

## Health Indicator Profile: Smoking (Cigarettes and Vaping)

Smoking tobacco is associated with numerous health problems and is the leading preventable cause of death in the United States. Smoking reduces overall health and contributes to increased risk of coronary heart disease, stroke, cancer, chronic obstructive pulmonary disease, and other diseases and conditions. Smoking also leads to increased absenteeism from work, health care utilization, and costs.<sup>1</sup>

Although smoking tobacco has decreased in recent years, there has been an increase in the use of e-cigarettes, also known as vaping. E-cigarettes can contain harmful substances, including nicotine, and have profound impacts on the health of adolescents and young adults, greatly increasing their likelihood to smoke cigarettes in adulthood.<sup>2</sup>

### Findings from the 2019 Santa Barbara County CHNA

#### Measure for cigarette smokers

The prevalence of current cigarette smoking status is based on two questions: "Have you smoked at least 100 cigarettes in your entire life?" and "Do you now smoke cigarettes every day, some days, or not at all?" Only those who answered "Yes" to the first question are asked about current smoking status.

#### SMOKING QUESTION

Do you now smoke  
cigarettes every day,  
some days, or not at all?

<sup>1</sup> Centers for Disease Control and Prevention. (2020). Smoking & tobacco use. Retrieved from <http://www.cdc.gov/tobacco>

<sup>2</sup> Centers for Disease Control and Prevention. "Quick Facts on the Risks of E-cigarettes for Kids, Teens, and Young Adults." Accessed 18 September 2020. [https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/Quick-Facts-on-the-Risks-of-E-cigarettes-for-Kids-Teens-and-Young-Adults.html)

**Table 1. Percentage of current adult cigarette smokers in Santa Barbara County**

	2016 Santa Barbara CHNA	2019 Santa Barbara CHNA	2018 California BRFSS	2020 Healthy People Target
	% (95% CI)	% (95% CI)	% (95% CI)	
<b>Overall</b>	9.3 (7.4, 11.2) <sup>^</sup>	11.5 (8.6, 14.4)	11.2 (10.4, 12.0)	12.0
<b>Male</b>	10.1 (7.8, 14.3)	15.4 (10.6, 20.3)	14.8 (13.5, 16.0)	
<b>Female</b>	8.5 (6.0, 10.9) <sup>^</sup>	7.4 (4.2, 10.7) <sup>^</sup>	7.7 (6.8, 8.6) <sup>^</sup>	
<b>Hispanic</b>	7.2 (4.3, 10.1) <sup>^</sup>	6.8 (3.4, 10.3) <sup>^</sup>	11.3 (10.0, 12.6)	
<b>Non-Hispanic White</b>	10.7 (7.8, 13.6)	16.1 (11.3, 21.0)	11.1 (10.1, 12.1)	
<b>Other</b>	8.6 (4.1, 13.1)	8.4 (0.0, 17.7) †	NA	
<b>Age 18-44</b>	8.8 (5.6, 12.0)	10.1 (5.7, 14.5)	12.6 (11.3, 13.8)	
<b>Age 45-64</b>	12.9 (9.5, 16.2)	13.5 (8.4, 18.6)	12.3 (10.2, 13.8)	
<b>Age 65+</b>	4.8 (2.3, 6.8) <sup>^</sup>	12.3 (6.3, 18.3)	5.8 (4.6, 7.0) <sup>^</sup>	
<b>&lt; High School</b>	9.8 (4.5, 15.0)	13.2 (4.7, 21.8) †	13.6 (11.6, 15.7)	
<b>High School Grad</b>	11.9 (6.9, 17.0)	19.0 (10.6, 27.3)	14.5 (12.6, 16.3) <sup>^</sup>	
<b>Some College</b>	10.9 (7.4, 14.3)	13.8 (8.4, 19.1)	13.1 (11.4, 14.8)	
<b>College Grad</b>	5.4 (2.9, 7.9) <sup>^</sup>	3.5 (0.9, 6.1) <sup>^</sup> †	5.2 (4.4, 6.0) <sup>^</sup>	
<b>&lt;\$35,000</b>	11.8 (8.3, 15.4)	18.5 (12.3, 24.6) <sup>^</sup>	14.5 (13.0, 16.1) <sup>^</sup>	
<b>\$35,000-\$74,999</b>	9.2 (4.8, 13.7)	13.5 (6.3, 20.7)	13.0 (11.1, 14.8)	
<b>\$75,000 or Greater</b>	6.9 (3.6, 10.2) <sup>^</sup>	2.2 (0.4, 4.1) <sup>^</sup> †	7.5 (6.4, 8.6) <sup>^</sup>	

<sup>^</sup> Significant difference between estimate and Healthy People 2020 Target

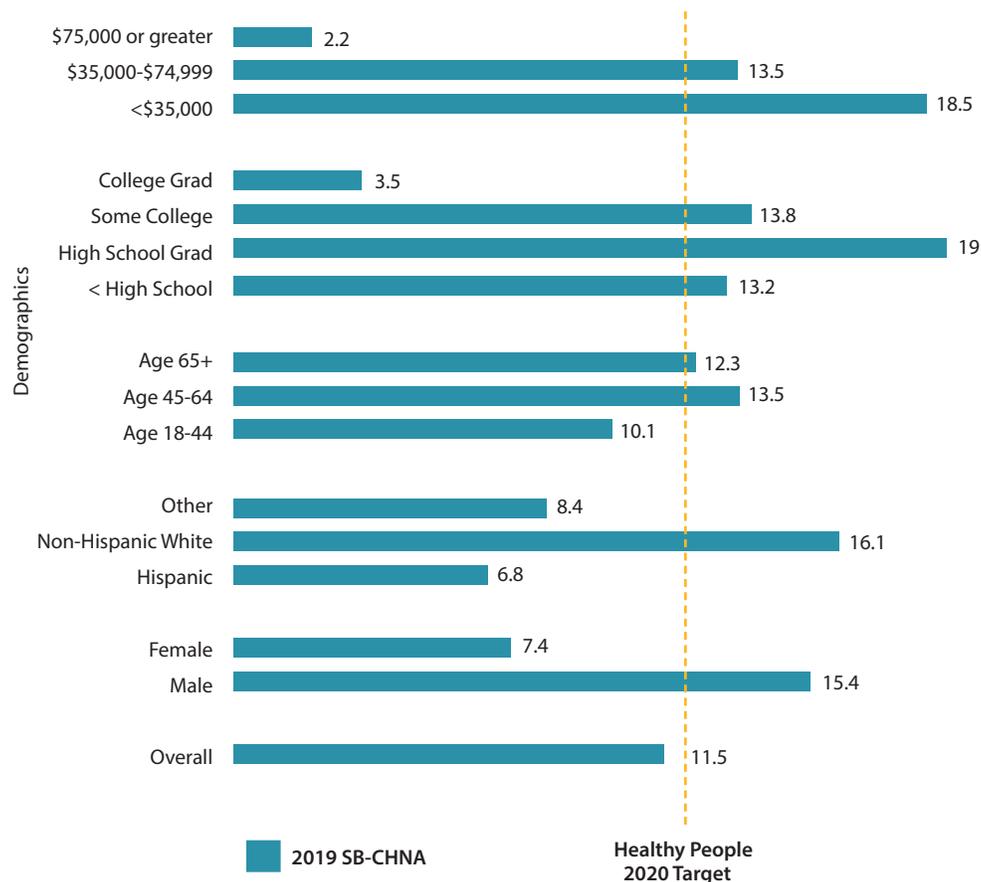
†Unreliable estimate (Relative Standard Error >0.3)

## Health disparities for current cigarette smokers

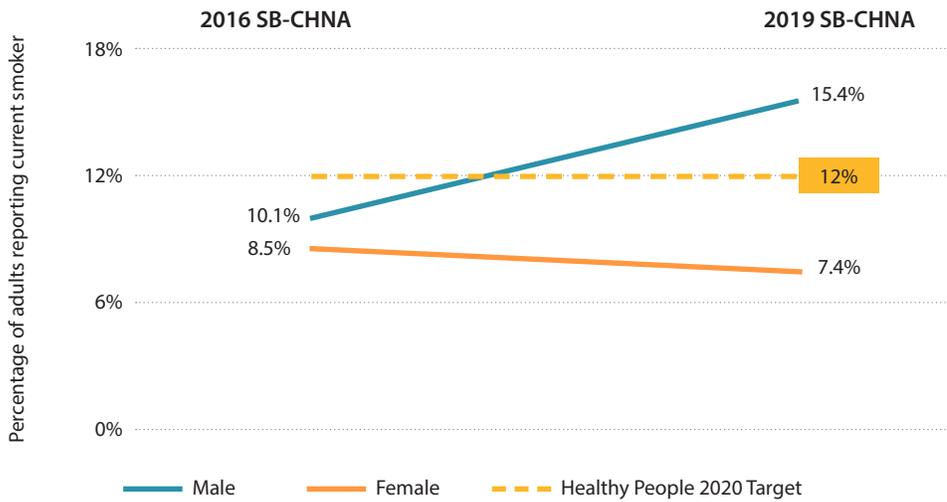
Santa Barbara County is below the HP 2020 target for current cigarette smokers at 11.5%, though the difference is not statistically significant. In 2019 there was a slight increase (2.2%) in current cigarette smoking compared to 2016 and it is now similar to Californians overall. The prevalence of males increased by 5.3% and for females a slight decrease of 1.1%; neither change was statistically significant. Hispanics reported current cigarette smoking significantly less than non-Hispanic Whites (6.8% vs. 16.1%). Other than college graduates, all other education levels increased in current cigarette smokers from 2016 with the largest increase in the high school graduate level (6.1%). Those with the highest household income also had the lowest reported current cigarette smokers at 2.2%, which is significantly lower than those reporting less than \$75,000.

Most impacted demographic subgroups include those reporting annual household incomes less than \$75,000, males, non-Hispanic Whites, those aged 45+, and those without a college degree (see below).

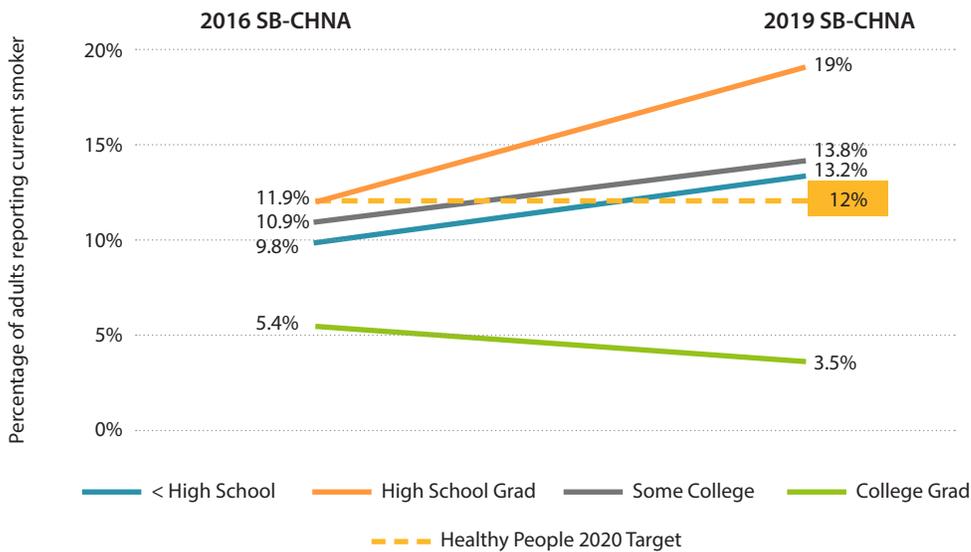
**Figure 1. 2019 Percentage of adults reporting current cigarette smoker status by demographic group**



**Figure 2. Percentage of adults reporting current cigarette smoker status by sex at birth in 2016 and 2019 and HP 2020 Target**



**Figure 3. Percentage of adults reporting current cigarette smoker status by education level in 2016 and 2019 and HP 2020 Target**

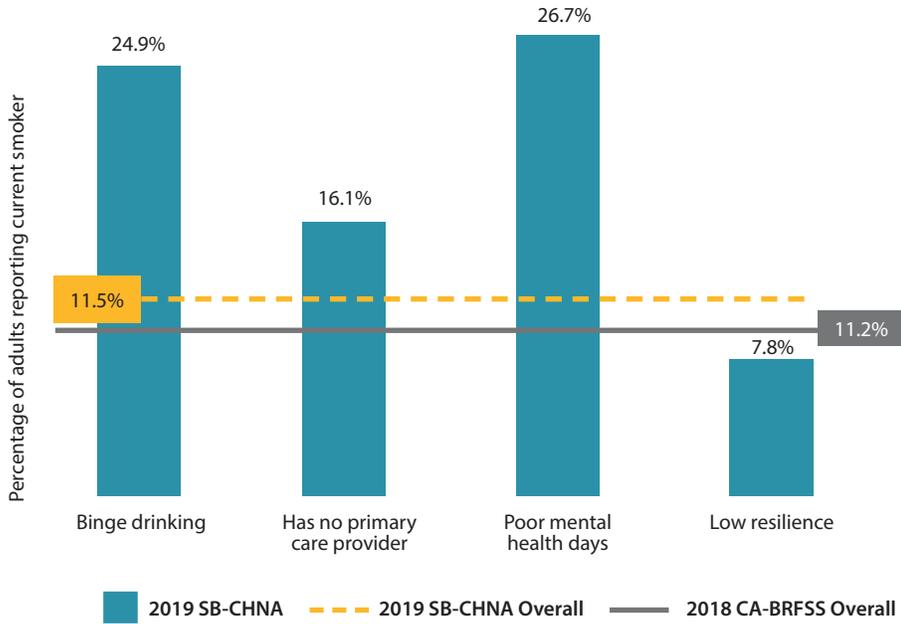


### Factors and health outcomes associated with current cigarette smokers

Figure 4 depicts the four health indicators that were most significantly related to current cigarette smoker status and includes binge drinking, not having a primary care provider, reporting 15 or more poor mental health days in the past 30 days, and low resilience. The percentage of those reporting current cigarette smoking status is much higher for binge drinkers, those without a primary care provider, and those experiencing 15 or more poor mental health days in the past 30 days. Those reporting low resilience also reported less current cigarette smokers; however this was not statistically significant when controlling for other health indicators and demographic characteristics.

Those reporting binge drinking had an increased odds of reporting being a current cigarette smoker, 5.1 times that of nonsmokers. The odds of reporting being a current cigarette smoker were 3.5 times greater for those without a primary care provider compared to those with a primary care provider. Those with poor mental health days had a four-fold increase in odds of reporting current cigarette smoker status when compared to those with less than 15 poor mental health days in the past 30 days.

**Figure 4. Percentage of adults reporting current cigarette smoker status by significant related risk factors**



**Table 2. Odds ratio estimates current cigarette smoker status by significant related risk factors**

Significant related risk factor	Point estimate	95% confidence limits	
Binge drinking	5.1	2.3	11.7
Poor mental health days	4.0	1.4	11.6
Has no primary care provider	3.5	1.6	7.4
Low resilience	0.3	0.0	1.2

Note: The degrees of freedom in computing the confidence limits is 666.

## Measure for vaping

The prevalence of vaping is based on two questions. The first is: "Have you ever used an e-cigarette other electronic 'vaping' product, even just one time, in your entire life?" Those respondents that answered yes to the first question were also asked: "Do you now use e-cigarettes or other electronic 'vaping' products every day, some days, or not at all?" Those that indicated that they use e-cigarettes every day or some days are considered current vapers and are represented in Table 3 below.

### VAPING QUESTIONS

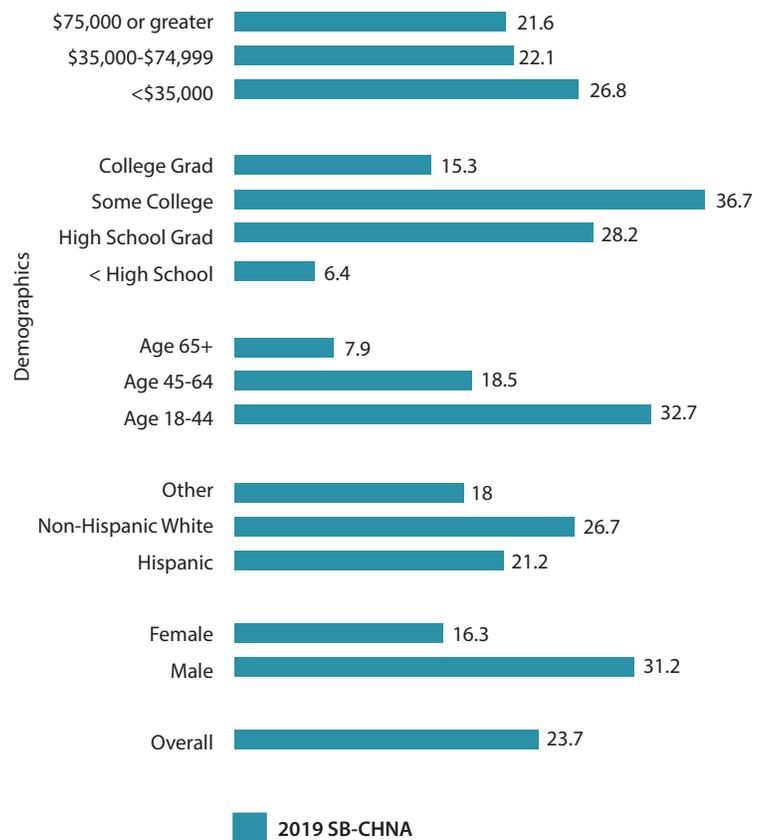
Have you ever used an e-cigarette or other electronic "vaping" product, even just one time, in your entire life?

Do you now use e-cigarettes or other electronic "vaping" products every day, some days, or not at all?

**Table 3. Percentage of adults reporting current vaping in Santa Barbara County in 2019**

2019 Santa Barbara CHNA	
% (95% CI)	
Overall	23.7 (19.6, 27.8)
Male	31.2 (24.7, 37.8)
Female	16.3 (11.6, 21.1)
Hispanic	21.2 (14.8, 27.6)
Non-Hispanic White	26.7 (20.9, 32.4)
Other	18.0 (3.8, 32.2) †
Age 18-44	32.7 (25.7, 39.6)
Age 45-64	18.5 (12.9, 24.1)
Age 65+	7.9 (3.2, 12.6)
< High School	6.4 (0.3, 12.4) †
High School Grad	28.2 (18.1, 38.3)
Some College	36.7 (28.6, 44.8)
College Grad	15.3 (9.7, 20.9)
<\$35,000	26.8 (19.6, 34.0)
\$35,000-\$74,999	22.1 (13.2, 31.1)
\$75,000 or Greater	21.6 (14.8, 28.4)

**Figure 5. Percentage of adults reporting current vaping by demographic group**



† Unreliable estimate (Relative Standard Error >0.3)

## Findings from the 2019 Santa Barbara County Listening Tour

The harmful effects of smoking traditional cigarettes are well known. Less known are the long-term consequences of using electronic cigarettes. The CDC notes that e-cigarettes contain substances that harm the body and the devices can cause unintended injuries resultant from fires, explosions, and toxic exposure to concentrated vaping liquid.<sup>3</sup> Tobacco cessation programs across the United States have been lauded as a public health win. However, service providers are finding that we must revisit how to educate the public on nicotine addiction.

### Prevalence of vaping among youth

Listening Tour participants described the elevated prevalence of tobacco and nicotine use made possible through vaping. As with alcohol use, use of e-cigarettes in Santa Barbara County is becoming increasingly normalized, according to Listening Tour participants. A YouthWell Coalition advocate reflected:

*"I think in the last two years, vaping and drinking have become very, very normalized. So, you'll see everyone's posting about it on social media. Yeah, it's the cool thing to do. Or they'll be posting about their withdrawals. They can't go, like, five hours without it. They really, really can't. And it's hard to see people going through that."*

Participants describe the ubiquity of vaping at school, observed in classrooms and in bathrooms. One participant described how her friends have multiple devices stored in various locations, always having them handy in their backpacks, cars, and bedrooms, so that they never have to go without them. Indeed, during a focus group with Latinx youth, discussions arose concerning the feelings of extreme withdrawal when one is unable to vape during a period of craving.

### Vaping to cope with stress

Youth in Santa Barbara County describe the rising use of e-cigarettes as an outgrowth of wanting to fit in and a self-medicating tactic to cope with life's stressors.

*"It's like a crutch, almost, to cope with depression or anxiety. They don't have the right tools or resources. They go to drinking or smoking or vaping or whatever. It's an escape from what they have going on in their lives." – YouthWell Coalition participant*

<sup>3</sup> Centers for Disease Control and Prevention. "About Electronic Cigarettes (E-Cigarettes)." Accessed 28 May 2020. [https://www.cdc.gov/tobacco/basic\\_information/e-cigarettes/about-e-cigarettes.html](https://www.cdc.gov/tobacco/basic_information/e-cigarettes/about-e-cigarettes.html)

## Impacts of marketing

Wider socio-economic forces are at play in the increasing use of e-cigarettes. The intentional designing of e-cigarettes to taste appealing to youth is a key factor for their increased use. Moreover, e-cigarettes are marketed to children and promoted through social media.

*"It's marketed to kids. It's got flavors like unicorn poop and thousands of flavors that are designed and marketed to kids' social media and YouTube influencers. And so, they're getting online and creating these influencing patterns and delivering. And JUUL is the worst. Pax Labs just got \$342 million in investment this weekend." –Substance use treatment service provider*

## Service providers' frustration

In the context of the widespread use of e-cigarettes, service providers express frustration at having to return to a problem thought to have been resolved.

*"If you talk to any principal right now, it's the e-cigarettes. The electronic delivery systems that are delivering both nicotine and marijuana. And they're flooding the schools, and we've stood by and watched it happen and made millions of dollars off of it. And it's really frustrating. We had tobacco use down to 4% in California." –Substance use service provider*

The CDC notes that e-cigarettes are not safe for youth or young adults. Additional research is needed to understand the long-term health effects of e-cigarette use.

## Conclusions

The past successes of tobacco cessation programs can inform how service providers and community leaders re-educate the public about the harms of nicotine, addiction, and the dangers of the e-cigarette devices themselves. During the Listening Tour, community members and service providers alike demanded programs to raise awareness, provide education, and focus on prevention related to nicotine use, whether it is delivered through traditional cigarettes or e-cigarettes. In addition, participants identified clear policy avenues to pursue, including regulating the available flavors in e-cigarettes that are designed to appeal to youth and restrict explicit marketing to youth and young adults.