

Table 13.1
LeukemiaTrends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2014</u>														
All Races	1975-06	0.3*	2006-14	1.7*									1.6*	1.7*
White	1975-05	0.4*	2005-14	1.7*									1.7*	1.7*
Black	1975-14	0.3											0.3	0.3
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2014</u>														
All Races	1992-05	0.3*	2005-14	1.3*									1.3*	1.3*
White	1992-04	0.4*	2004-14	1.4*									1.4*	1.4*
Black	1992-14	0.7*											0.7*	0.7*
<u>SEER 9 Observed Incidence^a, 1975-2014</u>														
All Races	1975-14	0.3*											0.3*	0.3*
White	1975-14	0.4*											0.4*	0.4*
Black	1975-14	0.0											0.0	0.0
<u>SEER 13 Observed Incidence^b, 1992-2014</u>														
All Races	1992-14	0.3*											0.3*	0.3*
White	1992-14	0.4*											0.4*	0.4*
White NH ^{ef}	1992-14	0.5*											0.5*	0.5*
Black	1992-14	0.2											0.2	0.2
Black NH ^{ef}	1992-14	0.2											0.2	0.2
API ^e	1992-14	-0.1											-0.1	-0.1
AI/AN ^{eg}	1992-14	1.7											1.7	1.7
Hispanic ^f	1992-14	0.5*											0.5*	0.5*
<u>U.S. Cancer Mortality^c, 1975-2014</u>														
All Races	1975-80	0.6	1980-88	-0.6*	1988-91	0.7	1991-01	-0.5*	2001-14	-1.0*			-1.0*	-1.0*
White	1975-80	0.5	1980-88	-0.7*	1988-91	0.7	1991-01	-0.4*	2001-14	-0.9*			-0.9*	-0.9*
Black	1975-93	0.5*	1993-14	-1.3*									-1.3*	-1.3*
<u>U.S. Cancer Mortality^c, 1992-2014</u>														
All Races	1992-01	-0.5*	2001-14	-1.0*									-1.0*	-1.0*
White	1992-01	-0.4*	2001-14	-0.9*									-0.9*	-0.9*
White NH ^{ef}	1992-01	-0.3*	2001-14	-0.9*									-0.9*	-0.9*
Black	1992-14	-1.3*											-1.3*	-1.3*
Black NH ^{ef}	1992-14	-1.2*											-1.2*	-1.2*
API ^e	1992-07	-1.4*	2007-11	3.1	2011-14	-5.6							-0.9	-3.5
AI/AN ^{eg}	1992-14	-0.5											-0.5	-0.5
Hispanic ^f	1992-14	-0.4*											-0.4*	-0.4*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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 13.2
LeukemiaTrends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four 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	2005-14	2010-14
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2014</u>														
All Races	1975-06	0.2*	2006-14	1.6*									1.5*	1.6*
White	1975-06	0.3*	2006-14	1.7*									1.5*	1.7*
Black	1975-14	0.3											0.3	0.3
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2014</u>														
All Races	1992-06	0.2	2006-14	1.3*									1.1*	1.3*
White	1992-14	0.7*											0.7*	0.7*
Black	1992-14	0.8*											0.8*	0.8*
<u>SEER 9 Observed Incidence^a, 1975-2014</u>														
All Races	1975-14	0.2*											0.2*	0.2*
White	1975-14	0.2*											0.2*	0.2*
Black	1975-14	0.0											0.0	0.0
<u>SEER 13 Observed Incidence^b, 1992-2014</u>														
All Races	1992-14	0.1											0.1	0.1
White	1992-14	0.2*											0.2*	0.2*
White NH ^{ef}	1992-14	0.3*											0.3*	0.3*
Black	1992-14	0.2											0.2	0.2
Black NH ^{ef}	1992-14	0.3											0.3	0.3
API ^e	1992-14	-0.1											-0.1	-0.1
AI/AN ^{eg}	1992-14	2.4*											2.4*	2.4*
Hispanic ^f	1992-14	0.2											0.2	0.2
<u>U.S. Cancer Mortality^c, 1975-2014</u>														
All Races	1975-80	0.5	1980-87	-0.7*	1987-95	0.2	1995-14	-0.9*					-0.9*	-0.9*
White	1975-01	-0.3*	2001-14	-0.9*									-0.9*	-0.9*
Black	1975-91	1.0*	1991-14	-1.3*									-1.3*	-1.3*
<u>U.S. Cancer Mortality^c, 1992-2014</u>														
All Races	1992-02	-0.6*	2002-14	-1.0*									-1.0*	-1.0*
White	1992-14	-0.7*											-0.7*	-0.7*
White NH ^{ef}	1992-14	-0.7*											-0.7*	-0.7*
Black	1992-14	-1.3*											-1.3*	-1.3*
Black NH ^{ef}	1992-14	-1.2*											-1.2*	-1.2*
API ^e	1992-14	-0.7*											-0.7*	-0.7*
AI/AN ^{eg}	1992-14	-0.2											-0.2	-0.2
Hispanic ^f	1992-14	-0.4*											-0.4*	-0.4*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska

Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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.

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Table 13.3
LeukemiaTrends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2014 With up to Five Joinpoints, 1992-2014 With up to Four Joinpoints,
Females 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	2005-14	2010-14
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2014</u>														
All Races	1975-99	0.2	1999-14	1.1*									1.1*	1.1*
White	1975-04	0.4*	2004-14	1.7*									1.7*	1.7*
Black	1975-14	0.3											0.3	0.3
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2014</u>														
All Races	1992-14	0.7*											0.7*	0.7*
White	1992-14	0.9*											0.9*	0.9*
Black	1992-14	0.7*											0.7*	0.7*
<u>SEER 9 Observed Incidence^a, 1975-2014</u>														
All Races	1975-14	0.3*											0.3*	0.3*
White	1975-14	0.5*											0.5*	0.5*
Black	1975-14	0.1											0.1	0.1
<u>SEER 13 Observed Incidence^b, 1992-2014</u>														
All Races	1992-14	0.3*											0.3*	0.3*
White	1992-14	0.5*											0.5*	0.5*
White NH ^{ef}	1992-14	0.5*											0.5*	0.5*
Black	1992-14	0.2											0.2	0.2
Black NH ^{ef}	1992-14	0.2											0.2	0.2
API ^e	1992-14	-0.1											-0.1	-0.1
AI/AN ^{eg}	1992-14	1.3											1.3	1.3
Hispanic ^f	1992-14	0.7*											0.7*	0.7*
<u>U.S. Cancer Mortality^c, 1975-2014</u>														
All Races	1975-80	0.7	1980-99	-0.4*	1999-14	-1.2*							-1.2*	-1.2*
White	1975-80	0.7	1980-00	-0.4*	2000-14	-1.1*							-1.1*	-1.1*
Black	1975-93	0.4*	1993-14	-1.3*									-1.3*	-1.3*
<u>U.S. Cancer Mortality^c, 1992-2014</u>														
All Races	1992-00	-0.5*	2000-14	-1.2*									-1.2*	-1.2*
White	1992-00	-0.4*	2000-14	-1.1*									-1.1*	-1.1*
White NH ^{ef}	1992-00	-0.3	2000-14	-1.1*									-1.1*	-1.1*
Black	1992-14	-1.2*											-1.2*	-1.2*
Black NH ^{ef}	1992-14	-1.2*											-1.2*	-1.2*
API ^e	1992-14	-0.8*											-0.8*	-0.8*
AI/AN ^{eg}	1992-14	-1.0											-1.0	-1.0
Hispanic ^f	1992-14	-0.5*											-0.5*	-0.5*

Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>).

The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

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

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Table 13.4
LeukemiaDelay-adjusted SEER Incidence^a Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975	12.80	16.93	9.96	13.10	17.49	10.10	11.58	16.33	8.47
1976	13.54	18.49	10.19	13.83	19.12	10.30	11.37	14.32	9.39
1977	12.74	16.34	10.22	13.20	17.04	10.52	10.15	13.61	7.72
1978	12.87	17.25	9.79	13.54	18.30	10.26	9.16	11.42	7.47
1979	12.56	16.79	9.70	13.03	17.56	10.02	10.60	13.52	8.64
1980	12.93	17.36	9.85	13.28	17.91	10.12	12.18	16.11	9.47
1981	12.38	16.47	9.65	12.65	17.03	9.82	12.27	14.47	10.37
1982	13.15	18.23	9.71	13.50	18.77	9.95	10.75	15.16	7.91
1983	13.15	17.81	9.91	13.48	18.43	10.07	12.48	15.95	10.06
1984	13.01	17.11	10.12	13.47	17.98	10.35	10.68	11.87	9.61
1985	13.38	17.78	10.38	13.75	18.30	10.64	12.32	17.03	9.30
1986	12.84	17.54	9.51	13.39	18.38	9.92	10.23	13.20	8.09
1987	13.36	17.76	10.33	13.81	18.47	10.62	12.57	17.60	9.26
1988	12.98	17.52	9.71	13.42	18.29	10.00	11.55	14.03	9.42
1989	13.46	17.69	10.48	14.00	18.33	11.01	11.26	15.80	8.11
1990	12.93	17.35	9.81	13.55	18.28	10.28	11.40	14.91	8.89
1991	13.08	16.82	10.25	13.71	17.78	10.60	10.81	12.09	9.98
1992	13.06	17.55	9.81	13.65	18.71	10.02	10.68	13.91	8.42
1993	13.09	17.10	10.08	13.66	18.02	10.37	11.68	15.29	9.14
1994	13.10	17.01	10.22	13.79	17.94	10.75	9.86	12.71	7.78
1995	13.64	17.80	10.54	14.52	18.91	11.27	9.97	13.69	7.42
1996	13.20	17.05	10.44	13.79	17.85	10.89	10.77	14.00	8.73
1997	13.25	17.66	10.04	14.08	18.76	10.68	10.67	14.23	8.29
1998	13.24	17.22	10.31	14.04	18.13	11.01	10.02	14.44	7.27
1999	12.88	17.20	9.68	13.52	18.02	10.16	10.62	14.18	8.32
2000	13.80	17.92	10.71	14.50	18.87	11.22	11.84	13.86	10.34
2001	14.47	18.83	11.17	15.42	19.93	12.00	11.93	14.60	10.07
2002	13.66	18.06	10.34	14.74	19.43	11.17	9.00	11.89	7.00
2003	13.72	17.98	10.49	14.50	19.13	10.98	11.48	14.95	9.00
2004	13.99	18.21	10.79	14.71	19.07	11.31	13.06	17.84	10.04
2005	13.93	18.25	10.60	14.86	19.72	11.06	11.42	12.87	10.36
2006	14.09	17.65	11.44	15.15	18.77	12.45	11.44	15.54	8.61
2007	13.79	18.09	10.53	14.91	19.47	11.37	10.12	13.93	7.79
2008	14.47	18.86	11.03	15.46	20.10	11.76	11.22	15.31	8.26
2009	14.20	18.32	10.99	15.16	19.60	11.62	11.70	15.94	8.89
2010	15.05	19.71	11.51	16.20	21.15	12.34	11.43	15.22	9.16
2011	15.36	19.69	11.88	16.38	20.93	12.67	13.19	15.72	11.17
2012	15.35	19.34	12.21	16.48	20.61	13.18	12.87	16.44	10.45
2013	15.52	19.92	12.02	16.85	21.42	13.15	12.59	16.65	9.60
2014	15.78	20.58	11.98	17.07	22.05	13.01	12.07	15.44	9.72

Additional information on the model used to delay-adjust SEER Incidence rates can be found at [\(https://surveillance.cancer.gov/delay/\)](https://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 13.5
LeukemiaAge-adjusted SEER Incidence^a Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2014	13.46	17.66	10.35	14.13	18.60	10.84	11.11	14.39	8.85
1975	12.80	16.93	9.96	13.10	17.49	10.10	11.58	16.33	8.47
1976	13.54	18.49	10.19	13.83	19.12	10.30	11.37	14.32	9.39
1977	12.74	16.34	10.22	13.20	17.04	10.52	10.15	13.61	7.72
1978	12.87	17.25	9.79	13.54	18.30	10.26	9.16	11.42	7.47
1979	12.56	16.79	9.70	13.03	17.56	10.02	10.60	13.52	8.64
1980	12.93	17.36	9.85	13.28	17.91	10.12	12.18	16.11	9.47
1981	12.38	16.47	9.65	12.65	17.03	9.82	12.27	14.47	10.37
1982	13.15	18.23	9.71	13.50	18.77	9.95	10.75	15.16	7.91
1983	13.15	17.81	9.91	13.48	18.43	10.07	12.48	15.95	10.06
1984	13.01	17.11	10.12	13.47	17.98	10.35	10.68	11.87	9.61
1985	13.38	17.78	10.38	13.75	18.30	10.64	12.32	17.03	9.30
1986	12.84	17.54	9.51	13.39	18.38	9.92	10.23	13.20	8.09
1987	13.36	17.76	10.33	13.81	18.47	10.62	12.57	17.60	9.26
1988	12.98	17.52	9.71	13.42	18.29	10.00	11.55	14.03	9.42
1989	13.46	17.69	10.48	14.00	18.33	11.01	11.26	15.80	8.11
1990	12.93	17.35	9.81	13.55	18.28	10.28	11.40	14.91	8.89
1991	13.08	16.82	10.25	13.71	17.78	10.60	10.81	12.09	9.98
1992	13.06	17.55	9.81	13.65	18.71	10.02	10.68	13.91	8.42
1993	13.09	17.10	10.08	13.66	18.02	10.37	11.68	15.29	9.14
1994	13.10	17.01	10.22	13.79	17.94	10.75	9.86	12.71	7.78
1995	13.64	17.80	10.54	14.52	18.91	11.27	9.97	13.69	7.42
1996	13.20	17.05	10.44	13.79	17.85	10.89	10.77	14.00	8.73
1997	13.25	17.66	10.04	14.08	18.76	10.68	10.67	14.23	8.29
1998	13.24	17.22	10.31	14.04	18.13	11.01	10.02	14.44	7.27
1999	12.88	17.20	9.68	13.52	18.02	10.16	10.62	14.18	8.32
2000	13.80	17.92	10.71	14.50	18.87	11.22	11.84	13.86	10.34
2001	14.47	18.83	11.17	15.42	19.93	12.00	11.93	14.60	10.07
2002	13.66	18.06	10.34	14.74	19.43	11.17	9.00	11.89	7.00
2003	13.72	17.98	10.49	14.50	19.13	10.98	11.48	14.95	9.00
2004	13.99	18.21	10.79	14.71	19.07	11.31	13.06	17.84	10.04
2005	13.93	18.25	10.60	14.86	19.72	11.06	11.42	12.87	10.36
2006	13.97	17.49	11.35	15.00	18.58	12.32	11.34	15.40	8.53
2007	13.55	17.77	10.35	14.61	19.08	11.15	9.92	13.63	7.64
2008	14.09	18.36	10.74	15.00	19.50	11.40	10.92	14.87	8.05
2009	13.69	17.65	10.61	14.55	18.80	11.16	11.23	15.29	8.55
2010	14.38	18.82	11.01	15.39	20.07	11.73	10.90	14.53	8.73
2011	14.55	18.63	11.27	15.41	19.67	11.92	12.46	14.84	10.56
2012	14.30	18.00	11.39	15.21	18.99	12.17	11.95	15.21	9.75
2013	14.14	18.14	10.96	15.19	19.30	11.87	11.37	15.06	8.65
2014	13.92	18.11	10.58	14.85	19.15	11.34	10.55	13.45	8.54

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

Table 13.6
Acute Lymphocytic Leukemia

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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2014	1.38	1.58	1.19	1.46	1.67	1.26	0.86	0.97	0.75
1975	0.93	1.12	0.76	0.99	1.23	0.78	-	-	-
1976	1.08	1.29	0.93	1.09	1.34	0.91	0.79	-	-
1977	1.10	1.30	0.91	1.17	1.38	0.96	-	-	-
1978	1.03	1.24	0.83	1.11	1.33	0.90	-	-	-
1979	1.02	1.18	0.88	1.08	1.20	0.97	-	-	-
1980	1.12	1.40	0.88	1.16	1.47	0.90	0.73	-	-
1981	1.24	1.31	1.18	1.30	1.39	1.23	0.95	-	-
1982	1.23	1.50	0.99	1.30	1.56	1.05	-	-	-
1983	1.29	1.52	1.08	1.39	1.64	1.18	0.80	-	-
1984	1.32	1.49	1.20	1.35	1.50	1.24	0.92	-	-
1985	1.30	1.55	1.09	1.35	1.62	1.12	-	-	-
1986	1.30	1.67	0.96	1.38	1.82	0.96	0.77	-	-
1987	1.32	1.48	1.19	1.35	1.54	1.19	0.89	-	1.15
1988	1.40	1.79	1.07	1.44	1.84	1.12	0.98	-	-
1989	1.62	1.82	1.43	1.69	1.90	1.49	1.03	-	-
1990	1.42	1.76	1.16	1.52	1.85	1.29	0.57	-	-
1991	1.38	1.72	1.05	1.51	1.94	1.09	0.86	-	-
1992	1.35	1.59	1.14	1.40	1.73	1.09	0.91	-	-
1993	1.26	1.41	1.09	1.38	1.57	1.15	0.82	-	-
1994	1.19	1.48	0.93	1.28	1.59	1.01	0.68	-	-
1995	1.50	1.80	1.21	1.61	1.87	1.35	0.98	1.32	-
1996	1.38	1.56	1.20	1.46	1.65	1.25	0.85	-	-
1997	1.33	1.51	1.16	1.44	1.60	1.28	0.79	0.98	-
1998	1.46	1.61	1.31	1.57	1.69	1.44	0.93	1.16	-
1999	1.31	1.48	1.15	1.40	1.56	1.24	0.68	-	-
2000	1.40	1.51	1.29	1.52	1.61	1.45	0.87	-	-
2001	1.46	1.66	1.26	1.58	1.82	1.35	0.68	-	-
2002	1.50	1.79	1.20	1.65	2.00	1.29	0.62	-	-
2003	1.43	1.67	1.22	1.48	1.70	1.27	0.78	0.97	-
2004	1.55	1.71	1.39	1.67	1.96	1.38	1.12	-	1.43
2005	1.58	1.88	1.29	1.66	1.94	1.38	0.97	1.18	-
2006	1.45	1.63	1.28	1.51	1.64	1.39	0.97	1.42	-
2007	1.52	1.68	1.38	1.60	1.72	1.50	0.95	1.06	-
2008	1.50	1.86	1.15	1.68	2.03	1.32	0.91	1.32	-
2009	1.47	1.61	1.35	1.57	1.74	1.42	0.96	1.08	0.85
2010	1.46	1.56	1.36	1.59	1.66	1.51	0.97	1.10	0.85
2011	1.77	1.89	1.67	1.93	2.00	1.88	1.33	1.64	1.02
2012	1.48	1.54	1.43	1.60	1.63	1.58	1.15	1.49	0.89
2013	1.60	1.77	1.43	1.73	1.89	1.57	0.94	1.32	-
2014	1.57	1.74	1.41	1.66	1.90	1.42	0.79	-	0.96

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

Table 13.7
Chronic Lymphocytic Leukemia

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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2014	4.83	6.71	3.45	5.24	7.28	3.74	3.78	5.38	2.70
1975	4.35	5.92	3.27	4.48	6.12	3.39	4.82	7.06	3.23
1976	4.56	6.76	3.08	4.76	7.17	3.15	4.26	6.58	2.95
1977	4.18	5.72	3.13	4.37	5.96	3.31	3.81	5.78	2.46
1978	4.46	5.94	3.45	4.76	6.43	3.62	3.33	3.64	3.07
1979	4.06	5.69	2.94	4.32	6.09	3.13	3.06	4.16	-
1980	4.52	6.30	3.33	4.69	6.54	3.46	4.51	7.06	2.89
1981	4.27	6.30	2.90	4.46	6.63	3.05	3.82	5.41	2.47
1982	4.30	6.14	3.01	4.50	6.39	3.18	3.77	6.65	-
1983	4.45	6.41	3.13	4.68	6.79	3.25	4.21	6.11	3.03
1984	4.43	6.30	3.12	4.72	6.82	3.29	3.45	4.46	2.65
1985	4.49	6.21	3.30	4.79	6.62	3.53	4.11	6.15	2.87
1986	4.50	6.33	3.24	4.87	6.84	3.54	2.79	4.18	-
1987	4.66	6.81	3.07	4.95	7.26	3.28	4.03	6.14	2.45
1988	4.55	6.46	3.15	4.77	6.87	3.27	4.43	5.32	3.53
1989	4.70	6.44	3.47	5.00	6.90	3.68	3.91	5.15	3.04
1990	4.61	6.30	3.42	4.92	6.77	3.63	4.51	6.13	3.43
1991	4.60	6.20	3.43	5.00	6.81	3.64	3.40	3.75	3.15
1992	4.61	6.73	3.16	5.04	7.42	3.42	3.21	4.96	2.08
1993	4.45	6.14	3.17	4.72	6.54	3.36	4.52	6.79	2.89
1994	4.60	6.12	3.46	5.04	6.69	3.83	3.19	4.13	2.32
1995	4.56	6.43	3.20	4.98	7.01	3.52	3.39	5.34	2.06
1996	4.73	6.36	3.56	5.17	6.89	3.94	3.52	5.36	2.26
1997	4.50	6.08	3.31	4.92	6.62	3.63	3.57	5.18	2.52
1998	4.24	5.96	2.99	4.67	6.53	3.32	2.85	3.73	2.29
1999	4.17	6.07	2.76	4.52	6.54	3.00	3.87	6.00	2.60
2000	4.68	6.56	3.24	5.18	7.31	3.53	3.35	4.31	2.72
2001	5.32	7.39	3.77	5.87	8.12	4.17	3.91	4.89	3.20
2002	5.10	7.18	3.53	5.71	8.00	3.98	3.05	4.35	2.10
2003	5.34	7.39	3.80	5.87	8.18	4.13	4.33	6.14	3.06
2004	5.54	7.62	3.96	6.03	8.11	4.42	5.01	8.16	2.89
2005	5.40	7.71	3.61	6.02	8.70	3.90	3.93	4.68	3.40
2006	5.76	7.61	4.39	6.39	8.33	4.93	4.60	6.76	3.17
2007	5.34	7.44	3.74	6.01	8.27	4.24	3.05	4.65	2.19
2008	5.49	7.36	4.06	6.11	8.05	4.61	3.78	5.77	2.33
2009	5.35	7.41	3.73	5.94	8.19	4.12	4.03	5.84	2.90
2010	5.46	7.61	3.83	6.07	8.33	4.30	3.52	5.22	2.47
2011	5.37	7.21	3.90	5.88	7.89	4.25	4.27	5.19	3.59
2012	5.12	6.81	3.79	5.67	7.43	4.24	3.68	4.79	2.96
2013	5.04	6.92	3.54	5.62	7.67	3.96	4.07	6.02	2.64
2014	5.03	7.11	3.35	5.61	7.79	3.81	3.46	5.74	1.86

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

Table 13.8
Acute Myeloid Leukemia

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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2014	3.61	4.48	3.01	3.68	4.58	3.05	3.19	3.80	2.78
1975	3.43	4.17	2.98	3.48	4.28	2.99	2.49	3.37	2.02
1976	3.50	4.43	2.87	3.53	4.46	2.91	2.56	-	2.64
1977	3.51	4.19	3.05	3.64	4.40	3.14	1.87	-	-
1978	3.42	4.43	2.69	3.53	4.59	2.78	2.70	3.47	2.13
1979	3.32	4.04	2.85	3.36	4.17	2.85	3.39	3.40	3.37
1980	3.14	4.10	2.43	3.17	4.11	2.49	2.88	3.28	2.53
1981	3.16	3.99	2.64	3.22	4.11	2.69	3.07	3.22	2.89
1982	3.42	4.79	2.60	3.47	4.90	2.63	2.50	3.22	2.09
1983	3.21	4.22	2.53	3.17	4.28	2.41	2.93	3.02	2.92
1984	3.30	4.06	2.73	3.35	4.17	2.77	2.35	2.10	2.44
1985	3.33	4.15	2.87	3.25	4.02	2.84	3.78	5.06	2.99
1986	3.00	3.91	2.40	2.95	3.85	2.38	3.21	4.04	2.68
1987	3.02	3.97	2.47	3.03	4.00	2.46	3.05	4.73	2.12
1988	3.03	3.79	2.51	3.07	3.87	2.56	2.79	3.14	2.49
1989	3.19	4.00	2.61	3.29	4.02	2.78	2.22	3.79	-
1990	3.04	3.91	2.43	3.12	4.06	2.46	2.55	3.02	2.19
1991	3.33	3.93	2.88	3.38	3.90	2.98	3.34	4.53	2.59
1992	3.22	3.85	2.76	3.28	4.03	2.75	3.05	2.99	3.05
1993	3.45	4.31	2.86	3.52	4.45	2.86	2.48	2.62	2.55
1994	3.46	4.14	3.02	3.48	4.24	2.97	2.94	3.24	2.77
1995	3.66	4.17	3.31	3.81	4.32	3.45	2.62	2.62	2.73
1996	3.47	4.34	2.90	3.46	4.29	2.94	3.21	4.05	2.73
1997	3.53	4.61	2.77	3.66	4.82	2.85	3.02	3.83	2.55
1998	3.93	4.94	3.21	4.06	5.06	3.32	3.05	4.64	2.11
1999	3.73	4.51	3.18	3.85	4.63	3.30	3.03	3.45	2.76
2000	4.05	4.95	3.41	4.05	4.96	3.39	4.41	4.88	4.01
2001	4.06	4.95	3.39	4.20	5.00	3.61	3.45	4.08	3.00
2002	3.63	4.58	2.98	3.78	4.78	3.11	2.91	3.31	2.67
2003	3.60	4.49	2.96	3.67	4.60	3.02	3.33	3.52	2.96
2004	3.42	4.15	2.93	3.50	4.22	3.00	3.39	4.31	3.01
2005	3.59	4.24	3.17	3.64	4.38	3.19	3.52	3.47	3.64
2006	3.54	4.11	3.14	3.66	4.22	3.25	2.84	3.34	2.57
2007	3.54	4.38	2.97	3.65	4.48	3.08	3.38	4.45	2.72
2008	3.82	4.68	3.18	3.86	4.85	3.08	3.07	3.78	2.74
2009	3.63	4.42	3.08	3.76	4.64	3.10	3.13	3.98	2.55
2010	4.23	5.37	3.41	4.44	5.67	3.50	3.33	4.47	2.61
2011	4.20	5.13	3.47	4.23	5.15	3.50	4.25	4.57	3.99
2012	4.58	5.60	3.78	4.68	5.72	3.87	3.84	4.44	3.43
2013	4.47	5.40	3.80	4.64	5.50	4.02	4.16	5.16	3.41
2014	4.33	5.21	3.68	4.54	5.41	3.91	3.68	4.36	3.13

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

Table 13.9
Chronic Myeloid Leukemia

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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2014	1.79	2.36	1.37	1.82	2.40	1.39	1.80	2.33	1.42
1975	1.98	2.93	1.33	2.00	3.01	1.31	1.94	-	-
1976	1.93	2.48	1.55	1.90	2.45	1.52	1.86	2.58	-
1977	1.68	2.08	1.39	1.69	2.14	1.37	1.84	-	-
1978	1.71	2.26	1.34	1.74	2.28	1.39	1.43	-	-
1979	1.87	2.48	1.43	1.89	2.50	1.45	1.94	2.80	-
1980	1.70	2.06	1.46	1.73	2.10	1.51	1.48	-	-
1981	1.64	1.97	1.41	1.59	1.90	1.39	2.38	3.00	1.81
1982	1.68	2.16	1.35	1.65	2.19	1.31	1.75	-	1.79
1983	1.69	2.23	1.33	1.64	2.15	1.32	2.51	3.44	1.85
1984	1.68	2.40	1.18	1.63	2.41	1.10	2.58	2.61	2.59
1985	1.97	2.76	1.43	2.00	2.80	1.47	2.06	2.89	-
1986	1.68	2.19	1.29	1.71	2.25	1.31	1.54	-	-
1987	1.88	2.32	1.58	1.90	2.38	1.58	2.14	2.88	-
1988	1.91	2.54	1.50	1.92	2.59	1.49	2.08	2.88	-
1989	1.70	2.22	1.35	1.68	2.18	1.35	2.21	3.12	-
1990	1.76	2.47	1.24	1.75	2.50	1.20	2.63	3.66	1.95
1991	1.88	2.44	1.47	1.91	2.55	1.46	1.56	-	1.75
1992	1.76	2.16	1.47	1.80	2.22	1.49	1.49	1.73	-
1993	1.92	2.53	1.48	1.95	2.52	1.55	2.28	3.56	-
1994	1.87	2.48	1.42	1.90	2.49	1.50	1.70	2.57	-
1995	1.90	2.56	1.38	1.96	2.69	1.39	1.59	2.09	-
1996	1.81	2.45	1.35	1.80	2.51	1.27	2.06	2.54	1.83
1997	1.87	2.68	1.30	1.94	2.74	1.37	1.67	2.53	-
1998	1.66	1.95	1.43	1.73	1.98	1.54	1.61	2.31	1.20
1999	1.80	2.49	1.28	1.77	2.44	1.28	1.72	2.30	1.26
2000	1.79	2.34	1.36	1.80	2.33	1.40	1.59	1.80	1.33
2001	1.79	2.35	1.38	1.84	2.36	1.46	1.97	2.83	1.36
2002	1.63	2.08	1.30	1.66	2.11	1.33	1.13	-	-
2003	1.65	2.23	1.19	1.75	2.36	1.25	1.44	2.11	-
2004	1.80	2.54	1.23	1.86	2.64	1.26	1.51	2.06	1.11
2005	1.69	2.27	1.24	1.78	2.37	1.30	1.75	2.44	1.29
2006	1.84	2.40	1.41	1.94	2.51	1.51	1.61	2.17	1.16
2007	1.70	2.31	1.21	1.80	2.49	1.23	1.41	1.83	1.14
2008	1.84	2.36	1.43	1.85	2.29	1.51	1.83	2.53	1.21
2009	1.79	2.36	1.33	1.78	2.28	1.39	1.87	2.89	1.23
2010	1.85	2.48	1.36	1.84	2.48	1.32	1.88	2.12	1.78
2011	1.92	2.54	1.42	2.03	2.70	1.46	1.60	1.95	1.29
2012	1.89	2.29	1.58	1.93	2.33	1.61	2.08	2.84	1.53
2013	1.87	2.51	1.36	1.94	2.60	1.39	1.65	2.07	1.43
2014	1.85	2.42	1.39	1.85	2.37	1.40	1.75	1.53	1.94

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

Table 13.10
LeukemiaAge-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
1975-2014	7.60	10.20	5.82	7.81	10.49	5.95	6.65	8.80	5.27
1975	8.09	10.98	6.16	8.27	11.28	6.29	6.58	8.57	5.15
1976	8.10	10.88	6.19	8.27	11.19	6.28	6.76	8.49	5.48
1977	8.11	10.84	6.26	8.27	11.11	6.34	6.82	8.76	5.51
1978	8.02	10.83	6.15	8.19	11.06	6.28	6.70	9.25	4.94
1979	8.26	11.06	6.41	8.43	11.36	6.52	6.99	8.90	5.68
1980	8.36	11.21	6.46	8.54	11.51	6.56	7.05	9.09	5.67
1981	8.10	10.89	6.24	8.24	11.16	6.31	7.11	8.92	5.86
1982	8.19	11.04	6.31	8.33	11.29	6.39	7.14	9.36	5.67
1983	8.11	10.93	6.26	8.24	11.19	6.32	7.22	9.21	5.90
1984	8.08	10.68	6.37	8.23	10.91	6.47	7.08	9.16	5.69
1985	8.07	10.77	6.31	8.23	10.97	6.44	7.08	9.62	5.42
1986	7.96	10.71	6.16	8.10	10.97	6.23	7.25	9.26	5.91
1987	7.80	10.31	6.14	7.91	10.50	6.20	7.24	9.41	5.85
1988	7.83	10.60	6.00	7.95	10.79	6.08	7.24	9.83	5.58
1989	7.95	10.62	6.15	8.07	10.75	6.26	7.36	10.34	5.45
1990	7.98	10.71	6.18	8.10	10.90	6.26	7.44	9.96	5.83
1991	7.99	10.50	6.32	8.12	10.64	6.44	7.45	10.05	5.80
1992	7.96	10.71	6.13	8.11	10.94	6.24	7.16	9.41	5.68
1993	7.93	10.66	6.09	8.04	10.84	6.16	7.36	9.76	5.77
1994	7.85	10.57	6.03	8.00	10.78	6.13	7.12	9.59	5.54
1995	7.90	10.80	5.98	8.04	11.03	6.05	7.17	9.75	5.53
1996	7.84	10.53	6.05	7.97	10.71	6.13	7.46	10.09	5.90
1997	7.71	10.42	5.89	7.89	10.68	6.01	6.83	9.23	5.29
1998	7.58	10.11	5.82	7.72	10.31	5.91	7.04	9.37	5.55
1999	7.68	10.22	5.96	7.87	10.47	6.09	6.74	8.78	5.43
2000	7.69	10.28	5.91	7.89	10.54	6.05	6.71	9.07	5.27
2001	7.64	10.19	5.88	7.83	10.46	6.02	6.74	8.80	5.41
2002	7.54	10.18	5.73	7.75	10.46	5.85	6.73	8.91	5.38
2003	7.45	10.02	5.63	7.68	10.37	5.76	6.54	8.47	5.30
2004	7.29	9.81	5.52	7.47	10.04	5.64	6.77	8.94	5.39
2005	7.26	9.82	5.46	7.50	10.14	5.63	6.07	8.11	4.78
2006	7.23	9.70	5.46	7.48	9.97	5.66	6.27	8.84	4.70
2007	7.08	9.54	5.33	7.30	9.86	5.46	6.19	8.07	5.05
2008	7.09	9.54	5.33	7.32	9.83	5.49	6.27	8.65	4.78
2009	7.06	9.53	5.25	7.31	9.86	5.41	6.05	8.14	4.71
2010	6.91	9.25	5.20	7.16	9.58	5.37	5.75	7.46	4.59
2011	6.95	9.28	5.24	7.18	9.60	5.39	5.99	7.74	4.85
2012	6.82	9.21	5.07	7.08	9.56	5.22	5.77	7.56	4.62
2013	6.75	9.09	5.03	7.03	9.43	5.23	5.68	7.70	4.37
2014	6.62	8.83	4.96	6.91	9.21	5.16	5.48	7.17	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).
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 13.11
LeukemiaSEER 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
<u>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2010-2014									
All ages	13.7	17.6	10.7	14.5	18.5	11.3	10.9	14.0	8.8
Under 65	6.8	8.0	5.7	7.2	8.5	6.0	5.6	6.5	4.7
65 and over	61.5	83.6	45.4	65.2	88.3	48.1	48.2	65.9	37.0
All ages (WHO world std) ^c	10.7	13.3	8.4	11.3	14.0	8.9	8.5	10.6	6.9
Age-Specific Rates, 2010-2014									
<1	4.9	4.6	5.1	4.9	4.4	5.4	3.6	3.9	-
1-4	9.1	9.3	9.0	10.0	10.1	10.0	4.6	4.7	4.5
5-9	4.3	4.9	3.7	4.8	5.5	4.0	2.6	2.6	2.6
10-14	3.3	3.6	2.9	3.4	3.6	3.3	2.5	3.1	1.9
15-19	3.2	3.8	2.6	3.5	4.2	2.8	1.9	2.2	1.5
20-24	2.7	3.1	2.3	2.9	3.4	2.4	2.0	1.8	2.1
25-29	2.9	3.3	2.5	3.1	3.4	2.7	2.2	2.2	2.3
30-34	3.5	3.9	3.1	3.6	4.1	3.1	2.7	2.6	2.8
35-39	4.4	5.0	3.9	4.6	5.2	4.0	4.3	4.7	4.0
40-44	5.6	6.4	4.8	5.7	6.6	4.8	5.6	6.2	5.0
45-49	8.0	9.4	6.7	8.3	9.7	7.0	7.6	9.0	6.3
50-54	11.9	14.5	9.5	12.5	15.1	10.0	10.2	12.3	8.3
55-59	17.2	21.6	13.1	18.0	22.3	13.8	15.3	20.4	11.0
60-64	26.2	33.5	19.5	27.6	35.3	20.3	22.0	27.3	17.6
65-69	39.0	51.2	28.1	41.5	54.4	29.7	31.7	41.9	23.8
70-74	53.2	70.2	39.0	55.9	73.5	40.9	44.9	57.7	35.5
75-79	69.1	92.8	50.6	73.6	98.2	54.1	55.8	81.9	38.7
80-84	84.7	117.3	62.5	89.8	123.4	66.2	63.3	86.8	50.2
85+	88.2	127.4	68.2	93.8	135.9	72.1	60.6	83.8	51.0
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2010-2014									
All ages	6.8	9.1	5.1	7.1	9.5	5.3	5.7	7.5	4.6
Under 65	1.9	2.3	1.6	1.9	2.3	1.6	2.0	2.5	1.7
65 and over	40.6	56.5	29.5	42.5	59.0	30.7	31.2	42.6	24.4
All ages (WHO world std) ^c	4.5	6.0	3.4	4.7	6.2	3.5	4.0	5.2	3.2
Age-Specific Rates, 2010-2014									
<1	0.5	0.4	0.6	0.5	0.5	0.5	0.5	-	-
1-4	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6
5-9	0.5	0.6	0.4	0.5	0.6	0.4	0.4	0.4	0.3
10-14	0.6	0.7	0.6	0.6	0.7	0.6	0.6	0.7	0.5
15-19	0.8	0.9	0.6	0.8	1.0	0.6	0.6	0.7	0.5
20-24	0.9	1.1	0.8	0.9	1.1	0.8	0.8	0.9	0.7
25-29	0.9	1.1	0.8	1.0	1.1	0.8	0.8	1.1	0.6
30-34	1.1	1.3	0.9	1.1	1.3	0.9	1.1	1.4	0.9
35-39	1.3	1.5	1.1	1.3	1.5	1.1	1.5	1.8	1.3
40-44	1.6	1.8	1.4	1.6	1.8	1.4	1.9	2.1	1.8
45-49	2.4	2.7	2.1	2.4	2.7	2.2	2.7	3.2	2.2
50-54	3.6	4.3	2.9	3.6	4.2	2.9	4.2	5.1	3.4
55-59	5.7	7.0	4.5	5.7	7.0	4.6	6.4	7.7	5.2
60-64	10.0	12.9	7.4	10.3	13.2	7.5	10.3	13.0	8.0
65-69	17.2	22.9	12.1	17.8	23.7	12.4	16.3	22.6	11.4
70-74	28.6	38.3	20.3	29.8	40.0	21.0	24.4	31.7	19.2
75-79	44.6	61.4	31.5	46.9	64.3	32.9	34.5	47.1	26.4
80-84	63.1	89.1	45.2	66.0	92.9	47.2	46.0	64.3	36.1
85+	84.3	121.9	65.4	88.5	128.0	68.4	55.5	76.1	47.2

^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.

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

^d Rates are per 100,000 and are age-adjusted to the world (WHO 2000-2025) standard million.

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

Table 13.12
Lymphocytic Leukemia

SEER Incidence^a Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>Acute Lymphocytic Leukemia</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2010-2014									
All ages	1.7	1.9	1.5	1.9	2.1	1.7	1.0	1.1	0.9
Under 65	1.7	1.9	1.6	1.9	2.1	1.7	1.0	1.1	0.9
65 and over	1.6	1.9	1.4	1.7	2.0	1.4	1.1	1.0	1.1
All ages (WHO world std) ^b	1.9	2.1	1.7	2.1	2.3	1.9	1.0	1.1	1.0
Age-Specific Rates, 2010-2014									
<1	2.0	1.5	2.6	2.0	1.3	2.7	-	-	-
1-4	7.7	7.8	7.6	8.6	8.7	8.6	3.5	3.4	3.5
5-9	3.6	4.1	3.2	4.1	4.8	3.5	1.9	1.8	2.0
10-14	2.2	2.4	2.0	2.4	2.5	2.3	1.6	2.1	1.1
15-19	1.8	2.3	1.2	2.0	2.7	1.4	0.8	1.1	-
20-24	1.0	1.3	0.6	1.1	1.5	0.7	0.4	-	-
25-29	0.8	0.9	0.6	0.9	1.1	0.7	-	-	-
30-34	0.6	0.8	0.5	0.7	0.9	0.5	-	-	-
35-39	0.8	0.9	0.7	0.9	1.0	0.7	0.5	-	-
40-44	0.7	0.8	0.6	0.8	0.9	0.6	0.6	-	-
45-49	0.9	1.0	0.8	1.0	1.1	0.9	-	-	-
50-54	0.9	1.0	0.8	0.9	1.0	0.9	0.6	-	-
55-59	1.1	1.3	1.0	1.1	1.2	1.1	1.3	1.6	1.1
60-64	1.4	1.5	1.4	1.5	1.6	1.4	1.3	1.5	-
65-69	1.4	1.5	1.3	1.5	1.7	1.3	-	-	-
70-74	1.5	1.7	1.3	1.5	1.8	1.3	-	-	-
75-79	1.8	2.1	1.6	2.0	2.4	1.7	-	-	-
80-84	1.9	2.6	1.5	1.9	2.5	1.5	-	-	-
85+	1.5	1.8	1.3	1.6	2.0	1.3	-	-	-
<u>Chronic Lymphocytic Leukemia</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2010-2014									
All ages	4.7	6.4	3.3	5.1	6.8	3.6	3.6	5.1	2.5
Under 65	1.5	2.0	1.1	1.6	2.1	1.2	1.2	1.6	0.8
65 and over	26.7	36.9	19.1	28.7	39.4	20.7	20.1	29.4	14.1
All ages (WHO world std) ^b	3.3	4.4	2.3	3.5	4.7	2.5	2.5	3.6	1.7
Age-Specific Rates, 2010-2014									
<1	-	-	-	-	-	-	-	-	-
1-4	-	-	-	-	-	-	-	-	-
5-9	-	-	-	-	-	-	-	-	-
10-14	-	-	-	-	-	-	-	-	-
15-19	-	-	-	-	-	-	-	-	-
20-24	-	-	-	-	-	-	-	-	-
25-29	-	-	-	-	-	-	-	-	-
30-34	0.1	0.2	-	0.1	0.2	-	-	-	-
35-39	0.3	0.4	0.3	0.4	0.4	0.3	-	-	-
40-44	0.9	1.1	0.7	0.9	1.1	0.7	0.8	1.2	-
45-49	2.0	2.6	1.5	2.2	2.8	1.6	1.6	2.1	1.2
50-54	4.3	5.8	2.9	4.6	6.0	3.2	3.2	4.5	2.0
55-59	7.3	9.7	5.0	7.9	10.4	5.5	5.2	7.5	3.2
60-64	11.5	15.4	7.9	12.3	16.4	8.4	8.7	11.7	6.2
65-69	17.5	24.0	11.8	18.8	25.3	12.8	13.5	19.2	9.0
70-74	23.8	32.6	16.4	25.2	34.2	17.5	19.5	27.7	13.6
75-79	29.8	40.6	21.4	32.5	43.5	23.7	21.4	35.3	12.3
80-84	35.7	49.2	26.4	38.5	52.8	28.4	26.9	38.4	20.5
85+	36.9	53.8	28.3	39.8	58.2	30.4	26.0	35.2	22.2

^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 Rates are per 100,000 and are age-adjusted to the world (WHO 2000-2025) standard million.

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

Table 13.13
Myeloid Leukemia

SEER Incidence^a Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>Acute Myeloid Leukemia</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2010-2014									
All ages	4.2	5.2	3.6	4.4	5.4	3.7	3.7	4.5	3.2
Under 65	2.0	2.1	1.8	2.0	2.1	1.9	1.8	2.0	1.7
65 and over	20.1	26.4	15.5	21.0	27.7	16.1	16.6	21.8	13.4
All ages (WHO world std) ^b	3.2	3.8	2.8	3.3	3.9	2.8	2.8	3.3	2.5
Age-Specific Rates, 2010-2014									
<1	1.7	1.8	1.6	1.7	1.8	1.7	-	-	-
1-4	1.0	1.0	1.0	1.0	0.9	1.0	0.9	1.0	-
5-9	0.4	0.5	0.4	0.4	0.5	0.4	-	-	-
10-14	0.7	0.8	0.7	0.7	0.8	0.7	0.6	-	-
15-19	1.0	1.0	1.0	1.0	1.0	1.0	0.6	-	-
20-24	1.1	1.0	1.1	1.1	1.1	1.2	0.9	0.8	1.1
25-29	1.1	1.1	1.2	1.1	1.1	1.2	1.0	-	1.3
30-34	1.5	1.5	1.5	1.5	1.6	1.5	1.4	1.2	1.5
35-39	1.6	1.7	1.6	1.7	1.7	1.6	1.7	1.9	1.5
40-44	1.9	1.9	1.9	1.9	2.0	1.9	1.9	1.6	2.1
45-49	2.5	2.5	2.4	2.5	2.5	2.5	2.5	2.6	2.4
50-54	3.5	3.6	3.3	3.6	3.8	3.4	3.3	3.8	2.9
55-59	4.8	5.6	4.0	4.8	5.5	4.1	5.2	6.6	4.0
60-64	7.9	9.5	6.5	8.3	9.9	6.7	6.8	8.1	5.7
65-69	12.2	15.0	9.7	13.1	16.2	10.2	9.7	12.2	7.7
70-74	17.9	22.3	14.2	18.6	23.4	14.5	16.6	19.0	14.9
75-79	23.3	30.4	17.8	24.1	31.4	18.4	22.0	29.9	16.8
80-84	28.5	39.0	21.2	29.7	40.4	22.1	20.9	29.4	16.1
85+	26.5	38.4	20.4	27.8	40.5	21.3	17.3	25.6	13.9
<u>Chronic Myeloid Leukemia</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2010-2014									
All ages	1.8	2.3	1.4	1.8	2.4	1.4	1.6	2.0	1.4
Under 65	1.0	1.2	0.8	1.0	1.2	0.8	1.1	1.2	0.9
65 and over	7.3	10.0	5.3	7.7	10.5	5.5	5.7	7.2	4.7
All ages (WHO world std) ^b	1.4	1.7	1.1	1.4	1.8	1.1	1.3	1.6	1.1
Age-Specific Rates, 2010-2014									
<1	0.4	0.6	-	-	-	-	-	-	-
1-4	0.1	-	-	0.1	-	-	-	-	-
5-9	0.1	-	-	-	-	-	-	-	-
10-14	0.1	0.2	-	0.1	-	-	-	-	-
15-19	0.2	0.2	0.2	0.2	0.2	0.2	-	-	-
20-24	0.5	0.6	0.4	0.5	0.6	0.3	0.4	-	-
25-29	0.7	0.9	0.5	0.7	0.8	0.5	0.7	0.9	-
30-34	0.9	1.0	0.7	0.9	1.1	0.7	0.6	-	-
35-39	1.1	1.4	0.9	1.2	1.4	0.9	1.1	1.1	1.1
40-44	1.3	1.6	1.1	1.4	1.7	1.0	1.7	2.0	1.4
45-49	1.6	2.0	1.3	1.6	1.8	1.3	2.3	2.7	1.9
50-54	2.0	2.3	1.6	2.0	2.4	1.6	2.0	2.1	1.9
55-59	2.4	2.8	2.1	2.5	2.8	2.1	2.5	3.0	2.1
60-64	3.3	4.0	2.6	3.2	4.0	2.5	3.3	3.7	3.0
65-69	4.9	6.4	3.5	5.0	6.6	3.5	5.3	6.2	4.5
70-74	6.1	8.0	4.5	6.5	8.5	4.8	4.3	5.7	3.3
75-79	8.0	11.2	5.6	8.6	11.9	5.9	6.3	9.0	4.5
80-84	10.1	14.1	7.3	10.7	14.8	7.8	6.4	-	6.4
85+	10.3	15.2	7.8	10.8	15.9	8.2	7.3	10.2	6.1

^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 Rates are per 100,000 and are age-adjusted to the world (WHO 2000-2025) standard million.

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

Table 13.14
Leukemia

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	-	-	-	14	-	-	-	-	-
1970-1973 ^a	-	-	-	22	-	-	-	-	-
1975-1977 ^b	34.1	33.0	35.6	34.5	33.6	35.8	33.4	30.4	36.7
1978-1980 ^b	36.0	35.0	37.3	36.7	35.8	38.0	28.2	27.3	29.3
1981-1983 ^b	37.3	36.9	37.8	38.1	37.8	38.5	33.9	33.4	34.3
1984-1986 ^b	40.5	40.1	41.1	41.6	41.3	42.0	32.7	31.5	34.1
1987-1989 ^b	42.9	44.0	41.3	43.9	45.5	41.7	35.0	32.7	37.8
1990-1992 ^b	45.2	44.6	46.0	46.4	46.2	46.8	35.7	30.5	41.3
1993-1995 ^b	47.5	48.4	46.4	48.6	49.4	47.5	41.3	41.6	40.9
1996-1998 ^b	48.3	48.5	48.0	49.6	49.6	49.7	38.6	39.0	38.0
1999-2001 ^b	50.9	51.9	49.5	52.0	52.9	50.6	43.3	44.5	41.9
2002-2006 ^b	59.5	59.9	58.9	60.4	60.8	59.8	53.3	55.3	50.8
2007-2013 ^b	63.7 ^e	65.2 ^e	61.7 ^e	64.8 ^e	66.0 ^e	63.0 ^e	57.8 ^e	59.0 ^e	56.1 ^e
5-Year Period Survival (Percent) ^{cd}									
2013	61.8	62.8	60.4	62.2	62.9	61.1	55.6	57.7	53.1
5-Year Relative Survival (Percent), 2007-2013 ^c									
Age at Diagnosis:									
Ages <45	74.8	74.4	75.4	75.8	75.0	76.9	66.8	66.7	66.9
Ages 45-54	69.5	70.8	67.6	71.1	72.0	69.7	58.8	60.2	56.7
Ages 55-64	68.1	69.1	66.4	69.1	70.0	67.5	56.9	56.2	57.3
Ages 65-74	58.2	58.4	57.8	58.8	58.7	59.0	51.4	52.0	50.5
Ages 75+	39.7	39.8	39.6	40.6	40.4	40.7	31.0	32.3	29.9
Ages <65	71.4	71.7	70.9	72.4	72.5	72.3	62.0	62.0	61.9
Ages 65+	47.8	48.7	46.7	48.4	49.1	47.6	41.6	43.3	39.8

^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 2014.

^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 2014.

^d Period survival provides a 2013 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).^e The difference between 1975-1977 and 2007-2013 is statistically significant (p<.05).^f The standard error is between 5 and 10 percentage points.^g 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 13.15
Lymphocytic Leukemia

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
<u>Acute Lymphocytic Leukemia</u>									
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	40.6	36.9	45.6	40.8	37.4	45.7	33.5 ^e	-	-
...									
1984-1986 ^a	52.1	49.1	56.1	52.8	49.4	57.8	36.0 ^e	43.5 ^e	27.3 ^e
1987-1989 ^a	54.3	53.7	55.0	54.8	54.7	54.9	44.7 ^e	42.0 ^e	47.1 ^e
1990-1992 ^a	58.0	54.5	63.1	57.7	54.9	62.0	57.1 ^e	50.4 ^e	63.3 ^e
1993-1995 ^a	60.1	57.8	63.4	59.7	57.8	62.5	53.2 ^e	45.9 ^e	63.8 ^e
1996-1998 ^a	65.5	64.3	66.9	66.3	64.2	68.9	55.6 ^e	59.1 ^e	50.2 ^e
1999-2001 ^a	63.5	63.4	63.5	64.8	65.2	64.2	56.0 ^e	48.8 ^e	63.0 ^e
2002-2006 ^a	67.9	66.4	70.0	67.9	66.0	70.5	64.4	65.7 ^e	62.7 ^e
2007-2013 ^a	71.0 ^d	71.3 ^d	70.6 ^d	72.2 ^d	72.6 ^d	71.8 ^d	62.2 ^d	62.6	61.4 ^e
5-Year Period Survival (Percent) ^{bc}									
2013	68.8	68.8	68.8	69.2	69.0	69.3	61.7	64.1	58.3
5-Year Relative Survival (Percent), 2007-2013 ^b									
Age at Diagnosis:									
Ages <45	79.9	78.9	81.3	80.2	79.0	81.8	76.0	75.9	75.9
Ages 45-54	36.4	37.4	35.2	37.0	38.6	34.8	22.8 ^e	24.6 ^e	-
Ages 55-64	25.8	23.5	28.6	26.8	25.4	28.8	9.1 ^e	16.7 ^e	-
Ages 65-74	22.7	22.1	23.3	21.6	22.0	21.3	-	-	-
Ages 75+	9.2	9.6	8.9	9.1	9.3	8.6	13.3 ^e	-	-
Ages <65	72.9	72.2	73.8	73.2	72.3	74.2	67.9	68.5	66.5
Ages 65+	16.7	16.5	16.8	16.1	16.5	15.6	15.5 ^e	-	19.8 ^e
<u>Chronic Lymphocytic Leukemia</u>									
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	67.1	64.7	70.3	67.9	65.4	71.1	56.9 ^e	55.1 ^e	59.0 ^e
...									
1984-1986 ^a	72.3	71.1	73.9	72.6	71.4	74.3	67.0 ^e	64.4 ^e	68.4 ^e
1987-1989 ^a	72.7	72.7	72.9	73.8	73.9	73.7	58.1	55.5 ^e	61.5 ^e
1990-1992 ^a	74.1	71.7	77.3	75.3	73.1	78.3	52.2	43.4 ^e	60.9 ^e
1993-1995 ^a	77.1	77.0	77.2	78.2	78.0	78.5	63.3	64.0 ^e	62.1 ^e
1996-1998 ^a	75.4	73.7	77.7	76.5	75.0	78.6	58.1	51.5 ^e	66.0 ^e
1999-2001 ^a	78.4	77.9	79.1	79.2	78.6	80.1	65.7	64.5 ^e	66.1 ^e
2002-2006 ^a	84.3	83.2	85.8	84.7	83.5	86.3	78.7	77.1	80.7
2007-2013 ^a	86.2 ^d	86.9 ^d	85.2 ^d	86.7 ^d	87.3 ^d	85.6 ^d	79.1 ^d	78.8 ^d	78.8
5-Year Period Survival (Percent) ^{bc}									
2013	83.5	83.5	83.4	83.6	83.6	83.6	72.5	73.0	71.3
5-Year Relative Survival (Percent), 2007-2013 ^b									
Age at Diagnosis:									
Ages <45	92.5	92.0	92.7	92.5	92.1	92.5	84.4 ^e	83.4 ^e	-
Ages 45-54	93.6	92.9	94.8	94.5	93.4	96.4	78.6	81.1	74.8 ^e
Ages 55-64	90.6	90.4	91.1	90.9	90.7	91.3	79.4	76.0	83.7
Ages 65-74	86.2	84.7	88.7	86.6	84.9	89.5	74.9	74.5	74.8
Ages 75+	70.6	70.2	71.0	70.9	70.7	71.1	55.6	53.9 ^e	56.1 ^e
Ages <65	91.6	91.3	92.3	92.0	91.6	92.9	79.6	78.4	80.9
Ages 65+	77.9	77.6	78.1	78.1	77.9	78.3	66.5	66.1	66.4

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

Based on follow-up of patients into 2014.

^b 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 2014.

^c Period survival provides a 2013 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^d The difference between 1975-1977 and 2007-2013 is statistically significant (p<.05).

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

^f 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 13.16
Myeloid Leukemia

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
<u>Acute Myeloid Leukemia</u>									
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	6.2	5.5	7.0	5.8	5.4	6.2	10.1	8.2	11.7
...									
1984-1986 ^a	10.6	9.2	12.3	10.2	8.9	11.8	9.8	6.7	12.9
1987-1989 ^a	11.4	9.1	14.2	11.3	9.6	13.2	9.2	4.4	15.7 ^e
1990-1992 ^a	13.7	12.6	15.1	13.4	12.2	14.9	13.5	12.9	13.9
1993-1995 ^a	16.2	14.9	17.5	15.4	14.1	16.8	21.5	20.6 ^e	22.0
1996-1998 ^a	17.0	16.0	18.3	15.6	14.5	17.1	22.1	25.2	18.2
1999-2001 ^a	19.2	18.8	19.7	18.7	17.7	19.9	19.3	24.8	14.2
2002-2006 ^a	24.3	21.8	27.0	23.9	21.5	26.6	24.5	23.2	25.7
2007-2013 ^a	27.4 ^d	27.1 ^d	27.6 ^d	26.8 ^d	26.3 ^d	27.3 ^d	28.6 ^d	27.7 ^d	29.2 ^d
5-Year Period Survival (Percent) ^{bc}									
2013	28.5	27.0	30.2	28.0	26.4	30.0	30.5	28.4	32.5
5-Year Relative Survival (Percent), 2007-2013 ^b									
Age at Diagnosis:									
Ages <45	58.4	56.1	60.8	59.4	56.8	62.3	51.7	48.0	54.7
Ages 45-54	41.3	39.7	43.1	42.8	40.8	45.1	34.6	31.7	37.4 ^e
Ages 55-64	29.8	29.1	30.7	30.7	29.7	32.1	23.1	24.2	21.5
Ages 65-74	12.5	12.0	13.2	12.6	12.2	13.1	13.1	11.7	14.3
Ages 75+	2.6	2.3	2.9	2.7	2.3	3.0	2.4	0.0	2.4
Ages <65	45.2	43.0	47.6	45.8	43.4	48.6	40.1	36.9	43.3
Ages 65+	6.7	6.7	6.8	6.8	6.8	6.7	7.6	7.4	7.7
<u>Chronic Myeloid Leukemia</u>									
5-Year Relative Survival (Percent)									
Year of Diagnosis:									
1975-1977 ^a	21.8	19.3	25.1	20.5	18.4	23.4	27.7 ^e	21.6 ^e	35.5 ^e
...									
1984-1986 ^a	22.4	20.2	25.6	22.9	20.2	26.8	21.4	20.3 ^e	22.2 ^e
1987-1989 ^a	30.3	30.7	29.8	30.2	31.1	29.0	33.3 ^e	28.1 ^e	41.3 ^e
1990-1992 ^a	30.7	29.6	32.2	30.3	30.0	30.6	34.9 ^e	25.5 ^e	44.9 ^e
1993-1995 ^a	35.4	35.2	35.8	35.2	35.1	35.2	35.6 ^e	32.8 ^e	40.2 ^e
1996-1998 ^a	37.1	37.7	36.2	37.9	37.6	38.3	31.0	30.4 ^e	31.4 ^e
1999-2001 ^a	47.3	45.8	49.3	45.9	44.1	48.3	49.0 ^e	49.6 ^e	48.1 ^e
2002-2006 ^a	57.1	56.8	57.5	55.8	55.6	56.1	58.2	60.1 ^e	55.5 ^e
2007-2013 ^a	68.0 ^d	66.8 ^d	69.5 ^d	67.1 ^d	65.6 ^d	68.8 ^d	69.9 ^d	67.9 ^{de}	72.7 ^d
5-Year Period Survival (Percent) ^{bc}									
2013	68.8	68.3	69.6	68.0	67.4	69.0	68.0	68.2	67.1
5-Year Relative Survival (Percent), 2007-2013 ^b									
Age at Diagnosis:									
Ages <45	88.8	87.5	90.7	90.3	88.7	92.8	76.6	73.5	81.1
Ages 45-54	84.3	81.2	88.8	84.8	82.0	88.9	84.0	79.3 ^e	89.5
Ages 55-64	76.9	74.0	81.3	76.9	73.7	82.4	69.7	64.5 ^e	73.8 ^e
Ages 65-74	57.8	54.8	62.0	57.4	54.6	61.4	60.1 ^e	53.6 ^e	67.0 ^e
Ages 75+	30.0	28.1	31.9	29.0	26.7	31.4	28.9 ^e	26.3 ^f	31.9 ^e
Ages <65	83.7	81.4	87.1	84.2	81.7	88.3	76.5	72.5	80.9
Ages 65+	42.7	41.3	44.3	41.8	40.4	43.6	46.4	44.2 ^e	48.6 ^e

^a SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).
Based on follow-up of patients into 2014.

^b 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 2014.

^c Period survival provides a 2013 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).
The difference between 1975-1977 and 2007-2013 is statistically significant (p<.05).

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

^e 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 13.17
LeukemiaSEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Survival Time																							
1-year	60.8	62.6	64.8	66.9	68.1	68.2	67.8	66.6	65.9	66.9	70.6	72.1	73.0	75.0	74.1	76.3	76.7	76.4	77.1	77.9	78.9	78.6	78.1
2-year	50.1	52.5	55.3	57.5	58.9	59.9	59.7	57.9	58.3	58.9	63.0	64.8	66.0	67.6	68.3	70.3	70.4	70.0	70.5	72.0	72.5	71.9	
3-year	43.7	46.5	49.6	52.8	54.2	55.3	54.8	53.9	54.6	55.0	58.9	61.7	62.1	64.2	64.6	67.0	67.2	66.2	68.0	68.6	69.3		
4-year	38.8	41.7	45.5	49.0	50.7	51.8	50.8	50.1	51.6	51.9	56.7	59.4	59.2	61.7	62.5	64.3	64.9	63.5	65.3	66.9			
5-year	34.6	37.6	42.3	46.0	48.1	48.6	48.2	48.0	48.3	49.8	54.2	57.5	57.2	59.5	60.8	62.2	63.3	61.4	62.9				
6-year	31.4	35.1	39.9	43.5	45.7	46.4	45.7	45.9	46.1	48.4	52.3	55.7	55.3	57.0	59.1	60.2	61.6	59.8					
7-year	29.1	32.5	37.1	40.9	44.2	45.1	43.7	44.3	44.3	47.2	50.9	54.1	53.3	55.8	57.6	58.5	60.8						
8-year	27.0	30.4	35.0	38.7	41.6	43.7	43.1	42.9	42.9	45.6	49.5	53.2	51.5	54.4	55.8	56.6							
9-year	25.0	28.5	33.0	37.2	40.6	42.0	41.7	41.8	42.0	44.8	48.1	51.5	50.3	52.7	54.2								
10-year	23.7	26.9	31.6	36.0	39.0	40.6	40.5	40.7	40.5	43.6	47.0	50.0	48.4	51.2									
11-year	22.4	25.7	29.9	34.6	37.7	39.7	38.6	39.4	39.1	42.4	45.7	48.7	46.7										
12-year	21.2	24.6	28.8	33.5	37.1	38.6	37.6	38.6	38.2	41.8	44.7	47.7											
13-year	20.4	23.6	28.0	32.6	36.6	38.1	36.9	37.6	37.1	40.2	44.0												
14-year	19.7	22.9	27.2	31.7	35.5	37.0	36.7	36.6	36.6	39.0													
15-year	19.2	22.3	26.7	31.2	35.2	35.9	36.1	35.5	35.8														
16-year	18.5	21.4	26.1	30.5	34.9	35.7	36.0	34.5															
17-year	18.0	20.7	25.6	29.9	34.0	35.3	35.1																
18-year	17.7	20.1	25.3	29.3	32.8	34.9																	
19-year	17.1	19.5	24.8	29.0	32.4																		
20-year	16.6	19.1	24.4	28.5																			

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

Table 13.18
LeukemiaSEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Survival Time																							
1-year	60.4	62.8	65.5	67.9	69.2	69.7	68.7	66.6	66.8	68.8	72.8	73.0	74.0	76.6	76.0	76.8	77.8	77.2	78.9	78.9	80.2	79.2	79.5
2-year	49.4	52.4	56.1	58.2	60.4	61.6	61.0	58.4	59.0	60.7	64.7	65.0	66.7	68.5	70.0	70.3	71.6	71.1	72.4	73.5	73.9	72.6	
3-year	42.7	46.0	49.9	53.2	55.5	57.3	55.0	54.4	55.2	57.1	60.7	62.2	62.5	65.2	66.3	67.0	68.7	67.4	69.5	70.5	71.1		
4-year	37.7	41.1	45.9	49.4	51.6	53.5	50.4	50.3	51.9	53.7	58.0	59.5	59.9	62.5	64.8	64.4	66.4	64.5	67.2	68.2			
5-year	33.4	37.1	42.9	46.2	48.1	49.5	47.7	48.2	47.9	52.2	55.2	57.0	57.5	59.9	62.8	62.1	64.8	62.6	65.0				
6-year	30.3	34.4	40.4	43.5	45.1	47.1	45.7	45.9	46.0	50.7	52.8	55.1	55.4	57.2	60.6	59.7	63.0	60.7					
7-year	27.7	31.8	37.4	40.8	43.8	45.8	43.7	44.1	43.7	49.6	51.3	52.7	53.2	56.1	59.1	58.2	61.9						
8-year	25.4	29.4	35.4	38.5	41.6	44.6	42.9	42.8	42.1	47.6	49.9	51.6	51.0	54.6	56.9	55.7							
9-year	23.2	27.5	33.2	37.0	40.3	42.3	41.9	41.6	41.3	46.2	48.5	50.3	49.7	52.3	55.0								
10-year	21.9	26.1	31.7	35.7	38.2	40.7	41.1	40.6	39.8	45.2	47.1	48.5	47.4	50.6									
11-year	20.5	24.9	30.2	34.6	37.6	39.7	38.8	39.0	38.1	44.2	45.9	46.9	45.7										
12-year	19.3	24.2	29.1	33.3	37.0	39.0	37.8	38.0	37.3	43.5	45.0	46.1											
13-year	18.6	23.4	28.3	32.4	36.7	38.8	37.1	36.5	36.1	41.7	43.9												
14-year	17.9	22.7	27.7	31.4	35.6	37.7	36.7	35.4	35.5	40.7													
15-year	17.5	22.1	27.0	30.9	35.1	36.9	36.2	34.5	34.9														
16-year	16.8	21.2	26.3	30.2	34.6	36.7	35.8	33.7															
17-year	16.4	20.4	26.0	29.5	33.8	36.4	34.6																
18-year	15.9	19.9	25.7	28.9	32.3	36.1																	
19-year	15.4	19.2	25.3	28.7	32.0																		
20-year	14.6	18.7	24.9	28.2																			

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

Table 13.19
LeukemiaSEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Survival Time																							
1-year	61.3	62.3	63.8	65.5	66.5	66.3	66.6	66.6	64.6	64.3	67.4	70.9	71.7	72.9	71.4	75.7	75.2	75.3	74.8	76.6	77.2	77.8	76.3
2-year	50.9	52.7	54.2	56.4	56.8	57.7	58.0	57.2	57.3	56.4	60.5	64.4	65.0	66.4	65.8	70.2	68.6	68.4	68.0	70.0	70.5	70.9	
3-year	45.0	47.1	49.2	52.2	52.5	52.8	54.4	53.2	53.9	52.2	56.4	61.0	61.6	62.8	62.1	66.9	65.3	64.6	65.9	66.0	67.0		
4-year	40.2	42.4	44.9	48.5	49.4	49.7	51.4	49.8	51.1	49.4	54.7	59.3	58.4	60.8	59.3	64.2	62.9	62.3	62.7	65.1			
5-year	36.1	38.4	41.4	45.8	48.0	47.4	48.9	47.7	48.9	46.6	52.9	58.2	56.7	58.8	58.0	62.3	61.1	59.9	60.1				
6-year	32.8	36.0	39.2	43.5	46.3	45.5	45.6	45.9	46.3	45.4	51.4	56.5	55.2	56.8	56.9	60.8	59.7	58.6					
7-year	30.9	33.4	36.7	41.0	44.7	44.1	43.8	44.6	45.0	43.8	50.4	55.9	53.5	55.5	55.5	58.9	59.3						
8-year	29.0	31.6	34.4	39.0	41.6	42.7	43.3	43.1	43.8	42.8	48.9	55.3	52.2	54.1	54.3	57.9							
9-year	27.3	29.9	32.6	37.5	40.9	41.5	41.3	42.2	42.9	42.8	47.6	53.2	51.1	53.3	53.1								
10-year	25.9	28.1	31.5	36.3	39.9	40.4	39.6	40.7	41.4	41.5	46.7	51.9	49.7	52.0									
11-year	24.7	26.9	29.5	34.6	37.8	39.7	38.2	40.0	40.3	40.1	45.4	51.2	48.0										
12-year	23.5	25.0	28.5	33.7	37.1	38.1	37.3	39.5	39.3	39.5	44.3	50.0											
13-year	22.7	23.9	27.5	32.8	36.4	37.1	36.6	38.9	38.5	38.2	44.0												
14-year	22.0	23.2	26.7	32.2	35.4	35.9	36.3	38.2	38.0	36.6													
15-year	21.4	22.5	26.4	31.7	35.3	34.6	35.9	36.6	36.7														
16-year	20.6	21.7	25.8	30.9	35.2	34.2	35.8	35.7															
17-year	20.1	21.0	25.1	30.3	34.1	33.8	35.7																
18-year	19.8	20.5	24.7	29.9	33.4	33.2																	
19-year	19.3	19.8	24.1	29.5	32.8																		
20-year	19.0	19.5	23.8	28.9																			

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

Table 13.20
Leukemia

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, 2012-2014 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	0.06	0.09	0.12	1.51	0.85	Asian/ Pacific Islander	0	0.06	0.09	0.11	1.01	0.63
	10	0.03	0.06	0.10	1.47	0.86		10	0.03	0.05	0.08	0.96	0.63
	20	0.03	0.07	0.13	1.44	0.85		20	0.02	0.05	0.09	0.93	0.62
	30	0.04	0.11	0.24	1.42	0.85		30	0.03	0.07	0.15	0.91	0.62
	40	0.07	0.21	0.48	1.40	0.85		40	0.04	0.12	0.26	0.89	0.61
	50	0.14	0.43	0.87	1.37	0.86		50	0.08	0.22	0.48	0.86	0.60
	60	0.30	0.77	1.18	1.30	0.86		60	0.15	0.41	0.67	0.80	0.58
	70	0.53	0.99	-	1.13	0.83		70	0.28	0.56	-	0.70	0.55
80	0.62	-	-	0.80	0.70	80	0.33	-	-	0.49	0.44		
White	0	0.06	0.10	0.13	1.58	0.89	American Indian/ Alaska Native ^a	0	0.04	0.07	0.10	0.82	0.49
	10	0.03	0.06	0.11	1.53	0.90		10	0.02	0.06	0.10	0.79	0.49
	20	0.03	0.07	0.14	1.51	0.89		20	0.03	0.08	0.11	0.77	0.49
	30	0.04	0.11	0.26	1.49	0.89		30	0.04	0.08	0.18	0.75	0.48
	40	0.07	0.22	0.51	1.46	0.89		40	0.04	0.14	0.26	0.72	0.48
	50	0.15	0.45	0.91	1.43	0.89		50	0.10	0.23	0.45	0.71	0.49
	60	0.32	0.81	1.23	1.36	0.90		60	0.14	0.37	0.60	0.65	0.49
	70	0.55	1.04	-	1.17	0.87		70	0.26	0.52	-	0.58	0.46
80	0.65	-	-	0.84	0.72	80	0.34	-	-	0.43	0.42		
Black	0	0.03	0.05	0.07	1.05	0.60	Hispanic ^b	0	0.07	0.11	0.14	1.23	0.71
	10	0.02	0.04	0.07	1.04	0.61		10	0.04	0.08	0.12	1.17	0.71
	20	0.02	0.05	0.12	1.02	0.61		20	0.04	0.08	0.14	1.13	0.70
	30	0.03	0.10	0.21	1.01	0.61		30	0.04	0.11	0.22	1.10	0.69
	40	0.07	0.19	0.40	1.00	0.61		40	0.06	0.17	0.36	1.07	0.68
	50	0.12	0.35	0.67	0.97	0.61		50	0.11	0.30	0.59	1.02	0.67
	60	0.25	0.60	0.85	0.92	0.61		60	0.20	0.50	0.81	0.95	0.66
	70	0.42	0.72	-	0.81	0.58		70	0.33	0.68	-	0.83	0.62
80	0.44	-	-	0.57	0.48	80	0.43	-	-	0.61	0.50		

Devcan 6.7.5, April 2017, National Cancer Institute (<https://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.

- Statistic could not be calculated.

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

Table 13.21
Leukemia

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, 2012-2014 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	0.06	0.10	0.13	1.79	1.02	Asian/ Pacific Islander	0	0.06	0.09	0.12	1.20	0.77
	10	0.04	0.07	0.11	1.75	1.03		10	0.04	0.07	0.10	1.15	0.78
	20	0.03	0.08	0.16	1.72	1.02		20	0.03	0.06	0.11	1.12	0.77
	30	0.05	0.12	0.29	1.71	1.02		30	0.03	0.08	0.17	1.09	0.76
	40	0.08	0.25	0.60	1.69	1.03		40	0.05	0.14	0.31	1.07	0.76
	50	0.17	0.53	1.08	1.66	1.04		50	0.09	0.27	0.58	1.04	0.75
	60	0.38	0.97	1.46	1.60	1.06		60	0.18	0.50	0.83	0.98	0.74
	70	0.68	1.26	-	1.41	1.05		70	0.35	0.70	-	0.87	0.71
80	0.82	-	-	1.03	0.91	80	0.44	-	-	0.64	0.58		
White	0	0.07	0.10	0.14	1.87	1.07	American Indian/ Alaska Native ^a	0	0.06	0.09	0.13	0.98	0.53
	10	0.04	0.07	0.12	1.82	1.07		10	0.03	0.07	0.10	0.93	0.53
	20	0.03	0.08	0.16	1.79	1.07		20	0.04	0.07	0.11	0.90	0.53
	30	0.05	0.13	0.30	1.78	1.07		30	0.04	0.08	0.18	0.88	0.53
	40	0.08	0.26	0.62	1.76	1.07		40	0.04	0.15	0.29	0.88	0.54
	50	0.18	0.56	1.13	1.73	1.09		50	0.11	0.26	0.52	0.88	0.55
	60	0.40	1.02	1.53	1.66	1.11		60	0.17	0.45	0.77	0.84	0.57
	70	0.71	1.31	-	1.46	1.10		70	0.33	0.71	-	0.79	0.53
80	0.85	-	-	1.07	0.94	80	0.53	-	-	0.65	0.43		
Black	0	0.03	0.06	0.08	1.21	0.68	Hispanic ^b	0	0.07	0.12	0.16	1.41	0.85
	10	0.03	0.05	0.08	1.21	0.69		10	0.05	0.09	0.14	1.35	0.85
	20	0.02	0.05	0.13	1.19	0.69		20	0.04	0.09	0.16	1.31	0.84
	30	0.03	0.11	0.25	1.19	0.69		30	0.05	0.12	0.24	1.28	0.83
	40	0.08	0.23	0.49	1.19	0.70		40	0.07	0.19	0.40	1.24	0.83
	50	0.15	0.43	0.83	1.16	0.70		50	0.12	0.34	0.69	1.20	0.82
	60	0.31	0.76	1.06	1.12	0.72		60	0.23	0.60	0.98	1.14	0.83
	70	0.57	0.95	-	1.03	0.71		70	0.41	0.84	-	1.02	0.80
80	0.61	-	-	0.74	0.61	80	0.56	-	-	0.80	0.71		

Devcan 6.7.5, April 2017, National Cancer Institute (<https://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.

- Statistic could not be calculated.

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

Table 13.22
Leukemia

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, 2012-2014 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	0.06	0.08	0.11	1.26	0.71	Asian/ Pacific Islander	0	0.05	0.08	0.09	0.85	0.51
	10	0.03	0.05	0.08	1.21	0.71		10	0.03	0.04	0.06	0.80	0.51
	20	0.02	0.06	0.11	1.19	0.71		20	0.01	0.04	0.07	0.77	0.50
	30	0.03	0.09	0.20	1.17	0.70		30	0.03	0.06	0.12	0.76	0.50
	40	0.06	0.17	0.38	1.14	0.70		40	0.03	0.10	0.21	0.74	0.50
	50	0.11	0.33	0.67	1.11	0.70		50	0.06	0.18	0.39	0.71	0.49
	60	0.22	0.58	0.92	1.04	0.69		60	0.12	0.34	0.55	0.66	0.47
	70	0.40	0.77	-	0.90	0.66		70	0.23	0.45	-	0.57	0.42
80	0.48	-	-	0.65	0.56	80	0.26	-	-	0.39	0.34		
White	0	0.06	0.09	0.11	1.32	0.74	American Indian/ Alaska Native ^a	0	0.03	0.04	0.07	0.68	0.45
	10	0.03	0.05	0.09	1.27	0.74		10	0.02	0.04	0.09	0.66	0.45
	20	0.03	0.06	0.12	1.24	0.73		20	0.03	0.08	0.11	0.65	0.44
	30	0.04	0.09	0.21	1.22	0.73		30	0.05	0.09	0.17	0.63	0.44
	40	0.06	0.17	0.39	1.20	0.73		40	0.04	0.13	0.24	0.59	0.43
	50	0.12	0.34	0.70	1.16	0.72		50	0.09	0.20	0.38	0.57	0.44
	60	0.23	0.61	0.97	1.09	0.72		60	0.12	0.31	0.45	0.50	0.43
	70	0.42	0.81	-	0.94	0.69		70	0.21	0.37	-	0.42	0.41
80	0.51	-	-	0.67	0.58	80	0.21	-	-	0.28	0.42		
Black	0	0.03	0.05	0.07	0.91	0.54	Hispanic ^b	0	0.06	0.09	0.12	1.07	0.60
	10	0.02	0.04	0.07	0.90	0.55		10	0.03	0.06	0.10	1.02	0.60
	20	0.02	0.06	0.11	0.88	0.54		20	0.03	0.07	0.12	0.99	0.59
	30	0.03	0.09	0.18	0.86	0.54		30	0.04	0.09	0.19	0.96	0.58
	40	0.06	0.15	0.33	0.84	0.54		40	0.05	0.15	0.32	0.93	0.58
	50	0.10	0.28	0.53	0.81	0.53		50	0.10	0.27	0.51	0.89	0.57
	60	0.20	0.47	0.69	0.77	0.53		60	0.17	0.42	0.68	0.81	0.55
	70	0.32	0.57	-	0.66	0.50		70	0.27	0.55	-	0.69	0.50
80	0.34	-	-	0.47	0.42	80	0.34	-	-	0.50	0.38		

Devcan 6.7.5, April 2017, National Cancer Institute (<https://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.

- Statistic could not be calculated.

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

Table 13.23
Leukemia

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

SEER Incidence	SEER 18 Areas ^b			SEER 13 Areas ^b			SEER 9 Areas ^b		
	Rate 2010-2014			Trend 2005-2014 ^c			Trend 2005-2014 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	13.7	17.6	10.7	0.3*	0.1	0.3*	0.3*	0.2*	0.3*
White	14.5	18.5	11.3	0.4*	0.2*	0.5*	0.4*	0.2*	0.5*
White Hispanic ^e	11.0	13.3	9.2	0.5*	0.2	0.7*	-	-	-
White Non-Hispanic ^e	14.9	19.1	11.5	0.5*	0.3*	0.5*	-	-	-
Black	10.9	14.0	8.8	0.2	0.2	0.2	0.0	0.0	0.1
Asian/Pacific Islander	7.8	9.7	6.3	-0.1	-0.1	-0.1	-	-	-
Amer Ind/Alaska Nat ^f	8.1	9.8	6.8	1.7	2.4*	1.3	-	-	-
Hispanic ^e	10.6	12.9	8.8	0.5*	0.2	0.7*	-	-	-
<u>U.S. Mortality^g</u>									
	Rate 2010-2014			Trend 2005-2014 ^h					
	Rate per 100,000 persons			AAPC (%)					
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females			
All Races	6.8	9.1	5.1	-1.0*	-1.0*	-1.2*			
White	7.1	9.5	5.3	-0.9*	-0.7*	-1.1*			
White Hispanic ^e	5.2	6.5	4.2	-0.3*	-0.3*	-0.4*			
White Non-Hispanic ^e	7.2	9.6	5.3	-0.9*	-0.7*	-1.1*			
Black	5.7	7.5	4.6	-1.3*	-1.3*	-1.2*			
Asian/Pacific Islander	3.9	5.0	3.0	-0.9	-0.7*	-0.8*			
Amer Ind/Alaska Nat									
Total U.S.	3.4	4.5	2.6	-1.4*	-1.4	-1.8*			
CHSDA Counties	4.4	5.8	3.4	-0.5	-0.2	-1.0			
Non-CHSDA Counties	2.3	3.0	1.7	-2.6*	-2.6	-2.7*			
Hispanic ^e	4.9	6.1	4.0	-0.4*	-0.4*	-0.5*			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.3.0.0, April 2016, 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 2005-2014 AAPC estimates are based on a Joinpoint analysis with up to 4 Joinpoints over diagnosis years 1992-2014.

d The 2005-2014 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2014.

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 2005-2014 Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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 2005-2014 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2014.

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

Table 13.24
LeukemiaAge-Adjusted SEER Incidence Rates^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates^a, 2010-2014</u>									
California	12.57	16.07	9.71	13.53	17.23	10.46	10.52	13.83	7.93
Greater Bay Area	12.69	16.44	9.72	14.52	18.70	11.13	11.16	15.04	8.20
San Francisco-Oakland	12.43	16.03	9.64	14.22	18.04	11.19	11.06	14.61	8.42
San Jose-Monterey	13.10	17.15	9.79	14.92	19.65	10.95	11.80	17.87	-
Los Angeles	11.94	15.17	9.36	13.02	16.52	10.13	10.43	13.13	8.53
Greater California	12.80	16.33	9.88	13.43	17.06	10.40	10.32	13.77	7.26
Connecticut	15.12	19.36	11.81	15.53	19.81	12.17	9.22	10.40	8.18
Detroit	15.47	20.37	11.85	16.45	21.62	12.54	11.94	15.29	9.72
Georgia	13.51	17.39	10.63	14.33	18.36	11.16	11.28	14.65	9.29
Atlanta	13.15	17.10	10.38	14.36	18.45	11.32	11.63	15.13	9.50
Rural Georgia	13.68	16.49	10.93	14.43	17.76	10.71	11.83	-	-
Greater Georgia	13.69	17.61	10.73	14.33	18.38	11.09	11.08	14.35	9.19
Hawaii	11.77	14.73	9.38	15.09	18.11	12.13	-	-	-
Iowa	15.77	20.39	12.07	15.74	20.40	12.01	14.23	17.65	10.76
Kentucky	15.74	20.08	12.41	15.78	20.04	12.48	12.25	16.53	9.25
Louisiana	13.38	17.01	10.57	14.56	18.39	11.51	10.37	13.00	8.46
New Jersey	15.10	19.36	11.82	15.26	19.54	11.92	10.83	13.74	9.02
New Mexico	12.58	15.61	9.99	12.65	15.74	10.01	8.27	-	-
Seattle-Puget Sound	15.64	20.33	11.79	16.46	21.14	12.56	14.13	18.55	10.13
Utah	13.81	17.30	10.81	14.01	17.46	11.03	-	-	-
SEER 9 Areas ^b	14.25	18.33	11.04	15.20	19.43	11.81	11.44	14.60	9.24
SEER 13 Areas ^b	13.69	17.59	10.60	14.79	18.92	11.44	11.18	14.26	9.01
SEER 18 Areas ^b	13.74	17.58	10.68	14.54	18.54	11.30	10.95	14.03	8.80

^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 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.

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

Table 13.25
LeukemiaAge-Adjusted SEER Death Rates^a
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Death Rates^a, 2010-2014</u>									
California	6.45	8.41	4.96	6.95	9.10	5.30	6.13	7.65	4.99
Greater Bay Area	5.83	7.65	4.49	6.59	8.64	5.06	5.95	8.36	4.21
San Francisco-Oakland	5.70	7.50	4.41	6.50	8.55	5.01	5.60	7.96	3.91
San Jose-Monterey	6.06	7.91	4.65	6.72	8.77	5.15	8.09	-	-
Los Angeles	6.40	8.31	5.00	7.03	9.26	5.34	6.12	7.31	5.33
Greater California	6.68	8.72	5.11	7.01	9.16	5.35	6.23	7.51	5.10
Connecticut	6.65	9.09	4.86	6.88	9.44	4.97	4.61	5.02	4.29
Detroit	6.77	9.55	4.85	7.15	10.10	5.06	5.51	7.25	4.40
Georgia	6.27	8.45	4.71	6.54	8.81	4.87	5.52	7.21	4.40
Atlanta	5.72	7.79	4.30	6.06	8.13	4.55	5.33	7.43	4.01
Rural Georgia	6.49	8.77	4.99	6.70	8.60	-	-	-	-
Greater Georgia	6.50	8.72	4.91	6.69	9.02	4.96	5.69	7.08	4.72
Hawaii	5.25	6.87	3.99	5.16	6.25	4.17	-	-	-
Iowa	7.18	9.79	5.28	7.24	9.83	5.37	-	-	-
Kentucky	7.71	10.38	5.82	7.79	10.51	5.85	6.72	8.85	5.46
Louisiana	7.01	9.47	5.24	7.20	9.77	5.30	6.33	8.36	5.01
New Jersey	6.46	8.63	4.95	6.90	9.34	5.16	4.95	5.87	4.43
New Mexico	6.00	7.94	4.42	6.26	8.27	4.60	8.35	-	-
Seattle-Puget Sound	6.53	8.74	4.89	6.76	8.94	5.15	6.97	9.97	4.55
Utah	6.42	8.03	5.12	6.54	8.11	5.27	-	-	-
SEER 9 Areas ^b	6.35	8.54	4.73	6.74	9.02	5.04	5.47	7.45	4.17
SEER 13 Areas ^b	6.36	8.48	4.79	6.83	9.10	5.12	5.64	7.46	4.43
SEER 18 Areas ^b	6.56	8.72	4.97	6.96	9.26	5.23	5.74	7.38	4.64
Total U.S.	6.81	9.13	5.10	7.07	9.47	5.27	5.73	7.52	4.55

^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 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.

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

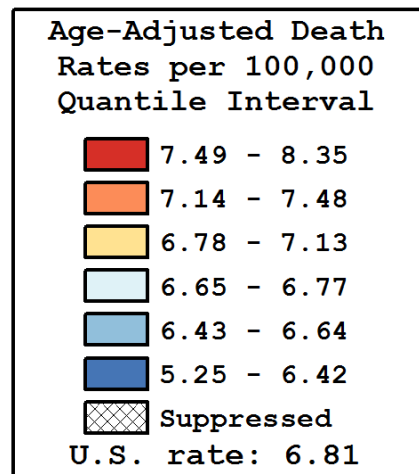
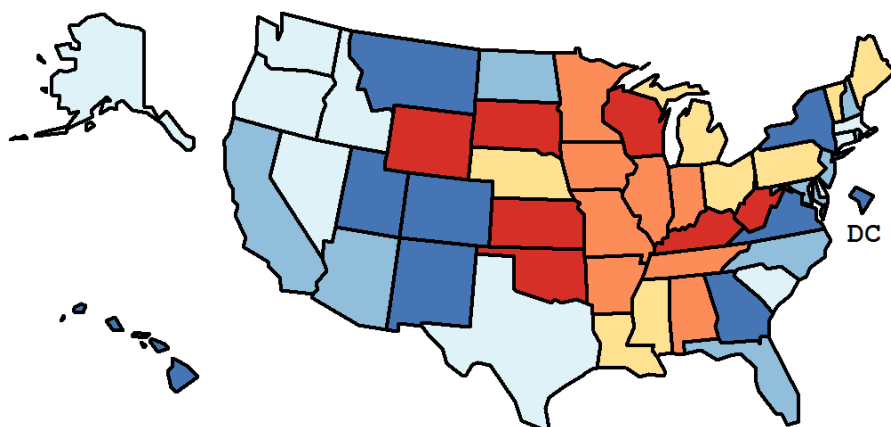
Table 13.26
Leukemia

Age-Adjusted Cancer Death^a Rates By State, All Races, 2010-2014

Males and Females

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	6.81	0.02		
High Five States				
South Dakota	8.35	0.42	01(01,17)	22.65 ^c
Wyoming	8.20	0.53	02(01,29)	20.50 ^c
Oklahoma	7.90	0.20	03(01,14)	16.11 ^c
Kansas	7.80	0.22	04(01,19)	14.62
Wisconsin	7.80	0.16	05(01,12)	14.57
Low Five States				
Colorado	6.26	0.16	47(27,50)	-8.06
Montana	6.16	0.32	48(16,51)	-9.52
New Mexico	6.00	0.23	49(28,51)	-11.83
D.C.	5.34	0.44	50(27,51)	-21.51 ^c
Hawaii	5.25	0.26	51(48,51)	-22.92 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	7.25	0.17	13(05,29)	6.48	Montana	6.16	0.32	48(16,51)	-9.52
Alaska	6.73	0.56	27(01,51)	-1.07	Nebraska	6.98	0.26	22(04,46)	2.60
Arizona	6.56	0.14	37(22,47)	-3.55	Nevada	6.69	0.23	29(10,48)	-1.68
Arkansas	7.38	0.21	10(02,28)	8.39	New Hampshire	6.60	0.30	35(08,50)	-2.98
California	6.45	0.06	41(30,47)	-5.28	New Jersey	6.46	0.11	40(25,48)	-5.14
Colorado	6.26	0.16	47(27,50)	-8.06	New Mexico	6.00	0.23	49(28,51)	-11.83
Connecticut	6.65	0.18	33(15,48)	-2.32	New York	6.41	0.08	44(30,48)	-5.83
Delaware	6.77	0.36	24(03,49)	-0.50	North Carolina	6.58	0.11	36(22,46)	-3.35
D.C.	5.34	0.44	50(27,51)	-21.51 ^c	North Dakota	6.64	0.41	34(03,50)	-2.51
Florida	6.43	0.07	42(29,47)	-5.50	Ohio	7.11	0.10	18(09,27)	4.41
Georgia	6.27	0.12	46(31,50)	-7.94	Oklahoma	7.90	0.20	03(01,14)	16.11 ^c
Hawaii	5.25	0.26	51(48,51)	-22.92 ^c	Oregon	6.66	0.17	32(16,48)	-2.15
Idaho	6.75	0.29	26(06,49)	-0.83	Pennsylvania	7.13	0.10	17(09,27)	4.77
Illinois	7.19	0.10	14(08,25)	5.70	Rhode Island	6.49	0.33	39(08,50)	-4.63
Indiana	7.48	0.15	08(03,22)	9.86	South Carolina	6.69	0.16	30(16,47)	-1.75
Iowa	7.18	0.20	15(05,34)	5.47	South Dakota	8.35	0.42	01(01,17)	22.65 ^c
Kansas	7.80	0.22	04(01,19)	14.62	Tennessee	7.37	0.15	11(04,24)	8.22
Kentucky	7.71	0.18	06(01,17)	13.24	Texas	6.77	0.08	25(20,37)	-0.56
Louisiana	7.01	0.18	21(08,39)	2.96	Utah	6.42	0.24	43(17,50)	-5.68
Maine	7.13	0.29	16(02,45)	4.80	Vermont	6.81	0.43	23(02,50)	0.07
Maryland	6.56	0.15	38(21,48)	-3.64	Virginia	6.27	0.12	45(30,50)	-7.86
Massachusetts	6.67	0.13	31(18,46)	-2.07	Washington	6.72	0.14	28(17,45)	-1.28
Michigan	7.09	0.11	20(09,30)	4.13	West Virginia	7.69	0.26	07(01,23)	13.00
Minnesota	7.45	0.16	09(02,22)	9.49	Wisconsin	7.80	0.16	05(01,12)	14.57
Mississippi	7.10	0.22	19(04,39)	4.37	Wyoming	8.20	0.53	02(01,29)	20.50 ^c
Missouri	7.34	0.15	12(04,25)	7.91					



^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.

^d Rank of state level death rate and the 95% confidence intervals (low, high) for the rank.

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.

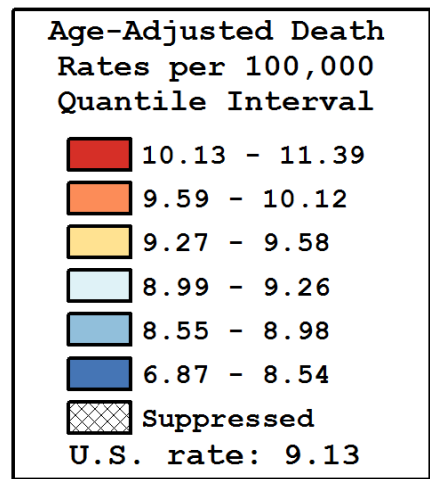
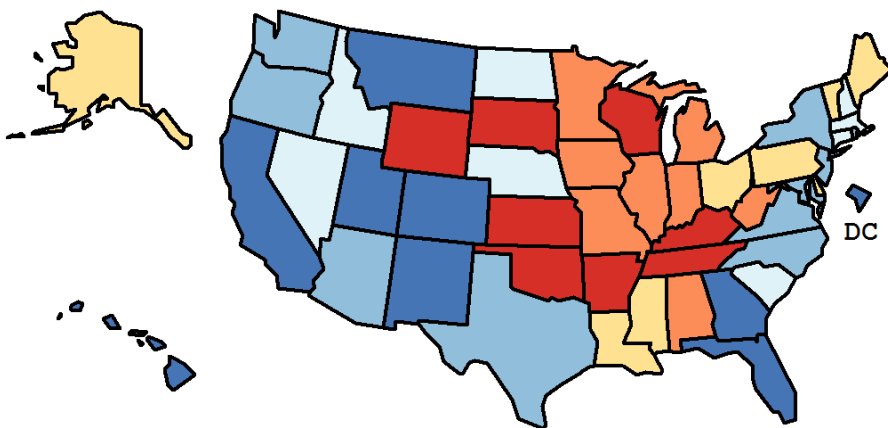
Table 13.27
Leukemia

Age-Adjusted Cancer Death^a Rates By State, All Races, 2010-2014

Males

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	9.13	0.04		
High Five States				
South Dakota	11.39	0.74	01(01,29)	24.86 ^c
Oklahoma	10.61	0.35	02(01,20)	16.25 ^c
Wisconsin	10.60	0.28	03(01,16)	16.15 ^c
Arkansas	10.45	0.39	04(01,25)	14.48
Kansas	10.45	0.40	05(01,26)	14.47
Low Five States				
Utah	8.03	0.41	47(24,51)	-12.03
New Mexico	7.94	0.40	48(26,51)	-13.03
Montana	7.82	0.54	49(22,51)	-14.36
D.C.	7.18	0.82	50(15,51)	-21.28 ^c
Hawaii	6.87	0.44	51(45,51)	-24.67 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	10.05	0.31	10(01,27)	10.16	Montana	7.82	0.54	49(22,51)	-14.36
Alaska	9.42	0.99	23(01,51)	3.22	Nebraska	9.21	0.46	26(04,49)	0.87
Arizona	8.71	0.23	40(22,48)	-4.51	Nevada	9.10	0.40	27(07,48)	-0.30
Arkansas	10.45	0.39	04(01,25)	14.48	New Hampshire	9.08	0.54	29(03,50)	-0.54
California	8.41	0.10	45(36,49)	-7.86	New Jersey	8.63	0.21	41(25,49)	-5.46
Colorado	8.40	0.29	46(24,50)	-7.91	New Mexico	7.94	0.40	48(26,51)	-13.03
Connecticut	9.09	0.32	28(10,47)	-0.41	New York	8.76	0.14	39(25,46)	-4.05
Delaware	9.49	0.66	19(01,49)	3.94	North Carolina	8.91	0.21	36(18,46)	-2.34
D.C.	7.18	0.82	50(15,51)	-21.28 ^c	North Dakota	9.04	0.72	31(01,51)	-0.94
Florida	8.54	0.12	43(31,48)	-6.42	Ohio	9.58	0.19	17(08,32)	4.94
Georgia	8.45	0.22	44(27,49)	-7.42	Oklahoma	10.61	0.35	02(01,20)	16.25 ^c
Hawaii	6.87	0.44	51(45,51)	-24.67 ^c	Oregon	8.97	0.31	35(14,48)	-1.66
Idaho	9.03	0.50	32(04,49)	-1.08	Pennsylvania	9.47	0.17	21(11,33)	3.76
Illinois	9.73	0.19	15(06,28)	6.65	Rhode Island	8.98	0.59	33(02,50)	-1.63
Indiana	9.98	0.26	12(02,27)	9.30	South Carolina	9.26	0.30	25(09,45)	1.45
Iowa	9.79	0.35	14(02,38)	7.32	South Dakota	11.39	0.74	01(01,29)	24.86 ^c
Kansas	10.45	0.40	05(01,26)	14.47	Tennessee	10.14	0.27	08(01,26)	11.12
Kentucky	10.38	0.33	06(01,23)	13.72	Texas	8.98	0.14	34(22,42)	-1.64
Louisiana	9.47	0.32	22(05,41)	3.74	Utah	8.03	0.41	47(24,51)	-12.03
Maine	9.39	0.50	24(02,48)	2.87	Vermont	9.47	0.78	20(01,50)	3.80
Maryland	8.85	0.27	37(17,48)	-3.05	Virginia	8.58	0.23	42(24,49)	-5.96
Massachusetts	9.07	0.24	30(14,45)	-0.57	Washington	8.83	0.24	38(19,48)	-3.28
Michigan	9.64	0.20	16(07,31)	5.62	West Virginia	10.12	0.46	09(01,37)	10.87
Minnesota	10.02	0.28	11(02,28)	9.78	Wisconsin	10.60	0.28	03(01,16)	16.15 ^c
Mississippi	9.57	0.39	18(02,44)	4.83	Wyoming	10.26	0.89	07(01,49)	12.38
Missouri	9.92	0.26	13(02,28)	8.68					



^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.

^d Rank of state level death rate and the 95% confidence intervals (low, high) for the rank.

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.

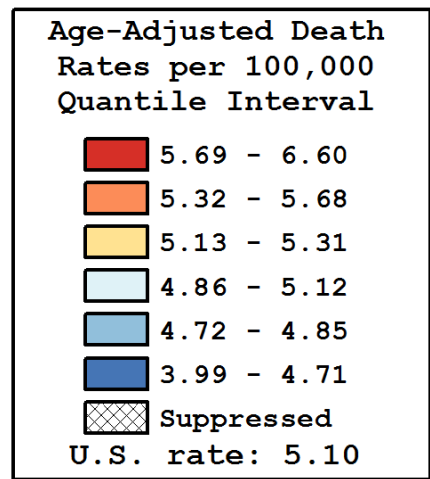
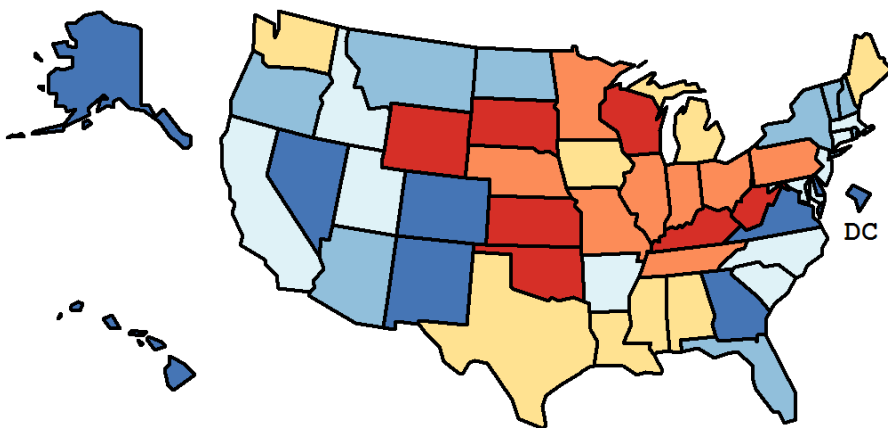
Table 13.28
Leukemia

Age-Adjusted Cancer Death^a Rates By State, All Races, 2010-2014

Females

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	5.10	0.02		
High Five States				
Wyoming	6.60	0.65	01(01,40)	29.35 ^c
South Dakota	5.94	0.48	02(01,45)	16.46 ^c
West Virginia	5.87	0.30	03(01,31)	15.15 ^c
Oklahoma	5.86	0.23	04(01,22)	14.89
Kansas	5.82	0.26	05(01,26)	14.16
Low Five States				
Virginia	4.60	0.14	47(26,50)	-9.73
New Mexico	4.42	0.27	48(16,51)	-13.38
Alaska	4.30	0.60	49(02,51)	-15.72 ^c
D.C.	4.26	0.50	50(05,51)	-16.55 ^c
Hawaii	3.99	0.31	51(24,51)	-21.68 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	5.27	0.19	19(04,42)	3.28	Montana	4.75	0.39	40(03,51)	-6.90
Alaska	4.30	0.60	49(02,51)	-15.72 ^c	Nebraska	5.37	0.31	13(01,47)	5.31
Arizona	4.85	0.16	35(15,48)	-4.90	Nevada	4.62	0.26	46(14,51)	-9.32
Arkansas	5.12	0.24	24(04,48)	0.38	New Hampshire	4.76	0.34	39(04,51)	-6.71
California	4.96	0.07	28(20,41)	-2.67	New Jersey	4.95	0.13	29(14,46)	-2.95
Colorado	4.64	0.19	45(20,50)	-9.00	New Mexico	4.42	0.27	48(16,51)	-13.38
Connecticut	4.86	0.20	33(12,49)	-4.75	New York	4.77	0.09	37(25,47)	-6.39
Delaware	4.71	0.40	44(04,51)	-7.64	North Carolina	4.99	0.13	27(13,45)	-2.15
D.C.	4.26	0.50	50(05,51)	-16.55 ^c	North Dakota	4.74	0.46	41(02,51)	-7.12
Florida	4.76	0.08	38(28,48)	-6.64	Ohio	5.37	0.12	15(05,29)	5.21
Georgia	4.71	0.14	43(22,49)	-7.62	Oklahoma	5.86	0.23	04(01,22)	14.89
Hawaii	3.99	0.31	51(24,51)	-21.68 ^c	Oregon	4.85	0.20	34(11,49)	-4.86
Idaho	4.86	0.33	32(04,51)	-4.74	Pennsylvania	5.48	0.11	10(03,24)	7.38
Illinois	5.45	0.12	12(04,26)	6.86	Rhode Island	4.73	0.37	42(04,51)	-7.29
Indiana	5.68	0.17	08(01,23)	11.45	South Carolina	4.94	0.19	30(10,48)	-3.21
Iowa	5.28	0.23	18(03,45)	3.45	South Dakota	5.94	0.48	02(01,45)	16.46 ^c
Kansas	5.82	0.26	05(01,26)	14.16	Tennessee	5.37	0.17	14(03,35)	5.26
Kentucky	5.82	0.21	06(01,21)	14.08	Texas	5.13	0.09	23(13,36)	0.69
Louisiana	5.24	0.20	20(04,44)	2.75	Utah	5.12	0.29	25(02,49)	0.33
Maine	5.28	0.34	17(01,49)	3.53	Vermont	4.82	0.48	36(02,51)	-5.46
Maryland	4.91	0.17	31(12,48)	-3.77	Virginia	4.60	0.14	47(26,50)	-9.73
Massachusetts	5.00	0.15	26(12,46)	-1.98	Washington	5.14	0.16	22(07,43)	0.76
Michigan	5.20	0.13	21(08,38)	2.05	West Virginia	5.87	0.30	03(01,31)	15.15 ^c
Minnesota	5.49	0.18	09(02,32)	7.72	Wisconsin	5.70	0.18	07(01,24)	11.82
Mississippi	5.31	0.25	16(02,46)	4.05	Wyoming	6.60	0.65	01(01,40)	29.35 ^c
Missouri	5.45	0.17	11(03,32)	6.93					



^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.

^d Rank of state level death rate and the 95% confidence intervals (low, high) for the rank.

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 13.29
LeukemiaEstimated United States Cancer Prevalence Counts^a on January 1, 2014
By Race/Ethnicity, Sex and Years Since Diagnosis

WARNING: The Prevalence Estimates presented on this page utilize a different tumor selection criteria from previous CSR releases and are NOT directly comparable to estimates from previous CSR releases.
Please see the Prevalence Comparison Chapter of this CSR for more information.

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <22 ^a	0 to <39 ^e	>=39 ^g	Complete ^h
<u>Race</u>	<u>Sex</u>										
All Races ^b	Both Sexes	151,081	93,834	55,871	34,351	21,156	13,225	352,781	381,780	5,948	387,728
	Males	88,049	53,792	31,508	19,012	11,686	7,181	202,071	217,434	2,555	219,989
	Females	63,032	40,042	24,363	15,339	9,470	6,044	150,710	164,346	3,393	167,739
White ^b	Both Sexes	131,277	82,606	49,750	30,644	18,979	11,838	310,105	336,400	4,978	341,378
	Males	76,923	47,386	28,084	16,939	10,706	6,519	178,246	192,374	1,776	194,150
	Females	54,354	35,220	21,666	13,705	8,273	5,319	131,859	144,026	3,202	147,228
Black ^b	Both Sexes	11,697	6,698	3,511	1,991	1,196	683	24,928	26,326	933	27,259
	Males	6,434	3,856	1,890	1,016	550	292	13,656	14,251	427	14,678
	Females	5,263	2,842	1,621	975	646	391	11,272	12,075	506	12,581
Asian/ Pacific Islander ^c	Both Sexes	3,532	2,348	1,461	1,113	+	+	8,763	+	+	+
	Males	2,016	1,289	815	598	+	+	4,870	+	+	+
	Females	1,516	1,059	646	515	+	+	3,893	+	+	+
Hispanic ^d	Both Sexes	13,363	8,826	5,612	3,995	+	+	33,014	+	+	+
	Males	7,450	5,029	3,037	2,228	+	+	18,476	+	+	+
	Females	5,913	3,797	2,575	1,767	+	+	14,538	+	+	+

Estimated prevalence percent^a on January 1, 2014, of the SEER^c population diagnosed in the previous 22 years
By Age at Prevalence, Race/Ethnicity and Sex

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>	<u>Sex</u>											
All Races ^c	Both Sexes	0.0975%	0.0319%	0.0623%	0.0523%	0.0326%	0.0497%	0.0941%	0.1980%	0.3525%	0.4479%	0.0938%
	Males	0.1136%	0.0329%	0.0680%	0.0578%	0.0365%	0.0579%	0.1155%	0.2532%	0.4631%	0.6214%	0.1162%
	Females	0.0819%	0.0309%	0.0564%	0.0465%	0.0285%	0.0415%	0.0735%	0.1481%	0.2619%	0.3433%	0.0753%
White ^c	Both Sexes	0.1127%	0.0360%	0.0708%	0.0600%	0.0367%	0.0527%	0.1031%	0.2203%	0.3978%	0.5066%	0.1050%
	Males	0.1307%	0.0364%	0.0771%	0.0653%	0.0414%	0.0607%	0.1261%	0.2806%	0.5184%	0.6998%	0.1292%
	Females	0.0948%	0.0356%	0.0642%	0.0544%	0.0318%	0.0444%	0.0803%	0.1639%	0.2965%	0.3886%	0.0845%
Black ^c	Both Sexes	0.0547%	0.0155%	0.0282%	0.0293%	0.0221%	0.0434%	0.0642%	0.1400%	0.2401%	0.2860%	0.0616%
	Males	0.0625%	0.0166%	0.0319%	0.0322%	0.0237%	0.0519%	0.0781%	0.1741%	0.3324%	0.4001%	0.0776%
	Females	0.0476%	0.0143%	0.0244%	0.0265%	0.0206%	0.0360%	0.0521%	0.1134%	0.1759%	0.2295%	0.0500%
Asian/ Pacific Islander ^c	Both Sexes	0.0478%	0.0254%	0.0518%	0.0354%	0.0213%	0.0370%	0.0535%	0.0788%	0.1148%	0.1356%	0.0478%
	Males	0.0556%	0.0285%	0.0555%	0.0423%	0.0226%	0.0446%	0.0648%	0.0937%	0.1421%	0.2058%	0.0575%
	Females	0.0407%	0.0222%	0.0479%	0.0284%	0.0202%	0.0303%	0.0437%	0.0666%	0.0935%	0.0925%	0.0399%
Hispanic ^d	Both Sexes	0.0608%	0.0364%	0.0717%	0.0601%	0.0344%	0.0462%	0.0636%	0.1137%	0.1854%	0.2072%	0.0691%
	Males	0.0672%	0.0375%	0.0781%	0.0684%	0.0420%	0.0538%	0.0731%	0.1266%	0.2035%	0.2906%	0.0798%
	Females	0.0542%	0.0352%	0.0651%	0.0512%	0.0262%	0.0383%	0.0543%	0.1025%	0.1719%	0.1568%	0.0599%

- ^a US 2014 cancer prevalence counts are based on 2014 cancer prevalence proportions from the SEER registries and 1/1/2014 US population estimates based on the average of 2013 and 2014 population estimates from the US Bureau of the Census.
^{b c d} Prevalence was calculated using the first invasive tumor for each cancer site diagnosed during the previous 39/22 years. Statistics based on (b) SEER 9 Areas (c) SEER 13 Areas excluding the Alaska Native Registry
^e (d) NHIA for Hispanic for SEER 13 Areas excluding the Alaska Native Registry.
^f Maximum limited-duration prevalence: 39 years for 1975-2014 SEER 9 data; 22 years for 1992-2014 SEER 13 data (excluding the Alaska Native Registry) used to calculate prevalence for Hispanics and Asian Pacific Islanders.
^{g h i} Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups. (g) Cases diagnosed more than 39 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 <39 and >=39. (i) Age-specific completeness index was approximated using empirical data from historical Connecticut tumor registry.
- Statistic not shown. Statistic based on fewer than 5 cases estimated alive in SEER for the time interval.
+ Not available.

Table 13.30
Acute Lymphocytic Leukemia

Estimated United States Cancer Prevalence Counts^a on January 1, 2014
By Race/Ethnicity, Sex and Years Since Diagnosis

WARNING: The Prevalence Estimates presented on this page utilize a different tumor selection criteria from previous CSR releases and are NOT directly comparable to estimates from previous CSR releases.
Please see the Prevalence Comparison Chapter of this CSR for more information.

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <22 ^a	0 to <39 ^e	>=39 ^g	Complete ^h
<u>Race</u>	<u>Sex</u>										
All Races ^b	Both Sexes	17,937	14,284	11,945	10,606	8,696	6,700	61,761	78,275	3,562	81,837
	Males	9,674	8,187	6,578	5,857	4,673	3,627	34,012	42,662	1,823	44,485
	Females	8,263	6,097	5,367	4,749	4,023	3,073	27,749	35,613	1,739	37,352
White ^b	Both Sexes	15,053	12,021	10,395	9,230	7,614	5,914	52,826	67,715	+	+
	Males	8,045	6,797	5,742	5,031	4,189	3,234	28,969	36,835	+	+
	Females	7,008	5,224	4,653	4,199	3,425	2,680	23,857	30,880	+	+
Black ^b	Both Sexes	1,532	1,167	715	684	576	339	4,555	5,339	+	+
	Males	916	798	330	393	258	155	2,619	2,990	+	+
	Females	616	369	385	291	318	184	1,936	2,349	+	+
Asian/ Pacific Islander ^c	Both Sexes	829	722	524	527	+	+	2,768	+	+	+
	Males	447	393	320	318	+	+	1,552	+	+	+
	Females	382	329	204	209	+	+	1,216	+	+	+
Hispanic ^d	Both Sexes	5,567	4,212	2,843	2,476	+	+	15,901	+	+	+
	Males	3,113	2,496	1,497	1,412	+	+	9,017	+	+	+
	Females	2,454	1,716	1,346	1,064	+	+	6,884	+	+	+

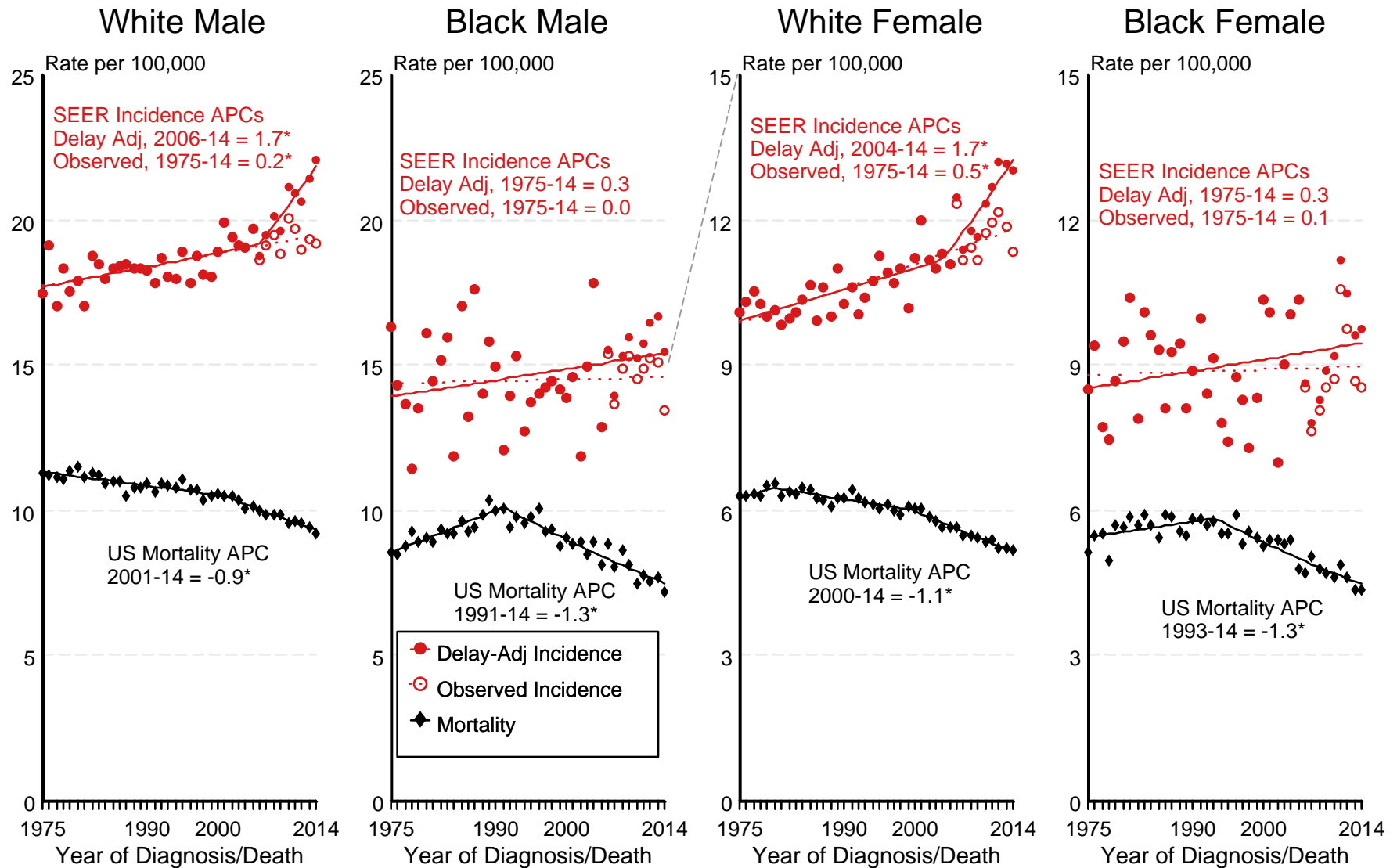
Estimated prevalence percent^a on January 1, 2014, of the SEER^c population diagnosed in the previous 22 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence		All Ages	0-9	10-19	20-29	Age Specific (Crude)					Age-Adjusted ^f	
						30-39	40-49	50-59	60-69	70-79	80+	All Ages
<u>Race</u>	<u>Sex</u>											
All Races ^c	Both Sexes	0.0198%	0.0270%	0.0527%	0.0380%	0.0107%	0.0065%	0.0049%	0.0057%	0.0046%	0.0028%	0.0204%
	Males	0.0224%	0.0276%	0.0571%	0.0432%	0.0133%	0.0074%	0.0059%	0.0055%	0.0054%	0.0039%	0.0226%
	Females	0.0172%	0.0263%	0.0480%	0.0326%	0.0080%	0.0057%	0.0040%	0.0059%	0.0039%	0.0021%	0.0183%
White ^c	Both Sexes	0.0225%	0.0310%	0.0606%	0.0450%	0.0134%	0.0070%	0.0054%	0.0062%	0.0048%	0.0024%	0.0236%
	Males	0.0252%	0.0312%	0.0654%	0.0503%	0.0165%	0.0079%	0.0062%	0.0059%	0.0062%	0.0026%	0.0258%
	Females	0.0198%	0.0307%	0.0555%	0.0394%	0.0101%	0.0060%	0.0045%	0.0064%	0.0036%	0.0023%	0.0213%
Black ^c	Both Sexes	0.0100%	0.0116%	0.0230%	0.0179%	0.0042%	0.0041%	0.0027%	0.0030%	-	-	0.0093%
	Males	0.0119%	0.0137%	0.0265%	0.0201%	0.0052%	0.0047%	0.0034%	-	-	-	0.0107%
	Females	0.0082%	0.0095%	0.0194%	0.0158%	0.0033%	0.0036%	0.0021%	0.0035%	-	-	0.0079%
Asian/ Pacific Islander ^c	Both Sexes	0.0137%	0.0204%	0.0414%	0.0232%	0.0045%	0.0058%	0.0041%	0.0043%	0.0042%	0.0040%	0.0148%
	Males	0.0161%	0.0213%	0.0443%	0.0292%	0.0052%	0.0060%	0.0060%	0.0043%	-	0.0106%	0.0166%
	Females	0.0114%	0.0195%	0.0382%	0.0171%	0.0038%	0.0057%	0.0026%	0.0042%	0.0062%	-	0.0131%
Hispanic ^d	Both Sexes	0.0287%	0.0315%	0.0621%	0.0464%	0.0135%	0.0091%	0.0073%	0.0097%	0.0081%	-	0.0250%
	Males	0.0322%	0.0321%	0.0670%	0.0539%	0.0175%	0.0106%	0.0093%	0.0066%	0.0079%	-	0.0277%
	Females	0.0252%	0.0310%	0.0569%	0.0383%	0.0093%	0.0077%	0.0053%	0.0123%	0.0084%	-	0.0222%

- ^a US 2014 cancer prevalence counts are based on 2014 cancer prevalence proportions from the SEER registries and 1/1/2014 US population estimates based on the average of 2013 and 2014 population estimates from the US Bureau of the Census.
^{b c d} Prevalence was calculated using the first invasive tumor for each cancer site diagnosed during the previous 39/22 years. Statistics based on (b) SEER 9 Areas (c) SEER 13 Areas excluding the Alaska Native Registry
^e (d) NHIA for Hispanic for SEER 13 Areas excluding the Alaska Native Registry.
^f Maximum limited-duration prevalence: 39 years for 1975-2014 SEER 9 data; 22 years for 1992-2014 SEER 13 data (excluding the Alaska Native Registry) used to calculate prevalence for Hispanics and Asian Pacific Islanders.
^{g h i} Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups. (g) Cases diagnosed more than 39 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 <39 and >=39. (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.

Figure 13.1

SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates^a Leukemia, by Race and Sex



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

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

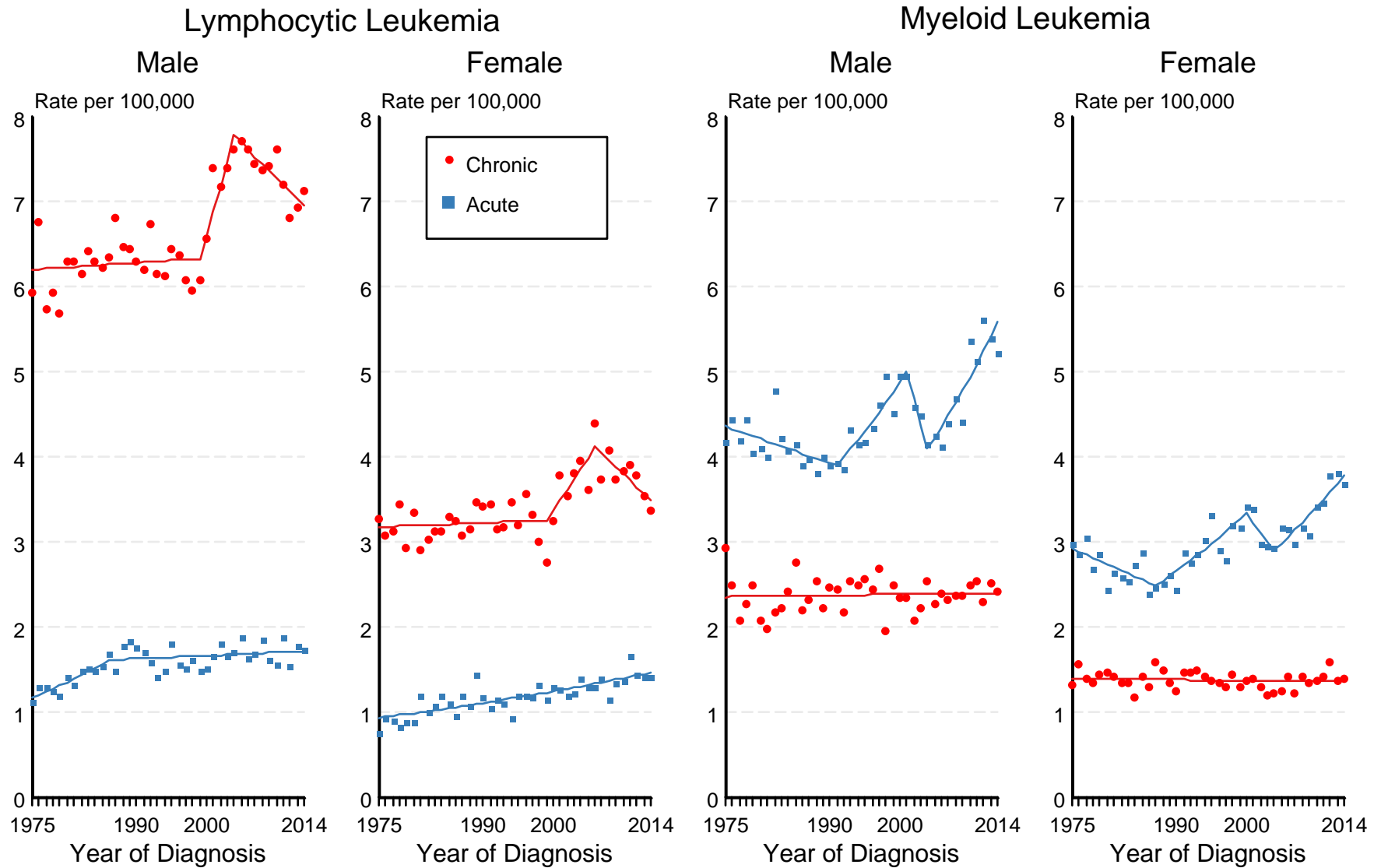
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.

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 13.2

SEER Observed Incidence Rates^a Lymphocytic and Myeloid Leukemia (Acute and Chronic), by Sex



Source: SEER 9 areas.

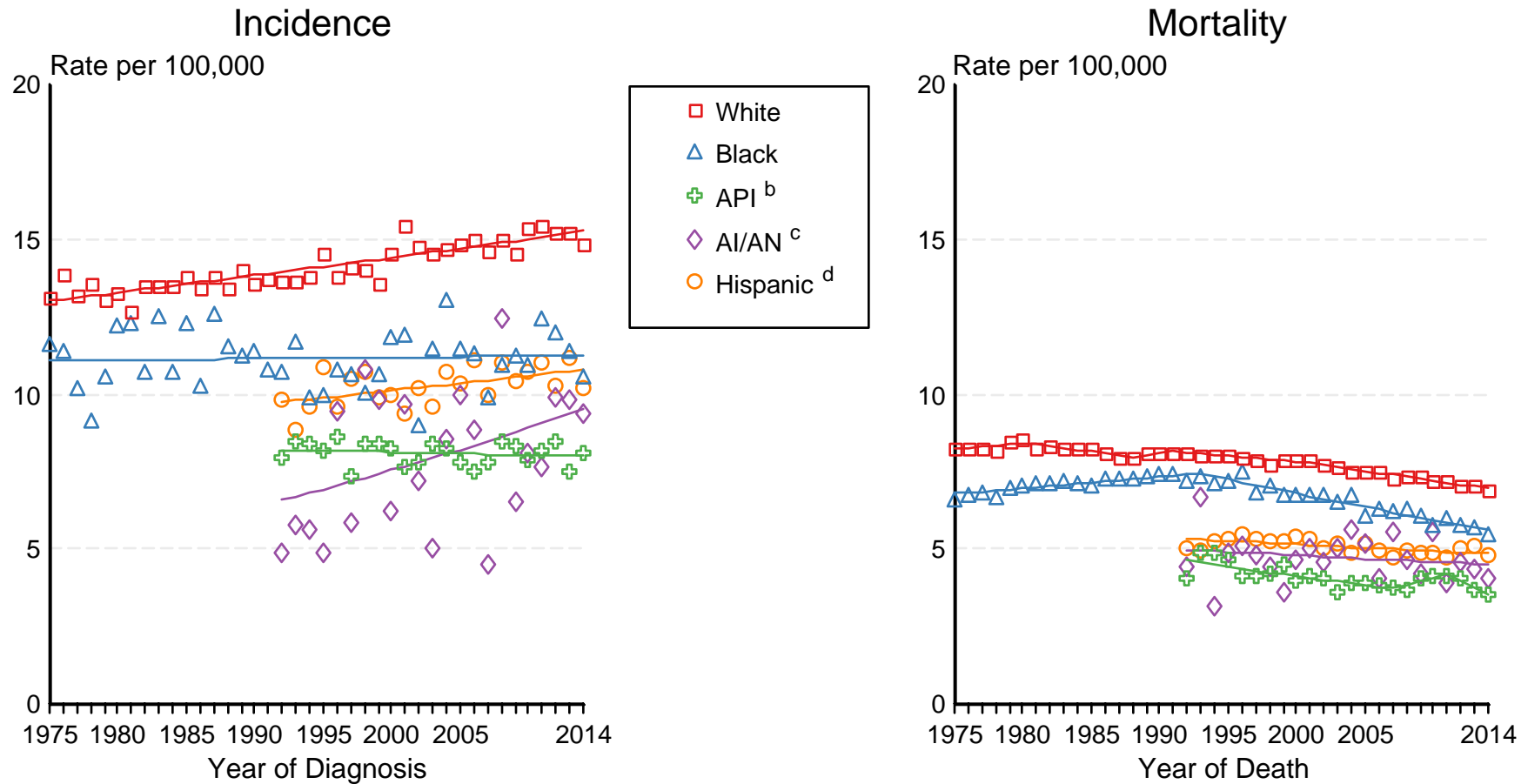
^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, National Cancer Institute.

Figure 13.3

SEER Incidence and US Death Rates^a Leukemia, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2014
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2014

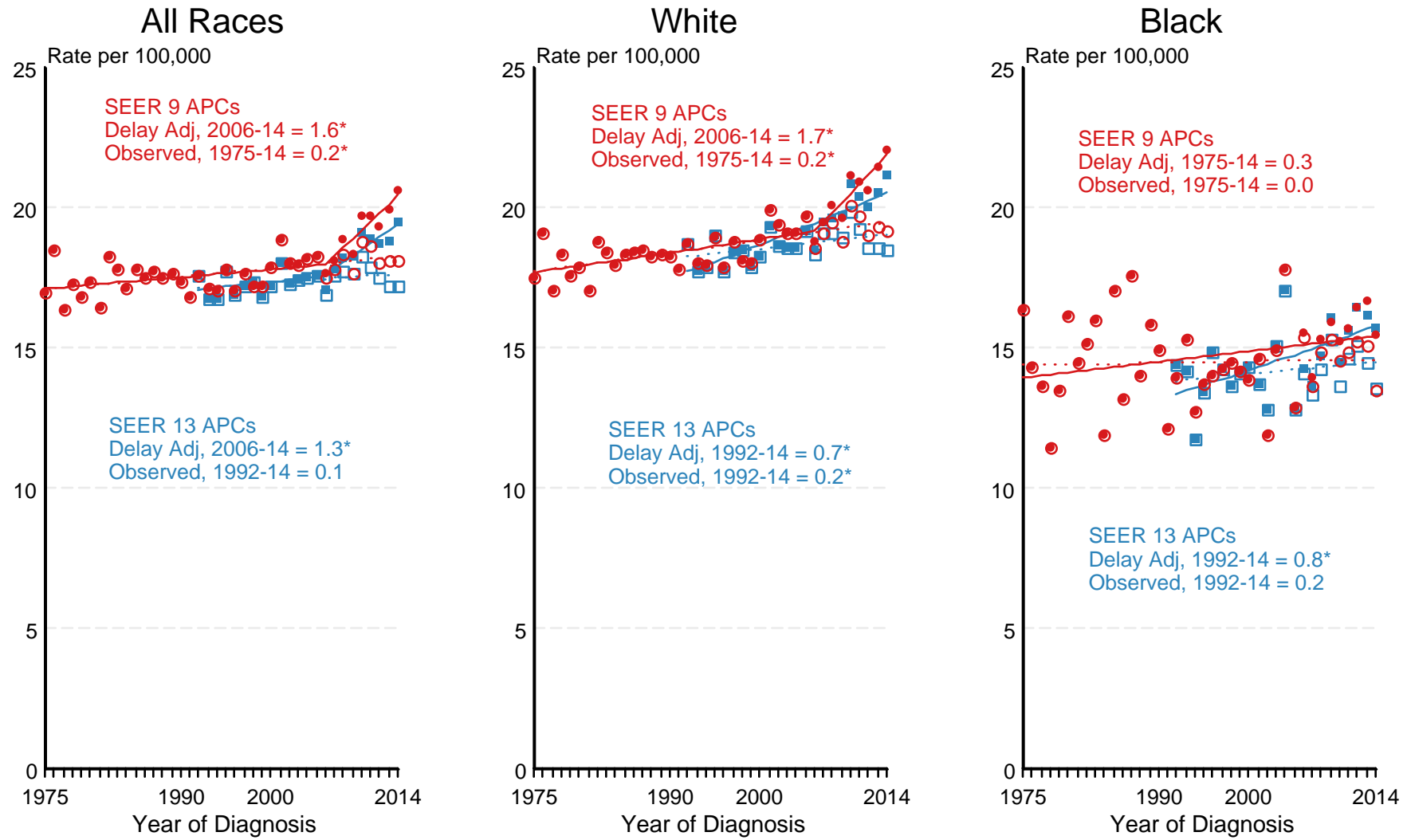


Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, 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 4.4, January 2017, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2014 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2014 allow a maximum of 4 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 New Hampshire and Oklahoma.

Figure 13.4

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Leukemia, Male, by Race

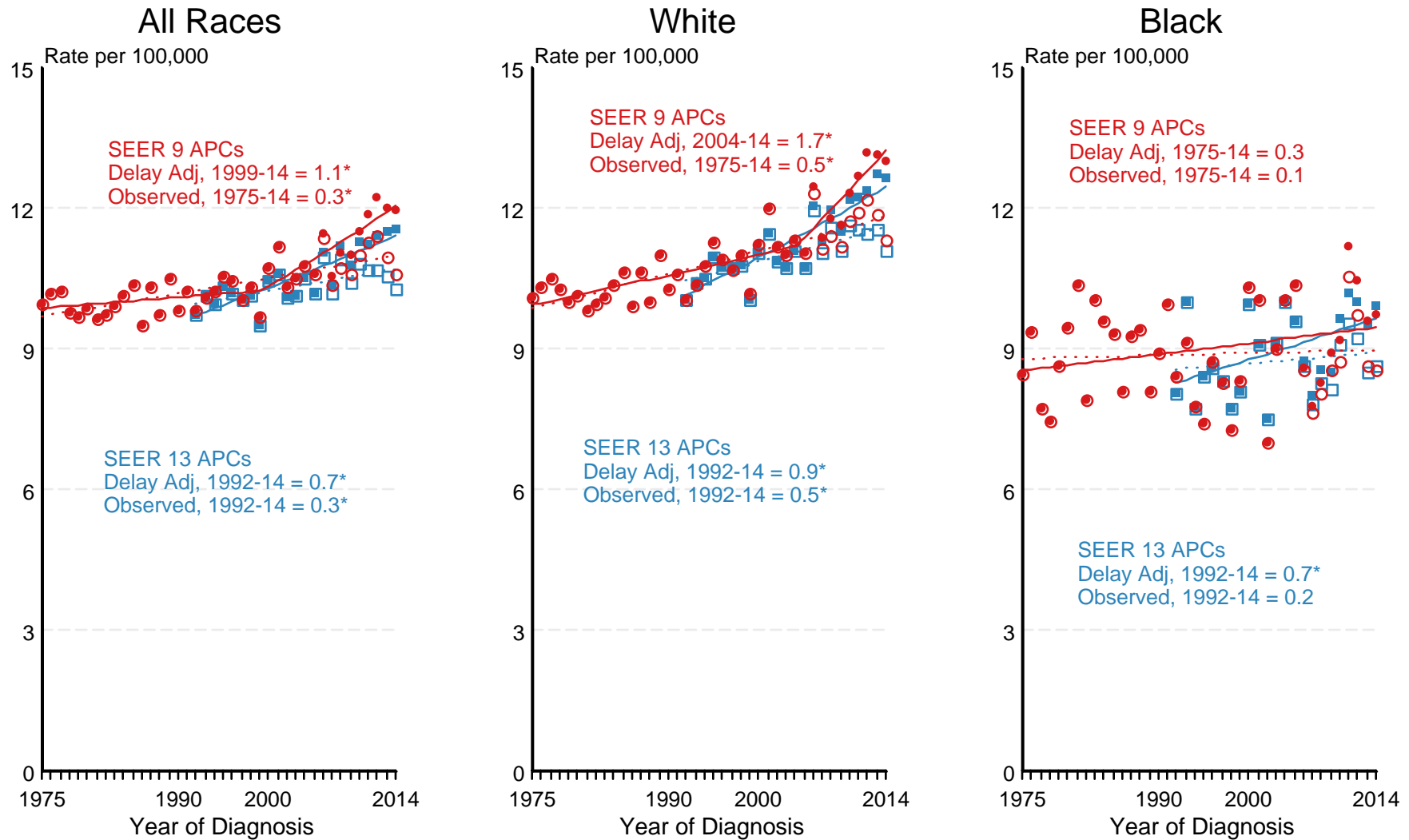


● SEER 9 Delay-Adj. Incidence
 ○ SEER 9 Observed Incidence
 ■ SEER 13 Delay-Adj. Incidence
 □ SEER 13 Observed Incidence

Source: SEER 9 areas and SEER 13 areas.
^a Rates are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1103).
 Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, 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 13.5

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a SEER 9 Areas Compared to SEER 13 Areas Leukemia, Female, by Race



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

Source: SEER 9 areas and SEER 13 areas.

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.4, January 2017, 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 ($p < 0.05$).