

Table 19.1
Non-Hodgkin Lymphoma

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2015 With up to Five Joinpoints, 1992-2015 With up to Four Joinpoints,
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2006-15	2011-15
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2015</u>														
All Races	1975-91	3.6*	1991-07	0.7*	2007-15	-0.6*							-0.4	-0.6*
White	1975-90	3.8*	1990-07	0.8*	2007-15	-0.6*							-0.4	-0.6*
Black	1975-95	4.5*	1995-15	0.2									0.2	0.2
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2015</u>														
All Races	1992-08	0.5*	2008-15	-0.7									-0.4	-0.7
White	1992-07	0.7*	2007-15	-0.5									-0.4	-0.5
Black	1992-97	4.0*	1997-00	-4.3	2000-04	3.8	2004-15	-0.6					-0.6	-0.6
<u>SEER 9 Observed Incidence^a, 1975-2015</u>														
All Races	1975-91	3.6*	1991-07	0.7*	2007-15	-0.8*							-0.7*	-0.8*
White	1975-90	3.8*	1990-07	0.8*	2007-15	-0.9*							-0.7*	-0.9*
Black	1975-95	4.7*	1995-00	-2.6	2000-04	5.1	2004-15	-1.2*					-1.2*	-1.2*
<u>SEER 13 Observed Incidence^b, 1992-2015</u>														
All Races	1992-08	0.5*	2008-15	-1.0*									-0.6*	-1.0*
White	1992-07	0.7*	2007-15	-0.8*									-0.7*	-0.8*
White NH ^{ef}	1992-07	0.8*	2007-15	-0.9*									-0.7*	-0.9*
Black	1992-97	4.0*	1997-00	-4.3	2000-04	4.0	2004-15	-1.0*					-1.0*	-1.0*
Black NH ^{ef}	1992-97	3.8*	1997-00	-4.2	2000-04	4.0	2004-15	-0.8*					-0.8*	-0.8*
API ^e	1992-15	0.2											0.2	0.2
AI/AN ^{eg}	1992-15	1.3											1.3	1.3
Hispanic ^f	1992-15	0.4*											0.4*	0.4*
<u>U.S. Cancer Mortality^c, 1975-2015</u>														
All Races	1975-91	2.5*	1991-97	1.6*	1997-06	-3.1*	2006-15	-2.2*					-2.2*	-2.2*
White	1975-91	2.5*	1991-97	1.6*	1997-06	-3.1*	2006-15	-2.2*					-2.2*	-2.2*
Black	1975-96	2.6*	1996-15	-2.3*									-2.3*	-2.3*
<u>U.S. Cancer Mortality^c, 1992-2015</u>														
All Races	1992-97	1.7*	1997-06	-3.1*	2006-15	-2.2*							-2.2*	-2.2*
White	1992-97	1.7*	1997-06	-3.1*	2006-15	-2.2*							-2.2*	-2.2*
White NH ^{ef}	1992-97	1.9*	1997-06	-3.1*	2006-15	-2.3*							-2.3*	-2.3*
Black	1992-96	2.4	1996-15	-2.2*									-2.2*	-2.2*
Black NH ^{ef}	1992-96	2.8	1996-15	-2.2*									-2.2*	-2.2*
API ^e	1992-15	-1.8*											-1.8*	-1.8*
AI/AN ^{eg}	1992-15	-0.7											-0.7	-0.7
Hispanic ^f	1992-97	3.2*	1997-01	-4.3	2001-15	-1.7*							-1.7*	-1.7*

Joinpoint Regression Program Version 4.6, February 2018, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

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

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

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

^a ^b ^c ^d ^e ^f - Joinpoint regression line analysis could not be performed on data series.

Table 19.2
Non-Hodgkin Lymphoma

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2015 With up to Five Joinpoints, 1992-2015 With up to Four Joinpoints,
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2006-15	2011-15
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2015</u>														
All Races	1975-91	4.3*	1991-15	0.3*									0.3*	0.3*
White	1975-90	4.4*	1990-07	0.6*	2007-15	-0.3							-0.2	-0.3
Black	1975-94	5.4*	1994-15	-0.2									-0.2	-0.2
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2015</u>														
All Races	1992-15	0.1											0.1	0.1
White	1992-95	2.7	1995-98	-2.2	1998-07	0.9*	2007-15	-0.5					-0.4	-0.5
Black	1992-15	-0.1											-0.1	-0.1
<u>SEER 9 Observed Incidence^a, 1975-2015</u>														
All Races	1975-91	4.2*	1991-08	0.5*	2008-15	-0.7							-0.4	-0.7
White	1975-90	4.4*	1990-07	0.6*	2007-15	-0.6							-0.5	-0.6
Black	1975-94	5.5*	1994-15	-0.4									-0.4	-0.4
<u>SEER 13 Observed Incidence^b, 1992-2015</u>														
All Races	1992-09	0.3	2009-15	-0.8									-0.5	-0.8
White	1992-95	2.7	1995-98	-2.2	1998-07	0.9*	2007-15	-0.8*					-0.7*	-0.8*
White NH ^{ef}	1992-95	2.9	1995-98	-2.0	1998-07	0.9*	2007-15	-0.7*					-0.5*	-0.7*
Black	1992-15	-0.2											-0.2	-0.2
Black NH ^{ef}	1992-15	-0.1											-0.1	-0.1
API ^e	1992-15	0.3*											0.3*	0.3*
AI/AN ^{eg}	1992-15	0.6											0.6	0.6
Hispanic ^f	1992-15	0.1											0.1	0.1
<u>U.S. Cancer Mortality^c, 1975-2015</u>														
All Races	1975-91	2.7*	1991-97	1.6*	1997-06	-2.9*	2006-15	-2.0*					-2.0*	-2.0*
White	1975-91	2.6*	1991-97	1.6*	1997-06	-2.8*	2006-15	-2.0*					-2.0*	-2.0*
Black	1975-96	2.6*	1996-15	-2.4*									-2.4*	-2.4*
<u>U.S. Cancer Mortality^c, 1992-2015</u>														
All Races	1992-97	1.7*	1997-06	-2.9*	2006-15	-2.0*							-2.0*	-2.0*
White	1992-97	1.7*	1997-06	-2.8*	2006-15	-2.0*							-2.0*	-2.0*
White NH ^{ef}	1992-97	2.0*	1997-06	-2.8*	2006-15	-2.0*							-2.0*	-2.0*
Black	1992-96	2.5	1996-15	-2.3*									-2.3*	-2.3*
Black NH ^{ef}	1992-96	2.8	1996-15	-2.2*									-2.2*	-2.2*
API ^e	1992-15	-1.8*											-1.8*	-1.8*
AI/AN ^{eg}	1992-15	-0.4											-0.4	-0.4
Hispanic ^f	1992-96	4.4	1996-03	-3.7*	2003-15	-1.1*							-1.1*	-1.1*

Joinpoint Regression Program Version 4.6, February 2018, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. The AAPC is the Average Annual Percent Change and is based on the APCs calculated by Joinpoint.

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

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

^a ^b ^c ^d ^e ^f ^g ^{*} -

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

Table 19.3
Non-Hodgkin Lymphoma

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2015 With up to Five Joinpoints, 1992-2015 With up to Four Joinpoints,
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	2006-15	2011-15								
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2015</u>														
All Races	1975-88	3.0*	1988-04	1.4*	2004-15	-0.7*							-0.7*	-0.7*
White	1975-88	3.1*	1988-04	1.4*	2004-15	-0.6*							-0.6*	-0.6*
Black	1975-04	3.0*	2004-15	-1.0									-1.0	-1.0
<u>SEER 13 Delay-Adjusted Incidence^b, 1992-2015</u>														
All Races	1992-04	1.3*	2004-15	-0.6*									-0.6*	-0.6*
White	1992-04	1.4*	2004-15	-0.5*									-0.5*	-0.5*
Black	1992-98	5.8*	1998-15	0.2									0.2	0.2
<u>SEER 9 Observed Incidence^a, 1975-2015</u>														
All Races	1975-88	3.0*	1988-04	1.4*	2004-15	-0.9*							-0.9*	-0.9*
White	1975-88	3.0*	1988-04	1.4*	2004-15	-0.8*							-0.8*	-0.8*
Black	1975-04	3.0*	2004-15	-1.3									-1.3	-1.3
<u>SEER 13 Observed Incidence^b, 1992-2015</u>														
All Races	1992-04	1.4*	2004-15	-0.8*									-0.8*	-0.8*
White	1992-04	1.4*	2004-15	-0.7*									-0.7*	-0.7*
White NH ^{ef}	1992-04	1.5*	2004-15	-0.9*									-0.9*	-0.9*
Black	1992-04	2.9*	2004-15	-1.0									-1.0	-1.0
Black NH ^{ef}	1992-04	2.9*	2004-15	-0.9									-0.9	-0.9
API ^e	1992-15	0.1											0.1	0.1
AI/AN ^{eg}	1992-15	1.7											1.7	1.7
Hispanic ^f	1992-15	0.9*											0.9*	0.9*
<u>U.S. Cancer Mortality^c, 1975-2015</u>														
All Races	1975-95	2.2*	1995-98	-0.4	1998-05	-3.6*	2005-15	-2.7*					-2.7*	-2.7*
White	1975-97	2.1*	1997-04	-3.7*	2004-15	-2.7*							-2.7*	-2.7*
Black	1975-96	2.7*	1996-15	-2.2*									-2.2*	-2.2*
<u>U.S. Cancer Mortality^c, 1992-2015</u>														
All Races	1992-97	1.7*	1997-05	-3.4*	2005-15	-2.7*							-2.7*	-2.7*
White	1992-94	3.3*	1994-97	0.6	1997-00	-2.5	2000-03	-4.4*	2003-15	-2.8*			-2.8*	-2.8*
White NH ^{ef}	1992-94	4.0*	1994-97	0.6	1997-00	-2.4	2000-03	-4.4*	2003-15	-2.8*			-2.8*	-2.8*
Black	1992-97	1.6	1997-15	-2.2*									-2.2*	-2.2*
Black NH ^{ef}	1992-97	1.9	1997-15	-2.2*									-2.2*	-2.2*
API ^e	1992-15	-1.6*											-1.6*	-1.6*
AI/AN ^{eg}	1992-15	-1.1											-1.1	-1.1
Hispanic ^f	1992-97	3.2	1997-15	-2.3*									-2.3*	-2.3*

Joinpoint Regression Program Version 4.6, February 2018, National Cancer Institute. (<https://surveillance.cancer.gov/joinpoint/>). The APC is the Annual Percent Change based on rates age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130). Trends are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). Trends are from the SEER 13 areas (SEER 9 Areas, Los Angeles, San Jose-Monterey, Rural Georgia, and the Alaska Native Registry). Trends are from US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

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

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

Hispanic and Non-Hispanic are not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics and Non-Hispanics are based on NHIA and exclude cases from the Alaska Native Registry.

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

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

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

^a ^b ^c ^d ^e ^f ^g ^{*} -

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

Table 19.4
Non-Hodgkin Lymphoma

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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-1979	11.60	13.44	10.18	12.09	13.93	10.68	6.96	8.74	5.52
1980	12.62	15.01	10.81	12.98	15.28	11.22	8.70	10.74	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	12.40	10.28	10.88	9.62
1984	15.19	18.29	12.79	15.97	19.10	13.55	9.46	12.52	6.92
1985	15.51	18.39	13.16	16.28	19.25	13.85	9.95	11.96	8.43
1986	15.90	19.43	13.00	16.82	20.57	13.75	10.66	13.13	8.52
1987	16.74	20.79	13.42	17.70	22.15	14.00	10.35	10.43	9.95
1988	17.26	21.35	14.08	18.22	22.44	14.90	11.58	15.79	8.49
1989	17.36	21.65	13.84	18.36	23.04	14.50	11.59	14.10	9.72
1990	18.51	22.97	14.81	19.34	23.96	15.50	13.92	17.63	11.02
1991	18.81	23.73	14.61	19.69	24.81	15.31	14.03	18.72	10.37
1992	18.61	23.04	14.93	19.55	23.94	15.82	13.68	18.87	9.65
1993	18.86	23.47	15.01	19.66	24.32	15.72	14.23	19.37	9.97
1994	19.95	24.96	15.79	20.67	25.58	16.55	14.43	21.52	8.77
1995	19.98	25.41	15.44	20.69	26.17	16.04	16.74	23.63	11.38
1996	19.42	24.24	15.48	20.27	25.20	16.21	15.54	19.25	12.39
1997	20.00	24.54	16.46	20.90	25.22	17.49	16.40	24.26	10.86
1998	19.61	22.95	16.85	20.60	24.01	17.77	14.49	16.96	12.54
1999	19.97	24.59	16.35	20.94	25.53	17.31	14.38	18.42	11.31
2000	19.79	24.33	16.12	20.97	25.70	17.11	13.89	18.23	10.66
2001	20.02	24.40	16.46	20.82	25.45	17.06	16.05	18.44	13.92
2002	20.22	24.20	17.09	21.34	25.53	17.97	14.45	17.10	12.45
2003	20.78	25.06	17.53	21.92	26.35	18.48	16.34	19.98	13.78
2004	21.39	25.90	17.94	22.33	26.84	18.82	18.53	24.03	14.55
2005	20.88	25.63	17.09	22.02	26.74	18.19	16.79	20.10	14.10
2006	20.50	24.73	17.23	21.75	26.06	18.36	16.34	20.92	12.94
2007	21.30	26.18	17.42	22.59	27.60	18.48	15.85	19.34	13.21
2008	21.00	25.82	17.06	21.87	26.89	17.71	16.95	19.00	15.09
2009	21.00	25.34	17.49	22.08	26.75	18.16	15.41	18.69	13.00
2010	21.54	26.78	17.26	22.51	27.61	18.31	17.89	23.35	13.53
2011	20.02	24.57	16.42	20.97	25.69	17.21	14.81	17.86	12.53
2012	20.51	25.14	16.75	21.47	26.19	17.56	16.86	19.34	14.66
2013	19.99	24.46	16.34	21.07	25.67	17.24	15.91	18.41	13.99
2014	20.50	25.35	16.55	21.73	26.56	17.77	15.45	20.34	11.64
2015	20.45	25.33	16.48	21.71	26.65	17.61	15.65	20.42	12.06

Reference: [Cancer Incidence Rates Adjusted for Reporting Delay](#).

Individual rates for diagnosis years 1975-1979 available in web browser version of [Cancer Statistics Review](#).

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^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Diagnosis:									
1975-2015	18.42	22.62	15.09	19.20	23.51	15.77	14.03	17.60	11.23
1975-1979	11.60	13.44	10.18	12.09	13.93	10.68	6.96	8.74	5.52
1980	12.62	15.01	10.81	12.98	15.28	11.22	8.70	10.74	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	12.40	10.28	10.88	9.62
1984	15.19	18.29	12.79	15.97	19.10	13.55	9.46	12.52	6.92
1985	15.51	18.39	13.16	16.28	19.25	13.85	9.95	11.96	8.43
1986	15.90	19.43	13.00	16.82	20.57	13.75	10.66	13.13	8.52
1987	16.74	20.79	13.42	17.70	22.15	14.00	10.35	10.43	9.95
1988	17.26	21.35	14.08	18.22	22.44	14.90	11.58	15.79	8.49
1989	17.36	21.65	13.84	18.36	23.04	14.50	11.59	14.10	9.72
1990	18.51	22.97	14.81	19.34	23.96	15.50	13.92	17.63	11.02
1991	18.81	23.73	14.61	19.69	24.81	15.31	14.03	18.72	10.37
1992	18.61	23.04	14.93	19.55	23.94	15.82	13.68	18.87	9.65
1993	18.86	23.47	15.01	19.66	24.32	15.72	14.23	19.37	9.97
1994	19.95	24.96	15.79	20.67	25.58	16.55	14.43	21.52	8.77
1995	19.98	25.41	15.44	20.69	26.17	16.04	16.74	23.63	11.38
1996	19.42	24.24	15.48	20.27	25.20	16.21	15.54	19.25	12.39
1997	20.00	24.54	16.46	20.90	25.22	17.49	16.40	24.26	10.86
1998	19.61	22.95	16.85	20.60	24.01	17.77	14.49	16.96	12.54
1999	19.97	24.59	16.35	20.94	25.53	17.31	14.38	18.42	11.31
2000	19.79	24.33	16.12	20.97	25.70	17.11	13.89	18.23	10.66
2001	20.02	24.40	16.46	20.82	25.45	17.06	16.05	18.44	13.92
2002	20.22	24.20	17.09	21.34	25.53	17.97	14.45	17.10	12.45
2003	20.78	25.06	17.53	21.92	26.35	18.48	16.34	19.98	13.78
2004	21.39	25.90	17.94	22.33	26.84	18.82	18.53	24.03	14.55
2005	20.88	25.63	17.09	22.02	26.74	18.19	16.79	20.10	14.10
2006	20.50	24.73	17.23	21.75	26.06	18.36	16.34	20.92	12.94
2007	21.26	26.13	17.39	22.55	27.55	18.44	15.80	19.29	13.17
2008	20.92	25.73	17.00	21.78	26.78	17.64	16.84	18.87	14.99
2009	20.88	25.20	17.39	21.94	26.59	18.04	15.26	18.51	12.87
2010	21.38	26.58	17.14	22.32	27.38	18.15	17.67	23.06	13.38
2011	19.84	24.34	16.27	20.75	25.42	17.02	14.57	17.57	12.33
2012	20.28	24.86	16.56	21.19	25.85	17.33	16.53	18.95	14.38
2013	19.71	24.13	16.11	20.74	25.26	16.96	15.52	17.98	13.65
2014	20.12	24.87	16.24	21.27	25.99	17.39	15.00	19.74	11.30
2015	19.91	24.67	16.04	21.04	25.83	17.06	15.02	19.61	11.58

^a Individual rates for diagnosis years 1975-1979 available in web browser version of [Cancer Statistics Review](#). 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^a Rates by Year, Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
Year of Death:									
1975-2015	7.07	8.87	5.75	7.37	9.22	6.01	4.82	6.19	3.83
1975-1979	5.80	7.08	4.84	6.02	7.33	5.03	3.75	4.83	2.92
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	6.29	8.17	4.83	4.36	5.74	3.40
2012	5.91	7.62	4.61	6.17	7.95	4.80	4.26	5.38	3.48
2013	5.71	7.38	4.44	5.95	7.67	4.62	4.12	5.27	3.33
2014	5.65	7.26	4.43	5.89	7.55	4.60	4.19	5.28	3.42
2015	5.47	7.13	4.18	5.69	7.40	4.34	4.05	5.20	3.22

^a Individual rates for years of death 1975-1979 available in web browser version of [Cancer Statistics Review](#). 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^a and U.S. Death^b Rates, Age-Adjusted and Age-Specific Rates, by Race and Sex

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
SEER Incidence									
Age at Diagnosis									
Age-Adjusted Rates, 2011-2015									
All ages	19.4	23.6	15.9	20.3	24.7	16.8	14.4	17.5	12.1
Under 65	9.1	10.7	7.5	9.3	11.0	7.7	8.8	10.7	7.0
65 and over	90.4	112.7	74.2	96.3	119.6	79.1	53.5	64.3	46.8
All ages (WHO world std) ^c	14.5	17.4	11.9	15.1	18.1	12.5	11.4	13.8	9.5
Age-Specific Rates, 2011-2015									
<1	-	-	-	-	-	-	-	-	-
1-4	0.7	1.0	0.5	0.8	1.0	0.5	0.7	-	-
5-9	1.2	1.7	0.7	1.2	1.8	0.7	1.0	1.3	-
10-14	1.4	1.8	1.0	1.4	1.7	1.0	1.4	1.8	0.8
15-19	2.0	2.6	1.4	1.9	2.4	1.4	1.9	2.8	1.0
20-24	2.5	3.0	2.1	2.5	2.9	2.0	2.6	3.6	1.6
25-29	3.4	3.9	2.9	3.3	3.9	2.7	3.7	4.1	3.4
30-34	4.6	5.3	3.9	4.4	5.0	3.8	5.7	7.0	4.6
35-39	6.9	8.1	5.7	6.8	7.8	5.8	8.3	10.7	6.2
40-44	9.5	11.3	7.8	9.5	11.2	7.7	10.6	12.6	8.8
45-49	14.2	16.4	11.9	14.6	16.8	12.4	14.5	17.9	11.4
50-54	21.5	25.1	18.0	22.2	26.0	18.5	20.2	23.4	17.4
55-59	30.4	35.6	25.4	31.6	36.6	26.8	27.1	33.4	21.6
60-64	43.6	51.8	36.0	46.1	54.5	38.1	34.0	40.9	28.4
65-69	63.1	74.5	52.9	66.6	78.1	56.1	45.7	53.0	40.0
70-74	82.7	99.5	68.6	88.3	105.5	73.5	50.7	62.1	42.4
75-79	104.4	127.4	86.4	112.0	136.5	92.5	59.9	66.4	55.5
80-84	119.0	151.9	96.2	127.2	161.9	102.6	66.6	81.6	58.1
85+	109.4	153.1	86.6	115.4	162.4	90.9	50.7	70.2	42.4
U.S. Mortality									
Age at Death									
Age-Adjusted Rates, 2011-2015									
All ages	5.7	7.4	4.5	6.0	7.7	4.6	4.2	5.4	3.4
Under 65	1.4	1.8	1.0	1.4	1.8	1.0	1.7	2.1	1.3
65 and over	35.9	46.3	28.4	37.8	48.7	30.0	21.7	27.8	17.9
All ages (WHO world std) ^c	3.7	4.8	2.8	3.8	4.9	2.9	3.0	3.8	2.3
Age-Specific Rates, 2011-2015									
<1	-	-	-	-	-	-	-	-	-
1-4	0.0	0.0	-	0.0	-	-	-	-	-
5-9	0.1	0.1	0.0	0.1	0.1	-	0.1	-	-
10-14	0.1	0.1	0.1	0.1	0.1	0.1	0.1	-	-
15-19	0.1	0.2	0.1	0.1	0.2	0.1	0.2	-	-
20-24	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.4	0.3
25-29	0.4	0.5	0.3	0.4	0.4	0.3	0.6	0.8	0.4
30-34	0.5	0.7	0.4	0.5	0.6	0.4	0.9	1.3	0.5
35-39	0.7	0.9	0.5	0.7	0.9	0.5	1.2	1.5	1.0
40-44	1.1	1.5	0.9	1.1	1.4	0.8	1.8	2.1	1.5
45-49	1.8	2.4	1.3	1.8	2.3	1.3	2.5	3.3	1.8
50-54	3.2	4.2	2.2	3.2	4.2	2.2	3.9	5.2	2.8
55-59	5.5	7.3	3.8	5.6	7.6	3.8	5.6	7.1	4.3
60-64	9.3	12.2	6.6	9.5	12.6	6.6	9.2	11.8	7.1
65-69	14.8	18.9	11.1	15.5	19.8	11.5	12.2	15.4	9.7
70-74	24.8	31.6	19.0	26.1	33.0	20.1	17.0	22.6	13.0
75-79	38.3	48.7	30.1	40.5	51.3	31.8	23.3	28.6	19.9
80-84	58.2	75.2	46.3	61.4	79.1	48.9	33.0	43.7	27.0
85+	75.1	99.7	62.5	79.4	105.1	66.1	36.4	46.0	32.4

^a SEER 18 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

^b US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.

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

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

- 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 ^a	-	-	-	31	31	31	-	-	-
1970-1973 ^a	-	-	-	41	39	43	-	-	-
1975-1977 ^b	46.5	45.6	47.5	46.8	46.3	47.3	48.6	42.6	55.3 ^g
1978-1980 ^b	47.9	46.1	49.8	47.9	46.2	49.5	51.1	46.9	56.7
1981-1983 ^b	50.6	50.3	50.9	50.8	50.5	51.1	49.5	49.2	49.8
1984-1986 ^b	51.6	50.1	53.3	52.0	50.6	53.6	46.8	44.5	49.9
1987-1989 ^b	50.9	47.6	54.9	51.3	48.1	55.2	45.7	41.3	51.0
1990-1992 ^b	50.7	46.7	55.7	51.5	47.6	56.4	42.2	38.2	47.7
1993-1995 ^b	52.6	48.7	57.5	53.3	49.8	57.7	42.3	35.9	54.4
1996-1998 ^b	58.8	57.0	61.0	59.5	57.7	61.5	54.7	53.1	57.2
1999-2001 ^b	63.9	61.4	67.0	64.9	62.8	67.5	55.7	49.0	63.7
2002-2004 ^b	69.8	68.6	71.2	71.0	70.1	72.1	63.5	60.9	66.6
2005-2007 ^b	71.1	70.0	72.5	72.4	71.7	73.3	61.2	54.9	68.0
2008-2014 ^b	74.1 ^f	73.3 ^f	75.0 ^f	74.9 ^f	74.1 ^f	76.0 ^f	69.2 ^f	66.9 ^f	71.7 ^f
5-Year Period Survival (Percent)^{cd}									
2014	71.7	70.0	73.7	71.9	70.2	74.0	68.0	65.0	71.4
Stage Distribution (%) 2008-2014^{ce}									
All Stages									
Number of cases	96,580	52,809	43,771	79,464	43,606	35,858	8,080	4,319	3,761
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	15	15
Distant	50	51	48	50	52	49	51	54	47
Unstaged/Unknown	8	7	8	7	7	8	6	6	7
5-Year Relative Survival (Percent), 2008-2014^c									
Age at Diagnosis:									
Ages <45	83.3	81.0	86.7	84.7	82.4	88.2	73.3	70.4	77.4
Ages 45-54	80.5	77.1	85.4	81.9	78.9	86.5	68.5	63.8	74.9
Ages 55-64	76.6	73.6	80.6	77.6	74.8	81.4	66.3	61.1	73.2
Ages 65-74	71.8	69.9	74.2	72.4	70.2	75.0	66.4	63.0	69.1
Ages 75+	54.7	52.4	56.7	55.0	52.3	57.4	47.4	43.2	49.6
Ages <65	79.5	76.7	83.5	80.6	78.0	84.5	69.6	65.4	75.2
Ages 65+	62.9	61.4	64.4	63.2	61.5	65.1	58.4	55.7	60.0
Stage^e:									
All Stages	71.4	69.9	73.3	71.8	70.2	73.6	66.2	63.3	69.6
Localized	83.3	82.4	84.2	83.4	82.7	84.2	80.3	76.0	84.1
Regional	75.2	75.0	75.3	75.5	75.3	75.7	70.6	71.8	69.2
Distant	64.1	62.4	66.3	65.0	63.2	67.3	57.6	55.3	60.6
Unstaged/Unknown	69.6	66.9	72.6	67.3	64.5	70.4	64.1	60.7	66.9

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

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

^c Based on follow-up of patients into 2015. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

^d 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). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

^e Based on follow-up of patients into 2015.

Period survival provides a 2014 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

^f Stage at diagnosis is classified using SEER Summary Stage 2000. Stage distribution percentages may not sum to 100 due to rounding.

The difference between 1975-1977 and 2008-2014 is statistically significant ($p<.05$).

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

^h The standard error is greater than 10 percentage points.

⁻ Statistic could not be calculated due to fewer than 25 cases during the time period.

Table 19.9
Non-Hodgkin Lymphoma

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males and Females

Year of Diagnosis

	1975-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Survival Time																												
1-year	70.2	73.0	71.3	70.4	70.3	73.2	75.6	76.7	77.4	77.3	78.7	81.0	80.3	81.1	81.7	81.0	81.6	84.1	83.9	84.3	83.4	84.1	84.4	83.2				
2-year	60.2	63.7	62.8	62.2	61.8	65.9	68.5	70.0	71.0	71.4	73.3	76.0	75.7	76.0	77.3	76.9	77.5	79.0	79.5	79.6	79.7	79.9	80.0					
3-year	54.6	58.5	58.2	57.7	57.5	62.0	64.9	66.4	66.9	67.8	70.1	73.1	73.1	73.6	74.8	74.5	75.0	76.2	77.3	77.4	77.5	77.8						
4-year	50.5	54.6	54.3	54.4	54.7	58.7	62.1	63.6	64.5	65.4	68.1	71.2	71.6	71.5	72.9	72.6	73.1	74.4	75.5	75.1	75.5							
5-year	46.8	50.7	51.0	51.6	51.9	56.0	59.4	60.9	62.0	63.8	65.9	69.3	70.0	70.1	71.6	70.5	71.2	72.8	74.1	74.1								
6-year	43.6	47.5	48.3	49.2	49.9	54.1	57.1	58.3	59.5	62.0	64.6	68.0	68.3	68.7	70.4	68.8	70.1	71.7	72.0									
7-year	40.8	45.0	45.8	46.9	47.8	52.2	55.2	56.4	57.7	60.4	62.9	66.3	67.2	67.2	68.4	67.2	68.7	70.1										
8-year	38.5	42.8	43.4	45.0	46.4	50.4	52.9	55.1	56.2	58.8	61.3	65.1	65.8	66.6	67.0	66.0	67.2											
9-year	36.6	40.8	41.4	43.4	45.2	49.3	51.5	53.4	54.8	57.5	60.0	64.0	64.8	64.9	65.2	65.0												
10-year	35.0	38.9	39.8	42.1	44.3	48.1	50.1	52.1	53.6	56.2	58.9	63.2	63.3	63.7	63.4													
11-year	33.5	37.4	38.5	40.6	43.3	46.6	48.8	51.0	52.5	54.7	58.0	61.8	62.1	62.9														
12-year	32.4	36.0	36.9	39.5	42.2	45.6	48.1	50.1	51.1	53.4	56.8	60.0	61.5															
13-year	31.4	34.8	35.7	38.3	41.4	44.8	46.9	49.1	49.9	51.9	56.1	59.3																
14-year	30.2	33.5	34.7	37.2	40.6	44.3	45.6	48.5	48.7	51.1	54.8																	
15-year	28.9	32.2	33.5	36.5	39.7	43.7	44.6	47.4	47.7	50.4																		
16-year	27.9	31.2	32.8	35.6	39.2	43.6	43.3	47.2	47.2	46.9																		
17-year	27.4	30.4	32.1	34.8	38.7	42.8	42.8																					
18-year	26.8	29.6	31.4	34.0	37.6	41.9	41.8																					
19-year	26.0	28.8	30.6	33.2	36.8	41.2																						
20-year	25.2	28.0	30.1	32.8	35.7																							

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

Table 19.10
Non-Hodgkin Lymphoma

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Males

Year of Diagnosis

	1975-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Survival Time																												
1-year	69.4	72.7	68.9	67.1	66.6	71.2	74.7	74.9	75.8	76.5	77.6	80.6	79.7	80.1	81.1	81.0	81.4	83.6	82.8	83.8	83.8	84.0	83.4	82.9				
2-year	59.4	63.7	60.5	58.2	58.3	63.6	67.2	68.2	69.1	70.3	71.3	75.2	74.9	75.4	76.2	76.5	77.8	77.9	78.1	78.7	79.8	79.1	78.6					
3-year	53.4	58.0	55.7	53.7	54.5	59.8	63.8	64.5	64.3	66.7	67.9	72.0	72.6	72.6	73.1	73.6	75.4	75.1	75.7	76.5	77.5	76.7						
4-year	49.3	53.9	51.5	50.4	51.5	56.1	61.0	62.0	61.5	63.9	65.7	70.0	70.9	70.1	71.1	71.3	73.4	73.4	73.6	74.2	75.6							
5-year	45.5	50.1	48.2	47.6	48.5	53.6	58.3	59.2	58.9	61.7	63.5	67.9	69.0	68.8	69.9	68.9	71.0	72.1	72.3	73.4								
6-year	42.6	46.6	45.5	45.6	46.8	51.0	56.1	56.5	56.2	60.2	62.0	66.7	66.9	67.5	68.4	67.0	69.6	71.4	70.6									
7-year	39.9	44.2	43.1	43.6	44.8	49.1	54.2	54.4	54.6	58.6	60.1	65.2	65.8	65.5	66.8	65.8	65.0	68.2	69.5									
8-year	37.8	42.0	41.0	41.8	43.2	47.4	52.0	53.2	53.5	56.6	58.2	63.7	64.5	64.9	65.0	63.3	66.5											
9-year	35.7	40.1	39.1	40.2	42.3	46.4	50.4	51.3	52.3	55.2	57.2	62.8	63.3	63.1	63.6	61.7												
10-year	34.0	38.0	37.7	39.1	41.5	45.5	48.9	50.3	51.5	54.2	56.0	61.7	61.7	62.0	61.3													
11-year	32.8	36.3	36.4	38.0	40.7	43.7	47.7	49.3	50.7	52.7	54.6	60.3	60.5	61.1														
12-year	31.9	35.2	35.1	37.2	39.4	42.6	47.2	48.1	49.8	51.4	53.6	58.9	60.0															
13-year	30.7	34.2	34.2	36.1	38.8	41.9	45.6	46.7	49.0	50.1	53.1	58.2																
14-year	29.5	33.0	33.2	35.0	37.7	41.4	44.4	46.1	47.9	49.5	52.0																	
15-year	28.1	31.9	32.3	34.4	36.7	40.9	43.5	45.3	47.2	48.8																		
16-year	27.2	30.8	31.6	33.3	36.0	40.9	42.6	45.2	47.0																			
17-year	26.5	30.0	30.8	32.6	35.6	40.3	41.9	44.8																				
18-year	26.1	29.4	30.2	31.9	34.9	39.5	41.0																					
19-year	25.6	28.7	29.3	31.2	34.1	39.0																						
20-year	25.0	28.0	29.1	30.9	33.0																							

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

Table 19.11
Non-Hodgkin Lymphoma

SEER^a Relative Survival (Percent)
By Year of Diagnosis

All Races, Females

Year of Diagnosis

	1975-	1980-	1985-	1990-	1979	1984	1989	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Survival Time																												
1-year	71.0	73.4	74.1	74.7	75.2	75.8	76.7	78.6	79.2	78.2	80.1	81.4	81.0	82.2	82.5	80.9	81.9	84.6	85.3	85.1	83.0	84.2	85.5	83.6				
2-year	61.1	63.7	65.6	67.2	66.4	68.7	70.1	72.0	73.3	72.7	75.8	76.9	76.5	76.7	78.6	77.4	77.1	80.3	81.2	80.7	79.6	80.8	81.6					
3-year	55.9	58.9	61.1	62.7	61.5	64.9	66.1	68.4	70.0	69.2	72.7	74.4	73.6	74.6	76.8	75.6	74.6	77.4	79.1	78.5	77.4	79.0						
4-year	51.9	55.3	57.6	59.5	59.0	61.9	63.4	65.3	68.0	67.4	70.9	72.5	72.4	73.0	75.1	74.0	72.9	75.6	77.7	76.3	75.4							
5-year	48.2	51.4	54.4	56.7	56.5	59.0	60.8	62.9	65.7	66.4	68.8	70.7	71.3	71.6	73.6	72.4	71.4	73.5	76.2	75.0								
6-year	44.6	48.4	51.7	53.9	53.9	58.0	58.3	60.3	63.4	64.2	67.9	69.5	69.9	70.1	72.6	70.9	70.6	72.1	73.7									
7-year	41.7	45.8	49.1	51.2	51.9	56.0	56.3	58.5	61.4	62.6	66.2	67.4	68.7	69.2	70.3	69.8	69.3	70.9										
8-year	39.2	43.7	46.3	49.1	50.5	54.1	53.9	57.3	59.5	61.5	64.9	66.7	67.2	68.4	69.3	69.2	68.2											
9-year	37.4	41.6	44.3	47.6	49.1	52.9	52.8	55.7	57.7	60.3	63.3	65.4	66.4	66.9	67.0	68.8												
10-year	36.0	39.9	42.4	45.8	47.9	51.3	51.6	54.2	56.1	58.7	62.5	64.8	65.1	65.8	65.8													
11-year	34.2	38.5	40.9	43.8	46.8	50.2	50.0	52.8	54.6	57.1	62.1	63.6	64.0	65.1														
12-year	32.9	36.8	39.1	42.5	45.9	49.4	49.3	52.3	52.8	55.9	60.5	61.3	63.1															
13-year	32.1	35.3	37.6	41.1	44.9	48.5	48.4	51.7	51.0	54.1	59.7	60.6																
14-year	31.0	34.0	36.5	39.9	44.1	47.9	47.0	51.1	49.6	53.0	58.1																	
15-year	29.7	32.6	34.9	39.1	43.5	47.2	45.9	49.7	48.2	52.3																		
16-year	28.7	31.6	34.2	38.5	43.4	46.6	44.0	49.1	46.7																			
17-year	28.2	30.6	33.6	37.7	42.7	45.8	43.7	48.9																				
18-year	27.4	29.8	32.7	36.7	41.2	44.8	42.8																					
19-year	26.5	28.8	32.1	35.8	40.5	43.8																						
20-year	25.4	28.0	31.2	35.2	39.3																							

^a Based on the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta). [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

Table 19.12

Non-Hodgkin Lymphoma

Number of Cases

By SEER Location and Year of Diagnosis, 1975-2015

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	2010-2011	2012-2013	2014-2015
SEER 9 ^b	5,222	2,506	2,704	3,176	3,627	3,993	4,569	4,729	5,324	5,261	5,261	5,560	5,776	6,227	6,399	6,700	6,992	7,054	7,445
SEER 9 except SF-Oakland	4,285	2,088	2,267	2,603	2,819	3,091	3,506	3,694	4,158	4,250	4,363	4,513	4,819	5,209	5,398	5,625	5,836	6,000	6,255
San Francisco-Oakland SMSA ^c	937	418	437	573	808	902	1,063	1,035	1,166	1,011	898	1,047	957	1,018	1,001	1,075	1,156	1,054	1,190
San Francisco City/County	245	96	123	210	326	393	467	410	450	354	213	256	220	283	219	216	240	225	242

Age-Adjusted Cancer Incidence Rates^a

By SEER Location and Year of Diagnosis, 1975-2015

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	2010-2011	2012-2013	2014-2015
SEER 9 ^b	13.4	15.5	16.1	18.3	20.1	21.5	23.4	23.3	25.2	24.4	23.8	24.4	24.6	25.8	25.4	25.5	25.5	24.5	24.8
SEER 9 except SF-Oakland	13.2	15.4	16.1	18.1	18.8	20.1	21.7	21.8	23.6	23.6	23.5	23.6	24.4	25.6	25.4	25.3	25.2	24.7	24.7
San Francisco-Oakland SMSA ^c	14.7	15.8	16.0	19.4	26.7	28.4	31.7	30.5	33.5	28.8	25.1	28.6	25.6	26.6	25.6	26.3	26.8	23.5	25.1
San Francisco City/County	14.3	14.4	17.6	29.3	44.4	51.9	61.0	52.3	57.4	44.8	27.4	32.5	26.9	35.4	26.5	25.7	27.3	25.4	25.4

^a Rates are per 100,000 males and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).^b The SEER 9 areas are San Francisco-Oakland SMSA, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.^c 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, 1975-2015

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	2010-2011	2012-2013	2014-2015
SEER 9 ^b	223	87	108	91	94	84	100	89	120	105	104	119	127	106	106	143	133	154	161
SEER 9 except SF-Oakland	191	78	95	82	80	76	86	74	107	84	93	100	115	89	87	114	118	128	132
San Francisco-Oakland SMSA ^c	32	9	13	9	14	8	14	15	13	21	11	19	12	17	19	29	15	26	29
San Francisco City/County	9	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	5	<4	6	<4

Age-Adjusted Cancer Incidence Rates^a

By SEER Location and Year of Diagnosis, 1975-2015

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	2010-2011	2012-2013	2014-2015
SEER 9 ^b	1.2	1.2	1.6	1.4	1.4	1.3	1.5	1.3	1.7	1.4	1.4	1.5	1.6	1.4	1.3	1.8	1.7	1.9	2.0
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	1.7	1.9	1.9
San Francisco-Oakland SMSA ^c	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	1.4	2.5	2.8
San Francisco City/County	2.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.0	-	4.9	-

^a 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).^b The SEER 9 areas are San Francisco-Oakland SMSA, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.^c 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, 1975-2015

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	2010-2011	2012-2013	2014-2015
SEER 9 ^b	1,463	687	723	958	1,211	1,412	1,765	1,830	2,089	1,770	1,605	1,695	1,624	1,723	1,655	1,694	1,674	1,590	1,510
SEER 9 except SF-Oakland	1,208	563	588	730	827	923	1,194	1,294	1,483	1,325	1,268	1,326	1,309	1,410	1,383	1,402	1,401	1,324	1,241
San Francisco-Oakland SMSA ^c	255	124	135	228	384	489	571	536	606	445	337	369	315	313	272	292	273	266	269
San Francisco City/County	58	29	34	105	215	288	333	303	317	225	105	115	111	111	86	75	73	71	69

Age-Adjusted Cancer Incidence Rates^a

By SEER Location and Year of Diagnosis, 1975-2015

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	2010-2011	2012-2013	2014-2015
SEER 9 ^b	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	12.3	11.6	11.9	11.6	11.0	10.5
SEER 9 except SF-Oakland	6.9	7.8	8.1	9.7	10.3	10.9	13.1	13.4	14.4	12.3	11.5	11.6	11.2	11.9	11.5	11.6	11.5	10.9	10.4
San Francisco-Oakland SMSA ^c	6.9	8.4	8.9	13.9	22.6	26.4	29.5	26.7	29.8	21.3	15.5	16.4	13.9	14.1	12.3	13.0	11.8	11.4	11.4
San Francisco City/County	6.7	8.8	9.4	27.2	56.5	71.5	81.3	72.4	74.4	51.0	23.0	25.2	23.9	24.8	19.4	16.2	15.2	14.5	13.9

^a 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).^b The SEER 9 areas are San Francisco-Oakland SMSA, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.^c 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, 1975-2015

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	2010-2011	2012-2013	2014-2015
SEER 9 ^b	3,536	1,732	1,873	2,127	2,322	2,497	2,704	2,810	3,115	3,386	3,552	3,746	4,025	4,398	4,638	4,863	5,185	5,310	5,774
SEER 9 except SF-Oakland	2,886	1,447	1,584	1,791	1,912	2,092	2,226	2,326	2,568	2,841	3,002	3,087	3,395	3,710	3,928	4,109	4,317	4,548	4,882
San Francisco-Oakland SMSA ^c	650	285	289	336	410	405	478	484	547	545	550	659	630	688	710	754	868	762	892
San Francisco City/County	178	65	88	104	109	105	132	106	130	126	106	141	108	169	131	136	164	148	171

Age-Adjusted Cancer Incidence Rates^a

By SEER Location and Year of Diagnosis, 1975-2015

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	2010-2011	2012-2013	2014-2015
SEER 9 ^b	45.1	52.2	54.0	59.6	63.3	67.3	70.1	70.6	76.1	80.1	81.1	83.1	85.8	90.0	90.1	89.0	89.8	86.2	88.6
SEER 9 except SF-Oakland	44.0	52.1	54.4	60.1	62.0	66.7	68.7	69.2	74.4	79.7	81.3	81.3	85.8	90.2	90.4	89.1	88.8	87.3	88.9
San Francisco-Oakland SMSA ^c	50.8	52.8	52.0	57.1	70.2	70.3	77.3	78.3	85.4	82.1	80.1	93.2	85.5	89.4	88.6	88.9	95.7	80.3	87.4
San Francisco City/County	48.2	44.6	59.8	72.7	73.9	75.7	93.4	74.7	91.4	87.2	72.7	93.4	69.0	104.7	76.4	76.9	89.0	78.2	84.1

^a Rates are per 100,000 males aged 55+ and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).^b The SEER 9 areas are San Francisco-Oakland SMSA, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah and Atlanta.^c 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, 2013-2015 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer						Risk of Being Diagnosed with Cancer						Risk of Dying	
		+10 yrs			+20 yrs			+30 yrs			Ever			from Cancer	
All Races	0	0.01	0.03	0.06	2.11	0.73		Asian/	0	0.01	0.03	0.05	1.84	0.73	
	10	0.02	0.05	0.10	2.12	0.74		Pacific	10	0.02	0.05	0.09	1.85	0.73	
	20	0.03	0.09	0.20	2.11	0.74		Islander	20	0.02	0.07	0.15	1.83	0.73	
	30	0.06	0.17	0.41	2.10	0.74			30	0.04	0.12	0.29	1.81	0.73	
	40	0.12	0.36	0.80	2.07	0.74			40	0.08	0.25	0.56	1.78	0.73	
	50	0.25	0.70	1.36	2.00	0.75			50	0.17	0.49	1.02	1.72	0.73	
	60	0.48	1.18	1.73	1.87	0.75			60	0.33	0.87	1.39	1.60	0.72	
	70	0.79	1.41	-	1.57	0.73			70	0.58	1.14	-	1.36	0.68	
	80	0.84	-	-	1.04	0.62			80	0.66	-	-	0.92	0.55	
White	0	0.01	0.03	0.05	2.21	0.76		American	0	0.01	0.02	0.03	1.26	0.50	
	10	0.02	0.05	0.10	2.22	0.77		Indian/	10	0.01	0.02	0.06	1.27	0.51	
	20	0.03	0.08	0.20	2.21	0.77		Alaska	20	0.01	0.04	0.10	1.26	0.51	
	30	0.06	0.17	0.42	2.20	0.78		Native ^a	30	0.03	0.09	0.22	1.27	0.52	
	40	0.12	0.37	0.84	2.17	0.78			40	0.06	0.19	0.39	1.27	0.53	
	50	0.25	0.74	1.44	2.11	0.79			50	0.14	0.34	0.68	1.26	0.54	
	60	0.51	1.25	1.83	1.96	0.79			60	0.22	0.58	0.99	1.21	0.56	
	70	0.84	1.49	-	1.64	0.76			70	0.41	0.87	-	1.13	0.57	
	80	0.88	-	-	1.09	0.65			80	0.63	-	-	0.97	0.48	
Black	0	0.01	0.02	0.05	1.29	0.43		Hispanic ^b	0	0.01	0.02	0.04	2.15	0.73	
	10	0.02	0.05	0.11	1.31	0.44			10	0.01	0.04	0.09	2.16	0.74	
	20	0.03	0.10	0.21	1.30	0.44			20	0.02	0.07	0.17	2.16	0.74	
	30	0.06	0.18	0.39	1.29	0.44			30	0.05	0.15	0.37	2.15	0.74	
	40	0.12	0.33	0.64	1.25	0.44			40	0.10	0.33	0.75	2.12	0.74	
	50	0.22	0.54	0.89	1.17	0.44			50	0.23	0.66	1.31	2.05	0.74	
	60	0.35	0.74	0.98	1.04	0.43			60	0.45	1.13	1.71	1.91	0.73	
	70	0.46	0.75	-	0.83	0.39			70	0.75	1.39	-	1.60	0.69	
	80	0.42	-	-	0.53	0.33			80	0.80	-	-	1.07	0.56	

Devcan 6.7.6, April 2018, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

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

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

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

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

Statistic could not be calculated.

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

Table 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, 2013-2015 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer					Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever	Risk of Dying from Cancer			+10 yrs	+20 yrs	+30 yrs	Ever		
All Races	0	0.01	0.04	0.07	2.37	0.82	Asian/ Pacific Islander	0	0.01	0.04	0.06	2.13	0.86	
	10	0.02	0.06	0.12	2.38	0.83		10	0.03	0.05	0.10	2.14	0.87	
	20	0.03	0.10	0.23	2.37	0.84		20	0.02	0.07	0.17	2.12	0.87	
	30	0.07	0.20	0.47	2.37	0.84		30	0.05	0.15	0.34	2.11	0.87	
	40	0.14	0.41	0.92	2.34	0.85		40	0.10	0.29	0.68	2.07	0.87	
	50	0.29	0.81	1.56	2.28	0.86		50	0.20	0.59	1.21	2.01	0.87	
	60	0.57	1.37	2.00	2.15	0.87		60	0.41	1.06	1.66	1.88	0.86	
	70	0.93	1.67	-	1.84	0.85		70	0.71	1.36	-	1.61	0.83	
	80	1.05	-	-	1.29	0.74		80	0.81	-	-	1.12	0.70	
White	0	0.01	0.03	0.07	2.47	0.86	American Indian/ Alaska Native ^a	0	0.01	0.03	0.04	1.20	0.57	
	10	0.02	0.05	0.12	2.49	0.87		10	0.02	0.03	0.07	1.21	0.57	
	20	0.03	0.10	0.23	2.47	0.87		20	0.01	0.05	0.11	1.20	0.58	
	30	0.06	0.20	0.48	2.47	0.88		30	0.04	0.10	0.23	1.21	0.59	
	40	0.14	0.42	0.96	2.45	0.89		40	0.06	0.20	0.37	1.21	0.60	
	50	0.29	0.85	1.64	2.39	0.90		50	0.14	0.32	0.64	1.21	0.62	
	60	0.60	1.45	2.11	2.25	0.91		60	0.20	0.54	0.91	1.16	0.64	
	70	0.99	1.76	-	1.93	0.89		70	0.41	0.84	-	1.13	0.67	
	80	1.10	-	-	1.34	0.77		80	0.62	-	-	1.05	0.60	
Black	0	0.01	0.03	0.07	1.43	0.47	Hispanic ^b	0	0.01	0.03	0.05	2.29	0.84	
	10	0.02	0.06	0.14	1.45	0.48		10	0.02	0.04	0.10	2.31	0.85	
	20	0.04	0.12	0.26	1.44	0.48		20	0.02	0.08	0.19	2.30	0.85	
	30	0.08	0.23	0.47	1.42	0.49		30	0.06	0.17	0.41	2.30	0.85	
	40	0.15	0.40	0.75	1.38	0.49		40	0.11	0.36	0.81	2.27	0.86	
	50	0.26	0.63	0.99	1.29	0.48		50	0.25	0.72	1.44	2.21	0.86	
	60	0.41	0.82	1.07	1.15	0.47		60	0.49	1.26	1.89	2.08	0.86	
	70	0.52	0.83	-	0.94	0.44		70	0.87	1.58	-	1.79	0.81	
	80	0.50	-	-	0.68	0.38		80	0.94	-	-	1.21	0.67	

Devcan 6.7.6, April 2018, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

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

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

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

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

Statistic could not be calculated.

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

Table 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, 2013-2015 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer						Risk of Being Diagnosed with Cancer						Risk of Dying from Cancer							
		+10 yrs			+20 yrs			+30 yrs			Ever			+10 yrs			+20 yrs			+30 yrs	
All Races	0	0.01	0.02	0.04	1.87	0.64		Asian/	0	0.01	0.02	0.04	1.60	0.62							
	10	0.01	0.04	0.08	1.88	0.65		Pacific	10	0.01	0.04	0.07	1.60	0.63							
	20	0.02	0.07	0.17	1.87	0.65		Islander	20	0.02	0.06	0.13	1.59	0.63							
	30	0.05	0.14	0.34	1.86	0.65			30	0.04	0.10	0.25	1.57	0.63							
	40	0.10	0.30	0.68	1.83	0.65			40	0.07	0.21	0.46	1.54	0.62							
	50	0.21	0.59	1.17	1.76	0.66			50	0.14	0.40	0.85	1.49	0.62							
	60	0.41	1.01	1.50	1.63	0.66			60	0.26	0.72	1.18	1.37	0.62							
	70	0.67	1.21	-	1.35	0.63			70	0.48	0.96	-	1.17	0.57							
	80	0.69	-	-	0.87	0.54			80	0.56	-	-	0.79	0.45							
White	0	0.01	0.02	0.04	1.96	0.67		American	0	0.00	0.01	0.02	1.34	0.47							
	10	0.01	0.04	0.08	1.97	0.68		Indian/	10	0.01	0.02	0.04	1.34	0.48							
	20	0.02	0.07	0.17	1.96	0.68		Alaska	20	0.01	0.03	0.09	1.34	0.48							
	30	0.05	0.14	0.35	1.95	0.68		Native ^a	30	0.03	0.08	0.20	1.35	0.48							
	40	0.10	0.31	0.71	1.92	0.68			40	0.06	0.18	0.40	1.35	0.49							
	50	0.21	0.63	1.24	1.85	0.69			50	0.13	0.36	0.71	1.33	0.50							
	60	0.43	1.07	1.59	1.71	0.69			60	0.24	0.61	1.06	1.27	0.52							
	70	0.71	1.27	-	1.42	0.66			70	0.41	0.90	-	1.14	0.52							
	80	0.73	-	-	0.91	0.56			80	0.64	-	-	0.94	0.45							
Black	0	0.00	0.01	0.04	1.18	0.40		Hispanic ^b	0	0.00	0.02	0.04	2.03	0.64							
	10	0.01	0.03	0.08	1.20	0.41			10	0.01	0.03	0.07	2.05	0.65							
	20	0.03	0.07	0.17	1.19	0.41			20	0.02	0.06	0.16	2.04	0.65							
	30	0.05	0.15	0.32	1.18	0.41			30	0.04	0.14	0.34	2.02	0.65							
	40	0.10	0.27	0.55	1.14	0.41			40	0.10	0.30	0.70	1.99	0.65							
	50	0.18	0.46	0.81	1.08	0.40			50	0.20	0.61	1.19	1.92	0.64							
	60	0.30	0.67	0.91	0.96	0.39			60	0.42	1.02	1.57	1.77	0.63							
	70	0.43	0.70	-	0.76	0.36			70	0.65	1.24	-	1.46	0.60							
	80	0.37	-	-	0.46	0.30			80	0.71	-	-	0.98	0.49							

Devcan 6.7.6, April 2018, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

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

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

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

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

- Statistic could not be calculated.

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

Table 19.19
Non-Hodgkin Lymphoma

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

SEER Incidence	SEER 18 Areas ^b			SEER 13 Areas ^b			SEER 9 Areas ^b		
	Rate 2011-2015			Trend 2006-2015 ^c			Trend 2006-2015 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	19.4	23.6	15.9	-0.6*	-0.5	-0.8*	-0.7*	-0.4	-0.9*
White	20.3	24.7	16.8	-0.7*	-0.7*	-0.7*	-0.7*	-0.5	-0.8*
White Hispanic ^e	18.0	20.9	15.7	0.4*	0.1	0.8*	-	-	-
White Non-Hispanic ^e	20.8	25.4	17.0	-0.7*	-0.5*	-0.9*	-	-	-
Black	14.4	17.5	12.1	-1.0*	-0.2	-1.0	-1.2*	-0.4	-1.3
Asian/Pacific Islander	13.6	16.7	11.1	0.2	0.3*	0.1	-	-	-
Amer Ind/Alaska Nat ^f	11.8	12.9	10.8	1.3	0.6	1.7	-	-	-
Hispanic ^e	17.5	20.2	15.3	0.4*	0.1	0.9*	-	-	-
U.S. Mortality ^g	Rate 2011-2015			Trend 2006-2015 ^h			AAPC (%)		
RACE/ETHNICITY	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	5.7	7.4	4.5	-2.2*	-2.0*	-2.7*			
White	6.0	7.7	4.6	-2.2*	-2.0*	-2.8*			
White Hispanic ^e	5.2	6.5	4.1	-2.0*	-1.5*	-2.1*			
White Non-Hispanic ^e	6.0	7.8	4.7	-2.3*	-2.0*	-2.8*			
Black	4.2	5.4	3.4	-2.2*	-2.3*	-2.2*			
Asian/Pacific Islander	4.0	5.0	3.2	-1.8*	-1.8*	-1.6*			
Amer Ind/Alaska Nat									
Total U.S.	3.1	4.0	2.4	-1.9*	-1.6*	-2.4*			
CHSDA Counties	4.4	5.6	3.4	-0.7	-0.4	-1.1			
Non-CHSDA Counties	1.8	2.4	1.3	-5.3*	-2.3	-4.7*			
Hispanic ^e	4.8	6.1	3.9	-1.7*	-1.1*	-2.3*			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.6, February 2018, National Cancer Institute.

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

^a Trend based on less than 10 cases for at least one year within the time interval.

^b 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).

^c The SEER 9 areas are San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, and Atlanta.

^d The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry, and Rural Georgia.

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

^f The 2006-2015 AAPC estimates are based on a Joinpoint analysis with up to 4 Joinpoints over diagnosis years 1992-2015.

^g The 2006-2015 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2015.

^h 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 2006-2015 Hispanic and Non-Hispanic mortality trends exclude deaths from New Hampshire and Oklahoma.

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

^j US Mortality Files, National Center for Health Statistics, CDC.

^k The 2006-2015 mortality AAPCs are based on a Joinpoint analysis using years of death 1992-2015.

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

Table 19.20
Non-Hodgkin Lymphoma

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
SEER Incidence Rates^a, 2011-2015									
California	18.53	22.60	15.19	19.43	23.65	15.91	14.32	16.58	12.40
Greater Bay Area	19.70	24.12	16.00	21.40	26.19	17.35	16.31	17.98	14.79
San Francisco-Oakland	19.71	24.47	15.81	21.64	26.71	17.42	16.03	18.03	14.31
San Jose-Monterey	19.72	23.52	16.42	21.02	25.33	17.26	17.89	17.22	17.86
Los Angeles	18.04	21.86	14.97	19.38	23.27	16.15	14.36	17.03	12.36
Greater California	18.35	22.40	15.00	18.92	23.09	15.45	13.37	15.48	11.35
Connecticut	21.14	26.05	17.34	21.53	26.41	17.75	13.35	18.08	9.79
Detroit	21.25	26.23	17.42	23.16	28.55	18.90	15.18	18.62	12.74
Georgia	18.07	22.26	14.70	19.23	23.42	15.72	14.40	17.83	11.89
Atlanta	18.79	23.59	14.97	20.64	25.65	16.43	15.78	19.43	12.92
Rural Georgia	13.37	14.19	12.72	16.16	17.97	14.05	7.09	-	-
Greater Georgia	17.80	21.78	14.62	18.80	22.78	15.49	13.59	16.83	11.33
Hawaii	17.31	21.26	13.96	20.42	24.11	16.30	-	-	-
Iowa	21.64	26.49	17.82	21.77	26.59	17.97	14.44	18.11	11.83
Kentucky	20.05	24.54	16.47	20.31	24.73	16.76	14.46	18.76	11.10
Louisiana	19.87	23.85	16.63	21.62	25.54	18.32	14.68	18.27	11.93
New Jersey	21.56	25.96	18.17	22.69	27.36	19.03	13.76	15.89	12.21
New Mexico	15.28	17.23	13.62	15.58	17.61	13.87	7.58	11.11	-
Seattle-Puget Sound	21.21	26.24	17.04	21.88	26.89	17.68	16.40	18.78	14.09
Utah	18.47	22.61	14.87	18.65	22.86	15.00	23.63	-	-
SEER 9 Areas ^b	19.97	24.56	16.24	20.99	25.66	17.16	15.32	18.79	12.62
SEER 13 Areas ^b	19.49	23.85	15.95	20.64	25.13	16.93	15.08	18.30	12.58
SEER 18 Areas ^b	19.38	23.63	15.94	20.34	24.69	16.76	14.42	17.45	12.07

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

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

The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry and Rural Georgia.

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

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

Table 19.21
Non-Hodgkin Lymphoma

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

	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
SEER Death Rates^a, 2011-2015									
California	5.47	6.99	4.31	5.87	7.53	4.58	4.23	4.70	3.80
Greater Bay Area	5.28	7.02	3.93	5.83	7.96	4.16	4.35	4.88	3.82
San Francisco-Oakland	5.18	6.96	3.80	5.68	7.82	3.98	4.45	5.08	3.88
San Jose-Monterey	5.47	7.14	4.18	6.10	8.21	4.47	-	-	-
Los Angeles	5.55	6.90	4.51	6.07	7.53	4.93	4.46	5.08	3.96
Greater California	5.50	7.02	4.34	5.79	7.40	4.55	3.94	4.29	3.62
Connecticut	5.43	7.10	4.21	5.57	7.25	4.34	3.65	5.17	2.63
Detroit	6.53	8.60	4.99	7.06	9.25	5.41	4.57	5.97	3.57
Georgia	5.44	7.13	4.20	5.94	7.63	4.64	3.81	5.21	2.86
Atlanta	4.93	6.85	3.59	5.25	7.46	3.64	4.17	5.47	3.29
Rural Georgia	5.93	8.79	3.70	7.34	9.81	5.32	-	-	-
Greater Georgia	5.64	7.22	4.46	6.15	7.68	4.95	3.60	4.99	2.64
Hawaii	5.09	6.70	3.78	5.93	7.59	4.09	-	-	-
Iowa	6.60	8.68	5.06	6.63	8.69	5.10	6.06	-	-
Kentucky	6.51	8.74	4.86	6.64	8.87	4.99	4.13	6.38	2.55
Louisiana	6.45	8.67	4.73	6.82	8.98	5.11	5.12	7.25	3.56
New Jersey	5.53	7.25	4.32	5.94	7.80	4.60	3.60	4.68	2.97
New Mexico	5.02	6.15	4.10	5.02	6.20	4.05	-	-	-
Seattle-Puget Sound	5.99	7.60	4.75	6.16	7.82	4.89	5.44	6.81	3.98
Utah	5.58	6.71	4.63	5.69	6.87	4.71	-	-	-
SEER 9 Areas ^b	5.70	7.42	4.39	5.99	7.79	4.60	4.34	5.64	3.38
SEER 13 Areas ^b	5.66	7.30	4.40	6.02	7.77	4.66	4.37	5.49	3.52
SEER 18 Areas ^b	5.70	7.37	4.43	6.05	7.81	4.69	4.20	5.43	3.30
Total U.S.	5.75	7.44	4.45	5.99	7.74	4.63	4.19	5.37	3.37

^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention.
Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

The SEER 13 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry and Rural Georgia.

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

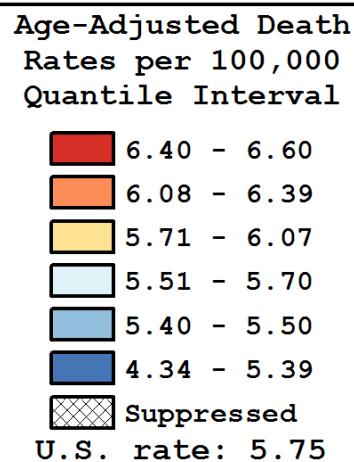
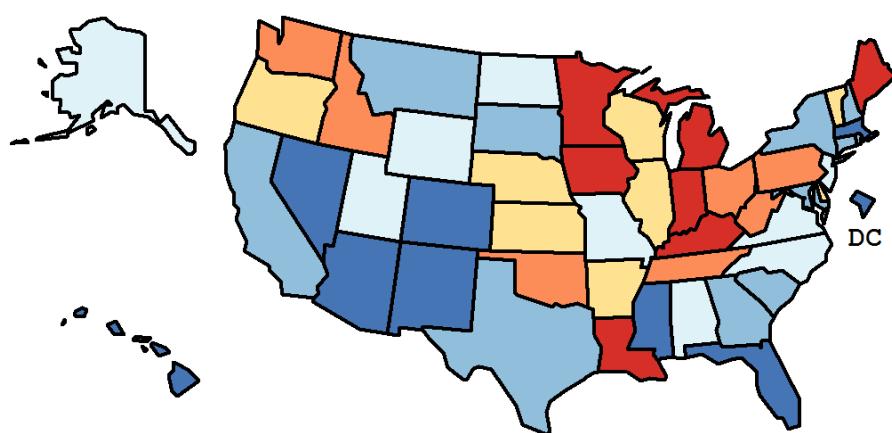
- Statistic not shown. Rate based on less than 16 cases for the time interval.

Table 19.22
Non-Hodgkin Lymphoma

Age-Adjusted Cancer Death^a Rates By State, All Races, 2011-2015

Males and Females

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	5.75	0.02							
High Five States									
Iowa	6.60	0.19	01(01,21)	14.91					
Michigan	6.60	0.11	02(01,12)	14.90					
Kentucky	6.51	0.17	03(01,16)	13.34					
Minnesota	6.47	0.15	04(01,17)	12.51					
Louisiana	6.45	0.17	05(01,20)	12.21					
Low Five States									
Nevada	5.09	0.19	47(22,51)	-11.33					
Hawaii	5.09	0.25	48(21,51)	-11.45					
New Mexico	5.02	0.21	49(31,51)	-12.56					
Colorado	5.01	0.14	50(31,51)	-12.79					
D.C.	4.34	0.39	51(27,51)	-24.40 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	5.70	0.15	23(10,39)	-0.85	Montana	5.48	0.30	37(05,50)	-4.68
Alaska	5.70	0.50	24(01,51)	-0.86	Nebraska	5.89	0.24	19(02,44)	2.51
Arizona	5.25	0.12	46(26,49)	-8.61	Nevada	5.09	0.19	47(22,51)	-11.33
Arkansas	5.84	0.19	22(01,31)	1.66	New Hampshire	5.43	0.27	40(18,51)	-5.46
California	5.47	0.05	38(25,43)	-4.75	New Jersey	5.53	0.11	31(23,47)	-3.78
Colorado	5.01	0.14	50(31,51)	-12.79	New Mexico	5.02	0.21	49(31,51)	-12.56
Connecticut	5.43	0.16	42(22,50)	-5.57	New York	5.50	0.07	32(23,42)	-4.26
Delaware	5.85	0.33	21(01,49)	1.82	North Carolina	5.62	0.10	26(19,43)	-2.20
D.C.	4.34	0.39	51(27,51)	-24.40 ^c	North Dakota	5.58	0.37	30(04,51)	-2.97
Florida	5.39	0.06	43(25,45)	-6.21	Ohio	6.39	0.10	08(01,16)	11.27
Georgia	5.44	0.11	39(28,50)	-5.25	Oklahoma	6.30	0.17	10(01,24)	9.72
Hawaii	5.09	0.25	48(21,51)	-11.45	Oregon	6.06	0.16	16(01,24)	5.44
Idaho	6.36	0.28	09(01,35)	10.60	Pennsylvania	6.17	0.09	13(05,21)	7.40
Illinois	5.89	0.09	20(14,30)	2.42	Rhode Island	5.50	0.29	33(05,50)	-4.36
Indiana	6.42	0.13	06(01,18)	11.78	South Carolina	5.49	0.15	36(21,49)	-4.44
Iowa	6.60	0.19	01(01,21)	14.91	South Dakota	5.50	0.33	34(03,51)	-4.37
Kansas	5.97	0.19	18(04,38)	3.86	Tennessee	6.26	0.13	11(03,24)	8.91
Kentucky	6.51	0.17	03(01,16)	13.34	Texas	5.49	0.07	35(22,39)	-4.39
Louisiana	6.45	0.17	05(01,20)	12.21	Utah	5.58	0.23	29(14,50)	-2.95
Maine	6.40	0.27	07(01,36)	11.45	Vermont	6.05	0.40	17(01,50)	5.24
Maryland	5.43	0.13	41(25,50)	-5.52	Virginia	5.60	0.12	28(19,46)	-2.57
Massachusetts	5.38	0.12	44(23,48)	-6.41	Washington	6.10	0.13	14(06,28)	6.20
Michigan	6.60	0.11	02(01,12)	14.90	West Virginia	6.21	0.23	12(01,26)	8.07
Minnesota	6.47	0.15	04(01,17)	12.51	Wisconsin	6.07	0.14	15(04,26)	5.58
Mississippi	5.31	0.18	45(21,50)	-7.66	Wyoming	5.65	0.43	25(01,51)	-1.60
Missouri	5.62	0.13	27(13,38)	-2.23					



^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

SE Standard error of the rate.

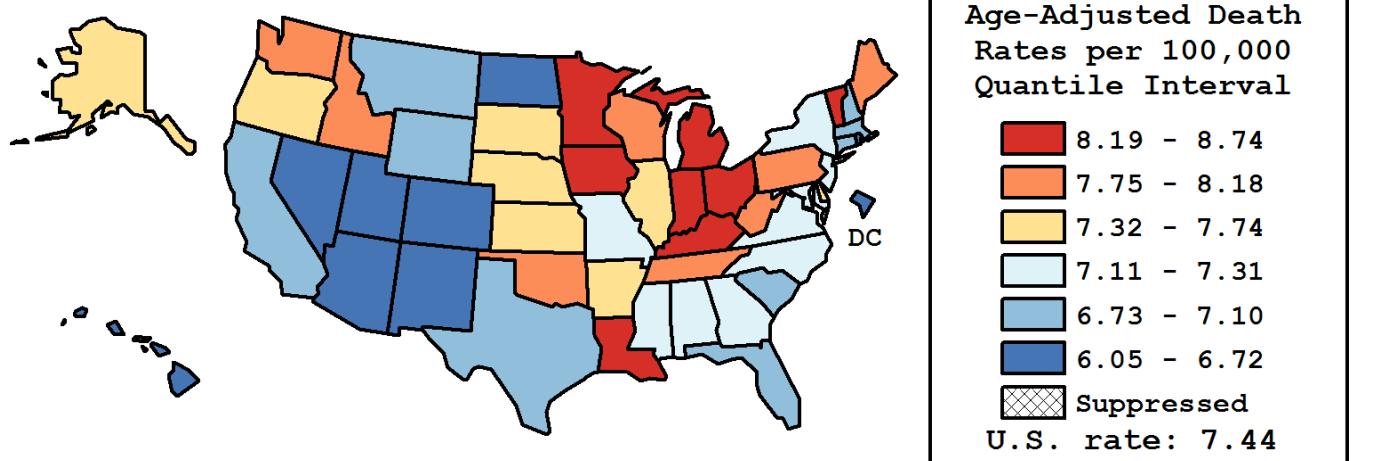
PD Percent difference between state rate and total U.S. rate.

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

Table 19.23
Non-Hodgkin Lymphoma

Age-Adjusted Cancer Death^a Rates By State, All Races, 2011-2015

Males									
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	7.44	0.03							
High Five States									
Kentucky	8.74	0.30	01(01,14)	17.48 ^c					
Iowa	8.68	0.33	02(01,21)	16.72 ^c					
Michigan	8.68	0.19	03(01,12)	16.68 ^c					
Louisiana	8.67	0.30	04(01,21)	16.55 ^c					
Vermont	8.53	0.72	05(01,50)	14.66					
Low Five States									
Nevada	6.54	0.32	47(16,51)	-12.09					
Colorado	6.53	0.25	48(27,51)	-12.26					
Arizona	6.50	0.20	49(26,50)	-12.62					
New Mexico	6.15	0.35	50(39,51)	-17.38 ^c					
D.C.	6.05	0.72	51(08,51)	-18.67 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	7.31	0.26	25(09,45)	-1.81	Montana	7.00	0.50	37(01,50)	-5.92
Alaska	7.34	0.83	24(01,51)	-1.35	Nebraska	7.43	0.41	20(07,50)	-0.10
Arizona	6.50	0.20	49(26,50)	-12.62	Nevada	6.54	0.32	47(16,51)	-12.09
Arkansas	7.38	0.32	22(05,46)	-0.86	New Hampshire	6.98	0.46	39(11,51)	-6.13
California	6.99	0.09	38(26,45)	-6.03	New Jersey	7.25	0.19	30(17,46)	-2.49
Colorado	6.53	0.25	48(27,51)	-12.26	New Mexico	6.15	0.35	50(39,51)	-17.38 ^c
Connecticut	7.10	0.28	34(15,50)	-4.60	New York	7.20	0.13	31(19,44)	-3.20
Delaware	7.69	0.58	19(01,50)	3.43	North Carolina	7.28	0.18	26(14,43)	-2.19
D.C.	6.05	0.72	51(08,51)	-18.67 ^c	North Dakota	6.72	0.61	43(03,51)	-9.68
Florida	6.98	0.11	40(22,44)	-6.18	Ohio	8.35	0.17	07(01,17)	12.19
Georgia	7.13	0.20	32(19,48)	-4.14	Oklahoma	8.18	0.30	09(01,28)	9.94
Hawaii	6.70	0.43	45(14,51)	-9.99	Oregon	7.73	0.28	18(01,31)	3.86
Idaho	7.99	0.46	12(01,47)	7.41	Pennsylvania	8.14	0.15	11(03,20)	9.39
Illinois	7.74	0.17	17(08,29)	4.03	Rhode Island	6.64	0.50	46(07,51)	-10.76
Indiana	8.32	0.24	08(01,18)	11.77	South Carolina	7.04	0.26	36(15,49)	-5.33
Iowa	8.68	0.33	02(01,21)	16.72 ^c	South Dakota	7.35	0.57	23(01,51)	-1.23
Kansas	7.43	0.33	21(04,46)	-0.14	Tennessee	8.18	0.24	10(01,23)	9.89
Kentucky	8.74	0.30	01(01,14)	17.48 ^c	Texas	7.08	0.12	35(18,41)	-4.87
Louisiana	8.67	0.30	04(01,21)	16.55 ^c	Utah	6.71	0.37	44(15,51)	-9.76
Maine	7.75	0.46	16(02,49)	4.21	Vermont	8.53	0.72	05(01,50)	14.66
Maryland	7.11	0.24	33(17,49)	-4.46	Virginia	7.27	0.20	27(12,44)	-2.23
Massachusetts	6.88	0.21	41(19,49)	-7.58	Washington	7.94	0.23	14(04,32)	6.72
Michigan	8.68	0.19	03(01,12)	16.68 ^c	West Virginia	7.78	0.39	15(01,41)	4.55
Minnesota	8.37	0.26	06(01,20)	12.48	Wisconsin	7.95	0.24	13(03,29)	6.86
Mississippi	7.27	0.34	29(10,49)	-2.33	Wyoming	6.78	0.71	42(03,51)	-8.93
Missouri	7.27	0.22	28(11,44)	-2.31					



^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

SE Standard error of the rate.

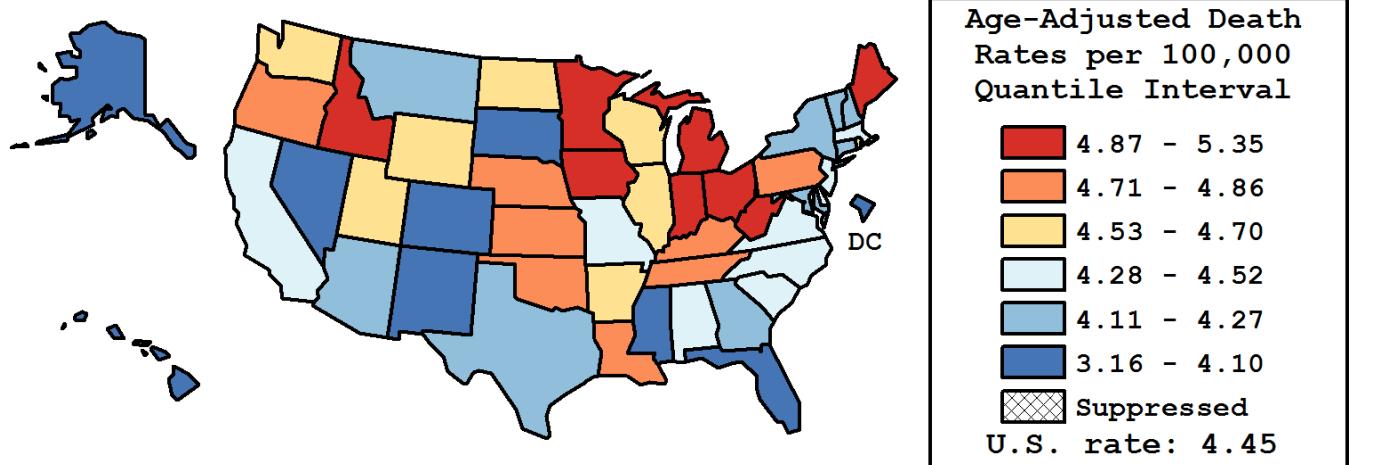
PD Percent difference between state rate and total U.S. rate.

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

Table 19.24
Non-Hodgkin Lymphoma

Age-Adjusted Cancer Death^a Rates By State, All Races, 2011-2015

Females									
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	4.45	0.02							
High Five States									
Maine	5.35	0.33	01(01,36)	20.00 ^c					
Iowa	5.06	0.22	02(01,30)	13.66					
Indiana	5.05	0.16	03(01,24)	13.38					
Michigan	5.02	0.13	04(01,19)	12.72					
West Virginia	5.01	0.28	05(01,28)	12.41					
Low Five States									
Mississippi	3.98	0.21	47(17,51)	-10.75					
Nevada	3.83	0.23	48(22,51)	-14.08					
Colorado	3.79	0.17	49(26,51)	-14.93					
Hawaii	3.78	0.28	50(15,51)	-15.05 ^c					
D.C.	3.16	0.44	51(21,51)	-29.00 ^c					
State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	4.52	0.17	25(03,39)	1.45	Montana	4.23	0.36	37(04,51)	-5.10
Alaska	4.10	0.58	44(02,51)	-8.07	Nebraska	4.72	0.28	14(01,39)	6.02
Arizona	4.20	0.14	41(21,49)	-5.74	Nevada	3.83	0.23	48(22,51)	-14.08
Arkansas	4.65	0.22	20(01,28)	4.36	New Hampshire	4.25	0.32	35(07,51)	-4.54
California	4.31	0.06	31(23,42)	-3.29	New Jersey	4.32	0.12	30(20,47)	-2.99
Colorado	3.79	0.17	49(26,51)	-14.93	New Mexico	4.10	0.26	43(15,51)	-7.92
Connecticut	4.21	0.19	39(18,50)	-5.47	New York	4.25	0.08	36(20,43)	-4.56
Delaware	4.45	0.38	26(01,51)	-0.18	North Carolina	4.43	0.12	27(15,44)	-0.65
D.C.	3.16	0.44	51(21,51)	-29.00 ^c	North Dakota	4.70	0.45	17(01,51)	5.61
Florida	4.07	0.07	45(28,48)	-8.62	Ohio	4.93	0.11	08(01,21)	10.61
Georgia	4.20	0.13	40(27,50)	-5.64	Oklahoma	4.82	0.20	12(01,34)	8.10
Hawaii	3.78	0.28	50(15,51)	-15.05 ^c	Oregon	4.71	0.19	16(01,36)	5.65
Idaho	4.98	0.33	06(01,45)	11.73	Pennsylvania	4.71	0.10	15(05,27)	5.76
Illinois	4.54	0.11	23(12,38)	1.90	Rhode Island	4.53	0.34	24(01,50)	1.63
Indiana	5.05	0.16	03(01,24)	13.38	South Carolina	4.30	0.17	32(15,49)	-3.38
Iowa	5.06	0.22	02(01,30)	13.66	South Dakota	4.03	0.38	46(02,51)	-9.59
Kansas	4.84	0.23	10(01,42)	8.56	Tennessee	4.82	0.15	11(04,36)	8.28
Kentucky	4.86	0.19	09(01,27)	9.16	Texas	4.27	0.08	34(21,43)	-4.08
Louisiana	4.73	0.19	13(01,32)	6.19	Utah	4.63	0.28	21(01,49)	3.96
Maine	5.35	0.33	01(01,36)	20.00 ^c	Vermont	4.16	0.45	42(01,51)	-6.69
Maryland	4.22	0.15	38(21,50)	-5.21	Virginia	4.36	0.13	29(19,48)	-2.10
Massachusetts	4.29	0.14	33(18,47)	-3.72	Washington	4.67	0.15	19(04,37)	4.86
Michigan	5.02	0.13	04(01,19)	12.72	West Virginia	5.01	0.28	05(01,28)	12.41
Minnesota	4.97	0.17	07(01,24)	11.51	Wisconsin	4.68	0.16	18(03,35)	5.07
Mississippi	3.98	0.21	47(17,51)	-10.75	Wyoming	4.63	0.53	22(01,51)	3.92
Missouri	4.36	0.15	28(07,40)	-2.02					



^a US Mortality Files, National Center for Health Statistics, Centers for Disease Control and Prevention. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130).

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

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

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

SE Standard error of the rate.

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

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

Table 19.25
Non-Hodgkin Lymphoma

Estimated United States Cancer Prevalence Counts^a on January 1, 2015
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 <23 ^e	0 to <40 ^e	>=40 ^g	Complete ^h
Race	Sex										
All Races ^b	Both Sexes	250,894	175,592	114,316	65,483	35,610	19,867	641,898	678,222	7,820	686,042
	Males	137,105	92,586	58,741	34,095	18,429	10,474	340,960	360,297	4,194	364,491
	Females	113,789	83,006	55,575	31,388	17,181	9,393	300,938	317,925	3,626	321,551
White ^b	Both Sexes	216,250	154,199	100,445	57,520	31,683	17,965	560,098	593,038	8,281	601,319
	Males	118,405	81,779	51,842	29,859	16,341	9,485	298,226	315,834	4,776	320,610
	Females	97,845	72,420	48,603	27,661	15,342	8,480	261,872	277,204	3,505	280,709
Black ^b	Both Sexes	20,975	13,038	9,080	5,216	2,323	1,224	50,633	52,818	684	53,502
	Males	11,053	6,418	4,484	2,800	1,188	655	25,944	27,068	302	27,370
	Females	9,922	6,620	4,596	2,416	1,135	569	24,689	25,750	382	26,132
Asian/ Pacific	Both Sexes	8,063	4,963	3,201	+	+	+	18,531	+	+	+
	Males	4,357	2,584	1,609	+	+	+	9,742	+	+	+
Islander ^c	Females	3,706	2,379	1,592	+	+	+	8,789	+	+	+
Hispanic ^d	Both Sexes	20,106	12,507	7,632	+	+	+	45,980	+	+	+
	Males	10,575	6,530	4,111	+	+	+	24,276	+	+	+
	Females	9,531	5,977	3,521	+	+	+	21,704	+	+	+

Estimated prevalence percent^a on January 1, 2015, of the SEER^c population diagnosed in the previous 23 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence	Age Specific (Crude)								Age-Adjusted ^f			
	All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+		
Race	Sex											
All Races ^c	Both Sexes	0.1764%	0.0033%	0.0136%	0.0272%	0.0504%	0.1062%	0.2231%	0.4342%	0.7633%	0.9530%	0.1634%
	Males	0.1900%	0.0039%	0.0187%	0.0337%	0.0582%	0.1233%	0.2568%	0.4914%	0.8759%	1.1626%	0.1905%
	Females	0.1632%	0.0027%	0.0083%	0.0205%	0.0425%	0.0892%	0.1907%	0.3825%	0.6708%	0.8257%	0.1406%
White ^c	Both Sexes	0.1998%	0.0033%	0.0137%	0.0287%	0.0517%	0.1128%	0.2393%	0.4731%	0.8387%	1.0430%	0.1769%
	Males	0.2141%	0.0041%	0.0192%	0.0359%	0.0591%	0.1310%	0.2747%	0.5282%	0.9539%	1.2710%	0.2050%
	Females	0.1856%	0.0025%	0.0080%	0.0212%	0.0438%	0.0939%	0.2040%	0.4215%	0.7415%	0.9025%	0.1526%
Black ^c	Both Sexes	0.1107%	0.0024%	0.0124%	0.0250%	0.0579%	0.1052%	0.1935%	0.3264%	0.5032%	0.5142%	0.1228%
	Males	0.1188%	0.0018%	0.0161%	0.0320%	0.0689%	0.1224%	0.2242%	0.3895%	0.5649%	0.5688%	0.1418%
	Females	0.1032%	0.0030%	0.0085%	0.0181%	0.0482%	0.0902%	0.1666%	0.2769%	0.4602%	0.4870%	0.1077%
Asian/ Pacific	Both Sexes	0.1069%	0.0038%	0.0134%	0.0213%	0.0350%	0.0673%	0.1405%	0.2597%	0.4501%	0.6064%	0.1022%
	Males	0.1163%	0.0039%	0.0168%	0.0246%	0.0407%	0.0754%	0.1596%	0.3001%	0.5459%	0.7525%	0.1211%
Islander ^c	Females	0.0983%	0.0036%	0.0098%	0.0180%	0.0298%	0.0602%	0.1239%	0.2267%	0.3752%	0.5161%	0.0874%
Hispanic ^d	Both Sexes	0.0852%	0.0029%	0.0107%	0.0209%	0.0367%	0.0792%	0.1727%	0.3433%	0.5556%	0.7054%	0.1236%
	Males	0.0888%	0.0029%	0.0141%	0.0257%	0.0432%	0.0918%	0.1917%	0.3746%	0.6062%	0.8104%	0.1388%
	Females	0.0816%	0.0028%	0.0071%	0.0157%	0.0298%	0.0662%	0.1542%	0.3161%	0.5176%	0.6418%	0.1108%

^a US 2015 cancer prevalence counts are based on 2015 cancer prevalence proportions from the SEER registries and 1/1/2015 US population estimates based on the average of 2014 and 2015 population estimates from the US Bureau of the Census.

^{b c d} Prevalence was calculated using the first invasive tumor for each cancer site diagnosed during the previous 40/23 years. Statistics based on (b) SEER 9 Areas (c) SEER 13 Areas excluding the Alaska Native Registry

(d) NHIA for Hispanic for SEER 13 Areas excluding the Alaska Native Registry.

^e Maximum limited-duration prevalence: 40 years for 1975-2015 SEER 9 data; 23 years for 1992-2015 SEER 13 data (excluding the Alaska Native Registry) used to calculate prevalence for Hispanics and Asian Pacific Islanders.

^{f g h i} Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.

(g) Cases diagnosed more than 40 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 <40 and >=40. (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^a
SEER^b Incidence Rates and Annual Percent Change by Age at Diagnosis

All Races, Both Sexes, 2006-2015

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	36.1	320,214	-0.3*	6.1	14,346	0.5	23.6	134,609	-0.5*	162.0	171,259	-0.3
1 Hodgkin Lymphoma	2.7	23,211	-1.9*	1.2	2,920	-1.3*	3.1	16,150	-1.6*	3.9	4,141	-3.2*
2 Non-Hodgkin lymphoma	32.5	288,751	-0.1	4.8	11,261	0.8*	20.0	115,695	-0.2	153.2	161,795	-0.1
2(a) Non-Hodgkin lymphoma, B-cell	30.1	267,746	0.1	3.8	9,009	2.1*	18.1	105,374	-0.1	145.2	153,363	0.1
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	1.5	12,635	2.6*	3.1	7,265	1.8*	0.7	3,941	3.8*	1.3	1,429	3.6*
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	27.0	241,130	-0.3	0.7	1,636	3.3*	16.6	96,966	-0.4*	135.0	142,528	-0.2
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	6.7	59,578	-1.3*	0.0	26	-	3.3	20,344	-1.1*	37.1	39,208	-1.4*
2(a) 2.1.1. Chronic/Small lymphocytic/ leukemia/lymphoma	5.8	52,072	-1.6*	0.0	20	-	2.9	17,591	-1.3*	32.6	34,461	-1.8*
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	0.0	204	-0.6	-	-	-	0.0	49	-	0.1	149	0.6
2(a) 2.1.3. Mantle-cell lymphoma	0.8	7,302	1.2*	-	-	-	0.4	2,704	0.6	4.4	4,598	1.6*
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	0.6	5,652	-0.6	-	-	-	0.3	1,697	-2.0*	3.8	3,953	-0.1
2(a) 2.2.1. Lymphoplasmacytic lymphoma	0.3	2,556	-0.6	-	-	-	0.1	772	-1.1	1.7	1,782	-0.4
2(a) 2.2.2. Waldenstrom macroglobulinemia	0.3	3,096	-0.6*	-	-	-	0.2	925	-2.8*	2.1	2,171	0.1
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	7.0	62,218	0.4	0.3	658	1.8	4.6	26,221	0.0	33.5	35,339	0.5*
2(a) 2.3.1. DLBCL, NOS ^c	6.9	61,404	0.3	0.3	615	1.0	4.5	25,579	-0.2	33.4	35,210	0.5*
2(a) 2.3.2. Intravascular large B-cell lymphoma	0.0	105	-	-	-	-	0.0	49	-	0.1	56	-
2(a) 2.3.3. Primary effusion lymphoma	0.0	127	2.1	-	-	-	0.0	90	-	0.0	37	-
2(a) 2.3.4. Mediastinal large B-cell lymphoma	0.1	582	9.5*	0.0	43	-	0.1	503	9.3*	0.0	36	-
2(a) 2.4. Burkitt lymphoma/leukemia	0.4	3,467	-1.6	0.3	746	4.6*	0.4	1,945	-3.8*	0.7	776	-2.3
2(a) 2.5. Marginal-zone lymphoma (MZL)	2.0	17,992	0.2	0.0	104	-	1.3	7,474	0.8	9.9	10,414	-0.2
2(a) 2.5.1. Splenic MZL	0.2	1,584	-0.6	-	-	-	0.1	599	-1.1	0.9	985	-0.4
2(a) 2.5.2. Extranodal MZL, MALT ^c type	1.2	10,862	1.4*	0.0	72	-	0.8	4,826	1.7*	5.6	5,964	1.1
2(a) 2.5.3. Nodal MZL	0.6	5,546	-2.0*	0.0	32	-	0.3	2,049	-0.8	3.3	3,465	-2.6*
2(a) 2.6. Follicular lymphoma	3.5	31,689	-2.2*	0.0	82	-	2.8	15,910	-2.7*	14.8	15,697	-1.9*
2(a) 2.7. Hairy-cell leukemia	0.3	2,632	-0.8	-	-	-	0.3	1,653	-0.8	0.9	979	-0.7
2(a) 2.8. Plasma cell neoplasms	6.5	57,866	1.2*	0.0	17	-	3.6	21,707	1.5*	34.3	36,142	1.0*
2(a) 2.8.1. Plasmacytoma	0.4	3,648	1.3	-	-	-	0.3	1,790	1.3	1.7	1,844	1.2
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	6.1	54,218	1.2*	-	-	-	3.3	19,917	1.5*	32.5	34,298	1.0*
2(a) 2.9. Heavy chain disease	0.0	36	-	-	-	-	-	-	-	0.0	20	-
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS ^c	1.6	13,981	4.1*	0.0	108	-	0.8	4,467	3.9*	8.9	9,406	4.2*

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

^a 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.

^b SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

^c 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^b Incidence Rates and Annual Percent Change by Age at Diagnosis

All Races, Both Sexes, 2006-2015

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	2.2	19,079	0.4	0.8	1,875	2.4	1.8	9,706	0.3	7.1	7,498	0.1
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	0.1	551	-	0.1	257	-	0.0	245	-	0.0	49	-
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	2.1	18,466	1.5*	0.7	1,615	8.1*	1.7	9,429	1.3*	7.0	7,422	0.4
2(b) 2.1. Mycosis fungoides/Sezary syndrome	0.5	4,717	1.7*	0.1	143	-	0.5	2,747	1.5	1.7	1,827	1.3*
2(b) 2.1.1. Mycosis fungoides	0.5	4,560	1.6*	0.1	143	-	0.5	2,689	1.4	1.6	1,728	1.2*
2(b) 2.1.2. Sezary syndrome	0.0	157	-	-	-	-	0.0	58	-	0.1	99	-
2(b) 2.2. Peripheral T-cell lymphoma	1.2	10,333	-0.1	0.2	416	0.5	0.9	5,118	-0.3	4.5	4,799	0.0
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS ^c	0.4	3,744	1.3*	0.0	69	-	0.3	1,755	1.4	1.8	1,920	1.2
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	0.2	1,379	0.4	-	-	-	0.1	518	-1.2	0.8	859	1.2
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	0.0	132	4.5	0.0	28	-	0.0	77	-	0.0	27	-
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	0.2	1,894	-2.6*	0.1	233	-1.5	0.2	1,068	-2.3	0.6	593	-3.6*
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	0.0	96	-	-	-	-	0.0	72	-	-	-	-
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	0.0	129	-	-	-	-	0.0	57	-	0.1	71	-
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS ^c	0.2	2,056	0.4	0.0	38	-	0.2	1,095	0.7	0.9	923	0.1
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	0.1	903	-4.3*	0.0	34	-	0.1	476	-4.7*	0.4	393	-4.3*
2(b) 2.3. Adult T-cell leukemia/lymphoma	0.3	2,219	10.6*	0.4	1,029	11.3*	0.2	888	11.2*	0.3	302	5.5
2(b) 2.4. NK ^c /T-cell lymphoma, nasal-type/aggressive NK ^c -cell leukemia	0.1	732	1.7	0.0	24	-	0.1	490	1.5	0.2	218	2.4
2(b) 2.5. T-cell large granular lymphocytic leukemia	0.0	125	-	-	-	-	0.0	49	-	0.1	75	-
2(b) 2.6. Prolymphocytic leukemia, T-cell	0.0	340	4.5*	-	-	-	0.0	137	-	0.2	201	5.1*
2(b) 3. Non-Hodgkin lymphoma, NOS ^c , T-cell	0.0	62	-	-	-	-	0.0	32	-	0.0	27	-
2(c) Non-Hodgkin lymphoma, unknown lineage	0.2	1,926	-31.3*	0.2	377	-	0.1	615	-	0.9	934	-
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	0.1	755	-29.4*	0.2	367	-	0.0	196	-	0.2	192	-
2(c) 2. Prolymphocytic leukemia, unknown lineage	0.0	75	-	-	-	-	0.0	21	-	0.1	54	-
2(c) 3. Non-Hodgkin lymphoma, NOS ^c , unknown lineage	0.1	1,096	-	-	-	-	0.1	398	-	0.7	688	-
2(*) 1. Total precursor lymphoma/leukemia ^d	1.6	13,941	-0.6	3.3	7,889	-1.1	0.8	4,382	0.3	1.6	1,670	-0.1
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	0.1	452	32.2*	-	-	-	0.0	223	-	0.2	220	-
4 Lymphoid neoplasm, NOS ^c	0.9	7,800	-5.1*	0.1	156	-	0.5	2,541	-5.9*	4.7	5,103	-5.3*

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

^a 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.

^b SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

^c NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

^d 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^a
SEER^b Incidence Rates and Annual Percent Change by Age at Diagnosis

All Races, Males, 2006-2015

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	44.7	179,485	-0.3	6.9	8,309	0.5	28.1	78,608	-0.6*	207.4	92,568	-0.2
1 Hodgkin Lymphoma	3.0	12,850	-1.7*	1.3	1,604	-1.2*	3.5	9,014	-1.5*	4.9	2,232	-2.9*
2 Non-Hodgkin lymphoma	40.5	162,258	-0.1	5.5	6,609	0.7	24.1	67,970	-0.4*	196.4	87,679	0.0
2(a) Non-Hodgkin lymphoma, B-cell	37.5	149,821	0.1	4.2	5,115	2.0*	21.8	61,794	-0.2	185.8	82,912	0.2
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	1.6	6,806	2.6*	3.2	3,915	1.4	0.8	2,185	4.2*	1.5	706	4.0*
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	33.9	135,571	-0.2	0.9	1,117	3.9*	20.0	57,018	-0.6*	173.4	77,436	-0.1
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	9.2	36,612	-1.3*	-	-	-	4.5	13,246	-1.1*	52.3	23,351	-1.4*
2(a) 2.1.1. Chronic/Small lymphocytic/ leukemia/lymphoma	7.9	31,318	-1.7*	-	-	-	3.8	11,212	-1.4*	45.1	20,093	-1.8*
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	0.0	137	-3.8*	-	-	-	0.0	35	-	0.2	100	-
2(a) 2.1.3. Mantle-cell lymphoma	1.3	5,157	1.0	-	-	-	0.7	1,999	0.3	7.0	3,158	1.3
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	0.9	3,281	-1.0	-	-	-	0.3	977	-1.3	5.2	2,304	-0.9
2(a) 2.2.1. Lymphoplasmacytic lymphoma	0.4	1,408	-1.1	-	-	-	0.1	410	-0.8	2.2	998	-1.2
2(a) 2.2.2. Waldenstrom macroglobulinemia	0.5	1,873	-0.9	-	-	-	0.2	567	-1.7	3.0	1,306	-0.7
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	8.6	34,338	0.5	0.3	391	2.9	5.7	15,740	-0.2	41.1	18,207	0.9*
2(a) 2.3.1. DLBCL, NOS ^c	8.5	33,944	0.4	0.3	370	1.6	5.6	15,439	-0.3	40.9	18,135	0.9*
2(a) 2.3.2. Intravascular large B-cell lymphoma	0.0	48	-	-	-	-	0.0	24	-	0.1	24	-
2(a) 2.3.3. Primary effusion lymphoma	0.0	118	-	-	-	-	0.0	89	-	0.1	29	-
2(a) 2.3.4. Mediastinal large B-cell lymphoma	0.1	228	-	0.0	21	-	0.1	188	-	0.0	19	-
2(a) 2.4. Burkitt lymphoma/leukemia	0.6	2,508	-1.1	0.5	571	4.6*	0.6	1,469	-4.2*	1.0	468	1.1
2(a) 2.5. Marginal-zone lymphoma (MZL)	2.1	8,450	0.2	0.1	69	-	1.3	3,570	0.1	10.8	4,811	0.2
2(a) 2.5.1. Splenic MZL	0.2	759	0.5	-	-	-	0.1	294	0.5	1.0	465	0.3
2(a) 2.5.2. Extranodal MZL, MALT ^c type	1.2	4,978	1.5	0.0	42	-	0.8	2,243	1.0	6.0	2,693	1.7
2(a) 2.5.3. Nodal MZL	0.7	2,713	-2.2	0.0	27	-	0.4	1,033	-2.3	3.7	1,653	-2.2
2(a) 2.6. Follicular lymphoma	3.9	15,913	-1.9*	0.1	65	-	2.9	8,241	-2.8*	16.7	7,607	-1.2*
2(a) 2.7. Hairy-cell leukemia	0.5	2,100	-1.6*	-	-	-	0.5	1,340	-1.3	1.7	760	-1.9*
2(a) 2.8. Plasma cell neoplasms	8.1	32,345	1.1*	-	-	-	4.3	12,426	1.3*	44.5	19,914	1.1*
2(a) 2.8.1. Plasmacytoma	0.5	2,251	0.3	-	-	-	0.4	1,143	0.1	2.4	1,104	0.6
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	7.6	30,094	1.2*	-	-	-	3.9	11,283	1.5*	42.1	18,810	1.1*
2(a) 2.9. Heavy chain disease	0.0	24	-	-	-	-	-	-	-	-	-	-
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS ^c	1.9	7,444	4.3*	0.1	83	-	0.9	2,591	4.8*	10.9	4,770	4.1*

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

^a 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.

^b SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

^c 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^b Incidence Rates and Annual Percent Change by Age at Diagnosis

All Races, Males, 2006-2015

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	2.8	11,385	0.4	1.1	1,286	1.6	2.1	5,800	0.3	9.5	4,299	0.1
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	0.1	383	-	0.2	187	-	0.1	169	-	0.1	27	-
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	2.7	10,973	1.6*	0.9	1,097	7.8*	2.1	5,619	1.4*	9.4	4,257	0.4
2(b) 2.1. Mycosis fungoides/Sezary syndrome	0.7	2,707	2.1*	0.1	83	-	0.6	1,539	1.5	2.4	1,085	1.6*
2(b) 2.1.1. Mycosis fungoides	0.6	2,616	2.2*	0.1	83	-	0.6	1,506	1.6	2.2	1,027	1.6
2(b) 2.1.2. Sezary syndrome	0.0	91	-	-	-	-	0.0	33	-	0.1	58	-
2(b) 2.2. Peripheral T-cell lymphoma	1.5	6,044	-0.4	0.2	249	-1.6	1.1	3,062	-0.4	6.1	2,733	-0.2
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS ^c	0.6	2,244	0.5	0.0	42	-	0.4	1,111	1.1	2.5	1,091	-0.1
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	0.2	747	2.4*	-	-	-	0.1	307	1.3	1.0	438	2.8
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	0.0	50	-	-	-	-	0.0	26	-	-	-	-
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	0.3	1,149	-2.7	0.1	146	-	0.2	647	-2.9	0.8	356	-2.3
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	0.0	64	-	-	-	-	0.0	47	-	-	-	-
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	0.0	74	-	-	-	-	0.0	33	-	0.1	40	-
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS ^c	0.3	1,187	-0.1	0.0	20	-	0.2	627	0.0	1.2	540	0.3
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	0.1	529	-5.5*	0.0	18	-	0.1	264	-5.4*	0.5	247	-5.3*
2(b) 2.3. Adult T-cell leukemia/lymphoma	0.4	1,499	10.7*	0.6	747	10.0*	0.2	594	11.3*	0.4	158	-
2(b) 2.4. NK ^c /T-cell lymphoma, nasal-type/aggressive NK ^c -cell leukemia	0.1	467	-0.1	0.0	17	-	0.1	321	0.0	0.3	129	-
2(b) 2.5. T-cell large granular lymphocytic leukemia	0.0	56	-	-	-	-	0.0	16	-	0.1	40	-
2(b) 2.6. Prolymphocytic leukemia, T-cell	0.1	200	5.9*	-	-	-	0.0	87	-	0.3	112	-
2(b) 3. Non-Hodgkin lymphoma, NOS ^c , T-cell	0.0	29	-	-	-	-	-	-	-	-	-	-
2(c) Non-Hodgkin lymphoma, unknown lineage	0.3	1,052	-	0.2	208	-	0.1	376	-	1.1	468	-
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	0.1	435	-	0.2	202	-	0.0	110	-	0.3	123	-
2(c) 2. Prolymphocytic leukemia, unknown lineage	0.0	39	-	-	-	-	-	-	-	0.1	29	-
2(c) 3. Non-Hodgkin lymphoma, NOS ^c , unknown lineage	0.1	578	-	-	-	-	0.1	256	-	0.7	316	-
2(*) 1. Total precursor lymphoma/leukemia ^d	1.8	7,624	-0.9*	3.6	4,304	-1.8*	0.9	2,464	0.2	1.9	856	0.2
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	0.1	265	-	-	-	-	0.1	138	-	0.3	121	-
4 Lymphoid neoplasm, NOS ^c	1.1	4,112	-5.3*	0.1	90	-	0.5	1,486	-6.7*	5.9	2,536	-5.2*

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

^a 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.

^b SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

^c NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

^d 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^a
SEER^b Incidence Rates and Annual Percent Change by Age at Diagnosis

All Races, Females, 2006-2015

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	29.2	140,729	-0.5*	5.2	6,037	0.6	19.3	56,001	-0.3	129.3	78,691	-0.7*
1 Hodgkin Lymphoma	2.3	10,361	-2.1*	1.1	1,316	-1.5	2.7	7,136	-1.8*	3.2	1,909	-3.7*
2 Non-Hodgkin lymphoma	26.1	126,493	-0.3	4.0	4,652	0.9	16.2	47,725	0.0	122.0	74,116	-0.5*
2(a) Non-Hodgkin lymphoma, B-cell	24.2	117,925	0.0	3.4	3,894	2.2*	14.7	43,580	0.1	115.9	70,451	-0.3
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	1.4	5,829	2.6*	2.9	3,350	2.3	0.6	1,756	3.3*	1.2	723	2.9
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	21.5	105,559	-0.4*	0.4	519	2.1	13.4	39,948	-0.1	107.2	65,092	-0.6*
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	4.6	22,966	-1.5*	-	-	-	2.3	7,098	-0.9	25.8	15,857	-1.7*
2(a) 2.1.1. Chronic/Small lymphocytic/ leukemia/lymphoma	4.2	20,754	-1.8*	-	-	-	2.0	6,379	-1.2	23.4	14,368	-2.1*
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	0.0	67	-	-	-	-	-	-	-	0.1	49	-
2(a) 2.1.3. Mantle-cell lymphoma	0.4	2,145	1.5	-	-	-	0.2	705	1.4	2.4	1,440	1.5
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	0.5	2,371	-0.5	-	-	-	0.2	720	-2.8*	2.7	1,649	0.4
2(a) 2.2.1. Lymphoplasmacytic lymphoma	0.2	1,148	-0.1	-	-	-	0.1	362	-1.1	1.3	784	0.1
2(a) 2.2.2. Waldenstrom macroglobulinemia	0.2	1,223	-0.7	-	-	-	0.1	358	-4.2*	1.4	865	0.7
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	5.8	27,880	0.2	0.2	267	0.3	3.6	10,481	0.4	28.2	17,132	0.1
2(a) 2.3.1. DLBCL, NOS ^c	5.7	27,460	0.0	0.2	245	0.2	3.5	10,140	0.0	28.1	17,075	0.0
2(a) 2.3.2. Intravascular large B-cell lymphoma	0.0	57	-	-	-	-	0.0	25	-	0.1	32	-
2(a) 2.3.3. Primary effusion lymphoma	-	-	-	-	-	-	-	-	-	-	-	-
2(a) 2.3.4. Mediastinal large B-cell lymphoma	0.1	354	9.4*	0.0	22	-	0.1	315	10.0*	0.0	17	-
2(a) 2.4. Burkitt lymphoma/leukemia	0.2	959	-2.6	0.2	175	5.1	0.2	476	-2.3	0.5	308	-8.0*
2(a) 2.5. Marginal-zone lymphoma (MZL)	2.0	9,542	0.2	0.0	35	-	1.3	3,904	1.5*	9.3	5,603	-0.7
2(a) 2.5.1. Splenic MZL	0.2	825	-1.4	-	-	-	0.1	305	-2.7	0.9	520	-0.8
2(a) 2.5.2. Extranodal MZL, MALT ^c type	1.2	5,884	1.3*	0.0	30	-	0.9	2,583	2.2*	5.4	3,271	0.7
2(a) 2.5.3. Nodal MZL	0.6	2,833	-1.7*	-	-	-	0.3	1,016	0.8	3.0	1,812	-3.0*
2(a) 2.6. Follicular lymphoma	3.2	15,776	-2.6*	0.0	17	-	2.6	7,669	-2.7*	13.5	8,090	-2.5*
2(a) 2.7. Hairy-cell leukemia	0.1	532	1.5	-	-	-	0.1	313	0.9	0.4	219	2.1
2(a) 2.8. Plasma cell neoplasms	5.2	25,521	1.2*	-	-	-	3.0	9,281	1.8*	26.9	16,228	0.8*
2(a) 2.8.1. Plasmacytoma	0.3	1,397	2.8*	-	-	-	0.2	647	3.5*	1.2	740	1.9
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	4.9	24,124	1.1*	-	-	-	2.8	8,634	1.6*	25.6	15,488	0.8*
2(a) 2.9. Heavy chain disease	-	-	-	-	-	-	-	-	-	-	-	-
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS ^c	1.3	6,537	3.7*	0.0	25	-	0.6	1,876	2.6	7.5	4,636	4.2*

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

^a 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.

^b SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

^c 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^b Incidence Rates and Annual Percent Change by Age at Diagnosis

All Races, Females, 2006-2015

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	7,694	0.5	0.5	589	4.3	1.4	3,906	0.3	5.3	3,199	-0.1
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	0.0	168	-	0.1	70	-	0.0	76	-	0.0	22	-
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	1.6	7,493	1.3	0.5	518	9.0*	1.4	3,810	1.1	5.2	3,165	0.3
2(b) 2.1. Mycosis fungoides/Sezary syndrome	0.4	2,010	1.0	0.1	60	-	0.4	1,208	1.5	1.2	742	0.7
2(b) 2.1.1. Mycosis fungoides	0.4	1,944	0.7	0.1	60	-	0.4	1,183	1.3	1.2	701	0.3
2(b) 2.1.2. Sezary syndrome	0.0	66	-	-	-	-	0.0	25	-	0.1	41	-
2(b) 2.2. Peripheral T-cell lymphoma	0.9	4,289	0.3	0.1	167	-	0.7	2,056	-0.1	3.4	2,066	0.2
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS ^c	0.3	1,500	2.5*	0.0	27	-	0.2	644	1.8	1.4	829	2.9*
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	0.1	632	-1.8	-	-	-	0.1	211	-4.7*	0.7	421	-0.4
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	0.0	82	-	0.0	17	-	0.0	51	-	-	-	-
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	0.2	745	-2.5*	0.1	87	-	0.2	421	-1.4	0.4	237	-6.0*
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	0.0	32	-	-	-	-	0.0	25	-	-	-	-
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	0.0	55	-	-	-	-	0.0	24	-	0.1	31	-
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS ^c	0.2	869	1.4	0.0	18	-	0.2	468	1.8	0.6	383	0.3
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	0.1	374	-3.2	0.0	16	-	0.1	212	-4.0	0.2	146	-3.7*
2(b) 2.3. Adult T-cell leukemia/lymphoma	0.2	720	10.7*	0.2	282	-	0.1	294	10.9*	0.2	144	-
2(b) 2.4. NK ^c /T-cell lymphoma, nasal-type/aggressive NK ^c -cell leukemia	0.1	265	5.2	-	-	-	0.1	169	-	0.1	89	-
2(b) 2.5. T-cell large granular lymphocytic leukemia	0.0	69	-	-	-	-	0.0	33	-	0.1	35	-
2(b) 2.6. Prolymphocytic leukemia, T-cell	0.0	140	-	-	-	-	0.0	50	-	0.1	89	-
2(b) 3. Non-Hodgkin lymphoma, NOS ^c , T-cell	0.0	33	-	-	-	-	0.0	20	-	-	-	-
2(c) Non-Hodgkin lymphoma, unknown lineage	0.2	874	-	0.1	169	-	0.1	239	-	0.7	466	-
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	0.1	320	-	0.1	165	-	0.0	86	-	0.1	69	-
2(c) 2. Prolymphocytic leukemia, unknown lineage	0.0	36	-	-	-	-	-	-	-	0.0	25	-
2(c) 3. Non-Hodgkin lymphoma, NOS ^c , unknown lineage	0.1	518	-	-	-	-	0.0	142	-	0.6	372	-
2(*) 1. Total precursor lymphoma/leukemia ^d	1.5	6,317	-0.1	3.1	3,585	-0.2	0.7	1,918	0.5	1.3	814	-0.8
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	0.0	187	-	-	-	-	0.0	85	-	0.2	99	-
4 Lymphoid neoplasm, NOS ^c	0.7	3,688	-4.8*	0.1	66	-	0.4	1,055	-4.8*	4.0	2,567	-5.5*

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

^a 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.

^b SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG).

^c NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

^d 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^a
SEER^b 5-Year Relative Survival (Percent) by Age at Diagnosis
All Races, Both Sexes, 2008-2014

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent (95% C.I.)						
Lymphoid Neoplasm	181,324	70.7 (70.4 , 70.9)	90.4 (89.7 , 91.1)	78.1 (77.7 , 78.4)	60.6 (60.1 , 61.1)			
1 Hodgkin Lymphoma	14,692	86.6 (85.9 , 87.3)	96.7 (95.5 , 97.5)	90.0 (89.3 , 90.7)	58.3 (55.3 , 61.2)			
2 Non-Hodgkin lymphoma	162,599	69.6 (69.3 , 69.9)	88.8 (88.0 , 89.6)	76.5 (76.2 , 76.9)	61.3 (60.8 , 61.8)			
2(a) Non-Hodgkin lymphoma, B-cell	150,729	70.0 (69.6 , 70.3)	89.4 (88.5 , 90.3)	77.2 (76.8 , 77.6)	61.8 (61.3 , 62.4)			
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	8,367	68.5 (67.3 , 69.6)	88.9 (87.8 , 89.9)	40.0 (37.6 , 42.3)	18.2 (14.7 , 22.1)			
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	134,401	70.2 (69.9 , 70.5)	92.1 (90.1 , 93.7)	78.8 (78.4 , 79.2)	62.3 (61.7 , 62.8)			
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	32,466	80.2 (79.5 , 80.9)	- (- , -)	88.0 (87.2 , 88.8)	74.7 (73.6 , 75.8)			
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	28,401	83.2 (82.5 , 84.0)	- (- , -)	91.1 (90.3 , 91.9)	77.9 (76.7 , 79.0)			
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	89	54.7 (40.3 , 67.0)	- (- , -)	60.5 (36.1 , 78.0)	46.4 (28.8 , 62.3)			
2(a) 2.1.3. Mantle-cell lymphoma	3,976	58.9 (56.7 , 61.0)	- (- , -)	68.7 (65.8 , 71.4)	50.9 (47.7 , 54.0)			
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	2,968	82.1 (79.6 , 84.4)	- (- , -)	89.2 (86.2 , 91.6)	78.0 (74.4 , 81.2)			
2(a) 2.2.1. Lymphoplasmacytic lymphoma	1,329	79.0 (75.1 , 82.4)	- (- , -)	84.9 (79.9 , 88.7)	75.6 (70.1 , 80.3)			
2(a) 2.2.2. Waldenstrom macroglobulinemia	1,639	84.6 (81.1 , 87.5)	- (- , -)	92.8 (88.7 , 95.5)	80.0 (74.8 , 84.1)			
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	34,659	62.8 (62.1 , 63.4)	90.6 (87.2 , 93.2)	72.4 (71.6 , 73.2)	53.0 (52.0 , 54.1)			
2(a) 2.3.1. DLBCL, NOS ^c	34,153	62.5 (61.9 , 63.2)	90.8 (87.3 , 93.4)	72.2 (71.3 , 73.0)	53.0 (52.0 , 54.1)			
2(a) 2.3.2. Intravascular large B-cell lymphoma	65	47.8 (33.5 , 60.7)	- (- , -)	49.1 (31.4 , 64.7)	45.1 (23.1 , 64.9)			
2(a) 2.3.3. Primary effusion lymphoma	46	33.7 (17.7 , 50.4)	- (- , -)	33.9 (16.4 , 52.4)	- (- , -)			
2(a) 2.3.4. Mediastinal large B-cell lymphoma	395	88.0 (83.6 , 91.3)	87.0 (64.6 , 95.6)	90.1 (85.6 , 93.3)	- (- , -)			
2(a) 2.4. Burkitt lymphoma/leukemia	2,192	63.4 (61.1 , 65.6)	91.7 (88.6 , 93.9)	60.0 (57.0 , 62.8)	38.6 (33.0 , 44.2)			
2(a) 2.5. Marginal-zone lymphoma (MZL)	9,805	90.4 (89.2 , 91.4)	98.7 (90.7 , 99.8)	93.5 (92.4 , 94.5)	87.1 (85.0 , 88.9)			
2(a) 2.5.1. Splenic MZL	849	86.9 (82.4 , 90.3)	- (- , -)	88.1 (82.7 , 91.8)	85.3 (79.7 , 89.5)			
2(a) 2.5.2. Extranodal MZL, MALT ^c type	6,024	94.2 (92.8 , 95.4)	98.0 (86.6 , 99.7)	95.6 (94.3 , 96.6)	92.4 (89.8 , 94.4)			
2(a) 2.5.3. Nodal MZL	2,932	83.5 (81.2 , 85.6)	- (- , -)	90.0 (87.6 , 92.0)	77.9 (74.1 , 81.2)			
2(a) 2.6. Follicular lymphoma	17,737	87.8 (87.0 , 88.6)	97.1 (80.0 , 99.6)	92.4 (91.6 , 93.1)	81.8 (80.1 , 83.2)			
2(a) 2.7. Hairy-cell leukemia	1,530	93.4 (90.8 , 95.2)	- (- , -)	97.0 (94.7 , 98.4)	83.7 (76.4 , 88.9)			
2(a) 2.8. Plasma cell neoplasms	33,021	50.7 (49.9 , 51.4)	- (- , -)	62.6 (61.5 , 63.6)	41.4 (40.4 , 42.4)			
2(a) 2.8.1. Plasmacytoma	2,016	69.5 (66.6 , 72.2)	- (- , -)	79.7 (76.4 , 82.6)	55.9 (50.8 , 60.6)			
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	31,005	49.4 (48.7 , 50.2)	- (- , -)	61.1 (60.0 , 62.2)	40.7 (39.6 , 41.7)			
2(a) 2.9. Heavy chain disease	-	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS ^c	7,961	67.7 (66.2 , 69.2)	89.9 (78.9 , 95.4)	76.6 (74.6 , 78.4)	61.8 (59.5 , 64.0)			

^a 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.

^b SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). [Expected survival rates](#) are derived from life tables by socio-economic status, geography and race developed by the SEER program.

^c 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^a

SEER^b 5-Year Relative Survival (Percent) by Age at Diagnosis

All Races, Both Sexes, 2008-2014

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent (95% C.I.)						
2(b) Non-Hodgkin lymphoma, T-cell	11,126	65.5 (64.4 , 66.6)	85.9 (83.7 , 87.8)	69.6 (68.3 , 70.9)	51.0 (48.7 , 53.2)			
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	288	64.8 (58.8 , 70.2)	90.4 (83.9 , 94.3)	46.9 (37.8 , 55.5)	- (- , -)			
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	10,815	65.6 (64.4 , 66.7)	85.2 (82.8 , 87.4)	70.3 (68.9 , 71.6)	51.4 (49.1 , 53.6)			
2(b) 2.1. Mycosis fungoides/Sezary syndrome	2,728	89.9 (87.8 , 91.6)	100.0 (- , -)	92.5 (90.5 , 94.1)	83.5 (78.3 , 87.5)			
2(b) 2.1.1. Mycosis fungoides	2,640	91.5 (89.4 , 93.2)	100.0 (- , -)	93.5 (91.5 , 95.0)	86.4 (81.0 , 90.3)			
2(b) 2.1.2. Sezary syndrome	88	38.7 (24.0 , 53.2)	- (- , -)	40.3 (19.7 , 60.2)	37.0 (17.8 , 56.4)			
2(b) 2.2. Peripheral T-cell lymphoma	5,815	58.2 (56.6 , 59.7)	85.7 (80.6 , 89.6)	66.4 (64.5 , 68.2)	43.5 (40.8 , 46.3)			
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS ^c	2,054	39.5 (36.9 , 42.1)	59.1 (41.5 , 73.0)	50.0 (46.5 , 53.4)	26.7 (23.0 , 30.6)			
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	775	38.8 (34.6 , 43.0)	- (- , -)	47.6 (41.4 , 53.6)	31.7 (26.1 , 37.5)			
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	83	91.0 (77.8 , 96.5)	- (- , -)	88.6 (71.8 , 95.7)	- (- , -)			
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	1,130	65.3 (61.9 , 68.5)	90.0 (83.8 , 93.9)	69.6 (65.6 , 73.3)	39.6 (31.6 , 47.6)			
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	62	26.1 (14.0 , 40.0)	- (- , -)	24.3 (11.1 , 40.4)	- (- , -)			
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	63	8.6 (2.6 , 19.2)	- (- , -)	8.6 (1.5 , 23.5)	9.3 (1.7 , 24.7)			
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS ^c	1,143	86.0 (82.8 , 88.8)	96.6 (77.8 , 99.5)	89.6 (86.1 , 92.2)	78.6 (72.4 , 83.6)			
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	505	88.0 (82.7 , 91.8)	- (- , -)	93.1 (88.3 , 96.0)	78.5 (65.8 , 86.9)			
2(b) 2.3. Adult T-cell leukemia/lymphoma	1,572	63.6 (60.7 , 66.3)	83.7 (80.6 , 86.4)	49.2 (44.5 , 53.8)	18.7 (11.9 , 26.9)			
2(b) 2.4. NK ^c /T-cell lymphoma, nasal-type/aggressive NK ^c -cell leukemia	463	42.8 (37.5 , 48.0)	- (- , -)	43.0 (37.0 , 48.9)	39.0 (27.4 , 50.5)			
2(b) 2.5. T-cell large granular lymphocytic leukemia	56	67.6 (51.1 , 79.6)	- (- , -)	74.6 (54.2 , 86.9)	56.3 (29.4 , 76.4)			
2(b) 2.6. Prolymphocytic leukemia, T-cell	181	14.0 (8.0 , 21.6)	- (- , -)	22.5 (12.9 , 33.6)	3.1 (0.3 , 12.8)			
2(b) 3. Non-Hodgkin lymphoma, NOS ^c , T-cell	-	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(c) Non-Hodgkin lymphoma, unknown lineage	744	60.8 (56.7 , 64.7)	89.4 (83.2 , 93.4)	59.1 (52.7 , 65.0)	47.1 (39.8 , 54.0)			
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	315	63.7 (57.9 , 69.0)	89.2 (82.9 , 93.3)	47.0 (36.2 , 57.1)	22.6 (12.5 , 34.6)			
2(c) 2. Prolymphocytic leukemia, unknown lineage	28	48.1 (28.3 , 65.3)	- (- , -)	- (- , -)	- (- , -)			
2(c) 3. Non-Hodgkin lymphoma, NOS ^c , unknown lineage	401	59.2 (53.2 , 64.8)	- (- , -)	65.6 (57.4 , 72.5)	53.6 (44.7 , 61.6)			
2(*) 1. Total precursor lymphoma/leukemia ^d	8,970	68.2 (67.1 , 69.3)	89.0 (88.0 , 89.9)	40.8 (38.6 , 42.9)	18.4 (15.1 , 22.0)			
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	206	76.7 (68.8 , 82.9)	- (- , -)	84.3 (74.8 , 90.4)	62.6 (47.9 , 74.2)			

4 Lymphoid neoplasm, NOS^c
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.

^b SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

^c NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

^d 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^a
SEER^b 5-Year Relative Survival (Percent) by Age at Diagnosis
All Races, Males, 2008-2014

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent (95% C.I.)						
Lymphoid Neoplasm	100,997	70.0 (69.6 , 70.4)	90.2 (89.2 , 91.0)	76.2 (75.7 , 76.6)	60.2 (59.5 , 60.9)			
1 Hodgkin Lymphoma	8,041	85.7 (84.7 , 86.7)	96.5 (94.8 , 97.7)	88.6 (87.5 , 89.5)	58.4 (54.2 , 62.3)			
2 Non-Hodgkin lymphoma	90,849	69.1 (68.6 , 69.5)	88.7 (87.6 , 89.7)	74.8 (74.3 , 75.3)	60.8 (60.0 , 61.5)			
2(a) Non-Hodgkin lymphoma, B-cell	83,791	69.5 (69.0 , 69.9)	89.4 (88.2 , 90.6)	75.6 (75.1 , 76.2)	61.4 (60.6 , 62.1)			
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	4,550	68.0 (66.4 , 69.5)	88.5 (87.0 , 89.9)	39.2 (36.1 , 42.3)	16.4 (11.7 , 21.8)			
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	74,978	69.7 (69.3 , 70.2)	92.9 (90.6 , 94.7)	77.1 (76.6 , 77.7)	61.8 (61.0 , 62.6)			
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	19,875	79.3 (78.3 , 80.2)	- (- , -)	86.9 (85.8 , 87.8)	73.2 (71.7 , 74.7)			
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	17,011	82.8 (81.8 , 83.8)	- (- , -)	90.4 (89.3 , 91.4)	77.0 (75.4 , 78.5)			
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	60	64.0 (45.3 , 77.8)	- (- , -)	- (- , -)	56.9 (32.8 , 75.2)			
2(a) 2.1.3. Mantle-cell lymphoma	2,804	57.9 (55.3 , 60.4)	- (- , -)	67.9 (64.6 , 71.0)	48.6 (44.7 , 52.4)			
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	1,708	81.0 (77.5 , 84.1)	- (- , -)	87.3 (82.9 , 90.6)	77.2 (72.0 , 81.5)			
2(a) 2.2.1. Lymphoplasmacytic lymphoma	733	79.9 (74.3 , 84.4)	- (- , -)	82.5 (75.1 , 87.8)	78.2 (70.2 , 84.3)			
2(a) 2.2.2. Waldenstrom macroglobulinemia	975	81.9 (77.0 , 85.8)	- (- , -)	90.7 (84.6 , 94.4)	76.3 (69.1 , 82.1)			
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	19,064	62.7 (61.8 , 63.5)	92.6 (88.5 , 95.3)	70.3 (69.2 , 71.3)	53.1 (51.6 , 54.6)			
2(a) 2.3.1. DLBCL, NOS ^c	18,845	62.6 (61.7 , 63.5)	92.6 (88.4 , 95.4)	70.2 (69.1 , 71.3)	53.2 (51.7 , 54.7)			
2(a) 2.3.2. Intravascular large B-cell lymphoma	27	29.9 (12.4 , 49.7)	- (- , -)	- (- , -)	- (- , -)			
2(a) 2.3.3. Primary effusion lymphoma	42	34.6 (17.8 , 52.0)	- (- , -)	32.2 (15.2 , 50.6)	- (- , -)			
2(a) 2.3.4. Mediastinal large B-cell lymphoma	150	85.9 (77.1 , 91.5)	- (- , -)	88.2 (78.4 , 93.7)	- (- , -)			
2(a) 2.4. Burkitt lymphoma/leukemia	1,598	64.8 (62.2 , 67.4)	91.4 (87.7 , 94.0)	60.3 (56.9 , 63.6)	39.2 (31.3 , 46.9)			
2(a) 2.5. Marginal-zone lymphoma (MZL)	4,531	88.7 (86.9 , 90.3)	100.0 (- , -)	92.3 (90.5 , 93.7)	84.5 (81.1 , 87.4)			
2(a) 2.5.1. Splenic MZL	396	85.1 (79.4 , 89.4)	- (- , -)	86.3 (78.5 , 91.4)	84.1 (74.6 , 90.2)			
2(a) 2.5.2. Extranodal MZL, MALT ^c type	2,720	93.7 (91.3 , 95.4)	100.0 (- , -)	95.1 (92.8 , 96.6)	91.6 (86.9 , 94.7)			
2(a) 2.5.3. Nodal MZL	1,415	80.1 (76.5 , 83.2)	- (- , -)	87.1 (83.4 , 90.1)	72.5 (66.5 , 77.7)			
2(a) 2.6. Follicular lymphoma	8,852	87.3 (86.1 , 88.4)	96.5 (76.2 , 99.5)	90.9 (89.7 , 91.9)	81.7 (79.3 , 83.9)			
2(a) 2.7. Hairy-cell leukemia	1,228	94.1 (91.1 , 96.0)	- (- , -)	96.7 (93.9 , 98.2)	86.1 (77.4 , 91.6)			
2(a) 2.8. Plasma cell neoplasms	18,108	50.5 (49.5 , 51.6)	- (- , -)	61.1 (59.7 , 62.5)	41.6 (40.1 , 43.0)			
2(a) 2.8.1. Plasmacytoma	1,218	69.5 (65.7 , 73.0)	- (- , -)	78.9 (74.6 , 82.5)	55.3 (48.2 , 61.9)			
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	16,890	49.2 (48.1 , 50.2)	- (- , -)	59.3 (57.9 , 60.8)	40.9 (39.4 , 42.3)			
2(a) 2.9. Heavy chain disease	-	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS ^c	4,263	66.6 (64.4 , 68.6)	89.9 (75.2 , 96.1)	72.8 (70.1 , 75.3)	61.1 (57.8 , 64.2)			

^a 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.

^b SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

^c 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^a

SEER^b 5-Year Relative Survival (Percent) by Age at Diagnosis

All Races, Males, 2008-2014

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent (95% C.I.)						
2(b) Non-Hodgkin lymphoma, T-cell	6,658	64.5 (63.0 , 65.9)	86.1 (83.4 , 88.4)	66.6 (64.8 , 68.3)	50.7 (47.6 , 53.8)			
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	200	63.9 (56.6 , 70.3)	89.6 (81.5 , 94.3)	43.3 (32.6 , 53.6)	- (- , -)			
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	6,447	64.6 (63.1 , 66.0)	85.6 (82.6 , 88.1)	67.3 (65.5 , 69.1)	51.2 (48.1 , 54.3)			
2(b) 2.1. Mycosis fungoides/Sezary syndrome	1,552	88.7 (85.7 , 91.1)	100.0 (- , -)	90.6 (87.6 , 92.9)	83.4 (75.6 , 88.8)			
2(b) 2.1.1. Mycosis fungoides	1,498	90.4 (87.4 , 92.7)	100.0 (- , -)	91.5 (88.5 , 93.7)	86.9 (78.6 , 92.1)			
2(b) 2.1.2. Sezary syndrome	54	38.1 (18.3 , 57.8)	- (- , -)	- (- , -)	37.1 (13.4 , 61.4)			
2(b) 2.2. Peripheral T-cell lymphoma	3,406	56.6 (54.5 , 58.7)	84.1 (77.0 , 89.2)	63.3 (60.8 , 65.7)	43.2 (39.4 , 46.9)			
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS ^c	1,234	40.0 (36.7 , 43.3)	63.3 (41.1 , 79.0)	49.1 (44.8 , 53.3)	27.1 (22.3 , 32.3)			
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	427	35.0 (29.5 , 40.6)	- (- , -)	39.7 (31.8 , 47.5)	30.4 (22.5 , 38.7)			
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	34	91.3 (62.8 , 98.2)	- (- , -)	- (- , -)	- (- , -)			
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	696	62.3 (57.8 , 66.4)	89.4 (81.1 , 94.2)	65.7 (60.4 , 70.4)	38.0 (27.9 , 48.0)			
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	44	29.3 (14.4 , 45.9)	- (- , -)	30.1 (13.1 , 49.3)	- (- , -)			
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	35	11.0 (2.8 , 25.6)	- (- , -)	- (- , -)	- (- , -)			
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS ^c	656	85.1 (80.5 , 88.8)	- (- , -)	88.3 (83.4 , 91.9)	78.4 (69.2 , 85.2)			
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	280	86.0 (78.3 , 91.2)	- (- , -)	92.4 (85.0 , 96.2)	75.0 (57.7 , 86.1)			
2(b) 2.3. Adult T-cell leukemia/lymphoma	1,065	66.3 (62.9 , 69.4)	85.0 (81.3 , 88.0)	50.0 (44.0 , 55.6)	16.5 (7.7 , 28.1)			
2(b) 2.4. NK ^c /T-cell lymphoma, nasal-type/aggressive NK ^c -cell leukemia	297	42.2 (35.6 , 48.5)	- (- , -)	41.4 (33.8 , 48.8)	38.0 (24.6 , 51.3)			
2(b) 2.5. T-cell large granular lymphocytic leukemia	-	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(b) 2.6. Prolymphocytic leukemia, T-cell	106	15.2 (7.4 , 25.6)	- (- , -)	20.3 (9.0 , 34.7)	8.5 (1.7 , 22.4)			
2(b) 3. Non-Hodgkin lymphoma, NOS ^c , T-cell	-	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(c) Non-Hodgkin lymphoma, unknown lineage	400	55.6 (50.0 , 60.9)	86.3 (76.4 , 92.2)	53.5 (45.2 , 61.1)	39.5 (29.6 , 49.3)			
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	180	59.3 (51.3 , 66.4)	85.9 (75.8 , 92.0)	42.1 (28.2 , 55.3)	26.1 (13.1 , 41.2)			
2(c) 2. Prolymphocytic leukemia, unknown lineage	-	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(c) 3. Non-Hodgkin lymphoma, NOS ^c , unknown lineage	206	52.7 (44.5 , 60.2)	- (- , -)	59.4 (48.9 , 68.5)	43.6 (30.8 , 55.6)			
2(*) 1. Total precursor lymphoma/leukemia ^d	4,930	67.6 (66.0 , 69.0)	88.5 (87.1 , 89.8)	39.7 (36.8 , 42.6)	17.2 (12.7 , 22.2)			
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	109	80.6 (70.9 , 87.3)	- (- , -)	83.1 (71.4 , 90.4)	69.5 (50.2 , 82.5)			

4 Lymphoid neoplasm, NOS^c
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.

^b SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

^c NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

^d 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^a
SEER^b 5-Year Relative Survival (Percent) by Age at Diagnosis
All Races, Females, 2008-2014

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent (95% C.I.)						
Lymphoid Neoplasm	80,327	71.5 (71.0 , 71.9)	90.8 (89.7 , 91.7)	80.8 (80.3 , 81.3)	61.1 (60.4 , 61.8)			
1 Hodgkin Lymphoma	6,651	87.7 (86.7 , 88.6)	96.8 (95.1 , 97.9)	91.8 (90.8 , 92.7)	57.8 (53.4 , 61.9)			
2 Non-Hodgkin lymphoma	71,750	70.4 (69.9 , 70.8)	89.0 (87.7 , 90.2)	79.1 (78.5 , 79.7)	61.8 (61.1 , 62.6)			
2(a) Non-Hodgkin lymphoma, B-cell	66,938	70.6 (70.1 , 71.1)	89.5 (88.0 , 90.7)	79.6 (79.0 , 80.2)	62.3 (61.6 , 63.1)			
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	3,817	69.0 (67.3 , 70.6)	89.4 (87.8 , 90.7)	41.0 (37.5 , 44.5)	19.5 (14.5 , 25.0)			
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	59,423	70.8 (70.3 , 71.3)	90.1 (86.0 , 93.1)	81.1 (80.5 , 81.7)	62.8 (62.0 , 63.6)			
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	12,591	81.6 (80.5 , 82.8)	- (- , -)	90.3 (89.0 , 91.4)	76.8 (75.1 , 78.4)			
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	11,390	83.9 (82.6 , 85.0)	- (- , -)	92.5 (91.2 , 93.6)	79.0 (77.3 , 80.7)			
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	29	34.9 (15.3 , 55.5)	- (- , -)	- (- , -)	- (- , -)			
2(a) 2.1.3. Mantle-cell lymphoma	1,172	61.2 (57.2 , 65.0)	- (- , -)	71.0 (65.3 , 75.9)	55.3 (49.9 , 60.4)			
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	1,260	83.5 (79.7 , 86.6)	- (- , -)	91.6 (87.7 , 94.3)	78.9 (73.6 , 83.4)			
2(a) 2.2.1. Lymphoplasmacytic lymphoma	596	78.0 (72.2 , 82.7)	- (- , -)	87.5 (80.4 , 92.1)	72.6 (64.5 , 79.1)			
2(a) 2.2.2. Waldenstrom macroglobulinemia	664	88.3 (83.0 , 92.0)	- (- , -)	95.0 (89.5 , 97.6)	84.4 (76.8 , 89.7)			
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	15,595	62.9 (61.9 , 63.8)	87.6 (81.1 , 92.0)	75.6 (74.4 , 76.8)	52.9 (51.4 , 54.3)			
2(a) 2.3.1. DLBCL, NOS ^c	15,308	62.5 (61.5 , 63.5)	87.9 (81.2 , 92.4)	75.2 (73.9 , 76.4)	52.9 (51.4 , 54.3)			
2(a) 2.3.2. Intravascular large B-cell lymphoma	38	59.6 (41.0 , 74.1)	- (- , -)	- (- , -)	- (- , -)			
2(a) 2.3.3. Primary effusion lymphoma	-	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(a) 2.3.4. Mediastinal large B-cell lymphoma	245	88.8 (83.5 , 92.5)	- (- , -)	90.9 (85.6 , 94.3)	- (- , -)			
2(a) 2.4. Burkitt lymphoma/leukemia	594	59.3 (54.8 , 63.5)	92.6 (85.8 , 96.3)	58.8 (52.7 , 64.4)	35.4 (27.4 , 43.5)			
2(a) 2.5. Marginal-zone lymphoma (MZL)	5,274	91.6 (90.1 , 92.9)	- (- , -)	94.7 (93.2 , 95.9)	88.9 (86.2 , 91.1)			
2(a) 2.5.1. Splenic MZL	453	87.3 (80.7 , 91.7)	- (- , -)	89.1 (80.6 , 94.0)	85.4 (74.8 , 91.8)			
2(a) 2.5.2. Extranodal MZL, MALT ^c type	3,304	94.6 (92.6 , 96.0)	- (- , -)	96.1 (94.3 , 97.3)	92.9 (89.2 , 95.4)			
2(a) 2.5.3. Nodal MZL	1,517	86.3 (83.1 , 88.9)	- (- , -)	92.6 (89.1 , 95.0)	81.7 (76.7 , 85.7)			
2(a) 2.6. Follicular lymphoma	8,885	88.3 (87.2 , 89.4)	- (- , -)	94.0 (92.9 , 94.9)	81.6 (79.5 , 83.6)			
2(a) 2.7. Hairy-cell leukemia	302	90.0 (82.8 , 94.3)	- (- , -)	97.4 (92.8 , 99.1)	73.8 (56.9 , 84.9)			
2(a) 2.8. Plasma cell neoplasms	14,913	50.8 (49.7 , 51.9)	- (- , -)	64.6 (63.0 , 66.1)	41.2 (39.7 , 42.7)			
2(a) 2.8.1. Plasmacytoma	798	69.4 (64.8 , 73.5)	- (- , -)	81.0 (75.5 , 85.4)	55.6 (48.3 , 62.3)			
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	14,115	49.8 (48.6 , 50.9)	- (- , -)	63.3 (61.7 , 64.9)	40.5 (39.0 , 42.0)			
2(a) 2.9. Heavy chain disease	-	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS ^c	3,698	69.0 (66.8 , 71.2)	- (- , -)	82.1 (79.2 , 84.6)	62.4 (59.3 , 65.3)			

^a 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.

^b SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). Expected survival rates are derived from life tables by socio-economic status, geography and race developed by the SEER program.

^c 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^a

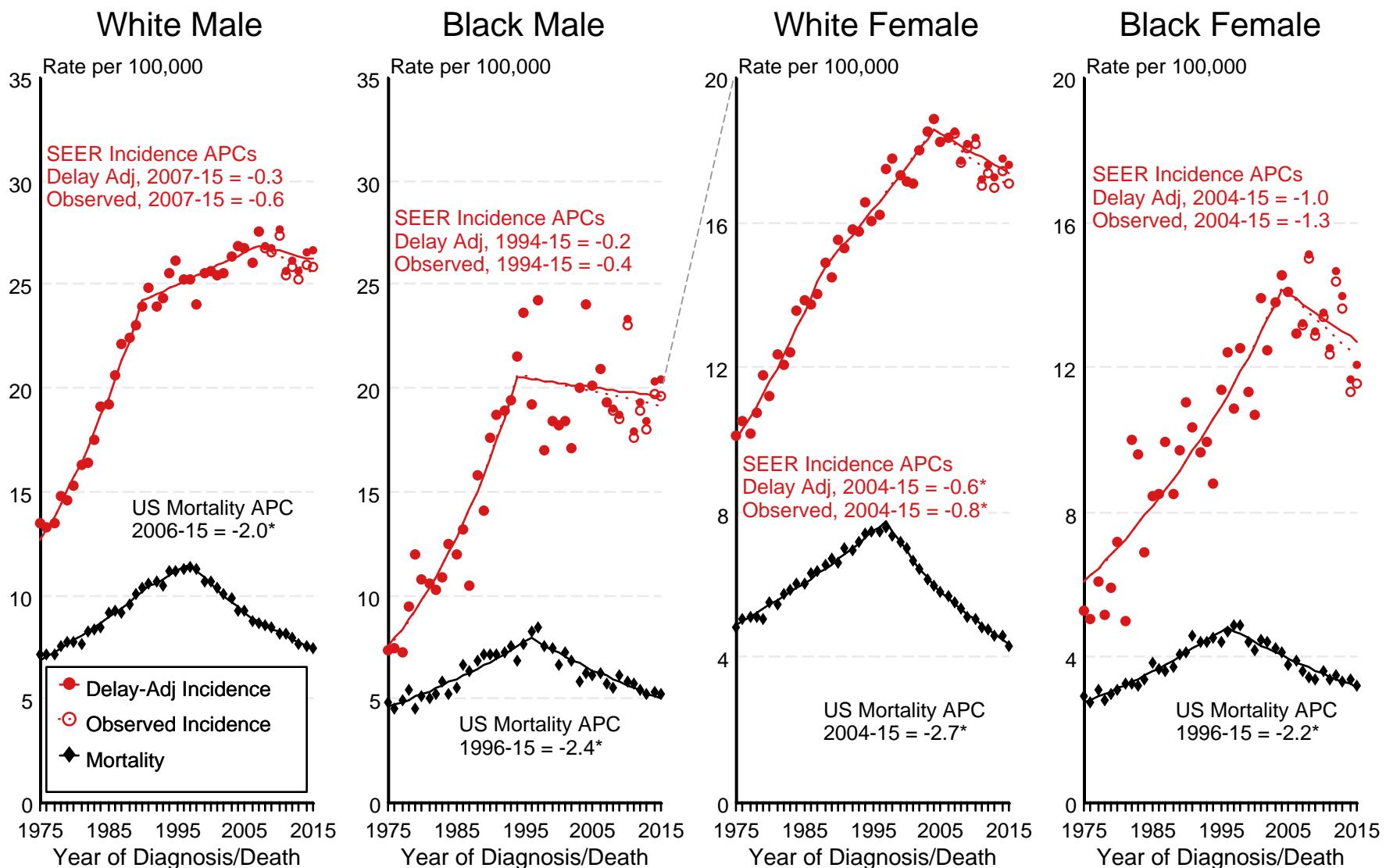
SEER^b 5-Year Relative Survival (Percent) by Age at Diagnosis

All Races, Females, 2008-2014

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.)	Percent (95% C.I.)
2(b) Non-Hodgkin lymphoma, T-cell	4,468	67.0 (65.3 , 68.7)	85.4 (81.2 , 88.7)	74.3 (72.2 , 76.2)	51.3 (48.0 , 54.6)			
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	88	66.8 (55.6 , 75.8)	92.1 (77.5 , 97.4)	55.1 (37.7 , 69.5)	- (- , -)			
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	4,368	67.1 (65.3 , 68.8)	84.5 (80.0 , 88.1)	74.8 (72.7 , 76.7)	51.5 (48.2 , 54.8)			
2(b) 2.1. Mycosis fungoides/Sezary syndrome	1,176	91.4 (88.3 , 93.7)	100.0 (- , -)	95.0 (92.1 , 96.9)	83.6 (76.0 , 89.0)			
2(b) 2.1.1. Mycosis fungoides	1,142	92.9 (89.8 , 95.1)	100.0 (- , -)	96.2 (93.2 , 97.9)	85.8 (77.8 , 91.1)			
2(b) 2.1.2. Sezary syndrome	34	34.5 (16.1 , 53.7)	- (- , -)	- (- , -)	- (- , -)			
2(b) 2.2. Peripheral T-cell lymphoma	2,409	60.3 (57.9 , 62.7)	87.8 (79.1 , 93.0)	71.1 (68.1 , 73.8)	43.9 (39.9 , 47.9)			
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS ^c	820	38.7 (34.6 , 42.8)	- (- , -)	51.3 (45.5 , 56.9)	26.0 (20.4 , 32.0)			
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	348	43.0 (36.7 , 49.1)	- (- , -)	59.6 (49.6 , 68.3)	32.4 (24.5 , 40.5)			
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	49	90.6 (72.4 , 97.0)	- (- , -)	83.8 (59.3 , 94.2)	- (- , -)			
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	434	70.0 (64.7 , 74.7)	90.7 (78.7 , 96.1)	76.0 (69.5 , 81.3)	42.1 (31.9 , 52.0)			
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	-	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	28	0.0 (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS ^c	487	86.6 (82.1 , 90.1)	- (- , -)	91.0 (86.0 , 94.3)	78.2 (68.8 , 85.1)			
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	225	89.9 (81.5 , 94.6)	- (- , -)	93.8 (86.0 , 97.3)	81.7 (61.0 , 92.1)			
2(b) 2.3. Adult T-cell leukemia/lymphoma	507	57.8 (52.6 , 62.7)	80.6 (74.1 , 85.7)	48.1 (40.2 , 55.6)	20.7 (11.2 , 32.3)			
2(b) 2.4. NK ^c /T-cell lymphoma, nasal-type/aggressive NK ^c -cell leukemia	166	43.4 (34.4 , 52.1)	- (- , -)	45.7 (35.8 , 54.9)	37.8 (19.1 , 56.4)			
2(b) 2.5. T-cell large granular lymphocytic leukemia	35	72.4 (50.0 , 86.0)	- (- , -)	- (- , -)	- (- , -)			
2(b) 2.6. Prolymphocytic leukemia, T-cell	75	12.1 (4.4 , 23.8)	- (- , -)	27.1 (11.7 , 45.1)	0.0 (- , -)			
2(b) 3. Non-Hodgkin lymphoma, NOS ^c , T-cell	-	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(c) Non-Hodgkin lymphoma, unknown lineage	344	66.7 (60.4 , 72.2)	93.0 (83.8 , 97.0)	68.1 (57.6 , 76.4)	51.8 (42.1 , 60.6)			
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	135	69.5 (60.6 , 76.8)	92.9 (83.6 , 97.0)	53.4 (36.2 , 67.9)	- (- , -)			
2(c) 2. Prolymphocytic leukemia, unknown lineage	-	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(c) 3. Non-Hodgkin lymphoma, NOS ^c , unknown lineage	195	65.9 (57.2 , 73.3)	- (- , -)	76.0 (62.4 , 85.2)	58.7 (47.3 , 68.4)			
2(*) 1. Total precursor lymphoma/leukemia ^d	4,040	69.0 (67.4 , 70.6)	89.5 (88.0 , 90.9)	42.2 (38.8 , 45.5)	19.1 (14.4 , 24.3)			
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	97	69.2 (55.4 , 79.5)	- (- , -)	84.5 (64.9 , 93.6)	51.6 (31.6 , 68.4)			
4 Lymphoid neoplasm, NOS ^c	1,829	53.0 (50.1 , 55.9)	85.4 (68.0 , 93.7)	75.6 (71.4 , 79.2)	40.3 (36.5 , 44.0)			
		Morton LM, Turner JJ, Cerhan JR, Linet M ^f , 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.						
^b		SEER 18 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey and Georgia excluding ATL/RG). <u>Expected survival rates</u> are derived from life tables by socio-economic status, geography and race developed by the SEER program.						
^c		NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.						
^d		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^a Non-Hodgkin Lymphoma, by Race and Sex



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

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.6, February 2018, National Cancer Institute.

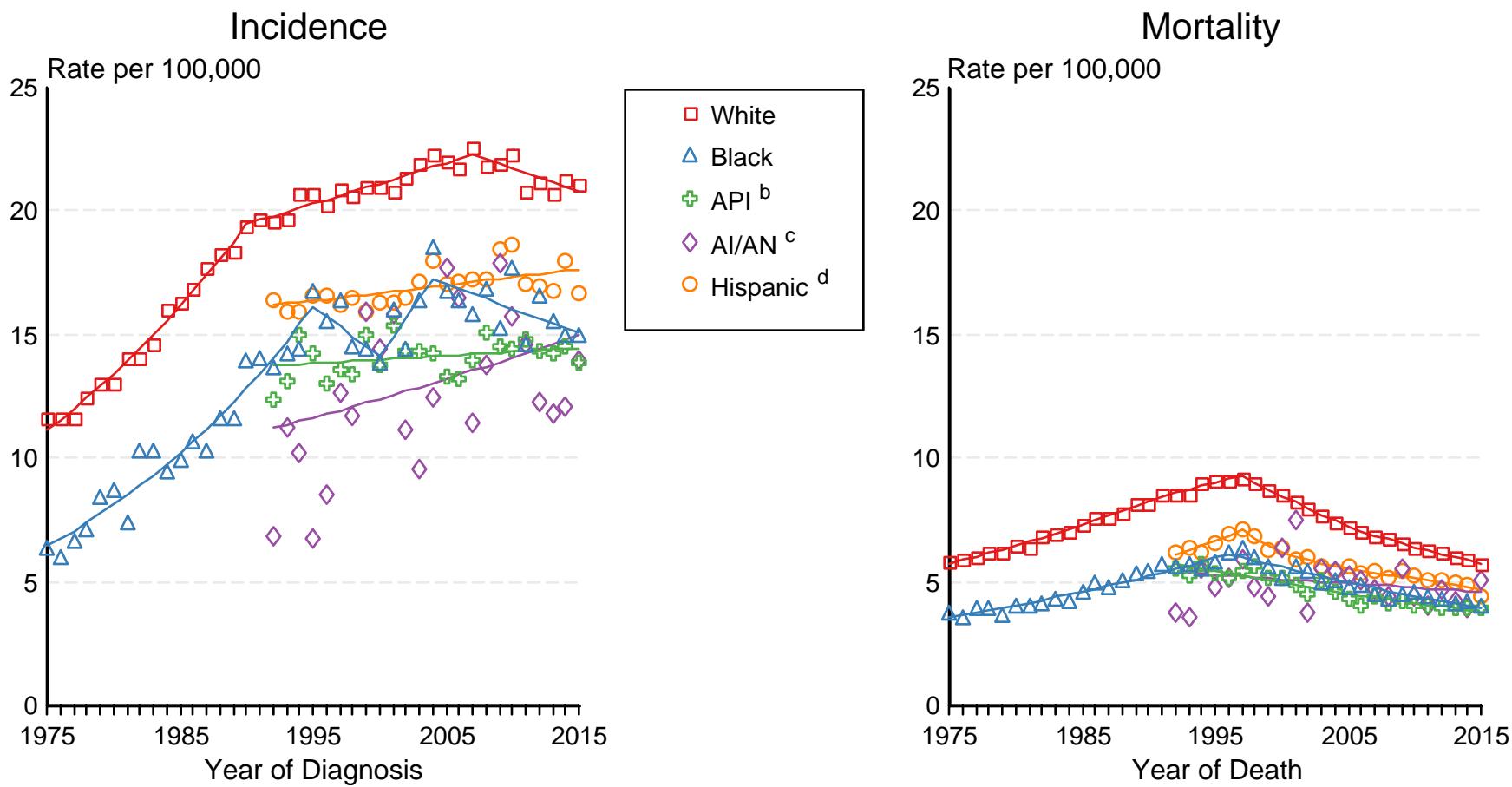
The APC is the Annual Percent Change for the regression line segments. The APC shown on the graph is for the most recent trend.

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

Figure 19.2

SEER Incidence and US Death Rates^a Non-Hodgkin Lymphoma, Both Sexes

Joinpoint Analyses for Whites and Blacks from 1975-2015
and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 1992-2015



Source: Incidence data for whites and blacks are from the SEER 9 areas (San Francisco, Connecticut, Detroit, Hawaii, Iowa, New Mexico, Seattle, Utah, Atlanta). Incidence data for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics are from the SEER 13 Areas (SEER 9 Areas, San Jose-Monterey, Los Angeles, Alaska Native Registry and Rural Georgia). Mortality data are from US Mortality Files, National Center for Health Statistics, CDC.

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

Regression lines are calculated using the Joinpoint Regression Program Version 4.6, February 2018, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2015 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 1992-2015 allow a maximum of 4 joinpoints.

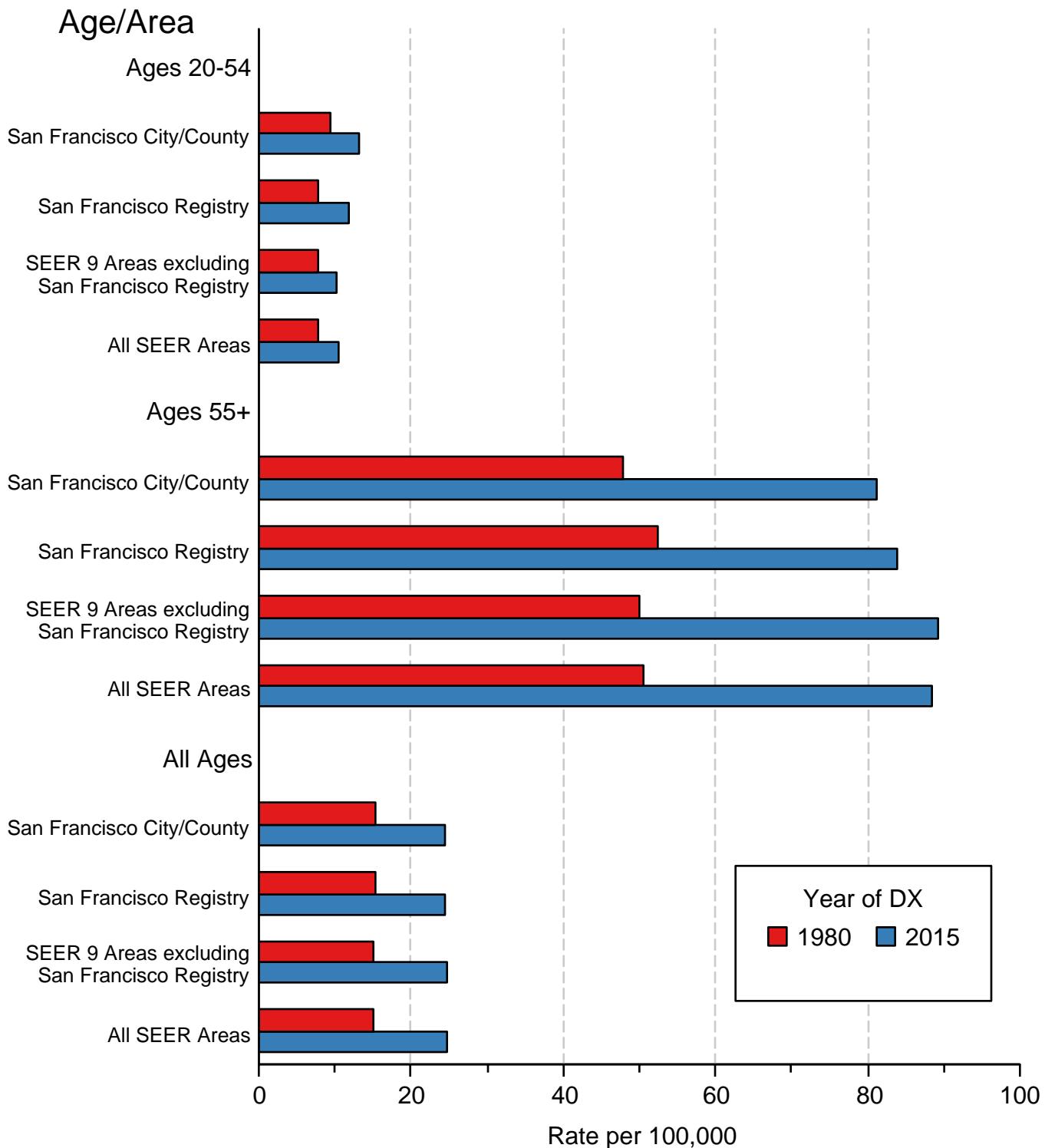
^b API = Asian/Pacific Islander.

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

^d Hispanic is not mutually exclusive from whites, blacks, Asian/Pacific Islanders, and American Indians/Alaska Natives. Incidence data for Hispanics are based on NHIA and exclude cases from the Alaska Native Registry. Mortality data for Hispanics exclude cases from New Hampshire and Oklahoma.

Figure 19.3

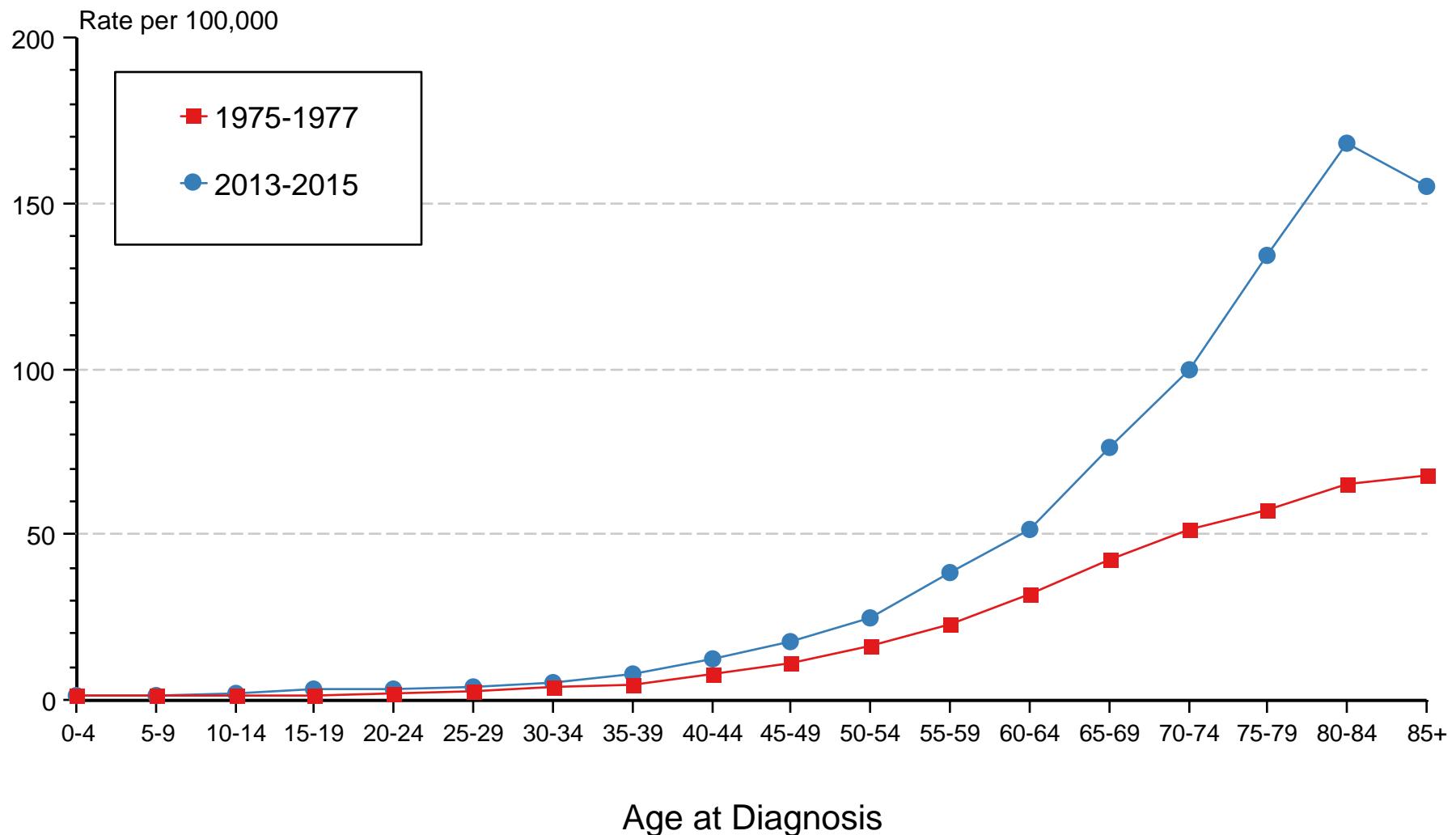
Non-Hodgkin Lymphoma Incidence Rates, 1980 vs 2015 Males by Age at Diagnosis and SEER area



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 2013-2015 All Races, Males



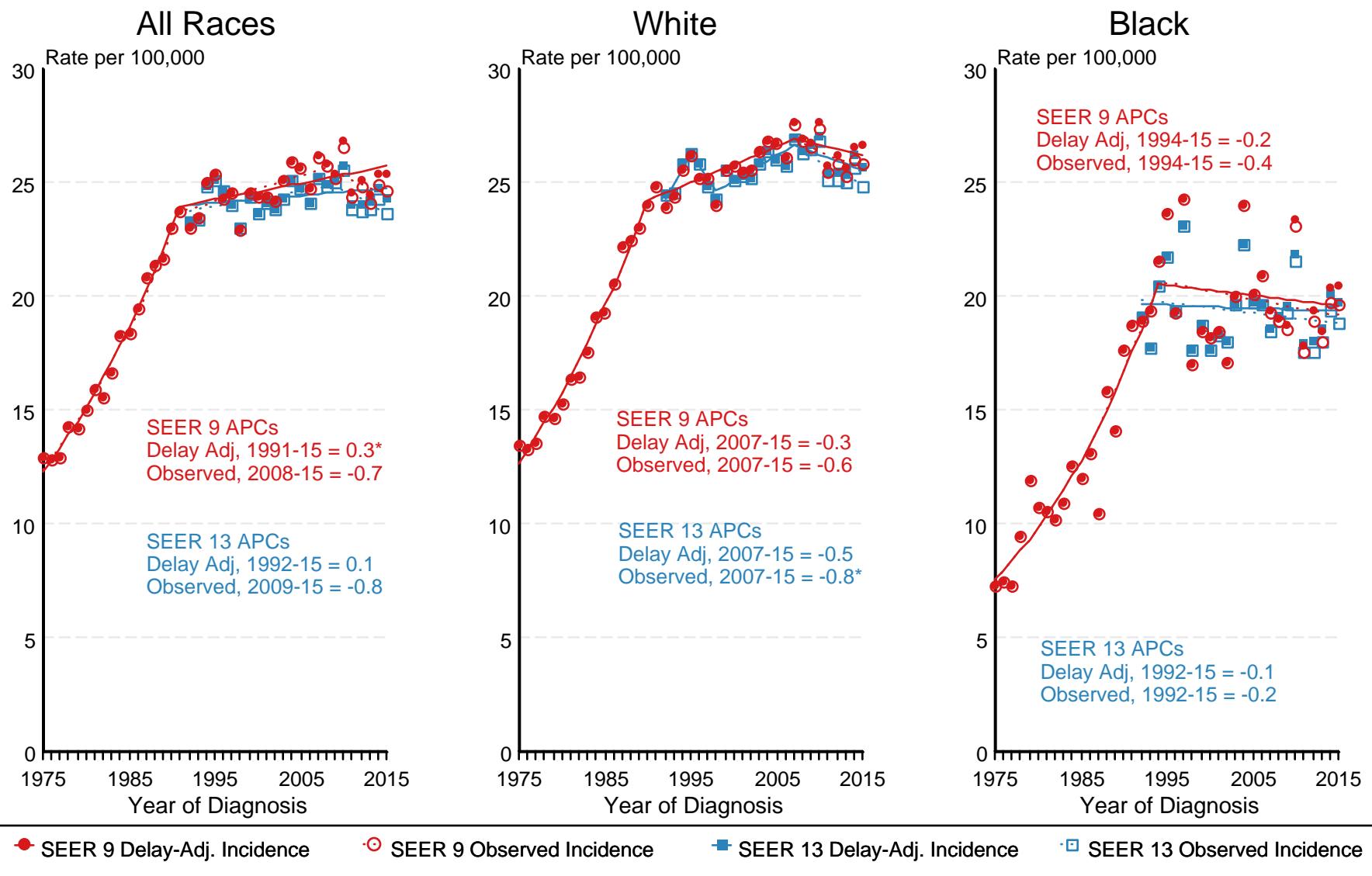
Source: SEER 9 areas. Rates are age-adjusted as appropriate to the 2000 US Std Population (19 age groups - Census P25-1103).

Figure 19.5

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a

SEER 9 Areas Compared to SEER 13 Areas

Non-Hodgkin Lymphoma, Male, by Race



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

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.6, February 2018, 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.

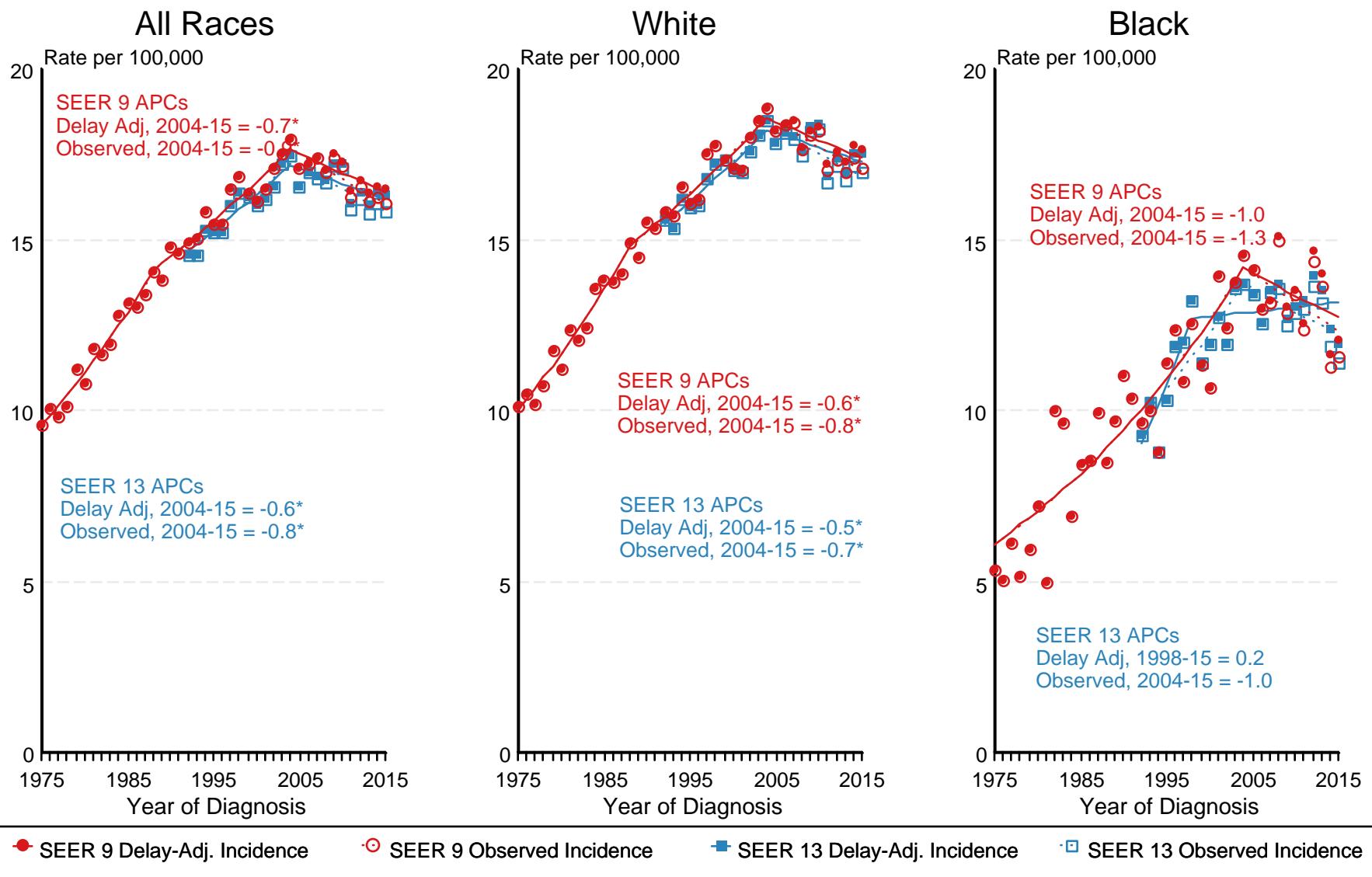
* The APC is significantly different from zero ($p < 0.05$).

Figure 19.6

SEER Observed Incidence and SEER Delay Adjusted Incidence Rates^a

SEER 9 Areas Compared to SEER 13 Areas

Non-Hodgkin Lymphoma, Female, by Race



Source: SEER 9 areas and SEER 13 areas.

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

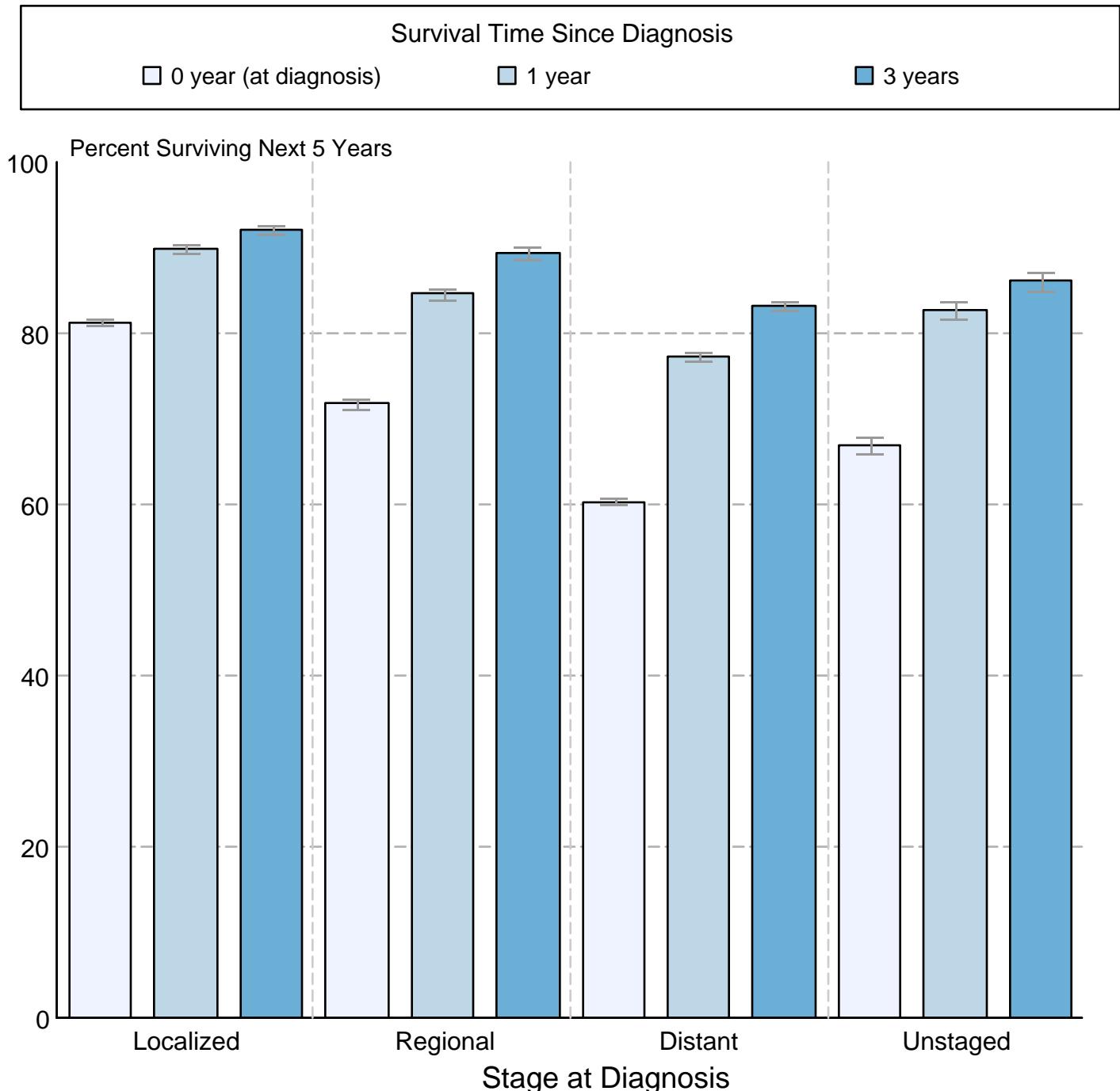
Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.6, February 2018, National Cancer Institute.

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
1998-2014 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.