Wyoming Survey & Analysis Center
UNIVERSITY OF WYOMING

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2019 Wyoming Adult Tobacco Survey

Wyoming Adults' Use of and Attitudes about Tobacco Products

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Wyoming Department of Health

Contents

LIST OF FIGURES

LIST OF TABLES

Background

Since the 1950s, scientists have been collecting evidence about the harmful effects of smoking. In 1964, the U.S. Surgeon General's office issued a landmark report, *Smoking and Health: Report of the Advisory Committee to the Surgeon General*, which stated that a link between smoking and certain cancers exists (U.S. Department of Health, Education, and Welfare, 1964). Based on a review of the latest research, cigarette smoking and breathing secondhand smoke (SHS) cause multiple cancers and chronic diseases (U.S. Department of Health and Human Services [USDHHS], 2010, 2014).

Smoking is the leading preventable cause of death in the United States. In Wyoming, smoking leads to approximately 800 deaths from smoking-related illnesses each year and nearly $258 million in annual healthcare costs (Centers for Disease Control and Prevention [CDC], 2014a).

The impact of tobacco has been greater for specific groups. For example, research shows the tobacco industry has targeted promotional efforts toward certain neighborhoods and groups such as the LGBTQ+ community, people of color, people with lower incomes, indigenous people, and people experiencing behavioral health conditions (D'Silva et al., 2018; Farber & Folan, 2017; Lee et al., 2015; Williams et al., 2013). As a result, people in these groups are more likely to smoke. That puts these populations at a disproportionate risk of smoking-related disease and death. These inequities have a greater impact on health outcomes than individual choices.

The Wyoming Tobacco Prevention and Control Program (TPCP) works to reduce tobacco use in Wyoming by using a variety of strategies to achieve the following four goals that it shares with the CDC:

1. Preventing initiation of tobacco use (CDC, 2014b)
2. Eliminating nonsmokers' exposure to secondhand smoke (CDC, 2017a)
3. Promoting quitting among adults and young people (CDC, 2015b)
4. Identifying and eliminating tobacco-related disparities (CDC, 2014b, 2015b, 2017a)

As part of monitoring progress on these goals, the TPCP tracks the use and availability of tobacco products including cigarettes, electronic nicotine delivery systems (ENDS; also known as e-cigarettes or vaping devices), and other forms of tobacco.

The achievement of tobacco prevention outcomes is the collective result of the work of many organizations over time. The efforts of state government programs including the TPCP, multiple federal agencies, and other groups such as county tobacco prevention coalitions have all played a part in tobacco prevention and control in Wyoming. Key federal agencies include the U.S. Food

and Drug Administration (FDA), the Substance Abuse and Mental Health Services Administration (SAMHSA), and the CDC. Non-governmental groups include the Robert Wood Johnson Foundation, the Campaign for Tobacco-Free Kids, the American Nonsmokers' Rights Foundation, the American Cancer Society, and the American Lung Association. Changes also reflect influences of the tobacco industry, such as changes in marketing practices or the release of new products such as ENDS.

The Wyoming Adult Tobacco Survey (ATS) is a telephone survey administered by the Wyoming Survey & Analysis Center (WYSAC) at the University of Wyoming under contract to the Wyoming Department of Health (WDH), Public Health Division (PHD). Its purpose is to collect state- and county-level data about tobacco use, the four TPCP/CDC goals, and the broader goal of reducing tobacco-related disease and death. In addition to analyzing the 2019 data, data from previous versions of the survey were used to analyze trends.

2019 ATS Methods

This section provides a general summary of the methods used to collect and analyze the data for the 2019 ATS. Additional technical details, including criteria for determining statistical significance, are in Appendix A.

WYSAC telephone interviewers conducted the telephone interviews. Most callers have significant experience on previous ATSs conducted by WYSAC for other states in recent years. Calling began on February 21, 2019 and ended on June 9, 2019. WYSAC callers completed 2,306 surveys (49% on cellphones; 51% on landlines).

In some figures and tables, percentages may not total 100% because respondents could choose more than one response. Occasionally, rounding of the actual percentages may result in reporting percentages that do not total 100.

Key Limitations

Most ATS survey items have been tested and validated by the CDC and reused over time. However, the ATS relies on self-reported data, respondents' memory of events, and their interpretation of the survey items. Therefore, the results presented here might include recall errors or respondent bias (such as not reporting on behaviors perceived to be unhealthy or unpopular).

In some cases, fewer than 50 people were asked an item. Estimates generated from such small groups are extremely imprecise and are not included in the body of the report. This follows the example set by the CDC in reporting Behavioral Risk Factor Surveillance System (BRFSS) statistics (https://www.cdc.gov/brfss/brfssprevalence/).

Electronic Nicotine Delivery Systems (ENDS)

ENDS Use in Wyoming

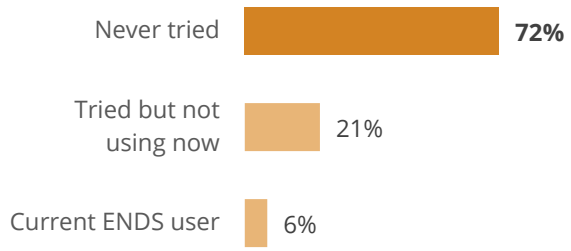
ENDS USAGE

ENDS are electronic nicotine delivery systems, also known as e-cigarettes or vapes. When people use ENDS, they are vaping. In 2018, the Surgeon General officially called youth and young adult vaping an epidemic (USDHHS, 2018). Studies show that young adults who have never smoked start using nicotine products by using ENDS (Bandi et al., 2020). They are then more likely to begin smoking combustible cigarettes (Berry et al., 2019; Hair et al., 2021).

Although ENDS use is less common among adults than smoking cigarettes or chewing tobacco, their recent emergence on the market and surging use among youth and young adults make them a key tobacco prevention issue.

Figure 1: Most Adults Have Never Tried ENDS

2019 Wyoming Adult ENDS use



Note: Current ENDS users said they use ENDS every day or some days.

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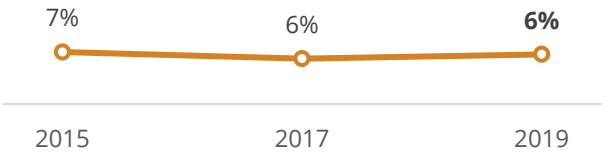
Most Wyoming adults (72%) have never tried ENDS and few are current ENDS users (Figure 1). For this report, current ENDS users are the respondents who said they use ENDS every day or some days.

ENDS use was about as common in 2019 as it was in 2015, the first time this question was asked on the ATS (Figure 2).

Figure 2: ENDS Use among Adults Has Been Stable since 2015

Percentage of adults who currently use ENDS in survey years



Note: Current ENDS users said they use ENDS every day or some days.

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FLAVORED ENDS USE

The Wyoming 2019 ATS was completed before new FDA flavor restrictions went into effect. In 2020, the FDA banned ENDS flavors except menthol and tobacco. However, the ban has large loopholes. It only applies to the cartridge ENDS style, like JUUL. These products have closed, pre-filled e-liquid cartridges that the user replaces when empty. The ban does not include ENDS with refillable e-liquid tanks or single-use or disposable products, like Puff Bar. According to the FDA, these exceptions avoided restricting all ENDS flavor options for adults who may be using e-cigarettes to stop smoking (FDA, 2020). However, data from Truth Initiative's vaping cessation program, This is Quitting, showed that many youth and young adult ENDS users enrolled in the program were switching to the types of ENDS that can still have flavors (Truth Initiative, 2020).

In 2019, the use of flavored ENDS was common for Wyoming adults:

- 83% of current ENDS users had used products flavored to taste like menthol, alcohol, candy, fruit, chocolate, or other sweets in the past 30 days.
- 45% of adults who had ever tried ENDS in their lifetime did so for reasons related to flavor.

Because the use of flavored ENDS is common among Wyoming adult ENDS users, it will be important to monitor how the use of ENDS among Wyoming adults changes in response to the FDA ban.

PREFERRED ENDS TYPES

Most adult ENDS users (82%) preferred a customized commercial juice or liquid from a vape shop to prefilled cartridges or mixing their own e-liquid. The FDA's 2020 flavor ban did not cover this type of ENDS.

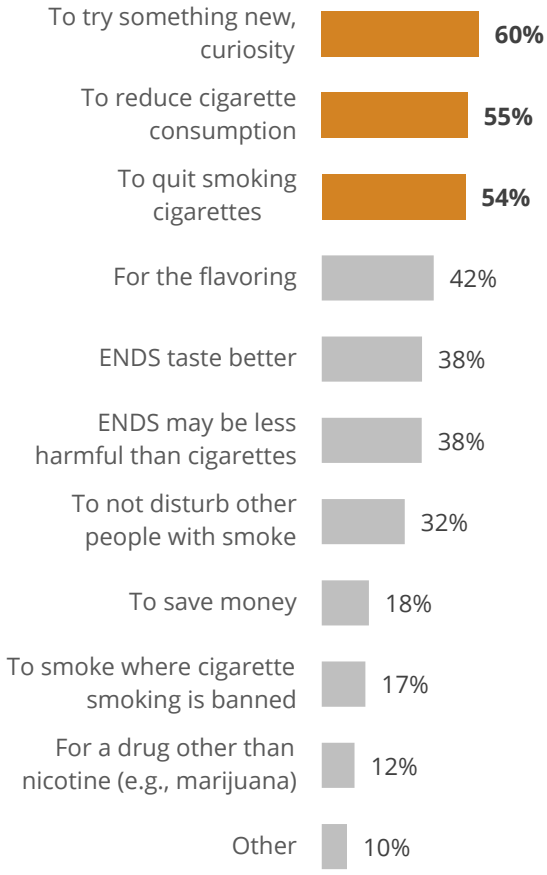
The 2019 ATS questionnaire added Juul as a brand option. It was by far the most preferred cartridge-style ENDS brand; 22% of ENDS users reported using Juul most often in the previous 30 days. The next most often used brand was Blu at 9% of users.

REASONS FOR TRYING ENDS

The top three reasons for trying ENDS were curiosity (60%), cutting back on smoking without necessarily trying to quit (55%), and to quit smoking cigarettes (54%; Figure 3). These results have not changed significantly since these questions were first asked in 2015. The U.S. Food and Drug Administration (FDA) has not approved ENDS as a cessation aid (FDA, 2019).

Figure 3: Two of the Three Most Common Reasons for Trying ENDS are Associated with Reducing Cigarette Smoking

Reasons why adults tried ENDS



Note: Percentages do not add up to 100% because respondents could choose more than one option.

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DO PEOPLE THINK ENDS USE IS HARMFUL?

The 2019 ATS included a series of questions regarding how harmful people think ENDS use is. In 2019, more people thought ENDS use was very harmful than in 2017 (Figure 4).

There are two likely reasons for this change. First, the public health community, including the TPCP, sponsored media messaging about the harms of ENDS use after 2017.

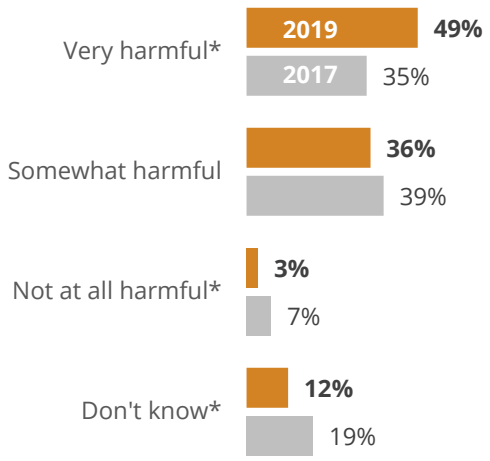
Second, an outbreak of lung injury associated with vaping was occurring as some people were answering the ATS questions. The early news headlines and public health communication about the outbreak may have influenced respondents' answers to these items. Data has since shown the majority of cases in the outbreak were linked to THC or marijuana-containing products (CDC, 2020b).

Three detailed findings stand out from the 2019 data. All relate to adults feeling more informed about the harms of vaping: (a) fewer adults said they did not know how harmful vaping was, (b) fewer adults think vaping is not at all harmful, and (c) more adults say that vaping is very harmful.

In 2019, compared to 2017, more adults said that vaping was about as harmful as, or even much more harmful than, smoking (Figure 5).

Figure 4: More People Thought ENDS Use Was Very Harmful in 2019 Than in 2017

Do you think using e-cigarettes or vape pens is very harmful, somewhat harmful, or not at all harmful to one's health?



Note: * denotes a statistically significant difference between 2017 and 2019.

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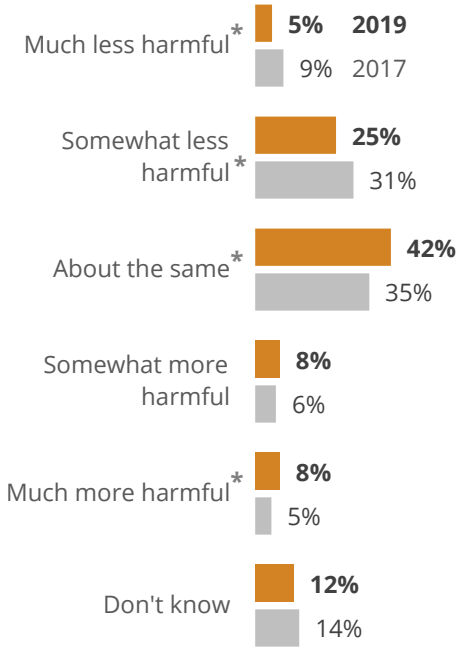
Figure 5: Adults Think Vaping and Smoking Are About Equally Harmful

Compared to smoking cigarettes, how harmful do you think using e-cigarettes or vape pens is to a person's health?



Note: * denotes a statistically significant difference between 2017 and 2019.

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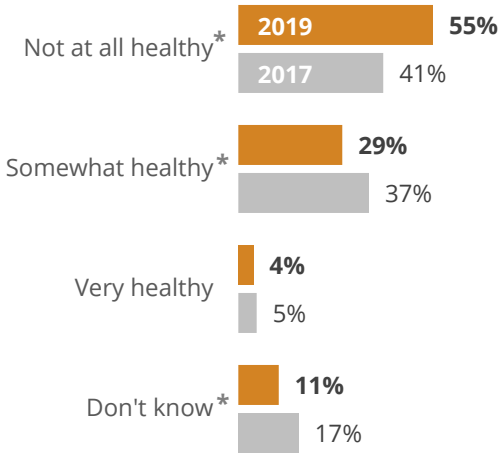
Most adults (55%) now believe that switching from cigarette smoking to using ENDS is not at all healthy, a significant increase since 2017 (41%; Figure 6). Those who said that switching is somewhat healthy decreased from 37% in 2017 to 29% in 2019. However, the number of people who said that making the switch was very healthy stayed about the same (4% vs 5% in 2017). Adults were less likely to report they did not know if making the switch was healthy or not (11% vs 17%). This change is part of a pattern in the data that suggests adults were more informed about the harms of vaping than in 2017.

Figure 6: Most Adults Now Think It Is Not at All Healthy to Switch From Cigarettes to ENDS

In your opinion, how healthy is it to completely switch from cigarette smoking to using e-cigarettes or vape pens?



Note: * denotes a statistically significant difference between 2017 and 2019.

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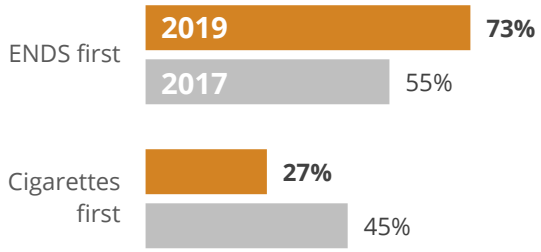
While more research is needed, the CDC has stated that smokers may see benefits from a complete switchover, with the caution that smokers are actually more likely to add a vaping habit to their smoking rather than completely switch (CDC, 2020a).

Initiation of ENDS Use

Figure 7: In 2019, More Smokers Reported Using ENDS Before Cigarettes Than in 2017

Percentage of current, former, and experimental smokers who had also tried ENDS and used ENDS first or cigarettes first



Note: This analysis was restricted to respondents who said ENDS were on the market (to their knowledge) when they started smoking.

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Current, former, and experimental smokers (see Table 1 below for a summary of the four smoking status categories) who had also tried ENDS were asked whether they used cigarettes or ENDS first. For most of these smokers (64%), this question was not applicable because ENDS were not on the market (to their knowledge) when they started smoking. However, more of the remaining smokers reported using ENDS before cigarettes in 2019 than in 2017 (Figure 7). Younger people turning 18 and becoming eligible for the ATS may be contributing to this change. Although a different research approach would provide stronger evidence, the 2019 ATS data support emerging research (such as Berry et al., 2019; Hair et al., 2021) that vaping may lead people to smoke, including some people who would not otherwise have started smoking.

Table 1: Definitions of Smoking Status

Responses to ATS lead to four key categories of smoking status.

	Current Smoker (Regular Smoker)	Former Smoker	Experimental Smoker	Never Smoker
Now smoke daily or some days	✓			
Smoked at least 100 cigarettes in lifetime (regular smoker)	✓	✓		
Ever tried smoking	✓	✓	✓	

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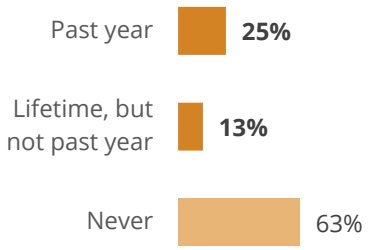
Promoting Cessation

As noted above, 21% of adults had tried ENDS but were not current users. This group could include former regular users and people who experimented with ENDS but never became regular users. The 2019 ATS questions do not allow a breakdown of those groups.

Although ENDS are a relatively new type of tobacco product, many current ENDS users have already tried to quit using them for good. At some point in their lives, about one third of current ENDS users (38% overall) had stopped using ENDS for at least one day because they were trying to quit for good (Figure 8).

Figure 8: Many ENDS Users Had Tried to Quit Using ENDS

Timing of quit attempts by current ENDS users



Note: Percentages do not add up to 100% because of rounding.

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Many Wyoming smokers vape as part of their strategy to quit smoking (Figure 3). According to the CDC, current research regarding ENDS use and quitting smoking is uncertain. There is some evidence suggesting that increased use of ENDS containing nicotine is associated with an increase in smoking cessation when compared to ENDS with no nicotine. However, there is not enough evidence to make any definitive claims (CDC, 2020c). In Wyoming, 72% of regular smokers (current and former; see Table 1) who had tried ENDS reported quitting smoking as one of their reasons for trying them.

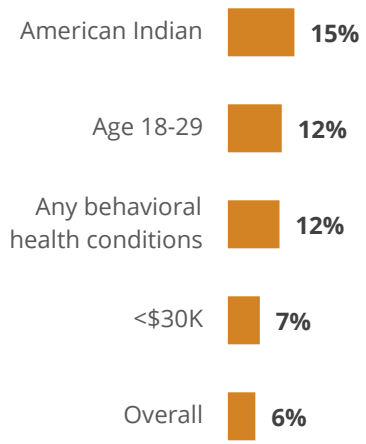
ENDS-Related Disparities

Generations-long inequities in social, economic, and environmental conditions contribute to adverse health outcomes. Breakdowns by race, ethnicity, or socioeconomic status may reflect where a person lives, works, or plays rather than the individual's characteristics or personal choices. These inequities have a greater impact on health outcomes than individual choices.

The TPCP has identified four priority populations, primarily based on disparities in the use and burden of traditional tobacco products: people with low incomes, American Indians, people experiencing behavioral health conditions, and young adults (18-29). As the ENDS market develops, WYSAC and the TPCP are monitoring ENDS use to identify and eliminate disparities of ENDS use among the selected priority populations (Figure 9).

Figure 9: Three Groups in Wyoming Are Disproportionately Impacted by ENDS Use

Adult ENDS rate by priority population



Note: The ENDS industry has targeted young adults (age 18-29; Lee, 2020) and American Indians (Field, 2020).

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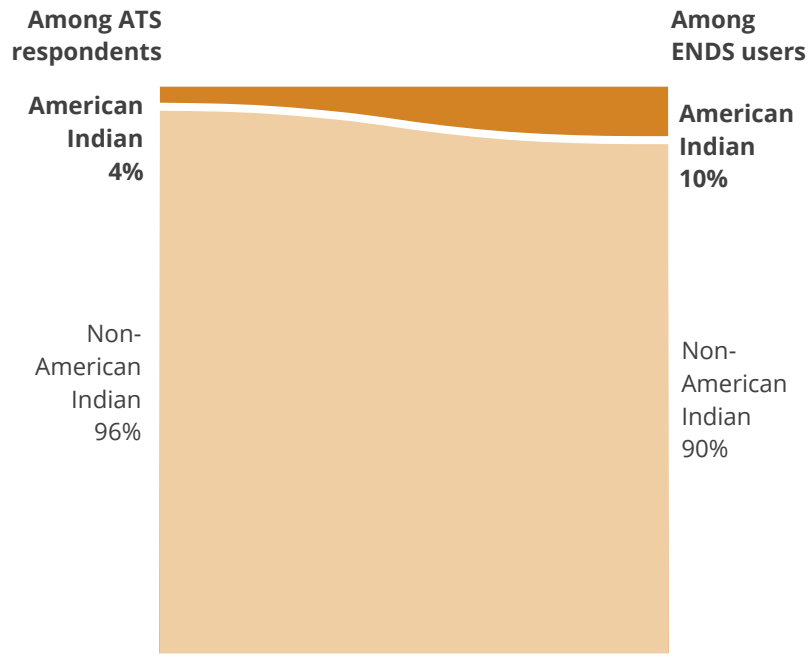
Three groups in Wyoming are disproportionately impacted by ENDS use: American Indians, young adults, and adults who reported having behavioral health conditions. This may be because the ENDS industry has focused marketing toward young adults (Lee, 2020) and American Indians (Field, 2020). WYSAC's literature review did not find conclusive evidence that the ENDS industry is also using targeted marketing toward people experiencing behavioral health conditions and lower incomes. In Wyoming, income does not appear related to adults' ENDS use.

The 2019 ATS included follow-up questions about quitting ENDS use. Fewer than 50 ENDS users within each priority population answered those questions. That is insufficient data for a precise estimate of lifetime and past year quit attempts in this report. WYSAC is available to discuss the data and associated limitations with interested parties.

Figure 10: American Indians Are Over-Represented Among ENDS Users

Percentage of ATS respondents and current ENDS use by American Indian identification



Note: The ENDS industry has targeted American Indians (Field, 2020).

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AMERICAN INDIAN

We acknowledge that different terms refer to the Indigenous population of the U.S. when unable to refer to specific tribes. In this report, use of the term American Indian mirrors the CDC-suggested survey item used for the ATS.

Respondents were considered American Indian when they self-identified as American Indian or multiracial including American Indian, regardless of whether they reported Hispanic ethnicity. This approach allowed for a larger sample from which to draw conclusions.

Focused efforts from tobacco companies have contributed to high smoking rates for American Indians (D'Silva et al., 2018). There is evidence that the ENDS industry is using this focused marketing of their products toward American Indians. A congressional investigation found ENDS manufacturer Juul targeted American Indian tribes with price discounts and programs (Field, 2020; Subcommittee on Economic and Consumer Policy, 2020). In Wyoming, ENDS use is more than double for American Indians (15%) than the overall population.

American Indians are over-represented among ENDS users (Figure 10). Only 4% of adults who responded to the survey identified as American Indian (including people who were multiracial including American Indian), yet they made up 10% of ENDS users in the survey.

YOUNG ADULTS

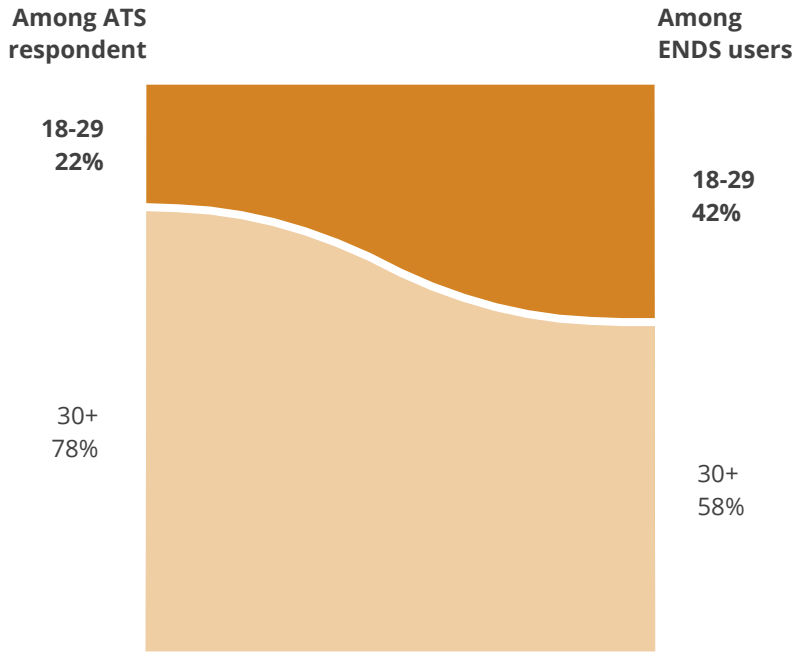
Respondents were considered young adults when they were between ages 18 and 29 years.

Much like the tobacco industry has targeted youth in the past (Farber & Folan, 2017), the ENDS industry has targeted young adults with advertising and marketing (Lee, 2020). The ENDS industry uses social media as a pathway to reach young adults (Lee, 2020).

With the ENDS industry's focused marketing, ENDS use is more than double for young adults (ages 18 to 29; 12%), compared to older adults (ages 30 and older; 5%).

Figure 11: Young Adults Are Over-Represented Among ENDS Users

Percentage of ATS respondents and ENDS users by young adult identification



Note: Young adults have been targeted by ENDS companies (Lee, 2020).

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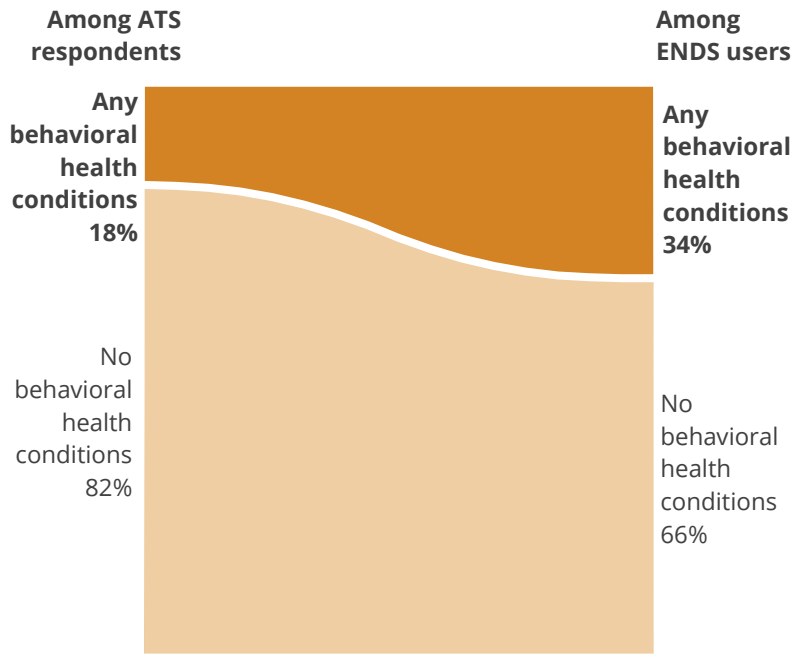
Young adults are over-represented among ENDS users. Only 22% of adults who responded to the survey were young adults, yet they made up 42% of current ENDS users in the survey (Figure 11).

Figure 12: Adults with Behavioral Health Conditions Are Over-Represented Among ENDS Users

Percentage of ATS respondents and ENDS use by self-reported behavioral health conditions



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BEHAVIORAL HEALTH

Historically, the tobacco industry has targeted people experiencing behavioral health conditions (such as depressive disorder, bipolar disorder, substance use disorder, and psychotic disorder; Williams et al., 2013). More research is needed to understand if the ENDS industry is also using focused marketing toward people experiencing behavioral health conditions.

For the ATS, respondents were considered to have a behavioral health condition if they reported one or more of the following conditions: anxiety disorder, depression disorder, bipolar disorder, alcohol abuse, drug abuse, or schizophrenia.

ENDS use is more than double for adults experiencing behavioral health conditions (12%), compared to those experiencing no behavioral conditions (5%).

Adults with behavioral health conditions are over-represented among ENDS users (Figure 12). Although 18% of adults who responded to the survey had behavioral health conditions, they made up 34% of ENDS users in the survey.

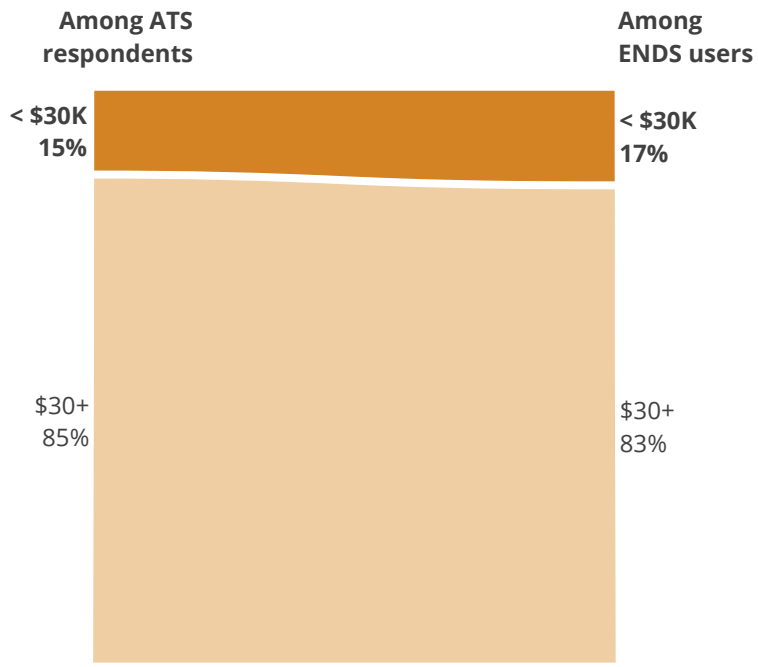
As with any self-report data, it is possible that people under-reported behavioral health conditions on the ATS. This limitation is especially relevant because of the stigma associated with having a behavioral health condition.

ADULTS WITH LOW ANNUAL HOUSEHOLD INCOME

Lower-income neighborhoods have been targeted by tobacco industry marketing (Lee et al., 2015). With the tobacco industry's focused strategies, adults with lower incomes have a disproportionately high rate of smoking (see the Goal Area 4: Identifying and Eliminating Tobacco-Related Disparities section for more information). More research is needed to understand if the ENDS industry is also using focused marketing toward people with lower incomes.

Figure 13: Adults with Low Annual Income Were Similarly Represented Among ENDS Users

Percentage of ATS respondents and ENDS use by income



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In Wyoming, income may not affect adults' ENDS use. About the same percentage of adults with annual household incomes less than $30,000 used ENDS (7%).

Adults with low annual incomes were similarly represented among ENDS users. Fifteen percent of adults who responded to the survey had annual household incomes less than $30,000, and they made up 17% of ENDS users in the survey (Figure 13).

Although ENDS use does not differ for adults with lower incomes, saving money is a motivation for ENDS users. About 18% of adults who had tried vaping did so to save money, most likely compared to the cost of cigarettes (Figure 3). ENDS products and cigarettes are packaged and sold very differently. These differences make direct cost comparisons challenging for consumers. The 2019 ATS did not include any items about the cost of ENDS products.

Conclusions

Certain populations are more vulnerable to ENDS use. Three out of four of the TPCP's priority populations (American Indians, young adults, and adults experiencing behavioral health conditions) have much higher ENDS use than those not in these priority groups. This may be because the ENDS industry has focused marketing toward young adults (Lee, 2020) and American Indians (Field, 2020). WYSAC's literature review did not find conclusive evidence that the ENDS industry is also using targeted marketing toward people experiencing behavioral health conditions and lower incomes. Income does not appear related to adults' ENDS use in Wyoming.

Using focused strategies to reach priority populations may help counter the ENDS industries' targeted measures. Prevention messaging directed toward the TPCP priority populations is an important part of work to reduce disparities. Messaging for these new products could include educational material about potential harms and risks. Messaging may also include ensuring these populations are aware of cessation resources for quitting ENDS use, especially among young people.

Use and Consumption of Cigarettes

Use and Consumption

SMOKING STATUS

Most adults (60%) have never been regular smokers. That is, they have not smoked at least 100 cigarettes in their lifetime. Adult Tobacco Survey (ATS) responses are divided into four key categories of smoking status, described in Table 2. In 2019, 13% of adults were current smokers. About one quarter (27%) of adults were former smokers and about one third (34%) were experimental smokers. About one quarter (26%) of all adults have never smoked or even tried smoking (Figure 14).

Figure 14: Most Adults Have Never Smoked Regularly

2019 Wyoming adult smoking status

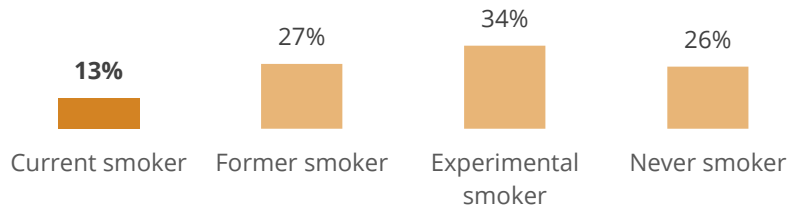

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Table 2: Definitions of Smoking Status

Responses to ATS lead to four key categories of smoking status.

	Current Smoker (Regular Smoker)	Former Smoker	Experimental Smoker	Never Smoker
Now smoke daily or some days	✓			
Smoked at least 100 cigarettes in lifetime (regular smoker)	✓	✓		
Ever tried smoking	✓	✓	✓	

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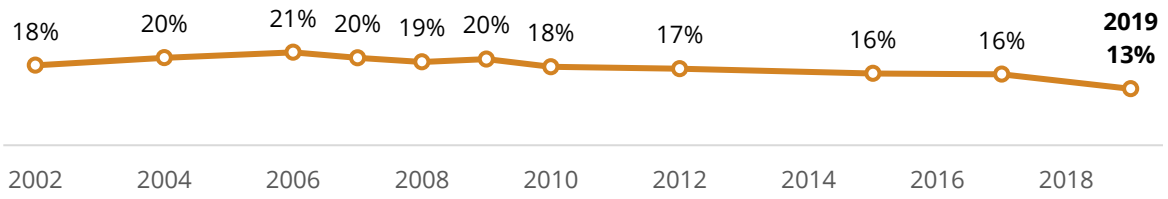
CIGARETTE USE OVER TIME

Cigarette smoking was less common in 2019 than it had been recently in Wyoming. In 2006, 21% of Wyoming adults smoked—a recent peak. Since then, the smoking rate has dropped significantly to 13% (Figure 15).

Figure 15: Fewer Adults Smoke Cigarettes Now Than Since Smoking's Recent Peak in 2006

Percentage of adults who are current smokers



The adult smoking rate is the percentage of adults who have smoked 100 cigarettes and currently smoke every day or some days.

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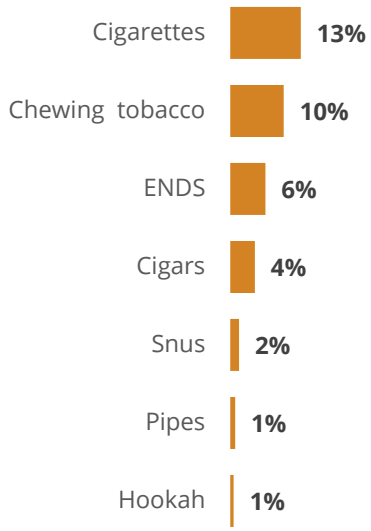
ALL TOBACCO PRODUCTS (INCLUDING ENDS)

Despite the decline in smoking, cigarettes remain the preferred tobacco product for adults in Wyoming (Figure 16).

The use of ENDS and chewing tobacco were about the same in 2019 as they were in 2017. ENDS use stayed at 6% and chewing tobacco use increased slightly to 10% of adults reporting current use. Use of these products has not changed significantly since 2010 when comparable questions were first asked.

Figure 16: Cigarettes Remain the Most Commonly Used Tobacco Product Among Adults

Percentage of adults reporting current cigarette, chewing tobacco, ENDS, or other tobacco use in the past 30 days



Note: Chewing tobacco also includes snuff and dip. Cigars also include cigarillos and very small cigars that look like cigarettes.

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Conclusions

Cigarettes and chewing tobacco remain the most commonly used types of tobacco for adults. ENDS are not as frequently used as cigarettes or smokeless tobacco in the adult population but are still a subject of concern for youth and young adults.

In 2019, cigarettes remain the most commonly used tobacco product in Wyoming despite an ongoing decline since peaking in 2006.

The adult smoking rate has decreased 38% (from 21% to 13%) since peaking in 2006.

Goal Area 1: Preventing Initiation of Tobacco Use

The TPCP and the CDC share the goal of reducing the health burdens of tobacco use by preventing the initiation of tobacco use. A related effort in some local and state tobacco prevention programs has been to raise the legal age of purchase from 18 (or 19 in some jurisdictions) to 21 (see https://tobacco21.org/). On December 20, 2019, President Trump signed a bipartisan bill that raised the minimum legal sales age for all tobacco products in the U.S. (including ENDS) to 21 (Carlisle, 2020). On March 13, 2020, Governor Gordon signed a similar law specific to Wyoming (Angell, 2020). This report provides data relevant to this developing issue in tobacco prevention, but all ATS data were collected before these laws took effect.

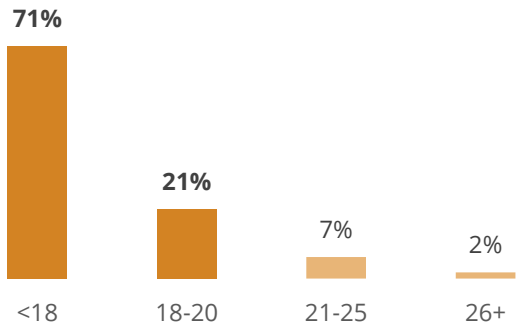
A key limitation for findings in this section is that many of the relevant survey questions ask about events (such as when someone first smoked a whole cigarette) that happened years before data collection. Therefore, these data are especially subject to memory errors. However, precise recall is not critical to the conclusions in this report.

Age of Smoking a Whole Cigarette for the First Time

Almost all (92%) of the adults who had ever smoked an entire cigarette smoked their first one before the age of 21 (Figure 17). Moreover, the vast majority of them smoked their first cigarette before they were 18, with an average age of 16. This pattern has remained consistent since comparable questions were first asked in 2010.

Figure 17: Most Adults Who Had Smoked a Whole Cigarette Did So Before the Age of 21

Age of smoking first whole cigarette, of those who had smoked a whole cigarette



Note: Percentages do not add up to 100% because of rounding.

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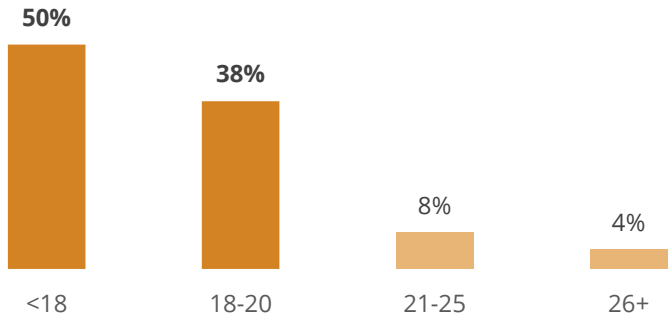
Age of Initiating Daily Smoking

When people start smoking at a younger age, they are more likely to keep the habit long term (CDC, 2014b). These ATS data show that this holds true for Wyomingites: 88% of regular smokers (current and former smokers; see Table 3) began smoking daily before the age of 21 (Figure 18). Regular smokers are those who had smoked at least 100 cigarettes in their lifetime (Table 3).

Figure 18: Most Regular Smokers Started Daily Smoking Before the Age of 21

Age of first smoking every day for 30 days in a row, of adults who have smoked 30 days in a row



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A growing public health concern is the link between ENDS use and the initiation of cigarette smoking. Emerging research (such as Berry et al., 2019; Hair et al., 2021) shows that vaping may lead people to smoke. In Wyoming, 73% of regular smokers who reported that ENDS were on the market when they began smoking said that they used ENDS first. This finding is consistent with concerns that vaping may lead to smoking, though it does not directly assess the transition. For a detailed examination of vaping in Wyoming see the ATS Electronic Nicotine Delivery Systems (ENDS) module.

Table 3: Definitions of Smoking Status

Responses to ATS lead to four key categories of smoking status

	Current Smoker (Regular Smoker)	Former Smoker (Regular Smoker)	Experimental Smoker	Never Smoker
Now smoke daily or some days	✓			
Regular smoker: Smoked at least 100 cigarettes in lifetime	✓	✓		
Ever tried smoking	✓	✓	✓	

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Conclusions

The smoking habits of the vast majority of smokers begin when they are under the age of 21, especially under the age of 18. Relatively few adults begin to smoke after age 21. ATS data on the subject clearly point toward youth being a key factor in the initiation of long-term smoking habits. Further, ATS data are consistent with new research showing that vaping may lead nonsmokers to smoke cigarettes.

The vast majority of smokers started smoking when they were under 21 years old.

Goal Area 2: Eliminating Nonsmokers' Exposure to Secondhand Smoke

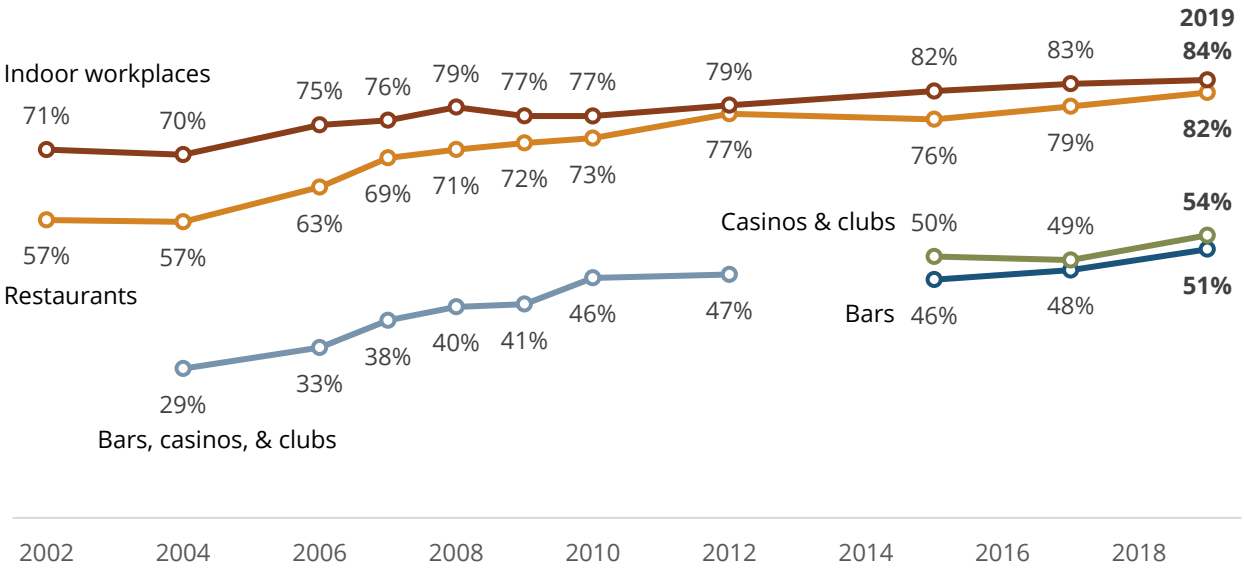
The TPCP and the CDC share the goal of reducing the health burdens of tobacco use by eliminating nonsmokers' exposure to secondhand smoke.

Support for Smokefree Indoor Air Policies and Laws

The ATS gathered information regarding Wyoming adults' opinions on smokefree indoor air policies and laws. Different ATS questions asked about support for policies, rules put in place by individual businesses, and statewide laws.

Figure 19: Support for Smokefree Air Policies Continued to Grow but Remains Lower for Venues Considered Adult Only

Percentage of adults who said that smoking should never be allowed in restaurants, bars, indoor workplaces, or casinos and clubs



Note: Between 2004 and 2012, the ATS included a single item about support for smokefree bars. Although these older estimates are not directly comparable to estimates from the related items on the 2015 and 2017 surveys, this figure includes them as a historical reference.

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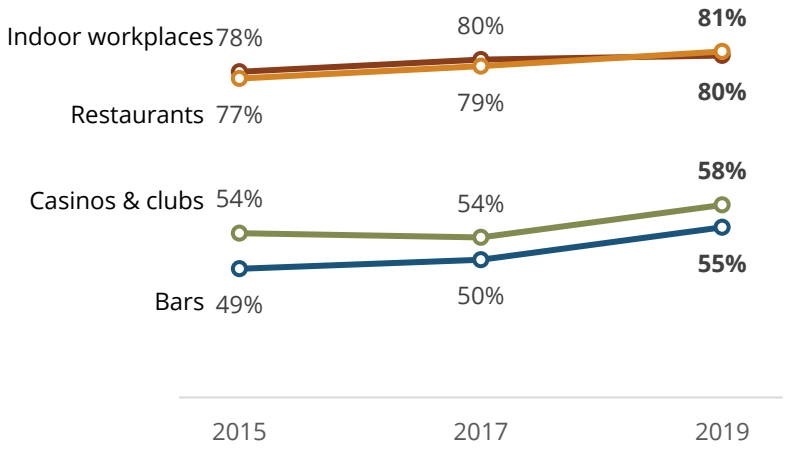
The ATS items about smokefree indoor air *policies* asked adults if they think smoking should be allowed indoors at workplaces, restaurants, bars, and casinos/clubs. (Casinos and clubs were combined on the survey, so were treated as a single venue type.)

The survey questions about smokefree *laws* asked respondents if they support or oppose statewide smokefree indoor air laws in Wyoming for the same venues.

Figure 20: Support for Smokefree Indoor Airs Laws for Restaurants and Bars Increased From 2015 to 2019

Percentage of adults who responded that they support a statewide law that makes each location smokefree indoors



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Support for smokefree air policies continued to grow in 2019. That support is the highest for indoor workplaces; however, support has basically leveled out since 2015. Support is weakest for venues considered adult only (Figure 19). Between 2004 and 2012, the ATS included a single item about support for smokefree bars, casinos, and clubs. After 2012, that was split into two items: one for bars and one for casinos and clubs. Although these older estimates are not directly comparable to estimates from the related items on the 2015 and later surveys, Figure 19 includes them as a historical reference.

Support for smokefree indoor air laws has increased since 2015. The levels of support for smokefree indoor air laws are very similar to those for smokefree indoor policies (Figure 20).

DEMOGRAPHIC DIFFERENCES IN SUPPORT FOR STATEWIDE INDOOR SMOKEFREE AIR LAWS

Potential associations were examined between support for state smokefree indoor air laws and seven demographic variables: gender, education, annual household income, sexual orientation, age, race, and ethnicity. Each of the four venues in Figure 20 were looked at separately to see which demographic variables were associated with more or less support for statewide smokefree air laws.

Age, race (White or non-White), and ethnicity (Hispanic or non-Hispanic) were not significantly associated with support for legally protected smokefree indoor air for any of the four venues.

When accounting for the other demographic variables, gender was the only variable significantly associated with support for smokefree indoor air laws across all venues. For each venue, men were less likely to support smokefree indoor air laws than women.

Table 4: For Workplaces, Women and People with More Education Are More Likely to Support Smokefree Air Laws

Percentage of adults in each group who support a statewide smokefree indoor air law covering workplaces

		Workplaces
Gender*	Men	75%
	Women	86%
Education*	Associate or less	79%
	Bachelor's or more	86%
Income	<$30,000	77%
	$30,000+	81%
Sexual Orientation	Straight	81%
	LGBT	84%

Note: * indicates a significant difference.

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Additional demographic variables were related to smokefree indoor air laws covering specific venues. These relationships are summarized in this section, with full results in Appendix C: Statistical Analysis Methods and Detailed Results.

Most people (80%) support smokefree air laws for workplaces (Figure 20). Gender and education were significantly associated with support for smokefree air laws (Table 4). Women and those with at least a bachelor's degree were more likely to support the laws. Income and sexual orientation did not have significant differences in support. Overall, support for smokefree workplaces is very high for all demographic groups.

Table 5: For Restaurants, Women, People with Higher Incomes, and Straight People Were More Likely to Support a Smokefree Air Law

Percentage of adults in each group who support a statewide smokefree indoor air law covering restaurants

		Restaurants
Gender*	Men	76%
	Women	86%
Education	Associate or less	80%
	Bachelor's or more	85%
Income*	<$30,000	73%
	$30,000+	82%
Sexual* Orientation	Straight	83%
	LGBT	62%

Note: * indicates a significant difference.

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Overall, a slim majority (55%) of people support smokefree air laws in bars (Figure 20). As in workplaces, women and those with at least a bachelor's degree were more likely to support legal protections (Table 6). For most demographic groups, a majority of adults support smokefree laws covering bars.

Most people (81%) support smokefree air laws for restaurants (Figure 20). However, there were significant differences in support for gender, income, and sexual orientation (Table 5). Women, those making over $30,000 per year, and those who identify as straight were more likely to support smokefree air laws in restaurants. Overall, support for smokefree air laws in restaurants is very high for all demographic groups.

Table 6: For Bars, Women and People With at Least a Bachelor's Degree Are More Likely to Support Smokefree Air Laws

Percentage of adults in each group who support a statewide smokefree indoor air law covering bars

		Bars
Gender*	Men	52%
	Women	63%
Education*	Associate or less	55%
	Bachelor's or more	65%
Income	<$30,000	46%
	$30,000+	59%
Sexual Orientation	Straight	59%
	LGBT	42%

Note: * indicates a significant difference.

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Table 7: For Casinos and Clubs, Women Were More Likely to Support Smokefree Air Laws

Percentage of adults in each group who support a statewide smokefree indoor air law covering casinos and clubs

		Casinos and Clubs
Gender*	Men	52%
	Women	65%
Education	Associate or less	57%
	Bachelor's or more	63%
Income	<$30,000	46%
	$30,000+	60%
Sexual Orientation	Straight	59%
	LGBT	42%

Note: * indicates a significant difference.

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In casinos and clubs, like bars, a slim majority, 58%, of adults support legal protections for smokefree air (Figure 20). Gender was the only demographic variable that showed a significant difference, with women being more likely to support laws (Table 7). For most demographic groups, a majority of adults support smokefree laws covering casinos and clubs.

Adult venues (bars, casinos, and clubs) had much lower support for smokefree air laws from all demographics, but most adults support legal protection.

Support for Other Smokefree Air Policies and Laws

OUTDOOR PARKS POLICY

Most Wyomingites (83%) thought that smoking should be restricted at outdoor parks, at least in some manner. This proportion has significantly increased from 76% in 2010. Complete restrictions are less popular than partial restrictions. In 2019, 36% of adults thought that smoking should never be allowed, and 47% of adults thought that smoking should be allowed only at some times or in some places.

OUTDOOR WORKPLACES LAW

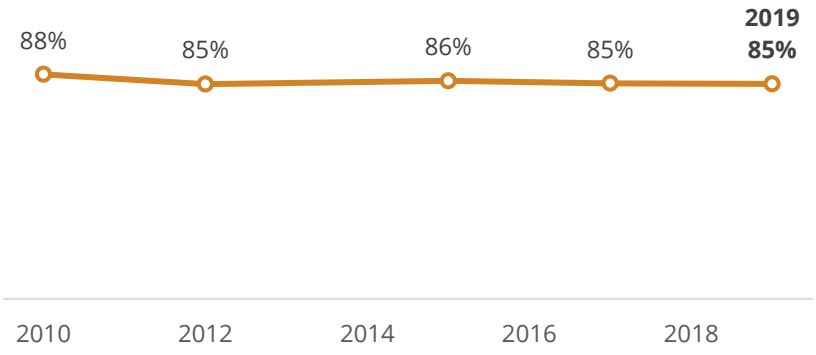
Support for laws making outdoor workplaces smokefree was substantially lower than support for laws making indoor workplaces smokefree: Only 30% of adults support a statewide smokefree air law for all outdoor workplaces. The level of support for such a law in 2019 has not changed significantly since comparable questions were first asked in 2015.

TOBACCO-FREE SCHOOL POLICY

Support for tobacco-free schools has been consistently high since 2010. In 2019, 85% of adults indicated that all school events should be tobacco-free for all students, staff, and visitors on all school grounds, fields, and parking lots (Figure 21). There was no significant difference between adults who had a child living with them and those who did not.

Figure 21: Most Adults Continue to Agree That School Events Should Be Tobacco-Free

Percentage of adults who said that tobacco use should be completely banned at all school events for all students, staff, and visitors on all school grounds, fields, and parking lots



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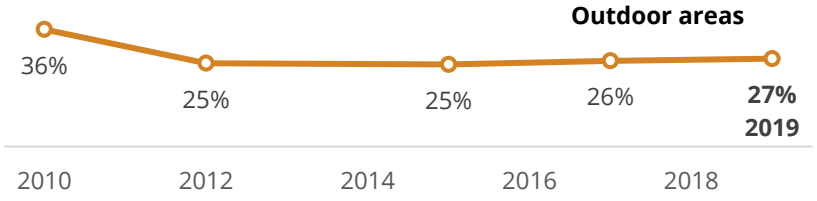
Exposure to Secondhand Smoke

SMOKING PROHIBITED INDOORS/OUTDOORS AT WORK

Most employed adults (87%) reported that smoking was never allowed in indoor areas (including inside a vehicle) at their place of work. The question asked in 2019 does not allow direct comparisons to earlier data, but does not show a dramatic change over time. However, relatively few adults (27%) reported that smoking was not allowed in outdoor areas, which has been consistent since 2012 after a drop from 36% in 2010, when comparable questions were first asked (Figure 22).

Figure 22: Most Adults Are Not Protected by Smokefree Outdoor Air Rules at Their Place of Work

Percentage of employed adults who responded that smoking was never allowed outdoors at their workplaces



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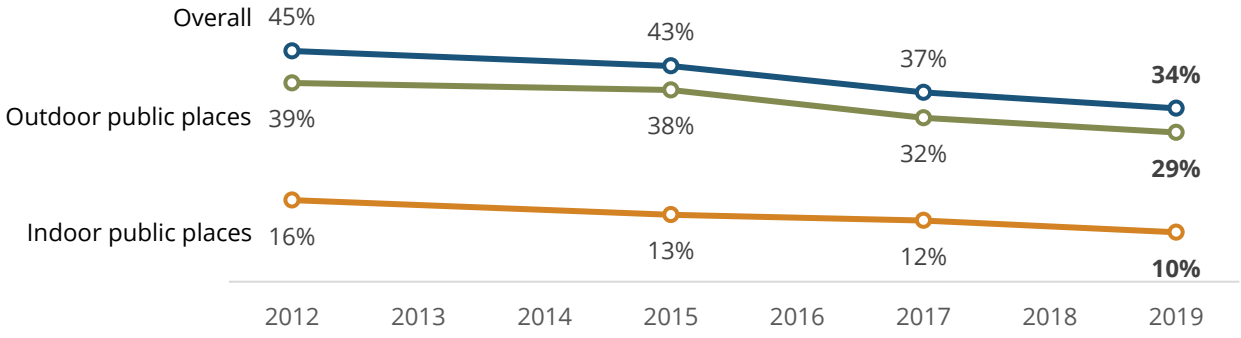
EXPOSURE TO SECONDHAND SMOKE AT WORK OR IN PUBLIC

Consistently since 2010, most employed adults did not regularly experience secondhand smoke (SHS) exposure at their workplace, either indoors or outdoors. However, in 2019, about 1 in 5 (21%) working adults still reported that they had breathed someone else's smoke at their workplace in the past seven days.

In public places, indoors and outdoors, 1 in 3 people reported breathing someone else's smoke in the past seven days (Figure 23). Although still a cause for concern, this is significantly less than the 2012 rate (45%), when comparable questions were first asked. Further, the chances of being exposed to SHS while in a public place is not significantly different between current smokers and nonsmokers: 38% of current smokers reported exposure to SHS while 34% of nonsmokers reported exposure to SHS in 2019. This lack of a difference could indicate that nonsmokers are unable to choose to avoid SHS exposure or often choose not to.

Figure 23: Since 2012, There Has Been a Significant Reduction in the Number of Adults Exposed to SHS in Indoor and Outdoor Public Places

Percentage of adults who had been exposed to someone else's smoke in indoor and outdoor public places in the past seven days.



Note: Overall combined exposure at indoor and outdoor public places.

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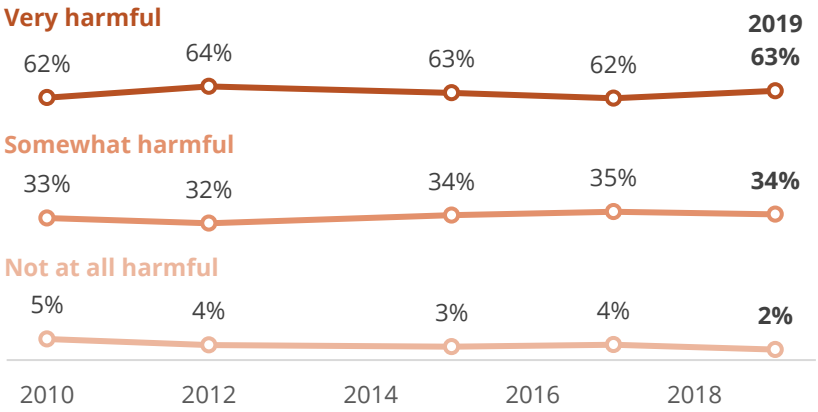
OPINIONS ABOUT HARMFULNESS OF SHS

Over the years, adults have almost unanimously agreed that SHS is harmful to one's health (Figure 24). In 2019, the majority (63%) believed SHS is very harmful to one's health, and 34% believed that SHS is somewhat harmful. Only 2% believed that it is not harmful. These levels of agreement have not changed significantly since a comparable question was first asked in 2010.

Figure 24: Wyoming Adults Almost Unanimously Agree That SHS Is Harmful to One's Health

Do you think that breathing smoke from other people's cigarettes or from other tobacco products is very harmful, somewhat harmful, or not at all harmful to one's health?



Note: Totals do not add up to 100 because of rounding.

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Conclusions

Wyoming has seen improvement in both the number of people exposed to secondhand smoke and the number of people who support smokefree air laws and policies. Adults exposed to SHS in public places decreased 24% since 2012. Between 2015 and 2019, support for smokefree indoor air laws increased significantly to 81% for restaurants and 55% for bars.

Wyoming has seen improvement in both the percentage of people exposed to secondhand smoke and the percentage of people who support smokefree air laws and policies.

However, Wyoming still has room for improvement. In public places, 1 in 3 adults still report SHS exposure in the last week. A slight majority of adults think that smoking should not be allowed in bars, and men are generally less likely to support smokefree air laws and policies in all venues. Wyoming can still improve by increasing support for smokefree air in adult-oriented businesses and further protecting people at work and in public.

Goal Area 3: Promoting Cessation

The TPCP and the CDC share the goal of reducing the health burdens of tobacco use by promoting and supporting quitting among adults and young people.

In this section, we explore smoker's cessation efforts, including their desire to quit and quit attempts. We look at respondents' awareness of quitlines, use of cessation aids, and barriers to quitting. The Wyoming Quit Tobacco (WQT) program is designed to assist with common barriers to quitting. This section also covers smokers' visits to healthcare providers, respondents' support of tobacco tax increases, and conclusions and recommendations based on the data and best practices in cessation efforts.

Smokers' Cessation Efforts

SMOKERS' DESIRE TO QUIT AND QUIT ATTEMPTS

Most smokers (68%) wanted to quit smoking cigarettes. Some (28%) said they did not want to quit. Few (4%) were unsure if they wanted to quit smoking.

At some point in their lives, about four out of five current smokers (81%) had stopped smoking for at least one day because they were trying to quit for good.

Two out of five (40%) current smokers have tried to quit smoking at least once in the past year because they were trying to quit for good (Figure 25).

Figure 25: Two Out of Five Current Smokers Have Tried to Quit in the Past Year

Percentage of smokers who tried to quit in the past year, tried in their lifetime but not in the past year, or never tried to quit

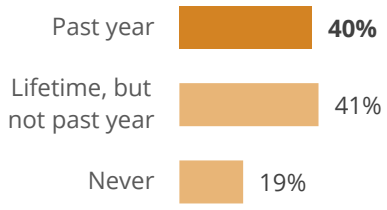

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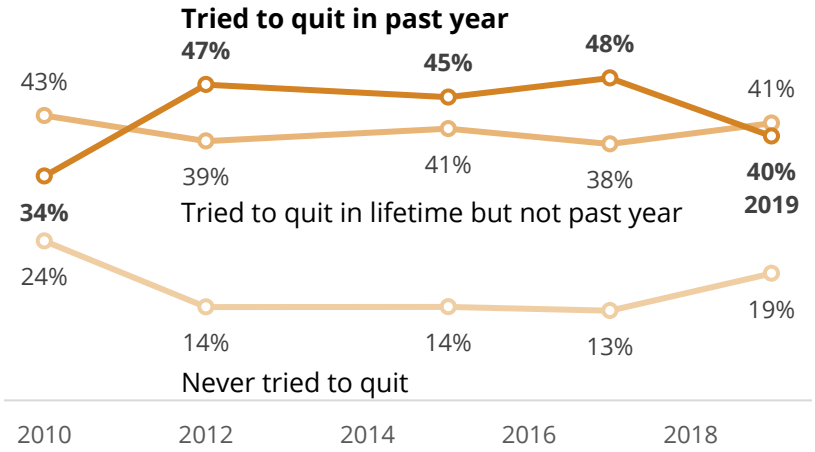
Figure 26: Smokers Who Tried to Quit Have Remained Stable Over the Years

Percentage of smokers who tried to quit in the past year, tried in their lifetime but not in the past year, or never tried to quit



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The percentage of smokers who have tried to quit has remained consistent over the years (Figure 26).

AWARENESS OF QUITLINES

About half (48%) of non-tobacco users were aware of telephone quitline services. Non-tobacco users' awareness has significantly grown over the years (Table 8).

Three-fourths (75%) of tobacco users were aware of telephone quitline services. Tobacco users' awareness of quitlines has remained consistent over the years.

Most tobacco users are aware of quitline services.

Table 8: Non-tobacco Users' Awareness of Quitline Services Has Grown Since 2010

Percentage of adults who are aware of telephone quitline services by tobacco use

	2010	2012	2015	2017	2019
Non-tobacco users*	41%	46%	45%	49%	48%
Tobacco users	75%	71%	69%	77%	75%

Note: * indicates a statistically significant trend.

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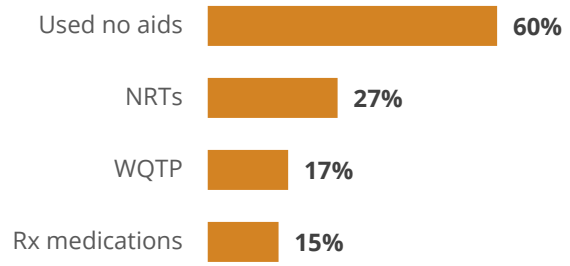
SMOKERS' USE OF CESSATION AIDS

Three out of five (60%) smokers who tried to quit in the last year did not use any cessation aids. Nicotine replacement therapy (NRT) is the most popular cessation aid used by smokers trying to quit (Figure 27). This may include people buying them over-the-counter themselves or by getting them from the WQT program.

Figure 27: NRT Is the Most Popular Cessation Aid Used by Smokers

Percentage of smokers who said they used the cessation aid the last time they tried to quit in the past year



Note: Percentages do not total 100% because respondents could identify more than one option. Respondents could not choose "used no aids" combined with any aids.

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SMOKERS' OBSTACLES TO QUITTING SMOKING CIGARETTES

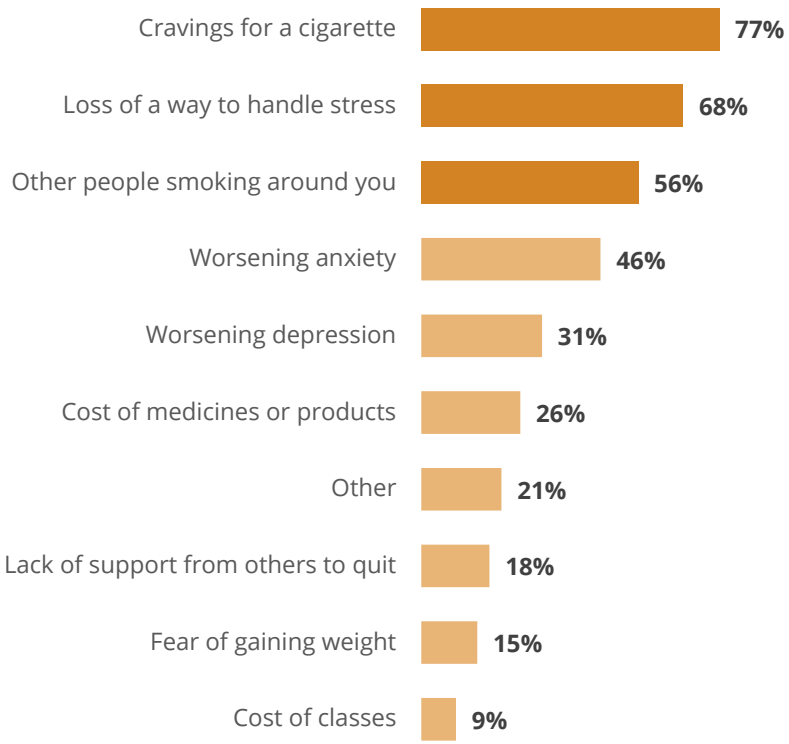
Cravings for a cigarette was the most common obstacle for current smokers the last time they tried to quit (77%; Figure 28). Current smokers said other obstacles to quitting cigarettes included the loss of a way to handle stress (68%) and other people smoking around them (56%).

The WQT program specifically targets the most common barriers to quitting smoking (https://www.quitwyo.org). In particular, the medications provided are designed to reduce cravings. Coaching can include strategies to deal with other barriers.

Many of these obstacles differ significantly for smokers experiencing behavioral health conditions. For details, see the Goal Area 4: Identifying and Eliminating Tobacco-Related Disparities section.

Figure 28: Craving Cigarettes Was the Most Common Obstacle for Current Smokers

Percentage of smokers who had tried to quit in their lifetime or wanted to quit faced obstacles to quitting smoking



Note: Percentages do not add up to 100% because respondents could choose more than one option.

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Smokers' Visits with Healthcare Providers

Most smokers had seen a healthcare professional in the past year (Figure 29). There was no significant relationship between seeing a healthcare professional and smoking status. For definitions of smoking status, see Table 9.

Figure 29: Most Smokers Had Seen a Healthcare Professional in the Past Year

Percentage of adults who had seen a healthcare professional by smoking status

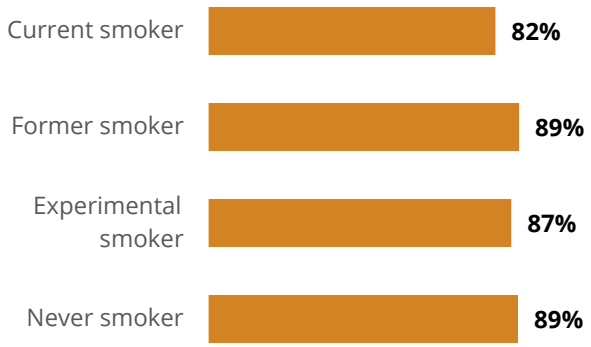

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Table 9: Definitions of Smoking Status

Responses to ATS lead to four key categories of smoking status.

	Current Smoker (Regular Smoker)	Former Smoker	Experimental Smoker	Never Smoker
Now smoke daily or some days	✓			
Smoked at least 100 cigarettes in lifetime (regular smoker)	✓	✓		
Ever tried smoking	✓	✓	✓	

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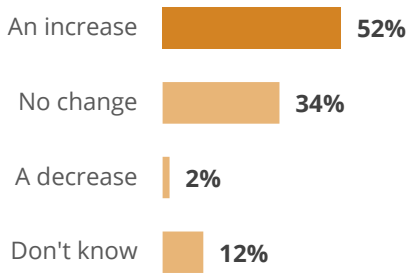
Tobacco Cessation and Tobacco Tax

CIGARETTE TAX INCREASE

Increasing tobacco product prices is an effective way to increase tobacco cessation (CDC, 2015b). It also discourages the initiation of tobacco use (CDC, 2014b). In Wyoming, the state's cigarette excise tax has remained at $0.60 per pack since 2003. Just over half (52%) of Wyoming adults would support an increase in the tax on cigarettes (Figure 30).

Figure 30: Just Over Half of Wyoming Adults Would Support an Increase in the Tax on Cigarettes, Currently at $0.60 per Pack

Percentage of adults who would support …



Note: WYSAC interviewers recorded a decrease in tax only when respondents volunteered that opinion.

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Wyoming adults' support for a cigarette tax increase has grown significantly since 2015 (Table 10). The Wyoming House of Representatives, Senate, and governor would have to approve a change to the cigarette tax.

Appendix B: Wyoming 2019 ATS Frequency Tables includes data on the price smokers paid for a pack or carton of cigarettes and use of special promotions to buy cigarettes.

Table 10: Wyoming Adults' Support for a Cigarette Tax Increase Has Grown Significantly Since 2015

Percentage of adults who would support …

	2015	2017	2019
An increase*	47%	53%	52%
No change*	39%	38%	34%
A decrease*	1%	1%	2%
Don't know	12%	8%	12%

Note: WYSAC interviewers recorded a decrease in tax only when respondents volunteered that opinion. The percentages for 2015 do not total 100% because of rounding.

* indicates a statistically significant trend.

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SMOKELESS TOBACCO TAX INCREASE

Wyoming state legislation currently taxes smokeless tobacco (chewing tobacco, snuff, dip, or snus) at $0.60 per ounce. A minimum tax of $0.60 is required even if the amount sold is less than one ounce. Over half (54%) of Wyoming adults said they would support an increase in the smokeless tobacco tax. A little over one third (36%) said they would not support an increase. Some respondents (10%) were not sure if they would support this tax increase. These findings have not changed significantly since 2015.

Conclusions

The majority of smokers want to quit smoking cigarettes and have tried to quit at some point in their lives. When they try to quit or want to quit, smokers face obstacles such as cravings for a cigarette, loss of a way to handle stress, and other people smoking around them. The WQT program is designed to assist with these obstacles.

Most smokers want to quit smoking cigarettes and have tried to quit at some point in their lives.

Most tobacco users are aware of quitline services, yet most smokers did not use any cessation aids. This choice probably made it less likely they would quit. Media emphasizing how the WQT program addresses common barriers to quitting smoking may increase enrollment in the WQT program and use of program services such as free medications.

Being around other people who are smoking was the third most commonly reported barrier to quitting smoking. Smokefree indoor air policies and laws may help many smokers who are trying to quit. They would also protect people who chose not to smoke from exposure to the harmful chemicals in secondhand smoke (CDC, 2015b).

Just under half of non-tobacco users were aware of telephone quitline services. Media campaigns can reach non-tobacco users who may encourage their family members who use tobacco to contact the WQT program.

Most tobacco users are aware of quitline services.

Since 2010, about three-fourths of tobacco users were aware of telephone quitline services. Market research may be able to identify ways to reach the remaining fourth.

Most adults (including current smokers) had seen a healthcare provider in the past year. This is an opportunity for healthcare providers to connect current smokers to available cessation resources and address barriers to quitting. Greater collaboration with healthcare providers could result in more tobacco users becoming aware of, and receptive to, cessation services (CDC, 2015b).

Public support for increasing the cigarette excise tax in Wyoming has grown significantly since 2015. Still, the cigarette excise tax has remained at $0.60 per pack since 2003. Increasing tobacco product pricing through taxation, minimum price laws, and other means is an evidence-based strategy for promoting cessation (CDC, 2015b).

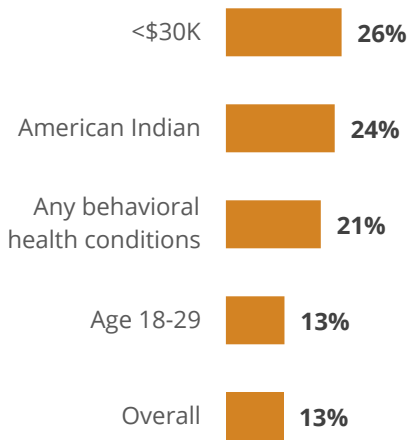
Goal Area 4: Identifying and Eliminating Tobacco-Related Disparities

Generations-long inequities in social, economic, and environmental conditions contribute to adverse health outcomes. Breakdowns by race, ethnicity, or socioeconomic status may reflect where a person lives, works, or plays rather than the individual's characteristics or personal choices. These inequities have a greater impact on health outcomes than individual choices. For example, research shows the tobacco industry has targeted promotional efforts toward certain sociodemographic neighborhoods (D'Silva et al., 2018; Farber & Folan, 2017; Lee et al., 2015; Williams et al., 2013).

Addressing these health inequities is the fourth goal of the TPCP and the CDC with the aim to reduce tobacco use and the related health burdens among populations disproportionately impacted by tobacco-related disease and death.

Figure 31: Four Groups in Wyoming Stand Out as Disproportionately Impacted by Smoking

Adult smoking rate by priority group



Note: The tobacco industry has targeted adults from these groups (D'Silva et al., 2018; Farber & Folan, 2017; Lee et al., 2015; Williams et al., 2013).

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The TPCP focuses on people with low incomes, American Indians, people experiencing behavioral health conditions, and young adults (age 18-29) as priority populations (Figure 31). The tobacco industry has targeted each of these populations (D'Silva et al., 2018; Farber & Folan, 2017; Lee et al., 2015; Williams et al., 2013).

For each population, we analyzed three key indicators: the prevalence of smoking compared to the rest of the adult population, quit attempts, and exposure to secondhand smoke (SHS) at work.

Because of the relatively small number of ATS respondents who are smokers within each priority population, there is a high degree of uncertainty around the estimates for most of these groups. This makes interpretation of statistical tests problematic. Therefore, we took a cautious

approach and chose not to provide interpretations for statistical tests in which we had a low degree of confidence, including when fewer than 50 adults responded to a question regardless of their answers to that question. This follows the example set by the CDC in reporting Behavioral Risk Factor Surveillance System (BRFSS) statistics (https://www.cdc.gov/brfss/brfssprevalence/).

These low numbers and cautious approach make it difficult to explore the possible overlap of different factors that may be affecting these groups and contributing to inequalities. For example, when looking at people with self-reported behavioral health conditions and people in lower income households, there may be some overlap of these two groups. Because there are so few respondents in each category, we do not explore these intersections, limiting the conclusions.

Adults with Low Annual Household Income

Tobacco industry marketing has traditionally targeted lower-income neighborhoods (Lee et al., 2015). Tobacco retailers are also more common in lower income neighborhoods (Young-Wolff et al., 2014). With the tobacco industry's pointed strategies toward people with lower incomes, adults with lower incomes have a disproportionately high rate of tobacco use.

An ideal measure for identifying people with low incomes would be the poverty level. However, this varies by size of household and other factors not included in the ATS. Based on practical considerations such as survey sample size, WYSAC and the TPCP partners use a threshold of $30,000 in annual household income to identify adults with low incomes.

For context, the median household income for Wyoming adults is $64,049 (U.S. Census Bureau, 2019). By definition, median means that half of the adults in the state have an annual income less than the median.

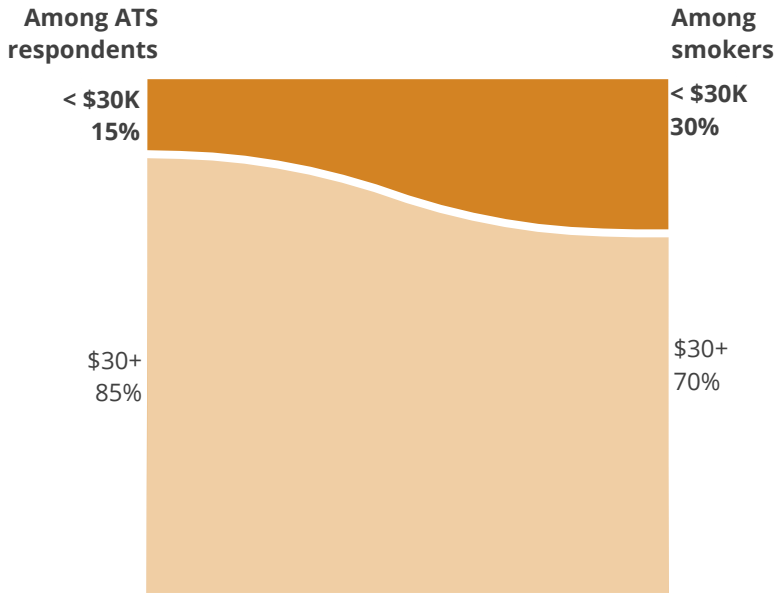
SMOKING

About twice the percentage of adults with annual household incomes less than $30,000 smoked cigarettes (26%).

Adults living in households making less than $30,000 per year are over-represented among smokers (Figure 32). Only 15% of adults who responded to the survey were living in households with an income of less than $30,000, yet they made up 30% of current smokers in the survey.

Figure 32: Adults Living in Households Making Less Than $30,000 per Year Are Over-Represented Among Smokers

Percentage of ATS respondents and current smokers by household income



Note: The tobacco industry has targeted lower income households (Lee et al., 2015).

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CURRENT SMOKERS' QUIT ATTEMPTS: LIFETIME AND PAST YEAR

Fewer than 50 current smokers said they live in households making less than $30,000 annually. That is insufficient data for a precise estimate of lifetime and past year quit attempts in this report. WYSAC is available to discuss the data and associated limitations with interested parties.

EXPOSURE TO SHS AT WORK

Due in part to the small sample size of adults with low incomes, the difference between reports of SHS exposure based on income was not statistically significant.

- 19% of adults with an annual income less than $30,000 reported that they were exposed to SHS at their workplace.
- 22% of adults with an annual income of $30,000 or more reported that they were exposed to SHS at their workplace.

American Indians

WYSAC acknowledges that different terms refer to the Indigenous population of the U.S. when unable to refer to specific tribes. In this report, use of the term American Indian mirrors the CDC-suggested survey item used for the ATS.

Tobacco companies have long used the ceremonial significance of tobacco to entice American Indians to use their commercial tobacco products (D'Silva et al., 2018). Tobacco companies have a history of targeting this community, beginning with using American Indian imagery and symbols in marketing, often depicting negative stereotypes. Changing their approach, tobacco companies began to shift their branding appearing to uphold the spiritual use of ceremonial tobacco by American Indians and began to introduce their products as all natural (D'Silva et al., 2018). With tobacco industries using the misrepresentation of American Indian culture and tradition to market their commercial tobacco products, the smoking rate for American Indians is much higher than the non-American Indian population.

WYSAC considered respondents American Indian when they self-identified as American Indian or multiracial including American Indian, regardless of whether they reported Hispanic ethnicity. This approach allowed for a larger sample from which to draw conclusions.

For context, American Indian and Alaska Native people make up 2.7% of the Wyoming population, although that number excludes American Indian and Alaska Natives who identify as more than one race or ethnicity including Hispanic or Latinx (U.S. Census Bureau, 2019).

A key limitation of the ATS is that it does not specifically account for ceremonial use of tobacco products. Asking about specific commercial products may lead respondents to exclude ceremonial use on their own.

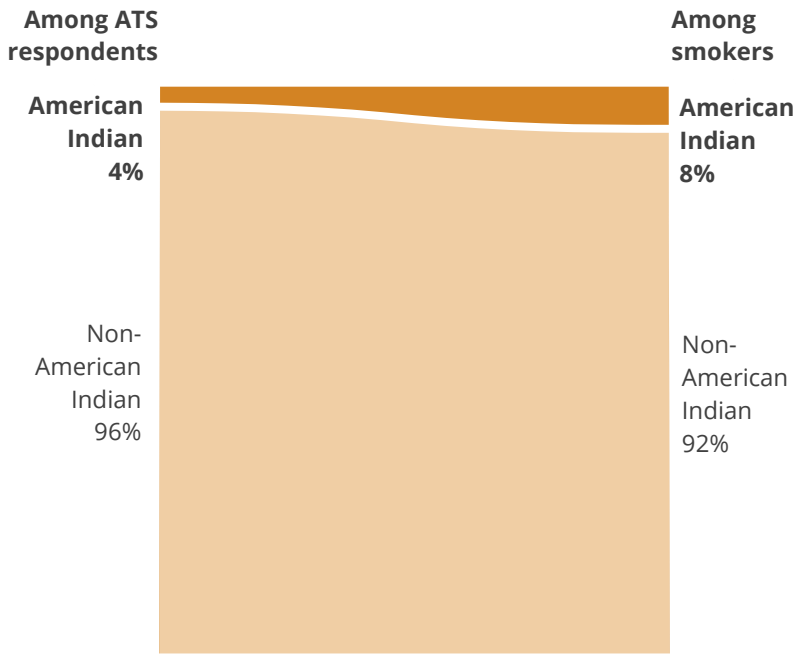
SMOKING

About twice the percentage of adults who identified as American Indian smoked cigarettes (24%).

Adults who identified as American Indian are over-represented among smokers (Figure 33). Only 4% of adults who responded to the survey were American Indian, yet they made up 8% of current smokers in the survey.

Figure 33: American Indians Are Over-Represented Among Smokers

Percentage of ATS respondents and current smokers by American Indian identification



Note: The tobacco industry has targeted American Indians (D'Silva et al., 2018).

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CURRENT SMOKERS' QUIT ATTEMPTS: LIFETIME AND PAST YEAR

Even after expanding the population analyzed as American Indians, fewer than 50 current smokers said they were American Indians. That is insufficient data for a precise estimate of lifetime and past year quit attempts in this report. WYSAC is available to discuss the data and associated limitations with interested parties.

EXPOSURE TO SHS AT WORK

Due in part to the small sample size for the American Indian population, the difference between reports of SHS exposure was not statistically significant.

- 31% of American Indian adults reported that they were exposed to SHS at their workplace.
- 21% of non-American Indian adults reported that they were exposed to SHS at their workplace.

Behavioral Health

Historically, the tobacco industry has targeted people experiencing behavioral health conditions (such as depressive disorder, bipolar disorder, substance use disorder, and psychotic disorder; Williams et al., 2013). Tobacco retailers are also more common in neighborhoods where people with behavioral health conditions live (Young-Wolff et al., 2014). This may be due in part to the overlap between people with behavioral health conditions and lower incomes.

Further, people experiencing behavioral health issues often have fewer resources to help them quit using tobacco (Williams et al., 2013). Research has shown that in a behavioral health setting, patients who are addicted to nicotine are less likely to be treated for a tobacco addiction than for addictions to alcohol or other substances (Petersen, 2003).

For all these reasons, studies (such as CDC, 2013; Talati et al., 2016) have demonstrated an association between cigarette smoking and behavioral health conditions. People with behavioral health conditions are more likely to smoke, and smokers with these conditions tend to smoke more cigarettes than smokers without behavioral health conditions (CDC, 2013). The 2019 ATS asked respondents "Do you have any mental [behavioral] health conditions, such as anxiety disorder, depression disorder, bipolar disorder, alcohol abuse, drug abuse, or schizophrenia?" About one fifth (18%) of adults reported having at least one behavioral health condition.

For context, the National Survey on Drug Use and Health showed that about 23% of adults in Wyoming have behavioral health conditions (SAMHSA, 2021).

As with any self-report data, it is possible that people under-reported health conditions on the ATS, especially those conditions that may have stigma attached such as behavioral health conditions.

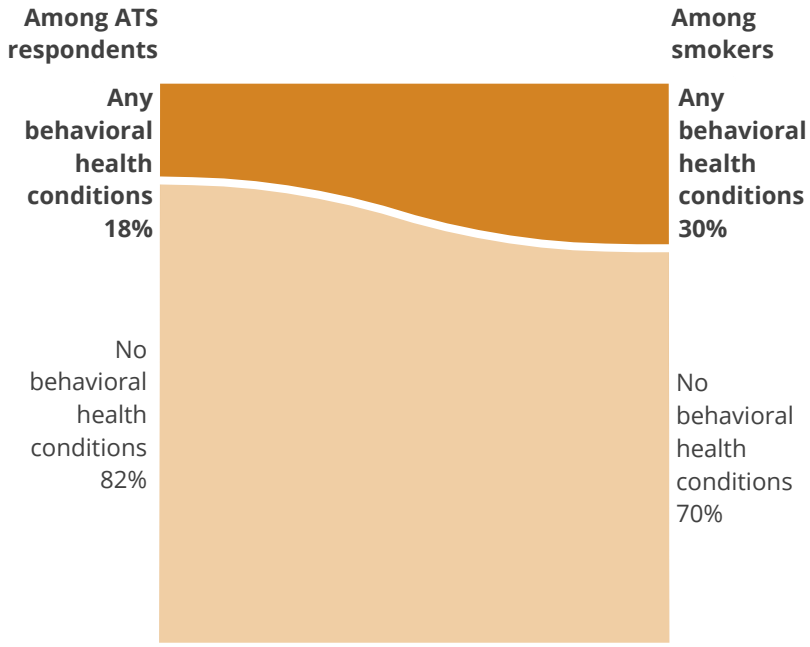
SMOKING

About twice the percentage of adults who said they had at least one behavioral health condition smoked cigarettes (21%).

Adults with behavioral health conditions are over-represented among smokers (Figure 34). Only 18% of adults who responded to the survey reported having behavioral health conditions, yet they made up 30% of current smokers in the survey.

Figure 34: Adults with Behavioral Health Conditions Are Over-Represented Among Smokers

Percentage of ATS respondents and current smokers by self-reported behavioral health conditions



Note: Adults with behavioral health conditions have been targeted by tobacco companies (Williams et al., 2013).

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CURRENT SMOKERS' QUIT ATTEMPTS: LIFETIME AND PAST YEAR

Due in part to the small sample size for people with behavioral health conditions, the differences between lifetime quit attempts for smokers with behavioral health conditions and those without behavioral health conditions were not statistically significant.

- 82% of current smokers with behavioral health conditions had stopped smoking for at least one day because they were trying to quit for good, and
- 81% of current smokers without behavioral health conditions had stopped smoking for at least one day because they were trying to quit for good.

Due in part to the small sample size for people with behavioral health conditions, the differences between recent quit attempts for smokers with behavioral health conditions and those without behavioral health conditions were not statistically significant.

- 48% of current smokers with behavioral health conditions had tried to quit smoking at least once in the past year, and
- 36% of current smokers without behavioral health conditions had tried to quit smoking at least once in the past year.

SMOKERS' OBSTACLES TO QUITTING SMOKING CIGARETTES

Four obstacles to quitting were statistically significantly more common among people with behavioral health conditions (Table 11). The Wyoming Quit Tobacco (WQT) program is designed to address the common barriers that adults face when quitting smoking, including these four obstacles.

Craving cigarettes was the greatest obstacle for the majority of current smokers who had tried to quit. It was a more common obstacle for current smokers with behavioral health conditions (94%) than it was for those without behavioral health conditions (72%).

Current smokers with behavioral health conditions said other obstacles to quitting cigarettes included the loss of a way to handle stress (89%) and worsening anxiety (82%).

Table 11: Obstacles to Quitting More Likely for Smokers with Behavioral Health Conditions Than Smokers Without Such Conditions

Percentage of smokers who had tried to quit in their lifetime or wanted to quit who reported obstacles to quitting cigarette smoking by behavioral health condition

	Any behavioral health conditions	No behavioral health conditions
Cravings for a cigarette*	94%	72%
Loss of a way to handle stress*	89%	61%
Worsening anxiety*	82%	34%
Other people smoking around you	60%	56%
Cost of medicines or products*	47%	17%
Worsening depression	44%	27%
Lack of support from others to quit	28%	14%
Fear of gaining weight	22%	12%
Other	16%	21%
Cost of classes	14%	7%

Note: Percentages do not add up to 100% because respondents could report more than one obstacle.

* indicates a statistically significant difference.

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Just under half (47%) of current smokers with behavioral health conditions said the cost of medicines or products was an obstacle to quitting, but 17% of current smokers without behavioral health conditions said this was a barrier to quitting. It is possible that an intersection exists between behavioral health conditions and lower incomes, but too few people in these groups were in the ATS sample to do any analyses.

EXPOSURE TO SHS AT WORK

Due in part to the small sample size of people who reported behavioral health conditions, the difference between reports of SHS exposure was not statistically significant.

- 24% of adults with behavioral health conditions reported that they were exposed to SHS at their workplace.
- 21% of adults without behavioral health conditions reported that they were exposed to SHS at their workplace.

Young Adults

ATS data (see the Goal Area 1: Preventing Initiation of Tobacco Use section) shows that most smokers start smoking as youths or young adults. Young adulthood is an impressionable stage when people may begin a lifelong smoking habit or a habit begun during adolescence could become set (Biener & Albers, 2004; Lee et al., 2020), making them a priority population. The tobacco industry has targeted young adults with advertising and marketing that promises to help them create the attractive, successful, and popular personas they seek (Farber & Folan, 2017). Industry campaigns promote messages, values, and product features designed specific to young adults (Lee et al., 2020). Tobacco companies place these campaigns in places young adults frequent most, such as colleges, fraternities, and bars (Ling & Glantz, 2002). With such targeted efforts, young adults are a priority population and require equally targeted efforts for tobacco prevention and control strategies.

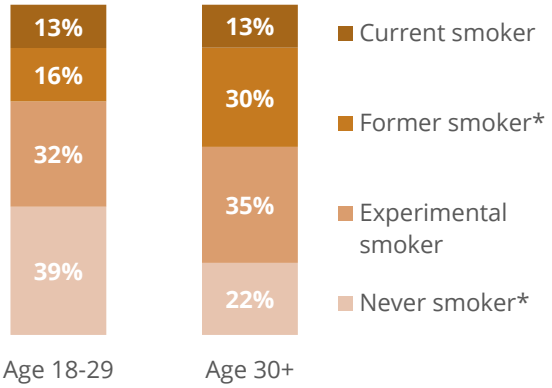
WYSAC considered respondents young adults when they were between ages 18 and 29 to increase the sample size and improve the reliability of estimates for this group. The U.S. Census Bureau's public reports do not estimate the proportion of Wyoming's population within this specific age range. The closest match is people 20 to 29 years old. As such, about 13% of Wyoming adults are between the ages of 20 and 29 (U.S. Census Bureau, 2020).

SMOKING

The smoking rate of young adults (13%) was similar to the smoking rate of other adults (13%; Figure 35).

Figure 35: Young Adults Are More Likely to Have Never Tried a Cigarette

Smoking status by age



Note: * indicates a statistically significant difference.

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Young adults are more likely to have never tried a cigarette: 39% of young adults have never tried a cigarette as compared to 22% of other adults. Because so few adults begin smoking after the age of 21 (see the Goal Area 1: Preventing Initiation of Tobacco Use section section), this difference between age cohorts may indicate that experimentation with tobacco products is becoming less common over time. It may also demonstrate the success of TPCP efforts to curb youth cigarette initiation and use.

Young adults are more likely to use ENDS (12%), which may lead to later initiation of smoking cigarettes. More research is needed to investigate this potential pathway to smoking.

Table 12 details the four categories of smoking status used in Figure 35.

Table 12: Definitions of Smoking Status

Responses to ATS lead to four key categories of smoking status.

	Current Smoker (Regular Smoker)	Former Smoker	Experimental Smoker	Never Smoker
Now smoke daily or some days	✓			
Smoked at least 100 cigarettes in lifetime (regular smoker)	✓	✓		
Ever tried smoking	✓	✓	✓	

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CURRENT SMOKERS' QUIT ATTEMPTS: LIFETIME AND PAST YEAR

Fewer than 50 current smokers said they were between 18 and 29 years old. That is insufficient data for a precise estimate in this report. WYSAC is available to discuss the data and associated limitations with interested parties.

EXPOSURE TO SHS AT WORK

Significantly, more young adults were exposed to SHS at their workplace (29%) than other working adults (19%). A possible explanation for this is an occupational disparity, as young adults who work in the service, maintenance, and transportation industries are at a higher risk of exposure to SHS than those working in other industries (Holmes & Ling, 2017). However, the ATS does not collect information about specific occupations.

Conclusions

The 2019 ATS data highlights the impact of the tobacco industry's targeted efforts to engage already vulnerable populations in tobacco use. The 2019 ATS data shows that people from households who make less than $30,000, who identify as American Indian, or who report having behavioral health conditions are disproportionately affected by tobacco use.

Current smokers with behavioral health conditions are more likely to face four obstacles to quitting than smokers without such conditions: craving cigarettes, the loss of a way to handle stress, worsening anxiety, and the cost of medicines or products. Free coaching and free cessation aids from the WQT program address these obstacles.

Young adults were more likely to have never tried a cigarette compared to other adults. This difference between age cohorts may indicate that experimentation with tobacco products is becoming less common over time, possibly due to the concerted efforts of the TPCP and other organizations to prevent youth use and initiation of cigarettes.

These priority populations are already vulnerable and most demonstrate higher smoking rates. These communities carry disproportionate burdens of smoking. Work related to Goal 4 of the TPCP is essential to combat targeted efforts from the tobacco industry to eliminate these tobacco-related disparities and work toward health equity.

Acknowledgement

Proportion plots adapted from a template distributed by Stephanie Evergreen: https://stephanieevergreen.com/proportion-plots/

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Appendix A: Data Collection Methods

Summary and Limitations

In this appendix, WYSAC provides the technical details of the methods used to collect the data for the 2019 ATS as reported by WYSAC's Survey Research Center experts Brian Harnisch and Bistra Anatchkova.

The CDC reduced the amount of technical support they provided to states before WYSAC administered the 2019 ATS, but CDC protocols for previous iterations of the ATS were used as guidance. CDC protocols for the 2017 ATS, the 2010 National Adult Tobacco Survey, and other previous iterations of the ATS (2002, 2004, 2006–2009, 2012, 2015) were generally similar, which allowed WYSAC to perform analyses of trends for comparable questions on the surveys.

WYSAC developed the 2019 ATS items based on the CDC's earlier core and supplemental ATS items.

Because the national and Wyoming tobacco prevention programs have been stable since the 2017 iteration of the ATS, few changes to the survey questionnaire were required. All of these changes reflect an emphasis on collecting data that the TPCP can use to assess their efforts and reducing the burden of data collection for people who complete the survey. Key changes for the 2019 ATS included:

- Adding questions about specific TPCP-sponsored media campaigns,
- Eliminating questions about patient experiences with healthcare providers (these data were not being used by the TPCP),
- Specifically naming the market-dominating brand Juul in questions about vaping,
- Eliminating questions about self-reported chronic conditions and diseases (including heart disease, cancer, diabetes, lung disease, and asthma) that are included on other surveys, and
- Adding questions to identify parents and guardians with children living at home.

DATA LIMITATIONS

Most ATS survey items have been tested and validated by the CDC and reused over time. However, the ATS relies on self-reported data, respondents' recollection of past events, and their interpretation of the survey items. Therefore, the results presented here might include recall errors or respondent bias (such as under-reporting undesirable behaviors).

Also, not all estimates have the same level of precision due to survey skip pattern, analysis of subgroups, and the combination of both. For example, questions asked only of smokers tend to have smaller sample sizes than other questions asked of everyone. A small sample size generally reduces the precision of an estimate. Estimates for small subgroups, such as African Americans in Wyoming, are also less precise than estimates for larger subgroups, such as White Americans. In some cases, fewer than 50 people were asked an item. Estimates generated from such small groups are extremely imprecise, so WYSAC does not report them in the body of the report. WYSAC is available to discuss estimates for these items.

Approach and Methodology

QUESTIONNAIRE DESIGN

The questionnaire used for the 2019 Wyoming ATS is based on the master list of core and supplemental questions from the CDC Office on Smoking and Health (OSH) State Adult Tobacco Survey Questions. For every iteration, the core CDC questions are asked along with a number of optional questions provided by the CDC, as well as questions added at the discretion of each state. For 2019, an additional set of questions was added to measure the impact of advertisements run in Wyoming.

SAMPLE DESIGN

The Random Digit Dial (RDD) landline and RDD cell phone samples for the 2019 Wyoming ATS were disproportionately stratified to produce county-level completion targets. The goal was to complete 2,300 total surveys, while the samples were designed to achieve roughly 100 completions in each geostrata (county). According to recent federal statistics,[1] an estimated 69.5% of Wyoming households are now cellphone-only households, with an additional 8.5% of households identified as cellphone-mostly. This translates to over three-quarters of the Wyoming adult population being reachable solely or primarily by cellphone. As a result, the sample design was further modified to attempt to secure roughly 70% of survey completions on cellphones.

[1] National Center for Health Statistics (NCHS), National Health Interview Survey, 2014–2018; U.S. Census Bureau, American Community Survey, 2013–2018; Wireless Substitution: State-Level Estimates from the National Health Interview Survey, 2018

The sample was generated by the Marketing Systems Group (M-S-G) under direction of the CDC.

SAMPLE MANAGEMENT

As WYSAC received the sample from the CDC in waves, each wave was released and worked until nearly all records received a final disposition before the next wave was released. After the first two waves of both landline and cellular sample were nearly completed, response rates by geostrata and phone type were calculated. WYSAC used this information to adjust the sample proportions for the following waves of sample to achieve the target number of completions in each geostrata, as well as the overall cellular ratio.

Sample was released and worked, following CDC guidelines.[2] For the landline sample, only numbers which were not pre-screened as disconnected, cellphones, or businesses were released for calling. Numbers identified by M-S-G as cellphones were added to the cellphone sample by them before delivery. For the cellular sample, M-S-G's CellWINS screening service was used to pre-screen non-working cellular numbers from the cellular sample prior to fielding. All numbers were attempted until a final disposition was achieved. Complete replicates (subsets of the sample) were released. Replicates were never broken. The reasoning behind this rule is that each replicate is a probability sample in itself. Once a replicate of phone numbers was released for calling, all released numbers were called until they received a final disposition code. Final disposition codes were assigned to landline telephone numbers which had not already received a final disposition only after (a) at least 5 calling occasions (each consisting of no more than 3 attempts at least one hour apart) for a minimum total of 12 call attempts, and (b) the 12 or more call attempts consisted of at least 3 weekday calls, 3 weeknight calls, and 3 weekend calls. The rules governing the assignment of final disposition codes were imbedded in the Ci3 program of the questionnaire and follow the CDC guidelines.

The CDC's guidelines require attempting soft refusals again in an effort at refusal conversion. These were handled by our most experienced and specially trained interviewers. These numbers were attempted until receiving a second refusal (final), a completed survey, or other final disposition.

In total, 26,883 landline and cellular telephone numbers were generated for this study (not including numbers pre-screened by the sample provider as disconnected, non-working, or business numbers, which were not attempted). A total of 150,906 attempts were made on the sample in the effort to reach a final disposition. Some numbers were called up to 22 times before they were assigned a final disposition code, which resulted in a 5.63 average number of call attempts per record.

[2] See Guidelines for Conducting General Population State Adult Tobacco Telephone Surveys, November 2011.

FIELDING PERIOD

Well-trained WYSAC telephone interviewers conducted the telephone interviews. Most callers had significant experience on previous Adult Tobacco Surveys conducted by WYSAC for other states in recent years. Calling began on February 21st, 2019, and ended on June 9th, 2019. Over the course of the fielding period, calling took place on Sunday through Thursday evenings until 9pm, as well as Tuesday, Thursday, Friday, and Saturday afternoons beginning at noon.

RESPONSE RATES

A total of 2,306 surveys were completed during the fielding period, meeting the target of 2,300. A total of 1,129 surveys were completed on cell phones, while 1,177 surveys were completed on landlines. The average interview length was 20 minutes and 38 seconds.

The AAPOR3 response rate formula is:

$$e = \frac{r+n}{r+n+i}$$

$$\text{AAPOR3RR} = \frac{r}{r+n+e*u}$$

Where, *r*=respondents, *n*=nonrespondents, *u*=unknown response status, *i*=ineligible, and e=estimated proportion of cases of unknown eligibility that are eligible.

Table A1.1: Response Rates

Frame	Respondent (%)	Non-Respondent (%)	Unknown (%)	Ineligible (%)	E (%)	AAPOR RR3
Landline	13.1	7.3	71.1	8.6	70.4	18.6
Cell phone	6.3	1.7	72.2	19.7	29.0	21.9
Combined						20.8

Table A1.2: Response Rates with Quantities

Frame	Respondent	Non-Respondent	Unknown	Ineligible	E	AAPOR RR3
Landline	1,177	650	6,370	768	0.704	18.6
Cell phone	1,129	307	12852	3,513	0.290	21.9
Combined						20.8

Source: 2019 Wyoming Adult Tobacco Survey Weighting Specifications

Appendix B: Wyoming 2019 ATS Frequency Tables

Appendix B consists of tables reporting Wyoming's state-level unweighted counts, weighted percentages, and 95% confidence intervals (CIs) for weighted percentages for every survey item and WYSAC-calculated variable. The unweighted counts represent the number of respondents who gave each response. The weighted 2019 ATS data are reflective of the Wyoming adult population (see Appendix A: Methods for more details); therefore, WYSAC uses them when reporting percentages and throughout the body of the report.

WYSAC lists questions and response options in the order they were asked of the 2,306 respondents (except where response option order was randomized, as indicated below). WYSAC also includes the abbreviated variable names used in the data file in parentheses following each question.

The survey involved a complex skip pattern; certain respondents were asked particular questions based on their answers to earlier survey questions. Respondents who were not asked a particular question are excluded from the percentage calculations. In the tables, "system missing" generally means that respondents were not asked a given question based on their prior responses. For example, smokers who had not tried to quit in the past year were not asked about what they used to try to quit smoking in the past year. They appear in the "system missing" row of the relevant tables. Any other respondents without a recorded answer are also included in the totals for system missing.

WYSAC generally treated responses of "don't know/not sure" and "refused" as missing data. However, if "don't know/not sure" accounted for at least 5% of valid responses after inclusion, then WYSAC did not treat the answers as missing. For example, WYSAC treated "don't know/not sure" as a valid response for the item about opinions on whether using ENDS is harmful to one's health (see Appendix B). This item included 345 respondents who answered "don't know/not sure" while 1,958 respondents provided their opinions. For this item, "don't know/not sure" accounted for about 15% (345/2,303) of valid responses after inclusion.

Percentages will not total 100% on variables where respondents could choose more than one response option. On other items, reported percentages may not total 100% because of rounding. Estimates with few observations in the frequency column may appear as 0% due to rounding.

General Health

1. Would you say that in general your health is excellent, very good, good, fair, or poor? (genhealth)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Excellent	17%	15%	20%	388
Very good	38%	35%	41%	864
Good	32%	29%	35%	738
Fair	10%	8%	13%	237
Poor	3%	2%	4%	79
Valid total	**100%**			**2,306**
Don't know / Not sure				0
Refused				0
System missing				0
Total				**2,306**

1a. Would you say that in general your health is excellent, very good, good, fair, or poor? (Collapsed; genhealth_2cat)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Excellent / Very good / Good	87%	85%	90%	1,990
Fair / Poor	13%	10%	15%	316
Valid total	**100%**			**2,306**
Don't know / Not sure				0
Refused				0
System missing				0
Total				**2,306**

Tobacco Prevalence and Consumption

CIGARETTE SMOKING

2. Have you smoked at least 100 cigarettes in your entire life? (smok100)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	40%	36%	43%	853
No	60%	57%	64%	1,448
Valid total	**100%**			**2,301**
Don't know / Not sure				4
Refused				1
System missing				0
Total				**2,306**

3. Do you now smoke cigarettes every day, some days, or not at all? (Do NOT use this table to report prevalence; smoknow)

Asked of respondents who had smoked at least 100 cigarettes in their lifetime.

	Estimate	Lower CI	Upper CI	Frequency
Every day	22%	17%	27%	170
Some days	10%	6%	14%	65
Not at all	68%	62%	73%	618
Valid total	**100%**			**853**
Don't know / Not sure				0
Refused				0
System missing				1,453
Total				**2,306**

3a. Current smoking status. (Calculated; smoknow_2cat)

Of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Current smoker (Every day or Some days)	13%	10%	15%	235
Non-smoker (Former, Experimental, or Never)	87%	85%	90%	2,066
Valid total	**100%**			**2,301**
Don't know / Not sure				0
Refused				0
System missing				5
Total				**2,306**

Current smokers: Respondents who had smoked at least 100 cigarettes in their lifetime (Q2) and now smoke cigarettes every day or some days (Q3).

There are three basic types of nonsmokers:

Former smokers: Respondents who had smoked at least 100 cigarettes in their lifetime (Q2) but now do not smoke cigarettes at all (Q3).

Experimental smokers: Respondents who had not smoked at least 100 cigarettes in their lifetime (Q2) but had tried cigarette smoking, even one or two puffs (Q5).

Never smokers: Respondents who had not smoked at least 100 cigarettes in their lifetime (Q2) and had never tried cigarette smoking, not even a puff (Q5).

4. On the average, about how many cigarettes a day do you now smoke? (Collapsed; smokperday)

Asked of current everyday smokers.

	Estimate	Lower CI	Upper CI	Frequency
0	1%	0%	2%	1
1 - 4	6%	1%	11%	13
5 - 9	10%	3%	17%	20
10 - 19	42%	30%	54%	65
20 - 39	37%	25%	49%	64
40+	5%	0%	9%	7
Valid total	**100%**			**170**
Don't know / Not sure				0
Refused				0
System missing				2,136
Total				**2,306**

5. Have you ever tried cigarette smoking, even one or two puffs? (smokever)

Asked of respondents who had not smoked 100 cigarettes in their lifetime.

	Estimate	Lower CI	Upper CI	Frequency
Yes (experimental smoker)	57%	53%	62%	837
No (never smoker)	43%	38%	47%	610
Valid total	**100%**			**1,447**
Don't know / Not sure				4
Refused				2
System missing				853
Total				**2,306**

6. Have you ever smoked a whole cigarette? (smokwholcig)

Asked of experimental smokers.

	Estimate	Lower CI	Upper CI	Frequency
Yes	50%	44%	56%	353
No	50%	44%	56%	459
Valid total	**100%**			**812**
Don't know / Not sure				24
Refused				1
System missing				1,469
Total				**2,306**

7. How old were you when you smoked a whole cigarette for the first time? (Collapsed; smokwholage)

Asked of experimental smokers who had ever smoked one whole cigarette and respondents who had smoked at least 100 cigarettes in their lifetime.

	Estimate	Lower CI	Upper CI	Frequency
1 - 9	5%	2%	7%	46
10 - 15	42%	37%	47%	447
16 - 17	24%	20%	29%	266
18 - 20	21%	17%	25%	298
21 - 25	7%	4%	9%	87
26+	2%	1%	3%	33
Valid total	**100%**			**1,177**
Never smoked a whole cigarette				1
Don't know / Not sure				26
Refused				2
System missing				1,100
Total				**2,306**

8. Was the last time you smoked a cigarette, even one or two puffs …? (Cleaned; smoklast_c)

Asked of experimental smokers and former smokers.

	Estimate	Lower CI	Upper CI	Frequency
Within the past 24 hours	0%	0%	1%	2
Within the past 7 days	1%	0%	2%	6
Within the past 30 days	3%	1%	5%	18
Within the past 3 months	3%	1%	4%	21
Within the past 6 months	2%	1%	3%	28
Within the past year	4%	2%	6%	35
Within the past 2 years	5%	2%	7%	41
Within the past 5 years	12%	9%	15%	102
Within the past 10 years	12%	8%	15%	114
Within the past 15 years	6%	4%	8%	69
More than 15 years ago	53%	48%	57%	1,011
Valid total	**100%**			**1,447**
Don't know / Not sure				8
Refused				0
System missing				851
Total				**2,306**

9. Since the last time you smoked a cigarette, have you decided that you are going to stop smoking cigarettes completely? (smokorquit)

Asked of experimental smokers and former smokers who at least puffed on a cigarette during the past year.

	Estimate	Lower CI	Upper CI	Frequency
Yes	90%	84%	96%	90
No	10%	4%	16%	18
Valid total	**100%**			**108**
Don't know / Not sure				2
Refused				0
System missing				2,196
Total				**2,306**

Note: Current smokers not included because, by definition, they smoke every day or some days. The CDC's wording for this item starts with "since the last time you smoked a cigarette" and therefore assumes a lag between the most recent cigarette and answering the question (former smokers, some experimental smokers) or irregular smoking patterns (some experimental smokers). These assumptions are not valid for current smokers. Current smokers are asked about a history of quit attempts in Questions 43 and 44.

10. During the past 30 days, that is, since [DATE FILL], on how many days did you smoke cigarettes? (Collapsed; smokdays30)

Asked of current some-day smokers, experimental smokers, and former smokers who at least puffed on a cigarette in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
0	15%	1%	29%	10
1 - 4	23%	9%	37%	23
5 - 10	12%	3%	20%	14
11 - 15	23%	9%	36%	20
16 - 29	18%	3%	34%	9
On all 30	9%	1%	18%	10
Valid total	**100%**			**86**
Don't know / Not sure				4
Refused				1
System missing				2,215
Total				**2,306**

11. On the average, on days when you smoked during the past 30 days, that is, since [DATE FILL], about how many cigarettes did you smoke a day? (Collapsed; smoksomeday)

Asked of current some-day smokers, experimental smokers, and former smokers who at least puffed on a cigarette in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
0	10%	0%	20%	10
1 - 4	57%	40%	74%	44
5 - 9	7%	0%	14%	6
10 - 19	12%	3%	22%	9
20 - 39	6%	0%	15%	5
40+	7%	0%	20%	1
Valid total	**100%**			**75**
Don't know / Not sure				1
Refused				0
System missing				2,230
Total				**2,306**

12. Have you ever smoked at least one cigarette every day for 30 days in a row? (smok30dever)

Asked of current some-day smokers and former smokers.

	Estimate	Lower CI	Upper CI	Frequency
Yes	85%	81%	90%	581
No	15%	10%	19%	98
Valid total	**100%**			**679**
Don't know / Not sure				4
Refused				0
System missing				1,623
Total				**2,306**

13. How old were you when you first smoked at least one cigarette every day for 30 days in a row? (Collapsed; smok30dage)

Asked of current everyday smokers, current some-day smokers, and former smokers who had ever smoked at least one cigarette every day for 30 days in a row.

	Estimate	Lower CI	Upper CI	Frequency
1 - 9	0%	0%	1%	3
10 - 15	26%	20%	32%	155
16 - 17	24%	18%	29%	147
18 - 20	38%	31%	44%	287
21 - 25	8%	5%	11%	86
26+	4%	2%	6%	37
Valid total	**100%**			**715**
Never smoked at least one cigarette every day for 30 days in a row				0
Don't know / Not sure				35
Refused				1
System missing				1,555
Total				**2,306**

14. Around this time last year, were you smoking cigarettes every day, some days, or not at all? (smokyrago)

Asked of current smokers, experimental smokers, and former smokers who at least puffed on a cigarette in the past year.

	Estimate	Lower CI	Upper CI	Frequency
Every day	53%	45%	62%	203
Some days	22%	15%	30%	68
Not at all	24%	17%	31%	74
Valid total	**100%**			**345**
Don't know / Not sure				0
Refused				0
System missing				1,961
Total				**2,306**

15. During the past 30 days, that is, since [DATE FILL], were the cigarettes that you usually smoked menthol? (mentholcigs2)

Asked of current smokers, experimental smokers, and former smokers who at least puffed on a cigarette in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Yes	23%	15%	32%	48
No	77%	68%	86%	210
Valid total	**100%**			**258**
Don't know / Not sure				3
Refused				0
System missing				2,045
Total				**2,306**

16. Were any of the cigarettes that you smoked in the past 30 days flavored to taste like candy, fruit, chocolate, or other sweets? (cigflavor)

Asked of current smokers, experimental smokers, and former smokers who at least puffed on a cigarette in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Yes	2%	0%	3%	5
No	98%	97%	100%	256
Valid total	**100%**			**261**
Don't know / Not sure				0
Refused				0
System missing				2,045
Total				**2,306**

17. Have you bought any cigarettes for yourself in the past 30 days, that is, since [DATE FILL]? (bghtpast30d)

Asked of experimental smokers and former smokers who at least puffed on a cigarette in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Yes	40%	7%	73%	8
No	60%	27%	93%	18
Valid total	**100%**			**26**
Don't know / Not sure				0
Refused				0
System missing				2,280
Total				**2,306**

18. The last time you bought cigarettes for yourself, did you buy them by the pack or by the carton? (buyquant2)

Asked of current smokers, and experimental smokers and former smokers who at least puffed on a cigarette and bought cigarettes for themselves in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
By the pack	74%	66%	82%	152
By the carton	24%	17%	32%	80
Other (specify)	1%	0%	2%	10
Valid total	**100%**			**242**
Don't know / Not sure				1
Refused				0
System missing				2,063
Total				**2,306**

Note: "Other" includes purchase units such as roll-your-own/loose tobacco and by the case.

19. What price did you pay for the last pack of cigarettes you bought? (Collapsed; costpack2)

Asked of respondents who bought cigarettes by the pack when they last bought cigarettes for themselves.

	Estimate	Lower CI	Upper CI	Frequency
$0.01 - $3.99	4%	0%	9%	5
$4.00 - $4.99	7%	2%	12%	21
$5.00 - $5.99	33%	22%	43%	44
$6.00+	47%	38%	57%	70
Don't know / Not sure (valid)	9%	2%	17%	12
Valid total	**100%**			**152**
Refused				0
System missing				2,154
Total				**2,306**

Note: If a respondent asked about discounts or coupons, the interviewer read the following: "Please report the cost after discounts or coupons."

20. What price did you pay for the last carton of cigarettes you bought? (Collapsed; costcarton2)

Asked of respondents who bought cigarettes by the carton when they last bought cigarettes for themselves.

	Estimate	Lower CI	Upper CI	Frequency
$10.00 - $19.99	2%	0%	6%	2
$20.00 - $29.99	3%	0%	6%	2
$30.00 - $39.99	11%	2%	20%	14
$40.00 - $49.99	17%	8%	26%	17
$50.00 - $59.99	29%	19%	40%	24
$60.00 - $69.99	38%	24%	53%	18
$70.00+	0%	0%	0%	0
Valid total	**100%**			**77**
Don't know / Not sure				3
Refused				0
System missing				2,226
Total				**2,306**

Note: If a respondent asked about discounts or coupons, the interviewer read the following: "Please report the cost after discounts or coupons." A carton of cigarettes typically contains 10 packs.

21. The last time you bought cigarettes, did you take advantage of coupons, rebates, buy 1 get 1 free, 2 for 1, or any other special promotions for cigarettes? (specoffers)

Asked of current smokers, experimental smokers, and former smokers who at least puffed on a cigarette and bought cigarettes for themselves in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Yes	21%	12%	29%	36
No	79%	71%	88%	207
Valid total	**100%**			**243**
Don't know / Not sure				0
Refused				0
System missing				2,063
Total				**2,306**

OTHER TOBACCO USE

(Read to respondents) Now I would like to ask you some questions about your use of other tobacco products.

22. Have you ever tried chewing tobacco, snuff, or dip, such as Skoal, Copenhagen, Grizzly, Levi Garrett, Red Man, or Day's Work, even just one time in your entire life? (sltever2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	41%	38%	45%	855
No	59%	55%	62%	1,446
Valid total	**100%**			**2,301**
Don't know / Not sure				4
Refused				1
System missing				0
Total				**2,306**

23. During the past 30 days, that is, since [DATE FILL], on how many days did you use chewing tobacco, snuff, or dip? (Do NOT use this table to report prevalence; collapsed; sltnodays)

Asked of respondents who had ever tried chewing tobacco, snuff, or dip.

	Estimate	Lower CI	Upper CI	Frequency
0	77%	72%	82%	689
1 - 4	3%	1%	4%	25
5 - 10	2%	0%	3%	14
11 - 15	1%	0%	3%	6
16 - 29	1%	0%	2%	5
On all 30	17%	12%	22%	113
Valid total	**100%**			**852**
Don't know / Not sure				3
Refused				0
System missing				1,451
Total				**2,306**

23a. Current smokeless tobacco use. (Calculated; sltstatus_2cat)

Of all respondents. Current smokeless tobacco users are defined as those who had ever tried chewing tobacco, snuff, or dip and used it in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Current smokeless tobacco user	10%	7%	12%	163
Non-user (former or never)	90%	88%	93%	2,135
Valid total	**100%**			**2,298**
Don't know / Not sure				3
Refused				0
System missing				5
Total				**2,306**

24. Have you ever tried snus, even just one time in your entire life? (snusever)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	19%	16%	22%	332
No	81%	78%	84%	1,952
Valid total	**100%**			**2,284**
Don't know / Not sure				22
Refused				0
System missing				0
Total				**2,306**

25. During the past 30 days, that is, since [DATE FILL], on how many days did you use snus? (Do NOT use this table to report prevalence; collapsed; snusnodays)

Asked of respondents who had ever tried snus.

	Estimate	Lower CI	Upper CI	Frequency
0	92%	88%	96%	300
1 - 4	4%	1%	6%	14
5 - 10	0%	0%	0%	1
11 - 15	0%	0%	0%	1
16 - 29	0%	0%	0%	1
On all 30	5%	1%	8%	15
Valid total	**100%**			**332**
Don't know / Not sure				0
Refused				0
System missing				1,974
Total				**2,306**

25a. Current snus use. (Calculated; snusstatus_2cat)

Of all respondents. Current snus users are defined as those who had ever tried snus and used it in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Current snus user	2%	1%	2%	32
Non-user (former or never)	98%	98%	99%	2,252
Valid total	**100%**			**2,284**
Don't know / Not sure				0
Refused				0
System missing				22
Total				**2,306**

26. Have you ever used chewing tobacco, snuff, dip, or snus instead of smoking a cigarette or other tobacco product because you were in a place where smoking was not allowed? (sltsub)

Asked of respondents who had smoked at least 100 cigarettes in their lifetime and had ever used smokeless tobacco or snus.

	Estimate	Lower CI	Upper CI	Frequency
Yes	46%	38%	53%	178
No	54%	47%	62%	280
Valid total	**100%**			**458**
Don't know / Not sure				4
Refused				0
System missing				1,844
Total				**2,306**

27. Have you ever tried smoking cigars, cigarillos, or very small cigars that look like cigarettes in your entire life, even one or two puffs? (cigarever)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	52%	48%	55%	1,069
No	48%	45%	52%	1,233
Valid total	**100%**			**2,302**
Don't know / Not sure				3
Refused				1
System missing				0
Total				**2,306**

Note: If a respondent was unsure what cigarillos were, the interviewer read the following: "Cigarillos are small, regular cigars. They are usually sold individually or in packs of 5 or 8. Some common brands are Black and Mild's, Swisher Sweets Cigarillos, and Phillies Blunts, but there are others." If a respondent was unsure what very small cigars that look like cigarettes were, the interviewer read the following: "Very small cigars that look like cigarettes are usually brown in color and have a spongy filter like a cigarette. They are about the same size as cigarettes and are often sold in packs of 20. Some common brands are Prime Time little filter cigars and Winchester little filter cigars, but there are others."

28. During the past 30 days, that is, since [DATE FILL], on how many days did you smoke cigars, cigarillos, or very small cigars that look like cigarettes? (Do NOT use this table to report prevalence; collapsed; cigarnodays)

Asked of respondents who had ever smoked cigars, cigarillos, or very small cigars.

	Estimate	Lower CI	Upper CI	Frequency
0	91%	88%	94%	999
1 - 4	7%	5%	10%	53
5 - 10	0%	0%	1%	3
11 - 15	0%	0%	0%	1
16 - 29	0%	0%	1%	2
On all 30	1%	0%	1%	11
Valid total	**100%**			**1,069**
Don't know / Not sure				0
Refused				0
System missing				1,237
Total				**2,306**

28a. Current cigar use. (Calculated; cigarstatus_2cat)

Of all respondents. Current cigar users are those who had ever tried cigars, cigarillos, or very small cigars and used it in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Current cigar smoker	4%	3%	6%	70
Non-user (former or never)	96%	94%	97%	2,232
Valid total	**100%**			**2,302**
Don't know / Not sure				0
Refused				0
System missing				4
Total				**2,306**

29. Were any of the cigars, cigarillos, or very small cigars that look like cigarettes that you smoked in the past 30 days flavored to taste like candy, fruit, chocolate, or other sweets? (cigarflavr)

Asked of respondents who had smoked cigars, cigarillos, or very small cigars in the past 30 days (current cigar users).

	Estimate	Lower CI	Upper CI	Frequency
Yes	35%	19%	51%	22
No	65%	49%	81%	48
Valid total	**100%**			**70**
Don't know / Not sure				0
Refused				0
System missing				2,236
Total				**2,306**

(Read to respondents) The next few questions ask about smoking tobacco in pipes. The next one or two questions ask about a regular pipe. After that, there are one or two questions asking about a hookah or other water pipe.

30. Have you ever smoked tobacco in a regular pipe in your entire life, even one or two puffs? (piperegever)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	19%	16%	21%	493
No	81%	79%	84%	1,808
Valid total	**100%**			**2,301**
Don't know / Not sure				3
Refused				2
System missing				0
Total				**2,306**

31. During the past 30 days, that is, since [DATE FILL], on how many days did you smoke tobacco in a regular pipe? (Do NOT use this table to report prevalence; collapsed; piperegdays)

Asked of respondents who had ever smoked tobacco in a regular pipe.

	Estimate	Lower CI	Upper CI	Frequency
0	95%	92%	99%	475
1 - 4	3%	0%	5%	11
5 - 10	0%	0%	1%	2
11 - 15	0%	0%	0%	0
16 - 29	1%	0%	4%	3
On all 30	0%	0%	1%	1
Valid total	**100%**			**492**
Don't know / Not sure				1
Refused				0
System missing				1,813
Total				**2,306**

31a. Current pipe use. (Calculated; piperegstatus_2cat)

Of all respondents. Current pipe users are those who had ever tried a regular pipe and used one in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Current regular pipe user	1%	0%	2%	17
Non-user (former or never)	99%	98%	100%	2,283
Valid total	**100%**			**2,300**
Don't know / Not sure				1
Refused				0
System missing				5
Total				**2,306**

32. Have you ever smoked tobacco in a hookah or other water pipe in your entire life, even one or two puffs? (pipewtrever)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	14%	12%	17%	203
No	86%	83%	88%	2,097
Valid total	**100%**			**2,300**
Don't know / Not sure				6
Refused				0
System missing				0
Total				**2,306**

33. During the past 30 days, that is, since [DATE FILL], on how many days did you smoke tobacco in a hookah or other water pipe? (Do NOT use this table to report prevalence; collapsed; pipewtrdays)

Asked of respondents who had ever smoked tobacco in a water pipe.

	Estimate	Lower CI	Upper CI	Frequency
0	96%	92%	100%	196
1 - 4	3%	0%	7%	4
5 - 10	0%	0%	1%	1
11 - 15	1%	0%	2%	1
16 - 29	0%	0%	0%	0
On all 30	0%	0%	0%	0
Valid total	**100%**			**202**
Don't know / Not sure				1
Refused				0
System missing				2,103
Total				**2,306**

33a. Current hookah or other water pipe use. (Calculated; pipewtrstatus_2cat)

Asked of all respondents. Current hookah or other water pipe users are those who had ever tried a hookah or other water pipe and used it in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Current water pipe user	1%	0%	1%	6
Non-user (former or never)	99%	99%	100%	2,293
Valid total	**100%**			**2,299**
Don't know / Not sure				1
Refused				0
System missing				6
Total				**2,306**

34. Have you ever tried e-cigarettes, vape pens, or Juul even just one time in your entire life? (wyecigever)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	28%	24%	31%	373
No	72%	69%	76%	1,932
Valid total	**100%**			**2,305**
Don't know / Not sure				1
Refused				0
System missing				0
Total				**2,306**

Note: If a respondent was unsure what e-cigarettes were, the interviewer read the following: "Electronic cigarettes, also known as e-cigarettes, are battery-operated products designed to deliver nicotine, flavor, and other chemicals. They turn nicotine and other chemicals into a vapor that is inhaled by the user."

35. You said you have at least tried cigarettes and e-cigarettes or vape pens. Which did you use first? (wyecigseq1)

Asked of current smokers, former smokers, and experimental smokers who had ever tried ENDS.

	Estimate	Lower CI	Upper CI	Frequency
Cigarettes	75%	68%	82%	251
E-cigarettes (vape pens, Juul, etc.)	25%	18%	32%	89
Valid total	**100%**			**340**
Don't know / Not sure				5
Refused				0
System missing				1,961
Total				**2,306**

36. When you started using tobacco, were e-cigarettes or vape pens on the market? (wyecigseq2)

Asked of current, former, and experimental smokers who began using cigarettes first before trying ENDS.

	Estimate	Lower CI	Upper CI	Frequency
Yes	13%	8%	18%	35
No	87%	82%	92%	211
Valid total	**100%**			**246**
Don't know / Not sure				5
Refused				0
System missing				2,055
Total				**2,306**

Note: If a respondent was unsure when electronic cigarettes became available, the interviewer informed the respondent that e-cigarettes came to market in roughly 2007.

37. Do you now use e-cigarettes or vape pens every day, some days, or not at all? (Do NOT use this table to report prevalence; wyecignow)

Asked of respondents who had ever tried ENDS.

	Estimate	Lower CI	Upper CI	Frequency
Every day	10%	6%	15%	32
Some days	13%	8%	18%	48
Not at all	77%	71%	83%	293
Valid total	**100%**			**373**
Don't know / Not sure				0
Refused				0
System missing				1,933
Total				**2,306**

37a. Current ENDS use. (Calculated; wyecigstatus)

Of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Currently use e-cigarettes every day	3%	1%	4%	32
Currently use e-cigarettes some days	4%	2%	5%	48
Currently do not use e-cigarettes	21%	18%	24%	293
Never tried e-cigarettes	72%	69%	76%	1,932
Valid total	**100%**			**2,305**
Unknown				1
System missing				0
Total				**2,306**

38. Were any of the e-cigarettes or vape pens that you used in the past 30 days flavored to taste like menthol, mint, alcohol, wine, cognac, candy, fruit, chocolate, or other sweets? (wyecigflavr)

Asked of respondents who now use ENDS every day or some days.

	Estimate	Lower CI	Upper CI	Frequency
Yes	83%	70%	96%	63
No	17%	4%	30%	16
Valid total	**100%**			**79**
Didn't use in the past 30 days				1
Don't know / Not sure				0
Refused				0
System missing				2,226
Total				**2,306**

39. During the past 30 days, what brand of e-cigarettes or vape pens did you use most often? (wyecigwhat)

Asked of respondents who now use ENDS every day or some days and did not answer "didn't use in the past 30 days" to Q38. Respondents were allowed to provide multiple answers.

39-1. A juice or liquid you blended yourself. (wyecigwhat_1)

	Estimate	Lower CI	Upper CI	Frequency
Yes	8%	0%	18%	6
No	92%	82%	100%	73
Valid total	**100%**			**79**
Don't know / Not sure				0
Refused				0
System missing				2,227
Total				**2,306**

39-2. A customized commercial juice or liquid, like from a vape shop. (wyecigwhat_2)

	Estimate	Lower CI	Upper CI	Frequency
Yes	82%	72%	93%	58
No	18%	7%	28%	20
Valid total	**100%**			**78**
Don't know / Not sure				1
Refused				0
System missing				2,227
Total				**2,306**

39-3. Juul. (wyecigwhat_11)

	Estimate	Lower CI	Upper CI	Frequency
Yes	22%	11%	33%	22
No	78%	67%	89%	55
Valid total	**100%**			**77**
Don't know / Not sure				2
Refused				0
System missing				2,227
Total				**2,306**

39-4. Vuse. (wyecigwhat_3)

	Estimate	Lower CI	Upper CI	Frequency
Yes	6%	1%	11%	10
No	94%	89%	99%	66
Valid total	**100%**			**76**
Don't know / Not sure				3
Refused				0
System missing				2,227
Total				**2,306**

39-5. Blu. (wyecigwhat_4)

	Estimate	Lower CI	Upper CI	Frequency
Yes	9%	2%	15%	11
No	91%	85%	98%	67
Valid total	**100%**			**78**
Don't know / Not sure				1
Refused				0
System missing				2,227
Total				**2,306**

39-6. Logic. (wyecigwhat_5)

	Estimate	Lower CI	Upper CI	Frequency
Yes	0%	0%	0%	1
No	100%	100%	100%	77
Valid total	**100%**			**78**
Don't know / Not sure				1
Refused				0
System missing				2,227
Total				**2,306**

39-7. Altria. (wyecigwhat_6)

	Estimate	Lower CI	Upper CI	Frequency
Yes	2%	0%	5%	1
No	98%	95%	100%	77
Valid total	**100%**			**78**
Don't know / Not sure				1
Refused				0
System missing				2,227
Total				**2,306**

39-8. MarkTen. (wyecigwhat_7)

	Estimate	Lower CI	Upper CI	Frequency
Yes	5%	0%	10%	4
No	95%	90%	100%	74
Valid total	**100%**			**78**
Don't know / Not sure				1
Refused				0
System missing				2,227
Total				**2,306**

39-9. Other juice for a cigalike. (wyecigwhat_8)

	Estimate	Lower CI	Upper CI	Frequency
Yes	4%	0%	12%	1
No	96%	88%	100%	76
Valid total	**100%**			**77**
Don't know / Not sure				2
Refused				0
System missing				2,227
Total				**2,306**

39-10. Other juice for a mod or similar device. (wyecigwhat_9)

	Estimate	Lower CI	Upper CI	Frequency
Yes	59%	44%	74%	39
No	41%	26%	56%	37
Valid total	**100%**			**76**
Don't know / Not sure				3
Refused				0
System missing				2,227
Total				**2,306**

39-11. Other (specify). (wyecigwhat_10)

	Estimate	Lower CI	Upper CI	Frequency
Yes	22%	7%	36%	15
No	78%	64%	93%	62
Valid total	**100%**			**77**
Don't know / Not sure				2
Refused				0
System missing				2,227
Total				**2,306**

40. Which of the following are your reasons for using e-cigarettes or vape pens? (wyecigwhy2)

Asked of respondents who had ever tried ENDS. Respondents could provide multiple reasons.

40-1. To quit smoking cigarettes. (wyecigwhy2_1)

	Estimate	Lower CI	Upper CI	Frequency
Yes	54%	47%	62%	184
No	46%	38%	53%	189
Valid total	**100%**			**373**
Don't know / Not sure				0
Refused				0
System missing				1,933
Total				**2,306**

40-2. To reduce cigarette consumption. (wyecigwhy2_2)

	Estimate	Lower CI	Upper CI	Frequency
Yes	55%	48%	63%	183
No	45%	37%	52%	190
Valid total	**100%**			**373**
Don't know / Not sure				0
Refused				0
System missing				1,933
Total				**2,306**

40-2a. To quit smoking cigarettes or to reduce cigarette consumption. (Calculated; wyecigwhy2_2a)

	Estimate	Lower CI	Upper CI	Frequency
Yes	58%	51%	65%	202
No	42%	35%	49%	171
Valid total	**100%**			**373**
Unknown				0
System missing				1,933
Total				**2,306**

40-3. To try something new: curious. (wyecigwhy2_3)

	Estimate	Lower CI	Upper CI	Frequency
Yes	60%	52%	67%	219
No	40%	33%	48%	154
Valid total	**100%**			**373**
Don't know / Not sure				0
Refused				0
System missing				1,933
Total				**2,306**

40-4. To not disturb other people with smoke. (wyecigwhy2_4)

	Estimate	Lower CI	Upper CI	Frequency
Yes	32%	24%	39%	112
No	68%	61%	76%	260
Valid total	**100%**			**372**
Don't know / Not sure				1
Refused				0
System missing				1,933
Total				**2,306**

40-5. To smoke in a place where cigarette smoking is banned. (wyecigwhy2_5)

	Estimate	Lower CI	Upper CI	Frequency
Yes	17%	11%	22%	56
No	83%	78%	89%	317
Valid total	**100%**			**373**
Don't know / Not sure				0
Refused				0
System missing				1,933
Total				**2,306**

40-6. To save money. (wyecigwhy2_6)

	Estimate	Lower CI	Upper CI	Frequency
Yes	18%	12%	24%	62
No	82%	76%	88%	311
Valid total	**100%**			**373**
Don't know / Not sure				0
Refused				0
System missing				1,933
Total				**2,306**

40-7. E-cigarettes or vape pens might be less harmful than cigarettes. (wyecigwhy2_7)

	Estimate	Lower CI	Upper CI	Frequency
Yes	38%	31%	45%	124
No	62%	55%	69%	232
Valid total	**100%**			**356**
Don't know / Not sure				17
Refused				0
System missing				1,933
Total				**2,306**

40-8. E-cigarettes or vape pens taste better. (wyecigwhy2_8)

	Estimate	Lower CI	Upper CI	Frequency
Yes	38%	31%	45%	133
No	62%	55%	69%	232
Valid total	**100%**			**365**
Don't know / Not sure				8
Refused				0
System missing				1,933
Total				**2,306**

40-9. For the flavoring. (wyecigwhy2_10)

	Estimate	Lower CI	Upper CI	Frequency
Yes	42%	35%	50%	149
No	58%	50%	65%	222
Valid total	**100%**			**371**
Don't know / Not sure				2
Refused				0
System missing				1,933
Total				**2,306**

40-9a. E-cigarettes or vape pens taste better or for the flavoring. (Calculated; wyecigwhy2_10a)

	Estimate	Lower CI	Upper CI	Frequency
Yes	45%	38%	53%	164
No	55%	47%	62%	199
Valid total	**100%**			**363**
Unknown				10
System missing				1,933
Total				**2,306**

40-10. For a drug other than nicotine. For example, marijuana. (wyecigwhy2_11)

	Estimate	Lower CI	Upper CI	Frequency
Yes	12%	7%	18%	41
No	88%	82%	93%	331
Valid total	**100%**			**372**
Don't know / Not sure				1
Refused				0
System missing				1,933
Total				**2,306**

40-11. Any other reason? (specify). (wyecigwhy2_9)

	Estimate	Lower CI	Upper CI	Frequency
Yes	10%	6%	14%	39
No	90%	87%	94%	334
Valid total	**100%**			**373**
Don't know / Not sure				0
Refused				0
System missing				1,933
Total				**2,306**

Note: "Other" includes reasons such as the buzz/fun, originally given as a gift, a friend offered it/someone else purchased it, peer pressure, health reasons, pain/anxiety relief, convenience, to quit chewing tobacco, as a chewing tobacco substitute, to avoid or not to blow secondhand smoke, it doesn't smell as bad as cigarettes, to try the different flavors/curiosity, use for marijuana, and vape tricks.

Cessation

AWARENESS OF QUITLINES AND COUNTER-MARKETING

(Read to respondents) A telephone quitline is a free telephone-based service that connects people who smoke cigarettes or use other tobacco products with someone who can help them quit.

41. Are you aware of any telephone quitline services that are available to help people quit using tobacco? (qtlineawrnt)

Asked of respondents who had never used any type of tobacco or had not used tobacco in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Yes	48%	44%	52%	864
No	52%	48%	56%	1,004
Valid total	**100%**			**1,868**
Don't know / Not sure				17
Refused				0
System missing				421
Total				**2,306**

42. Are you aware of any telephone quitline services that are available to help you quit using tobacco? (qtlineawrt)

Asked of tobacco users who had used any type of tobacco in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Yes	75%	69%	82%	313
No	25%	18%	31%	107
Valid total	**100%**			**420**
Don't know / Not sure				1
Refused				0
System missing				1,885
Total				**2,306**

42a. Awareness of any telephone quit line services. (Calculated; qtlineawr)

Of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	55%	51%	58%	1,177
No	45%	42%	49%	1,111
Valid total	**100%**			**2,288**
Unknown				18
System missing				0
Total				**2,306**

Note: WYSAC calculated this variable, using Q41 (qtlineawrnt) and Q42 (qtlineawrt).

QUIT ATTEMPTS

43. In your whole life, how many times have you stopped smoking for one day or longer because you were trying to quit smoking cigarettes for good? (Collapsed; qtatt2)

Asked of current smokers, experimental smokers, and former smokers who at least puffed on a cigarette in the past year.

	Estimate	Lower CI	Upper CI	Frequency
None	20%	13%	27%	57
1 - 5 times	40%	33%	48%	160
6 - 10 times	11%	6%	16%	40
11 - 20 times	8%	4%	12%	29
More than 20 times	7%	2%	12%	20
Don't know / Not sure (valid)	14%	8%	20%	39
Valid total	**100%**			**345**
Refused				0
System missing				1,961
Total				**2,306**

Note: If a respondent provided a range or was unsure, the interviewer read the following: "You said you have tried to quit smoking cigarettes about x to y times in your entire life. Your answer doesn't have to be exact, but I do need to report one number. What is your best guess of the number of times in your whole life that you have stopped smoking for one day or longer because you were trying to quit smoking cigarettes for good?"

44. During the past 12 months, that is, since [DATE FILL], how many times have you stopped smoking for one day or longer because you were trying to quit smoking cigarettes for good? (Collapsed; qt12mos)

Asked of current smokers, experimental smokers, and former smokers who at least puffed on a cigarette in the past year and had tried to quit in their lifetime.

	Estimate	Lower CI	Upper CI	Frequency
None	43%	34%	52%	119
1 - 5 times	49%	39%	59%	111
6 - 10 times	2%	0%	5%	5
11 - 20 times	2%	0%	5%	4
More than 20 times	3%	0%	7%	4
Valid total	**100%**			**243**
Don't know / Not sure				6
Refused				0
System missing				2,057
Total				**2,306**

Note: If a respondent provided a range or was unsure, the interviewer read the following: "You said you have tried to quit smoking cigarettes about x to y times in the past 12 months. Your answer doesn't have to be exact, but I do need to report one number. What is your best guess of the number of times in the past 12 months that you have stopped smoking for one day or longer because you were trying to quit smoking cigarettes for good?"

44a. Smoking cessation efforts. (Calculated; qtatt12mos_3cat)

Asked of current smokers, experimental smokers, and former smokers who at least puffed on a cigarette in the past year.

	Estimate	Lower CI	Upper CI	Frequency
Never tried to quit	24%	16%	32%	57
Tried to quit in lifetime but not in the past year	33%	25%	40%	119
Tried to quit in the past year	43%	34%	52%	124
Valid total	**100%**			**300**
Unknown				45
System missing				1,961
Total				**2,306**

Note: WYSAC calculated this variable, using Q43 (qtatt2) and Q44 (qt12mos).

45. When you quit smoking [The last time you tried to quit smoking], did you use the Wyoming Quit Tobacco Program? (wyqtline)

Asked of current smokers, experimental smokers, and former smokers who had tried to quit in the past year.

	Estimate	Lower CI	Upper CI	Frequency
Yes	13%	4%	21%	14
No	87%	79%	96%	110
Valid total	**100%**			**124**
Don't know / Not sure				0
Refused				0
System missing				2,182
Total				**2,306**

46. When you quit smoking [The last time you tried to quit smoking], did you use any of the following medications: a nicotine patch, nicotine gum, nicotine lozenges, nicotine nasal spray, or a nicotine inhaler to help you quit? (wyqtmed2)

Asked of current smokers, experimental smokers, and former smokers who had tried to quit in the past year.

	Estimate	Lower CI	Upper CI	Frequency
Yes	26%	14%	39%	40
No	74%	61%	86%	84
Valid total	**100%**			**124**
Don't know / Not sure				0
Refused				0
System missing				2,182
Total				**2,306**

47. When you quit smoking [The last time you tried to quit smoking], did you use pills such as Wellbutrin, Zyban, buproprion, Chantix, or varenicline to help you quit? (wyqtmed3)

Asked of current smokers, experimental smokers, and former smokers who had tried to quit in the past year.

	Estimate	Lower CI	Upper CI	Frequency
Yes	12%	6%	19%	22
No	88%	81%	94%	102
Valid total	**100%**			**124**
Don't know / Not sure				0
Refused				0
System missing				2,182
Total				**2,306**

47a. Use of smoking cessation aid. (Calculated; wyqtaid_2cat)

Asked of current smokers, experimental smokers, and former smokers who had tried to quit in the past year.

	Estimate	Lower CI	Upper CI	Frequency
Used a cessation aid(s)	37%	23%	50%	56
Used no cessation aids	63%	50%	77%	68
Valid total	**100%**			**124**
Unknown				0
System missing				2,182
Total				**2,306**

Note: WYSAC calculated this variable, using Q45 (wyqtline), Q46 (wyqtmed2), and Q47 (wyqtmed3).

48. Do you want to quit smoking cigarettes for good? (qtwant)

Asked of current smokers, and experimental smokers and former smokers who had at least puffed on a cigarette in the past year and had not, according to Q9, decided to quit completely. (Everyone who had at least puffed on a cigarette in the past year and had not decided for sure that they were going to quit.)

	Estimate	Lower CI	Upper CI	Frequency
Yes	64%	55%	73%	148
No	31%	21%	40%	89
Don't know / Not sure (valid)	5%	2%	8%	18
Valid total	**100%**			**255**
Refused				0
System missing				2,051
Total				**2,306**

49. I'm about to ask about some things that can make it hard for some people to quit smoking. Which of the following has made it hard for you to quit smoking? (wyqtobst)

Asked of current smokers, and experimental smokers and former smokers who had tried to quit in their lifetime or wanted to quit smoking cigarettes for good. Respondents were allowed to provide multiple reasons.

49-1. Cost of medicines or products to help with quitting. (wyqtobst_1)

	Estimate	Lower CI	Upper CI	Frequency
Yes	24%	17%	30%	72
No	76%	70%	83%	205
Valid total	**100%**			**277**
Don't know / Not sure				0
Refused				1
System missing				2,028
Total				**2,306**

49-2. Cost of classes to help with quitting. (wyqtobst_2)

	Estimate	Lower CI	Upper CI	Frequency
Yes	9%	5%	13%	27
No	91%	87%	95%	245
Valid total	**100%**			**272**
Don't know / Not sure				6
Refused				0
System missing				2,028
Total				**2,306**

49-3. Fear of gaining weight. (wyqtobst_3)

	Estimate	Lower CI	Upper CI	Frequency
Yes	13%	8%	18%	46
No	87%	82%	92%	232
Valid total	**100%**			**278**
Don't know / Not sure				0
Refused				0
System missing				2,028
Total				**2,306**

49-4. Loss of a way to handle stress. (wyqtobst_4)

	Estimate	Lower CI	Upper CI	Frequency
Yes	69%	61%	77%	180
No	31%	23%	39%	93
Valid total	**100%**			**273**
Don't know / Not sure				5
Refused				0
System missing				2,028
Total				**2,306**

49-5. Other people smoking around you. (wyqtobst_5)

	Estimate	Lower CI	Upper CI	Frequency
Yes	60%	52%	69%	145
No	40%	31%	48%	132
Valid total	**100%**			**277**
Don't know / Not sure				1
Refused				0
System missing				2,028
Total				**2,306**

49-6. Cravings for a cigarette. (wyqtobst_6)

	Estimate	Lower CI	Upper CI	Frequency
Yes	78%	70%	85%	206
No	22%	15%	30%	70
Valid total	**100%**			**276**
Don't know / Not sure				2
Refused				0
System missing				2,028
Total				**2,306**

49-7. Lack of support from others to quit. (wyqtobst_7)

	Estimate	Lower CI	Upper CI	Frequency
Yes	18%	11%	24%	48
No	82%	76%	89%	228
Valid total	**100%**			**276**
Don't know / Not sure				2
Refused				0
System missing				2,028
Total				**2,306**

49-8. Worsening depression. (wyqtobst_8)

	Estimate	Lower CI	Upper CI	Frequency
Yes	28%	20%	36%	71
No	72%	64%	80%	203
Valid total	**100%**			**274**
Don't know / Not sure				3
Refused				1
System missing				2,028
Total				**2,306**

49-9. Worsening anxiety. (wyqtobst_9)

	Estimate	Lower CI	Upper CI	Frequency
Yes	47%	37%	56%	117
No	53%	44%	63%	158
Valid total	**100%**			**275**
Don't know / Not sure				2
Refused				1
System missing				2,028
Total				**2,306**

49-10. Other (specify). (wyqtobst_10)

	Estimate	Lower CI	Upper CI	Frequency
Yes	22%	14%	30%	62
No	78%	70%	86%	214
Valid total	**100%**			**276**
Don't know / Not sure				2
Refused				0
System missing				2,028
Total				**2,306**

Note: "Other" includes reasons such as habit, something to do while driving, boredom, nicotine addiction/withdrawal symptoms, alcohol use, family influence, health reasons, enjoyment, lack of will or desire to quit, bad luck, cost, mental health, substitute for drugs and alcohol, and stress/fear/anger.

50. In your whole life, how many times have you stopped using e-cigarettes or vape pens for one day or longer because you were trying to quit using e-cigarettes or vape pens for good? (Collapsed; wyecigqtatt2)

Asked of respondents who now use ENDS every day or some days.

	Estimate	Lower CI	Upper CI	Frequency
None	59%	43%	75%	50
1 - 5 times	35%	19%	51%	25
6 - 10 times	0%	0%	0%	1
11 - 20 times	0%	0%	0%	0
More than 20 times	0%	0%	0%	0
Don't know / Not sure (valid)	6%	0%	14%	4
Valid total	**100%**			**80**
Refused				0
System missing				2,226
Total				**2,306**

Note: If a respondent provided a range or was unsure, the interviewer read the following: "You said you have tried to quit using e-cigarettes about x to y times in your entire life. Your answer doesn't have to be exact, but I do need to report one number. What is your best guess of the number of times in your whole life that you have stopped using for one day or longer because you were trying to quit using e-cigarettes for good?"

51. During the past 12 months, that is, since [DATE FILL], how many times have you stopped using e-cigarettes or vape pens for one day or longer because you were trying to quit using e-cigarettes or vape pens for good? (Collapsed; wyecigqt12mos)

Asked of respondents who now use ENDS every day or some days and had tried to quit in their lifetime.

	Estimate	Lower CI	Upper CI	Frequency
None	34%	12%	56%	9
1 - 5 times	66%	44%	88%	17
6 - 10 times	0%	0%	0%	0
11 - 20 times	0%	0%	0%	0
More than 20 times	0%	0%	0%	0
Valid total	**100%**			**26**
Don't know / Not sure				0
Refused				0
System missing				2,280
Total				**2,306**

51a. ENDS cessation efforts. (Calculated; wyecigqtatt12mos_3cat)

Asked of respondents who now use ENDS every day or some days.

	Estimate	Lower CI	Upper CI	Frequency
Never tried to quit	63%	46%	79%	50
Tried to quit in lifetime but not in the past year	13%	2%	23%	9
Tried to quit in the past year	25%	10%	39%	17
Valid total	**100%**			**76**
Unknown				4
System missing				2,226
Total				**2,306**

Note: WYSAC calculated this variable, using Q50 (wyecigqtatt2) and Q51 (wyecigqt12mos).

RECENT MEDIA: AWARENESS OF RECENT MEDIA CAMPAIGNS AND COUNTER-MARKETING

(Read to respondents) The next few questions are about ads that have been running in Wyoming. These include ads from TV, newspapers, movie theaters, radio, and online.

52. There was a series of ads that varied in length. They each told part of a story about a mother who smoked near her child in her car, at a birthday party, and in her garage. The son was later in the hospital because of an asthma attack. You may have also seen or heard an ad telling the whole story. Each ad also provided information about the consequences of being around cigarette smoke. Do you recall seeing or hearing any of those ads? (media1)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	36%	33%	39%	760
No	64%	61%	67%	1,516
Valid total	**100%**			**2,276**
Don't know / Not sure				29
Refused				1
System missing				0
Total				**2,306**

53. How compelling were these ads to you? (media1a)

Asked of respondents who had seen or heard the media ads.

	Estimate	Lower CI	Upper CI	Frequency
Not at all compelling	16%	12%	20%	131
Somewhat compelling	38%	32%	44%	261
Very compelling	46%	40%	52%	350
Valid total	**100%**			**742**
Don't know / Not sure				16
Refused				2
System missing				1,546
Total				**2,306**

54. There was a series of ads that were interviews with women talking about the consequences of secondhand smoke. Those included interviews with a mother whose son developed asthma, a mother whose daughter had nosebleeds, a woman who had asthma and atopic dermatitis and thought her mother loved smoking more than her, and a mother who was worried about something bad happening to her children because of her smoking. Each ad also provided information about the consequences of being around cigarette smoke. Do you recall seeing or hearing any of those ads? (media2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	22%	19%	25%	523
No	78%	75%	81%	1,739
Valid total	**100%**			**2,262**
Don't know / Not sure				44
Refused				0
System missing				0
Total				**2,306**

55. How compelling were these ads to you? (media2a)

Asked of respondents who had seen or heard the media ads.

	Estimate	Lower CI	Upper CI	Frequency
Not at all compelling	11%	7%	15%	81
Somewhat compelling	36%	28%	43%	155
Very compelling	53%	45%	61%	279
Valid total	**100%**			**515**
Don't know / Not sure				8
Refused				0
System missing				1,783
Total				**2,306**

56. Those ads were connected to the website stop secondhand smoke.com. Did you visit that website? (media3)

Asked of respondents who reported having seen or heard any of the ads mentioned above.

	Estimate	Lower CI	Upper CI	Frequency
Yes	3%	1%	4%	21
No	97%	96%	99%	855
Valid total	**100%**			**876**
Don't know / Not sure				9
Refused				0
System missing				1,421
Total				**2,306**

57. How likely would you be to ask a stranger not to smoke around you if you couldn't move away from the smoke? (media4)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Very likely	41%	38%	45%	946
Somewhat likely	29%	26%	32%	687
Not at all likely	30%	27%	33%	637
Valid total	**100%**			**2,270**
Don't know / Not sure				35
Refused				1
System missing				0
Total				**2,306**

58. Have you asked someone to not smoke near you because of the ads or the information in the ads? (media5)

Asked of respondents who reported having seen or heard any of the ads mentioned above.

	Estimate	Lower CI	Upper CI	Frequency
Yes	16%	11%	21%	104
No	84%	79%	89%	773
Valid total	**100%**			**877**
Don't know / Not sure				8
Refused				0
System missing				1,421
Total				**2,306**

59. Have you avoided smoking near other people because of the ads or the information in the ads? (media6)

Asked of respondents who are current smokers and who saw or heard any of the ads mentioned above.

	Estimate	Lower CI	Upper CI	Frequency
Yes	38%	21%	55%	39
No	62%	45%	79%	69
Valid total	**100%**			**108**
Don't know / Not sure				0
Refused				0
System missing				2,198
Total				**2,306**

60. Those ads also included a phone number for a smoking quitline, 1-800-QUIT NOW. Did you call that quitline because of the ads? (media7)

Asked of respondents who smoke every day or some days or who had smoked within the last year and who saw or heard any of the ads mentioned above.

	Estimate	Lower CI	Upper CI	Frequency
Yes	2%	0%	4%	3
No	98%	96%	100%	148
Valid total	**100%**			**151**
Don't know / Not sure				0
Refused				0
System missing				2,155
Total				**2,306**

INTERACTIONS WITH HEALTH PROFESSIONALS

61. In the past 12 months, that is, since [DATE FILL], have you seen a doctor, dentist, nurse, or other health professional? (hcwcare2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	87%	85%	90%	2,028
No	13%	10%	15%	275
Valid total	**100%**			**2,303**
Don't know / Not sure				2
Refused				1
System missing				0
Total				**2,306**

Secondhand Smoke and Tobacco-Free Policies

AT HOME

(Read to respondents) Now I'm going to ask a question about smoking inside the home.

62. Not counting decks, porches, or garages, during the past 7 days, that is, since last [TODAY'S DAY OF WEEK], on how many days did someone other than you smoke tobacco inside your home while you were at home? (Collapsed; smokhome7d2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
None	94%	92%	96%	2,198
1 - 6 days	2%	1%	3%	43
On all 7 days	4%	2%	5%	60
Valid total	**100%**			**2,301**
Don't know / Not sure				5
Refused				0
System missing				0
Total				**2,306**

IN THE WORKPLACE

63. Are you currently working for pay or are you self-employed, either part-time or full-time? (employ2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	68%	65%	71%	1,329
No	32%	29%	35%	971
Valid total	**100%**			**2,300**
Don't know / Not sure				3
Refused				3
System missing				0
Total				**2,306**

(Read to respondents) The next two questions refer to smoking in indoor areas. When answering the questions, please count your vehicle as an indoor area.

64. Now I'm going to ask you about smoke you might have breathed at work because someone else was smoking, either indoors or outdoors. During the past 7 days, that is, since last [TODAY'S DAY OF WEEK], on how many days did you breathe the smoke at your workplace from someone other than you who was smoking tobacco? (Collapsed; shsexpwork)

Asked of respondents who are employed or self-employed. Working in a vehicle was considered as working indoors.

	Estimate	Lower CI	Upper CI	Frequency
None	79%	75%	83%	1,122
1 - 6 days	16%	13%	20%	162
On all 7 days	5%	3%	7%	40
Valid total	**100%**			**1,324**
Don't know / Not sure				4
Refused				1
System missing				977
Total				**2,306**

65. At your workplace, is smoking in indoor areas always allowed, allowed only at some times or in some places, or never allowed? (worksmokind)

Asked of employed respondents. Working in a vehicle was considered as working indoors. The order of the response options for this question was randomly reversed.

	Estimate	Lower CI	Upper CI	Frequency
Always allowed	4%	2%	5%	39
Allowed only at some times or in some places	10%	7%	13%	98
Never allowed	87%	83%	90%	1,155
Valid total	**100%**			**1,292**
Don't know / Not sure				32
Refused				5
System missing				977
Total				**2,306**

Note: In previous ATS iterations, this question was asked only of respondents who said they worked in a vehicle, indoors (at home or in a place like an office building, retail store, restaurant, or factory), or somewhere else. It excluded those who said they worked outdoors most of the time.

66. At your workplace, is smoking in outdoor areas always allowed, allowed only at some times or in some places, or never allowed? (worksmokout)

Asked of respondents who are employed or self-employed. The order of the response options for this question was randomly reversed.

	Estimate	Lower CI	Upper CI	Frequency
Always allowed	37%	32%	41%	465
Allowed only at some times or in some places	37%	32%	41%	397
Never allowed	27%	23%	30%	403
Valid total	**100%**			**1,265**
Don't know / Not sure				62
Refused				2
System missing				977
Total				**2,306**

(Read to respondents) The next two questions ask for your opinion about smoking at all workplaces.

67. At workplaces, do you think smoking indoors should be always allowed, allowed only at some times or in some places, or never allowed? (workindopn2)

Asked of all respondents. The order of the response options for this question was randomly reversed.

	Estimate	Lower CI	Upper CI	Frequency
Always allowed	2%	1%	3%	38
Allowed only at some times or in some places	14%	12%	17%	315
Never allowed	84%	81%	87%	1,890
Valid total	**100%**			**2,243**
Don't know / Not sure				56
Refused				7
System missing				0
Total				**2,306**

68. Do you support or oppose a state law in Wyoming banning smoking in all indoor workplaces? (wyworkindlawopn2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Support	80%	77%	83%	1,760
Oppose	20%	17%	23%	440
Valid total	**100%**			**2,200**
Don't know / Not sure				98
Refused				8
System missing				0
Total				**2,306**

69. At workplaces, do you think smoking outdoors should be always allowed, allowed only at some times or in some places, or never allowed? (workoutdopn2)

Asked of all respondents. The order of the response options for this question was randomly reversed.

	Estimate	Lower CI	Upper CI	Frequency
Always allowed	26%	23%	29%	606
Allowed only at some times or in some places	60%	57%	64%	1,310
Never allowed	13%	11%	16%	317
Valid total	**100%**			**2,233**
Don't know / Not sure				67
Refused				6
System missing				0
Total				**2,306**

70. Do you support or oppose a state law in Wyoming banning smoking in all outdoor workplaces? (wyworkoutlawopn2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Support	30%	27%	33%	721
Oppose	62%	59%	66%	1,394
Don't know / Not sure (valid)	7%	6%	9%	177
Valid total	**100%**			**2,292**
Refused				14
System missing				0
Total				**2,306**

IN PUBLIC PLACES

(Read to respondents) The next several questions ask about tobacco use in indoor and outdoor public places. Examples of indoor public places are the indoor areas of stores, restaurants, bars, casinos, clubs, and sports arenas. Examples of outdoor public places are stadiums and parks.

71. [Not counting times while you were at work,] during the past 7 days, that is, since last [TODAY'S DAY OF WEEK], on how many days did you breathe the smoke from someone else who was smoking in an indoor public place? (Collapsed; wyshsexppub)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
None	90%	88%	92%	2,077
1 - 6 days	9%	7%	11%	184
On all 7 days	1%	0%	1%	19
Valid total	**100%**			**2,280**
Don't know / Not sure				26
Refused				0
System missing				0
Total				**2,306**

72. [Not counting times while you were at work,] during the past 7 days, that is, since last [TODAY'S DAY OF WEEK], on how many days did you breathe the smoke from someone else who was smoking in an outdoor public place? (Collapsed; wyshsexppub2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
None	71%	67%	74%	1,756
1 - 6 days	27%	24%	30%	475
On all 7 days	2%	1%	4%	38
Valid total	**100%**			**2,269**
Don't know / Not sure				37
Refused				0
System missing				0
Total				**2,306**

72a. Exposure to secondhand smoke (SHS) in an indoor or outdoor public place in the past 7 days. (Calculated; wyshsexppub_indoutd)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Not exposed to secondhand smoke	66%	62%	69%	1,641
Exposed to secondhand smoke	34%	31%	38%	612
Valid total	**100%**			**2,253**
Unknown				53
System missing				0
Total				**2,306**

(Read to respondents) Now we have a few questions about your opinions on smoking in indoor public places.

73. Should smoking indoors in restaurants always be allowed, be allowed only at some times or in some places, or never be allowed? (shsindropn1)

Asked of all respondents. The order of the response options for this question was randomly reversed.

	Estimate	Lower CI	Upper CI	Frequency
Always be allowed	2%	1%	3%	39
Be allowed only at some times or in some places	17%	14%	19%	380
Never be allowed	82%	79%	84%	1,846
Valid total	**100%**			**2,265**
Don't know / Not sure				34
Refused				7
System missing				0
Total				**2,306**

74. Do you support or oppose a state law in Wyoming banning smoking in all restaurants? (wyreslawopn2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Support	81%	78%	84%	1,806
Oppose	19%	16%	22%	438
Valid total	**100%**			**2,244**
Don't know / Not sure				54
Refused				8
System missing				0
Total				**2,306**

75. Should smoking indoors in bars always be allowed, be allowed only at some times or in some places, or never be allowed? (wyshsindropn2)

Asked of all respondents. The order of the response options for this question was randomly reversed.

	Estimate	Lower CI	Upper CI	Frequency
Always be allowed	9%	8%	11%	215
Be allowed only at some times or in some places	35%	31%	38%	748
Never be allowed	51%	48%	55%	1,196
Don't know / Not sure (valid)	4%	3%	6%	126
Valid total	**100%**			**2,285**
Refused				21
System missing				0
Total				**2,306**

76. Do you support or oppose a state law in Wyoming banning smoking in all bars? (wybarlawopn2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Support	55%	51%	59%	1,261
Oppose	40%	37%	44%	895
Don't know / Not sure (valid)	5%	3%	6%	136
Valid total	**100%**			**2,292**
Refused				14
System missing				0
Total				**2,306**

77. Should smoking indoors in casinos and clubs always be allowed, be allowed only at some times or in some places, or never be allowed? (wyshsindropn3)

Asked of all respondents. The order of the response options for this question was randomly reversed.

	Estimate	Lower CI	Upper CI	Frequency
Always be allowed	9%	7%	11%	172
Be allowed only at some times or in some places	37%	33%	40%	799
Never be allowed	54%	51%	58%	1,237
Valid total	**100%**			**2,208**
Don't know / Not sure				88
Refused				10
System missing				0
Total				**2,306**

78. Do you support or oppose a state law in Wyoming banning smoking in all casinos and clubs? (wyclublawopn2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Support	56%	52%	59%	1,300
Oppose	40%	36%	43%	878
Don't know / Not sure (valid)	5%	4%	6%	120
Valid total	**100%**			**2,298**
Refused				8
System missing				0
Total				**2,306**

79. Should smoking at parks always be allowed, be allowed only at some times or in some places, or never be allowed? (shsoutdropn)

Asked of all respondents. The order of the response options for this question was randomly reversed.

	Estimate	Lower CI	Upper CI	Frequency
Always be allowed	17%	14%	20%	377
Be allowed only at some times or in some places	47%	43%	50%	1,032
Never be allowed	36%	33%	40%	833
Valid total	**100%**			**2,242**
Don't know / Not sure				59
Refused				5
System missing				0
Total				**2,306**

GENERAL KNOWLEDGE AND ATTITUDES

(Read to respondents) Now we have some general questions about smoking and tobacco use.

80. Do you think that breathing smoke from other people's cigarettes or from other tobacco products is very harmful, somewhat harmful, or not at all harmful to one's health? (shsharmopn)

Asked of all respondents. The order of the response options for this question was randomly reversed.

	Estimate	Lower CI	Upper CI	Frequency
Not at all harmful to one's health	2%	1%	4%	53
Somewhat harmful to one's health	34%	31%	38%	774
Very harmful to one's health	63%	60%	67%	1,435
Valid total	**100%**			**2,262**
Don't know / Not sure				41
Refused				3
System missing				0
Total				**2,306**

81. Do you think using e-cigarettes or vape pens is very harmful, somewhat harmful, or not at all harmful to one's health? (wyharmecig)

Asked of all respondents. The order of the response options for this question was randomly reversed.

	Estimate	Lower CI	Upper CI	Frequency
Not at all harmful to one's health	3%	2%	4%	58
Somewhat harmful to one's health	36%	32%	39%	658
Very harmful to one's health	49%	46%	53%	1,242
Don't know / Not sure (valid)	12%	10%	14%	345
Valid total	**100%**			**2,303**
Refused				3
System missing				0
Total				**2,306**

82. In your opinion, how healthy is it to completely switch from cigarette smoking to using e-cigarettes or vape pens? (wyhealthyecig)

Asked of all respondents. The order of the response options for this question was randomly reversed.

	Estimate	Lower CI	Upper CI	Frequency
Not at all healthy	55%	51%	58%	1,310
Somewhat healthy	29%	26%	33%	565
Very healthy	4%	3%	6%	64
Don't know / Not sure (valid)	11%	9%	13%	364
Valid total	**100%**			**2,303**
Refused				3
System missing				0
Total				**2,306**

83. Compared to smoking cigarettes, how harmful do you think using e-cigarettes or vape pens is to a person's health? Would you say much less harmful, somewhat less harmful, about the same, somewhat more harmful, or much more harmful than cigarettes? (wyecigmoreharm)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Much less harmful than cigarettes	5%	4%	7%	86
Somewhat less harmful	25%	22%	28%	499
About the same	42%	39%	46%	943
Somewhat more harmful	8%	6%	9%	205
Much more harmful than cigarettes	8%	6%	9%	215
Don't know / Not sure (valid)	12%	10%	14%	356
Valid total	**100%**			**2,304**
Refused				2
System missing				0
Total				**2,306**

Demographics

(Read to respondents) Now I would like to ask you some questions about yourself and your family. Please remember that your answers will be private and that no one will be able to identify you from any published reports.

84. Are you Hispanic or Latino? (hispanic)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	9%	6%	11%	104
No	91%	89%	94%	2,184
Valid total	**100%**			**2,288**
Don't know / Not sure				3
Refused				15
System missing				0
Total				**2,306**

85. I'm going to read a list of racial categories. Which one or more of the following do you consider yourself to be? (racemulti)

Asked of all respondents.

85-1. White. (racemulti_1)

	Estimate	Lower CI	Upper CI	Frequency
Yes	95%	93%	97%	2,178
No	5%	4%	7%	109
Valid total	**100%**			**2,287**
Don't know / Not sure				3
Refused				16
System missing				0
Total				**2,306**

85-2. Black or African American. (racemulti_2)

	Estimate	Lower CI	Upper CI	Frequency
Yes	1%	0%	1%	11
No	99%	99%	100%	2,274
Valid total	**100%**			**2,285**
Don't know / Not sure				3
Refused				18
System missing				0
Total				**2,306**

85-3. Asian. (racemulti_3)

	Estimate	Lower CI	Upper CI	Frequency
Yes	1%	0%	1%	20
No	99%	99%	100%	2,266
Valid total	**100%**			**2,286**
Don't know / Not sure				2
Refused				18
System missing				0
Total				**2,306**

85-4. Native Hawaiian or other Pacific Islander. (racemulti_4)

	Estimate	Lower CI	Upper CI	Frequency
Yes	0%	0%	1%	12
No	100%	99%	100%	2,274
Valid total	**100%**			**2,286**
Don't know / Not sure				2
Refused				18
System missing				0
Total				**2,306**

85-5. American Indian or Alaska Native. (racemulti_5)

	Estimate	Lower CI	Upper CI	Frequency
Yes	4%	3%	6%	103
No	96%	94%	97%	2,182
Valid total	**100%**			**2,285**
Don't know / Not sure				3
Refused				18
System missing				0
Total				**2,306**

85-6. Some other racial category. (racemulti_6)

	Estimate	Lower CI	Upper CI	Frequency
Yes	4%	3%	5%	95
No	96%	95%	97%	2,187
Valid total	**100%**			**2,282**
Don't know / Not sure				4
Refused				20
System missing				0
Total				**2,306**

85a. Multiple race. (Calculated into mutually exclusive categories; racemulti_7cat)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
White only	91%	89%	93%	2,057
Black or African American only	0%	0%	0%	5
Asian only	0%	0%	1%	9
Native Hawaiian or other Pacific Islander only	0%	0%	0%	2
American Indian, Alaska Native only	2%	1%	2%	28
Other race only	2%	1%	3%	50
Multiracial	5%	3%	6%	127
Valid total	**100%**			**2,278**
Unknown				28
System missing				0
Total				**2,306**

85b. Race/Ethnicity. (Calculated; raceethnic_8cat)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
White only, non-Hispanic	86%	83%	89%	2,000
Black only, non-Hispanic	0%	0%	0%	5
Asian only, non-Hispanic	0%	0%	1%	9
Native Hawaiian or other Pacific Islander; only, non-Hispanic	0%	0%	0%	2
American Indian, Alaska Native; only, non-Hispanic	1%	0%	2%	22
Other race only, non-Hispanic	1%	0%	1%	24
Multiracial, non-Hispanic	3%	2%	4%	111
Hispanic	9%	6%	11%	104
Valid total	**100%**			**2,277**
Unknown				29
System missing				0
Total				**2,306**

85c. Race/Ethnicity. (Calculated; raceethnic_5cat)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
White only, non-Hispanic	86%	83%	89%	2,000
Black only, non-Hispanic	0%	0%	0%	5
Asian only, non-Hispanic	0%	0%	1%	9
Other, non-Hispanic	5%	4%	6%	159
Hispanic	9%	6%	11%	104
Valid total	**100%**			**2,277**
Unknown				29
System missing				0
Total				**2,306**

86. What is the highest level of school you have completed or the highest degree you have received? (Collapsed; educa2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Less than high school diploma, GED, or equivalent	8%	6%	11%	71
GED or equivalent	3%	1%	4%	45
High school diploma	27%	24%	30%	503
Some college, no degree	19%	16%	21%	467
Post high school certificate or diploma, or associate degree	20%	17%	23%	399
Bachelor's degree	15%	13%	17%	498
Master's, professional, or doctoral degree	8%	7%	9%	316
Valid total	**100%**			**2,299**
Don't know / Not sure				4
Refused				3
System missing				0
Total				**2,306**

87. What is your age? (Collapsed; age)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
18-20 years	7%	4%	9%	66
21-24 years	5%	3%	7%	77
25-34 years	18%	15%	21%	191
35-44 years	16%	13%	19%	233
45-54 years	15%	13%	18%	273
55-64 years	18%	16%	21%	494
65+ years	21%	19%	23%	933
Valid total	**100%**			**2,267**
Don't know / Not sure				4
Refused				35
System missing				0
Total				**2,306**

88. Are you male or female? (gender)

Recorded for all respondents. (Respondents' gender was usually recorded without asking; interviewers read the question only if necessary.)

	Estimate	Lower CI	Upper CI	Frequency
Male	51%	47%	54%	1,090
Female	49%	46%	53%	1,215
Valid total	**100%**			**2,305**
Don't know / Not sure				0
Refused				1
System missing				0
Total				**2,306**

89. How many children aged 17 or younger live in your household 6 months or more of the year? (childle17)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
None	65%	62%	69%	1,794
1	14%	12%	17%	192
2	12%	9%	14%	183
3	5%	3%	7%	70
4	2%	1%	3%	35
5 or more children	1%	1%	2%	24
Valid total	**100%**			**2,298**
Don't know / Not sure				0
Refused				8
System missing				0
Total				**2,306**

90. Do you smoke cigarettes in front of your children aged 17 or younger? (wysmokfrntchild)

Asked of current smokers who have children aged 17 or younger living in their home.

	Estimate	Lower CI	Upper CI	Frequency
No, never	41%	22%	59%	24
Yes, rarely	12%	0%	24%	8
Yes, sometimes	37%	21%	54%	20
Yes, always	10%	2%	18%	8
Valid total	**100%**			**60**
Don't know / Not sure				0
Refused				0
System missing				2,246
Total				**2,306**

91. Now I'm going to ask you about how many different telephone numbers your household has. Do not include numbers that are only used by a computer or fax machine. Also, do not include cell phone telephone numbers. Do you have more than one landline telephone number in your household? (telnosgt1)

Asked of landline respondents only.

	Estimate	Lower CI	Upper CI	Frequency
Yes	2%	1%	2%	38
No	98%	98%	99%	1,087
Valid total	**100%**			**1,125**
Don't know / Not sure				1
Refused				8
System missing				1,172
Total				**2,306**

Note: Landline telephone numbers do not include numbers that are only used by a computer or fax machine.

92. How many of these are residential numbers? (telnosres)

Asked if respondents indicated having more than one landline telephone number in their household.

	Estimate	Lower CI	Upper CI	Frequency
None	2%	0%	6%	1
1	46%	21%	71%	18
2	47%	20%	73%	14
3	4%	0%	10%	4
4	0%	0%	0%	0
5	1%	0%	2%	1
6	0%	0%	0%	0
Valid total	**100%**			**38**
Don't know / Not sure				0
Refused				0
System missing				2,268
Total				**2,306**

93. What county do you live in? (Cleaned; county)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Albany	5%	4%	7%	124
Big Horn	3%	2%	3%	123
Campbell	11%	9%	13%	98
Carbon	2%	2%	3%	121
Converse	3%	2%	4%	75
Crook	2%	1%	3%	94
Fremont	7%	6%	8%	110
Goshen	2%	2%	3%	114
Hot Springs	1%	1%	2%	92
Johnson	1%	1%	2%	83
Laramie	15%	13%	17%	130
Lincoln	3%	2%	4%	112
Natrona	14%	12%	16%	111
Niobrara	0%	0%	0%	74
Park	6%	5%	8%	86
Platte	2%	1%	2%	84
Sheridan	5%	4%	6%	100
Sublette	1%	1%	1%	91
Sweetwater	6%	5%	7%	96
Teton	2%	2%	3%	119
Uinta	3%	2%	3%	90
Washakie	1%	1%	2%	82
Weston	2%	1%	2%	97
Valid total	**100%**			**2,306**
Don't know / Not sure				0
Refused				0
System missing				0
Total				**2,306**

Note: Responses to this question originally included don't know / not sure and refused. WYSAC and the WYSAC contractor backfilled these missing responses, using the sampling frame, during their data cleaning process.

Existing Chronic Conditions and Diseases

(Read to respondents) Now I want to ask you some questions about chronic conditions or diseases you might have.

94. Have you ever been told by a doctor or other health professional that you have high cholesterol? (cholesterol)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	24%	21%	26%	720
No	77%	74%	79%	1,568
Valid total	**100%**			**2,288**
Don't know / Not sure				7
Refused				11
System missing				0
Total				**2,306**

95. Have you ever been told by a doctor or other health professional that you have high blood pressure, or hypertension? (hypertension)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	30%	27%	33%	851
No	70%	67%	73%	1,438
Valid total	**100%**			**2,289**
Don't know / Not sure				4
Refused				13
System missing				0
Total				**2,306**

96. Do you have any mental health conditions, such as anxiety disorder, depression disorder, bipolar disorder, alcohol abuse, drug abuse, or schizophrenia? (mentalhealth)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	18%	15%	21%	305
No	82%	79%	85%	1,981
Valid total	**100%**			**2,286**
Don't know / Not sure				2
Refused				18
System missing				0
Total				**2,306**

Opinions and Attitudes Related to Tobacco

(Read to respondents) Now I would like to ask you a few more questions about your opinions and attitudes related to tobacco.

EXCISE TAXES

97. Currently Wyoming's cigarette tax is 60 cents per pack. How much of an increase in tax per pack would you approve, if any? (wycigtaxopn3a)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
No increase in the tax	34%	31%	38%	716
Up to 50 cents	12%	10%	15%	285
50 cents to 1 dollar	13%	11%	15%	318
$1.01 to $1.50	5%	3%	6%	128
More than $1.50	22%	19%	24%	510
Decrease the tax (volunteered only)	2%	1%	3%	33
Don't know / Not sure (valid)	12%	10%	14%	292
Valid total	**100%**			**2,282**
Refused				24
System missing				0
Total				**2,306**

98. Are you for or against an increase in the tax on chewing tobacco, snuff, dip, or snus? (wyslttaxopn)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
For	54%	51%	58%	1,339
Against	36%	33%	40%	736
Don't know / Not sure (valid)	10%	7%	12%	205
Valid total	**100%**			**2,280**
Refused				26
System missing				0
Total				**2,306**

99. Should tobacco use be completely banned on school grounds, including fields and parking lots, and at all school events, even for teachers and other adults? (schoolopn2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Yes	85%	83%	88%	1,962
No	15%	12%	17%	300
Valid total	**100%**			**2,262**
Don't know / Not sure				37
Refused				7
System missing				0
Total				**2,306**

100. In order to help someone you know to stop smoking or using other tobacco products, would you like the 1-800 quitline telephone number or the address for a website? (helpnontobac)

Asked of respondents who had never used any type of tobacco or had not used tobacco in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Yes	9%	7%	11%	141
No	91%	89%	94%	1,744
Valid total	**100%**			**1,885**
Don't know / Not sure				0
Refused				0
System missing				421
Total				**2,306**

Note: If respondents answered "Yes," the interviewer read "The quitline number is 1-800-QUIT NOW or 1-800-784-8669. A website that tells you about help you can get to stop smoking is www.quitwyo.org."

101. In order to get help to stop using tobacco for good, would you like the 1-800 quitline telephone number or the address for a website? (helptobac)

Asked of tobacco users who had used any type of tobacco in the past 30 days.

	Estimate	Lower CI	Upper CI	Frequency
Yes	17%	11%	24%	62
No	83%	76%	89%	359
Valid total	**100%**			**421**
Don't know / Not sure				0
Refused				0
System missing				1,885
Total				**2,306**

Note: If respondents answered "Yes," the interviewer read "The quitline number is 1-800-QUIT NOW or 1-800-784-8669. A website that tells you about help you can get to stop smoking is www.quitwyo.org."

Additional Sociodemographic Questions

(Read to participants) I have two final questions that are important to the CDC to develop effective programs. Please remember that all answers are private.

102. Now I would like to ask about the combined income of everybody who lives with you. Is your annual household income from all sources …? (income2)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Less than $20,000	8%	5%	10%	149
$20,000 to less than $30,000	8%	5%	10%	144
$30,000 to less than $40,000	11%	9%	14%	233
$40,000 to less than $50,000	13%	10%	15%	290
$50,000 to less than $70,000	15%	13%	17%	364
$70,000 to less than $100,000	21%	18%	24%	372
$100,000 to less than $150,000	15%	13%	18%	331
$150,000 or more	9%	7%	11%	177
Valid total	**100%**			**2,060**
Don't know / Not sure				84
Refused				162
System missing				0
Total				**2,306**

103. Do you consider yourself to be …? (sexualorient)

Asked of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Heterosexual, or straight	96%	94%	97%	2,129
Gay or lesbian	1%	0%	2%	12
Bisexual	3%	1%	4%	29
Transgender	0%	0%	0%	0
Other (specify)	1%	0%	1%	26
Valid total	**100%**			**2,196**
Respondent does not understand responses				9
Don't know / Not sure				15
Refused				86
System missing				0
Total				**2,306**

Note: The interviewer read aloud a number with each response so that respondents could answer by saying a number instead of the word if they chose.

Appendix C: Statistical Analysis Methods and Detailed Results

Appendix C provides details of statistical analyses summarized in the body of the report. WYSAC does not provide interpretations of the statistical test results in Appendix C because they are provided in the body of the report.

WYSAC analyzed the data using Stata, version 16.1 with the complex sample survey methods available in that statistical package. Relationships and linear trends noted as significant in the body of the report are statistically significant, $p < .05$.

Prior to conducting analyses, WYSAC recoded responses about race and ethnicity as follows. WYSAC divided racial groups into two groups, White and non-White, because of small group sizes in specific racial groups, which is not ideal because estimates for specific non-White groups may be very different. Consistent with the CDC's recommended item, ethnicity has two groups: Hispanic and non-Hispanic. WYSAC did not recode ethnicity.

WYSAC generally treated responses of "don't know/not sure" and "refused" as missing data. However, if "don't know/not sure" accounted for at least 5% of valid responses after inclusion, then WYSAC did not treat the answers as missing. For example, WYSAC treated "don't know/not sure" as a valid response for the item about opinions on whether using ENDS is harmful to one's health (see Appendix B). This item included 345 respondents who answered "don't know/not sure" while 1,958 respondents provided their opinions. For this item, "don't know/not sure" accounted for about 15% (345/2,303) of valid responses after inclusion.

For statistical analysis, WYSAC performed logistic regression and multinomial logistic regression to identify associations with time (difference since a reference year or other changes over time longer than two years). Generally, WYSAC looked at changes since the first time a comparable question was asked, with two exceptions to this general rule: the smoking trend and working in a smoke-free workplace.

Upon visual inspection, the smoking rate over time has a slight inverted U-shape peaking in 2006. However, data in straight-line trends are more useful to lay audiences of the main report. WYSAC focused on a linear trend from the apparent peak in 2006 (see Table C18).

A straight-line trend appeared less appropriate for estimates of how many adults who reported smoking was prohibited in outdoor areas of their workplaces. The estimate of 36% in 2010 was much higher (about 10 percentage points) than all other estimates. WYSAC treated the 2010 estimate as an outlier and omitted it from the main trend analysis. WYSAC separately tested the

difference between 2010 and 2012 and the apparently stable trend from 2012 to 2019 (see Table C45 and Table C46). The drop from 36% in 2010 to 25% in 2012 was statistically significant. The estimates from 2012 through 2019 (when it was 27%) did not reveal a statistically significant change.

WYSAC also used logistic regression and multinomial logistic regression to test for associations between a dependent variable and respondent's characteristics (independent variables) such as smoking status for different demographic groups. For logistic regression, a model is a contrast between a given outcome and the base outcome of a dichotomous dependent variable with the outcome of interest coded as 1 and the base outcome coded as 0. For multinomial logistic regression, a model has multiple outcomes, depending on the number of outcomes of a dependent variable with more than two outcomes. Each multinomial logistic regression question is a contrast between a given outcome and a base outcome.

Each table within this appendix reports the coefficients (Bs) for each level of independent variable (except for reference groups), their standard errors (SEs), Odds Ratios (ORs) for logistic regression, relative-risk ratios (RRR) for multinomial logistic regression, t-statistics, and their p-values. When an independent variable is dummy coded, its reference group is indicated in the table.

Because odds ratios from logistic regression are less intuitive than relative risk, and thus less useful to lay audiences of the main report body, WYSAC provides odds ratios in this appendix for technical audiences and relative risk estimates in the main body.

When a multinomial logistic regression model was statistically significant, WYSAC additionally computed a table of average marginal effects to help with interpretation; in the table, coefficients (Bs) are the average marginal effects. WYSAC presents the tables in the order they appear in the main body of the report.

Electronic Nicotine Delivery System (ENDS)

PREVALENCE AND CONSUMPTION

Table C1: Logistic Regression of Current ENDS Use: Change Over Time 2015 - 2019

Variable	B	SE	OR	t	p
Year	-0.013	0.053	0.987	-0.239	0.811
Intercept	23.026	107.700	1.00e+10	0.214	0.831

Table C2: Logistic Regression of Flavored ENDS Use: Difference From 2017

Variable	B	SE	OR	t	p
2017 (reference)					
2019	-0.245	0.546	0.783	-0.449	0.654
Intercept	1.837	0.295	6.278	6.228	<0.001

Table C3: Logistic Regression of Using a Customized Commercial Juice or Liquid From a Vape Shop Most Often: Difference From 2017

Variable	B	SE	OR	t	p
2017 (reference)					
2019	-0.081	0.453	0.922	-0.178	0.859
Intercept	1.620	0.271	5.052	5.972	<0.001

Table C4: Logistic Regression of Reason for Using ENDS: To Try Something New (Curious): Change Over Time 2015 - 2019

Variable	B	SE	OR	t	p
Year	-0.018	0.051	0.982	-0.358	0.721
Intercept	37.336	103.145	1.64e+16	0.362	0.717

Table C5: Logistic Regression of Reason for Using ENDS: To Reduce Cigarette Consumption: Change Over Time 2015 - 2019

Variable	B	SE	OR	t	p
Year	0.031	0.049	1.031	0.629	0.530
Intercept	-61.653	98.231	<0.001	-0.628	0.530

Table C6: Logistic Regression of Reason for Using ENDS: To Quit Smoking Cigarettes: Change Over Time 2015 – 2019

Variable	B	SE	OR	t	p
Year	0.039	0.050	1.039	0.773	0.439
Intercept	-77.558	100.449	<0.001	-0.772	0.440

Table C7: Multinomial Logistic Regression of Opinion on Whether Using ENDS Is Harmful to One's Health: Difference From 2017

Variable	B	SE	RRR	t	p
Not at all harmful					
2017 (reference)					
2019	-0.292	0.241	0.747	-1.211	0.226
Intercept	-0.997	0.124	0.369	-8.053	<0.001
Somewhat harmful					
2017 (reference)					
2019	0.368	0.131	1.444	2.803	0.005
Intercept	0.724	0.071	2.064	10.204	<0.001
Very harmful					
2017 (reference)					
2019	0.823	0.123	2.276	6.688	<0.001
Intercept	0.592	0.069	1.808	8.525	<0.001
Don't know (base outcome)					

Table C8: Marginal Effects of Year on Opinion on Whether Using ENDS Is Harmful to One's Health: Difference From 2017

Variable	B	SE	t	p
Not at all harmful	-0.038	0.010	-3.921	<0.001
Somewhat harmful	-0.038	0.022	-1.720	0.086
Very harmful	0.147	0.021	6.841	<0.001
Don't know	-0.071	0.014	-5.047	<0.001

Table C9: Multinomial Logistic Regression of Opinions on How Harmful Using ENDS Would Be Compared to Cigarette Smoking: Difference From 2017

Variable	B	SE	RRR	t	p
Much less harmful					
2017 (reference)					
2019	-0.387	0.219	0.679	-1.766	0.077
Intercept	-0.445	0.118	0.641	-3.757	<0.001
Somewhat less harmful					
2017 (reference)					
2019	-0.066	0.140	0.936	-0.470	0.638
Intercept	0.803	0.075	2.231	10.711	<0.001
About the same					
2017 (reference)					
2019	0.304	0.127	1.355	2.382	0.017
Intercept	0.951	0.070	2.589	13.522	<0.001
Somewhat more harmful					
2017 (reference)					
2019	0.304	0.186	1.355	1.631	0.103
Intercept	-0.755	0.114	0.470	-6.607	<0.001
Much more harmful					
2017 (reference)					
2019	0.557	0.201	1.745	2.769	0.006
Intercept	-1.006	0.142	0.366	-7.108	<0.001
Don't know (base outcome)					

Table C10: Marginal Effects of Year on Opinions on How Harmful Using ENDS Would Be Compared to Cigarette Smoking: Difference From 2017

Variable	B	SE	t	p
Much less harmful	-0.035	0.012	-2.988	0.003
Somewhat less harmful	-0.054	0.020	-2.662	0.008
About the same	0.067	0.021	3.136	0.002
Somewhat more harmful	0.012	0.011	1.152	0.249
Much more harmful	0.027	0.010	2.564	0.010
Don't know	-0.017	0.013	-1.298	0.194

Table C11: Multinomial Logistic Regression of Opinions on How Healthy Switching From Cigarette Smoking to Using ENDS Is: Difference From 2017

Variable	B	SE	RRR	t	p
Not at all healthy					
2017 (reference)					
2019	0.697	0.121	2.008	5.758	<0.001
Intercept	0.875	0.066	2.399	13.190	<0.001
Somewhat healthy					
2017 (reference)					
2019	0.174	0.133	1.190	1.308	0.191
Intercept	0.771	0.070	2.163	10.964	<0.001
Very healthy					
2017 (reference)					
2019	0.217	0.255	1.242	0.850	0.395
Intercept	-1.195	0.149	0.303	-8.047	<0.001
Don't know (base outcome)					

Table C12: Marginal Effects of Year on Opinions on How Healthy Switching From Cigarette Smoking to Using ENDS Is: Difference From 2017

Variable	B	SE	t	p
Not at all healthy	0.140	0.022	6.445	<0.001
Somewhat healthy	-0.075	0.021	-3.572	<0.001
Very healthy	-0.009	0.010	-0.832	0.405
Don't know	-0.056	0.013	-4.310	<0.001

INITIATION OF ENDS USE

Table C13: Logistic Regression: Using ENDS First Before Ever Trying Cigarette Smoking: Difference From 2017

Variable	B	SE	OR	t	p
2017 (reference)					
2019	0.797	0.333	2.219	2.396	0.017
Intercept	0.188	0.204	1.207	0.919	0.359

ENDS-RELATED DISPARITIES

Table C14: Logistic Regression of Current ENDS Use: Difference between American Indian and Other for 2019

Variable	B	SE	OR	t	p
American Indian	1.078	0.509	2.939	2.117	0.034
Other (reference)					
Intercept	-2.783	0.179	0.062	-15.561	<0.001

Table C15: Logistic Regression of Current ENDS Use: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	0.951	0.367	2.588	2.594	0.010
No BHCs (reference)					
Intercept	-2.950	0.204	0.052	-14.473	<0.001

Table C16: Logistic Regression of Current ENDS Use: Difference between Annual Household Income <$30,000 and $30,000+ for 2019

Variable	B	SE	OR	t	p
<$30K	0.176	0.364	1.193	0.485	0.628
$30K+ (reference)					
Intercept	-2.706	0.199	0.067	-13.589	<0.001

Table C17: Logistic Regression of Current ENDS Use: Difference between Ages 18-29 and Ages 30+ for 2019

Variable	B	SE	OR	t	p
18-29	1.036	0.342	2.817	3.032	0.002
30+ (reference)					
Intercept	-2.983	0.222	0.051	-13.441	<0.001

Use and Consumption of Cigarettes

Table C18: Logistic Regression of Current Smoking: Change Over Time 2006 - 2019

Variable	B	SE	OR	t	p
Year	-0.036	0.007	0.964	-5.245	<0.001
Intercept	71.330	13.893	9.51e+30	5.134	<0.001

Table C19: Logistic Regression of Chewing Tobacco, Snuff, Dip Use in the Past 30 Days: Change Over Time 2010 - 2019

Variable	B	SE	OR	t	p
Year	0.021	0.022	1.021	0.933	0.351
Intercept	-44.495	45.175	<0.001	-0.985	0.325

Table C20: Logistic Regression of Snus Use in the Past 30 Days: Change Over Time 2010 – 2019

Variable	B	SE	OR	t	p
Year	-0.062	0.039	0.940	-1.559	0.119
Intercept	120.186	79.578	1.57e+52	1.510	0.131

Table C21: Logistic Regression of Cigar Use in the Past 30 Days: Change Over Time 2010 – 2019

Variable	B	SE	OR	t	p
Year	-0.040	0.033	0.961	-1.208	0.227
Intercept	77.212	66.329	3.41e+33	1.164	0.244

Table C22: Logistic Regression of Regular Pipe Use in the Past 30 Days: Change Over Time 2010 – 2019

Variable	B	SE	OR	t	p
Year	-0.068	0.072	0.934	-0.944	0.345
Intercept	132.577	145.226	3.78e+57	0.913	0.361

Table C23: Logistic Regression of Water Pipe Use in the Past 30 Days: Change Over Time 2010 – 2019

Variable	B	SE	OR	t	p
Year	-0.055	0.048	0.947	-1.144	0.253
Intercept	105.501	96.235	6.59e+45	1.096	0.273

Table C24: Logistic Regression of Current ENDS Use: Change Over Time 2015 – 2019

Variable	B	SE	OR	t	p
Year	-0.013	0.053	0.987	-0.239	0.811
Intercept	23.026	107.700	1.00e+10	0.214	0.831

Goal Area 1: Preventing Initiation of Tobacco Use

Table C25: Logistic Regression of Smoking a Whole Cigarette for the First Time before Age 21 (Base Outcome = Ages 21+): Change Over Time 2010 – 2019

Variable	B	SE	OR	t	p
Year	0.003	0.018	1.003	0.185	0.853
Intercept	-4.509	36.762	0.011	-0.123	0.902

Table C26: Logistic Regression of Smoking at Least 100 Cigarettes in Lifetime: Difference in Age of Smoking a Whole Cigarette for the First Time

Variable	B	SE	OR	t	p
Age of Smoking a Whole Cigarette for the First Time					
<18	2.350	0.302	10.488	7.775	<0.001
18-20	1.195	0.345	3.304	3.465	0.001
21+ (reference)					
Age					
18-24	-2.279	0.516	0.102	-4.414	<0.001
25-34	-1.224	0.342	0.294	-3.577	<0.001
35-44	-1.443	0.325	0.236	-4.436	<0.001
45-54	-1.515	0.341	0.220	-4.450	<0.001
55-64	-0.725	0.290	0.484	-2.502	0.013
65+ (reference)					
Intercept	0.176	0.308	1.192	0.571	0.568

Table C27: Logistic Regression of Smoking a Cigarette Every Day for 30 Days in a Row for the First Time before Age 21 (Base Outcome = Ages 21+): Change Over Time 2010 – 2019

Variable	B	SE	OR	t	p
Year	0.027	0.021	1.027	1.271	0.204
Intercept	-52.803	42.835	<0.001	-1.233	0.218

Goal Area 2: Eliminating Nonsmokers' Exposure to Secondhand Smoke

SUPPORT FOR SMOKEFREE INDOOR AIR POLICIES AND LAWS

Table C28: Logistic Regression of Support for Smokefree Indoor Workplace Policies: Change Over Time 2002 – 2019

Variable	B	SE	OR	t	p
Year	0.048	0.005	1.049	10.375	<0.001
Intercept	-95.421	9.314	<0.001	-10.245	<0.001

Table C29: Logistic Regression of Support for Smokefree Indoor Restaurant Policies: Change Over Time 2002 – 2019

Variable	B	SE	OR	t	p
Year	0.073	0.004	1.076	16.907	<0.001
Intercept	-145.510	8.656	<0.001	-16.811	<0.001

Table C30: Multinomial Logistic Regression of Support for Smokefree Indoor Bar Policies: Change Over time 2015 – 2019

Variable	B	SE	RRR	t	p
Allowed					
Year	0.037	0.052	1.038	0.719	0.472
Intercept	-72.369	103.900	<0.001	-0.697	0.486
Never allowed					
Year	0.092	0.052	1.096	1.786	0.074
Intercept	-183.266	103.880	<0.001	-1.764	0.078
Don't know (base outcome)					

Table C31: Marginal Effects of Year on Support for Smokefree Indoor Bar Policies: Change Over time 2015 – 2019

Variable	B	SE	t	p
Allowed	-0.012	0.006	-2.107	0.035
Never allowed	0.015	0.006	2.632	0.009
Don't know	-0.003	0.002	-1.306	0.191

Table C32: Logistic Regression of Support for Smokefree Indoor Casino & Club Policies: Change Over Time 2015 – 2019

Variable	B	SE	OR	t	p
Year	0.041	0.023	1.042	1.807	0.071
Intercept	-82.448	45.651	<0.001	-1.806	0.071

Table C33: Logistic Regression of Support for a Statewide Smokefree Indoor Air Law for Indoor Workplaces: Change Over Time 2015 – 2019

Variable	B	SE	OR	t	p
Year	0.036	0.027	1.037	1.338	0.181
Intercept	-71.752	54.596	<0.001	-1.314	0.189

Table C34: Logistic Regression of Support for a Statewide Smokefree Air Law for Restaurants: Change Over Time 2015 – 2019

Variable	B	SE	OR	t	p
Year	0.059	0.027	1.061	2.196	0.028
Intercept	-118.597	54.594	<0.001	-2.172	0.030

Table C35: Multinomial Logistic Regression of Support for a Statewide Smokefree Air Law for Bars Over Time 2015 – 2019

Variable	B	SE	RRR	t	p
Support					
Year	0.058	0.054	1.059	1.073	0.283
Intercept	-113.893	108.405	<0.001	-1.051	0.293
Oppose					
Year	-0.004	0.054	0.996	-0.069	0.945
Intercept	9.841	109.026	18791.868	0.090	0.928
Don't know (base outcome)					

Table C36: Marginal Effects of Year on Support for a Statewide Smokefree Air Law for Bars Over Time 2015 – 2019

Variable	B	SE	t	p
Support	0.015	0.005	2.772	0.006
Oppose	-0.014	0.005	-2.561	0.010
Don't know	-0.001	0.002	-0.559	0.576

Table C37: Logistic Regression of Support for a Statewide Smokefree Air Law for Casinos and Clubs Over Time 2015 – 2019

Variable	B	SE	OR	t	p
Year	0.042	0.023	1.043	1.828	0.068
Intercept	-84.339	46.246	<0.001	-1.824	0.068

Table C38: Logistic Regression of Support for a Statewide Smokefree Indoor Air Law for Indoor Workplace in 2019: Association with Demographic Characteristics

Variable	B	SE	OR	t	p
Age					
18-24	0.244	0.395	1.277	0.618	0.537
25-34	0.387	0.315	1.472	1.227	0.220
35-44	0.219	0.309	1.245	0.709	0.479
45-54	0.498	0.309	1.645	1.609	0.108
55-64	-0.122	0.249	0.885	-0.491	0.624
65+ (reference)					
Gender					
Men	-0.830	0.203	0.436	-4.081	<0.001
Women (reference)					
Annual household income					
<$30K	-0.381	0.288	0.683	-1.325	0.185
$30K+ (reference)					
Education					
Associate or less	-0.462	0.206	0.630	-2.248	0.025
bachelor's or higher (reference)					
Race					
Non-White	-0.209	0.332	0.812	-0.629	0.530
White (reference)					
Ethnicity					
Hispanic	0.596	0.425	1.814	1.402	0.161
Non-Hispanic (reference					
People who self-identified as LGBTQ					
LGBTQ	0.124	0.547	1.132	0.227	0.821
People who self-identified as straight					
Intercept	2.110	0.231	8.251	9.130	<0.001

Table C39: Logistic Regression of Support for a Statewide Smokefree Air Law for Restaurants in 2019: Association with Demographic Characteristics

Variable	B	SE	OR	t	p
Age					
18-24	-0.139	0.377	0.870	-0.370	0.712
25-34	0.319	0.337	1.376	0.946	0.344
35-44	0.009	0.311	1.009	0.030	0.976
45-54	0.418	0.318	1.520	1.315	0.189
55-64	-0.336	0.257	0.714	-1.311	0.190
65+ (reference)					
Gender					
Men	-0.898	0.200	0.407	-4.500	<0.001
Women (reference)					
Annual household income					
<$30K	-0.575	0.269	0.563	-2.134	0.033
$30K+ (reference)					
Education					
Associate or less	-0.332	0.214	0.718	-1.547	0.122
Bachelor's or higher (reference)					
Race					
Non-White	0.446	0.359	1.561	1.241	0.215
White (reference)					
Ethnicity					
Hispanic	0.394	0.461	1.482	0.854	0.393
Non-Hispanic (reference)					
People who self-identified as LGBTQ					
LGBTQ	-1.283	0.469	0.277	-2.735	0.006
People who self-identified as straight (reference)					
Intercept	2.329	0.243	10.273	9.578	<0.001

Table C40: Logistic Regression of Support for a Statewide Smokefree Air Law for Bars in 2019: Association with Demographic Characteristics

Variable	B	SE	OR	t	p
Age					
18-24	-0.415	0.311	0.660	-1.335	0.182
25-34	-0.200	0.255	0.819	-0.783	0.433
35-44	-0.339	0.259	0.712	-1.308	0.191
45-54	-0.083	0.239	0.920	-0.349	0.727
55-64	-0.371	0.214	0.690	-1.730	0.084
65+ (reference)					
Gender					
Men	-0.546	0.162	0.579	-3.371	0.001
Women (reference)					
Annual household income					
<$30K	-0.480	0.252	0.619	-1.901	0.057
$30K+ (reference)					
Education					
Associate or less	-0.354	0.164	0.702	-2.161	0.031
Bachelor's or higher (reference)					
Race					
Non-White	0.081	0.294	1.084	0.275	0.784
White (reference)					
Ethnicity					
Hispanic	0.520	0.385	1.682	1.350	0.177
Non-Hispanic (reference)					
People who self-identified as LGBTQ					
LGBTQ	-0.805	0.465	0.447	-1.733	0.083
People who self-identified as straight (reference)					
Intercept	1.146	0.187	3.147	6.143	<0.001

Table C41: Logistic Regression of Support for a Statewide Smokefree Air Law for Casinos and Clubs in 2019: Association with Demographic Characteristics

Variable	B	SE	OR	t	p
Age					
18-24	-0.290	0.309	0.749	-0.937	0.349
25-34	0.064	0.257	1.066	0.250	0.803
35-44	-0.106	0.257	0.900	-0.411	0.681
45-54	0.311	0.237	1.365	1.310	0.190
55-64	-0.162	0.213	0.851	-0.758	0.449
65+ (reference)					
Gender					
Men	-0.669	0.162	0.512	-4.140	<0.001
Women (reference)					
Annual household income					
<$30K	-0.470	0.244	0.625	-1.926	0.054
$30K+ (reference)					
Education					
Associate or less	-0.107	0.165	0.899	-0.645	0.519
Bachelor's or higher (reference)					
Race					
Non-White	0.118	0.296	1.125	0.398	0.690
White (reference)					
Ethnicity					
Hispanic	-0.013	0.370	0.987	-0.035	0.972
Non-Hispanic (reference)					
People who self-identified as LGBTQ					
LGBTQ	-0.818	0.448	0.441	-1.825	0.068
people who self-identified as straight (reference)					
Intercept	0.887	0.182	2.428	4.869	<0.001

SUPPORT FOR OTHER SMOKEFREE AIR POLICIES AND LAWS

Table C42: Logistic Regression of Support for Smokefree Parks: Change Over Time 2010 – 2019

Variable	B	SE	OR	t	p
Year	0.041	0.014	1.042	2.929	0.003
Intercept	-80.771	28.064	<0.001	-2.878	0.004

Table C43: Multinomial Logistic Regression of Support for a Smokefree Air Law for Outdoor Workplaces: Change Over Time 2015 – 2019

Variable	B	SE	RRR	t	p
Support					
Year	0.028	0.050	1.028	0.551	0.582
Intercept	-54.223	100.865	<0.001	-0.538	0.591
Oppose					
Year	-0.002	0.048	0.998	-0.048	0.962
Intercept	6.749	96.309	852.799	0.070	0.944
Don't know (base outcome)					

Table C44: Logistic Regression of Support for Tobacco-Free Schools: Change Over Time 2010 – 2019

Variable	B	SE	OR	t	p
Year	-0.019	0.016	0.981	-1.203	0.229
Intercept	39.754	31.546	1.84e+17	1.260	0.208

EXPOSURE TO SECONDHAND SMOKE

Table C45: Logistic Regression of Smoking Prohibited Outdoors at Work: Difference From 2010 to 2012

Variable	B	SE	OR	t	p
2010 (reference)					
2012	-0.488	0.144	0.614	-3.397	0.001
Intercept	-0.595	0.118	0.552	-5.043	<0.001

Table C46: Logistic Regression of Smoking Prohibited Outdoors at Work: Change Over Time 2012 – 2019

Variable	B	SE	OR	t	p
Year	0.011	0.017	1.011	0.654	0.513
Intercept	-23.441	34.222	<0.001	-0.685	0.493

Table C47: Logistic Regression of Workplace Secondhand Smoke (SHS) Exposure: Change Over Time 2010 – 2019

Variable	B	SE	OR	t	p
Year	0.005	0.018	1.006	0.298	0.765
Intercept	-12.444	37.140	<0.001	-0.335	0.738

Table C48: Logistic Regression of SHS Exposure in Indoor Public Places: Change Over Time 2012 – 2019

Variable	B	SE	OR	t	p
Year	-0.078	0.018	0.925	-4.233	<0.001
Intercept	154.700	36.995	1.53e+67	4.182	<0.001

Table C49: Logistic Regression of SHS Exposure in Outdoor Public Places: Change Over Time 2012 – 2019

Variable	B	SE	OR	t	p
Year	-0.065	0.013	0.937	-4.966	<0.001
Intercept	130.130	26.325	3.27e+56	4.943	<0.001

Table C50: Logistic Regression of SHS Exposure in Indoor or Outdoor Public Places: Change Over Time 2012 – 2019

Variable	B	SE	OR	t	p
Year	-0.070	0.013	0.933	-5.533	<0.001
Intercept	140.433	25.452	9.75e+60	5.518	<0.001

Table C51: Logistic Regression of SHS Exposure in Indoor Public Places: Difference by Current Smoking Status

Variable	B	SE	OR	t	p
Current smoker	0.503	0.329	1.654	1.530	0.126
Nonsmoker (reference)					
Intercept	-2.302	0.133	0.100	-17.350	<0.001

Table C52: Logistic Regression of SHS Exposure in Outdoor Public Places: Difference by Current Smoking Status

Variable	B	SE	OR	t	p
Current smoker	0.172	0.251	1.188	0.684	0.494
Nonsmoker (reference)					
Intercept	-0.898	0.086	0.407	-10.410	<0.001

Table C53: Logistic Regression of SHS Exposure in Indoor or Outdoor Public Places: Difference by Current Smoking Status

Variable	B	SE	OR	t	p
Current smoker	0.214	0.236	1.239	0.906	0.365
Nonsmoker (reference)					
Intercept	-0.684	0.082	0.505	-8.308	<0.001

Table C54: Multinomial Logistic Regression of Opinion on Harmfulness of Secondhand Smoke: Change Over Time 2010 – 2019

Variable	B	SE	RRR	t	p
Not at all harmful (base outcome)					
Somewhat harmful					
Year	0.065	0.035	1.067	1.840	0.066
Intercept	-128.778	71.249	<0.001	-1.807	0.071
Very harmful					
Year	0.059	0.034	1.061	1.713	0.087
Intercept	-115.681	69.227	<0.001	-1.671	0.095

Goal Area 3: Promoting Cessation

TOBACCO CESSATION AND TOBACCO TAX

Table C55: Multinomial Logistic Regression of Opinions on Cigarette Tax Increase: Change Over Time 2015 – 2019

Variable	B	SE	RRR	t	p
A decrease					
Year	0.324	0.111	1.383	2.924	0.003
Intercept	-656.405	223.722	<0.001	-2.934	0.003
No change					
Year	-0.023	0.043	0.978	-0.524	0.600
Intercept	46.944	87.150	2.44e+20	0.539	0.590
An increase					
Year	0.036	0.042	1.037	0.869	0.385
Intercept	-71.245	83.781	<0.001	-0.850	0.395
Don't know (base outcome)					

Table C56: Marginal Effects of Year on Opinions on Wyoming Cigarette Tax Increase: Change Over Time 2015 – 2019

Variable	B	SE	t	p
A decrease	0.004	0.002	2.312	0.021
No change	-0.013	0.005	-2.502	0.012
An increase	0.011	0.006	2.023	0.043
Don't know	-0.001	0.004	-0.385	0.700

Table C57: Multinomial Logistic Regression of Support for an Increase in the Tax on Chewing Tobacco, Snuff, Dip, or Snus: Change Over Time 2015 – 2019

Variable	B	SE	RRR	t	p
For an increase					
Year	0.040	0.047	1.041	0.860	0.390
Intercept	-78.903	93.782	<0.001	-0.841	0.400
Against an increase					
Year	-0.009	0.048	0.991	-0.188	0.851
Intercept	19.719	96.815	3.66e+08	0.204	0.839
Don't know (base outcome)					

SMOKERS' CESSATION EFFORTS

Table C58: Multinomial Logistic Regression of Smoker's Quit Attempt: Change Over Time 2010 – 2019

Variable	B	SE	RRR	t	p
Never tried to quit (base outcome)					
Tried to quit in lifetime, not past year					
Year	0.032	0.056	1.033	0.577	0.564
Intercept	-64.133	112.644	<0.001	-0.569	0.569
Tried to quit in past year					
Year	0.055	0.053	1.056	1.024	0.306
Intercept	-109.393	107.748	<0.001	-1.015	0.310

Table C59: Logistic Regression of Non-Tobacco User's Awareness of Quitline Services: Change Over Time 2010 – 2019

Variable	B	SE	OR	t	p
Year	0.030	0.011	1.031	2.713	0.007
Intercept	-60.757	22.334	<0.001	-2.720	0.007

Table C60: Logistic Regression of Tobacco User's Awareness of Quitline Services: Change Over Time 2010 – 2019

Variable	B	SE	OR	t	p
Year	0.014	0.024	1.014	0.558	0.577
Intercept	-26.304	48.989	<0.001	-0.537	0.591

Table C61: Logistic Regression of Non-Tobacco User's Awareness of Quitline Services: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	0.250	0.227	1.284	1.103	0.270
No BHCs (reference)					
Intercept	-0.117	0.089	0.889	-1.320	0.187

Table C62: Logistic Regression of Tobacco User's Awareness of Quitline Services: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	0.449	0.276	1.567	1.629	0.103
No BHCs (reference)					
Intercept	1.048	0.115	2.851	9.133	<0.001

Table C63: Logistic Regression of Smoker's WQT Use for Their Quit Attempts: Change Over Time 2012 - 2019

Variable	B	SE	OR	t	p
Year	0.050	0.081	1.051	0.619	0.536
Intercept	-102.459	162.360	<0.001	-0.631	0.528

Table C64: Logistic Regression of Smoker's NRT Use for Their Quit Attempts: Change Over Time 2012 - 2019

Variable	B	SE	OR	t	p
Year	0.006	0.054	1.006	0.116	0.907
Intercept	-13.592	108.837	<0.001	-0.125	0.901

Table C65: Logistic Regression of Smoker's Rx Medication Use for Their Quit Attempts: Change Over Time 2012 - 2019

Variable	B	SE	OR	t	p
Year	0.020	0.063	1.020	0.310	0.757
Intercept	-41.525	127.854	<0.001	-0.325	0.745

Table C66: Logistic Regression of Smoker's Obstacles to Quitting: Cravings for a Cigarette: Difference From 2017

Variable	B	SE	OR	t	p
2017 (reference)					
2019	-0.024	0.348	0.977	-0.068	0.946
Intercept	1.243	0.217	3.466	5.735	<0.001

Table C67: Logistic Regression of Smoker's Obstacles to Quitting: Loss of a Way to Handle Stress: Difference From 2017

Variable	B	SE	OR	t	p
2017 (reference)					
2019	-0.531	0.298	0.588	-1.783	0.075
Intercept	1.276	0.180	3.584	7.078	<0.001

Table C68: Logistic Regression of Smoker's Obstacles to Quitting: Other People Smoking around You: Difference From 2017

Variable	B	SE	OR	t	p
2017 (reference)					
2019	-0.316	0.271	0.729	-1.165	0.244
Intercept	0.567	0.161	1.763	3.524	<0.001

INVOLVEMENT OF HEALTHCARE PROVIDERS IN TOBACCO CESSATION

Table C69: Logistic Regression of Seeing a Healthcare Provider in the Past Year: Association with Smoking Status for 2019

Variable	B	SE	OR	t	p
Current smoker	-0.527	0.333	0.590	-1.585	0.113
Former smoker	0.030	0.332	1.031	0.091	0.927
Experimental smoker	-0.181	0.255	0.835	-0.709	0.478
Never smoker (reference)					
Intercept	2.057	0.187	7.826	10.980	<0.001

Goal Area 4: Identifying and Eliminating Tobacco-Related Disparities

AMERICAN INDIAN

Table C70: Logistic Regression of Current Smoking: Difference between American Indian and Other for 2019

Variable	B	SE	OR	t	p
American Indian	0.842	0.368	2.321	2.287	0.022
Other (reference)					
Intercept	-1.977	0.118	0.139	-16.759	<0.001

Table C71: Logistic Regression of Secondhand Smoke Exposure at Work: Difference between American Indian and Other for 2019

Variable	B	SE	OR	t	p
American Indian	0.558	0.412	1.747	1.354	0.176
Other (reference)					
Intercept	-1.338	0.123	0.262	-10.895	<0.001

BEHAVIORAL HEALTH

Table C72: Logistic Regression of Current Smoking: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	0.795	0.252	2.215	3.162	0.002
No BHCs (reference)					
Intercept	-2.107	0.133	0.122	-15.889	<0.001

Table C73: Multinomial Logistic Regression of Smoker's Quit Attempt: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	RRR	t	p
Never tried to quit (base outcome)					
Tried to quit in lifetime, not past year					
Any BHCs	-0.243	0.742	0.784	-0.327	0.744
No BHCs (reference)					
Intercept	0.835	0.429	2.306	1.949	0.051
Tried to quit in past year					
Any BHCs	0.324	0.780	1.383	0.415	0.678
No BHCs (reference)					
Intercept	0.639	0.444	1.894	1.439	0.150

Table C74: Logistic Regression of Smoker's Obstacles to Quitting: Cravings for a Cigarette: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	1.808	0.514	6.098	3.519	<0.001
No BHCs (reference)					
Intercept	0.956	0.308	2.602	3.108	0.002

Table C75: Logistic Regression of Smoker's Obstacles to Quitting: Loss of a Way to Handle Stress: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	1.660	0.638	5.261	2.604	0.009
No BHCs (reference)					
Intercept	0.457	0.270	1.579	1.690	0.091

Table C76: Logistic Regression of Smoker's Obstacles to Quitting: Worsening Anxiety: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	2.169	0.555	8.748	3.907	<0.001
No BHCs (reference)					
Intercept	-0.675	0.287	0.509	-2.357	0.019

Table C77: Logistic Regression of Smoker's Obstacles to Quitting: Other People Smoking Around You: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	0.162	0.499	1.176	0.325	0.745
No BHCs (reference)					
Intercept	0.251	0.258	1.285	0.972	0.331

Table C78: Logistic Regression of Smoker's Obstacles to Quitting: Cost of Medicines or Products: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	1.456	0.497	4.287	2.930	0.003
No BHCs (reference)					
Intercept	-1.571	0.295	0.208	-5.319	<0.001

Table C79: Logistic Regression of Smoker's Obstacles to Quitting: Worsening Depression: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	0.773	0.500	2.165	1.544	0.123
No BHCs (reference)					
Intercept	-1.007	0.320	0.365	-3.146	0.002

Table C80: Logistic Regression of Smoker's Obstacles to Quitting: Lack of Support From Others to Quit: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	0.890	0.567	2.435	1.569	0.117
No BHCs (reference)					
Intercept	-1.834	0.414	0.160	-4.433	<0.001

Table C81: Logistic Regression of Smoker's Obstacles to Quitting: Fear of Gaining Weight: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	0.782	0.552	2.185	1.417	0.157
No BHCs (reference)					
Intercept	-2.029	0.335	0.132	-6.052	<0.001

Table C82: Logistic Regression of Smoker's Obstacles to Quitting: Other: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	-0.348	0.551	0.706	-0.631	0.528
No BHCs (reference)					
Intercept	-1.347	0.339	0.260	-3.971	<0.001

Table C83: Logistic Regression of Smoker's Obstacles to Quitting: Cost of Classes: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	0.808	0.684	2.243	1.180	0.238
No BHCs (reference)					
Intercept	-2.590	0.491	0.075	-5.270	<0.001

Table C84: Logistic Regression of Secondhand Smoke Exposure at Work: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2019

Variable	B	SE	OR	t	p
Any BHCs	0.200	0.313	1.222	0.641	0.522
No BHCs (reference)					
Intercept	-1.349	0.130	0.259	-10.401	<0.001

ANNUAL HOUSEHOLD INCOME

Table C85: Logistic Regression of Current Smoking: Difference between Annual Household Income <$30,000 and $30,000+ for 2019

Variable	B	SE	OR	t	p
<$30K	1.080	0.285	2.945	3.796	<0.001
$30K+ (reference)					
Intercept	-2.132	0.133	0.119	-16.038	<0.001

Table C86: Logistic Regression of Secondhand Smoke Exposure at Work: Difference between Annual Household Income <$30,000 and $30,000+ for 2019

Variable	B	SE	OR	t	p
<$30K	-0.178	0.339	0.837	-0.524	0.600
$30K+ (reference)					
Intercept	-1.274	0.128	0.280	-9.980	<0.001

YOUNG ADULTS

Table C87: Multinomial Logistic Regression of Smoking Status: Difference between Ages 18–29 and Ages 30+ for 2019

Variable	B	SE	RRR	t	p
Current smoker					
18-29	-0.566	0.323	0.568	-1.753	0.080
30+ (reference)					
Intercept	-0.519	0.138	0.595	-3.756	<0.001
Former smoker					
18-29	-1.196	0.321	0.302	-3.731	<0.001
30+ (reference)					
Intercept	0.320	0.108	1.377	2.967	0.003
Experimental smoker					
18-29	-0.672	0.242	0.511	-2.779	0.005
30+ (reference)					
Intercept	0.476	0.100	1.609	4.735	<0.001
Never smoker (base outcome)					

Table C88: Marginal Effects of Age on Smoker's Quit Attempt: Difference between Age 18-29 and Age 30+ for 2019

Variable	B	SE	t	p
Current smoker	0.001	0.034	0.036	0.971
Former smoker	-0.139	0.042	-3.296	0.001
Experimental smoker	-0.032	0.047	-0.687	0.492
Never smoker	0.170	0.048	3.527	<0.001

Table C89: Logistic Regression of Secondhand Smoke Exposure at Work: Difference between Ages 18-29 and Ages 30+ for 2019

Variable	B	SE	OR	t	p
18-29	0.570	0.267	1.768	2.137	0.033
30+ (reference)					
Intercept	-1.464	0.142	0.231	-10.330	<0.001