

V. LUNG AND BRONCHUS CANCER

Due to aggressive anti-smoking policies and subsequent reductions in the prevalence of smoking over many years, lung and bronchus cancer incidence and mortality in the Greater Bay Area have continued to decrease through 2018 (**Figure 13**). From 1998-2018, incidence has decreased by an average of -2.7% per year in males, and -1.5% per year in females. Notably, the declines in incidence rates for this period were observed for all racial/ethnic groups for males and females, with the exception of Asian/Pacific Islander females for which the incidence rates were stable. NH Black (-2.8% per year) and NH White (-2.7% per year) males experienced the largest decline in incidence.

Despite the decline in incidence and mortality, lung and bronchus cancer continues to be the second most common cancer diagnosis for males and females in the Greater Bay Area. From 2014 through 2018, approximately 16,000 new lung and bronchus cancers were diagnosed. The highest incidence rates of lung and bronchus cancer were observed among NH Black males and females (66.2 and 47.5 per 100,000, respectively) followed by Asian/Pacific Islander males (45.8 per 100,000). Hispanic females had the lowest rate (22.6 per 100,000) (**Table 5a**). From 2014 through 2018, the Greater Bay Area incidence rates of lung and bronchus cancer for NH White and Hispanic males and females were lower than rates in California. In contrast, incidence rates for NH Black males and females and Asian/Pacific Islander males and females in the Greater Bay Area were higher than those in California.

Lung and bronchus cancer continues to be the biggest contributor to cancer deaths, representing 20% of all cancer deaths among both males and females in the Greater Bay

Area. From 2014 through 2018, NH Black males and females had the highest lung and bronchus cancer mortality rates (48.0 and 30.2 per 100,000, respectively), while the lowest mortality rates were observed in Hispanic and Asian/Pacific Islander females (13.4 and 17.5 per 100,000 respectively; **Table 5b**). The mortality rate of lung and bronchus cancer declined annually by an average of -2.9% per year from 1988 through 2018, ranging from -2.8% in NH White males and females to -1.7% in Hispanic males and females. The mortality rates in the Greater Bay Area were substantially lower for NH White males and females in comparison to rates in California. In contrast, fairly similar mortality rates were seen for NH Black, Hispanic, and Asian/Pacific Islander males and females in the Greater Bay Area and in California.

In 2013, the U.S. Preventive Services Task Force recommended annual lung cancer screening by low-dose computed tomography (LDCT) for high risk populations (adults aged 55 to 80 years, who have a 30 pack-year smoking history and currently smoke or have quit within the past 15 years); starting in 2015, Medicare approved coverage for this screening [26, 27]. While adoption of lung cancer screening is slowly increasing, there is limited data to understand whether screening is reaching those that would most benefit [28]. In 2018, just 17.7% of approximately 1.3 million estimated eligible smokers in the U.S. were screened, with a higher proportion of those screened having a primary care provider and health insurance. This suggests that healthcare access and insurance may be barriers for screening uptake [28]. Furthermore, awareness programs and mandated LDCT screening are recommended to prevent thousands of deaths due to lung cancer nationwide.

Table 5a and 5b: Lung and Bronchus Cancer Age-Adjusted Incidence and Mortality Rates per 100,000 by Sex, Race/Ethnicity, and Region¹, 2014-2018

5a: Incidence

Race/Ethnicity	Greater Bay Area		California	
	Males	Females	Males	Females
All Racial/Ethnic Groups	43.0	35.3	45.1	37.0
NH White	41.6	39.8	49.5	44.7
NH Black	66.2	47.5	61.9	45.9
Hispanic	32.7	22.6	29.1	20.5
Asian/Pacific Islander	45.8	29.3	43.4	28.1

5b: Mortality

Race/Ethnicity	Greater Bay Area		California	
	Males	Females	Males	Females
All Racial/Ethnic Groups	29.7	22.0	33.2	24.1
NH White	29.0	25.3	36.2	29.3
NH Black	48.0	30.2	48.0	31.1
Hispanic	22.5	13.4	21.7	13.1
Asian/Pacific Islander	30.1	17.5	31.1	17.1

¹ The two regions represented include: (1) the Greater Bay Area (nine-county region) and (2) all of California (including the nine-county Greater Bay Area region).

Figure 13: Lung and Bronchus Cancer Age-Adjusted Annual Incidence Rates and Trends in the Greater Bay Area by Race/Ethnicity, 1988-2018

