Table 18.1
Myeloma

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2009 With up to Five Joinpoints, 1992-2009 With up to Three Joinpoints,
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC[d]	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2000-09	2005-09
SEER 9 Delay-Adjusted Incidence[a], 1975-2009														
All Races	1975-09	0.7*											0.7*	0.7*
White	1975-09	0.7*											0.7*	0.7*
Black	1975-96	1.3*	1996-02	-2.1	2002-09	3.5*							2.2*	3.5*
SEER 13 Delay-Adjusted Incidence[b], 1992-2009														
All Races	1992-09	0.5*											0.5*	0.5*
White	1992-09	0.4*											0.4*	0.4*
Black	1992-09	0.6*											0.6*	0.6*
SEER 9 Observed Incidence[a], 1975-2009														
All Races	1975-91	1.2*	1991-09	0.2									0.2	0.2
White	1975-97	1.0*	1997-09	-0.2									-0.2	-0.2
Black	1975-09	0.6*											0.6*	0.6*
SEER 13 Observed Incidence[b], 1992-2009														
All Races	1992-09	0.1											0.1	0.1
White	1992-09	0.1											0.1	0.1
White NH[ef]	1992-09	0.1											0.1	0.1
Black	1992-09	0.2											0.2	0.2
Black NH[ef]	1992-09	0.2											0.2	0.2
API[e]	1992-09	0.0											0.0	0.0
AI/AN[eg]	1992-09	0.5											0.5	0.5
Hispanic[f]	1992-09	-0.3											-0.3	-0.3
U.S. Cancer Mortality[c], 1975-2009														
All Races	1975-94	1.4*	1994-02	-0.7*	2002-09	-1.9*							-1.7*	-1.9*
White	1975-94	1.4*	1994-02	-0.6*	2002-09	-1.9*							-1.6*	-1.9*
Black	1975-82	3.4*	1982-96	1.2*	1996-09	-1.8*							-1.8*	-1.8*
U.S. Cancer Mortality[c], 1992-2009														
All Races	1992-94	2.0	1994-02	-0.7*	2002-09	-2.0*							-1.7*	-2.0*
White	1992-94	2.0	1994-02	-0.6*	2002-09	-1.9*							-1.6*	-1.9*
White NH[ef]	1992-02	-0.2	2002-09	-2.0*									-1.6*	-2.0*
Black	1992-98	0.1	1998-09	-2.0*									-2.0*	-2.0*
Black NH[ef]	1992-95	2.7	1995-09	-1.7*									-1.7*	-1.7*
API[e]	1992-09	-0.9											-0.9	-0.9
AI/AN[eg]	1992-09	-1.6											-1.6	-1.6
Hispanic[f]	1992-01	1.3	2001-09	-3.2*									-2.7*	-3.2*

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 18.2
Myeloma

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2009 With up to Five Joinpoints, 1992-2009 With up to Three Joinpoints,
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC[d]	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2000-09	2005-09
SEER 9 Delay-Adjusted Incidence[a], 1975-2009														
All Races	1975-09	0.8*											0.8*	0.8*
White	1975-09	0.8*											0.8*	0.8*
Black	1975-09	0.7*											0.7*	0.7*
SEER 13 Delay-Adjusted Incidence[b], 1992-2009														
All Races	1992-09	0.5*											0.5*	0.5*
White	1992-09	0.5*											0.5*	0.5*
Black	1992-09	0.9*											0.9*	0.9*
SEER 9 Observed Incidence[a], 1975-2009														
All Races	1975-09	0.6*											0.6*	0.6*
White	1975-09	0.7*											0.7*	0.7*
Black	1975-09	0.5*											0.5*	0.5*
SEER 13 Observed Incidence[b], 1992-2009														
All Races	1992-09	0.2											0.2	0.2
White	1992-09	0.2											0.2	0.2
White NH[ef]	1992-09	0.3											0.3	0.3
Black	1992-09	0.5											0.5	0.5
Black NH[ef]	1992-09	0.5											0.5	0.5
API[e]	1992-09	-0.3											-0.3	-0.3
AI/AN[eg]	1992-09	-0.9											-0.9	-0.9
Hispanic[f]	1992-09	-0.4											-0.4	-0.4
U.S. Cancer Mortality[c], 1975-2009														
All Races	1975-94	1.5*	1994-09	-1.1*									-1.1*	-1.1*
White	1975-94	1.5*	1994-09	-0.9*									-0.9*	-0.9*
Black	1975-82	3.7*	1982-94	1.2*	1994-09	-1.4*							-1.4*	-1.4*
U.S. Cancer Mortality[c], 1992-2009														
All Races	1992-94	3.2	1994-09	-1.1*									-1.1*	-1.1*
White	1992-94	3.6	1994-09	-1.0*									-1.0*	-1.0*
White NH[ef]	1992-94	4.3	1994-09	-0.9*									-0.9*	-0.9*
Black	1992-09	-1.3*											-1.3*	-1.3*
Black NH[ef]	1992-09	-1.1*											-1.1*	-1.1*
API[e]	1992-09	-0.6											-0.6	-0.6
AI/AN[eg]	1992-09	-0.9											-0.9	-0.9
Hispanic[f]	1992-09	-1.2*											-1.2*	-1.2*

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska
Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.
The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 18.3
Myeloma

Trends in SEER Incidence[ab] and U.S. Mortality[c] Using the Joinpoint Regression Program,
1975-2009 With up to Five Joinpoints, 1992-2009 With up to Three Joinpoints,
Females by Race/Ethnicity

	JP Trend 1 Years	JP Trend 1 APC	JP Trend 2 Years	JP Trend 2 APC	JP Trend 3 Years	JP Trend 3 APC	JP Trend 4 Years	JP Trend 4 APC	JP Trend 5 Years	JP Trend 5 APC	JP Trend 6 Years	JP Trend 6 APC	AAPC[d] 2000-09	AAPC[d] 2005-09
SEER 9 Delay-Adjusted Incidence[a], 1975-2009														
All Races	1975-09	0.6*											0.6*	0.6*
White	1975-09	0.5*											0.5*	0.5*
Black	1975-09	0.9*											0.9*	0.9*
SEER 13 Delay-Adjusted Incidence[b], 1992-2009														
All Races	1992-09	0.3											0.3	0.3
White	1992-09	0.1											0.1	0.1
Black	1992-09	0.4											0.4	0.4
SEER 9 Observed Incidence[a], 1975-2009														
All Races	1975-92	1.1*	1992-09	0.0									0.0	0.0
White	1975-09	0.3*											0.3*	0.3*
Black	1975-09	0.7*											0.7*	0.7*
SEER 13 Observed Incidence[b], 1992-2009														
All Races	1992-09	-0.1											-0.1	-0.1
White	1992-09	-0.3											-0.3	-0.3
White NH[ef]	1992-09	-0.3											-0.3	-0.3
Black	1992-09	0.0											0.0	0.0
Black NH[ef]	1992-09	0.0											0.0	0.0
API[e]	1992-09	0.5											0.5	0.5
AI/AN[eg]	1992-09	1.7											1.7	1.7
Hispanic[f]	1992-09	-0.3											-0.3	-0.3
U.S. Cancer Mortality[c], 1975-2009														
All Races	1975-93	1.5*	1993-02	-0.5*	2002-09	-2.9*							-2.3*	-2.9*
White	1975-93	1.4*	1993-02	-0.5*	2002-09	-2.8*							-2.3*	-2.8*
Black	1975-96	2.0*	1996-09	-2.2*									-2.2*	-2.2*
U.S. Cancer Mortality[c], 1992-2009														
All Races	1992-01	-0.2	2001-09	-2.7*									-2.4*	-2.7*
White	1992-02	-0.4	2002-09	-2.8*									-2.3*	-2.8*
White NH[ef]	1992-02	-0.4	2002-09	-2.9*									-2.3*	-2.9*
Black	1992-00	0.1	2000-09	-2.9*									-2.9*	-2.9*
Black NH[ef]	1992-99	0.5	1999-09	-2.5*									-2.5*	-2.5*
API[e]	1992-09	-1.0											-1.0	-1.0
AI/AN[eg]	1992-09	-2.3											-2.3	-2.3
Hispanic[f]	1992-97	6.1	1997-09	-2.5*									-2.5*	-2.5*

Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute. (http://surveillance.cancer.gov/joinpoint/).
The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).
[a] Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).
[b] Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).
[c] Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
[d] The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.
[e] API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic
[f] Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The Hispanic and Non-Hispanic mortality trends exclude deaths from CT, DC, ME, MD, MN, NH, NY, ND, SC, OK and VT.
[g] Data for American Indian/Alaska Native are based on the CHSDA(Contract Health Service Delivery Area) counties.
* The APC/AAPC is significantly different from zero (p<.05).
- Joinpoint regression line analysis could not be performed on data series.

Table 18.4
Myeloma

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	4.91	6.43	3.86	4.61	6.17	3.57	9.72	10.86	8.61
1976	5.02	6.08	4.37	4.76	5.77	4.14	9.20	11.22	7.90
1977	5.06	6.38	4.16	4.85	6.19	3.95	9.13	11.00	7.79
1978	4.74	5.93	3.94	4.43	5.59	3.66	9.61	11.13	8.53
1979	4.88	6.00	4.09	4.49	5.40	3.83	10.99	15.26	8.23
1980	4.79	5.77	4.12	4.43	5.44	3.75	9.89	10.83	9.05
1981	5.02	6.00	4.33	4.62	5.46	4.00	11.01	15.23	8.19
1982	5.29	6.28	4.67	4.89	5.87	4.32	11.57	13.93	9.72
1983	5.31	6.94	4.22	4.74	6.30	3.73	13.78	16.35	11.92
1984	5.41	6.97	4.33	5.05	6.44	4.10	10.79	15.23	7.71
1985	5.20	6.32	4.36	4.94	5.95	4.19	9.45	12.58	7.24
1986	5.33	6.31	4.65	4.89	6.02	4.13	11.01	11.57	10.43
1987	5.93	7.38	5.03	5.66	7.18	4.72	11.13	13.48	9.69
1988	5.33	6.57	4.51	5.03	6.37	4.18	10.81	12.18	9.72
1989	5.43	6.72	4.49	5.09	6.33	4.17	10.79	13.58	8.95
1990	5.66	7.25	4.57	5.25	6.94	4.10	11.98	14.63	10.30
1991	6.04	7.67	4.86	5.57	7.17	4.42	12.79	15.93	10.65
1992	5.96	7.30	5.07	5.64	7.01	4.76	11.57	13.16	10.42
1993	5.60	7.33	4.36	5.15	6.80	3.99	12.80	15.83	10.52
1994	5.74	6.81	5.07	5.22	6.34	4.47	12.89	15.25	12.03
1995	5.75	7.25	4.72	5.33	6.80	4.33	12.30	15.27	10.41
1996	5.84	7.20	4.81	5.44	6.88	4.32	12.68	13.54	12.00
1997	6.14	7.40	5.27	5.73	7.08	4.79	12.76	14.47	11.99
1998	5.95	7.34	4.92	5.61	7.13	4.46	11.82	13.22	10.96
1999	5.64	7.13	4.55	5.18	6.62	4.11	12.22	15.54	10.13
2000	6.11	7.63	4.98	5.82	7.63	4.46	10.99	10.78	10.90
2001	5.93	7.35	4.85	5.52	6.95	4.41	12.26	14.82	10.76
2002	6.08	7.91	4.72	5.75	7.68	4.31	11.16	14.09	9.28
2003	5.91	7.40	4.80	5.65	7.19	4.48	11.03	14.31	8.92
2004	5.95	7.46	4.84	5.47	6.99	4.35	12.87	15.87	10.77
2005	6.20	7.81	5.00	5.79	7.53	4.48	12.71	14.62	11.53
2006	5.98	7.23	5.04	5.63	7.02	4.54	13.10	14.82	12.07
2007	6.06	7.93	4.63	5.69	7.71	4.10	11.88	14.54	10.07
2008	6.31	7.75	5.28	5.80	7.31	4.69	14.56	18.00	12.72
2009	6.61	8.21	5.38	5.95	7.57	4.70	14.40	17.18	12.44

Additional information on the model used to delay-adjust SEER Incidence rates can be found at
(http://surveillance.cancer.gov/delay/).

[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).
- Delay-adjusted rate is not shown for observed rates based on less than 16 cases for the time interval.

Table 18.5
Myeloma

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:									
1975-2009	5.64	7.04	4.65	5.24	6.66	4.23	11.69	14.06	10.13
1975	4.91	6.43	3.86	4.61	6.17	3.57	9.72	10.86	8.61
1976	5.02	6.08	4.37	4.76	5.77	4.14	9.20	11.22	7.90
1977	5.06	6.38	4.16	4.85	6.19	3.95	9.13	11.00	7.79
1978	4.74	5.93	3.94	4.43	5.59	3.66	9.61	11.13	8.53
1979	4.88	6.00	4.09	4.49	5.40	3.83	10.99	15.26	8.23
1980	4.79	5.77	4.12	4.43	5.44	3.75	9.89	10.83	9.05
1981	5.02	6.00	4.33	4.62	5.46	4.00	11.01	15.23	8.19
1982	5.29	6.28	4.67	4.89	5.87	4.32	11.57	13.93	9.72
1983	5.31	6.94	4.22	4.74	6.30	3.73	13.78	16.35	11.92
1984	5.41	6.97	4.33	5.05	6.44	4.10	10.79	15.23	7.71
1985	5.20	6.32	4.36	4.94	5.95	4.19	9.45	12.58	7.24
1986	5.33	6.31	4.65	4.89	6.02	4.13	11.01	11.57	10.42
1987	5.93	7.37	5.02	5.66	7.18	4.71	11.13	13.48	9.69
1988	5.33	6.57	4.51	5.03	6.37	4.18	10.81	12.17	9.72
1989	5.43	6.72	4.49	5.09	6.33	4.17	10.78	13.57	8.94
1990	5.66	7.25	4.57	5.25	6.94	4.10	11.97	14.62	10.29
1991	6.04	7.67	4.86	5.57	7.17	4.42	12.78	15.92	10.64
1992	5.96	7.30	5.07	5.63	7.01	4.75	11.56	13.15	10.40
1993	5.60	7.32	4.35	5.15	6.80	3.98	12.78	15.81	10.50
1994	5.74	6.80	5.06	5.21	6.34	4.46	12.87	15.23	12.01
1995	5.74	7.24	4.71	5.32	6.78	4.32	12.27	15.24	10.38
1996	5.83	7.19	4.80	5.43	6.87	4.31	12.64	13.51	11.96
1997	6.13	7.38	5.26	5.72	7.06	4.77	12.71	14.42	11.94
1998	5.94	7.32	4.90	5.59	7.11	4.44	11.76	13.16	10.90
1999	5.62	7.10	4.53	5.15	6.59	4.09	12.15	15.46	10.06
2000	6.08	7.60	4.95	5.79	7.59	4.43	10.90	10.70	10.80
2001	5.89	7.31	4.82	5.48	6.90	4.37	12.13	14.68	10.64
2002	6.03	7.85	4.68	5.69	7.61	4.26	11.01	13.92	9.14
2003	5.84	7.32	4.74	5.57	7.10	4.41	10.85	14.09	8.76
2004	5.86	7.36	4.76	5.37	6.87	4.26	12.59	15.55	10.52
2005	6.08	7.67	4.90	5.66	7.37	4.37	12.35	14.24	11.18
2006	5.82	7.05	4.90	5.46	6.82	4.39	12.62	14.32	11.60
2007	5.85	7.67	4.45	5.46	7.42	3.92	11.32	13.90	9.57
2008	6.01	7.41	5.01	5.49	6.94	4.42	13.66	16.95	11.88
2009	6.08	7.58	4.92	5.43	6.92	4.26	12.96	15.54	11.14

Table 18.6
Myeloma

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

Year of Death:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2009	3.61	4.52	2.99	3.33	4.22	2.73	6.90	8.52	5.89
1975	2.94	3.70	2.42	2.73	3.47	2.23	5.26	6.44	4.41
1976	3.10	3.89	2.57	2.89	3.64	2.38	5.56	6.92	4.58
1977	3.13	3.92	2.60	2.91	3.64	2.43	5.55	7.24	4.42
1978	3.17	3.94	2.66	2.95	3.69	2.45	5.74	6.97	4.93
1979	3.26	4.12	2.68	3.03	3.85	2.48	5.91	7.42	4.89
1980	3.27	4.12	2.72	3.02	3.83	2.49	6.10	7.37	5.23
1981	3.29	4.05	2.79	3.01	3.70	2.54	6.57	8.16	5.50
1982	3.38	4.17	2.85	3.10	3.81	2.62	6.68	8.56	5.45
1983	3.44	4.34	2.87	3.15	3.97	2.63	6.82	8.73	5.58
1984	3.47	4.26	2.95	3.20	3.92	2.73	6.64	8.38	5.47
1985	3.58	4.46	3.02	3.29	4.11	2.78	6.90	8.57	5.82
1986	3.61	4.51	3.03	3.29	4.12	2.76	7.16	9.10	5.95
1987	3.61	4.57	2.97	3.32	4.21	2.72	7.06	9.18	5.71
1988	3.63	4.61	3.02	3.36	4.35	2.73	6.89	8.14	6.12
1989	3.70	4.64	3.10	3.42	4.30	2.85	7.08	8.91	5.92
1990	3.80	4.83	3.13	3.49	4.45	2.87	7.32	9.64	5.92
1991	3.87	4.83	3.26	3.54	4.46	2.95	7.77	9.59	6.64
1992	3.80	4.72	3.19	3.48	4.36	2.90	7.45	9.33	6.32
1993	3.96	4.89	3.35	3.64	4.56	3.04	7.82	9.32	6.88
1994	3.97	5.03	3.26	3.67	4.69	2.99	7.68	9.68	6.46
1995	3.98	4.94	3.36	3.66	4.61	3.02	7.79	9.41	6.90
1996	3.91	4.94	3.25	3.59	4.60	2.94	7.70	9.63	6.54
1997	3.90	4.93	3.22	3.60	4.61	2.93	7.49	9.24	6.45
1998	3.83	4.76	3.21	3.50	4.41	2.88	7.75	9.49	6.77
1999	3.84	4.72	3.24	3.52	4.41	2.91	7.45	8.84	6.64
2000	3.83	4.66	3.27	3.53	4.38	2.96	7.51	8.76	6.73
2001	3.80	4.69	3.18	3.52	4.40	2.89	7.24	8.76	6.29
2002	3.81	4.78	3.14	3.56	4.56	2.86	6.90	8.37	6.03
2003	3.71	4.60	3.08	3.44	4.35	2.79	7.14	8.49	6.31
2004	3.57	4.43	2.97	3.30	4.16	2.69	6.89	8.36	6.03
2005	3.57	4.51	2.90	3.33	4.26	2.65	6.50	8.13	5.50
2006	3.49	4.38	2.86	3.24	4.11	2.61	6.57	8.37	5.45
2007	3.48	4.43	2.81	3.21	4.18	2.53	6.60	7.93	5.83
2008	3.31	4.30	2.60	3.07	4.03	2.36	6.37	8.07	5.29
2009	3.28	4.25	2.59	3.06	4.00	2.38	6.00	7.72	4.87

[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 18.7
Myeloma

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									
Age-Adjusted Rates, 2005-2009									
All ages	5.8	7.4	4.7	5.3	6.9	4.1	11.7	14.3	10.1
Under 65	2.2	2.6	1.9	2.0	2.4	1.6	4.8	5.6	4.2
65 and over	30.7	40.1	24.2	28.6	38.2	21.8	59.5	74.8	50.5
All ages (IARC world std)[c]	3.7	4.6	3.0	3.3	4.2	2.6	7.6	9.2	6.5
Age-Specific Rates, 2005-2009									
<1	–	–	–	–	–	–	–	–	–
1-4	–	–	–	–	–	–	–	–	–
5-9	–	–	–	–	–	–	–	–	–
10-14	–	–	–	–	–	–	–	–	–
15-19	–	–	–	–	–	–	–	–	–
20-24	–	–	–	–	–	–	–	–	–
25-29	0.1	0.1	–	0.1	–	–	–	–	–
30-34	0.3	0.4	0.2	0.3	0.4	–	0.6	–	–
35-39	0.7	0.7	0.6	0.6	0.7	0.5	1.6	1.5	1.6
40-44	1.8	2.1	1.5	1.6	2.0	1.2	4.1	3.6	4.5
45-49	3.4	3.7	3.0	2.9	3.4	2.4	7.0	7.5	6.6
50-54	6.2	7.1	5.3	5.5	6.3	4.6	13.2	15.0	11.6
55-59	9.8	11.5	8.3	8.8	10.3	7.3	21.3	26.5	17.1
60-64	15.6	19.2	12.2	14.0	17.5	10.6	34.5	42.8	28.0
65-69	22.7	27.8	18.3	20.5	25.9	15.8	48.0	55.5	42.4
70-74	29.4	37.9	22.4	26.9	35.4	19.9	57.0	72.4	46.1
75-79	34.8	45.2	27.2	32.8	43.4	24.8	66.4	84.2	55.2
80-84	39.1	50.9	31.7	37.0	49.7	28.9	72.6	85.9	65.5
85+	34.3	50.7	26.7	33.1	49.2	25.7	63.1	93.1	51.9
U.S. Mortality									
Age at Death									
Age-Adjusted Rates, 2005-2009									
All ages	3.4	4.4	2.7	3.2	4.1	2.5	6.4	8.0	5.4
Under 65	0.8	1.0	0.7	0.7	0.9	0.6	1.8	2.2	1.5
65 and over	21.3	27.6	17.2	20.2	26.4	16.0	37.9	48.0	32.1
All ages (IARC world std)[c]	1.9	2.4	1.5	1.8	2.2	1.4	3.8	4.6	3.2
Age-Specific Rates, 2005-2009									
<1	–	–	–	–	–	–	–	–	–
1-4	–	–	–	–	–	–	–	–	–
5-9	–	–	–	–	–	–	–	–	–
10-14	–	–	–	–	–	–	–	–	–
15-19	–	–	–	–	–	–	–	–	–
20-24	–	–	–	–	–	–	–	–	–
25-29	–	–	–	–	–	–	–	–	–
30-34	0.0	0.1	–	0.0	0.0	–	–	–	–
35-39	0.1	0.2	0.1	0.1	0.2	0.1	0.3	0.4	0.2
40-44	0.4	0.5	0.3	0.4	0.5	0.3	0.9	1.0	0.8
45-49	1.0	1.2	0.8	0.8	1.0	0.6	2.3	2.9	1.9
50-54	2.2	2.7	1.7	1.8	2.3	1.4	5.0	6.1	4.1
55-59	4.0	4.8	3.3	3.5	4.1	2.9	9.0	11.1	7.3
60-64	7.1	8.7	5.6	6.4	7.9	4.9	15.1	18.2	12.7
65-69	11.5	14.0	9.3	10.5	13.1	8.2	23.7	27.4	20.9
70-74	18.0	22.1	14.6	16.7	20.6	13.4	33.0	42.0	26.8
75-79	24.6	31.1	19.8	23.5	29.9	18.6	41.9	52.7	35.3
80-84	31.0	41.0	24.7	29.9	39.8	23.5	51.3	68.3	42.3
85+	33.0	47.3	26.6	31.8	46.4	25.2	56.7	74.6	50.0

[a]   SEER 18 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 18.8
Myeloma

5-Year Relative and Period Survival (Percent) by Race, Sex, Diagnosis Year 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]	-	-	-	12	13	10	-	-	-
1970-1973[a]	-	-	-	19	20	17	-	-	-
1975-1977[b]	25.1	24.5	25.8	24.5	24.0	25.1	30.3	31.0	29.6
1978-1980[b]	26.0	24.6	27.4	25.0	24.5	25.6	31.9	27.4	36.2
1981-1983[b]	27.8	25.9	29.7	27.5	25.7	29.3	28.9	29.8	27.9
1984-1986[b]	27.4	27.9	27.0	26.2	26.1	26.3	32.1	33.3	30.9
1987-1989[b]	27.5	29.1	25.9	27.2	29.3	25.0	30.3	30.3	30.3
1990-1992[b]	29.5	30.8	28.1	28.6	29.8	27.2	34.6	38.6	30.8
1993-1995[b]	32.0	32.4	31.6	30.9	31.6	30.2	35.6	34.8	36.0
1996-1998[b]	32.6	34.8	30.1	32.4	34.7	29.8	31.2	32.9	30.0
1999-2001[b]	34.2	36.9	31.1	34.2	37.0	30.7	33.1	35.9	30.7
2002-2008[b]	42.6[f]	43.8[f]	41.2[f]	42.9[f]	44.9[f]	40.4[f]	42.7[f]	41.5[f]	43.9[f]
5-Year Period Survival (Percent)[cd]									
2008	42.2	43.2	40.9	42.3	44.0	40.1	41.4	40.5	42.2
Stage Distribution (%) 2002-2008[ce]									
All Stages									
Number of cases	26,471	14,301	12,170	19,665	10,931	8,734	5,055	2,469	2,586
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	5	6	4	5	6	4	4	4	3
Regional	0	0	0	0	0	0	0	0	0
Distant	95	94	96	95	94	96	96	96	97
Unstaged	0	0	0	0	0	0	0	0	0
5-Year Relative Survival (Percent), 2002-2008[c]									
Age at Diagnosis:									
Ages <45	63.9	65.4	61.8	63.9	66.9	58.4	63.1	60.9	65.3
Ages 45-54	57.2	55.5	59.6	60.2	58.6	62.7	49.0	44.6	53.6
Ages 55-64	50.8	50.2	51.6	51.2	50.6	52.0	48.6	46.3	51.2
Ages 65-74	39.0	38.2	39.9	39.1	38.9	39.5	36.8	35.2	38.5
Ages 75+	24.5	25.8	23.4	24.5	26.7	22.5	23.6	21.1	25.1
Ages <65	54.4	53.6	55.4	55.4	55.0	56.1	50.7	47.4	54.1
Ages 65+	31.3	32.2	30.4	31.2	32.8	29.4	30.7	29.6	31.6
Stage[e]:									
All Stages	41.1	42.1	40.1	40.9	42.6	38.8	41.0	39.5	42.4
Localized	67.0	71.6	59.4	67.1	72.3	57.8	58.1	59.7[g]	55.8[g]
Regional	-	-	-	-	-	-	-	-	-
Distant	39.8	40.3	39.3	39.4	40.6	38.0	40.3	38.6	41.9
Unstaged	-	-	-	-	-	-	-	-	-

[a] Based on End Results data from a series of hospital registries and one population-based registry.
[b] SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Based on follow-up of patients into 2009.
[c] SEER 18 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, New Jersey and Georgia excluding ATL/RG). Based on follow-up of patients into 2009.
[d] Period survival provides a 2008 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2006-2008: 0-1 year survival), (2005-2007: 1-2 year survival), (2004-2006: 2-3 year survival), (2003-2005: 3-4 year survival), (2002-2004: 4-5 years survival).
[e] Stage at diagnosis is classified using SEER Summary Stage 2000.
[f] The difference between 1975-1977 and 2002-2008 is statistically significant (p<.05).
[g] The standard error is between 5 and 10 percentage points.
[h] 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 18.9
Myeloma

SEER[a] Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

Survival Time	1975-1979	1980-1984	1985-1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1-year	68.8	70.7	73.0	71.4	75.5	69.5	72.8	73.4	74.7	71.1	74.8	75.3	74.2	73.0	73.2	74.9	77.6	74.7	76.1	73.9	76.5	76.5
2-year	52.6	55.0	58.5	56.5	60.0	56.6	58.8	59.1	59.2	58.3	61.1	62.6	60.2	60.2	60.0	63.2	65.2	66.5	64.1	65.7	65.6	
3-year	40.3	43.2	45.9	44.0	48.0	45.7	46.6	48.3	48.1	45.8	49.0	51.5	48.2	49.9	49.6	53.4	55.8	58.2	56.3	57.1		
4-year	31.7	34.5	36.2	37.8	38.2	35.1	37.8	37.6	40.5	38.2	38.9	39.8	38.6	41.0	43.9	46.6	47.6	50.4	49.2			
5-year	25.5	27.1	27.7	30.2	31.0	27.5	31.1	31.3	33.6	31.8	31.8	34.0	31.1	34.1	37.1	39.8	41.7	44.5				
6-year	20.2	21.3	22.3	24.1	24.8	21.3	26.8	26.2	28.3	27.1	26.4	29.5	26.7	28.8	32.3	34.7	37.1					
7-year	16.4	16.9	17.7	18.8	21.1	18.7	22.2	21.0	23.6	23.8	22.5	23.9	22.9	24.7	28.7	31.2						
8-year	13.6	13.5	15.1	17.0	17.5	15.8	17.9	18.3	20.4	21.4	19.8	21.7	19.4	22.0	25.2							
9-year	11.5	11.4	12.0	15.3	16.1	13.8	16.0	15.5	18.2	19.9	17.1	19.0	17.7	19.6								
10-year	10.1	9.7	10.5	13.6	14.4	11.9	14.5	13.7	17.0	17.3	15.4	17.1	15.6									
11-year	8.8	8.7	9.2	12.4	12.8	10.8	13.4	13.1	15.8	15.7	14.1	16.0										
12-year	7.9	7.7	8.4	11.5	11.1	9.0	11.9	11.5	14.2	14.9	12.9											
13-year	6.7	6.8	7.6	10.8	10.3	8.2	10.6	11.1	13.4	13.3												
14-year	6.1	6.1	7.0	9.7	9.5	7.7	9.9	10.4	12.2													
15-year	5.4	5.7	6.3	9.1	9.1	7.6	9.0	9.9														
16-year	4.9	5.2	5.7	8.7	8.3	7.4	8.2															
17-year	4.6	4.7	5.4	8.7	8.0	6.6																
18-year	4.0	4.4	5.1	8.0	7.4																	
19-year	3.8	3.8	5.0	7.3																		
20-year	3.3	3.5	4.7																			

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

Table 18.10
Myeloma

SEER[a] Relative Survival (Percent)
By Year of Diagnosis

All Races, Males

Year of Diagnosis

Survival Time	1975- 1979	1980- 1984	1985- 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
1-year	68.7	70.8	73.9	71.0	76.6	73.2	70.5	74.5	75.4	71.9	74.5	76.4	76.1	74.4	74.8	75.6	77.5	76.7	76.2	73.6	77.0	75.6
2-year	52.8	55.4	60.0	56.8	62.0	60.1	57.6	59.7	59.9	59.7	61.4	63.8	61.7	62.2	62.1	62.1	65.9	68.1	63.7	66.4	66.8	
3-year	39.6	43.1	46.6	44.9	49.2	48.9	44.9	47.4	49.6	46.0	50.8	54.0	51.4	52.5	51.3	52.2	56.8	60.2	55.7	57.5		
4-year	31.2	34.1	37.2	37.2	39.6	36.5	36.1	37.3	41.8	39.8	41.0	43.6	43.0	43.2	46.4	46.7	48.1	51.3	49.0			
5-year	24.7	26.0	28.6	30.4	32.8	29.1	29.9	30.5	36.4	33.8	32.5	38.1	34.8	35.9	39.8	41.4	42.3	45.5				
6-year	19.4	21.0	23.7	22.9	26.9	22.4	26.8	27.8	31.6	29.6	26.6	33.7	29.9	29.9	34.9	35.8	37.8					
7-year	15.6	17.1	19.4	18.5	22.6	19.5	22.1	23.2	26.1	25.8	22.4	27.6	25.9	25.6	31.2	32.6						
8-year	13.1	13.8	16.3	17.7	19.6	17.6	17.5	20.2	22.2	24.1	20.3	25.1	21.5	23.0	27.3							
9-year	11.1	11.9	13.0	16.1	18.0	15.9	16.0	16.8	20.0	21.4	18.3	22.8	19.1	19.2								
10-year	9.5	9.9	11.4	14.6	16.0	13.5	14.9	14.8	19.0	18.5	16.4	21.1	17.3									
11-year	7.7	9.0	10.0	12.5	14.1	13.0	13.4	13.9	17.8	17.2	14.9	20.3										
12-year	7.1	7.7	9.4	12.3	12.4	11.6	11.4	11.4	15.5	16.6	14.3											
13-year	5.9	6.9	8.6	11.6	11.8	10.7	10.0	10.9	14.9	14.4												
14-year	5.4	6.1	8.0	10.5	11.1	10.4	9.6	9.9	13.2													
15-year	4.7	5.7	7.3	10.5	10.5	10.2	8.4	9.2														
16-year	4.5	5.2	6.8	10.2	10.0	10.2	7.9															
17-year	4.1	4.9	6.5	9.9	9.6	9.1																
18-year	3.6	4.5	6.2	8.8	8.7																	
19-year	3.4	4.2	6.2	7.8																		
20-year	2.7	3.9	6.0																			

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

Table 18.11
Myeloma

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	2007	2008
Survival Time																						
1-year	69.0	70.5	72.2	71.8	74.2	65.6	75.7	72.5	74.1	70.2	75.0	74.1	72.0	71.4	71.4	74.0	77.7	72.4	76.1	74.3	75.8	77.4
2-year	52.4	54.7	56.9	56.1	57.6	52.9	60.2	58.5	58.4	56.9	60.8	61.3	58.5	57.8	57.5	64.6	64.4	64.7	64.5	65.1	63.9	
3-year	41.0	43.4	45.1	43.0	46.7	42.4	48.7	49.1	46.4	45.5	47.1	48.7	44.5	46.8	47.6	54.8	54.7	55.9	57.1	56.6		
4-year	32.2	35.0	35.2	38.4	36.6	33.5	39.8	37.9	39.1	36.5	36.7	35.5	33.6	38.3	41.1	46.5	46.9	49.3	49.5			
5-year	26.3	28.3	26.8	29.9	28.9	25.9	32.5	31.9	30.6	29.8	31.1	29.5	26.9	31.9	34.1	37.9	41.1	43.3				
6-year	21.1	21.5	20.9	25.4	22.4	20.2	26.8	24.7	24.6	24.4	26.1	24.7	23.0	27.6	29.4	33.4	36.2					
7-year	17.2	16.7	16.1	19.1	19.3	17.9	22.4	19.1	20.9	21.6	22.5	20.0	19.6	23.7	25.8	29.4						
8-year	14.2	13.1	13.8	16.2	14.9	14.0	18.5	16.4	18.3	18.6	19.2	18.0	17.1	20.7	22.9							
9-year	12.0	10.9	11.0	14.4	13.9	11.7	16.0	14.3	16.1	18.1	15.7	14.8	16.0	20.2								
10-year	10.7	9.4	9.6	12.6	12.5	10.3	13.9	12.7	14.9	16.0	14.4	12.8	13.8									
11-year	9.9	8.5	8.4	12.3	11.1	8.5	13.4	12.3	13.4	14.2	13.2	11.5										
12-year	8.8	7.6	7.3	10.7	9.5	6.3	12.5	11.5	12.5	13.1	11.1											
13-year	7.5	6.7	6.6	9.9	8.5	5.7	11.2	11.1	11.6	12.0												
14-year	6.9	6.0	6.0	8.9	7.5	5.0	10.2	10.9	11.0													
15-year	6.0	5.7	5.3	7.7	7.3	5.0	9.7	10.6														
16-year	5.3	5.1	4.6	7.2	6.3	4.2	8.6															
17-year	5.1	4.6	4.4	7.2	6.0	4.0																
18-year	4.5	4.2	4.0	7.2	5.9																	
19-year	4.2	3.4	3.7	6.6																		
20-year	3.8	3.2	3.4																			

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

Table 18.12

Myeloma

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, 2007-2009 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.00	0.67	0.41	Asian/	0	0.00	0.00	0.00	0.48	0.28
	10	0.00	0.00	0.01	0.67	0.42	Pacific	10	0.00	0.00	0.00	0.48	0.28
	20	0.00	0.01	0.03	0.68	0.42	Islander	20	0.00	0.00	0.02	0.48	0.28
	30	0.01	0.03	0.11	0.68	0.42		30	0.00	0.02	0.06	0.49	0.28
	40	0.03	0.10	0.27	0.68	0.43		40	0.01	0.06	0.16	0.48	0.28
	50	0.08	0.25	0.48	0.68	0.43		50	0.04	0.15	0.32	0.48	0.28
	60	0.18	0.43	0.60	0.63	0.43		60	0.11	0.28	0.41	0.45	0.27
	70	0.28	0.47	–	0.52	0.39		70	0.18	0.33	–	0.36	0.25
	80	0.27	–	–	0.33	0.29		80	0.17	–	–	0.22	0.19
White	0	0.00	0.00	0.00	0.61	0.39	American	0	0.00	0.00	0.00	0.47	0.30
	10	0.00	0.00	0.01	0.62	0.39	Indian/	10	0.00	0.00	0.00	0.48	0.30
	20	0.00	0.01	0.03	0.62	0.39	Alaska	20	0.00	0.00	0.02	0.48	0.30
	30	0.00	0.03	0.10	0.63	0.40	Native[a]	30	0.00	0.02	0.06	0.49	0.31
	40	0.02	0.09	0.24	0.63	0.40		40	0.02	0.06	0.19	0.50	0.32
	50	0.07	0.22	0.44	0.62	0.41		50	0.05	0.18	0.35	0.51	0.33
	60	0.16	0.39	0.55	0.59	0.40		60	0.15	0.33	0.41	0.50	0.32
	70	0.26	0.44	–	0.48	0.37		70	0.21	0.30	–	0.41	0.29
	80	0.25	–	–	0.31	0.28		80	0.12	–	–	0.27	0.19
Black	0	0.00	0.00	0.00	1.12	0.64	Hispanic[b]	0	0.00	0.00	0.00	0.67	0.37
	10	0.00	0.00	0.01	1.14	0.65		10	0.00	0.00	0.01	0.68	0.37
	20	0.00	0.01	0.06	1.15	0.66		20	0.00	0.01	0.03	0.68	0.38
	30	0.01	0.06	0.22	1.16	0.67		30	0.00	0.03	0.10	0.68	0.38
	40	0.05	0.22	0.54	1.18	0.68		40	0.02	0.10	0.26	0.68	0.38
	50	0.17	0.51	0.88	1.18	0.69		50	0.08	0.24	0.47	0.67	0.38
	60	0.38	0.79	1.06	1.12	0.69		60	0.17	0.41	0.58	0.63	0.37
	70	0.50	0.84	–	0.91	0.64		70	0.26	0.45	–	0.50	0.32
	80	0.50	–	–	0.61	0.48		80	0.24	–	–	0.30	0.22

Devcan Version 6.6.1, April 2012, National Cancer Institute (http://surveillance.cancer.gov/devcan/).
Source: Incidence data are from the SEER 18 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, New Jersey, and Georgia excluding ATL/RG). 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, North Dakota and South Carolina.
- Statistic could not be calculated.
A percent of 0.00 represents a value that is below 0.005.

Table 18.13

Myeloma

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, 2007-2009 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer +10 yrs	+20 yrs	+30 yrs	Ever	Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer +10 yrs	+20 yrs	+30 yrs	Ever	Risk of Dying from Cancer
All Races	0	0.00	0.00	0.00	0.77	0.46	Asian/	0	0.00	0.00	0.00	0.55	0.34
	10	0.00	0.00	0.01	0.78	0.47	Pacific	10	0.00	0.00	0.00	0.56	0.34
	20	0.00	0.01	0.04	0.79	0.47	Islander	20	0.00	0.00	0.02	0.56	0.34
	30	0.01	0.03	0.12	0.80	0.48		30	0.00	0.02	0.07	0.56	0.34
	40	0.03	0.12	0.32	0.80	0.49		40	0.01	0.07	0.19	0.56	0.35
	50	0.09	0.30	0.57	0.80	0.50		50	0.05	0.18	0.36	0.56	0.35
	60	0.22	0.52	0.72	0.77	0.50		60	0.13	0.33	0.48	0.53	0.33
	70	0.35	0.59	–	0.64	0.47		70	0.21	0.39	–	0.44	0.31
	80	0.35	–	–	0.42	0.36		80	0.22	–	–	0.28	0.24
White	0	0.00	0.00	0.00	0.73	0.45	American	0	0.00	0.00	0.01	0.55	0.33
	10	0.00	0.00	0.01	0.74	0.45	Indian/	10	0.00	0.01	0.01	0.56	0.34
	20	0.00	0.01	0.03	0.74	0.45	Alaska	20	0.01	0.01	0.04	0.56	0.34
	30	0.01	0.03	0.11	0.75	0.46	Native[a]	30	0.00	0.03	0.08	0.57	0.35
	40	0.03	0.11	0.29	0.76	0.47		40	0.03	0.08	0.23	0.59	0.36
	50	0.08	0.27	0.53	0.75	0.47		50	0.05	0.21	0.30	0.59	0.37
	60	0.20	0.49	0.68	0.72	0.48		60	0.17	0.27	0.35	0.59	0.38
	70	0.33	0.56	–	0.61	0.45		70	0.13	0.22	–	0.51	0.36
	80	0.33	–	–	0.40	0.35		80	0.13	–	–	0.55	0.23
Black	0	0.00	0.00	0.00	1.19	0.66	Hispanic[b]	0	0.00	0.00	0.00	0.75	0.42
	10	0.00	0.00	0.01	1.22	0.68		10	0.00	0.00	0.01	0.75	0.42
	20	0.00	0.01	0.06	1.23	0.68		20	0.00	0.01	0.03	0.76	0.43
	30	0.01	0.06	0.24	1.25	0.70		30	0.00	0.03	0.11	0.76	0.43
	40	0.05	0.24	0.61	1.28	0.71		40	0.02	0.11	0.30	0.77	0.44
	50	0.20	0.59	0.99	1.29	0.73		50	0.09	0.28	0.52	0.76	0.44
	60	0.45	0.91	1.20	1.25	0.74		60	0.20	0.46	0.66	0.72	0.43
	70	0.61	0.99	–	1.06	0.71		70	0.30	0.52	–	0.59	0.39
	80	0.63	–	–	0.74	0.56		80	0.29	–	–	0.39	0.28

Table 18.14

Myeloma

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, 2007-2009 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.00	0.00	0.00	0.57	0.37	Asian/	0	0.00	0.00	0.00	0.42	0.23
	10	0.00	0.00	0.01	0.58	0.37	Pacific	10	0.00	0.00	0.00	0.42	0.23
	20	0.00	0.01	0.03	0.58	0.37	Islander	20	0.00	0.00	0.02	0.42	0.23
	30	0.00	0.03	0.09	0.58	0.37		30	0.00	0.02	0.05	0.42	0.23
	40	0.02	0.09	0.23	0.58	0.37		40	0.01	0.05	0.14	0.42	0.24
	50	0.07	0.21	0.39	0.57	0.38		50	0.04	0.13	0.28	0.41	0.24
	60	0.15	0.34	0.49	0.53	0.37		60	0.09	0.24	0.36	0.38	0.23
	70	0.22	0.38	–	0.42	0.34		70	0.16	0.28	–	0.31	0.21
	80	0.22	–	–	0.27	0.25		80	0.14	–	–	0.17	0.15
White	0	0.00	0.00	0.00	0.51	0.34	American	0	0.00	0.00	0.00	0.44	0.26
	10	0.00	0.00	0.00	0.52	0.34	Indian/	10	0.00	0.00	0.00	0.45	0.27
	20	0.00	0.00	0.03	0.52	0.34	Alaska	20	0.00	0.00	0.01	0.45	0.27
	30	0.00	0.02	0.08	0.52	0.34	Native[a]	30	0.00	0.01	0.05	0.45	0.27
	40	0.02	0.08	0.19	0.52	0.35		40	0.01	0.05	0.17	0.46	0.28
	50	0.06	0.18	0.35	0.51	0.35		50	0.04	0.16	0.39	0.47	0.29
	60	0.12	0.30	0.44	0.47	0.34		60	0.13	0.38	0.46	0.46	0.27
	70	0.20	0.35	–	0.38	0.31		70	0.28	0.37	–	0.37	0.23
	80	0.20	–	–	0.25	0.23		80	0.12	–	–	0.12	0.16
Black	0	0.00	0.00	0.00	1.06	0.63	Hispanic[b]	0	0.00	0.00	0.00	0.61	0.33
	10	0.00	0.00	0.01	1.08	0.64		10	0.00	0.00	0.01	0.62	0.34
	20	0.00	0.01	0.06	1.09	0.64		20	0.00	0.01	0.03	0.62	0.34
	30	0.01	0.06	0.20	1.09	0.64		30	0.00	0.03	0.09	0.62	0.34
	40	0.05	0.19	0.48	1.10	0.65		40	0.02	0.09	0.22	0.62	0.34
	50	0.14	0.44	0.78	1.08	0.66		50	0.07	0.20	0.42	0.60	0.34
	60	0.32	0.68	0.95	1.01	0.66		60	0.14	0.36	0.51	0.55	0.33
	70	0.42	0.73	–	0.81	0.59		70	0.24	0.40	–	0.45	0.28
	80	0.43	–	–	0.54	0.44		80	0.20	–	–	0.26	0.18

Devcan Version 6.6.1, April 2012, National Cancer Institute (http://surveillance.cancer.gov/devcan/).
Source: Incidence data are from the SEER 18 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, New Jersey, and Georgia excluding ATL/RG). 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, North Dakota and South Carolina.
- Statistic could not be calculated.
A percent of 0.00 represents a value that is below 0.005.

Table 18.15
Myeloma

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

SEER Incidence	SEER 18 Areas[b] Rate 2005-2009 Rate per 100,000 persons			SEER 13 Areas[b] Trend 2000-2009[c] AAPC (%)			SEER 9 Areas[b] Trend 2000-2009[d] AAPC (%)		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
RACE/ETHNICITY									
All Races	5.8	7.4	4.7	0.1	0.2	-0.1	0.2	0.6*	0.0
White	5.3	6.9	4.1	0.1	0.2	-0.3	-0.2	0.7*	0.3*
White Hispanic[e]	5.4	6.3	4.7	-0.5	-0.8	-0.5	–	–	–
White Non-Hispanic[e]	5.3	7.0	4.0	0.1	0.3	-0.3	–	–	–
Black	11.7	14.3	10.1	0.2	0.5	0.0	0.6*	0.5*	0.7*
Asian/Pacific Islander	3.5	4.2	2.9	0.0	-0.3	0.5	–	–	–
Amer Ind/Alaska Nat[f]	4.5	4.9	4.2	–	–	–	–	–	–
Hispanic[e]	5.4	6.3	4.7	-0.3	-0.4	-0.3	–	–	–

U.S. Mortality[g]	Rate 2005-2009 Rate per 100,000 persons			Trend 2000-2009[h] AAPC (%)		
	Total	Males	Females	Total	Males	Females
RACE/ETHNICITY						
All Races	3.4	4.4	2.7	-1.7*	-1.1*	-2.4*
White	3.2	4.1	2.5	-1.6*	-1.0*	-2.3*
White Hispanic[e]	2.8	3.4	2.4	-2.7*	-1.2*	-2.5*
White Non-Hispanic[e]	3.2	4.2	2.5	-1.6*	-0.9*	-2.3*
Black	6.4	8.0	5.4	-2.0*	-1.3*	-2.9*
Asian/Pacific Islander	1.7	2.1	1.4	-0.9	-0.6	-1.0
Amer Ind/Alaska Nat						
Total U.S.	2.4	3.1	1.9	-1.6	–	–
CHSDA Counties	3.0	3.8	2.5	-1.6	–	–
Non-CHSDA Counties	1.8	2.4	1.3	–	–	–
Hispanic[e]	2.7	3.3	2.3	-2.7*	-1.2*	-2.5*

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 3.5, April 2011, 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 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG.
[c] The 2000-2009 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2009.
[d] The 2000-2009 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2009.
[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 2005-2009 Hispanic and Non-Hispanic death rates exclude deaths from the District of Columbia, North Dakota, and South Carolina. The 2000-2009 Hispanic and Non-Hispanic mortality trends exclude deaths from Connecticut, the District of Columbia, Maine, Maryland, Minnesota, New Hampshire, New York, North Dakota, Oklahoma, South Carolina 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 2000-2009 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2009.
*   The APC is significantly different from zero (p<.05).

Table 18.16
Myeloma

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], 2005-2009

	Total	Males	Females	Total	Males	Females	Total	Males	Females
California	5.43	6.89	4.29	5.29	6.81	4.09	10.97	13.60	9.20
Greater Bay Area	5.74	7.15	4.64	5.90	7.56	4.57	11.58	13.63	10.28
San Francisco-Oakland	5.80	7.19	4.73	5.91	7.58	4.55	11.73	13.98	10.37
San Jose-Monterey	5.62	7.09	4.46	5.89	7.54	4.60	9.67	9.86	–
Los Angeles	5.48	6.90	4.43	5.07	6.62	3.89	11.27	13.47	9.93
Greater California	5.29	6.79	4.11	5.20	6.66	4.04	10.09	13.70	7.39
Connecticut	5.91	7.44	4.81	5.42	6.91	4.34	12.11	14.98	10.41
Detroit	7.14	8.76	6.04	5.51	7.09	4.39	13.80	16.43	12.18
Georgia	6.10	7.70	4.94	4.67	6.25	3.49	11.02	13.52	9.39
Atlanta	6.52	8.01	5.49	4.60	6.24	3.44	11.39	13.02	10.24
Rural Georgia	5.81	7.56	4.18	3.25	–	–	10.87	16.74	–
Greater Georgia	5.90	7.55	4.69	4.72	6.29	3.52	10.82	13.66	9.03
Hawaii	4.63	6.02	3.53	5.37	6.99	3.91	–	–	–
Iowa	5.63	7.23	4.51	5.52	7.13	4.38	14.34	–	–
Kentucky	5.82	7.49	4.62	5.40	7.02	4.23	13.23	16.85	10.82
Louisiana	6.47	8.11	5.31	4.72	6.15	3.67	12.04	15.07	10.10
New Jersey	6.52	8.16	5.29	5.89	7.60	4.59	11.63	13.37	10.42
New Mexico	5.23	6.48	4.15	5.10	6.38	4.00	–	–	–
Seattle-Puget Sound	6.22	8.03	4.82	6.05	7.92	4.57	14.67	18.02	11.71
Utah	4.96	6.30	3.80	4.99	6.35	3.79	–	–	–
9 SEER Areas[b]	5.97	7.48	4.83	5.50	7.09	4.27	12.60	15.05	11.07
11 SEER Areas[b]	5.84	7.33	4.72	5.43	7.02	4.21	12.21	14.55	10.74
13 SEER Areas[b]	5.84	7.33	4.72	5.42	7.01	4.20	12.18	14.57	10.68
18 SEER Areas[b]	5.83	7.36	4.67	5.34	6.91	4.14	11.74	14.34	10.05

[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 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and
        Georgia excluding ATL/RG.
–   Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 18.17

Myeloma

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], 2005-2009

California	3.20	4.10	2.54	3.16	4.11	2.46	7.00	8.50	6.04
Greater Bay Area	3.08	3.89	2.50	3.20	4.13	2.51	6.83	7.11	6.67
San Francisco-Oakland	3.15	3.92	2.60	3.16	4.06	2.50	7.06	7.64	6.72
San Jose-Monterey	2.95	3.83	2.30	3.28	4.23	2.54	-	-	-
Los Angeles	3.18	3.98	2.62	2.93	3.70	2.39	7.20	9.04	6.07
Greater California	3.24	4.23	2.52	3.23	4.25	2.48	6.79	8.75	5.44
Connecticut	3.15	4.07	2.51	2.97	3.82	2.38	5.58	6.98	4.65
Detroit	3.79	4.78	3.06	3.07	4.16	2.23	6.74	7.68	6.08
Georgia	3.56	4.45	3.00	2.95	3.80	2.39	5.85	7.34	5.01
Atlanta	3.42	4.35	2.86	2.59	3.56	1.97	5.84	7.00	5.13
Rural Georgia	4.18	-	3.92	3.26	-	-	-	-	-
Greater Georgia	3.61	4.51	3.03	3.07	3.89	2.53	5.92	7.65	4.97
Hawaii	2.47	3.19	1.92	3.65	4.30	3.11	-	-	-
Iowa	3.31	4.32	2.55	3.29	4.28	2.55	-	-	-
Kentucky	3.51	4.88	2.59	3.27	4.62	2.35	8.19	10.33	6.77
Louisiana	3.81	4.86	3.14	2.87	3.75	2.29	7.03	8.98	5.87
New Jersey	3.41	4.36	2.75	3.17	4.15	2.47	6.24	7.59	5.40
New Mexico	2.97	3.77	2.37	2.99	3.84	2.32	-	-	-
Seattle-Puget Sound	3.31	4.55	2.40	3.31	4.60	2.35	7.67	9.83	6.31
Utah	3.39	4.21	2.74	3.37	4.17	2.74	-	-	-
9 SEER Areas[b]	3.28	4.21	2.61	3.13	4.12	2.41	6.43	7.52	5.71
11 SEER Areas[b]	3.24	4.14	2.60	3.10	4.04	2.41	6.60	7.85	5.80
13 SEER Areas[b]	3.24	4.14	2.60	3.10	4.03	2.42	6.57	7.82	5.76
18 SEER Areas[b]	3.33	4.28	2.66	3.13	4.11	2.43	6.57	8.12	5.62
Total U.S.	3.42	4.37	2.75	3.18	4.12	2.50	6.40	8.03	5.38

[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 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and
       Georgia excluding ATL/RG.
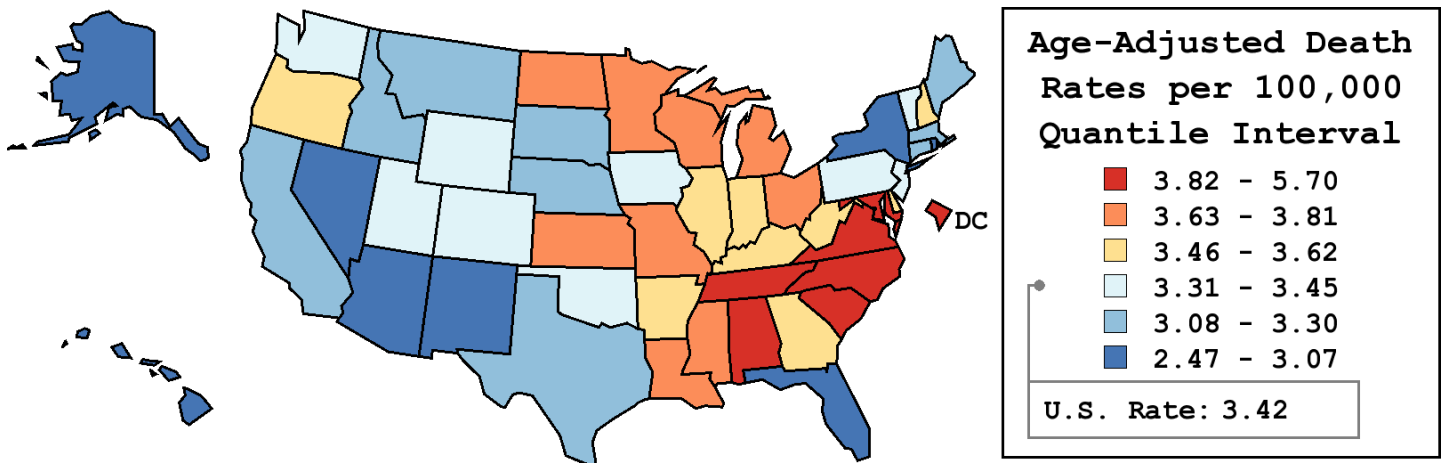-   Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 18.18
Myeloma

Age-Adjusted Cancer Death[a] Rates By State, All Races, 2005-2009

Males and Females

State	Rate	SE	Rank	PD
TOTAL U.S.	3.42	0.01		
High Five States				
D.C.	5.70[b]	0.45	(01)	66.55[c]
North Carolina	4.04[b]	0.09	(02)	18.02[c]
Alabama	4.00[b]	0.13	(03)	16.90[c]
Virginia	3.98[b]	0.10	(04)	16.27[c]
Maryland	3.96[b]	0.12	(05)	15.60[c]
Low Five States				
Florida	2.95[b]	0.05	(47)	-13.85
Alaska	2.95	0.40	(48)	-13.88
Rhode Island	2.85	0.22	(49)	-16.73[c]
Nevada	2.58[b]	0.15	(50)	-24.70[c]
Hawaii	2.47[b]	0.18	(51)	-27.73[c]

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	4.00[b]	0.13	(03)	16.90[c]	Montana	3.24	0.24	(38)	-5.39
Alaska	2.95	0.40	(48)	-13.88	Nebraska	3.23	0.18	(39)	-5.58
Arizona	2.95[b]	0.09	(46)	-13.74	Nevada	2.58[b]	0.15	(50)	-24.70[c]
Arkansas	3.46	0.15	(25)	1.22	New Hampshire	3.57	0.23	(22)	4.22
California	3.20[b]	0.04	(40)	-6.59	New Jersey	3.41	0.09	(27)	-0.23
Colorado	3.32	0.13	(33)	-3.07	New Mexico	2.97	0.17	(45)	-13.08
Connecticut	3.15	0.13	(42)	-7.94	New York	3.07[b]	0.05	(44)	-10.20
Delaware	3.60	0.27	(19)	5.22	North Carolina	4.04[b]	0.09	(02)	18.02[c]
D.C.	5.70[b]	0.45	(01)	66.55[c]	North Dakota	3.70	0.32	(13)	8.26
Florida	2.95[b]	0.05	(47)	-13.85	Ohio	3.69[b]	0.08	(14)	7.71
Georgia	3.56	0.10	(23)	4.15	Oklahoma	3.45	0.13	(26)	0.77
Hawaii	2.47[b]	0.18	(51)	-27.73[c]	Oregon	3.62	0.13	(17)	5.89
Idaho	3.30	0.21	(36)	-3.55	Pennsylvania	3.36	0.07	(30)	-1.93
Illinois	3.57	0.08	(21)	4.27	Rhode Island	2.85	0.22	(49)	-16.73[c]
Indiana	3.57	0.10	(20)	4.30	South Carolina	3.87	0.13	(07)	13.07
Iowa	3.31	0.14	(34)	-3.42	South Dakota	3.19	0.27	(41)	-6.72
Kansas	3.81	0.16	(09)	11.25	Tennessee	3.90[b]	0.11	(06)	14.05
Kentucky	3.51	0.13	(24)	2.70	Texas	3.30	0.06	(35)	-3.49
Louisiana	3.81	0.13	(08)	11.45	Utah	3.39	0.19	(29)	-1.01
Maine	3.09	0.20	(43)	-9.76	Vermont	3.32	0.31	(32)	-2.91
Maryland	3.96[b]	0.12	(05)	15.60[c]	Virginia	3.98[b]	0.10	(04)	16.27[c]
Massachusetts	3.29	0.10	(37)	-3.91	Washington	3.33	0.10	(31)	-2.63
Michigan	3.80[b]	0.08	(10)	10.92	West Virginia	3.61	0.18	(18)	5.46
Minnesota	3.76	0.12	(11)	9.79	Wisconsin	3.67	0.11	(15)	7.19
Mississippi	3.71	0.16	(12)	8.53	Wyoming	3.41	0.36	(28)	-0.40
Missouri	3.66	0.11	(16)	6.90					

Age-Adjusted Death Rates per 100,000 Quantile Interval

- 3.82 - 5.70
- 3.63 - 3.81
- 3.46 - 3.62
- 3.31 - 3.45
- 3.08 - 3.30
- 2.47 - 3.07

U.S. Rate: 3.42

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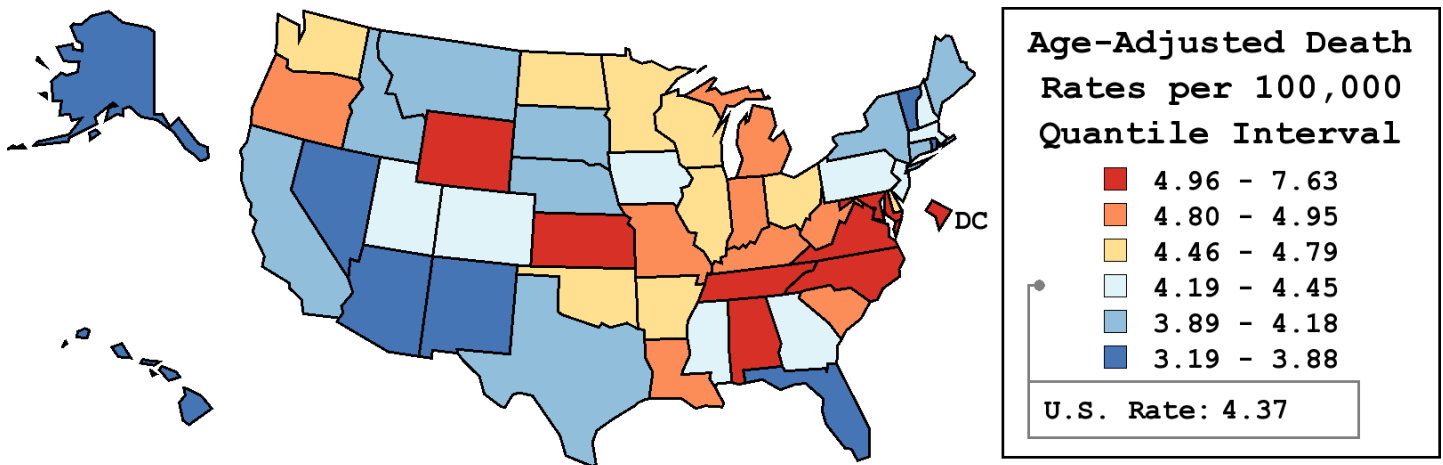-   Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 18.19
Myeloma

Age-Adjusted Cancer Death[a] Rates By State, All Races, 2005-2009

Males

State	Rate	SE	Rank	PD
TOTAL U.S.	4.37	0.03		
High Five States				
D.C.	7.63[b]	0.85	(01)	74.48[c]
Tennessee	5.23[b]	0.20	(02)	19.65[c]
Maryland	5.07	0.22	(03)	16.09[c]
Virginia	5.03[b]	0.19	(04)	15.13[c]
Wyoming	5.00	0.65	(05)	14.39
Low Five States				
Florida	3.68[b]	0.08	(47)	-15.92[c]
Alaska	3.41	0.64	(48)	-22.00[c]
Rhode Island	3.34	0.37	(49)	-23.70[c]
Nevada	3.22[b]	0.25	(50)	-26.43[c]
Hawaii	3.19[b]	0.31	(51)	-27.08[c]

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	4.99	0.22	(06)	14.06	Montana	3.93	0.40	(42)	-9.99
Alaska	3.41	0.64	(48)	-22.00[c]	Nebraska	4.13	0.32	(37)	-5.43
Arizona	3.68[b]	0.16	(46)	-15.72[c]	Nevada	3.22[b]	0.25	(50)	-26.43[c]
Arkansas	4.46	0.26	(25)	1.94	New Hampshire	4.30	0.39	(32)	-1.62
California	4.10[b]	0.08	(39)	-6.16	New Jersey	4.36	0.15	(29)	-0.33
Colorado	4.30	0.23	(31)	-1.56	New Mexico	3.77	0.29	(45)	-13.84
Connecticut	4.07	0.23	(41)	-6.79	New York	3.91[b]	0.10	(43)	-10.54
Delaware	4.69	0.49	(20)	7.20	North Carolina	4.98[b]	0.17	(07)	13.95
D.C.	7.63[b]	0.85	(01)	74.48[c]	North Dakota	4.76	0.54	(18)	8.98
Florida	3.68[b]	0.08	(47)	-15.92[c]	Ohio	4.61	0.13	(21)	5.38
Georgia	4.45	0.17	(26)	1.86	Oklahoma	4.60	0.24	(22)	5.19
Hawaii	3.19[b]	0.31	(51)	-27.08[c]	Oregon	4.83	0.24	(15)	10.44
Idaho	4.12	0.36	(38)	-5.75	Pennsylvania	4.29	0.12	(33)	-1.75
Illinois	4.57	0.13	(23)	4.45	Rhode Island	3.34	0.37	(49)	-23.70[c]
Indiana	4.86	0.19	(13)	11.16	South Carolina	4.93	0.23	(10)	12.78
Iowa	4.32	0.24	(30)	-1.27	South Dakota	4.14	0.46	(36)	-5.18
Kansas	4.97	0.28	(08)	13.71	Tennessee	5.23[b]	0.20	(02)	19.65[c]
Kentucky	4.88	0.24	(12)	11.74	Texas	4.18	0.10	(35)	-4.32
Louisiana	4.86	0.24	(14)	11.14	Utah	4.21	0.32	(34)	-3.65
Maine	4.08	0.35	(40)	-6.69	Vermont	3.88	0.52	(44)	-11.24
Maryland	5.07	0.22	(03)	16.09[c]	Virginia	5.03[b]	0.19	(04)	15.13[c]
Massachusetts	4.38	0.18	(27)	0.25	Washington	4.53	0.19	(24)	3.69
Michigan	4.91[b]	0.15	(11)	12.42	West Virginia	4.95	0.33	(09)	13.31
Minnesota	4.74	0.21	(19)	8.49	Wisconsin	4.79	0.20	(17)	9.62
Mississippi	4.38	0.27	(28)	0.24	Wyoming	5.00	0.65	(05)	14.39
Missouri	4.80	0.19	(16)	9.92					

Age-Adjusted Death Rates per 100,000 Quantile Interval

- 4.96 - 7.63
- 4.80 - 4.95
- 4.46 - 4.79
- 4.19 - 4.45
- 3.89 - 4.18
- 3.19 - 3.88

U.S. Rate: 4.37

[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<=.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.
-   Statistic not shown. Rate based on less than 16 cases for the time interval.
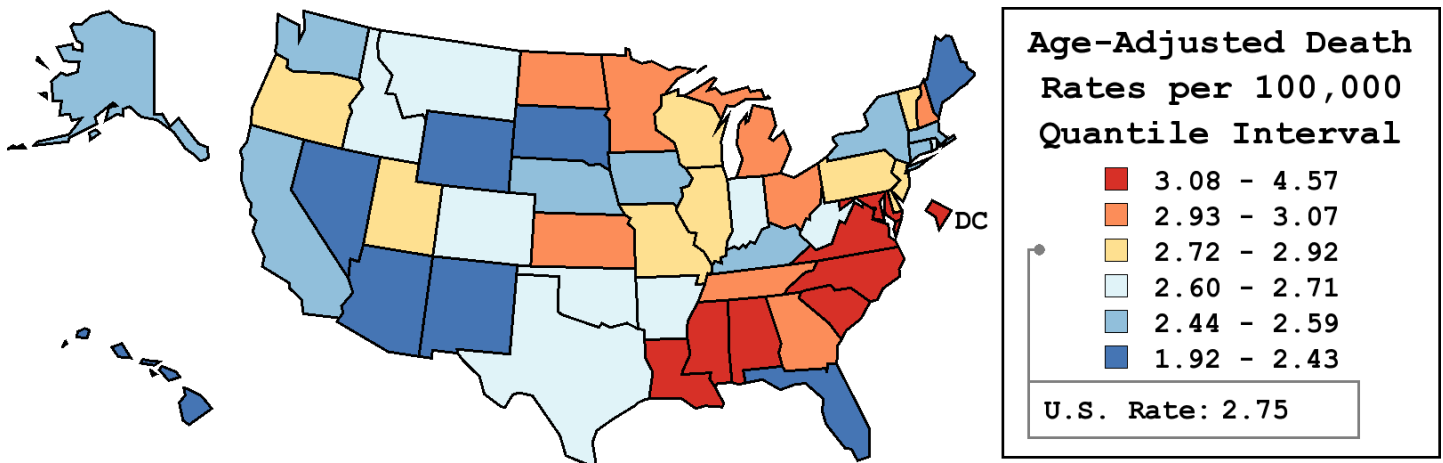
Table 18.20
Myeloma

Age-Adjusted Cancer Death[a] Rates By State, All Races, 2005-2009

Females

State	Rate	SE	Rank	PD
TOTAL U.S.	2.75	0.02		
High Five States				
D.C.	4.57	0.52	(01)	66.23[c]
North Carolina	3.39[b]	0.11	(02)	23.55[c]
Virginia	3.29[b]	0.12	(03)	19.64[c]
Alabama	3.26	0.15	(04)	18.69[c]
Mississippi	3.23	0.19	(05)	17.71[c]
Low Five States				
Florida	2.38[b]	0.06	(47)	-13.51
New Mexico	2.37	0.21	(48)	-13.86
Nevada	2.05[b]	0.18	(49)	-25.45[c]
Wyoming	1.99	0.38	(50)	-27.68[c]
Hawaii	1.92[b]	0.22	(51)	-29.97[c]

State	Rate	SE	Rank	PD	State	Rate	SE	Rank	PD
Alabama	3.26	0.15	(04)	18.69[c]	Montana	2.67	0.30	(29)	-2.76
Alaska	2.51	0.49	(40)	-8.55	Nebraska	2.58	0.22	(36)	-6.17
Arizona	2.38	0.12	(46)	-13.33	Nevada	2.05[b]	0.18	(49)	-25.45[c]
Arkansas	2.70	0.18	(28)	-1.75	New Hampshire	3.07	0.28	(09)	11.92
California	2.54[b]	0.05	(38)	-7.41	New Jersey	2.75	0.10	(22)	0.26
Colorado	2.60	0.15	(32)	-5.40	New Mexico	2.37	0.21	(48)	-13.86
Connecticut	2.51	0.15	(41)	-8.58	New York	2.50[b]	0.06	(42)	-9.03
Delaware	2.84	0.32	(21)	3.36	North Carolina	3.39[b]	0.11	(02)	23.55[c]
D.C.	4.57[b]	0.52	(01)	66.23[c]	North Dakota	2.94	0.38	(16)	7.20
Florida	2.38[b]	0.06	(47)	-13.51	Ohio	3.07[b]	0.09	(10)	11.83
Georgia	3.00	0.11	(13)	9.25	Oklahoma	2.60	0.15	(34)	-5.52
Hawaii	1.92[b]	0.22	(51)	-29.97[c]	Oregon	2.72	0.16	(25)	-0.89
Idaho	2.71	0.26	(26)	-1.28	Pennsylvania	2.73	0.08	(24)	-0.64
Illinois	2.92	0.09	(17)	6.22	Rhode Island	2.60	0.28	(33)	-5.48
Indiana	2.70	0.12	(27)	-1.60	South Carolina	3.14	0.15	(07)	14.42
Iowa	2.55	0.16	(37)	-7.08	South Dakota	2.43	0.31	(44)	-11.64
Kansas	3.01	0.19	(11)	9.51	Tennessee	2.99	0.13	(14)	8.70
Kentucky	2.59	0.14	(35)	-5.87	Texas	2.65	0.07	(30)	-3.41
Louisiana	3.14	0.16	(08)	14.28	Utah	2.74	0.23	(23)	-0.40
Maine	2.41	0.23	(45)	-12.29	Vermont	2.89	0.38	(19)	5.36
Maryland	3.23	0.14	(06)	17.54[c]	Virginia	3.29[b]	0.12	(03)	19.64[c]
Massachusetts	2.54	0.11	(39)	-7.72	Washington	2.44	0.12	(43)	-11.03
Michigan	2.98	0.10	(15)	8.54	West Virginia	2.64	0.20	(31)	-3.96
Minnesota	3.01	0.14	(12)	9.41	Wisconsin	2.90	0.13	(18)	5.60
Mississippi	3.23	0.19	(05)	17.71[c]	Wyoming	1.99	0.38	(50)	-27.68[c]
Missouri	2.84	0.12	(20)	3.54					

Age-Adjusted Death Rates per 100,000 Quantile Interval

- 3.08 - 4.57
- 2.93 - 3.07
- 2.72 - 2.92
- 2.60 - 2.71
- 2.44 - 2.59
- 1.92 - 2.43

U.S. Rate: 2.75

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

Table 18.21
Myeloma (Invasive)

Estimated United States Cancer Prevalence Counts[a] on January 1, 2009
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis	Sex	0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <19[e]	0 to <34[e]	>=34[g]	Complete[h]
Race											
All Races[b]	Both Sexes	45,747	15,680	5,928	2,305	905	279	69,411	70,950	263	71,213
	Males	24,230	8,744	3,306	1,343	513	160	37,464	38,319	95	38,414
	Females	21,517	6,936	2,622	962	392	119	31,947	32,631	168	32,799
White[b]	Both Sexes	34,935	12,486	4,640	1,739	649	188	53,654	54,719	101	54,820
	Males	19,405	7,200	2,680	990	372	117	30,182	30,788	0[i]	30,788
	Females	15,530	5,286	1,960	749	277	71	23,472	23,931	101[i]	24,032
Black[b]	Both Sexes	9,098	2,589	1,058	465	203	82	13,126	13,521	+	+
	Males	4,024	1,254	499	301	127	39	6,018	6,245	+	+
	Females	5,074	1,335	559	164	76	43	7,108	7,276	+	+
Asian/	Both Sexes	1,016	354	117	+	+	+	1,537	+	+	+
Pacific	Males	506	173	67	+	+	+	771	+	+	+
Islander[c]	Females	510	181	50	+	+	+	766	+	+	+
Hispanic[d]	Both Sexes	3,195	1,233	373	+	+	+	4,921	+	+	+
	Males	1,761	679	219	+	+	+	2,739	+	+	+
	Females	1,434	554	154	+	+	+	2,182	+	+	+

Estimated prevalence percent[a] on January 1, 2009, of the SEER 11 population diagnosed in the previous 19 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	Sex	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	Age-Adjusted[f] All Ages
Race				Age Specific (Crude)								
All Races[c]	Both Sexes	0.0199%	–	–	0.0002%	0.0021%	0.0099%	0.0304%	0.0745%	0.1031%	0.0936%	0.0199%
	Males	0.0217%	–	–	0.0003%	0.0027%	0.0112%	0.0350%	0.0881%	0.1242%	0.1188%	0.0238%
	Females	0.0181%	–	–	–	0.0014%	0.0086%	0.0259%	0.0621%	0.0863%	0.0795%	0.0167%
White[c]	Both Sexes	0.0194%	–	–	0.0002%	0.0020%	0.0090%	0.0282%	0.0691%	0.0969%	0.0883%	0.0186%
	Males	0.0219%	–	–	0.0003%	0.0025%	0.0109%	0.0332%	0.0840%	0.1218%	0.1182%	0.0230%
	Females	0.0169%	–	–	–	0.0013%	0.0071%	0.0233%	0.0551%	0.0767%	0.0716%	0.0148%
Black[c]	Both Sexes	0.0310%	–	–	–	0.0037%	0.0214%	0.0612%	0.1513%	0.2049%	0.1845%	0.0400%
	Males	0.0302%	–	–	–	0.0045%	0.0200%	0.0690%	0.1766%	0.2127%	0.1929%	0.0437%
	Females	0.0318%	–	–	–	0.0029%	0.0227%	0.0547%	0.1319%	0.1996%	0.1806%	0.0374%
Asian/	Both Sexes	0.0113%	–	–	–	0.0010%	0.0045%	0.0149%	0.0453%	0.0598%	0.0666%	0.0116%
Pacific	Males	0.0115%	–	–	–	0.0017%	0.0053%	0.0157%	0.0508%	0.0693%	0.0697%	0.0130%
Islander[c]	Females	0.0110%	–	–	–	–	0.0038%	0.0142%	0.0406%	0.0527%	0.0647%	0.0105%
Hispanic[d]	Both Sexes	0.0101%	–	–	0.0004%	0.0023%	0.0083%	0.0264%	0.0645%	0.1015%	0.0798%	0.0181%
	Males	0.0108%	–	–	0.0007%	0.0032%	0.0086%	0.0307%	0.0792%	0.1145%	0.1065%	0.0216%
	Females	0.0094%	–	–	–	0.0012%	0.0079%	0.0223%	0.0517%	0.0918%	0.0642%	0.0154%

[a] US 2009 cancer prevalence counts are based on 2009 cancer prevalence proportions from the SEER registries and 1/1/2009
     US population estimates based on the average of 2008 and 2009 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.
[e] Maximum limited-duration prevalence: 34 years for 1975-2009 SEER 9 data; 19 years for 1990-2009 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 34 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 <34 and >=34. (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] Myeloma, by Race and Sex
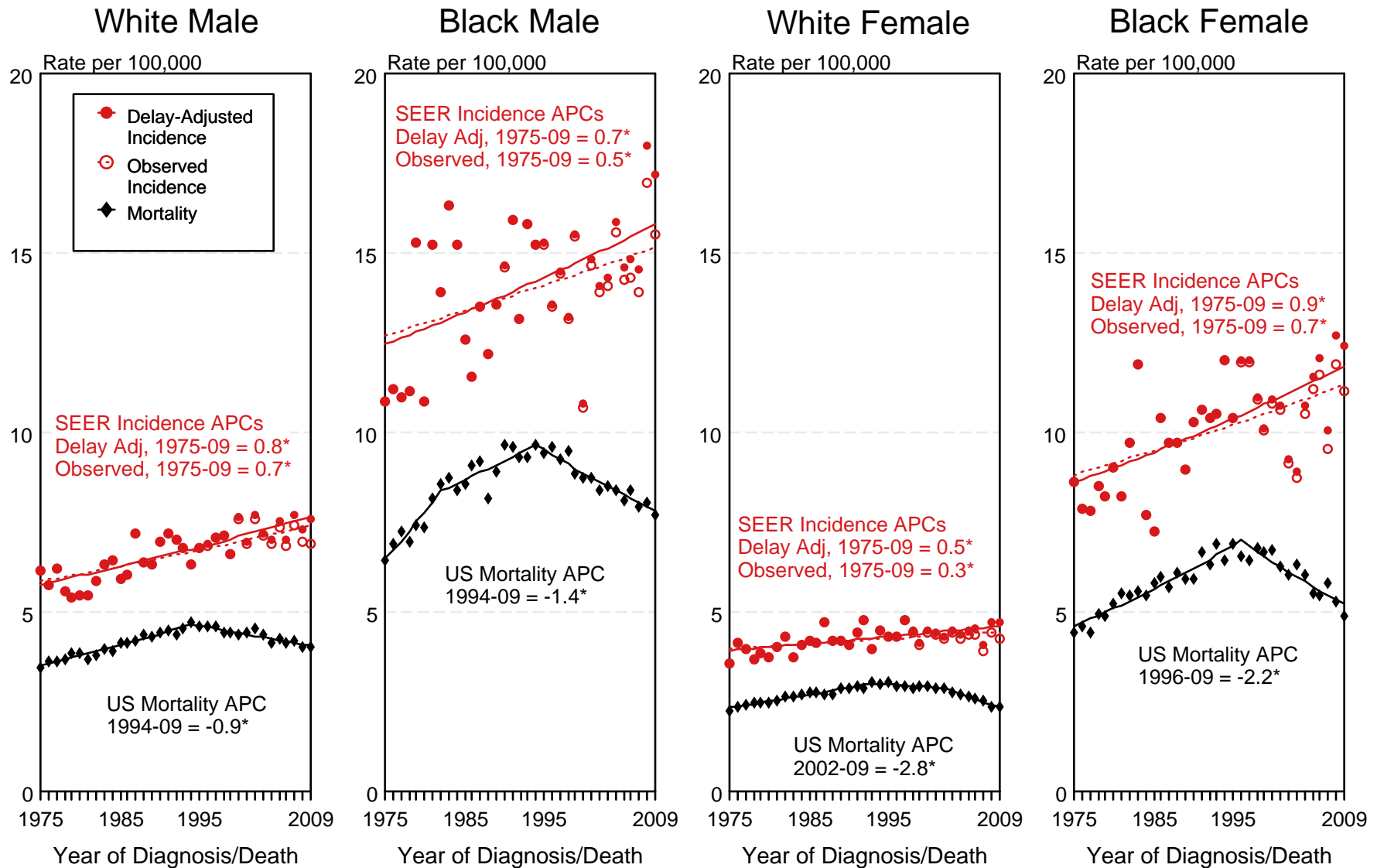
White Male

Rate per 100,000

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

SEER Incidence APCs
Delay Adj, 1975-09 = 0.8*
Observed, 1975-09 = 0.7*

US Mortality APC
1994-09 = -0.9*

Year of Diagnosis/Death

Black Male

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-09 = 0.7*
Observed, 1975-09 = 0.5*

US Mortality APC
1994-09 = -1.4*

Year of Diagnosis/Death

White Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-09 = 0.5*
Observed, 1975-09 = 0.3*

US Mortality APC
2002-09 = -2.8*

Year of Diagnosis/Death

Black Female

Rate per 100,000

SEER Incidence APCs
Delay Adj, 1975-09 = 0.9*
Observed, 1975-09 = 0.7*

US Mortality APC
1996-09 = -2.2*

Year of Diagnosis/Death

SEER Incidence and US Death Rates[a]
Myeloma, Both Sexes
Joinpoint Analyses for Whites and Blacks from 1975-2009
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2009
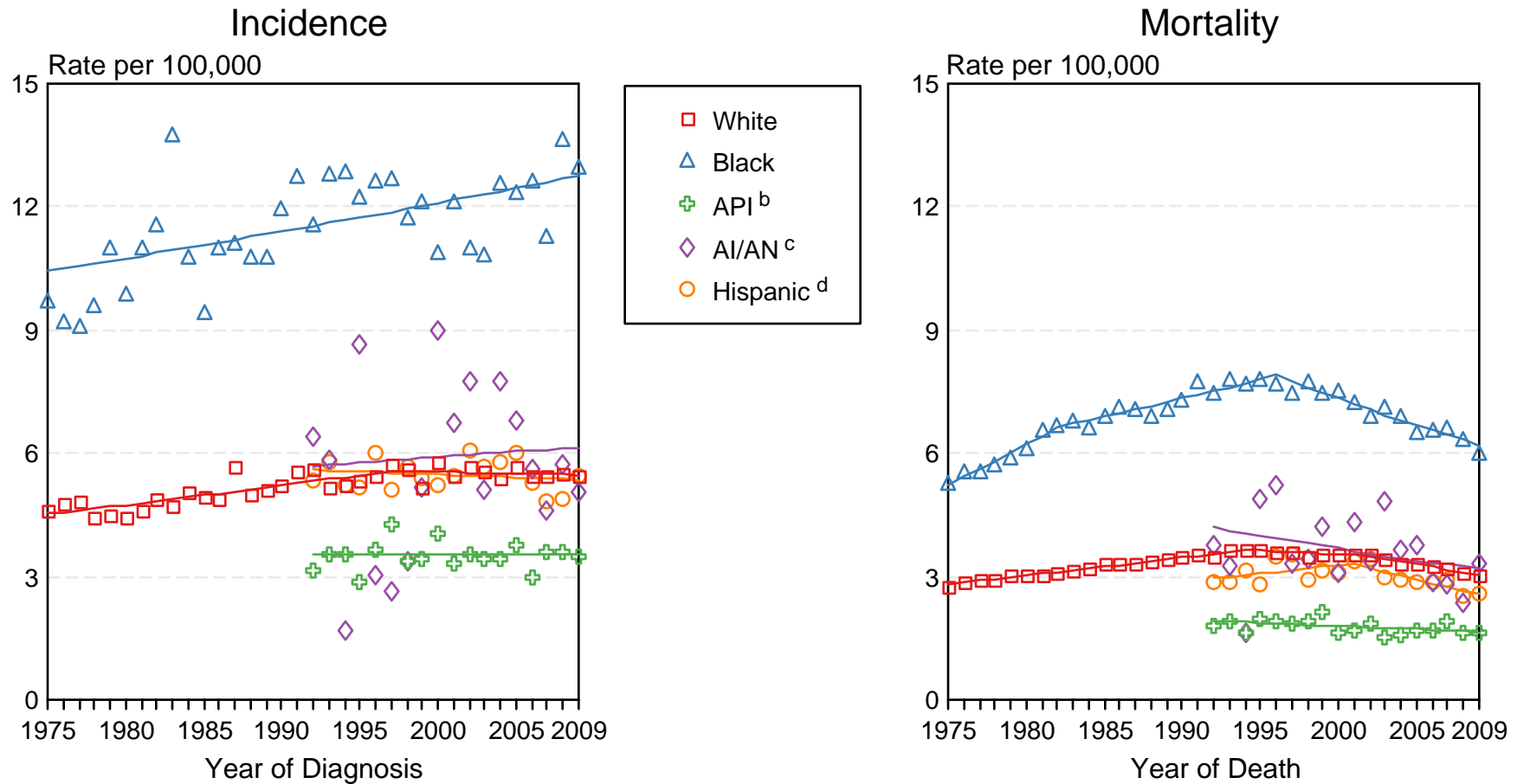
Incidence

Rate per 100,000

Year of Diagnosis

Mortality

Rate per 100,000

Year of Death

Legend:
- White
- Black
- API [b]
- AI/AN [c]
- Hispanic [d]

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 3.5, April 2011, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2009 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2009 allow a maximum of 3 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, South Carolina, Oklahoma, and Vermont.

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

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-09 = 0.8*
Observed, 1975-09 = 0.6*

SEER 13 APCs
Delay Adj, 1992-09 = 0.5*
Observed, 1992-09 = 0.2

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-09 = 0.8*
Observed, 1975-09 = 0.7*

SEER 13 APCs
Delay Adj, 1992-09 = 0.5*
Observed, 1992-09 = 0.2

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-09 = 0.7*
Observed, 1975-09 = 0.5*

SEER 13 APCs
Delay Adj, 1992-09 = 0.9*
Observed, 1992-09 = 0.5

Year of Diagnosis

Figure 18.3

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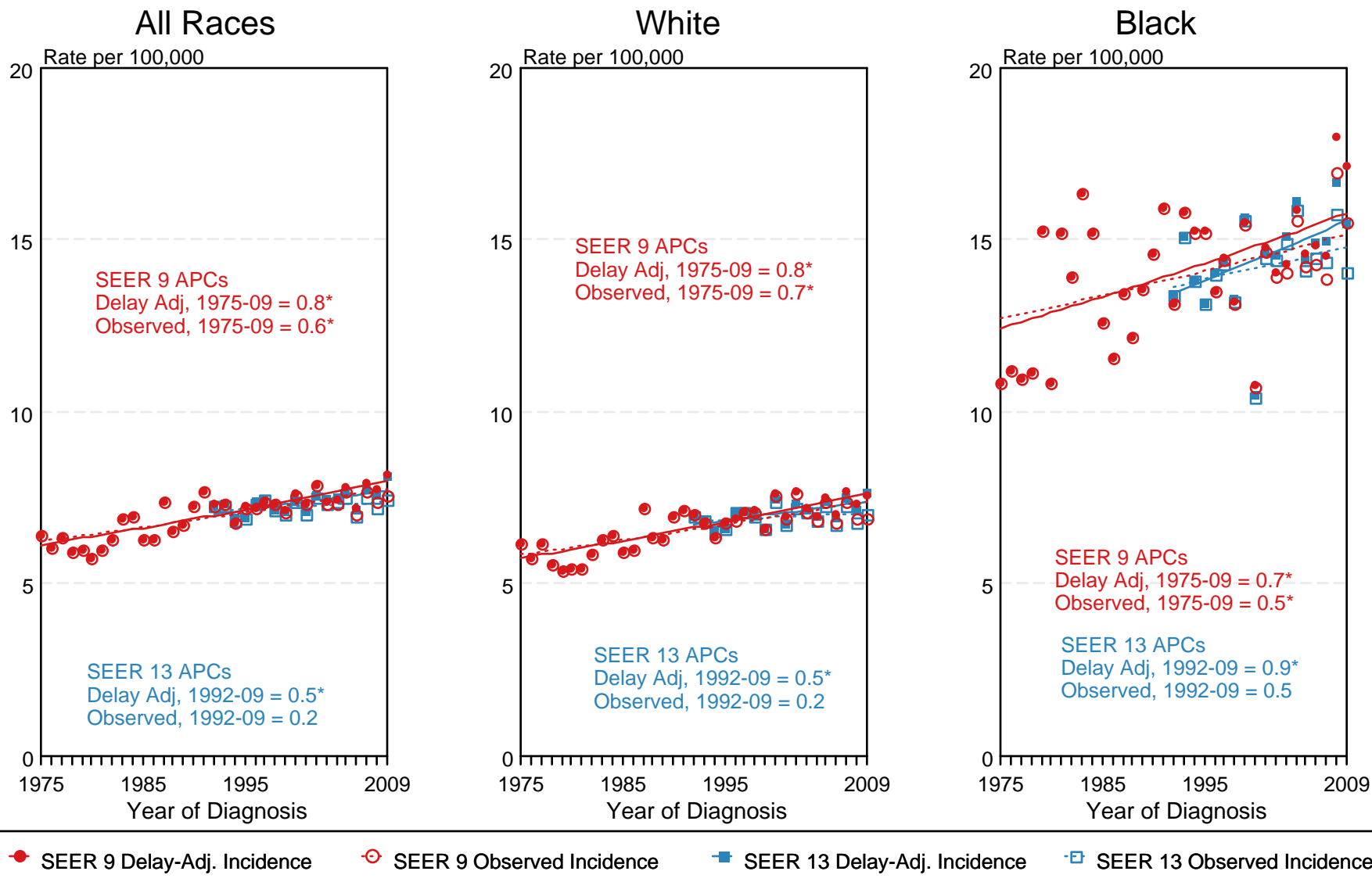- ■ SEER 13 Delay-Adj. Incidence
- □ SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, 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
Myeloma, Female, by Race

All Races

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-09 = 0.6*
Observed, 1992-09 = 0.0

SEER 13 APCs
Delay Adj, 1992-09 = 0.3
Observed, 1992-09 = -0.1

Year of Diagnosis

White

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-09 = 0.5*
Observed, 1975-09 = 0.3*

SEER 13 APCs
Delay Adj, 1992-09 = 0.1
Observed, 1992-09 = -0.3

Year of Diagnosis

Black

Rate per 100,000

SEER 9 APCs
Delay Adj, 1975-09 = 0.9*
Observed, 1975-09 = 0.7*

SEER 13 APCs
Delay Adj, 1992-09 = 0.4
Observed, 1992-09 = 0.0

Year of Diagnosis

Figure 18.4

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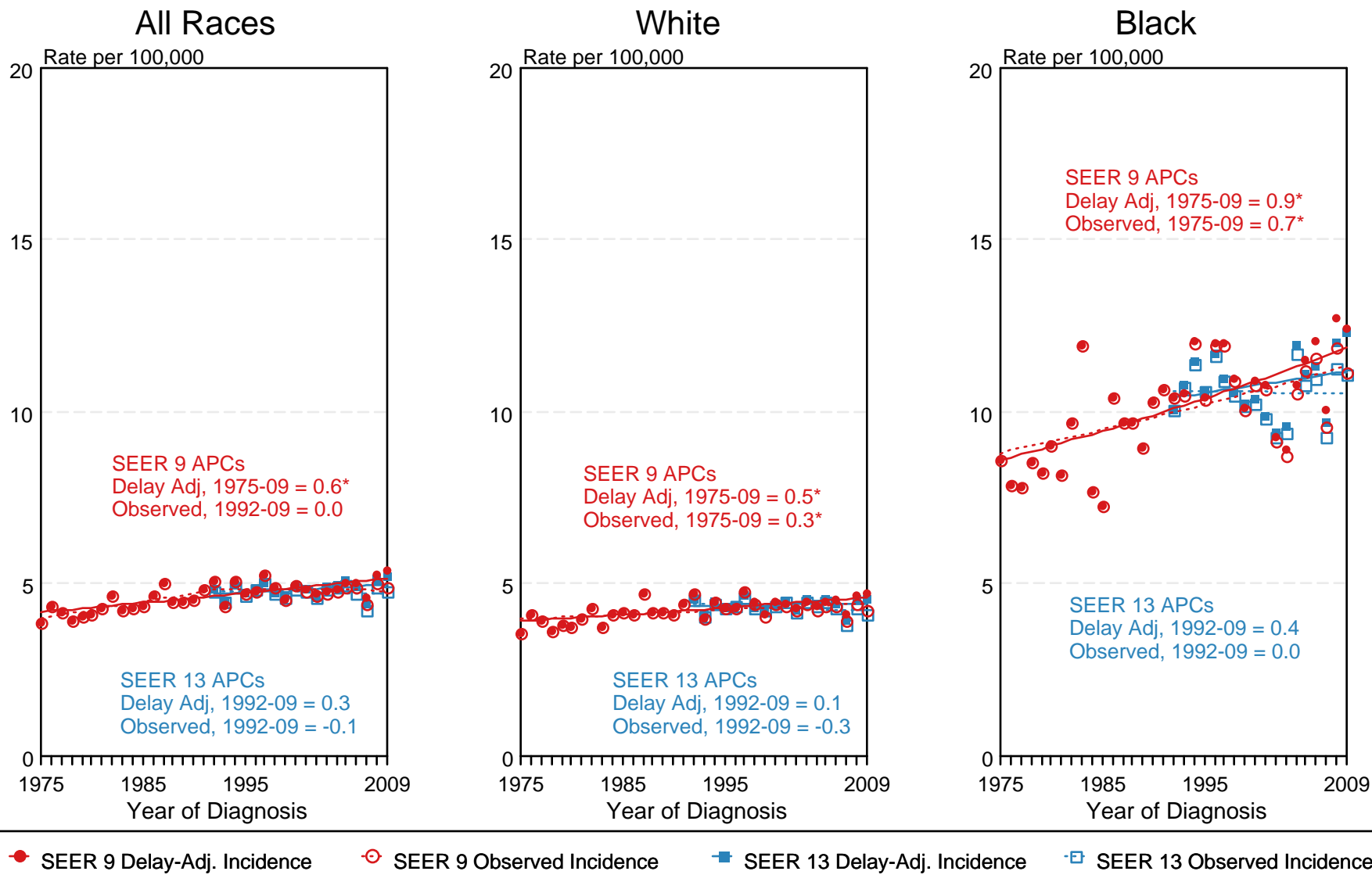- ■ SEER 13 Delay-Adj. Incidence
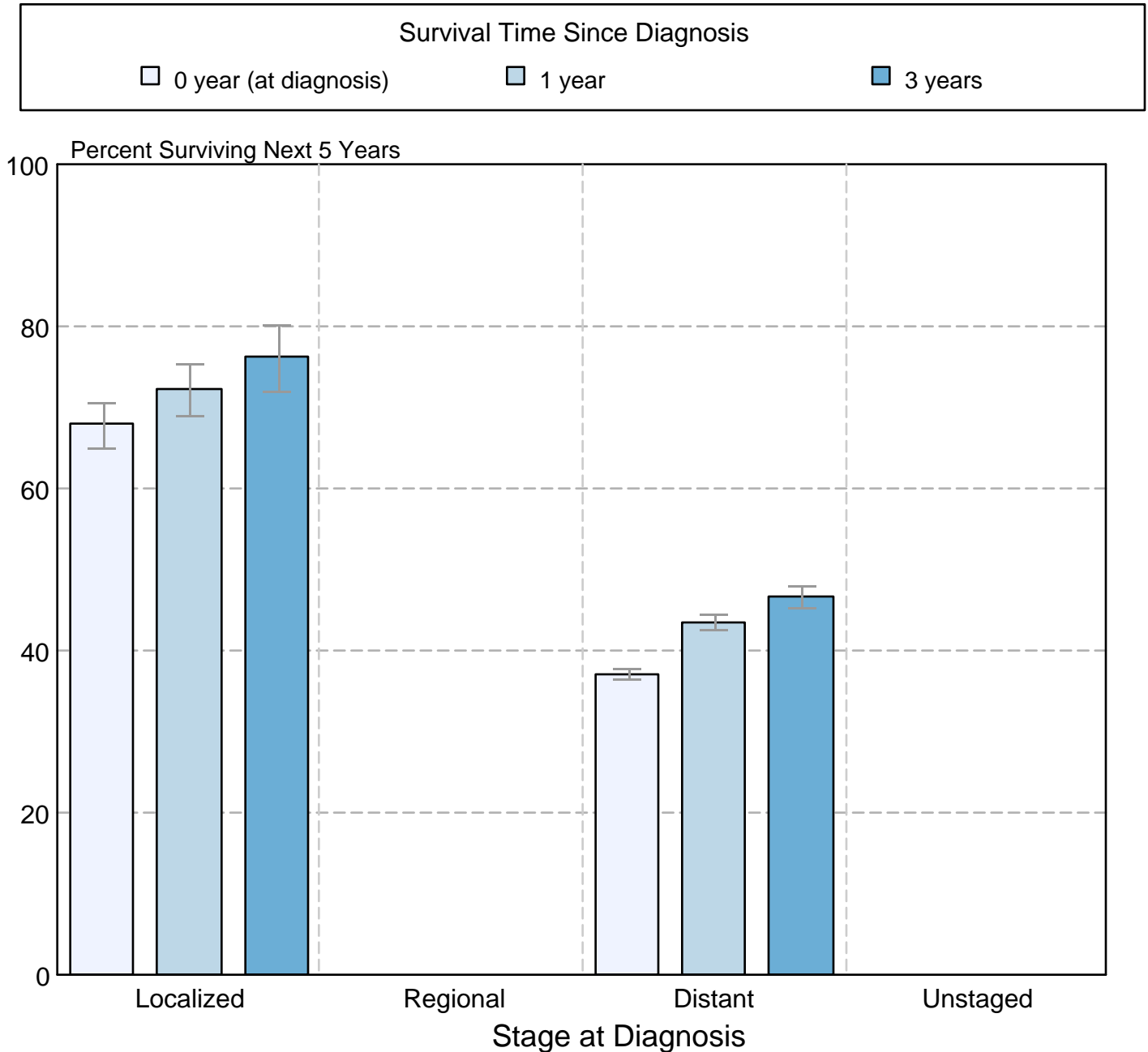- □ SEER 13 Observed Incidence

[a] Source: SEER 9 areas and SEER 13 areas.
Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 3.5, April 2011, National Cancer Institute.
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.
* The APC is significantly different from zero (p < 0.05).

Figure 18.5

Myeloma
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
1998-2008 by stage at diagnosis

Survival Time Since Diagnosis
☐ 0 year (at diagnosis)   ☐ 1 year   ■ 3 years

Percent Surviving Next 5 Years

Stage at Diagnosis

Source: SEER 18 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, New Jersey and Georgia excluding ATL/RG). California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG contribute cases for diagnosis years 2000-2008. The remaining 13 SEER Areas contribute cases for the entire period 1998-2008.
Stage at diagnosis is classified using SEER Summary Stage 2000.
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.