

XI. THYROID CANCER

Thyroid cancer incidence increased dramatically in the Greater Bay Area for males and females starting in the early 2000s, but has stabilized since 2010. This pattern was mostly due to incidence among NH White populations; the overall increase in incidence from 1988-2018 was 3.1% per year for both NH White males and females. Whereas for non-White populations, the increase in thyroid cancer incidence was generally more gradual from 1988 through 2018 (**Figure 19**). These increases in thyroid cancer during the 31-year period from 1988-2018 may be due to improved imaging technology and thus increased detection of thyroid cancers, as well as to the increased prevalence of suspected risk factors (e.g., prior radiation exposure, obesity, insulin resistance due to obesity or type 2 diabetes) [61-63]. There has been substantial scientific discourse as to whether or not the increase in papillary thyroid cancer diagnoses represents “overdiagnosis” of a harmless condition [64], and questions about potential over-treatment of otherwise indolent cancers.

From 2014-2018, thyroid cancer incidence rates were strikingly higher among females than males in all racial/ethnic groups. NH Black females had significantly lower rates than females of other racial/ethnic groups, while NH Black and Hispanic males had significantly lower rates than NH White and

Asian/Pacific Islander males. Incidence rates for NH White males and females were 7.5 and 18.1 per 100,000, respectively. For NH Black males and females, incidence rates were 3.2 and 9.1 per 100,000, respectively. Hispanic males and females had incidence rates of 5.2 and 17.3 per 100,000, respectively, and Asian/Pacific Islander males and females had incidence rates of 7.1 and 19.5 per 100,000, respectively. In the Greater Bay Area, incidence rates of thyroid cancer were significantly lower than rates in California for NH White and Hispanic females, whereas for NH Black and Asian/Pacific Islander females and males, rates were similar between the Greater Bay Area and all of California (**Figure 20**).

Mortality due to thyroid cancer remained very low among all racial/ethnic groups for both males and females (0.5 and 0.7 per 100,000, respectively, for 2014-2018), was stable from 1988 through 2018 for males, but increased by 1.1% per year for females during this time. The mortality rates of thyroid cancer in 2014-2018 were significantly higher in Asian/Pacific Islander females (0.8 per 100,000) compared to the rate in Asian/Pacific Islander males (0.4 per 100,000). Mortality rates in California were similar to those in the Greater Bay Area for both sexes and all racial/ethnic groups.

Figure 19: Thyroid Cancer Age-Adjusted Incidence Rates and Trends in the Greater Bay Area by Sex and Race/Ethnicity, 1988-2018

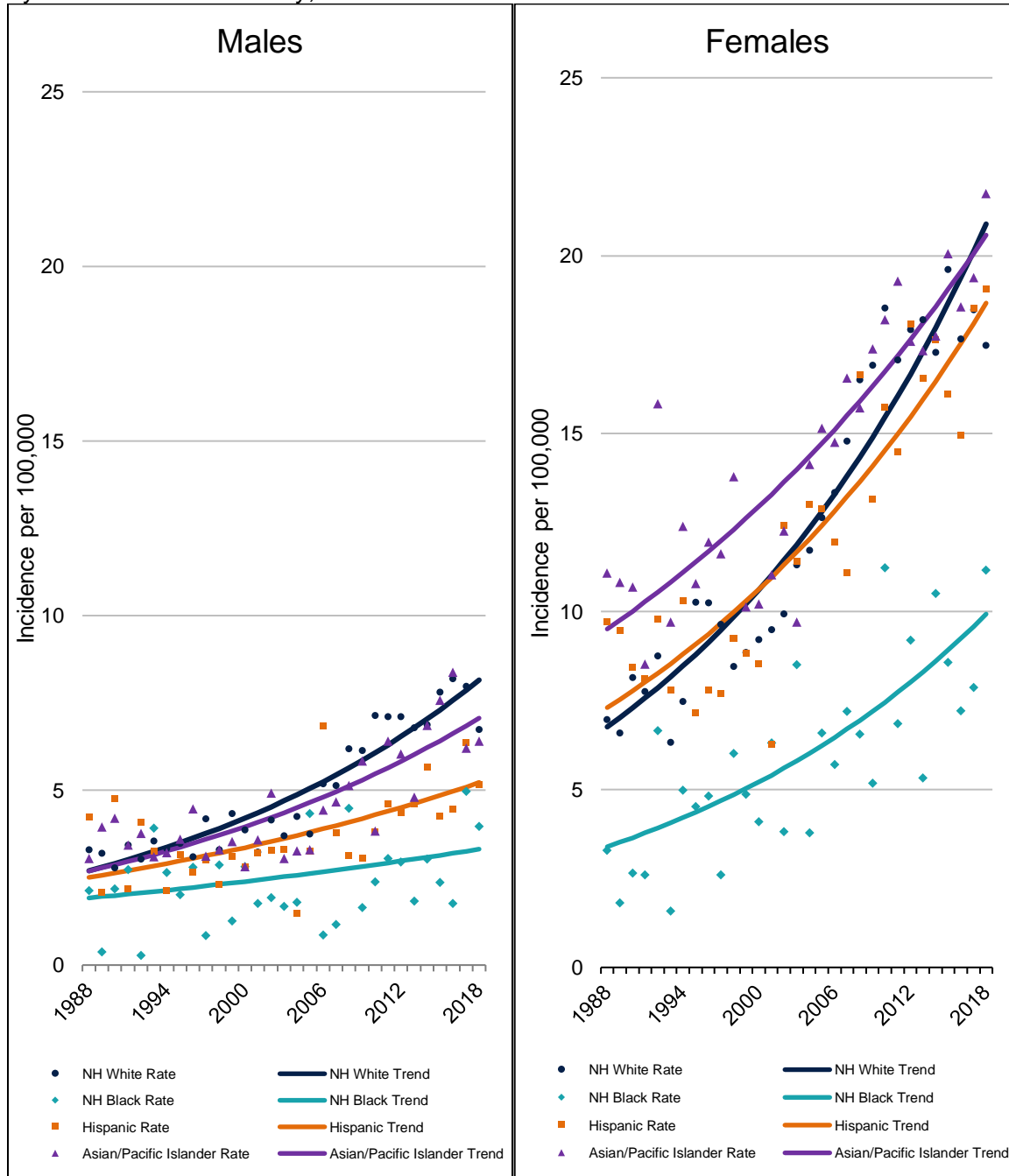
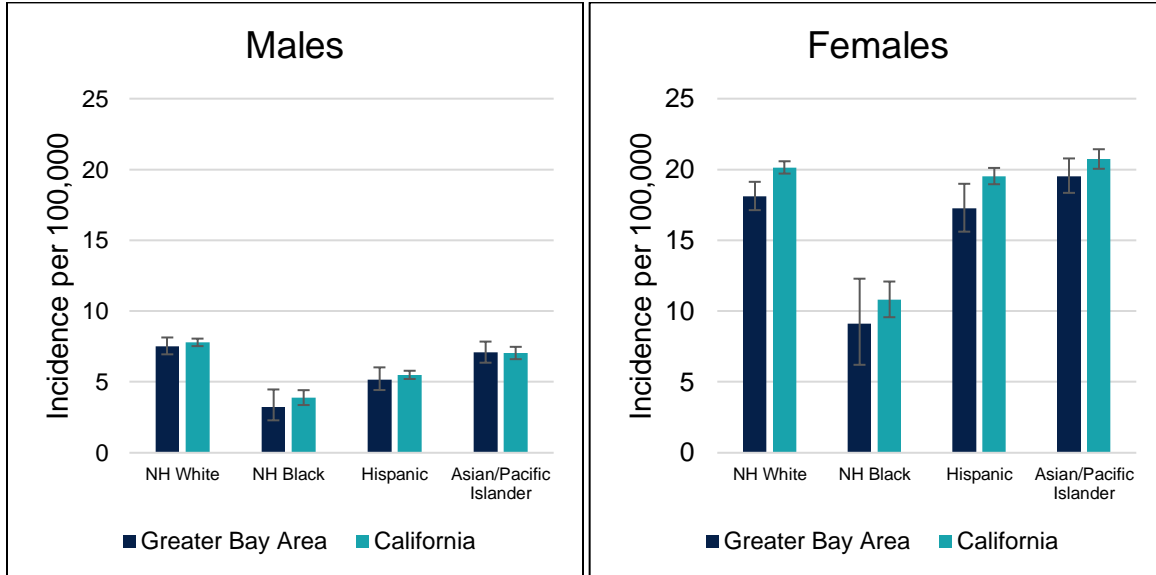


Figure 20: Thyroid Cancer Age-Adjusted Incidence Rates¹ by Sex, Race/Ethnicity, and Region², 2014-2018



¹ Error bars (in Black at the top of the bars) indicate 95% confidence intervals surrounding the corresponding incidence rates.

² 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).