

Table 21.1
Cancer of the Ovary (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,
All Ages by Race/Ethnicity

	Joinpoint Trend 1		Joinpoint Trend 2		Joinpoint Trend 3		Joinpoint Trend 4		Joinpoint Trend 5		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1998-2007	2003-2007
SEER 9 Delay-Adjusted Incidence^a, 1975-2007												
All Races	1975-1985	0.1	1985-2001	-0.7*	2001-2007	-1.9*					-1.5*	-1.9*
White	1975-1985	0.3	1985-2001	-0.6*	2001-2007	-2.1*					-1.6*	-2.1*
Black	1975-2007	-0.4*									-0.4*	-0.4*
SEER 13 Delay-Adjusted Incidence^b, 1992-2007												
All Races	1992-2007	-1.0*									-1.0*	-1.0*
White	1992-2001	-0.5*	2001-2007	-1.8*							-1.4*	-1.8*
Black	1992-2007	-0.2									-0.2	-0.2
SEER 9 Observed Incidence^a, 1975-2007												
All Races	1975-1985	0.2	1985-2001	-0.7*	2001-2007	-2.2*					-1.7*	-2.2*
White	1975-1985	0.3	1985-2001	-0.7*	2001-2007	-2.5*					-1.9*	-2.5*
Black	1975-2007	-0.5*									-0.5*	-0.5*
SEER 13 Observed Incidence^b, 1992-2007												
All Races	1992-2001	-0.6*	2001-2007	-2.0*							-1.5*	-2.0*
White	1992-2001	-0.5*	2001-2007	-2.3*							-1.7*	-2.3*
White NH ^{ef}	1992-2000	-0.4	2000-2007	-1.9*							-1.6*	-1.9*
Black	1992-2007	-0.5									-0.5	-0.5
Black NH ^{ef}	1992-2007	-0.5									-0.5	-0.5
API ^e	1992-2007	0.0									0.0	0.0
AI/AN ^{eg}	1992-2007	0.0									0.0	0.0
Hispanic ^f	1992-2007	-0.7									-0.7	-0.7
U.S. Cancer Mortality^c, 1975-2007												
All Races	1975-1982	-1.2*	1982-1992	0.3*	1992-1998	-1.2*	1998-2002	0.8	2002-2007	-1.7*	-0.6	-1.7*
White	1975-1981	-1.5*	1981-1992	0.3	1992-1998	-1.1*	1998-2002	0.8	2002-2007	-1.5*	-0.5	-1.5*
Black	1975-2004	0.0	2004-2007	-4.6							-1.6	-3.5
U.S. Cancer Mortality^c, 1992-2007												
All Races	1992-1998	-1.2*	1998-2002	0.8	2002-2007	-1.7*					-0.6	-1.7*
White	1992-1998	-1.1*	1998-2002	0.9	2002-2007	-1.5*					-0.5	-1.5*
White NH ^{ef}	1992-1998	-0.9*	1998-2002	1.0	2002-2007	-1.5*					-0.4	-1.5*
Black	1992-2005	-0.5	2005-2007	-5.4							-1.6	-3.0
Black NH ^{ef}	1992-2007	-0.6*									-0.6*	-0.6*
API ^e	1992-2007	0.1									0.1	0.1
AI/AN ^{eg}	1992-2007	0.7									0.7	0.7
Hispanic ^f	1992-2007	-0.4									-0.4	-0.4

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

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

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

Table 21.2
Cancer of the Ovary (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2007 With up to Four Joinpoints, 1992-2007 With up to Two Joinpoints,
Ages <65 by Race/Ethnicity

	Joinpoint Trend 1		Joinpoint Trend 2		Joinpoint Trend 3		Joinpoint Trend 4		Joinpoint Trend 5		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1998-2007	2003-2007
SEER 9 Delay-Adjusted Incidence^a, 1975-2007												
All Races	1975-2007	-1.1*									-1.1*	-1.1*
White	1975-2007	-1.1*									-1.1*	-1.1*
Black	1975-2007	-0.9*									-0.9*	-0.9*
SEER 13 Delay-Adjusted Incidence^b, 1992-2007												
All Races	1992-2007	-0.9*									-0.9*	-0.9*
White	1992-2007	-1.0*									-1.0*	-1.0*
Black	1992-2007	-0.1									-0.1	-0.1
SEER 9 Observed Incidence^a, 1975-2007												
All Races	1975-2007	-1.2*									-1.2*	-1.2*
White	1975-2007	-1.2*									-1.2*	-1.2*
Black	1975-2007	-1.0*									-1.0*	-1.0*
SEER 13 Observed Incidence^b, 1992-2007												
All Races	1992-2007	-1.0*									-1.0*	-1.0*
White	1992-2007	-1.2*									-1.2*	-1.2*
White NH ^{ef}	1992-2007	-1.2*									-1.2*	-1.2*
Black	1992-2007	-0.4									-0.4	-0.4
Black NH ^{ef}	1992-2007	-0.4									-0.4	-0.4
API ^e	1992-2007	-0.1									-0.1	-0.1
AI/AN ^{eg}	1992-2007	-1.5									-1.5	-1.5
Hispanic ^f	1992-2007	-0.7									-0.7	-0.7
U.S. Cancer Mortality^c, 1975-2007												
All Races	1975-1982	-2.9*	1982-1994	-1.3*	1994-1998	-2.7*	1998-2002	0.8	2002-2007	-2.7*	-1.1*	-2.7*
White	1975-1982	-2.9*	1982-1994	-1.2*	1994-1998	-2.7*	1998-2002	0.8	2002-2007	-2.6*	-1.1	-2.6*
Black	1975-1995	-1.9*	1995-2007	-0.5							-0.5	-0.5
U.S. Cancer Mortality^c, 1992-2007												
All Races	1992-1998	-2.3*	1998-2002	0.7	2002-2007	-2.7*					-1.2	-2.7*
White	1992-2007	-1.3*									-1.3*	-1.3*
White NH ^{ef}	1992-2007	-1.1*									-1.1*	-1.1*
Black	1992-2007	-0.8*									-0.8*	-0.8*
Black NH ^{ef}	1992-2004	0.1	2004-2007	-4.4							-1.4	-3.3
API ^e	1992-2007	-1.4*									-1.4*	-1.4*
AI/AN ^{eg}	1992-2007	-0.4									-0.4	-0.4
Hispanic ^f	1992-2007	-0.7*									-0.7*	-0.7*

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

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

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

Table 21.3
Cancer of the Ovary (Invasive)

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2007 With up to Four Joinpoints, 1992-2007 With up to Two Joinpoints,
Ages 65+ by Race/Ethnicity

	Joinpoint Trend 1		Joinpoint Trend 2		Joinpoint Trend 3		Joinpoint Trend 4		Joinpoint Trend 5		AAPCd	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	1998-2007	2003-2007
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2007</u>												
All Races	1975-1990	1.4*	1990-2007	-1.0*							-1.0*	-1.0*
White	1975-1990	1.5*	1990-2007	-0.9*							-0.9*	-0.9*
Black	1975-2007	0.2									0.2	0.2
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2007</u>												
All Races	1992-2007	-1.1*									-1.1*	-1.1*
White	1992-2007	-0.9*									-0.9*	-0.9*
Black	1992-2007	-0.3									-0.3	-0.3
<u>SEER 9 Observed Incidence^a, 1975-2007</u>												
All Races	1975-1990	1.4*	1990-2007	-1.2*							-1.2*	-1.2*
White	1975-1991	1.4*	1991-2007	-1.2*							-1.2*	-1.2*
Black	1975-2007	0.1									0.1	0.1
<u>SEER 13 Observed Incidence^b, 1992-2007</u>												
All Races	1992-2007	-1.2*									-1.2*	-1.2*
White	1992-2007	-1.1*									-1.1*	-1.1*
White NH ^{ef}	1992-2007	-1.1*									-1.1*	-1.1*
Black	1992-2007	-0.6									-0.6	-0.6
Black NH ^{ef}	1992-2007	-0.6									-0.6	-0.6
API ^e	1992-2007	0.2									0.2	0.2
AI/AN ^{eg}	1992-2007	1.2									1.2	1.2
Hispanic ^f	1992-2007	-0.7									-0.7	-0.7
<u>U.S. Cancer Mortality^c, 1975-2007</u>												
All Races	1975-1985	0.6*	1985-1991	1.9*	1991-1999	-0.4	1999-2002	1.2	2002-2007	-1.2*	-0.3	-1.2*
White	1975-1984	0.5*	1984-1991	1.8*	1991-1998	-0.4	1998-2001	1.4	2001-2007	-0.7*	0.0	-0.7*
Black	1975-1992	2.2*	1992-2007	-0.9*							-0.9*	-0.9*
<u>U.S. Cancer Mortality^c, 1992-2007</u>												
All Races	1992-2007	-0.2									-0.2	-0.2
White	1992-2007	0.0									0.0	0.0
White NH ^{ef}	1992-2007	0.1									0.1	0.1
Black	1992-2007	-0.8*									-0.8*	-0.8*
Black NH ^{ef}	1992-2007	-0.7*									-0.7*	-0.7*
API ^e	1992-2007	1.3*									1.3*	1.3*
AI/AN ^{eg}	1992-2007	1.3									1.3	1.3
Hispanic ^f	1992-2007	-0.2									-0.2	-0.2

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

Joinpoint Regression Program Version 3.4.3, April 2010, National Cancer Institute. (<http://srab.cancer.gov/joinpoint/>).

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

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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

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

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

^a
^b
^c
^d
^e
^f

Table 21.4
Cancer of the Ovary (Invasive)

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

	All Races, Females			White Females			Black Females		
	All	<65	65+	All	<65	65+	All	<65	65+
Year of Diagnosis:									
1975	16.32	11.61	48.88	16.77	12.00	49.79	11.72	7.40	41.58
1976	15.85	11.22	47.86	16.63	11.87	49.55	11.41	7.37	39.32
1977	15.62	11.20	46.15	16.19	11.58	48.07	11.34	8.69	29.65
1978	15.38	10.78	47.18	16.16	11.36	49.31	9.96	6.07	36.83
1979	15.39	10.70	47.79	15.84	10.91	49.91	11.94	9.07	31.79
1980	15.44	10.65	48.61	16.21	11.19	50.88	11.74	7.42	41.60
1981	15.42	10.48	49.53	16.00	10.87	51.47	11.68	7.58	40.08
1982	15.57	10.09	53.43	16.13	10.48	55.14	12.40	7.50	46.24
1983	15.98	10.45	54.19	16.42	10.73	55.78	13.06	9.18	39.90
1984	16.26	10.98	52.80	17.17	11.73	54.71	10.98	5.87	46.32
1985	16.54	10.77	56.42	17.43	11.39	59.15	11.31	7.26	39.29
1986	15.03	9.89	50.57	15.71	10.47	51.92	10.70	6.25	41.50
1987	16.15	10.16	57.60	17.04	10.85	59.82	11.83	6.26	50.30
1988	15.27	9.56	54.73	16.01	10.09	56.98	11.57	6.64	45.69
1989	15.52	9.54	56.85	16.50	10.27	59.57	11.00	5.43	49.52
1990	15.40	9.45	56.53	16.27	10.06	59.20	10.25	5.69	41.72
1991	15.78	9.71	57.72	16.56	10.31	59.81	11.06	5.49	49.56
1992	14.93	9.35	53.53	15.67	9.74	56.70	11.26	7.79	35.25
1993	15.24	9.13	57.45	16.05	9.62	60.52	11.65	6.61	46.48
1994	14.49	8.88	53.24	15.01	9.16	55.43	12.48	6.51	53.73
1995	14.61	8.77	54.99	15.39	9.33	57.24	10.35	4.91	47.91
1996	14.15	8.43	53.72	15.32	9.25	57.30	9.08	4.56	40.33
1997	14.76	9.23	52.97	15.48	9.71	55.30	10.68	5.69	45.20
1998	14.38	8.85	52.62	15.15	9.28	55.74	10.92	6.06	44.52
1999	14.74	8.74	56.26	15.49	8.97	60.50	10.85	6.37	41.79
2000	14.39	9.10	50.98	15.30	9.69	54.09	10.91	5.55	47.90
2001	14.60	9.20	51.88	15.66	9.82	56.08	9.49	6.28	31.74
2002	13.90	8.04	54.40	14.56	8.42	57.01	10.62	5.64	45.01
2003	13.68	8.45	49.81	14.23	8.92	50.91	12.32	6.14	55.05
2004	13.24	8.03	49.21	13.91	8.24	53.10	10.27	6.39	37.11
2005	12.92	8.07	46.43	13.55	8.21	50.50	10.66	7.20	34.62
2006	12.93	7.66	49.31	13.67	8.03	52.61	8.98	5.44	33.45
2007	12.97	8.13	46.40	13.59	8.53	48.61	11.66	5.88	51.63

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

^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 21.5
Cancer of the Ovary (Invasive)

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

	All Races, Females			White Females			Black Females		
	All	<65	65+	All	<65	65+	All	<65	65+
Year of Diagnosis:									
1975	16.32	11.61	48.88	16.77	12.00	49.79	11.72	7.40	41.58
1976	15.85	11.22	47.86	16.63	11.87	49.55	11.41	7.37	39.32
1977	15.62	11.20	46.15	16.19	11.58	48.07	11.34	8.69	29.65
1978	15.38	10.78	47.18	16.16	11.36	49.31	9.96	6.07	36.83
1979	15.39	10.70	47.79	15.84	10.91	49.91	11.94	9.07	31.79
1980	15.44	10.65	48.61	16.21	11.19	50.88	11.74	7.42	41.60
1981	15.42	10.48	49.53	16.00	10.87	51.47	11.68	7.58	40.08
1982	15.57	10.09	53.43	16.13	10.48	55.14	12.40	7.50	46.23
1983	15.98	10.45	54.18	16.42	10.73	55.78	13.06	9.18	39.89
1984	16.26	10.98	52.79	17.16	11.73	54.71	10.98	5.87	46.31
1985	16.53	10.76	56.41	17.42	11.39	59.13	11.30	7.25	39.27
1986	15.02	9.89	50.55	15.71	10.47	51.91	10.69	6.24	41.47
1987	16.15	10.15	57.58	17.04	10.85	59.80	11.82	6.26	50.27
1988	15.26	9.56	54.69	16.01	10.08	56.95	11.56	6.63	45.65
1989	15.51	9.53	56.80	16.49	10.27	59.53	10.99	5.42	49.45
1990	15.39	9.44	56.48	16.26	10.05	59.15	10.23	5.68	41.65
1991	15.76	9.70	57.66	16.55	10.30	59.74	11.03	5.48	49.47
1992	14.91	9.34	53.46	15.65	9.73	56.62	11.23	7.77	35.16
1993	15.22	9.12	57.35	16.03	9.60	60.42	11.62	6.59	46.34
1994	14.46	8.86	53.14	14.98	9.14	55.32	12.44	6.49	53.54
1995	14.58	8.75	54.86	15.35	9.31	57.10	10.30	4.89	47.70
1996	14.11	8.40	53.56	15.27	9.22	57.12	9.03	4.53	40.11
1997	14.71	9.20	52.79	15.42	9.68	55.09	10.61	5.65	44.91
1998	14.33	8.82	52.43	15.09	9.24	55.50	10.84	6.02	44.19
1999	14.66	8.69	55.95	15.39	8.92	60.12	10.74	6.31	41.36
2000	14.29	9.04	50.65	15.18	9.62	53.68	10.77	5.49	47.32
2001	14.48	9.13	51.47	15.52	9.72	55.56	9.36	6.18	31.28
2002	13.77	7.97	53.88	14.40	8.32	56.36	10.43	5.54	44.22
2003	13.52	8.35	49.24	14.03	8.79	50.20	12.06	6.01	53.90
2004	13.05	7.92	48.53	13.67	8.10	52.19	10.01	6.23	36.18
2005	12.70	7.93	45.66	13.27	8.04	49.44	10.34	6.98	33.57
2006	12.67	7.51	48.32	13.32	7.83	51.26	8.65	5.24	32.24
2007	12.53	7.85	44.82	13.00	8.15	46.50	10.98	5.54	48.63
1975-2007	14.75	9.34	52.17	15.51	9.84	54.71	10.93	6.36	42.53

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

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 21.6
Cancer of the Ovary (Invasive)

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

	All Races, Females			White Females			Black Females		
	All	<65	65+	All	<65	65+	All	<65	65+
Year of Death:									
1975	9.84	5.83	37.55	10.16	6.01	38.81	7.16	4.64	24.58
1976	10.02	5.73	39.66	10.28	5.90	40.58	8.01	4.61	31.52
1977	9.58	5.47	38.05	9.87	5.65	39.08	7.41	4.25	29.21
1978	9.55	5.44	37.97	9.83	5.62	38.88	7.35	4.17	29.33
1979	9.33	5.10	38.58	9.56	5.20	39.70	7.53	4.43	28.94
1980	9.29	4.97	39.15	9.52	5.11	39.96	7.85	4.18	33.21
1981	9.23	4.94	38.89	9.48	5.10	39.75	7.36	3.74	32.36
1982	9.22	4.80	39.81	9.49	4.97	40.72	7.41	3.64	33.45
1983	9.20	4.70	40.34	9.43	4.80	41.38	7.67	4.11	32.25
1984	9.11	4.63	40.08	9.36	4.79	40.93	7.55	3.76	33.80
1985	9.08	4.57	40.23	9.34	4.72	41.29	7.30	3.74	31.87
1986	9.24	4.57	41.55	9.52	4.73	42.63	7.42	3.66	33.43
1987	9.18	4.46	41.86	9.46	4.64	42.82	7.55	3.52	35.45
1988	9.31	4.41	43.16	9.55	4.56	44.08	7.87	3.67	36.88
1989	9.21	4.30	43.20	9.52	4.49	44.27	7.41	3.26	36.16
1990	9.33	4.26	44.35	9.61	4.46	45.23	7.86	3.32	39.24
1991	9.51	4.32	45.37	9.74	4.48	46.13	8.36	3.43	42.46
1992	9.46	4.24	45.51	9.70	4.38	46.49	8.19	3.59	39.99
1993	9.08	4.02	44.06	9.34	4.19	44.93	7.74	3.02	40.42
1994	9.38	4.14	45.64	9.67	4.32	46.70	7.82	3.20	39.72
1995	9.12	3.96	44.77	9.47	4.17	46.07	7.37	2.93	38.04
1996	8.86	3.82	43.70	9.13	3.97	44.80	7.32	2.89	37.92
1997	8.94	3.77	44.70	9.21	3.94	45.59	7.93	3.11	41.19
1998	8.73	3.68	43.64	9.02	3.81	45.03	7.37	3.22	36.06
1999	8.77	3.73	43.57	9.07	3.90	44.83	7.38	3.05	37.31
2000	8.89	3.67	44.98	9.25	3.85	46.56	7.15	2.91	36.49
2001	8.99	3.73	45.37	9.31	3.87	46.86	7.52	3.20	37.36
2002	9.02	3.79	45.18	9.37	3.97	46.73	7.43	3.11	37.29
2003	8.85	3.68	44.59	9.17	3.83	46.05	7.45	3.12	37.39
2004	8.76	3.54	44.87	9.06	3.65	46.43	7.65	3.13	38.90
2005	8.63	3.57	43.63	8.96	3.73	45.08	7.28	2.90	37.57
2006	8.54	3.47	43.57	8.91	3.62	45.43	6.85	2.92	34.02
2007	8.22	3.20	42.87	8.59	3.36	44.79	6.57	2.68	33.49
1975-2007	9.11	4.21	42.98	9.41	4.39	44.14	7.52	3.39	36.03

^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 21.7
Cancer of the Ovary (Invasive)

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

	Incidence ^a			US Death ^b		
	All Races, Females	White Females	Black Females	All Races, Females	White Females	Black Females
Age-Adjusted Rates, 2003-2007						
Age at Diagnosis/Death:						
All ages	12.9	13.5	10.2	8.6	8.9	7.2
Under 65	7.9	8.3	5.8	3.5	3.6	2.9
65 and over	47.0	49.6	40.1	43.9	45.6	36.2
All ages (IARC world std) ^c	9.2	9.7	7.1	5.5	5.7	4.6
Age-Specific Rates, 2003-2007						
Age at Diagnosis/Death:						
<1	-	-	-	-	-	-
1-4	-	-	-	-	-	-
5-9	0.2	0.3	-	-	-	-
10-14	0.8	0.9	-	-	-	-
15-19	1.4	1.3	1.5	0.1	0.1	-
20-24	1.7	1.7	1.1	0.2	0.2	-
25-29	2.2	2.2	1.7	0.3	0.3	0.4
30-34	3.2	3.2	2.8	0.5	0.6	0.5
35-39	4.6	4.5	4.0	1.1	1.2	1.1
40-44	8.8	9.2	5.8	2.6	2.7	2.2
45-49	15.0	15.4	11.2	5.5	5.7	4.8
50-54	22.2	23.1	15.5	9.9	10.3	8.4
55-59	27.7	29.6	18.2	15.4	16.2	12.6
60-64	35.6	37.9	27.6	23.2	24.2	19.2
65-69	39.5	41.8	34.1	31.5	32.9	27.4
70-74	45.7	48.9	38.0	39.9	41.5	33.9
75-79	50.5	53.5	42.7	48.7	50.5	40.3
80-84	55.6	57.9	44.8	57.6	59.6	43.4
85+	50.4	51.9	48.0	55.4	56.9	45.2

^a Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
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 21.8
Cancer of the Ovary (Invasive)

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

	All Races, Females			White Females			Black Females		
	All	<65	65+	All	<65	65+	All	<65	65+
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1960-1963 ^a	-	-	-	32	-	-	32	-	-
1970-1973 ^a	-	-	-	36	-	-	32	-	-
1975-1977 ^b	37.3	44.4	22.1	36.6	43.7	21.7	43.2	49.3	25.7 ^e
1978-1980 ^b	38.9	47.5	22.5	38.1	46.7	22.7	40.3	49.7	13.0
1981-1983 ^b	40.6	50.6	24.4	40.3	50.6	24.4	39.2	46.0	23.4
1984-1986 ^b	39.9	49.7	25.0	39.0	48.7	24.7	41.0	53.1	21.3
1987-1989 ^b	40.0	51.3	24.8	40.0	51.5	25.2	35.2	47.3	17.9
1990-1992 ^b	42.6	55.6	25.6	42.5	56.2	25.6	38.0	50.1	17.7
1993-1995 ^b	43.6	55.9	28.1	42.7	55.5	27.6	43.2	55.4	27.3
1996-1998 ^b	45.7	57.2	29.8	45.2	56.8	29.9	41.0	52.7	22.2
1999-2006 ^b	45.3 ^e	55.9 ^e	29.1 ^e	45.0 ^e	56.0 ^e	29.5 ^e	36.7	44.7	20.9
5-Year Period Survival (Percent)^{cd}									
Year of Diagnosis:									
1999-2006	46.2	56.8	29.6	46.3	56.8	30.7	37.0	47.8	17.3
Stage Distribution (%) 1999-2006^c									
All Stages									
Number of cases	33,718	18,513	15,205	28,677	15,244	13,433	2,387	1,422	965
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	15	21	7	14	20	7	15	20	7
Regional	17	20	13	17	20	13	14	15	14
Distant	62	55	70	63	56	70	62	59	67
Unstaged	7	4	10	7	4	10	9	6	12
5-Year Relative Survival (Percent), 1999-2006^c									
Age at Diagnosis:									
Ages <45	73.1	-	-	73.6	-	-	66.3	-	-
Ages 45-54	57.5	-	-	58.5	-	-	41.8	-	-
Ages 55-64	45.0	-	-	45.3	-	-	32.3	-	-
Ages 65-74	34.9	-	-	35.3	-	-	22.9	-	-
Ages 75+	22.5	-	-	23.2	-	-	14.1	-	-
Ages <65	56.5	-	-	56.7	-	-	46.4	-	-
Ages 65+	28.9	-	-	29.4	-	-	19.3	-	-
Stage:									
All Stages	45.6	56.5	28.9	45.4	56.7	29.4	36.8	46.4	19.3
Localized	93.5	93.7	92.4	93.4	93.6	92.7	92.3	95.4	77.0 ^f
Regional	73.4	80.2	57.4	74.0	81.0	58.2	55.9	64.6	39.7 ^f
Distant	27.6	34.8	19.2	28.2	35.6	19.9	18.8	24.3	10.1
Unstaged	27.2	49.2	12.8	26.5	48.7	13.5	28.3	47.0 ^f	8.0

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

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

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

Based on follow-up of patients into 2007.

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.

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).

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

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.

^a^b^c^d^e^f^g⁻

Table 21.9
Cancer of the Ovary (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	65.2	70.7	70.8	72.3	72.9	75.0	72.6	72.3	74.0	74.8	77.3	76.0	74.5	77.6	76.8	76.5	76.7	76.0	76.0	75.6
2-year	49.8	54.1	55.0	58.0	59.1	60.9	59.2	61.6	61.2	62.5	66.4	65.2	62.7	65.3	66.2	64.6	67.2	65.3	64.9	
3-year	43.1	46.9	47.6	49.4	50.0	52.1	49.9	54.4	52.3	54.0	57.9	56.6	54.2	56.1	57.2	55.5	59.8	57.1		
4-year	39.7	42.7	42.9	45.2	44.8	47.8	44.1	48.6	47.7	47.7	50.4	51.9	49.3	49.0	51.8	49.7	51.5			
5-year	37.8	40.5	39.8	42.1	41.7	43.9	40.3	46.1	44.3	43.9	46.0	47.3	44.6	44.9	47.4	44.4				
6-year	36.7	38.8	38.0	40.5	39.6	41.6	38.5	42.9	41.1	40.9	42.8	44.8	42.3	41.8	44.9					
7-year	35.6	38.3	37.0	39.4	38.2	40.3	38.0	41.3	39.6	39.7	40.6	43.2	40.6	40.6	39.5					
8-year	35.0	37.2	36.3	38.3	37.1	39.7	37.1	40.7	38.3	38.9	39.5	41.5	39.3							
9-year	34.7	36.4	35.9	37.8	36.8	39.4	36.3	39.3	37.1	38.5	38.5	40.1								
10-year	34.6	35.9	35.7	37.7	36.3	39.4	35.6	38.6	36.8	38.2	37.8									
11-year	34.5	35.9	35.7	37.4	36.0	39.2	35.2	37.8	36.4	37.7										
12-year	34.2	35.6	35.5	37.4	35.9	38.8	35.0	37.8	36.4											
13-year	34.1	35.4	35.4	37.4	35.9	38.5	35.0	37.7												
14-year	34.1	35.4	35.4	37.4	35.9	38.5	35.0													
15-year	33.8	35.4	35.4	37.4	35.9	38.5														
16-year	33.8	35.4	35.4	37.4	35.9															
17-year	33.8	35.4	35.4	37.4																
18-year	33.8	35.4	35.4																	
19-year	33.8	35.4																		
20-year	33.8	35.4																		

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

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

Table 21.10
Cancer of the Ovary (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	Risk of Dying from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.00	0.01	0.03	1.39	1.04	Asian/ Pacific Islander	0	0.00	0.01	0.04	1.14	0.72	
	10	0.01	0.03	0.07	1.41	1.05		10	0.01	0.03	0.08	1.15	0.73	
	20	0.02	0.06	0.18	1.40	1.06		20	0.02	0.06	0.18	1.14	0.73	
	30	0.04	0.16	0.39	1.39	1.06		30	0.04	0.16	0.38	1.12	0.73	
	40	0.12	0.35	0.68	1.36	1.06		40	0.12	0.34	0.55	1.08	0.73	
	50	0.24	0.58	0.93	1.27	1.04		50	0.22	0.43	0.64	0.97	0.70	
	60	0.35	0.72	1.00	1.07	0.96		60	0.22	0.43	0.66	0.77	0.63	
	70	0.42	0.72	-	0.81	0.79		70	0.23	0.47	-	0.58	0.53	
	80	0.40	-	-	0.51	0.54		80	0.28	-	-	0.42	0.37	
White	0	0.00	0.01	0.03	1.47	1.09	American Indian/ Alaska Native ^a	0	0.00	0.01	0.02	1.23	0.80	
	10	0.01	0.03	0.07	1.48	1.11		10	0.01	0.02	0.05	1.24	0.81	
	20	0.02	0.06	0.18	1.48	1.11		20	0.01	0.04	0.15	1.24	0.81	
	30	0.04	0.16	0.41	1.46	1.11		30	0.03	0.14	0.34	1.24	0.82	
	40	0.12	0.37	0.72	1.43	1.11		40	0.11	0.31	0.57	1.23	0.84	
	50	0.26	0.61	0.99	1.34	1.09		50	0.21	0.48	0.72	1.16	0.84	
	60	0.37	0.77	1.06	1.13	1.00		60	0.28	0.54	0.89	1.00	0.79	
	70	0.44	0.76	-	0.84	0.82		70	0.30	0.69	-	0.82	0.70	
	80	0.42	-	-	0.53	0.55		80	0.53	-	-	0.69	0.56	
Black	0	0.00	0.01	0.02	0.96	0.74	Hispanic ^b	0	0.00	0.02	0.03	1.30	0.84	
	10	0.01	0.02	0.05	0.98	0.76		10	0.01	0.03	0.07	1.31	0.85	
	20	0.01	0.04	0.12	0.98	0.76		20	0.02	0.05	0.15	1.30	0.85	
	30	0.03	0.11	0.26	0.97	0.76		30	0.03	0.13	0.33	1.29	0.85	
	40	0.08	0.24	0.49	0.96	0.77		40	0.10	0.30	0.58	1.26	0.85	
	50	0.16	0.42	0.68	0.91	0.76		50	0.20	0.49	0.81	1.18	0.83	
	60	0.28	0.57	0.76	0.81	0.72		60	0.30	0.63	0.89	1.01	0.77	
	70	0.34	0.56	-	0.63	0.60		70	0.35	0.65	-	0.77	0.64	
	80	0.32	-	-	0.41	0.42		80	0.36	-	-	0.52	0.45	

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

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 21.11
Cancer of the Ovary (Invasive)

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

<u>SEER Incidence</u>	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			
	Females	Females	Females
All Races	12.9	-1.5*	-1.7*
White	13.5	-1.7*	-1.9*
White Hispanic ^e	11.3	-0.9	-
White Non-Hispanic ^e	13.9	-1.6*	-
Black	10.2	-0.5	-0.5*
Asian/Pacific Islander	9.8	0.0	-
Amer Ind/Alaska Nat ^f	10.9	-	-
Hispanic ^e	11.0	-0.7	-
<u>U.S. Mortality^g</u>			
	Rate 2003-2007	Trend 1998-2007 ^h	
	Rate per 100,000 persons	AAPC (%)	
RACE/ETHNICITY			
	Females	Females	
All Races	8.6	-0.6	
White	8.9	-0.5	
White Hispanic ^e	6.2	-0.4	
White Non-Hispanic ^e	9.2	-0.4	
Black	7.2	-1.6	
Asian/Pacific Islander	4.9	0.1	
Amer Ind/Alaska Nat			
Total U.S.	5.3	-0.2	
CHSDA Counties	6.8	0.7	
Non-CHSDA Counties	3.5	-	
Hispanic ^e	6.0	-0.4	

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 21.12
Cancer of the Ovary (Invasive)

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

	All Races			Whites			Blacks		
	All Ages	Ages <65	Ages 65+	All Ages	Ages <65	Ages 65+	All Ages	Ages <65	Ages 65+
<u>SEER Incidence Rates^a, 2003-2007</u>									
Atlanta & Rural Georgia	12.05	6.94	47.38	12.76	7.30	50.51	10.97	6.57	41.32
Atlanta	11.98	6.96	46.64	12.66	7.34	49.49	10.97	6.60	41.17
Rural Georgia	13.05	6.56	57.90	13.94	-	66.18	11.10	-	-
California	12.89	7.99	46.78	13.61	8.26	50.55	9.98	6.05	37.12
Greater Bay Area	12.75	8.27	43.71	13.44	8.28	49.10	9.65	6.03	34.63
San Francisco-Oakland	12.99	8.44	44.39	13.63	8.35	50.12	10.09	6.34	36.03
San Jose-Monterey	12.29	7.91	42.56	13.11	8.13	47.55	-	-	-
Los Angeles	12.88	8.11	45.90	13.88	8.49	51.15	10.49	6.27	39.69
Greater California	12.94	7.82	48.31	13.53	8.15	50.76	9.42	5.77	34.68
Connecticut	13.43	8.22	49.49	13.75	8.50	50.02	9.58	5.14	40.23
Detroit	13.08	8.09	47.57	13.86	8.77	49.00	10.96	6.18	44.01
Hawaii	10.69	7.39	33.51	12.15	8.04	40.57	-	-	-
Iowa	13.49	8.30	49.40	13.55	8.28	50.00	-	-	-
Kentucky	11.98	7.54	42.62	12.32	7.75	43.88	7.11	4.71	23.75
Louisiana	11.20	6.44	44.11	11.91	7.18	44.61	9.85	4.79	44.79
New Jersey	14.09	9.09	48.70	14.84	9.69	50.43	10.81	6.27	42.20
New Mexico	12.27	7.78	43.34	12.49	7.87	44.39	-	-	-
Seattle-Puget Sound	13.97	7.92	55.76	14.52	8.24	57.96	8.72	-	-
Utah	11.56	7.13	42.14	11.60	7.11	42.64	-	-	-
9 SEER Areas ^b	12.88	7.90	47.32	13.44	8.17	49.93	10.40	6.00	40.80
11 SEER Areas ^b	12.86	7.96	46.74	13.54	8.25	50.06	10.36	6.03	40.29
13 SEER Areas ^b	12.86	7.95	46.78	13.54	8.25	50.11	10.37	6.04	40.35
17 SEER Areas ^b	12.88	7.95	47.00	13.53	8.31	49.61	10.15	5.81	40.15

^b Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
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 21.13
Cancer of the Ovary (Invasive)

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

	All Races			Whites			Blacks		
	All Ages	Ages <65	Ages 65+	All Ages	Ages <65	Ages 65+	All Ages	Ages <65	Ages 65+
<u>SEER Death Rates^a, 2003-2007</u>									
Atlanta & Rural Georgia	8.52	2.81	47.99	9.31	2.83	54.11	7.19	3.06	35.74
Atlanta	8.37	2.84	46.59	9.24	2.87	53.27	6.86	3.11	32.79
Rural Georgia	10.34	-	67.75	10.02	-	66.59	11.01	-	-
California	8.63	3.57	43.63	9.33	3.84	47.29	7.41	2.81	39.25
Greater Bay Area	7.90	3.28	39.85	8.81	3.57	45.04	7.49	3.30	36.47
San Francisco-Oakland	8.19	3.41	41.25	9.33	3.77	47.76	7.70	3.47	36.96
San Jose-Monterey	7.31	3.02	36.97	7.88	3.21	40.17	-	-	-
Los Angeles	8.88	3.68	44.85	9.89	4.03	50.41	8.07	2.97	43.29
Greater California	8.78	3.63	44.43	9.27	3.85	46.73	6.39	2.33	34.45
Connecticut	8.57	3.47	43.81	8.90	3.66	45.07	5.19	2.25	25.48
Detroit	8.52	3.44	43.62	8.85	3.59	45.23	7.58	3.04	39.01
Hawaii	6.85	3.08	32.92	8.87	3.52	45.87	-	-	-
Iowa	9.07	3.72	46.03	9.18	3.79	46.48	-	-	-
Kentucky	8.45	3.76	40.91	8.67	3.87	41.81	6.04	2.66	29.37
Louisiana	8.47	3.28	44.33	8.65	3.42	44.81	8.17	2.97	44.13
New Jersey	9.01	3.95	43.98	9.49	4.13	46.54	7.27	3.83	31.08
New Mexico	8.08	3.23	41.63	8.06	3.15	42.02	-	-	-
Seattle-Puget Sound	10.16	3.55	55.85	10.66	3.76	58.40	8.28	-	-
Utah	8.34	3.36	42.79	8.43	3.41	43.17	-	-	-
9 SEER Areas ^b	8.62	3.38	44.86	9.17	3.56	47.93	7.11	2.94	35.95
11 SEER Areas ^b	8.61	3.43	44.43	9.25	3.64	48.03	7.35	2.93	37.90
13 SEER Areas ^b	8.59	3.41	44.40	9.23	3.63	47.95	7.39	2.92	38.33
17 SEER Areas ^b	8.67	3.53	44.14	9.19	3.74	46.87	7.36	2.99	37.54
Total U.S.	8.59	3.49	43.90	8.93	3.63	45.55	7.15	2.95	36.22

^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).

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.

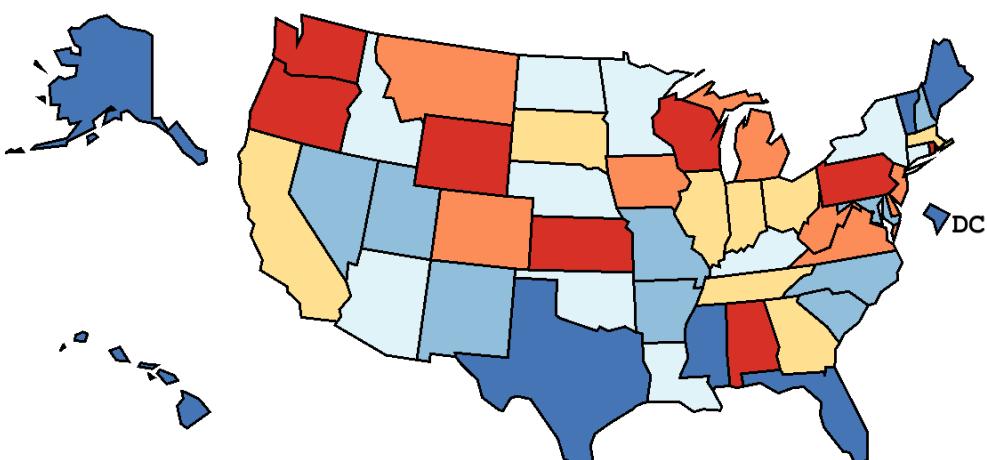
The SEER 17 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana and New Jersey.

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

Table 21.14
Cancer of the Ovary (Invasive)

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

Females				
State	Rate	SE	Rank	PD
TOTAL U.S.	8.59	0.03		
High Five States				
Washington	10.08 ^b	0.25	(01)	17.33 ^c
Oregon	9.76 ^b	0.30	(02)	13.60
Wisconsin	9.49 ^b	0.24	(03)	10.47
Wyoming	9.41	0.82	(04)	9.54
Alabama	9.33	0.26	(05)	8.59
Low Five States				
Florida	7.82 ^b	0.11	(47)	-9.01
Mississippi	7.62	0.30	(48)	-11.35
D.C.	7.54	0.68	(49)	-12.32
Hawaii	6.85 ^b	0.43	(50)	-20.27 ^c
Alaska	6.17	0.75	(51)	-28.16 ^c
State	Rate	SE	Rank	PD
Alabama	9.33	0.26	(05)	8.59
Alaska	6.17	0.75	(51)	-28.16 ^c
Arizona	8.59	0.23	(25)	-0.03
Arkansas	8.32	0.31	(37)	-3.23
California	8.63	0.10	(23)	0.44
Colorado	8.99	0.28	(13)	4.64
Connecticut	8.57	0.28	(27)	-0.32
Delaware	8.93	0.60	(15)	3.90
D.C.	7.54	0.68	(49)	-12.32
Florida	7.82 ^b	0.11	(47)	-9.01
Georgia	8.71	0.20	(22)	1.39
Hawaii	6.85 ^b	0.43	(50)	-20.27 ^c
Idaho	8.53	0.49	(28)	-0.74
Illinois	8.72	0.16	(21)	1.47
Indiana	8.87	0.22	(17)	3.19
Iowa	9.07	0.31	(11)	5.55
Kansas	9.10	0.34	(08)	5.92
Kentucky	8.45	0.26	(30)	-1.62
Louisiana	8.47	0.26	(29)	-1.47
Maine	8.00	0.43	(44)	-6.92
Maryland	8.23	0.23	(40)	-4.23
Massachusetts	8.85	0.21	(18)	3.03
Michigan	8.95	0.18	(14)	4.18
Minnesota	8.44	0.24	(31)	-1.80
Mississippi	7.62	0.30	(48)	-11.35
Missouri	8.07	0.21	(43)	-6.12
Montana	9.09	0.56	(09)	5.73
Nebraska	8.41	0.41	(33)	-2.13
Nevada	8.17	0.37	(41)	-4.94
New Hampshire	8.36	0.47	(35)	-2.69
New Jersey	9.01	0.19	(12)	4.79
New Mexico	8.08	0.39	(42)	-5.93
New York	8.59	0.12	(26)	-0.06
North Carolina	8.29	0.18	(38)	-3.55
North Dakota	8.38	0.67	(34)	-2.51
Ohio	8.61	0.16	(24)	0.16
Oklahoma	8.44	0.28	(32)	-1.83
Oregon	9.76 ^b	0.30	(02)	13.60
Pennsylvania	9.26 ^b	0.15	(06)	7.74
Rhode Island	9.20	0.53	(07)	7.04
South Carolina	8.25	0.26	(39)	-3.95
South Dakota	8.84	0.62	(19)	2.82
Tennessee	8.78	0.22	(20)	2.13
Texas	7.85 ^b	0.12	(46)	-8.66
Utah	8.34	0.41	(36)	-2.93
Vermont	7.96	0.65	(45)	-7.41
Virginia	8.93	0.21	(16)	3.86
Washington	10.08 ^b	0.25	(01)	17.33 ^c
West Virginia	9.08	0.39	(10)	5.66
Wisconsin	9.49 ^b	0.24	(03)	10.47
Wyoming	9.41	0.82	(04)	9.54



Age-Adjusted Death
Rates per 100,000
Quantile Interval

- 9.10 - 10.08
- 8.88 - 9.09
- 8.60 - 8.87
- 8.37 - 8.59
- 8.01 - 8.36
- 6.17 - 8.00

U. S. Rate: 8.59

^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 21.15
Cancer of the Ovary (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2007
By Race/Ethnicity 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	53,433	31,181	22,816	18,814	15,719	11,447	115,526	156,901	20,261	177,162
White ^b	46,925	27,547	20,126	17,210	14,082	10,279	102,101	139,282	17,539	156,821
Black ^b	3,713	1,948	1,573	985	1,049	785	7,541	10,338	1,734	12,072
Asian/Pacific Islander ^c	2,165	1,209	799	+	+	+	4,413	+	+	+
Hispanic ^d	3,993	2,093	1,483	+	+	+	8,061	+	+	+

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

Age at Prevalence	Age Specific (Crude)									Age-Adjusted ^f All Ages
	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	
<u>Race</u>										
All Races ^c	0.0677%	0.0004%	0.0056%	0.0171%	0.0268%	0.0629%	0.1317%	0.1953%	0.2091%	0.1691%
White ^c	0.0741%	0.0004%	0.0059%	0.0177%	0.0261%	0.0658%	0.1398%	0.2094%	0.2295%	0.1811%
Black ^c	0.0357%	-	0.0035%	0.0105%	0.0256%	0.0399%	0.0747%	0.1188%	0.1202%	0.0979%
Asian/Pacific Islander ^c	0.0608%	-	0.0052%	0.0213%	0.0302%	0.0652%	0.1314%	0.1610%	0.1442%	0.1184%
Hispanic ^d	0.0356%	-	0.0065%	0.0175%	0.0222%	0.0449%	0.0990%	0.1389%	0.1753%	0.1408%

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

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.

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 Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.

^{g h i} (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.

Table 21.16

Cancer of the Ovary (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2003-2007
Females by Race

Histology ^a	All Races		White		Black		Asian/Pacific Islander		American Indian/Alaska Native ^b		Hispanic ^c	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Carcinoma	22,477	92.4%	19,119	92.7%	1,539	89.5%	1,580	91.0%	108	91.5%	2,303	87.3%
Epidermoid carcinoma ^d (8051-8131)	175	0.7%	136	0.7%	-	-	21	1.2%	-	-	25	0.9%
Adenocarcinoma ^e	20,658	84.9%	17,624	85.5%	1,355	78.8%	1,467	84.5%	98	83.1%	2,064	78.3%
Adenocarcinoma, NOS (8140)	3,263	13.4%	2,720	13.2%	319	18.6%	199	11.5%	-	-	325	12.3%
Papillary adenocarcinoma, NOS (8050,8260)	584	2.4%	496	2.4%	55	3.2%	26	1.5%	-	-	48	1.8%
Clear cell adenocarcinoma (8310,9110)	1,239	5.1%	987	4.8%	41	2.4%	201	11.6%	-	-	104	3.9%
Endometrioid carcinoma (8380-8383,8570)	2,528	10.4%	2,152	10.4%	115	6.7%	230	13.2%	-	-	229	8.7%
Cystadenocarcinoma, NOS (8440,8450)	153	0.6%	117	0.6%	24	1.4%	-	-	-	-	-	-
Serous cystadenocarcinoma (8441)	3,033	12.5%	2,607	12.6%	184	10.7%	204	11.8%	18	15.3%	308	11.7%
Papillary serous cystadenocarcinoma (8460-8462)	7,224	29.7%	6,366	30.9%	447	26.0%	350	20.2%	35	29.7%	697	26.4%
Mucinous cystadenocarcinoma (8470-8473)	547	2.2%	451	2.2%	28	1.6%	54	3.1%	-	-	87	3.3%
Mucinous adenocarcinoma (8480,8482)	865	3.6%	692	3.4%	77	4.5%	84	4.8%	-	-	108	4.1%
Mucin-producing adenocarcinoma(8481)	82	0.3%	66	0.3%	-	-	-	-	-	-	-	-
Other adenocarcinoma ^f	1,140	4.7%	970	4.7%	55	3.2%	104	6.0%	-	-	129	4.9%
Other specific carcinomas ^g	541	2.2%	427	2.1%	77	4.5%	31	1.8%	-	-	80	3.0%
Stromal cell tumor	318	1.3%	236	1.1%	59	3.4%	19	1.1%	-	-	45	1.7%
Other ^h	223	0.9%	191	0.9%	18	1.0%	-	-	-	-	35	1.3%
Unspecified, Carcinoma, NOS (8010,8020-8022)	1,103	4.5%	932	4.5%	93	5.4%	61	3.5%	-	-	134	5.1%

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). Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases. Estimates 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.

^c Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

^d Epidermoid carcinoma includes squamous, basal, and transitional cell carcinomas.

^e Adenocarcinoma includes histologies 8050,8140-8147,8160-8162,8180-8221,8250-8507,8514,8520-8551,8560,8570-8574,8576,8940-8941,9110.

^f Other adenocarcinoma includes histologies 8141-8147,8160-8162,8180-8221,8250-8259,8261-8309,8311-8379,8384-8439,8442-8449,8451-8459,8463-8469,8474-8479,8483-8507,8514,8520-8551,8560,8571-8574,8576,8940-8941.

^g Other specific carcinomas includes histologies 8011-8015,8030-8046,8150-8155,8170-8175,8230-8231,8247-8249,8508,8510-8513,8561-8562,8575,8580-8619,8632-8649,8651-8671.

^h Other subgroup of other specific carcinomas includes histologies 8011-8015,8030-8046,8150-8155,8170-8175,8230-8231,8247-8249,8508,8510-8513,8561-8562,8575,8580-8619,8632-8649,8651-8671.

ⁱ Statistic not shown due to fewer than 16 cases during the time period.

Table 21.16 - continued

Cancer of the Ovary (Invasive)

Percent Distribution and Counts by Histology among Histologically Confirmed Cases, 2003-2007
Females by Race

Histology ^a	All Races		White		Black		Asian/Pacific Islander		American Indian/Alaska Native ^b		Hispanic ^c	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Sarcoma and other soft tissue tumors (8680-8713,8800-8921, 8990-8991,9040-9044, 9120-9136,9141-9340, 9540-9582)	84	0.3%	63	0.3%	17	1.0%	-	-	-	-	-	-
Other specific types (8240-8246,8720-8790, 8930-8936,8950-8983, 9000-9030,9060-9105, 9350-9364,9380-9513, 9530-9539)	1,595	6.6%	1,283	6.2%	149	8.7%	143	8.2%	-	-	287	10.9%
Mullerian mixed tumor (8950-8951,8980)	671	2.8%	573	2.8%	48	2.8%	44	2.5%	-	-	58	2.2%
Teratoma, malignant (9080-9085,9102)	354	1.5%	264	1.3%	36	2.1%	48	2.8%	-	-	110	4.2%
Other	570	2.3%	446	2.2%	65	3.8%	51	2.9%	-	-	119	4.5%
Unspecified (8000-8005)	179	0.7%	151	0.7%	-	-	-	-	-	-	32	1.2%
Total ^d	24,335	100.0%	20,616	100.0%	1,719	100.0%	1,736	100.0%	118	100.0%	2,637	100.0%

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). Percents may not sum to 100 due to rounding.

^a Excludes Kaposi Sarcoma, mesothelioma, lymphomas, leukemias, myelomas, lymphoreticular, and immunoproliferative diseases.

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

^c Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives.

^d Underlying incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

- Statistic not shown due to fewer than 16 cases during the time period.

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

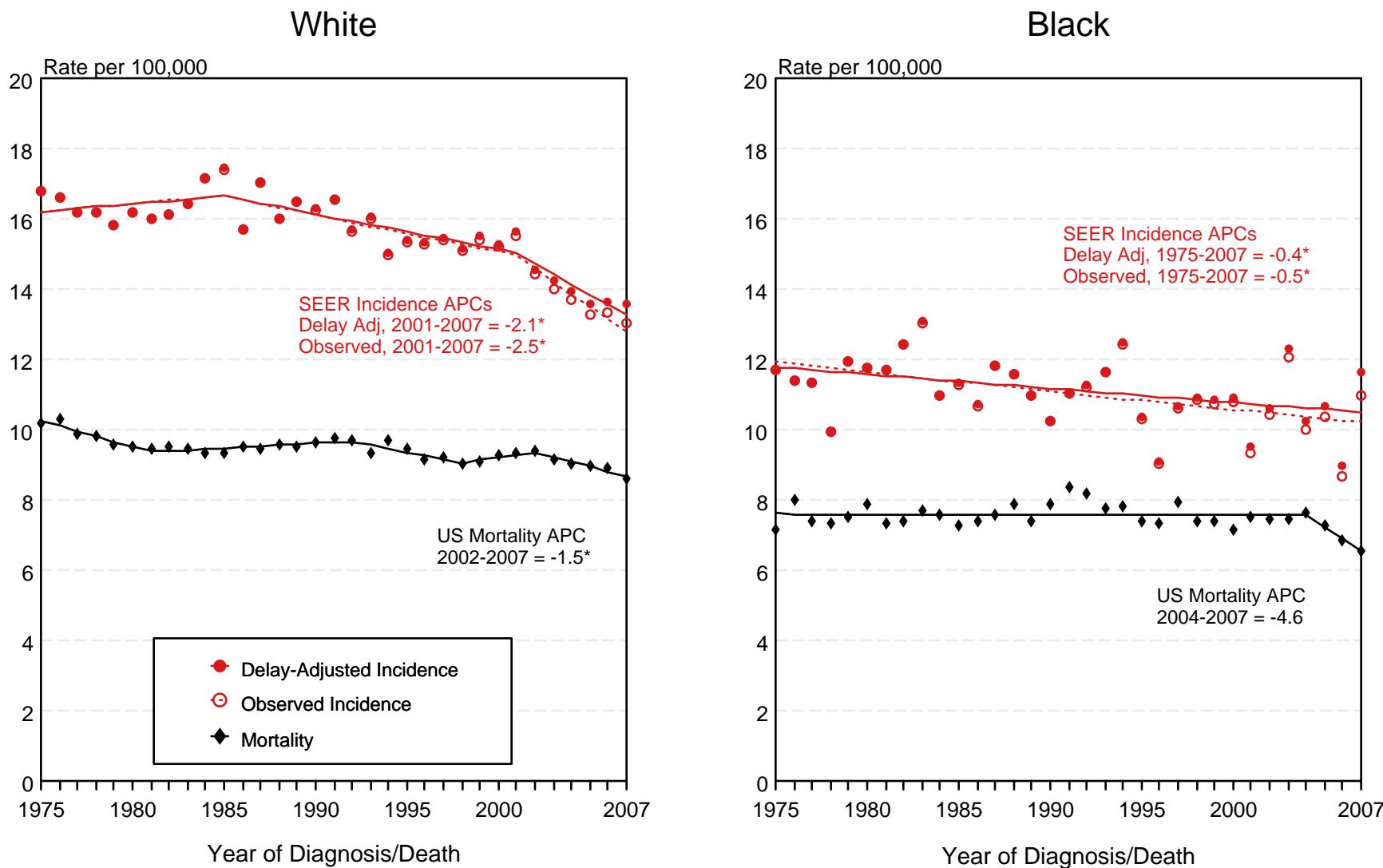


Figure 21.1

- ^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). Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473. Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.4.3, 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, SEER Delay Adjusted Incidence and US Death Rates^a Cancer of the Ovary, by Age and Race

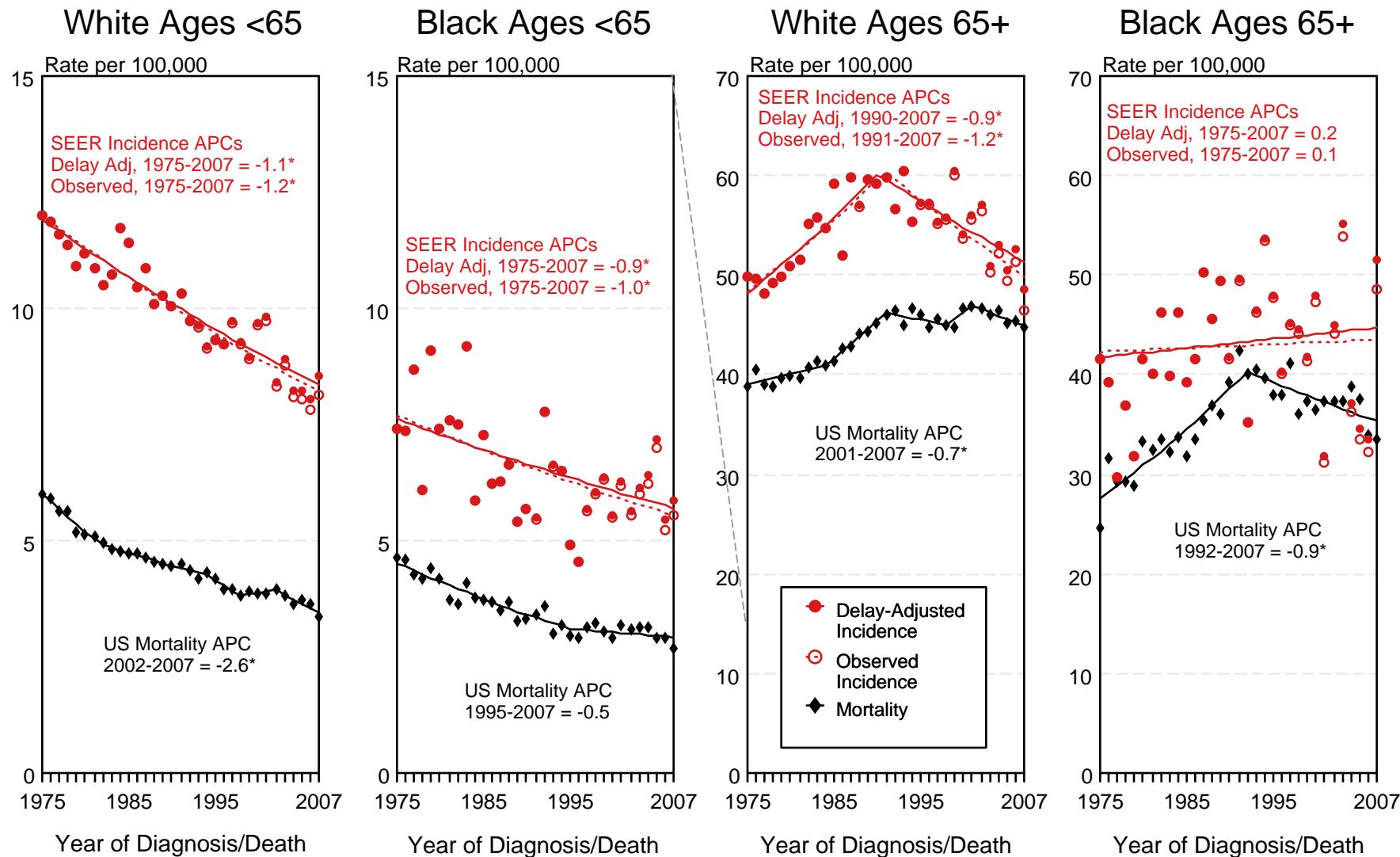


Figure 21.2

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

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

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

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

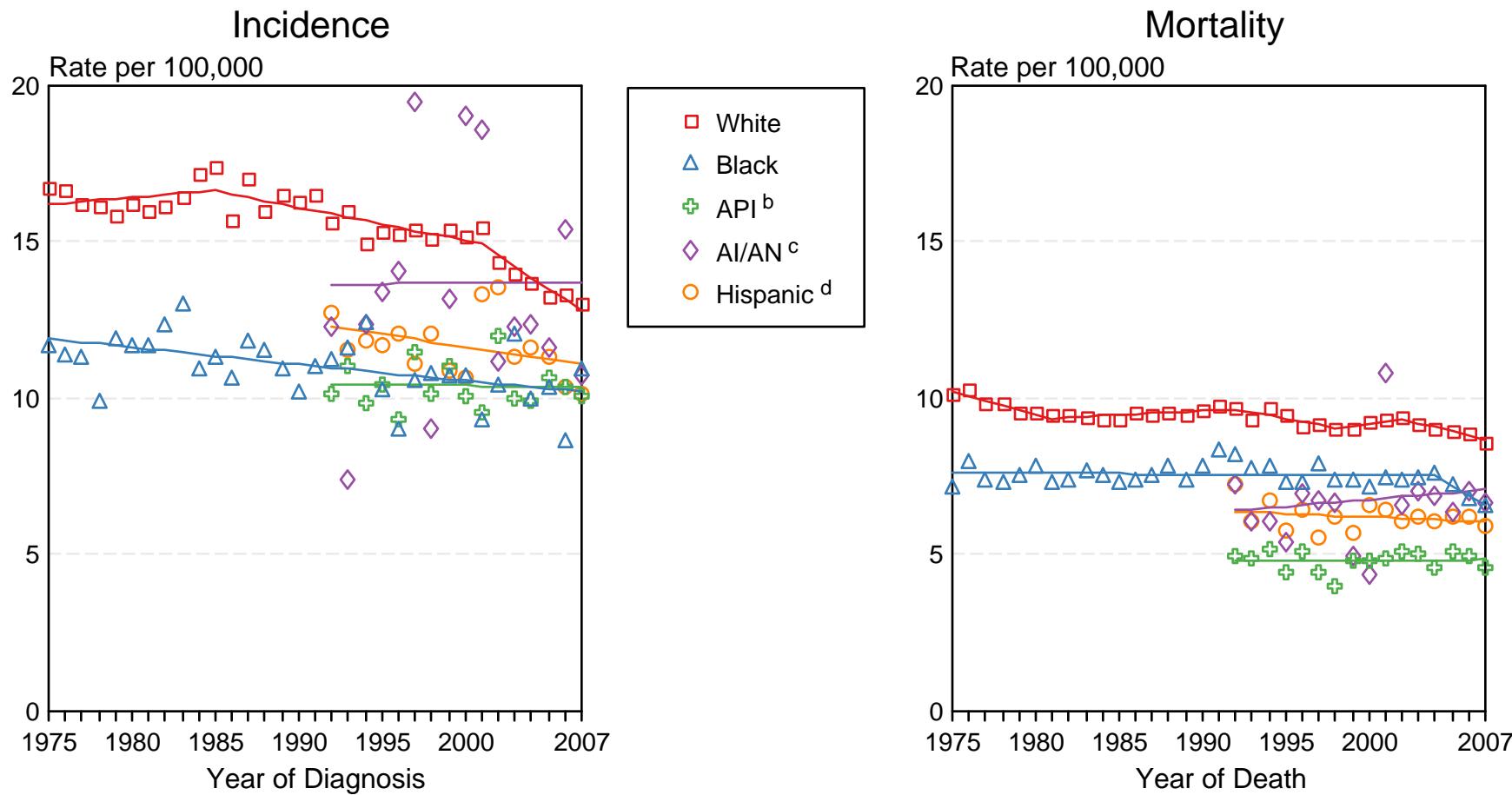
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

SEER Incidence and US Death Rates^a

Cancer of the Ovary

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

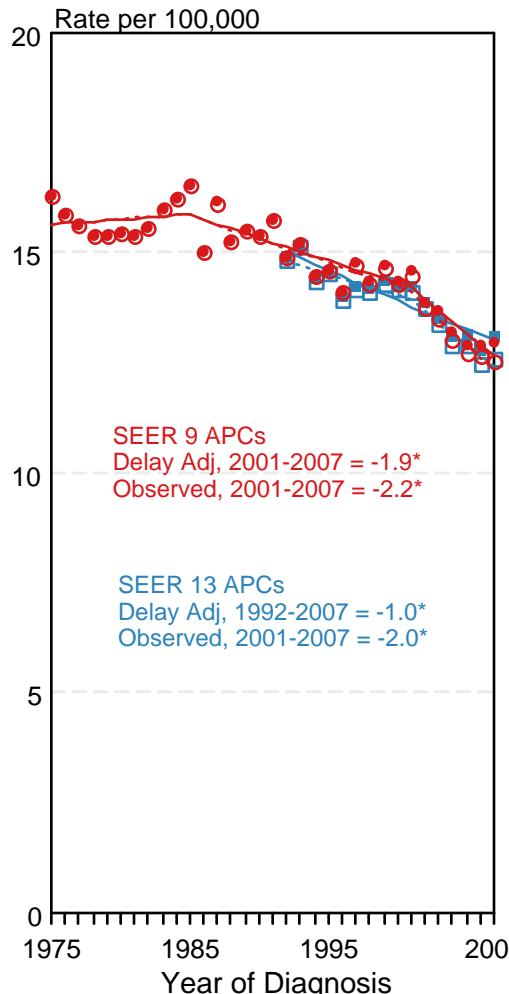
Figure 11.3

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a

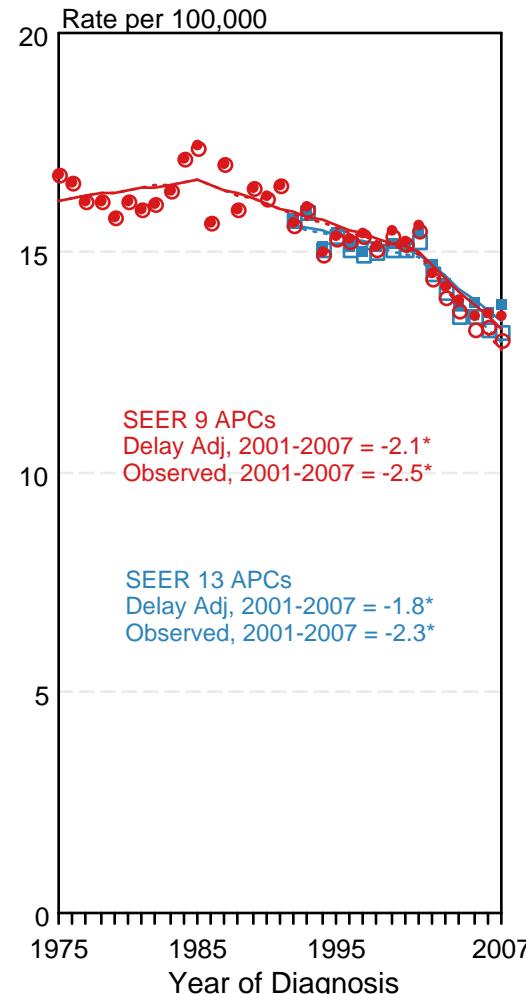
SEER 9 Areas Compared to SEER 13 Areas

Cancer of the Ovary, by Race

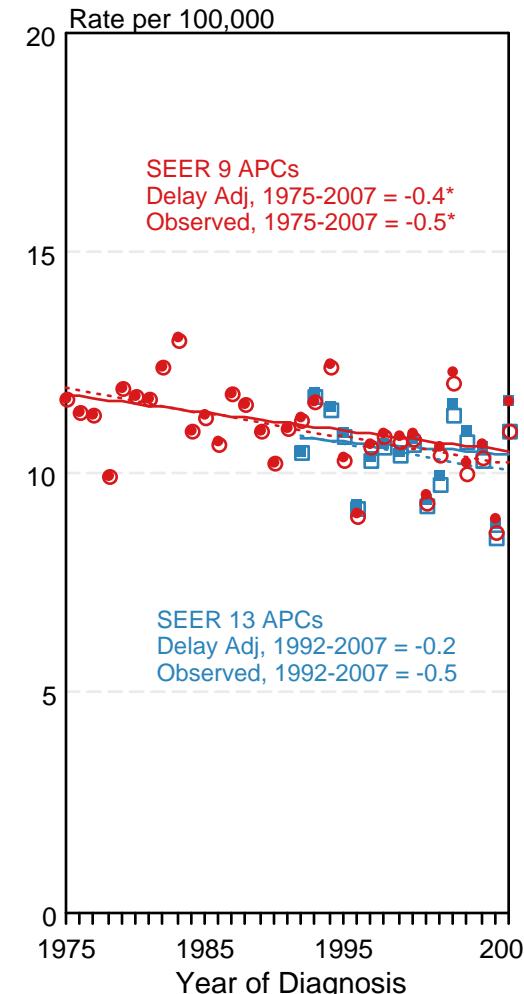
All Races



White



Black



● SEER 9 Delay-Adjusted Incidence ○ SEER 9 Observed Incidence ■ SEER 13 Delay-Adjusted Incidence □ SEER 13 Observed Incidence

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

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

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

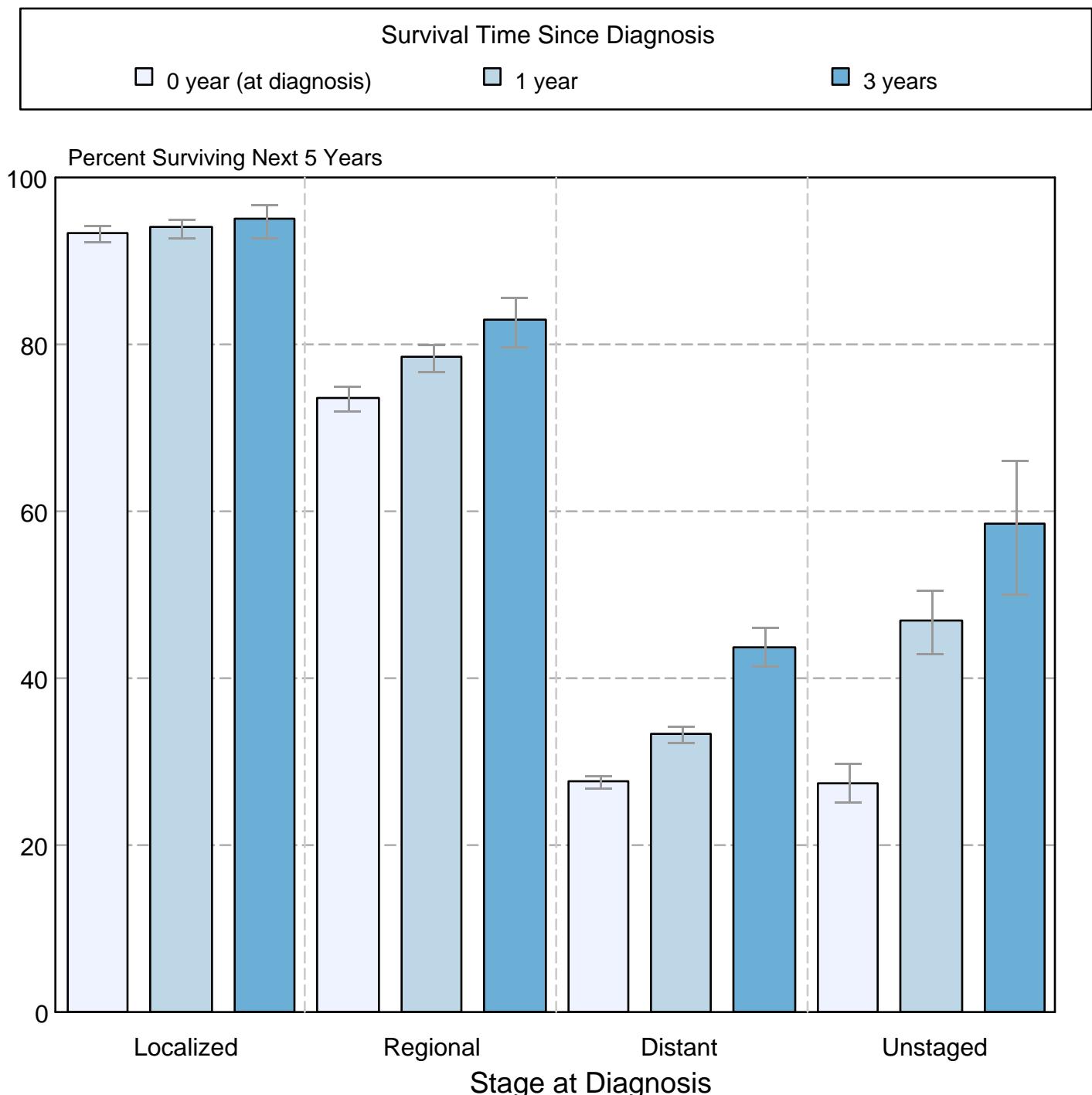
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 21.4

Figure 21.5

Cancer of the Ovary
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.