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## Asian American, Native Hawaiian and Pacific Islander Tobacco Use Patterns

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### Abstract

**Objectives**—To provide a national depiction of Asian American (AA) and Native Hawaiian/Pacific Islander (NHPI) tobacco use and highlight considerations for targeted interventions.

**Methods**—We analyzed data from the 2009-2010 National Adult Tobacco Survey for subgroup differences in prevalence and consumption of various tobacco products.

**Results**—Use varies considerably by ethnic subgroups for cigarette smoking (including menthol) and other forms of tobacco. Despite being lighter, less frequent, and seemingly less dependent smokers, AANHPIs had similar quit ratios as non-AANHPIs.

**Conclusions**—AA and NHPI disparities in tobacco use may be due to underutilization of cessation resources, including those for non-cigarette tobacco products, and lack of availability of culturally-appropriate resources. Community-based and regulatory approaches should be employed to reduce use of all tobacco products, especially among high prevalence subgroups.

### Keywords

Asian American; Native Hawaiian/Pacific Islander; tobacco; prevalence

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Tobacco use continues to be the leading contributor to premature morbidity and mortality globally<sup>1</sup> and in the US.<sup>2</sup> However, patterns of tobacco use and consumption vary dramatically across and within racial/ethnic groups. This variation is, in part, the result of dynamic processes of social organization and migration history<sup>3</sup> that can alter tobacco use

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#### Human Subjects Statement

As this was a secondary data analysis of a deidentified national dataset, no approval for human subjects' protections was necessary for this study.

#### Conflict of Interest Statement

All authors declare no conflicts of interest.

patterns of these groups in various ways. Tobacco use has social and economic costs as well as population health consequences in Asian countries and Pacific Island regions.<sup>4</sup> In the case of Asian American (AA) and Native Hawaiian/ Pacific Islander (NHPI) groups, there is high prevalence of tobacco use in Asian countries (ranging from 20 – 62%) and Pacific Islander territories (including Hawaii).<sup>5,6</sup> Despite this, it is often assumed that AA and NHPI population groups exhibit lower rates of smoking in the US and studies consistently show that AA prevalence rates are lower than the national average (9.9% and 20% in 2011, respectively).<sup>7-9</sup> However, reports of AA and NHPI prevalence rates are often based on aggregating AAs and NHPIs into a single category, which may attenuate potentially significant differences in tobacco use patterns among diverse subgroups.<sup>10,11</sup>

A 2006 review of tobacco use among Asian Americans found great heterogeneity in cigarette smoking prevalence among subgroups,<sup>12</sup> with national estimates ranging from as low as 0.9% for Asian Indian women to 33.0% for Korean men. Estimates in specific geographic regions, such as California, found AA subgroup prevalence rates as high as 56.0% for Vietnamese men.<sup>12,13</sup> A more recent analysis of representative data from California also found dramatic disparities between sexes among five Asian subgroups, including a higher rate of smoking for Japanese females compared to males.<sup>14</sup> Whereas these results suggest that there may be wide variation in tobacco use patterns among subgroups, much of the research on tobacco use among AA subgroups use region/state level data or convenience samples from ethnic enclaves, limiting their generalizability on a national level as indicated by Chae et al.<sup>11,12,15,16</sup>

The most recent analysis of *national* data reporting adult *subgroup* estimates, based on analysis of the National Survey on Drug Use and Health (NSDUH), found AA smoking prevalence to be 14.5%, with AA subgroup estimates ranging from 3.5% to 37.4%, and NHPI smoking prevalence to be 31.4%.<sup>17</sup> However, this study was based on data from 2002 to 2005, and more current national estimates are important for tracking disparities between groups and appropriately informing targeted program planning. The only other report of national AA subgroup prevalence is the 2003 National Latino and Asian American Study, which reported population-level prevalence estimates for Chinese, Filipino, and Vietnamese in the US (ranging from 13.4% - 15.1%);<sup>11</sup> however, this research did not examine sex differences or other correlates by specific subgroup.

In addition, previous studies of AA tobacco use have focused largely exclusively on describing *cigarette* use. Although cigarettes are the most frequently used tobacco product among adults in the US, 13.6% of adults and 25.1% of daily smokers report trying at least one *non-cigarette* tobacco product.<sup>18</sup> An analysis of NSDUH data between 2002 and 2010 reported an increase in prevalence for use of cigars among AA males, although the study sample included adolescents and adults.<sup>19</sup> Furthermore, research reports that use of non-cigarette tobacco products is increasing. Studies show that sales of smokeless tobacco products have increased<sup>20</sup> and that use of other tobacco products, such as cigars<sup>21</sup> and hookah,<sup>22</sup> is becoming more popular. No form of tobacco is safe and these various tobacco products have different health risks,<sup>23</sup> with combustible forms, such as cigars and hookah, posing health risks equal to and potentially greater than those of cigarettes.<sup>24-26</sup> Although the variation in current cigarette smoking across Asian subgroups has been examined,<sup>17</sup> we

are not aware of any published national reports of non-cigarette tobacco product use among AA subgroups.

Cultural practices related to non-cigarette tobacco products influence tobacco use among some Asian ethnic groups, such as the use of *gutka* and *zarda*, by South Asians in the US.<sup>27</sup> These cultural practices vary for AA subgroups; therefore, examination of non-cigarette product use across these groups is particularly warranted. Furthermore, there are negative health effects that can result from the use of multiple tobacco products. For example, smokers' use of cigarettes with other tobacco products poses significant health risks, particularly if it undermines cessation.<sup>23</sup> Cultural practices that influence patterns of non-cigarette tobacco use may put some AA groups at increased risk for non-cigarette product use or multiple tobacco product use.

This paper provides an analysis of recent national rates of tobacco use behavior among Asian Americans and Native Hawaiian/Pacific Islanders, both as a group overall, and by sub-group ethnicity. We use data from the National Adult Tobacco Survey (NATS) which allows for description of prevalence estimates of cigarettes *and* other tobacco products by AA and NHPI subgroups, and by sex. We also add to the literature by examining patterns of tobacco use related to dependence, such as frequency and heaviness of smoking, use of menthol cigarettes, and cessation attempts. These considerations are instructive for developing areas for future research as well as targeted intervention among high-risk subgroups.

## METHODS

We utilized data from the 2009-2010 NATS. A detailed description of the survey design and sampling procedures are provided elsewhere;<sup>28</sup> specifics relevant to this analysis are found below. Conducted by the Centers for Disease Control and Prevention (CDC), the 2009 – 2010 NATS was a stratified, dual-frame (ie, cellphones and landlines) random digit dial telephone survey of non-institutionalized adults aged 18 years residing in the 50 US states and the District of Columbia. The instrumentation was conducted only in English. The sample was designed to yield data representative at both national and state levels.

The 2009–2010 NATS dataset contains a sample of 118,581 individual records, of which 2679 identified as being of Asian or NHPI descent. Individuals who identified themselves as Asian were further asked to identify their race/ethnicity from provided response options as Asian Indian, Chinese, Filipino, Japanese, Korean, or Vietnamese. We used these AA subgroups for analysis in this paper.

Key tobacco measures included ever and current use of various tobacco products: cigarettes, smoke-less tobacco, cigars, and hookah. For cigarettes, respondents were categorized as “ever smokers” if they responded that they had “tried smoking a cigarette in your entire life, even a puff.” Respondents were categorized as “current smokers” if they reported smoking at least 100 cigarettes in their lifetime and also reported currently smoking “every day” or “some days.” Consistent with previous research, “ever use” of non-cigarette tobacco products (hookah pipes, smokeless tobacco, and cigars) was measured by asking

respondents if they had ever tried the product and “current use” was defined as use of the product in the past 30 days.<sup>5</sup> We also examined detailed cigarette smoking behaviors (eg, frequency of use, cessation history) using validated measures available on the NATS; however, due to small sample sizes we were unable to conduct subgroup analyses. These variables were examined for AANHPIs as a group overall versus non-AANHPIs.

This was a secondary data analysis of a large federal data set. The dataset was weighted for the varying probability of selection using the variable “WT national” provided by the CDC in the dataset intended for providing national estimates. Details about the survey’s weighting methodology are provided elsewhere.<sup>29</sup> Analyses of available variables included the generation of prevalence estimates and standard error rates and the use of Wald chisquare tests to look for significant relationships between categorical variables (eg, tobacco use and ethnicity)(with p values of < .05 considered significant). Missing data were treated as missing and such cases were excluded from the denominators in analyses of the various variables. Statistical analyses were performed using SUDAAN (version 11.0) which corrects for the complex sample design.

## RESULTS

### Demographic Characteristics

Table 1 shows characteristics of the respondent sample. Demographic profiles of AA and NHPI NATS respondents within each subgroup largely resembled that found in US Census Bureau data, with respect to age, education, and income distribution,<sup>30</sup> although the dataset was weighted to provide representative estimates. A notable exception was the underrepresentation of AA and NHPI survey respondents age 55 and over relative to the Census Bureau data (possibly attributable to reduced English proficiency among older respondents unable to participate in the survey). With respect to sex, only Vietnamese NATS respondents deviated considerably from Census Bureau figures, with males underrepresented in the tobacco survey. Educational attainment and income were largely consistent with the Census Bureau data, with the exceptions being an overrepresentation of NHPI NATS respondents with less than a high school education and Vietnamese NATS respondents whose highest level of education is a bachelor’s degree.

### Prevalence of Tobacco Use

As shown in Table 2, the prevalence of ever and current cigarette, hookah, smokeless tobacco (SLT) and cigar use differed by AA and NHPI group ethnicity. *Ever use of cigarettes* differed significantly ( $\chi^2 = 5.4$ ,  $p < .01$ ,  $df = 6$ ), ranging from as low as 9% among Vietnamese respondents to as high as 48.4% among NHPIs. *Current use of cigarettes* also differed significantly by group/ ethnicity ( $\chi^2 = 3.6$ ,  $p < .01$ ,  $df = 6$ ) and was least prevalent among Chinese (4.7%), Asian Indians (5.5%) and Vietnamese (7.2%) and most prevalent among Filipinos (13.6%), Koreans (15.3%), Japanese (18.8%) and NHPIs (20%). Current cigarette smoking was also more prevalent in males versus females in all ethnic groups except Chinese. However, sex disparities in current cigarette smoking were most notable among Vietnamese and Asian Indians (with almost all male smokers), and among Koreans (approximately 17 point difference in smoking prevalence between males and females,

though not statistically significant). With respect to current use of menthol cigarettes, survey results also indicated that preference for menthol cigarettes was slightly higher for AA and NHPI cigarette smokers overall (39.3%) compared to non AA and NHPI smokers (35.6%), and was particularly high for Filipino and NHPI cigarette smokers (45% and 46%, respectively; data not presented in table).

The prevalence of *current hookah use* also varied greatly by ethnicity (ranging from as low as 0.4% among Filipinos to 14.6% among Koreans)( $\chi^2 = 2.01$ ,  $p = .05$ ,  $df = 6$ ) as did use by sex within ethnicity (Table 2). Interpretation of this finding warrants caution given the accepted standard for statistical significance ( $p < .05$ ); however, given the dearth of data adequately powered to assess differences in prevalence of hookah use among AANHPI subgroups, these results should be considered noteworthy. Prevalence of *current smokeless tobacco use* was low for all groups (between 0 and 2.5%)( $\chi^2 = 1.66$ ,  $p = .13$ ,  $df = 6$ ) although *ever use of smokeless tobacco* use differed significantly by group ( $\chi^2 = 4.3$ ,  $p < .01$ ,  $df=6$ ) and was notably high among Japanese (42.3%) and NHPI males (29.1%). Although the prevalence of *current cigar use* ranged from approximately 1% to 7%, prevalence of *ever cigar use* was much higher and differed significantly by group ( $\chi^2 = 2.8$ ,  $p = .01$ ,  $df = 6$ ), ranging from about 18% to 46.6%. *Current cigar use* was highest among NHPI (10.4%) and Japanese (8.4%) males.

### Current Cigarette Smoker Characteristics

Survey results also indicated that the prevalence of *daily cigarette smoking* was lower among AANHPI current cigarette smokers (68.4%) versus non-AANHPIs (76.8%)(though not significantly), as was the prevalence of smoking a pack of cigarettes or more per day among daily smokers (31.1% versus 46.6%, respectively)( $\chi^2 = 4.6$ ,  $p = .03$ ,  $df = 1$ ; data not in table). Cigarette smoking within five minutes of waking is a validated and commonly used indicator of nicotine dependence.<sup>31</sup> Using this indicator, our results demonstrate that levels of nicotine dependence were also significantly lower for AANHPIs (9.4%) relative to non-smoking AANHPIs (23.5%)( $\chi^2 = 17.1$ ,  $p < .01$ ,  $df = 1$ ). In addition, AANHPIs as a group overall had a high prevalence of wanting to quit smoking (67.1%) and a higher prevalence of making at least one quit attempt in the last year (64.1%) as compared to non-AANHPIs (55.6%)( $\chi^2 = 1.3$ ,  $p = .24$ ,  $df = 1$ ) but the relative quit ratio (percentage of former/ever smokers) was similar for both groups (58.0% and 55.3%, respectively). Awareness of a smoking cessation quit-line service among AAs and NHPIs was relatively low overall (%) and receipt of advice to quit from a health professional was significantly lower (63.1%) among AANHPIs compared to non-AANHPIs (68.7%)( $\chi^2 = 6.9$ ,  $p < .01$ ,  $df = 1$ ).

## DISCUSSION

Our results show that prevalence of ever and current cigarette, hookah, smokeless tobacco, and cigar use varied by AA and NHPI group. Specifically, results demonstrate that NHPIs and several AA subgroups, such as Japanese and Koreans, exhibit cigarette smoking rates near the national average, underscoring need for interventions targeting specific subgroups. Our results are also consistent with previous work in finding notable differences in tobacco use within groups by sex, with use led predominantly by males.<sup>4,17,32-38</sup> Current cigarette

smoking was more prevalent among males compared with females in all groups, except Chinese. On one hand, these sex disparities are consistent with prior studies exhibiting large differences in cigarette smoking prevalence between AANHPI men and women;<sup>12,15</sup> these patterns are surmised to be attributable to lack of social acceptance of female smoking as well as the cultural attribution of tobacco use to masculinity among many Asian populations.<sup>39</sup> On the other hand, our finding that the male-female disparity is narrow for certain subgroups may reflect the influence of acculturation in which females shed traditional sex roles in context of American norms and expectations.<sup>40</sup> Further monitoring of sex differences among AANHPI subgroups, using measures of acculturation validated for these populations, may provide meaningful information for culturally appropriate interventions.

This study also found that menthol use (typically researched in African Americans and Latino minorities) is also high among AAs and NHPIs, especially among certain subgroups. This is significant given that menthol use has been associated with difficulty in quitting, particularly for some minority groups<sup>41,42</sup> and in acting as a more palatable starter cigarette product for youth.<sup>43</sup> Specifically, Filipino and NHPI smokers reported menthol smoking at rates higher than those for AA and NHPI smokers overall. Our findings align with national data on race from 2004 to 2008 showing that Asian smokers use menthol cigarettes at rates higher than Whites (31.2% vs. 23.8%) but much less than African Americans (82.6%).<sup>44</sup> However, we are not aware of any published national estimates of menthol cigarette use among Asian subgroups, although there are some references describing higher use of menthol cigarettes in Asian countries and the Pacific Islands.<sup>45</sup>

Moreover, comparing AANHPI with non-AANHPI cigarettes smokers, we found that the prevalence of nicotine dependence and receiving advice to quit from a health professional were significantly lower for AANHPIs. These considerations are important for culturally-tailored cessation strategies, such as in-language quit-lines; message targeting that considers these distinct patterns should be included in any comprehensive tobacco control strategy.

Consistent with previous work by Caraballo et al,<sup>17</sup> our overall findings illustrate that tobacco use continues to be a public health issue among AA and NHPI populations, especially in certain subgroups. Our study helps fill a notable gap in research by presenting recent national data about the use of non-cigarette products, such as hookah, smokeless tobacco and cigars in these populations. Of the currently used non-cigarette products measured by the NATS, hookah was the most popular among AA and NHPI subgroups. Current hookah use rates were several times higher for Korean (14.6%), NHPI (7.3%), and Vietnamese (5.8%) subgroups than for the non-AA/NHPI population (1.4%). It should be noted that these results likely underestimate the total use of other tobacco products since some populations, like South Asians, commonly use products not included in traditional surveillance, such as *gutka* and *zarda*.<sup>46,47</sup> Monitoring and addressing use of these other tobacco products is important given that they are also addictive and associated with various health effects, are typically less expensive than cigarettes, may be used as cigarette substitutes when quitting or to circumvent smoking bans, and some may be perceived as being less risky than cigarettes. In addition, many of these products have yet to be regulated

under the authority granted to the Food and Drug Administration under the Family Smoking Prevention and Tobacco Control Act.<sup>48</sup>

This study also confirms and builds on previous research by exploring correlates and patterns of tobacco use for AA and NHPIs that suggest target areas for intervention. Much of the epidemiology examining cigarette smoking has not traditionally focused on light and intermittent patterns, although recent research has highlighted racial disparities in light/intermittent smoking,<sup>49</sup> nicotine dependence and metabolism,<sup>50</sup> and cessation attempts.<sup>51</sup> Our observations that AA and NHPIs appeared to be lighter (ie, less likely to smoke a pack of cigarettes or more per day) and more intermittent smokers (ie, less likely to smoke daily) relative to non-AANHPIs are consistent with results of previous work on light and intermittent smoking.<sup>49,52</sup> These findings underscore the need to address such tobacco use patterns among AANHPIs. Educational campaigns to change perceptions that light or intermittent smoking imparts less harm and to encourage complete cessation may be used to address smoking in this population.

In addition, we found that despite being lighter, less frequent, and seemingly less dependent smokers, AANHPIs as a group overall did not have higher quit ratios compared to non-AANHPIs. These results may be related to the low awareness and underutilization of recommended tobacco cessation resources that were also suggested by our findings. Increasing the availability of culturally appropriate resources, such as quit-lines accessible in native languages of AA and NHPI subgroups,<sup>53</sup> may be one promising approach for some of these populations.<sup>54</sup> Furthermore, our findings indicate that, relative to others, AA and NHPI smokers are less likely to receive advice to quit by health professionals. Clinicians should address the various types of tobacco used among AA and NHPI subgroups with appropriate cessation support such as counseling, pharmacological, and behavioral cessation therapies.

This study has a number of limitations. The relatively small sample sizes for NHPIs and AA subgroups resulted in large variance estimates, which may have potentially limited the power to detect significant prevalence relationships among groups and precluded a more detailed analysis of tobacco use correlates by ethnic subpopulations. This limitation also impeded our ability to examine important correlates of use outside of sex, as prior work has concluded that levels of acculturation and nativity—among other variables—are highly associated with tobacco use.<sup>55</sup> Whereas these data include measurements of membership in AA subgroups and NHPIs, the NATS does not capture all possible subgroups. Other research has shown that subgroups not able to be included in this analysis, such as Cambodians and Samoans, exhibit concerning rates of tobacco use.<sup>4,56</sup> Future research on AA and NHPI tobacco use at the national level should be inclusive of the numerous racial/ethnic subgroups encompassing the AANHPI population and be powered sufficiently to detect meaningful by these variables.

In addition, the method of data collection—random-digit-dial sampling without instrumentation in specific AA and NHPI languages—may have selected for those who were born in the US or who are more acculturated, perhaps explaining our finding of greater cigarette smoking among Chinese women in the US.<sup>57</sup> As the NATS was only conducted in English, exclusion of AAs and NHPIs who have limited English proficiency may

underrepresent those at higher risk for tobacco use. A related factor resulting in underestimates of tobacco use might be the presence of social desirability bias of respondents as recent immigrants—especially AANHPI subgroups—who might be less likely to admit to stigmatized behaviors, such as cigarette smoking and use of other tobacco products. Despite these limitations, the NATS provides a timely snapshot of disparities in prevalence among these subgroups, highlighting important differences by sex and types of tobacco products. Our findings provide a starting point for future research, including enhanced surveillance and potential targets for intervention based on differential tobacco use behavior among the featured subgroups.

Overall, this study highlights factors associated with tobacco use in AAs and NHPIs as a group overall, as well as important differences in tobacco use prevalence among diverse subgroups. Study findings reinforce the importance of disaggregating AA and NHPI subgroup tobacco data when possible and suggest areas that may be in need of surveillance and culturally appropriate intervention efforts, such as intermittent cigarette use, menthol cigarette use, use of non-cigarette tobacco products, provider screenings and availability of culturally and linguistically tailored cessation services.

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**Table 1**

Demographic Characteristics of Asian Americans and Native Hawaiian / Pacific Islander NATS Respondents  
(N = 2679)

	Asian Indian (N = 544)	Chinese (N = 543)	Filipino (N = 338)	Japanese (N = 491)	Korean (N = 138)	Vietnamese (N = 69)	Native Hawaiian / Pacific Islander (N = 556)	Asian American / Native Hawaiian / Pacific Islander (AA & NHPI) (N = 2679)	Non AA & NHPI (N = 115,902)
<b>Sex</b>									
Male	57.2%	52.0%	51.8%	37.5%	45.9%	60.0%	58.0%	53.4%	48.5%
Female	42.7%	47.2%	48.2%	62.4%	54.1%	39.9%	42.0%	46.4%	51.5%
<b>Age</b>									
18-24 yrs	10.9%	20.8%	15.5%	11.2%	24.9%	35.9%	21.3%	18.4%	12.9%
25-34 yrs	37.1%	24.0%	19.2%	13.9%	42.0%	20.3%	24.2%	26.0%	17.5%
35-44 yrs	25.4%	24.1%	24.9%	19.7%	18.4%	19.3%	32.3%	25.6%	18.6%
45-54 yrs	19.0%	16.5%	23.6%	22.9%	4.0%	16.2%	9.1%	15.9%	19.3%
55-64 yrs	5.5%	10.2%	11.3%	13.3%	8.7%	7.1%	6.6%	8.6%	14.5%
65+ yrs	2.3%	4.4%	5.5%	19.0%	2.0%	1.1%	6.5%	5.4%	17.1%
<b>Highest Education Level</b>									
Less than High School	6.1%	4.7%	3.3%	2.6%	5.9%	24.0%	23.0%	10.0%	15.8%
High School	9.7%	12.8%	21.9%	12.8%	18.7%	20.4%	37.7%	20.3%	30.0%
Some College	6.1%	7.1%	12.4%	18.3%	19.2%	7.0%	15.6%	11.3%	15.6%
Associate Degree	5.4%	11.8%	10.5%	17.5%	8.7%	9.2%	9.1%	9.8%	14.3%
Bachelor's Degree	25.0%	32.8%	41.7%	29.4%	35.0%	35.3%	9.6%	26.9%	14.1%
Master's/Doctoral Degree	47.7%	30.7%	10.2%	19.6%	12.6%	4.2%	5.1%	21.6%	10.2%
<b>Income</b>									
< \$30,000	13.4%	13.6%	16.0%	8.2%	6.2%	40.2%	28.0%	17.8%	25.1%
\$30,000 – <\$50,000	16.4%	16.1%	21.0%	21.0%	12.3%	6.8%	22.9%	18.2%	25.4%
\$50,000 – <\$70,000	18.1%	11.2%	29.5%	23.4%	19.4%	17.0%	24.2%	18.6%	16.7%
\$70,000 – <\$100,000	15.3%	14.2%	26.6%	23.8%	25.5%	9.8%	10.4%	16.4%	15.6%
\$100,000 +	36.8%	45.0%	17.9%	23.7%	36.6%	26.3%	14.5%	29.0%	17.2%

**Table 2**  
Current and Ever Use of Tobacco by Asian American (AA) and Native Hawaiian / Pacific Islander (NHPI) Subgroups

	Cigarette						Hookah						Smokeless Tobacco						Cigar		
	Ever		Current		Ever		Current		Ever		Current		Ever		Current		Ever		Current		
	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	%	SE	
<b>ASIAN INDIAN</b>	15.0%	2.9	5.5%	2.3	17.8%	2.9	3.6%	2.9	1.6	3.3%	1.1	0.0%	0.0	17.8%	3.0	1.1%	0.6				
Male (N = 282)	23.9%	4.6	9.4%	3.9	17.6%	3.5	3.6%	3.5	1.8	5.5%	1.9	0.1%	0.1	26.1%	4.7	2.0%	1.0				
Female (N = 260)	3.1%	1.9	0.4%	0.2	18.0%	4.9	3.7%	3.1	3.1	0.4%	0.3	0.0%	.	6.8%	2.2	0.0%	.				
<b>CHINESE</b>	15.4%	3.0	4.7%	1.7	12.0%	3.4	2.0%	0.9	0.9	4.2%	1.7	1.6%	1.5	19.7%	3.1	1.9%	1.2				
Male (N = 231)	19.4%	4.7	3.7%	1.7	17.7%	4.1	2.9%	1.7	1.7	7.8%	3.2	3.0%	2.7	27.2%	5.0	1.4%	0.7				
Female (N = 309)	10.9%	3.5	5.8%	2.9	5.7%	2.1	1.0%	0.7	0.7	0.2%	0.1	0.0%	.	11.3%	3.5	2.5%	2.4				
<b>FILIPINO</b>	29.8%	5.4	13.6%	4.0	11.4%	3.5	0.4%	0.4	0.4	6.3%	2.3	0.0%	.	18.5%	3.9	3.4%	1.7				
Male (N = 106)	40.0%	9.6	14.7%	6.8	9.0%	4.4	0.0%	.	.	3.8%	1.9	0.0%	.	20.4%	6.6	2.2%	2.0				
Female (N = 232)	18.8%	4.5	12.5%	4.0	14.1%	5.4	0.9%	0.9	0.9	9.0%	4.3	0.0%	.	16.4%	4.0	4.6%	2.9				
<b>JAPANESE</b>	43.6%	6.5	18.8%	5.4	8.6%	3.0	1.8%	1.6	1.6	18.1%	5.7	2.2%	1.3	37.4%	6.3	4.7%	2.0				
Male (N = 167)	52.4%	9.9	20.1%	7.3	10.9%	6.1	4.7%	4.2	4.2	42.3%	10.8	5.7%	3.3	50.8%	10.1	8.4%	4.6				
Female (N = 323)	38.3%	8.3	18.0%	7.6	7.1%	3.1	0.0%	.	.	3.5%	1.7	0.0%	.	29.4%	8.7	2.5%	1.7				
<b>KOREAN</b>	24.8%	6.3	15.3%	5.8	30.2%	7.6	14.6%	6.7	6.7	4.0%	1.9	1.0%	0.8	25.1%	6.0	2.0%	1.1				
Male (N = 52)	31.4%	11.2	24.5%	11.1	32.4%	12.6	23.6%	12.5	12.5	8.7%	4.4	2.2%	1.7	31.5%	10.0	1.6%	1.2				
Female (N = 86)	19.1%	6.0	7.4%	3.9	28.2%	9.0	7.0%	4.9	4.9	0.1%	0.1	0.0%	.	19.6%	7.4	2.3%	1.8				
<b>VIETNAMESE</b>	9.1%	4.9	7.2%	4.8	18.1%	7.3	5.8%	5.6	5.6	0.4%	0.4	0.0%	.	24.1%	9.9	2.2%	1.8				
Male (N = 34)	14.9%	8.2	11.9%	7.9	8.3%	5.5	0.0%	.	.	0.6%	0.6	0.0%	.	24.5%	13.7	2.9%	2.9				
Female (N = 34)	0.3%	0.3	0.1%	0.1	32.7%	14.0	14.6%	13.0	13.0	0.0%	.	0.0%	.	23.6%	13.8	1.1%	1.1				
<b>NHPI<sup>d</sup></b>	48.4%	7.0	20.0%	4.1	16.2%	4.0	7.3%	2.9	2.9	18.8%	4.1	2.5%	1.8	46.6%	7.1	7.2%	2.6				
Male (N = 257)	59.3%	9.1	21.9%	6.3	22.4%	6.6	11.7%	5.1	5.1	29.1%	7.6	4.3%	2.1	65.2%	8.1	10.4%	4.4				
Female (N = 298)	33.3%	6.5	17.4%	4.7	7.7%	4.4	1.2%	0.8	0.8	4.7%	1.8	0.0%	.	20.8%	5.5	2.9%	1.5				
<b>AA / NHPI (N = 2679)<sup>b</sup></b>	27.9%	2.6	11.7%	1.4	15.2%	1.5	4.3%	1.0	1.0	8.8%	1.2	1.2%	0.5	27.6%	2.6	3.5%	0.8				
Male (N = 1129)	35.9%	4.2	13.6%	2.2	17.6%	2.3	6.0%	1.6	1.6	13.9%	2.2	2.3%	0.9	37.4%	4.1	4.5%	1.2				
Female (N = 1542)	18.6%	2.1	9.5%	1.6	12.4%	1.9	2.4%	0.9	0.9	2.9%	0.8	0.0%	.	16.2%	2.1	2.4%	0.8				
<b>NON AA / NHPI (N = 115,902)</b>	44.3%	0.3	19.8%	0.3	9.6%	0.2	1.4%	0.1	0.1	22.1%	0.3	3.4%	0.1	42.7%	0.3	6.7%	0.2				

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	Cigarette			Hookah			Smokeless Tobacco			Cigar		
	Ever	Current	SE	Ever	Current	SE	Ever	Current	SE	Ever	Current	SE
Male (N = 282)	49.8%	22.7%	0.5	13.3%	2.1%	0.4	38.6%	6.7%	0.5	61.5%	10.6%	0.3
Female (N = 282)	39.2%	17.1%	0.4	6.1%	0.8%	0.2	6.6%	0.4%	0.2	24.9%	3.1%	0.2

Note.

Sample sizes (N) shown are unweighted but all prevalence estimates are based on weighted sample data; all not equal to 100% due to missing sex-specific data.

<sup>a</sup> = Native Hawaiian / Pacific Islander ONLY

<sup>b</sup> = Asian American & Native Hawaiian / Pacific Islander COMBINED