

Table 19.1  
Non-Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2012 With up to Five Joinpoints, 1992-2012 With up to Three Joinpoints,  
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2003-12	2008-12
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2012</u>														
All Races	1975-91	3.7*	1991-12	0.6*									0.6*	0.6*
White	1975-90	3.8*	1990-07	0.9*	2007-12	-0.6							0.0	-0.6
Black	1975-94	4.5*	1994-12	0.6									0.6	0.6
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2012</u>														
All Races	1992-10	0.6*	2010-12	-2.6									-0.2	-1.1
White	1992-10	0.6*	2010-12	-2.7									-0.1	-1.0
Black	1992-95	4.7	1995-12	0.4									0.4	0.4
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2012</u>														
All Races	1975-91	3.6*	1991-08	0.6*	2008-12	-1.4							-0.3	-1.4
White	1975-90	3.8*	1990-07	0.8*	2007-12	-1.3*							-0.4	-1.3*
Black	1975-94	4.6*	1994-12	0.4									0.4	0.4
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2012</u>														
All Races	1992-10	0.5*	2010-12	-4.0									-0.6	-1.8
White	1992-09	0.6*	2009-12	-2.6*									-0.5	-1.8*
White NH <sup>ef</sup>	1992-09	0.7*	2009-12	-2.8*									-0.5	-1.9*
Black	1992-97	4.0*	1997-00	-4.3	2000-04	3.9	2004-12	-1.1					-0.5	-1.1
Black NH <sup>ef</sup>	1992-97	3.8*	1997-00	-4.2	2000-04	3.9	2004-12	-0.9					-0.4	-0.9
API <sup>e</sup>	1992-12	0.2											0.2	0.2
AI/AN <sup>eg</sup>	1992-12	2.0*											2.0*	2.0*
Hispanic <sup>f</sup>	1992-10	0.6*	2010-12	-4.3									-0.5	-1.9
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2012</u>														
All Races	1975-91	2.5*	1991-97	1.6*	1997-06	-3.1*	2006-12	-2.2*					-2.5*	-2.2*
White	1975-91	2.5*	1991-97	1.6*	1997-06	-3.1*	2006-12	-2.1*					-2.5*	-2.1*
Black	1975-96	2.7*	1996-12	-2.4*									-2.4*	-2.4*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2012</u>														
All Races	1992-97	1.7*	1997-06	-3.1*	2006-12	-2.2*							-2.5*	-2.2*
White	1992-97	1.7*	1997-06	-3.1*	2006-12	-2.1*							-2.5*	-2.1*
White NH <sup>ef</sup>	1992-97	1.9*	1997-06	-3.1*	2006-12	-2.2*							-2.5*	-2.2*
Black	1992-96	2.7	1996-12	-2.4*									-2.4*	-2.4*
Black NH <sup>ef</sup>	1992-96	3.0	1996-12	-2.3*									-2.3*	-2.3*
API <sup>e</sup>	1992-12	-2.0*											-2.0*	-2.0*
AI/AN <sup>eg</sup>	1992-12	-0.4											-0.4	-0.4
Hispanic <sup>f</sup>	1992-97	3.1*	1997-03	-3.7*	2003-12	-1.2*							-1.2*	-1.2*

Joinpoint Regression Program Version 4.2.0, April 2015, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).  
<sup>a</sup> The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).  
<sup>b</sup> Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta).  
<sup>c</sup> Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry).  
<sup>d</sup> Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.  
<sup>e</sup> The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.  
<sup>f</sup> API - Asian/Pacific Islander, AI/AN - American Indian/Alaska Native, NH - Non-Hispanic  
<sup>f</sup> 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.  
<sup>f</sup> The Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.  
<sup>g</sup> 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 19.2  
Non-Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2012 With up to Five Joinpoints, 1992-2012 With up to Three Joinpoints,  
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2003-12	2008-12
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2012</u>														
All Races	1975-91	4.2*	1991-12	0.4*									0.4*	0.4*
White	1975-90	4.5*	1990-12	0.5*									0.5*	0.5*
Black	1975-94	5.4*	1994-12	-0.2									-0.2	-0.2
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2012</u>														
All Races	1992-95	2.8	1995-98	-2.2	1998-10	0.7*	2010-12	-2.8					-0.1	-1.1
White	1992-95	2.6*	1995-98	-2.0	1998-10	0.8*	2010-12	-2.8					0.0	-1.0
Black	1992-12	-0.1											-0.1	-0.1
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2012</u>														
All Races	1975-91	4.2*	1991-12	0.3*									0.3*	0.3*
White	1975-90	4.5*	1990-10	0.5*	2010-12	-3.6							-0.4	-1.6
Black	1975-94	5.5*	1994-12	-0.4									-0.4	-0.4
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2012</u>														
All Races	1992-95	2.8	1995-98	-2.1	1998-10	0.6*	2010-12	-4.1					-0.5	-1.8
White	1992-95	2.6	1995-98	-1.9	1998-10	0.6*	2010-12	-4.3					-0.5	-1.9
White NH <sup>ef</sup>	1992-95	2.9	1995-98	-1.9	1998-09	0.8*	2009-12	-2.7					-0.4	-1.8
Black	1992-12	-0.3											-0.3	-0.3
Black NH <sup>ef</sup>	1992-12	-0.2											-0.2	-0.2
API <sup>e</sup>	1992-12	0.2											0.2	0.2
AI/AN <sup>eg</sup>	1992-12	1.2											1.2	1.2
Hispanic <sup>f</sup>	1992-12	0.2											0.2	0.2
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2012</u>														
All Races	1975-91	2.7*	1991-97	1.6*	1997-06	-2.9*	2006-12	-1.9*					-2.2*	-1.9*
White	1975-96	2.5*	1996-12	-2.5*									-2.5*	-2.5*
Black	1975-96	2.7*	1996-12	-2.5*									-2.5*	-2.5*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2012</u>														
All Races	1992-97	1.7*	1997-06	-2.9*	2006-12	-1.8*							-2.2*	-1.8*
White	1992-97	1.7*	1997-07	-2.8*	2007-12	-1.7*							-2.2*	-1.7*
White NH <sup>ef</sup>	1992-97	1.7*	1997-12	-2.5*									-2.5*	-2.5*
Black	1992-96	2.7	1996-12	-2.4*									-2.4*	-2.4*
Black NH <sup>ef</sup>	1992-96	3.0	1996-12	-2.3*									-2.3*	-2.3*
API <sup>e</sup>	1992-12	-2.2*											-2.2*	-2.2*
AI/AN <sup>eg</sup>	1992-12	-0.3											-0.3	-0.3
Hispanic <sup>f</sup>	1992-96	4.4	1996-03	-3.8*	2003-12	-1.1							-1.1	-1.1

Joinpoint Regression Program Version 4.2.0, April 2015, National Cancer Institute. (<http://surveillance.cancer.gov/joinpoint/>).

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

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 19.3  
Non-Hodgkin Lymphoma

Trends in SEER Incidence<sup>ab</sup> and U.S. Mortality<sup>c</sup> Using the Joinpoint Regression Program,  
1975-2012 With up to Five Joinpoints, 1992-2012 With up to Three Joinpoints,  
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC <sup>d</sup>	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2003-12	2008-12
<u>SEER 9 Delay-Adjusted Incidence<sup>a</sup>, 1975-2012</u>														
All Races	1975-88	3.0*	1988-04	1.4*	2004-12	-0.5							-0.3	-0.5
White	1975-88	3.0*	1988-04	1.5*	2004-12	-0.5							-0.3	-0.5
Black	1975-83	7.9*	1983-12	1.9*									1.9*	1.9*
<u>SEER 13 Delay-Adjusted Incidence<sup>b</sup>, 1992-2012</u>														
All Races	1992-04	1.3*	2004-12	-0.4									-0.2	-0.4
White	1992-04	1.4*	2004-12	-0.4									-0.2	-0.4
Black	1992-98	5.3*	1998-12	0.7									0.7	0.7
<u>SEER 9 Observed Incidence<sup>a</sup>, 1975-2012</u>														
All Races	1975-88	3.0*	1988-04	1.4*	2004-12	-0.8*							-0.6*	-0.8*
White	1975-88	3.0*	1988-04	1.4*	2004-12	-1.0*							-0.7*	-1.0*
Black	1975-04	2.9*	2004-12	-0.7									-0.3	-0.7
<u>SEER 13 Observed Incidence<sup>b</sup>, 1992-2012</u>														
All Races	1992-04	1.3*	2004-12	-0.8*									-0.5	-0.8*
White	1992-04	1.4*	2004-12	-0.8*									-0.5	-0.8*
White NH <sup>ef</sup>	1992-04	1.5*	2004-12	-1.0*									-0.7*	-1.0*
Black	1992-98	5.4*	1998-12	0.4									0.4	0.4
Black NH <sup>ef</sup>	1992-98	5.3*	1998-12	0.5									0.5	0.5
API <sup>e</sup>	1992-12	0.3											0.3	0.3
AI/AN <sup>eg</sup>	1992-12	2.5*											2.5*	2.5*
Hispanic <sup>f</sup>	1992-12	0.8*											0.8*	0.8*
<u>U.S. Cancer Mortality<sup>c</sup>, 1975-2012</u>														
All Races	1975-94	2.2*	1994-97	0.8	1997-12	-3.1*							-3.1*	-3.1*
White	1975-94	2.2*	1994-97	0.8	1997-12	-3.1*							-3.1*	-3.1*
Black	1975-97	2.6*	1997-12	-2.5*									-2.5*	-2.5*
<u>U.S. Cancer Mortality<sup>c</sup>, 1992-2012</u>														
All Races	1992-94	3.4*	1994-98	0.1	1998-04	-3.7*	2004-12	-2.8*					-2.9*	-2.8*
White	1992-94	3.6*	1994-98	0.1	1998-04	-3.7*	2004-12	-2.8*					-2.9*	-2.8*
White NH <sup>ef</sup>	1992-94	4.2*	1994-98	0.1	1998-03	-3.8*	2003-12	-3.0*					-3.0*	-3.0*
Black	1992-97	1.9	1997-12	-2.4*									-2.4*	-2.4*
Black NH <sup>ef</sup>	1992-97	2.1	1997-12	-2.3*									-2.3*	-2.3*
API <sup>e</sup>	1992-12	-1.6*											-1.6*	-1.6*
AI/AN <sup>eg</sup>	1992-01	5.6	2001-12	-4.5*									-4.5*	-4.5*
Hispanic <sup>f</sup>	1992-97	2.8	1997-12	-2.0*									-2.0*	-2.0*

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

Table 19.4  
Non-Hodgkin Lymphoma

Delay-adjusted SEER Incidence<sup>a</sup> Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975	11.07	12.89	9.59	11.61	13.49	10.11	6.36	7.31	5.31
1976	11.22	12.82	10.06	11.65	13.27	10.51	6.04	7.45	5.03
1977	11.18	12.93	9.82	11.64	13.52	10.20	6.64	7.23	6.10
1978	11.92	14.28	10.12	12.48	14.77	10.74	7.15	9.46	5.17
1979	12.53	14.21	11.21	12.99	14.59	11.77	8.46	11.95	5.91
1980	12.62	15.01	10.81	12.97	15.26	11.22	8.77	10.89	7.20
1981	13.58	15.90	11.81	14.06	16.34	12.35	7.42	10.59	4.98
1982	13.39	15.56	11.61	14.02	16.42	12.05	10.27	10.22	10.01
1983	13.99	16.62	11.95	14.63	17.52	12.39	10.28	10.88	9.62
1984	15.19	18.29	12.79	15.96	19.10	13.54	9.46	12.52	6.92
1985	15.51	18.39	13.17	16.28	19.24	13.86	9.95	11.96	8.43
1986	15.91	19.42	13.03	16.83	20.55	13.78	10.66	13.13	8.52
1987	16.74	20.79	13.42	17.70	22.14	14.00	10.40	10.55	9.95
1988	17.25	21.32	14.08	18.20	22.41	14.90	11.58	15.79	8.49
1989	17.35	21.65	13.84	18.35	23.02	14.50	11.62	14.17	9.72
1990	18.51	22.98	14.81	19.33	23.94	15.50	13.92	17.63	11.02
1991	18.81	23.74	14.60	19.68	24.81	15.29	14.03	18.72	10.37
1992	18.63	23.05	14.94	19.56	23.95	15.84	13.68	18.87	9.65
1993	18.86	23.47	15.01	19.65	24.30	15.71	14.11	19.37	9.78
1994	19.95	24.96	15.80	20.68	25.58	16.56	14.43	21.52	8.77
1995	19.99	25.43	15.43	20.68	26.16	16.02	16.70	23.54	11.38
1996	19.42	24.21	15.49	20.26	25.19	16.20	15.46	19.19	12.30
1997	19.98	24.51	16.44	20.86	25.20	17.44	16.31	24.10	10.84
1998	19.61	22.95	16.84	20.58	24.00	17.74	14.43	16.78	12.55
1999	19.96	24.59	16.34	20.92	25.49	17.31	14.40	18.45	11.32
2000	19.78	24.30	16.12	20.93	25.64	17.07	13.91	18.27	10.68
2001	20.03	24.41	16.48	20.84	25.47	17.08	16.06	18.39	13.97
2002	20.24	24.23	17.10	21.36	25.55	17.98	14.58	17.34	12.50
2003	20.80	25.08	17.56	21.96	26.40	18.52	16.12	19.73	13.60
2004	21.46	25.98	17.99	22.43	26.95	18.91	18.55	24.13	14.51
2005	20.94	25.71	17.13	22.13	26.91	18.27	16.96	20.33	14.23
2006	20.60	24.81	17.33	21.87	26.18	18.47	16.45	20.99	13.08
2007	21.37	26.27	17.47	22.72	27.80	18.55	15.81	19.30	13.18
2008	21.05	25.89	17.10	21.98	27.05	17.79	17.06	19.28	15.07
2009	21.06	25.40	17.54	22.17	26.87	18.24	15.45	18.91	12.90
2010	21.70	26.99	17.40	22.66	27.81	18.43	17.94	23.44	13.58
2011	20.28	24.88	16.63	21.26	26.02	17.45	14.92	17.94	12.68
2012	20.88	25.62	17.05	21.93	26.80	17.92	17.19	19.63	15.00

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

<sup>a</sup> 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 19.5  
Non-Hodgkin Lymphoma

Age-adjusted SEER Incidence<sup>a</sup> Rates by Year, Race and Sex

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2012	18.22	22.33	14.96	18.96	23.18	15.60	13.80	17.31	11.05
1975	11.07	12.89	9.59	11.61	13.49	10.11	6.36	7.31	5.31
1976	11.22	12.82	10.06	11.65	13.27	10.51	6.04	7.45	5.03
1977	11.18	12.93	9.82	11.64	13.52	10.20	6.64	7.23	6.10
1978	11.92	14.28	10.12	12.48	14.77	10.74	7.15	9.46	5.17
1979	12.53	14.21	11.21	12.99	14.59	11.77	8.46	11.95	5.91
1980	12.62	15.01	10.81	12.97	15.26	11.22	8.77	10.89	7.20
1981	13.58	15.90	11.81	14.06	16.34	12.35	7.42	10.59	4.98
1982	13.39	15.56	11.61	14.02	16.42	12.05	10.27	10.22	10.01
1983	13.99	16.62	11.95	14.63	17.52	12.39	10.28	10.88	9.62
1984	15.19	18.29	12.79	15.96	19.10	13.54	9.46	12.52	6.92
1985	15.51	18.39	13.17	16.28	19.24	13.86	9.95	11.96	8.43
1986	15.91	19.42	13.03	16.83	20.55	13.78	10.66	13.13	8.52
1987	16.74	20.79	13.42	17.70	22.14	14.00	10.40	10.55	9.95
1988	17.25	21.32	14.08	18.20	22.41	14.90	11.58	15.79	8.49
1989	17.35	21.65	13.84	18.35	23.02	14.50	11.62	14.17	9.72
1990	18.51	22.98	14.81	19.33	23.94	15.50	13.92	17.63	11.02
1991	18.81	23.74	14.60	19.68	24.81	15.29	14.03	18.72	10.37
1992	18.63	23.05	14.94	19.56	23.95	15.84	13.68	18.87	9.65
1993	18.86	23.47	15.01	19.65	24.30	15.71	14.11	19.37	9.78
1994	19.95	24.96	15.80	20.68	25.58	16.56	14.43	21.52	8.77
1995	19.99	25.43	15.43	20.68	26.16	16.02	16.70	23.54	11.38
1996	19.42	24.21	15.49	20.26	25.19	16.20	15.46	19.19	12.30
1997	19.98	24.51	16.44	20.86	25.20	17.44	16.31	24.10	10.84
1998	19.60	22.94	16.84	20.57	23.99	17.73	14.42	16.77	12.54
1999	19.95	24.58	16.33	20.90	25.46	17.29	14.38	18.42	11.31
2000	19.76	24.28	16.10	20.89	25.60	17.05	13.88	18.23	10.65
2001	20.00	24.37	16.45	20.79	25.41	17.04	16.01	18.33	13.92
2002	20.20	24.18	17.06	21.29	25.47	17.93	14.51	17.26	12.45
2003	20.74	25.01	17.51	21.87	26.29	18.45	16.02	19.61	13.52
2004	21.38	25.88	17.93	22.31	26.81	18.82	18.41	23.94	14.41
2005	20.84	25.58	17.05	21.99	26.73	18.15	16.81	20.14	14.10
2006	20.47	24.65	17.23	21.68	25.96	18.32	16.27	20.76	12.94
2007	21.20	26.06	17.33	22.47	27.50	18.36	15.59	19.02	13.00
2008	20.83	25.61	16.92	21.69	26.67	17.56	16.77	18.94	14.83
2009	20.77	25.04	17.30	21.79	26.40	17.93	15.13	18.50	12.64
2010	21.30	26.49	17.09	22.15	27.16	18.04	17.49	22.84	13.24
2011	19.76	24.23	16.22	20.61	25.20	16.94	14.40	17.30	12.25
2012	20.05	24.56	16.39	20.88	25.48	17.09	16.33	18.62	14.27

<sup>a</sup> 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 19.6  
Non-Hodgkin Lymphoma

Age-adjusted U.S. Death<sup>a</sup> Rates by Year, Race and Sex

Year of Death:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2012	7.23	9.04	5.90	7.53	9.39	6.16	4.90	6.30	3.89
1975	5.63	6.92	4.65	5.83	7.15	4.82	3.74	4.83	2.92
1976	5.71	6.87	4.83	5.94	7.14	5.03	3.54	4.54	2.76
1977	5.77	6.88	4.92	5.96	7.10	5.10	3.89	4.89	3.12
1978	5.93	7.30	4.90	6.15	7.53	5.12	3.90	5.40	2.81
1979	5.95	7.40	4.88	6.18	7.70	5.08	3.65	4.50	2.98
1980	6.23	7.47	5.29	6.47	7.74	5.52	3.99	5.15	3.12
1981	6.16	7.38	5.27	6.40	7.66	5.47	3.98	5.00	3.25
1982	6.55	7.98	5.49	6.83	8.29	5.74	4.12	5.23	3.29
1983	6.66	8.11	5.58	6.92	8.39	5.85	4.30	5.79	3.23
1984	6.76	8.15	5.75	7.05	8.50	6.01	4.19	5.28	3.39
1985	7.06	8.80	5.80	7.34	9.17	6.02	4.62	5.57	3.87
1986	7.31	8.98	6.05	7.59	9.25	6.33	4.95	6.64	3.70
1987	7.26	8.81	6.10	7.56	9.12	6.38	4.73	6.30	3.62
1988	7.52	9.28	6.24	7.82	9.59	6.53	5.01	6.82	3.72
1989	7.83	9.73	6.43	8.12	10.04	6.71	5.33	7.10	4.07
1990	7.87	9.97	6.34	8.16	10.32	6.58	5.39	7.13	4.17
1991	8.19	10.15	6.74	8.50	10.52	7.00	5.70	7.17	4.61
1992	8.22	10.30	6.69	8.53	10.66	6.96	5.64	7.23	4.45
1993	8.25	10.14	6.86	8.57	10.45	7.17	5.69	7.53	4.40
1994	8.63	10.75	7.10	9.00	11.20	7.41	5.54	6.82	4.56
1995	8.72	10.81	7.16	9.09	11.21	7.49	5.79	7.62	4.45
1996	8.75	10.94	7.14	9.09	11.29	7.46	6.21	8.25	4.74
1997	8.88	11.03	7.25	9.21	11.35	7.57	6.34	8.45	4.87
1998	8.69	10.85	7.10	9.03	11.27	7.38	5.99	7.50	4.89
1999	8.32	10.36	6.85	8.67	10.71	7.18	5.65	7.44	4.41
2000	8.17	10.20	6.70	8.54	10.63	7.01	5.20	6.61	4.17
2001	7.91	9.98	6.42	8.21	10.31	6.68	5.61	7.28	4.47
2002	7.65	9.66	6.19	7.97	10.04	6.44	5.41	6.88	4.41
2003	7.38	9.40	5.92	7.69	9.81	6.13	4.94	5.83	4.27
2004	7.09	8.94	5.73	7.38	9.28	5.96	5.01	6.23	4.13
2005	6.95	8.87	5.56	7.24	9.22	5.79	4.77	6.11	3.81
2006	6.74	8.48	5.44	7.01	8.78	5.66	4.92	6.27	3.93
2007	6.59	8.36	5.26	6.86	8.67	5.49	4.52	5.77	3.62
2008	6.41	8.20	5.09	6.71	8.56	5.33	4.31	5.48	3.45
2009	6.30	8.12	4.93	6.56	8.42	5.13	4.49	6.15	3.41
2010	6.14	7.83	4.85	6.37	8.11	5.04	4.57	5.84	3.64
2011	6.03	7.85	4.64	6.28	8.16	4.83	4.36	5.75	3.40
2012	5.91	7.62	4.61	6.17	7.95	4.80	4.27	5.39	3.49

<sup>a</sup> 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 19.7  
Non-Hodgkin Lymphoma

SEER Incidence<sup>a</sup> and U.S. Death<sup>b</sup> 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, 2008-2012									
All ages	19.7	23.9	16.3	20.6	24.9	17.1	14.6	17.8	12.1
Under 65	9.3	11.0	7.6	9.5	11.2	7.8	9.0	11.2	7.0
65 and over	91.6	112.8	76.4	97.3	119.2	81.3	53.2	63.7	46.8
All ages (IARC world std) <sup>c</sup>	13.0	15.6	10.7	13.6	16.2	11.2	10.5	12.9	8.6
Age-Specific Rates, 2008-2012									
<1	-	-	-	-	-	-	-	-	-
1-4	0.7	0.9	0.5	0.7	0.9	0.5	0.7	-	-
5-9	1.1	1.6	0.6	1.0	1.5	0.5	1.2	1.6	-
10-14	1.3	1.7	0.9	1.3	1.6	0.9	1.6	1.9	1.2
15-19	1.7	2.3	1.2	1.8	2.3	1.2	1.6	2.2	1.0
20-24	2.5	3.1	1.9	2.6	3.1	2.0	2.6	3.6	1.5
25-29	3.5	4.0	3.0	3.3	3.8	2.8	4.5	5.4	3.7
30-34	4.8	5.7	3.9	4.6	5.5	3.8	6.2	7.8	4.8
35-39	7.3	8.6	6.0	7.3	8.6	5.9	9.4	11.5	7.6
40-44	10.1	12.3	8.0	10.3	12.4	8.2	10.9	13.2	8.8
45-49	14.6	17.3	11.9	15.1	17.8	12.4	14.5	18.7	10.8
50-54	21.5	25.4	17.8	22.4	26.4	18.4	20.4	24.3	17.0
55-59	30.5	36.0	25.4	31.8	36.9	26.9	26.6	35.0	19.4
60-64	44.2	51.9	37.2	46.4	54.0	39.1	34.4	41.2	28.8
65-69	64.2	75.2	54.4	67.8	78.7	57.9	45.8	52.3	40.8
70-74	82.9	99.3	69.2	89.0	106.2	74.4	48.6	57.3	42.3
75-79	106.3	131.2	87.3	113.4	138.9	93.4	62.5	73.7	55.3
80-84	119.9	146.7	102.2	127.6	155.7	108.5	61.5	75.4	54.0
85+	111.5	152.4	91.0	116.3	159.0	94.9	53.7	71.2	46.5
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2008-2012									
All ages	6.2	7.9	4.8	6.4	8.2	5.0	4.4	5.7	3.5
Under 65	1.5	2.0	1.1	1.5	2.0	1.1	1.8	2.4	1.3
65 and over	38.0	48.6	30.6	40.1	51.1	32.3	22.2	28.6	18.4
All ages (IARC world std) <sup>c</sup>	3.3	4.3	2.5	3.5	4.4	2.6	2.7	3.6	2.1
Age-Specific Rates, 2008-2012									
<1	-	-	-	-	-	-	-	-	-
1-4	0.0	-	-	-	-	-	-	-	-
5-9	0.1	0.1	0.0	0.1	0.1	0.0	-	-	-
10-14	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-
15-19	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.3	-
20-24	0.3	0.4	0.2	0.3	0.4	0.2	0.3	0.4	0.3
25-29	0.4	0.6	0.3	0.4	0.5	0.3	0.7	1.0	0.5
30-34	0.6	0.8	0.4	0.6	0.7	0.4	0.9	1.2	0.6
35-39	0.8	1.0	0.6	0.8	1.0	0.5	1.4	1.8	1.0
40-44	1.3	1.7	0.9	1.2	1.6	0.8	2.0	2.3	1.7
45-49	2.1	2.7	1.4	2.0	2.7	1.4	2.7	3.5	2.1
50-54	3.6	4.7	2.4	3.5	4.7	2.4	4.5	6.1	3.1
55-59	6.1	8.1	4.2	6.2	8.2	4.3	6.4	8.8	4.4
60-64	10.2	13.3	7.4	10.6	13.7	7.6	9.6	13.0	6.8
65-69	16.5	20.9	12.6	17.2	21.8	13.0	13.1	16.0	10.9
70-74	26.4	33.2	20.8	27.9	34.9	22.0	18.1	23.4	14.3
75-79	41.4	52.1	33.1	43.8	54.9	35.1	24.1	30.4	20.1
80-84	59.7	76.8	48.2	62.9	80.5	50.8	32.8	45.3	26.1
85+	78.2	103.0	66.1	82.6	108.5	69.8	35.1	44.6	31.4

<sup>a</sup> 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.

<sup>b</sup> US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

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

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

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

Table 19.8  
Non-Hodgkin Lymphoma

## 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 <sup>a</sup>	-	-	-	31	31	31	-	-	-
1970-1973 <sup>a</sup>	-	-	-	41	39	43	-	-	-
1975-1977 <sup>b</sup>	46.5	45.6	47.5	46.8	46.3	47.3	48.6	42.6	55.3 <sup>g</sup>
1978-1980 <sup>b</sup>	47.9	46.1	49.8	47.9	46.2	49.5	51.3	47.3	56.7
1981-1983 <sup>b</sup>	50.5	50.2	50.9	50.7	50.4	51.0	49.4	49.0	49.8
1984-1986 <sup>b</sup>	51.5	49.9	53.3	51.9	50.4	53.6	46.8	44.5	49.9
1987-1989 <sup>b</sup>	50.9	47.6	54.9	51.3	48.1	55.2	45.9	41.7	51.0
1990-1992 <sup>b</sup>	50.7	46.7	55.7	51.5	47.6	56.4	42.2	38.2	47.7
1993-1995 <sup>b</sup>	52.5	48.7	57.4	53.2	49.7	57.6	42.1	35.7	54.0
1996-1998 <sup>b</sup>	58.8	57.0	61.0	59.4	57.6	61.4	54.7	53.2	56.9
1999-2001 <sup>b</sup>	63.9	61.4	66.9	64.9	62.8	67.5	55.7	48.9	63.8
2002-2004 <sup>b</sup>	69.7	68.5	71.2	71.0	70.1	72.1	63.5	60.9	66.5
2005-2011 <sup>b</sup>	71.9 <sup>f</sup>	70.8 <sup>f</sup>	73.3 <sup>f</sup>	73.0 <sup>f</sup>	72.1 <sup>f</sup>	74.0 <sup>f</sup>	64.0 <sup>f</sup>	59.2 <sup>f</sup>	69.0 <sup>f</sup>
5-Year Period Survival (Percent) <sup>cd</sup>									
2011	70.6	69.1	72.3	71.1	69.8	72.7	63.7	60.3	67.6
Stage Distribution (%) 2005-2011 <sup>ce</sup>									
All Stages									
Number of cases	93,276	50,477	42,799	77,757	42,131	35,626	7,576	4,093	3,483
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	28	27	29	27	26	29	28	25	31
Regional	15	15	15	15	15	15	15	14	15
Distant	50	51	47	50	52	48	51	55	47
Unstaged	8	7	8	7	7	8	7	6	7
5-Year Relative Survival (Percent), 2005-2011 <sup>c</sup>									
Age at Diagnosis:									
Ages <45	80.4	78.0	84.2	82.3	79.7	86.5	67.2	64.7	71.0
Ages 45-54	78.2	74.9	83.0	80.1	77.2	84.5	62.5	57.2	70.2
Ages 55-64	75.7	72.7	79.7	76.6	73.8	80.4	66.4	60.9	73.7
Ages 65-74	70.6	67.8	73.8	71.2	68.5	74.3	64.8	56.3	71.6
Ages 75+	54.2	53.2	55.1	54.9	53.7	55.9	45.1	42.3	46.1
Ages <65	77.7	74.9	81.8	79.1	76.4	83.1	65.5	61.2	71.7
Ages 65+	61.7	60.4	62.9	62.2	61.0	63.4	56.2	51.3	59.2
Stage <sup>e</sup> :									
All Stages	70.0	68.6	71.6	70.6	69.4	72.0	62.8	59.1	67.2
Localized	82.0	81.7	82.3	82.5	82.5	82.4	77.1	73.0	80.8
Regional	73.8	73.2	74.6	74.4	74.0	74.9	68.7	66.8	70.5
Distant	62.4	60.8	64.4	63.5	61.8	65.5	53.6	50.9	57.3
Unstaged	68.6	67.1	70.1	67.4	66.0	68.9	60.8	57.3	64.1

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

<sup>b</sup> SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta).

Based on follow-up of patients into 2012.

<sup>c</sup> 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 2012.

<sup>d</sup> Period survival provides a 2011 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2009-2011: 0-1 year survival), (2008-2010: 1-2 year survival), (2007-2009: 2-3 year survival), (2006-2008: 3-4 year survival), (2005-2007: 4-5 years survival).

<sup>e</sup> Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

<sup>f</sup> The difference between 1975-1977 and 2005-2011 is statistically significant (p<.05).

<sup>g</sup> The standard error is between 5 and 10 percentage points.

<sup>h</sup> 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 19.9  
Non-Hodgkin Lymphoma

SEER<sup>a</sup> 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
Survival Time																					
1-year	70.2	73.0	71.2	70.4	70.3	73.2	75.6	76.6	77.4	77.2	78.6	80.9	80.3	81.0	81.6	80.9	81.6	83.9	83.8	84.0	83.1
2-year	60.2	63.7	62.8	62.2	61.8	65.9	68.5	70.0	71.1	71.3	73.2	76.0	75.7	76.0	77.2	76.9	77.4	78.8	79.3	79.3	
3-year	54.7	58.5	58.2	57.7	57.4	62.0	64.9	66.4	66.9	67.8	70.0	73.1	73.1	73.5	74.7	74.4	74.9	75.9	77.0		
4-year	50.6	54.5	54.3	54.4	54.6	58.7	62.1	63.6	64.4	65.4	68.0	71.1	71.5	71.4	72.7	72.5	72.9	74.2			
5-year	46.8	50.7	51.0	51.6	51.9	56.0	59.3	60.9	62.1	63.8	65.8	69.2	70.0	70.0	71.3	70.4	70.9				
6-year	43.6	47.5	48.3	49.2	49.8	54.1	57.1	58.3	59.5	61.9	64.5	68.0	68.3	68.6	70.0	68.6					
7-year	40.8	45.0	45.8	46.9	47.8	52.1	55.2	56.4	57.7	60.3	62.8	66.1	67.1	67.0	68.0						
8-year	38.5	42.8	43.4	45.0	46.3	50.4	52.9	55.2	56.3	58.7	61.1	65.0	65.6	66.4							
9-year	36.5	40.8	41.4	43.4	45.1	49.2	51.4	53.4	54.7	57.4	59.8	63.8	64.6								
10-year	34.9	38.9	39.8	42.0	44.2	48.0	50.1	52.2	53.6	56.1	58.7	63.0									
11-year	33.5	37.3	38.4	40.5	43.2	46.6	48.7	51.0	52.4	54.5	57.8										
12-year	32.3	35.9	36.9	39.5	42.1	45.6	48.0	50.0	51.1	53.2											
13-year	31.4	34.7	35.7	38.3	41.3	44.7	46.7	49.0	49.9												
14-year	30.2	33.5	34.6	37.1	40.4	44.2	45.4	48.3													
15-year	28.8	32.2	33.5	36.4	39.5	43.5	44.4														
16-year	27.9	31.1	32.7	35.5	38.9	43.5															
17-year	27.3	30.3	32.0	34.7	38.5																
18-year	26.7	29.5	31.2	33.9																	
19-year	26.0	28.7	30.5																		
20-year	25.1	27.9	30.0																		

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

Table 19.10  
Non-Hodgkin Lymphoma

SEER<sup>a</sup> 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
Survival Time																					
1-year	69.4	72.7	68.8	67.0	66.7	71.1	74.6	74.9	75.9	76.4	77.5	80.6	79.6	80.0	81.0	80.9	81.4	83.4	82.6	83.4	83.5
2-year	59.4	63.7	60.4	58.2	58.4	63.6	67.2	68.2	69.3	70.2	71.1	75.3	74.8	75.3	76.1	76.4	77.7	77.6	77.8	78.5	
3-year	53.4	58.1	55.7	53.7	54.5	59.8	63.8	64.6	64.3	66.7	67.8	71.9	72.6	72.4	72.9	73.5	75.3	74.9	75.4		
4-year	49.4	53.9	51.5	50.4	51.5	56.1	61.0	62.0	61.5	63.8	65.6	70.0	70.8	70.0	70.9	71.2	73.2	73.1			
5-year	45.5	50.1	48.1	47.6	48.5	53.6	58.2	59.2	59.1	61.6	63.5	67.9	68.9	68.7	69.6	68.7	70.8				
6-year	42.6	46.6	45.4	45.6	46.8	51.0	56.1	56.5	56.2	60.1	61.8	66.7	66.9	67.4	68.1	66.9					
7-year	39.9	44.2	43.1	43.6	44.8	49.1	54.2	54.5	54.6	58.5	59.9	65.2	65.7	65.2	66.4						
8-year	37.8	42.0	40.9	41.7	43.2	47.5	52.0	53.3	53.6	56.5	58.1	63.6	64.3	64.7							
9-year	35.7	40.0	39.0	40.2	42.2	46.4	50.4	51.4	52.3	55.1	57.0	62.7	63.1								
10-year	34.0	37.9	37.6	39.1	41.5	45.4	48.8	50.3	51.5	54.0	55.8	61.6									
11-year	32.8	36.3	36.3	38.0	40.6	43.7	47.6	49.3	50.7	52.4	54.4										
12-year	31.9	35.2	35.0	37.2	39.4	42.5	47.0	48.1	49.8	51.1											
13-year	30.6	34.2	34.2	36.0	38.7	41.6	45.4	46.7	49.1												
14-year	29.4	33.0	33.1	34.9	37.6	41.3	44.2	46.0													
15-year	28.0	31.9	32.3	34.3	36.6	40.7	43.3														
16-year	27.1	30.7	31.5	33.2	35.9	40.7															
17-year	26.5	29.9	30.7	32.5	35.6																
18-year	26.1	29.3	30.1	31.8																	
19-year	25.5	28.7	29.3																		
20-year	25.0	27.9	29.0																		

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

Table 19.11  
Non-Hodgkin Lymphoma

SEER<sup>a</sup> 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
Survival Time																					
1-year	71.1	73.3	73.9	74.7	75.1	75.8	76.7	78.5	79.3	78.1	80.1	81.4	81.1	82.0	82.3	80.8	81.8	84.4	85.1	84.9	82.7
2-year	61.1	63.7	65.6	67.3	66.3	68.7	70.1	72.0	73.4	72.7	75.7	76.8	76.6	76.7	78.4	77.3	77.1	80.2	81.0	80.3	
3-year	56.0	58.9	61.1	62.7	61.4	64.9	66.2	68.4	69.9	69.2	72.7	74.4	73.6	74.7	76.7	75.5	74.4	77.1	78.9		
4-year	51.9	55.2	57.6	59.5	58.9	61.9	63.4	65.3	68.0	67.4	70.9	72.4	72.4	73.1	74.9	73.9	72.6	75.4			
5-year	48.2	51.3	54.4	56.6	56.4	59.0	60.7	62.9	65.7	66.4	68.7	70.7	71.2	71.6	73.3	72.3	71.1				
6-year	44.6	48.4	51.7	53.9	53.8	58.0	58.3	60.3	63.4	64.2	67.7	69.6	69.9	70.0	72.3	70.7					
7-year	41.8	45.8	49.1	51.1	51.9	56.0	56.3	58.5	61.4	62.5	66.1	67.1	68.6	69.1	69.8						
8-year	39.3	43.7	46.3	49.1	50.3	54.1	53.9	57.3	59.5	61.4	64.7	66.5	67.1	68.3							
9-year	37.4	41.6	44.2	47.5	49.0	52.8	52.6	55.7	57.6	60.2	63.1	65.1	66.3								
10-year	36.0	39.8	42.4	45.8	47.7	51.3	51.5	54.2	56.0	58.6	62.1	64.6									
11-year	34.2	38.4	40.9	43.8	46.6	50.1	49.9	52.8	54.5	56.9	61.7										
12-year	32.9	36.8	39.1	42.5	45.6	49.4	49.2	52.2	52.7	55.7											
13-year	32.1	35.2	37.5	41.1	44.7	48.4	48.3	51.6	50.8												
14-year	31.0	34.0	36.4	39.9	43.8	47.7	46.7	50.9													
15-year	29.7	32.5	34.9	39.0	43.2	47.0	45.6														
16-year	28.7	31.5	34.2	38.4	43.0	46.5															
17-year	28.2	30.6	33.5	37.6	42.2																
18-year	27.4	29.7	32.6	36.5																	
19-year	26.4	28.7	31.9																		
20-year	25.3	27.9	31.1																		

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

Table 19.12

## Non-Hodgkin Lymphoma

## Number of Cases

By SEER Location and Year of Diagnosis, 1975-2012

All Races, Males, All Ages

## Year of Diagnosis

SEER Location	1975- 1979	1980- 1981	1982- 1983	1984- 1985	1986- 1987	1988- 1989	1990- 1991	1992- 1993	1994- 1995	1996- 1997	1998- 1999	2000- 2001	2002- 2003	2004- 2005	2006- 2007	2008- 2009	2010- 2012
SEER 9 <sup>b</sup>	5,223	2,506	2,704	3,176	3,626	3,990	4,570	4,731	5,326	5,253	5,260	5,550	5,767	6,218	6,380	6,665	10,461
SEER 9 except SF-Oakland	4,285	2,088	2,267	2,603	2,818	3,088	3,507	3,696	4,159	4,244	4,362	4,503	4,814	5,201	5,381	5,597	8,771
San Francisco-Oakland SMSA <sup>c</sup>	938	418	437	573	808	902	1,063	1,035	1,167	1,009	898	1,047	953	1,017	999	1,068	1,690
San Francisco City/County	245	96	123	210	326	393	467	410	451	353	213	256	219	284	220	214	356

Age-Adjusted Cancer Incidence Rates<sup>a</sup>

By SEER Location and Year of Diagnosis, 1975-2012

All Races, Males, All Ages

## Year of Diagnosis

SEER Location	1975- 1979	1980- 1981	1982- 1983	1984- 1985	1986- 1987	1988- 1989	1990- 1991	1992- 1993	1994- 1995	1996- 1997	1998- 1999	2000- 2001	2002- 2003	2004- 2005	2006- 2007	2008- 2009	2010- 2012
SEER 9 <sup>b</sup>	13.4	15.5	16.1	18.3	20.1	21.5	23.4	23.3	25.2	24.4	23.8	24.3	24.6	25.7	25.4	25.3	25.1
SEER 9 except SF-Oakland	13.2	15.4	16.1	18.1	18.8	20.0	21.7	21.8	23.6	23.5	23.5	23.5	24.4	25.6	25.3	25.2	24.9
San Francisco-Oakland SMSA <sup>c</sup>	14.8	15.8	16.0	19.4	26.7	28.4	31.7	30.5	33.5	28.7	25.1	28.6	25.5	26.6	25.5	26.1	25.9
San Francisco City/County	14.3	14.4	17.6	29.3	44.4	51.9	61.0	52.3	57.5	44.6	27.4	32.5	26.8	35.6	26.6	25.4	26.9

<sup>a</sup> Rates are per 100,000 males and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).<sup>b</sup> The SEER 9 areas are San Francisco-Oakland SMSA, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.<sup>c</sup> The San Francisco-Oakland SMSA represents 15% of all persons in the SEER areas. For this age group, all SEER areas may not be generalizable to the United States for Non-Hodgkin Lymphoma.

- Statistic not shown. Rate based on less than 4 cases for the time interval.

Table 19.13

## Non-Hodgkin Lymphoma

## Number of Cases

By SEER Location and Year of Diagnosis, 1975-2012

All Races, Males, Ages 0-19

## Year of Diagnosis

SEER Location	1975- 1979	1980- 1981	1982- 1983	1984- 1985	1986- 1987	1988- 1989	1990- 1991	1992- 1993	1994- 1995	1996- 1997	1998- 1999	2000- 2001	2002- 2003	2004- 2005	2006- 2007	2008- 2009	2010- 2012
SEER 9 <sup>b</sup>	223	87	108	91	94	85	100	89	119	105	104	119	127	106	106	143	213
SEER 9 except SF-Oakland	191	78	95	82	80	77	86	74	106	84	93	100	115	89	87	114	183
San Francisco- Oakland SMSA <sup>c</sup>	32	9	13	9	14	8	14	15	13	21	11	19	12	17	19	29	30
San Francisco City/County	9	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	5	7

Age-Adjusted Cancer Incidence Rates<sup>a</sup>

By SEER Location and Year of Diagnosis, 1975-2012

All Races, Males, Ages 0-19

## Year of Diagnosis

SEER Location	1975- 1979	1980- 1981	1982- 1983	1984- 1985	1986- 1987	1988- 1989	1990- 1991	1992- 1993	1994- 1995	1996- 1997	1998- 1999	2000- 2001	2002- 2003	2004- 2005	2006- 2007	2008- 2009	2010- 2012
SEER 9 <sup>b</sup>	1.2	1.2	1.6	1.4	1.4	1.3	1.5	1.3	1.6	1.4	1.4	1.5	1.6	1.4	1.3	1.8	1.8
SEER 9 except SF-Oakland	1.2	1.3	1.6	1.4	1.4	1.3	1.5	1.2	1.7	1.3	1.4	1.5	1.7	1.3	1.3	1.6	1.8
San Francisco- Oakland SMSA <sup>c</sup>	1.4	1.0	1.5	1.0	1.6	0.9	1.5	1.6	1.3	2.1	1.1	1.8	1.2	1.7	1.9	2.8	1.9
San Francisco City/County	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.0	3.7

<sup>a</sup> Rates are per 100,000 males aged 0-19 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

<sup>b</sup> The SEER 9 areas are San Francisco-Oakland SMSA, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

<sup>c</sup> The San Francisco-Oakland SMSA represents 15% of all persons in the SEER areas. For this age group, all SEER areas may not be generalizable to the United States for Non-Hodgkin Lymphoma.

- Statistic not shown. Rate based on less than 4 cases for the time interval.

Table 19.14

## Non-Hodgkin Lymphoma

## Number of Cases

By SEER Location and Year of Diagnosis, 1975-2012

All Races, Males, Ages 20-54

## Year of Diagnosis

SEER Location	1975- 1979	1980- 1981	1982- 1983	1984- 1985	1986- 1987	1988- 1989	1990- 1991	1992- 1993	1994- 1995	1996- 1997	1998- 1999	2000- 2001	2002- 2003	2004- 2005	2006- 2007	2008- 2009	2010- 2012
SEER 9 <sup>b</sup>	1,464	687	723	958	1,210	1,410	1,765	1,831	2,090	1,764	1,607	1,689	1,621	1,716	1,650	1,689	2,454
SEER 9 except SF-Oakland	1,208	563	588	730	826	921	1,194	1,295	1,484	1,321	1,269	1,320	1,307	1,403	1,378	1,397	2,054
San Francisco-Oakland SMSA <sup>c</sup>	256	124	135	228	384	489	571	536	606	443	338	369	314	313	272	292	400
San Francisco City/County	58	29	34	105	215	288	333	303	317	224	105	115	111	112	86	75	113

Age-Adjusted Cancer Incidence Rates<sup>a</sup>

By SEER Location and Year of Diagnosis, 1975-2012

All Races, Males, Ages 20-54

## Year of Diagnosis

SEER Location	1975- 1979	1980- 1981	1982- 1983	1984- 1985	1986- 1987	1988- 1989	1990- 1991	1992- 1993	1994- 1995	1996- 1997	1998- 1999	2000- 2001	2002- 2003	2004- 2005	2006- 2007	2008- 2009	2010- 2012
SEER 9 <sup>b</sup>	6.9	7.9	8.2	10.4	12.4	13.5	15.9	15.6	16.9	13.8	12.1	12.3	11.7	12.2	11.6	11.8	11.3
SEER 9 except SF-Oakland	6.9	7.8	8.1	9.7	10.3	10.8	13.1	13.4	14.4	12.3	11.5	11.5	11.2	11.9	11.5	11.6	11.3
San Francisco-Oakland SMSA <sup>c</sup>	6.9	8.4	8.9	13.9	22.6	26.4	29.5	26.7	29.8	21.2	15.5	16.4	13.9	14.1	12.3	13.0	11.5
San Francisco City/County	6.7	8.8	9.4	27.2	56.5	71.5	81.3	72.4	74.4	50.7	23.0	25.2	23.9	25.1	19.4	16.2	15.5

<sup>a</sup> Rates are per 100,000 males aged 20-54 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

<sup>b</sup> The SEER 9 areas are San Francisco-Oakland SMSA, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.

<sup>c</sup> The San Francisco-Oakland SMSA represents 15% of all persons in the SEER areas. For this age group, all SEER areas may not be generalizable to the United States for Non-Hodgkin Lymphoma.

- Statistic not shown. Rate based on less than 4 cases for the time interval.

Table 19.15

## Non-Hodgkin Lymphoma

## Number of Cases

By SEER Location and Year of Diagnosis, 1975-2012

All Races, Males, Ages 55+

## Year of Diagnosis

SEER Location	1975- 1979	1980- 1981	1982- 1983	1984- 1985	1986- 1987	1988- 1989	1990- 1991	1992- 1993	1994- 1995	1996- 1997	1998- 1999	2000- 2001	2002- 2003	2004- 2005	2006- 2007	2008- 2009	2010- 2012
SEER 9 <sup>b</sup>	3,536	1,732	1,873	2,127	2,322	2,495	2,705	2,811	3,117	3,384	3,549	3,742	4,019	4,396	4,624	4,833	7,794
SEER 9 except SF-Oakland	2,886	1,447	1,584	1,791	1,912	2,090	2,227	2,327	2,569	2,839	3,000	3,083	3,392	3,709	3,916	4,086	6,534
San Francisco-Oakland SMSA <sup>c</sup>	650	285	289	336	410	405	478	484	548	545	549	659	627	687	708	747	1,260
San Francisco City/County	178	65	88	104	109	105	132	106	131	126	106	141	107	169	132	134	236

Age-Adjusted Cancer Incidence Rates<sup>a</sup>

By SEER Location and Year of Diagnosis, 1975-2012

All Races, Males, Ages 55+

## Year of Diagnosis

SEER Location	1975- 1979	1980- 1981	1982- 1983	1984- 1985	1986- 1987	1988- 1989	1990- 1991	1992- 1993	1994- 1995	1996- 1997	1998- 1999	2000- 2001	2002- 2003	2004- 2005	2006- 2007	2008- 2009	2010- 2012
SEER 9 <sup>b</sup>	45.2	52.2	54.0	59.6	63.3	67.2	70.1	70.6	76.1	80.0	81.1	83.0	85.7	90.0	89.9	88.5	88.5
SEER 9 except SF-Oakland	44.0	52.1	54.4	60.1	62.0	66.7	68.8	69.2	74.4	79.6	81.3	81.2	85.8	90.1	90.1	88.6	88.0
San Francisco-Oakland SMSA <sup>c</sup>	50.9	52.8	52.0	57.1	70.2	70.3	77.3	78.3	85.5	82.1	79.9	93.1	85.2	89.2	88.3	88.0	91.5
San Francisco City/County	48.2	44.6	59.8	72.7	73.9	75.7	93.4	74.7	92.1	87.2	72.7	93.4	68.5	104.7	77.1	75.7	84.8

<sup>a</sup> Rates are per 100,000 males aged 55+ and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).<sup>b</sup> The SEER 9 areas are San Francisco-Oakland SMSA, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.<sup>c</sup> The San Francisco-Oakland SMSA represents 15% of all persons in the SEER areas. For this age group, all SEER areas may not be generalizable to the United States for Non-Hodgkin Lymphoma.

- Statistic not shown. Rate based on less than 4 cases for the time interval.

Table 19.16  
Non-Hodgkin Lymphoma

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, 2010-2012 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	0.01	0.02	0.05	2.12	0.77	Asian/ Pacific Islander	0	0.01	0.02	0.05	1.84	0.74
	10	0.02	0.04	0.10	2.13	0.78		10	0.01	0.04	0.08	1.84	0.75
	20	0.03	0.09	0.20	2.12	0.78		20	0.02	0.06	0.14	1.83	0.75
	30	0.06	0.18	0.42	2.11	0.78		30	0.04	0.12	0.28	1.82	0.75
	40	0.12	0.36	0.82	2.08	0.78		40	0.08	0.24	0.57	1.79	0.75
	50	0.25	0.71	1.37	2.01	0.79		50	0.17	0.50	1.01	1.73	0.75
	60	0.50	1.19	1.74	1.87	0.79		60	0.34	0.87	1.41	1.61	0.74
	70	0.79	1.42	-	1.56	0.75		70	0.56	1.15	-	1.36	0.69
80	0.84	-	-	1.04	0.63	80	0.70	-	-	0.96	0.57		
White	0	0.01	0.02	0.05	2.22	0.81	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.01	0.03	1.26	0.48
	10	0.02	0.04	0.10	2.23	0.81		10	0.01	0.02	0.07	1.27	0.48
	20	0.03	0.09	0.20	2.22	0.82		20	0.01	0.06	0.12	1.26	0.49
	30	0.06	0.18	0.43	2.21	0.82		30	0.05	0.11	0.26	1.27	0.49
	40	0.12	0.37	0.85	2.18	0.82		40	0.06	0.21	0.53	1.25	0.50
	50	0.26	0.75	1.45	2.11	0.83		50	0.16	0.49	0.90	1.24	0.51
	60	0.52	1.27	1.84	1.97	0.83		60	0.35	0.79	1.12	1.16	0.53
	70	0.85	1.50	-	1.64	0.79		70	0.50	0.87	-	0.92	0.52
80	0.89	-	-	1.08	0.66	80	0.50	-	-	0.57	0.39		
Black	0	0.01	0.02	0.06	1.30	0.45	Hispanic <sup>b</sup>	0	0.01	0.02	0.05	2.18	0.76
	10	0.02	0.05	0.12	1.32	0.46		10	0.01	0.04	0.08	2.19	0.77
	20	0.03	0.11	0.23	1.31	0.46		20	0.02	0.07	0.18	2.18	0.77
	30	0.07	0.20	0.40	1.29	0.46		30	0.05	0.15	0.38	2.17	0.77
	40	0.12	0.34	0.65	1.24	0.46		40	0.11	0.34	0.76	2.14	0.77
	50	0.22	0.54	0.89	1.16	0.45		50	0.23	0.67	1.33	2.07	0.77
	60	0.35	0.73	0.97	1.03	0.44		60	0.45	1.14	1.74	1.92	0.76
	70	0.46	0.75	-	0.82	0.41		70	0.76	1.41	-	1.62	0.72
80	0.42	-	-	0.53	0.33	80	0.82	-	-	1.08	0.57		

Devcan 6.8.0, August 2014, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG). Mortality data are from the NCHS public use data file for the total US.

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

<sup>b</sup> 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 19.17  
Non-Hodgkin Lymphoma

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, 2010-2012 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	0.01	0.03	0.06	2.37	0.86	Asian/ Pacific Islander	0	0.01	0.03	0.05	2.09	0.83
	10	0.02	0.05	0.12	2.39	0.88		10	0.02	0.04	0.09	2.10	0.84
	20	0.03	0.10	0.24	2.38	0.88		20	0.03	0.07	0.16	2.09	0.84
	30	0.07	0.21	0.48	2.37	0.88		30	0.04	0.13	0.33	2.08	0.84
	40	0.14	0.42	0.94	2.34	0.89		40	0.09	0.29	0.68	2.05	0.84
	50	0.29	0.82	1.57	2.27	0.90		50	0.20	0.60	1.21	1.99	0.84
	60	0.58	1.38	2.00	2.14	0.90		60	0.41	1.06	1.66	1.86	0.83
	70	0.94	1.66	-	1.82	0.87		70	0.70	1.36	-	1.58	0.78
80	1.03	-	-	1.26	0.75	80	0.83	-	-	1.10	0.65		
White	0	0.01	0.03	0.06	2.47	0.91	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.02	0.04	1.37	0.58
	10	0.02	0.05	0.12	2.49	0.92		10	0.01	0.03	0.09	1.38	0.59
	20	0.03	0.10	0.24	2.48	0.92		20	0.02	0.08	0.15	1.38	0.59
	30	0.07	0.21	0.49	2.47	0.93		30	0.06	0.13	0.24	1.39	0.60
	40	0.14	0.43	0.97	2.44	0.93		40	0.07	0.19	0.54	1.37	0.62
	50	0.30	0.86	1.65	2.38	0.94		50	0.12	0.49	0.97	1.36	0.64
	60	0.60	1.46	2.10	2.24	0.95		60	0.41	0.93	1.27	1.36	0.66
	70	1.00	1.75	-	1.91	0.91		70	0.62	1.02	-	1.12	0.64
80	1.08	-	-	1.31	0.78	80	0.59	-	-	0.73	0.55		
Black	0	0.01	0.03	0.07	1.43	0.50	Hispanic <sup>b</sup>	0	0.01	0.03	0.06	2.39	0.82
	10	0.02	0.06	0.15	1.45	0.51		10	0.02	0.05	0.10	2.40	0.83
	20	0.04	0.13	0.28	1.44	0.51		20	0.03	0.08	0.20	2.39	0.83
	30	0.08	0.24	0.49	1.42	0.51		30	0.05	0.17	0.42	2.39	0.84
	40	0.16	0.41	0.76	1.37	0.51		40	0.12	0.38	0.86	2.36	0.84
	50	0.27	0.63	1.00	1.27	0.50		50	0.26	0.76	1.49	2.30	0.84
	60	0.40	0.82	1.07	1.12	0.49		60	0.52	1.30	1.96	2.16	0.83
	70	0.53	0.85	-	0.92	0.46		70	0.88	1.63	-	1.84	0.79
80	0.51	-	-	0.62	0.38	80	0.99	-	-	1.28	0.63		

Devcan 6.8.0, August 2014, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG). Mortality data are from the NCHS public use data file for the total US.

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

<sup>b</sup> 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 19.18  
Non-Hodgkin Lymphoma

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, 2010-2012 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	0.01	0.02	0.04	1.89	0.68	Asian/ Pacific Islander	0	0.01	0.02	0.04	1.63	0.67
	10	0.01	0.03	0.08	1.91	0.69		10	0.01	0.03	0.07	1.63	0.68
	20	0.02	0.07	0.17	1.90	0.69		20	0.02	0.06	0.12	1.62	0.68
	30	0.05	0.15	0.35	1.89	0.69		30	0.04	0.10	0.24	1.60	0.68
	40	0.10	0.30	0.70	1.85	0.69		40	0.06	0.20	0.48	1.57	0.68
	50	0.21	0.61	1.19	1.79	0.70		50	0.14	0.42	0.84	1.52	0.67
	60	0.42	1.03	1.53	1.66	0.70		60	0.28	0.71	1.22	1.41	0.66
	70	0.67	1.22	-	1.36	0.67		70	0.45	0.98	-	1.19	0.62
80	0.72	-	-	0.90	0.56	80	0.62	-	-	0.86	0.51		
White	0	0.00	0.02	0.04	1.99	0.72	American Indian/ Alaska Native <sup>a</sup>	0	0.00	0.01	0.02	1.16	0.39
	10	0.01	0.03	0.08	2.00	0.72		10	0.01	0.01	0.05	1.17	0.39
	20	0.02	0.07	0.17	1.99	0.72		20	0.01	0.04	0.10	1.17	0.40
	30	0.05	0.15	0.36	1.98	0.73		30	0.04	0.09	0.27	1.17	0.40
	40	0.10	0.32	0.73	1.95	0.73		40	0.05	0.24	0.52	1.16	0.40
	50	0.22	0.64	1.26	1.89	0.73		50	0.19	0.48	0.83	1.14	0.41
	60	0.44	1.09	1.62	1.74	0.73		60	0.30	0.67	0.98	0.99	0.42
	70	0.71	1.29	-	1.43	0.70		70	0.41	0.76	-	0.77	0.43
80	0.75	-	-	0.93	0.58	80	0.45	-	-	0.46	0.29		
Black	0	0.01	0.02	0.04	1.19	0.42	Hispanic <sup>b</sup>	0	0.01	0.02	0.03	1.99	0.72
	10	0.01	0.03	0.10	1.21	0.43		10	0.01	0.03	0.07	2.00	0.72
	20	0.02	0.09	0.18	1.20	0.43		20	0.02	0.06	0.15	2.00	0.72
	30	0.06	0.16	0.33	1.18	0.42		30	0.04	0.13	0.33	1.98	0.72
	40	0.10	0.27	0.55	1.13	0.42		40	0.09	0.30	0.67	1.95	0.72
	50	0.18	0.46	0.79	1.07	0.42		50	0.21	0.59	1.18	1.89	0.72
	60	0.31	0.66	0.90	0.96	0.41		60	0.39	1.01	1.55	1.73	0.71
	70	0.40	0.68	-	0.76	0.38		70	0.66	1.25	-	1.44	0.67
80	0.38	-	-	0.48	0.31	80	0.71	-	-	0.95	0.53		

Devcan 6.8.0, August 2014, National Cancer Institute (<http://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, and Georgia excluding ATL/RG). Mortality data are from the NCHS public use data file for the total US.

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

<sup>b</sup> 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 19.19  
Non-Hodgkin Lymphoma

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

SEER Incidence	SEER 18 Areas <sup>b</sup>			SEER 13 Areas <sup>b</sup>			SEER 9 Areas <sup>b</sup>		
	Rate 2008-2012			Trend 2003-2012 <sup>c</sup>			Trend 2003-2012 <sup>d</sup>		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	19.7	23.9	16.3	-0.6	-0.5	-0.5	-0.3	0.3*	-0.6*
White	20.6	24.9	17.1	-0.5	-0.5	-0.5	-0.4	-0.4	-0.7*
White Hispanic <sup>e</sup>	18.5	21.4	16.1	-0.4	0.2	0.8*	-	-	-
White Non-Hispanic <sup>e</sup>	21.0	25.5	17.3	-0.5	-0.4	-0.7*	-	-	-
Black	14.6	17.8	12.1	-0.5	-0.3	0.4	0.4	-0.4	-0.3
Asian/Pacific Islander	13.6	16.6	11.3	0.2	0.2	0.3	-	-	-
Amer Ind/Alaska Nat <sup>f</sup>	12.6	14.6	11.1	2.0*	1.2	2.5*	-	-	-
Hispanic <sup>e</sup>	17.8	20.6	15.5	-0.5	0.2	0.8*	-	-	-
<u>U.S. Mortality<sup>g</sup></u>									
RACE/ETHNICITY	Rate 2008-2012			Trend 2003-2012 <sup>h</sup>					
	Rate per 100,000 persons			AAPC (%)					
	Total	Males	Females	Total	Males	Females			
All Races	6.2	7.9	4.8	-2.5*	-2.2*	-2.9*			
White	6.4	8.2	5.0	-2.5*	-2.2*	-2.9*			
White Hispanic <sup>e</sup>	5.5	6.7	4.5	-0.9*	-1.6*	-1.9*			
White Non-Hispanic <sup>e</sup>	6.5	8.3	5.0	-2.5*	-2.5*	-3.0*			
Black	4.4	5.7	3.5	-2.4*	-2.4*	-2.4*			
Asian/Pacific Islander	4.1	5.0	3.4	-2.0*	-2.2*	-1.6*			
Amer Ind/Alaska Nat									
Total U.S.	3.2	3.9	2.6	-3.7*	-1.6	-5.6*			
CHSDA Counties	4.6	5.7	3.6	-0.4	-0.3	-4.5*			
Non-CHSDA Counties	1.5	1.8	1.3	-7.6*	-6.5*	-5.4*			
Hispanic <sup>e</sup>	5.2	6.3	4.3	-1.2*	-1.1	-2.0*			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.2.0, April 2015, 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 2003-2012 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 1992-2012.

d The 2003-2012 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2012.

e Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. The 2003-2012 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 2003-2012 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2012.

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

Table 19.20  
Non-Hodgkin Lymphoma

Age-Adjusted SEER Incidence Rates<sup>a</sup>  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Incidence Rates<sup>a</sup>, 2008-2012</u>									
California	18.82	22.81	15.53	19.76	23.84	16.33	14.23	17.11	11.83
Greater Bay Area	20.52	25.40	16.39	22.55	27.90	17.84	16.84	19.49	14.52
San Francisco-Oakland	20.50	25.96	15.98	22.54	28.59	17.30	16.87	19.89	14.29
San Jose-Monterey	20.61	24.40	17.23	22.60	26.71	18.80	17.35	17.94	16.71
Los Angeles	18.35	22.08	15.36	19.89	23.78	16.67	14.01	17.47	11.41
Greater California	18.44	22.23	15.31	18.91	22.70	15.77	13.24	15.68	11.00
Connecticut	21.05	25.41	17.69	21.36	25.84	17.88	14.17	16.50	12.38
Detroit	21.27	25.85	17.77	22.83	27.42	19.29	15.45	19.39	12.54
Georgia	18.01	22.33	14.59	19.14	23.47	15.54	14.36	17.94	11.82
Atlanta	19.11	24.44	15.09	20.62	26.58	15.93	16.61	19.81	14.05
Rural Georgia	15.45	18.22	12.97	18.36	19.38	16.80	8.91	-	-
Greater Georgia	17.49	21.39	14.33	18.61	22.43	15.36	12.79	16.37	10.39
Hawaii	17.89	21.74	14.67	20.83	25.16	16.14	-	-	-
Iowa	22.46	27.34	18.59	22.45	27.21	18.68	15.54	19.62	12.43
Kentucky	20.84	25.38	17.29	20.97	25.38	17.53	16.59	22.02	12.41
Louisiana	20.22	24.60	16.68	22.03	26.61	18.22	14.67	17.97	12.10
New Jersey	21.22	25.43	17.93	22.46	26.79	19.04	14.17	17.20	11.87
New Mexico	15.77	17.98	13.84	15.69	17.84	13.81	12.50	16.41	-
Seattle-Puget Sound	22.24	27.11	18.17	22.76	27.75	18.59	17.84	19.18	15.91
Utah	19.31	23.88	15.41	19.53	24.23	15.52	-	-	-
9 SEER Areas <sup>b</sup>	20.53	25.18	16.78	21.42	26.17	17.51	16.03	19.24	13.45
11 SEER Areas <sup>b</sup>	20.04	24.44	16.48	21.16	25.71	17.39	15.60	18.85	13.02
13 SEER Areas <sup>b</sup>	20.02	24.40	16.46	21.15	25.69	17.39	15.51	18.79	12.93
18 SEER Areas <sup>b</sup>	19.67	23.87	16.27	20.61	24.89	17.10	14.60	17.84	12.08

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

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

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

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

The SEER 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG.

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

Table 19.21  
Non-Hodgkin Lymphoma

Age-Adjusted SEER Death Rates<sup>a</sup>  
By Registry, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
<u>SEER Death Rates<sup>a</sup>, 2008-2012</u>									
California	5.84	7.44	4.60	6.25	8.01	4.87	4.57	5.76	3.72
Greater Bay Area	5.89	7.71	4.49	6.57	8.75	4.84	5.17	6.41	4.46
San Francisco-Oakland	5.74	7.61	4.32	6.34	8.57	4.57	5.16	6.19	4.62
San Jose-Monterey	6.17	7.90	4.81	6.97	9.05	5.31	-	-	-
Los Angeles	5.66	7.07	4.55	6.10	7.62	4.89	4.84	6.11	3.86
Greater California	5.90	7.51	4.65	6.21	7.94	4.86	3.93	5.18	3.03
Connecticut	5.58	7.13	4.45	5.67	7.30	4.46	3.96	4.69	3.56
Detroit	6.80	8.78	5.40	7.28	9.26	5.85	5.10	7.00	3.82
Georgia	5.49	7.32	4.20	5.96	7.78	4.64	3.93	5.52	2.88
Atlanta	5.15	7.25	3.86	5.40	7.75	3.91	4.58	6.04	3.71
Rural Georgia	5.94	8.62	3.94	7.03	8.69	-	-	-	-
Greater Georgia	5.63	7.34	4.34	6.13	7.76	4.87	3.56	5.14	2.41
Hawaii	5.75	7.41	4.47	5.71	7.42	4.12	-	-	-
Iowa	6.70	8.75	5.24	6.70	8.74	5.25	7.00	-	-
Kentucky	7.01	8.81	5.65	7.19	8.93	5.87	4.43	7.26	2.59
Louisiana	6.58	8.57	5.02	7.12	9.11	5.50	4.65	6.41	3.38
New Jersey	5.79	7.41	4.67	6.15	7.83	4.96	4.02	5.55	3.12
New Mexico	5.12	6.05	4.30	5.23	6.21	4.35	-	-	-
Seattle-Puget Sound	6.50	8.43	5.02	6.76	8.79	5.17	3.93	4.18	-
Utah	5.78	7.19	4.63	5.88	7.36	4.69	-	-	-
9 SEER Areas <sup>b</sup>	6.02	7.79	4.71	6.28	8.13	4.88	4.74	6.15	3.79
11 SEER Areas <sup>b</sup>	5.95	7.64	4.68	6.29	8.09	4.91	4.78	6.14	3.83
13 SEER Areas <sup>b</sup>	5.96	7.65	4.68	6.30	8.10	4.92	4.75	6.14	3.78
18 SEER Areas <sup>b</sup>	6.00	7.69	4.72	6.35	8.12	5.00	4.37	5.89	3.32
Total U.S.	6.15	7.92	4.82	6.42	8.23	5.02	4.40	5.72	3.48

<sup>a</sup> 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).

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

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

The SEER 18 areas comprise the SEER 13 areas plus California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG.

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

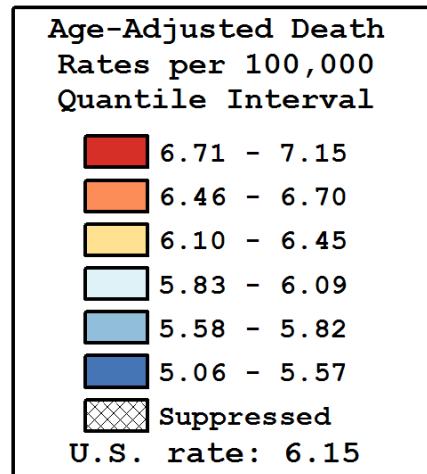
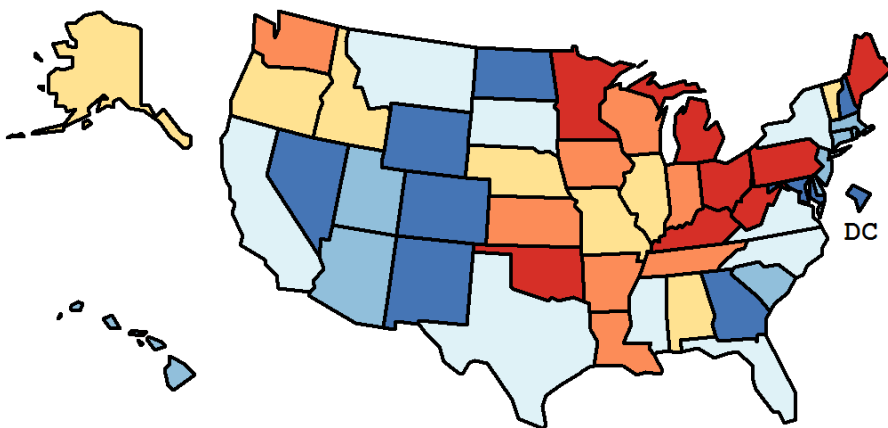
Table 19.22  
Non-Hodgkin Lymphoma

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2008-2012

Males and Females

State	Rate	SE	Rank(CI) <sup>d</sup>	PD
TOTAL U.S.	6.15	0.02		
High Five States				
Minnesota	7.15 <sup>b</sup>	0.16	01(01,11)	16.23 <sup>c</sup>
Michigan	7.02 <sup>b</sup>	0.11	02(01,12)	14.18
Kentucky	7.01 <sup>b</sup>	0.18	03(01,17)	13.89
West Virginia	6.93	0.25	04(01,23)	12.69
Oklahoma	6.89 <sup>b</sup>	0.19	05(01,21)	12.05
Low Five States				
Nevada	5.48	0.21	47(24,51)	-10.85
Wyoming	5.42	0.45	48(07,51)	-11.84
North Dakota	5.36	0.37	49(16,51)	-12.92
New Mexico	5.12 <sup>b</sup>	0.22	50(36,51)	-16.78 <sup>c</sup>
D.C.	5.06	0.43	51(17,51)	-17.68 <sup>c</sup>

State	Rate	SE	Rank(CI) <sup>d</sup>	PD	State	Rate	SE	Rank(CI) <sup>d</sup>	PD
Alabama	6.27	0.16	22(08,36)	1.94	Montana	6.01	0.32	26(03,50)	-2.31
Alaska	6.37	0.56	18(01,51)	3.52	Nebraska	6.29	0.25	21(03,43)	2.29
Arizona	5.79	0.13	36(23,47)	-5.88	Nevada	5.48	0.21	47(24,51)	-10.85
Arkansas	6.64	0.20	12(01,27)	8.00	New Hampshire	5.56	0.28	44(18,51)	-9.64
California	5.84 <sup>b</sup>	0.06	33(25,42)	-5.14	New Jersey	5.79	0.11	35(23,47)	-5.84
Colorado	5.48 <sup>b</sup>	0.16	46(26,51)	-10.85	New Mexico	5.12 <sup>b</sup>	0.22	50(36,51)	-16.78 <sup>c</sup>
Connecticut	5.58	0.16	42(25,51)	-9.29	New York	5.89 <sup>b</sup>	0.07	29(23,42)	-4.33
Delaware	5.75	0.34	38(08,51)	-6.48	North Carolina	5.86	0.11	30(22,45)	-4.67
D.C.	5.06	0.43	51(17,51)	-17.68 <sup>c</sup>	North Dakota	5.36	0.37	49(16,51)	-12.92
Florida	5.84 <sup>b</sup>	0.07	32(25,43)	-5.13	Ohio	6.86 <sup>b</sup>	0.10	06(01,16)	11.50
Georgia	5.49 <sup>b</sup>	0.12	45(32,51)	-10.77	Oklahoma	6.89 <sup>b</sup>	0.19	05(01,21)	12.05
Hawaii	5.75	0.27	39(13,51)	-6.57	Oregon	6.45	0.17	17(04,29)	4.81
Idaho	6.32	0.29	20(02,46)	2.73	Pennsylvania	6.72 <sup>b</sup>	0.09	08(03,19)	9.16
Illinois	6.34	0.10	19(11,27)	3.12	Rhode Island	5.69	0.31	40(12,51)	-7.55
Indiana	6.69 <sup>b</sup>	0.14	11(02,22)	8.81	South Carolina	5.82	0.16	34(20,48)	-5.39
Iowa	6.70	0.19	10(01,24)	8.94	South Dakota	6.09	0.36	25(01,50)	-0.99
Kansas	6.51	0.21	16(02,31)	5.80	Tennessee	6.59	0.14	13(03,24)	7.06
Kentucky	7.01 <sup>b</sup>	0.18	03(01,17)	13.89	Texas	5.95	0.08	28(22,40)	-3.29
Louisiana	6.58	0.17	14(02,26)	6.95	Utah	5.78	0.24	37(16,50)	-6.08
Maine	6.83	0.29	07(01,28)	11.08	Vermont	6.23	0.41	23(01,50)	1.30
Maryland	5.57 <sup>b</sup>	0.14	43(27,50)	-9.43	Virginia	6.01	0.12	27(17,41)	-2.38
Massachusetts	5.68 <sup>b</sup>	0.12	41(25,49)	-7.69	Washington	6.51	0.14	15(04,26)	5.82
Michigan	7.02 <sup>b</sup>	0.11	02(01,12)	14.18	West Virginia	6.93	0.25	04(01,23)	12.69
Minnesota	7.15 <sup>b</sup>	0.16	01(01,11)	16.23 <sup>c</sup>	Wisconsin	6.70 <sup>b</sup>	0.15	09(02,22)	8.95
Mississippi	5.84	0.20	31(17,50)	-5.12	Wyoming	5.42	0.45	48(07,51)	-11.84
Missouri	6.20	0.14	24(13,36)	0.80					



<sup>a</sup> 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).

<sup>b</sup> Difference between state rate and total U.S. rate is statistically significant ( $p < .0002$ ).

<sup>c</sup> Absolute percent difference between state rate and total U.S. rate is 15% or more.

<sup>d</sup> 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.

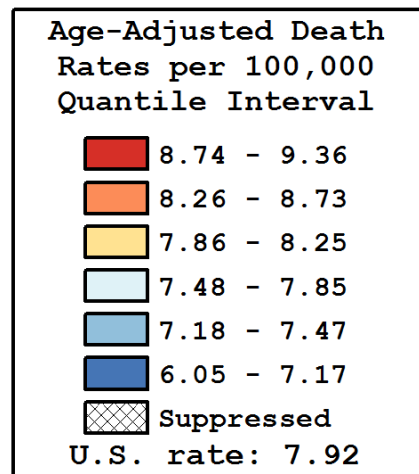
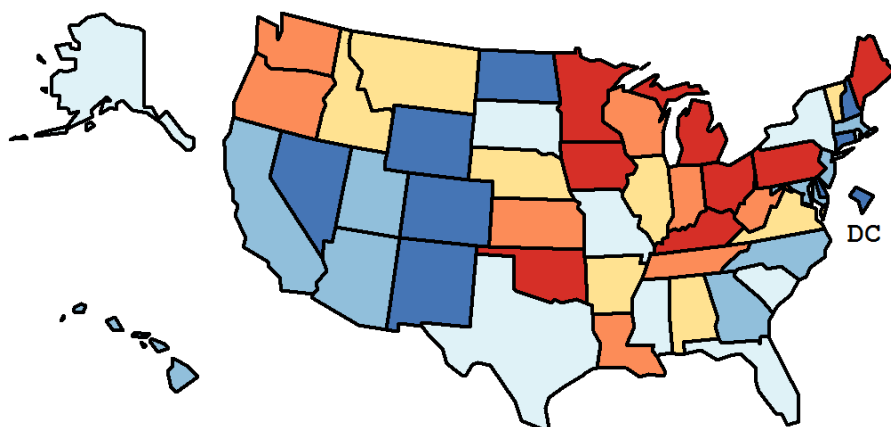
Table 19.23  
Non-Hodgkin Lymphoma

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2008-2012

Males

State	Rate	SE	Rank(CI) <sup>d</sup>	PD
TOTAL U.S.	7.92	0.03		
High Five States				
Minnesota	9.36 <sup>b</sup>	0.28	01(01,14)	18.13 <sup>c</sup>
Michigan	9.16 <sup>b</sup>	0.20	02(01,13)	15.71 <sup>c</sup>
Ohio	9.00 <sup>b</sup>	0.18	03(01,16)	13.67
Oklahoma	8.89	0.32	04(01,23)	12.24
Maine	8.82	0.50	05(01,36)	11.40
Low Five States				
Delaware	6.87	0.56	47(12,51)	-13.24
Nevada	6.82	0.35	48(23,51)	-13.90
Wyoming	6.32	0.74	49(13,51)	-20.22 <sup>c</sup>
North Dakota	6.31	0.61	50(18,51)	-20.26 <sup>c</sup>
New Mexico	6.05 <sup>b</sup>	0.36	51(42,51)	-23.63 <sup>c</sup>

State	Rate	SE	Rank(CI) <sup>d</sup>	PD	State	Rate	SE	Rank(CI) <sup>d</sup>	PD
Alabama	7.86	0.28	24(09,44)	-0.80	Montana	8.00	0.55	21(01,49)	0.98
Alaska	7.81	0.92	26(01,51)	-1.34	Nebraska	7.91	0.43	23(02,47)	-0.10
Arizona	7.19	0.22	42(24,49)	-9.17	Nevada	6.82	0.35	48(23,51)	-13.90
Arkansas	8.17	0.35	19(02,42)	3.10	New Hampshire	7.17	0.48	43(09,51)	-9.43
California	7.44 <sup>b</sup>	0.10	35(25,44)	-6.06	New Jersey	7.41	0.19	37(21,47)	-6.46
Colorado	7.02	0.27	46(24,50)	-11.32	New Mexico	6.05 <sup>b</sup>	0.36	51(42,51)	-23.63 <sup>c</sup>
Connecticut	7.13	0.29	44(22,50)	-9.91	New York	7.59	0.13	31(21,43)	-4.12
Delaware	6.87	0.56	47(12,51)	-13.24	North Carolina	7.47	0.20	34(20,47)	-5.67
D.C.	7.05	0.80	45(01,51)	-10.97	North Dakota	6.31	0.61	50(18,51)	-20.26 <sup>c</sup>
Florida	7.49 <sup>b</sup>	0.12	33(23,44)	-5.42	Ohio	9.00 <sup>b</sup>	0.18	03(01,16)	13.67
Georgia	7.32	0.21	39(21,48)	-7.53	Oklahoma	8.89	0.32	04(01,23)	12.24
Hawaii	7.41	0.47	36(07,50)	-6.44	Oregon	8.33	0.30	16(02,36)	5.15
Idaho	8.01	0.49	20(01,48)	1.15	Pennsylvania	8.75 <sup>b</sup>	0.16	08(02,19)	10.46
Illinois	8.20	0.18	18(08,30)	3.50	Rhode Island	7.67	0.55	28(01,50)	-3.17
Indiana	8.64	0.25	12(01,24)	9.11	South Carolina	7.64	0.28	30(12,47)	-3.58
Iowa	8.75	0.34	07(01,27)	10.49	South Dakota	7.51	0.60	32(02,51)	-5.19
Kansas	8.73	0.36	09(01,28)	10.20	Tennessee	8.70	0.25	10(01,24)	9.81
Kentucky	8.81	0.31	06(01,24)	11.27	Texas	7.66	0.13	29(19,40)	-3.23
Louisiana	8.57	0.31	13(01,30)	8.22	Utah	7.19	0.41	41(15,51)	-9.16
Maine	8.82	0.50	05(01,36)	11.40	Vermont	8.25	0.73	17(01,50)	4.15
Maryland	7.29	0.25	40(21,49)	-7.95	Virginia	7.93	0.22	22(11,41)	0.08
Massachusetts	7.38	0.22	38(21,48)	-6.83	Washington	8.35	0.24	15(03,30)	5.41
Michigan	9.16 <sup>b</sup>	0.20	02(01,13)	15.71 <sup>c</sup>	West Virginia	8.44	0.42	14(01,41)	6.58
Minnesota	9.36 <sup>b</sup>	0.28	01(01,14)	18.13 <sup>c</sup>	Wisconsin	8.65	0.25	11(01,25)	9.21
Mississippi	7.85	0.36	25(05,47)	-0.91	Wyoming	6.32	0.74	49(13,51)	-20.22 <sup>c</sup>
Missouri	7.79	0.24	27(12,44)	-1.68					



<sup>a</sup> 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).

<sup>b</sup> Difference between state rate and total U.S. rate is statistically significant ( $p < .0002$ ).

<sup>c</sup> Absolute percent difference between state rate and total U.S. rate is 15% or more.

<sup>d</sup> 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.

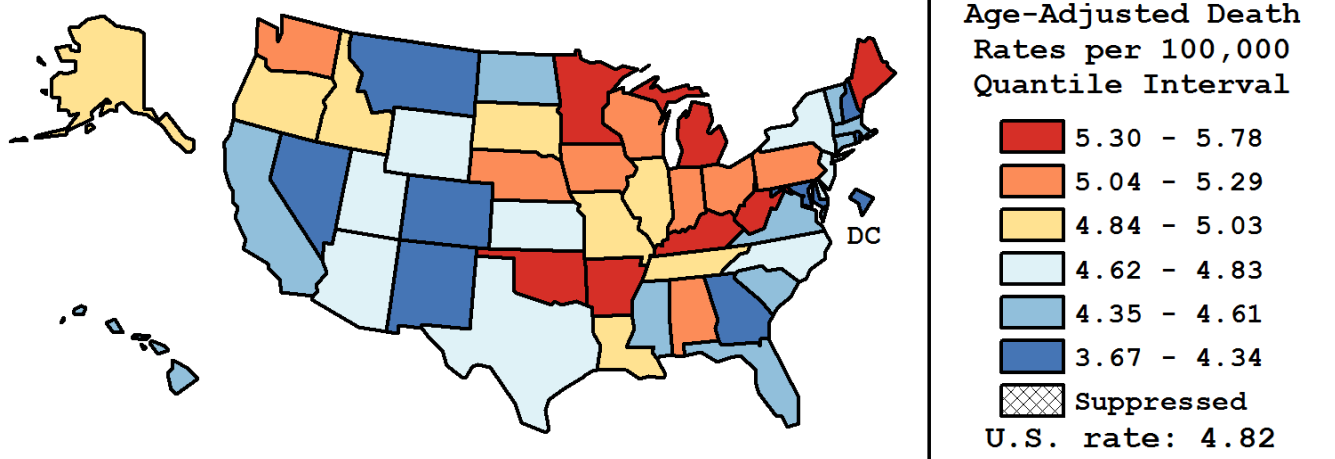
Table 19.24  
Non-Hodgkin Lymphoma

Age-Adjusted Cancer Death<sup>a</sup> Rates By State, All Races, 2008-2012

Females

State	Rate	SE	Rank(CI) <sup>d</sup>	PD
TOTAL U.S.	4.82	0.02		
High Five States				
West Virginia	5.78	0.30	01(01,23)	19.93 <sup>c</sup>
Kentucky	5.65 <sup>b</sup>	0.21	02(01,19)	17.32 <sup>c</sup>
Arkansas	5.51	0.25	03(01,26)	14.27
Minnesota	5.42	0.18	04(01,25)	12.36
Michigan	5.41 <sup>b</sup>	0.13	05(01,20)	12.29
Low Five States				
New Hampshire	4.30	0.32	47(09,51)	-10.79
Colorado	4.26	0.18	48(24,51)	-11.66
Rhode Island	4.23	0.34	49(10,51)	-12.31
Georgia	4.20 <sup>b</sup>	0.13	50(32,51)	-12.80
D.C.	3.67	0.47	51(15,51)	-23.91 <sup>c</sup>

State	Rate	SE	Rank(CI) <sup>d</sup>	PD	State	Rate	SE	Rank(CI) <sup>d</sup>	PD
Alabama	5.12	0.19	13(02,35)	6.31	Montana	4.34	0.37	43(05,51)	-9.94
Alaska	5.02	0.69	17(01,51)	4.21	Nebraska	5.04	0.30	15(01,48)	4.51
Arizona	4.64	0.16	30(15,47)	-3.66	Nevada	4.33	0.26	45(14,51)	-10.12
Arkansas	5.51	0.25	03(01,26)	14.27	New Hampshire	4.30	0.32	47(09,51)	-10.79
California	4.60	0.07	35(23,43)	-4.61	New Jersey	4.67	0.13	28(16,45)	-3.15
Colorado	4.26	0.18	48(24,51)	-11.66	New Mexico	4.30	0.27	46(15,51)	-10.73
Connecticut	4.45	0.19	41(18,51)	-7.66	New York	4.66	0.09	29(20,43)	-3.24
Delaware	4.83	0.41	25(01,51)	0.11	North Carolina	4.69	0.13	27(16,45)	-2.71
D.C.	3.67	0.47	51(15,51)	-23.91 <sup>c</sup>	North Dakota	4.61	0.45	34(01,51)	-4.43
Florida	4.49 <sup>b</sup>	0.08	39(26,47)	-6.93	Ohio	5.28 <sup>b</sup>	0.12	09(02,23)	9.63
Georgia	4.20 <sup>b</sup>	0.13	50(32,51)	-12.80	Oklahoma	5.34	0.22	07(01,29)	10.75
Hawaii	4.47	0.32	40(04,51)	-7.24	Oregon	4.98	0.20	22(03,43)	3.32
Idaho	4.90	0.34	23(01,50)	1.71	Pennsylvania	5.22 <sup>b</sup>	0.11	12(03,24)	8.28
Illinois	5.03	0.11	16(06,30)	4.38	Rhode Island	4.23	0.34	49(10,51)	-12.31
Indiana	5.29	0.17	08(01,26)	9.80	South Carolina	4.50	0.18	37(17,50)	-6.62
Iowa	5.24	0.22	11(01,36)	8.71	South Dakota	5.02	0.43	18(01,51)	4.21
Kansas	4.80	0.24	26(03,49)	-0.37	Tennessee	5.00	0.16	21(04,38)	3.77
Kentucky	5.65 <sup>b</sup>	0.21	02(01,19)	17.32 <sup>c</sup>	Texas	4.64	0.09	31(20,43)	-3.79
Louisiana	5.02	0.20	19(02,39)	4.17	Utah	4.63	0.29	32(04,51)	-3.86
Maine	5.34	0.33	06(01,44)	10.81	Vermont	4.61	0.47	33(01,51)	-4.42
Maryland	4.34	0.16	44(24,51)	-10.01	Virginia	4.58	0.14	36(18,48)	-5.02
Massachusetts	4.50	0.14	38(21,49)	-6.65	Washington	5.09	0.17	14(03,34)	5.62
Michigan	5.41 <sup>b</sup>	0.13	05(01,20)	12.29	West Virginia	5.78	0.30	01(01,23)	19.93 <sup>c</sup>
Minnesota	5.42	0.18	04(01,25)	12.36	Wisconsin	5.25	0.17	10(01,28)	8.89
Mississippi	4.40	0.23	42(15,51)	-8.81	Wyoming	4.83	0.56	24(01,51)	0.23
Missouri	5.01	0.16	20(04,37)	3.89					



<sup>a</sup> 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).

<sup>b</sup> Difference between state rate and total U.S. rate is statistically significant ( $p < .0002$ ).

<sup>c</sup> Absolute percent difference between state rate and total U.S. rate is 15% or more.

<sup>d</sup> 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 19.25  
Non-Hodgkin LymphomaEstimated United States Cancer Prevalence Counts<sup>a</sup> on January 1, 2012  
By Race/Ethnicity, Sex and Years Since Diagnosis

Years Since Diagnosis		0 to <5	5 to <10	10 to <15	15 to <20	20 to <25	25 to <30	0 to <20 <sup>e</sup>	0 to <37 <sup>e</sup>	>=37 <sup>g</sup>	Complete <sup>h</sup>	
Race	Sex											
All Races <sup>b</sup>	Both Sexes	205,597	143,043	87,628	50,507	28,179	15,884	499,961	541,393	8,232	549,625	
	Males	110,512	73,527	45,359	26,351	14,922	8,603	262,705	284,672	4,332	289,004	
	Females	95,085	69,516	42,269	24,156	13,257	7,281	237,256	256,721	3,900	260,621	
White <sup>b</sup>	Both Sexes	177,024	125,584	77,296	44,460	25,369	14,430	436,199	473,815	8,597	482,412	
	Males	95,569	64,896	40,143	23,215	13,477	7,779	230,047	250,031	4,868	254,899	
	Females	81,455	60,688	37,153	21,245	11,892	6,651	206,152	223,784	3,729	227,513	
Black <sup>b</sup>	Both Sexes	16,520	11,569	6,486	3,710	1,796	916	39,149	41,616	683	42,299	
	Males	8,420	5,675	3,240	1,899	923	534	19,661	20,969	289	21,258	
	Females	8,100	5,894	3,246	1,811	873	382	19,488	20,647	394	21,041	
Asian/ Pacific Islander <sup>c</sup>	Both Sexes	6,342	3,800	2,382	+	+	+	13,826	+	+	+	
	Males	3,369	1,919	1,274	+	+	+	7,211	+	+	+	
	Females	2,973	1,881	1,108	+	+	+	6,615	+	+	+	
Hispanic <sup>d</sup>	Both Sexes	16,134	9,712	5,785	+	+	+	34,651	+	+	+	
	Males	8,441	4,947	3,073	+	+	+	18,053	+	+	+	
	Females	7,693	4,765	2,712	+	+	+	16,598	+	+	+	

Estimated prevalence percent<sup>a</sup> on January 1, 2012, of the SEER<sup>c</sup> population diagnosed in the previous 20 years  
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	All Ages	Age Specific (Crude)									Age-Adjusted <sup>f</sup>	
		0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages	
Race	Sex											
All Races <sup>c</sup>	Both Sexes	0.1402%	0.0029%	0.0120%	0.0252%	0.0461%	0.0991%	0.1958%	0.3710%	0.5961%	0.6826%	0.1347%
	Males	0.1498%	0.0037%	0.0159%	0.0306%	0.0540%	0.1166%	0.2266%	0.4203%	0.6685%	0.7803%	0.1546%
	Females	0.1309%	0.0021%	0.0078%	0.0196%	0.0382%	0.0818%	0.1664%	0.3265%	0.5375%	0.6248%	0.1173%
White <sup>c</sup>	Both Sexes	0.1571%	0.0030%	0.0125%	0.0264%	0.0479%	0.1057%	0.2098%	0.3998%	0.6519%	0.7289%	0.1446%
	Males	0.1671%	0.0039%	0.0170%	0.0322%	0.0560%	0.1248%	0.2425%	0.4471%	0.7281%	0.8267%	0.1653%
	Females	0.1472%	0.0021%	0.0077%	0.0202%	0.0393%	0.0860%	0.1774%	0.3557%	0.5885%	0.6705%	0.1260%
Black <sup>c</sup>	Both Sexes	0.0878%	0.0026%	0.0110%	0.0244%	0.0509%	0.0921%	0.1623%	0.2844%	0.3672%	0.3532%	0.0996%
	Males	0.0934%	0.0027%	0.0130%	0.0312%	0.0621%	0.1046%	0.1884%	0.3394%	0.3521%	0.4004%	0.1117%
	Females	0.0828%	0.0025%	0.0090%	0.0178%	0.0411%	0.0811%	0.1395%	0.2413%	0.3778%	0.3302%	0.0896%
Asian/ Pacific Islander <sup>c</sup>	Both Sexes	0.0883%	0.0029%	0.0102%	0.0189%	0.0305%	0.0618%	0.1243%	0.2260%	0.3764%	0.4951%	0.0876%
	Males	0.0955%	0.0035%	0.0134%	0.0209%	0.0343%	0.0693%	0.1429%	0.2605%	0.4486%	0.5988%	0.1027%
	Females	0.0818%	0.0023%	0.0067%	0.0169%	0.0270%	0.0552%	0.1084%	0.1974%	0.3206%	0.4317%	0.0758%
Hispanic <sup>d</sup>	Both Sexes	0.0679%	0.0031%	0.0094%	0.0196%	0.0324%	0.0771%	0.1502%	0.2847%	0.4602%	0.5289%	0.1042%
	Males	0.0695%	0.0036%	0.0126%	0.0231%	0.0384%	0.0875%	0.1692%	0.2984%	0.4720%	0.5701%	0.1130%
	Females	0.0663%	0.0026%	0.0061%	0.0157%	0.0260%	0.0662%	0.1319%	0.2730%	0.4515%	0.5043%	0.0962%

<sup>a</sup> US 2012 cancer prevalence counts are based on 2012 cancer prevalence proportions from the SEER registries and 1/1/2012 US population estimates based on the average of 2011 and 2012 population estimates from the US Bureau of the Census. Prevalence was calculated using the First Malignant Primary Only for a person.

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

<sup>e</sup> Maximum limited-duration prevalence: 37 years for 1975-2012 SEER 9 data; 20 years for 1992-2012 SEER 11 data (used to calculate prevalence for Hispanics and Asian Pacific Islanders).

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

<sup>g h i</sup> (g) Cases diagnosed more than 37 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 <37 and >=37. (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 19.26  
All Lymphoid Neoplasms With Detailed Non-Hodgkin Lymphoma Subtypes<sup>a</sup>  
SEER<sup>b</sup> Incidence Rates and Annual Percent Change by Age at Diagnosis

All Races, Both Sexes, 2003-2012

Site	All Ages			Ages 0-19			Ages 20-64			Ages 65+		
	Rate	Count	APC	Rate	Count	APC	Rate	Count	APC	Rate	Count	APC
Lymphoid Neoplasm	35.8	299,007	-0.2	5.9	13,906	1.1*	23.6	127,216	-0.5*	160.3	157,885	-0.1
1 Hodgkin Lymphoma	2.7	23,122	-0.8	1.2	2,896	1.1	3.2	16,102	-0.9*	4.2	4,124	-1.5
2 Non-Hodgkin lymphoma	32.0	267,287	0.0	4.6	10,899	0.9*	19.9	108,203	-0.3*	150.6	148,185	0.1
2(a) Non-Hodgkin lymphoma, B-cell	29.4	245,737	0.3	3.5	8,257	2.8*	17.9	97,835	-0.1	141.9	139,645	0.3
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	1.3	11,097	3.5*	2.8	6,645	3.0*	0.6	3,346	3.7*	1.1	1,106	5.4*
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	26.7	222,882	-0.2	0.6	1,507	2.0	16.5	90,613	-0.5*	132.9	130,762	0.0
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	6.6	54,892	-1.4*	0.0	26	-	3.3	18,508	-1.5*	36.9	36,358	-1.3*
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	5.8	48,201	-1.7*	0.0	23	-	2.8	16,006	-1.8*	32.6	32,172	-1.7*
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	0.0	201	-2.2	-	-	-	0.0	56	-	0.1	142	-3.0
2(a) 2.1.3. Mantle-cell lymphoma	0.8	6,490	1.2	0.0	0	-	0.4	2,446	0.7	4.1	4,044	1.4
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	0.6	5,226	-1.1*	-	-	-	0.3	1,571	-2.2*	3.7	3,652	-0.7
2(a) 2.2.1. Lymphoplasmacytic lymphoma	0.3	2,354	0.8	-	-	-	0.1	710	-0.6	1.7	1,643	1.4
2(a) 2.2.2. Waldenstrom macroglobulinemia	0.3	2,872	-2.6*	-	-	-	0.2	861	-3.5*	2.0	2,009	-2.3*
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	7.0	58,035	0.3	0.3	656	2.4	4.6	24,848	-0.2	33.1	32,531	0.6*
2(a) 2.3.1. DLBCL, NOS <sup>c</sup>	6.9	57,438	0.2	0.3	627	1.8	4.5	24,382	-0.5	32.9	32,429	0.6*
2(a) 2.3.2. Intravascular large B-cell lymphoma	0.0	79	-	0.0	0	-	0.0	29	-	0.1	50	-
2(a) 2.3.3. Primary effusion lymphoma	0.0	99	-	0.0	0	-	0.0	75	-	0.0	24	-
2(a) 2.3.4. Mediastinal large B-cell lymphoma	0.1	419	11.4*	0.0	29	-	0.1	362	11.1*	0.0	28	-
2(a) 2.4. Burkitt lymphoma/leukemia	0.4	3,366	0.4	0.3	654	0.6	0.4	1,963	0.8	0.8	749	-0.3
2(a) 2.5. Marginal-zone lymphoma (MZL)	2.0	16,325	1.3*	0.0	86	-	1.2	6,840	0.7	9.6	9,399	1.5*
2(a) 2.5.1. Splenic MZL	0.2	1,369	-0.6	0.0	0	-	0.1	538	-0.8	0.8	831	-0.5
2(a) 2.5.2. Extranodal MZL, MALT <sup>c</sup> type	1.2	9,764	1.4*	0.0	58	-	0.8	4,376	0.7	5.4	5,330	1.8*
2(a) 2.5.3. Nodal MZL	0.6	5,192	1.4	0.0	28	-	0.3	1,926	1.0	3.3	3,238	1.5
2(a) 2.6. Follicular lymphoma	3.6	30,925	-1.5*	0.0	69	-	2.9	15,878	-2.0*	15.2	14,978	-1.1
2(a) 2.7. Hairy-cell leukemia	0.3	2,531	-0.9	-	-	-	0.3	1,601	-0.5	0.9	929	-1.5*
2(a) 2.8. Plasma cell neoplasms	6.2	51,543	1.1*	-	-	-	3.5	19,386	1.1*	32.7	32,145	1.0*
2(a) 2.8.1. Plasmacytoma	0.4	3,300	2.8*	-	-	-	0.3	1,613	2.9*	1.7	1,677	2.7*
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	5.8	48,243	0.9*	-	-	-	3.2	17,773	1.0*	31.0	30,468	0.9*
2(a) 2.9. Heavy chain disease	0.0	39	-	0.0	0	-	0.0	18	-	0.0	21	-
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS <sup>c</sup>	1.4	11,758	5.5*	0.0	105	-	0.7	3,876	4.4*	7.9	7,777	5.9*

The APC is the Annual Percent Change over the time interval.

<sup>a</sup> Morton LM, Turner JJ, Cerhan JR, Linet MS, Treseler PA, Clarke CA, Jack A, Cozen W, Maynadié M, Spinelli JJ, Costantini AS, Rüdiger T, Scarpa A, Zheng T, Weisenburger DD. Proposed classification of lymphoid neoplasms for epidemiologic research from the Pathology Working Group of the International Lymphoma Epidemiology Consortium (InterLymph). *Blood*. 2007;110:695-708.

<sup>b</sup> 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).

<sup>c</sup> NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

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

- 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.

Table 19.26 - continued  
 All Lymphoid Neoplasms With Detailed Non-Hodgkin Lymphoma Subtypes  
 SEER<sup>b</sup> Incidence Rates and Annual Percent Change by Age at Diagnosis

All Races, Both Sexes, 2003-2012

Site	All Ages			Ages 0-19			Ages 20-64			Ages 65+		
	Rate	Count	APC	Rate	Count	APC	Rate	Count	APC	Rate	Count	APC
2(b) Non-Hodgkin lymphoma, T-cell	2.1	17,850	0.4	0.8	1,816	1.6	1.7	9,199	0.3	7.0	6,835	0.3
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	0.1	1,167	-	0.2	567	-	0.1	505	-	0.1	95	-
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	2.0	16,564	1.4*	0.5	1,245	7.3*	1.6	8,634	1.3*	6.8	6,685	0.5
2(b) 2.1. Mycosis fungoides/Sezary syndrome	0.5	4,138	1.3	0.0	104	-	0.5	2,444	1.0	1.6	1,590	1.5
2(b) 2.1.1. Mycosis fungoides	0.5	4,010	1.0	0.0	104	-	0.5	2,406	0.8	1.5	1,500	1.0
2(b) 2.1.2. Sezary syndrome	0.0	128	-	0.0	0	-	0.0	38	-	0.1	90	-
2(b) 2.2. Peripheral T-cell lymphoma	1.2	9,726	0.2	0.2	401	-0.7	0.9	4,918	0.1	4.5	4,407	0.4
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS <sup>c</sup>	0.4	3,467	1.0	0.0	69	-	0.3	1,654	0.9	1.8	1,744	1.1
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	0.1	1,211	3.6*	-	-	-	0.1	474	1.8	0.7	734	4.4*
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	0.0	122	-	0.0	20	-	0.0	72	-	0.0	30	-
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	0.2	1,956	-3.3*	0.1	235	-3.4	0.2	1,114	-1.7	0.6	607	-5.7*
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	0.0	77	-	-	-	-	0.0	56	-	-	-	-
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	0.0	111	-	0.0	0	-	0.0	55	-	0.1	56	-
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS <sup>c</sup>	0.2	1,899	0.2	0.0	29	-	0.2	1,012	0.0	0.9	858	0.1
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	0.1	883	0.0	0.0	34	-	0.1	481	-1.0	0.4	368	1.2
2(b) 2.3. Adult T-cell leukemia/lymphoma	0.2	1,554	10.3*	0.3	713	12.3*	0.1	616	12.0*	0.2	225	0.1
2(b) 2.4. NK <sup>c</sup> /T-cell lymphoma, nasal-type/aggressive NK <sup>c</sup> -cell leukemia	0.1	670	3.0*	0.0	25	-	0.1	456	3.5	0.2	189	3.1
2(b) 2.5. T-cell large granular lymphocytic leukemia	0.0	186	-	-	-	-	0.0	74	-	0.1	111	-
2(b) 2.6. Prolymphocytic leukemia, T-cell	0.0	290	2.9	-	-	-	0.0	126	-	0.2	163	2.4
2(b) 3. Non-Hodgkin lymphoma, NOS <sup>c</sup> , T-cell	0.0	119	-	-	-	-	0.0	60	-	0.1	55	-
2(c) Non-Hodgkin lymphoma, unknown lineage	0.4	3,700	-15.0*	0.4	826	-	0.2	1,169	-	1.7	1,705	-14.8*
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	0.2	1,550	-14.8*	0.3	808	-	0.1	411	-	0.3	331	-
2(c) 2. Prolymphocytic leukemia, unknown lineage	0.0	99	-	-	-	-	0.0	27	-	0.1	70	-
2(c) 3. Non-Hodgkin lymphoma, NOS <sup>c</sup> , unknown lineage	0.2	2,051	-	0.0	16	-	0.1	731	-	1.3	1,304	-
2(*) 1. Total precursor lymphoma/leukemia <sup>d</sup>	1.7	13,814	-0.1	3.4	8,020	-0.2	0.8	4,262	-0.3	1.5	1,532	0.8
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	0.0	188	16.6*	-	-	-	0.0	105	-	0.1	81	-
4 Lymphoid neoplasm, NOS <sup>c</sup>	1.0	8,410	-4.6*	0.0	109	-	0.5	2,806	-4.5*	5.5	5,495	-5.0*

The APC is the Annual Percent Change over the time interval.

<sup>a</sup> Morton LM, et al. Proposed classification of lymphoid neoplasms for epidemiologic research from the Pathology Working Group of the International Lymphoma Epidemiology Consortium (InterLymph). Blood. 2007;110:695-708.

<sup>b</sup> 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).

<sup>c</sup> NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

<sup>d</sup> Total precursor lymphoma/leukemia is comprised of categories 2(a)1., 2(b)1., and 2(c)1.

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

- 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.

Table 19.27  
All Lymphoid Neoplasms With Detailed Non-Hodgkin Lymphoma Subtypes<sup>a</sup>  
SEER<sup>b</sup> Incidence Rates and Annual Percent Change by Age at Diagnosis

All Races, Males, 2003-2012

Site	All Ages			Ages 0-19			Ages 20-64			Ages 65+		
	Rate	Count	APC	Rate	Count	APC	Rate	Count	APC	Rate	Count	APC
Lymphoid Neoplasm	44.2	166,052	-0.1	6.7	8,096	0.6	28.1	74,420	-0.6*	204.0	83,536	0.1
1 Hodgkin Lymphoma	3.1	12,642	-0.9	1.3	1,565	0.8	3.5	8,911	-0.9	5.2	2,166	-1.6
2 Non-Hodgkin lymphoma	39.9	148,929	0.0	5.4	6,463	0.3	23.9	63,776	-0.4*	192.1	78,690	0.3
2(a) Non-Hodgkin lymphoma, B-cell	36.6	136,329	0.3	3.9	4,737	2.2*	21.6	57,576	-0.3	180.7	74,016	0.5*
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	1.5	6,028	3.0*	3.0	3,629	2.0*	0.7	1,860	3.4*	1.3	539	7.4*
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	33.4	124,105	-0.1	0.9	1,034	1.9	20.0	53,462	-0.6*	169.8	69,609	0.2
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	9.2	33,462	-1.4*	-	-	-	4.4	12,125	-1.6*	52.1	21,323	-1.3*
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	7.9	28,773	-1.7*	-	-	-	3.7	10,283	-2.0*	45.2	18,477	-1.7*
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	0.0	131	-	-	-	-	0.0	38	-	0.2	92	-
2(a) 2.1.3. Mantle-cell lymphoma	1.2	4,558	0.8	0.0	0	-	0.7	1,804	0.4	6.7	2,754	1.0
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	0.8	3,002	-1.7*	-	-	-	0.3	896	-2.0	5.2	2,105	-1.6
2(a) 2.2.1. Lymphoplasmacytic lymphoma	0.4	1,288	-0.3	0.0	0	-	0.1	378	-2.4	2.2	910	0.5
2(a) 2.2.2. Waldenstrom macroglobulinemia	0.5	1,714	-2.8*	-	-	-	0.2	518	-1.7	3.0	1,195	-3.1*
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	8.5	31,640	0.7*	0.3	386	3.2	5.7	14,931	-0.3	40.1	16,323	1.3*
2(a) 2.3.1. DLBCL, NOS <sup>c</sup>	8.4	31,351	0.6*	0.3	375	2.4	5.6	14,705	-0.4	39.9	16,271	1.2*
2(a) 2.3.2. Intravascular large B-cell lymphoma	0.0	36	-	0.0	0	-	0.0	17	-	0.0	19	-
2(a) 2.3.3. Primary effusion lymphoma	0.0	89	-	0.0	0	-	0.0	71	-	0.0	18	-
2(a) 2.3.4. Mediastinal large B-cell lymphoma	0.0	164	-	-	-	-	0.1	138	-	-	-	-
2(a) 2.4. Burkitt lymphoma/leukemia	0.6	2,462	-0.1	0.4	512	0.1	0.6	1,518	0.1	1.0	432	-0.6
2(a) 2.5. Marginal-zone lymphoma (MZL)	2.1	7,632	1.7*	0.0	61	-	1.2	3,301	0.6	10.4	4,270	2.2*
2(a) 2.5.1. Splenic MZL	0.2	640	-0.3	0.0	0	-	0.1	261	-2.0	0.9	379	0.3
2(a) 2.5.2. Extranodal MZL, MALT <sup>c</sup> type	1.2	4,458	1.8*	0.0	38	-	0.8	2,042	0.9	5.8	2,378	2.2*
2(a) 2.5.3. Nodal MZL	0.7	2,534	2.0	0.0	23	-	0.4	998	0.4	3.7	1,513	2.6
2(a) 2.6. Follicular lymphoma	4.0	15,363	-1.6*	0.0	54	-	3.1	8,263	-2.5*	16.9	7,046	-0.8
2(a) 2.7. Hairy-cell leukemia	0.5	2,021	-0.7	-	-	-	0.5	1,308	-0.2	1.7	712	-1.6*
2(a) 2.8. Plasma cell neoplasms	7.8	28,496	1.2*	-	-	-	4.1	11,109	1.1*	42.4	17,382	1.3*
2(a) 2.8.1. Plasmacytoma	0.5	2,050	2.7*	-	-	-	0.4	1,053	2.6*	2.4	993	2.6*
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	7.2	26,446	1.1*	-	-	-	3.7	10,056	0.9*	40.0	16,389	1.2*
2(a) 2.9. Heavy chain disease	0.0	27	-	0.0	0	-	-	-	-	0.0	16	-
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS <sup>c</sup>	1.7	6,196	5.8*	0.1	74	-	0.8	2,254	4.5*	9.6	3,868	6.2*

The APC is the Annual Percent Change over the time interval.

<sup>a</sup> Morton LM, Turner JJ, Cerhan JR, Linet MS, Treseler PA, Clarke CA, Jack A, Cozen W, Maynadié M, Spinelli JJ, Costantini AS, Rüdiger T, Scarpa A, Zheng T, Weisenburger DD. Proposed classification of lymphoid neoplasms for epidemiologic research from the Pathology Working Group of the International Lymphoma Epidemiology Consortium (InterLymph). *Blood*. 2007;110:695-708.

<sup>b</sup> 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).

<sup>c</sup> NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

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

- 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.

Table 19.27 - continued  
 All Lymphoid Neoplasms With Detailed Non-Hodgkin Lymphoma Subtypes  
 SEER<sup>b</sup> Incidence Rates and Annual Percent Change by Age at Diagnosis

All Races, Males, 2003-2012

Site	All Ages			Ages 0-19			Ages 20-64			Ages 65+		
	Rate	Count	APC	Rate	Count	APC	Rate	Count	APC	Rate	Count	APC
2(b) Non-Hodgkin lymphoma, T-cell	2.7	10,606	0.3	1.0	1,257	1.3	2.1	5,476	0.4	9.4	3,873	-0.1
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	0.2	801	-	0.3	407	-	0.1	344	-	0.1	50	-
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	2.5	9,742	1.3*	0.7	847	7.5*	2.0	5,102	1.4	9.2	3,793	0.1
2(b) 2.1. Mycosis fungoides/Sezary syndrome	0.6	2,344	0.9	0.0	47	-	0.5	1,351	1.4	2.3	946	0.0
2(b) 2.1.1. Mycosis fungoides	0.6	2,271	0.6	0.0	47	-	0.5	1,331	1.2	2.1	893	-0.4
2(b) 2.1.2. Sezary syndrome	0.0	73	-	0.0	0	-	0.0	20	-	0.1	53	-
2(b) 2.2. Peripheral T-cell lymphoma	1.5	5,680	0.2	0.2	245	-1.7	1.1	2,959	0.1	6.0	2,476	0.4
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS <sup>c</sup>	0.6	2,084	1.9*	0.0	43	-	0.4	1,056	1.6	2.4	985	2.3
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	0.2	625	2.9	-	-	-	0.1	265	3.5	0.9	357	2.3
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	0.0	43	-	-	-	-	0.0	23	-	-	-	-
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	0.3	1,189	-3.9*	0.1	150	-	0.3	689	-3.1	0.8	350	-4.3*
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	0.0	54	-	-	-	-	0.0	37	-	-	-	-
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	0.0	60	-	0.0	0	-	0.0	28	-	0.1	32	-
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS <sup>c</sup>	0.3	1,111	-0.3	-	-	-	0.2	597	-0.6	1.2	499	-0.3
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	0.1	514	-0.2	0.0	18	-	0.1	264	-0.4	0.6	232	-0.3
2(b) 2.3. Adult T-cell leukemia/lymphoma	0.3	1,043	10.7*	0.4	533	11.7*	0.2	401	13.0*	0.3	109	-
2(b) 2.4. NK <sup>c</sup> /T-cell lymphoma, nasal-type/aggressive NK <sup>c</sup> -cell leukemia	0.1	423	1.6	0.0	21	-	0.1	293	1.5	0.3	109	-
2(b) 2.5. T-cell large granular lymphocytic leukemia	0.0	88	-	0.0	0	-	0.0	27	-	0.2	61	-
2(b) 2.6. Prolymphocytic leukemia, T-cell	0.0	164	2.3	-	-	-	0.0	71	-	0.2	92	-
2(b) 3. Non-Hodgkin lymphoma, NOS <sup>c</sup> , T-cell	0.0	63	-	-	-	-	0.0	30	-	0.1	30	-
2(c) Non-Hodgkin lymphoma, unknown lineage	0.5	1,994	-15.9*	0.4	469	-	0.3	724	-	2.0	801	-15.5*
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	0.2	855	-15.2*	0.4	458	-	0.1	237	-	0.4	160	-
2(c) 2. Prolymphocytic leukemia, unknown lineage	0.0	59	-	-	-	-	-	-	-	0.1	43	-
2(c) 3. Non-Hodgkin lymphoma, NOS <sup>c</sup> , unknown lineage	0.3	1,080	-	-	-	-	0.2	472	-	1.5	598	-
2(*) 1. Total precursor lymphoma/leukemia <sup>d</sup>	1.9	7,684	-0.7	3.7	4,494	-1.3	1.0	2,441	-0.9	1.8	749	2.9*
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	0.0	101	-	-	-	-	0.0	63	-	0.1	37	-
4 Lymphoid neoplasm, NOS <sup>c</sup>	1.2	4,380	-4.5*	0.1	67	-	0.6	1,670	-5.4*	6.6	2,643	-4.5*

The APC is the Annual Percent Change over the time interval.

<sup>a</sup> Morton LM, et al. Proposed classification of lymphoid neoplasms for epidemiologic research from the Pathology Working Group of the International Lymphoma Epidemiology Consortium (InterLymph). *Blood*. 2007;110:695-708.

<sup>b</sup> 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).

<sup>c</sup> NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

<sup>d</sup> Total precursor lymphoma/leukemia is comprised of categories 2(a)1., 2(b)1., and 2(c)1.

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

- 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.

Table 19.28  
All Lymphoid Neoplasms With Detailed Non-Hodgkin Lymphoma Subtypes<sup>a</sup>  
SEER<sup>b</sup> Incidence Rates and Annual Percent Change by Age at Diagnosis

All Races, Females, 2003-2012

Site	All Ages			Ages 0-19			Ages 20-64			Ages 65+		
	Rate	Count	APC	Rate	Count	APC	Rate	Count	APC	Rate	Count	APC
Lymphoid Neoplasm	29.1	132,955	-0.3	5.0	5,810	1.8*	19.2	52,796	-0.3	129.6	74,349	-0.6*
1 Hodgkin Lymphoma	2.4	10,480	-0.8	1.1	1,331	1.2	2.8	7,191	-1.0*	3.5	1,958	-1.6
2 Non-Hodgkin lymphoma	25.8	118,358	-0.2	3.9	4,436	1.8*	15.9	44,427	-0.1	121.3	69,495	-0.4
2(a) Non-Hodgkin lymphoma, B-cell	23.8	109,408	0.1	3.1	3,520	3.7*	14.4	40,259	0.1	114.6	65,629	-0.1
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	1.2	5,069	4.1*	2.6	3,016	4.1*	0.6	1,486	4.1*	1.0	567	3.5
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	21.4	98,777	-0.4	0.4	473	1.9	13.2	37,151	-0.3	106.8	61,153	-0.5*
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	4.6	21,430	-1.6*	-	-	-	2.2	6,383	-1.3*	26.0	15,035	-1.7*
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	4.2	19,428	-1.9*	-	-	-	2.0	5,723	-1.5*	23.7	13,695	-2.0*
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	0.0	70	-	-	-	-	0.0	18	-	0.1	50	-
2(a) 2.1.3. Mantle-cell lymphoma	0.4	1,932	1.6	0.0	0	-	0.2	642	1.5	2.3	1,290	1.6
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	0.5	2,224	-0.6	-	-	-	0.2	675	-2.4*	2.7	1,547	0.2
2(a) 2.2.1. Lymphoplasmacytic lymphoma	0.2	1,066	1.8*	-	-	-	0.1	332	1.8	1.3	733	1.8*
2(a) 2.2.2. Waldenstrom macroglobulinemia	0.2	1,158	-2.7*	-	-	-	0.1	343	-6.3*	1.4	814	-1.3
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	5.8	26,395	-0.2	0.2	270	0.8	3.6	9,917	-0.2	28.2	16,208	-0.2
2(a) 2.3.1. DLBCL, NOS <sup>c</sup>	5.7	26,087	-0.3	0.2	252	0.7	3.5	9,677	-0.5	28.1	16,158	-0.2
2(a) 2.3.2. Intravascular large B-cell lymphoma	0.0	43	-	0.0	0	-	-	-	-	0.1	31	-
2(a) 2.3.3. Primary effusion lymphoma	-	-	-	0.0	0	-	-	-	-	-	-	-
2(a) 2.3.4. Mediastinal large B-cell lymphoma	0.1	255	-	0.0	18	-	0.1	224	-	-	-	-
2(a) 2.4. Burkitt lymphoma/leukemia	0.2	904	1.6	0.1	142	-	0.2	445	3.4	0.6	317	-0.5
2(a) 2.5. Marginal-zone lymphoma (MZL)	1.9	8,693	0.9	0.0	25	-	1.3	3,539	0.8	9.0	5,129	0.9
2(a) 2.5.1. Splenic MZL	0.2	729	-0.4	0.0	0	-	0.1	277	0.3	0.8	452	-0.8
2(a) 2.5.2. Extranodal MZL, MALT <sup>c</sup> type	1.2	5,306	1.0	0.0	20	-	0.8	2,334	0.6	5.2	2,952	1.4
2(a) 2.5.3. Nodal MZL	0.6	2,658	0.9	-	-	-	0.3	928	1.5	3.0	1,725	0.6
2(a) 2.6. Follicular lymphoma	3.4	15,562	-1.5*	-	-	-	2.7	7,615	-1.4*	14.1	7,932	-1.5
2(a) 2.7. Hairy-cell leukemia	0.1	510	-2.2	0.0	0	-	0.1	293	-1.8	0.4	217	-2.7
2(a) 2.8. Plasma cell neoplasms	5.0	23,047	0.7	-	-	-	2.9	8,277	1.2	25.9	14,763	0.4
2(a) 2.8.1. Plasmacytoma	0.3	1,250	3.0*	-	-	-	0.2	560	3.4	1.2	684	2.3
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	4.7	21,797	0.6	-	-	-	2.7	7,717	1.0	24.7	14,079	0.3
2(a) 2.9. Heavy chain disease	-	-	-	0.0	0	-	-	-	-	-	-	-
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS <sup>c</sup>	1.2	5,562	5.0*	0.0	31	-	0.6	1,622	4.1*	6.7	3,909	5.4*

The APC is the Annual Percent Change over the time interval.

<sup>a</sup> Morton LM, Turner JJ, Cerhan JR, Linet MS, Treseler PA, Clarke CA, Jack A, Cozen W, Maynadié M, Spinelli JJ, Costantini AS, Rüdiger T, Scarpa A, Zheng T, Weisenburger DD. Proposed classification of lymphoid neoplasms for epidemiologic research from the Pathology Working Group of the International Lymphoma Epidemiology Consortium (InterLymph). *Blood*. 2007;110:695-708.

<sup>b</sup> 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).

<sup>c</sup> NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

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

- 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.

Table 19.28 - continued  
 All Lymphoid Neoplasms With Detailed Non-Hodgkin Lymphoma Subtypes  
 SEER<sup>b</sup> Incidence Rates and Annual Percent Change by Age at Diagnosis

All Races, Females, 2003-2012

Site	All Ages			Ages 0-19			Ages 20-64			Ages 65+		
	Rate	Count	APC	Rate	Count	APC	Rate	Count	APC	Rate	Count	APC
2(b) Non-Hodgkin lymphoma, T-cell	1.6	7,244	0.5	0.5	559	2.3	1.4	3,723	0.1	5.2	2,962	0.4
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	0.1	366	-	0.1	160	-	0.1	161	-	0.1	45	-
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	1.5	6,822	1.3*	0.3	398	6.8*	1.3	3,532	1.1	5.1	2,892	0.7
2(b) 2.1. Mycosis fungoides/Sezary syndrome	0.4	1,794	1.5	0.0	57	-	0.4	1,093	0.4	1.1	644	2.9*
2(b) 2.1.1. Mycosis fungoides	0.4	1,739	1.2	0.0	57	-	0.4	1,075	0.3	1.1	607	2.5
2(b) 2.1.2. Sezary syndrome	0.0	55	-	0.0	0	-	0.0	18	-	0.1	37	-
2(b) 2.2. Peripheral T-cell lymphoma	0.9	4,046	0.2	0.1	156	-	0.7	1,959	0.1	3.4	1,931	0.3
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS <sup>c</sup>	0.3	1,383	-0.2	0.0	26	-	0.2	598	-0.3	1.3	759	-0.5
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	0.1	586	3.9*	0.0	0	-	0.1	209	-0.2	0.7	377	6.2*
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	0.0	79	-	-	-	-	0.0	49	-	0.0	16	-
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	0.2	767	-2.2*	0.1	85	-	0.2	425	0.7	0.4	257	-7.8*
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	0.0	23	-	-	-	-	0.0	19	-	-	-	-
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	0.0	51	-	0.0	0	-	0.0	27	-	0.0	24	-
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS <sup>c</sup>	0.2	788	0.8	-	-	-	0.2	415	0.8	0.6	359	0.5
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	0.1	369	-0.1	0.0	16	-	0.1	217	-1.4	0.2	136	-
2(b) 2.3. Adult T-cell leukemia/lymphoma	0.1	511	9.3*	0.2	180	-	0.1	215	9.6*	0.2	116	-
2(b) 2.4. NK <sup>c</sup> /T-cell lymphoma, nasal-type/aggressive NK <sup>c</sup> -cell leukemia	0.1	247	5.3	-	-	-	0.1	163	-	0.1	80	-
2(b) 2.5. T-cell large granular lymphocytic leukemia	0.0	98	-	-	-	-	0.0	47	-	0.1	50	-
2(b) 2.6. Prolymphocytic leukemia, T-cell	0.0	126	-	0.0	0	-	0.0	55	-	0.1	71	-
2(b) 3. Non-Hodgkin lymphoma, NOS <sup>c</sup> , T-cell	0.0	56	-	-	-	-	0.0	30	-	0.0	25	-
2(c) Non-Hodgkin lymphoma, unknown lineage	0.4	1,706	-	0.3	357	-	0.2	445	-	1.5	904	-
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	0.2	695	-	0.3	350	-	0.1	174	-	0.3	171	-
2(c) 2. Prolymphocytic leukemia, unknown lineage	0.0	40	-	-	-	-	-	-	-	0.0	27	-
2(c) 3. Non-Hodgkin lymphoma, NOS <sup>c</sup> , unknown lineage	0.2	971	-	-	-	-	0.1	259	-	1.2	706	-
2(*) 1. Total precursor lymphoma/leukemia <sup>d</sup>	1.5	6,130	0.8	3.1	3,526	1.4	0.7	1,821	0.6	1.4	783	-1.2
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	0.0	87	-	-	-	-	0.0	42	-	0.1	44	-
4 Lymphoid neoplasm, NOS <sup>c</sup>	0.9	4,030	-4.5*	0.0	42	-	0.4	1,136	-3.1*	4.7	2,852	-5.4*

The APC is the Annual Percent Change over the time interval.

<sup>a</sup> Morton LM, et al. Proposed classification of lymphoid neoplasms for epidemiologic research from the Pathology Working Group of the International Lymphoma Epidemiology Consortium (InterLymph). *Blood*. 2007;110:695-708.

<sup>b</sup> 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).

<sup>c</sup> NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

<sup>d</sup> Total precursor lymphoma/leukemia is comprised of categories 2(a)1., 2(b)1., and 2(c)1.

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

- 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.

Table 19.29  
All Lymphoid Neoplasms With Detailed Non-Hodgkin Lymphoma Subtypes<sup>a</sup>

SEER<sup>b</sup> 5-Year Relative Survival (Percent) by Age at Diagnosis

All Races, Both Sexes, 2005-2011

Site	Count	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
		Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )		
Lymphoid Neoplasm	171,838	69.0 ( 68.7 , 69.3 )	89.5 ( 88.8 , 90.2 )	76.6 ( 76.2 , 76.9 )	58.4 ( 57.9 , 59.0 )				
1 Hodgkin Lymphoma	14,979	85.9 ( 85.2 , 86.6 )	97.0 ( 96.1 , 97.8 )	89.9 ( 89.1 , 90.5 )	53.6 ( 50.5 , 56.5 )				
2 Non-Hodgkin lymphoma	152,478	67.8 ( 67.5 , 68.2 )	87.4 ( 86.5 , 88.2 )	74.8 ( 74.4 , 75.2 )	59.2 ( 58.6 , 59.7 )				
2(a) Non-Hodgkin lymphoma, B-cell	140,008	68.3 ( 67.9 , 68.6 )	88.4 ( 87.4 , 89.3 )	75.7 ( 75.3 , 76.1 )	59.8 ( 59.2 , 60.4 )				
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	7,457	68.6 ( 67.3 , 69.7 )	88.2 ( 87.0 , 89.2 )	37.6 ( 35.2 , 40.0 )	16.0 ( 12.3 , 20.1 )				
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	126,080	68.2 ( 67.9 , 68.6 )	88.8 ( 86.6 , 90.6 )	77.1 ( 76.6 , 77.5 )	59.9 ( 59.4 , 60.5 )				
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	30,161	77.6 ( 76.9 , 78.4 )	- ( - , - )	86.0 ( 85.1 , 86.8 )	72.0 ( 70.8 , 73.1 )				
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	26,520	80.7 ( 79.9 , 81.5 )	- ( - , - )	88.8 ( 87.9 , 89.7 )	75.3 ( 74.1 , 76.5 )				
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	105	43.2 ( 30.5 , 55.3 )	- ( - , - )	57.0 ( 36.0 , 73.5 )	35.4 ( 20.0 , 51.1 )				
2(a) 2.1.3. Mantle-cell lymphoma	3,536	55.8 ( 53.5 , 58.0 )	- ( - , - )	67.7 ( 64.7 , 70.6 )	45.9 ( 42.6 , 49.1 )				
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	2,736	80.1 ( 77.4 , 82.5 )	- ( - , - )	87.6 ( 84.5 , 90.1 )	75.5 ( 71.6 , 78.9 )				
2(a) 2.2.1. Lymphoplasmacytic lymphoma	1,237	74.9 ( 70.7 , 78.6 )	- ( - , - )	82.6 ( 77.3 , 86.8 )	70.2 ( 64.3 , 75.4 )				
2(a) 2.2.2. Waldenstrom macroglobulinemia	1,499	84.2 ( 80.6 , 87.1 )	- ( - , - )	91.0 ( 87.2 , 93.7 )	79.7 ( 74.4 , 84.1 )				
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	33,046	61.2 ( 60.6 , 61.9 )	87.0 ( 83.3 , 90.0 )	70.7 ( 69.8 , 71.5 )	51.6 ( 50.5 , 52.6 )				
2(a) 2.3.1. DLBCL, NOS <sup>c</sup>	32,657	61.1 ( 60.4 , 61.8 )	88.1 ( 84.4 , 91.0 )	70.5 ( 69.7 , 71.4 )	51.6 ( 50.5 , 52.7 )				
2(a) 2.3.2. Intravascular large B-cell lymphoma	42	51.0 ( 32.9 , 66.5 )	- ( - , - )	- ( - , - )	- ( - , - )				
2(a) 2.3.3. Primary effusion lymphoma	54	22.5 ( 10.8 , 36.9 )	- ( - , - )	24.1 ( 10.4 , 40.9 )	- ( - , - )				
2(a) 2.3.4. Mediastinal large B-cell lymphoma	293	83.2 ( 77.5 , 87.6 )	- ( - , - )	87.8 ( 82.1 , 91.8 )	- ( - , - )				
2(a) 2.4. Burkitt lymphoma/leukemia	2,198	59.1 ( 56.8 , 61.3 )	88.7 ( 85.3 , 91.3 )	56.3 ( 53.3 , 59.1 )	33.0 ( 27.2 , 38.9 )				
2(a) 2.5. Marginal-zone lymphoma (MZL)	9,101	89.6 ( 88.4 , 90.7 )	98.4 ( 89.3 , 99.8 )	92.5 ( 91.2 , 93.6 )	86.8 ( 84.7 , 88.7 )				
2(a) 2.5.1. Splenic MZL	787	83.9 ( 79.1 , 87.7 )	- ( - , - )	85.4 ( 79.7 , 89.6 )	82.4 ( 74.3 , 88.1 )				
2(a) 2.5.2. Extranodal MZL, MALT <sup>c</sup> type	5,450	94.0 ( 92.4 , 95.3 )	97.5 ( 83.5 , 99.6 )	95.5 ( 94.1 , 96.7 )	92.4 ( 89.3 , 94.6 )				
2(a) 2.5.3. Nodal MZL	2,864	82.8 ( 80.5 , 85.0 )	- ( - , - )	87.7 ( 85.0 , 90.1 )	78.4 ( 74.6 , 81.6 )				
2(a) 2.6. Follicular lymphoma	17,933	86.4 ( 85.5 , 87.1 )	94.6 ( 79.2 , 98.7 )	90.9 ( 90.1 , 91.6 )	80.2 ( 78.6 , 81.8 )				
2(a) 2.7. Hairy-cell leukemia	1,460	93.5 ( 90.9 , 95.5 )	- ( - , - )	97.4 ( 95.6 , 98.5 )	82.9 ( 75.0 , 88.6 )				
2(a) 2.8. Plasma cell neoplasms	29,416	46.4 ( 45.6 , 47.2 )	- ( - , - )	59.5 ( 58.4 , 60.6 )	36.1 ( 35.0 , 37.2 )				
2(a) 2.8.1. Plasmacytoma	1,837	66.6 ( 63.5 , 69.5 )	- ( - , - )	78.3 ( 74.8 , 81.4 )	51.0 ( 45.6 , 56.1 )				
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	27,579	45.0 ( 44.2 , 45.9 )	- ( - , - )	57.8 ( 56.7 , 59.0 )	35.4 ( 34.3 , 36.5 )				
2(a) 2.9. Heavy chain disease	29	53.1 ( 28.0 , 73.0 )	- ( - , - )	- ( - , - )	- ( - , - )				
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS <sup>c</sup>	6,471	69.1 ( 67.4 , 70.7 )	92.6 ( 82.9 , 96.9 )	76.4 ( 74.2 , 78.4 )	64.1 ( 61.6 , 66.4 )				

<sup>a</sup> Morton LM, Turner JJ, Cerhan JR, Linet MS, Treseler PA, Clarke CA, Jack A, Cozen W, Maynadié M, Spinelli JJ, Costantini AS, Rüdiger T, Scarpa A, Zheng T, Weisenburger DD. Proposed classification of lymphoid neoplasms for epidemiologic research from the Pathology Working Group of the International Lymphoma Epidemiology Consortium (InterLymph). *Blood*. 2007;110:695-708.

<sup>b</sup> 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).

<sup>c</sup> NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

- Statistic not displayed due to less than 25 cases.



Table 19.29 - continued  
 All Lymphoid Neoplasms With Detailed Non-Hodgkin Lymphoma Subtypes<sup>a</sup>

SEER<sup>b</sup> 5-Year Relative Survival (Percent) by Age at Diagnosis

All Races, Both Sexes, 2005-2011

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	
2(b) Non-Hodgkin lymphoma, T-cell	10,425	64.0 ( 62.9 , 65.1 )	84.2 ( 81.9 , 86.3 )	67.5 ( 66.1 , 68.9 )	50.4 ( 48.0 , 52.8 )			
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	794	64.2 ( 60.5 , 67.7 )	85.0 ( 80.8 , 88.3 )	47.3 ( 41.4 , 53.0 )	10.6 ( 3.1 , 23.4 )			
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	9,567	64.2 ( 62.9 , 65.4 )	83.9 ( 80.9 , 86.4 )	68.9 ( 67.5 , 70.4 )	51.3 ( 48.8 , 53.7 )			
2(b) 2.1. Mycosis fungoides/Sezary syndrome	2,422	89.2 ( 86.9 , 91.1 )	94.7 ( 76.6 , 98.9 )	92.2 ( 90.0 , 94.0 )	82.2 ( 76.3 , 86.7 )			
2(b) 2.1.1. Mycosis fungoides	2,353	90.7 ( 88.4 , 92.5 )	94.7 ( 76.6 , 98.9 )	93.0 ( 90.9 , 94.7 )	85.2 ( 79.0 , 89.6 )			
2(b) 2.1.2. Sezary syndrome	69	34.0 ( 19.1 , 49.6 )	- ( - , - )	45.5 ( 21.8 , 66.5 )	25.4 ( 9.0 , 45.9 )			
2(b) 2.2. Peripheral T-cell lymphoma	5,490	57.0 ( 55.3 , 58.6 )	81.4 ( 75.9 , 85.8 )	64.2 ( 62.2 , 66.2 )	43.1 ( 40.3 , 45.9 )			
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS <sup>c</sup>	1,866	37.9 ( 35.2 , 40.7 )	60.2 ( 43.6 , 73.2 )	44.9 ( 41.2 , 48.6 )	28.3 ( 24.2 , 32.6 )			
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	716	43.8 ( 39.3 , 48.1 )	- ( - , - )	55.4 ( 48.9 , 61.4 )	33.7 ( 27.6 , 39.9 )			
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	81	72.6 ( 56.6 , 83.5 )	- ( - , - )	72.4 ( 52.0 , 85.2 )	- ( - , - )			
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	1,147	58.4 ( 55.1 , 61.5 )	86.2 ( 79.6 , 90.8 )	62.4 ( 58.4 , 66.1 )	32.8 ( 26.1 , 39.6 )			
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	49	27.3 ( 14.8 , 41.3 )	- ( - , - )	33.0 ( 17.6 , 49.4 )	- ( - , - )			
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	60	14.4 ( 6.3 , 25.6 )	- ( - , - )	16.4 ( 5.7 , 31.9 )	13.2 ( 3.3 , 29.9 )			
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS <sup>c</sup>	1,060	82.8 ( 79.1 , 85.9 )	- ( - , - )	87.3 ( 83.3 , 90.4 )	75.3 ( 67.7 , 81.4 )			
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	511	90.6 ( 85.5 , 94.0 )	- ( - , - )	94.7 ( 89.6 , 97.3 )	81.8 ( 68.1 , 90.1 )			
2(b) 2.3. Adult T-cell leukemia/lymphoma	958	58.4 ( 54.6 , 62.0 )	84.7 ( 80.7 , 88.0 )	37.5 ( 31.4 , 43.6 )	16.3 ( 8.1 , 27.0 )			
2(b) 2.4. NK <sup>c</sup> /T-cell lymphoma, nasal-type/aggressive NK <sup>c</sup> -cell leukemia	428	43.1 ( 37.6 , 48.6 )	- ( - , - )	42.7 ( 36.5 , 48.8 )	40.6 ( 27.2 , 53.6 )			
2(b) 2.5. T-cell large granular lymphocytic leukemia	120	69.4 ( 57.1 , 78.8 )	- ( - , - )	77.8 ( 59.7 , 88.6 )	59.4 ( 42.0 , 73.1 )			
2(b) 2.6. Prolymphocytic leukemia, T-cell	149	13.5 ( 6.9 , 22.3 )	- ( - , - )	14.0 ( 5.4 , 26.8 )	13.0 ( 4.5 , 26.1 )			
2(b) 3. Non-Hodgkin lymphoma, NOS <sup>c</sup> , T-cell	64	38.7 ( 26.2 , 51.0 )	- ( - , - )	54.2 ( 36.4 , 68.9 )	- ( - , - )			
2(c) Non-Hodgkin lymphoma, unknown lineage	2,045	58.7 ( 56.2 , 61.1 )	84.7 ( 81.3 , 87.6 )	55.1 ( 50.9 , 59.0 )	43.2 ( 38.7 , 47.5 )			
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	914	63.9 ( 60.5 , 67.1 )	85.2 ( 81.8 , 88.1 )	36.1 ( 29.3 , 42.8 )	23.4 ( 15.7 , 31.9 )			
2(c) 2. Prolymphocytic leukemia, unknown lineage	54	50.0 ( 33.5 , 64.4 )	- ( - , - )	- ( - , - )	41.0 ( 22.5 , 58.7 )			
2(c) 3. Non-Hodgkin lymphoma, NOS <sup>c</sup> , unknown lineage	1,077	54.7 ( 51.0 , 58.3 )	- ( - , - )	64.7 ( 59.5 , 69.4 )	47.4 ( 42.2 , 52.4 )			
2(*) 1. Total precursor lymphoma/leukemia <sup>d</sup>	9,165	67.8 ( 66.7 , 68.8 )	87.7 ( 86.7 , 88.6 )	38.8 ( 36.7 , 40.9 )	17.3 ( 14.1 , 20.9 )			
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	85	64.4 ( 50.1 , 75.6 )	- ( - , - )	71.4 ( 55.0 , 82.7 )	50.5 ( 25.1 , 71.3 )			
4 Lymphoid neoplasm, NOS <sup>c</sup>	4,296	49.3 ( 47.3 , 51.2 )	85.4 ( 73.9 , 92.2 )	61.8 ( 59.0 , 64.4 )	40.1 ( 37.4 , 42.8 )			

<sup>a</sup> Morton LM, Turner JJ, Cerhan JR, Linet MS, Treseler PA, Clarke CA, Jack A, Cozen W, Maynadié M, Spinelli JJ, Costantini AS, Rüdiger T, Scarpa A, Zheng T, Weisenburger DD. Proposed classification of lymphoid neoplasms for epidemiologic research from the Pathology Working Group of the International Lymphoma Epidemiology Consortium (InterLymph). Blood. 2007;110:695-708.

<sup>b</sup> 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).

<sup>c</sup> NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

<sup>d</sup> Total precursor lymphoma/leukemia is comprised of categories 2(a)1., 2(b)1., and 2(c)1.

- Statistic not displayed due to less than 25 cases.

Table 19.30  
All Lymphoid Neoplasms With Detailed Non-Hodgkin Lymphoma Subtypes<sup>a</sup>

SEER<sup>b</sup> 5-Year Relative Survival (Percent) by Age at Diagnosis

All Races, Males, 2005-2011

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	
Lymphoid Neoplasm	94,857	68.6 ( 68.2 , 69.0 )	89.0 ( 88.0 , 89.9 )	74.7 ( 74.2 , 75.2 )	58.2 ( 57.5 , 59.0 )			
1 Hodgkin Lymphoma	8,183	85.1 ( 84.1 , 86.0 )	97.1 ( 95.7 , 98.1 )	88.5 ( 87.5 , 89.4 )	52.9 ( 48.6 , 57.0 )			
2 Non-Hodgkin lymphoma	84,404	67.5 ( 67.0 , 67.9 )	87.0 ( 85.8 , 88.0 )	73.1 ( 72.5 , 73.6 )	58.9 ( 58.1 , 59.7 )			
2(a) Non-Hodgkin lymphoma, B-cell	77,077	68.0 ( 67.5 , 68.4 )	88.0 ( 86.6 , 89.2 )	74.1 ( 73.5 , 74.6 )	59.6 ( 58.8 , 60.4 )			
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	4,066	68.3 ( 66.7 , 69.9 )	87.5 ( 85.9 , 89.0 )	36.9 ( 33.6 , 40.1 )	17.2 ( 11.8 , 23.5 )			
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	69,644	68.0 ( 67.5 , 68.5 )	89.4 ( 86.7 , 91.5 )	75.3 ( 74.8 , 75.9 )	59.8 ( 59.0 , 60.6 )			
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	18,227	76.6 ( 75.6 , 77.5 )	- ( - , - )	84.4 ( 83.2 , 85.5 )	70.4 ( 68.9 , 71.9 )			
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	15,668	80.0 ( 79.0 , 81.1 )	- ( - , - )	87.5 ( 86.2 , 88.6 )	74.4 ( 72.7 , 75.9 )			
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	68	52.3 ( 34.7 , 67.2 )	- ( - , - )	- ( - , - )	44.9 ( 23.4 , 64.3 )			
2(a) 2.1.3. Mantle-cell lymphoma	2,491	55.5 ( 52.7 , 58.1 )	- ( - , - )	67.1 ( 63.6 , 70.4 )	44.4 ( 40.5 , 48.4 )			
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	1,561	80.0 ( 76.4 , 83.1 )	- ( - , - )	87.4 ( 83.3 , 90.5 )	75.2 ( 69.9 , 79.6 )			
2(a) 2.2.1. Lymphoplasmacytic lymphoma	674	76.0 ( 70.4 , 80.7 )	- ( - , - )	83.0 ( 76.0 , 88.1 )	71.3 ( 62.9 , 78.1 )			
2(a) 2.2.2. Waldenstrom macroglobulinemia	887	83.0 ( 78.1 , 86.9 )	- ( - , - )	90.3 ( 84.8 , 93.9 )	78.1 ( 70.9 , 83.7 )			
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	17,982	61.2 ( 60.3 , 62.1 )	88.2 ( 83.1 , 91.8 )	68.1 ( 67.0 , 69.1 )	52.1 ( 50.5 , 53.7 )			
2(a) 2.3.1. DLBCL, NOS <sup>c</sup>	17,795	61.2 ( 60.3 , 62.1 )	88.8 ( 83.7 , 92.3 )	68.1 ( 66.9 , 69.1 )	52.2 ( 50.6 , 53.8 )			
2(a) 2.3.2. Intravascular large B-cell lymphoma	-	- ( - , - )	- ( - , - )	- ( - , - )	- ( - , - )			
2(a) 2.3.3. Primary effusion lymphoma	49	22.0 ( 9.5 , 37.8 )	- ( - , - )	21.8 ( 8.0 , 39.8 )	- ( - , - )			
2(a) 2.3.4. Mediastinal large B-cell lymphoma	116	79.1 ( 68.4 , 86.5 )	- ( - , - )	86.3 ( 75.3 , 92.6 )	- ( - , - )			
2(a) 2.4. Burkitt lymphoma/leukemia	1,604	60.7 ( 58.0 , 63.3 )	88.8 ( 85.0 , 91.7 )	56.5 ( 53.1 , 59.7 )	30.7 ( 22.7 , 39.1 )			
2(a) 2.5. Marginal-zone lymphoma (MZL)	4,220	89.4 ( 87.5 , 91.1 )	100.0 ( - , - )	90.9 ( 88.9 , 92.6 )	87.2 ( 84.1 , 89.8 )			
2(a) 2.5.1. Splenic MZL	370	88.3 ( 80.9 , 93.0 )	- ( - , - )	83.7 ( 74.9 , 89.6 )	91.1 ( 78.8 , 96.4 )			
2(a) 2.5.2. Extranodal MZL, MALT <sup>c</sup> type	2,467	93.7 ( 91.1 , 95.6 )	- ( - , - )	94.4 ( 92.0 , 96.1 )	92.3 ( 87.8 , 95.2 )			
2(a) 2.5.3. Nodal MZL	1,383	81.7 ( 78.1 , 84.8 )	- ( - , - )	85.5 ( 81.2 , 88.9 )	77.0 ( 71.4 , 81.7 )			
2(a) 2.6. Follicular lymphoma	8,878	85.4 ( 84.2 , 86.5 )	93.0 ( 73.6 , 98.3 )	89.2 ( 88.0 , 90.3 )	79.1 ( 76.6 , 81.4 )			
2(a) 2.7. Hairy-cell leukemia	1,177	94.4 ( 91.4 , 96.4 )	- ( - , - )	97.2 ( 95.1 , 98.4 )	85.8 ( 76.4 , 91.7 )			
2(a) 2.8. Plasma cell neoplasms	15,973	47.5 ( 46.5 , 48.6 )	- ( - , - )	59.2 ( 57.7 , 60.7 )	37.2 ( 35.7 , 38.8 )			
2(a) 2.8.1. Plasmacytoma	1,131	69.9 ( 66.0 , 73.4 )	- ( - , - )	78.7 ( 74.4 , 82.4 )	56.2 ( 48.8 , 62.9 )			
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	14,842	45.8 ( 44.7 , 46.9 )	- ( - , - )	57.2 ( 55.6 , 58.8 )	36.2 ( 34.6 , 37.7 )			
2(a) 2.9. Heavy chain disease	-	- ( - , - )	- ( - , - )	- ( - , - )	- ( - , - )			
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS <sup>c</sup>	3,367	67.6 ( 65.1 , 69.9 )	91.4 ( 78.4 , 96.8 )	74.0 ( 71.0 , 76.7 )	62.0 ( 58.3 , 65.5 )			

<sup>a</sup> Morton LM, Turner JJ, Cerhan JR, Linet MS, Treseler PA, Clarke CA, Jack A, Cozen W, Maynadié M, Spinelli JJ, Costantini AS, Rüdiger T, Scarpa A, Zheng T, Weisenburger DD. Proposed classification of lymphoid neoplasms for epidemiologic research from the Pathology Working Group of the International Lymphoma Epidemiology Consortium (InterLymph). *Blood*. 2007;110:695-708.

<sup>b</sup> 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).

<sup>c</sup> NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

- Statistic not displayed due to less than 25 cases.

Table 19.30 - continued  
All Lymphoid Neoplasms With Detailed Non-Hodgkin Lymphoma Subtypes<sup>a</sup>

SEER<sup>b</sup> 5-Year Relative Survival (Percent) by Age at Diagnosis

All Races, Males, 2005-2011

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )		
2(b) Non-Hodgkin lymphoma, T-cell	6,229	63.1 ( 61.6 , 64.6 )	84.3 ( 81.5 , 86.7 )	65.0 ( 63.1 , 66.8 )	49.0 ( 45.7 , 52.3 )			
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	553	64.6 ( 60.1 , 68.7 )	83.8 ( 78.8 , 87.8 )	46.8 ( 39.6 , 53.6 )	0.0 ( - , - )			
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	5,644	63.0 ( 61.4 , 64.6 )	84.5 ( 81.0 , 87.4 )	66.3 ( 64.3 , 68.2 )	50.0 ( 46.6 , 53.3 )			
2(b) 2.1. Mycosis fungoides/Sezary syndrome	1,368	88.0 ( 84.7 , 90.6 )	100.0 ( - , - )	91.7 ( 88.6 , 94.1 )	78.9 ( 70.4 , 85.2 )			
2(b) 2.1.1. Mycosis fungoides	1,325	89.5 ( 86.2 , 92.1 )	100.0 ( - , - )	92.7 ( 89.5 , 94.9 )	81.4 ( 72.5 , 87.7 )			
2(b) 2.1.2. Sezary syndrome	43	37.1 ( 17.2 , 57.1 )	- ( - , - )	- ( - , - )	35.2 ( 12.3 , 59.5 )			
2(b) 2.2. Peripheral T-cell lymphoma	3,207	55.5 ( 53.3 , 57.6 )	80.4 ( 73.3 , 85.8 )	61.2 ( 58.5 , 63.7 )	42.8 ( 39.0 , 46.6 )			
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS <sup>c</sup>	1,121	37.1 ( 33.4 , 40.7 )	61.5 ( 41.2 , 76.7 )	42.7 ( 37.9 , 47.4 )	27.5 ( 21.8 , 33.4 )			
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	373	38.8 ( 32.7 , 44.8 )	- ( - , - )	51.1 ( 42.1 , 59.4 )	26.7 ( 18.8 , 35.2 )			
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	28	75.1 ( 34.8 , 92.5 )	- ( - , - )	- ( - , - )	- ( - , - )			
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	715	55.8 ( 51.7 , 59.7 )	88.2 ( 80.0 , 93.1 )	56.6 ( 51.4 , 61.4 )	33.6 ( 25.1 , 42.2 )			
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	34	24.1 ( 9.8 , 41.8 )	- ( - , - )	- ( - , - )	- ( - , - )			
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	30	- ( - , - )	- ( - , - )	- ( - , - )	- ( - , - )			
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS <sup>c</sup>	615	82.7 ( 77.7 , 86.7 )	- ( - , - )	86.5 ( 80.9 , 90.5 )	76.5 ( 66.0 , 84.1 )			
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	291	90.9 ( 84.9 , 94.6 )	- ( - , - )	95.6 ( 89.7 , 98.2 )	81.9 ( 65.3 , 91.1 )			
2(b) 2.3. Adult T-cell leukemia/lymphoma	663	62.5 ( 58.0 , 66.7 )	85.8 ( 81.3 , 89.3 )	40.0 ( 32.4 , 47.5 )	- ( - , - )			
2(b) 2.4. NK <sup>c</sup> /T-cell lymphoma, nasal-type/aggressive NK <sup>c</sup> -cell leukemia	282	41.1 ( 34.4 , 47.6 )	- ( - , - )	40.3 ( 32.9 , 47.6 )	34.4 ( 18.2 , 51.3 )			
2(b) 2.5. T-cell large granular lymphocytic leukemia	51	60.7 ( 42.0 , 75.0 )	- ( - , - )	- ( - , - )	47.0 ( 23.1 , 67.8 )			
2(b) 2.6. Prolymphocytic leukemia, T-cell	73	14.6 ( 5.5 , 27.7 )	- ( - , - )	15.1 ( 4.5 , 31.5 )	- ( - , - )			
2(b) 3. Non-Hodgkin lymphoma, NOS <sup>c</sup> , T-cell	32	43.7 ( 25.7 , 60.4 )	- ( - , - )	- ( - , - )	- ( - , - )			
2(c) Non-Hodgkin lymphoma, unknown lineage	1,098	57.7 ( 54.3 , 60.9 )	83.9 ( 79.1 , 87.6 )	51.6 ( 46.4 , 56.7 )	40.5 ( 34.1 , 46.9 )			
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	503	63.3 ( 58.6 , 67.5 )	84.1 ( 79.3 , 87.9 )	31.4 ( 23.1 , 39.9 )	25.6 ( 14.1 , 38.9 )			
2(c) 2. Prolymphocytic leukemia, unknown lineage	29	44.6 ( 24.5 , 62.9 )	- ( - , - )	- ( - , - )	- ( - , - )			
2(c) 3. Non-Hodgkin lymphoma, NOS <sup>c</sup> , unknown lineage	566	53.1 ( 48.0 , 57.9 )	- ( - , - )	61.1 ( 54.5 , 67.0 )	43.7 ( 36.0 , 51.2 )			
2(*) 1. Total precursor lymphoma/leukemia <sup>d</sup>	5,122	67.5 ( 66.0 , 68.9 )	86.9 ( 85.5 , 88.2 )	38.1 ( 35.3 , 40.8 )	17.9 ( 13.1 , 23.3 )			
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	45	78.3 ( 57.7 , 89.7 )	- ( - , - )	75.5 ( 54.1 , 87.9 )	- ( - , - )			
4 Lymphoid neoplasm, NOS <sup>c</sup>	2,225	49.4 ( 46.7 , 52.0 )	81.9 ( 63.9 , 91.4 )	58.8 ( 55.2 , 62.3 )	40.3 ( 36.3 , 44.3 )			

<sup>a</sup> Morton LM, Turner JJ, Cerhan JR, Linet MS, Treseler PA, Clarke CA, Jack A, Cozen W, Maynadié M, Spinelli JJ, Costantini AS, Rüdiger T, Scarpa A, Zheng T, Weisenburger DD. Proposed classification of lymphoid neoplasms for epidemiologic research from the Pathology Working Group of the International Lymphoma Epidemiology Consortium (InterLymph). Blood. 2007;110:695-708.

<sup>b</sup> 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).

<sup>c</sup> NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

<sup>d</sup> Total precursor lymphoma/leukemia is comprised of categories 2(a)1., 2(b)1., and 2(c)1.

- Statistic not displayed due to less than 25 cases.

Table 19.31  
All Lymphoid Neoplasms With Detailed Non-Hodgkin Lymphoma Subtypes<sup>a</sup>

SEER<sup>b</sup> 5-Year Relative Survival (Percent) by Age at Diagnosis

All Races, Females, 2005-2011

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	
Lymphoid Neoplasm	76,981	69.5 ( 69.0 , 69.9 )	90.2 ( 89.1 , 91.2 )	79.2 ( 78.7 , 79.7 )	58.7 ( 57.9 , 59.4 )			
1 Hodgkin Lymphoma	6,796	86.9 ( 85.9 , 87.8 )	96.9 ( 95.4 , 97.9 )	91.5 ( 90.5 , 92.4 )	54.3 ( 50.1 , 58.3 )			
2 Non-Hodgkin lymphoma	68,074	68.3 ( 67.8 , 68.8 )	88.1 ( 86.7 , 89.3 )	77.3 ( 76.7 , 77.9 )	59.5 ( 58.7 , 60.2 )			
2(a) Non-Hodgkin lymphoma, B-cell	62,931	68.6 ( 68.1 , 69.1 )	88.9 ( 87.4 , 90.2 )	78.1 ( 77.4 , 78.7 )	60.0 ( 59.2 , 60.8 )			
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	3,391	68.8 ( 67.0 , 70.6 )	89.0 ( 87.3 , 90.4 )	38.4 ( 34.7 , 42.0 )	14.5 ( 9.9 , 19.9 )			
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	56,436	68.5 ( 67.9 , 69.0 )	87.5 ( 83.2 , 90.7 )	79.6 ( 78.9 , 80.2 )	60.1 ( 59.3 , 60.9 )			
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	11,934	79.3 ( 78.0 , 80.5 )	- ( - , - )	89.1 ( 87.7 , 90.4 )	74.0 ( 72.3 , 75.7 )			
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	10,852	81.6 ( 80.3 , 82.8 )	- ( - , - )	91.3 ( 89.9 , 92.5 )	76.5 ( 74.7 , 78.2 )			
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	37	27.2 ( 11.8 , 45.2 )	- ( - , - )	- ( - , - )	- ( - , - )			
2(a) 2.1.3. Mantle-cell lymphoma	1,045	56.7 ( 52.3 , 60.8 )	- ( - , - )	69.5 ( 63.4 , 74.9 )	48.5 ( 42.6 , 54.2 )			
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	1,175	80.0 ( 75.8 , 83.5 )	- ( - , - )	87.6 ( 82.5 , 91.2 )	75.7 ( 69.6 , 80.6 )			
2(a) 2.2.1. Lymphoplasmacytic lymphoma	563	73.6 ( 67.1 , 78.9 )	- ( - , - )	81.7 ( 72.6 , 88.0 )	69.2 ( 60.4 , 76.5 )			
2(a) 2.2.2. Waldenstrom macroglobulinemia	612	85.8 ( 80.0 , 90.0 )	- ( - , - )	91.5 ( 85.6 , 95.1 )	81.7 ( 72.8 , 87.9 )			
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	15,064	61.3 ( 60.3 , 62.3 )	85.4 ( 79.3 , 89.8 )	74.7 ( 73.4 , 75.9 )	51.0 ( 49.5 , 52.5 )			
2(a) 2.3.1. DLBCL, NOS <sup>c</sup>	14,862	61.0 ( 60.0 , 62.0 )	87.2 ( 81.0 , 91.5 )	74.4 ( 73.1 , 75.6 )	51.0 ( 49.5 , 52.5 )			
2(a) 2.3.2. Intravascular large B-cell lymphoma	-	- ( - , - )	- ( - , - )	- ( - , - )	- ( - , - )			
2(a) 2.3.3. Primary effusion lymphoma	-	- ( - , - )	- ( - , - )	- ( - , - )	- ( - , - )			
2(a) 2.3.4. Mediastinal large B-cell lymphoma	177	85.6 ( 78.9 , 90.4 )	- ( - , - )	88.8 ( 82.0 , 93.1 )	- ( - , - )			
2(a) 2.4. Burkitt lymphoma/leukemia	594	54.8 ( 50.2 , 59.1 )	88.0 ( 79.3 , 93.2 )	55.6 ( 49.4 , 61.3 )	34.5 ( 26.9 , 42.2 )			
2(a) 2.5. Marginal-zone lymphoma (MZL)	4,881	89.8 ( 88.1 , 91.2 )	- ( - , - )	94.0 ( 92.3 , 95.3 )	86.2 ( 83.3 , 88.6 )			
2(a) 2.5.1. Splenic MZL	417	78.9 ( 72.0 , 84.2 )	- ( - , - )	86.8 ( 78.5 , 92.1 )	72.3 ( 61.4 , 80.6 )			
2(a) 2.5.2. Extranodal MZL, MALT <sup>c</sup> type	2,983	94.3 ( 92.1 , 95.9 )	- ( - , - )	96.5 ( 94.5 , 97.8 )	92.1 ( 88.0 , 94.8 )			
2(a) 2.5.3. Nodal MZL	1,481	83.7 ( 80.4 , 86.5 )	- ( - , - )	90.1 ( 86.2 , 92.9 )	79.0 ( 74.0 , 83.2 )			
2(a) 2.6. Follicular lymphoma	9,055	87.4 ( 86.2 , 88.4 )	- ( - , - )	92.7 ( 91.6 , 93.6 )	81.1 ( 78.9 , 83.1 )			
2(a) 2.7. Hairy-cell leukemia	283	89.9 ( 82.2 , 94.4 )	- ( - , - )	97.7 ( 93.3 , 99.2 )	74.2 ( 56.0 , 85.7 )			
2(a) 2.8. Plasma cell neoplasms	13,443	45.0 ( 43.9 , 46.2 )	- ( - , - )	59.8 ( 58.1 , 61.5 )	35.0 ( 33.4 , 36.5 )			
2(a) 2.8.1. Plasmacytoma	706	61.0 ( 55.6 , 65.9 )	- ( - , - )	77.0 ( 70.1 , 82.5 )	44.1 ( 36.4 , 51.6 )			
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	12,737	44.2 ( 43.0 , 45.3 )	- ( - , - )	58.7 ( 56.9 , 60.4 )	34.5 ( 33.0 , 36.1 )			
2(a) 2.9. Heavy chain disease	-	- ( - , - )	- ( - , - )	- ( - , - )	- ( - , - )			
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS <sup>c</sup>	3,104	70.7 ( 68.2 , 72.9 )	- ( - , - )	79.4 ( 76.3 , 82.1 )	65.9 ( 62.5 , 69.1 )			

<sup>a</sup> Morton LM, Turner JJ, Cerhan JR, Linet MS, Treseler PA, Clarke CA, Jack A, Cozen W, Maynadié M, Spinelli JJ, Costantini AS, Rüdiger T, Scarpa A, Zheng T, Weisenburger DD. Proposed classification of lymphoid neoplasms for epidemiologic research from the Pathology Working Group of the International Lymphoma Epidemiology Consortium (InterLymph). *Blood*. 2007;110:695-708.

<sup>b</sup> 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).

<sup>c</sup> NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

- Statistic not displayed due to less than 25 cases.

Table 19.31 - continued  
All Lymphoid Neoplasms With Detailed Non-Hodgkin Lymphoma Subtypes<sup>a</sup>

SEER<sup>b</sup> 5-Year Relative Survival (Percent) by Age at Diagnosis

All Races, Females, 2005-2011

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )	Percent ( 95% C.I. )		
2(b) Non-Hodgkin lymphoma, T-cell	4,196	65.3 ( 63.5 , 67.0 )	84.0 ( 79.2 , 87.8 )	71.2 ( 69.1 , 73.3 )	51.6 ( 48.2 , 55.0 )			
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	241	63.3 ( 56.2 , 69.5 )	88.0 ( 79.5 , 93.2 )	48.6 ( 37.9 , 58.5 )	19.4 ( 5.9 , 38.8 )			
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	3,923	65.7 ( 63.9 , 67.5 )	82.4 ( 76.1 , 87.1 )	72.8 ( 70.5 , 74.9 )	52.4 ( 48.8 , 55.8 )			
2(b) 2.1. Mycosis fungoides/Sezary syndrome	1,054	90.4 ( 87.2 , 92.9 )	89.8 ( 59.0 , 97.8 )	92.7 ( 89.4 , 95.1 )	85.9 ( 79.7 , 90.4 )			
2(b) 2.1.1. Mycosis fungoides	1,028	91.9 ( 88.7 , 94.3 )	89.8 ( 59.0 , 97.8 )	93.3 ( 90.0 , 95.6 )	88.2 ( 81.7 , 92.4 )			
2(b) 2.1.2. Sezary syndrome	26	28.4 ( 9.1 , 51.6 )	- ( - , - )	- ( - , - )	- ( - , - )			
2(b) 2.2. Peripheral T-cell lymphoma	2,283	58.8 ( 56.4 , 61.2 )	82.9 ( 72.9 , 89.4 )	68.8 ( 65.7 , 71.6 )	43.5 ( 39.2 , 47.6 )			
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS <sup>c</sup>	745	38.8 ( 34.6 , 43.0 )	- ( - , - )	48.5 ( 42.5 , 54.3 )	28.8 ( 23.0 , 34.9 )			
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	343	48.7 ( 42.2 , 54.8 )	- ( - , - )	59.9 ( 50.7 , 68.0 )	39.8 ( 31.0 , 48.4 )			
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	53	70.6 ( 52.3 , 83.0 )	- ( - , - )	66.4 ( 41.6 , 82.6 )	- ( - , - )			
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	432	62.1 ( 56.6 , 67.1 )	82.2 ( 68.3 , 90.4 )	72.1 ( 65.8 , 77.5 )	30.8 ( 20.8 , 41.3 )			
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	-	- ( - , - )	- ( - , - )	- ( - , - )	- ( - , - )			
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	30	19.7 ( 7.4 , 36.2 )	- ( - , - )	- ( - , - )	- ( - , - )			
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS <sup>c</sup>	445	83.0 ( 77.1 , 87.5 )	- ( - , - )	88.5 ( 82.3 , 92.6 )	74.0 ( 61.9 , 82.8 )			
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	220	90.0 ( 81.6 , 94.6 )	- ( - , - )	93.0 ( 84.8 , 96.8 )	80.6 ( 56.6 , 92.1 )			
2(b) 2.3. Adult T-cell leukemia/lymphoma	295	48.8 ( 41.7 , 55.4 )	80.9 ( 70.8 , 87.9 )	32.5 ( 22.5 , 43.0 )	25.6 ( 13.1 , 40.0 )			
2(b) 2.4. NK <sup>c</sup> /T-cell lymphoma, nasal-type/aggressive NK <sup>c</sup> -cell leukemia	146	46.7 ( 36.7 , 56.0 )	- ( - , - )	47.3 ( 35.7 , 57.9 )	46.3 ( 27.2 , 63.4 )			
2(b) 2.5. T-cell large granular lymphocytic leukemia	69	75.3 ( 58.1 , 86.3 )	- ( - , - )	77.7 ( 51.3 , 90.9 )	68.6 ( 43.4 , 84.3 )			
2(b) 2.6. Prolymphocytic leukemia, T-cell	76	12.7 ( 4.6 , 25.1 )	- ( - , - )	11.2 ( 1.1 , 34.7 )	12.8 ( 3.4 , 28.4 )			
2(b) 3. Non-Hodgkin lymphoma, NOS <sup>c</sup> , T-cell	32	33.2 ( 16.9 , 50.4 )	- ( - , - )	- ( - , - )	- ( - , - )			
2(c) Non-Hodgkin lymphoma, unknown lineage	947	59.9 ( 56.0 , 63.5 )	85.8 ( 80.2 , 89.9 )	60.6 ( 53.7 , 66.8 )	45.2 ( 39.1 , 51.1 )			
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	411	64.5 ( 59.3 , 69.2 )	86.7 ( 81.3 , 90.6 )	42.0 ( 31.0 , 52.6 )	20.9 ( 11.9 , 31.6 )			
2(c) 2. Prolymphocytic leukemia, unknown lineage	25	53.4 ( 27.2 , 73.9 )	- ( - , - )	- ( - , - )	- ( - , - )			
2(c) 3. Non-Hodgkin lymphoma, NOS <sup>c</sup> , unknown lineage	511	56.5 ( 50.9 , 61.7 )	- ( - , - )	71.4 ( 62.8 , 78.4 )	50.2 ( 43.1 , 56.9 )			
2(*) 1. Total precursor lymphoma/leukemia <sup>d</sup>	4,043	68.1 ( 66.5 , 69.7 )	88.7 ( 87.2 , 90.1 )	39.8 ( 36.5 , 43.0 )	16.3 ( 12.2 , 21.1 )			
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	40	45.0 ( 23.8 , 64.2 )	- ( - , - )	- ( - , - )	- ( - , - )			
4 Lymphoid neoplasm, NOS <sup>c</sup>	2,071	49.1 ( 46.3 , 51.8 )	89.6 ( 71.0 , 96.5 )	66.3 ( 61.8 , 70.3 )	39.9 ( 36.3 , 43.4 )			

<sup>a</sup> Morton LM, Turner JJ, Cerhan JR, Linet MS, Treseler PA, Clarke CA, Jack A, Cozen W, Maynadié M, Spinelli JJ, Costantini AS, Rüdiger T, Scarpa A, Zheng T, Weisenburger DD. Proposed classification of lymphoid neoplasms for epidemiologic research from the Pathology Working Group of the International Lymphoma Epidemiology Consortium (InterLymph). Blood. 2007;110:695-708.

<sup>b</sup> 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).

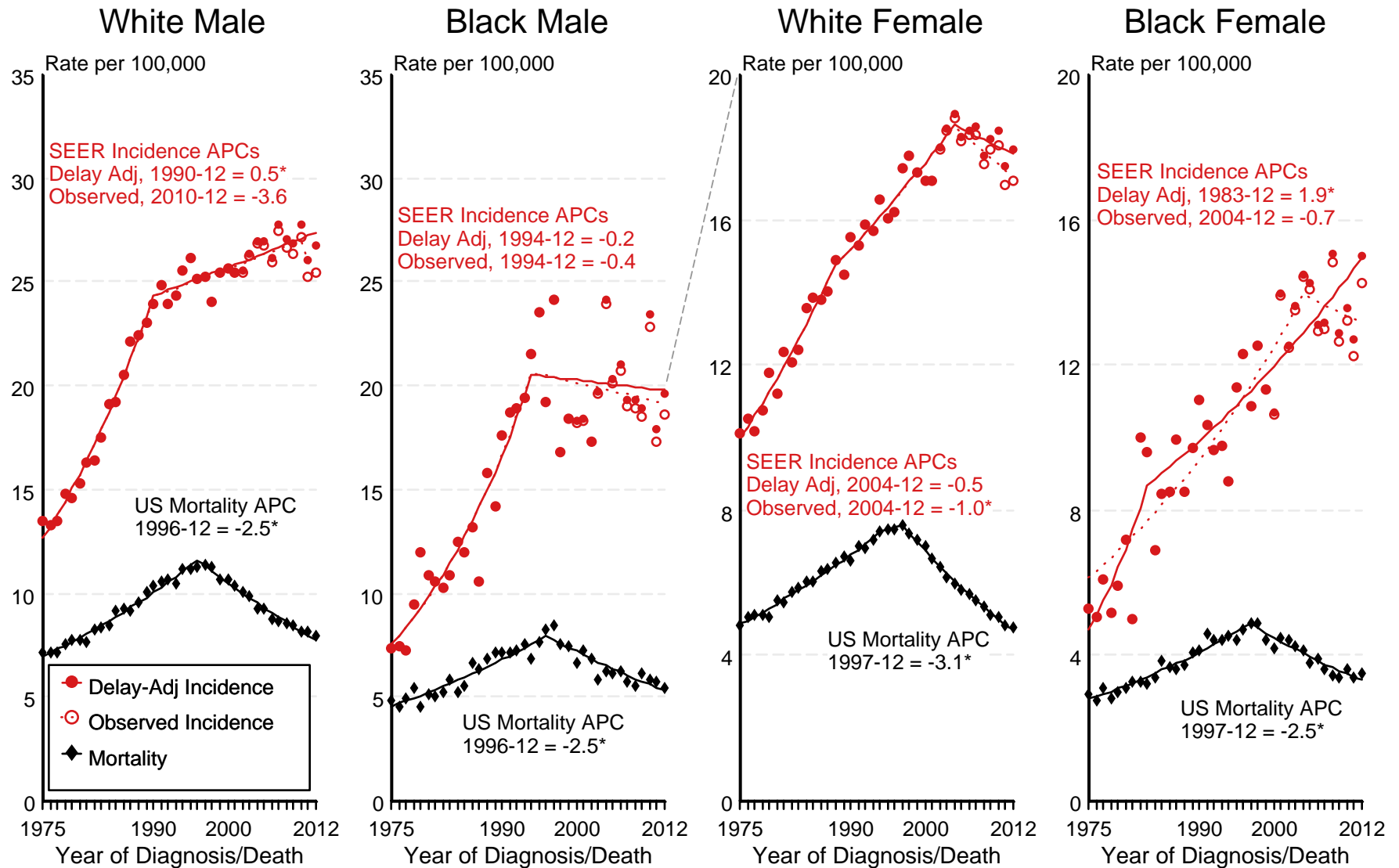
<sup>c</sup> NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

<sup>d</sup> Total precursor lymphoma/leukemia is comprised of categories 2(a)1., 2(b)1., and 2(c)1.

- Statistic not displayed due to less than 25 cases.

Figure 19.1

# SEER Observed Incidence, SEER Delay Adjusted Incidence and US Death Rates<sup>a</sup> Non-Hodgkin Lymphoma, by Race and Sex



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

<sup>a</sup> 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 4.2.0, April 2015, 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.

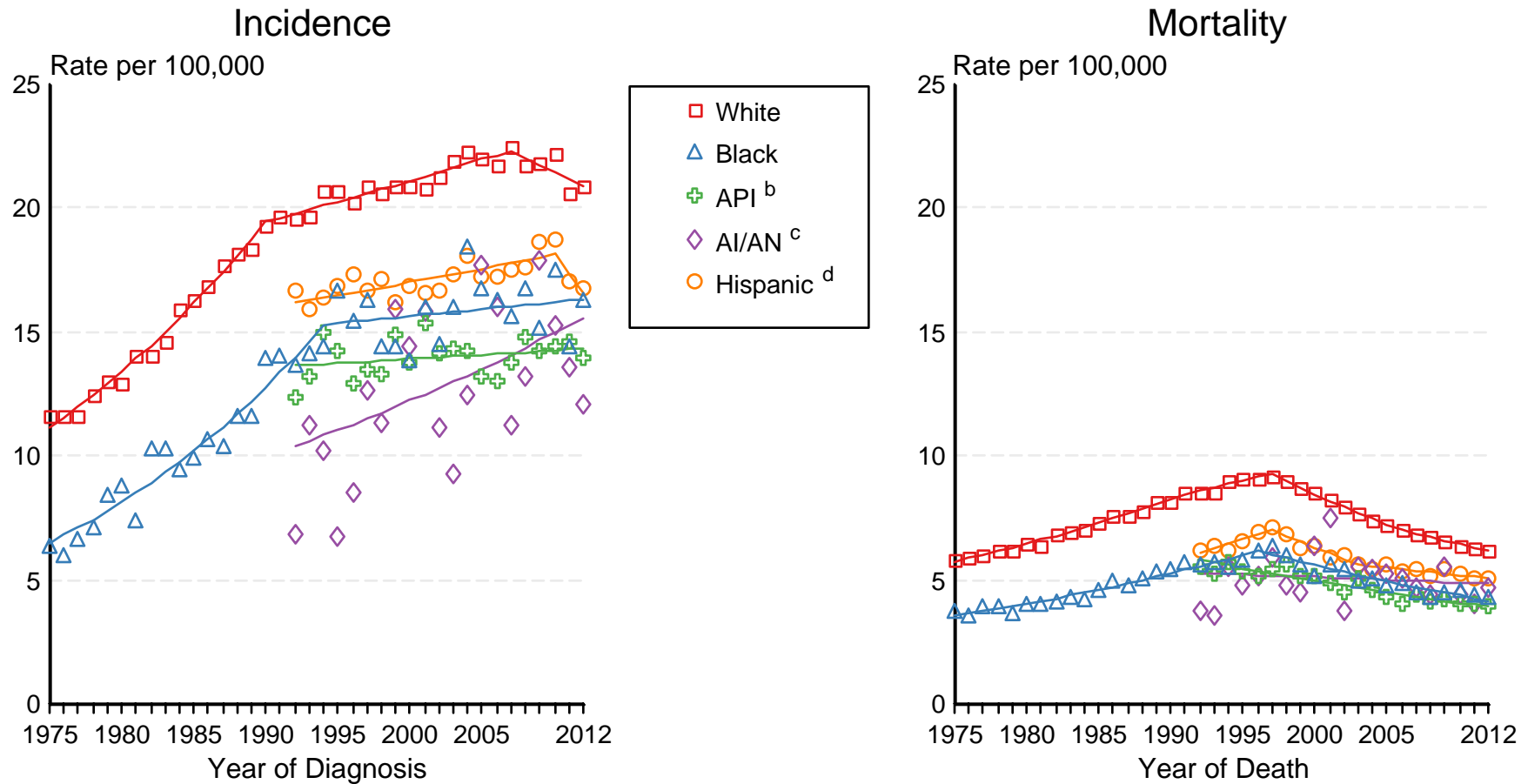
\* The APC is significantly different from zero ( $p < 0.05$ ).

Figure 19.2

# SEER Incidence and US Death Rates<sup>a</sup> Non-Hodgkin Lymphoma, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2012

and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2012



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.

<sup>a</sup> 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 4.2.0, April 2015, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2012 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2012 allow a maximum of 3 joinpoints.

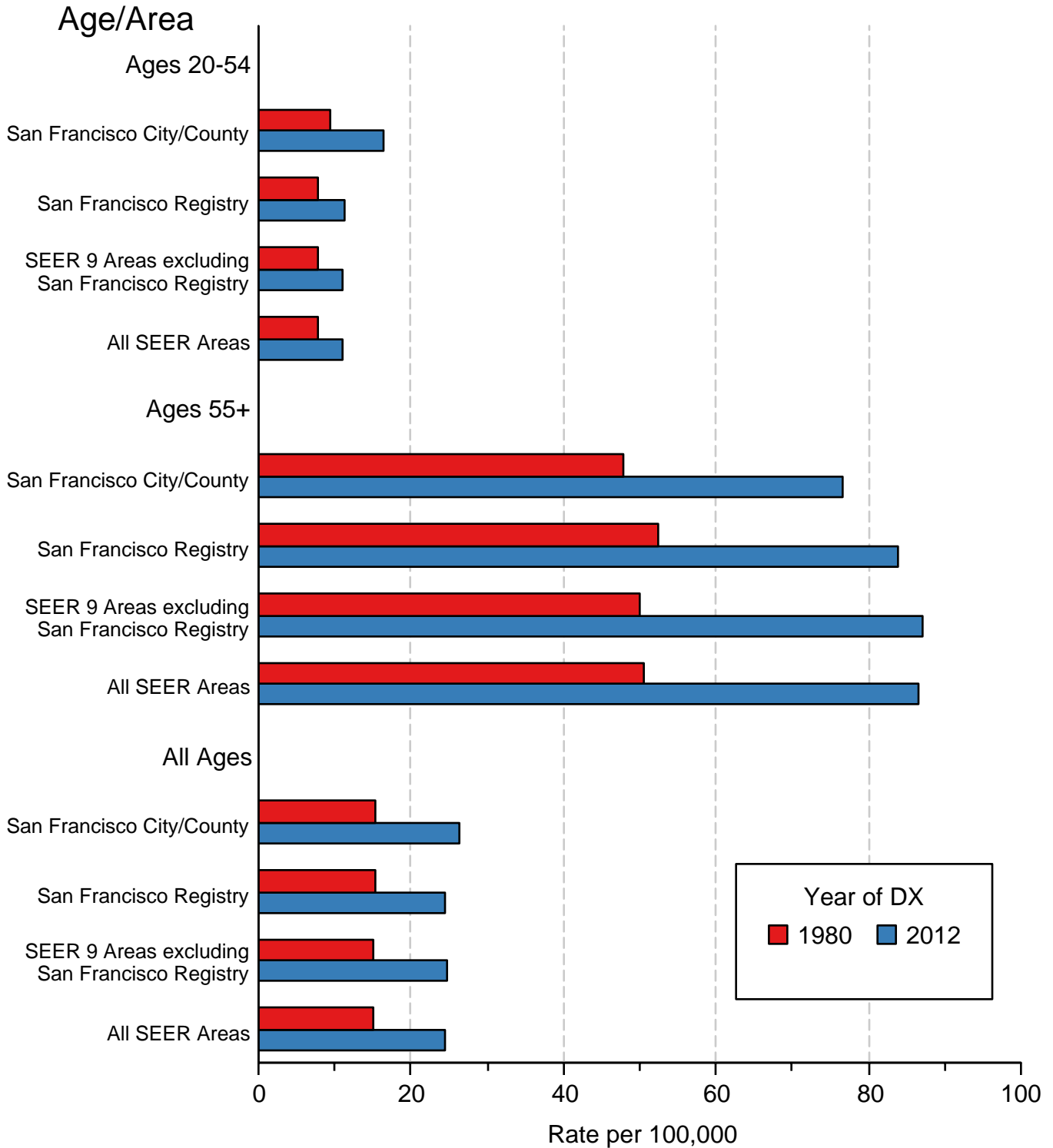
<sup>b</sup> API = Asian/Pacific Islander.

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

<sup>d</sup> 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 19.3

# Non-Hodgkin Lymphoma Incidence Rates, 1980 vs 2012 Males by Age at Diagnosis and SEER area

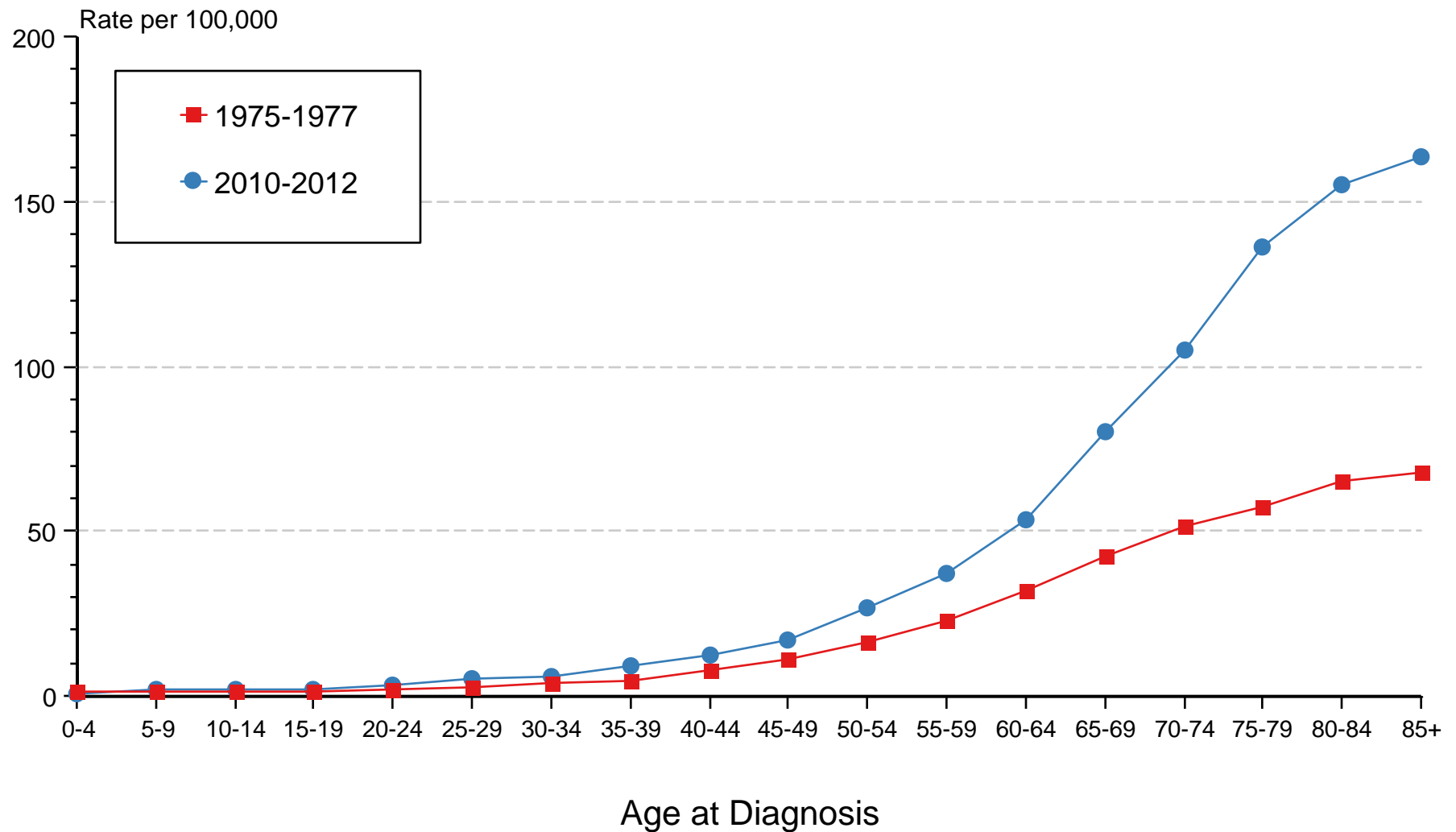


Source: SEER 9 areas. Rates are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1103).



Figure 19.4

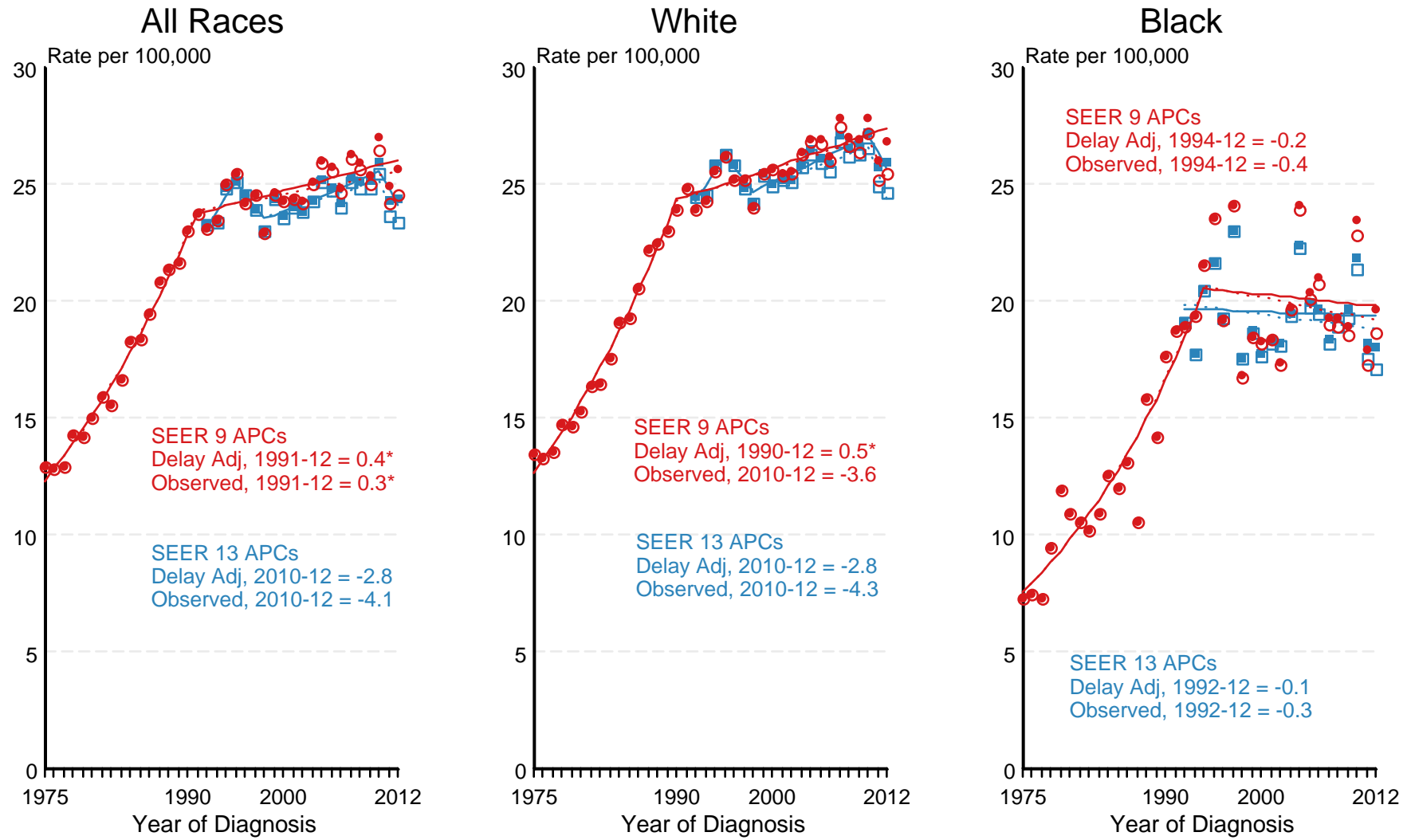
# Non-Hodgkin Lymphoma SEER Incidence by Age 1975-1977 vs 2010-2012 All Races, Males



Source: SEER 9 areas. Rates are age-adjusted as appropriate to the 2000 US Std Population (19 age groups - Census P25-1103).

Figure 19.5

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates<sup>a</sup> SEER 9 Areas Compared to SEER 13 Areas Non-Hodgkin Lymphoma, Male, by Race

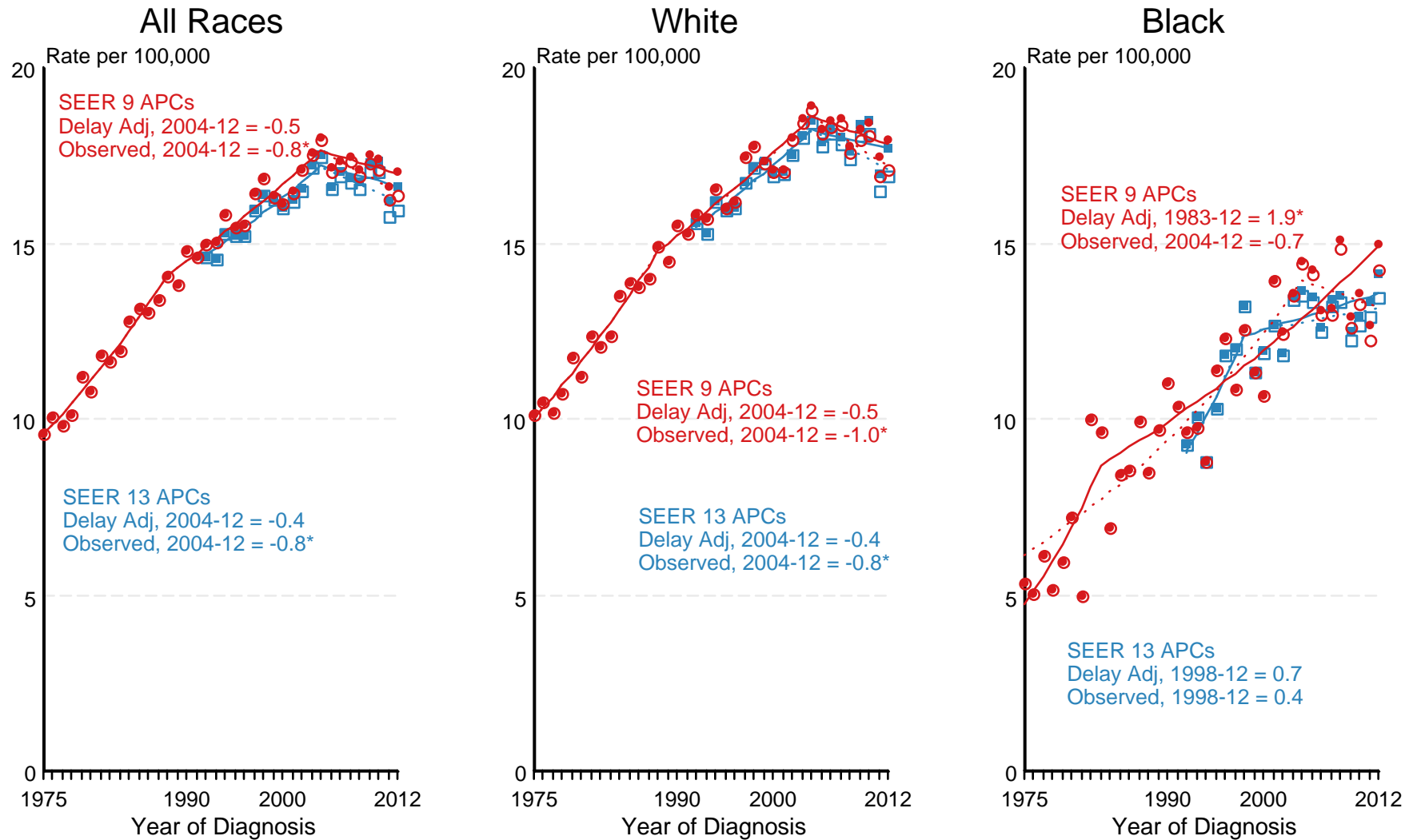


● SEER 9 Delay-Adj. Incidence    ○ SEER 9 Observed Incidence    ■ SEER 13 Delay-Adj. Incidence    □ SEER 13 Observed Incidence

Source: SEER 9 areas and SEER 13 areas.  
<sup>a</sup> 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 4.2.0, April 2015, 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 19.6

# SEER Observed Incidence and SEER Delay Adjusted Incidence Rates<sup>a</sup> SEER 9 Areas Compared to SEER 13 Areas Non-Hodgkin Lymphoma, Female, by Race



Source: SEER 9 areas and SEER 13 areas.

<sup>a</sup> 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 4.2.0, April 2015, National Cancer Institute.

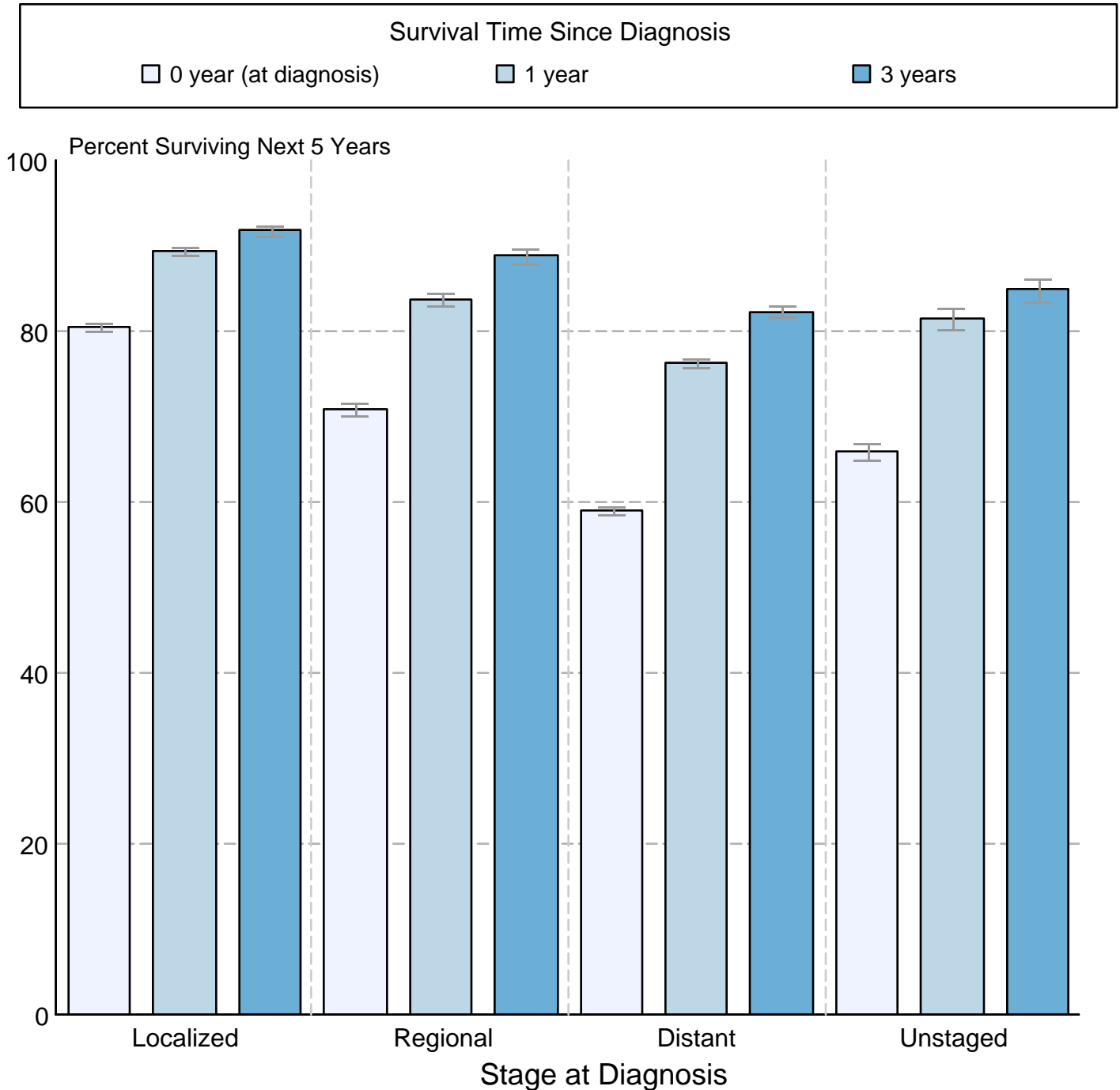
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 19.7

## Non-Hodgkin Lymphoma 5-Year SEER Conditional Relative Survival and 95% Confidence Intervals

Probability of surviving the next 5 years given the cohort  
has already survived 0, 1, or 3 years  
1998-2011 by stage at diagnosis



Source: SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG contribute cases for diagnosis years 2000 and later. The remaining 13 SEER Areas contribute cases for the entire time period. Percent surviving is not shown if based on less than 25 cases. Confidence intervals are not shown if length of the confidence interval is greater than 5 times the standard error.