

WASHOE COUNTY
HEALTH DISTRICT
ENHANCING QUALITY OF LIFE

Youth Vaping/E-cigarette
Survey Data Results

2020

Introduction

Washoe County Health District along with statewide partners launched Behind The Haze (BTH) in 2020 to deliver educational content that exposes the truth about vapes and discourages use among teens ages 13-18. To inform the BTH campaign, an online survey was conducted of Nevada youth to assess the following:

- Vape-related behaviors among youth in Washoe County such as prevalence of use, intent to quit, and susceptibility to e-cigarettes.
- Vape-related trends including preferred products, accessibility, and reasons for use.
- Vape-related knowledge, beliefs, attitudes, and perceived norms.

This report includes results from Washoe County youth respondents as well as those from all of Nevada.

Online Survey Recruitment:

Method: Facebook and Instagram ads

Screening criteria: Washoe residents ages 13-18. Must give consent to participate.

Timeframe: April to June 2020*

Incentive: Amazon gift card

* Nevada school closures began March 16, 2020 through the end of the 19/20 school year.

Demographic Characteristics

Total	Washoe online survey (n=79)	
Gender		
Female	58	73.4%
Male	21	26.6%
Age		
13 years old	2	2.5%
14 years old	6	7.6%
15 years old	16	20.3%
16 years old	10	12.7%
17 years old	13	16.5%
18 years old	32	40.5%
High school status		
Currently a HS student	56	70.9%
Already graduated	20	25.3%
Stopped going	3	3.8%

Race/ethnicity		
White/Caucasian*	45	57.0%
Hispanic/Latino	21	26.6%
Two or more races*	9	11.4%
Asian*	2	2.5%
Black/African American*	1	1.3%
Native Hawaiian/Pacific Islander*	1	1.3%
Adverse Childhood Experience		n=65
0	5	7.7%
Low (1-3)	31	47.7%
Middle (4-6)	26	40.0%
High (7-9)	3	4.6%

**non-Hispanic*

Due to rounding, the sum of certain categories exceed 100%.

American Indian/Alaskan Native and Other data is not available.

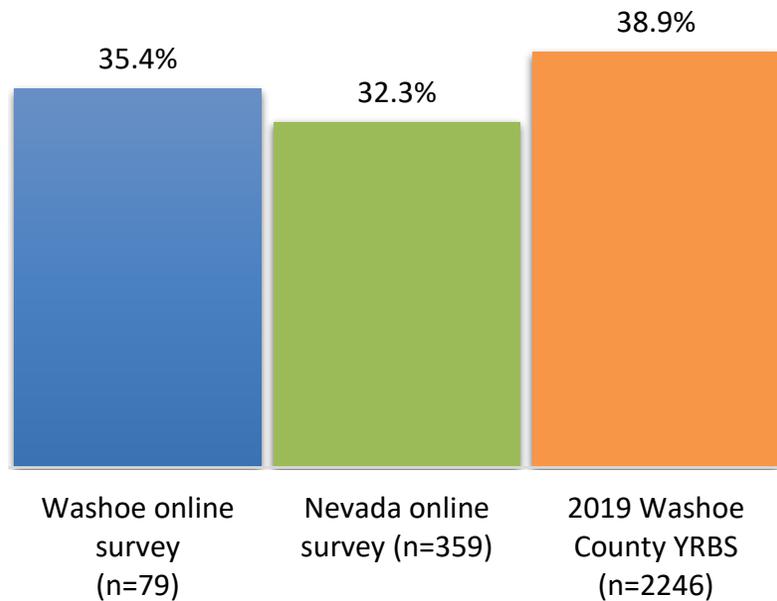
Peer Crowd Identification

Peer crowd	Washoe Online Survey (n=79)	Related Terms	Description
Popular	39.2%	Partiers, preppy, elites	Highly value social status; possess extended networks of friends and acquaintances; place high importance on appearance and style; prefer pop and dance music
Mainstream	16.5%	Brains, academics, normal, homebody	Value family, faith, future goals; place less value on social status; perceived as friendly, approachable, and goal oriented; often associated with academic performance
Country	15.2%	-	Value their communities and families; believe in tradition, patriotism, hard work; enjoy outdoor activities like hunting, fishing, “mudding” trucks; prefer country music
Hip hop	11.4%	Urban, gangsters	Often feel they have to overcome life struggles to succeed; value authenticity, confidence and respect; distinct clothing and style, used as status symbol; prefer hip hop and rap music
Alternative	8.9%	Hipsters, emos, rockers, deviants, skaters	Take pride in being different from most peers; use physical appearance to demonstrate uniqueness; value individuality, creativity, art; prefer alternative or punk rock music
Tie	8.9%	-	Identify as two crowds

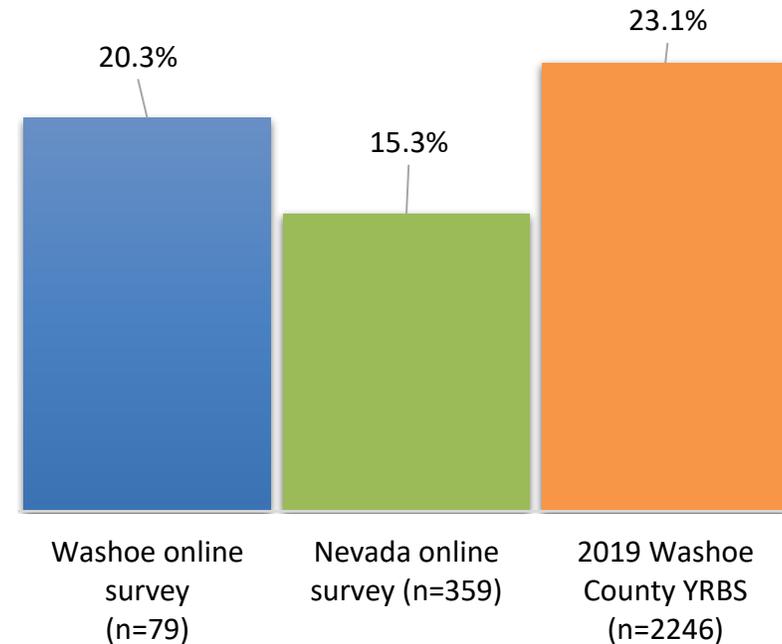
Source: Peer Crowd Identification and Adolescent Health Behaviors: Results from a Statewide Representative Study

Prevalence of Use

Percentage of youth who ever tried electronic vapor products, even one or two puffs



Percentage of youth who used electronic vapor products in the past 30 days*

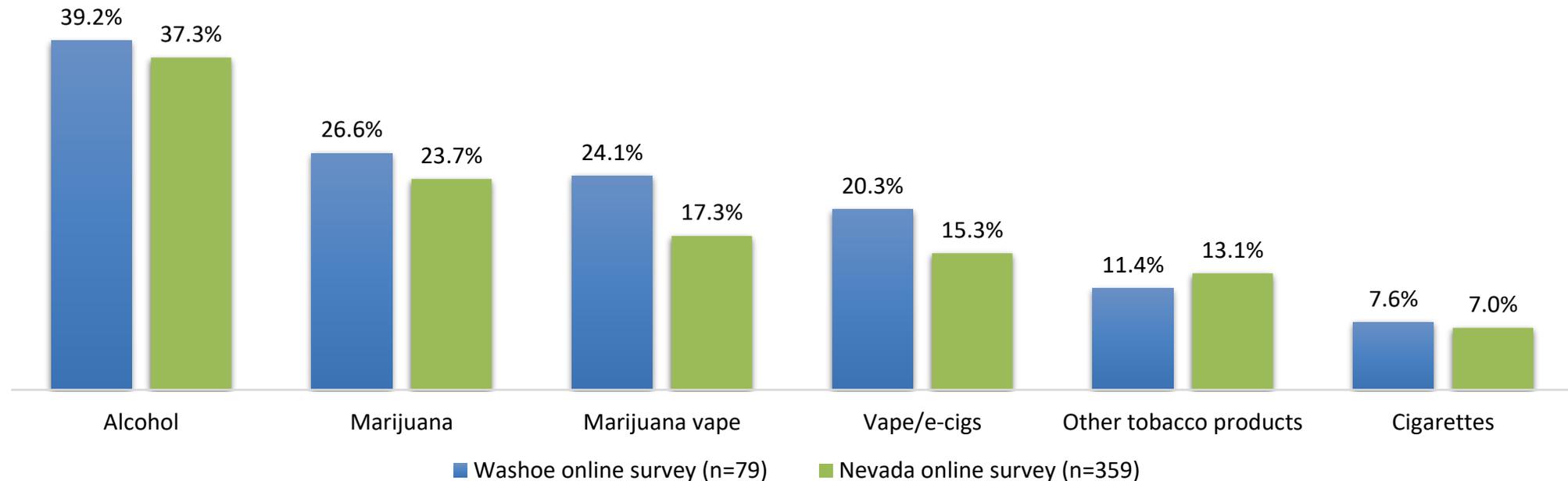


Online surveys collected are not representative of Washoe or Nevada youth due to the small number of responses.

**Past 30-day use online survey data may have been impacted due to COVID-19 stay-at-home order.*

Substance Use

All participants were asked to report whether they had used any substance or tobacco products in the past 30 days. Alcohol was the most used substance (39.2% of Washoe County youth) whereas the use of nicotine vapes was reported as 20.3%. The Washoe and Nevada online survey results had the same pattern of use prevalence.



Marijuana use includes marijuana, pot, weed, or cannabis.

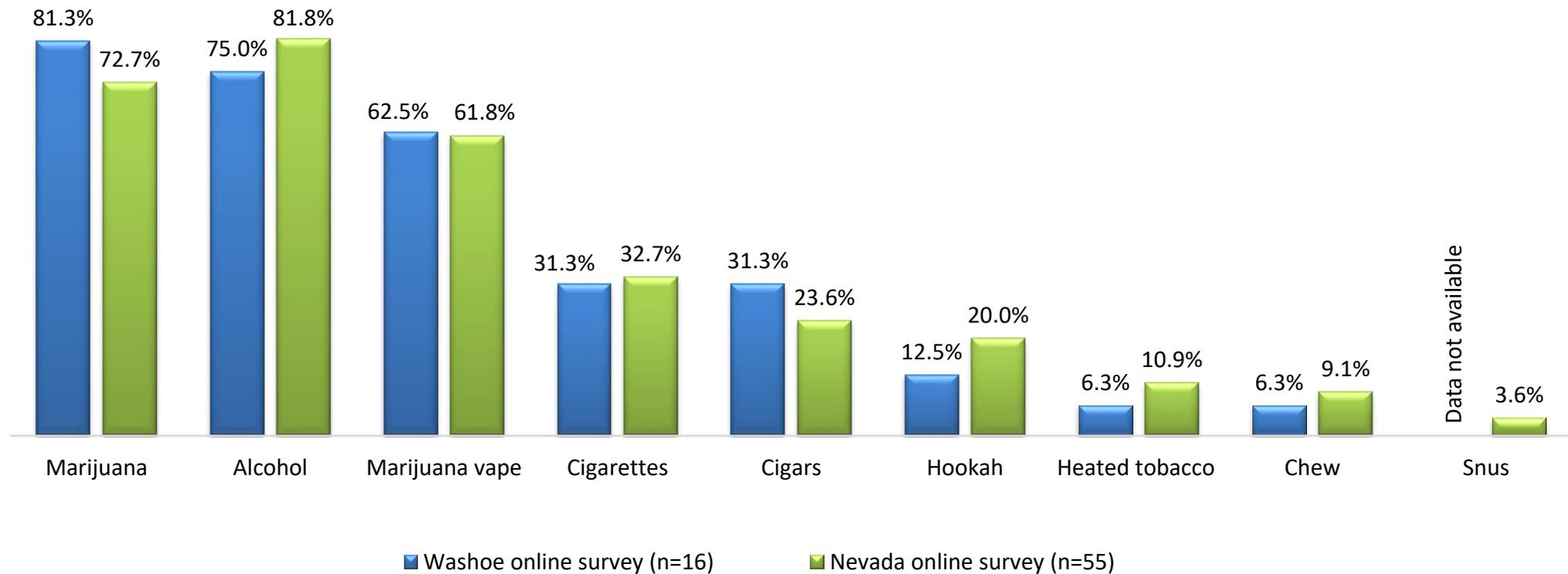
Marijuana vape includes vapes that contain marijuana, marijuana concentrations, marijuana waxes, THC, CBD, or harsh oils.

Other tobacco products include hookah, snus, cigars, chew, and heated tobacco product such as IQOS.

Past 30-day use online survey data may have been impacted due to COVID-19 stay-at-home order, resulting in increased parental supervision.

Vape Dual Use

Vape users were asked to report whether they had used other tobacco products or substances in the past 30 days. For Washoe County respondents, cigarettes (31.3%) and cigars (31.3%) were the most common tobacco products used among vape users. Washoe County vape users were most likely to report using marijuana (81.3%).



Past 30-day use online survey data may have been impacted due to COVID-19 stay-at-home order, resulting in increased parental supervision.

Vape-Related Trends

About 1 out of 5 Washoe County youth started smoking before the age of 13. Fruit/candy and menthol/mint were equally (68.8%) among youth's top choices. Disposable vaping product such as Puff Bar (81.3%) was the most popular brand.

14.5 Average age of first vape use

Use of Flavored E-Cigs*	Current use (n=16)	
Fruit or candy	11	68.8%
Menthol or mint	11	68.8%
Tobacco flavored	2	12.5%
Don't know or not sure	2	12.5%
Unflavored or flavorless	1	12.5%
Clove or spice	1	6.3%
Other	1	6.3%

Use of E-cig Brands*	Current use (n=16)	
Puff Bar	13	81.3%
Smok	9	56.3%
Suorin	8	50.0%
Juul	5	31.3%
Vuse	2	12.5%
Blu	1	6.3%
Njoy	1	6.3%
Other	1	6.3%



Respondents can select more than one choice.

Responses do not include vapes with marijuana, marijuana concentrations, marijuana waxes, THC, CBD, or harsh oils.

First Tobacco Product

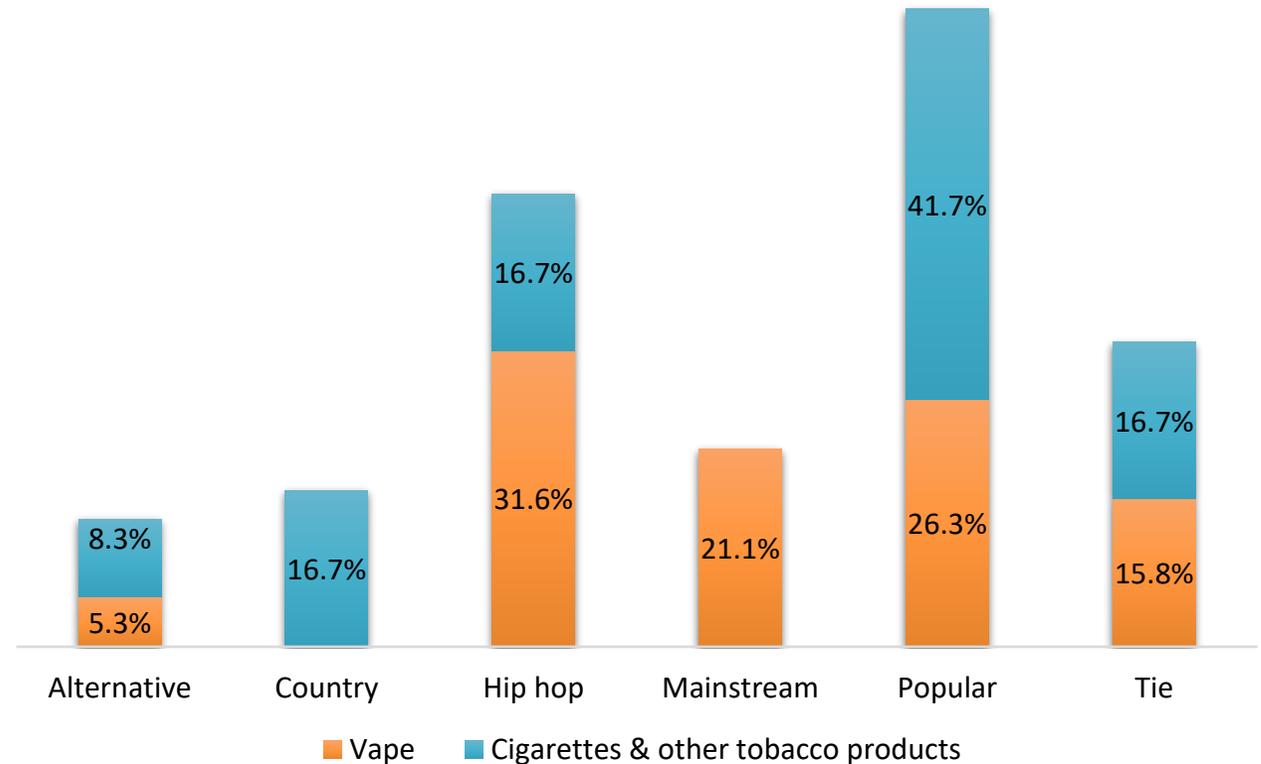
Approximately 3 out of 5 Washoe youth tried vape as first product.

Hip hop crowd was nearly 2x as likely to have tried vape as first product.

Mainstream crowd were exclusively tried vape as first product.

Popular crowd had the highest overall tobacco use and was the second highest group to have tried vape as first product.

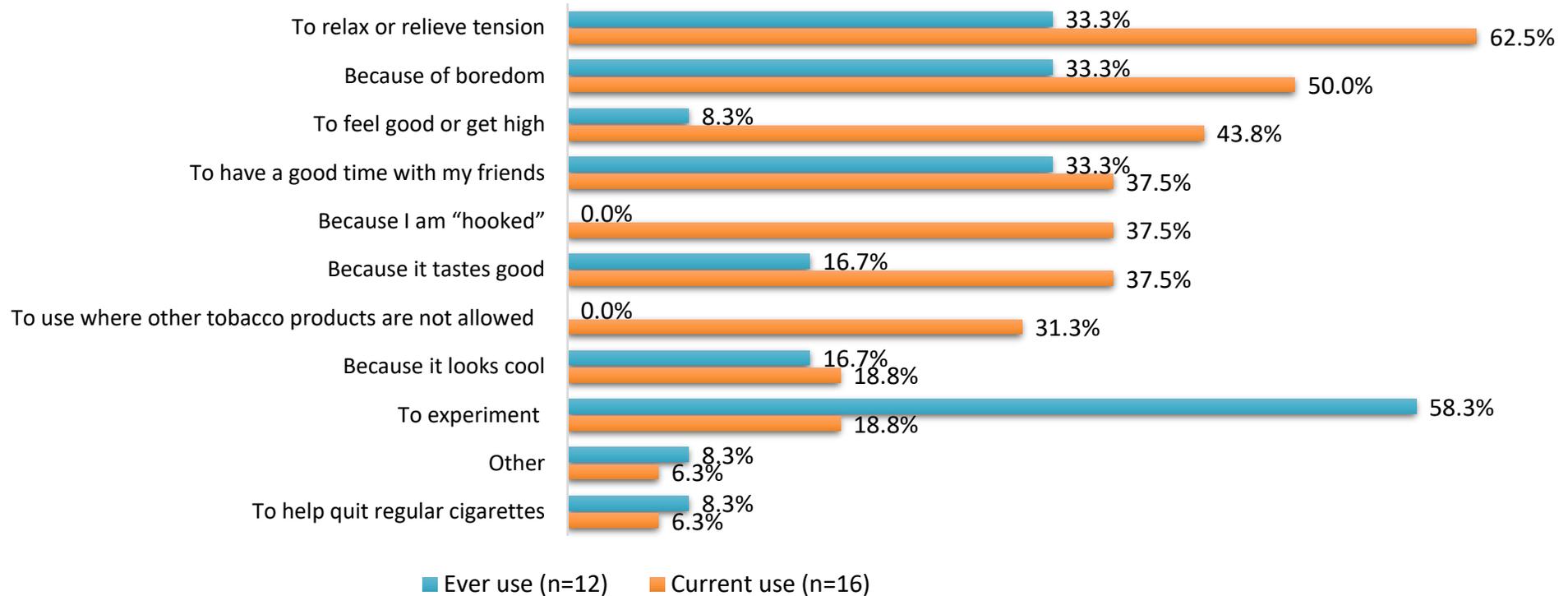
First Tobacco Product by Peer Crowd



Other tobacco products such as traditional cigars, cigarillos, little cigars, chew, snuff or dip.

Reasons For Use

Washoe County youth respondents reported the reasons they use vapes. The most common reason for current users (self-reported past 30-day use) was to relax or relieve tension (62.5%). To experiment (58.3%) was the main reason for ever users (those tried vapes before but did not vape in the past 30 days).



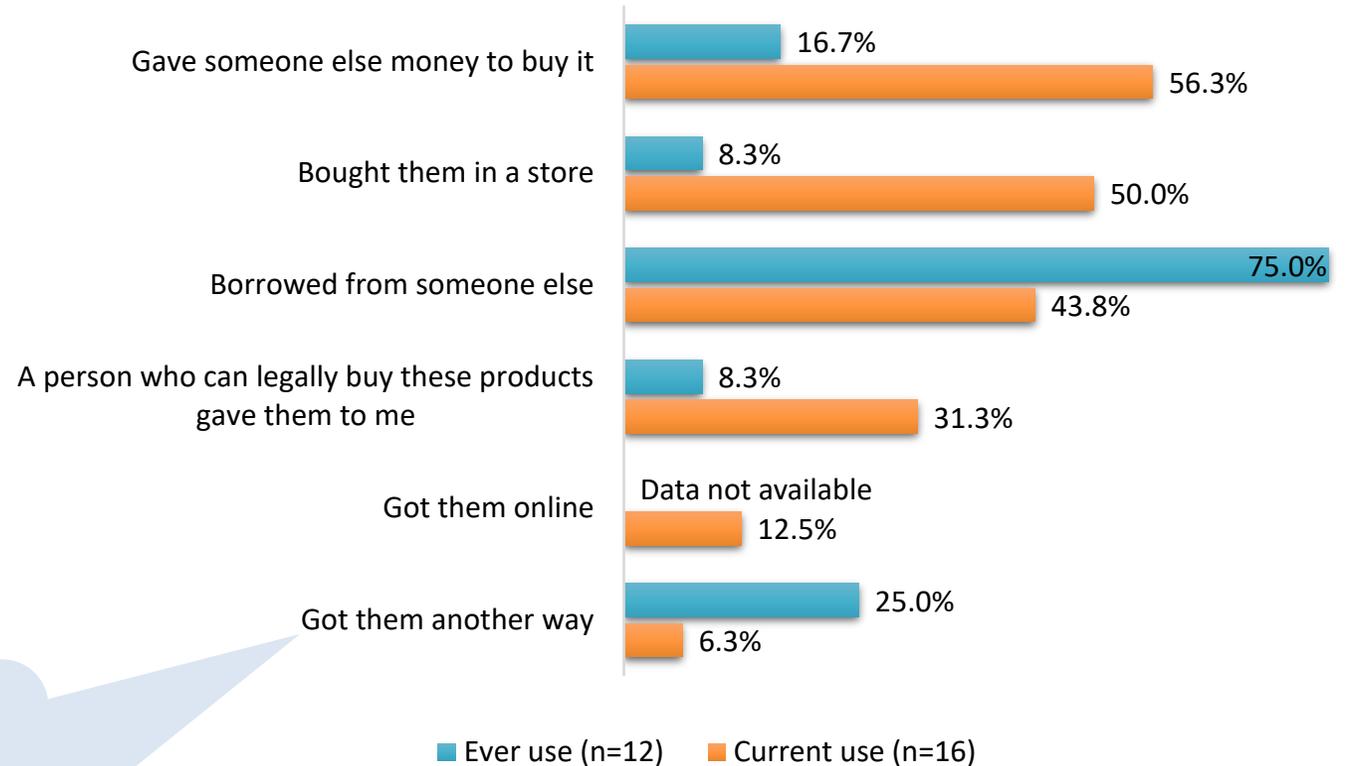
Respondents can select more than one choice.

Responses do not include vapes with marijuana, marijuana concentrations, marijuana waxes, THC, CBD, or harsh oils.

Access To Electronic Vapor Products

Respondents were asked how they usually acquire vapes. Ever users commonly borrowed from someone else (75.0%). Current users were more likely to purchase their own vapes by giving someone else money to buy (56.3%), or directly buying vapes in a store (50.0%) such as a convenience store, supermarket, discount store, gas station, or vape store.

*"I bought it from someone."
"I did not own any."
"I don't have my own."
"I got it from my boyfriend, his mom."*



*Respondents can select more than one choice.
Responses do not include vapes with marijuana, marijuana concentrations, marijuana waxes, THC, CBD, or harsh oils.*

Susceptibility

Four questions were used to assess respondents' susceptibility to electronic vapor products and cigarettes. Respondents who answered "Definitely yes", "Probably yes", or "Probably not" to at least one of the four questions were considered susceptible. Those answered "Definitely not" to all questions were considered non-susceptible.

Questions	1 Definitely yes	2 Probably yes	3 Probably not	4 Definitely not
Do you think you will use [product type] soon?	Susceptible			Non- susceptible
Do you think you will use [product type] next year?				
If one of your best friends were to offer you a [product type] would you use it?				
Have you ever been curious about using a [product type]?				

Susceptibility

Susceptibility to vapes was assessed among respondents who had never tried electronic vapor products in their lifetime (non-vape users). Susceptibility to smoking cigarettes was measured among three groups of respondents: 1) non-vape users, 2) current users, and 3) ever users. Non-vape users were the more susceptible to smoking cigarettes (25.5%) than ever users (8.3%). The biggest factors of susceptibility to vapes for non-users were curiosity (49.0%), followed by peer pressure (35.3%).

Approximately 1 out of 2 non-vape users were more susceptible to vapes than cigarettes.

Susceptible to vaping		Susceptible cigarettes	
Non-vape users (n=51)	54.9%	Non-vape users (n=51)	25.5%
		Current vape users (n=16)	31.3%
		Ever vape users (n=12)	8.3%

Intent To Quit

Among youth who wanted to quit vaping, 43.8% of them didn't know when they were going to quit, and 25% of them already planned to quit vaping within the next 30 days or 6 months. Additionally, 43.8% of youth reported that they have tried to quit more than 10 times. The most common strategies were taking a break from vaping or cutting back.

56.3% vape users interested in reducing vape use.

68.8% vape users wanted to quit vaping.

Current use (n=16)		
Within the next 30 days	3	18.8%
Within the next 6 months	1	6.3%
Want to quit but don't know when	7	43.8%
Don't want to quit	3	18.8%

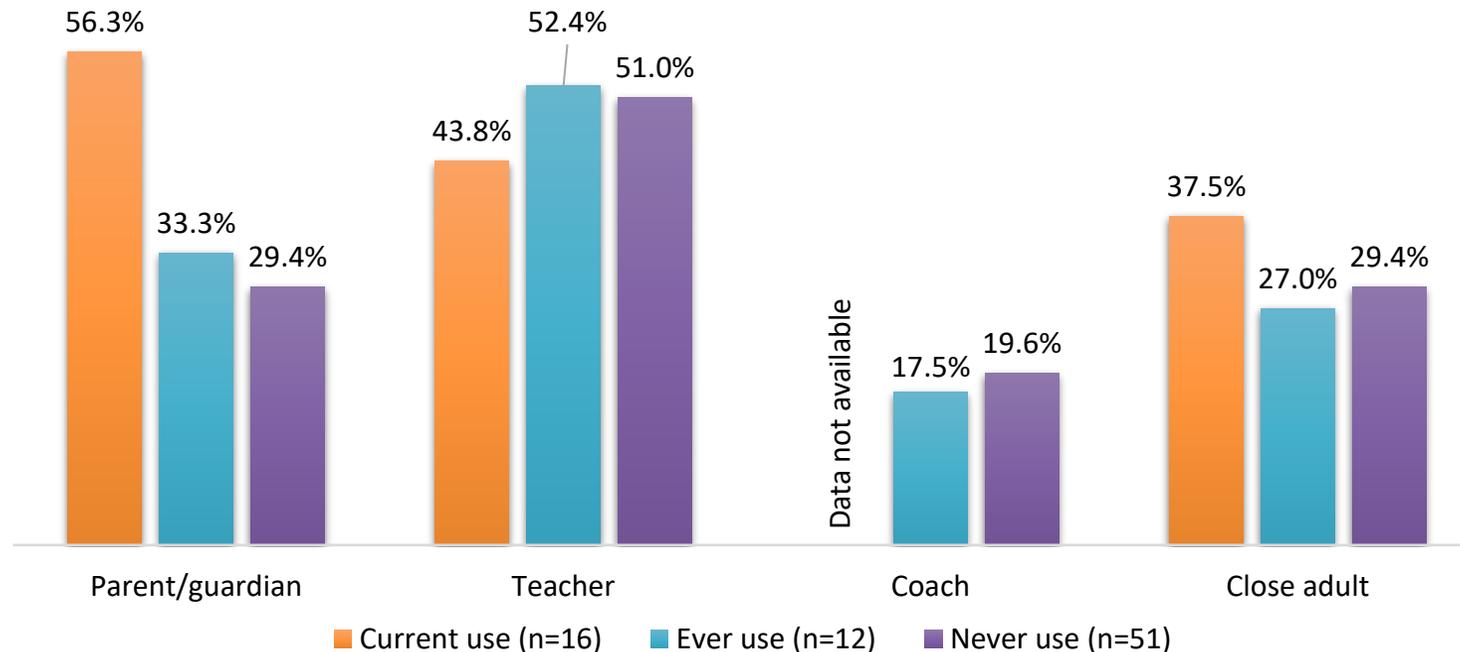
**Respondents can select more than one choice.
Responses do not include vapes with marijuana, marijuana concentrations, marijuana waxes, THC, CBD, or harsh oils.*

43.8% vape users have tried to quit vaping 10+ times

Strategies to quit vaping*	Current use (n=16)	
Took a break from vaping	10	62.5%
Cut back how much I vaped	9	56.3%
Stopped buying vapes	6	37.5%
Threw out or gave away my vapes	5	31.3%
Tried to relax or manage stress	5	31.3%
Picked a quit date	3	18.8%
Online quit resources	3	18.8%
Talked to someone	1	6.3%
Avoided certain people/places	1	6.3%

Talk To Adults About Vaping

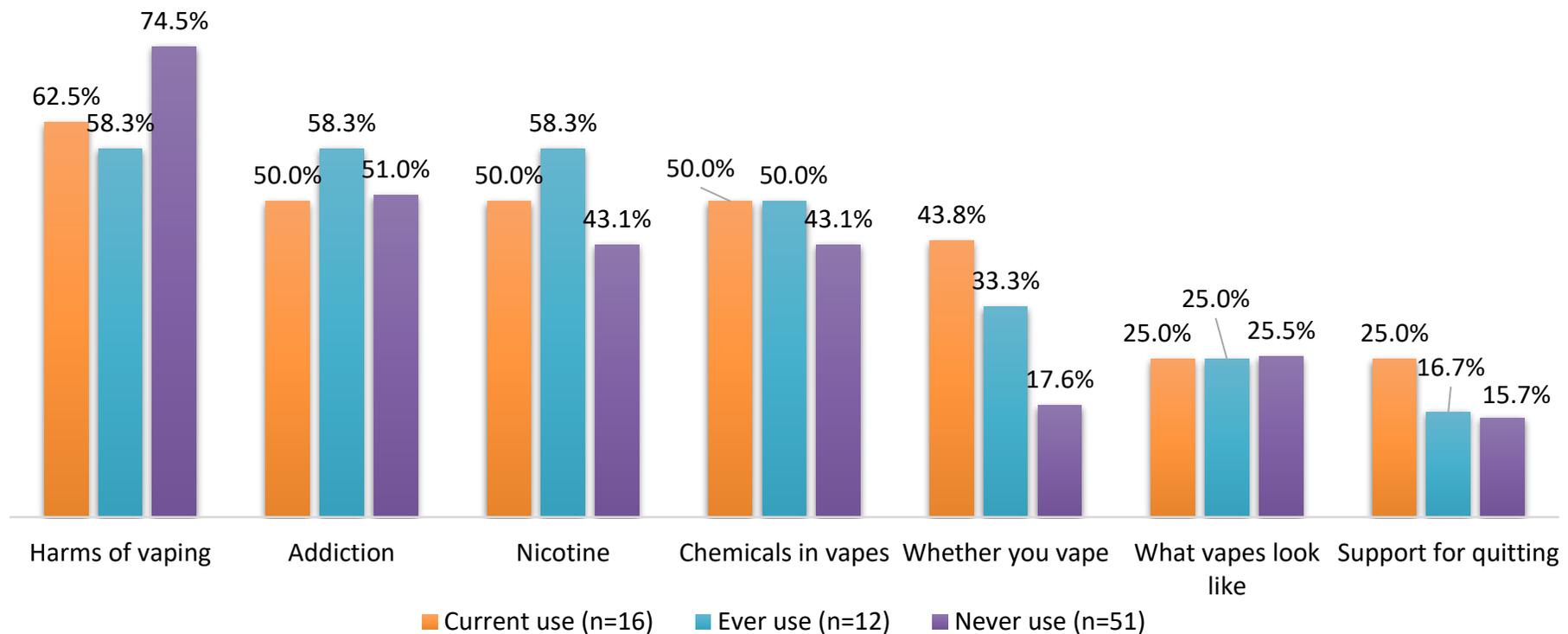
Around 76% of overall respondents discussed vaping with an adult. Current users discussed mostly with their parent/guardian (56.3%), whereas ever users (52.4%) and non-users (51.0%) were more likely to have a discussion with teacher.



Respondents can select more than one choice.

Vape-Related Topics

Overall, youth's discussions with adults were centered around the impacts of vaping such as harms of vaping, addiction, nicotine, and chemicals in vapes. Youth's personal issue on vaping like whether they vape, what vapes look like, and support for quitting were less likely to be discussed.



Respondents can select more than one choice.

Knowledge – Health Impacts

Respondents were asked to rate whether the following statements motivate them to stop or avoid using vapes on a scale of 1 (does not motivate at all) to 5 (motivates a lot). Responses of “4” and “5” were combined and reported below. All groups had similar understanding of health impacts, but fewer current users found such statements less motivating.

Have you heard of the statement before? Does this statement motivate you to stop or avoid using vapes?	HEARD BEFORE			MOTIVATING		
	Current use (n=16)	Ever use (n=12)	Never use (n=51)	Current use (n=16)	Ever use (n=12)	Never use (n=51)
E-cigarette and vape aerosols contain lead, a neurotoxin that can cause damage to the brain.	68.8%	75.0%	72.5%	37.5%	75.0%	66.7%
Inhalation of formaldehyde, found in Juul aerosol/vapor, can cause bronchitis and pneumonia.	75.0%	66.7%	64.7%	31.3%	75.0%	68.6%
Common vaping ingredients like propylene glycol and glycerin damage the protective lining in your lungs.	56.3%	83.3%	68.6%	25.0%	83.3%	76.5%
Like smoking, vape use significantly increases a person’s risk of developing chronic lung diseases like asthma, bronchitis, and emphysema.	81.3%	91.7%	86.3%	37.5%	58.3%	76.5%
Vaping decreases the body’s ability to fight off infections such as the flu, a leading cause of pneumonia.	68.8%	66.7%	80.4%	37.5%	75.0%	80.4%

Knowledge – Health Impacts (cont.)

Despite hearing the statements before, current users were most likely to disagree with statements about the health impacts of vaping.

Have you heard of the statement before? How much do you agree with this statement?	HEARD BEFORE			AGREEMENT		
	Current use (n=16)	Ever use (n=12)	Never use (n=51)	Current use (n=16)	Ever use (n=12)	Never use (n=51)
Vape clouds contain dangerous chemicals, like formaldehyde. Formaldehyde is used to preserve dead bodies.	68.8%	66.7%	62.7%	43.8%	33.3%	62.7%
Vape aerosol contains toxic chemicals like arsenic, lead, and formaldehyde that can cause brain and lung damage.	81.3%	91.7%	78.4%	43.8%	75.0%	74.5%
Vaping can cause a chemical burn in the lungs, similar to that seen in people exposed to poisons like mustard gas.	37.5%	66.7%	60.8%	37.5%	50.0%	60.8%
The chemicals in vapes break down the defenses in your lungs, making you more vulnerable to viruses.	81.3%	83.3%	72.5%	43.8%	75.0%	78.4%
Even if you are strong, young, and healthy, the chemicals in vapes weaken you.	81.3%	75.0%	80.4%	56.3%	66.7%	68.6%
Every time you vape, you risk permanent damage to your health.	93.8%	91.7%	92.2%	50.0%	58.3%	68.6%

Knowledge – Addiction

Current users were not as motivated to avoid vapes as other groups despite having relatively similar knowledge related to addiction.

Have you heard of the statement before? Does this statement motivate you to stop or avoid using vapes?	HEARD BEFORE			MOTIVATING		
	Current use (n=16)	Ever use (n=12)	Never use (n=51)	Current use (n=16)	Ever use (n=12)	Never use (n=51)
Vapes and e-cigarettes usually contain nicotine, an addictive chemical. The nicotine in a single JUUL cartridge is roughly equal to a pack of cigarettes.	87.5%	83.3%	88.2%	37.5%	75.0%	84.3%
The nicotine found in vapes and e-cigarettes can harm adolescent brain development and affect attention and learning.	75.0%	83.3%	86.3%	43.8%	75.0%	72.5%
Nicotine can harm the parts of the brain that control attention and learning, because it changes the way synapses are formed.	68.8%	75.0%	80.4%	43.8%	50.0%	74.5%
Using nicotine can prime the brain and increase the risk of addiction to other drugs such as cocaine.	43.8%	66.7%	84.3%	25.0%	66.7%	80.4%
Vape users are at high risk of becoming cigarette smokers, especially if they start during adolescence.	87.5%	100.0%	86.3%	31.3%	50.0%	80.4%

Knowledge – Marketing Strategies

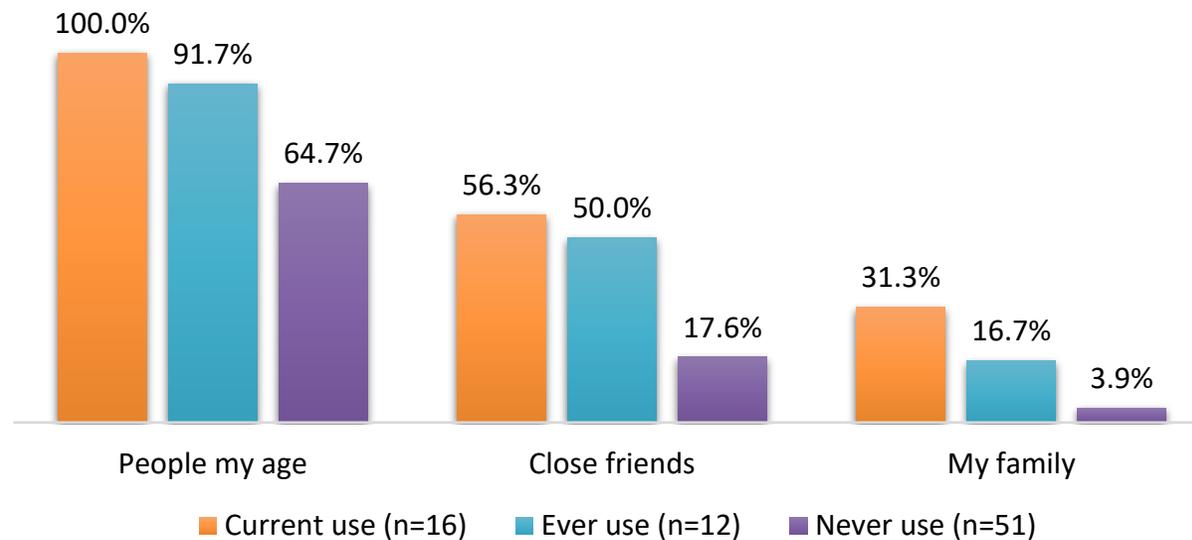
Generally, all user groups had similar awareness regarding the vape industry’s marketing strategies, but current users were less motivated or less in agreement.

Have you heard of the statement before? Does this statement motivate you to stop or avoid using vapes?	HEARD BEFORE			MOTIVATING		
	Current use (n=16)	Ever use (n=12)	Never use (n=51)	Current use (n=16)	Ever use (n=12)	Never use (n=51)
The vape industry paid schools and summer camps so their representatives could visit and tell students that JUUL was completely safe to use, which is not true.	37.5%	41.7%	43.1%	25.0%	50.0%	60.8%
Vape or e-cigarette companies marketed their products as a tool to help smokers quit cigarette, but vapes or e-cigarettes were never approved by the FDA as a product to help people quit using tobacco.	81.3%	58.3%	64.7%	31.3%	58.3%	58.8%
Many e-liquid ingredients and flavorings have only been tested using ingestion in rats.	50.0%	50.0%	51.0%	31.3%	58.3%	66.7%
The FDA has found that JUUL illegally marketed e-cigarettes as safer than cigarettes.	75.0%	50.0%	66.7%	31.3%	50.0%	64.7%
Have you heard of the statement before? How much do you agree with this statement?	HEARD BEFORE			AGREEMENT		
Vape companies went into schools and lied to students, telling them that vapes are “totally safe”.	37.5%	33.3%	43.1%	37.5%	8.3%	37.3%
The vape industry is creating the next generation of addicts and making billions off of their addiction.	81.3%	83.3%	86.3%	62.5%	83.3%	74.5%

Perceived Norms

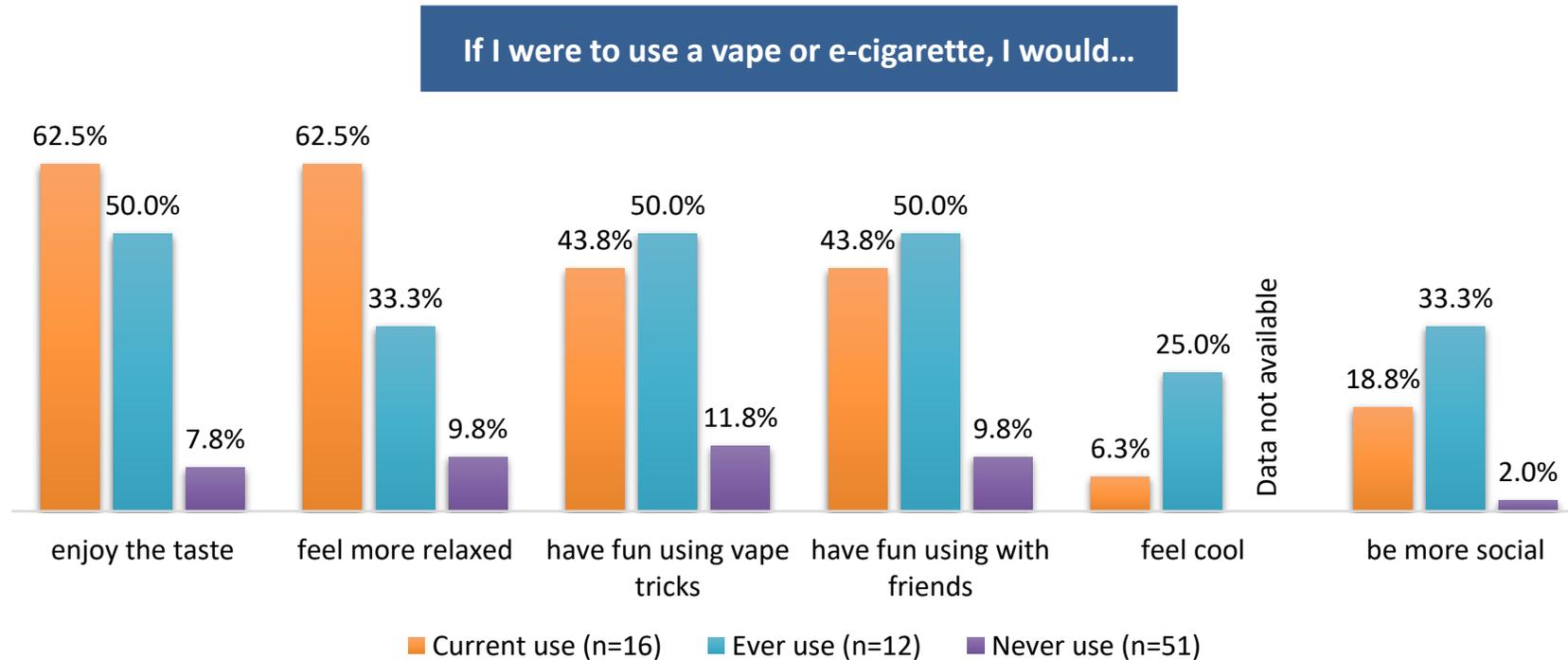
Respondents reported how many of their peers and family members use vapes. Responses such as “about half”, “most”, or “all” were combined and reported below. Current and ever users were more likely to report their peers and family members using vapes compared to non-users. Current users were almost eight (8) times more likely to have a family member who vapes compared to non-users.

Percentage of vape use in respondents' social environment



Perceived Benefits

Respondents were asked to rate the perceived benefits of vape or e-cigarette use on a scale of 1 (definitely wouldn't) to 5 (definitely would). Responses of "4" and "5" were reported below. Very few non-users perceived the benefits of vaping. Current users were nearly twice as likely to feel relaxed than ever users. The perceived benefits among ever users were higher than current users across the categories such as have fun using vape tricks, have fun using with friends, feel cool, and be more social.

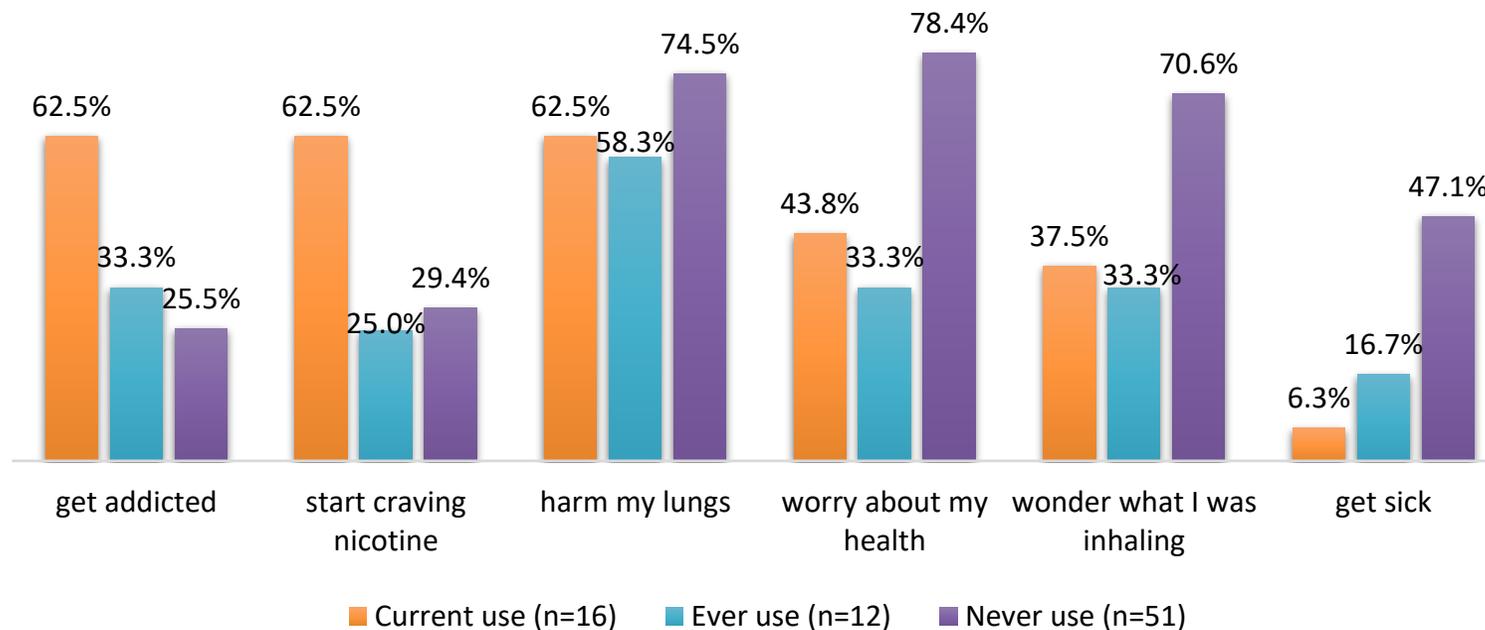


Responses do not include vapes with marijuana, marijuana concentrations, marijuana waxes, THC, CBD, or harsh oils.

Perceived Risks

Non-users were more likely to perceive vape-related risks to their body than the risks of nicotine addiction. Most current users did not view getting sick as a risk (6.3%), but perceived addiction, craving nicotine, and lung damage as their central concerns (equally 62.5%).

If I were to use a vape or e-cigarette, I would...

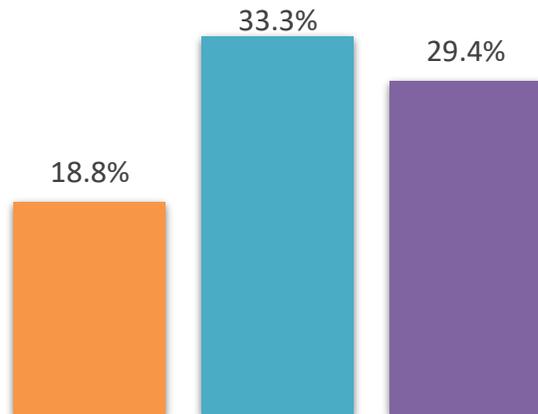


Responses do not include vapes with marijuana, marijuana concentrations, marijuana waxes, THC, CBD, or harsh oils.

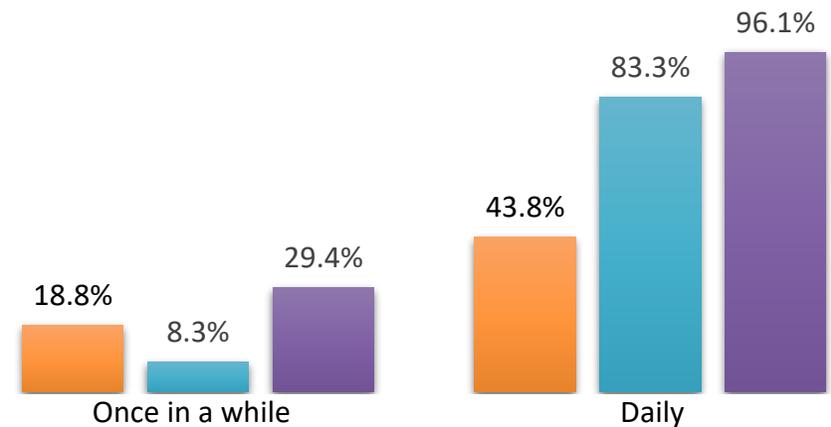
Perceived Risks of E-Cigarettes vs. Cigarettes

Ever users and non-users were more likely to agree that vaping is more harmful to their health than smoking regular cigarettes than current users. All user groups perceived that vaping daily is more harmful compared to vaping once in a while. Only 8.3% of ever users saw harm with occasional vaping, but most of them (83.3%) acknowledged the harm of vaping daily.

Compared to smoking regular cigarettes, using vapes or e-cigarettes is more harmful to my health.



Using vapes or e-cigarettes is very harmful when used...



■ Current use (n=16) ■ Ever use (n=12) ■ Never use (n=51)

Attitudes & Beliefs

Current users were more likely to agree with the following statements compared to the other groups: aerosol from vapes are harmless, vapes sold at stores are safe to use, & their peers are trying to quit using vapes. Ever users were less likely to agree it's tough to quit using vapes. About 80.4% of non-users were more likely to agree the vape industry wants to get youth addicted to nicotine compared to current users (50.0%) and ever users (58.3%).

How much do you agree with the following statements?	Current use (n=16)	Ever use (n=12)	Never use (n=51)
People who use vapes or e-cigarettes are more social.	25.0%	25.0%	15.7%
The aerosol from vapes or e-cigarettes are harmless.	12.5%	8.3%	3.9%
Vapes or e-cigarettes sold at stores are safe to use.	31.3%	16.7%	7.8%
It is tough to quit using vapes or e-cigarettes.	68.8%	41.7%	66.7%
People my age are trying to quit using vapes or e-cigarettes.	37.5%	16.7%	19.6%
The vape or e-cigarette industry wants to get people my age addicted to nicotine.	50.0%	58.3%	80.4%

Responses do not include vapes with marijuana, marijuana concentrations, marijuana waxes, THC, CBD, or harsh oils.

Key Findings & Implications

Prevalence of Use among Washoe County Youth

- Half of youth who reported to had ever tried using vapes are regular users.
- Current users reported using e-cigarettes or vapes (20.3%) the most, and were most likely to co-use with marijuana (81.3%).

Vaping Trends

- Youth preferred flavored e-cigarettes such as fruit/candy or menthol/mint (68.8%). Popular vape brands were Puff Bar (81.3%), Smok (56.3%), Suorin (50.0%), and Juul (31.3%).
- Approximately, 3 out of 5 Washoe youth tried vape as first product. On average, youth started vaping around age 14.5.
- Youth identified in the hip hop, popular, and mainstream peer crowds had the greatest risk to vaping.
- Ever users were more interested in experimenting (58.3%) as a reason for use. They were more likely to borrow from someone (75.0%) than purchase their own vapes.
- Current users used vapes for the purpose of relaxing or relieving tension (62.5%), and they mostly bought their own vapes by giving someone else money (56.3%), or buying directly in a store (50.0%).

Key Findings & Implications

Susceptibility and Intent to Quit

- Curiosity and peer pressure were the biggest factors of youth susceptibility to vapes.
- 68.8% of current users wanted to quit vaping, but majority of them (43.8%) did not know when they were going to quit whereas 25% already planned to stop in the future.
- 43.8% of current users have tried to quit vaping more than 10 times commonly by taking a break from it (62.5%).

Knowledge

- Current users were much less likely to be motivated or in agreement with the knowledge statements related to the adverse health impacts of vaping, addiction, and vape industry's marketing strategies.

Perceived Norms

- Social and family influence is an important contributor to youth's use of vapes. Current users were more likely to have their peers and family use vapes. Specifically, current users were almost eight (8) times more likely to report family members who are using vapes compared to non-users.
- The majority of youth (76%) discussed vaping with an adult such as parent/guardian, teacher, close adult, or coach. Discussion topics include harms of vaping, addiction, nicotine, chemical in vapes, whether youth vape, what vapes look like, and support for quitting. It is important to educate adults so they can give youth good information and advice.

Key Findings & Implications

Perceived Benefits and Risks

- Current users believed vaping can help feel more relaxed and were much less likely to worry about their health, whether they get sick from vaping or what they were inhaling in a vape. They were more likely to report higher perceived risks of nicotine addiction, but were less likely to be motivated to stop using vapes compared to ever users or non-users.
- Ever users cared more about the sociability of vaping: having fun doing vape tricks, vaping for fun with friends, feeling cool, and to be more social. Both ever users and non-users were less likely to think they would get addicted or start craving nicotine if they were to vape.
- Non-users were least likely to perceive the benefits of vaping, and more likely to perceive the risks to their body from vaping.

Beliefs

- Current users were four times more likely to agree that vapes sold at stores are safe to use compared to non-users, and twice as likely than ever users. Ever users (41.7%) were the least likely to believe that it is tough to quit vapes or e-cigarettes.

Acknowledgement

The Washoe County Health District would like to thank Behind The Haze campaign for the online survey.