

Table 19.1
Non-Hodgkin Lymphoma

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints,
Both Sexes by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2008-17	2013-17
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2017</u>														
All Races	1975-91	3.6*	1991-07	0.7*	2007-17	-0.7*							-0.7*	-0.7*
White	1975-90	3.8*	1990-07	0.8*	2007-17	-0.7*							-0.7*	-0.7*
Black	1975-95	4.5*	1995-17	0.2									0.2	0.2
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2017</u>														
All Races	2000-06	0.9*	2006-15	-0.2	2015-17	-1.8							-0.6*	-1.0
White	2000-07	1.0*	2007-17	-0.4*									-0.4*	-0.4*
White NH ^{ef}	2000-07	1.1*	2007-11	-0.7	2011-15	0.4	2015-17	-2.3*					-0.6*	-1.0*
Black	2000-17	0.3*											0.3*	0.3*
Black NH ^{ef}	2000-17	0.3*											0.3*	0.3*
API ^e	2000-17	0.3											0.3	0.3
AI/AN ^{eg}	2000-17	-0.4											-0.4	-0.4
Hispanic ^f	2000-17	0.3*											0.3*	0.3*
<u>U.S. Cancer Mortality^c, 1975-2017</u>														
All Races	1975-91	2.5*	1991-97	1.6*	1997-06	-3.1*	2006-17	-2.2*					-2.2*	-2.2*
White	1975-91	2.5*	1991-97	1.6*	1997-06	-3.1*	2006-17	-2.2*					-2.2*	-2.2*
Black	1975-96	2.6*	1996-17	-2.2*									-2.2*	-2.2*
<u>U.S. Cancer Mortality^c, 2000-2017</u>														
All Races	2000-05	-3.4*	2005-17	-2.2*									-2.2*	-2.2*
White	2000-05	-3.4*	2005-17	-2.2*									-2.2*	-2.2*
White NH ^{ef}	2000-06	-3.2*	2006-17	-2.2*									-2.2*	-2.2*
Black	2000-17	-1.9*											-1.9*	-1.9*
Black NH ^{ef}	2000-17	-1.9*											-1.9*	-1.9*
API ^e	2000-17	-1.7*											-1.7*	-1.7*
AI/AN ^{eg}	2000-17	-2.3*											-2.3*	-2.3*
Hispanic ^f	2000-17	-1.7*											-1.7*	-1.7*

Joinpoint Regression Program Version 4.8, April 2020, 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).

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

^b Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

^g Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Table 19.2
Non-Hodgkin Lymphoma

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints,
Males by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2008-17	2013-17
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2017</u>														
All Races	1975-91	4.2*	1991-10	0.4*	2010-17	-0.9*							-0.6*	-0.9*
White	1975-90	4.4*	1990-08	0.6*	2008-17	-0.6*							-0.6*	-0.6*
Black	1975-94	5.4*	1994-17	-0.2									-0.2	-0.2
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2017</u>														
All Races	2000-07	0.9*	2007-15	-0.2	2015-17	-2.3							-0.6	-1.2
White	2000-07	1.2*	2007-11	-0.7	2011-14	0.9	2014-17	-1.8*					-0.6*	-1.1*
White NH ^{ef}	2000-07	1.3*	2007-11	-0.7	2011-15	0.8	2015-17	-3.0*					-0.6	-1.1
Black	2000-17	0.1											0.1	0.1
Black NH ^{ef}	2000-17	0.1											0.1	0.1
API ^e	2000-17	0.4*											0.4*	0.4*
AI/AN ^{eg}	2000-17	-1.3											-1.3	-1.3
Hispanic ^f	2000-17	0.1											0.1	0.1
<u>U.S. Cancer Mortality^c, 1975-2017</u>														
All Races	1975-91	2.7*	1991-97	1.6*	1997-06	-2.9*	2006-17	-2.0*					-2.0*	-2.0*
White	1975-91	2.6*	1991-97	1.6*	1997-06	-2.8*	2006-17	-2.0*					-2.0*	-2.0*
Black	1975-96	2.6*	1996-17	-2.3*									-2.3*	-2.3*
<u>U.S. Cancer Mortality^c, 2000-2017</u>														
All Races	2000-06	-3.0*	2006-17	-1.9*									-1.9*	-1.9*
White	2000-06	-3.0*	2006-17	-1.9*									-1.9*	-1.9*
White NH ^{ef}	2000-06	-3.0*	2006-17	-1.9*									-1.9*	-1.9*
Black	2000-17	-1.8*											-1.8*	-1.8*
Black NH ^{ef}	2000-17	-1.7*											-1.7*	-1.7*
API ^e	2000-17	-1.4*											-1.4*	-1.4*
AI/AN ^{eg}	2000-17	-0.6											-0.6	-0.6
Hispanic ^f	2000-17	-1.5*											-1.5*	-1.5*

Joinpoint Regression Program Version 4.8, April 2020, 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).

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

^b Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

^g Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

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

Table 19.3
Non-Hodgkin Lymphoma

Trends in SEER Incidence^{ab} and U.S. Mortality^c Using the Joinpoint Regression Program,
1975-2017 With up to Five Joinpoints, 2000-2017 With up to Three Joinpoints,
Females by Race/Ethnicity

	JP Trend 1		JP Trend 2		JP Trend 3		JP Trend 4		JP Trend 5		JP Trend 6		AAPC ^d	
	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	Years	APC	2008-17	2013-17
<u>SEER 9 Delay-Adjusted Incidence^a, 1975-2017</u>														
All Races	1975-90	2.8*	1990-04	1.3*	2004-17	-0.6*							-0.6*	-0.6*
White	1975-88	3.1*	1988-04	1.4*	2004-17	-0.6*							-0.6*	-0.6*
Black	1975-03	3.0*	2003-17	-0.3									-0.3	-0.3
<u>SEER 21 Delay-Adjusted Incidence^b, 2000-2017</u>														
All Races	2000-06	0.7*	2006-17	-0.4*									-0.4*	-0.4*
White	2000-06	0.8*	2006-17	-0.5*									-0.5*	-0.5*
White NH ^{ef}	2000-06	0.8*	2006-17	-0.5*									-0.5*	-0.5*
Black	2000-17	0.6*											0.6*	0.6*
Black NH ^{ef}	2000-17	0.5*											0.5*	0.5*
API ^e	2000-17	0.2											0.2	0.2
AI/AN ^{eg}	2000-17	0.4											0.4	0.4
Hispanic ^f	2000-17	0.5*											0.5*	0.5*
<u>U.S. Cancer Mortality^c, 1975-2017</u>														
All Races	1975-94	2.2*	1994-97	1.0	1997-08	-3.3*	2008-17	-2.5*					-2.5*	-2.5*
White	1975-97	2.1*	1997-04	-3.8*	2004-17	-2.6*							-2.6*	-2.6*
Black	1975-96	2.7*	1996-17	-2.2*									-2.2*	-2.2*
<u>U.S. Cancer Mortality^c, 2000-2017</u>														
All Races	2000-04	-3.9*	2004-17	-2.7*									-2.7*	-2.7*
White	2000-03	-4.5*	2003-17	-2.7*									-2.7*	-2.7*
White NH ^{ef}	2000-03	-4.3*	2003-11	-2.9*	2011-17	-2.3*							-2.5*	-2.3*
Black	2000-02	2.5	2002-08	-3.9*	2008-14	-0.5	2014-17	-4.3					-1.8	-3.4*
Black NH ^{ef}	2000-17	-2.0*											-2.0*	-2.0*
API ^e	2000-17	-2.1*											-2.1*	-2.1*
AI/AN ^{eg}	2000-17	-3.9*											-3.9*	-3.9*
Hispanic ^f	2000-17	-2.0*											-2.0*	-2.0*

Joinpoint Regression Program Version 4.8, April 2020, 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).

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

^b Trends are from the SEER 21 areas (SEER 9 areas, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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

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

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

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

^g Data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

- 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	13.94	10.68	6.96	8.74	5.52
1980	12.62	15.01	10.81	12.98	15.27	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	16.41	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	16.83	20.59	13.75	10.66	13.13	8.52
1987	16.74	20.80	13.42	17.71	22.17	13.99	10.35	10.43	9.95
1988	17.26	21.36	14.08	18.22	22.45	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	22.98	14.81	19.34	23.97	15.49	13.92	17.63	11.02
1991	18.81	23.74	14.61	19.70	24.81	15.32	14.03	18.81	10.29
1992	18.63	23.05	14.94	19.56	23.94	15.85	13.68	18.87	9.65
1993	18.86	23.47	15.00	19.65	24.33	15.70	14.23	19.37	9.97
1994	19.94	24.95	15.79	20.66	25.57	16.54	14.52	21.52	8.94
1995	20.00	25.42	15.47	20.71	26.18	16.06	16.76	23.63	11.43
1996	19.42	24.24	15.48	20.26	25.19	16.20	15.64	19.36	12.48
1997	20.00	24.53	16.47	20.91	25.22	17.51	16.40	24.26	10.86
1998	19.62	22.96	16.86	20.62	24.03	17.79	14.46	16.89	12.54
1999	19.97	24.59	16.36	20.96	25.53	17.35	14.38	18.42	11.31
2000	19.81	24.37	16.12	20.98	25.72	17.09	13.93	18.23	10.74
2001	20.02	24.41	16.46	20.83	25.47	17.06	16.05	18.44	13.92
2002	20.23	24.21	17.10	21.34	25.53	17.97	14.53	17.10	12.59
2003	20.79	25.08	17.52	21.91	26.34	18.47	16.41	20.15	13.78
2004	21.40	25.89	17.97	22.35	26.84	18.87	18.64	24.26	14.55
2005	20.88	25.63	17.09	22.03	26.75	18.20	16.73	19.95	14.10
2006	20.52	24.75	17.23	21.78	26.10	18.38	16.38	20.95	12.98
2007	21.28	26.14	17.41	22.58	27.59	18.47	15.83	19.36	13.17
2008	20.93	25.78	16.98	21.82	26.84	17.66	16.80	18.94	14.88
2009	20.91	25.19	17.44	22.01	26.63	18.15	15.32	18.56	12.95
2010	21.47	26.70	17.20	22.49	27.56	18.30	17.82	23.36	13.39
2011	19.91	24.44	16.32	20.90	25.64	17.11	14.61	17.53	12.43
2012	20.44	25.05	16.69	21.43	26.16	17.52	16.86	19.29	14.69
2013	19.93	24.36	16.31	21.05	25.61	17.26	15.80	18.20	13.93
2014	20.43	25.25	16.49	21.73	26.53	17.77	15.50	20.51	11.53
2015	20.37	25.18	16.44	21.67	26.55	17.62	15.56	20.10	12.07
2016	19.89	24.04	16.48	20.91	25.12	17.40	16.94	19.79	14.53
2017	19.74	24.17	16.07	20.75	25.43	16.80	16.24	19.55	13.57

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

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

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

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

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

Table 19.5
Non-Hodgkin Lymphoma

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

Year of Diagnosis:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2017	18.51	22.72	15.16	19.31	23.64	15.85	14.21	17.74	11.42
1975-1979	11.60	13.44	10.18	12.09	13.94	10.68	6.96	8.74	5.52
1980	12.62	15.01	10.81	12.98	15.27	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	16.41	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	16.83	20.59	13.75	10.66	13.13	8.52
1987	16.74	20.80	13.42	17.71	22.17	13.99	10.35	10.43	9.95
1988	17.26	21.36	14.08	18.22	22.45	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	22.98	14.81	19.34	23.97	15.49	13.92	17.63	11.02
1991	18.81	23.74	14.61	19.70	24.81	15.32	14.03	18.81	10.29
1992	18.63	23.05	14.94	19.56	23.94	15.85	13.68	18.87	9.65
1993	18.86	23.47	15.00	19.65	24.33	15.70	14.23	19.37	9.97
1994	19.94	24.95	15.79	20.66	25.57	16.54	14.52	21.52	8.94
1995	20.00	25.42	15.47	20.71	26.18	16.06	16.76	23.63	11.43
1996	19.42	24.24	15.48	20.26	25.19	16.20	15.64	19.36	12.48
1997	20.00	24.53	16.47	20.91	25.22	17.51	16.40	24.26	10.86
1998	19.62	22.96	16.86	20.62	24.03	17.79	14.46	16.89	12.54
1999	19.97	24.59	16.36	20.96	25.53	17.35	14.38	18.42	11.31
2000	19.81	24.37	16.12	20.98	25.72	17.09	13.93	18.23	10.74
2001	20.02	24.41	16.46	20.83	25.47	17.06	16.05	18.44	13.92
2002	20.23	24.21	17.10	21.34	25.53	17.97	14.53	17.10	12.59
2003	20.79	25.08	17.52	21.91	26.34	18.47	16.41	20.15	13.78
2004	21.40	25.89	17.97	22.35	26.84	18.87	18.64	24.26	14.55
2005	20.88	25.63	17.09	22.03	26.75	18.20	16.73	19.95	14.10
2006	20.52	24.75	17.23	21.78	26.10	18.38	16.38	20.95	12.98
2007	21.28	26.14	17.41	22.58	27.59	18.47	15.83	19.36	13.17
2008	20.93	25.78	16.98	21.82	26.84	17.66	16.80	18.94	14.88
2009	20.88	25.16	17.42	21.97	26.58	18.11	15.28	18.50	12.91
2010	21.42	26.63	17.16	22.41	27.46	18.23	17.72	23.23	13.32
2011	19.83	24.34	16.25	20.79	25.50	17.02	14.49	17.38	12.33
2012	20.33	24.92	16.60	21.27	25.96	17.39	16.66	19.05	14.52
2013	19.80	24.20	16.20	20.86	25.38	17.10	15.57	17.94	13.72
2014	20.27	25.05	16.36	21.48	26.24	17.57	15.23	20.15	11.34
2015	20.14	24.90	16.26	21.35	26.16	17.36	15.21	19.66	11.81
2016	19.58	23.67	16.23	20.50	24.62	17.06	16.48	19.25	14.14
2017	19.26	23.59	15.68	20.13	24.67	16.30	15.61	18.79	13.04

^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

Year of Death:	All Races			Whites			Blacks		
	Total	Males	Females	Total	Males	Females	Total	Males	Females
1975-2017	6.96	8.75	5.65	7.26	9.10	5.91	4.75	6.11	3.77
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	5.75	3.40
2012	5.91	7.62	4.61	6.18	7.95	4.80	4.26	5.38	3.48
2013	5.71	7.38	4.44	5.96	7.68	4.63	4.12	5.28	3.33
2014	5.66	7.27	4.43	5.90	7.56	4.61	4.19	5.29	3.42
2015	5.47	7.14	4.19	5.70	7.41	4.35	4.05	5.20	3.22
2016	5.38	6.91	4.18	5.62	7.21	4.36	3.83	4.81	3.12
2017	5.30	6.97	4.02	5.55	7.23	4.22	3.96	5.37	2.98

^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
<u>SEER Incidence</u>									
<u>Age at Diagnosis</u>									
Age-Adjusted Rates, 2013-2017									
All ages	19.6	23.8	16.2	20.6	25.0	17.0	14.7	17.7	12.5
Under 65	9.4	11.0	7.8	9.6	11.2	8.0	9.1	10.9	7.5
65 and over	90.3	112.6	74.0	96.7	120.2	79.2	53.6	64.9	46.6
All ages (WHO world std) ^c	14.7	17.7	12.1	15.3	18.4	12.7	11.7	14.0	9.8
Age-Specific Rates, 2013-2017									
<1	-	-	-	-	-	-	-	-	-
1-4	0.8	1.0	0.6	0.8	1.1	0.6	0.5	-	-
5-9	1.2	1.7	0.7	1.3	1.9	0.7	0.9	1.1	0.7
10-14	1.5	1.9	1.0	1.4	1.9	0.9	1.3	1.7	0.9
15-19	2.1	2.8	1.5	2.1	2.7	1.5	2.0	2.6	1.4
20-24	2.7	3.1	2.2	2.6	3.0	2.1	2.7	3.4	2.1
25-29	3.5	4.0	3.0	3.4	3.9	2.9	4.0	4.8	3.3
30-34	4.9	5.5	4.2	4.7	5.3	4.1	5.5	6.7	4.4
35-39	7.1	8.4	5.8	7.0	8.3	5.6	7.9	9.4	6.6
40-44	9.8	11.6	8.1	9.7	11.4	8.1	11.3	13.6	9.3
45-49	14.6	16.8	12.5	14.7	16.8	12.6	16.1	19.3	13.3
50-54	22.1	25.3	18.9	22.6	26.0	19.3	21.7	25.3	18.6
55-59	31.1	36.3	26.3	32.8	38.0	27.7	25.8	30.2	21.9
60-64	44.3	52.3	36.9	46.6	54.7	38.9	36.7	44.5	30.5
65-69	62.8	74.3	52.6	66.7	78.1	56.4	44.3	52.3	38.2
70-74	82.7	99.1	68.9	88.2	105.2	73.5	53.7	64.1	46.4
75-79	105.3	130.1	85.9	113.7	140.5	92.2	59.3	68.4	53.5
80-84	118.8	152.5	95.3	127.5	163.2	102.0	66.8	82.9	57.8
85+	107.7	148.9	86.2	115.5	159.3	92.4	48.8	67.6	41.0
<u>U.S. Mortality</u>									
<u>Age at Death</u>									
Age-Adjusted Rates, 2013-2017									
All ages	5.5	7.1	4.2	5.7	7.4	4.4	4.0	5.2	3.2
Under 65	1.3	1.7	0.9	1.3	1.7	0.9	1.6	2.1	1.2
65 and over	34.5	44.7	27.3	36.5	47.0	28.8	20.8	26.6	17.3
All ages (WHO world std) ^c	2.9	3.8	2.2	3.0	3.9	2.3	2.5	3.2	1.9
Age-Specific Rates, 2013-2017									
<1	-	-	-	-	-	-	-	-	-
1-4	0.0	0.1	-	0.0	0.1	-	-	-	-
5-9	0.0	0.1	0.0	0.0	0.0	-	0.1	-	-
10-14	0.1	0.1	0.0	0.1	0.1	0.0	0.1	-	-
15-19	0.1	0.2	0.1	0.1	0.2	0.1	0.2	0.2	-
20-24	0.2	0.3	0.2	0.2	0.3	0.1	0.4	0.5	0.3
25-29	0.3	0.4	0.2	0.3	0.4	0.2	0.5	0.7	0.3
30-34	0.5	0.7	0.3	0.4	0.6	0.3	0.9	1.2	0.6
35-39	0.7	0.9	0.5	0.6	0.8	0.4	1.1	1.3	0.8
40-44	1.0	1.3	0.8	1.0	1.2	0.8	1.7	2.2	1.3
45-49	1.7	2.2	1.3	1.7	2.1	1.2	2.5	3.3	1.8
50-54	3.0	4.0	2.0	3.0	4.0	2.0	3.7	4.9	2.5
55-59	5.2	6.8	3.6	5.3	7.0	3.6	5.5	7.0	4.2
60-64	8.7	11.4	6.1	8.8	11.6	6.2	8.8	11.6	6.5
65-69	13.9	18.0	10.3	14.5	18.7	10.6	12.1	15.1	9.7
70-74	23.5	30.0	18.0	24.7	31.4	18.9	16.3	21.2	12.8
75-79	36.7	46.6	28.8	38.8	49.2	30.4	22.6	27.9	19.2
80-84	55.6	71.5	44.3	59.1	75.5	47.1	31.1	39.8	26.2
85+	74.6	99.4	61.6	79.4	105.1	65.7	34.2	46.0	29.3

^a SEER 21 areas. Rates are per 100,000 and are age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130), unless noted.

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

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

- 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	45.5	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	46.3	49.6	51.1	46.9	56.7
1981-1983 ^b	50.6	50.3	50.9	50.7	50.5	51.0	49.5	49.2	49.8
1984-1986 ^b	51.6	50.0	53.3	52.0	50.6	53.6	46.8	44.5	49.9
1987-1989 ^b	50.9	47.6	54.9	51.4	48.2	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	38.4	47.6
1993-1995 ^b	52.6	48.8	57.5	53.3	49.8	57.7	42.6	35.9	55.1
1996-1998 ^b	58.8	57.0	61.0	59.4	57.6	61.5	54.8	53.2	57.3
1999-2001 ^b	64.0	61.5	67.0	65.0	62.9	67.5	55.7	49.1	63.7
2002-2004 ^b	69.8	68.6	71.2	71.0	70.1	72.1	63.7	61.3	66.6
2005-2009 ^b	72.1	71.0	73.4	73.3	72.4	74.5	62.9	58.3	68.0
2010-2016 ^b	75.1 ^f	74.3 ^f	76.1 ^f	75.9 ^f	75.1 ^f	76.9 ^f	71.5 ^f	69.0 ^f	74.4 ^f
5-Year Period Survival (Percent) ^{cd}									
2016	73.1	71.9	74.5	73.5	72.2	75.1	69.2	67.6	70.8
Stage Distribution (%) 2010-2016 ^{ce}									
All Stages									
Number of cases	99,037	54,394	44,643	81,022	44,677	36,345	8,357	4,473	3,884
Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Localized	27	26	28	27	26	28	28	25	31
Regional	15	15	15	15	15	15	15	15	15
Distant	50	52	48	51	52	49	51	54	48
Unstaged/Unknown	8	7	8	7	7	8	6	6	7
5-Year Relative Survival (Percent), 2010-2016 ^c									
Age at Diagnosis:									
Ages <45	84.7	82.7	87.8	85.9	83.8	89.2	75.8	73.5	79.2
Ages 45-54	81.8	78.4	86.7	83.4	80.3	88.0	69.8	64.3	77.0
Ages 55-64	77.6	75.1	81.1	78.7	76.2	82.0	69.7	65.0	75.7
Ages 65-74	73.3	71.6	75.3	73.9	71.9	76.3	67.3	65.5	68.5
Ages 75+	56.1	55.2	56.9	56.6	55.4	57.7	52.0	50.3	52.7
Ages <65	80.6	78.0	84.3	81.7	79.3	85.3	71.8	67.9	77.2
Ages 65+	64.6	63.9	65.4	65.1	64.1	66.2	60.9	60.4	61.1
Stage ^e :									
All Stages	72.7	71.5	74.2	73.1	71.9	74.6	68.4	66.0	71.2
Localized	84.7	84.0	85.5	85.1	84.4	85.8	82.4	77.8	86.7
Regional	75.5	75.9	75.1	76.0	76.3	75.5	70.7	70.9	70.3
Distant	65.8	64.4	67.5	66.7	65.3	68.5	60.3	59.3	61.6
Unstaged/Unknown	70.0	67.7	72.5	67.7	65.3	70.3	66.6	63.1	69.7

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

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

Based on follow-up of patients into 2017. [Expected survival rates](#) are derived from the U.S. Annual Life Tables.

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

Based on follow-up of patients into 2017.

^d Period survival provides a 2016 estimate of survival by piecing together the most recent conditional survival estimates from several cohorts. It is computed here using three year calendar blocks (2010-2012: 0-1 year survival), (2009-2011: 1-2 year survival), (2008-2010: 2-3 year survival), (2007-2009: 3-4 year survival), (2006-2008: 4-5 years survival).

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

^f The difference between 1975-1977 and 2010-2016 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- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Survival Time																										
1-year	70.2	73.0	71.2	70.4	70.4	73.2	75.5	76.6	77.5	77.2	78.6	80.9	80.3	81.0	81.6	80.9	81.7	84.1	83.8	84.3	83.5	84.1	84.4	83.5	84.6	85.0
2-year	60.2	63.7	62.8	62.2	61.9	65.8	68.4	70.1	71.1	71.4	73.3	76.1	75.6	76.0	77.3	76.9	77.6	78.9	79.5	79.6	79.8	80.0	80.1	79.8	80.8	
3-year	54.6	58.5	58.2	57.7	57.6	62.0	64.9	66.4	67.9	70.1	73.2	73.1	73.5	74.8	74.5	75.1	76.2	77.3	77.5	77.6	77.9	78.1	78.2			
4-year	50.6	54.6	54.4	54.4	54.8	58.8	62.1	63.6	64.6	65.5	68.1	71.2	71.6	71.5	73.1	72.6	73.3	74.5	75.6	75.3	75.7	76.9	76.6			
5-year	46.8	50.7	51.0	51.6	52.1	56.0	59.3	61.0	62.1	63.8	66.0	69.3	70.0	70.1	71.6	70.5	71.4	72.8	74.1	74.3	74.3	75.2				
6-year	43.6	47.5	48.3	49.3	49.9	54.1	57.1	58.3	59.6	62.1	64.6	68.1	68.3	68.7	70.3	68.9	70.3	71.8	72.2	72.4	72.3					
7-year	40.8	45.0	45.9	47.0	47.9	52.2	55.2	56.5	57.8	60.5	63.0	66.3	67.2	67.2	68.5	67.3	68.9	70.2	71.1	71.4						
8-year	38.5	42.9	43.4	45.1	46.5	50.5	53.0	55.2	56.3	58.9	61.3	65.1	65.7	66.6	67.1	66.2	67.4	69.1	70.2							
9-year	36.6	40.8	41.5	43.5	45.3	49.3	51.5	53.4	54.9	57.5	60.0	64.0	64.8	64.9	65.2	65.2	66.2	68.0								
10-year	35.0	38.9	39.8	42.1	44.4	48.1	50.1	52.2	53.7	56.2	58.9	63.2	63.3	63.8	63.5	63.8	65.3									
11-year	33.5	37.4	38.5	40.6	43.4	46.5	48.8	51.1	52.6	54.8	58.1	61.8	62.2	63.0	63.2	63.1										
12-year	32.4	36.0	36.9	39.6	42.3	45.7	48.2	50.2	51.3	53.6	56.9	60.1	61.6	61.7	62.3											
13-year	31.4	34.8	35.8	38.3	41.6	44.8	46.9	49.2	50.0	52.0	56.1	59.4	60.3	60.8												
14-year	30.2	33.5	34.7	37.2	40.7	44.3	45.7	48.7	48.9	51.3	54.9	58.3	59.6													
15-year	28.9	32.2	33.5	36.6	39.9	43.7	44.7	47.5	47.9	50.5	54.1	58.2														
16-year	28.0	31.2	32.8	35.7	39.4	43.6	43.4	47.3	47.2	49.2	53.6															
17-year	27.4	30.4	32.1	34.9	38.9	42.8	42.8	46.9	45.9	48.1																
18-year	26.8	29.6	31.4	34.1	37.9	42.0	42.0	46.3	45.4																	
19-year	26.1	28.8	30.6	33.3	37.1	41.3	41.3	45.8																		
20-year	25.2	28.0	30.1	32.9	35.9	40.9	40.9																			

^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- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Survival Time																										
1-year	69.4	72.7	68.9	67.0	66.8	71.1	74.6	74.8	76.0	76.5	77.5	80.5	79.7	80.1	81.0	81.0	81.5	83.7	82.6	83.7	83.8	84.0	83.4	83.1	83.7	84.5
2-year	59.4	63.7	60.5	58.3	58.5	63.5	67.1	68.3	69.2	70.3	71.3	75.3	74.9	75.5	76.2	76.5	77.9	78.0	78.1	78.8	79.9	79.3	78.8	79.4	79.6	
3-year	53.4	58.0	55.7	53.7	54.5	59.7	63.8	64.6	64.3	66.8	68.0	72.0	72.6	72.6	73.2	73.6	75.5	75.2	75.8	76.6	77.6	76.9	76.7	77.6		
4-year	49.4	54.0	51.6	50.4	51.6	56.3	61.0	62.0	61.5	63.9	65.7	70.1	70.9	70.2	71.3	71.3	73.4	73.6	73.7	74.4	75.7	75.9	75.1			
5-year	45.4	50.1	48.2	47.6	48.6	53.6	58.1	59.2	59.0	61.8	63.6	68.0	68.9	68.9	69.9	68.9	71.2	72.3	72.4	73.5	74.3	74.5				
6-year	42.6	46.6	45.5	45.6	46.9	51.0	56.0	56.5	56.3	60.3	61.9	66.8	67.0	67.5	68.4	67.1	69.8	71.6	70.7	71.7	72.5					
7-year	39.9	44.2	43.2	43.7	44.9	49.1	54.3	54.5	54.6	58.7	60.1	65.2	65.8	65.5	66.9	65.1	68.3	69.7	69.8	70.7						
8-year	37.8	42.0	41.0	41.8	43.3	47.4	52.1	53.3	53.6	56.8	58.3	63.7	64.5	65.0	65.0	63.4	66.6	68.8	69.2							
9-year	35.7	40.1	39.1	40.2	42.4	46.5	50.4	51.4	52.3	55.3	57.2	62.8	63.4	63.2	63.6	61.9	65.3	67.7								
10-year	34.1	38.0	37.7	39.2	41.7	45.4	48.8	50.4	51.5	54.2	56.0	61.8	61.8	62.0	61.4	60.9	64.4									
11-year	32.8	36.4	36.4	38.1	40.8	43.6	47.7	49.5	50.8	52.7	54.7	60.3	60.6	61.2	61.3	60.0										
12-year	31.9	35.2	35.1	37.3	39.5	42.6	47.2	48.2	49.8	51.5	53.7	58.9	60.1	59.6	60.3											
13-year	30.8	34.2	34.2	36.1	39.0	41.8	45.6	46.8	49.1	50.2	53.1	58.3	59.2	58.8												
14-year	29.5	33.1	33.2	35.0	37.8	41.4	44.4	46.2	48.1	49.7	52.1	57.2	58.1													
15-year	28.2	32.0	32.4	34.4	36.9	40.8	43.5	45.4	47.3	48.9	51.3	57.1														
16-year	27.2	30.8	31.6	33.4	36.2	40.8	42.6	45.3	47.1	47.5	50.6															
17-year	26.6	30.0	30.8	32.6	35.9	40.3	42.0	44.9	46.3	46.8																
18-year	26.2	29.4	30.2	32.0	35.2	39.5	41.0	44.3	45.7																	
19-year	25.6	28.8	29.4	31.3	34.3	39.0	40.3	43.8																		
20-year	25.1	28.0	29.1	31.0	33.3	38.8	40.0																			

^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- 1979	1980- 1984	1985- 1989	1990- 1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Survival Time																										
1-year	71.0	73.3	74.0	74.7	75.2	75.7	76.7	78.6	79.3	78.1	80.0	81.3	81.0	82.0	82.4	80.9	82.0	84.6	85.2	85.1	83.1	84.3	85.7	83.9	85.9	85.6
2-year	61.1	63.7	65.6	67.2	66.5	68.7	70.1	72.1	73.4	72.6	75.7	76.9	76.5	76.5	78.6	77.4	77.2	80.1	81.2	80.7	79.7	80.9	81.8	80.2	82.4	
3-year	55.9	59.0	61.2	62.8	61.6	64.9	66.2	68.4	70.1	69.2	72.7	74.4	73.6	74.5	76.8	75.6	74.7	77.4	79.2	78.6	77.6	79.2	79.8	79.0		
4-year	51.9	55.3	57.7	59.5	59.0	61.9	63.4	65.5	68.2	67.4	71.0	72.5	72.4	72.9	75.1	73.9	73.0	75.6	77.8	76.5	75.7	78.0	78.4			
5-year	48.3	51.4	54.4	56.7	56.7	59.1	60.7	62.9	65.9	66.3	68.8	70.7	71.2	71.5	73.5	72.3	71.6	73.5	76.3	75.2	74.3	76.1				
6-year	44.7	48.5	51.7	53.9	54.0	58.0	58.4	60.4	63.5	64.2	67.9	69.5	69.8	70.0	72.6	71.0	70.9	72.1	73.9	73.3	72.0					
7-year	41.8	45.9	49.1	51.2	52.0	56.0	56.3	58.6	61.5	62.6	66.4	67.4	68.7	69.2	70.4	69.9	69.6	70.8	72.7	72.2						
8-year	39.2	43.8	46.3	49.2	50.5	54.2	54.1	57.3	59.6	61.5	65.0	66.8	67.1	68.4	69.5	69.3	68.5	69.5	71.5							
9-year	37.5	41.6	44.3	47.6	49.2	52.9	52.8	55.8	57.9	60.3	63.3	65.4	66.4	66.8	67.1	68.9	67.3	68.5								
10-year	36.0	39.8	42.4	45.8	48.0	51.4	51.7	54.2	56.2	58.7	62.5	64.9	65.1	65.7	65.9	67.1	66.2									
11-year	34.2	38.5	40.9	43.8	46.9	50.2	50.0	53.0	54.8	57.2	62.2	63.6	64.0	65.1	65.4	66.5										
12-year	32.9	36.8	39.1	42.5	46.0	49.5	49.4	52.4	53.0	56.0	60.7	61.3	63.2	64.1	64.6											
13-year	32.1	35.3	37.5	41.1	45.0	48.5	48.5	51.8	51.1	54.2	59.8	60.7	61.6	63.1												
14-year	31.0	34.0	36.5	40.0	44.3	47.9	47.1	51.4	49.8	53.2	58.4	59.6	61.2													
15-year	29.7	32.5	35.0	39.3	43.7	47.2	46.2	49.9	48.6	52.4	57.6	59.2														
16-year	28.8	31.7	34.3	38.6	43.6	46.7	44.3	49.4	47.0	51.2	57.1															
17-year	28.2	30.6	33.6	37.8	42.8	45.9	43.9	49.1	45.4	49.7																
18-year	27.4	29.9	32.7	36.8	41.4	45.0	43.0	48.6	44.8																	
19-year	26.5	28.8	32.1	35.9	40.7	44.0	42.4	48.0																		
20-year	25.4	28.0	31.2	35.4	39.4	43.4	42.0																			

^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 19.12
Non-Hodgkin Lymphoma

Number of Cases

By SEER Location and Year of Diagnosis, 1975-2017

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	2016- 2017
SEER 9 ^b	5,222	2,506	2,704	3,176	3,628	3,994	4,571	4,731	5,324	5,260	5,262	5,566	5,779	6,226	6,404	6,704	7,000	7,081	7,520	7,446
SEER 9 except SF-Oakland	4,285	2,088	2,267	2,603	2,820	3,091	3,508	3,696	4,158	4,249	4,363	4,519	4,823	5,208	5,401	5,626	5,843	6,018	6,319	6,264
San Francisco- Oakland SMSA ^c	937	418	437	573	808	903	1,063	1,035	1,166	1,011	899	1,047	956	1,018	1,003	1,078	1,157	1,063	1,201	1,182
San Francisco City/County	245	96	123	210	326	393	467	410	450	354	213	256	220	283	219	217	240	225	242	231

Age-Adjusted Cancer Incidence Rates^a

By SEER Location and Year of Diagnosis, 1975-2017

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	2016- 2017
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	24.7	25.8	25.5	25.5	25.5	24.6	25.0	23.6
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	24.5	25.6	25.4	25.3	25.2	24.7	24.9	23.6
San Francisco- Oakland SMSA ^c	14.7	15.8	16.0	19.4	26.7	28.5	31.7	30.5	33.5	28.8	25.2	28.6	25.5	26.6	25.6	26.3	26.8	23.7	25.3	23.5
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	25.9	27.3	25.3	25.2	22.8

^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, 1975-2017

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	2016- 2017
SEER 9 ^b	223	87	108	91	94	84	100	89	120	105	104	119	127	107	106	144	134	155	162	149
SEER 9 except SF-Oakland	191	78	95	82	80	76	86	74	107	84	93	100	115	90	87	114	119	129	132	129
San Francisco- Oakland SMSA ^c	32	-	13	-	14	-	14	15	13	21	11	19	12	17	19	30	15	26	30	20
San Francisco City/County	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Age-Adjusted Cancer Incidence Rates^a

By SEER Location and Year of Diagnosis, 1975-2017

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	2016- 2017
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	2.0	2.0	1.9
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	1.9
San Francisco- Oakland SMSA ^c	1.4	-	1.5	-	1.6	-	1.5	1.6	1.3	2.1	1.1	1.8	1.2	1.7	1.9	2.9	1.4	2.5	2.9	1.9
San Francisco City/County	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

^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, 1975-2017

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	2016- 2017
SEER 9 ^b	1,463	686	723	958	1,212	1,413	1,767	1,830	2,089	1,770	1,607	1,698	1,624	1,721	1,656	1,691	1,676	1,598	1,523	1,471
SEER 9 except SF-Oakland	1,208	563	588	730	828	923	1,196	1,294	1,483	1,325	1,268	1,329	1,309	1,409	1,384	1,398	1,403	1,330	1,251	1,222
San Francisco- Oakland SMSA ^c	255	123	135	228	384	490	571	536	606	445	339	369	315	312	272	293	273	268	272	249
San Francisco City/County	58	29	34	105	215	288	333	303	317	225	105	115	111	111	86	75	73	71	69	60

Age-Adjusted Cancer Incidence Rates^a

By SEER Location and Year of Diagnosis, 1975-2017

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	2016- 2017
SEER 9 ^b	6.9	7.9	8.2	10.4	12.4	13.6	16.0	15.6	16.9	13.8	12.1	12.4	11.7	12.3	11.6	11.8	11.6	11.1	10.6	10.3
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	11.6	11.0	10.4	10.2
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	15.6	16.4	13.9	14.1	12.3	13.0	11.8	11.5	11.5	10.4
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	14.0	11.8

^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, 1975-2017

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	2016- 2017
SEER 9 ^b	3,536	1,733	1,873	2,127	2,322	2,497	2,704	2,812	3,115	3,385	3,551	3,749	4,028	4,398	4,642	4,869	5,190	5,328	5,835	5,826
SEER 9 except SF-Oakland	2,886	1,447	1,584	1,791	1,912	2,092	2,226	2,328	2,568	2,840	3,002	3,090	3,399	3,709	3,930	4,114	4,321	4,559	4,936	4,913
San Francisco- Oakland SMSA ^c	650	286	289	336	410	405	478	484	547	545	549	659	629	689	712	755	869	769	899	913
San Francisco City/County	178	65	88	104	109	105	132	106	130	126	106	141	108	169	131	136	164	148	171	169

Age-Adjusted Cancer Incidence Rates^a

By SEER Location and Year of Diagnosis, 1975-2017

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	2016- 2017
SEER 9 ^b	45.1	52.2	54.0	59.6	63.3	67.3	70.1	70.7	76.1	80.0	81.1	83.2	85.9	90.0	90.2	89.1	89.9	86.4	89.4	84.0
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	85.9	90.1	90.4	89.1	88.8	87.4	89.7	84.2
San Francisco- Oakland SMSA ^c	50.8	52.9	52.0	57.1	70.2	70.3	77.3	78.3	85.4	82.1	80.0	93.2	85.4	89.5	88.8	88.9	95.8	80.8	87.7	83.2
San Francisco City/County	48.2	44.6	59.8	72.7	73.9	75.7	93.4	74.7	91.5	87.2	72.7	93.4	69.0	104.7	76.4	76.9	89.0	77.8	83.2	76.6

^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, 2015-2017 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.01	0.03	0.06	2.15	0.70	Asian/ Pacific Islander	0	0.01	0.02	0.05	1.81	0.69
	10	0.02	0.05	0.11	2.16	0.71		10	0.02	0.04	0.09	1.81	0.70
	20	0.03	0.09	0.21	2.15	0.71		20	0.03	0.08	0.16	1.80	0.70
	30	0.06	0.18	0.42	2.14	0.72		30	0.05	0.13	0.30	1.78	0.70
	40	0.12	0.37	0.81	2.11	0.72		40	0.08	0.25	0.58	1.74	0.70
	50	0.25	0.71	1.37	2.04	0.73		50	0.17	0.50	1.02	1.68	0.70
	60	0.49	1.19	1.75	1.89	0.73		60	0.34	0.88	1.37	1.55	0.69
	70	0.79	1.43	-	1.59	0.71		70	0.57	1.10	-	1.30	0.65
80	0.84	-	-	1.05	0.61	80	0.63	-	-	0.86	0.53		
White	0	0.01	0.03	0.06	2.25	0.74	American Indian/ Alaska Native ^a	0	0.00	0.01	0.02	1.19	0.47
	10	0.02	0.05	0.10	2.26	0.75		10	0.01	0.02	0.05	1.20	0.48
	20	0.03	0.09	0.20	2.25	0.75		20	0.01	0.04	0.09	1.20	0.48
	30	0.06	0.18	0.43	2.24	0.75		30	0.03	0.08	0.22	1.21	0.49
	40	0.12	0.37	0.85	2.21	0.76		40	0.05	0.19	0.41	1.21	0.50
	50	0.26	0.75	1.45	2.15	0.77		50	0.15	0.38	0.76	1.20	0.52
	60	0.51	1.26	1.86	2.00	0.77		60	0.25	0.66	1.05	1.14	0.53
	70	0.84	1.52	-	1.67	0.75		70	0.46	0.91	-	1.01	0.51
80	0.89	-	-	1.11	0.64	80	0.59	-	-	0.73	0.37		
Black	0	0.01	0.02	0.05	1.37	0.42	Hispanic ^b	0	0.01	0.02	0.05	2.24	0.72
	10	0.02	0.05	0.11	1.39	0.42		10	0.02	0.04	0.09	2.25	0.72
	20	0.03	0.10	0.23	1.38	0.42		20	0.03	0.08	0.19	2.24	0.72
	30	0.06	0.20	0.40	1.36	0.43		30	0.05	0.16	0.39	2.23	0.73
	40	0.13	0.35	0.66	1.32	0.43		40	0.11	0.34	0.77	2.20	0.73
	50	0.22	0.55	0.91	1.23	0.42		50	0.24	0.68	1.34	2.13	0.73
	60	0.36	0.75	1.03	1.10	0.41		60	0.46	1.15	1.76	1.98	0.73
	70	0.47	0.80	-	0.89	0.38		70	0.76	1.43	-	1.67	0.69
80	0.46	-	-	0.58	0.31	80	0.84	-	-	1.14	0.57		

Devcan 6.7.8, April 2020, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). 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 PRCA (Purchased/Referred Care Delivery Areas) 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, 2015-2017 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.01	0.03	0.07	2.40	0.80	Asian/ Pacific Islander	0	0.01	0.03	0.06	2.15	0.83
	10	0.02	0.06	0.13	2.41	0.81		10	0.02	0.05	0.10	2.15	0.83
	20	0.04	0.10	0.24	2.40	0.81		20	0.03	0.08	0.18	2.14	0.83
	30	0.07	0.20	0.48	2.40	0.82		30	0.05	0.15	0.34	2.12	0.83
	40	0.14	0.42	0.93	2.37	0.83		40	0.10	0.29	0.69	2.08	0.84
	50	0.29	0.81	1.57	2.31	0.84		50	0.20	0.60	1.20	2.01	0.84
	60	0.56	1.38	2.02	2.17	0.85		60	0.42	1.04	1.63	1.89	0.83
	70	0.95	1.69	-	1.86	0.84		70	0.68	1.32	-	1.60	0.79
80	1.04	-	-	1.29	0.73	80	0.79	-	-	1.14	0.65		
White	0	0.01	0.04	0.07	2.51	0.84	American Indian/ Alaska Native ^a	0	0.00	0.01	0.02	1.05	0.53
	10	0.02	0.06	0.12	2.52	0.85		10	0.01	0.02	0.04	1.07	0.54
	20	0.04	0.10	0.23	2.51	0.85		20	0.01	0.03	0.07	1.06	0.55
	30	0.07	0.20	0.49	2.51	0.86		30	0.02	0.06	0.18	1.08	0.56
	40	0.14	0.43	0.96	2.49	0.87		40	0.04	0.16	0.39	1.09	0.57
	50	0.30	0.85	1.66	2.42	0.88		50	0.13	0.37	0.77	1.11	0.59
	60	0.59	1.46	2.13	2.28	0.89		60	0.26	0.70	1.06	1.07	0.62
	70	1.01	1.79	-	1.96	0.88		70	0.52	0.94	-	0.95	0.60
80	1.10	-	-	1.34	0.77	80	0.59	-	-	0.60	0.44		
Black	0	0.01	0.03	0.07	1.47	0.46	Hispanic ^b	0	0.01	0.03	0.06	2.39	0.80
	10	0.02	0.06	0.14	1.49	0.47		10	0.02	0.05	0.11	2.40	0.81
	20	0.04	0.12	0.27	1.48	0.47		20	0.03	0.09	0.20	2.39	0.81
	30	0.08	0.23	0.46	1.47	0.48		30	0.06	0.18	0.43	2.39	0.82
	40	0.16	0.40	0.76	1.43	0.48		40	0.12	0.37	0.83	2.37	0.82
	50	0.25	0.63	1.01	1.34	0.47		50	0.26	0.73	1.46	2.30	0.82
	60	0.42	0.84	1.13	1.20	0.46		60	0.50	1.27	1.93	2.17	0.82
	70	0.53	0.89	-	0.98	0.43		70	0.87	1.62	-	1.89	0.79
80	0.56	-	-	0.70	0.37	80	0.98	-	-	1.34	0.66		

Devcan 6.7.8, April 2020, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). 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 PRCDA (Purchased/Referred Care Delivery Areas) 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, 2015-2017 By Race/Ethnicity

Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer	Race/ Ethnicity	Current Age	Risk of Being Diagnosed with Cancer				Risk of Dying from Cancer
		+10 yrs	+20 yrs	+30 yrs	Ever				+10 yrs	+20 yrs	+30 yrs	Ever	
All Races	0	0.01	0.02	0.04	1.91	0.62	Asian/ Pacific Islander	0	0.00	0.01	0.04	1.53	0.59
	10	0.01	0.04	0.09	1.93	0.63		10	0.01	0.04	0.08	1.53	0.59
	20	0.03	0.08	0.18	1.92	0.63		20	0.02	0.07	0.14	1.52	0.59
	30	0.05	0.15	0.36	1.90	0.63		30	0.05	0.12	0.26	1.50	0.59
	40	0.10	0.31	0.70	1.87	0.63		40	0.07	0.21	0.48	1.46	0.59
	50	0.22	0.61	1.19	1.80	0.64		50	0.15	0.41	0.87	1.41	0.59
	60	0.41	1.02	1.52	1.66	0.64		60	0.27	0.74	1.17	1.29	0.58
	70	0.66	1.22	-	1.37	0.62		70	0.49	0.94	-	1.07	0.55
80	0.70	-	-	0.89	0.53	80	0.52	-	-	0.66	0.44		
White	0	0.01	0.02	0.04	2.01	0.65	American Indian/ Alaska Native ^a	0	0.00	0.01	0.02	1.31	0.41
	10	0.01	0.04	0.08	2.02	0.66		10	0.01	0.01	0.05	1.32	0.42
	20	0.02	0.07	0.17	2.01	0.66		20	0.01	0.05	0.11	1.32	0.42
	30	0.05	0.15	0.37	2.00	0.66		30	0.04	0.11	0.26	1.32	0.43
	40	0.10	0.32	0.73	1.97	0.66		40	0.07	0.22	0.44	1.31	0.43
	50	0.22	0.64	1.26	1.90	0.67		50	0.16	0.39	0.74	1.28	0.45
	60	0.44	1.08	1.61	1.75	0.67		60	0.24	0.62	1.03	1.18	0.45
	70	0.70	1.29	-	1.44	0.65		70	0.42	0.88	-	1.04	0.43
80	0.74	-	-	0.94	0.56	80	0.59	-	-	0.80	0.32		
Black	0	0.01	0.02	0.04	1.28	0.38	Hispanic ^b	0	0.01	0.02	0.04	2.12	0.65
	10	0.01	0.04	0.09	1.30	0.39		10	0.01	0.04	0.08	2.13	0.66
	20	0.02	0.08	0.19	1.29	0.39		20	0.02	0.07	0.17	2.12	0.66
	30	0.05	0.17	0.35	1.27	0.39		30	0.04	0.14	0.35	2.10	0.66
	40	0.11	0.30	0.58	1.23	0.38		40	0.10	0.31	0.72	2.07	0.66
	50	0.19	0.48	0.83	1.15	0.38		50	0.22	0.63	1.24	2.00	0.66
	60	0.31	0.68	0.95	1.03	0.37		60	0.43	1.05	1.63	1.84	0.65
	70	0.43	0.73	-	0.82	0.35		70	0.68	1.29	-	1.52	0.62
80	0.40	-	-	0.52	0.28	80	0.74	-	-	1.02	0.51		

Devcan 6.7.8, April 2020, National Cancer Institute (<https://surveillance.cancer.gov/devcan/>).

Source: Incidence data are from the SEER 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts). 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 PRCD (Purchased/Referred Care Delivery Areas) 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 21 Areas ^b			SEER 21 Areas ^b			SEER 9 Areas ^b		
	Rate 2013-2017			Trend 2008-2017 ^c			Trend 2008-2017 ^d		
	Rate per 100,000 persons			AAPC (%)			AAPC (%)		
Race/Ethnicity	Total	Males	Females	Total	Males	Females	Total	Males	Females
All Races	19.6	23.8	16.2	-0.9*	-1.0*	-0.8*	-0.8*	-0.8*	-0.8*
White	20.6	25.0	17.0	-1.0*	-1.0*	-1.0*	-0.9*	-0.9*	-0.8*
White Hispanic ^e	18.5	21.4	16.3	-0.8*	-0.2	-0.4	-	-	-
White Non-Hispanic ^e	21.0	25.6	17.1	-1.0*	-1.0*	-0.9*	-	-	-
Black	14.7	17.7	12.5	0.1	-0.1	0.4*	0.0	-0.4	-0.7
Asian/Pacific Islander	13.5	16.5	11.1	0.0	0.1	-0.1	-	-	-
Amer Ind/Alaska Nat ^f	10.9	10.8	10.9	-0.9	-1.8	-0.1	-	-	-
Hispanic ^e	18.1	20.9	15.9	-0.3	-0.1	0.3	-	-	-
<u>U.S. Mortality^g</u>									
U.S. Mortality ^g	Rate 2013-2017			Trend 2008-2017 ^h					
	Rate per 100,000 persons			AAPC (%)					
	Total	Males	Females	Total	Males	Females			
All Races	5.5	7.1	4.2	-2.2*	-1.9*	-2.7*			
White	5.7	7.4	4.4	-2.2*	-1.9*	-2.7*			
White Hispanic ^e	5.0	6.3	3.9	-1.6*	-1.3*	-1.9*			
White Non-Hispanic ^e	5.8	7.5	4.5	-2.2*	-1.9*	-2.5*			
Black	4.0	5.2	3.2	-1.9*	-1.8*	-1.8			
Asian/Pacific Islander	3.8	4.9	3.0	-1.7*	-1.4*	-2.1*			
Amer Ind/Alaska Nat									
Total U.S.	3.0	3.8	2.4	-3.3*	-2.1*	-4.4*			
PRCDA Counties	4.2	5.5	3.2	-2.3*	-0.6	-3.9*			
Non-PRCDA Counties	1.7	2.0	1.5	-5.0*	-4.9*	-5.1*			
Hispanic ^e	4.7	5.9	3.7	-1.7*	-1.5*	-2.0*			

The AAPC is the Average Annual Percent Change over the time interval. The AAPCs are calculated by the Joinpoint Regression Program Version 4.8, April 2020, National Cancer Institute.

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

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

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).

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

The SEER 21 areas comprise the SEER 9 areas plus San Jose-Monterey, Los Angeles, the Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts.

The 2008-2017 AAPC estimates are based on a Joinpoint analysis with up to 3 Joinpoints over diagnosis years 2000-2017.

The 2008-2017 AAPC estimates are based on a Joinpoint analysis with up to 5 Joinpoints over diagnosis years 1975-2017.

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.

Incidence data for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) counties.

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

The 2008-2017 mortality AAPCs are based on a Joinpoint analysis using years of death 2000-2017.

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
<u>SEER Incidence Rates^a, 2013-2017</u>									
California	18.40	22.36	15.11	19.34	23.49	15.85	14.00	16.25	12.06
Greater Bay Area	19.60	23.75	16.15	21.59	25.97	17.89	16.56	19.19	14.14
San Francisco-Oakland	19.54	24.11	15.76	21.83	26.64	17.82	16.38	18.98	14.09
San Jose-Monterey	19.78	23.14	16.93	21.21	24.88	18.04	17.99	20.35	15.03
Los Angeles	17.89	21.62	14.88	19.30	23.20	16.06	13.93	16.82	11.77
Greater California	18.20	22.18	14.85	18.74	22.90	15.22	12.83	14.33	11.36
Connecticut	21.11	26.16	17.13	21.46	26.57	17.39	13.14	16.48	10.51
Detroit	21.28	25.95	17.66	22.86	27.85	18.91	16.29	19.66	13.85
Georgia	18.20	22.31	14.88	19.37	23.38	15.98	14.61	18.45	11.81
Atlanta	19.13	23.49	15.60	21.23	25.37	17.66	15.83	20.27	12.56
Rural Georgia	16.40	19.44	13.75	20.06	24.82	15.14	9.06	-	10.30
Greater Georgia	17.78	21.78	14.55	18.72	22.72	15.39	13.83	17.23	11.35
Hawaii	16.44	19.77	13.50	19.55	22.42	16.28	-	-	-
Idaho	19.36	23.04	16.03	19.29	22.91	16.03	-	-	-
Iowa	21.12	25.83	17.24	21.23	25.88	17.41	14.62	17.88	11.30
Kentucky	20.10	24.45	16.57	20.47	24.84	16.86	13.76	18.06	10.72
Louisiana	19.21	23.35	15.87	20.75	25.15	17.08	14.71	17.74	12.40
Massachusetts	18.04	22.09	14.83	18.34	22.61	14.96	12.82	14.50	11.44
New Jersey	21.74	26.12	18.34	23.18	27.91	19.43	14.08	16.61	12.42
New Mexico	15.09	17.13	13.33	15.22	17.57	13.19	9.93	11.91	-
New York	21.66	26.33	18.00	23.12	27.93	19.25	15.65	18.66	13.59
Seattle-Puget Sound	20.94	25.99	16.75	21.67	26.62	17.51	15.39	18.70	12.18
Utah	18.63	23.02	14.78	18.86	23.38	14.87	19.79	-	-
SEER 9 Areas ^b	19.81	24.27	16.14	20.86	25.41	17.07	15.62	19.16	12.80
SEER 13 Areas ^b	19.35	23.58	15.89	20.55	24.92	16.90	15.23	18.64	12.55
SEER 18 Areas ^b	19.26	23.43	15.85	20.26	24.58	16.67	14.50	17.53	12.15
SEER 21 Areas ^b	19.60	23.84	16.17	20.59	24.97	16.97	14.71	17.68	12.45

^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.

The SEER 21 areas comprise the SEER 18 areas plus Idaho, New York and Massachusetts.

- 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
<u>SEER Death Rates^a, 2013-2017</u>									
California	5.26	6.73	4.13	5.61	7.18	4.38	4.18	4.91	3.57
Greater Bay Area	4.99	6.54	3.75	5.48	7.26	4.05	4.21	4.93	3.40
San Francisco-Oakland	4.93	6.48	3.70	5.42	7.16	4.04	4.32	4.82	3.68
San Jose-Monterey	5.12	6.67	3.84	5.60	7.44	4.08	-	-	-
Los Angeles	5.35	6.71	4.34	5.85	7.27	4.78	4.20	5.29	3.51
Greater California	5.32	6.81	4.16	5.54	7.13	4.31	4.12	4.44	3.75
Connecticut	5.31	6.99	4.06	5.46	7.11	4.23	3.55	5.25	2.43
Detroit	6.04	7.67	4.89	6.61	8.38	5.33	4.05	4.83	3.51
Georgia	5.21	6.76	4.03	5.69	7.25	4.47	3.63	4.87	2.73
Atlanta	4.87	6.48	3.70	5.38	7.12	4.07	3.78	4.99	2.89
Rural Georgia	5.30	6.64	3.99	6.26	7.19	5.21	-	-	-
Greater Georgia	5.34	6.86	4.17	5.79	7.29	4.60	3.51	4.76	2.61
Hawaii	4.42	5.66	3.35	5.26	6.21	4.01	-	-	-
Idaho	6.36	7.72	5.18	6.45	7.83	5.24	-	-	-
Iowa	6.24	8.26	4.68	6.29	8.31	4.71	-	-	-
Kentucky	6.23	8.55	4.47	6.35	8.71	4.57	3.98	5.82	2.64
Louisiana	5.86	7.92	4.28	6.32	8.43	4.67	4.41	6.10	3.17
Massachusetts	5.28	6.74	4.20	5.45	6.99	4.31	3.48	3.98	3.11
New Jersey	5.37	7.15	4.10	5.72	7.67	4.28	3.98	4.89	3.39
New Mexico	4.67	5.78	3.75	4.73	5.90	3.76	-	-	-
New York	5.32	7.00	4.09	5.75	7.51	4.41	3.88	5.15	3.07
Seattle-Puget Sound	5.71	7.44	4.40	5.91	7.65	4.58	4.57	5.02	3.96
Utah	5.35	6.84	4.11	5.45	6.95	4.19	-	-	-
SEER 9 Areas ^b	5.40	7.01	4.17	5.74	7.41	4.43	3.95	4.98	3.16
SEER 13 Areas ^b	5.37	6.92	4.19	5.76	7.38	4.49	4.03	5.12	3.22
SEER 18 Areas ^b	5.43	7.05	4.19	5.77	7.48	4.44	4.01	5.12	3.18
SEER 21 Areas ^b	5.41	7.03	4.18	5.75	7.45	4.44	3.94	5.09	3.13
Total U.S.	5.50	7.13	4.25	5.74	7.41	4.43	4.03	5.19	3.21

^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.

The SEER 21 areas comprise the SEER 18 areas plus Idaho, New York and Massachusetts.

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

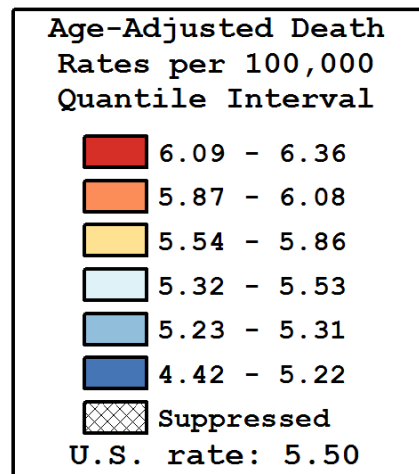
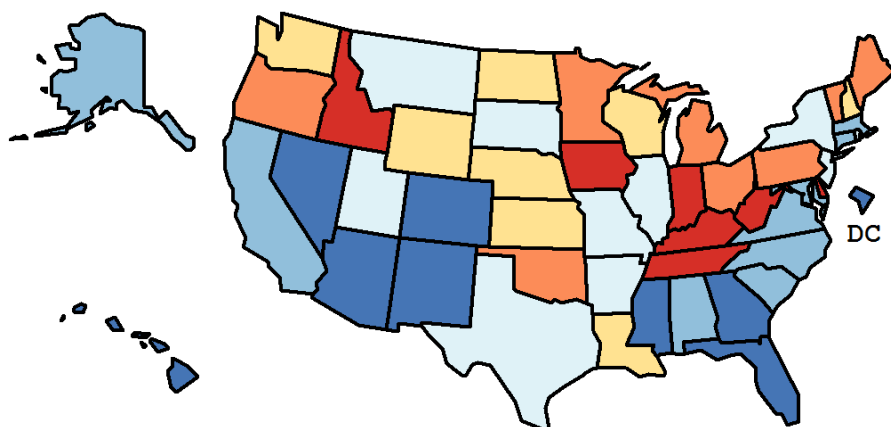
Table 19.22
Non-Hodgkin Lymphoma

Age-Adjusted Cancer Death^a Rates By State, All Races, 2013-2017

Males and Females

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	5.50	0.02		
High Five States				
Idaho	6.36	0.27	01(01,23)	15.69 ^c
Indiana	6.28	0.13	02(01,16)	14.19
Iowa	6.24	0.18	03(01,21)	13.52
Delaware	6.23	0.33	04(01,37)	13.32
Kentucky	6.23	0.16	05(01,20)	13.20
Low Five States				
Arizona	4.94	0.11	47(35,50)	-10.24
Colorado	4.70	0.14	48(43,51)	-14.50
New Mexico	4.67	0.20	49(35,51)	-15.05 ^c
D.C.	4.47	0.39	50(21,51)	-18.76 ^c
Hawaii	4.42	0.22	51(43,51)	-19.66 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	5.25	0.14	40(21,48)	-4.56	Montana	5.49	0.29	26(02,49)	-0.17
Alaska	5.25	0.46	39(01,51)	-4.46	Nebraska	5.77	0.23	19(01,45)	4.83
Arizona	4.94	0.11	47(35,50)	-10.24	Nevada	5.09	0.19	46(21,50)	-7.47
Arkansas	5.41	0.18	28(13,47)	-1.61	New Hampshire	5.56	0.26	22(02,48)	1.11
California	5.26	0.05	37(27,45)	-4.32	New Jersey	5.37	0.10	29(20,45)	-2.30
Colorado	4.70	0.14	48(43,51)	-14.50	New Mexico	4.67	0.20	49(35,51)	-15.05 ^c
Connecticut	5.31	0.16	34(18,47)	-3.52	New York	5.32	0.07	33(23,44)	-3.18
Delaware	6.23	0.33	04(01,37)	13.32	North Carolina	5.24	0.10	41(23,47)	-4.66
D.C.	4.47	0.39	50(21,51)	-18.76 ^c	North Dakota	5.54	0.36	23(01,50)	0.72
Florida	5.22	0.06	43(27,46)	-5.02	Ohio	6.05	0.09	11(02,20)	10.00
Georgia	5.21	0.10	44(24,48)	-5.35	Oklahoma	6.08	0.17	08(01,24)	10.56
Hawaii	4.42	0.22	51(43,51)	-19.66 ^c	Oregon	5.89	0.16	15(02,28)	7.10
Idaho	6.36	0.27	01(01,23)	15.69 ^c	Pennsylvania	5.92	0.08	14(05,23)	7.59
Illinois	5.53	0.09	24(16,38)	0.61	Rhode Island	5.36	0.29	30(04,50)	-2.48
Indiana	6.28	0.13	02(01,16)	14.19	South Carolina	5.26	0.14	38(20,48)	-4.45
Iowa	6.24	0.18	03(01,21)	13.52	South Dakota	5.44	0.33	27(01,50)	-1.11
Kansas	5.70	0.19	20(04,44)	3.60	Tennessee	6.13	0.13	06(01,20)	11.44
Kentucky	6.23	0.16	05(01,20)	13.20	Texas	5.33	0.07	32(23,44)	-3.11
Louisiana	5.86	0.16	16(03,30)	6.48	Utah	5.35	0.21	31(11,49)	-2.67
Maine	6.06	0.26	10(01,36)	10.26	Vermont	5.93	0.39	13(01,48)	7.88
Maryland	5.24	0.13	42(21,48)	-4.78	Virginia	5.27	0.11	36(22,47)	-4.24
Massachusetts	5.28	0.12	35(21,47)	-4.04	Washington	5.80	0.12	18(05,28)	5.52
Michigan	6.07	0.10	09(02,20)	10.41	West Virginia	6.09	0.22	07(01,28)	10.69
Minnesota	6.02	0.14	12(01,24)	9.38	Wisconsin	5.82	0.13	17(05,29)	5.76
Mississippi	5.15	0.18	45(20,49)	-6.29	Wyoming	5.66	0.43	21(01,50)	2.86
Missouri	5.53	0.12	25(14,42)	0.54					



^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.

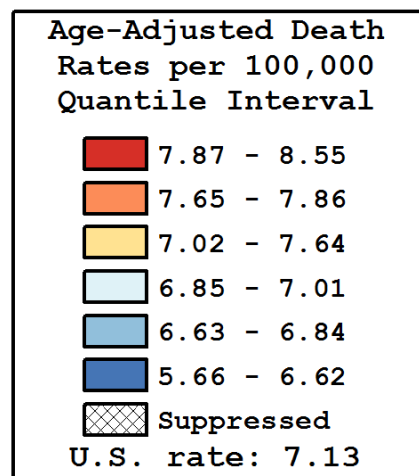
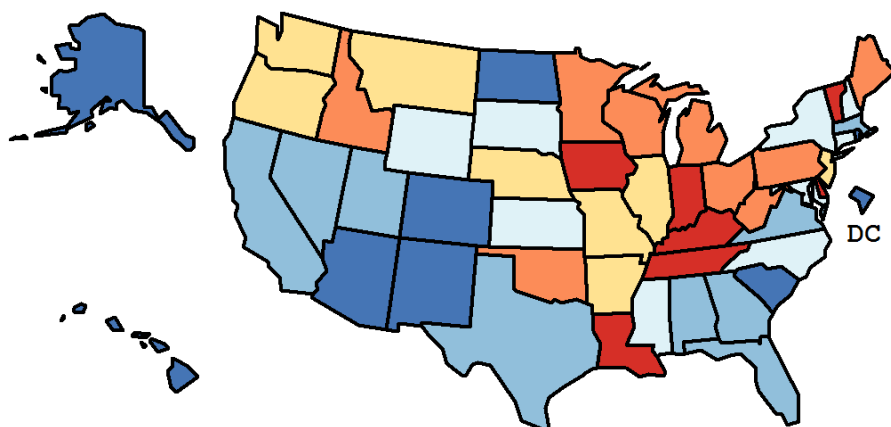
Table 19.23
Non-Hodgkin Lymphoma

Age-Adjusted Cancer Death^a Rates By State, All Races, 2013-2017

Males

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	7.13	0.03		
High Five States				
Kentucky	8.55	0.29	01(01,14)	20.00 ^c
Delaware	8.52	0.59	02(01,35)	19.48 ^c
Indiana	8.41	0.23	03(01,14)	17.98 ^c
Iowa	8.26	0.32	04(01,22)	15.95 ^c
Tennessee	8.03	0.23	05(01,22)	12.62
Low Five States				
Alaska	6.31	0.74	47(02,51)	-11.52
Arizona	6.18	0.18	48(36,51)	-13.37
D.C.	5.92	0.69	49(06,51)	-16.98 ^c
New Mexico	5.78	0.33	50(33,51)	-18.86 ^c
Hawaii	5.66	0.38	51(34,51)	-20.58 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	6.84	0.24	34(15,48)	-4.02	Montana	7.15	0.50	22(02,50)	0.35
Alaska	6.31	0.74	47(02,51)	-11.52	Nebraska	7.44	0.40	19(01,47)	4.41
Arizona	6.18	0.18	48(36,51)	-13.37	Nevada	6.79	0.32	38(11,50)	-4.68
Arkansas	7.04	0.31	24(08,48)	-1.28	New Hampshire	6.95	0.45	31(03,51)	-2.44
California	6.73	0.09	41(27,46)	-5.55	New Jersey	7.15	0.18	23(13,42)	0.24
Colorado	6.37	0.24	46(25,51)	-10.57	New Mexico	5.78	0.33	50(33,51)	-18.86 ^c
Connecticut	6.99	0.28	27(10,48)	-2.00	New York	7.00	0.12	26(18,42)	-1.78
Delaware	8.52	0.59	02(01,35)	19.48 ^c	North Carolina	6.94	0.17	32(17,45)	-2.60
D.C.	5.92	0.69	49(06,51)	-16.98 ^c	North Dakota	6.62	0.60	43(03,51)	-7.16
Florida	6.64	0.10	42(28,47)	-6.82	Ohio	7.86	0.16	09(03,21)	10.29
Georgia	6.76	0.19	39(20,48)	-5.17	Oklahoma	7.86	0.29	08(01,31)	10.30
Hawaii	5.66	0.38	51(34,51)	-20.58 ^c	Oregon	7.49	0.27	18(03,39)	5.01
Idaho	7.72	0.44	14(01,45)	8.23	Pennsylvania	7.73	0.15	12(04,24)	8.41
Illinois	7.23	0.16	21(12,38)	1.39	Rhode Island	6.56	0.49	45(07,51)	-8.00
Indiana	8.41	0.23	03(01,14)	17.98 ^c	South Carolina	6.56	0.24	44(20,50)	-7.98
Iowa	8.26	0.32	04(01,22)	15.95 ^c	South Dakota	6.97	0.56	29(02,51)	-2.16
Kansas	6.98	0.31	28(08,49)	-2.11	Tennessee	8.03	0.23	05(01,22)	12.62
Kentucky	8.55	0.29	01(01,14)	20.00 ^c	Texas	6.84	0.11	36(22,45)	-4.08
Louisiana	7.92	0.28	07(01,28)	11.07	Utah	6.84	0.36	35(08,50)	-4.08
Maine	7.69	0.45	15(01,45)	7.95	Vermont	7.92	0.69	06(01,49)	11.16
Maryland	6.88	0.23	33(15,47)	-3.50	Virginia	6.84	0.19	37(18,47)	-4.11
Massachusetts	6.74	0.20	40(19,48)	-5.42	Washington	7.64	0.22	17(03,30)	7.16
Michigan	7.79	0.18	11(03,23)	9.24	West Virginia	7.72	0.38	13(01,41)	8.29
Minnesota	7.81	0.24	10(02,26)	9.62	Wisconsin	7.66	0.23	16(03,30)	7.48
Mississippi	6.96	0.33	30(08,49)	-2.36	Wyoming	7.01	0.71	25(01,51)	-1.67
Missouri	7.28	0.22	20(08,41)	2.18					



^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.

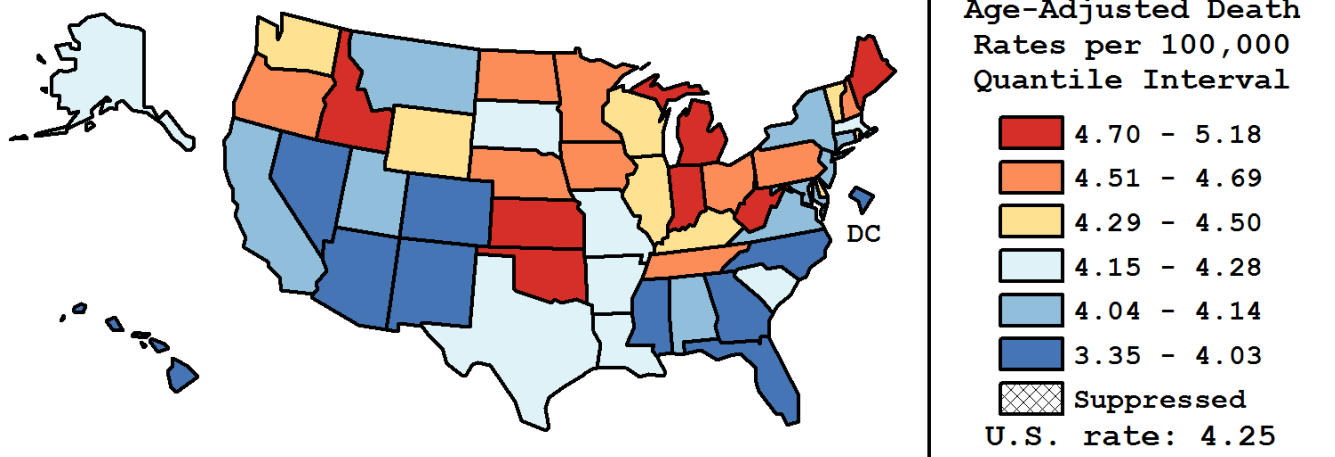
Table 19.24
Non-Hodgkin Lymphoma

Age-Adjusted Cancer Death^a Rates By State, All Races, 2013-2017

Females

State	Rate	SE	Rank(CI) ^d	PD
TOTAL U.S.	4.25	0.02		
High Five States				
Idaho	5.18	0.33	01(01,31)	21.91 ^c
Maine	4.82	0.31	02(01,43)	13.47
West Virginia	4.80	0.27	03(01,40)	12.91
Michigan	4.79	0.12	04(01,21)	12.68
Oklahoma	4.71	0.20	05(01,32)	10.89
Low Five States				
New Mexico	3.75	0.24	47(17,51)	-11.82
Nevada	3.54	0.21	48(29,51)	-16.64 ^c
D.C.	3.43	0.45	49(04,51)	-19.21 ^c
Colorado	3.37	0.15	50(45,51)	-20.62 ^c
Hawaii	3.35	0.26	51(28,51)	-21.11 ^c

State	Rate	SE	Rank(CI) ^d	PD	State	Rate	SE	Rank(CI) ^d	PD
Alabama	4.09	0.16	39(13,49)	-3.83	Montana	4.14	0.35	33(01,51)	-2.59
Alaska	4.20	0.57	29(01,51)	-1.11	Nebraska	4.51	0.28	16(01,47)	6.25
Arizona	3.88	0.13	46(25,50)	-8.78	Nevada	3.54	0.21	48(29,51)	-16.64 ^c
Arkansas	4.18	0.21	31(05,48)	-1.53	New Hampshire	4.54	0.32	15(01,48)	6.86
California	4.13	0.06	34(21,44)	-2.78	New Jersey	4.10	0.12	37(17,47)	-3.60
Colorado	3.37	0.15	50(45,51)	-20.62 ^c	New Mexico	3.75	0.24	47(17,51)	-11.82
Connecticut	4.06	0.18	40(12,49)	-4.31	New York	4.09	0.08	38(21,46)	-3.71
Delaware	4.44	0.37	19(01,50)	4.56	North Carolina	4.02	0.11	44(21,48)	-5.29
D.C.	3.43	0.45	49(04,51)	-19.21 ^c	North Dakota	4.69	0.44	08(01,49)	10.45
Florida	4.03	0.07	42(25,46)	-5.04	Ohio	4.69	0.11	09(02,23)	10.40
Georgia	4.03	0.12	43(19,48)	-5.06	Oklahoma	4.71	0.20	05(01,32)	10.89
Hawaii	3.35	0.26	51(28,51)	-21.11 ^c	Oregon	4.59	0.19	13(01,38)	8.07
Idaho	5.18	0.33	01(01,31)	21.91 ^c	Pennsylvania	4.56	0.10	14(03,27)	7.44
Illinois	4.29	0.10	24(13,41)	0.90	Rhode Island	4.41	0.34	22(01,50)	3.79
Indiana	4.70	0.15	07(01,27)	10.63	South Carolina	4.25	0.16	26(07,47)	0.13
Iowa	4.68	0.21	11(01,36)	10.06	South Dakota	4.25	0.39	27(01,51)	0.02
Kansas	4.71	0.23	06(01,39)	10.89	Tennessee	4.68	0.15	10(01,27)	10.10
Kentucky	4.47	0.18	18(02,43)	5.19	Texas	4.15	0.08	32(20,45)	-2.32
Louisiana	4.28	0.18	25(05,46)	0.82	Utah	4.11	0.25	35(04,50)	-3.20
Maine	4.82	0.31	02(01,43)	13.47	Vermont	4.50	0.47	17(01,51)	6.01
Maryland	4.04	0.15	41(17,48)	-4.96	Virginia	4.11	0.13	36(15,47)	-3.32
Massachusetts	4.20	0.14	28(12,46)	-1.04	Washington	4.37	0.14	23(06,43)	2.77
Michigan	4.79	0.12	04(01,21)	12.68	West Virginia	4.80	0.27	03(01,40)	12.91
Minnesota	4.61	0.16	12(01,34)	8.47	Wisconsin	4.43	0.15	20(03,41)	4.35
Mississippi	3.93	0.21	45(14,51)	-7.51	Wyoming	4.43	0.51	21(01,51)	4.30
Missouri	4.20	0.14	30(12,46)	-1.17					



^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 19.25
Non-Hodgkin LymphomaEstimated United States Cancer Prevalence Counts^a on January 1, 2017
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 ^b		> 25 ^d	Complete ^e
Race	Sex									
All Races	Both Sexes	255,823	180,652	122,549	73,159	40,797	672,980		46,851	719,831
	Males	138,660	96,777	62,677	38,089	21,280	357,483		23,952	381,435
	Females	117,164	83,875	59,872	35,070	19,517	315,497		22,899	338,396
White	Both Sexes	219,695	156,580	106,707	64,191	35,524	582,697		45,797	628,494
	Males	119,527	84,275	54,837	33,535	18,538	310,710		24,602	335,312
	Females	100,168	72,306	51,870	30,657	16,986	271,987		21,195	293,182
Black	Both Sexes	21,278	14,055	10,085	5,507	3,114	54,040		3,920	57,960
	Males	11,105	7,321	4,958	2,762	1,599	27,745		1,806	29,551
	Females	10,173	6,734	5,127	2,745	1,516	26,295		2,113	28,409
Asian/ Pacific Islander	Both Sexes	8,776	5,679	3,458	2,114	1,097	21,124		+	+
	Males	4,767	2,942	1,743	1,155	555	11,162		+	+
	Females	4,009	2,737	1,715	959	543	9,962		+	+
Hispanic	Both Sexes	22,714	15,150	8,884	5,187	2,848	54,782		+	+
	Males	11,516	7,891	4,598	2,748	1,541	28,293		+	+
	Females	11,198	7,259	4,286	2,439	1,307	26,489		+	+

Estimated prevalence percent^a on January 1, 2017, of the SEER population diagnosed in the previous 25 years
By Age at Prevalence, Race/Ethnicity and Sex

Age at Prevalence		Age Specific (Crude)										Age-Adjusted ^c
		All Ages	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	80+	All Ages
Race	Sex											
All Races	Both Sexes	0.2076	0.0038	0.0141	0.0284	0.0550	0.1145	0.2415	0.4719	0.8396	1.0538	0.1779
	Males	0.2240	0.0049	0.0188	0.0352	0.0644	0.1325	0.2773	0.5334	0.9656	1.2775	0.2072
	Females	0.1918	0.0026	0.0093	0.0213	0.0456	0.0969	0.2072	0.4162	0.7341	0.9144	0.1532
White	Both Sexes	0.2303	0.0037	0.0145	0.0286	0.0552	0.1170	0.2488	0.4952	0.8825	1.1108	0.1852
	Males	0.2478	0.0051	0.0195	0.0350	0.0651	0.1346	0.2853	0.5554	1.0073	1.3491	0.2149
	Females	0.2131	0.0024	0.0093	0.0217	0.0449	0.0992	0.2132	0.4395	0.7758	0.9597	0.1597
Black	Both Sexes	0.1186	0.0035	0.0117	0.0283	0.0576	0.1067	0.2090	0.3395	0.5280	0.5535	0.1288
	Males	0.1269	0.0039	0.0142	0.0376	0.0651	0.1285	0.2420	0.3946	0.6277	0.5786	0.1493
	Females	0.1110	0.0030	0.0091	0.0189	0.0507	0.0873	0.1803	0.2955	0.4583	0.5410	0.1122
Asian/ Pacific Islander	Both Sexes	0.1013	0.0039	0.0131	0.0214	0.0381	0.0705	0.1448	0.2785	0.4655	0.6095	0.1063
	Males	0.1116	0.0049	0.0171	0.0241	0.0434	0.0772	0.1715	0.3210	0.5661	0.7538	0.1261
	Females	0.0918	0.0028	0.0090	0.0187	0.0333	0.0645	0.1217	0.2442	0.3850	0.5155	0.0905
Hispanic	Both Sexes	0.0942	0.0028	0.0124	0.0209	0.0411	0.0861	0.1906	0.3754	0.6108	0.7555	0.1347
	Males	0.0963	0.0034	0.0149	0.0256	0.0477	0.0967	0.2065	0.4086	0.6404	0.8419	0.1475
	Females	0.0921	0.0022	0.0097	0.0158	0.0338	0.0753	0.1749	0.3460	0.5880	0.7018	0.1237

^a US 2017 cancer prevalence counts are based on 2017 cancer prevalence proportions from the SEER 13 Areas (excluding the Alaska Native Registry) and 1/1/2017 US population estimates based on the average of 2016 and 2017 population estimates from the US Bureau of the Census.

^b Prevalence was calculated using the first invasive tumor for each cancer site diagnosed during the previous 25 years. Maximum limited-duration prevalence is 25 years for 1992-2017 data.

^c Percentages are age-adjusted to the 2000 US Standard Population (19 age groups - Census P25-1130) by 5-year age groups.

^d Cases diagnosed more than 25 years ago were estimated using the completeness index method (Capocaccia et. al. 1997, Merrill et. al. 2000).

^e Complete prevalence is obtained by summing <=25 and > 25.

- 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, 2008-2017

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	37.3	462,841	-0.6*	6.2	18,828	0.3	24.8	192,178	-0.5*	166.5	251,835	-0.7*
1 Hodgkin Lymphoma	2.7	32,038	-1.6*	1.3	3,908	-0.5	3.2	22,321	-1.5*	3.8	5,809	-2.7*
2 Non-Hodgkin lymphoma	33.8	420,388	-0.4	4.8	14,658	0.4	21.1	166,410	-0.3*	158.3	239,320	-0.5
2(a) Non-Hodgkin lymphoma, B-cell	31.3	390,607	-0.3	3.9	11,919	1.0	19.1	151,415	-0.2	150.4	227,273	-0.4
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	1.5	17,046	1.5	3.1	9,469	0.6	0.8	5,414	3.1*	1.4	2,163	2.2
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	28.1	352,894	-0.5*	0.8	2,302	2.7*	17.5	139,407	-0.5*	139.8	211,185	-0.5*
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	6.9	87,929	-1.4*	0.0	34	3.5	3.6	29,822	-0.9*	38.3	58,073	-1.7*
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	6.1	77,018	-1.5*	0.0	28	-	3.1	25,930	-0.9*	33.7	51,060	-1.8*
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	0.0	316	0.5	-	-	-	0.0	73	-1.6	0.2	237	0.8
2(a) 2.1.3. Mantle-cell lymphoma	0.8	10,595	-0.5	-	-	-	0.5	3,819	-0.8	4.5	6,776	-0.3
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	0.7	9,038	1.1*	-	-	-	0.3	2,617	-0.4	4.3	6,419	1.7*
2(a) 2.2.1. Lymphoplasmacytic lymphoma	0.3	3,758	0.7	-	-	-	0.1	1,115	-0.1	1.8	2,641	1.0
2(a) 2.2.2. Waldenstrom macroglobulinemia	0.4	5,280	1.4*	-	-	-	0.2	1,502	-0.7	2.5	3,778	2.1*
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	7.2	89,099	0.0	0.3	920	1.9	4.8	36,736	-0.4	34.2	51,443	0.2
2(a) 2.3.1. DLBCL, NOS ^c	7.1	87,686	-0.2	0.3	847	0.4	4.6	35,635	-0.7	34.0	51,204	0.2
2(a) 2.3.2. Intravascular large B-cell lymphoma	0.0	169	5.5*	-	-	-	0.0	63	3.6	0.1	106	5.8
2(a) 2.3.3. Primary effusion lymphoma	0.0	189	5.1*	-	-	-	0.0	126	1.1	0.0	63	12.6*
2(a) 2.3.4. Mediastinal large B-cell lymphoma	0.1	1,055	9.5*	0.0	73	20.7*	0.1	912	8.9*	0.0	70	4.0*
2(a) 2.4. Burkitt lymphoma/leukemia	0.4	4,662	-2.4*	0.4	1,061	3.2*	0.4	2,563	-4.3*	0.7	1,038	-4.3*
2(a) 2.5. Marginal-zone lymphoma (MZL)	2.2	27,143	-0.3	0.0	139	-0.3	1.4	11,206	0.1	10.5	15,798	-0.6
2(a) 2.5.1. Splenic MZL	0.2	2,524	0.9	-	-	-	0.1	909	-0.4	1.1	1,615	1.5
2(a) 2.5.2. Extranodal MZL, MALT ^c type	1.3	16,309	0.5	0.0	94	-2.5	0.9	7,214	0.7	5.9	9,001	0.3
2(a) 2.5.3. Nodal MZL	0.7	8,310	-2.2*	0.0	45	2.3	0.4	3,083	-1.2	3.4	5,182	-2.8*
2(a) 2.6. Follicular lymphoma	3.5	43,697	-1.9*	0.0	123	8.6	2.8	21,614	-2.1*	14.5	21,960	-1.8*
2(a) 2.7. Hairy-cell leukemia	0.3	3,752	-1.1	-	-	-	0.3	2,310	-1.1	0.9	1,442	-1.2
2(a) 2.8. Plasma cell neoplasms	6.9	87,527	0.6*	0.0	22	-	4.0	32,515	1.1*	36.4	54,990	0.4
2(a) 2.8.1. Plasmacytoma	0.4	4,943	-1.3*	-	-	-	0.3	2,362	-1.1	1.7	2,566	-1.4
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	6.5	82,584	0.7*	-	-	-	3.7	30,153	1.3*	34.7	52,424	0.5
2(a) 2.9. Heavy chain disease	0.0	47	-10.1	-	-	-	0.0	24	-	0.0	22	-5.8
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS ^c	1.7	20,667	1.6	0.0	148	-0.2	0.8	6,594	2.0	9.2	13,925	1.4

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 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

^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, 2008-2017

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	2.3	27,927	-0.2	0.8	2,515	1.3	1.9	14,258	0.2	7.4	11,154	-1.0*
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	0.0	443	-40.8*	0.1	201	-	0.0	199	-37.1*	0.0	43	-
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	2.3	27,426	0.6	0.8	2,314	5.2*	1.9	14,026	0.8	7.3	11,086	-0.8
2(b) 2.1. Mycosis fungoides/Sezary syndrome	0.6	7,364	1.8*	0.1	230	9.3*	0.6	4,305	2.4*	1.9	2,829	0.3
2(b) 2.1.1. Mycosis fungoides	0.6	7,106	1.7*	0.1	230	9.3*	0.6	4,207	2.3*	1.7	2,669	0.1
2(b) 2.1.2. Sezary syndrome	0.0	258	4.2*	-	-	-	0.0	98	5.7	0.1	160	3.3
2(b) 2.2. Peripheral T-cell lymphoma	1.2	14,730	-1.3*	0.2	527	-1.5	1.0	7,213	-1.0	4.6	6,990	-1.5*
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS ^c	0.4	5,521	-0.6	0.0	89	-0.2	0.3	2,519	-0.5	1.9	2,913	-0.7
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	0.2	1,984	-0.7	-	-	-	0.1	738	0.7	0.8	1,244	-1.4
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	0.0	179	2.2	0.0	32	1.6	0.0	108	0.5	0.0	39	7.4
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	0.2	2,493	-3.5*	0.1	286	-1.9	0.2	1,434	-3.8*	0.5	773	-3.5
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	0.0	159	8.5*	-	-	-	0.0	114	12.5*	0.0	30	-
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	0.0	184	2.1	-	-	-	0.0	79	1.0	0.1	104	2.0
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS ^c	0.2	3,004	-1.1	0.0	58	-5.0	0.2	1,596	0.0	0.9	1,350	-2.1
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	0.1	1,206	-3.6*	0.0	44	-	0.1	625	-4.2*	0.4	537	-3.4*
2(b) 2.3. Adult T-cell leukemia/lymphoma	0.3	3,680	6.4*	0.5	1,526	7.1*	0.2	1,583	6.3	0.4	571	4.2*
2(b) 2.4. NK ^c /T-cell lymphoma, nasal-type/aggressive NK ^c -cell leukemia	0.1	1,002	-1.6	0.0	26	-	0.1	672	-1.1	0.2	304	-2.6
2(b) 2.5. T-cell large granular lymphocytic leukemia	0.0	91	-	-	-	-	0.0	42	-	0.0	49	-
2(b) 2.6. Prolymphocytic leukemia, T-cell	0.0	559	2.5*	-	-	-	0.0	211	-1.2	0.2	343	4.4*
2(b) 3. Non-Hodgkin lymphoma, NOS ^c , T-cell	0.0	58	-28.6*	-	-	-	0.0	33	-	0.0	25	-
2(c) Non-Hodgkin lymphoma, unknown lineage	0.2	1,854	-25.7*	0.1	224	-	0.1	737	-20.1*	0.6	893	-26.5*
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	0.1	602	-27.1*	0.1	219	-	0.0	186	-25.8*	0.1	197	-14.4*
2(c) 2. Prolymphocytic leukemia, unknown lineage	0.0	78	-13.1*	-	-	-	0.0	20	-	0.0	58	-12.1
2(c) 3. Non-Hodgkin lymphoma, NOS ^c , unknown lineage	0.1	1,174	-25.5*	-	-	-	0.1	531	-18.3*	0.4	638	-30.7*
2(*) 1. Total precursor lymphoma/leukemia ^d	1.6	18,091	-0.5	3.3	9,889	-1.2*	0.8	5,799	0.6	1.6	2,403	0.3
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	0.1	922	24.4*	0.0	23	-	0.1	406	20.9*	0.3	493	27.0*
4 Lymphoid neoplasm, NOS ^c	0.8	9,493	-5.7*	0.1	239	8.9*	0.4	3,041	-5.2*	4.0	6,213	-6.5*

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 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

^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, 2008-2017

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	46.2	258,947	-0.6*	7.0	10,934	0.4	29.4	111,596	-0.7*	213.2	136,417	-0.6
1 Hodgkin Lymphoma	3.1	17,536	-1.7*	1.3	2,081	-0.5	3.6	12,370	-1.6*	4.7	3,085	-3.0*
2 Non-Hodgkin lymphoma	42.1	235,884	-0.4	5.6	8,696	0.4	25.3	97,214	-0.5*	203.1	129,974	-0.5
2(a) Non-Hodgkin lymphoma, B-cell	39.0	218,219	-0.3	4.4	6,849	0.9	22.8	88,309	-0.4*	192.4	123,061	-0.3
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	1.7	9,256	1.7*	3.3	5,169	0.6	0.9	3,012	3.8*	1.6	1,075	2.0
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	35.3	197,946	-0.5*	1.0	1,577	2.0*	21.0	81,482	-0.7*	179.5	114,887	-0.5
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	9.6	53,797	-1.7*	0.0	19	-	4.8	19,351	-1.1*	53.9	34,427	-1.9*
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	8.2	46,115	-1.8*	0.0	17	-	4.1	16,457	-1.1*	46.4	29,641	-2.1*
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	0.0	191	-2.8	-	-	-	0.0	45	-8.3	0.2	144	-1.8
2(a) 2.1.3. Mantle-cell lymphoma	1.3	7,491	-0.9	-	-	-	0.7	2,849	-0.8	7.2	4,642	-0.9
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	1.0	5,315	1.6*	-	-	-	0.4	1,551	-0.7	5.9	3,764	2.3*
2(a) 2.2.1. Lymphoplasmacytic lymphoma	0.4	2,133	1.3	-	-	-	0.2	625	0.7	2.4	1,508	1.5
2(a) 2.2.2. Waldenstrom macroglobulinemia	0.6	3,182	1.7*	-	-	-	0.2	926	-1.6	3.6	2,256	2.8*
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	8.9	49,192	0.1	0.4	556	2.1	5.8	21,859	-0.8	42.2	26,777	0.6
2(a) 2.3.1. DLBCL, NOS ^c	8.7	48,537	0.0	0.3	514	0.3	5.7	21,369	-1.0	42.0	26,654	0.6
2(a) 2.3.2. Intravascular large B-cell lymphoma	0.0	74	7.1*	-	-	-	0.0	30	4.6	0.1	44	7.1
2(a) 2.3.3. Primary effusion lymphoma	0.0	172	4.6	-	-	-	0.0	122	0.9	0.1	50	11.9
2(a) 2.3.4. Mediastinal large B-cell lymphoma	0.1	409	12.2*	0.0	42	-	0.1	338	11.2*	0.0	29	0.0
2(a) 2.4. Burkitt lymphoma/leukemia	0.6	3,374	-2.8*	0.5	786	1.6	0.6	1,936	-4.7*	1.0	652	-3.1
2(a) 2.5. Marginal-zone lymphoma (MZL)	2.3	12,661	-0.5	0.1	100	-4.2	1.3	5,220	-0.5	11.5	7,341	-0.4
2(a) 2.5.1. Splenic MZL	0.2	1,217	1.4	-	-	-	0.1	441	1.4	1.2	776	1.5
2(a) 2.5.2. Extranodal MZL, MALT ^c type	1.3	7,426	0.4	0.0	65	-5.0	0.9	3,269	0.1	6.4	4,092	0.6
2(a) 2.5.3. Nodal MZL	0.7	4,018	-2.7*	0.0	35	-4.0	0.4	1,510	-2.4*	3.9	2,473	-2.9*
2(a) 2.6. Follicular lymphoma	3.8	21,902	-1.6*	0.1	107	8.2	2.9	11,149	-2.2*	16.3	10,646	-1.3*
2(a) 2.7. Hairy-cell leukemia	0.5	2,993	-1.5*	-	-	-	0.5	1,895	-1.4*	1.7	1,098	-1.7
2(a) 2.8. Plasma cell neoplasms	8.7	48,689	0.6	-	-	-	4.7	18,508	1.1*	47.0	30,173	0.3
2(a) 2.8.1. Plasmacytoma	0.5	3,054	-1.2	-	-	-	0.4	1,506	-1.2	2.4	1,544	-1.1
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	8.1	45,635	0.7	-	-	-	4.3	17,002	1.3*	44.7	28,629	0.4
2(a) 2.9. Heavy chain disease	0.0	23	-	-	-	-	-	-	-	-	-	-
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS ^c	2.0	11,017	1.7	0.1	103	-2.8	1.0	3,815	2.1	11.3	7,099	1.6

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 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

^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, 2008-2017

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	2.9	16,534	-0.5	1.1	1,729	1.2	2.3	8,403	-0.4	9.9	6,402	-1.1
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	0.1	313	-40.2*	0.1	144	-	0.0	139	-38.0*	0.0	30	-
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	2.9	16,186	0.3	1.0	1,585	5.4*	2.3	8,244	0.3	9.8	6,357	-0.8
2(b) 2.1. Mycosis fungoides/Sezary syndrome	0.7	4,177	1.4	0.1	141	8.7	0.7	2,366	1.6	2.5	1,670	0.6
2(b) 2.1.1. Mycosis fungoides	0.7	4,033	1.4	0.1	141	8.7	0.6	2,317	1.7	2.4	1,575	0.5
2(b) 2.1.2. Sezary syndrome	0.0	144	1.6	-	-	-	0.0	49	-0.8	0.2	95	2.5
2(b) 2.2. Peripheral T-cell lymphoma	1.5	8,557	-1.7*	0.2	312	-0.4	1.2	4,272	-1.7	6.2	3,973	-1.8*
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS ^c	0.6	3,248	-1.3	0.0	52	1.5	0.4	1,541	-1.0	2.6	1,655	-1.6
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	0.2	1,070	1.0	-	-	-	0.1	443	2.5	1.0	625	0.2
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	0.0	66	-0.7	-	-	-	0.0	37	-6.5	0.0	16	-
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	0.3	1,528	-4.2*	0.1	180	-1.1	0.2	864	-5.2*	0.8	484	-3.7*
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	0.0	114	6.7	-	-	-	0.0	81	11.0*	0.0	20	-
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	0.0	101	0.2	-	-	-	0.0	43	-0.9	0.1	57	-0.1
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS ^c	0.3	1,723	-1.7	0.0	31	-3.8	0.2	905	-0.9	1.2	787	-2.2
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	0.1	707	-4.1*	0.0	20	-	0.1	358	-4.9*	0.5	329	-3.5*
2(b) 2.3. Adult T-cell leukemia/lymphoma	0.4	2,420	6.6*	0.7	1,112	6.9*	0.3	1,014	6.0	0.5	294	6.5*
2(b) 2.4. NK ^c /T-cell lymphoma, nasal-type/aggressive NK ^c -cell leukemia	0.1	661	-1.8	0.0	17	-	0.1	449	-1.0	0.3	195	-3.0
2(b) 2.5. T-cell large granular lymphocytic leukemia	0.0	45	-	-	-	-	0.0	18	-	0.0	27	-
2(b) 2.6. Prolymphocytic leukemia, T-cell	0.1	326	2.7	-	-	-	0.0	125	-0.5	0.3	198	3.9
2(b) 3. Non-Hodgkin lymphoma, NOS ^c , T-cell	0.0	35	-	-	-	-	0.0	20	-	-	-	-
2(c) Non-Hodgkin lymphoma, unknown lineage	0.2	1,131	-20.2*	0.1	118	-	0.1	502	-15.8*	0.8	511	-20.4*
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	0.1	366	-20.5*	0.1	115	-	0.0	114	-21.6*	0.2	137	-6.4
2(c) 2. Prolymphocytic leukemia, unknown lineage	0.0	44	-10.3	-	-	-	-	-	-	0.1	33	-10.3
2(c) 3. Non-Hodgkin lymphoma, NOS ^c , unknown lineage	0.1	721	-20.5*	-	-	-	0.1	377	-14.2*	0.5	341	-25.6*
2(*) 1. Total precursor lymphoma/leukemia ^d	1.8	9,935	-0.4	3.5	5,428	-1.4	0.9	3,265	0.8	1.9	1,242	0.5
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	0.1	521	23.9*	-	-	-	0.1	247	19.5*	0.4	259	27.0*
4 Lymphoid neoplasm, NOS ^c	0.9	5,006	-6.1*	0.1	142	8.4	0.5	1,765	-5.9*	5.0	3,099	-6.8*

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 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

^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, 2008-2017

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	30.2	203,894	-0.6*	5.3	7,894	0.3	20.4	80,582	-0.2	132.7	115,418	-0.9*
1 Hodgkin Lymphoma	2.4	14,502	-1.5*	1.2	1,827	-0.5	2.9	9,951	-1.5*	3.2	2,724	-2.4*
2 Non-Hodgkin lymphoma	27.1	184,504	-0.4*	4.0	5,962	0.4	17.1	69,196	0.0	125.9	109,346	-0.8*
2(a) Non-Hodgkin lymphoma, B-cell	25.2	172,388	-0.3	3.4	5,070	1.2	15.5	63,106	0.0	120.0	104,212	-0.6*
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	1.4	7,790	1.2	2.9	4,300	0.6	0.7	2,402	2.2	1.3	1,088	2.2
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	22.5	154,948	-0.5*	0.5	725	4.5*	14.2	57,925	-0.2	111.0	96,298	-0.8*
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	4.8	34,132	-1.2*	-	-	-	2.4	10,471	-0.5	27.0	23,646	-1.5*
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	4.4	30,903	-1.4*	-	-	-	2.2	9,473	-0.4	24.4	21,419	-1.8*
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	0.0	125	6.2	-	-	-	0.0	28	-	0.1	93	4.7
2(a) 2.1.3. Mantle-cell lymphoma	0.4	3,104	0.1	-	-	-	0.2	970	-0.9	2.5	2,134	0.6
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	0.5	3,723	0.4	-	-	-	0.2	1,066	0.0	3.1	2,655	0.6
2(a) 2.2.1. Lymphoplasmacytic lymphoma	0.2	1,625	0.0	-	-	-	0.1	490	-0.9	1.3	1,133	0.4
2(a) 2.2.2. Waldenstrom macroglobulinemia	0.3	2,098	0.8	-	-	-	0.1	576	0.7	1.8	1,522	0.8
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	5.9	39,907	-0.2	0.2	364	1.8	3.8	14,877	0.0	28.4	24,666	-0.4
2(a) 2.3.1. DLBCL, NOS ^c	5.7	39,149	-0.4	0.2	333	0.8	3.6	14,266	-0.3	28.3	24,550	-0.5
2(a) 2.3.2. Intravascular large B-cell lymphoma	0.0	95	3.7	-	-	-	0.0	33	2.3	0.1	62	3.9
2(a) 2.3.3. Primary effusion lymphoma	0.0	17	-	-	-	-	-	-	-	-	-	-
2(a) 2.3.4. Mediastinal large B-cell lymphoma	0.1	646	7.8*	0.0	31	10.9	0.2	574	7.6*	0.0	41	7.0
2(a) 2.4. Burkitt lymphoma/leukemia	0.2	1,288	-1.3	0.2	275	8.3*	0.2	627	-3.3*	0.4	386	-6.1*
2(a) 2.5. Marginal-zone lymphoma (MZL)	2.1	14,482	-0.1	0.0	39	10.1*	1.5	5,986	0.7	9.8	8,457	-0.7
2(a) 2.5.1. Splenic MZL	0.2	1,307	0.2	-	-	-	0.1	468	-2.0	1.0	839	1.3
2(a) 2.5.2. Extranodal MZL, MALT ^c type	1.3	8,883	0.6	0.0	29	4.0	1.0	3,945	1.3	5.7	4,909	0.1
2(a) 2.5.3. Nodal MZL	0.6	4,292	-1.7*	-	-	-	0.4	1,573	0.0	3.1	2,709	-2.8*
2(a) 2.6. Follicular lymphoma	3.2	21,795	-2.1*	0.0	16	-	2.6	10,465	-2.0*	13.1	11,314	-2.3*
2(a) 2.7. Hairy-cell leukemia	0.1	759	0.0	-	-	-	0.1	415	0.4	0.4	344	-0.3
2(a) 2.8. Plasma cell neoplasms	5.6	38,838	0.5*	-	-	-	3.3	14,007	1.1*	28.7	24,817	0.2
2(a) 2.8.1. Plasmacytoma	0.3	1,889	-1.4*	-	-	-	0.2	856	-0.9	1.2	1,022	-1.8*
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	5.3	36,949	0.6*	-	-	-	3.1	13,151	1.2*	27.5	23,795	0.3
2(a) 2.9. Heavy chain disease	0.0	24	-	-	-	-	-	-	-	-	-	-
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS ^c	1.4	9,650	1.4	0.0	45	6.8	0.7	2,779	1.9	7.7	6,826	1.1

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 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

^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, 2008-2017

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	1.8	11,393	0.1	0.5	786	1.5	1.6	5,855	1.0	5.5	4,752	-1.4*
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	0.0	130	-	0.0	57	-	0.0	60	-	-	-	-
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	1.7	11,240	0.7	0.5	729	4.8	1.5	5,782	1.5*	5.5	4,729	-1.2
2(b) 2.1. Mycosis fungoides/Sezary syndrome	0.5	3,187	2.2*	0.1	89	11.1*	0.5	1,939	3.4*	1.3	1,159	-0.7
2(b) 2.1.1. Mycosis fungoides	0.5	3,073	2.0*	0.1	89	11.1*	0.5	1,890	3.2*	1.3	1,094	-1.0
2(b) 2.1.2. Sezary syndrome	0.0	114	8.1*	-	-	-	0.0	49	11.5*	0.1	65	3.6
2(b) 2.2. Peripheral T-cell lymphoma	0.9	6,173	-1.0	0.1	215	-2.7	0.8	2,941	-0.1	3.5	3,017	-1.6*
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS ^c	0.3	2,273	0.1	0.0	37	-	0.3	978	0.3	1.4	1,258	0.0
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	0.1	914	-2.9	-	-	-	0.1	295	-2.1	0.7	619	-3.4
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	0.0	113	4.2	0.0	19	0.2	0.0	71	4.2	0.0	23	-
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	0.2	965	-2.4*	0.1	106	-4.2	0.2	570	-1.6	0.3	289	-3.5
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	0.0	45	12.7	-	-	-	0.0	33	-	-	-	-
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	0.0	83	3.9	-	-	-	0.0	36	4.5	0.1	47	3.1
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS ^c	0.2	1,281	-0.6	0.0	27	-	0.2	691	1.2	0.7	563	-2.4
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	0.1	499	-3.3	0.0	24	-	0.1	267	-3.4	0.2	208	-3.9
2(b) 2.3. Adult T-cell leukemia/lymphoma	0.2	1,260	6.1	0.3	414	8.0*	0.2	569	6.6	0.3	277	1.3
2(b) 2.4. NK ^c /T-cell lymphoma, nasal-type/aggressive NK ^c -cell leukemia	0.1	341	-1.8	-	-	-	0.1	223	-3.5	0.1	109	-0.5
2(b) 2.5. T-cell large granular lymphocytic leukemia	0.0	46	-	-	-	-	0.0	24	-	0.0	22	-
2(b) 2.6. Prolymphocytic leukemia, T-cell	0.0	233	2.2	-	-	-	0.0	86	-1.7	0.2	145	4.8
2(b) 3. Non-Hodgkin lymphoma, NOS ^c , T-cell	0.0	23	-	-	-	-	-	-	-	-	-	-
2(c) Non-Hodgkin lymphoma, unknown lineage	0.1	723	-36.3*	0.1	106	-	0.1	235	-30.3*	0.4	382	-36.9*
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	0.0	236	-38.2*	0.1	104	-	0.0	72	-32.3*	0.1	60	-
2(c) 2. Prolymphocytic leukemia, unknown lineage	0.0	34	-	-	-	-	-	-	-	0.0	25	-
2(c) 3. Non-Hodgkin lymphoma, NOS ^c , unknown lineage	0.1	453	-36.2*	-	-	-	0.0	154	-29.8*	0.3	297	-39.0*
2(*) 1. Total precursor lymphoma/leukemia ^d	1.4	8,156	-0.5	3.0	4,461	-1.0	0.7	2,534	0.3	1.3	1,161	0.0
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	0.1	401	25.0*	-	-	-	0.0	159	21.9*	0.3	234	26.2*
4 Lymphoid neoplasm, NOS ^c	0.6	4,487	-5.4*	0.1	97	9.5	0.3	1,276	-4.3*	3.4	3,114	-6.4*

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 21 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, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

^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, 2010-2016

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	
Lymphoid Neoplasm	188,530	72.2 (71.9 , 72.5)	90.7 (90.1 , 91.4)	79.4 (79.0 , 79.7)	62.9 (62.4 , 63.4)			
1 Hodgkin Lymphoma	14,617	87.4 (86.7 , 88.1)	98.0 (97.0 , 98.6)	90.8 (90.1 , 91.5)	59.6 (56.5 , 62.5)			
2 Non-Hodgkin lymphoma	170,050	71.2 (70.9 , 71.5)	89.1 (88.2 , 89.8)	77.9 (77.6 , 78.3)	63.5 (63.0 , 64.0)			
2(a) Non-Hodgkin lymphoma, B-cell	158,270	71.7 (71.3 , 72.0)	89.9 (89.0 , 90.7)	78.7 (78.3 , 79.1)	64.1 (63.5 , 64.6)			
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	8,913	69.0 (67.8 , 70.1)	89.2 (88.2 , 90.2)	43.3 (41.1 , 45.6)	18.2 (14.7 , 22.1)			
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	140,525	72.0 (71.6 , 72.3)	92.8 (91.0 , 94.2)	80.2 (79.8 , 80.5)	64.6 (64.1 , 65.1)			
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	34,014	82.6 (81.9 , 83.3)	94.2 (64.5 , 99.2)	89.5 (88.7 , 90.2)	77.9 (76.8 , 78.9)			
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	29,646	85.7 (84.9 , 86.4)	93.0 (58.5 , 99.0)	92.4 (91.6 , 93.1)	81.1 (80.0 , 82.2)			
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	89	53.9 (38.7 , 66.9)	- (- , -)	60.5 (34.8 , 78.7)	48.9 (30.3 , 65.1)			
2(a) 2.1.3. Mantle-cell lymphoma	4,279	61.9 (59.9 , 63.9)	- (- , -)	71.2 (68.5 , 73.8)	54.9 (51.9 , 57.8)			
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	3,237	84.1 (81.7 , 86.3)	- (- , -)	91.5 (88.7 , 93.6)	80.2 (76.7 , 83.3)			
2(a) 2.2.1. Lymphoplasmacytic lymphoma	1,400	82.6 (78.7 , 85.8)	- (- , -)	86.4 (81.8 , 89.8)	80.1 (74.6 , 84.5)			
2(a) 2.2.2. Waldenstrom macroglobulinemia	1,837	85.4 (81.9 , 88.2)	- (- , -)	94.9 (90.8 , 97.2)	80.4 (75.4 , 84.4)			
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	36,007	63.8 (63.2 , 64.5)	90.6 (87.3 , 93.1)	73.6 (72.8 , 74.4)	54.1 (53.1 , 55.1)			
2(a) 2.3.1. DLBCL, NOS ^c	35,396	63.5 (62.8 , 64.1)	90.9 (87.4 , 93.4)	73.3 (72.5 , 74.0)	54.1 (53.0 , 55.1)			
2(a) 2.3.2. Intravascular large B-cell lymphoma	75	50.2 (37.2 , 61.9)	- (- , -)	56.0 (38.1 , 70.6)	42.6 (24.6 , 59.4)			
2(a) 2.3.3. Primary effusion lymphoma	49	55.0 (39.1 , 68.4)	- (- , -)	53.1 (34.9 , 68.3)	59.1 (26.0 , 81.5)			
2(a) 2.3.4. Mediastinal large B-cell lymphoma	487	89.4 (85.6 , 92.2)	87.8 (70.2 , 95.3)	90.6 (86.7 , 93.4)	64.1 (38.8 , 81.1)			
2(a) 2.4. Burkitt lymphoma/leukemia	2,088	66.1 (63.7 , 68.3)	93.6 (91.0 , 95.5)	61.1 (57.9 , 64.1)	40.9 (34.7 , 47.0)			
2(a) 2.5. Marginal-zone lymphoma (MZL)	10,369	91.1 (90.0 , 92.0)	98.3 (86.3 , 99.8)	94.8 (93.8 , 95.7)	87.4 (85.4 , 89.1)			
2(a) 2.5.1. Splenic MZL	885	86.5 (82.1 , 89.9)	- (- , -)	89.4 (84.1 , 93.0)	84.6 (77.4 , 89.6)			
2(a) 2.5.2. Extranodal MZL, MALT ^c type	6,523	94.7 (93.4 , 95.8)	97.5 (81.3 , 99.7)	96.5 (95.2 , 97.4)	92.5 (89.9 , 94.4)			
2(a) 2.5.3. Nodal MZL	2,961	84.4 (82.1 , 86.4)	100.0 (- , -)	92.1 (89.8 , 94.0)	77.6 (73.8 , 80.9)			
2(a) 2.6. Follicular lymphoma	17,771	89.0 (88.2 , 89.7)	95.4 (82.2 , 98.9)	93.1 (92.3 , 93.8)	83.8 (82.2 , 85.2)			
2(a) 2.7. Hairy-cell leukemia	1,596	94.3 (91.9 , 96.0)	- (- , -)	97.0 (95.7 , 97.9)	86.2 (79.4 , 90.9)			
2(a) 2.8. Plasma cell neoplasms	35,428	53.9 (53.2 , 54.6)	84.9 (51.8 , 96.0)	65.1 (64.1 , 66.1)	45.4 (44.4 , 46.4)			
2(a) 2.8.1. Plasmacytoma	1,974	71.9 (69.0 , 74.6)	90.9 (50.8 , 98.7)	80.0 (76.6 , 82.9)	61.3 (56.1 , 66.1)			
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	33,454	52.8 (52.1 , 53.6)	- (- , -)	63.9 (62.9 , 65.0)	44.7 (43.7 , 45.7)			
2(a) 2.9. Heavy chain disease	15	69.5 (30.6 , 89.4)	100.0 (- , -)	78.6 (8.0 , 97.7)	52.3 (15.1 , 80.1)			
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS ^c	8,832	69.3 (67.9 , 70.6)	91.6 (79.9 , 96.6)	79.2 (77.4 , 80.9)	63.0 (61.0 , 64.9)			

^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, 2010-2016

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	
2(b) Non-Hodgkin lymphoma, T-cell	11,486	66.2 (65.1 , 67.3)	85.3 (83.0 , 87.3)	70.5 (69.2 , 71.8)	52.3 (50.0 , 54.5)			
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	48	62.6 (44.7 , 76.2)	87.5 (58.6 , 96.7)	64.5 (38.3 , 81.8)	0.0 (- , -)			
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	11,432	66.2 (65.1 , 67.3)	85.2 (82.9 , 87.2)	70.6 (69.2 , 71.9)	52.3 (50.1 , 54.5)			
2(b) 2.1. Mycosis fungoides/Sezary syndrome	2,961	90.7 (88.7 , 92.3)	100.0 (- , -)	92.7 (90.7 , 94.2)	85.7 (80.8 , 89.5)			
2(b) 2.1.1. Mycosis fungoides	2,861	92.0 (90.0 , 93.6)	100.0 (- , -)	93.7 (91.8 , 95.2)	87.6 (82.5 , 91.3)			
2(b) 2.1.2. Sezary syndrome	100	48.4 (33.1 , 62.0)	- (- , -)	43.9 (21.9 , 64.0)	51.5 (30.8 , 68.8)			
2(b) 2.2. Peripheral T-cell lymphoma	5,949	58.1 (56.6 , 59.7)	88.3 (83.5 , 91.7)	66.3 (64.4 , 68.1)	43.8 (41.1 , 46.5)			
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS ^c	2,184	40.2 (37.7 , 42.7)	72.5 (55.9 , 83.7)	48.1 (44.7 , 51.4)	30.0 (26.5 , 33.6)			
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	793	38.1 (33.8 , 42.3)	100.0 (- , -)	48.6 (41.9 , 54.9)	30.1 (24.6 , 35.8)			
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	89	85.9 (73.6 , 92.7)	85.1 (50.8 , 96.2)	81.8 (64.9 , 91.1)	93.5 (33.6 , 99.6)			
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	1,061	69.4 (66.0 , 72.5)	91.7 (85.8 , 95.2)	73.9 (69.8 , 77.5)	44.4 (36.1 , 52.4)			
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	69	33.1 (20.2 , 46.6)	75.1 (12.6 , 96.1)	29.4 (15.4 , 45.0)	- (- , -)			
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	75	10.8 (4.4 , 20.6)	0.0 (- , -)	13.2 (3.8 , 28.5)	8.7 (1.8 , 22.8)			
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS ^c	1,186	83.0 (79.4 , 86.0)	96.6 (77.8 , 99.5)	89.3 (85.8 , 92.0)	71.9 (64.3 , 78.2)			
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	492	89.4 (83.9 , 93.1)	90.9 (68.1 , 97.7)	93.8 (88.6 , 96.7)	81.6 (68.4 , 89.7)			
2(b) 2.3. Adult T-cell leukemia/lymphoma	1,852	64.3 (61.8 , 66.8)	82.8 (79.9 , 85.4)	51.6 (47.4 , 55.7)	20.9 (13.5 , 29.4)			
2(b) 2.4. NK ^c /T-cell lymphoma, nasal-type/aggressive NK ^c -cell leukemia	470	43.4 (38.1 , 48.6)	60.0 (31.8 , 79.7)	44.5 (38.2 , 50.5)	37.6 (27.4 , 47.8)			
2(b) 2.5. T-cell large granular lymphocytic leukemia	0	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(b) 2.6. Prolymphocytic leukemia, T-cell	200	15.5 (9.5 , 23.0)	100.0 (- , -)	23.4 (13.3 , 35.1)	6.2 (1.4 , 16.2)			
2(b) 3. Non-Hodgkin lymphoma, NOS ^c , T-cell	6	65.4 (12.8 , 91.6)	- (- , -)	- (- , -)	100.0 (- , -)			
2(c) Non-Hodgkin lymphoma, unknown lineage	294	40.3 (33.3 , 47.1)	73.5 (37.4 , 90.8)	46.7 (37.9 , 55.1)	25.4 (14.7 , 37.6)			
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	87	43.6 (31.2 , 55.4)	79.6 (39.3 , 94.6)	70.3 (47.3 , 84.7)	12.3 (3.6 , 26.8)			
2(c) 2. Prolymphocytic leukemia, unknown lineage	17	36.8 (13.7 , 60.5)	- (- , -)	55.7 (6.2 , 88.4)	27.9 (6.4 , 55.4)			
2(c) 3. Non-Hodgkin lymphoma, NOS ^c , unknown lineage	190	38.9 (29.8 , 47.8)	0.0 (- , -)	40.5 (31.0 , 49.8)	30.8 (11.0 , 53.3)			
2(*) 1. Total precursor lymphoma/leukemia ^d	9,048	68.7 (67.6 , 69.8)	89.2 (88.1 , 90.1)	43.9 (41.6 , 46.1)	17.6 (14.3 , 21.3)			
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	384	74.7 (67.4 , 80.5)	100.0 (- , -)	82.0 (75.2 , 87.2)	59.9 (43.1 , 73.2)			
4 Lymphoid neoplasm, NOS ^c	3,479	52.0 (49.9 , 54.1)	82.3 (74.0 , 88.2)	67.1 (64.2 , 69.8)	39.9 (37.0 , 42.7)			

^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.

^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, 2010-2016

Site	Count	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
		Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)		
Lymphoid Neoplasm	105,719	71.7 (71.3 , 72.1)	90.5 (89.6 , 91.3)	77.6 (77.2 , 78.1)	62.7 (62.0 , 63.4)				
1 Hodgkin Lymphoma	8,122	86.5 (85.5 , 87.4)	97.8 (96.3 , 98.7)	89.5 (88.4 , 90.4)	59.0 (54.8 , 62.9)				
2 Non-Hodgkin lymphoma	95,555	70.8 (70.4 , 71.2)	88.9 (87.8 , 89.9)	76.3 (75.8 , 76.8)	63.3 (62.6 , 64.0)				
2(a) Non-Hodgkin lymphoma, B-cell	88,449	71.3 (70.9 , 71.7)	89.8 (88.6 , 90.9)	77.2 (76.7 , 77.7)	63.9 (63.1 , 64.6)				
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	4,862	68.4 (66.9 , 69.9)	88.6 (87.1 , 89.9)	43.5 (40.6 , 46.5)	15.1 (10.6 , 20.5)				
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	78,883	71.6 (71.2 , 72.1)	93.9 (91.9 , 95.4)	78.6 (78.1 , 79.2)	64.4 (63.6 , 65.1)				
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	20,830	81.6 (80.7 , 82.5)	91.0 (50.5 , 98.7)	88.6 (87.6 , 89.5)	76.2 (74.8 , 77.5)				
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	17,762	85.2 (84.2 , 86.1)	89.0 (43.1 , 98.4)	91.8 (90.8 , 92.7)	80.1 (78.5 , 81.5)				
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	58	53.2 (35.0 , 68.4)	- (- , -)	57.9 (30.8 , 77.6)	50.3 (28.5 , 68.7)				
2(a) 2.1.3. Mantle-cell lymphoma	3,010	61.1 (58.6 , 63.6)	- (- , -)	71.0 (67.8 , 74.0)	52.9 (49.1 , 56.5)				
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	1,913	82.1 (78.6 , 85.0)	- (- , -)	91.7 (87.7 , 94.4)	76.7 (71.7 , 80.9)				
2(a) 2.2.1. Lymphoplasmacytic lymphoma	785	79.8 (74.3 , 84.2)	- (- , -)	85.8 (79.3 , 90.4)	76.0 (68.3 , 82.1)				
2(a) 2.2.2. Waldenstrom macroglobulinemia	1,128	83.7 (79.0 , 87.4)	- (- , -)	95.0 (89.0 , 97.7)	77.1 (70.2 , 82.5)				
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	19,993	63.9 (63.1 , 64.8)	92.6 (88.6 , 95.2)	71.5 (70.4 , 72.5)	54.9 (53.4 , 56.3)				
2(a) 2.3.1. DLBCL, NOS ^c	19,715	63.7 (62.8 , 64.6)	93.3 (89.3 , 95.8)	71.2 (70.2 , 72.3)	54.9 (53.4 , 56.3)				
2(a) 2.3.2. Intravascular large B-cell lymphoma	32	34.5 (16.8 , 52.9)	- (- , -)	45.0 (20.8 , 66.6)	- (- , -)				
2(a) 2.3.3. Primary effusion lymphoma	44	56.4 (39.5 , 70.2)	- (- , -)	51.6 (33.3 , 67.2)	70.7 (25.9 , 91.5)				
2(a) 2.3.4. Mediastinal large B-cell lymphoma	202	88.6 (82.3 , 92.7)	83.9 (57.3 , 94.6)	90.2 (83.4 , 94.3)	67.8 (31.9 , 87.6)				
2(a) 2.4. Burkitt lymphoma/leukemia	1,524	66.9 (64.2 , 69.5)	93.6 (90.7 , 95.6)	60.7 (57.0 , 64.1)	42.2 (34.1 , 50.0)				
2(a) 2.5. Marginal-zone lymphoma (MZL)	4,798	89.6 (87.9 , 91.1)	100.0 (- , -)	93.3 (91.6 , 94.7)	85.6 (82.4 , 88.3)				
2(a) 2.5.1. Splenic MZL	417	81.1 (73.8 , 86.6)	- (- , -)	83.3 (74.2 , 89.5)	78.9 (66.9 , 87.0)				
2(a) 2.5.2. Extranodal MZL, MALT ^c type	2,968	94.1 (91.9 , 95.8)	100.0 (- , -)	96.1 (94.0 , 97.5)	91.8 (87.5 , 94.7)				
2(a) 2.5.3. Nodal MZL	1,413	82.7 (79.2 , 85.6)	100.0 (- , -)	89.1 (85.5 , 91.9)	75.6 (69.7 , 80.6)				
2(a) 2.6. Follicular lymphoma	8,969	89.2 (88.1 , 90.3)	96.8 (78.0 , 99.6)	92.2 (91.1 , 93.2)	85.0 (82.7 , 87.0)				
2(a) 2.7. Hairy-cell leukemia	1,278	94.9 (92.0 , 96.7)	- (- , -)	96.6 (95.0 , 97.6)	88.1 (80.0 , 93.1)				
2(a) 2.8. Plasma cell neoplasms	19,572	53.7 (52.7 , 54.7)	100.0 (- , -)	63.5 (62.1 , 64.8)	45.8 (44.4 , 47.2)				
2(a) 2.8.1. Plasmacytoma	1,195	72.3 (68.4 , 75.7)	100.0 (- , -)	79.0 (74.6 , 82.8)	62.6 (55.5 , 68.9)				
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	18,377	52.5 (51.5 , 53.5)	- (- , -)	62.1 (60.7 , 63.5)	45.0 (43.5 , 46.4)				
2(a) 2.9. Heavy chain disease	6	66.6 (12.1 , 92.4)	100.0 (- , -)	70.6 (3.1 , 96.6)	- (- , -)				
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS ^c	4,704	68.8 (66.9 , 70.7)	90.6 (75.4 , 96.6)	76.4 (74.0 , 78.7)	62.8 (59.9 , 65.6)				

^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, 2010-2016

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	
2(b) Non-Hodgkin lymphoma, T-cell	6,880	65.2 (63.8 , 66.6)	85.3 (82.4 , 87.7)	67.5 (65.7 , 69.2)	52.8 (49.7 , 55.7)			
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	30	67.7 (45.9 , 82.2)	100.0 (- , -)	57.1 (23.8 , 80.3)	- (- , -)			
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	6,845	65.2 (63.7 , 66.6)	85.1 (82.2 , 87.6)	67.6 (65.8 , 69.3)	52.7 (49.6 , 55.7)			
2(b) 2.1. Mycosis fungoides/Sezary syndrome	1,699	88.8 (86.0 , 91.1)	100.0 (- , -)	90.6 (87.6 , 92.9)	84.3 (77.4 , 89.3)			
2(b) 2.1.1. Mycosis fungoides	1,641	89.7 (86.9 , 92.0)	100.0 (- , -)	91.3 (88.4 , 93.5)	85.6 (78.4 , 90.6)			
2(b) 2.1.2. Sezary syndrome	58	59.2 (37.7 , 75.5)	- (- , -)	56.5 (26.8 , 78.1)	60.1 (29.4 , 80.8)			
2(b) 2.2. Peripheral T-cell lymphoma	3,458	56.7 (54.6 , 58.7)	85.6 (78.5 , 90.5)	63.3 (60.8 , 65.7)	43.6 (39.9 , 47.3)			
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS ^c	1,303	40.1 (36.9 , 43.3)	73.1 (51.7 , 86.2)	46.6 (42.4 , 50.7)	29.9 (25.1 , 34.8)			
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	462	36.2 (30.8 , 41.7)	100.0 (- , -)	41.8 (33.7 , 49.7)	31.0 (23.7 , 38.7)			
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	33	83.2 (59.1 , 93.8)	72.4 (25.7 , 92.6)	88.3 (60.5 , 97.0)	83.1 (13.9 , 98.3)			
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	638	67.6 (63.0 , 71.7)	91.0 (82.7 , 95.4)	71.6 (66.0 , 76.4)	43.6 (32.8 , 54.0)			
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	48	39.7 (23.7 , 55.2)	75.2 (12.6 , 96.1)	38.6 (19.8 , 57.1)	- (- , -)			
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	39	10.6 (3.0 , 23.7)	0.0 (- , -)	15.9 (4.0 , 35.0)	0.0 (- , -)			
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS ^c	665	81.9 (76.8 , 85.9)	92.9 (58.9 , 99.0)	88.5 (83.6 , 92.0)	70.4 (59.4 , 78.9)			
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	270	87.6 (79.4 , 92.7)	90.9 (50.8 , 98.7)	92.5 (83.9 , 96.6)	79.5 (61.0 , 89.9)			
2(b) 2.3. Adult T-cell leukemia/lymphoma	1,273	66.3 (63.2 , 69.2)	83.6 (80.0 , 86.6)	52.4 (47.3 , 57.3)	20.2 (12.1 , 29.7)			
2(b) 2.4. NK ^c /T-cell lymphoma, nasal-type/aggressive NK ^c -cell leukemia	293	43.7 (36.6 , 50.5)	66.7 (28.2 , 87.8)	42.1 (33.7 , 50.3)	42.0 (28.7 , 54.7)			
2(b) 2.5. T-cell large granular lymphocytic leukemia	0	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(b) 2.6. Prolymphocytic leukemia, T-cell	122	16.3 (8.4 , 26.6)	100.0 (- , -)	18.8 (7.4 , 34.2)	10.4 (2.6 , 24.7)			
2(b) 3. Non-Hodgkin lymphoma, NOS ^c , T-cell	5	56.6 (5.9 , 89.2)	- (- , -)	0.0 (- , -)	100.0 (- , -)			
2(c) Non-Hodgkin lymphoma, unknown lineage	226	39.0 (31.0 , 47.0)	77.8 (36.5 , 93.9)	45.0 (35.2 , 54.4)	19.7 (7.2 , 36.7)			
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	66	37.5 (23.9 , 51.0)	87.5 (38.6 , 98.2)	66.9 (36.4 , 85.3)	9.9 (2.1 , 25.2)			
2(c) 2. Prolymphocytic leukemia, unknown lineage	8	41.3 (8.8 , 72.5)	- (- , -)	52.3 (5.3 , 86.7)	28.9 (0.8 , 72.9)			
2(c) 3. Non-Hodgkin lymphoma, NOS ^c , unknown lineage	152	40.0 (29.7 , 50.1)	0.0 (- , -)	41.0 (30.9 , 50.8)	21.6 (1.7 , 56.5)			
2(*) 1. Total precursor lymphoma/leukemia ^d	4,958	68.0 (66.5 , 69.5)	88.6 (87.2 , 89.9)	44.0 (41.0 , 46.9)	14.6 (10.4 , 19.6)			
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	210	76.2 (67.6 , 82.7)	100.0 (- , -)	80.9 (71.7 , 87.3)	63.8 (44.0 , 78.3)			
4 Lymphoid neoplasm, NOS ^c	1,832	50.0 (47.0 , 52.8)	82.2 (71.1 , 89.3)	59.7 (55.6 , 63.5)	39.5 (35.4 , 43.5)			

^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.

^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, 2010-2016

Site	Count	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
		Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)		
Lymphoid Neoplasm	82,811	72.8 (72.4 , 73.2)	91.1 (90.1 , 92.0)	81.8 (81.4 , 82.3)	63.1 (62.4 , 63.8)				
1 Hodgkin Lymphoma	6,495	88.6 (87.6 , 89.5)	98.1 (96.8 , 98.9)	92.5 (91.6 , 93.4)	60.1 (55.6 , 64.2)				
2 Non-Hodgkin lymphoma	74,495	71.8 (71.4 , 72.3)	89.3 (88.0 , 90.5)	80.3 (79.7 , 80.8)	63.7 (63.0 , 64.4)				
2(a) Non-Hodgkin lymphoma, B-cell	69,821	72.1 (71.6 , 72.6)	90.0 (88.6 , 91.2)	80.8 (80.2 , 81.3)	64.3 (63.5 , 65.0)				
2(a) 1. Precursor Non-Hodgkin lymphoma, B-cell	4,051	69.6 (67.9 , 71.2)	89.9 (88.4 , 91.3)	43.1 (39.6 , 46.5)	20.9 (15.9 , 26.5)				
2(a) 2. Mature Non-Hodgkin lymphoma, B-cell	61,642	72.4 (71.9 , 72.9)	89.9 (85.8 , 92.9)	82.4 (81.8 , 82.9)	64.9 (64.1 , 65.6)				
2(a) 2.1. Chronic/Small/Prolymphocytic/ Mantle B-cell Non-Hodgkin lymphoma	13,184	84.2 (83.0 , 85.2)	100.0 (- , -)	91.2 (90.0 , 92.3)	80.2 (78.6 , 81.7)				
2(a) 2.1.1. Chronic/Small lymphocytic leukemia/lymphoma	11,884	86.4 (85.2 , 87.5)	100.0 (- , -)	93.4 (92.2 , 94.5)	82.5 (80.7 , 84.1)				
2(a) 2.1.2. Prolymphocytic leukemia, B-cell	31	56.7 (29.3 , 77.0)	- (- , -)	83.7 (26.4 , 97.7)	45.7 (16.3 , 71.3)				
2(a) 2.1.3. Mantle-cell lymphoma	1,269	63.6 (59.9 , 67.2)	- (- , -)	71.8 (66.4 , 76.6)	58.8 (53.6 , 63.6)				
2(a) 2.2. Lymphoplasmacytic lymphoma/ Waldenstrom macroglobulinemia	1,324	87.0 (83.2 , 90.0)	- (- , -)	90.8 (86.4 , 93.9)	84.9 (79.5 , 89.0)				
2(a) 2.2.1. Lymphoplasmacytic lymphoma	615	86.0 (80.3 , 90.2)	- (- , -)	86.8 (79.8 , 91.5)	85.2 (76.6 , 90.8)				
2(a) 2.2.2. Waldenstrom macroglobulinemia	709	87.8 (82.2 , 91.8)	- (- , -)	94.3 (87.6 , 97.4)	84.8 (77.0 , 90.1)				
2(a) 2.3. Diffuse large B-cell lymphoma (DLBCL)	16,014	63.7 (62.7 , 64.6)	87.4 (81.0 , 91.8)	76.9 (75.7 , 78.1)	53.3 (51.9 , 54.7)				
2(a) 2.3.1. DLBCL, NOS ^c	15,681	63.2 (62.2 , 64.2)	86.9 (80.1 , 91.5)	76.4 (75.2 , 77.6)	53.3 (51.8 , 54.7)				
2(a) 2.3.2. Intravascular large B-cell lymphoma	43	61.4 (43.4 , 75.2)	- (- , -)	65.7 (39.9 , 82.5)	55.2 (30.3 , 74.4)				
2(a) 2.3.3. Primary effusion lymphoma	5	43.1 (4.9 , 79.0)	- (- , -)	100.0 (- , -)	- (- , -)				
2(a) 2.3.4. Mediastinal large B-cell lymphoma	285	89.8 (84.8 , 93.3)	93.1 (60.1 , 99.0)	90.8 (85.6 , 94.2)	58.9 (23.1 , 82.6)				
2(a) 2.4. Burkitt lymphoma/leukemia	564	63.7 (59.1 , 67.9)	93.7 (86.7 , 97.1)	62.3 (56.1 , 67.9)	38.4 (28.8 , 48.0)				
2(a) 2.5. Marginal-zone lymphoma (MZL)	5,571	92.2 (90.7 , 93.5)	92.4 (56.3 , 98.9)	96.1 (94.6 , 97.1)	88.7 (86.0 , 90.9)				
2(a) 2.5.1. Splenic MZL	468	90.7 (85.1 , 94.3)	- (- , -)	95.0 (87.6 , 98.0)	87.3 (78.4 , 92.7)				
2(a) 2.5.2. Extranodal MZL, MALT ^c type	3,555	95.0 (93.0 , 96.4)	91.0 (50.4 , 98.7)	96.7 (95.0 , 97.9)	93.0 (89.6 , 95.4)				
2(a) 2.5.3. Nodal MZL	1,548	86.0 (82.9 , 88.7)	100.0 (- , -)	94.4 (90.9 , 96.5)	79.3 (74.1 , 83.5)				
2(a) 2.6. Follicular lymphoma	8,802	88.7 (87.6 , 89.8)	88.3 (40.9 , 98.3)	94.0 (93.0 , 94.9)	82.6 (80.5 , 84.6)				
2(a) 2.7. Hairy-cell leukemia	318	91.1 (85.3 , 94.7)	- (- , -)	97.1 (92.6 , 98.9)	77.5 (62.7 , 87.1)				
2(a) 2.8. Plasma cell neoplasms	15,856	54.1 (53.0 , 55.2)	78.3 (37.3 , 94.1)	67.3 (65.8 , 68.7)	45.0 (43.6 , 46.5)				
2(a) 2.8.1. Plasmacytoma	779	71.4 (66.7 , 75.5)	87.5 (38.7 , 98.1)	81.7 (76.1 , 86.1)	59.4 (51.5 , 66.4)				
2(a) 2.8.2. Multiple myeloma/ plasma-cell leukemia	15,077	53.2 (52.1 , 54.3)	0.0 (- , -)	66.3 (64.7 , 67.8)	44.4 (43.0 , 45.9)				
2(a) 2.9. Heavy chain disease	9	68.5 (27.7 , 89.4)	- (- , -)	100.0 (- , -)	52.1 (10.8 , 82.6)				
2(a) 3. Non-Hodgkin lymphoma, B-cell, NOS ^c	4,128	69.8 (67.8 , 71.8)	95.5 (71.9 , 99.3)	83.3 (80.6 , 85.7)	63.2 (60.4 , 65.9)				

^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, 2010-2016

Site	All Ages		Ages 0-19		Ages 20-64		Ages 65+	
	Count	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	Percent (95% C.I.)	
2(b) Non-Hodgkin lymphoma, T-cell	4,606	67.6 (65.9 , 69.2)	85.2 (81.2 , 88.3)	75.1 (73.0 , 77.0)	51.6 (48.4 , 54.8)			
2(b) 1. Precursor Non-Hodgkin lymphoma, T-cell	18	58.1 (29.8 , 78.4)	66.7 (19.5 , 90.5)	74.4 (28.7 , 93.2)	0.0 (- , -)			
2(b) 2. Mature Non-Hodgkin lymphoma, T-cell	4,587	67.7 (65.9 , 69.3)	85.5 (81.5 , 88.6)	75.1 (73.0 , 77.0)	51.8 (48.6 , 55.0)			
2(b) 2.1. Mycosis fungoides/Sezary syndrome	1,262	93.0 (90.1 , 95.0)	100.0 (- , -)	95.3 (92.6 , 97.1)	86.9 (79.9 , 91.6)			
2(b) 2.1.1. Mycosis fungoides	1,220	94.8 (91.9 , 96.7)	100.0 (- , -)	96.7 (94.0 , 98.2)	89.7 (82.3 , 94.1)			
2(b) 2.1.2. Sezary syndrome	42	31.7 (12.4 , 53.1)	- (- , -)	0.0 (- , -)	35.2 (11.3 , 60.6)			
2(b) 2.2. Peripheral T-cell lymphoma	2,491	60.2 (57.8 , 62.5)	91.7 (84.6 , 95.6)	70.7 (67.7 , 73.5)	43.6 (39.7 , 47.5)			
2(b) 2.2.1. Peripheral T-cell lymphoma, NOS ^c	881	40.3 (36.3 , 44.1)	71.4 (40.6 , 88.2)	50.8 (45.1 , 56.2)	29.5 (24.4 , 34.9)			
2(b) 2.2.2. Angioimmunoblastic T-cell lymphoma	331	40.4 (33.7 , 47.1)	- (- , -)	60.2 (48.6 , 70.0)	29.2 (21.2 , 37.6)			
2(b) 2.2.3. Subcutaneous panniculitis-like T-cell lymphoma	56	87.2 (70.8 , 94.7)	100.0 (- , -)	78.4 (55.9 , 90.3)	100.0 (- , -)			
2(b) 2.2.4. Anaplastic large cell lymphoma, T-cell or null-cell type	423	71.6 (66.5 , 76.2)	92.7 (81.6 , 97.2)	76.8 (70.6 , 81.8)	44.3 (31.6 , 56.3)			
2(b) 2.2.5. Hepatosplenic T-cell lymphoma	21	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(b) 2.2.6. Enteropathy-type T-cell lymphoma	36	12.3 (3.0 , 28.7)	- (- , -)	- (- , -)	13.5 (2.7 , 33.2)			
2(b) 2.2.7. Cutaneous T-cell lymphoma, NOS ^c	521	84.3 (79.0 , 88.3)	100.0 (- , -)	90.1 (84.5 , 93.8)	72.9 (61.8 , 81.3)			
2(b) 2.2.8. Primary cutaneous anaplastic large cell lymphoma	222	91.2 (82.6 , 95.7)	90.9 (50.7 , 98.7)	94.8 (87.8 , 97.9)	83.9 (60.7 , 94.0)			
2(b) 2.3. Adult T-cell leukemia/lymphoma	579	60.2 (55.5 , 64.6)	81.0 (75.3 , 85.5)	49.6 (42.0 , 56.8)	21.6 (11.1 , 34.3)			
2(b) 2.4. NK ^c /T-cell lymphoma, nasal-type/aggressive NK ^c -cell leukemia	177	42.2 (34.1 , 50.1)	- (- , -)	46.6 (37.0 , 55.6)	30.4 (16.1 , 46.0)			
2(b) 2.5. T-cell large granular lymphocytic leukemia	0	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(b) 2.6. Prolymphocytic leukemia, T-cell	78	14.5 (6.3 , 25.8)	- (- , -)	31.2 (13.7 , 50.6)	0.0 (- , -)			
2(b) 3. Non-Hodgkin lymphoma, NOS ^c , T-cell	1	- (- , -)	- (- , -)	- (- , -)	- (- , -)			
2(c) Non-Hodgkin lymphoma, unknown lineage	68	43.6 (29.7 , 56.7)	50.0 (0.6 , 91.1)	50.8 (28.9 , 69.2)	27.6 (12.1 , 45.7)			
2(c) 1. Precursor lymphoblastic leukemia/lymphoma, unknown lineage	21	63.3 (36.0 , 81.5)	50.0 (0.6 , 91.1)	75.6 (40.6 , 91.7)	25.3 (0.9 , 67.1)			
2(c) 2. Prolymphocytic leukemia, unknown lineage	9	34.1 (7.9 , 63.3)	- (- , -)	- (- , -)	25.7 (3.7 , 56.9)			
2(c) 3. Non-Hodgkin lymphoma, NOS ^c , unknown lineage	38	33.0 (15.0 , 52.2)	- (- , -)	32.1 (7.9 , 60.1)	28.9 (8.7 , 53.1)			
2(*) 1. Total precursor lymphoma/leukemia ^d	4,090	69.5 (67.8 , 71.1)	89.8 (88.3 , 91.2)	43.8 (40.3 , 47.1)	20.6 (15.6 , 26.0)			
3 Composite Hodgkin lymphoma and Non-Hodgkin lymphoma	174	70.4 (57.6 , 80.0)	- (- , -)	83.5 (71.7 , 90.7)	52.9 (29.3 , 71.8)			
4 Lymphoid neoplasm, NOS ^c	1,647	54.1 (51.1 , 57.1)	82.4 (67.2 , 91.0)	76.7 (72.6 , 80.3)	40.0 (36.0 , 43.9)			

^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.

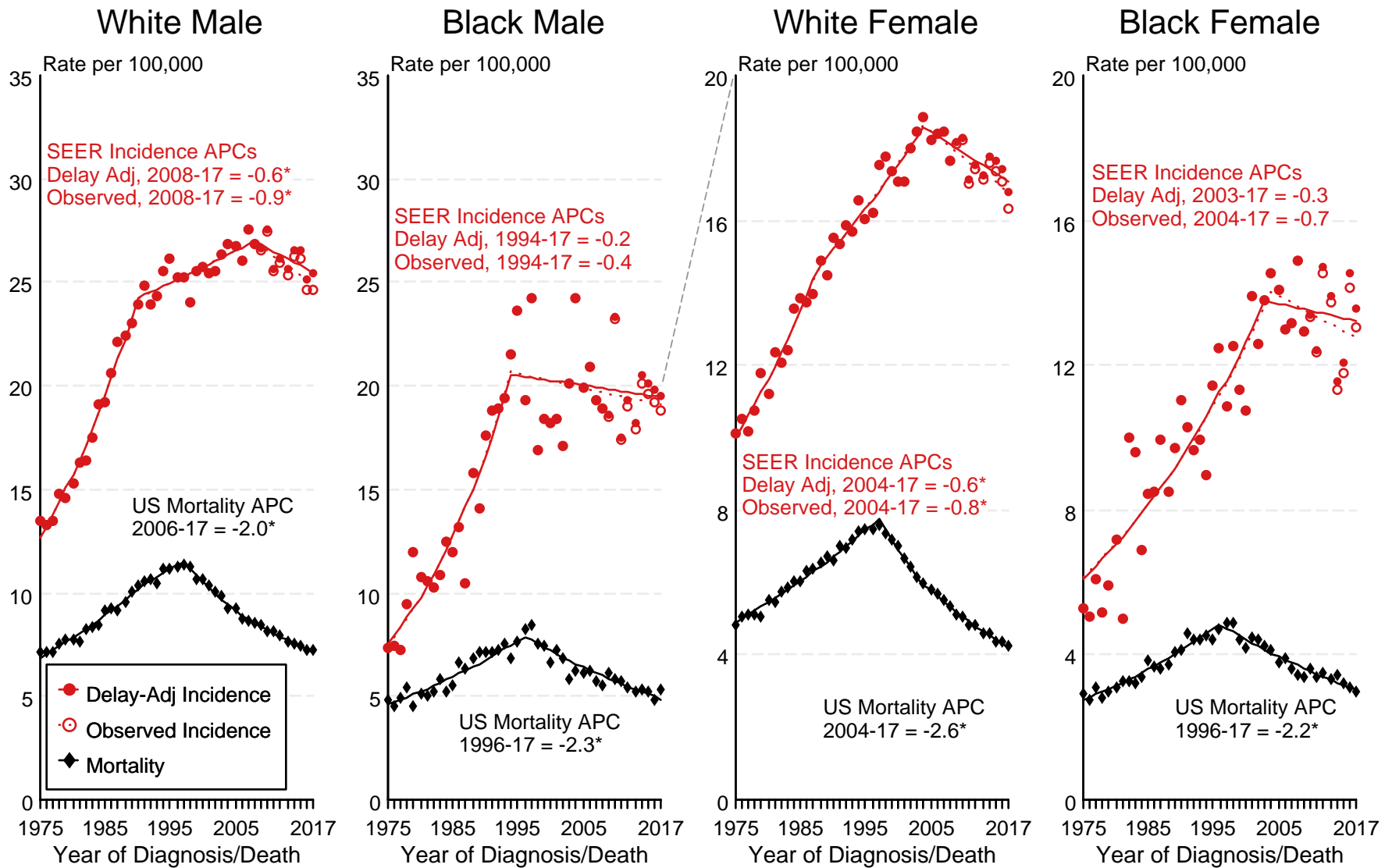
^c NOS = Not otherwise specified. MALT = Mucosa-associated lymphoid tissue. NK = Natural killer.

^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



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

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

Regression lines and APCs are calculated using the Joinpoint Regression Program Version 4.8, April 2020, 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.

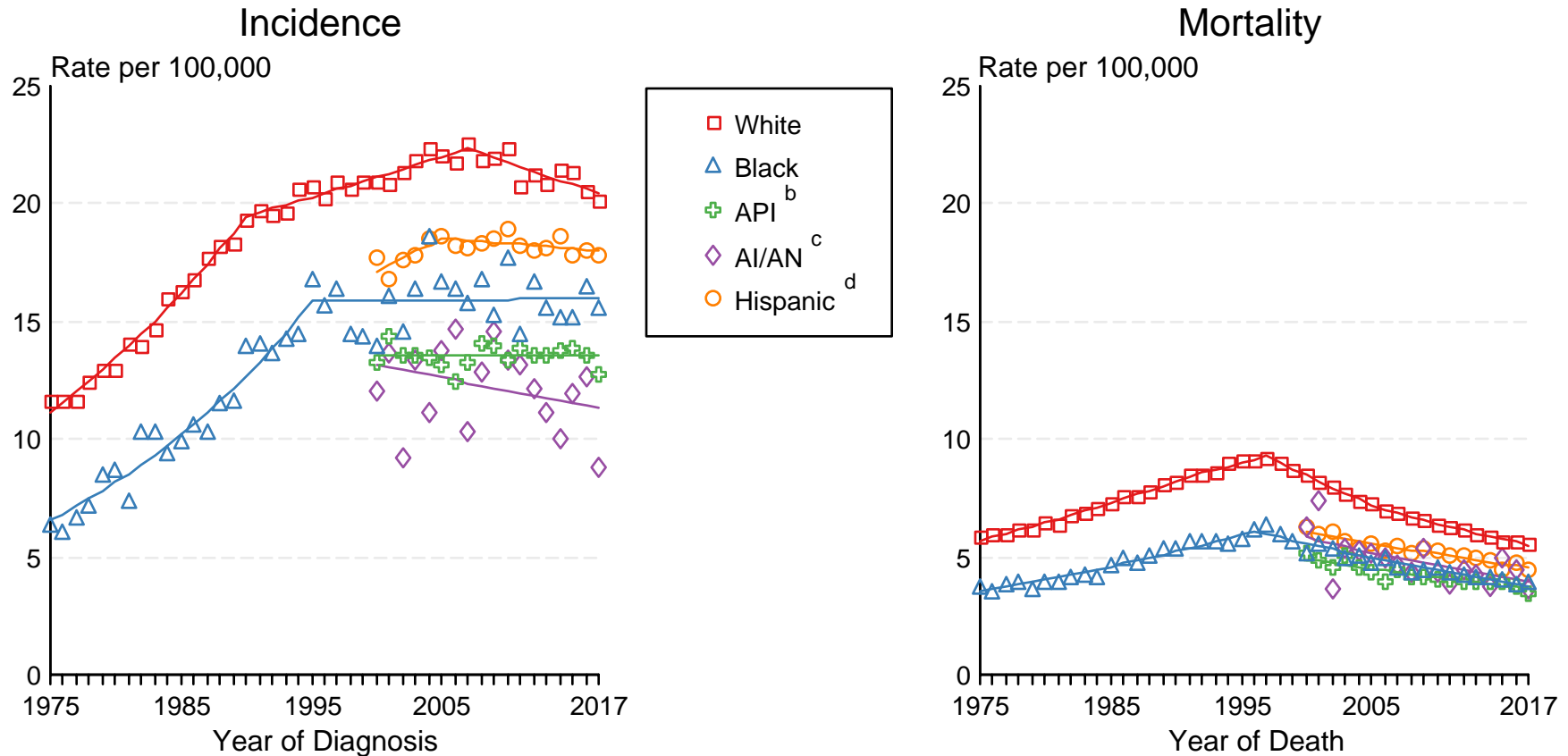
* The APC is significantly different from zero ($p < 0.05$).

Figure 19.2

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

Joinpoint Analyses for Whites and Blacks from 1975-2017

and for Asian/Pacific Islanders, American Indians/Alaska Natives and Hispanics from 2000-2017



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 21 areas (SEER 9 areas, San Jose-Monterey, Los Angeles, Alaska Native Registry, Rural Georgia, California excluding SF/SJM/LA, Kentucky, Louisiana, New Jersey, Georgia excluding ATL/RG, Idaho, New York and Massachusetts).

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 4.8, April 2020, National Cancer Institute. Joinpoint analyses for Whites and Blacks during the 1975-2017 period allow a maximum of 5 joinpoints. Analyses for other ethnic groups during the period 2000-2017 allow a maximum of 3 joinpoints.

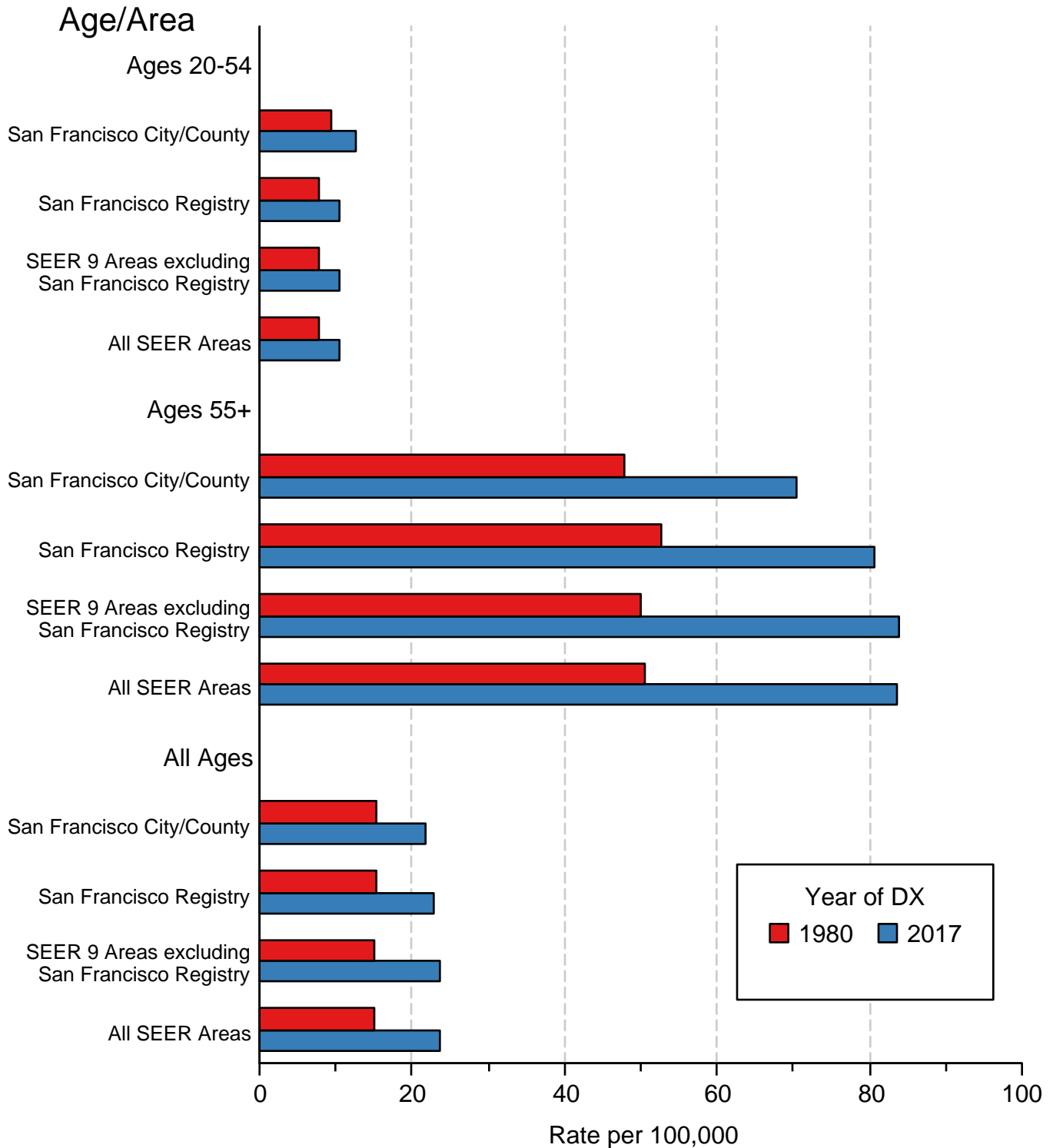
^b API = Asian/Pacific Islander.

^c AI/AN = American Indian/Alaska Native. Rates for American Indian/Alaska Native are based on the Purchased/Referred Care Delivery Area (PRCDA) 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.

Figure 19.3

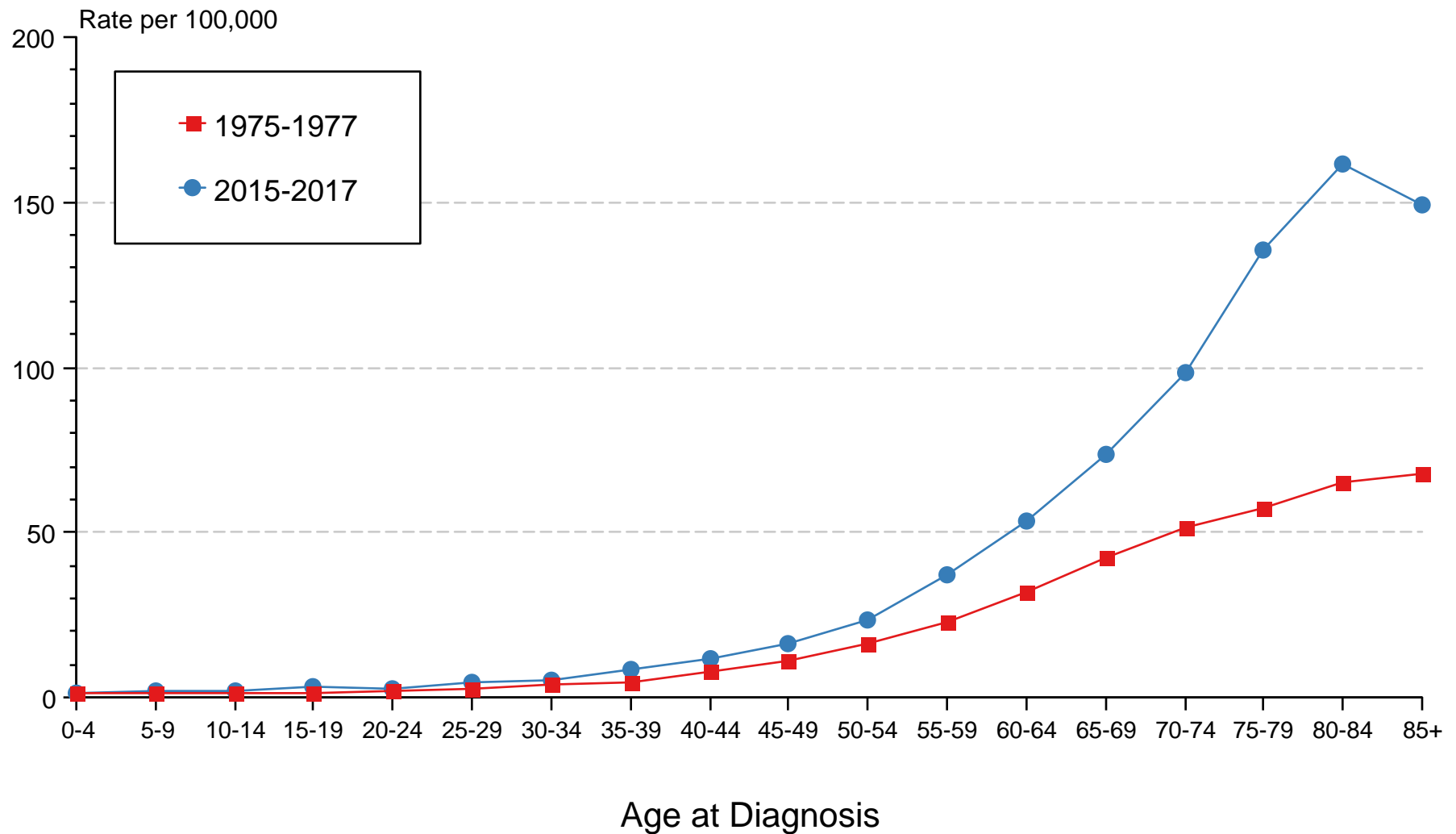
Non-Hodgkin Lymphoma Incidence Rates, 1980 vs 2017 Males by Age at Diagnosis and SEER area



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 2015-2017 All Races, Males

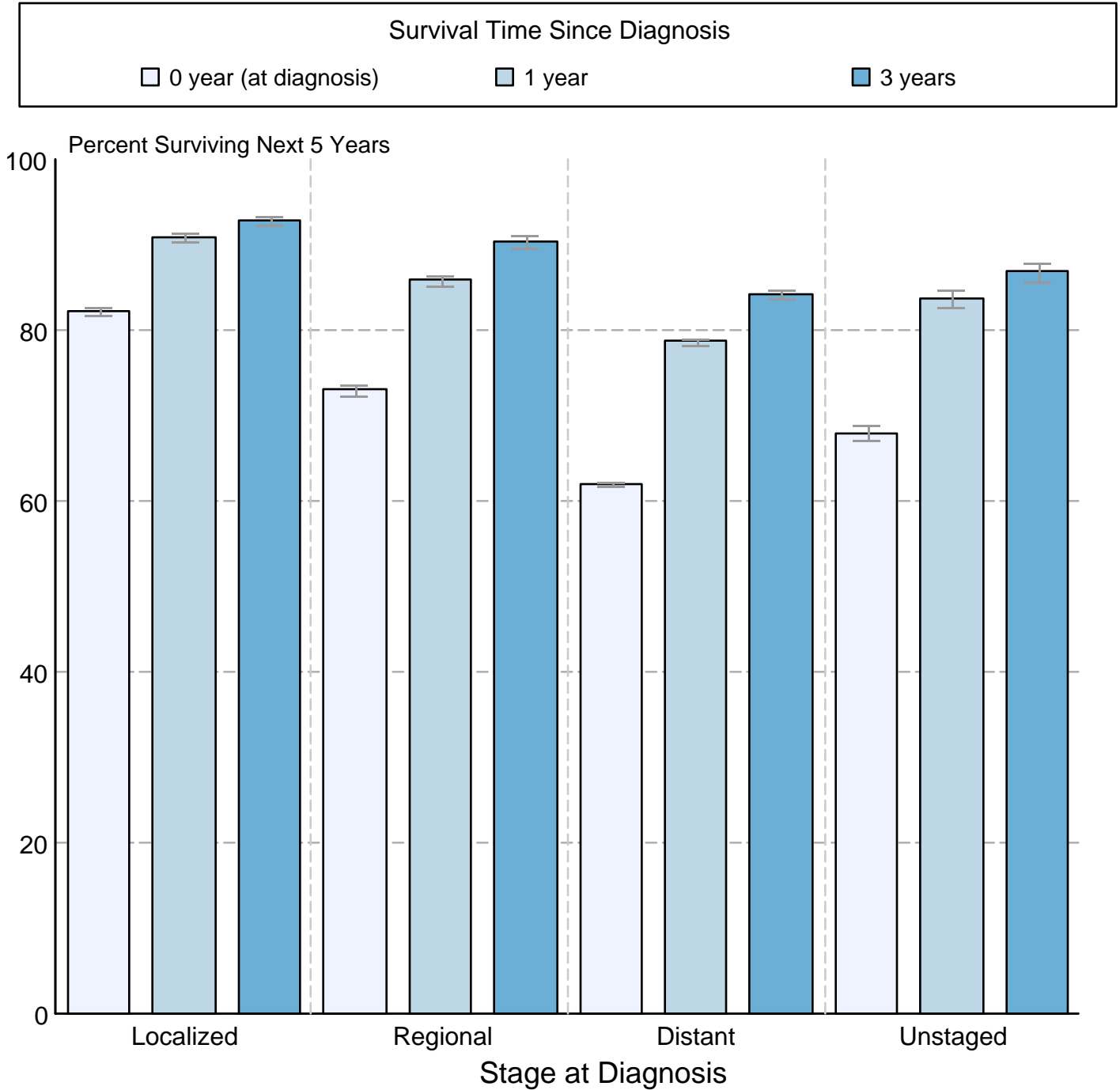


Source: SEER 9 areas. Rates are age-adjusted as appropriate to the 2000 US Std Population (19 age groups - Census P25-1103).

Figure 19.5

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
2000-2015 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).
 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.