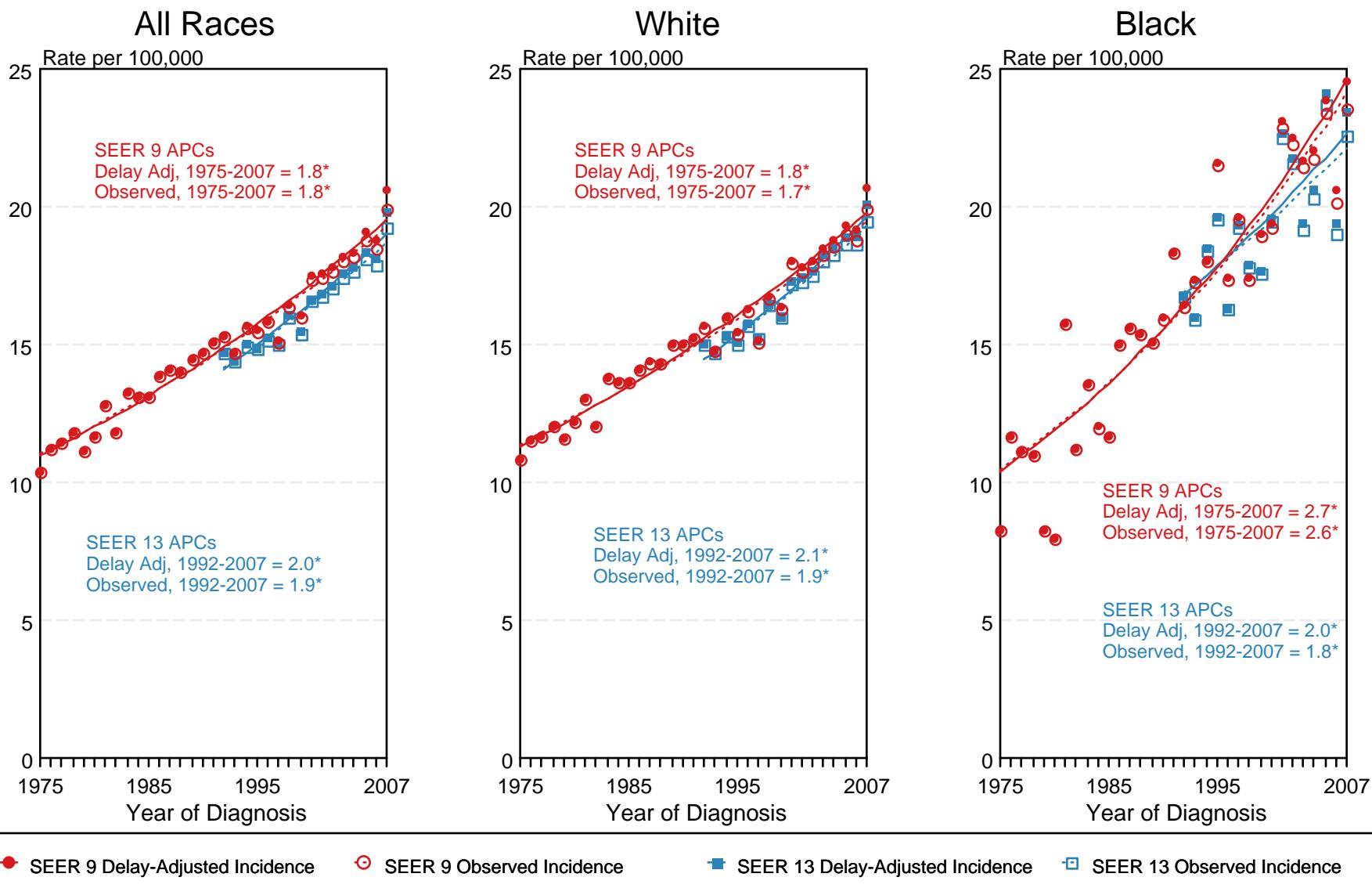


Figure 11.3

^a Source: SEER 9 areas and SEER 13 areas.

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute.

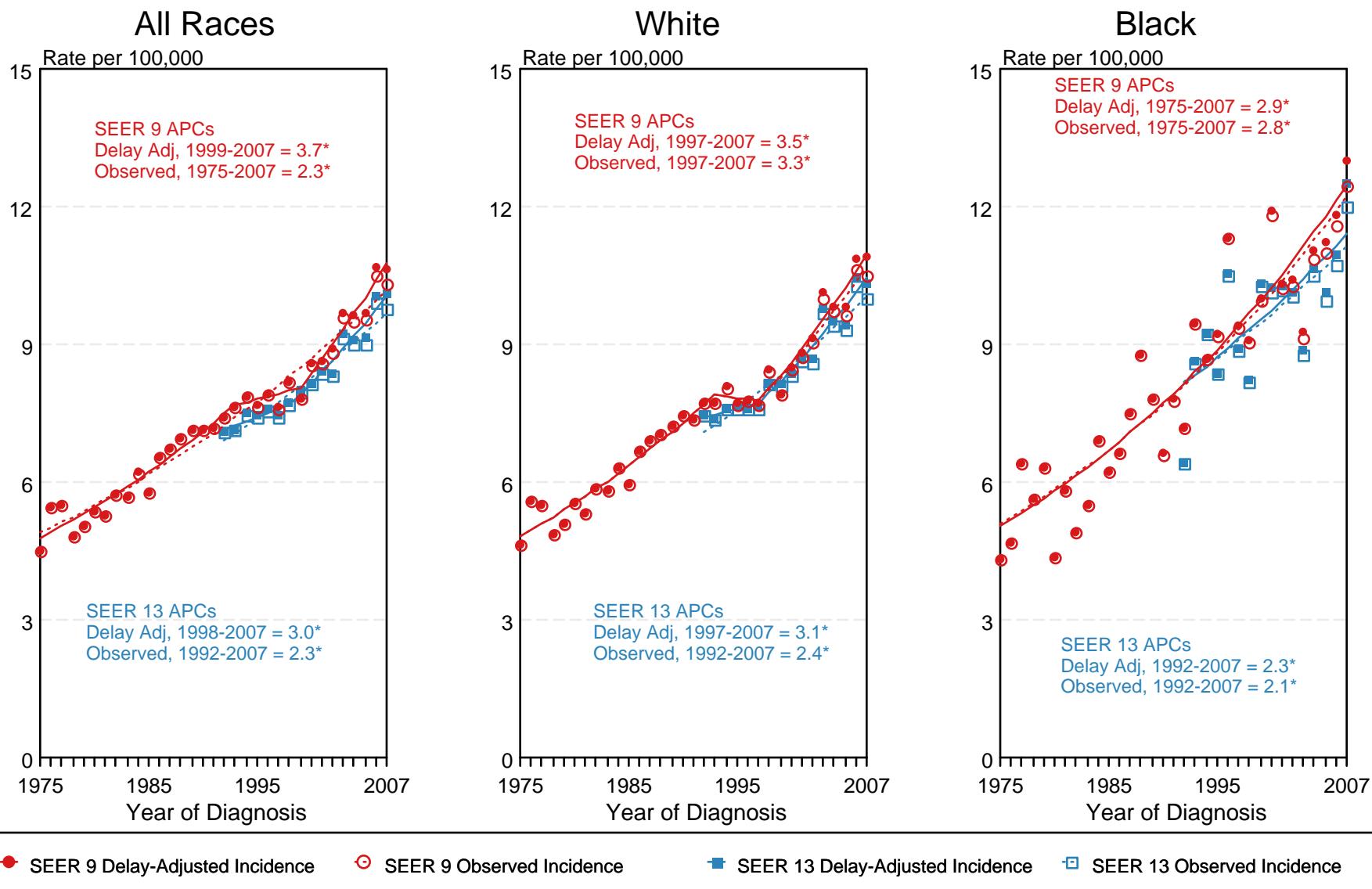
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a

SEER 9 Areas Compared to SEER 13 Areas

Cancer of the Kidney and Renal Pelvis, Female, by Race



^a Source: SEER 9 areas and SEER 13 areas.

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute.

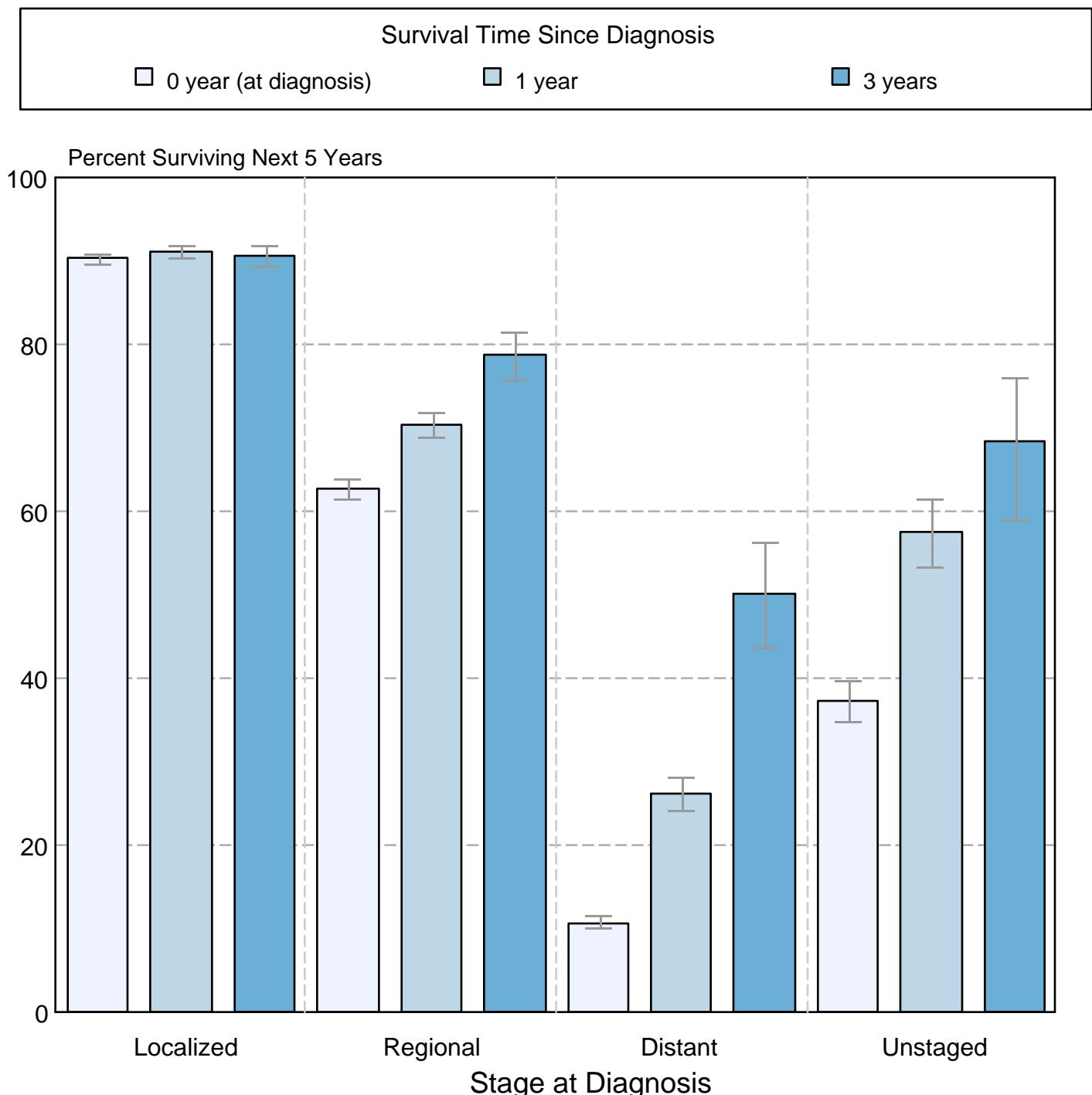
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 11.4

Figure 11.5

Cancer of the Kidney and Renal Pelvis
5-Year SEER Conditional Relative Survival and
95% Confidence Intervals
Probability of surviving the next 5 years given the cohort
has already survived 0, 1, or 3 years
1998-2006 by stage at diagnosis



Source: SEER 17 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2006. The remaining 13 SEER Areas contribute cases for the entire period 1998-2006.

Percent surviving is not shown if based on less than 25 cases.

Confidence intervals are not shown if length of the confidence interval is greater than 5 times the standard error.