

II. ALL INVASIVE CANCERS IN THE GREATER BAY AREA, 1988-2018

Overall Invasive Cancer Incidence Rates

From 1988 through 2018, incidence rates of all invasive cancers (i.e., rate of newly diagnosed cancers of any site) declined substantially in the Greater Bay Area (**Figure 5**). Invasive cancers are those determined by a pathologist to have spread beyond the tissue of origin and invaded the surrounding tissue (i.e., not *in situ* or benign cancers). The annual percent decrease in incidence rates from 1988 through 2018 was substantially greater for males than females (-1.0% vs. -0.4%, respectively), driven largely by declines in the incidence rates of smoking-related cancers and prostate cancer in males (data not shown). During the recent 5-year period of 2014-2018, 163,850 new cases of invasive cancer were diagnosed in the Greater Bay Area. In 2018 alone, approximately 33,000 new cases of cancer were diagnosed.

The five most common invasive cancers—breast, prostate, lung and bronchus, colorectal, and melanoma—accounted for slightly over half (52.8%) of all newly diagnosed cancers. The incidence rate of all invasive cancers from 2014-2018 was higher in males (416.9 per 100,000) than in females (381.8 per 100,000) (**Table 1**). In the Greater Bay Area, Non-Hispanic (NH) Black males had the highest incidence rate (489.7 per 100,000), while Asian/Pacific Islander males had the lowest incidence rate (302.6 per 100,000). NH White females had the highest incidence rate (429.7 per 100,000) and Asian/Pacific Islander females had the lowest rate (296.6 per 100,000). Incidence rates of all invasive cancers among males and females in

the Greater Bay Area were almost identical to the rates in California.

Figure 5: Age-Adjusted Incidence Rates and Trends for All Invasive Cancers in the Greater Bay Area by Race/Ethnicity, 1988-2018

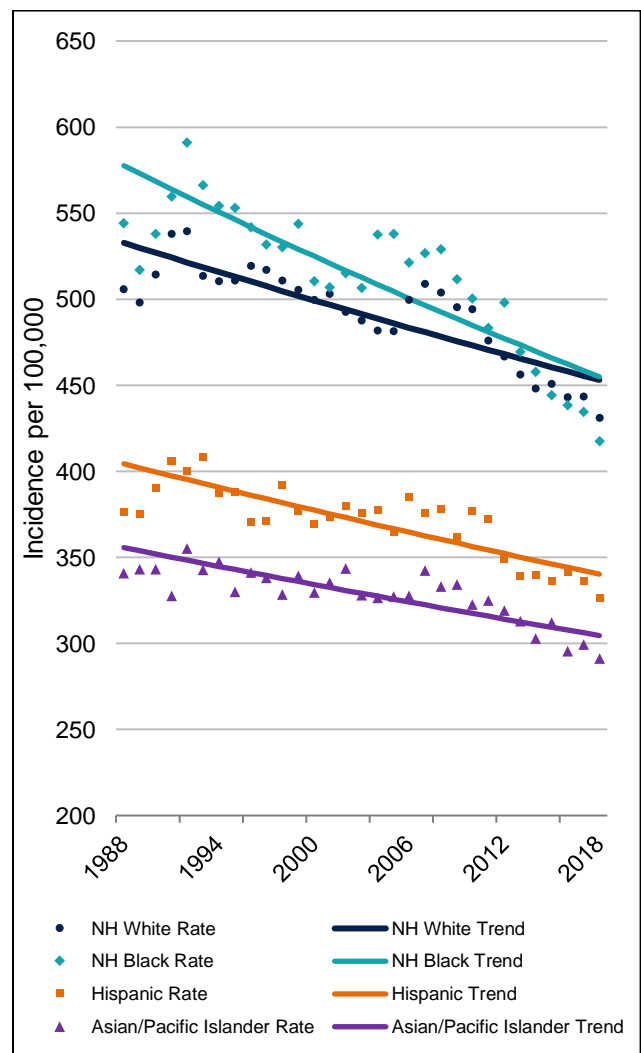


Table 1: Age-Adjusted Incidence Rates for All Invasive Cancers per 100,000 by Sex and Race/Ethnicity, and Region¹, 2014-2018

Race/Ethnicity	Greater Bay Area		California	
	Males	Females	Males	Females
All Racial/Ethnic Groups	416.9	381.8	423.1	384.0
NH White	468.4	429.1	468.9	426.8
NH Black	489.7	401.8	462.1	386.5
Hispanic	353.0	331.1	341.2	322.5
Asian/Pacific Islander	296.6	306.8	288.9	305.8

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).

Overall Cancer Mortality Rates

As with overall cancer incidence, deaths due to cancer also declined dramatically from 1988 through 2018 in the Greater Bay Area (**Figure 6**). In general, a more substantial decline in cancer mortality occurred for males than females over the 31-year period. Among males, the annual percent decline in mortality was -2.0%, compared to -1.7% in females (data not shown). From 1988 through 2018, cancer mortality rates fell from 544.9.6 to 411.2 per 100,000 among males, and 416.4 to 379.7 per 100,000 among females. During this 31-year period, cancer mortality declined across all racial/ethnic groups, particularly among NH Black males and females. Deaths due to cancer declined -2.1% per year among NH Black males, and -1.2% among NH Black females, with similar patterns observed in California [2]. From 2014 through 2018, the overall cancer mortality rate in the Greater Bay Area was significantly lower than the mortality rate for California among males and females (**Table 2**). Overall, males had a substantially higher mortality rate than females (148.3 vs. 111.6 per 100,000, respectively), with the highest mortality rate observed in NH Black males (222.3 per 100,000) and lowest mortality rate observed in Asian/Pacific Islander females (87.2 per 100,000). In 2018, breast, prostate, lung, colorectal, and melanoma were the most common cancer sites, and lung, breast, prostate, colorectal, and pancreatic cancer were the most common cause of cancer deaths, collectively accounting for half of all cancer deaths in the Greater Bay Area (**Figure 7**).

Figure 6: Age-Adjusted Mortality Rates and Trends for All Invasive Cancers in the Greater Bay Area by Race/Ethnicity, 1988-2018

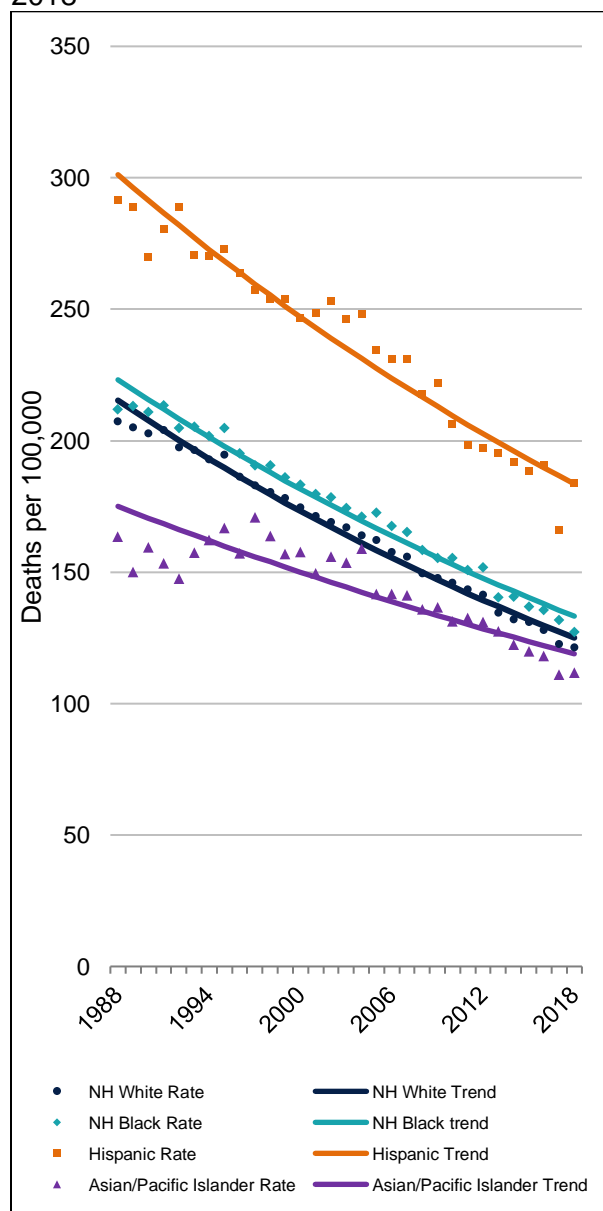


Table 2: Age-Adjusted Mortality Rates for All Invasive Cancers per 100,000 by Sex, Race/Ethnicity, and Region¹, 2014-2018

Race/Ethnicity	Greater Bay Area		California	
	Males	Females	Males	Females
All Racial/Ethnic Groups	148.3	111.6	164.5	122.2
NH White	156.9	118.8	175.7	131.0
NH Black	222.3	159.6	218.2	158.3
Hispanic	135.4	103.7	142.3	107.3
Asian/Pacific Islander	118.5	87.2	125.8	92.9

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 7: Number of New Invasive Cancer Cases and Deaths from Cancer in the Greater Bay Area by Cancer Site, 2018

