

XVII. LYMPHOMA

Hodgkin Lymphoma

Hodgkin lymphoma affects the immune system, specifically the lymphocytes. There are two major types: classical Hodgkin lymphoma and nodular lymphocyte-predominant Hodgkin lymphoma. It is more commonly found in males than in females. In addition, risk factors include family history, and past Epstein-Barr infection [90, 91].

The incidence rates of Hodgkin lymphoma have decreased in the Greater Bay Area from 1988 through 2018, with the largest decline among NH White males (-1.0% per year). From 2014 to 2018, the incidence rates of Hodgkin lymphoma in the Greater Bay Area were highest in NH White males and females (2.9 per 100,000) and lowest in Asian/Pacific Islander males and females (1.5 per 100,000). Incidence of Hodgkin lymphoma in the Greater Bay Area (2.3 per 100,000) was similar to the overall rate in California (2.2 per 100,000).

Mortality rates in the Greater Bay Area have decreased significantly (males: -3.2% per year; females: -3.0% per year) from 1988 to 2018. From 2014-2018, mortality rates were the highest in Hispanics (males: 0.4 per 100,000; females: 0.3 per 100,000). Mortality rates were the lowest in Asian/Pacific Islander individuals (males: 0.2 per 100,000; females: 0.1 per 100,000). The mortality rate for Hodgkin lymphoma in the Greater Bay Area (0.2 per 100,000) was lower than the overall rate in California (0.3 per 100,000).

Non-Hodgkin Lymphoma

Non-Hodgkin Lymphoma (NHL) is a type of cancer that encompasses a wide range of illnesses affecting the lymphatic system. It can vary from the most indolent to the most aggressive malignancies. Older age, being male, and having a weakened immune system can increase the risk of adult NHL [92, 93].

During 2014 through 2018, incidence rates for NHL changed significantly for both males and females in the Greater Bay Area region. In males, there was a decreasing trend in incidence rates, especially for NH White males (-0.5% per year). The highest incidence rate for males was among NH White males (27.5 per 100,000) and lowest incidence rate was among Asian/Pacific Islander males (18.7 per 100,000). In females, there was an increasing trend among NH Black females (1.1% per year). The highest incidence rate for females was among NH White females (17.4 per 100,000) and the lowest incidence rate was among Asian/Pacific Islander females (12.6 per 100,000).

There was a decreasing trend in NHL mortality overall (-2.0% per year), but both NH White males and females experienced the greatest annual decline in mortality (males: -1.8% per year; females: -2.4% per year). The mortality rate in males was the highest among NH White males (6.9 per 100,000). Among females, Hispanic females had the highest mortality rate (4.3 per 100,000).

The incidence rate of NHL for the Greater Bay Area region (20.0 per 100,000) was slightly higher than the statewide rate (18.4 per 100,000). The incidence rate for males in

the region was 24.3 per 100,000; the incidence rate for females was 16.4 per 100,000.

and 3.8 per 100,000 for females, which was lower than statewide rates (males: 6.6 per 100,000; females: 4.1 per 100,000).

The mortality rate of NHL for the Greater Bay Area region was 6.3 per 100,000 for males

Table 10a and 10b: Hodgkin and Non-Hodgkin Lymphoma Age-Adjusted Incidence Rates per 100,000 by Sex, Race/Ethnicity, and Region¹, 2014-2018

10a: Hodgkin Lymphoma

Race/Ethnicity	Greater Bay Area		California	
	Males	Females	Males	Females
All Racial/Ethnic Groups	2.5	2.0	2.5	1.9
NH White	3.1	2.7	3.2	2.5
NH Black	2.7	2.1	2.5	2.2
Hispanic	2.8	2.0	2.2	1.7
Asian/Pacific Islander	1.7	1.2	1.6	1.1

10b: Non-Hodgkin Lymphoma

Race/Ethnicity	Greater Bay Area		California	
	Males	Females	Males	Females
All Racial/Ethnic Groups	24.3	16.4	22.8	15.2
NH White	27.5	17.8	24.5	15.8
NH Black	20.1	14.1	17.6	12.4
Hispanic	21.8	17.4	19.9	15.3
Asian/Pacific Islander	18.7	12.6	17.2	11.9

Figure 29: Non-Hodgkin Lymphoma Incidence Rates and Trends in the Greater Bay Area, by Race/Ethnicity, 1988-2018

