

California Native Hawaiian and Pacific Islander Adult Health Behaviors and Attitudes on Tobacco Use

A report based on the California NHPI Tobacco Survey



UCLA Center for Health Policy Research
Funded by the California Tobacco Control Program,
California Department of Health

CALIFORNIA NATIVE HAWAIIAN AND PACIFIC ISLANDER ADULT HEALTH BEHAVIORS AND ATTITUDES ON TOBACCO USE

A report based on the California NHPI Tobacco Survey

June 2022



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About

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Health behaviors and attitudes about tobacco among Native Hawaiian and Pacific Islander adults in California

The **California Native Hawaiian and Pacific Islander Tobacco Survey*** was developed by the UCLA Center for Health Policy Research and community partners to understand how certain health behaviors and attitudes regarding **tobacco** affect **Native Hawaiian and Pacific Islander (NHPI)** communities in California



Among NHPI smokers...

1 in 6 (16.6%) did not try to quit smoking in the **past 12 months**

1 in 7 (14%) have never tried to quit smoking in their **lifetime**

2 in 5 (40.4%) delayed or did not get **FDA-approved cessation medicine†** due to cost

1 in 2 (52.3%) would rather receive cessation services at **NHPI-serving health organizations** than general health organizations

2 in 3 (65.8%) would be more likely to quit if more tobacco cessation services were **tailored to NHPI communities**

37.4% delayed or did not seek cessation services because of perceived **race-based discrimination**

Cessation methods used:

71.2% used NHPI-serving cessation services programs

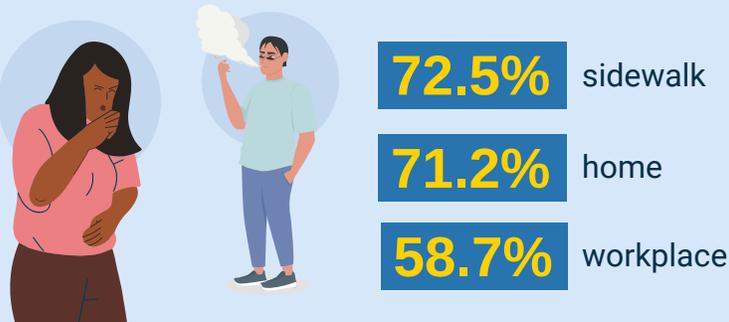
63.5% used vaping products

59.8% used FDA-approved cessation medicine

59.6% used a cessation hotline

Secondhand Smoke or Vape

NHPI adults were exposed in places such as...



Related Policy

Among NHPI adults...

3 in 4 (76%) agree or strongly agree on a **tobacco sales ban** to anyone born after 2025

More than **4 in 5** (83.2%) agree or strongly agree that apartment units should be **smoke- and vape-free**

*The California Native Hawaiian and Pacific Islander Tobacco Survey is a study that used non-probability recruitment methods, therefore data estimates may not be entirely represent NHPI populations in California.

†Nicotine replacement therapy or prescription cessation medication (e.g. Chantix or Zyban)

Read the full report:
<https://ucla.in/3NmgnJ7>

Executive Summary

The **California Native Hawaiian and Pacific Islander Health Behaviors and Attitudes on Tobacco Use** is a report based on the California Native Hawaiian and Pacific Islander (NHPI) Tobacco Survey. This report provides estimates on tobacco use, other health behaviors associated with tobacco such as smoking cessation and exposure to tobacco secondhand smoke (SHS) or secondhand vape (SHV) as well as attitudes regarding tobacco use and tobacco control policies among surveyed NHPI adults in California. This report also provides estimates on marijuana use and co-use among surveyed NHPI adults in California. Estimates presented in this report are disaggregated by NHPI subgroups, sex, age groups, education level, and regions in California to support examination of health disparities that exists among and within the NHPI adult population in California.

Key Findings

Below are the key findings gathered from the California NHPI Tobacco Survey:

Tobacco Use

A large proportion of NHPI adults in this sample use tobacco products as 64.3% of NHPI adults surveyed reported use of tobacco products of any kind in the past 30 days:

- Over three-quarters (77.8%) of Native Hawaiian adults and a majority (54.3%) of Pacific Islander adults reported being a current smoker.
- A majority (52.2%) of NHPI adults reported ever use of vaping products (lifetime), and close to 2 in 5 (38.4%) of NHPI adults reported current use of vaping products (past 30 days).
- Among NHPI adults, 22.4% reported use of big cigars, 21.4% reported use of little cigars, 22.1% reported use of smokeless tobacco (chewing tobacco, snuff or snus), 20.8% reported use of heated tobacco products, 18.3% reported use of hookah, and 16.9% reported use of nicotine pouch in the past 30 days.
- A majority (54.6%) of NHPI adults reported current use of flavored tobacco products.
- Over three-quarters (77.4%) of NHPI adults who chewed betel nut had reported current use of betel nut with tobacco.

A large proportion of NHPI young adults (ages 18 to 24) in this sample use tobacco products such as cigarettes, vaping products, and flavored tobacco products:

- About 3 in 5 (59.3%) NHPI young adults reported being a current smoker.
- 45.2% of NHPI young adults reported current use of vaping products and 62.0% of NHPI young adults reported ever use of vaping products.
- 57.7% of NHPI young adults reported current use of flavored tobacco products.

A larger proportion of NHPI male adults in this sample reported tobacco use than NHPI female adults:

- 83.6% of NHPI male adults compared to 45.9% of NHPI female adults reported use of tobacco products.
- 81.7% of NHPI male adults compared to 37.9% of women reported being current smokers.
- A majority (51.5%) of NHPI male adults compared to a quarter (25.9%) of women reported current use of vaping products. In addition, 63.4% of NHPI male adults compared to 41.6% of NHPI female adults reported ever use of vaping products.
- 71.0% of NHPI male adults compared to 38.9% of NHPI female adults reported current use of flavored tobacco products.

Cessation

NHPI smokers indicated greater level of comfort and likelihood of quitting smoking with NHPI specific organizations and services, but continue to face many obstacles:

- A majority (52.3%) of current NPHI smokers in this sample indicated that they were more comfortable receiving tobacco cessation services at health organizations that serve NHPI communities than health organizations that serve the general population.
- About two-thirds (65.8%) of current smokers also indicated that they were more likely to quit if more tobacco cessation services were tailored to NHPI communities.
- A larger proportion of Guamanian (91.9%) and Fijian smokers (83.7%) indicated that they would be more likely to quit if cessation services were tailored to NHPI communities than any other NHPI smoker comparing by NHPI subgroups.

- Withdrawal symptoms (31.7%), relapse or unable to quit (23.6%), and decrease in social interaction with peers (15.7%) were the biggest fears that NHPI smokers had when quitting smoking for good.
- Around 2 in 5 (40.4%) NHPI smokers delayed or did not get nicotine replacement therapy (NRT) or prescription cessation medications due to cost and 37.4% of NHPI smokers delayed or did not seek cessation services because of perceived unfair treatment based on their race or ethnicity.

About 9 in 10 (92.6%) NHPI adults with less than a high school diploma in this sample reported being a current smoker and many face substantial barriers to cessation, despite indicating a clear need for cessation programs:

- NHPI smokers with a bachelor's degree (92.5%) are more likely to report having attempted to quit in their lifetime than NHPI smokers with less than a high school diploma (66.5%), but NHPI smokers with less than a high school diploma (97.7%) were more likely to report having attempted to quit in the past 12 months when comparing by education level.
- 67.7% reported that they were more comfortable receiving cessation services from health organizations that serve NHPI communities. Also, almost all (93.5%) indicated that they would be likely to quit if cessation services were specific to NHPI communities.
- Among NHPI smokers with less than a high school diploma who had attempted to quit: 86.2% used cessation services programs at a NHPI specific organization, 73.0% used a cessation helpline, and 72.4% used nicotine replacement therapy (NRT) or prescription cessation medications.
- A majority (56.4%) of current NHPI smokers with less than high school a diploma delayed or not get NRT or prescription cessation medications due to cost.

Tobacco Secondhand Smoke and Vape Exposure

Over two-thirds (67.0%) of NHPI adults in this sample reported being exposed to tobacco secondhand smoke (SHS) or secondhand vape (SHV), while 48.9% of NHPI adults reported exposure to marijuana secondhand smoke (SHS), a lower percentage of reported exposure compared to NHPI adults exposed to tobacco SHS or SHV.

- NHPI adults with less than a high school diploma (92.8%) were more likely to report being exposed to tobacco SHS or SHV than any other NHPI adult when comparing across education level.
- Larger proportions of NHPI adults reported being exposed to tobacco SHS or SHV on the sidewalk (72.5%) and at home (71.2%) than in the workplace (58.7%).
- A larger proportion of NHPI adults in Northern and Sierra Counties (88.7%), Central Coast (86.7%), and Sacramento area (82.3%) indicated being exposed to tobacco SHS or SHV in the past two weeks than other regions in California.

Attitudes Around Tobacco-Related Statements

Many NHPI adults in the sample agreed that tobacco negatively impacts their community:

- About two-thirds (66.4%) of NHPI adults agree or strongly agree that the tobacco industry advertising targets the NHPI community.
- 76.2% of NHPI adults agree or strongly agree that vaping, juuling, and e-cigarettes are a health threat to NHPI communities. Agreement to this statement among NHPI young adults (aged 18 to 24) was at 76.1% and 66.4% among NHPI older adults (aged 65 and over), and overall percentages of agreement were similar across age groups.
- Over two-thirds (67.6%) of NHPI adults agree or strongly agree that flavored e-cigarettes and other flavored tobacco products are intentionally designed to appeal to youth. Agreement to this statement among NHPI young adult was at 74.9% compared to 57.1 among NHPI adults aged 50 to 64.

There was strong agreement among NHPI adults on tobacco control policies:

- There was strong agreement (76.6%) among NHPI adults that the sale of tobacco should be banned to anyone born after 2025. Despite a large percentage (77.3%) of Fijian adults in this sample reporting being a current smoker, 91.2% of Fijian adults agree or strongly agree to the tobacco control policy. On the other hand, 77.8% of Native Hawaiian adults reported being a current smoker and only 62.2% of Native Hawaiian adults agree or strongly agree to the tobacco control policy.
- Over 4 in 5 (83.2%) NHPI adults agree or strongly agree to having smoke- and vape-free apartment units.

Background

Data collection on Hawaiian and Part Hawaiian as a separate race category on the U.S. Census began in 1960, a year after Hawaii became the 50th state of the United States. Starting in the 1970s, Hawaiian was included in the Census for all states except Alaska.¹ In 1997, under the Office of Management and Budget Directive 15, Native Hawaiian and Pacific Islanders (NHPI) were considered their own category, replacing the racial category “Asian or Pacific Islander”.¹

Since then, the 2010 Census counted around 540,000 Native Hawaiians and Pacific Islanders alone and an additional 685,000 NHPIs were two or more races with a majority of NHPIs living in either Hawaii or California.¹ According to the latest Census, NHPIs are one of the fastest growing population groups in the U.S. from 2000 to 2019. The NHPI population in the U.S. grew by 72.7%, second only to the Asian Americans (alone) population at 82.2%, while the general U.S. population grew only about 16.3% within the same time period.²

Despite the growing Asian American and NHPI populations in the U.S., data collection efforts and availability of AA and NHPI population data remain sparse.³ In addition, population data on NHPIs are systematically conflated with Asians or Asian Americans as “Asian or Pacific Islander (API)”, which often masks disparities on a variety of sociodemographic and health indicators between Asian Americans and NHPIs as well as within Asian American and NHPI communities.⁴

Tobacco companies have heavily targeted NHPI communities with advertising campaigns, which have led to disproportional use of tobacco products as well as disparate health outcomes among NHPI individuals.⁵ However, because of small sample sizes, lack of in-language surveys, and aggregation of Asian/Asian American and NHPI data as a standard practice, research on tobacco use among NHPI communities are all the more limited.⁵ These limitations make it difficult to track trends on tobacco use and evaluations on tobacco use disparities statewide and at the national level. Given the disproportionate use of tobacco among NHPI individuals, NHPI community organizations in California and in the United States have long engaged in vast anti-tobacco coalition building and participated with various stakeholders to enact tobacco control policies.⁶

Comprehensive data collection and reporting on NHPI communities and their health are critical to decreasing health disparities and achieving health equity. This report aims to provide population health and health behaviors data among NHPI communities in California with hopes of providing NHPI community stakeholders with the tools to strengthen research on tobacco and further improve the health and wellbeing of all NHPI community members.

Methodology

About

The **California Native Hawaiian and Pacific Islander (NHPI) Tobacco Survey** (referred to in respondent materials as the “California Pacific Islander Health Attitudes and Behavior Survey” or CPIHABS is a follow-on study that contacted adults residing in California who identify as Native Hawaiian or Pacific Islander). The survey sample consists of re-contacted respondents from the 2019-2020 main California Health Interview Survey (CHIS), referrals from 2019-2020 CHIS respondents and community-based organizations (CBOs) serving NHPI communities, respondents referred by CBO recruits as well as respondents from CBOs and community leaders’ social media and e-mail contacts. This survey employed a convenience or non-probability-based sampling design, which differs from the probability-based sampling utilized in the development of CHIS data. Data table estimates in this report are not entirely representative of the NHPI populations in the state of California. UCLA CHPR cautions readers when interpreting the results of the data estimate tables pertaining to its generalizability to the overall NHPI populations in California.

A total of 1,267 respondents were collected between July 2020 and June 7, 2021. The survey was made available via telephone and web, but all responses were web-based. Further information regarding the study methodology including sample design, data collection, data processing and preparation, data collection results, survey weights and variance estimation can be found on a separate document entitled, *California Pacific Islander Health Attitudes and Behaviors Survey -- Methodology Report: January 2022*.

Interpretation and Limitations

Statistically unstable estimates symbolized by an exclamation point (!) reflect percentages based on a small sample size that may not accurately reflect the behaviors, health conditions, or health services issues of the population.

The coefficient of variation (CV) is defined as the ratio between the standard error of the point estimate and the point estimate. The CV is calculated for each estimate to assess statistical stability. A point estimate with a CV larger or equal to 0.30 is considered a statistically unstable estimate.

If an estimate table has values followed by an exclamation point (!), the UCLA Center for Health Policy Research and CHIS do not recommend using these values for purposes of policy development, program planning, or advocacy. Statistically unstable estimates are shown in the report to illustrate completeness of data collected and analyzed.

Statistical testing was not conducted to assess differences in estimates between subgroups. In lieu of statistical testing, 95% confidence intervals for estimates are provided in this report.

Construction of NHPI as a Race Category and Detailed Race Categories

In constructing the Native Hawaiian and other Pacific Islander categories, respondents who identified as Native Hawaiian and Pacific Islander were randomly selected to either be included in the Native Hawaiian or Pacific Islander category. For example, if a respondent is Native Hawaiian and Fijian, the respondent was randomly selected and treated as Native Hawaiian or Fijian. Therefore, Native Hawaiians and Pacific Islanders are treated as mutually exclusive in this report. For a respondent who is Native Hawaiian and have multiple Pacific Islander identities, the respondent was also randomly selected as either Native Hawaiian or Pacific Islander. If the respondent was categorized as Pacific Islander (e.g. respondent who is Tongan and Samoan), responses are recorded under “Other Pacific Islander”.

Demographic Characteristics

The sample consists of Native Hawaiian and other Pacific Islander adult respondents totaling 1,267. The survey recorded 713 responses from Native Hawaiian alone adults, which is a larger proportion of the sample compared to the proportion of Native Hawaiians among the NHPI population in California. After weighting calibrations using American Community Survey (ACS) 5-year estimates as benchmarks, 21.2% of the sample are Native Hawaiian, 28.9% are Samoan, 12.8% are Guamanian, 14.5% are Tongan, 5.4% are Fijian, and 17.2% are considered Other Pacific Islanders.

A majority (57.9%) of the sample are adults ages 25 to 49, 18.0% of the sample are young adults (aged 18 to 24), 16.7% are adults aged 50 to 64, and 7.4% are older adults (aged 65 and over).

A majority of the sample respondents are female (51.2%) and 48.8% are male based sex assigned on birth certificate.

About 2 in 5 (40.8%) in the sample are adults with “some college, university, or community college”, which includes completion of an Associate’s degree or 2-year equivalent degree, 27.0% are adults with a bachelor’s degree or higher, about a quarter (24.0%) have a high school diploma, and 8.2% have less than a high school diploma.

Regionally, 26.6% of the sample are from the Larger Bay Area, followed by Southern California counties other than Los Angeles (25.3%), Los Angeles county (21.2%), San Joaquin Valley (11.3%), Sacramento (10.3%), Northern or Sierra Counties (2.8%) and Central Coast (2.5%).

Close to half of respondents (44.4%) are homeowners in a single-unit building, 18.4% are renters in a single-unit building, 16.9% are renters in a multi-unit building, 16.1% are homeowners in a multi-unit building and 4.2% had other arrangements.

Table 1. Demographic characteristics of sample

	Percent (%)	95% Confidence Interval
NHPI		
Native Hawaiian	21.2	17.9 – 24.5
Samoan	28.9	24.1 – 33.6
Tongan	14.5	10.4 – 18.5
Guamanian	12.8	8.3 – 17.2
Fijian	5.4	3.2 – 7.6
Other Pacific Islander	17.2	13.2 – 21.3
Sex		
Male	48.8	43.5 – 54.1

Female	51.2	45.9 – 56.5
Age		
18 to 24	18.0	14.2 – 21.8
25 to 49	57.9	52.4 – 63.3
50 to 64	16.7	12.2 – 21.2
65 and over	7.4	3.8 – 11.0
Education		
Less than high school	8.2	5.1 – 11.3
High school graduate	24.0	19.4 – 28.6
Some college or community college	40.8	35.8 – 45.7
Bachelor's degree or higher	27.0	22.3 – 31.8
Region		
North/Sierra Counties	2.8 (!)	1.1 – 4.4
Larger Bay area	26.6	22.3 – 30.9
Sacramento area	10.3	7.0 – 13.6
San Joaquin Valley	11.3	8.0 – 14.6
Central Coast	2.5	1.0 – 3.9
Los Angeles	21.2	17.6 – 24.9
Other Southern California	25.3	20.5 – 30.1
Housing Status		
Rent in multi-unit building	16.9	13.0 – 20.8
Rent in single-unit building	18.4	14.5 – 22.4
Homeowners in multi-unit building	16.1	12.0 – 20.3
Homeowners in single-unit building	44.4	39.3 – 49.5
Other arrangements	4.2	1.9 – 6.5

Tobacco Use

Current Use of Tobacco Products

Table 2 shows that about 64.3% of NHPI adults in this sample indicated current use of tobacco products of any kind. Current tobacco use is defined as the use of one of the following tobacco products in the past 30 days: cigarettes, vaping products, smokeless (chewing tobacco, snuff or snus), big cigars, cigarillos or little cigars, hookah, heated tobacco products, or nicotine pouches. This study found that a larger proportion of Native Hawaiians (78.8%) and Fijians (77.3%) reported current use of tobacco than any other NHPI subgroups. NHPI male adults reported higher current use of tobacco products than NHPI female adults (83.6% vs. 45.9%). In addition, current use of tobacco products decreases across adult age groups. Larger proportion of adults with some college or community college reported current tobacco use than adults who are high school graduates as well as adults with a bachelor’s degree (70.3% vs. 62.2% and 46.4%). About 9 in 10 (90.8%) NHPI adults in the Sacramento area reported current use of tobacco followed by 84.3% of NHPI adults in the Northern or Sierra counties and 84.0% of NHPI adults in the Central Coast, which are among the highest across regions in California.

Table 2. Percentages of sample reporting current use of tobacco products by NHPI subgroups, sex, age, education level and regions in California

	Use of Tobacco (%)	95% Confidence Interval
Overall NHPI Population	64.3	59.2 – 69.5
NHPI subgroups		
Native Hawaiian	78.8	73.4 – 84.2
Samoan	62.3	53.4 – 66.6
Tongan	56.1	40.9 – 84.2
Guamanian	39.7	21.7 – 57.7
Fijian	77.3	56.2 – 98.4
Other Pacific Islander	57.7	46.4 – 68.9
Sex		
Male	83.6	77.8 – 89.5
Female	45.9	38.6 – 53.2
Age		
18 to 24	72.2	61.8 – 82.6
25 to 49	67.5	61.5 – 73.5
50 to 64	59.9	44.4 – 75.4
65 and over	30.6 (!)	6.8 – 54.4
Education		
Less than high school	100.0 (!)	100.0 – 100.0
High school graduate	62.2	50.8 – 73.6
Some college or community college	70.3	62.8 – 77.8

Bachelor's degree or higher	46.4	37.1 – 55.7
Region		
North/Sierra Counties	84.3	63.3 – 100.0
Larger Bay area	55.7	46.0 – 65.4
Sacramento area	90.8	82.4 – 99.2
San Joaquin Valley	68.0	53.0 – 83.0
Central Coast	84.0	61.9 – 100.0
Los Angeles	56.7	46.7 – 66.6
Other Southern California	63.4	53.3 – 73.3

! = Statistically Unstable Estimate

Current Smokers

Table 3 shows that around 3 in 5 (59.3%) NHPI adults reported being a current smoker. A current smoker is defined as someone who has had 100 or more cigarettes in their lifetime and smokes cigarettes some days or every day. Larger proportions of Native Hawaiians (77.8%) and Fijians (77.3%) reported being current smokers than any other adult comparing across NHPI subgroups. A higher percentage of NHPI male adults reported being a current smoker than NHPI female adults (81.7% vs. 37.9%). A higher percentage of NHPI adults aged 25 to 49 (62.5%) reported being current smokers than NHPI older adults or adults aged 65 and over (30.6%). NHPI adults with less than a high school diploma (92.6%) reported a higher percentage of being a current smoker than any other adult compared by education level. Larger proportions of adults in North or Sierra counties (84.3%), Sacramento area (90.5%), and Central Coast (84.0%) reported being current smokers compared to all other California regions.

Table 3. Percentages of sample reporting current smoking by NHPI subgroups, sex, age, education level and regions in California

	Current Smoker (%)	95% Confidence Interval
Overall NHPI Population	59.3	54.1 – 64.5
NHPI subgroups		
Native Hawaiian	77.8	72.3 – 83.2
Samoan	55.0	46.0 – 64.0
Tongan	42.3	28.2 – 56.5
Guamanian	38.8	20.9 – 56.8
Fijian	77.3	56.2 – 98.4
Other Pacific Islander	67.5	55.5 – 79.6
Sex		
Male	81.7	75.7 – 87.8
Female	37.9	30.9 – 45.0
Age		
18 to 24	60.3	49.7 – 70.8
25 to 49	62.5	56.1 – 69.0
50 to 64	59.9	44.4 – 75.4
65 and over	30.6	6.8 – 54.4

Education		
Less than high school	92.6	77.3 – 100.0
High school graduate	58.3	46.9 – 69.7
Some college or community college	64.3	56.7 – 71.9
Bachelor’s degree or higher	42.6	33.5 – 51.7
Region		
North/Sierra Counties	84.3	63.3 – 100.0
Larger Bay area	52.3	42.3 – 62.3
Sacramento area	90.5	82.1 – 98.9
San Joaquin Valley	67.8	52.9 – 82.8
Central Coast	84.0	61.9 – 100.0
Los Angeles	46.5	37.0 – 56.0
Other Southern California	55.8	45.5 – 66.1

! = Statistically Unstable Estimate

Current and Lifetime Use of Vaping Products

Table 4 shows that 38.4% of NHPI adults in this sample reported current use of vaping products (past 30 days) and a majority (52.2%) reported having ever used vaping products (lifetime use). A larger proportion of Fijians (66.2%) reported current use of vaping products than any NHPI group. NHPI male adults reported both higher percentages of current use and ever use of vaping products than NHPI female adults. A higher percentage (62.0%) of NHPI young adults reported having ever used vaping products than older adults (24.0%).

Table 4 also shows that percentages of NHPI adults reporting current and ever use of vaping products decreases across education levels, but with an uptick among NHPI adults with some college or community college. About 7 in 10 (70.7%) NHPI adults in the Sacramento region reported current use of vaping products, a larger proportion than any other region in California, while 17.0% of NHPI adults in the Central Coast reported current use of vaping products, the smallest proportion across regions in California. Larger proportions of NHPI adults in the Sacramento region (76.6%) and in the Central Coast (64.3%) reported having ever used vaping products than any other region in California.

Table 4. Percentages of sample reporting current and ever use of vaping products by NHPI subgroups, sex, age, education level and regions in California

	Current Use of Vaping Products		Ever Use of Vaping Products	
	(%)	95% Confidence Interval	(%)	95% Confidence Interval
Overall NHPI Population	38.4	34.0 – 42.7	52.2	47.7 – 56.8
NHPI subgroups				

Native Hawaiian	52.5	45.1 – 60.0	60.9	53.4 – 68.4
Samoan	32.8	24.2 – 41.3	49.6	40.3 – 58.9
Tongan	24.3	11.8 – 36.9	44.1	28.8 – 59.3
Guamanian	21.8	6.2 – 37.4	34.8	17.1 – 52.5
Fijian	66.2	43.9 – 88.5	68.7	46.1 – 91.3
Other PI	45.7	33.6 – 57.7	60.6	47.9 – 73.2
Sex				
Male	51.5	44.6 – 58.3	63.4	55.9 – 70.9
Female	25.9	20.5 – 31.3	41.6	35.3 – 47.97
Age				
18 to 24	45.2	33.8 – 56.6	62.0	50.2 – 73.8
25 to 49	39.5	34.7 – 44.3	55.4	49.7 – 61.1
50 to 64	34.8	20.7 – 48.9	43.3	28.2 – 58.4
65 and over	21.3	0.0 – 42.6	24.0 (!)	2.5 – 45.5
Education				
Less than high school	59.4	36.0 – 82.8	68.9	47.4 – 90.5
High school graduate	34.6	24.5 – 44.6	43.7	32.9 – 54.4
Some college or community college	40.2	33.4 – 47.0	59.8	52.8 – 66.9
Bachelor's degree or higher	32.7	23.9 – 41.4	43.4	34.0 – 52.8
Region				
North/Sierra	50.2	23.0 – 77.4	58.0	28.4 – 87.5
Larger Bay area	25.5	18.4 – 32.6	37.9	29.2 – 46.5
Sacramento	70.7	55.3 – 86.0	76.6	62.2 – 91.0
San Joaquin Valley	51.2	36.9 – 65.6	58.9	44.0 – 73.9
Central Coast	17.0	0.0 – 36.9	64.3	29.3 – 99.4
Los Angeles	35.5	27.1 – 43.9	49.9	40.2 – 59.6
Other Southern California	36.3	26.2 – 46.4	54.7	44.0 – 65.4

! = Statistically Unstable Estimate

Current Use of Other Tobacco Products

Tobacco products other than cigarettes and vaping products include big cigars, little cigars or cigarillos, smokeless tobacco (i.e., chewing tobacco, snuff or snus), hookah, heated tobacco products, and nicotine pouch. Among NHPI adults in this sample

reported current use tobacco products were: big cigars (22.4%), little cigars (21.4%), smokeless tobacco (22.1%), heated tobacco products (20.8%), hookah (18.3%), and nicotine pouch (16.9%). Larger proportions of Native Hawaiian adults reported current use of other tobacco products compared to the general NHPI adult population. NHPI male adults were more likely to report use of other tobacco products than NHPI female adults. Current use of other tobacco products was similar across age groups. NHPI adults with less than a high school diploma were more likely to use other tobacco products than any other NHPI adult compared across education level. Smaller proportions of NHPI adults in the Bay Area, Los Angeles, and other Southern California regions reported use of other tobacco products than other regions in California (See Appendix Table 1).

Current Use of Flavored Tobacco Products

Table 5 shows that a majority (54.6%) of NHPI adults in this sample reported current use of flavored tobacco products. NHPI male adults reported higher current use of flavored tobacco products than NHPI female adults (71.0% vs. 38.9%). Current use of flavored tobacco products was similar across age groups. Larger proportions of NHPI adults with less than a high school diploma reported current use of flavored tobacco products than NHPI adults with a bachelor's degree (76.0% vs. 42.1%). A larger proportion of NHPI adults in the Sacramento area (88.3%) reported current use of flavored tobacco products than any other NHPI adult across regions in California.

Table 5. Percentages of sample reporting current use of flavored tobacco products by NHPI subgroups, sex, age, education level and regions in California

	Use of Flavored Tobacco (%)	95% Confidence Interval
Overall NHPI Population	54.6	49.7 – 59.5
NHPI groups		
Native Hawaiian	66.4	58.9 – 73.9
Samoan	51.0	41.6 – 60.4
Tongan	45.6	30.5 – 60.7
Guamanian	34.6	16.8 – 52.3
Fijian	76.8	55.6 – 97.9
Other Pacific Islander	61.4	48.7 – 74.0
Sex		
Male	71.0	64.8 – 77.3
Female	38.9	32.0 – 45.8
Age		
18 to 24	57.7	46.0 – 69.5
25 to 49	59.2	53.4 – 64.9
50 to 64	46.0	30.6 – 61.3
65 and over	30.6 (!)	6.8 – 54.4
Education		
Less than high school	76.0	56.4 – 95.7

High school graduate	49.8	38.2 – 61.3
Some college or	61.4	53.9 – 68.8
Bachelor's degree or	42.1	32.7 – 51.4
Region		
North/Sierra Counties	79.1	58.0 – 100.0
Larger Bay area	42.2	32.9 – 51.5
Sacramento area	88.3	79.5 – 97.1
San Joaquin Valley	65.0	49.9 – 80.0
Central Coast	53.0 (!)	20.8 – 85.2
Los Angeles	46.3	36.9 – 55.6
Other Southern	53.6	42.7 – 64.5

! = Statistically Unstable Estimate

Current Use of Betel Nut with Tobacco

Betel nut is a fruit from the tropical areca palm. In some cultures, betel nut is consumed with other ingredients such as tobacco. Table 6 shows that about over three quarters (77.4%) of NHPI adults who chewed betel nut used it with tobacco in the past 30 days. Larger proportions of Samoans (81.3%) and other Pacific Islanders (91.6%) reported current use of betel nut with tobacco across NHPI subgroups. NHPI young adults (86.0%) and adults aged 25 to 49 (84.6%) reported higher current use of betel nut with tobacco than adults aged 50 to 64. Almost all (99.5%) of NHPI adults who have less than a high school diploma reported current use betel nut with tobacco compared across education level. The Central Coast (99.1%), Northern and Sierra Counties (95.8%), and Bay Area (94.8%), were among the regions with the largest proportions of NHPI adults reporting current use of betel nut with tobacco.

Table 6. Percentages of sample reporting current use of betel nut with tobacco by NHPI subgroups, sex, age, education level and regions in California

	Current Use of Betel Nut with Tobacco (%)	95% Confidence Interval
NHPI Adults who Chewed Betel Nut	77.4	69.8 – 85.0
NHPI subgroups		
Native Hawaiian	75.1	66.2 – 83.9
Samoan	81.3	64.6 – 98.1
Tongan	68.3	28.1 – 100.0
Guamanian	69.5	29.1 – 100.0
Fijian	58.9	31.0 – 86.7
Other Pacific Islander	91.6	85.0 – 98.2
Sex		
Male	76.9	68.2 – 85.5
Female	78.9	64.1 – 93.7
Age		
18 to 24	86.0	72.9 – 99.0
25 to 49	84.6	77.2 – 92.0

50 to 64	47.0	22.7 – 71.3
65 and over	51.6 (!)	0.0 – 100.0
Education		
Less than high school	99.5	98.5 – 100.0
High school graduate	69.1	50.7 – 87.6
Some college or community college	78.1	68.8 – 87.4
Bachelor's degree or higher	70.8	52.3 – 89.3
Region		
North/Sierra Counties	95.8	85.9 – 100.0
Larger Bay area	94.8	89.5 – 100.0
Sacramento area	65.9	43.7 – 88.2
San Joaquin Valley	73.0	56.6 – 89.4
Central Coast	99.1	96.5 – 100.0
Los Angeles	81.2	71.4 – 91.0
Other Southern California	69.5	52.1 – 86.9

! = Statistically Unstable Estimate

Current Marijuana Use

Table 7 shows that 34.4% of NHPI adults reported current use of marijuana. Marijuana is used in this report instead of cannabis due to how the survey question was presented to respondents. A larger proportion of Native Hawaiians (50.6%) reported current marijuana use than any other NHPI group. The proportions of NHPI adults reporting current use of marijuana were similar across sex and age groups. A larger proportion of adults with less than a high school diploma (65.0%) reported current use of marijuana than other NHPI adults comparing by educational level. Larger proportions of NHPI adults in the Sacramento region (55.1%) and San Joaquin Valley (57.0%) region reported current use of marijuana than any other region in California.

Table 7. Percentages of sample reporting current use of marijuana by NHPI subgroups, sex, age, education level and regions in California

	Use of Marijuana (%)	95% Confidence Interval
Overall NHPI Population	34.4	33.1 – 42.2
NHPI subgroups		
Native Hawaiian	50.6	43.2 – 58.0
Samoan	41.0	32.3 – 49.7
Tongan	31.9	18.1 – 45.8
Guamanian	18.6 (!)	4.7 – 32.5
Fijian	32.5	13.8 – 51.2
Other Pacific Islander	39.3	26.9 – 51.6
Sex		
Male	43.5	36.7 – 50.3
Female	32.1	25.8 – 38.3
Age		

18 to 24	40.2	28.8 – 51.5
25 to 49	39.1	33.9 – 44.3
50 to 64	34.6	20.3 – 48.8
65 and over	27.3 (!)	2.8 – 51.7
Education		
Less than high school	65.0	44.4 – 85.6
High school graduate	34.4	24.8 – 43.9
Some college or community college	32.7	26.6 – 38.9
Bachelor's degree or higher	39.7	29.8 – 49.6
Region		
North/Sierra Counties	31.0 (!)	6.9 – 55.1
Larger Bay area	29.9	21.1 – 38.8
Sacramento area	55.1	37.2 – 73.0
San Joaquin Valley	57.0	42.6 – 71.4
Central Coast	53.3 (!)	21.1 – 85.5
Los Angeles	34.1	25.4 – 42.8
Other Southern California	32.3	23.6 – 40.9

! = Statistically Unstable Estimate

Co-Use and Poly-Use of Tobacco Products

Table 8 shows that about 33.3% of NHPI adults reported current co-use of cigarettes and vaping products, 28.4% reported co-use of cigarettes and marijuana, and 22.8% reported poly-use of cigarettes, vaping products, and marijuana. Larger proportions of NHPI male adults reported co-use of cigarettes and vaping products (48.2% vs. 19.0%), co-use of cigarettes and marijuana (40.1% vs. 17.2%), and poly-use of cigarettes, vaping products and marijuana (34.4% vs. 11.8%) than NHPI female adults. Percentages of co-use of tobacco products and marijuana were similar across age groups. Larger proportions of NHPI adults with less than a high school diploma reported co-use of cigarettes and vaping products (51.0%), cigarettes and marijuana (63.9%), as well as poly-use of cigarettes, vaping products and marijuana (44.7%) than any other NHPI adult by educational level.

Table 8. Percentages of sample reporting co-use of tobacco products and marijuana by NHPI subgroups, sex, age, and education level

	Use Both Cigarettes & Vaping Products % (95% Confidence Interval)	Use Both Cigarettes & Marijuana % (95% Confidence Interval)	Use Cigarettes, Vaping Products & Marijuana % (95% Confidence Interval)
Overall NHPI Population	33.3 (29.0 – 37.5)	28.4 (23.8 – 32.9)	22.8 (19.1 – 26.6)
NHPI subgroups			
Native Hawaiian	50.4 (43.1 – 57.8)	49.2 (41.7 – 56.6)	41.4 (34.6 – 48.3)

Samoan	26.4 (18.6 – 34.2)	22.8 (15.5 – 30.2)	16.9 (10.8 – 23.0)
Tongan	14.0 (!) (5.1 – 22.9)	14.6 (!) (4.1 – 25.0)	8.7 (!) (1.3 – 16.1)
Guamanian	17.1 (!) (4.0 – 30.1)	9.9 (!) (0.0 – 21.2)	6.8 9 (!) (0.0 – 16.1)
Fijian	64.9 (42.8 – 87.0)	32.0 (13.4 – 50.6)	31.2 (!) (12.7 – 49.7)
Other Pacific Islander	41.9 (30.6 – 53.2)	36.2 (24.3 – 48.0)	31.0 (20.0 – 42.1)
Sex			
Male	48.2 (41.3 – 55.2)	40.1 (33.4 – 46.8)	34.4 (28.1 – 40.7)
Female	19.0 (14.4 – 23.6)	17.2 (12.2 – 22.2)	11.8 (8.5 – 15.2)
Age			
18 to 24	34.0 (23.3 – 44.6)	28.0 (18.6 – 37.5)	22.6 (13.8 – 31.5)
25 to 49	35.2 (30.5 – 40.0)	30.1 (24.9 – 35.4)	24.4 (20.1 – 28.7)
50 to 64	31.0 (17.7 – 44.3)	26.7 (13.9 – 39.4)	23.1 (12.0 – 34.1)
65 and over	21.3 (!) (0.0 – 42.6)	19.2 (!) (0.0 – 39.8)	11.1 (!) (0.0 – 26.8)
Education			
Less than high school	51.0 (30.4 – 71.6)	63.9 (43.4 – 84.4)	44.7 (25.8 – 63.6)
High school graduate	31.4 (21.8 – 41.0)	27.2 (18.4 – 35.9)	23.3 (15.4 – 31.1)
Some college or community college	33.2 (26.8 – 39.7)	25.8 (19.9 – 31.7)	20.9 (15.9 – 25.9)
Bachelor’s degree or higher	29.6 (21.1 – 38.1)	22.5 (14.4 – 30.7)	18.8 (11.6 – 25.9)

! = Statistically Unstable Estimate

Cessation

Level of Comfort Receiving Cessation Services

Table 9 shows that a majority (52.3%) of NHPI smokers indicated that they would be more comfortable receiving cessation services at health organizations that serve NHPI communities than health organizations serve the general public, while 20.9% indicated they would be less comfortable, and 26.8% indicated there would be no difference in their level of comfort. Percentages of smokers who reported that they would be more comfortable receiving services at NHPI serving health organizations were similar across NHPI subgroups, sex, and age. NHPI smokers who have a high school diploma (32.3%) were less likely to report that they would be more comfortable in receiving cessation services at an NHPI serving health organizations over general health organizations than NHPI smokers with some college or community college (54.2%), and NHPI smokers with a bachelor's degree (62.0%).

Table 9. Percentages of NHPI smokers based on their level of comfort receiving cessation services at health organizations serving NHPI communities compared to general health organizations by NHPI subgroups, sex, age and education level

	More Comfortable % (95% Confidence Interval)	Less Comfortable % (95% Confidence Interval)	No Difference % (95% Confidence Interval)
NHPI Smokers	52.3 (46.1 – 58.4)	20.9 (16.2 – 25.5)	26.8 (20.5 – 33.2)
NHPI subgroups			
Native Hawaiian	49.9 (40.8 – 60.0)	25.4 (17.4 – 33.7)	24.6 (17.6 – 31.6)
Samoan	46.1 (32.2 – 60.7)	16.3 (6.5 – 23.9)	37.6 (23.4 – 51.7)
Tongan	59.6 (39.9 – 79.4)	26.4 (!) (7.6 – 45.2)	14.0 (!) (0.7 – 27.2)
Fijian	47.5 (24.3 – 70.7)	25.4 (!) (7.4 – 43.0)	27.4 (!) (2.7 – 52.0)
Guamanian	61.0 (32.9 – 89.0)	10.1 (!) (0.0 – 26.5)	20.9 (!) (0.5 – 57.5)
Other PI	57.2 (43.6 – 70.8)	22.7 (12.4 – 32.3)	20.4 (!) (6.7 – 35.0)
Sex			
Male	51.1 (43.9 – 58.3)	19.7 (14.0 – 25.4)	29.2 (21.7 – 36.8)
Female	54.7 (43.7 – 65.7)	23.4 (15.6 – 31.1)	21.9 (12.4 – 31.4)

Age			
18 to 24	50.6 (35.0 – 66.1)	17.7 (!) (7.2 – 28.1)	31.7 (15.2 – 48.2)
25 to 49	58.8 (51.9 – 65.8)	21.2 (15.9 – 26.4)	20.0 (13.8 – 26.1)
50 to 64	39.5 (20.3 – 58.6)	21.2 (!) (6.4 – 36.0)	39.3 (20.4 – 58.3)
65 and over	12.9 (!) (0.0 – 46.2)	30.3 (!) (0.0 – 75.9)	56.8 (!) (7.2 – 100.0)
Education			
Less than high school	67.7 (44.6 – 90.8)	18.1 (!) (0.4 – 35.7)	14.3 (!) (0.0 – 32.2)
High school graduate	32.3 (19.0 – 45.6)	31.9 (18.9 – 44.8)	35.8 (21.4 – 50.2)
Some college or community college	54.2 (46.6 – 61.8)	18.1 (13.2 – 22.9)	27.7 (19.8 – 35.7)
Bachelor's degree or higher	62.0 (48.4 – 75.6)	15.7 (5.9 – 25.4)	22.2 (10.4 – 33.9)

! = Statistically Unstable Estimate

Likelihood of Quitting if Cessation Services Were Tailored to NHPI Communities

Table 10 shows that about two-thirds (66.1%) of NHPI smokers reported that they would more likely to quit smoking if cessation services were tailored to NHPI communities. A larger proportion of Guamanian (91.9%) and Fijian smokers (83.7%) indicated that they would be more likely to quit with NHPI specific cessation services than other NHPI smokers comparing by NHPI subgroups. Percentages indicating likelihood of smokers to quit were similar across sex and age. A larger proportion of NHPI smokers with less than high school diplomas (93.5%) reported that they were more likely to quit smoking if cessation services were NHPI specific than any other NHPI smoker when comparing by education level.

Table 10. Percentages of NHPI smokers based on their likelihood of quitting smoking for good if cessation services were tailored to NHPI communities by NHPI subgroups, sex, age and education level

	More Likely % (95% Confidence Interval)	Less Likely % (95% Confidence Interval)	No Difference % (95% Confidence Interval)
NHPI Smokers	66.1 (61.0 – 71.3)	21.0 (16.7 – 25.2)	12.9 (8.8 – 17.0)

NHPI subgroups			
Native Hawaiian	51.2 (42.5 – 59.9)	27.9 (19.9 – 35.9)	20.9 (14.2 – 27.7)
Samoan	67.2 (55.4 – 79.0)	15.7 (8.8 – 22.6)	17.1 (!) (6.6 – 27.5)
Tongan	67.4 (47.8 – 87.0)	23.0 (4.1 – 41.9)	9.6 (!) (0.0 – 20.9)
Guamanian	91.9 (80.5 – 100.0)	8.1 (0.0 – 19.4)	N/A
Fijian	83.7 (70.4 – 97.0)	16.3 (3.0 – 29.6)	N/A
Other Pacific Islander	67.7 (53.4 – 82.1)	24.4 (11.7 – 37.1)	5.5 (!) (0.0 – 17.1)
Sex			
Male	64.5 57.9 – 71.1	21.5 (16.1 – 27.0)	14.0 (8.5 – 19.5)
Female	68.7 59.3 – 78.1	19.7 (12.5 – 27.0)	10.7 (!) (4.4 – 17.0)
Age			
18 to 24	66.8 52.9 – 80.8	21.3 (9.5 – 33.1)	11.8 (!) (2.7 – 20.9)
25 to 49	69.9 64.1 – 75.7	19.3 (14.5 – 24.1)	10.3 (6.0 – 14.7)
50 to 64	51.6 31.4 – 71.7	29.4 (12.1 – 46.7)	19.0 (!) (7.0 – 13.0)
65 and over	60.0 (!) 11.5 – 100.0	7.6 (0.0 – 37.0)	32.4 (!) (0.0 – 76.8)
Education			
Less than high school	93.5 85.8 – 100.0	4.2 (!) (0.0 – 10.5)	2.3 (!) (0.0 – 7.0)
High school graduate	51.8 38.0 – 65.6	25.9 (15.2 – 36.7)	22.2 (10.2 – 34.3)
Some college or community college	62.2 55.4 – 69.0	24.0 (18.5 – 29.5)	13.2 (8.1 – 18.3)
Bachelor's degree or higher	73.0 60.1 – 86.0	19.0 (6.6 – 31.3)	8.0 (!) (2.9 – 13.1)

! = Statistically Unstable Estimate

Attempt to Quit in the Past 12 Months

Table 11 shows that 16.6% of NHPI smokers did not attempt to quit smoking in the past year. A larger proportion (36.1%) of Tongan smokers did not attempt to quit smoking than any other smoker comparing by NHPI subgroups. Attempt to quit in the past 12

months was similar comparing by sex. NHPI young adults (97.8%) were more likely to report having attempted to quit in the past year than any other age group. NHPI smokers with less than a high school diploma (97.7%) were also more likely to report having attempted to quit in the past year when comparing by education level.

Table 11. Percentages of NHPI smokers who attempted to quit in the past 12 months by NHPI subgroups, sex, age and education level.

	Did Not Attempt to Quit (%)	95% Confidence Interval	Attempted to Quit (%)	95% Confidence Interval
NHPI Smokers	16.6	10.9 – 22.2	83.4	77.8 – 89.1
NHPI subgroups				
Native Hawaiian	19.0	10.0 – 28.0	81.0	72.0 – 97.1
Samoaan	9.7 (!)	2.9 – 16.5	90.3	83.5 – 97.1
Tongan	36.1	15.2 – 56.9	63.9	43.1 – 84.8
Guamanian	19.7 (!)	0.0 – 44.5	80.3	55.5 – 100.0
Fijian	2.8 (!)	0.0 – 6.7	97.2	92.3 – 100.0
Other Pacific Islander	17.2 (!)	2.8 – 31.5	82.8	68.5 – 97.2
Sex				
Male	12.9	6.9 – 19.0	87.1	81.0 – 93.1
Female	23.3	11.9 – 34.8	76.7	65.2 – 88.1
Age				
18 to 24	2.2 (!)	0.0 – 5.3	97.8	94.7 – 100.0
25 to 49	16.5	11.0 – 22.1	83.5	77.9 – 89.0
50 to 64	30.5 (!)	5.2 – 55.7	69.5	44.2 – 94.8
65 and over	40.2 (!)	0.0 – 100.0	59.8 (!)	0.0 – 100.0
Education				
Less than high school	2.2 (!)	0.0 – 5.3	97.7	94.7 – 100.0
High school graduate	16.5	11.0 – 22.1	88.5	77.9 – 89.0
Some college or community college	30.5 (!)	5.2 – 55.8	69.5	44.2 – 94.7
Bachelor’s degree or higher	40.2 (!)	0.0 – 100.0	59.8 (!)	0.0 – 100.0

! = Statistically Unstable Estimate

Ever Attempted to Quit Smoking (Lifetime)

Table 12 shows that 14.0% of NHPI smokers have never tried to quit smoking cigarettes in their lifetime. Native Hawaiian smokers (32.0%) reported a higher percentage of never having tried to quit smoking in their lifetime than any other smoker comparing by NHPI subgroups, despite 77.3% of Native Hawaiian adults having reported being a current smoker. NHPI male smokers were less likely to report having attempted to quit smoking

in their lifetime than NHPI female smokers (78.6% vs. 93.1%), despite NHPI male adults being more likely to report being a current smoker than NHPI female adults. NHPI smokers with a bachelor's degree (92.5%) are more likely to report having attempted to quit in their lifetime than NHPI smokers with less than a high school diploma (66.5%).

Table 12. Percentages of NHPI smokers who attempted to quit smoking in their lifetime by NHPI subgroups, sex, age and education level

	Never Attempted to Quit (%)	95% Confidence Interval	Attempted to Quit (%)	95% Confidence Interval
NHPI Smokers	14.0	10.9 – 17.0	86.0	83.0 – 89.1
NHPI subgroups				
Native Hawaiian	32.0	24.0 – 40.0	68.0	59.7 – 76.0
Samoaan	14.1	7.8 – 20.5	85.9	79.5 – 92.2
Tongan	9.1 (!)	0.0 – 18.3	90.9	81.7 – 100.0
Guamanian	0.6 (!)	0.0 – 1.7	99.3	98.3 – 100.0
Fijian	2.8 (!)	0.0 – 7.4	97.2	92.6 – 100.0
Other Pacific Islander	8.9 (!)	2.3 – 15.7	91.0	84.3 – 97.7
Sex				
Male	21.3	16.0 – 26.8	78.6	73.2 – 84.0
Female	6.9	3.6 – 10.2	93.1	89.7 – 96.4
Age				
18 to 24	12.5 (!)	4.6 – 20.4	87.5	79.6 – 94.4
25 to 49	12.7	9.2 – 16.3	87.3	83.7 – 90.9
50 to 64	21.4	10.4 – 32.4	78.6	67.6 – 89.6
65 and over	10.4 (!)	0.0 – 25.1	89.6	74.9 – 100.0
Education				
Less than high school	33.5 (!)	13.6 – 54.5	66.5	46.5 – 86.4
High school graduate	11.7	6.1 – 17.4	88.3	82.6 – 93.9
Some college or community college	15.6	10.6 – 20.6	84.4	79.4 – 89.4
Bachelor's degree or higher	7.5	3.4 – 11.7	92.5	88.3 – 96.6

! = Statistically Unstable Estimate

Top Fears if Quitting Smoking for Good

Withdrawal symptoms (31.7%), relapse or unable to quit (23.6%), and decrease in social interaction with peers (15.7%) were the biggest fears that NHPI smokers had about quitting smoking for good. Percentages of the top three fears among NHPI smokers were similar across age, sex, and education level (see Appendix Table 2).

Barriers to Cessation

Table 13 shows that around 2 in 5 (40.4%) NHPI smokers delayed or did not get nicotine replacement therapy (NRT) or prescription cessation medications due to cost. Larger proportions of Fijian (58.6%) and other Pacific Islander smokers (58.0%) reported that they delayed or did not get NRT or prescription cessation medications due to cost compared to other NHPI smokers across NHPI subgroups. Larger proportion of NHPI smokers who had less than a high school diploma (56.4%) reported that they delayed or did not get NRT or prescription cessation medications due to cost compared to any other NHPI smokers across education levels.

Table 13 also shows that 37.4% of NHPI smokers delayed or did not seek cessation services because of perceived unfair treatment due to their race or ethnicity. Larger proportions of Fijian (58.6%) or other Pacific Islander (58.0%) smokers also reported having delayed or not seek cessations services due to perceived unfair treatment comparing by NHPI subgroups. Percentages of smokers who delayed or not seek cessation services because of perceived race-based discrimination were similar across sex, age, and education level.

Table 13. Percentages of NHPI smokers who had delayed or did not get NRT or prescription cessation medication due to cost or delayed or did not seek smoking cessation programs because of perceived race-based unfair treatment in the past year by NHPI subgroups, sex, age and education level

	Delayed or Did Not Get NRT or Prescription Cessation Medication Due to Cost (%)	95% Confidence Interval	Delayed or Did Not Seek Cessation Services Because of Perceived Unfair Treatment Due to Race/Ethnicity (%)	95% Confidence Interval
NHPI Smokers	40.4	34.2 – 46.6	37.4	31.4 – 43.8
NHPI subgroups				
Native Hawaiian	33.2	26.9 – 40.3	34.9	26.7 – 41.5
Samoaan	35.7	23.8 – 47.6	30.7	20.4 – 41.0
Tongan	33.4(!)	13.4 – 53.4	28.4 (!)	9.9 – 46.9
Guamanian	29.7 (!)	5.3 – 50.1	49.9 (!)	19.7 – 80.2
Fijian	58.6	33.9 – 83.2	56.6	32.6 – 80.7
Other Pacific Islander	58.0	43.2 – 72.9	44.2	29.2 – 59.2
Sex				
Male	39.3	31.4 – 47.2	36.3	28.7 – 43.8
Female	42.7	32.9 – 52.6	39.7	29.8 – 49.6
Age				

18 to 24	46.8	30.9 – 62.8	36.7	23.0 – 50.4
25 to 49	45.8	39.1 – 52.6	44.0	37.4 – 50.5
50 to 64	15.1 (!)	0.0 – 30.7	20.8 (!)	2.1 – 39.5
65 and over	32.4 (!)	0.0 – 80.0	5.9 (!)	0.0 – 19.8
Education				
Less than high school	56.4	34.3 – 78.6	44.8	24.2 – 65.5
High school graduate	40.9	26.7 – 55.1	34.6	20.7 – 48.4
Some college or community college	37.5	29.8 – 45.2	33.7	26.6 – 40.8
Bachelor's degree or higher	36.3	22.4 – 50.2	44.6	31.0 – 58.1

! = Statistically Unstable Estimate

Methods of Cessation

Among NHPI smokers who tried to quit in the past year, 71.2% used cessation services programs at NHPI specific organizations, while 63.5% of NHPI smokers also reported using vaping products when trying to quit, 59.8% used NRT or prescription cessation medication and 59.6% used a cessation services hotline. Comparing across NHPI subgroups, a smaller proportion of Samoan smokers (45.0%) used NRT or prescription cessation medication compared to Other Pacific Islander smokers (80.3%). Samoan smokers (30.5%) were also less likely to use a cessation services hotline than Other Pacific Islander smokers (84.6%) comparing across NHPI subgroups. A smaller proportion of Tongan smokers (41.6%) used cessation services at NHPI organizations than Fijian smokers (85.9%). A larger proportion of Fijian smokers (94.7%) used vaping products to quit than any other NHPI smoker comparing by NHPI subgroups. Percentages based on cessation methods used comparing by sex were similar, except that a larger proportion of NHPI male smokers (65.0%) reported using NRT or prescription cessation medication than NHPI female smokers (46.2%). Comparing by age groups, percentages of NHPI smokers across cessation methods used were also similar. A larger proportion of smokers (72.4%) who have less than a high school diploma reported use of NRT or prescription cessation medication than any other NHPI adult comparing by education levels, which may be due to a larger percentage of current smokers have less than a high school diploma. Smokers in the San Joaquin Valley reported higher use of vaping products when attempting to quit than any other smoker across regions in California (see Appendix Table 3).

Secondhand Smoke Exposure

Tobacco Secondhand Smoke (SHS) or Secondhand Vape (SHV) Exposure

Table 14 shows that over a third (67.0%) of NHPI adults in the survey sample indicated exposure to tobacco secondhand smoke (SHS) or secondhand vape (SHV) in the past two weeks. A larger proportion (84.8%) of Fijian adults reported exposure to tobacco SHS or SHV than any other NHPI subgroups but exposures were still similar across NHPI subgroups. About 7 in 10 (71.6%) NHPI male adults reported exposure to tobacco SHS or SHV, but exposures were still similar compared by sex. Also, over 7 in 10 (72.0%) NHPI adults aged 25 to 49 reported exposure to tobacco SHS or SHV, but exposures were still similar across age groups. NHPI adults with less than a high school diploma (92.8%) were more likely to report being exposed to tobacco SHS or SHV than any other NHPI adult when comparing across education level. Larger proportions of NHPI adults in North or Sierra counties (88.7%), Central Coast (86.7%), and Sacramento (82.3%) reported exposure to tobacco SHS or SHV than any other region in California, but exposure was still similar across regions in California. Close to 4 in 5 (79.1%) NHPI adults who are considered homeowners in a single-unit building reported exposure to tobacco SHS or SHV, but exposure was still similar across housing status.

Marijuana Secondhand Smoke Exposure

Table 14 also shows that 48.9% of NHPI adults reported exposure to marijuana secondhand smoke (SHS), a lower percentage of reported exposure compared to NHPI adults exposed to tobacco SHS or SHV. A majority (52.6%) of NHPI female adults reported exposure to tobacco SHS or SHV, but exposure was still similar compared by sex. Exposure to tobacco SHS or SHV was similar across age. Close to 7 in 10 (68.4%) NHPI adults with less than a high school diploma reported exposure to marijuana SHS, but exposure to marijuana SHS was still similar across education levels. Close to 2 in 5 (38.3%) NHPI adults in the larger Bay Area reported exposure to marijuana SHS, which was less than any region in California but exposure was still similar across regions in California.

Table 14. Percentages of sample reporting exposure to tobacco secondhand smoke (SHS) or secondhand vape (SHV) or exposure to marijuana SHS by NHPI subgroups, sex, age, education, regions in California and housing status

	Exposure to Tobacco SHS or SHV (%)	95% Confidence Interval	Exposure to Marijuana SHS (%)	95% Confidence Interval
Overall NHPI Population	67.0	62.4 – 71.5	48.9	44.2 – 53.6

NHPI subgroups				
Native Hawaiian	70.7	65.0 – 76.4	53.4	46.0 – 60.8
Samoaan	73.3	65.2 – 81.5	54.4	44.9 – 63.9
Tongan	55.7	41.5 – 69.8	49.8	34.9 – 64.9
Guamanian	45.0	26.3 – 63.7	39.4	21.0 – 57.7
Fijian	84.8	67.0 – 100.0	40.7	19.5 – 62.0
Other Pacific Islander	61.2	50.3 – 72.1	42.7	30.0 – 55.5
Sex				
Male	71.6	64.8 – 78.4	44.9	38.3 – 51.5
Female	62.6	55.8 – 69.3	52.6	45.4 – 59.7
Age				
18 to 24	68.4	56.7 – 80.1	42.2	30.4 – 53.9
25 to 49	72.0	66.7 – 77.2	52.1	46.2 – 58.0
50 to 64	57.9	43.8 – 72.1	47.9	32.8 – 63.1
65 and over	45.0	17.3 – 72.7	41.7	14.3 – 69.1
Education				
Less than high school	92.8	81.7 – 100.0	68.4	47.3 – 89.5
High school graduate	57.6	46.9 – 68.3	45.7	35.3 – 56.1
Some college or community college	68.1	60.7 – 75.4	46.5	38.9 – 54.0
Bachelor’s degree or higher	65.8	56.0 – 75.6	49.2	39.4 – 59.1
Region				
North/Sierra Counties	88.7	76.4 – 100.0	34.9 (!)	11.1 – 58.6
Larger Bay area	55.5	45.5 – 65.6	38.3	28.4 – 48.2
Sacramento area	82.3	70.7 – 93.9	51.1	34.1 – 68.0
San Joaquin Valley	74.4	60.0 – 88.8	65.7	53.0 – 78.5
Central Coast	86.7	71.0 – 100.0	59.4	31.7 – 87.2
Los Angeles	62.6	52.7 – 72.6	50.3	41.3 – 59.2
Other Southern California	68.8	59.2 – 78.4	50.7	40.1 – 61.3
Housing Status				
Rent in multi-unit building	63.3	50.7 – 76.0	50.3	37.7 – 62.9
Rent in single-unit building	61.8	50.3 – 73.2	47.0	34.6 – 59.5
Homeowner in multi- unit building	79.1	68.5 – 89.6	46.0	33.2 – 58.9
Homeowner in single- unit building	67.3	60.2 – 74.4	49.3	42.2 – 56.4
Other arrangements	54.1	25.9 – 82.3	56.5	29.6 – 83.3

! = Statistically Unstable Estimate

Places of Exposure

Table 15 shows that larger proportions of NHPI adults reported exposure to tobacco SHS or SHV at home and on the sidewalk than in the workplace (71.2% and 72.5% vs. 58.7%, respectively). A smaller proportion of Tongans reported exposure to tobacco SHS or SHV in the workplace than any other NHPI group. Larger proportions of Native Hawaiians and Fijians reported exposure to tobacco SHS or SHV at home, on the sidewalk, and in the workplace compared across NHPI subgroups. NHPI female adults (37.6%) were less likely to reported exposure to tobacco SHS or SHV in the workplace than NHPI male adults (78.1%). NHPI female adults also reported less exposure to tobacco SHS or SHV in the workplace than at home or on the sidewalk (63.7% and 68.8%). Reported exposure to tobacco SHS or SHV at home was similar across sex, age, education level, housing status and regions in California. Likewise, reported exposure to tobacco SHS or SHV on sidewalks was similar across sex, age, education level, and regions in California. Reported exposures to tobacco SHS or SHV in the workplace was similar across age, education level, and regions in California.

Table 15. Percentages of sample reporting places of exposure to tobacco SHS or SHV by NHPI subgroups, sex, age, education level, regions in California and housing status

	At Home % (95% Confidence Interval)	In the Workplace % (95% Confidence Interval)	On the Sidewalk % (95% Confidence Interval)
NHPI adults exposed to SHS or SHV	71.2 (65.5 – 76.8)	58.7 (52.8 – 64.7)	72.5 (66.9 – 78.1)
NHPI subgroups			
Native Hawaiian	84.0 (76.9 – 91.2)	82.4 (73.5 – 91.2)	86.9 (80.1 – 93.8)
Samoan	66.3 (56.1 – 76.4)	45.8 (34.6 – 57.1)	65.6 (54.9 – 76.4)
Guamanian	64.1 (39.4 – 88.7)	51.9 (24.7 – 79.0)	69.7 (43.6 – 95.8)
Tongan	63.9 (46.8 – 81.1)	31.8 (16.2 – 47.4)	63.4 (44.1 – 82.7)
Fijian	78.4 (61.1 – 95.8)	73.4 (52.2 – 94.6)	86.4 (72.6 – 100.0)
Other Pacific Islander	69.5 (55.5 – 83.5)	67.2 (53.5 – 81.0)	68.9 (56.8 – 81.2)
Sex			
Male	78.1 (71.5 – 84.6)	78.1 (71.4 – 84.7)	75.9 (69.2 – 82.6)
Female	63.7 (54.8 – 72.6)	37.6 (29.4 – 45.9)	68.8 (60.1 – 77.5)
Age			

18 to 24	77.8 (66.6 – 89.0)	50.0 (36.0 – 64.0)	73.8 (68.7 – 100.0)
25 to 49	66.8 (60.4 – 73.2)	61.2 (54.9 – 67.5)	71.3 (59.4 – 83.7)
50 to 64	71.7 (51.4 – 92.1)	64.9 (43.5 – 86.3)	74.1 (53.7 – 94.4)
65 and over	100.0 (!) (100.0 – 100.0)	42.6 (!) (2.6 – 82.6)	78.6 (40.6 – 100.0)
Education			
Less than high school	64.3 (!) (41.2 – 87.4)	62.5 (39.6 – 85.5)	86.3 (68.7 – 100.)
High school graduate	78.0 (66.6 – 89.4)	62.8 (49.3 – 76.2)	71.6 (59.4 – 83.7)
Some college or community college	73.6 (66.1 – 81.1)	64.1 (55.6 – 72.6)	74.7 (66.5 – 82.8)
Bachelor's degree or higher	65.1 (54.7 – 75.5)	45.7 (34.3 – 57.0)	64.0 (51.8 – 76.1)
Region			
North/Sierra Counties	68.6 (37.5 – 99.6)	79.3 (54.2 – 100.0)	69.6 (41.7 – 97.6)
Larger Bay area	68.9 (57.5 – 80.4)	56.9 (43.8 – 69.9)	69.8 (57.2 – 82.3)
Sacramento area	81.5 (69.2 – 93.9)	75.4 (60.0 – 90.7)	57.9 (37.8 – 78.0)
San Joaquin Valley	76.0 (62.5 – 89.5)	70.5 (55.3 – 85.7)	77.2 (63.5 – 90.9)
Central Coast	44.1 (10.3 – 77.8)	31.3 (!) (1.2 – 61.4)	64.0 (27.1 – 100.0)
Los Angeles	73.0 (63.3 – 82.7)	50.9 (40.6 – 61.1)	74.6 (66.1 – 83.2)
Other Southern California	68.1 (55.0 – 81.3)	53.1 (38.3 – 67.9)	79.5 (69.0 – 89.9)
Housing Status			
Rent in multi-unit building	61.6 (49.3 – 73.9)	N/A	N/A
Rent in single-unit building	60.2 (45.4 – 75.0)	N/A	N/A
Homeowner in multi-unit building	78.3 (66.4 – 90.3)	N/A	N/A
Homeowner in single-unit building	76.0 (68.0 – 84.0)	N/A	N/A

Other
arrangements

68.7 (35.0 – 100.0)	N/A	N/A
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! = Statistically Unstable Estimate

NHPI Adult Attitudes on Tobacco Use and Tobacco Control Policies

Attitudes on Tobacco Use and its Impacts on the NHPI Health and Community

Several attitudes-related questions regarding tobacco use and its impact on NHPI health and community were asked of NHPI adults. Betel nut with tobacco has been associated with an increased risk of certain cancers, precancerous lesions in the mouth and tooth decay. Table 16 shows that close to 4 in 5 (78.8%) NHPI adults agree or strongly agree that consuming betel nut with tobacco is dangerous to one’s health with similar percentages of agreement as well as disagreement across NHPI subgroups. About 9 in 10 (90.7%) NHPI adults over the age of 65 agreed that betel nut with tobacco is dangerous to one’s health with similar percentages of agreement and disagreement across age.

Table 16. Percentages of agreement or disagreement on whether consuming a small quantity of betel nut with tobacco is dangerous to health by NHPI subgroups and age among NHPI adults

	Agree or Strongly Agree (%)	95% Confidence Interval	Disagree or Strongly Disagree (%)	95% Confidence Interval
Overall NHPI Population	78.8	74.5 – 83.0	21.2	17.0 – 25.4
NHPI subgroups				
Native Hawaiian	70.7	62.5 – 78.9	29.1	20.9 – 37.3
Samoaan	77.9	69.3 – 86.6	22.1	13.4 – 30.7
Tongan	83.0	71.5 – 94.5	17.0 (!)	5.5 – 28.5
Guamanian	76.5	60.6 – 92.4	23.5 (!)	7.6 – 39.4
Fijian	85.9	71.7 – 100.0	14.1 (!)	0.0 – 28.3
Other Pacific Islander	85.9	77.8 – 94.0	14.1	6.0 – 22.1
Age				
18 to 24	77.1	66.8 – 87.5	22.9	12.5 – 33.2
25 to 49	80.1	75.0 – 85.1	19.8	14.8 – 24.9
50 to 64	70.6	57.9 – 83.2	29.4	16.7 – 42.1
65 and over	90.7	76.2 – 100.0	9.3 (!)	0.0 – 23.8

! = Statistically Unstable Estimate

Table 17 shows that over two-thirds (67.6%) of NHPI adults agree or strongly agree that flavored vaping products and other flavored tobacco products are intentionally designed

to appeal to youth with similar percentages of agreement and disagreement across NHPI subgroups and age.

Table 17. Percentages of agreement or disagreement on whether e-cigarettes and other flavored tobacco products are intentionally designed to appeal to youth by NHPI subgroups and age among NHPI adults

	Agree or Strongly Agree (%)	95% Confidence Interval	Disagree or Strongly Disagree (%)	95% Confidence Interval
Overall NHPI Population	67.6	62.6 – 72.7	32.2	27.1 – 37.2
NHPI subgroups				
Native Hawaiian	67.7	60.7 – 74.6	32.0	25.0 – 38.9
Samoan	64.1	54.7 – 73.5	35.6	26.1 – 45.0
Tongan	68.0	55.1 – 80.9	32.0	19.1 – 44.9
Guamanian	61.5	43.5 – 79.4	38.0	20.0 – 55.9
Fijian	71.0	49.7 – 92.3	29.0 (!)	7.7 – 50.3
Other Pacific Islander	76.6	66.0 – 87.9	23.4	12.1 – 34.8
Age				
18 to 24	74.9	64.8 – 85.1	25.0	14.9 – 35.1
25 to 49	67.5	61.9 – 73.1	32.1	26.6 – 37.7
50 to 64	57.1	42.4 – 71.8	42.9	28.2 – 57.6
65 and over	74.5	50.5 – 98.6	25.5 (!)	1.4 – 49.5

! = Statistically Unstable Estimate

Table 18 shows that 76.2% of NHPI adults agree or strongly agree with similar percentages of agreement and disagreement across NHPI subgroups and age.

Table 18. Percentages of agreement or disagreement on whether vaping, “Juuling”, and using e-cigarettes are health threats to NHPI communities by NHPI subgroups and age among NHPI adults

	Agree or Strongly Agree (%)	95% Confidence Interval	Disagree or Strongly Disagree (%)	95% Confidence Interval
Overall NHPI Population	76.2	71.6 – 80.8	23.1	18.5 – 27.7
NHPI subgroups				
Native Hawaiian	67.5	58.8 – 76.2	32.0	23.3 – 40.8
Samoan	74.3	65.9 – 82.7	25.1	16.7 – 33.6
Tongan	77.7	64.8 – 90.7	19.5 (!)	7.0 – 32.0
Guamanian	82.3	67.3 – 97.2	17.7 (!)	2.8 – 32.7
Fijian	81.6	59.7 – 100.0	18.4 (!)	0.0 – 40.3
Other Pacific Islander	82.6	72.4 – 92.7	17.1	7.0 – 27.3
Age				

18 to 24	76.1	66.0 – 86.2	21.9	11.9 – 32.0
25 to 49	79.3	74.4 – 84.3	20.1	15.1 – 25.1
50 to 64	69.5	56.9 – 82.1	30.0	17.5 – 42.6
65 and over	66.4	41.0 – 91.8	33.6 (!)	8.2 – 59.0

! = Statistically Unstable Estimate

Table 19 shows that 66.4% of NHPI adults agree or strongly agree to this statement and with similar percentages of agreement across NHPI adults when comparing by NHPI subgroups and age.

Table 19. Percentages of agreement or disagreement on whether tobacco advertising targets the NHPI community by NHPI subgroups and age among NHPI adults

	Agree or Strongly Agree (%)	95% Confidence Interval	Disagree or Strongly Disagree (%)	95% Confidence Interval
Overall NHPI Population	66.4	61.2 – 71.7	16.3	12.5 – 20.1
NHPI subgroups				
Native Hawaiian	67.9	59.9 – 75.9	25.0	18.4 – 31.6
Samoaan	59.0	49.1 – 68.9	12.2	5.8 – 18.6
Tongan	60.7	46.2 – 75.2	7.3 (!)	0.0 – 15.7
Guamanian	59.0	41.1 – 77.0	29.3	12.1 – 46.6
Fijian	79.2	57.7 – 100.0	20.3 (!)	0.0 – 41.8
Other Pacific Islander	83.4	75.4 – 91.3	9.2	4.4 – 14.0
Age				
18 to 24	66.1	55.1 – 77.2	11.6	4.4 – 18.8
24 to 49	70.6	65.8 – 76.4	11.5	7.9 – 15.3
50 to 64	57.6	42.0 – 73.1	32.7	19.1 – 46.6
65 and over	54.7	27.6 – 81.7	27.6 (!)	3.6 – 51.7

! = Statistically Unstable Estimate

Table 20 shows that about 72.4% of NHPI adults agree or strongly agree that tobacco use is a bigger problem for NHPIs compared to the general public with similar percentages of agreement and disagreement when comparing by NHPI subgroups and age.

Table 20. Percentages of agreement or disagreement on whether tobacco use is a bigger problem for NHPIs compared to the general public by NHPI subgroups and age among NHPI adults

	Agree or Strongly Agree (%)	95% Confidence Interval	Disagree or Strongly Disagree (%)	95% Confidence Interval
Overall NHPI Population	72.4	67.6 – 77.3	27.3	22.4 – 32.2

NHPI subgroups				
Native Hawaiian	61.8	53.0 – 70.5	37.7	29.0 – 46.5
Samoaan	68.7	60.0 – 77.4	30.8	22.0 – 39.5
Tongan	79.7	67.1 – 92.2	20.3 (!)	7.8 – 32.9
Guamanian	79.9	65.8 – 94.0	20.1 (!)	6.0 – 34.2
Fijian	78.1	56.0 – 100.0	21.8 (!)	0.0 – 43.9
Other Pacific Islander	83.4	67.5 – 89.3	21.5 (!)	10.6 – 32.4
Age				
18 to 24	67.0	54.9 – 79.1	32.9	20.8 – 45.0
25 to 49	78.2	73.2 – 83.1	21.4	16.5 – 26.3
50 to 64	61.8	46.6 – 77.0	38.2	23.0 – 53.4
65 and over	64.9	37.9 – 91.9	35.1 (!)	8.1 – 36.2

! = Statistically Unstable Estimate

NHPI Adult Attitudes Toward Tobacco Control Policies

Two attitudes-related questions regarding tobacco control policies were asked of NHPI adults. Table 21 shows that about 76% of NHPI adults agree or strongly agree on a tobacco sales ban to anyone born after 2025. Fijian and Guamanian adults overwhelmingly support the sales ban with about 9 in 10 supporting such a policy. Larger proportions of adults between the ages of 50 to 64 and young adults disagree or strongly disagree to such a policy than adults ages 25 to 49 or older adults.

Table 21. Percentages of agreement or disagreement on whether tobacco sales should be banned to anyone born after 2025 across NHPI subgroups and age among NHPI adults

	Agree or Strongly Agree (%)	95% Confidence Interval	Disagree or Strongly Disagree (%)	95% Confidence Interval
Overall NHPI Population	76.6	72.2 – 81.0	23.2	18.8 – 27.6
NHPI subgroups				
Native Hawaiian	62.2	54.0 – 70.4	37.6	29.4 – 45.9
Samoaan	73.3	64.7 – 82.0	26.3	17.7 – 35.0
Tongan	85.5	75.5 – 95.5	14.6 (!)	4.5 – 24.5
Guamanian	90.7	80.1 – 100.0	9.3 (!)	0.0 – 19.9
Fijian	91.2	78.5 – 100.0	8.8 (!)	0.0 – 21.5
Other Pacific Islander	77.4	66.7 – 88.0	22.5	11.8 – 33.1
Age				
18 to 24	69.6	58.0 – 81.1	30.4	18.8 – 42.0
25 to 49	81.4	76.8 – 86.0	18.3	13.7 – 22.9
50 to 64	65.0	50.5 – 79.4	35.0	20.6 – 49.5
65 and over	82.6	62.0 – 100.0	17.4 (!)	0.0 – 38.0

! = Statistically Unstable Estimate

Table 22 shows that 83.2% of NHPI adults agree or strongly agree that apartment complexes should require all units to be smoke- and vape-free, with similar percentages of agreement across NHPI subgroups, age, and housing status.

Table 22. Percentages of agreement or disagreement on whether apartment complexes should be smoke or vape- free by NHPI subgroups, age, and housing status among NHPI adults

	Agree or Strongly Agree (%)	95% Confidence Interval	Disagree or Strongly Disagree (%)	95% Confidence Interval
Overall NHPI Population	83.2	79.4 – 86.9	16.1	12.5 – 19.8
NHPI subgroups				
Native Hawaiian	71.0	63.0 – 78.9	28.8	20.8 – 36.7
Samoaan	85.9	79.0 – 92.9	14.1	7.1 – 21.0
Tongan	84.0	72.1 – 95.8	16.0 (!)	4.2 – 27.9
Guamanian	92.5	83.2 – 100.0	7.4 (!)	0.0 – 16.8
Fijian	67.3	43.5 – 91.1	21.6 (!)	0.1 – 43.2
Other Pacific Islander	90.9	85.2 – 96.6	8.9 (!)	3.2 – 14.6
Age				
18 to 24	84.5	76.2 – 92.9	15.5	7.1 – 23.8
25 to 49	84.2	79.4 – 89.0	15.6	10.8 – 20.4
50 to 64	78.3	68.0 – 88.6	21.7	11.4 – 32.0
65 and over	82.6	61.5 – 100.0	9.3 (!)	0.0 – 23.8
Housing Status				
Rent in multi-unit building	79.8	69.2 – 90.4	20.2	9.6 – 30.8
Rent in single-unit building	86.3	77.0 – 95.6	13.6	4.4 – 22.9
Homeowner in multi-unit building	78.8	67.4 – 90.2	17.3	7.7 – 27.0
Homeowner in single-unit building	85.1	80.3 – 89.8	14.8	10.0 – 19.5
Other arrangements	79.2	57.4 – 100.0	20.8	0.0 – 42.6

! = Statistically Unstable Estimate

Recommendations

Future Research

The California NHPI Tobacco Survey offers new insights to the ongoing health disparities that exists within NHPI communities in regards to tobacco use and other health behaviors associated with tobacco. While the California NHPI Tobacco Survey aimed to make data on NHPI communities more readily available and accessible, this survey also sought to offer avenues for researchers, policymakers and decisionmakers, and community stakeholders to advance efforts in ensuring that data collection on and within NHPI communities are more broadly exercised as well as ensuring that efforts to make the health and wellbeing of NHPI communities both a research and policy priority.

While collecting data on understudied populations such as NHPI communities remain a challenge, future research should consider adopting a community stakeholder engagement model to tackle this issue. UCLA CHPR collaborated with a diverse set of community stakeholders at the onset of the California NHPI Tobacco Survey. Community stakeholders were invited to be subject matter experts of the study with the responsibility of supporting survey questionnaire development. In the process, community stakeholder engagement evolved and became vital in data collection efforts as community stakeholders became involved in survey dissemination, especially to survey respondents that UCLA CHPR would otherwise not have been able to reach. Moreover, community stakeholders were able to preview preliminary data results, provide recommendations on additional data analysis as well as interpretation of data results.

In addition to community participation and engagement, UCLA CHPR also sought ways to ensure that both data and research products could be used for community outreach and advocacy around tobacco use. For example, UCLA CHPR created a standard paper-sized infographic (attached in this report) that contained key results from the study, which community members could use for public health outreach efforts. UCLA CHPR also hosted a “community report back”, which was a townhall-style event that provided community members with an initial summary of the study conducted regarding NHPIs and tobacco use as well as opportunities for community members to voice out questions or future directions of the study. Ultimately, community engagement has been crucial to conducting research on NHPIs and tobacco use.

Sampling Method

Although the California NHPI Tobacco Survey utilized nonprobability-based sampling methods, future data collection should attempt to use probability-based sampling methods to create population-representative estimates when possible. Probability-based sampling methods not only allows for population-representative estimates, but also

further data disaggregation that have the potential to highlight potential drivers of health disparities and poor health outcomes among NHPI communities.

COVID-19 Pandemic

The COVID-19 pandemic and governmental policies that were implemented to slow the spread of the COVID-19 outbreak may have impacted data related to secondhand exposure and location of exposure. Collecting data post-pandemic would provide larger understanding of tobacco use and secondhand exposure as in-person social interactions returning to pre-pandemic levels.

Modifications or Additional Questions to Consider for Future Research

- Income or poverty level – The latest estimates on income or level of poverty among NHPIs in the California Health Interview Survey are statistically unstable. A future follow-on study or research study in general with questions regarding household income or poverty as a percent of the federal poverty level would provide more information on whether income is a factor to tobacco use among NHPIs. In the survey results, around 90% of NHPI smokers with less than a high school diploma reported interest in smoking cessation programs, the highest when comparing NHPI smokers by education level. In this case, level of education may be a proxy for income or ability to pay. Questions regarding income or level of poverty can provide valuable insights in how to make tobacco cessation medications or treatments more affordable as well as how policy interventions such as current state taxes on tobacco products affect NHPI households.
- Factors to SHS or SHV exposure within a household – the study results show that tobacco SHS or SHV at home were similar across sex, age, and education level. Subject matter expert knowledge suggests that NHPI households mostly consist of intergenerational families with varying levels of tobacco use and health behaviors related to tobacco. Questions that explore these health behaviors within households may provide further insights to tobacco SHS or SHV at home and in general.
- Barriers to cessation – the survey asked questions regarding top fears of smokers when trying to quit for good as well as barriers to cessation such as cost of cessation treatment and perceived race-based discrimination when seeking cessation services. Subject matter experts also suggested including a greater set of questions to explore how information regarding cessation or cessation services are being received via the web and social media as well as questions that explore the social dynamics of smoking within the family and amongst peers.

List of Terms

General Terms

- Young adults: adults between the ages of 18 to 24 years old.
- Older adults: adults who are 65 years old or older.
- Sex: sex assigned on original birth certificate: male or female.

Tobacco Products

- Betel nut: Betel nut is a fruit from the tropical areca palm. In some cultures, betel nut is consumed with other ingredients such as tobacco.
- Big cigars: tobacco wrapped in tobacco leaf.
- Smokeless tobacco (chewing tobacco, snuff, or snus): loose leaf or ground tobacco leaves that come in a large pouch (bag) or in tins.
- Hookah: Water pipe used to smoke tobacco or something else.
- Heated tobacco products: tobacco in the form of heat-sticks or capsules that is heated, instead of being combusted or burned, using an electronic device.
- Little cigars or cigarillos (LCC): tobacco wrapped in tobacco leaf or brown paper.
- Nicotine pouch: is a small bag that contains nicotine and some other ingredients.
- Vapes: electronic devices like vape pens, vaping products, e-hookah, hookah pens, e-vaporizers, tanks, pods or mods used to inhale a vapor.

Product Use

- Current use: use of tobacco or other products in the past 30 days.
- Ever used: use of tobacco or other products (lifetime).
- Co-use: Use of cigarettes and at least one tobacco product within the past 30 days OR use of marijuana or some other product and at least one tobacco product within the last 30 days.
- Poly-use: Use of two or more tobacco products within the past the past 30 days.

Health Behaviors

- Tobacco use: use of cigarettes, vaping products or other tobacco products in the past 30 days.
- Other tobacco products: any tobacco product other than cigarettes or vaping products.
- Current smoker: respondent has had 100 or more cigarettes in their lifetime and smokes cigarettes daily or some days
 - Not a current smoker: smoked less than (<)100 cigarettes in lifetime or not smoke daily.

Endnote

1. U.S. Census Bureau. The Native Hawaiian and Pacific Islander Population 2010: 2010 Census Briefs. May 2012.
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3. Asian Pacific Partners for Empowerment, Advocacy, and Leadership. Tobacco use among Asian American, Native Hawaiian and Pacific Islander communities in California. 2012.
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5. Lew R and Tanjasiri SP. Slowing the epidemic of tobacco use among Asian Americans and Pacific Islanders. 2003. American Journal of Public Health 93(5): 764-768.
6. Palmer P, Lee C, Sablan-Santos L, and et. al. Eliminating tobacco disparities among Native Hawaiian Pacific Islanders through policy change: the role of community-based organizations. 2013. Health Promotion Practice 14(1): 36S-39S.