

Table XXI-1
OVARY CANCER (Invasive)TRENDS IN SEER INCIDENCE^a AND U.S. MORTALITY^b USING THE JOINPOINT REGRESSION PROGRAM, 1975-2003
WITH UP TO THREE JOINPOINTS BY RACE AND AGE

		Joinpoint Segment 1		Joinpoint Segment 2		Joinpoint Segment 3		Joinpoint Segment 4	
		Year	APC	Year	APC	Year	APC	Year	APC
<u>SEER Cancer Incidence^a</u>									
All Races	All Ages	1975-1987	0.1	1987-2003	-0.9*				
All Races	Under 65	1975-2003	-1.1*						
All Races	65 and Over	1975-1989	1.5*	1989-2003	-0.9*				
White	All Ages	1975-1985	0.3	1985-2001	-0.7*	2001-2003	-4.9		
White	Under 65	1975-2003	-1.1*						
White	65 and Over	1975-1990	1.5*	1990-2003	-0.9*				
Black	All Ages	1975-2003	-0.5*						
Black	Under 65	1975-2003	-1.4*						
Black	65 and Over	1975-2003	0.5						
<u>SEER Delay-Adjusted Incidence^a</u>									
All Races	All Ages	1975-1985	0.2	1985-2003	-0.7*				
All Races	Under 65	1975-2003	-1.1*						
All Races	65 and Over	1975-1989	1.5*	1989-2003	-0.7*				
White	All Ages	1975-1987	0.2	1987-2003	-0.7*				
White	Under 65	1975-2003	-1.0*						
White	65 and Over	1975-1989	1.6*	1989-2003	-0.6*				
Black	All Ages	1975-2003	-0.3						
Black	Under 65	1975-2003	-1.3*						
Black	65 and Over	1975-2003	0.6						
<u>U.S. Cancer Mortality^b</u>									
All Races	All Ages	1975-1982	-1.2*	1982-1992	0.3	1992-1998	-1.1*	1998-2003	0.4
All Races	Under 65	1975-1982	-2.9*	1982-1994	-1.3*	1994-1997	-3.1	1997-2003	0.0
All Races	65 and Over	1975-1984	0.6*	1984-1991	1.7*	1991-2003	-0.1		
White	All Ages	1975-1981	-1.5*	1981-1992	0.3	1992-1998	-1.0*	1998-2003	0.5
White	Under 65	1975-1980	-3.5*	1980-1994	-1.3*	1994-1998	-2.4*	1998-2003	0.3
White	65 and Over	1975-1981	0.2	1981-1991	1.4*	1991-2003	0.1		
Black	All Ages	1975-2003	0.0						
Black	Under 65	1975-1996	-1.9*	1996-2003	0.6				
Black	65 and Over	1975-1992	2.2*	1992-2003	-0.9*				

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

Joinpoint Regression Program Version 3.1, April 2006, 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).

^a Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).^b Trends are from the NCHS public use data file for the total US.

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

Table XXI-2
OVARY CANCER (Invasive)

AGE-ADJUSTED SEER INCIDENCE^a RATES BY YEAR, RACE AND AGE

	<u>All Races, Females</u>			<u>White Females</u>			<u>Black Females</u>		
	All	<65	65+	All	<65	65+	All	<65	65+
<u>SEER INCIDENCE RATES</u>									
<u>YEAR OF DIAGNOSIS:</u>									
1975	16.3	11.6	48.9	16.8	12.0	49.8	11.7	7.4	41.6
1976	15.8	11.2	47.8	16.6	11.9	49.5	11.4	7.4	39.3
1977	15.6	11.2	46.2	16.2	11.6	48.1	11.4	8.7	29.7
1978	15.4	10.8	47.2	16.1	11.3	49.3	10.0	6.1	36.8
1979	15.4	10.7	47.8	15.8	10.9	49.9	11.9	9.1	31.8
1980	15.4	10.6	48.6	16.2	11.2	50.9	11.7	7.4	41.6
1981	15.4	10.5	49.5	16.0	10.8	51.5	11.7	7.6	40.1
1982	15.6	10.1	53.4	16.1	10.5	55.1	12.3	7.4	46.2
1983	16.0	10.4	54.2	16.4	10.7	55.8	13.1	9.2	39.9
1984	16.2	11.0	52.8	17.1	11.7	54.7	11.0	5.9	46.3
1985	16.5	10.7	56.3	17.4	11.4	59.1	11.3	7.3	39.3
1986	15.0	9.9	50.4	15.7	10.5	51.7	10.6	6.2	41.5
1987	16.2	10.2	57.6	17.0	10.9	59.8	11.8	6.3	50.3
1988	15.3	9.6	54.7	16.0	10.1	57.0	11.6	6.6	45.6
1989	15.5	9.5	56.8	16.5	10.3	59.5	10.9	5.3	49.5
1990	15.4	9.4	56.5	16.3	10.1	59.2	10.1	5.6	41.7
1991	15.7	9.7	57.7	16.5	10.3	59.7	11.0	5.5	49.5
1992	14.9	9.3	53.4	15.6	9.7	56.6	11.0	7.5	35.2
1993	15.2	9.1	57.4	16.0	9.6	60.4	11.5	6.4	46.3
1994	14.4	8.8	53.1	15.0	9.1	55.3	12.4	6.5	53.5
1995	14.5	8.7	54.9	15.3	9.3	57.1	10.3	4.9	47.7
1996	14.1	8.4	53.6	15.3	9.2	57.1	9.0	4.5	40.1
1997	14.7	9.2	52.7	15.4	9.7	55.1	10.5	5.6	44.9
1998	14.2	8.7	52.4	15.0	9.1	55.5	10.7	6.0	43.3
1999	14.6	8.6	55.9	15.4	8.9	60.2	10.7	6.2	41.4
2000	14.1	8.9	50.1	15.1	9.6	53.3	10.5	5.4	45.8
2001	14.4	9.1	51.0	15.4	9.7	55.1	9.3	6.1	31.4
2002	13.5	7.8	52.9	14.1	8.1	55.4	10.2	5.4	43.0
2003	13.2	8.2	47.7	13.6	8.6	48.5	11.7	5.7	52.9
1975-2003	15.1	9.6	52.8	15.8	10.1	55.2	11.0	6.4	43.2

^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 XXI-3
OVARY CANCER (Invasive)

AGE-ADJUSTED U.S. DEATH^a RATES BY YEAR, RACE AND AGE

	<u>All Races, Females</u>			<u>White Females</u>			<u>Black Females</u>		
	<u>All</u>	<u><65</u>	<u>65+</u>	<u>All</u>	<u><65</u>	<u>65+</u>	<u>All</u>	<u><65</u>	<u>65+</u>
<u>U.S. DEATH RATES</u>									
<u>YEAR OF DEATH:</u>									
1975	9.8	5.8	37.5	10.2	6.0	38.8	7.2	4.6	24.6
1976	10.0	5.7	39.7	10.3	5.9	40.6	8.0	4.6	31.5
1977	9.6	5.5	38.0	9.9	5.6	39.1	7.4	4.3	29.2
1978	9.6	5.4	38.0	9.8	5.6	38.9	7.4	4.2	29.3
1979	9.3	5.1	38.6	9.6	5.2	39.7	7.5	4.4	28.9
1980	9.3	5.0	39.1	9.5	5.1	40.0	7.9	4.2	33.2
1981	9.2	4.9	38.9	9.5	5.1	39.8	7.4	3.7	32.4
1982	9.2	4.8	39.8	9.5	5.0	40.7	7.4	3.6	33.5
1983	9.2	4.7	40.3	9.4	4.8	41.4	7.7	4.1	32.3
1984	9.1	4.6	40.1	9.4	4.8	40.9	7.6	3.8	33.8
1985	9.1	4.6	40.2	9.3	4.7	41.3	7.3	3.7	31.9
1986	9.2	4.6	41.6	9.5	4.7	42.6	7.4	3.7	33.4
1987	9.2	4.5	41.9	9.5	4.6	42.8	7.6	3.5	35.5
1988	9.3	4.4	43.2	9.6	4.6	44.1	7.9	3.7	36.9
1989	9.2	4.3	43.2	9.5	4.5	44.3	7.4	3.3	36.2
1990	9.3	4.3	44.4	9.6	4.5	45.2	7.9	3.3	39.2
1991	9.5	4.3	45.4	9.7	4.5	46.1	8.4	3.4	42.5
1992	9.5	4.2	45.5	9.7	4.4	46.5	8.2	3.6	40.0
1993	9.1	4.0	44.1	9.3	4.2	44.9	7.7	3.0	40.4
1994	9.4	4.1	45.6	9.7	4.3	46.7	7.8	3.2	39.7
1995	9.1	4.0	44.8	9.5	4.2	46.1	7.4	2.9	38.0
1996	8.9	3.8	43.7	9.1	4.0	44.8	7.3	2.9	37.9
1997	8.9	3.8	44.7	9.2	3.9	45.6	7.9	3.1	41.2
1998	8.7	3.7	43.6	9.0	3.8	45.0	7.4	3.2	36.1
1999	8.8	3.7	43.6	9.1	3.9	44.8	7.4	3.1	37.3
2000	8.9	3.7	45.0	9.2	3.8	46.6	7.2	2.9	36.5
2001	9.0	3.7	45.4	9.3	3.9	46.9	7.5	3.2	37.4
2002	9.0	3.8	45.2	9.4	4.0	46.7	7.4	3.1	37.3
2003	8.8	3.7	44.6	9.2	3.8	46.1	7.5	3.1	37.4
1975-2003	9.2	4.4	42.8	9.5	4.5	43.9	7.6	3.5	36.0

^a NCHS public use data file for the total US. 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 XXI-4
OVARY CANCER (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
<u>AGE-ADJUSTED RATES, 2000-2003</u>						
AGE AT DIAGNOSIS/DEATH:						
All ages	13.7	14.5	10.1	8.9	9.3	7.4
Under 65	8.4	8.9	5.7	3.7	3.9	3.1
65 and over	50.1	52.7	40.3	45.0	46.6	37.2
All ages(IARC world std) ^c	9.8	10.4	7.0	5.7	5.9	4.8
<u>AGE-SPECIFIC RATES, 2000-2003</u>						
AGE AT DIAGNOSIS/DEATH:						
<1	-	-	-	-	-	-
1-4	-	-	-	-	-	-
5-9	0.2	0.3	-	-	-	-
10-14	0.6	0.7	-	-	-	-
15-19	1.5	1.6	1.3	0.1	0.1	-
20-24	1.8	1.8	-	0.2	0.2	-
25-29	2.3	2.3	1.5	0.4	0.4	0.3
30-34	2.9	3.0	2.8	0.6	0.6	0.6
35-39	5.4	5.5	4.7	1.3	1.3	1.4
40-44	9.0	9.4	6.1	2.8	2.9	2.5
45-49	16.0	16.9	10.0	6.0	6.3	4.6
50-54	22.3	24.0	13.9	10.6	11.1	8.5
55-59	30.1	32.4	18.0	16.2	16.9	13.2
60-64	38.6	41.6	28.7	24.4	25.5	20.3
65-69	43.8	46.9	32.5	32.5	33.8	27.5
70-74	48.8	51.3	40.6	39.8	41.2	33.7
75-79	54.6	58.1	37.2	51.4	53.2	41.8
80-84	58.0	60.2	50.6	59.5	61.4	44.5
85+	49.7	50.8	50.5	55.8	57.0	49.0

- ^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 NCHS public use data file for the total US. 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 XXI-5
OVARY CANCER (Invasive)

SURVIVAL RATES, BY RACE, DIAGNOSIS YEAR, STAGE AND AGE

	All Races, Females			White Females			Black Females		
	All	<65	65+	All	<65	65+	All	<65	65+
<u>5-YR RELATIVE SURVIVAL RATES</u>									
YEAR OF DIAGNOSIS:									
1960-1963 ^a	-	-	-	32	-	-	32	-	-
1970-1973 ^a	-	-	-	36	-	-	32	-	-
1975-1977 ^b	37.0	44.3	21.9	36.4	43.6	21.7	43.4	49.5	25.5 ^f
1978-1980 ^b	38.7	47.2	22.6	37.9	46.4	22.8	40.3	49.7	13.0
1981-1983 ^b	40.4	50.3	24.3	40.2	50.4	24.4	39.3	46.3	23.4 ^f
1984-1986 ^b	39.8	49.5	24.9	38.9	48.5	24.6	40.6	52.4	21.5
1987-1989 ^b	39.9	51.3	24.7	39.9	51.4	25.1	35.5	47.8	17.9
1990-1992 ^b	42.4	55.5	25.6	42.5	56.3	25.6	36.8	48.6	17.6
1993-1995 ^b	43.2	55.6	27.9	42.6	55.5	27.5	42.6	54.3	27.4
1996-2002 ^b	44.9 ^e	56.4 ^e	28.7 ^e	44.6 ^e	56.6 ^e	28.8 ^e	38.9	48.1	22.6
<u>5-YR PERIOD SURVIVAL RATES^{cd}</u>									
YEAR OF DIAGNOSIS:									
1996-2002	45.0	57.3	27.5	44.9	57.8	27.7	36.5	47.2	18.4
<u>STAGE DISTRIBUTION (%) 1996-2002^c</u>									
All Stages									
Number of cases	22,395	12,028	10,367	19,215	9,993	9,222	1,505	867	638
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	19	27	10	18	26	9	17	23	8
Regional	7	8	5	7	8	5	7	7	7
Distant	68	61	75	69	62	76	67	64	72
Unstaged	7	4	10	7	4	10	9	6	12
<u>5-YR RELATIVE SURVIVAL RATES, 1996-2002^c</u>									
AGE AT DIAGNOSIS:									
<45	72.5	-	-	73.1	-	-	68.3	-	-
45-54	55.2	-	-	55.5	-	-	42.4	-	-
55-64	46.4	-	-	46.6	-	-	37.4	-	-
65-74	34.5	-	-	34.4	-	-	25.1	-	-
75+	20.4	-	-	20.8	-	-	18.1	-	-
Under 65	56.4	-	-	56.4	-	-	49.7	-	-
65 and over	28.0	-	-	28.1	-	-	22.2	-	-
STAGE:									
All Stages	44.7	56.4	28.0	44.2	56.4	28.1	39.5	49.7	22.2
Localized	93.1	93.4	92.4	93.3	93.8	91.5	93.9	93.6	90.3 ^f
Regional	69.0	74.1	58.2	69.0	74.7	57.6	59.9 ^f	61.3 ^f	56.1 ^g
Distant	29.6	38.5	19.6	29.7	38.8	20.0	23.8	30.7	13.7
Unstaged	23.3	44.5	10.4	23.0	43.9	11.2	21.9 ^f	50.6 ^f	-

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

- ^a Rates are based on End Results data from a series of hospital registries and one population-based registry.
- ^b Rates are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).
- ^c Rates are based on follow-up of patients into 2003.
- ^c Rates 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). California excluding SF/SJM/LA, Kentucky, Louisiana, and New Jersey contribute cases for diagnosis years 2000-2002. The remaining 13 SEER Areas contribute cases for the entire period 1996-2002. Rates are based on follow-up of patients into 2003.
- ^d 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 calendar year blocks (2000-2002: 0-1 year survival), (1999-2001: 1-2 year survival), (1998-2000: 2-3 year survival), (1997-1999: 3-4 year survival), (1996-1998: 4-5 years survival).
- ^e The difference in rates between 1975-1977 and 1996-2002 is statistically significant (p<.05).
- ^f The standard error of the survival rate is between 5 and 10 percentage points.
- ^g The standard error of the survival rate is greater than 10 percentage points.
- Statistic could not be calculated due to fewer than 16 cases during the time period.

Table XXI-6
OVARY CANCER (Invasive)

SURVIVAL RATES^a

By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Relative Survival Rates (SEER ^b)																				
1-year	65.1	70.6	72.1	69.1	71.0	69.6	71.9	72.1	72.7	75.0	72.6	72.1	73.8	74.7	77.2	75.9	74.4	77.3	76.4	76.0
2-year	49.6	54.0	55.4	52.3	54.0	56.6	56.4	57.8	58.9	60.9	59.1	61.3	61.0	62.6	66.2	65.1	62.3	64.7	65.7	
3-year	42.9	46.8	48.2	46.1	46.6	49.3	47.5	49.2	49.7	52.0	49.6	54.1	52.1	53.9	57.7	56.4	53.6	55.1		
4-year	39.5	42.5	42.9	42.1	42.6	44.7	41.7	45.1	44.6	47.6	43.8	48.2	47.5	47.6	50.1	51.7	48.4			
5-year	37.6	40.2	40.0	38.6	39.3	41.4	39.0	42.0	41.6	43.6	40.0	45.8	44.1	43.7	45.6	47.0				
6-year	36.5	38.5	38.0	37.1	37.8	39.5	36.7	40.4	39.4	41.4	38.2	42.5	40.8	40.7	42.3					
7-year	35.4	37.9	36.5	36.0	37.3	38.6	35.9	39.3	38.0	40.0	37.7	40.8	39.3	39.6						
8-year	34.7	36.8	35.9	35.5	36.6	37.9	34.5	38.2	36.9	39.4	36.7	40.2	37.9							
9-year	34.4	36.0	35.2	35.2	36.2	37.4	34.5	37.6	36.5	39.1	35.9	38.7								
10-year	34.3	35.6	35.0	34.9	36.1	37.0	34.4	37.6	36.0	39.1	35.1									
11-year	34.2	35.6	34.8	34.9	36.1	36.5	34.4	37.2	35.7	39.0										
12-year	33.9	35.3	34.8	34.8	35.9	36.4	34.2	37.2	35.4											
13-year	33.9	35.0	34.8	34.7	35.7	35.8	33.9	37.2												
14-year	33.8	35.0	34.8	34.7	35.7	35.1	33.9													
15-year	33.5	35.0	34.8	34.7	35.7	35.1														
16-year	33.5	35.0	34.8	34.7	35.7															
17-year	33.5	35.0	34.8	34.7																
18-year	33.5	35.0	34.8																	
19-year	33.5	35.0																		
20-year	33.5																			

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

^b Survival rates are relative rates expressed as percents.

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

Table XXI-7
OVARY CANCER (Invasive)

Percent Diagnosed With Cancer In 10, 20 and 30 Years and In Remaining Lifetime,
 Given Cancer Free At Current Age By Race

Lifetime Risk (Percent) of Being Diagnosed (17 SEER Areas) With Cancer and
 Lifetime Risk (Percent) of Dying (Total U.S.) From Cancer

2001-2003

<u>Race/Ethnicity</u>	<u>Current Age</u>	<u>+10 yrs</u>	<u>+20 yrs</u>	<u>+30 yrs</u>	<u>Eventually</u>
All Races	0	0.00	0.01	0.03	1.44
	10	0.01	0.03	0.07	1.46
	20	0.02	0.06	0.19	1.45
	30	0.04	0.17	0.41	1.44
	40	0.12	0.37	0.73	1.41
	50	0.25	0.62	1.00	1.31
	60	0.38	0.78	1.05	1.11
White	0	0.00	0.01	0.03	1.53
	10	0.01	0.03	0.08	1.54
	20	0.02	0.06	0.19	1.54
	30	0.04	0.17	0.44	1.52
	40	0.13	0.40	0.78	1.49
	50	0.27	0.66	1.07	1.39
	60	0.41	0.83	1.11	1.17
Black	0	0.00	0.01	0.02	0.95
	10	0.01	0.02	0.06	0.97
	20	0.02	0.05	0.13	0.97
	30	0.04	0.12	0.26	0.96
	40	0.08	0.22	0.47	0.94
	50	0.15	0.40	0.65	0.90
	60	0.28	0.54	0.76	0.82
Asian/Pacific Islander	0	0.00	0.01	0.04	1.12
	10	0.01	0.04	0.08	1.13
	20	0.03	0.07	0.19	1.12
	30	0.04	0.16	0.34	1.10
	40	0.12	0.30	0.54	1.06
	50	0.19	0.42	0.69	0.95
	60	0.24	0.51	0.71	0.79
Hispanic ^a	0	0.00	0.02	0.04	1.35
	10	0.01	0.03	0.07	1.36
	20	0.02	0.06	0.16	1.35
	30	0.04	0.14	0.34	1.33
	40	0.11	0.31	0.60	1.30
	50	0.20	0.50	0.87	1.22
	60	0.31	0.69	0.98	1.05

<u>Race/Ethnicity</u>	<u>Lifetime Risk of Developing</u>	<u>Lifetime Risk of Dying</u>
All Races	1.44%	1.05%
White	1.53%	1.11%
Black	0.95%	0.76%
Asian/Pacific Islander	1.12%	0.69%
Hispanic ^a	1.35%	0.81%

Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
 Devcan Version 6.1.0, April 2006, 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 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 Hawaii, Seattle, Alaska Native Registry and Kentucky. Underlying mortality data for Hispanics exclude deaths from Minnesota, New Hampshire and North Dakota.

Table XXI-8
OVARY CANCER (Invasive)

SEER INCIDENCE AND U.S. MORTALITY
AGE-ADJUSTED RATES AND TRENDS^a
 By Race/Ethnicity and Sex

SEER Incidence

RACE/ETHNICITY	Rate 2000-2003 ^b	Trend 1994-2003 ^c
	Rate per 100,000 persons	APC (%)
	Females	Females
All Races	13.7	-0.9*
White	14.5	-0.8*
White Hispanic ^d	11.7	-0.1
White Non-Hispanic ^d	14.9	-0.8*
Black	10.1	-0.7
Asian/Pacific Islander	9.7	0.1
Amer Ind/Alaska Nat ^e	13.1	-0.1
Hispanic ^d	11.4	0.0

U.S. Mortality^f

RACE/ETHNICITY	Rate 2000-2003	Trend 1994-2003
	Rate per 100,000 persons	APC (%)
	Females	Females
All Races	8.9	-0.3
White	9.3	-0.3
White Hispanic ^d	6.4	0.1
White Non-Hispanic ^d	9.5	-0.1
Black	7.4	-0.3
Asian/Pacific Islander	4.9	0.6
Amer Ind/Alaska Nat	5.5	2.1
Hispanic ^d	6.1	0.2

- Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473. The APC is the Annual Percent Change over the time interval.
- 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 Incidence data used in calculating the rates are from the 17 SEER 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).
- ^c Incidence data used in calculating the trends are from the 13 SEER areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia).
- ^d 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 Hawaii, Seattle, Alaska Native Registry and Kentucky. The 2000-2003 Hispanic and Non-Hispanic death rates exclude deaths from Minnesota, New Hampshire and North Dakota. The 1994-2003 Hispanic and Non-Hispanic mortality trends exclude deaths from Maine, Minnesota, New Hampshire, North Dakota, and Oklahoma.
- ^e Incidence data for American Indians/Alaska Natives include cases from Connecticut, Detroit, Iowa, New Mexico, Seattle, Utah, Atlanta, and the Alaska Native Registry. Incidence rates are for diagnosis years 1999-2002. Incidence trends are for diagnosis years 1994-2002.
- ^f Mortality data are analyzed from a public use file provided by the National Center for Health Statistics (NCHS).
- * The APC is significantly different from zero (p<.05).

Table XXI-9
OVARY CANCER (Invasive)

AGE-ADJUSTED SEER INCIDENCE RATES^a
By Registry, Race/Ethnicity and Age

	All Races			Whites	Blacks	Asian/Pacific Islanders	Hispanics ^b
	All Ages	Ages <65	Ages 65+	All Ages	All Ages	All Ages	All Ages
<u>SEER INCIDENCE RATES^a, 2000-2003</u>							
REGISTRY							
17 SEER Areas ^c	13.7	8.4	50.1	14.5	10.1	9.7	11.4
13 SEER Areas ^c	13.6	8.4	49.4	14.5	10.1	10.0	11.6
11 SEER Areas ^c	13.6	8.4	49.4	14.5	10.0	10.0	11.6
9 SEER Areas ^c	13.8	8.5	50.4	14.5	10.4	9.9	11.0
San Francisco-Oakland	13.4	8.7	46.0	14.6	9.1	10.6	10.7
Connecticut	14.0	9.0	48.9	14.6	7.5	-	10.3
Metropolitan Detroit	14.0	8.6	51.4	15.2	10.6	-	17.0
Hawaii	10.7	7.3	34.0	11.7	-	10.3	-
Iowa	14.1	8.8	51.4	14.1	-	-	-
New Mexico	12.8	8.0	46.5	12.8	-	-	10.7
Seattle-Puget Sound	15.6	8.9	62.1	16.2	10.6	11.2	-
Utah	13.4	8.0	50.3	13.7	-	-	11.9
Metropolitan Atlanta	13.4	7.8	51.8	14.1	12.3	-	12.4
San Jose-Monterey	12.7	8.3	43.1	13.7	-	9.2	10.4
Los Angeles	13.3	8.3	47.6	14.5	8.9	10.4	12.2
Rural Georgia	15.8	10.1	55.6	16.8	-	-	-
California exclud. SF/SJM/LA	13.3	8.0	50.3	14.0	8.2	8.8	11.2
Kentucky	12.8	7.9	46.9	13.0	10.4	-	-
Louisiana	12.2	6.8	49.6	13.1	10.3	-	11.8
New Jersey	15.6	10.0	54.0	16.4	10.8	10.4	10.8

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

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

^b 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 Hawaii, Seattle, Alaska Native Registry and Kentucky.

^c 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 XXI-10
OVARY CANCER (Invasive)

AGE-ADJUSTED SEER DEATH RATES^a
By Registry, Race/Ethnicity and Age

	All Races			Whites	Blacks	Asian/Pacific Islanders	Hispanics ^b
	All Ages	Ages <65	Ages 65+	All Ages	All Ages	All Ages	All Ages
<u>SEER DEATH RATES^a, 2000-2003</u>							
REGISTRY							
17 SEER Areas ^c	9.1	3.7	46.6	9.7	7.6	5.3	6.7
13 SEER Areas ^c	9.0	3.7	45.9	9.7	7.5	5.2	7.0
11 SEER Areas ^c	9.0	3.7	46.0	9.7	7.5	5.2	7.0
9 SEER Areas ^c	9.1	3.6	46.6	9.6	7.4	5.3	6.6
San Francisco-Oakland	8.6	3.7	43.0	9.9	6.1	5.6	5.7
Connecticut	8.7	3.5	44.8	9.1	4.8	-	6.1
Metropolitan Detroit	9.3	4.0	46.3	9.8	8.0	-	-
Hawaii	6.6	3.4	28.5	9.5	-	5.6	-
Iowa	9.8	3.6	52.8	9.9	-	-	-
New Mexico	8.5	3.6	42.4	8.5	-	-	7.4
Seattle-Puget Sound	10.6	3.9	56.7	11.0	8.1	5.3	-
Utah	8.0	3.2	40.8	8.1	-	-	-
Metropolitan Atlanta	9.1	3.2	50.1	9.4	8.6	-	-
San Jose-Monterey	8.2	3.4	41.3	9.5	-	3.7	6.6
Los Angeles	9.1	3.9	45.1	10.0	7.8	5.5	7.4
Rural Georgia	10.1	-	50.5	10.4	-	-	-
California exclud. SF/SJM/LA	9.3	3.6	48.1	9.7	6.5	5.9	6.7
Kentucky	8.9	3.7	44.5	9.1	7.1	-	-
Louisiana	8.4	3.3	44.0	8.8	7.7	-	-
New Jersey	9.9	4.2	48.9	10.2	8.6	4.5	4.4
Total U.S.	8.9	3.7	45.0	9.3	7.4	4.9	6.1

^a NCHS public use data file for the total US. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

^b Hispanic is not mutually exclusive from Whites, Blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. The 2000-2003 Hispanic death rates do not include deaths from Minnesota, New Hampshire and North Dakota.

^c 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 XXI-11
OVARY CANCER (Invasive)AVERAGE ANNUAL AGE-ADJUSTED CANCER DEATH^a RATES BY STATE, ALL RACES, 2000-2003

Females

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
TOTAL U.S.	8.9	0.04							
High Five States									
Washington	10.6 ^{bc}	0.29	(01)	19.1					
Maine	10.6 ^b	0.57	(02)	19.1					
Wyoming	10.3 ^b	0.98	(03)	15.7					
West Virginia	10.1	0.46	(04)	13.5					
South Dakota	9.9	0.74	(05)	11.2					
Low Five States									
District of Columbia	8.0	0.78	(47)	-10.1					
Utah	8.0	0.47	(48)	-10.1					
South Carolina	7.8 ^c	0.29	(49)	-12.4					
Hawaii	6.6 ^{bc}	0.48	(50)	-25.8					
Alaska	6.6 ^b	0.94	(51)	-25.8					
Alabama	9.5	0.30	(11)	6.7	Montana	9.4	0.66	(13)	5.6
Alaska	6.6 ^b	0.94	(51)	-25.8	Nebraska	9.2	0.48	(16)	3.4
Arizona	8.5	0.27	(39)	-4.5	Nevada	8.6	0.46	(34)	-3.4
Arkansas	8.4	0.36	(42)	-5.6	New Hampshire	8.5	0.55	(36)	-4.5
California	9.1	0.12	(20)	2.2	New Jersey	9.9 ^c	0.22	(06)	11.2
Colorado	9.3	0.34	(14)	4.5	New Mexico	8.5	0.47	(37)	-4.5
Connecticut	8.7	0.32	(32)	-2.2	New York	9.0	0.14	(25)	1.1
Delaware	8.9	0.69	(27)	0.0	North Carolina	8.7	0.22	(33)	-2.2
District of Columbia	8.0	0.78	(47)	-10.1	North Dakota	8.1	0.72	(44)	-9.0
Florida	8.5	0.14	(38)	-4.5	Ohio	9.0	0.18	(22)	1.1
Georgia	9.0	0.24	(21)	1.1	Oklahoma	8.3	0.32	(43)	-6.7
Hawaii	6.6 ^{bc}	0.48	(50)	-25.8	Oregon	9.8	0.35	(08)	10.1
Idaho	9.5	0.60	(10)	6.7	Pennsylvania	9.5	0.17	(12)	6.7
Illinois	8.9	0.18	(29)	0.0	Rhode Island	8.6	0.58	(35)	-3.4
Indiana	9.6	0.26	(09)	7.9	South Carolina	7.8 ^c	0.29	(49)	-12.4
Iowa	9.8	0.37	(07)	10.1	South Dakota	9.9	0.74	(05)	11.2
Kansas	9.2	0.39	(15)	3.4	Tennessee	9.1	0.26	(19)	2.2
Kentucky	8.9	0.31	(28)	0.0	Texas	8.1 ^c	0.14	(46)	-9.0
Louisiana	8.4	0.30	(40)	-5.6	Utah	8.0	0.47	(48)	-10.1
Maine	10.6 ^b	0.57	(02)	19.1	Vermont	8.4	0.77	(41)	-5.6
Maryland	8.8	0.27	(31)	-1.1	Virginia	9.0	0.24	(24)	1.1
Massachusetts	9.2	0.25	(17)	3.4	Washington	10.6 ^{bc}	0.29	(01)	19.1
Michigan	9.1	0.20	(18)	2.2	West Virginia	10.1	0.46	(04)	13.5
Minnesota	8.9	0.29	(30)	0.0	Wisconsin	9.0	0.27	(23)	1.1
Mississippi	8.1	0.36	(45)	-9.0	Wyoming	10.3 ^b	0.98	(03)	15.7
Missouri	9.0	0.26	(26)	1.1					

^a NCHS public use data file. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

SE Standard error of the rate.

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

Table XXI-12
OVARY CANCER (Invasive)

Estimated United States Cancer Prevalence Counts^a on January 1, 2003
 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	0 to <13 ^e	0 to <28 ^e	>=28 ^g	Complete ^h
<u>Race</u>									
All Races ^b	54,837	28,750	22,267	19,029	13,944	97,850	145,849	25,991	171,840
White ^b	48,800	25,457	20,280	17,246	12,457	87,293	130,574	22,633	153,207
Black ^b	3,499	1,975	1,219	1,177	1,027	6,176	9,403	2,216	11,619
Asian/Pacific Islander ^c	1,793	910	+	+	+	3,101	+	+	+
Hispanic ^d	3,722	1,608	+	+	+	6,164	+	+	+

Estimated prevalence percent^a on January 1, 2003, of the SEER 11 population diagnosed in the previous 10 years
 By Age at Prevalence and Race/Ethnicity

Age at Prevalence	All Ages	Age Specific (Crude)									Age-Adjusted ^f	
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages	
<u>Race</u>												
All Races ^c	0.0529%	0.0005%	0.0050%	0.0123%	0.0209%	0.0518%	0.1117%	0.1663%	0.1726%	0.1187%	0.0523%	
White ^c	0.0584%	0.0006%	0.0051%	0.0128%	0.0209%	0.0547%	0.1203%	0.1813%	0.1877%	0.1241%	0.0559%	
Black ^c	0.0273%	-	0.0034%	0.0085%	0.0160%	0.0343%	0.0604%	0.0894%	0.1040%	0.0993%	0.0321%	
Asian/Pacific Islander ^c	0.0441%	-	0.0071%	0.0128%	0.0246%	0.0490%	0.0967%	0.1297%	0.1170%	0.0773%	0.0436%	
Hispanic ^d	0.0283%	0.0008%	0.0055%	0.0125%	0.0166%	0.0374%	0.0887%	0.1234%	0.1478%	0.1185%	0.0426%	

- ^a Ovary excludes borderline cases or histologies 8442, 8451, 8462, 8472, and 8473.
 US 2003 cancer prevalence counts are based on 2003 cancer prevalence proportions from the SEER registries and 1/1/2003 US population estimates based on the average of 2002 and 2003 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.
- ^{b c d} 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 excluding Hawaii and Seattle.
- ^e Maximum limited-duration prevalence: 28 years for 1975-2003 SEER 9 data; 13 years for 1990-2003 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).
- ^f Percentages are age-adjusted to the 2000 US standard population by 5-year age groups.
- ^{g h} (g) Cases diagnosed more than 28 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 <28 and >=28.
- Statistic not shown. Statistic based on fewer than 5 cases estimated alive in SEER for the time interval.
- + Not available.

SEER Incidence, Delay Adjusted Incidence and US Death Rates+ Ovary Cancer, by Race

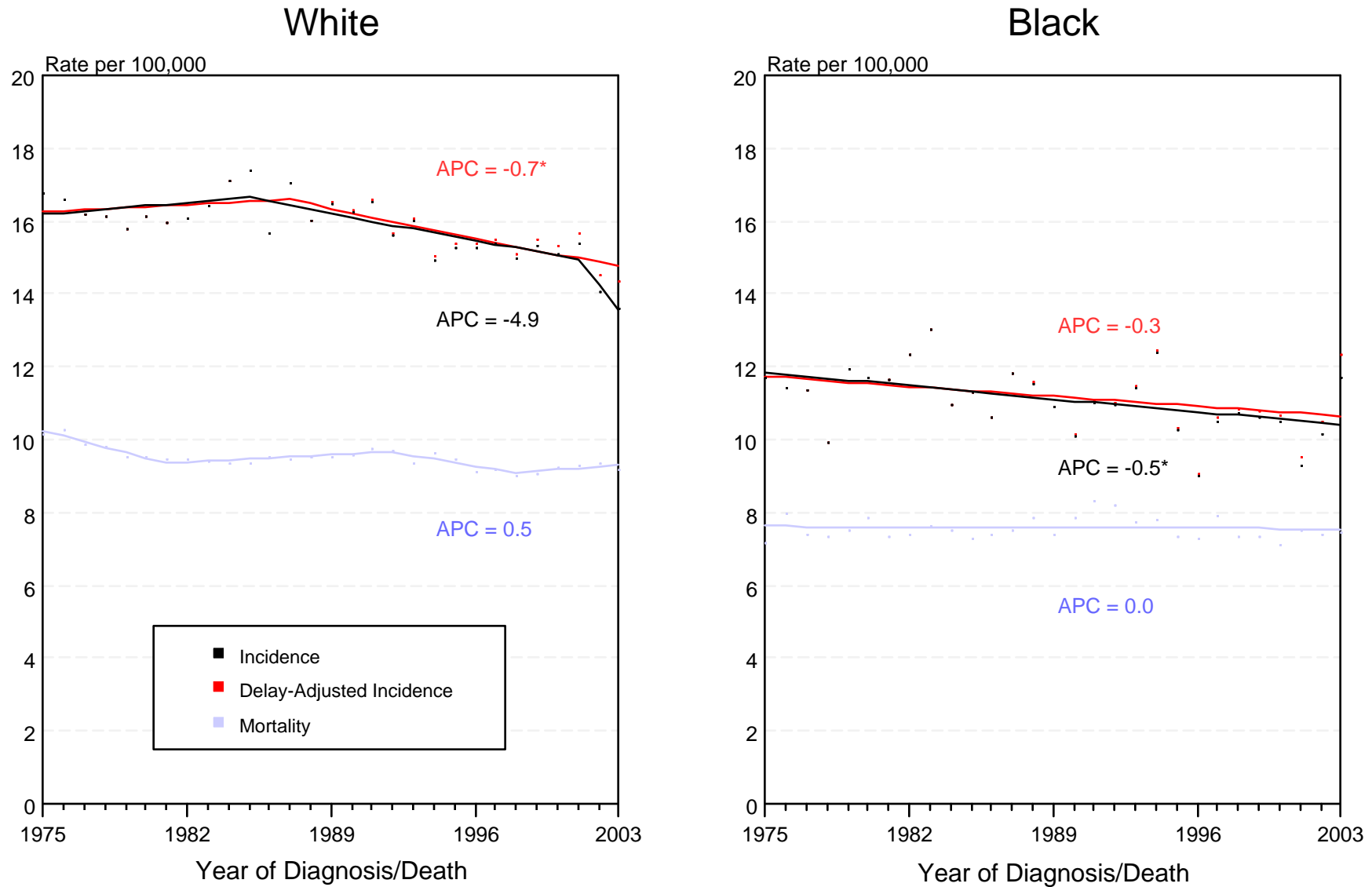


Figure XXI-1

- + Source: SEER 9 areas and NCHS public use data file for the total US. 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 3.1, April 2006, 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, Delay Adjusted Incidence and US Death Rates+ Ovary Cancer, by Age and Race

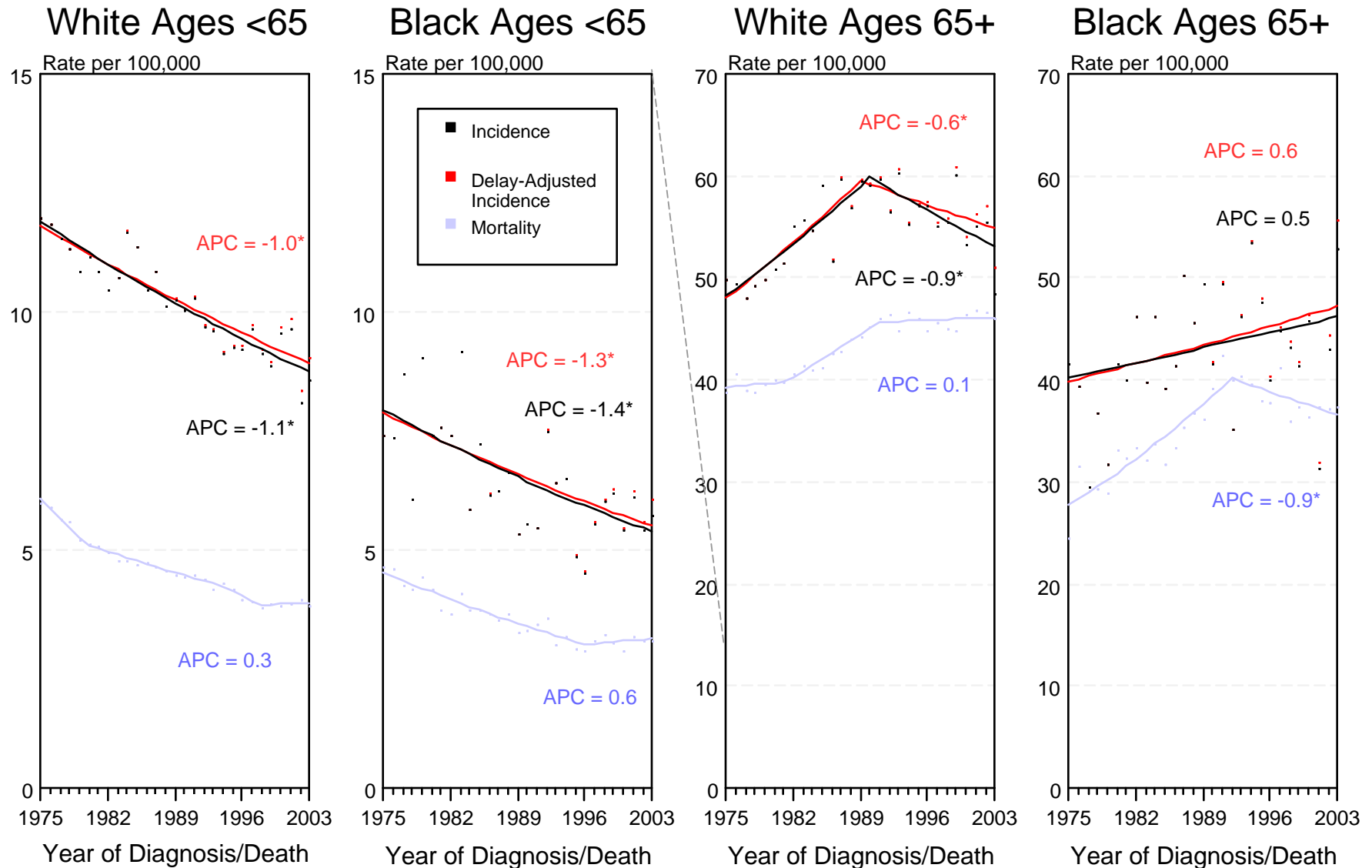


Figure XXI-2

- + Source: SEER 9 areas and NCHS public use data file for the total US. 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 3.1, April 2006, 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* Ovary Cancer

Joinpoint Analyses for Whites and Blacks from 1975-2003
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2003

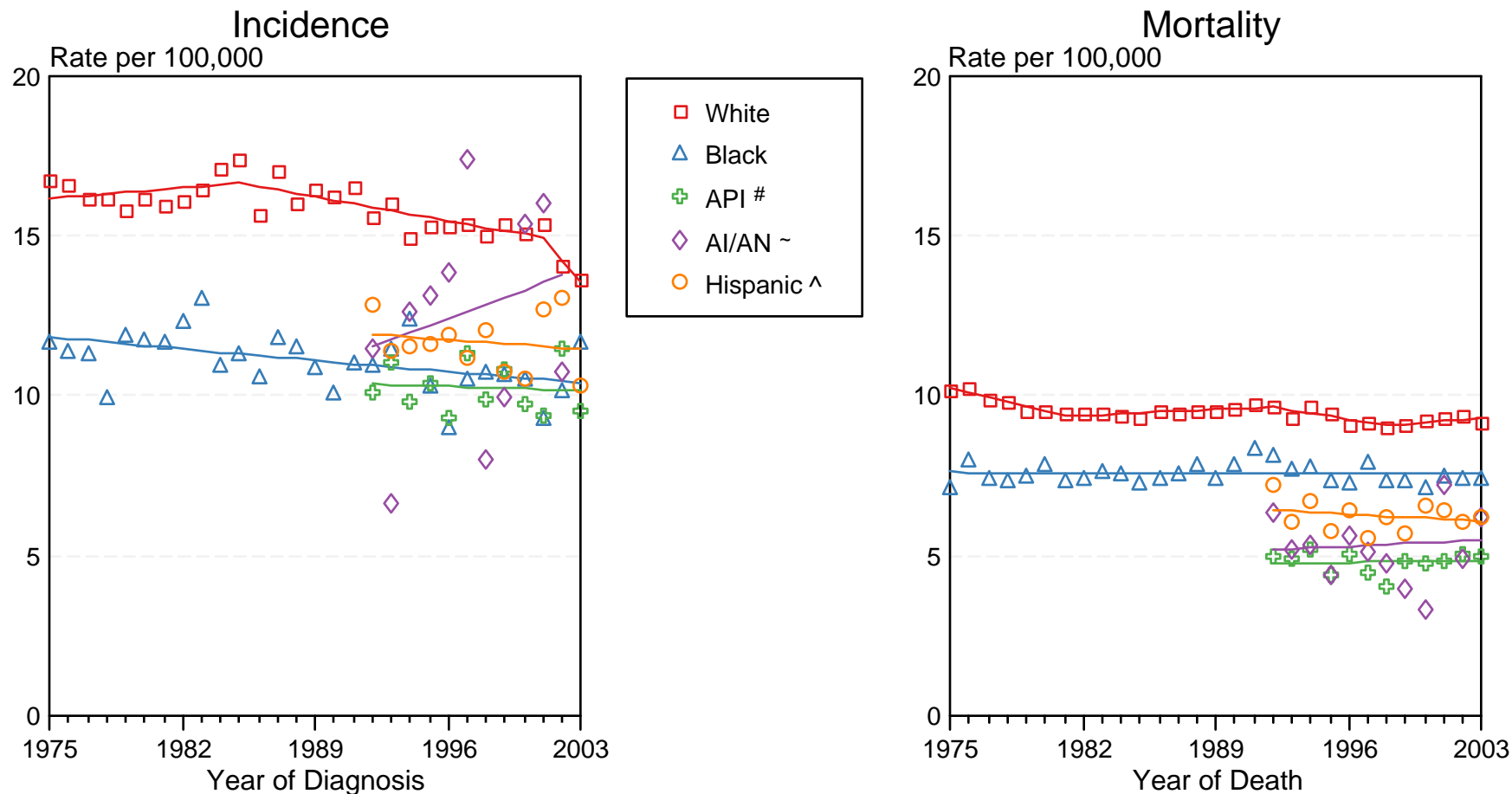


Figure XXI-3

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 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 NCHS public use data file for the total US.

* 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 3.1, April 2006, National Cancer Institute.

API = Asian/Pacific Islander.

~ AI/AN = American Indian/Alaska Native. Incidence data for AI/AN include cases from Connecticut, Detroit, Iowa, New Mexico, Seattle, Utah, Atlanta and the Alaska Native Registry for the time period 1992-2002. Mortality data are from the entire US for the time period 1992-2003.

^ 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 Hawaii, Seattle, and the Alaska Native Registry. Mortality data for Hispanics exclude cases from Connecticut, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, and Vermont.