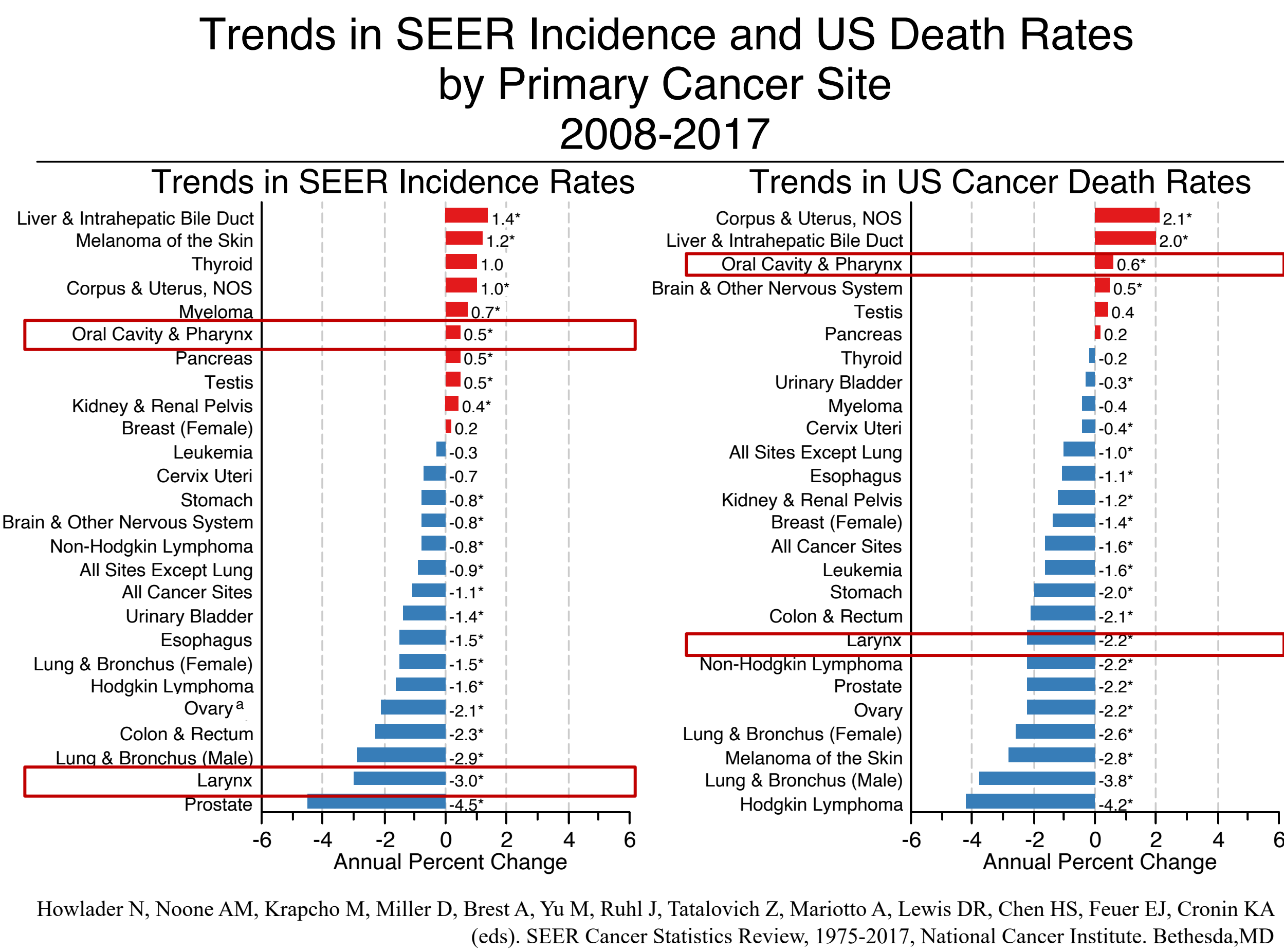


A Contemporary Analysis of Racial Disparities in Head and Neck Cancer Incidence and Mortality in the United States

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Background and Objectives

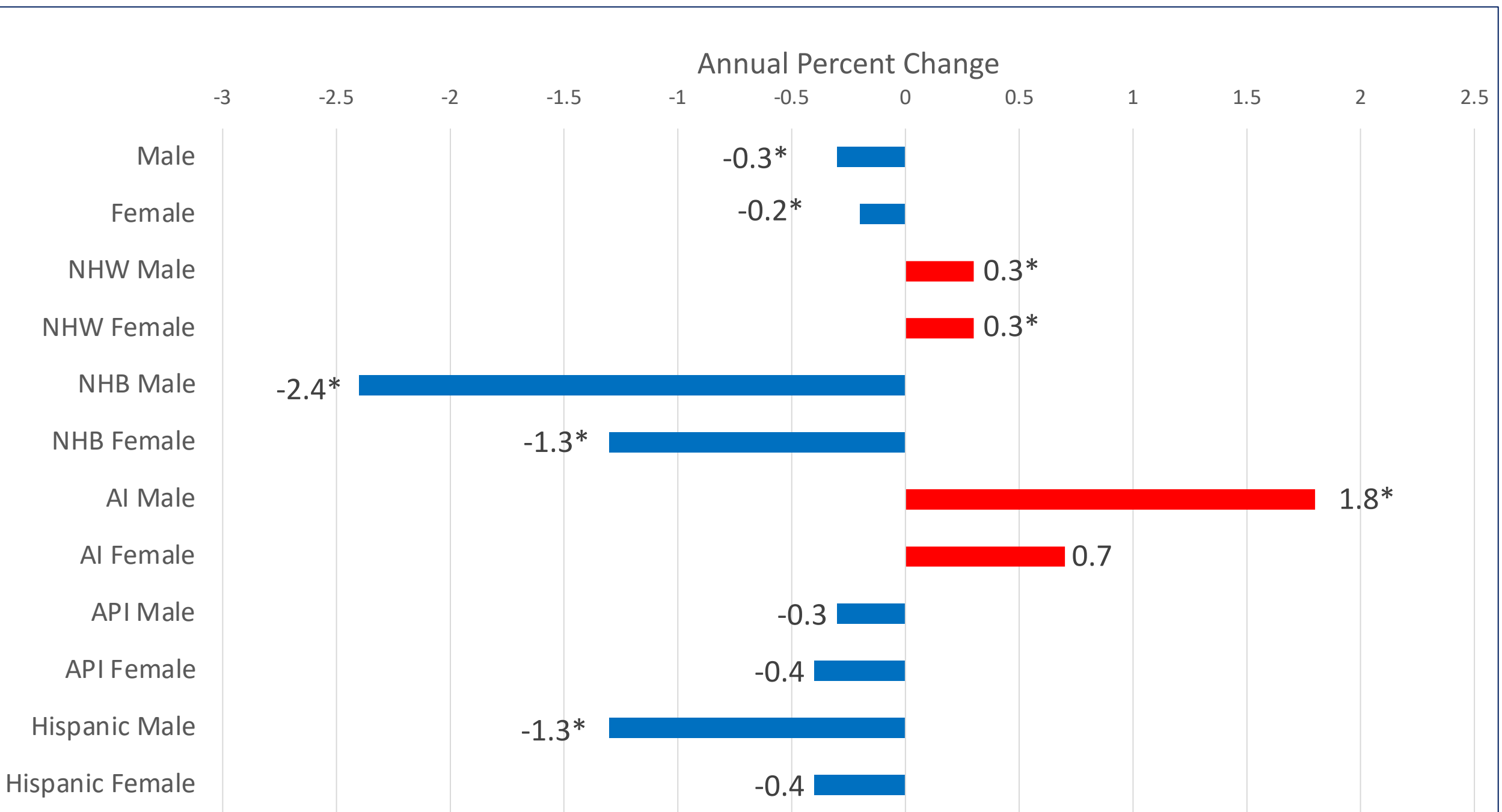


Non-Hispanic Blacks (NHB) experience worse cancer outcomes across a variety of malignancies, including head and neck cancer, compared to Non-Hispanic Whites (NHW). The landscape of head and neck cancer (HNC) has been evolving, driven by an increase in HPV-positive oropharyngeal cancers (OPC) and a reduction in malignancies of other subsites due to a decline in tobacco use. However, the impact of this shift on racial disparities remains to be evaluated. In this study, we examined changes in the incidence and mortality of head and neck cancer by subsite (oral cavity, oropharynx, and larynx), sex and race.

Methods

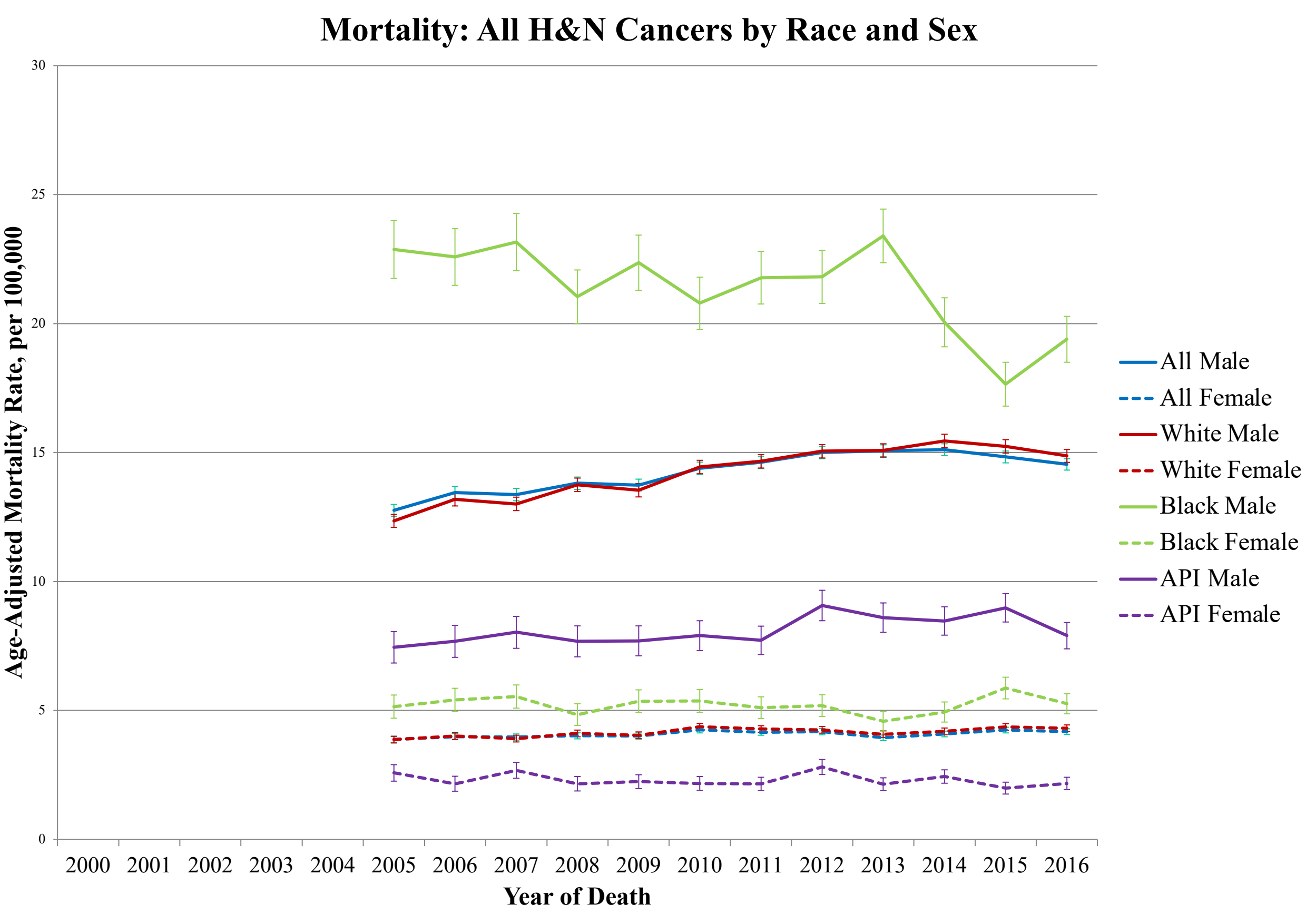
Patients diagnosed with HNC (oral cavity, oropharynx, hypopharynx, nasal and paranasal sinuses and larynx) from 2000 to 2017 and in the National Cancer Institute Surveillance, Epidemiology, and End Results (SEER) program were included in this retrospective study. Average annual percentage change (aAPC) in incidence and mortality (2000 to 2017) were age adjusted to the 2000 US standard population and were calculated overall by sex and by race (NHW, NHB, American Indian, Asian Pacific Islander and Hispanic). The mortality data were collected and maintained by the National Center for Health Statistics and include all cause mortality. The Tiwari modification was used to compute confidence intervals and assess trends over time.

Head and Neck Cancer Incidence

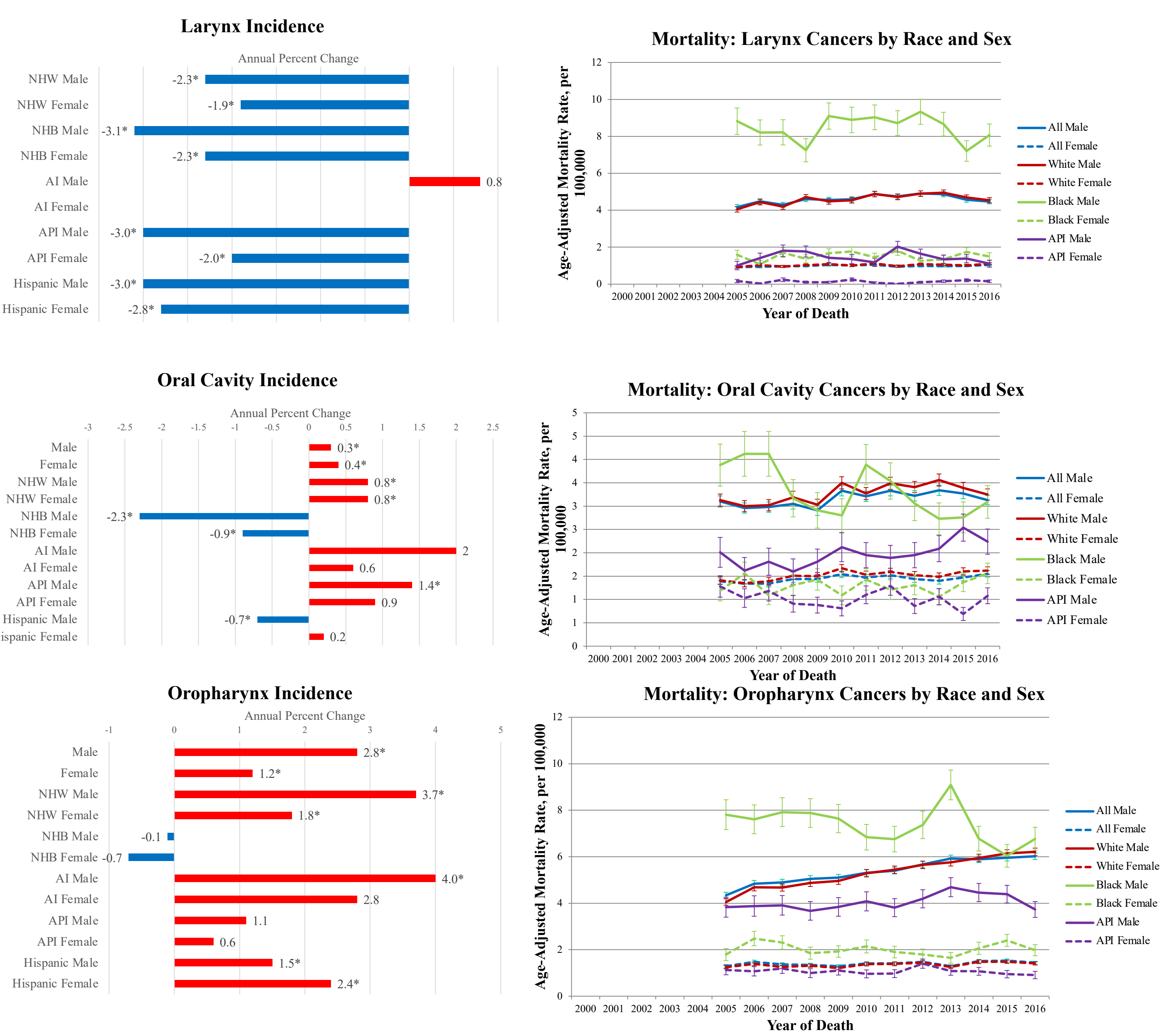


Rates are per 100,000 and age-adjusted to the 2000 US Std Population (19 age groups - Census P25-1130) standard; Percent changes were calculated using 1 year for each end point; APCs were calculated using weighted least squares method. *The APC is significantly different from zero ($p < 0.05$).

Head and Neck Cancer Mortality



Results by Subsite



Conclusions

- The previous racial disparity in incidence of HNC has been eliminated over the last decade, driven by a decline in incidence among NHB in all subsites.
- This trend also reflects the heavier burden on NHW of HPV-positive OPC. The increased mortality in this group as seen in the SEER database stands in contrast to the improved prognosis of HPV mediated oropharyngeal carcinoma.
- Despite the elimination of an incidence disparity between NHB and NHW, NHB continue to experience a higher mortality rate. Further research is needed to elucidate the factors underlying the persistence of this racial disparity in mortality.
- SEER Database studies are limited by incomplete data, variations in data reporting, lack of other variables including adjuvant therapies and selection bias among other concerns.