



# 2021 Wyoming Adult Tobacco Survey

## *Wyoming Adults' Use of and Attitudes about Commercial Tobacco and Nicotine Products*

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# COMMUNITY PREVENTION UNIT

## ABOUT THIS REPORT

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# Background

Smoking is the leading preventable cause of death in the United States, annually causing more than 480,000 deaths. 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). In addition, scientists have known since the 1950s that smoking can cause lung cancer. This link between smoking and cancer was widely published in the landmark 1964 Surgeon General's report *Smoking and Health: Report of the Advisory Committee to the Surgeon General of the Public Health Service* (U.S. Department of Health, Education, and Welfare, 1964). Since then, further research has established that smoking cigarettes and breathing secondhand smoke causes multiple cancers and chronic diseases (U.S. Department of Health and Human Services [USDHHS], 2010, 2014).

The Surgeon General declared vaping (the use of e-cigarettes or electronic nicotine delivery systems [ENDS]; also known as e-cigarettes or vaping devices) an epidemic among youth and young adults in 2018 (USDHHS, 2018). Research indicates that vaping can lead to cigarette smoking (Berry et al., 2019; Hair et al., 2021). However, the CDC also states that vaping could be better than smoking for non-pregnant adult smokers if they completely switch from smoked tobacco products to ENDS (CDC, 2022a). More research is needed to learn about the long-term effects of vaping and breathing secondhand aerosol exhaled from someone who is using ENDS (CDC, 2022a).

Certain groups of people are more at risk of suffering the impacts of tobacco use than others. Research has repeatedly shown that tobacco companies have targeted promotional efforts toward certain neighborhoods, 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; Prochaska et al., 2017). 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 Substance Use and Tobacco Prevention Program (SUTPP) and the CDC share four goals:

1. Preventing initiation of tobacco use (CDC, 2014b)
2. Eliminating nonsmokers' exposure to secondhand smoke (CDC, 2017)
3. Promoting quitting among adults and young people (CDC, 2015)
4. Identifying and eliminating tobacco-related disparities (CDC, 2014b, 2015, 2017, 2021b)

The SUTPP uses a variety of strategies as it focuses on reducing the impact of tobacco use in Wyoming by achieving these goals. The SUTPP monitors its progress on these goals by tracking the use and availability of tobacco products including cigarettes, ENDS, 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 SUTPP, multiple federal agencies, county prevention specialists, and other groups 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 SUTPP/CDC goals, and the broader goal of reducing tobacco-related disease and death. In addition to analyzing the 2021 data, WYSAC used data from previous versions of the survey to analyze trends.

# 2021 ATS Methods

This report summarizes results from the 2021 ATS and trend analyses using previous versions of the ATS.

In this section, WYSAC provides a general summary of the methods used to collect and analyze the data for the 2021 ATS. Additional technical details, including criteria for determining statistical significance, are in the appendices.

Appendix A provides the technical details of the methods used to collect the data for the 2021 ATS as reported by WYSAC's Survey Research Center.

Appendix B provides 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.

Appendix C provides details of statistical analyses summarized in the body of this report.

Trained WYSAC telephone interviewers conducted the telephone interviews. Calling began on April 15, 2021, and ended on September 2, 2021. WYSAC callers completed 1,999 surveys (52% on cell phones; 48% 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 embarrassing or unpopular behaviors).

In addition, the 2021 ATS was administered during the ongoing COVID-19 pandemic. This presented logistical difficulties in hiring callers to conduct the interviews and maintaining a safe environment within the call center. Most results do not give a reason to suspect the pandemic had a large impact on the estimates reported in this document. That is, they are generally consistent with patterns from past data. Exceptions to this are noted in the report as needed.

The ATS has a complex skip pattern that means not all respondents are asked each question. For example, people who have never smoked are not asked about quitting smoking. 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. 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)

## *Background*

ENDS are electronic nicotine delivery systems, also known as e-cigarettes or vapes. When people use ENDS, they are vaping. Studies show that many young adults who have never smoked start using nicotine products by using ENDS (Bandi et al., 2021). 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. In 2018, the U.S. Surgeon General officially called youth and young adult vaping an epidemic (USDHHS, 2018).

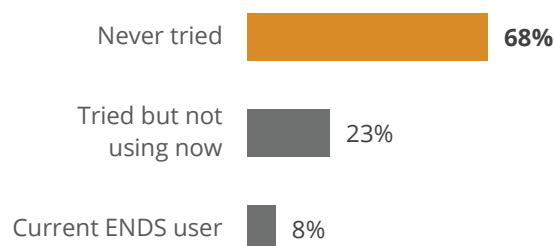
## *ENDS Use in Wyoming*

A limitation of the ATS is difficulty getting young adults to respond. With a small subset of the respondents being young adults, it is necessary to report on the full adult population. That may hide some key findings that would be clearer in a survey of young adults.

Most Wyoming adults (68%) have never tried ENDS, and few are current ENDS users (8%, Figure 1). For this report, current ENDS users are the respondents who said they use ENDS every day or some days.

**Figure 1: Most Adults Have Never Tried ENDS**

*2021 Wyoming adult ENDS use*

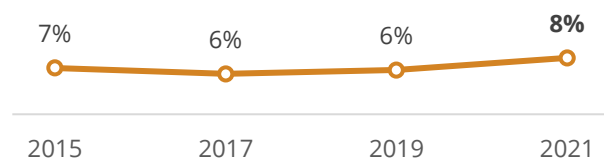


Note: Current ENDS users said they use ENDS every day or some days.

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## Figure 2: Adult ENDS Use 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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ENDS use was about as common in 2021 as it was in 2015 (Figure 2), the first time this question was asked on the ATS. The two-percentage-point increase from 2019 to 2021 was not significant.

## FLAVORED ENDS USE

In 2020, the FDA partially banned ENDS flavors except menthol and tobacco. However, the ban has large loopholes. It only applies to the cartridge-style ENDS, 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 prod-

ucts, like Puff Bar. According to the FDA, these exceptions avoided restricting all flavor options for adults who may be using ENDS to stop smoking (FDA, 2020). However, research shows that youth and young adults are using menthol instead of mint and are switching to the types of ENDS that can still have flavors (Truth Initiative, 2020).

In 2021, the use of flavored ENDS was common for Wyoming adults:

- 82% of current ENDS users had used products flavored to taste like mint, candy, fruit, chocolate, or other flavors besides tobacco in the past 30 days.
- 46% of adults who had tried ENDS in their lifetime did so for reasons related to flavor.

Wyoming adults' use of flavored ENDS products has not significantly changed between 2017 and 2021. 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 TYPE

In 2021, the most popular type of ENDS was a customized commercial juice from a vape shop. Most adult ENDS users (74%) said they had used that type of ENDS in the past 30 days. The FDA's 2020 flavor ban did not cover these types of ENDS.

JUUL was by far the most preferred cartridge-style ENDS brand; 27% of ENDS users reported using JUUL most often in the previous 30 days. The next most frequently used brand was Vuse at 19% of users.

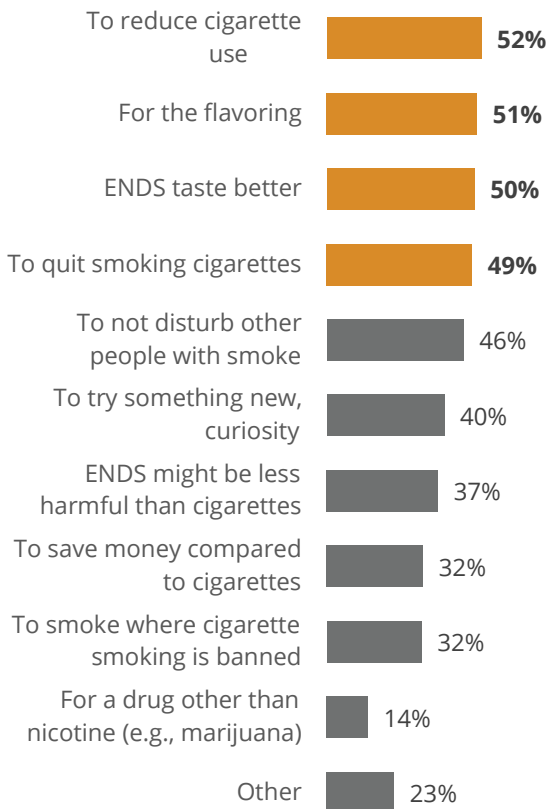
## REASONS FOR TRYING ENDS

Curiosity was the most popular reason for trying ENDS (61%) among all adults who had ever tried ENDS. Reasons for trying ENDS show a different pattern for current users.

For current ENDS users, the top four reasons for trying ENDS were to reduce cigarette use (52%), for the flavoring (51%), ENDS taste better (50%), and to quit smoking cigarettes (49%; Figure 3). These results have not changed significantly since these questions were first asked in 2015.

**Figure 3: Current ENDS Users Use ENDS for Switching From Smoking and for Flavor**

*Current ENDS users' reasons for using ENDS*



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

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However, comparisons of 2019 and 2021 data may indicate emerging trends. There was a significant decrease for current ENDS users trying ENDS to reduce cigarette use, from 76% to 52%. There was a significant decrease for current ENDS users trying ENDS to quit smoking cigarettes, from 72% to 49%.

Some research suggests that use of ENDS with nicotine is associated with quitting smoking. The CDC has said that smokers may see benefits from completely switching from smoking to ENDS (CDC, 2022a). However, there is not enough evidence to be sure (CDC, 2020). More research is needed to learn if ENDS are a broadly successful tobacco-related harm reduction tool. The FDA has not approved ENDS as a cessation aid (FDA, 2022).



## DO PEOPLE THINK ENDS USE IS HARMFUL?

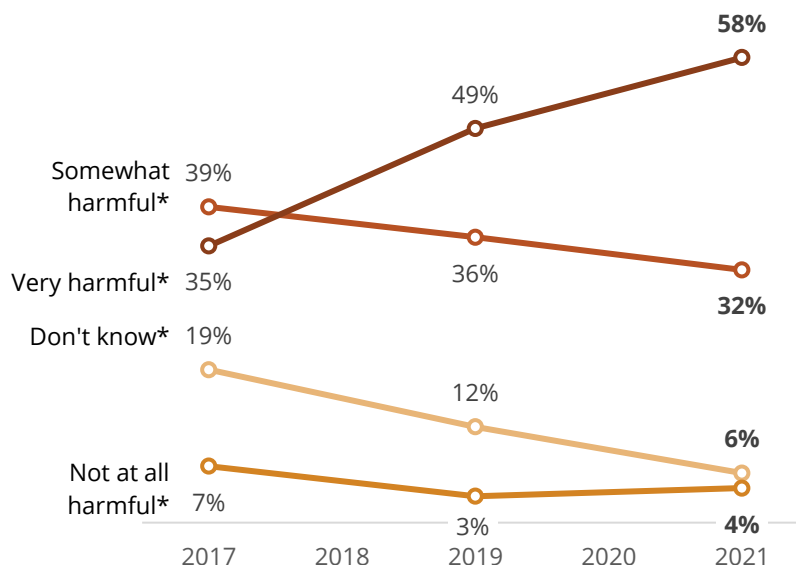
The 2021 ATS included a series of questions regarding how harmful people think ENDS use is. Perceived harmfulness of ENDS has significantly increased since 2017 (Figure 4).

One reason for this change may be that the public health community, including the SUTPP and county partners, sponsored media messaging about the harms of ENDS use after 2017.

In 2021, compared to 2017, more adults said that vaping was at least as harmful as smoking (Table 1).

**Figure 4: Since 2017, More Adults See ENDS Use as Very Harmful**

*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 change over time 2017-2021.

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**Table 1: Adults Increasingly See Vaping and Smoking as Similarly Harmful**

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

	2017	2019	2021
Much less harmful	9%	5%	3%
Somewhat less harmful	31%	25%	17%
About the same	35%	42%	49%
Somewhat more harmful	6%	8%	12%
Much more harmful	5%	8%	12%
Don't know	14%	12%	6%

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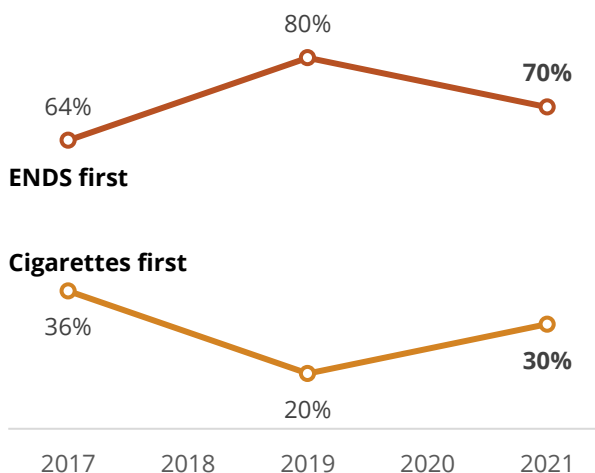
## Starting ENDS Use

Current smokers (see Table 2 for a summary of the four smoking status categories) who had also tried ENDS were asked whether they used cigarettes or ENDS first. For about half of these smokers (51%), this question was not applicable because ENDS were not on the market (to their knowledge) when they started smoking. Most current smokers reported using ENDS before cigarettes (Figure 5). There was no significant difference from 2017 to 2021.

Although a different research approach would provide stronger evidence, the 2021 ATS data support emerging research (such as Berry et al., 2019 and Hair et al., 2021) that vaping may lead people to smoke, including some people who would not otherwise have started smoking.

**Figure 5: Many Current Smokers Report Trying ENDS Before Cigarettes**

*Percentage of current smokers who had also tried ENDS and used ENDS first or cigarettes first*



Note: The 2019 estimates have n<50.

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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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## Quitting ENDS Use

In 2021, 34% of adults who were current ENDS users tried to quit in the past year or in their lifetime (Figure 6).

## Conclusion

These findings reflect the full adult population of Wyoming. Surveys focused on young adults or youth may find different patterns.

Many current ENDS users tried ENDS for the flavor or to try to quit or cut back on smoking.

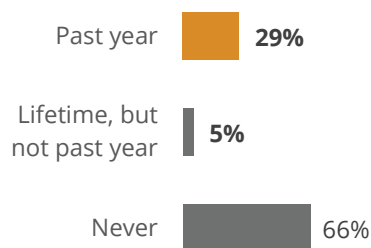
Current research (CDC, 2022a; CDC, 2020) does not show a consistent benefit of using ENDS to quit smoking. The FDA has not approved ENDS as a cessation aid (FDA, 2022).

Perceived harm of ENDS has grown over time. Compared to 2017, more Wyoming adults say vaping is at least as harmful as smoking.

Many ENDS users want to quit. Just over one third of current ENDS users had tried to quit ENDS in the past year or in their lifetime.

## Figure 6: Almost One Third of Current ENDS Users Tried to Quit in the Past Year

Timing of quit attempts by current ENDS users



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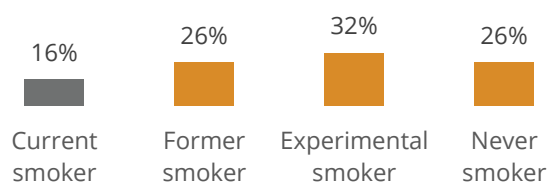
# Cigarette Smoking and Use of Other Commercial Tobacco and Nicotine Products

## *Cigarette Smoking in 2021*

Most adults (58%) have never been regular smokers. That is, they have not smoked at least 100 cigarettes in their lifetime. Adult Tobacco Survey (ATS) responses were divided into four key categories of smoking status, described in Table 3. Most adults (84%) were not current smokers; 16% of adults were current smokers. About one quarter (26%) of adults were former smokers, and about one third (32%) were experimental smokers. About one quarter (26%) of all adults had never tried smoking (Figure 7).

**Figure 7: Most Adults Were Not Current Smokers**

*2021 Wyoming adult smoking status*



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**Table 3: Definitions of Smoking Status**

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

	Current 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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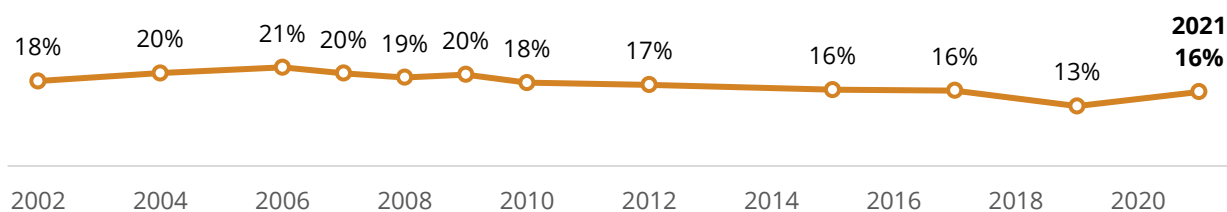
## Cigarette Use Over Time

On December 20, 2019, President Trump signed a bipartisan bill that raised the minimum legal sales age for all commercial tobacco/nicotine 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). These changes in laws did not affect most of the ATS respondents.

Cigarette smoking has become less common since a recent peak of 21% in 2006. Since then, the smoking rate has dropped significantly to 16% in 2021. The three-percentage-point difference between the 2019 and 2021 smoking rates was not significant (Figure 8).

**Figure 8: Smoking Has Become Less Common**

*Percentage of adults who are current smokers*



Note: The adult smoking rate is the percentage of adults who have smoked 100 cigarettes and currently smoke every day or some days. There is not a significance difference between 2019 and 2021. The downward trend from the peak in 2006 is significant.

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## Other Commercial Tobacco and Nicotine Products (Including ENDS)

Cigarettes, ENDS, and chewing tobacco were the most commonly used commercial tobacco/nicotine products. Cigarettes remained the preferred tobacco/nicotine product (Figure 9).

Use of non-cigarette commercial tobacco/nicotine products has remained consistent since 2010. The use of ENDS and chewing tobacco was about the same in 2021 as in 2019, but slight changes in the percentages made ENDS use rise from third to second most popular. Chewing tobacco dropped from second to third most popular.

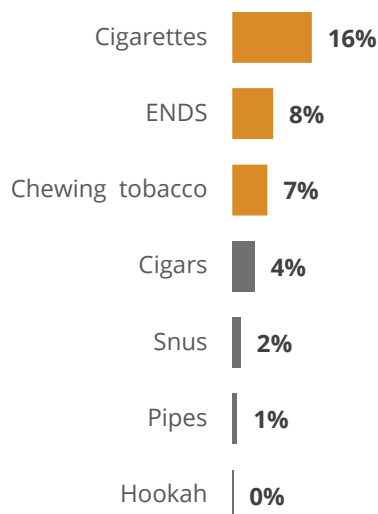
## Conclusions

The adult smoking rate has decreased significantly since its recent peak in 2006. However, since 2010, use of all commercial tobacco/nicotine products has remained fairly consistent.

Cigarettes, ENDS, and chewing tobacco were the three most popular commercial tobacco/nicotine products for adults. ENDS are a subject of concern for youth and young adults because of national trends showing increased use (Gentzke et al., 2022) and the potential for them to lead to cigarette smoking (Berry et al., 2019; Hair et al., 2021). Their relative popularity is also increasing.

### Figure 9: Cigarettes, ENDS, and Chewing Tobacco Were the Most Commonly Used Commercial Tobacco/Nicotine Products Among Adults

Percentage of adults reporting current cigarette, ENDS, chewing tobacco, or other commercial tobacco/nicotine use



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

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**In 2021, cigarettes, ENDS, and chewing tobacco were the most popular commercial tobacco/nicotine products for adults.**

# Commercial Tobacco and Nicotine Taxes

Preventing new cigarette smoking and decreasing the use of other commercial tobacco and nicotine products are key goals of the SUTPP and the CDC.

According to the CDC, increasing tobacco product prices is an effective way to prevent youth from starting to smoke (CDC, 2014b). It also encourages adults to quit smoking (CDC, 2015).

Taxes are one way that state governments can influence tobacco prices. Nationally, every 10% increase in cigarette prices decreases cigarette use by 3–5%. Raising cigarette prices prevents youth and people with lower incomes from smoking and reduces the average number of cigarettes smoked (U.S. Department of Health and Human Services [USDHHS], 2014).

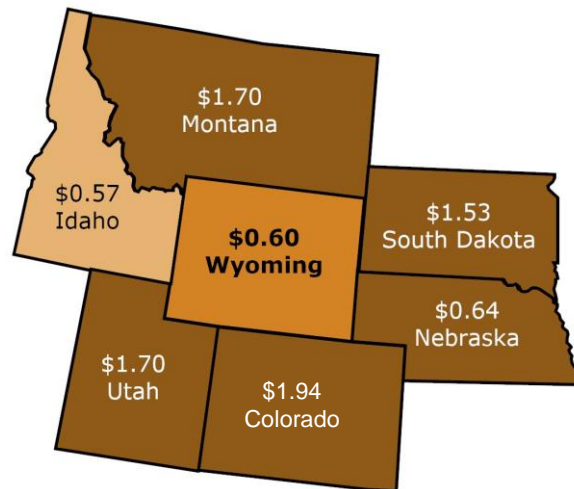
In one study of adults aged 50 years and older, a \$1 increase in the price of cigarettes was associated with a 6% higher quit rate (Stevens et al., 2017). Increasing cigarette taxes could encourage quitting among older adults and could decrease the risk of smoking-related diseases.

## *Commercial Tobacco and Nicotine Tax Rates*

### **CIGARETTES**

At the time of data collection, Wyoming's cigarette excise tax was \$0.60 per pack, the second lowest in the region (Figure 10). Wyoming ranks 44th out of 51 states (including DC) on cigarette taxes (CDC, 2021c). Wyoming's cigarette excise tax has not changed since 2003.

**Figure 10: Wyoming's Cigarette Tax Second Lowest Among Neighboring States**



Source: CDC, 2021c.

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## SMOKELESS TOBACCO

At the time of data collection, Wyoming’s smokeless tobacco (chewing tobacco, snuff, dip, or snus) tax had a minimum tax of \$0.60 per ounce, with an additional \$0.60 per ounce for packaging larger than one ounce.

## ELECTRONIC NICOTINE DELIVERY SYSTEM

Since July 2020 and through the time of data collection, Wyoming has had a default ENDS tax at the rate of 15% of the wholesale purchase price. If the tax is not paid by the wholesaler, consumers pay 7.5% of the retail purchase price (2021 Wyoming Statute 39-18-104[g] <https://wyo-leg.gov/NXT/gateway.dll?f=templates&fn=default.htm>).

### *Support for Evidence-Based Policy Has Declined*

In the 2019 ATS, over half of Wyoming adults supported increasing the taxes on cigarettes (52%) and smokeless tobacco (54%; WYSAC, 2022). In 2021, support for increasing cigarette and smokeless tobacco tax had significantly decreased to just under half—44% and 46% respectively.

Support for increases in taxes on ENDS was stronger than for other taxes on tobacco or nicotine products (Table 4).

- More than half (55%) of Wyoming adults would support an increase in the ENDS tax,
- Less than half (44%) of Wyoming adults would support a cigarette tax increase, and
- Less than half (46%) of Wyoming adults would support a tax increase on chewing tobacco, snuff, dip, or snus.

**Table 4: Support for Evidence-Based Policy Was Strongest for ENDS**

*Percentage of adults who would support an increase in the tax*

	Support for an increase in the tax on ...		
	Cigarettes	Chewing tobacco, snuff, dip, or snus	E-cigarettes and vaping devices
For an increase	44%	46%	55%
Against an increase*	48%	46%	39%
Don't know	8%	7%	6%

\*The percentage for “against an increase” includes those who would support no changes or a decrease.



## *Cost of Smoking*

Smoking is the leading preventable cause of illness and death in the United States. In 2018, the costs of smoking-related illness totaled more than \$600 billion. This includes more than \$240 billion for direct medical care and more than \$372 billion in lost productivity (CDC, 2022b). In 2009, Wyoming's tobacco-related healthcare costs were \$258 million (CDC, 2021a).

Commercial tobacco/nicotine prevention programs have been shown to reduce smoking rates and smoking-related costs. A study of Washington State's tobacco/nicotine control program showed that for every \$1 spent on the program between 2000 and 2009, \$5 was saved in tobacco-related hospitalization costs (Dilley et al., 2012).

## *Conclusions*

Wyoming adults' support for increasing taxes on commercial tobacco/nicotine has decreased. In 2021, support for increasing cigarette and smokeless tobacco tax significantly decreased compared to 2019. Throughout the ATS 2021 data, there seems to be a decrease in support for government interventions that would benefit public health, including tax increases and smokefree indoor air policies and laws.

Between ATS 2019 and ATS 2021, there was a decline in support for public health policies as it related to the COVID pandemic (WYSAC, 2020). It is possible that this decrease has spilled over to other public health interventions.

Wyoming's cigarette excise tax has remained at \$0.60 per pack since 2003. Higher commercial tobacco taxes are an evidence-based way to keep youth from starting to smoke (CDC, 2014b). Increasing commercial tobacco and nicotine product pricing through taxation, minimum price laws, or other means is an evidence-based strategy for encouraging people to quit using commercial tobacco products (CDC, 2015). Wyoming could benefit from raising its tobacco or nicotine taxes.

# Goal Area 1: Preventing Commercial Tobacco Use

The SUTPP and the CDC share the goal of reducing the health burdens of tobacco use by preventing new tobacco use (CDC, 2014b).

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/>). 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 (FDA, 2021). This legislation, known as Tobacco 21 (T21), went into effect on December 20, 2019. On March 13, 2020, Governor Gordon signed a similar law specific to Wyoming, and the law became effective on July 1, 2020 (SF0050, 2020). Broad surveys, such as the ATS, with few young adults in the sample are not strong methods for showing short-term effects of T21.

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, responses to such questions are especially subject to memory errors. However, precise recall is not critical to the conclusions in this report.

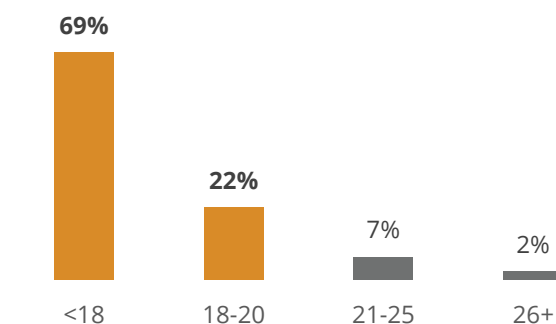
## *Age of Smoking a Whole Cigarette for the First Time*

The age of first smoking a whole cigarette is related to long-term smoking habits (CDC, 2014b).

In 2021, almost all (91%) of the Wyoming adults who had ever smoked an entire cigarette smoked their first one before the age of 21 (Figure 11). 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 11: Almost All Smoking Begins Before the Age of 21**

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



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## *Conclusions*

The vast majority of smokers begin when they are under the age of 21, especially under the age of 18. ATS data are consistent with other research findings that the earlier someone starts smoking, the more likely they are to continue smoking (Dierker et al., 2012; Sharapova et al., 2020). Wyoming may benefit from continued tobacco prevention efforts focusing on youth, though ATS data may not show results until years after success with youth happens.

**The vast majority of smokers started smoking when they were younger than 21.**

# Goal Area 2: Eliminating Nonsmokers' Exposure to Secondhand Smoke

The SUTPP and the CDC share the goal of reducing the health burdens of commercial tobacco or nicotine 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. These questions asked about smoking, not vaping.

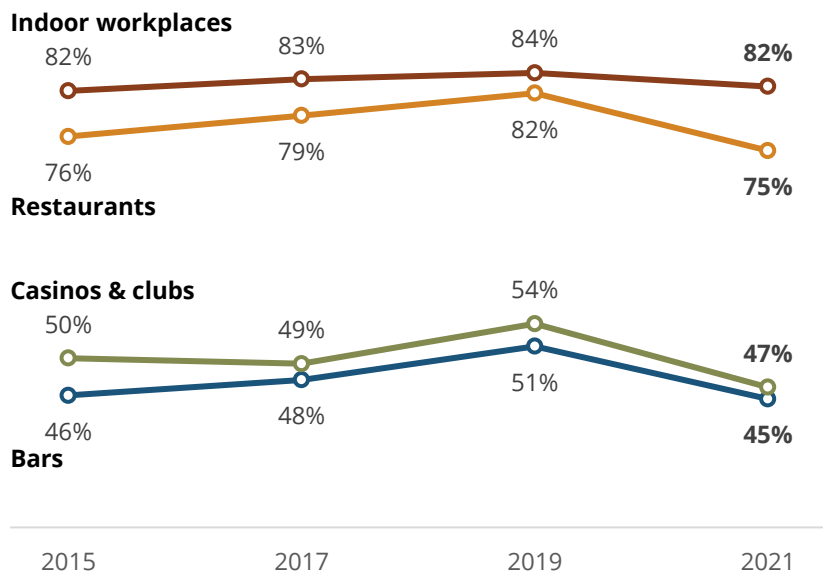
### SUPPORT FOR SMOKEFREE INDOOR AIR POLICIES

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

In 2021, most adults (82%; Figure 12) supported smoke-free indoor air policies for workplaces. Three-fourths (75%) of adults supported smokefree indoor air policies

**Figure 12: Adult Support for Smokefree Indoor Air Policies Remains Strong**

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



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for restaurants. Slightly less than half (47%) of adults supported smokefree indoor air policies for casinos and clubs. Under half (45%) of adults supported smokefree indoor air policies for bars.

Between 2019 and 2021, support for smokefree indoor air policies for restaurants and casinos and clubs significantly decreased. No other differences between 2019 and 2021 were significant.

Wyoming adults' support for indoor air policies has remained strong and consistent between 2015 and 2021.

## **SUPPORT FOR SMOKEFREE INDOOR AIR LAWS**

Additional survey questions asked respondents if they support or oppose statewide smokefree indoor air laws in Wyoming for the same venues. Support for smokefree air laws was similar to support for smokefree air policies. Details are in Appendix B: Wyoming 2021 ATS Frequency Tables and Appendix C: Statistical Analysis Methods and Detailed Results.

### *Support for Other Smokefree Air Policies and Laws*

#### **SMOKEFREE PARKS POLICIES**

In 2021, four out of five Wyomingites (80%) thought smoking should be restricted at outdoor parks, at least in some manner. This support has remained consistent since 2010. In 2021, 27% of adults thought that smoking should never be allowed, and 53% of adults thought that smoking should be allowed only at some times or in some places.

#### **SMOKEFREE WORKPLACES LAWS**

Support for laws making outdoor workplaces smokefree was substantially lower than support for laws making indoor workplaces smokefree: In 2021, only 22% of adults supported a statewide smokefree air law for all outdoor workplaces, compared to 77% for indoor workplaces. The level of support for such a law has not changed significantly since comparable questions were first asked in 2015. There was no question about support for policies against smoking outdoors at work.

#### **TOBACCO-FREE SCHOOL POLICIES**

In 2021, most adults (85%) thought commercial tobacco and nicotine use should be completely banned at schools. This support has been consistent since 2010. There was no significant difference of support between adults who were living with a child aged 17 or younger and those adults who were not.

## Exposure to Secondhand Smoke

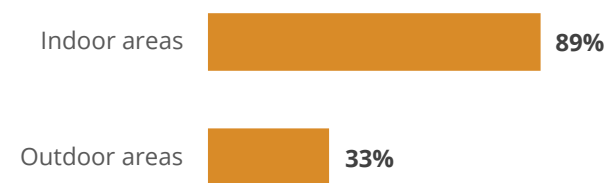
### SMOKING REGULATIONS AT WORK

Most employed adults (89%; Figure 13) reported that smoking was never allowed in indoor areas (including inside a vehicle) at their place of work. The question asked since 2019 does not allow direct comparison to earlier data but does not show a dramatic change over time.

About one third (33%) of adults reported that smoking was not allowed in outdoor areas. This has significantly increased since 2012 (25%). There is still a large gap between indoor and outdoor policies at work. Workers are better protected indoors than outdoors at work.

### Figure 13: Most Adults Are Protected From Secondhand Smoke Indoors at Their Workplace

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



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### EXPOSURE TO SECONDHAND SMOKE AT WORK AND IN PUBLIC PLACES

In 2021, most employed adults (82%) were not exposed to secondhand smoke at their workplace. Still, 18% of employed adults reported experiencing secondhand smoke at their workplace either indoors or outdoors. There's been no significant difference over time between 2010 and 2021.

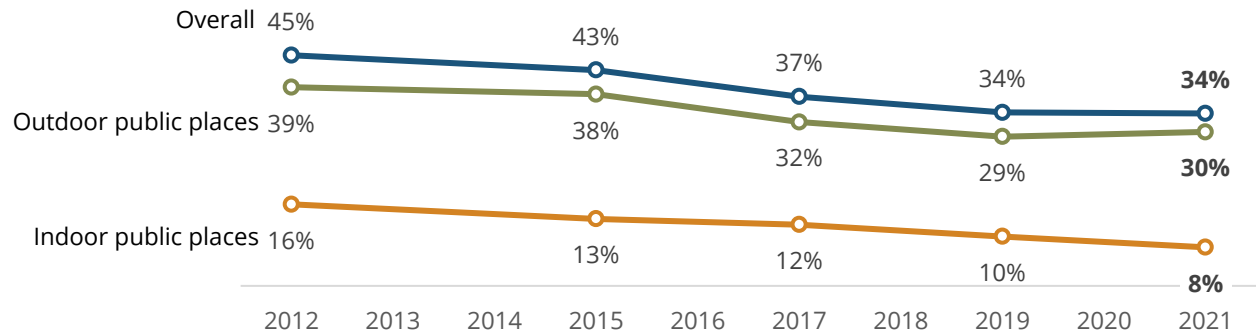
In 2021, most adults (66%) were not exposed to secondhand smoke in public places, indoors and outdoors. About one third (34%; Figure 14) of adults reported breathing someone else's secondhand smoke in an indoor or outdoor public place. Almost one third (30%) of adults reported experiencing exposure to secondhand smoke in outdoor public places. Very few (8%) adults reported being exposed to secondhand smoke in indoor public places. Although still a cause for concern, exposure to secondhand smoke has significantly decreased in public places, indoors and outdoors, between 2012 and 2021.

In 2021, the chances of being exposed to secondhand smoke while in a public place were not significantly different between current smokers and nonsmokers:

- 42% of current smokers reported exposure to secondhand smoke.
- 32% of nonsmokers reported exposure to secondhand smoke.

### Figure 14: Most Secondhand Smoke Exposure Occurs in 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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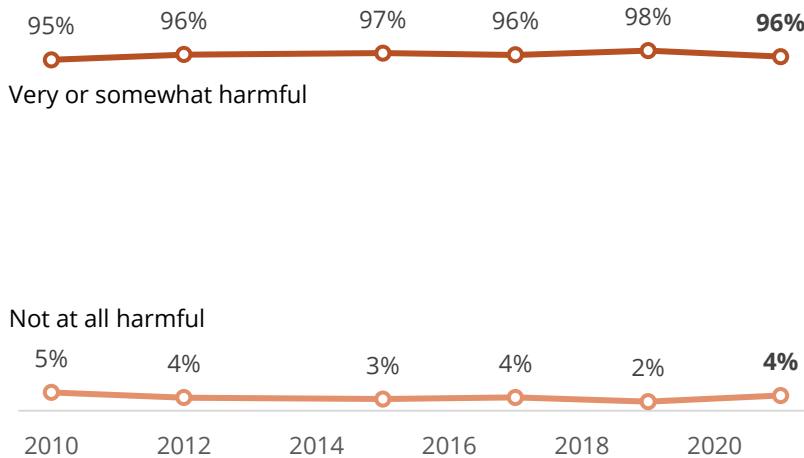
### OPINIONS ABOUT HARMFULNESS OF SECONDHAND SMOKE

Over the years, adults have almost unanimously agreed that breathing someone else's secondhand smoke is harmful to one's health (Figure 15). In 2021, the majority (96%) believed

secondhand smoke was very or somewhat harmful to one's health. Only 4% believed that it was not harmful. These levels of agreement have not changed significantly over time between 2010 and 2021.

### Figure 15: Most Adults Know Secondhand Smoke Is Harmful

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?



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## Conclusions

Over the years, exposure to secondhand smoke has significantly decreased in public places, indoors and outdoors. Two-thirds of adults reported that they were not exposed to secondhand smoke in public places, indoors or outdoors.

Adults have shown consistent and strong support for indoor air policies for workplaces and restaurants. Most adults thought that smoking should be restricted at outdoor parks. Wyoming adults continue to support a complete ban of commercial tobacco and nicotine use at schools.

Most employed adults are not exposed to secondhand smoke indoors at work.

Wyoming still has room for improvement. Adults are less protected in outdoor areas including at work and in public places. Adult support for outdoor policies at work and for indoor air policies at adult-oriented establishments was weak. Wyoming may benefit from focusing prevention efforts in these areas.

**Most adults thought commercial tobacco and nicotine use should be completely banned at schools.**



# Goal Area 3: Promoting Quitting

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

In this section, we explore smokers' desire to quit and quit attempts. We look at awareness of quitlines (for all tobacco and nicotine users, including current ENDS users), use of quit aids, and barriers to quitting. This section also covers commercial tobacco and nicotine users' visits to healthcare providers and conclusions and recommendations based on the data and best practices in helping people quit.

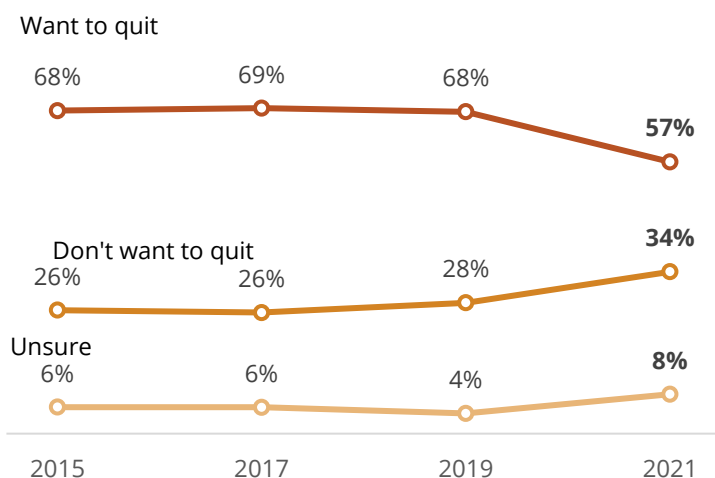
## *Efforts to Quit Smoking*

### SMOKERS' DESIRE TO QUIT

More than half of smokers (57%) wanted to quit smoking cigarettes (Figure 16). The 11-point difference between 2019 and 2021 for smokers who want to quit was not significant, probably because relatively few people answered the questions. There were no significant changes from 2015–2021.

**Figure 16: Most Smokers Wanted to Quit**

*Percentage of smokers who wanted to quit smoking cigarettes for good from 2015–2021*



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## SMOKERS' QUIT ATTEMPTS

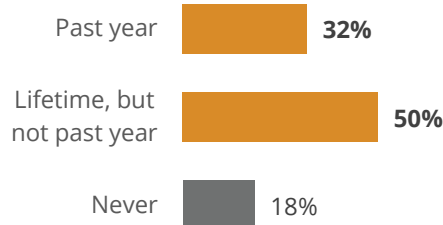
At some point in their lives, about four out of five current smokers (82%) had stopped smoking for at least one day because they were trying to quit for good.

About one third (32%) of current smokers have tried to quit smoking at least once in the past year because they were trying to quit for good (Figure 17).

Smokers' quit attempts have not changed significantly between 2010 and 2021.

### Figure 17: Most Smokers Have Tried to Quit

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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## Aids to Quit Smoking

### AWARENESS OF QUITLINES

Most commercial tobacco and nicotine users (including ENDS users, 68%) were aware of telephone quitline services (Figure 18). About half (49%) of non-tobacco and non-nicotine users were aware of telephone quitline services.

### Figure 18: Most Commercial Tobacco and Nicotine Users Were Aware of the Quitline

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



This may demonstrate the success of media campaigns by SUTPP and their partners, including county-level efforts.

**Most commercial tobacco and nicotine users were aware of quitline services.**

Note: WYSAC revised the 2021 ATS skip logic to incorporate the ENDS use status for these questions. Between 2010 and 2019, the ATS did not include the ENDS use status as part of the skip logic. The questions were asked of non-tobacco users or tobacco users regardless of the ENDS use status.

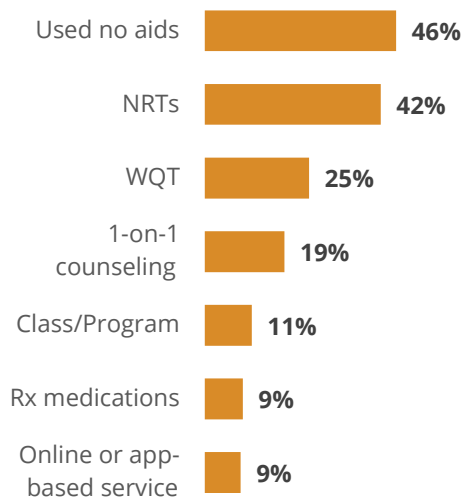
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## SMOKERS' USE OF QUIT AIDS

Most (54%) smokers who tried to quit in the last year used at least one quit aid. Nicotine replacement therapy (NRT) was the most popular aid used by smokers (Figure 19). This may have included people buying them over the counter or getting them from the Wyoming Quit Tobacco (WQT) program.

### Figure 19: Most Smokers Used a Quit Aid

*Percentage of smokers who said they used the quit aid the last time they tried to quit*



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

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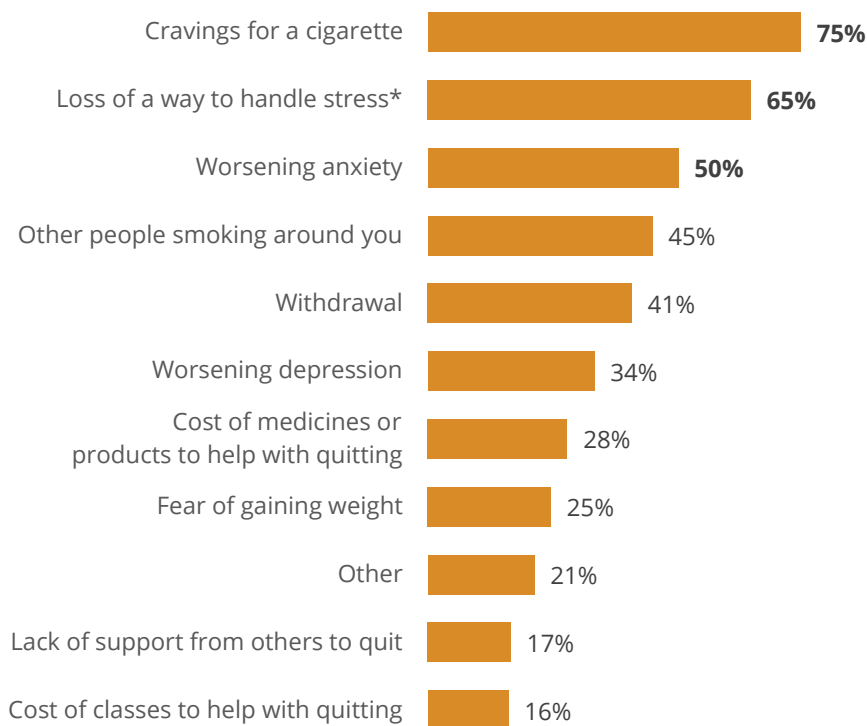
## SMOKERS' OBSTACLES TO QUITTING CIGARETTES

Cravings for a cigarette was the most common obstacle for current smokers the last time they tried to quit (75%; Figure 20). Current smokers said other obstacles to quitting cigarettes included the loss of a way to handle stress (65%) and worsening anxiety (50%). For smokers, the loss of a way to handle stress has decreased significantly over time from 2017 to 2021. Other barriers have been relatively stable over the same timeframe.

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.

### Figure 20: Most Barriers Are Addressed by the WQT

*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.

\* Denotes a statistically significant change over time 2017–2021.

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## Health Professionals' Involvement in Quitting Commercial Tobacco and Nicotine Use

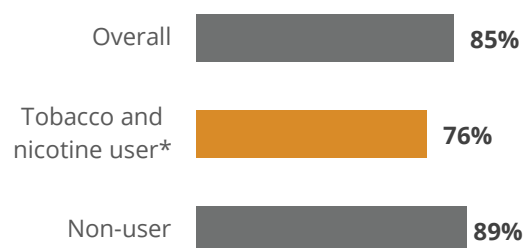
### VISITS WITH HEALTH PROFESSIONALS

The 2021 ATS asked respondents if they had seen a health professional (a doctor, dentist, nurse, or other health professional) in the past year and if so, if the health professional asked if they smoked cigarettes or used any other tobacco product or nicotine products, including ENDS.

Most commercial tobacco and nicotine users had seen a health professional in the past year (76%; Figure 21). Still, commercial tobacco and nicotine use was related to lower likelihood of seeing a health professional. This difference might be due, in part, to barriers to seeking care that might be linked to tobacco and nicotine use, such as lower income.

**Figure 21: Commercial Tobacco and Nicotine Users Were Less Likely to See a Health Professional than Non-Users**

*Percentage of adults who had seen a health professional by tobacco and nicotine use status*



Note: \*denotes a statistically significant difference from non-users.

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### HEALTH PROFESSIONALS' SUPPORT FOR QUITTING TOBACCO AND NICOTINE USE

Adults are often asked about their commercial tobacco or nicotine use when visiting a health professional:

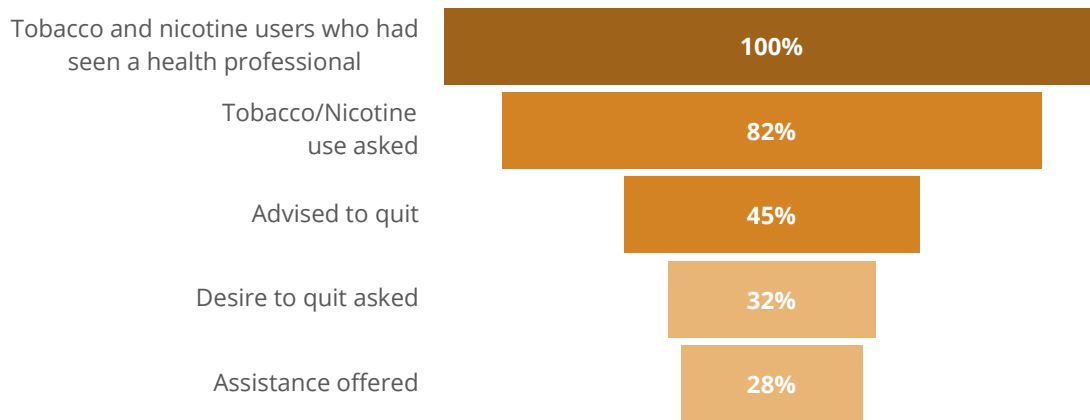
- 72% of all adults were asked if they smoked cigarettes or used any other tobacco or nicotine products.
- 82% of tobacco or nicotine users were asked if they smoked cigarettes or used any other tobacco or nicotine products, significantly more than 67% for non-users.

We do not know to what extent health professionals use medical records to identify tobacco and nicotine users (and non-users) during a visit. This may be a limitation when health professionals had records of their patients' tobacco or nicotine use and did not ask if they used tobacco or nicotine products.

Less than half of tobacco and nicotine users received support with quitting, even when focusing on those who say a professional asked them about their tobacco or nicotine use (Figure 22).

### Figure 22: About One Fourth of Tobacco and Nicotine Users Received Support From Health Professionals

*Percentage of tobacco or nicotine users who had seen a health professional in the past year*



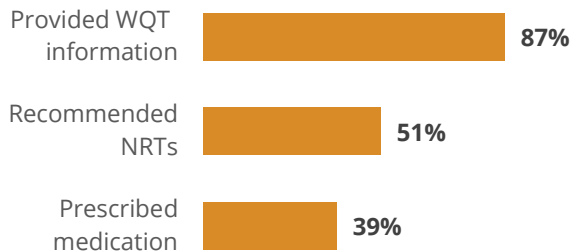
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When commercial tobacco or nicotine users were offered assistance, health professionals provided WQT information (87%; Figure 23), recommended NRTs (51%), and prescribed medication (39%). These protocols align with best practices in support of quitting.

### Figure 23: Support with Quitting Followed Best Practices

*Percentage of tobacco or nicotine users who were advised to quit and were offered assistance by a health professional to help them quit*

**A health professional ...**



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## Conclusions

Most 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 worsening anxiety. The WQT program is designed to assist with these obstacles. Media emphasizing how the WQT program addresses common barriers to quitting smoking may increase enrollment in the WQT program.

Most tobacco and nicotine users are aware of quitline services. Most who had tried to quit in the last year used a quit aid the last time they tried to quit.

Visits to health professionals are opportunities for connecting current commercial tobacco and nicotine users to available resources and to address barriers to quitting. Most adults were asked by a health professional if they used commercial tobacco or nicotine products. Adult commercial tobacco and nicotine users were less likely to report that health professionals followed up or offered help with quitting. Greater collaboration with health professionals could result in more commercial tobacco and nicotine users becoming aware of, and receptive to, services that could increase their chances of quitting (CDC, 2015).

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

# Goal Area 4: Identifying and Eliminating ENDS-Related Disparities

Generations-long inequities in social, economic, and environmental conditions contribute to poor 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 (CDC, 2022c). These inequities have a greater impact on health outcomes than individual choices.

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

Starting in 2019, the SUTPP identified two priority groups that were unequally impacted by ENDS use: people experiencing behavioral health conditions and young adults (age 18–29). The SUTPP has two other priority populations to tobacco and nicotine prevention efforts: American Indians and people with low incomes.

The ENDS industry has targeted American Indians with ENDS marketing efforts (Field, 2020). However, in Wyoming, the data do not consistently show disproportionate ENDS use for American Indians. This may be a result of the small sample size for this population. For the 2021 ATS, fewer than 50 ENDS users said they were American Indians, including multi-racial people who included American Indian as part of their identification.

Unlike for smoking, income does not appear related to adults' ENDS use in the ATS 2021 data.

For each population, we analyzed three key indicators: the prevalence of use, quit attempts, and exposure to secondhand smoke or ENDS aerosol.

The 2021 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.

For context, the overall vaping rate is 8%.



## 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; Prochaska et al., 2017; Campbell et al., 2016). More research is needed to understand if the ENDS industry is also using focused marketing toward people experiencing behavioral health conditions.

For context, the 2021 ATS asked respondents “Do you have any mental health conditions, such as an anxiety disorder, depression disorder, bipolar disorder, schizophrenia, Attention-Deficit/Hyperactivity Disorder (ADHD), Post-Traumatic Stress Disorder (PTSD) or substance use disorder?” About one fifth (22%) of adults reported having at least one behavioral health condition.

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.

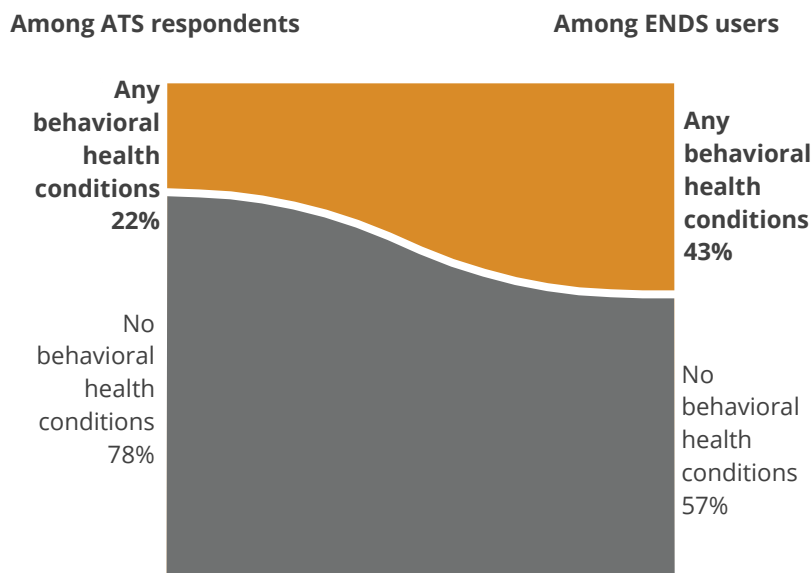
### ENDS USE

Adults who said they had at least one behavioral health condition (15%) were statistically significantly more likely to use ENDS than adults who did not have at least one behavioral health condition (6%).

Adults with behavioral health conditions are over-represented among ENDS users (Figure 24). Only 22% of adults who responded to the survey reported having behavioral health conditions, yet they made up 43% of current ENDS users in the survey.

**Figure 24: Adults with Behavioral Health Conditions Are Over-Represented among ENDS Users**

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



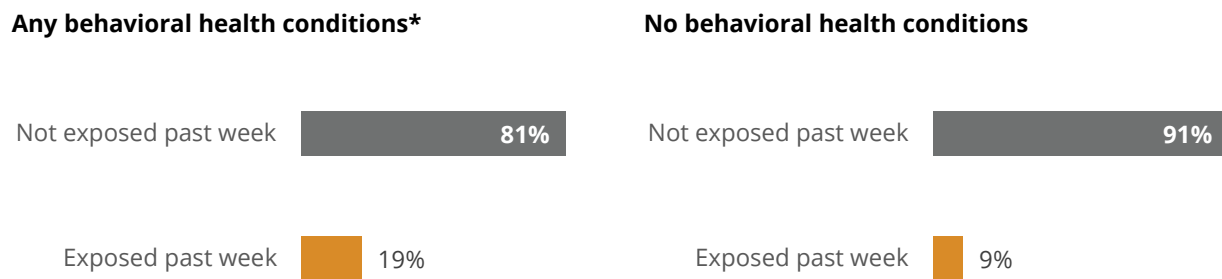
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## EXPOSURE TO ENDS AEROSOL IN INDOOR PUBLIC PLACES

In 2021, 81% of adults with behavioral health conditions were not exposed to someone else's ENDS aerosol in indoor public places in the past seven days. Significantly more adults with behavioral health conditions were exposed to ENDS aerosol in indoor public places than those with no behavioral health conditions (Figure 25).

### Figure 25: Exposure to ENDS Aerosol in Public Places Significantly Higher for Adults with a Behavioral Health Condition

*Percentage of adults who had been exposed to someone else's ENDS aerosol in indoor public places in the past seven days by behavioral health condition*



Note: \* indicates a statistically significant difference.

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## Young Adults

Much like the tobacco industry has targeted youth (Farber & Folan, 2017), the ENDS industry has targeted young adults with advertising and marketing (Lee et al., 2020). The ENDS industry uses social media as a pathway to reach young adults (Lee et al., 2020). The ENDS industry's focused efforts have contributed to disproportionately higher ENDS use rates for young adults.

WYSAC considered respondents as young adults when they were between the ages of 18 and 29 to increase the sample size and improve the reliability of estimates for this group. In 2021, 15% of Wyoming's population was young adults (CDC, 2023).

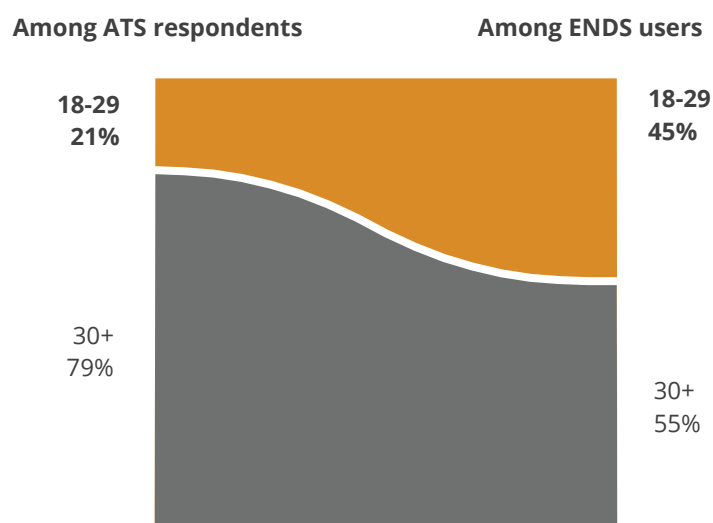
### ENDS USE

Young adults (18%) were statistically significantly more likely to use ENDS than other adults (6%). ENDS use may lead to later initiation of smoking, but more research is needed to investigate this potential pathway to smoking.

Young adults are over-represented among ENDS users (Figure 26). Only 21% of adults who responded to the survey were between the ages of 18 and 29, yet they made up 45% of current ENDS users in the survey.

### Figure 26: Young Adults (Ages 18–29) Are Over-Represented among ENDS Users

*Percentage of ATS respondents and ENDS use by age*



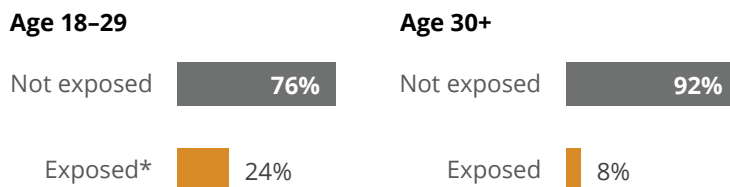
Note: The ENDS industry has targeted young adults (Lee, 2020).

## EXPOSURE TO ENDS AEROSOL IN INDOOR PUBLIC PLACES

In 2021, 76% of young adults were not exposed to someone else's ENDS aerosol in indoor public places in the past seven days. Exposure to ENDS aerosol in indoor public places was about three times more common for young adults than for other adults (Figure 27).

### Figure 27: Exposure to ENDS Aerosol in Public Places Is Significantly Higher for Young Adults (Ages 18–29)

*Percentage of adults who had been exposed to someone else's ENDS aerosol in indoor public places in the past seven days by age*



Note: \* indicates a statistically significant difference.

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## *Conclusions*

The 2021 ATS data highlight the impact of the ENDS industry's targeted efforts to engage already vulnerable populations in nicotine use. People experiencing behavioral health conditions and young adults (ages 18-29) are disproportionately affected by ENDS use.

People experiencing behavioral health conditions were significantly more likely to use ENDS than those without behavioral health conditions. They were also significantly more likely to be exposed to someone else's ENDS aerosol in a public place in the last week.

Young adults are significantly more likely to use ENDS than other adults (age 30 and older).

Although most adults were not exposed to ENDS aerosol in public places, exposure was significantly higher for young adults.

These communities carry disproportionate burdens of ENDS use. Work related to Goal 4 of the SUTPP is essential to combat targeted efforts from the ENDS industry to eliminate these disparities and work toward health equity. Evidence-based ways to reduce these disparities include developing equitable policies, programs, and systems (CDC, 2022c).

## *Acknowledgement*

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

# Goal Area 4: Identifying and Eliminating Smoking-Related Disparities

Generations-long inequities in social, economic, and environmental conditions contribute to poor 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 (CDC, 2022c). These inequities have a greater impact on health outcomes than individual choices.

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

Starting in 2019, the SUTPP identified four priority groups in Wyoming that were unequally impacted by smoking: people with low incomes, people who identify as American Indian, people experiencing behavioral health conditions, and young adults (aged 18-29).

For each population and each smoking-related disparity, we analyzed three key indicators: the prevalence, quit attempts, and exposure to secondhand smoke.

Because of the small number of ATS respondents who were smokers within each priority population, there is a high degree of uncertainty around the estimates for most of these groups. Therefore, WYSAC 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. Because of this issue, we do not report quit attempts for people with low incomes, American Indians, or young adults. We also do not report a prevalence rate for American Indians.

For context, the overall smoking rate in Wyoming adults is 16%.

## Adults with Low Annual Household Income

Tobacco industry marketing has targeted lower-income neighborhoods (Lee et al., 2015). With the tobacco industry's pointed strategies toward people with lower incomes, adults with lower incomes have a disproportionately high rate of commercial tobacco and nicotine 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 SUTPP partners used 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 \$65,304 (U.S. Census Bureau, 2021). By definition, half of the adults in the state have an annual income less than the median.

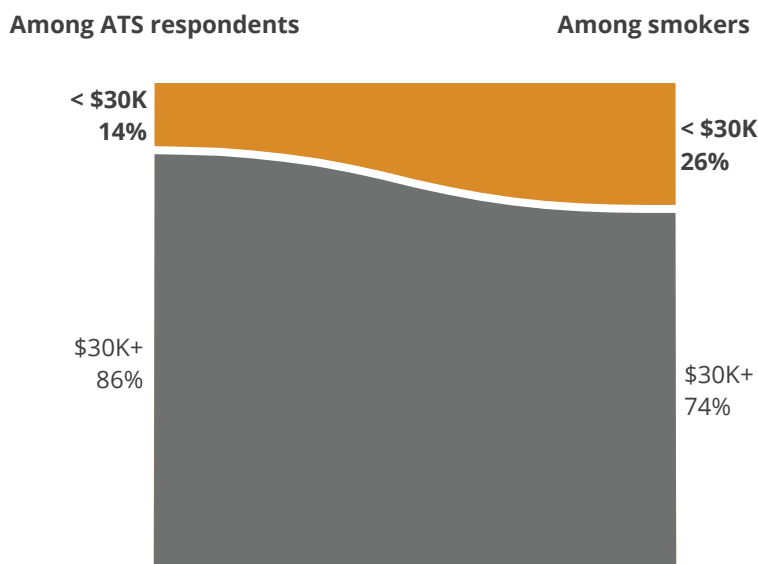
### SMOKING PREVALENCE

Adults with an annual household income of less than \$30,000 (29%) had a significantly higher smoking rate than those with annual household incomes greater than \$30,000 (14%).

Adults living in households making less than \$30,000 per year are over-represented among smokers (Figure 28). Only 14% of adults who responded to the survey were living in households with an income of less than \$30,000, yet they made up 26% of current smokers in the survey.

**Figure 28: 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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## EXPOSURE TO SECONDHAND SMOKE AT WORK

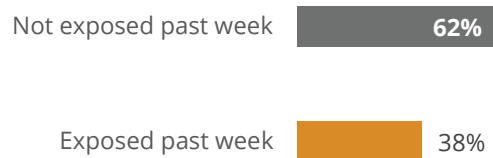
In 2021, 62% of adults with an annual income less than \$30,000 were not exposed to someone else's secondhand smoke at work. Significantly more adults with an annual income less than \$30,000 were exposed to secondhand smoke at work than working adults with an annual income of \$30,000 or more (Figure 29).

Occupational differences might explain this difference. For example, adults working in service industries are at a higher risk of exposure to secondhand smoke than those working in other industries (Holmes & Ling, 2017; Su et al., 2019), and they might have lower incomes. However, the ATS does not collect information about specific occupations.

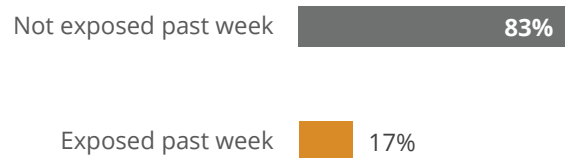
### Figure 29: Exposure to Secondhand Smoke at Work Is Significantly Lower for Adults with Annual Household Incomes More Than \$30,000

*Percentage of adults who had been exposed to secondhand smoke at work by income*

#### Income less than \$30,000\*



#### Income more than \$30,000



Note: \* indicates a statistically significant difference.

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## American Indian

WYSAC acknowledges that different terms refer to the Indigenous populations 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 encourage 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. The tobacco industry misled these communities by providing financial support for their cultural events and providing highly discounted prices on commercial tobacco and nicotine products (Lempert & Glantz, 2019). The tobacco industry's focused efforts have contributed to disproportionately high smoking rates for American Indians (D'Silva et al., 2018).

WYSAC considered respondents as 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.

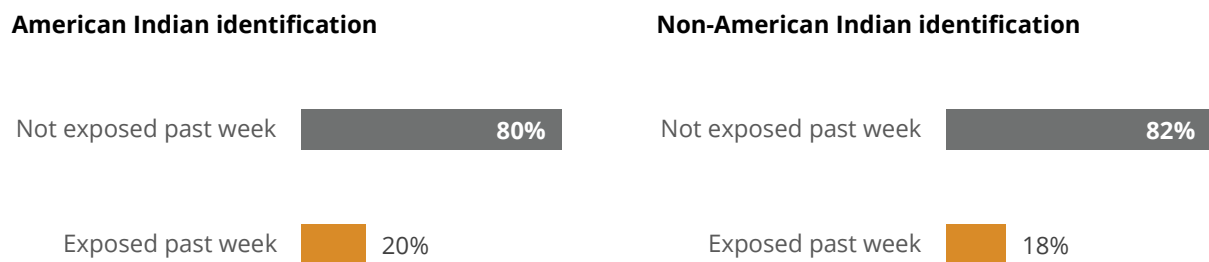
For context, American Indian and Alaska Native people make up 2.8% of the Wyoming population, although that number excludes American Indian and Alaska Natives who identify as more than one race or ethnicity including Hispanic or Latinx (U.S. Census Bureau, 2021).

### EXPOSURE TO SECONDHAND SMOKE AT WORK

In 2021, 80% of American Indian adults were not exposed to secondhand smoke at work. The difference between American Indian adults and non-American Indian adults who were exposed to secondhand smoke at work was not significantly different (Figure 30).

#### Figure 30: Most American Indian Adults Are Not Exposed to Secondhand Smoke at Work

*Percentage of adults who had been exposed to someone else's secondhand smoke at work by American Indian identification*



## 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; Prochaska et al., 2017; Campbell et al., 2016).

For this reason, studies (such as the Center for Behavioral Health Statistics and Quality, 2020; 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 (Center for Behavioral Health Statistics and Quality, 2020).

For context, the 2021 ATS asked respondents “Do you have any mental health conditions, such as an anxiety disorder, depression disorder, bipolar disorder, schizophrenia, Attention-Deficit/Hyperactivity Disorder (ADHD), Post-Traumatic Stress Disorder (PTSD) or substance use disorder?” About one fifth (22%) of adults reported having at least one behavioral health condition.

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.

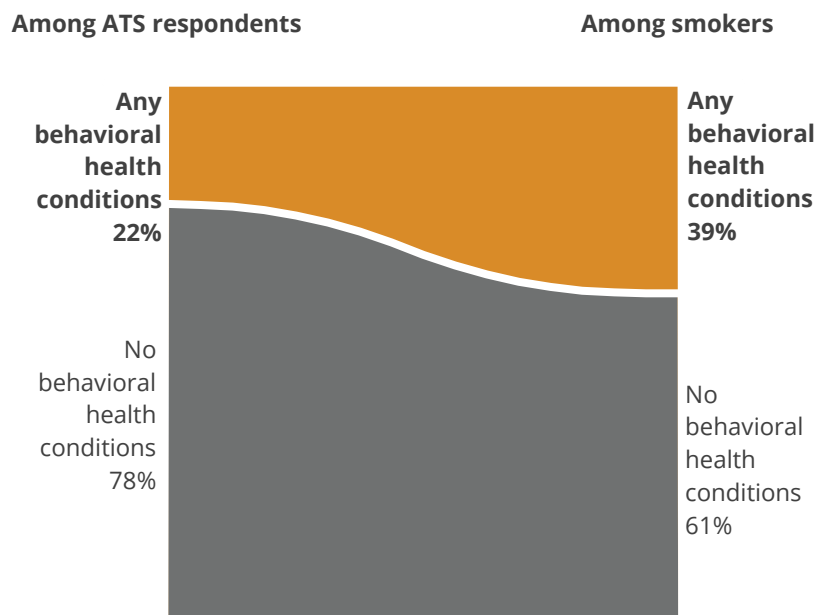
### SMOKING PREVALENCE

Adults with behavioral health conditions (28%) had a significantly higher smoking rate than those without a behavioral health condition (13%).

Adults with behavioral health conditions are over-represented among smokers (Figure 31). Only 22% of adults

**Figure 31: 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 (Prochaska et al., 2017).

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who responded to the survey reported having behavioral health conditions, yet they made up 39% of current smokers in the survey.

## **CURRENT SMOKERS' QUIT ATTEMPTS: LIFETIME AND PAST YEAR**

Due in part to the small sample size for people with behavioral health conditions, the difference between quit attempts (including lifetime and past year) for smokers with behavioral health conditions and those without behavioral health conditions was not statistically significant.

Lifetime quit attempts:

- 77% of current smokers with behavioral health conditions had stopped smoking for at least one day because they were trying to quit for good, and
- 85% of current smokers without behavioral health conditions had stopped smoking for at least one day because they were trying to quit for good.

Past year quit attempts:

- 27% of current smokers with behavioral health conditions had tried to quit smoking at least once in the past year, and
- 35% 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

One obstacle to quitting was significantly more common among people with behavioral health conditions than among all others: worsening anxiety (Table 5).

Current smokers with behavioral health conditions noted the top three obstacles to quitting cigarettes as cravings for a cigarette (72%), worsening anxiety (72%), and the loss of a way to handle stress (70%). The Wyoming Quit Tobacco (WQT) program is designed to address the common barriers that adults face when quitting smoking, including these three obstacles.

### Table 5: Worsening Anxiety More of an Obstacle to Quitting 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 and faced obstacles to quitting smoking*

	Any behavioral health conditions	No behavioral health conditions
Cravings for a cigarette	72%	77%
Worsening anxiety*	72%	36%
Loss of a way to handle stress	70%	62%
Worsening depression	46%	26%
Other people smoking around you	45%	45%
Withdrawal	41%	41%
Cost of medicines or products to help with quitting	32%	25%
Other	30%	16%
Fear of gaining weight	27%	23%
Lack of support from others to quit	14%	18%
Cost of classes to help with quitting	10%	21%

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

\* Indicates a statistically significant difference.

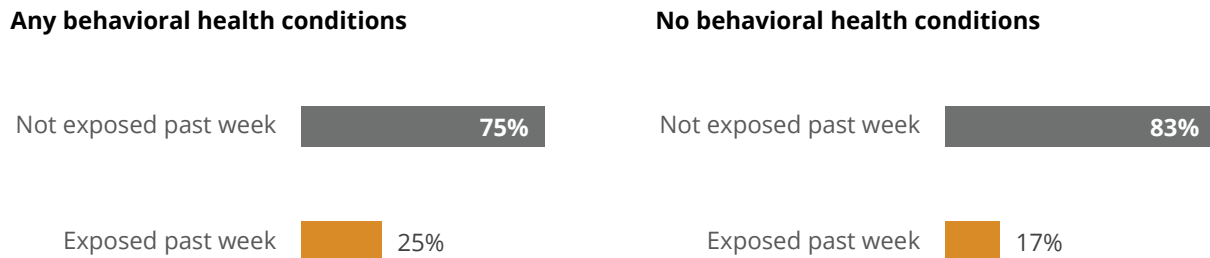
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## EXPOSURE TO SECONDHAND SMOKE AT WORK

In 2021, 75% of adults with any behavioral health conditions were not exposed to someone else's secondhand smoke at work. Slightly more adults with a behavioral health condition were exposed to secondhand smoke at work than adults without any behavioral health conditions (Figure 32). Due in part to the small sample size of people who reported behavioral health conditions, the difference between reports of secondhand smoke exposure was not statistically significant.

### Figure 32: Exposure to Secondhand Smoke at Work Is Slightly Higher for Adults With a Behavioral Health Condition

*Percentage of adults who had been exposed to someone else's secondhand smoke at work by behavioral health condition*



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## Young Adults

ATS data (see the Goal Area 1: Preventing Commercial Tobacco Use section) showed 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 industry efforts, young adults are a priority population and require equally targeted efforts for commercial tobacco and nicotine prevention and control strategies.

WYSAC considered respondents as young adults when they were between the ages of 18 and 29 to increase the sample size and improve the reliability of estimates for this group. In 2021, Wyoming's population of young adults was 87,642 (CDC, 2023).

### SMOKING PREVALENCE

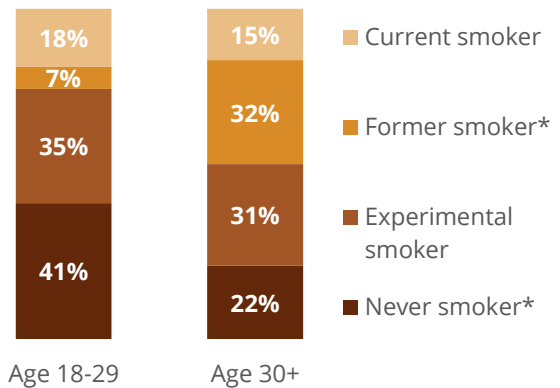
The smoking rate of young adults (18%) was similar to the smoking rate of other adults (15%; Figure 33).

However, young adults are about twice as likely to have never tried a cigarette: 41% of young adults have never tried a cigarette compared to 22% of other adults. Because so few adults begin smoking after the age of 21 (see the Goal Area 1: Preventing Commercial Tobacco Use section), this difference between age cohorts may indicate that experimentation with commercial tobacco and nicotine products is becoming less common over time. It may also demonstrate the collective success of CDC, SUTPP, multiple federal agencies, county prevention workers, and other groups.

Young adults were statistically significantly less likely to be former smokers (7%) compared to other adults (32%).

**Figure 33: 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 use ENDS (18%), which may lead to later initiation of smoking cigarettes. More research is needed to investigate this potential pathway to smoking.

Table 6 details the four categories of smoking status used in Figure 33.

**Table 6: 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	✓	✓	✓	

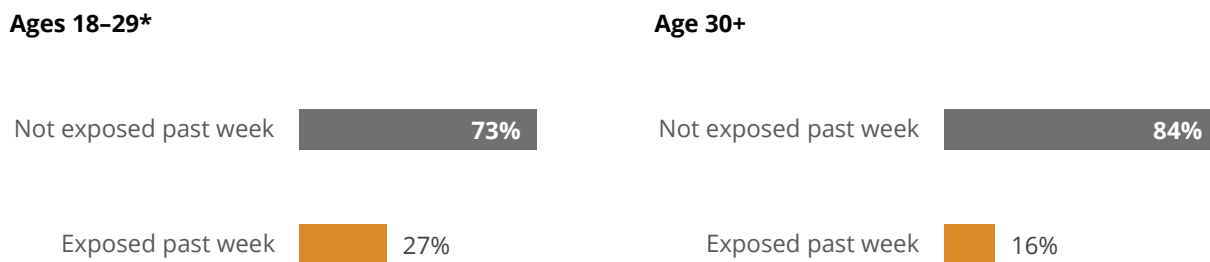
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**EXPOSURE TO SECONDHAND SMOKE AT WORK**

In 2021, 73% of young adults were not exposed to someone else’s secondhand smoke at work. Significantly more young adults were exposed to secondhand smoke at work than other working adults (Figure 34).

**Figure 34: Exposure to Secondhand Smoke at Work Is Significantly Higher for Young Adults**

*Percentage of adults who had been exposed to secondhand smoke at work by age*



Note: \* indicates a statistically significant difference.

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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 secondhand smoke than those working in other industries (Holmes & Ling, 2017). However, the ATS does not collect information about specific occupations.

## *Conclusions*

The 2021 ATS data highlight the impact of the tobacco industry's targeted efforts to engage already vulnerable populations in commercial tobacco use. People with low incomes, people who identify as American Indian, and people experiencing behavioral health conditions are disproportionately affected by smoking. Young adults (aged 18-29) are a priority population because young adulthood is an impressionable stage when people may begin a lifelong smoking habit (Biener & Albers, 2004; Lee et al., 2020).

Adults with an annual household income of less than \$30,000 had a significantly higher smoking rate than those with annual household incomes greater than \$30,000. They were also significantly more likely to be exposed to secondhand smoke at work.

Previous ATS results have shown a smoking disparity for American Indian adults. In 2021, too few smokers identified as American Indian to detect a smoking disparity.

People with behavioral health conditions were significantly more likely to smoke than those without a behavioral health condition. Current smokers with behavioral health conditions are significantly more likely to identify worsening anxiety as an obstacle to quitting than smokers without such conditions. Additional barriers for this group are craving cigarettes and the loss of a way to handle stress. 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.

These communities carry disproportionate burdens of smoking. Work related to Goal 4 of the SUTPP is essential to combat targeted efforts from the tobacco industry to eliminate these disparities and work toward health equity. Evidence-based ways to reduce these disparities include developing equitable policies, programs, and systems (CDC, 2022c).

## *Acknowledgement*

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



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# Appendix A: 2021 ATS Data Collection Methods

## *Summary and Limitations*

In this appendix, WYSAC provides the technical details of the methods used to collect the data for the 2021 ATS as reported by WYSAC's Survey Research Center experts Brian Harnisch and Bistra Anatchkova.

The CDC no longer provides technical support directly to states, but CDC protocols for earlier iterations of the ATS were used as guidance. Protocols for the 2021 ATS, the 2010 National Adult Tobacco Survey, and other earlier iterations of the ATS (2002, 2004, 2006–2009, 2012, 2015, 2017, and 2019) were generally similar, which allowed WYSAC to perform analyses of trends for comparable questions on the surveys.

WYSAC developed the 2021 ATS items based on the 2019 ATS questionnaire including CDC's earlier core and supplemental ATS items as well as state-added questions to meet the SUTPP's data needs. The changes made for the 2021 ATS reflect an emphasis on collecting data that the SUTPP can use to assess their efforts and reducing the burden of data collection for people who complete the survey. The 2021 ATS included the following key changes:

- Introductory text clarifying tobacco use to mean commercial tobacco use and not the ceremonial, sacred, or traditional use of tobacco by some American Indian communities;
- Dropping questions about the frequency and amount of cigarette smoking and the use of special promotions for buying cigarettes;
- Adding “mint” in the list of flavors in questions about flavored tobacco or ENDS;
- Adding newer brands of ENDS and dropping brands that were rarely mentioned by respondents;
- Adding questions about the use of emerging nicotine or tobacco products such as heated tobacco, nicotine pouches, dissolvable nicotine, and nicotine gel to satisfy CDC requirements;
- Asking ENDS users questions about awareness of quitlines;
- Adding questions about cessation aids such as a class, one-on-one counseling, and an online or app-based service for smoking and ENDS cessation;
- Adding questions about patient experiences with healthcare providers;
- Adding questions about secondhand ENDS aerosol exposure in indoor public places;
- Asking about support for changing the tax on ENDS products; and

- Improving the survey's inclusive approach to gender identity by
  - Adding a question about respondent's sex assigned at birth, and
  - Modifying gender and sexuality questions to incorporate more inclusive ways of asking those questions.

## 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 in WYSAC's reporting might include recall errors or respondent bias (such as underreporting 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 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 or appendices of the report. WYSAC is available to discuss estimates for these items.

## *Approach and Methodology*

### QUESTIONNAIRE DESIGN

The questionnaire used for the 2021 Wyoming ATS is based on the master list of core and supplemental questions originally from CDC's Office on Smoking and Health (OSH) State Adult Tobacco Survey Questions. For every past 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. Now that the project is no longer directly supported by the OSH, questionnaire decisions are left up to each state. The questionnaire used for the 2021 iteration is based on the questionnaire used in the 2019 iteration, with slight modifications of addition and subtraction of a few questions of interest, as well as a few wording changes.

### SAMPLE DESIGN

The Random Digit Dial (RDD) landline and RDD cell phone samples for the 2021 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,<sup>1</sup> an estimated 76.1 percent of Wyoming households are now cellphone-only households, with an additional 10.2 percent of households identified as cellphone-mostly. This translates to over 85 percent of the Wyoming adult population being reachable solely or primarily by cellphone. County-level cellular use estimates were provided to WYSAC in 2019 by our sample provider; this was the last year they produced these estimates. These estimates were used as targets proportions for completed surveys at the county level.

The sample was generated by the Marketing Systems Group (M-S-G), a leading vendor for scientific sample well versed in the production of this sample for previous iterations led by the CDC.

## SAMPLE MANAGEMENT

As WYSAC received the sample from M-S-G 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 samples 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.<sup>2</sup> For the landline sample, only numbers which were not pre-screened as disconnected, cellphone, or businesses were released for calling. Numbers identified by M-S-G as cellphones were added to the cellphone sample by M-S-G 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 for most sample members. 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 five calling occasions (each consisting of no more than three attempts at least one hour apart) for a minimum total of 12 call attempts and (b) the 12 or more call attempts consisting of at least three weekday calls, three weeknight calls, and three

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<sup>1</sup> NCHS, National Health Interview Survey, 2017–2019; U.S. Census Bureau, American Community Survey, 2017–2019; (Wireless Substitution: State-Level Estimates from the National Health Interview Survey, 2019)

<sup>2</sup> See Guidelines for Conducting General Population State Adult Tobacco Telephone Surveys, November 2011.

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, 34,978 landline and cellular telephone numbers were generated for this study (not including those pre-screened by the sample provider as disconnected, non-working, or business numbers, which were not attempted). A total of 145,799 attempts were made on the sample in the effort to reach a final disposition. Some numbers were called up to 15 times before they were assigned a final disposition code, which resulted in a 5.16 average number of call attempts per record.

## FIELDING PERIOD

WYSAC telephone interviewers conducted the telephone interviews. Most callers have significant experience on previous ATs conducted by WYSAC for other states in recent years. Calling began on April 15th, 2021, and concluded on September 2nd, 2021. Over the course of the fielding period, calling took place on Sunday through Thursday evenings until 9 p.m., as well as Friday and Saturday afternoons beginning at noon.

## RESPONSE RATE

A total of 1,999 surveys were completed during the fielding period. A total of 1,037 surveys were completed on cell phones, while 962 surveys were completed on landlines. The average interview length was 20 minutes and 10 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	6.9	33.2	36.5	23.5	63.0	10.9
Cell phone	4.9	6.2	74.3	14.6	43.3	11.4
Combined						11.2

**Table A2.2: Response Rates with Quantities**

Frame	Respondent	Non-Respondent	Unknown	Ineligible	E (%)	AAPOR RR3
Landline	962	4,642	5,113	3,285	0.630	10.9
Cell phone	1,037	1,301	15,580	3,058	0.433	11.4
Combined						11.2

Source: 2021 Wyoming Adult Tobacco Survey Weighting Specifications

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# Appendix B: Wyoming 2021 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 2021 ATS data are reflective of the Wyoming adult population; therefore, WYSAC uses them when reporting percentages and throughout the body of the report. Using a logit transform, Stata's confidence intervals for percentages will range between 0% and 100% and do not cross those endpoints. WYSAC suppressed tables for variables with fewer than 50 respondents.

WYSAC lists questions and response options in the order they were asked of the 1,999 respondents (except where the 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 Q87 [wyharmecig]). This item included 173 respondents who answered "don't know/not sure" while 1,825 respondents provided their opinions. For this item, "don't know/not sure" accounted for about 9% (173/1,998) 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	16%	14%	19%	334
Very good	34%	30%	38%	732
Good	34%	30%	38%	639
Fair	12%	10%	15%	220
Poor	4%	3%	6%	69
<b>Valid total</b>	<b>100%</b>			<b>1,994</b>
Don't know / Not sure				4
Refused				1
System missing				0
<b>Total</b>				<b>1,999</b>

## Tobacco Prevalence and Consumption

### CIGARETTE SMOKING

*(Read to respondents)* When we ask about tobacco use during this survey, we are asking about commercial tobacco and not the ceremonial, sacred, or traditional use of tobacco by some American Indian communities. Traditional tobacco is tobacco and/or other plant mixtures grown or harvested and used by American Indians and Alaska Natives for ceremonial or medicinal purposes.

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

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Yes (regular smoker)	42%	38%	46%	749
No	58%	54%	62%	1,247
<b>Valid total</b>	<b>100%</b>			<b>1,996</b>
Don't know / Not sure				3
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

Note: Do not include electronic cigarettes (e-cigarettes, NJOY, Blue Tip), herbal cigarettes, cigars, cigarillos, little cigars, pipes, bidis, kreteks, water pipes (hookahs) or marijuana.

### 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 (current smoker)	32%	26%	39%	163
Some days (current smoker)	6%	3%	10%	35
Not at all (former smoker)	62%	56%	69%	551
<b>Valid total</b>	<b>100%</b>			<b>749</b>
Don't know / Not sure				0
Refused				0
System missing				1,250
<b>Total</b>				<b>1,999</b>

#### 3a. Current smoking status. (Calculated; smoknow\_2cat)

*Calculated percentages of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Current smoker (Every day or Some days)	16%	13%	19%	198
Non-smoker (Former, Experimental, or Never)	84%	81%	87%	1,798
<b>Valid total</b>	<b>100%</b>			<b>1,996</b>
Don't know / Not sure				0
Refused				0
System missing				3
<b>Total</b>				<b>1,999</b>

**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 non-smokers:

**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 (Q4).

**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 (Q4).

#### 4. 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)	55%	50%	60%	696
No (never smoker)	45%	40%	50%	553
<b>Valid total</b>	<b>100%</b>			<b>1,249</b>
Don't know / Not sure				1
Refused				0
System missing				749
<b>Total</b>				<b>1,999</b>

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

*Asked of experimental smokers.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	47%	40%	54%	287
No	53%	46%	60%	402
<b>Valid total</b>	<b>100%</b>			<b>689</b>
Don't know / Not sure				7
Refused				0
System missing				1,303
<b>Total</b>				<b>1,999</b>

## 6. 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	3%	2%	4%	40
10 - 15	40%	35%	46%	373
16 - 17	26%	21%	31%	233
18 - 20	22%	17%	27%	250
21 - 25	7%	5%	10%	94
26+	2%	1%	5%	23
<b>Valid total</b>	<b>100%</b>			<b>1,013</b>
Never smoked a whole cigarette				0
Don't know / Not sure				22
Refused				1
System missing				963
<b>Total</b>				<b>1,999</b>

## 7. Was the last time you smoked a cigarette, even one or two puffs ...? (Cleaned; smoklast)

*Asked of experimental smokers and former smokers.*

	Estimate	Lower CI	Upper CI	Frequency
Within the past 24 hours	0%	0%	1%	1
Within the past 7 days	1%	1%	3%	10
Within the past 30 days	1%	1%	3%	14
Within the past 3 months	3%	1%	7%	10
Within the past 6 months	3%	2%	6%	22
Within the past year	5%	3%	8%	27
Within the past 2 years	4%	2%	7%	31
Within the past 5 years	12%	9%	16%	93
Within the past 10 years	10%	7%	14%	78
Within the past 15 years	6%	4%	9%	65
More than 15 years ago	55%	49%	60%	892
<b>Valid total</b>	<b>100%</b>			<b>1,243</b>
Don't know / Not sure				2
Refused				2
System missing				752
<b>Total</b>				<b>1,999</b>



## 8. 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	79%	66%	88%	56
No	21%	12%	34%	26
<b>Valid total</b>	<b>100%</b>			<b>82</b>
Don't know / Not sure				2
Refused				0
System missing				1,915
<b>Total</b>				<b>1,999</b>

Note: Current smokers are 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 Q41 (qtatt2) and Q42 (qt12mos).

## 9. 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	83%	75%	88%	509
No	17%	12%	25%	74
<b>Valid total</b>	<b>100%</b>			<b>583</b>
Don't know / Not sure				3
Refused				0
System missing				1,413
<b>Total</b>				<b>1,999</b>

### 10. 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	1%	0%	4%	3
10 - 15	20%	15%	26%	127
16 - 17	26%	20%	33%	144
18 - 20	34%	28%	42%	245
21 - 25	13%	9%	17%	94
26+	6%	3%	10%	36
<b>Valid total</b>	<b>100%</b>			<b>649</b>
Never smoked at least one cigarette every day for 30 days in a row				1
Don't know / Not sure				22
Refused				0
System missing				1,327
<b>Total</b>				<b>1,999</b>

### 11. 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	21%	13%	31%	41
No	79%	69%	87%	182
<b>Valid total</b>	<b>100%</b>			<b>223</b>
Don't know / Not sure				0
Refused				0
System missing				1,776
<b>Total</b>				<b>1,999</b>

**12. Were any of the cigarettes that you smoked in the past 30 days flavored to taste like mint, candy, fruit, chocolate, or other flavors besides tobacco? (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	8%	3%	19%	11
No	92%	81%	97%	211
<b>Valid total</b>	<b>100%</b>			<b>222</b>
Don't know / Not sure				1
Refused				0
System missing				1,776
<b>Total</b>				<b>1,999</b>

Note: Previous ATS iterations asked this question with slightly different examples: "Were any of the cigarettes that you smoked in the past 30 days flavored to taste like candy, fruit, chocolate, or other sweets?"

**13. 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.*

Fewer than 50 respondents answered the question.

**OTHER TOBACCO USE**

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

**14. 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	40%	36%	44%	720
No	60%	56%	64%	1,276
<b>Valid total</b>	<b>100%</b>			<b>1,996</b>
Don't know / Not sure				3
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

**15. 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	82%	75%	88%	610
1 - 4	3%	1%	4%	24
5 - 10	2%	0%	8%	5
11 - 15	1%	0%	2%	5
16 - 29	1%	0%	3%	3
On all 30	12%	8%	19%	69
<b>Valid total</b>	<b>100%</b>			<b>716</b>
Don't know / Not sure				3
Refused				1
System missing				1,279
<b>Total</b>				<b>1,999</b>

**15a. Current smokeless tobacco use. (Calculated; sltstatus\_2cat)**

*Calculated percentages 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	7%	5%	10%	106
Non-user (former or never)	93%	90%	95%	1,886
<b>Valid total</b>	<b>100%</b>			<b>1,992</b>
Don't know / Not sure				3
Refused				1
System missing				3
<b>Total</b>				<b>1,999</b>

**16. 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	17%	14%	20%	300
No	83%	80%	86%	1,670
<b>Valid total</b>	<b>100%</b>			<b>1,970</b>
Don't know / Not sure				29
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

**17. 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	90%	80%	95%	276
1 - 4	3%	1%	7%	6
5 - 10	1%	0%	4%	3
11 - 15	0%	0%	1%	1
16 - 29	0%	0%	1%	1
On all 30	6%	2%	17%	12
<b>Valid total</b>	<b>100%</b>			<b>299</b>
Don't know / Not sure				1
Refused				0
System missing				1,699
<b>Total</b>				<b>1,999</b>

**17a. Current snus use. (Calculated; snusstatus\_2cat)**

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

	<b>Estimate</b>	<b>Lower CI</b>	<b>Upper CI</b>	<b>Frequency</b>
Current snus user	2%	1%	3%	23
Non-user (former or never)	98%	97%	99%	1,946
<b>Valid total</b>	<b>100%</b>			<b>1,969</b>
Don't know / Not sure				1
Refused				0
System missing				29
<b>Total</b>				<b>1,999</b>

**18. 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.*

	<b>Estimate</b>	<b>Lower CI</b>	<b>Upper CI</b>	<b>Frequency</b>
Yes	42%	33%	51%	152
No	58%	49%	67%	265
<b>Valid total</b>	<b>100%</b>			<b>417</b>
Don't know / Not sure				1
Refused				0
System missing				1,581
<b>Total</b>				<b>1,999</b>

## 19. 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%	56%	928
No	48%	44%	52%	1,068
<b>Valid total</b>	<b>100%</b>			<b>1,996</b>
Don't know / Not sure				3
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

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 Milds, Swisher Sweets Cigarillos, and Phillie 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."

## 20. 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%	87%	94%	867
1 - 4	5%	3%	9%	44
5 - 10	1%	1%	4%	9
11 - 15	0%	0%	0%	0
16 - 29	0%	0%	1%	2
On all 30	1%	0%	6%	4
<b>Valid total</b>	<b>100%</b>			<b>926</b>
Don't know / Not sure				2
Refused				0
System missing				1,071
<b>Total</b>				<b>1,999</b>

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 Milds, Swisher Sweets Cigarillos, and Phillie 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."

## 20a. Current cigar use. (Calculated; cigarstatus\_2cat)

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

	Estimate	Lower CI	Upper CI	Frequency
Current cigar smoker	4%	3%	7%	59
Non-user (former or never)	96%	93%	97%	1,935
<b>Valid total</b>	<b>100%</b>			<b>1,994</b>
Don't know / Not sure				2
Refused				0
System missing				3
<b>Total</b>				<b>1,999</b>

## 21. 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 mint, candy, fruit, chocolate, or other flavors besides tobacco? (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	57%	36%	76%	20
No	43%	24%	64%	39
<b>Valid total</b>	<b>100%</b>			<b>59</b>
Don't know / Not sure				0
Refused				0
System missing				1,940
<b>Total</b>				<b>1,999</b>

Note: Previous ATS iterations asked this question with slightly different examples: "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?"



*(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.

**22. First, I want to ask you about a regular pipe. 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	20%	17%	23%	420
No	80%	77%	83%	1,572
<b>Valid total</b>	<b>100%</b>			<b>1,992</b>
Don't know / Not sure				7
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

**23. 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%	91%	97%	401
1 - 4	4%	2%	8%	12
5 - 10	0%	0%	2%	3
11 - 15	0%	0%	0%	0
16 - 29	0%	0%	0%	0
On all 30	1%	0%	3%	3
<b>Valid total</b>	<b>100%</b>			<b>419</b>
Don't know / Not sure				1
Refused				0
System missing				1,579
<b>Total</b>				<b>1,999</b>

### 23a. Current pipe use. (Calculated; piperegstatus\_2cat)

Calculated percentages 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%	1%	2%	18
Non-user (former or never)	99%	98%	99%	1,973
<b>Valid total</b>	<b>100%</b>			<b>1,991</b>
Don't know / Not sure				1
Refused				0
System missing				7
<b>Total</b>				<b>1,999</b>

### 24. Now, I want to ask you about a hookah or other water pipe. 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	16%	13%	19%	193
No	84%	81%	87%	1,800
<b>Valid total</b>	<b>100%</b>			<b>1,993</b>
Don't know / Not sure				6
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

**25. 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	99%	95%	100%	190
1 - 4	1%	0%	5%	3
5 - 10	0%	0%	0%	0
11 - 15	0%	0%	0%	0
16 - 29	0%	0%	0%	0
On all 30	0%	0%	0%	0
<b>Valid total</b>	<b>100%</b>			<b>193</b>
Don't know / Not sure				0
Refused				0
System missing				1,806
<b>Total</b>				<b>1,999</b>

**25a. Current hookah or other water pipe use. (Calculated; pipewtr-status\_2cat)**

*Calculated percentages 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	0%	0%	1%	3
Non-user (former or never)	100%	99%	100%	1,990
<b>Valid total</b>	<b>100%</b>			<b>1,993</b>
Don't know / Not sure				0
Refused				0
System missing				6
<b>Total</b>				<b>1,999</b>

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

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	32%	28%	36%	349
No	68%	64%	72%	1,649
<b>Valid total</b>	<b>100%</b>			<b>1,998</b>
Don't know / Not sure				1
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

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."

## 27. You said you have at least tried cigarettes and e-cigarettes or vape pens. Which did you use first? (wycigseq1)

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

	Estimate	Lower CI	Upper CI	Frequency
Cigarettes	68%	60%	76%	216
E-cigarettes or vape pens	32%	24%	40%	112
<b>Valid total</b>	<b>100%</b>			<b>328</b>
Don't know / Not sure				5
Refused				0
System missing				1,666
<b>Total</b>				<b>1,999</b>

Note: Previous ATS iterations worded the response option for e-cigarettes slightly differently: "E-cigarettes (vape pens, Juul, etc.)."

## 28. 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	22%	14%	32%	31
No	78%	68%	86%	179
<b>Valid total</b>	<b>100%</b>			<b>210</b>
Don't know / Not sure				6
Refused				0
System missing				1,783
<b>Total</b>				<b>1,999</b>

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.

## 29. 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	12%	8%	19%	37
Some days	13%	8%	21%	31
Not at all	74%	66%	81%	281
<b>Valid total</b>	<b>100%</b>			<b>349</b>
Don't know / Not sure				0
Refused				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

## 29a. Current ENDS use. (Calculated; wyecigstatus)

Calculated percentages of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
Currently use e-cigarettes every day	4%	2%	6%	37
Currently use e-cigarettes some days	4%	3%	7%	31
Currently do not use e-cigarettes	23%	20%	27%	281
Never tried e-cigarettes	68%	64%	72%	1,649
<b>Valid total</b>	<b>100%</b>			<b>1,998</b>
Unknown				1
System missing				0
<b>Total</b>				<b>1,999</b>

### 30. Were any of the e-cigarettes or vape pens that you used in the past 30 days flavored to taste like mint, candy, fruit, chocolate, or other flavors besides tobacco? (wycigflavr)

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

	Estimate	Lower CI	Upper CI	Frequency
Yes	82%	61%	93%	52
No	18%	7%	39%	15
<b>Valid total</b>	<b>100%</b>			<b>67</b>
Didn't use in the past 30 days				1
Don't know / Not sure				0
Refused				0
System missing				1,931
<b>Total</b>				<b>1,999</b>

Note: Previous ATS iterations asked this question with slightly different examples: "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?"

### 31. During the past 30 days, what brand of e-cigarettes or vape pens did you use most often? Please tell me 'yes' or 'no' for each. (wycigwhat)

*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 Q30. Respondents were allowed to provide multiple answers.*

#### 31-1. A juice or liquid you blended yourself. (wycigwhat\_1)

	Estimate	Lower CI	Upper CI	Frequency
Yes	23%	9%	45%	9
No	77%	55%	91%	58
<b>Valid total</b>	<b>100%</b>			<b>67</b>
Don't know / Not sure				0
Refused				0
System missing				1,932
<b>Total</b>				<b>1,999</b>

**31-2. A customized commercial juice or liquid, like from a vape shop.  
(wyecigwhat\_2)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	74%	58%	85%	47
No	26%	15%	42%	20
<b>Valid total</b>	<b>100%</b>			<b>67</b>
Don't know / Not sure				0
Refused				0
System missing				1,932
<b>Total</b>				<b>1,999</b>

**31-3. Juul. (wyecigwhat\_11)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	27%	14%	47%	16
No	73%	53%	86%	50
<b>Valid total</b>	<b>100%</b>			<b>66</b>
Don't know / Not sure				1
Refused				0
System missing				1,932
<b>Total</b>				<b>1,999</b>

**31-4. Vuse. (wyecigwhat\_3)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	19%	11%	29%	16
No	81%	71%	89%	51
<b>Valid total</b>	<b>100%</b>			<b>67</b>
Don't know / Not sure				0
Refused				0
System missing				1,932
<b>Total</b>				<b>1,999</b>

**31-5. Blu. (wyecigwhat\_4)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	0%	0%	2%	1
No	100%	98%	100%	65
<b>Valid total</b>	<b>100%</b>			<b>66</b>
Don't know / Not sure				1
Refused				0
System missing				1,932
<b>Total</b>				<b>1,999</b>

**31-6. Logic. (wyecigwhat\_5)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	0%	0%	0%	0
No	100%	100%	100%	65
<b>Valid total</b>	<b>100%</b>			<b>65</b>
Don't know / Not sure				2
Refused				0
System missing				1,932
<b>Total</b>				<b>1,999</b>

**31-7. Suorin. (wyecigwhat\_14)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	1%	0%	4%	2
No	99%	96%	100%	63
<b>Valid total</b>	<b>100%</b>			<b>65</b>
Don't know / Not sure				2
Refused				0
System missing				1,932
<b>Total</b>				<b>1,999</b>



**31-8. A commercial juice or liquid purchased online or from a vape shop. Example brands: VaporFi, Naked 100, Boosted. (wyecigwhat\_12)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	45%	27%	65%	24
No	55%	35%	73%	43
<b>Valid total</b>	<b>100%</b>			<b>67</b>
Don't know / Not sure				0
Refused				0
System missing				1,932
<b>Total</b>				<b>1,999</b>

**31-9. Other juice for a cigalike. (wyecigwhat\_8)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	2%	0%	11%	3
No	98%	89%	100%	61
<b>Valid total</b>	<b>100%</b>			<b>64</b>
Don't know / Not sure				3
Refused				0
System missing				1,932
<b>Total</b>				<b>1,999</b>

**31-10. Other juice for a mod or similar device. (wyecigwhat\_9)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	44%	29%	60%	27
No	56%	40%	71%	40
<b>Valid total</b>	<b>100%</b>			<b>67</b>
Don't know / Not sure				0
Refused				0
System missing				1,932
<b>Total</b>				<b>1,999</b>

### 31-11. Other (specify). (wycigwhat\_10)

	Estimate	Lower CI	Upper CI	Frequency
Yes	18%	9%	34%	13
No	82%	66%	91%	53
<b>Valid total</b>	<b>100%</b>			<b>66</b>
Don't know / Not sure				1
Refused				0
System missing				1,932
<b>Total</b>				<b>1,999</b>

Note: Most open-ended answers to this question should have actually been answered as one of the given responses. Of all the "Other" responses, nine of them should have been WYECIGWHAT\_12 (a commercial juice or liquid purchased online or from a vape shop). The remaining four responses included the Vuse Alto Pod, a non-nicotine homemade juice, buying from a local vape shop, or an unknown brand.

### 32. Which of the following are your reasons for using e-cigarettes or vape pens? Please tell me 'yes' or 'no' for each. (wycigwhy2)

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

#### 32-1. To quit smoking cigarettes. (wycigwhy2\_1)

	Estimate	Lower CI	Upper CI	Frequency
Yes	46%	38%	54%	161
No	54%	46%	62%	188
<b>Valid total</b>	<b>100%</b>			<b>349</b>
Don't know / Not sure				0
Refused				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

#### 32-2. To reduce cigarette consumption. (wycigwhy2\_2)

	Estimate	Lower CI	Upper CI	Frequency
Yes	46%	38%	55%	163
No	54%	45%	62%	186
<b>Valid total</b>	<b>100%</b>			<b>349</b>
Don't know / Not sure				0
Refused				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

**32-2a. To quit smoking cigarettes or to reduce cigarette consumption. (Calculated; wyecigwhy2\_2a)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	53%	45%	61%	187
No	47%	39%	55%	162
<b>Valid total</b>	<b>100%</b>			<b>349</b>
Unknown				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

**32-3. To try something new: curious. (wyecigwhy2\_3)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	61%	52%	68%	212
No	39%	32%	48%	137
<b>Valid total</b>	<b>100%</b>			<b>349</b>
Don't know / Not sure				0
Refused				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

**32-4. To not disturb other people with smoke. (wyecigwhy2\_4)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	29%	22%	37%	112
No	71%	63%	78%	237
<b>Valid total</b>	<b>100%</b>			<b>349</b>
Don't know / Not sure				0
Refused				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

**32-5. To smoke in a place where cigarette smoking is banned. (wyecigwhy2\_5)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	17%	12%	24%	73
No	83%	76%	88%	276
<b>Valid total</b>	<b>100%</b>			<b>349</b>
Don't know / Not sure				0
Refused				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

**32-6. To save money compared to cigarettes. (wyecigwhy2\_6)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	21%	15%	28%	62
No	79%	72%	85%	285
<b>Valid total</b>	<b>100%</b>			<b>347</b>
Don't know / Not sure				2
Refused				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

Note: Previous iterations asked, "To save money" without specifying "compared to cigarettes."

**32-7. E-cigarettes or vape pens might be less harmful than cigarettes. (wyecigwhy2\_7)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	26%	20%	34%	96
No	74%	66%	80%	240
<b>Valid total</b>	<b>100%</b>			<b>336</b>
Don't know / Not sure				13
Refused				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

**32-8. E-cigarettes or vape pens taste better. (wycigwhy2\_8)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	36%	29%	45%	124
No	64%	56%	71%	220
<b>Valid total</b>	<b>100%</b>			<b>344</b>
Don't know / Not sure				5
Refused				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

**32-9. For the flavoring. (wycigwhy2\_10)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	41%	34%	49%	129
No	59%	51%	66%	218
<b>Valid total</b>	<b>100%</b>			<b>347</b>
Don't know / Not sure				2
Refused				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

**32-9a. E-cigarettes or vape pens taste better or for the flavoring. (Calculated; wycigwhy2\_10a)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	46%	38%	54%	150
No	54%	46%	62%	194
<b>Valid total</b>	<b>100%</b>			<b>344</b>
Unknown				5
System missing				1,650
<b>Total</b>				<b>1,999</b>

**32-10. For a drug other than nicotine. For example, marijuana. (wyecigwhy2\_11)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	13%	8%	20%	41
No	87%	80%	92%	308
<b>Valid total</b>	<b>100%</b>			<b>349</b>
Don't know / Not sure				0
Refused				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

**32-11. Any other reason? (specify). (wyecigwhy2\_9)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	12%	8%	18%	46
No	88%	82%	92%	303
<b>Valid total</b>	<b>100%</b>			<b>349</b>
Don't know / Not sure				0
Refused				0
System missing				1,650
<b>Total</b>				<b>1,999</b>

Note: WYSAC received 46 total “other” answers to this question. Most of them dealt with vaping in contrast to cigarettes. Six responses mentioned cutting back on cigarettes or smokeless tobacco. Six opined that vaping was in some way better, healthier, or less harmful than cigarettes. Four mentioned wanting to avoid secondhand smoke, and two answered that they did not want to smell like cigarettes. After cigarette comparisons, social pressure or availability was the most common response with 10 answers. Stress and/or anxiety relief was a reason given by seven people. The remaining 11 responses were split between other perceived benefits (stay awake at work, cleared a chronic sinus infection, not drinking as much), taste, nicotine fix, boredom, curiosity, tricks, and enjoying the smell.

**33. Have you ever tried other nicotine or tobacco products even just one time in your entire life? Please tell me 'yes' or 'no' for each. (newproductsever)**

*Asked of all respondents. Respondents were allowed to provide multiple answers.*

**33-1. Heat-not-burn or heated tobacco products like IQOS ("eye-kose"). (newproductsever\_1)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	0%	0%	2%	4
No	100%	98%	100%	1,990
<b>Valid total</b>	<b>100%</b>			<b>1,994</b>
Don't know / Not sure				5
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

**33-2. Nicotine pouches, like ZYN. (newproductsever\_2)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	11%	8%	14%	148
No	89%	86%	92%	1,848
<b>Valid total</b>	<b>100%</b>			<b>1,996</b>
Don't know / Not sure				3
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

**33-3. Dissolvable nicotine like strips, or sticks. (newproductsever\_3)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	2%	1%	3%	22
No	98%	97%	99%	1,975
<b>Valid total</b>	<b>100%</b>			<b>1,997</b>
Don't know / Not sure				2
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

### 33-4. Nicotine gel. (newproductsever\_4)

	Estimate	Lower CI	Upper CI	Frequency
Yes	0%	0%	1%	5
No	100%	99%	100%	1,994
<b>Valid total</b>	<b>100%</b>			<b>1,999</b>
Don't know / Not sure				0
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

Note: If needed, the interviewer read, "A tobacco product that contains nicotine and can be absorbed through the skin."

### 33-5. Any other types (please specify). (newproductsever\_5)

	Estimate	Lower CI	Upper CI	Frequency
Yes	7%	5%	9%	96
No	93%	91%	95%	1,901
<b>Valid total</b>	<b>100%</b>			<b>1,997</b>
Don't know / Not sure				2
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

Note: WYSAC received 96 "other" responses to this question, 84 of which were some form of NRT (gum, patches, lozenges, Chantix—which is not a nicotine product). Of the remaining twelve, six were new products: snus pouches, Rogue nicotine pouches and toothpicks. Three were non-nicotine (marijuana, Nicoban), two were other forms of tobacco smoking (loose leaf tobacco, and clove cigarettes), and one was chewing punk tobacco (tobacco mixed with the ash of a fungus, also called Iqmik).

### 34. Do you now use heated tobacco products every day, some days, or not at all? (Do NOT use this table to report prevalence; newproductscurrent\_heated)

*Asked of respondents who had ever tried heated tobacco products.*

Fewer than 50 respondents answered the question.



**35. Do you now use nicotine pouches every day, some days, or not at all? (Do NOT use this table to report prevalence; newproductscurrent\_pouches)**

*Asked of respondents who had ever tried nicotine pouches.*

	Estimate	Lower CI	Upper CI	Frequency
Every day	10%	5%	20%	14
Some days	17%	10%	28%	24
Not at all	73%	60%	83%	110
<b>Valid total</b>	<b>100%</b>			<b>148</b>
Don't know / Not sure				0
Refused				0
System missing				1,851
<b>Total</b>				<b>1,999</b>

**35a. Current nicotine pouch use. (Calculated; nppouchstatus)**

*Calculated percentages of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Currently use nicotine pouches every day	1%	1%	2%	14
Currently use nicotine pouches some days	2%	1%	3%	24
Currently do not use nicotine pouches	8%	6%	10%	110
Never tried nicotine pouches	89%	86%	92%	1,848
<b>Valid total</b>	<b>100%</b>			<b>1,996</b>
Unknown				3
System missing				0
<b>Total</b>				<b>1,999</b>

**36. Do you now use dissolvable nicotine products every day, some days, or not at all? (Do NOT use this table to report prevalence; newproductscurrent\_dissolvable)**

*Asked of respondents who had ever tried dissolvable nicotine products.*

Fewer than 50 respondents answered the question.

**37. Do you now use nicotine gel every day, some days, or not at all? (Do NOT use this table to report prevalence; newproductscurrent\_gel)**

*Asked of respondents who had ever tried nicotine gel.*

Fewer than 50 respondents answered the question.

**38. Do you now use this other product every day, some days, or not at all? (Do NOT use this table to report prevalence; newproductscurrent\_other)**

*Asked of respondents who had ever tried other nicotine products.*

	Estimate	Lower CI	Upper CI	Frequency
Every day	12%	3%	38%	7
Some days	9%	3%	24%	8
Not at all	80%	59%	91%	81
<b>Valid total</b>	<b>100%</b>			<b>96</b>
Don't know / Not sure				0
Refused				0
System missing				1,903
<b>Total</b>				<b>1,999</b>

**38a. Current other nicotine product use. (Calculated; npotherstatus)**

*Calculated percentages of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Currently use other types of nicotine or tobacco products every day	1%	0%	3%	7
Currently use other types of nicotine or tobacco products some days	1%	0%	2%	8
Currently do not use other types of nicotine or tobacco products	5%	4%	8%	81
Never tried other types of nicotine or tobacco products	93%	91%	95%	1,901
<b>Valid total</b>	<b>100%</b>			<b>1,997</b>
Unknown				2
System missing				0
<b>Total</b>				<b>1,999</b>

## 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.

#### **39. Are you aware of any telephone quitline services that are available to help people quit using tobacco? (qtlneawrnt)**

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

	Estimate	Lower CI	Upper CI	Frequency
Yes	49%	44%	53%	778
No	51%	47%	56%	844
<b>Valid total</b>	<b>100%</b>			<b>1,622</b>
Don't know / Not sure				8
Refused				0
System missing				369
<b>Total</b>				<b>1,999</b>

Note: Previous ATS iterations asked this question to respondents who had never used any type of tobacco or had not used tobacco in the past 30 days regardless of the status of ENDS use.

#### **40. Are you aware of any telephone quitline services that are available to help you quit using tobacco? (qtlneawrt)**

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

	Estimate	Lower CI	Upper CI	Frequency
Yes	68%	60%	75%	261
No	32%	25%	40%	106
<b>Valid total</b>	<b>100%</b>			<b>367</b>
Don't know / Not sure				2
Refused				0
System missing				1,630
<b>Total</b>				<b>1,999</b>

Note: Previous ATS iterations asked this question to tobacco users who had used any type of tobacco in the past 30 days regardless of the status of ENDS use.

#### 40a. Awareness of any telephone quitline services. (Calculated; qtlineawr)

*Calculated percentages of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	54%	50%	58%	1,039
No	46%	42%	50%	950
<b>Valid total</b>	<b>100%</b>			<b>1,989</b>
Unknown				10
System missing				0
<b>Total</b>				<b>1,999</b>

Notes: WYSAC calculated this variable, using Q39 (qtlineawrnt) and Q40 (qtlineawrt).

### QUIT ATTEMPTS

#### 41. 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	25%	17%	35%	49
1 - 5 times	48%	38%	57%	136
6 - 10 times	14%	8%	22%	34
11 - 20 times	6%	3%	12%	18
More than 20 times	3%	2%	5%	24
Don't know / Not sure (valid)	4%	2%	9%	20
<b>Valid total</b>	<b>100%</b>			<b>281</b>
Refused				1
System missing				1,717
<b>Total</b>				<b>1,999</b>

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?"

**42. 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	54%	42%	65%	117
1 - 5 times	43%	32%	55%	84
6 - 10 times	2%	0%	12%	4
11 - 20 times	0%	0%	0%	2
More than 20 times	0%	0%	2%	2
<b>Valid total</b>	<b>100%</b>			<b>209</b>
Don't know / Not sure				2
Refused				1
System missing				1,787
<b>Total</b>				<b>1,999</b>

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?"

**42a. 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	26%	18%	36%	49
Tried to quit in lifetime but not in the past year	40%	31%	49%	117
Tried to quit in the past year	34%	25%	44%	92
<b>Valid total</b>	<b>100%</b>			<b>258</b>
Unknown				24
System missing				1,717
<b>Total</b>				<b>1,999</b>

Note: WYSAC calculated this variable, using Q41 (qtatt2) and Q42 (qt12mos).

**43. 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	20%	9%	41%	12
No	80%	59%	91%	80
<b>Valid total</b>	<b>100%</b>			<b>92</b>
Don't know / Not sure				0
Refused				0
System missing				1,907
<b>Total</b>				<b>1,999</b>

**44. When you quit smoking [The last time you tried to quit smoking], did you use a class or program to help you quit? (qtclasspgm)**

*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	7%	2%	21%	5
No	93%	79%	98%	87
<b>Valid total</b>	<b>100%</b>			<b>92</b>
Don't know / Not sure				0
Refused				0
System missing				1,907
<b>Total</b>				<b>1,999</b>

Note: If needed, the interviewer read, "This would include telehealth or online classes or programs."

**45. When you quit smoking [The last time you tried to quit smoking], did you use one-on-one counseling from a health professional to help you quit? (qtcounsl)**

*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%	31%	7
No	87%	69%	96%	85
<b>Valid total</b>	<b>100%</b>			<b>92</b>
Don't know / Not sure				0
Refused				0
System missing				1,907
<b>Total</b>				<b>1,999</b>

Note: If needed, the interviewer read, "This includes by telehealth, phone, or texts with a person."

**46. When you quit smoking [The last time you tried to quit smoking], did you use an online or app-based service? (wyqtapp)**

*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	6%	1%	21%	3
No	94%	79%	99%	89
<b>Valid total</b>	<b>100%</b>			<b>92</b>
Don't know / Not sure				0
Refused				0
System missing				1,907
<b>Total</b>				<b>1,999</b>

Note: If needed, the interviewer read, "This can include automated text messages."

**47. 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	32%	19%	50%	30
No	68%	50%	81%	62
<b>Valid total</b>	<b>100%</b>			<b>92</b>
Don't know / Not sure				0
Refused				0
System missing				1,907
<b>Total</b>				<b>1,999</b>

**48. When you quit smoking [The last time you tried to quit smoking], did you use pills such as Wellbutrin, Zyban, bupropion, 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	11%	6%	20%	17
No	89%	80%	94%	75
<b>Valid total</b>	<b>100%</b>			<b>92</b>
Don't know / Not sure				0
Refused				0
System missing				1,907
<b>Total</b>				<b>1,999</b>



**48a. Use of evidence-based smoking cessation aid: The Wyoming Quit Tobacco program, nicotine replacement therapy, or prescription medication (Calculated; wyqtaids\_2cat)**

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

	<b>Estimate</b>	<b>Lower CI</b>	<b>Upper CI</b>	<b>Frequency</b>
Used a cessation aid(s)	40%	26%	57%	39
Used no cessation aids	60%	43%	74%	53
<b>Valid total</b>	<b>100%</b>			<b>92</b>
Unknown				0
System missing				1,907
<b>Total</b>				<b>1,999</b>

Note: WYSAC calculated this variable, using Q43 (wyqtline), Q47 (wyqtmed2), and Q48 (wyqtmed3).

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

*Asked of respondents who had at least puffed on a cigarette in the past year and had not decided that they were going to quit.*

	<b>Estimate</b>	<b>Lower CI</b>	<b>Upper CI</b>	<b>Frequency</b>
Yes	54%	43%	65%	110
No	37%	28%	48%	102
Don't know / Not sure (valid)	8%	4%	18%	14
<b>Valid total</b>	<b>100%</b>			<b>226</b>
Refused				0
System missing				1,773
<b>Total</b>				<b>1,999</b>

**50. 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? Please tell me 'yes' or 'no' for each. (wyqtobst)**

*Asked of respondents who had tried to quit smoking cigarettes in their lifetime or wanted to quit smoking cigarettes for good while having at least puffed on a cigarette in the past year. Respondents were allowed to provide multiple responses.*

**50-1. Cost of medicines or products to help with quitting. (wyqtobst\_1)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	24%	16%	34%	45
No	76%	66%	84%	181
<b>Valid total</b>	<b>100%</b>			<b>226</b>
Don't know / Not sure				1
Refused				0
System missing				1,772
<b>Total</b>				<b>1,999</b>

**50-2. Cost of classes to help with quitting. (wyqtobst\_2)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	14%	8%	22%	27
No	86%	78%	92%	199
<b>Valid total</b>	<b>100%</b>			<b>226</b>
Don't know / Not sure				1
Refused				0
System missing				1,772
<b>Total</b>				<b>1,999</b>

**50-3. Fear of gaining weight. (wyqtobst\_3)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	22%	14%	33%	44
No	78%	67%	86%	183
<b>Valid total</b>	<b>100%</b>			<b>227</b>
Don't know / Not sure				0
Refused				0
System missing				1,772
<b>Total</b>				<b>1,999</b>

**50-4. Loss of a way to handle stress. (wyqtobst\_4)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	65%	54%	74%	138
No	35%	26%	46%	87
<b>Valid total</b>	<b>100%</b>			<b>225</b>
Don't know / Not sure				2
Refused				0
System missing				1,772
<b>Total</b>				<b>1,999</b>

**50-5. Other people smoking around you. (wyqtobst\_5)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	49%	39%	59%	107
No	51%	41%	61%	118
<b>Valid total</b>	<b>100%</b>			<b>225</b>
Don't know / Not sure				2
Refused				0
System missing				1,772
<b>Total</b>				<b>1,999</b>

**50-6. Cravings for a cigarette. (wyqtobst\_6)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	73%	63%	81%	170
No	27%	19%	37%	56
<b>Valid total</b>	<b>100%</b>			<b>226</b>
Don't know / Not sure				1
Refused				0
System missing				1,772
<b>Total</b>				<b>1,999</b>

### 50-7. Lack of support from others to quit. (wyqtobst\_7)

	Estimate	Lower CI	Upper CI	Frequency
Yes	15%	9%	23%	42
No	85%	77%	91%	182
<b>Valid total</b>	<b>100%</b>			<b>224</b>
Don't know / Not sure				3
Refused				0
System missing				1,772
<b>Total</b>				<b>1,999</b>

### 50-8. Worsening depression. (wyqtobst\_8)

	Estimate	Lower CI	Upper CI	Frequency
Yes	35%	25%	47%	62
No	65%	53%	75%	161
<b>Valid total</b>	<b>100%</b>			<b>223</b>
Don't know / Not sure				4
Refused				0
System missing				1,772
<b>Total</b>				<b>1,999</b>

### 50-9. Worsening anxiety. (wyqtobst\_9)

	Estimate	Lower CI	Upper CI	Frequency
Yes	51%	41%	61%	105
No	49%	39%	59%	120
<b>Valid total</b>	<b>100%</b>			<b>225</b>
Don't know / Not sure				2
Refused				0
System missing				1,772
<b>Total</b>				<b>1,999</b>

### 50-10. Withdrawal. (wyqtobst\_11)

	Estimate	Lower CI	Upper CI	Frequency
Yes	42%	32%	52%	102
No	58%	48%	68%	121
<b>Valid total</b>	<b>100%</b>			<b>223</b>
Don't know / Not sure				4
Refused				0
System missing				1,772
<b>Total</b>				<b>1,999</b>

### 50-11. Other (specify). (wyqtobst\_10)

	Estimate	Lower CI	Upper CI	Frequency
Yes	18%	11%	29%	38
No	82%	71%	89%	189
<b>Valid total</b>	<b>100%</b>			<b>227</b>
Don't know / Not sure				0
Refused				0
System missing				1,772
<b>Total</b>				<b>1,999</b>

Note: WYSAC received 38 total "other" answers to this question. Fourteen responses mentioned stress, anxiety, fear, and other health-related conditions. Eleven responses were related to lack of desire or motivation to quit. Five responses cited habit. The remaining seven responses included the availability of cigarettes, boredom, the fact that marijuana is illegal in Wyoming, the Wyoming quitline being unreliable, or family members.

**51. 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 had ever tried ENDS.*

	Estimate	Lower CI	Upper CI	Frequency
None	44%	36%	52%	153
1 - 5 times	46%	38%	54%	157
6 - 10 times	3%	1%	9%	7
11 - 20 times	1%	1%	4%	6
More than 20 times	0%	0%	1%	3
Don't know / Not sure (valid)	6%	3%	11%	22
<b>Valid total</b>	<b>100%</b>			<b>348</b>
Refused				1
System missing				1,650
<b>Total</b>				<b>1,999</b>

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?"

**52. 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 had ever tried ENDS and had tried to quit in their lifetime.*

	Estimate	Lower CI	Upper CI	Frequency
None	63%	50%	74%	120
1 - 5 times	37%	26%	50%	51
6 - 10 times	0%	0%	0%	0
11 - 20 times	0%	0%	0%	0
More than 20 times	0%	0%	0%	0
<b>Valid total</b>	<b>100%</b>			<b>171</b>
Don't know / Not sure				2
Refused				0
System missing				1,826
<b>Total</b>				<b>1,999</b>

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 the past twelve 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 using for one day or longer because you were trying to quit using e-cigarettes for good?"

### 52a. ENDS cessation efforts (Calculated; wyecigqtatt12mos\_3cat)

*Asked of respondents who had ever tried ENDS.*

	Estimate	Lower CI	Upper CI	Frequency
Never tried to quit	47%	38%	55%	153
Tried to quit in lifetime but not in the past year	34%	26%	42%	120
Tried to quit in the past year	20%	13%	28%	51
<b>Valid total</b>	<b>100%</b>			<b>324</b>
Unknown				25
System missing				1,650
<b>Total</b>				<b>1,999</b>

Note: WYSAC calculated this variable, using Q51 (wyecigqtatt2) and Q52 (wyecigqt12mos).

### 53. The last time you tried to quit using e-cigarettes or vape pens, did you use the Wyoming Quit Tobacco program? (wyqtline\_ends)

*Asked of respondents who had ever tried ENDS and had tried to quit in the last year.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	0%	0%	0%	0
No	100%	100%	100%	51
<b>Valid total</b>	<b>100%</b>			<b>51</b>
Don't know / Not sure				0
Refused				0
System missing				1,948
<b>Total</b>				<b>1,999</b>

**54. The last time you tried to quit using e-cigarettes or vape pens, did you use a class or program to help you quit? (If needed, this would include telehealth or online classes or programs; qtclasspgm\_ends)**

*Asked of respondents who now use ENDS every day or some days and had tried to quit in the last year.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	0%	0%	0%	0
No	100%	100%	100%	51
<b>Valid total</b>	<b>100%</b>			<b>51</b>
Don't know / Not sure				0
Refused				0
System missing				0
<b>Total</b>				<b>51</b>

Note: If needed, interviewer read, "This would include telehealth or online classes or programs."

**55. The last time you tried to quit using e-cigarettes or vape pens, did you use one-on-one counseling from a health professional to help you quit? (qtcounsel\_ends)**

*Asked of respondents who now use ENDS every day or some days and had tried to quit in the last year.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	3%	0%	20%	1
No	97%	80%	100%	50
<b>Valid total</b>	<b>100%</b>			<b>51</b>
Don't know / Not sure				0
Refused				0
System missing				1,948
<b>Total</b>				<b>1,999</b>

Note: If needed, interviewer read, "This includes by telehealth, phone, or texts with a person."



**56. The last time you tried to quit using e-cigarettes or vape pens, did you use an online or app-based service? (wyqtapp\_ends)**

*Asked of respondents who had ever tried ENDS and had tried to quit in the last year.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	5%	1%	20%	2
No	95%	80%	99%	49
<b>Valid total</b>	<b>100%</b>			<b>51</b>
Don't know / Not sure				0
Refused				0
System missing				1,948
<b>Total</b>				<b>1,999</b>

Note: If needed, interviewer read, "Can include automated text messages."

**57. The last time you tried to quit using e-cigarettes or vape pens, 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\_ends)**

*Asked of respondents who had ever tried ENDS and had tried to quit in the last year.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	8%	2%	22%	7
No	92%	78%	98%	44
<b>Valid total</b>	<b>100%</b>			<b>51</b>
Don't know / Not sure				0
Refused				0
System missing				1,948
<b>Total</b>				<b>1,999</b>

**58. The last time you tried to quit using e-cigarettes or vape pens, did you use pills such as Wellbutrin, Zyban, bupropion, Chantix, or varenicline to help you quit? (wyqtmed3\_ends)**

*Asked of respondents who had ever tried ENDS and had tried to quit in the last year.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	1%	0%	9%	1
No	99%	91%	100%	50
<b>Valid total</b>	<b>100%</b>			<b>51</b>
Don't know / Not sure				0
Refused				0
System missing				1,948
<b>Total</b>				<b>1,999</b>

**58a. Use of ENDS cessation aid: The Wyoming Quit Tobacco program, nicotine replacement therapy, or prescription medication. (Calculated; wyqtaids\_ends\_2cat)**

*Asked of respondents who had ever tried ENDS and had tried to quit in the last year.*

	Estimate	Lower CI	Upper CI	Frequency
Used a cessation aid(s)	9%	3%	23%	8
Used no cessation aids	91%	77%	97%	43
<b>Valid total</b>	<b>100%</b>			<b>51</b>
Unknown				0
System missing				1,948
<b>Total</b>				<b>1,999</b>

Note: WYSAC calculated this variable, using Q53 (wyqtline\_ends), Q57 (wyqtmed2\_ends), and Q58 (wyqtmed3\_ends).

## HEALTH PROFESSIONALS' ADVICE TO QUIT

### 59. 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	85%	81%	88%	1,763
No	15%	12%	19%	229
<b>Valid total</b>	<b>100%</b>			<b>1,992</b>
Don't know / Not sure				5
Refused				2
System missing				0
<b>Total</b>				<b>1,999</b>

### 60. In the past 12 months, that is, since [DATE FILL], did any doctor, dentist, nurse, or other health professional ask if you smoke cigarettes or use any other tobacco or nicotine products? (hcwask)

*Asked of respondents who have seen a healthcare professional in the past year.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	73%	69%	77%	1,117
No	27%	23%	31%	592
<b>Valid total</b>	<b>100%</b>			<b>1,709</b>
Don't know / Not sure				54
Refused				0
System missing				236
<b>Total</b>				<b>1,999</b>

**61. In the past 12 months, that is, since [DATE FILL], did any doctor, dentist, nurse, or other health professional advise you to quit smoking cigarettes or using any other tobacco products? (hcwadvise2)**

*Asked of tobacco or ENDS users (smoked cigarettes sometime in the past year, used other tobacco in the past 30 days, or use ENDS now every day or some days) who had visited a health professional in the past year.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	45%	36%	55%	130
No	55%	45%	64%	190
<b>Valid total</b>	<b>100%</b>			<b>320</b>
Don't know / Not sure				2
Refused				0
System missing				1,677
<b>Total</b>				<b>1,999</b>

**62. The last time a health professional advised you to quit using tobacco, did they also ask if you wanted to try to quit? (hcwqtask)**

*Asked of tobacco or ENDS users (smoked cigarettes sometime in the past year, used other tobacco in the past 30 days, or use ENDS now every day or some days) who were advised to quit by a health professional.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	70%	53%	83%	92
No	30%	17%	47%	38
<b>Valid total</b>	<b>100%</b>			<b>130</b>
Don't know / Not sure				0
Refused				0
System missing				1,869
<b>Total</b>				<b>1,999</b>

**63. The last time a health professional advised you to quit using tobacco, did they also offer any assistance, information, or additional advice to help you quit? (hcwmoradvice)**

*Asked of tobacco or ENDS users (smoked cigarettes sometime in the past year, used other tobacco in the past 30 days, or use ENDS now every day or some days) who were advised to quit by a health professional.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	62%	44%	77%	82
No	38%	23%	56%	47
<b>Valid total</b>	<b>100%</b>			<b>129</b>
Don't know / Not sure				1
Refused				0
System missing				1,869
<b>Total</b>				<b>1,999</b>

**64. The last time a health professional advised you to quit using tobacco, did they provide you with information about the Wyoming Quit Tobacco program? For example, a brochure, phone number, or web address? (wyhcwwqtp)**

*Asked of tobacco or ENDS users (smoked cigarettes sometime in the past year, used other tobacco in the past 30 days, or use ENDS now every day or some days) who were offered assistance by a health professional.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	87%	75%	94%	62
No	13%	6%	25%	18
<b>Valid total</b>	<b>100%</b>			<b>80</b>
Don't know / Not sure				2
Refused				0
System missing				1,917
<b>Total</b>				<b>1,999</b>

**65. (Did they) Recommend a nicotine patch, nicotine gum, lozenges, nasal spray, or an inhaler? (wyhcwmed2)**

*Asked of tobacco or ENDS users (smoked cigarettes sometime in the past year, used other tobacco in the past 30 days, or use ENDS now every day or some days) who were offered assistance by a health professional.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	51%	32%	70%	38
No	49%	30%	68%	43
<b>Valid total</b>	<b>100%</b>			<b>81</b>
Don't know / Not sure				1
Refused				0
System missing				1,917
<b>Total</b>				<b>1,999</b>

**66. (Did they) Prescribe pills such as Wellbutrin, Zyban, bupropion, Chantix, or varenicline? (wyhcwmed3)**

*Asked of tobacco or ENDS users (smoked cigarettes sometime in the past year, used other tobacco in the past 30 days, or use ENDS now every day or some days) who were offered assistance by a health professional.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	39%	21%	60%	30
No	61%	40%	79%	51
<b>Valid total</b>	<b>100%</b>			<b>81</b>
Don't know / Not sure				1
Refused				0
System missing				1,917
<b>Total</b>				<b>1,999</b>

## Secondhand Smoke and Tobacco-Free Policies

### AT HOME

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

**67. 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	93%	90%	95%	1,915
1 - 6 days	3%	1%	5%	29
On all 7 days	4%	3%	7%	52
<b>Valid total</b>	<b>100%</b>			<b>1,996</b>
Don't know / Not sure				2
Refused				1
System missing				0
<b>Total</b>				<b>1,999</b>

### IN THE WORKPLACE

**68. 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	65%	61%	69%	1,038
No	35%	31%	39%	951
<b>Valid total</b>	<b>100%</b>			<b>1,989</b>
Don't know / Not sure				4
Refused				6
System missing				0
<b>Total</b>				<b>1,999</b>

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

**69. 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	82%	77%	86%	899
1 - 6 days	12%	9%	16%	104
On all 7 days	6%	4%	10%	33
<b>Valid total</b>	<b>100%</b>			<b>1,036</b>
Don't know / Not sure				2
Refused				0
System missing				961
<b>Total</b>				<b>1,999</b>

**70. 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	2%	1%	4%	32
Allowed only at some times or in some places	8%	6%	12%	60
Never allowed	89%	86%	92%	915
<b>Valid total</b>	<b>100%</b>			<b>1,007</b>
Don't know / Not sure				27
Refused				4
System missing				961
<b>Total</b>				<b>1,999</b>



**71. 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	33%	28%	38%	313
Allowed only at some times or in some places	35%	30%	40%	301
Never allowed	33%	28%	38%	374
<b>Valid total</b>	<b>100%</b>			<b>988</b>
Don't know / Not sure				44
Refused				6
System missing				961
<b>Total</b>				<b>1,999</b>

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

**72. 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%	35
Allowed only at some times or in some places	16%	13%	19%	291
Never allowed	82%	79%	85%	1,611
<b>Valid total</b>	<b>100%</b>			<b>1,937</b>
Don't know / Not sure				53
Refused				9
System missing				0
<b>Total</b>				<b>1,999</b>

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

*Asked of all respondents.*

	<b>Estimate</b>	<b>Lower CI</b>	<b>Upper CI</b>	<b>Frequency</b>
Oppose	23%	20%	27%	439
Support	77%	73%	80%	1,453
<b>Valid total</b>	<b>100%</b>			<b>1,892</b>
Don't know / Not sure				98
Refused				9
System missing				0
<b>Total</b>				<b>1,999</b>

**74. 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.*

	<b>Estimate</b>	<b>Lower CI</b>	<b>Upper CI</b>	<b>Frequency</b>
Always allowed	30%	27%	34%	525
Allowed only at some times or in some places	60%	56%	64%	1,141
Never allowed	9%	7%	11%	268
<b>Valid total</b>	<b>100%</b>			<b>1,934</b>
Don't know / Not sure				59
Refused				6
System missing				0
<b>Total</b>				<b>1,999</b>

## 75. 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
Oppose	71%	67%	74%	1,306
Support	22%	19%	26%	525
Don't know / Not sure (valid)	7%	5%	10%	157
<b>Valid total</b>	<b>100%</b>			<b>1,988</b>
Refused				11
System missing				0
<b>Total</b>				<b>1,999</b>

## 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.

## 76. [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; wyssexppub)

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
None	92%	90%	94%	1,862
1 - 6 days	7%	5%	10%	114
On all 7 days	0%	0%	1%	13
<b>Valid total</b>	<b>100%</b>			<b>1,989</b>
Don't know / Not sure				9
Refused				1
System missing				0
<b>Total</b>				<b>1,999</b>

**77. [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 vapor or aerosol cloud from someone else who was vaping in an indoor public place? (Collapsed; wyvapexppub)**

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
None	89%	86%	91%	1,845
1 - 6 days	11%	8%	13%	127
On all 7 days	1%	0%	1%	10
<b>Valid total</b>	<b>100%</b>			<b>1,982</b>
Don't know / Not sure				16
Refused				1
System missing				0
<b>Total</b>				<b>1,999</b>

**77a. Exposure to secondhand smoke or e-cigarette aerosol in an indoor public place in the past 7 days. (Calculated; wyshsvapexppub\_2cat)**

*Calculated percentages of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Not exposed to secondhand smoke or e-cigarette aerosol	85%	81%	88%	1,766
Exposed to secondhand smoke or e-cigarette aerosol	15%	13%	19%	210
<b>Valid total</b>	<b>100%</b>			<b>1,976</b>
Unknown				23
System missing				0
<b>Total</b>				<b>1,999</b>

Note: WYSAC calculated this variable, using Q76 (wyshsexppub) and Q77 (wyvapexppub).

**78. [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; wyssexppub2)**

*Asked of all respondents.*

	<b>Estimate</b>	<b>Lower CI</b>	<b>Upper CI</b>	<b>Frequency</b>
None	70%	66%	73%	1,517
1 - 6 days	27%	23%	31%	420
On all 7 days	4%	2%	6%	34
<b>Valid total</b>	<b>100%</b>			<b>1,971</b>
Don't know / Not sure				27
Refused				1
System missing				0
<b>Total</b>				<b>1,999</b>

**78a. Exposure to secondhand smoke in an indoor or outdoor public place in the past 7 days. (Calculated; wyssexppub\_indoutd)**

*Calculated percentages of all respondents.*

	<b>Estimate</b>	<b>Lower CI</b>	<b>Upper CI</b>	<b>Frequency</b>
Not exposed to secondhand smoke	66%	62%	70%	1,450
Exposed to secondhand smoke	34%	30%	38%	518
<b>Valid total</b>	<b>100%</b>			<b>1,968</b>
Unknown				31
System missing				0
<b>Total</b>				<b>1,999</b>

Note: WYSAC calculated this variable, using Q76 (wyssexppub) and Q78 (wyssexppub2).

**78b. Exposure to secondhand smoke in an indoor or outdoor public place or secondhand e-cigarette aerosol in an indoor public place in the past 7 days. (Calculated; wysHSVapexppub\_indoutd)**

*Calculated percentages of all respondents.*

	<b>Estimate</b>	<b>Lower CI</b>	<b>Upper CI</b>	<b>Frequency</b>
Not exposed to secondhand smoke or e-cigarette aerosol	65%	61%	69%	1,422
Exposed to secondhand smoke or e-cigarette aerosol	35%	31%	39%	535
<b>Valid total</b>	<b>100%</b>			<b>1,957</b>
Unknown				42
System missing				0
<b>Total</b>				<b>1,999</b>

Note: WYSAC calculated this variable, using Q76 (wysHsexppub), Q77 (wyvapexppub), and Q78 (wysHsexppub2).

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

**79. 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.*

	<b>Estimate</b>	<b>Lower CI</b>	<b>Upper CI</b>	<b>Frequency</b>
Always be allowed	3%	1%	4%	44
Be allowed only at some times or in some places	23%	19%	27%	347
Never be allowed	75%	71%	78%	1,557
<b>Valid total</b>	<b>100%</b>			<b>1,948</b>
Don't know / Not sure				43
Refused				8
System missing				0
<b>Total</b>				<b>1,999</b>

**80. 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
Oppose	25%	21%	29%	445
Support	75%	71%	79%	1,499
<b>Valid total</b>	<b>100%</b>			<b>1,944</b>
Don't know / Not sure				48
Refused				7
System missing				0
<b>Total</b>				<b>1,999</b>

**81. Should smoking indoors in bars always be allowed, be allowed only at some times or in some places, or never be allowed? (wysindropn2)**

*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	10%	7%	12%	170
Be allowed only at some times or in some places	40%	36%	45%	661
Never be allowed	45%	41%	49%	1,026
Don't know / Not sure (valid)	5%	3%	7%	113
<b>Valid total</b>	<b>100%</b>			<b>1,970</b>
Refused				29
System missing				0
<b>Total</b>				<b>1,999</b>

**82. 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
Oppose	46%	42%	51%	822
Support	49%	45%	53%	1,062
Don't know / Not sure (valid)	5%	3%	7%	101
<b>Valid total</b>	<b>100%</b>			<b>1,985</b>
Refused				14
System missing				0
<b>Total</b>				<b>1,999</b>

**83. 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%	12%	150
Be allowed only at some times or in some places	44%	40%	48%	692
Never be allowed	47%	43%	51%	1,058
<b>Valid total</b>	<b>100%</b>			<b>1,900</b>
Don't know / Not sure				76
Refused				23
System missing				0
<b>Total</b>				<b>1,999</b>

**84. 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
Oppose	48%	44%	52%	798
Support	52%	48%	56%	1,089
<b>Valid total</b>	<b>100%</b>			<b>1,887</b>
Don't know / Not sure				99
Refused				13
System missing				0
<b>Total</b>				<b>1,999</b>



**85. 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	20%	17%	24%	347
Be allowed only at some times or in some places	53%	49%	57%	987
Never be allowed	27%	24%	31%	597
<b>Valid total</b>	<b>100%</b>			<b>1,931</b>
Don't know / Not sure				55
Refused				13
System missing				0
<b>Total</b>				<b>1,999</b>

**GENERAL KNOWLEDGE AND ATTITUDES**

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

**86. 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	4%	3%	6%	53
Somewhat harmful to one's health	44%	40%	49%	780
Very harmful to one's health	51%	47%	56%	1,128
<b>Valid total</b>	<b>100%</b>			<b>1,961</b>
Don't know / Not sure				34
Refused				4
System missing				0
<b>Total</b>				<b>1,999</b>

**87. 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	4%	3%	7%	41
Somewhat harmful to one's health	32%	28%	35%	529
Very harmful to one's health	58%	54%	62%	1,255
Don't know / Not sure (valid)	6%	5%	8%	173
<b>Valid total</b>	<b>100%</b>			<b>1,998</b>
Refused				1
System missing				0
<b>Total</b>				<b>1,999</b>

**88. 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	68%	64%	71%	1,405
Somewhat healthy	23%	20%	27%	359
Very healthy	2%	1%	4%	41
Don't know / Not sure (valid)	7%	5%	9%	187
<b>Valid total</b>	<b>100%</b>			<b>1,992</b>
Refused				7
System missing				0
<b>Total</b>				<b>1,999</b>

**89. 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? (wycigmoharm)**

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Much less harmful than cigarettes	3%	2%	5%	41
Somewhat less harmful	17%	14%	20%	287
About the same	49%	45%	53%	909
Somewhat more harmful	12%	10%	15%	258
Much more harmful than cigarettes	12%	10%	15%	308
Don't know / Not sure (valid)	6%	5%	8%	191
<b>Valid total</b>	<b>100%</b>			<b>1,994</b>
Refused				5
System missing				0
<b>Total</b>				<b>1,999</b>

## 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.

**90. Are you Hispanic or Latino? (hispanic)**

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	9%	6%	12%	80
No	91%	88%	94%	1,898
<b>Valid total</b>	<b>100%</b>			<b>1,978</b>
Don't know / Not sure				5
Refused				16
System missing				0
<b>Total</b>				<b>1,999</b>

**91. 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. Respondents were allowed to provide multiple answers.*

**91-1. White. (racemulti\_1)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	94%	92%	96%	1,886
No	6%	4%	8%	85
<b>Valid total</b>	<b>100%</b>			<b>1,971</b>
Don't know / Not sure				2
Refused				26
System missing				0
<b>Total</b>				<b>1,999</b>

**91-2. Black or African American. (racemulti\_2)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	1%	0%	1%	12
No	99%	99%	100%	1,959
<b>Valid total</b>	<b>100%</b>			<b>1,971</b>
Don't know / Not sure				3
Refused				25
System missing				0
<b>Total</b>				<b>1,999</b>

**91-3. Asian. (racemulti\_3)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	1%	0%	2%	14
No	99%	98%	100%	1,956
<b>Valid total</b>	<b>100%</b>			<b>1,970</b>
Don't know / Not sure				1
Refused				28
System missing				0
<b>Total</b>				<b>1,999</b>

**91-4. Native Hawaiian or other Pacific Islander. (racemulti\_4)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	0%	0%	1%	9
No	100%	99%	100%	1,961
<b>Valid total</b>	<b>100%</b>			<b>1,970</b>
Don't know / Not sure				1
Refused				28
System missing				0
<b>Total</b>				<b>1,999</b>

**91-5. American Indian or Alaska Native. (racemulti\_5)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	5%	3%	7%	99
No	95%	93%	97%	1,871
<b>Valid total</b>	<b>100%</b>			<b>1,970</b>
Don't know / Not sure				1
Refused				28
System missing				0
<b>Total</b>				<b>1,999</b>

**91-6. Some other racial category. (racemulti\_6)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	3%	2%	5%	65
No	97%	95%	98%	1,902
<b>Valid total</b>	<b>100%</b>			<b>1,967</b>
Don't know / Not sure				2
Refused				30
System missing				0
<b>Total</b>				<b>1,999</b>

### 91a. Multiple race. (Calculated into mutually exclusive categories; racemulti\_7cat)

Calculated percentages of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
White only	92%	89%	94%	1,773
Black or African American only	0%	0%	1%	3
Asian only	0%	0%	0%	5
Native Hawaiian or other Pacific Islander only	0%	0%	0%	2
American Indian, Alaska Native only	1%	1%	3%	23
Other race only	2%	1%	4%	26
Multiracial	5%	3%	7%	120
<b>Valid total</b>	<b>100%</b>			<b>1,952</b>
Unknown				47
System missing				0
<b>Total</b>				<b>1,999</b>

Note: WYSAC calculated this variable, using Q91-1 (racemulti\_1), Q91-2 (racemulti\_2), Q91-3 (racemulti\_3), Q91-4 (racemulti\_4), Q91-5 (racemulti\_5), and Q91-6 (racemulti\_6).

### 91b. Race/Ethnicity. (Calculated; raceethnic\_8cat)

Calculated percentages of all respondents.

	Estimate	Lower CI	Upper CI	Frequency
White only, non-Hispanic	86%	83%	89%	1,725
Black only, non-Hispanic	0%	0%	1%	3
Asian only, non-Hispanic	0%	0%	0%	5
Native Hawaiian or other Pacific Islander; only, non-Hispanic	0%	0%	0%	2
American Indian, Alaska Native; only, non-Hispanic	1%	0%	2%	19
Other race only, non-Hispanic	0%	0%	0%	12
Multiracial, non-Hispanic	4%	3%	5%	110
Hispanic	9%	6%	12%	80
<b>Valid total</b>	<b>100%</b>			<b>1,956</b>
Unknown				43
System missing				0
<b>Total</b>				<b>1,999</b>

Note: WYSAC calculated this variable, using Q90 (hispanic), Q91-1 (racemulti\_1), Q91-2 (racemulti\_2), Q91-3 (racemulti\_3), Q91-4 (racemulti\_4), Q91-5 (racemulti\_5), and Q91-6 (racemulti\_6).

### 91c. Race/Ethnicity. (Calculated; raceethnic\_5cat)

*Calculated percentages of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
White only, non-Hispanic	86%	83%	89%	1,725
Black only, non-Hispanic	0%	0%	1%	3
Asian only, non-Hispanic	0%	0%	0%	5
Other, non-Hispanic	5%	3%	7%	143
Hispanic	9%	6%	12%	80
<b>Valid total</b>	<b>100%</b>			<b>1,956</b>
Unknown				43
System missing				0
<b>Total</b>				<b>1,999</b>

Note: WYSAC calculated this variable, using Q90 (hispanic), Q91-1 (racemulti\_1), Q91-2 (racemulti\_2), Q91-3 (racemulti\_3), Q91-4 (racemulti\_4), Q91-5 (racemulti\_5), and Q91-6 (racemulti\_6).

### 92. 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%	5%	11%	71
GED or equivalent	3%	1%	5%	30
High school diploma	27%	24%	31%	425
Some college, no degree	19%	16%	23%	390
Post high school certificate or diploma, or associate degree	18%	15%	22%	327
Bachelor's degree	16%	14%	19%	451
Master's, professional, or doctoral degree	9%	7%	11%	301
<b>Valid total</b>	<b>100%</b>			<b>1,995</b>
Don't know / Not sure				1
Refused				3
System missing				0
<b>Total</b>				<b>1,999</b>

### 93. What is your age? (Collapsed; age)

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
18-20 years	5%	4%	8%	52
21-24 years	6%	4%	9%	59
25-34 years	17%	14%	21%	167
35-44 years	17%	13%	20%	184
45-54 years	14%	12%	17%	227
55-64 years	18%	15%	21%	365
65+ years	22%	19%	25%	904
<b>Valid total</b>	<b>100%</b>			<b>1,958</b>
Don't know / Not sure				2
Refused				39
System missing				0
<b>Total</b>				<b>1,999</b>

### 94. Which of the following categories do you identify with the most: Male, female, or a category not listed? (gender)

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Male	50%	46%	54%	908
Female	49%	45%	53%	1,053
A category not listed (specify)	1%	1%	4%	15
<b>Valid total</b>	<b>100%</b>			<b>1,976</b>
Don't know / Not sure				14
Refused				9
System missing				0
<b>Total</b>				<b>1,999</b>

Note: WYSAC received 15 total “a category not listed” answers to this question. Four respondents said they were both genders, two said they were non-binary, two said they were gender fluid, and one respondent said they were transgender. One person said they were a free spirit, two people didn’t know, and one person said “myself.” Two responses were unclear or potentially a refusal to respond to the question.



### 95. What was your sex assigned at birth? (birth\_sex)

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Male	50%	46%	54%	914
Female	50%	46%	54%	1,068
Intersex	0%	0%	0%	1
A sex not listed	0%	0%	0%	1
<b>Valid total</b>	<b>100%</b>			<b>1,984</b>
Don't know / Not sure				5
Refused				10
System missing				0
<b>Total</b>				<b>1,999</b>

### 96. How many children aged 17 or younger live in your household 6 months or more of the year? (childe17)

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
None	67%	63%	71%	1,561
1	12%	10%	16%	162
2	11%	9%	14%	145
3	5%	4%	7%	76
4	2%	2%	4%	27
5 or more children	1%	1%	3%	17
<b>Valid total</b>	<b>100%</b>			<b>1,988</b>
Don't know / Not sure				0
Refused				11
System missing				0
<b>Total</b>				<b>1,999</b>

**97. 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	33%	20%	50%	23
Yes, rarely	11%	4%	28%	9
Yes, sometimes	51%	33%	70%	26
Yes, always	4%	1%	12%	5
<b>Valid total</b>	<b>100%</b>			<b>63</b>
Don't know / Not sure				0
Refused				0
System missing				1,936
<b>Total</b>				<b>1,999</b>

**98. 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 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	3%	2%	4%	40
No	97%	96%	98%	866
<b>Valid total</b>	<b>100%</b>			<b>906</b>
Don't know / Not sure				1
Refused				2
System missing				1,090
<b>Total</b>				<b>1,999</b>

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

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

Fewer than 50 respondents answered the question.

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

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Albany	5%	4%	7%	104
Big Horn	3%	2%	4%	91
Campbell	8%	7%	9%	93
Carbon	2%	1%	2%	93
Converse	4%	4%	5%	91
Crook	2%	2%	3%	88
Fremont	5%	4%	6%	90
Goshen	2%	1%	2%	87
Hot Springs	1%	1%	1%	85
Johnson	1%	1%	2%	85
Laramie	15%	13%	17%	103
Lincoln	4%	2%	6%	84
Natrona	15%	14%	17%	94
Niobrara	1%	0%	2%	64
Park	8%	6%	10%	90
Platte	2%	1%	2%	74
Sheridan	5%	4%	6%	87
Sublette	2%	1%	3%	73
Sweetwater	6%	6%	7%	79
Teton	4%	3%	6%	90
Uinta	4%	3%	5%	75
Washakie	1%	1%	1%	80
Weston	2%	2%	3%	99
<b>Valid total</b>	<b>100%</b>			<b>1,999</b>
Don't know / Not sure				0
Refused				0
System missing				0
<b>Total</b>				<b>1,999</b>

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.

**101. Do you have any mental health conditions, such as an anxiety disorder, depression disorder, bipolar disorder, schizophrenia, Attention-Deficit/Hyperactivity Disorder (ADHD), Post-Traumatic Stress Disorder (PTSD) or substance use disorder? (mentalhealth)**

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
Yes	22%	19%	26%	284
No	78%	74%	81%	1,692
<b>Valid total</b>	<b>100%</b>			<b>1,976</b>
Don't know / Not sure				7
Refused				16
System missing				0
<b>Total</b>				<b>1,999</b>

Note: The wording was modified from the earlier iterations to match the item in the WQT intake. The 2017 and 2019 ATS asked, "Do you have any mental health conditions, such as anxiety disorder, depression disorder, bipolar disorder, alcohol abuse, drug abuse, or schizophrenia?"

## *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

**102. Currently Wyoming's cigarette tax is 60 cents per pack. How much of an increase in tax per pack would you approve, if any? (wycigtaxopn3)**

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
No increase in the tax	47%	43%	51%	714
Up to 50 cents	13%	11%	16%	260
50 cents to 1 dollar	10%	8%	12%	238
\$1.01 to \$1.50	3%	2%	5%	83
More than \$1.50	17%	15%	21%	407
Decrease the tax (volunteered only)	1%	1%	2%	24
Don't know / Not sure (valid)	8%	7%	11%	236
<b>Valid total</b>	<b>100%</b>			<b>1,962</b>
Refused				37
System missing				0
<b>Total</b>				<b>1,999</b>

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

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
For	46%	42%	50%	1,050
Against	46%	42%	51%	737
Don't know / Not sure (valid)	7%	5%	10%	176
<b>Valid total</b>	<b>100%</b>			<b>1,963</b>
Refused				36
System missing				0
<b>Total</b>				<b>1,999</b>

**104. Are you for or against an increase in the tax on e-cigarettes and vaping devices? (wyendstaxopn)**

*Asked of all respondents.*

	Estimate	Lower CI	Upper CI	Frequency
For	55%	50%	59%	1,185
Against	39%	35%	44%	629
Don't know / Not sure (valid)	6%	4%	8%	158
<b>Valid total</b>	<b>100%</b>			<b>1,972</b>
Refused				27
System missing				0
<b>Total</b>				<b>1,999</b>

**105. 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%	81%	88%	1,685
No	15%	12%	19%	264
<b>Valid total</b>	<b>100%</b>			<b>1,949</b>
Don't know / Not sure				40
Refused				10
System missing				0
<b>Total</b>				<b>1,999</b>

**106. 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%	6%	12%	115
No	91%	88%	94%	1,545
<b>Valid total</b>	<b>100%</b>			<b>1,660</b>
Don't know / Not sure				0
Refused				0
System missing				339
<b>Total</b>				<b>1,999</b>

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](http://www.quitwyo.org)."

**107. 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	11%	7%	17%	37
No	89%	83%	93%	302
<b>Valid total</b>	<b>100%</b>			<b>339</b>
Don't know / Not sure				0
Refused				0
System missing				1,660
<b>Total</b>				<b>1,999</b>

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](http://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.

### **108. 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	5%	3%	7%	98
\$20,000 to less than \$30,000	9%	7%	12%	145
\$30,000 to less than \$40,000	9%	7%	12%	163
\$40,000 to less than \$50,000	14%	11%	17%	233
\$50,000 to less than \$70,000	16%	13%	19%	305
\$70,000 to less than \$100,000	23%	20%	27%	390
\$100,000 to less than \$150,000	14%	11%	18%	230
\$150,000 or more	10%	8%	13%	182
<b>Valid total</b>	<b>100%</b>			<b>1,746</b>
Don't know / Not sure				81
Refused				172
System missing				0
<b>Total</b>				<b>1,999</b>

### **109. Do you consider yourself to be heterosexual, or straight, gay or lesbian, bisexual, transgender, or an identify not listed? (lgbtq)**

*Asked of all respondents. Respondents were allowed to provide multiple answers.*

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.

### 109-1. Heterosexual, or straight. (lgbtq\_1\_c.)

	Estimate	Lower CI	Upper CI	Frequency
Yes	95%	92%	97%	1,882
No	5%	3%	8%	47
<b>Valid total</b>	<b>100%</b>			<b>1,929</b>
Respondent does not understand responses				10
Don't know / Not sure				15
Refused				45
System missing				0
<b>Total</b>				<b>1,999</b>

### 109-2. Gay or lesbian. (lgbtq\_2\_c.)

	Estimate	Lower CI	Upper CI	Frequency
Yes	2%	1%	4%	15
No	98%	96%	99%	1,914
<b>Valid total</b>	<b>100%</b>			<b>1,929</b>
Respondent does not understand responses				10
Don't know / Not sure				15
Refused				45
System missing				0
<b>Total</b>				<b>1,999</b>

### 109-3. Bisexual. (lgbtq\_3\_c.)

	Estimate	Lower CI	Upper CI	Frequency
Yes	2%	1%	4%	25
No	98%	96%	99%	1,904
<b>Valid total</b>	<b>100%</b>			<b>1,929</b>
Respondent does not understand responses				10
Don't know / Not sure				15
Refused				45
System missing				0
<b>Total</b>				<b>1,999</b>



**109-4. Transgender. (lgbtq\_4\_c)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	0%	0%	2%	6
No	100%	98%	100%	1,923
<b>Valid total</b>	<b>100%</b>			<b>1,929</b>
Respondent does not understand responses				10
Don't know / Not sure				15
Refused				45
System missing				0
<b>Total</b>				<b>1,999</b>

**109-5. I prefer to identify myself as an identity not listed. (lgbtq\_96\_c)**

	Estimate	Lower CI	Upper CI	Frequency
Yes	1%	0%	3%	6
No	99%	97%	100%	1,923
<b>Valid total</b>	<b>100%</b>			<b>1,929</b>
Respondent does not understand responses				10
Don't know / Not sure				15
Refused				45
System missing				0
<b>Total</b>				<b>1,999</b>

Note: WYSAC received 6 total “identity not listed” answers to this question. Four people answered asexual, one person said pansexual, and one person answered “zx.”

# 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,  $p < .05$ .

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. This item included 173 respondents who answered “don’t know/not sure” while 1,825 respondents provided their opinions. For this item, “don’t know/not sure” accounted for about 9% (173/1,998) 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 three exceptions to this general rule: the smoking trend, working in a smokefree workplace, and the difference between 2019 and 2021.

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 C29).

A straight-line trend appeared less appropriate for estimates of how many adults 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 slight upward trend from 2012 to 2022 (see Table C53 and Table C54). The drop from 36% in 2010 to 25% in 2012 was statistically significant. The increase from 25% in 2012 to 33% in 2022 was statistically significant.

We observed that estimates for some variables showed unexpected changes between 2019 and 2021, deviating from the earlier trends. For example, the estimate for support for smokefree indoor restaurant policies trended upward from 76% in 2015 to 82% in 2019 but dropped to 75% in 2021. In a case like this, WYSAC tested the difference between 2019 and 2021, which was statistically significant (Table C44).

WYSAC also used logistic regression and multinomial logistic regression to test for associations between a dependent variable and respondents' 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 dependent variable has more than two outcomes. A multinomial logistic regression model with a three-category dependent variable has two contrasts, each comparing a given outcome and a selected 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 in which the relevant summaries appear in the main body of the report.

## *Electronic Nicotine Delivery System*

### ENDS USE IN WYOMING

**Table C1: Logistic Regression of Current ENDS Use: Change over Time 2015–2021**

Variable	B	SE	OR	t	p
Year	0.039	0.038	1.040	1.025	0.306
Intercept	-81.288	76.739	<0.001	-1.059	0.289

**Table C2: Logistic Regression of Current ENDS Users' Flavored ENDS Use in the Past 30 days: Change over Time 2017–2021**

Variable	B	SE	OR	t	p
Year	-0.082	0.157	0.922	-0.519	0.604
Intercept	166.406	317.075	1.86e+72	0.525	0.600

**Table C3: Logistic Regression of Trying ENDS for Reasons Related to Flavor: Change over Time 2017–2021**

Variable	B	SE	OR	t	p
Year	-0.061	0.052	0.941	-1.176	0.240
Intercept	122.336	104.100	1.35e+53	1.175	0.240

**Table C4: Logistic Regression of Using a Customized Commercial Juice or Liquid from a Vape Shop Most Often Among Current ENDS Users: Difference between 2019 and 2021**

Variable	B	SE	OR	t	p
2019 (reference)					
2021	-0.518	0.497	0.596	-1.043	0.300
Intercept	1.539	0.363	4.660	4.244	<0.001

**Table C5: Logistic Regression of Using Other Juice for a Mod or Similar Device Among Current ENDS Users: Difference between 2019 and 2021**

Variable	B	SE	OR	t	p
2019 (reference)					
2021	-0.605	0.446	0.546	-1.356	0.178
Intercept	0.368	0.316	1.445	1.164	0.247

**Table C6: Logistic Regression of Current ENDS Users' Reason for Using ENDS: To Reduce Cigarette Consumption: Change over Time 2015–2021**

Variable	B	SE	OR	t	p
Year	-0.078	0.076	0.925	-1.025	0.305
Intercept	158.317	153.762	5.71e+68	1.030	0.303

**Table C7: Logistic Regression of Current ENDS Users' Reason for Using ENDS: To Reduce Cigarette Consumption: Difference between 2019 and 2021**

Variable	B	SE	OR	t	p
2019 (reference)					
2021	-1.053	0.496	0.349	-2.121	0.034
Intercept	1.135	0.339	3.110	3.346	<0.001

**Table C8: Logistic Regression of Current ENDS Users' Reason for Using ENDS: For the Flavoring: Change over Time 2015–2021**

Variable	B	SE	OR	t	p
Year	-0.183	0.114	0.832	-1.607	0.108
Intercept	370.667	230.365	9.52e+160	1.609	0.108

**Table C9: Logistic Regression of Current ENDS Users' Reason for Using ENDS: For the Flavoring: Difference between 2019 and 2021**

Variable	B	SE	OR	t	p
2019 (reference)					
2021	-0.642	0.501	0.526	-1.281	0.200
Intercept	0.666	0.354	1.946	1.880	0.060

**Table C10: Logistic Regression of Current ENDS Users' Reason for Using ENDS: E-cigarette or Vape Pens Taste Better: Change over Time 2015–2021**

Variable	B	SE	OR	t	p
Year	-0.107	0.071	0.899	-1.498	0.134
Intercept	216.327	144.073	8.90e+93	1.502	0.133

**Table C11: Logistic Regression of Current ENDS Users' Reason for Using ENDS: E-cigarette or Vape Pens Taste Better: Difference between 2019 and 2021**

Variable	B	SE	OR	t	p
2019 (reference)					
2021	-0.437	0.492	0.646	-0.887	0.375
Intercept	0.426	0.335	1.531	1.271	0.204

**Table C12: Logistic Regression of Current ENDS Users' Reason for Using ENDS: To Quit Smoking Cigarettes: Change over Time 2015–2021**

Variable	B	SE	OR	t	p
Year	0.009	0.072	1.009	0.126	0.900
Intercept	-18.072	145.979	<0.001	-0.124	0.901

**Table C13: Logistic Regression of Current ENDS Users' Reason for Using ENDS: To Quit Smoking Cigarettes: Difference between 2019 and 2021**

Variable	B	SE	OR	t	p
2019 (reference)					
2021	-0.991	0.483	0.371	-2.050	0.040
Intercept	0.946	0.321	2.576	2.949	0.003

**Table C14: Multinomial Logistic Regression of Opinion on Whether Using ENDS Is Harmful to One's Health: Change over Time 2017–2021**

Variable	B	SE	RRR	t	p
Not at all harmful					
Year	0.132	0.084	1.141	1.567	0.117
Intercept	-267.511	170.110	<0.001	-1.573	0.116
Somewhat harmful					
Year	0.220	0.041	1.246	5.402	<0.001
Intercept	-442.838	82.146	<0.001	-5.391	<0.001
Very harmful					
Year	0.403	0.039	1.497	10.405	<0.001
Intercept	-813.134	78.251	<0.001	-10.391	<0.001
Don't know (base outcome)					

**Table C15: Marginal Effects of Year on Opinion on Whether Using ENDS Is Harmful to One's Health: Change over Time 2017–2021**

Variable	B	SE	t	p
Not at all harmful	-0.007	0.003	-2.065	0.039
Somewhat harmful	-0.019	0.006	-3.262	0.001
Very harmful	0.058	0.006	10.268	<0.001
Don't know	-0.033	0.004	-9.232	<0.001

**Table C16: Multinomial Logistic Regression of Opinion on Whether Using ENDS Is Harmful to One's Health Among Adults Aged 18-24: Change over Time 2017-2021**

Variable	B	SE	RRR	t	p
Not at all harmful					
Year	0.132	0.296	1.141	0.447	0.655
Intercept	-266.271	596.577	<0.001	-0.446	0.655
Somewhat harmful					
Year	0.182	0.197	1.200	0.922	0.356
Intercept	-364.593	398.530	<0.001	-0.915	0.360
Very harmful					
Year	0.515	0.201	1.674	2.568	0.010
Intercept	-1038.099	405.102	<0.001	-2.563	0.010
Don't know (base outcome)					

**Table C17: Marginal Effects of Year on Opinion on Whether Using ENDS Is Harmful to One's Health Among Adults Aged 18-24: Change over Time 2017-2021**

Variable	B	SE	t	p
Not at all harmful	-0.009	0.011	-0.822	0.411
Somewhat harmful	-0.057	0.017	-3.320	<0.001
Very harmful	0.074	0.016	4.570	<0.001
Don't know	-0.008	0.006	-1.362	0.173

**Table C18: Multinomial Logistic Regression of Opinion on Whether Using ENDS Is Harmful to One's Health Among Adults Aged 25-34: Change over Time 2017-2021**

Variable	B	SE	RRR	t	p
Not at all harmful					
Year	0.144	0.210	1.155	0.686	0.493
Intercept	-290.364	423.456	<0.001	-0.686	0.493
Somewhat harmful					
Year	0.221	0.149	1.248	1.489	0.137
Intercept	-445.132	300.189	<0.001	-1.483	0.138
Very harmful					
Year	0.318	0.146	1.375	2.181	0.029
Intercept	-640.754	294.505	<0.001	-2.176	0.030
Don't know (base outcome)					

Note: The model was not statistically significant,  $F(3, 7213) = 2.04x$ ,  $p = 0.106$ .

**Table C19: Multinomial Logistic Regression of Opinion on Whether Using ENDS Is Harmful to One's Health Among Adults Aged 35-44: Change over Time 2017-2021**

Variable	B	SE	RRR	t	p
Not at all harmful					
Year	0.638	0.225	1.892	2.831	0.005
Intercept	-1288.148	454.678	<0.001	-2.833	0.005
Somewhat harmful					
Year	0.475	0.143	1.607	3.319	<0.001
Intercept	-956.405	288.517	<0.001	-3.315	<0.001
Very harmful					
Year	0.656	0.140	1.927	4.696	<0.001
Intercept	-1322.564	281.919	<0.001	-4.691	<0.001
Don't know (base outcome)					

**Table C20: Marginal Effects of Year on Opinion on Whether Using ENDS Is Harmful to One's Health Among Adults Aged 35-44: Change over Time 2017-2021**

Variable	B	SE	t	p
Not at all harmful	0.005	0.009	0.535	0.593
Somewhat harmful	-0.019	0.015	-1.256	0.209
Very harmful	0.058	0.015	3.768	<0.001
Don't know	-0.044	0.010	-4.482	<0.001

**Table C21: Multinomial Logistic Regression of Opinion on Whether Using ENDS Is Harmful to One's Health Among Adults Aged 45-54: Change over Time 2017-2021**

Variable	B	SE	RRR	t	p
Not at all harmful					
Year	0.008	0.326	1.008	0.024	0.981
Intercept	-17.091	657.510	<0.001	-0.026	0.979
Somewhat harmful					
Year	0.309	0.119	1.362	2.608	0.009
Intercept	-623.012	239.145	<0.001	-2.605	0.009
Very harmful					
Year	0.538	0.111	1.712	4.825	<0.001
Intercept	-1084.405	224.920	<0.001	-4.821	<0.001
Don't know (base outcome)					



**Table C22: Marginal Effects of Year on Opinion on Whether Using ENDS Is Harmful to One's Health Among Adults Aged 45-54: Change over Time 2017-2021**

Variable	B	SE	t	p
Not at all harmful	-0.013	0.009	-1.389	0.165
Somewhat harmful	-0.018	0.013	-1.305	0.192
Very harmful	0.078	0.013	5.851	<0.001
Don't know	-0.047	0.010	-4.521	<0.001

**Table C23: Multinomial Logistic Regression of Opinion on Whether Using ENDS Is Harmful to One's Health Among Adults Aged 55-64: Change over Time 2017-2021**

Variable	B	SE	RRR	t	p
Not at all harmful					
Year	0.029	0.153	1.029	0.189	0.850
Intercept	-59.715	308.220	<0.001	-0.194	0.846
Somewhat harmful					
Year	0.237	0.086	1.268	2.748	0.006
Intercept	-477.958	174.150	<0.001	-2.745	0.006
Very harmful					
Year	0.395	0.080	1.484	4.940	<0.001
Intercept	-795.534	161.194	<0.001	-4.935	<0.001
Don't know (base outcome)					

**Table C24: Marginal Effects of Year on Opinion on Whether Using ENDS Is Harmful to One's Health Among Adults Aged 55-64: Change over Time 2017-2021**

Variable	B	SE	t	p
Not at all harmful	-0.010	0.005	-1.846	0.065
Somewhat harmful	-0.008	0.013	-0.597	0.551
Very harmful	0.058	0.013	4.520	<0.001
Don't know	-0.041	0.009	-4.642	<0.001

**Table C25: Multinomial Logistic Regression of Opinion on Whether Using ENDS Is Harmful to One's Health Among Adults Aged 65+: Change over Time 2017–2021**

Variable	B	SE	RRR	t	p
Not at all harmful					
Year	-0.041	0.146	0.959	-0.284	0.776
Intercept	81.607	294.009	2.76e+35	0.278	0.781
Somewhat harmful					
Year	0.176	0.062	1.193	2.854	0.004
Intercept	-356.174	124.778	<0.001	-2.854	0.004
Very harmful					
Year	0.305	0.057	1.356	5.343	<0.001
Intercept	-614.079	115.068	<0.001	-5.337	<0.001
Don't know (base outcome)					

**Table C26: Marginal Effects of Year on Opinion on Whether Using ENDS Is Harmful to One's Health Among Adults Aged 65+: Change over Time 2017–2021**

Variable	B	SE	t	p
Not at all harmful	-0.007	0.004	-2.008	0.045
Somewhat harmful	-0.005	0.007	-0.730	0.465
Very harmful	0.053	0.009	5.831	<0.001
Don't know	-0.040	0.008	-5.344	<0.001

## INITIATION OF ENDS USE

**Table C27: Logistic Regression: Using ENDS First Before Ever Trying Cigarette Smoking Among Current Smokers: Change over Time 2017–2021**

Variable	B	SE	OR	t	p
Year	0.052	0.161	1.053	0.320	0.749
Intercept	-103.355	325.568	<0.001	-0.317	0.751

## PROMOTING CESSATION

**Table C28: Multinomial Logistic Regression of Current ENDS Users' Quit Attempt: Change over Time 2017–2021**

Variable	B	SE	RRR	t	p
Never tried to quit (base outcome)					
Tried to quit in lifetime, not past year					
Year	0.029	0.136	1.029	0.212	0.832
Intercept	-60.362	274.075	<0.001	-0.220	0.826
Tried to quit in past year					
Year	0.111	0.141	1.118	0.789	0.430
Intercept	-225.759	284.845	<0.001	-0.793	0.428

## *Use and Consumption of Cigarettes*

**Table C29: Logistic Regression of Current Smoking: Change over Time 2006–2021**

Variable	B	SE	OR	t	p
Year	-0.029	0.007	0.971	-4.406	<0.001
Intercept	56.710	13.219	4.26e+24	4.290	<0.001

**Table C30: Logistic Regression of Current Smoking: Difference between 2019 and 2021**

Variable	B	SE	OR	t	p
2019 (reference)					
2021	0.248	0.167	1.282	1.484	0.138
Intercept	-1.918	0.111	0.147	-17.348	<0.001

**Table C31: Logistic Regression of Current Smoking: Change over Time 2010–2021**

Variable	B	SE	OR	t	p
Year	-0.023	0.013	0.978	-1.731	0.083
Intercept	44.094	26.428	1.41e+19	1.668	0.095

**Table C32: Logistic Regression of Chewing Tobacco, Snuff, Dip Use in the Past 30 Days: Change over Time 2010–2021**

Variable	B	SE	OR	t	p
Year	-0.0003	0.018	1.000	-0.021	0.984
Intercept	-1.626	37.083	0.197	-0.044	0.965

**Table C33: Logistic Regression of Snus Use in the Past 30 Days: Change over Time 2010–2021**

Variable	B	SE	OR	t	p
Year	-0.054	0.035	0.948	-1.522	0.128
Intercept	104.299	71.040	1.98e+45	1.468	0.142

**Table C34: Logistic Regression of Cigar Use in the Past 30 Days: Change over Time 2010–2021**

Variable	B	SE	OR	t	p
Year	-0.035	0.027	0.965	-1.312	0.189
Intercept	68.230	54.230	4.29e+29	1.258	0.208

**Table C35: Logistic Regression of Regular Pipe Use in the Past 30 Days: Change over Time 2010–2021**

Variable	B	SE	OR	t	p
Year	-0.048	0.056	0.953	-0.866	0.387
Intercept	93.041	112.748	2.56e+40	0.825	0.409

**Table C36: Logistic Regression of Water Pipe Use in the Past 30 Days: Change over Time 2010–2021**

Variable	B	SE	OR	t	p
Year	-0.096	0.038	0.908	-2.550	0.011
Intercept	189.533	76.174	2.06e+82	2.488	0.013

**Table C37: Logistic Regression of Current ENDS Use: Change over Time 2015–2021**

Variable	B	SE	OR	t	p
Year	0.039	0.038	1.040	1.025	0.306
Intercept	-81.288	76.739	<0.001	-1.059	0.289

### *Goal Area 1: Preventing Initiation of Tobacco Use*

**Table C38: Logistic Regression of Smoking a Whole Cigarette for the First Time before Age 21 (Base Outcome = ages 21+): Change over Time 2010–2021**

Variable	B	SE	OR	t	p
Year	-0.0001	0.015	1.000	-0.008	0.994
Intercept	2.541	31.226	12.695	0.081	0.935

### *Goal Area 2: Eliminating Nonsmokers' Exposure to Secondhand Smoke*

#### SUPPORT FOR SMOKEFREE INDOOR AIR POLICIES AND LAWS

**Table C39: Logistic Regression of Support for Smokefree Indoor Workplace Policies: Change over Time 2002–2021**

Variable	B	SE	OR	t	p
Year	0.042	0.004	1.043	9.496	<0.001
Intercept	-83.508	8.923	<0.001	-9.359	<0.001

**Table C40: Logistic Regression of Support for Smokefree Indoor Workplace Policies: Change over Time 2015–2021**

Variable	B	SE	OR	t	p
Year	0.008	0.022	1.008	0.374	0.708
Intercept	-14.701	43.486	<0.001	-0.338	0.735

**Table C41: Logistic Regression of Support for Smokefree Indoor Workplace Policies: Difference between 2019 and 2021**

Variable	B	SE	OR	t	p
2019 (reference)					
2021	-0.115	0.153	0.891	-0.752	0.452
Intercept	1.655	0.103	5.234	16.063	<0.001

**Table C42: Logistic Regression of Support for Smokefree Indoor Restaurant Policies: Change over Time 2002–2021**

Variable	B	SE	OR	t	p
Year	0.057	0.004	1.059	13.552	<0.001
Intercept	-114.053	8.477	<0.001	-13.454	<0.001

**Table C43: Logistic Regression of Support for Smokefree Indoor Restaurant Policies: Change over Time 2015–2021**

Variable	B	SE	OR	t	p
Year	-0.007	0.020	0.993	-0.348	0.728
Intercept	15.268	40.270	4.27e+06	0.379	0.705

**Table C44: Logistic Regression of Support for Smokefree Indoor Restaurant Policies: Difference between 2019 and 2021**

Variable	B	SE	OR	t	p
2019 (reference)					
2021	-0.402	0.137	0.669	-2.927	0.003
Intercept	1.486	0.093	4.420	16.060	<0.001

**Table C45: Multinomial Logistic Regression of Support for Smokefree Indoor Bar Policies: Change over Time 2015–2021**

Variable	B	SE	RRR	t	p
Allowed					
Year	0.025	0.038	1.025	0.659	0.510
Intercept	-48.239	76.702	<0.001	-0.629	0.529
Never allowed					
Year	0.028	0.038	1.029	0.750	0.453
Intercept	-54.818	76.114	<0.001	-0.720	0.471
Don't know (base outcome)					

**Table C46: Multinomial Logistic Regression of Support for Smokefree Indoor Bar Policies: Difference between 2019 and 2021**

Variable	B	SE	RRR	t	p
Allowed					
2019 (reference)					
2021	0.015	0.259	1.015	0.059	0.953
Intercept	2.347	0.167	10.452	14.073	<0.001
Never allowed					
2019 (reference)					
2021	-0.236	0.258	0.790	-0.916	0.360
Intercept	2.498	0.166	12.158	15.074	<0.001
Don't know (base outcome)					

**Table C47: Logistic Regression of Support for Smokefree Indoor Casino and Club Policies: Change over Time 2015–2021**

Variable	B	SE	OR	t	p
Year	-0.011	0.016	0.989	-0.735	0.462
Intercept	23.086	31.374	1.06e+10	0.736	0.462

**Table C48: Logistic Regression of Support for Smokefree Indoor Casino and Club Policies: Difference between 2019 and 2021**

Variable	B	SE	OR	t	p
2019 (reference)					
2021	-0.302	0.112	0.739	-2.708	0.007
Intercept	0.168	0.074	1.183	2.274	0.023

## SUPPORT FOR OTHER SMOKEFREE AIR POLICIES AND LAWS

**Table C49: Logistic Regression of Support for Smokefree Parks: Change over Time 2010–2021**

Variable	B	SE	OR	t	p
Year	0.023	0.012	1.023	1.920	0.055
Intercept	-44.215	23.757	<0.001	-1.861	0.063

**Table C50: Multinomial Logistic Regression of Support for a Smokefree Air Law for Outdoor Workplaces: Change over Time 2015–2021**

Variable	B	SE	RRR	t	p
Support					
Year	-0.017	0.035	0.983	-0.488	0.626
Intercept	35.403	69.920	2.37e+15	0.506	0.613
Oppose					
Year	0.020	0.033	1.020	0.598	0.550
Intercept	-37.842	67.001	<0.001	-0.565	0.572
Don't know (base outcome)					

**Table C51: Logistic Regression of Support for Tobacco-Free Schools: Change over Time 2010–2021**

Variable	B	SE	OR	t	p
Year	-0.018	0.013	0.982	-1.365	0.172
Intercept	37.624	26.256	2.19e+16	1.433	0.152

## EXPOSURE TO SECONDHAND SMOKE

**Table C52: Logistic Regression of Smoking Prohibited Indoors at Work: Difference between 2019 and 2021**

Variable	B	SE	OR	t	p
2019 (reference)					
2021	0.245	0.225	1.277	1.087	0.277
Intercept	1.882	0.147	6.565	12.801	<0.001

**Table C53: Logistic Regression of Smoking Prohibited Outdoors at Work: Difference between 2010 and 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 C54: Logistic Regression of Smoking Prohibited Outdoors at Work: Change over Time 2012–2021**

Variable	B	SE	OR	t	p
Year	0.035	0.014	1.036	2.506	0.012
Intercept	-72.544	28.544	<0.001	-2.542	0.011

**Table C55: Logistic Regression of Workplace Secondhand Smoke (SHS) Exposure: Change over Time 2010–2021**

Variable	B	SE	OR	t	p
Year	-0.004	0.015	0.996	-0.276	0.783
Intercept	6.906	30.080	998.018	0.230	0.818

**Table C56: Logistic Regression of SHS Exposure in Indoor Public Places: Change over Time 2012–2021**

Variable	B	SE	OR	t	p
Year	-0.089	0.016	0.915	-5.707	<0.001
Intercept	176.819	31.322	6.19e+76	5.645	<0.001

**Table C57: Logistic Regression of SHS Exposure in Outdoor Public Places: Change over Time 2012–2021**

Variable	B	SE	OR	t	p
Year	-0.053	0.011	0.949	-4.791	<0.001
Intercept	105.318	22.114	5.49e+45	4.763	<0.001

**Table C58: Logistic Regression of SHS Exposure in Indoor or Outdoor Public Places: Change over Time 2012–2021**

Variable	B	SE	OR	t	p
Year	-0.060	0.011	0.942	-5.695	<0.001
Intercept	120.399	21.212	1.94e+52	5.676	<0.001

**Table C59: Logistic Regression of SHS Exposure in Indoor or Outdoor Public Places: Difference by Current Smoking Status in 2021**

Variable	B	SE	OR	t	p
Current smoker	0.427	0.253	1.532	1.687	0.092
Nonsmoker (reference)					
Intercept	-0.735	0.098	0.480	-7.468	<0.001



**Table C60: Logistic Regression of Opinion on Harmfulness of Secondhand Smoke (1 = Very or Somewhat Harmful vs. 0 = Not at All Harmful): Change over Time 2010–2021**

Variable	B	SE	OR	t	p
Year	0.026	0.029	1.026	0.891	0.373
Intercept	-48.884	58.588	<0.001	-0.834	0.404

### *Goal Area 3: Promoting Cessation*

#### SMOKERS' CESSATION EFFORTS

**Table C61: Multinomial Logistic Regression of Smokers' Desire to Quit: Change over Time 2015–2021**

Variable	B	SE	RRR	t	p
Want to quit					
Year	-0.086	0.103	0.917	-0.835	0.404
Intercept	176.361	208.227	3.92e+76	0.847	0.397
Do not want to quit					
Year	-0.013	0.108	0.987	-0.122	0.903
Intercept	28.108	217.084	1.61e+12	0.129	0.897
Don't know (base outcome)					

**Table C62: Multinomial Logistic Regression of Smokers' Desire to Quit: Change over Time 2015–2019**

Variable	B	SE	RRR	t	p
Want to quit					
Year	0.061	0.097	1.063	0.628	0.530
Intercept	-120.258	195.635	<0.001	-0.615	0.539
Do not want to quit					
Year	0.075	0.110	1.078	0.685	0.493
Intercept	-149.827	221.070	<0.001	-0.678	0.498
Don't know (base outcome)					

**Table C63: Multinomial Logistic Regression of Smokers' Desire to Quit: Difference between 2019 and 2021**

Variable	B	SE	RRR	t	p
Want to quit					
2019 (reference)					
2021	-0.835	0.603	0.434	-1.386	0.166
Intercept	2.766	0.330	15.896	8.374	<0.001
Do not want to quit					
2019 (reference)					
2021	-0.453	0.628	0.635	-0.722	0.470
Intercept	1.866	0.363	6.461	5.140	<0.001
Don't know (base outcome)					

**Table C64: Multinomial Logistic Regression of Smokers' Quit Attempt: Change over Time 2010–2021**

Variable	B	SE	RRR	t	p
Never tried to quit (base outcome)					
Tried to quit in lifetime, not past year					
Year	0.027	0.044	1.027	0.600	0.548
Intercept	-52.891	89.635	<0.001	-0.590	0.555
Tried to quit in past year					
Year	0.007	0.043	1.007	0.166	0.868
Intercept	-13.429	86.011	<0.001	-0.156	0.876

**Table C65: Multinomial Logistic Regression of Smokers' Quit Attempt: Difference between 2019 and 2021**

Variable	B	SE	RRR	t	p
Never tried to quit (base outcome)					
Tried to quit in lifetime, not past year					
2019 (reference)					
2021	0.219	0.507	1.245	0.432	0.666
Intercept	0.781	0.353	2.184	2.214	0.027
Tried to quit in past year					
2019 (reference)					
2021	-0.186	0.538	0.830	-0.346	0.729
Intercept	0.733	0.368	2.082	1.990	0.047

**Table C66: Logistic Regression of Smokers' WQT Use for Their Quit Attempts: Change over Time 2012–2021**

Variable	B	SE	OR	t	p
Year	0.105	0.078	1.111	1.354	0.176
Intercept	-214.007	156.676	<0.001	-1.366	0.172

**Table C67: Logistic Regression of Smokers' Use of a Class or Program for Their Quit Attempts: Difference between 2010 and 2021**

Variable	B	SE	OR	t	p
2010 (reference)					
2021	0.013	0.728	1.013	0.018	0.985
Intercept	-2.565	0.388	0.077	-6.612	<0.001

**Table C68: Logistic Regression of Smokers' Use of One-on-One Counseling for Their Quit Attempts: Difference between 2010 and 2021**

Variable	B	SE	OR	t	p
2010 (reference)					
2021	0.418	0.692	1.518	0.603	0.547
Intercept	-2.360	0.375	0.094	-6.298	<0.001

**Table C69: Logistic Regression of Smokers' NRT Use for Their Quit Attempts: Change over Time 2012–2021**

Variable	B	SE	OR	t	p
Year	0.055	0.051	1.056	1.068	0.286
Intercept	-110.946	103.115	<0.001	-1.076	0.282

**Table C70: Logistic Regression of Smokers' Rx Medication Use for Their Quit Attempts: Change over Time 2012–2021**

Variable	B	SE	OR	t	p
Year	-0.018	0.049	0.982	-0.361	0.718
Intercept	33.697	98.673	4.31e+14	0.342	0.733

**Table C71: Logistic Regression of Smokers' Obstacles to Quitting: Craving for a Cigarette: Change over Time 2017–2021**

Variable	B	SE	OR	t	p
Year	-0.035	0.094	0.965	-0.378	0.706
Intercept	72.738	189.465	3.89e+31	0.384	0.701

**Table C72: Logistic Regression of Smokers' Obstacles to Quitting: Loss of a Way to Handle Stress: Change over Time 2017–2021**

Variable	B	SE	OR	t	p
Year	-0.161	0.079	0.851	-2.033	0.042
Intercept	326.142	159.910	4.40e+141	2.040	0.041

**Table C73: Logistic Regression of Smokers' Obstacles to Quitting: Worsening Anxiety: Change over Time 2017–2021**

Variable	B	SE	OR	t	p
Year	-0.032	0.074	0.968	-0.435	0.663
Intercept	65.125	149.499	1.92e+28	0.436	0.663

## HEALTHCARE PROVIDERS' INVOLVEMENT IN TOBACCO CESSATION

**Table C74: Logistic Regression of Seeing a Healthcare Provider in the Past Year: Association with Tobacco/ENDS Use for 2021**

Variable	B	SE	OR	t	p
Used tobacco/ENDS	-0.947	0.255	0.388	-3.710	<0.001
Did not use tobacco/ENDS (reference)					
Intercept	2.098	0.165	8.146	12.684	<0.001

**Table C75: Logistic Regression of Patients Being Asked by Health Professional about Tobacco/Nicotine Use: Association with Tobacco/ENDS Use for 2021**

Variable	B	SE	OR	t	p
Used tobacco/ENDS	0.743	0.267	2.102	2.782	0.005
Did not use tobacco/ENDS (reference)					
Intercept	0.815	0.111	2.260	7.331	<0.001

## TOBACCO CESSATION AND TOBACCO TAX

**Table C76: Multinomial Logistic Regression of Opinions on Cigarette Tax Increase: Change over Time 2015–2021**

Variable	B	SE	RRR	t	p
A decrease					
Year	0.152	0.056	1.164	2.732	0.006
Intercept	-308.595	112.130	<0.001	-2.752	0.006
No change					
Year	0.064	0.027	1.066	2.374	0.018
Intercept	-128.422	54.654	<0.001	-2.350	0.019
An increase					
Year	0.028	0.026	1.028	1.088	0.277
Intercept	-54.821	51.813	<0.001	-1.058	0.290
Don't know (base outcome)					

**Table C77: Marginal Effects of Year on Opinions on Wyoming Cigarette Tax Increase: Change over Time 2015–2021**

Variable	B	SE	t	p
A decrease	0.001	0.001	1.937	0.053
No change	0.009	0.004	2.371	0.018
An increase	-0.006	0.004	-1.664	0.096
Don't know	-0.004	0.002	-1.852	0.064

**Table C78: 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 C79: 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 C80: Multinomial Logistic Regression of Opinions on Cigarette Tax Increase: Difference between 2019 and 2021**

Variable	B	SE	RRR	t	p
A decrease					
2019 (reference)					
2021	-0.238	0.439	0.788	-0.543	0.587
Intercept	-1.770	0.286	0.170	-6.188	<0.001
No change					
2019 (reference)					
2021	0.665	0.188	1.944	3.540	<0.001
Intercept	1.055	0.125	2.872	8.451	<0.001
An increase					
2019 (reference)					
2021	0.173	0.180	1.188	0.957	0.339
Intercept	1.478	0.117	4.385	12.617	<0.001
Don't know (base outcome)					

**Table C81: Marginal Effects of Year on Opinions on Wyoming Cigarette Tax Increase: Difference between 2019 and 2021**

Variable	B	SE	t	p
A decrease	-0.009	0.006	-1.407	0.160
No change	0.127	0.027	4.635	<0.001
An increase	-0.083	0.027	-3.051	0.002
Don't know	-0.035	0.016	-2.238	0.025

**Table C82: Multinomial Logistic Regression of Support for an Increase in the Tax on Chewing Tobacco, Snuff, Dip, or Snus: Change over Time 2015–2021**

Variable	B	SE	RRR	t	p
For an increase					
Year	0.025	0.029	1.026	0.861	0.389
Intercept	-49.437	59.473	<0.001	-0.831	0.406
Against an increase					
Year	0.055	0.031	1.057	1.803	0.071
Intercept	-110.058	61.907	<0.001	-1.778	0.075
Don't know (base outcome)					

**Table C83: 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)					

**Table C84: Multinomial Logistic Regression of Support for an Increase in the Tax on Chewing Tobacco, Snuff, Dip, or Snus: Difference between 2019 and 2021**

Variable	B	SE	RRR	t	p
For an increase					
2019 (reference)					
2021	0.112	0.204	1.119	0.548	0.584
Intercept	1.740	0.132	5.698	13.225	<0.001
Against an increase					
2019 (reference)					
2021	0.518	0.211	1.678	2.449	0.014
Intercept	1.339	0.138	3.814	9.691	<0.001
Don't know (base outcome)					

**Table C85: Marginal Effects of Year on Support for an Increase in the Tax on Chewing Tobacco, Snuff, Dip, or Snus: Difference between 2019 and 2021**

Variable	B	SE	t	p
For an increase	-0.079	0.028	-2.877	0.004
Against an increase	0.102	0.028	3.686	<0.001
Don't know	-0.023	0.015	-1.494	0.135

## *Goal Area 4: Identifying and Eliminating Tobacco-Related Disparities*

### SMOKING-RELATED DISPARITIES

#### Adults With Low Annual Household Income

**Table C86: Logistic Regression of Current Smoking: Difference between Annual Household Income <\$30,000 and \$30,000+ for 2021**

Variable	B	SE	OR	t	p
<\$30K \$30K+ (reference)	0.945	0.330	2.572	2.866	0.004
Intercept	-1.847	0.152	0.158	-12.181	<0.001

**Table C87: Logistic Regression of Secondhand Smoke Exposure at Work: Difference between Annual Household Income <\$30,000 and \$30,000+ for 2021**

Variable	B	SE	OR	t	p
<\$30K \$30K+ (reference)	1.138	0.453	3.120	2.513	0.012
Intercept	-1.614	0.161	0.199	-10.013	<0.001

#### American Indian

**Table C88: Logistic Regression of Current Smoking: Difference between American Indian and Non-American Indian for 2021**

Variable	B	SE	OR	t	p
American Indian Non-American Indian (reference)	1.601	0.409	4.960	3.911	<0.001
Intercept	-1.777	0.135	0.169	-13.193	<0.001

**Table C89: Logistic Regression of American Indian Current Smoking: Difference between 2019–2021**

Variable	B	SE	OR	t	p
2019 (reference) 2021	0.959	0.521	2.608	1.841	0.066
Intercept	-1.135	0.348	0.322	-3.260	0.001



**Table C90: Logistic Regression of Secondhand Smoke Exposure at Work: Difference between American Indian and Non-American Indian for 2021**

Variable	B	SE	OR	t	p
American Indian	0.094	0.505	1.098	0.185	0.853
Non-American Indian (reference)					
Intercept	-1.490	0.152	0.225	-9.799	<0.001

## Behavioral Health

**Table C91: Logistic Regression of Current Smoking: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	0.982	0.271	2.670	3.628	<0.001
No BHCs (reference)					
Intercept	-1.934	0.153	0.145	-12.630	<0.001

**Table C92: Multinomial Logistic Regression of Smokers' Quit Attempt: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	RRR	t	p
Never tried to quit (base outcome)					
Tried to quit in lifetime, not past year					
Any BHCs	-0.447	0.744	0.639	-0.601	0.548
No BHCs (reference)					
Intercept	1.223	0.529	3.398	2.311	0.021
Tried to quit in past year					
Any BHCs	-0.703	0.812	0.495	-0.866	0.386
No BHCs (reference)					
Intercept	0.862	0.554	2.369	1.558	0.119

**Table C93: Logistic Regression of Smokers' Obstacles to Quitting: Cost of Medicines or Products: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	0.324	0.558	1.383	0.580	0.562
No BHCs (reference)					
Intercept	-1.073	0.359	0.342	-2.987	0.003

**Table C94: Logistic Regression of Smokers' Obstacles to Quitting: Cost of Classes: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	-0.895	0.683	0.409	-1.311	0.190
No BHCs (reference)					
Intercept	-1.352	0.405	0.259	-3.343	<0.001

**Table C95: Logistic Regression of Smokers' Obstacles to Quitting: Fear of Gaining Weight: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	0.189	0.639	1.208	0.295	0.768
No BHCs (reference)					
Intercept	-1.187	0.380	0.305	-3.123	0.002

**Table C96: Logistic Regression of Smokers' Obstacles to Quitting: Loss of a Way to Handle Stress: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	0.337	0.567	1.401	0.594	0.552
No BHCs (reference)					
Intercept	0.491	0.315	1.634	1.559	0.119

**Table C97: Logistic Regression of Smokers' Obstacles to Quitting: Other People Smoking Around You: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	-0.022	0.522	0.978	-0.042	0.966
No BHCs (reference)					
Intercept	-0.184	0.300	0.832	-0.614	0.540

**Table C98: Logistic Regression of Smokers' Obstacles to Quitting: Cravings for a Cigarette: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	-0.249	0.628	0.780	-0.396	0.692
No BHCs (reference)					
Intercept	1.203	0.362	3.330	3.319	<0.001

**Table C99: Logistic Regression of Smokers' Obstacles to Quitting: Lack of Support from Others to Quit: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	-0.322	0.613	0.725	-0.524	0.600
No BHCs (reference)					
Intercept	-1.485	0.423	0.227	-3.514	<0.001

**Table C100: Logistic Regression of Smokers' Obstacles to Quitting: Worsening Depression: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	0.887	0.560	2.429	1.585	0.113
No BHCs (reference)					
Intercept	-1.062	0.364	0.346	-2.917	0.004

**Table C101: Logistic Regression of Smokers' Obstacles to Quitting: Worsening Anxiety: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	1.498	0.579	4.471	2.585	0.010
No BHCs (reference)					
Intercept	-0.558	0.309	0.573	-1.803	0.072

**Table C102: Logistic Regression of Smokers' Obstacles to Quitting: Withdrawal: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	0.018	0.506	1.018	0.035	0.972
No BHCs (reference)					
Intercept	-0.367	0.305	0.693	-1.203	0.229

**Table C103: Logistic Regression of Smokers' Obstacles to Quitting: Other: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	0.781	0.652	2.183	1.198	0.231
No BHCs (reference)					
Intercept	-1.646	0.414	0.193	-3.978	<0.001

**Table C104: Logistic Regression of Secondhand Smoke Exposure at Work: Difference Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	0.486	0.342	1.625	1.421	0.156
No BHCs (reference)					
Intercept	-1.598	0.166	0.202	-9.637	<0.001

## Young Adults

**Table C105: Multinomial Logistic Regression of Smoking Status: Difference between Ages 18-29 and Ages 30+ for 2021**

Variable	B	SE	RRR	t	p
Current smoker					
18-29	-0.492	0.348	0.611	-1.414	0.157
30+ (reference)					
Intercept	-0.362	0.159	0.696	-2.283	0.023
Former smoker					
18-29	-2.157	0.342	0.116	-6.305	<0.001
30+ (reference)					
Intercept	0.350	0.124	1.418	2.815	0.005
Experimental smoker					
18-29	-0.497	0.255	0.608	-1.951	0.051
30+ (reference)					
Intercept	0.321	0.120	1.378	2.678	0.007
Never smoker (base outcome)					

**Table C106: Marginal Effects of Age on Smoking Status: Difference between Ages 18-29 and Ages 30+ for 2021**

Variable	B	SE	t	p
Current smoker	0.020	0.046	0.444	0.657
Former smoker	-0.248	0.029	-8.666	<0.001
Experimental smoker	0.039	0.051	0.753	0.451
Never smoker	0.189	0.052	3.650	<0.001

**Table C107: Logistic Regression of Secondhand Smoke Exposure at Work: Difference between Ages 18-29 and Ages 30+ for 2021**

Variable	B	SE	OR	t	p
18-29	0.690	0.304	1.994	2.270	0.023
30+ (reference)					
Intercept	-1.687	0.189	0.185	-8.927	<0.001

## ENDS-RELATED DISPARITIES

### Adults with Low Annual Household Income

**Table C108: Logistic Regression of Current ENDS Use: Difference between Annual Household Income <\$30,000 and \$30,000+ for 2021**

Variable	B	SE	OR	t	p
<\$30K	0.258	0.601	1.295	0.429	0.668
\$30K+ (reference)					
Intercept	-2.580	0.230	0.076	-11.232	<0.001

### American Indian

**Table C109: Logistic Regression of Current ENDS Use: Difference between American Indian and Non-American Indian for 2021**

Variable	B	SE	OR	t	p
American Indian	0.014	0.791	1.014	0.018	0.986
Non-American Indian (reference)					
Intercept	-2.413	0.191	0.090	-12.666	<0.001

**Table C110: Logistic Regression of Secondhand ENDS Aerosol Exposure in Indoor Public Places: Difference between American Indian Adults and Non-American Indian Adults for 2021**

Variable	B	SE	OR	t	p
American Indian	0.916	0.506	2.499	1.809	0.071
Non-American Indian (reference)					
Intercept	-2.115	0.139	0.121	-15.216	<0.001

### Behavioral Health

**Table C111: Logistic Regression of Current ENDS Use: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	1.048	0.385	2.852	2.724	0.007
No BHCs (reference)					
Intercept	-2.802	0.259	0.061	-10.831	<0.001

**Table C112: Multinomial Logistic Regression of Quit Attempt of Adults Who Tried ENDS: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	RRR	t	p
Never tried to quit (base outcome)					
Tried to quit in lifetime, not past year					
Any BHCs	0.717	0.395	2.048	1.815	0.071
No BHCs (reference)					
Intercept	-0.536	0.235	0.585	-2.285	0.023
Tried to quit in past year					
Any BHCs	0.773	0.522	2.166	1.482	0.140
No BHCs (reference)					
Intercept	-1.091	0.289	0.336	-3.770	<0.001

**Table C113: Logistic Regression of Secondhand ENDS Aerosol Exposure in Indoor Public Places: Difference between Any Behavioral Health Conditions (BHCs) and No BHCs for 2021**

Variable	B	SE	OR	t	p
Any BHCs	0.810	0.289	2.249	2.809	0.005
No BHCs (reference)					
Intercept	-2.286	0.165	0.102	-13.826	<0.001

### Young Adults

**Table C114: Logistic Regression of Current ENDS Use: Difference between Ages 18-29 and Ages 30+ for 2021**

Variable	B	SE	OR	t	p
18-29	1.274	0.370	3.574	3.439	<0.001
30+ (reference)					
Intercept	-2.804	0.278	0.061	-10.104	<0.001

**Table C115: Logistic Regression of Secondhand ENDS Aerosol Exposure in Indoor Public Places: Difference between Ages 18-29 and Ages 30+ for 2021**

Variable	B	SE	OR	t	p
18-29	1.341	0.284	3.824	4.730	<0.001
30+ (reference)					
Intercept	-2.469	0.166	0.085	-14.853	<0.001