



# Wyoming Young Adult Tobacco Survey

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#### ABOUT THIS REPORT

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# **Executive Summary**

The Wyoming Survey & Analysis Center (WYSAC), under contract to the Wyoming Department of Health, Public Health Division, conducted a survey of young adults aged 18 to 25. The survey measured attitudes and behaviors of young adults in Wyoming related to tobacco use. Key findings from the survey include the following:

- 18% of young adults in Wyoming currently smoke. Young men, those who identify as LGBT, and those not attending school are more likely to be smokers.
- Nearly one third (27%) of current smokers consider themselves to be "social smokers."
- 7% of young adults in Wyoming use electronic nicotine delivery systems (ENDS; also known as e-cigarettes) every day or some days; another 11% use ENDS rarely. Those who have ever smoked cigarettes, even a puff, are more likely to have tried or currently use ENDS. Former cigarette smokers (17%) report using ENDS every day more frequently than current cigarette smokers (6%) and experimental cigarette smokers (2%).
- 86% of current smokers have made at least one quit attempt in the past year.
- Most young adults perceive smoking as socially unacceptable in general, among their close friends, and among family. Young men and those who have ever smoked, even a puff, are significantly more likely to agree that smoking is socially acceptable.
- Almost all young adults in Wyoming (95%) think people their age put themselves at great or moderate risk if they smoke cigarettes every day. Young women, never smokers, and those attending school are significantly more likely to perceive great risk in daily cigarette smoking.
- Almost all young adults in Wyoming (97%) think that a woman who smokes while pregnant puts her developing infant at great or moderate risk of health problems.
- Young adults in Wyoming are less likely to perceive daily ENDS use as risky compared to every day cigarette use. Still, the majority (70%) think people their age put themselves at great or moderate risk if they use e-cigarettes or vape every day.
- 51% of smokers (who report currently drinking alcohol) report that they are more likely to smoke when they drink alcohol.
- 64% of every day or some-day young adult smokers report smoking more when they are stressed.
- 98% of every day or some-day young adult smokers report that weight played no role in their choice to start smoking.

# Background

The Wyoming Survey & Analysis Center (WYSAC), under contract to the Wyoming Department of Health, Public Health Division, conducted a random digit dial (RDD) survey, which included landlines and cell phones, of young adults aged 18 to 25. The survey measured attitudes and behaviors of young adults in Wyoming related to tobacco use.

In 2010, WYSAC performed a literature review to summarize what is known about young adult smoking initiation. The results of the literature review indicated that additional research would further inform tobacco prevention and control efforts regarding those who do (and do not) initiate smoking as young adults (WYSAC, 2010). In 2011, WYSAC conducted two focus groups with young adults who initiated cigarette smoking after turning 18. One recommendation that came from the focus groups was more research into the emergence of "social smokers" and the definitions employed by researchers to characterize smoking status (WYSAC, 2011). In addition, the 2012 Adult Tobacco Survey (ATS) showed that while most current smokers initiated smoking before the legal age of 18 (72%), those who initiated between the ages of 18 and 24 increased from 13% in 2010 to 25% in 2012 (WYSAC, 2014).

To better understand tobacco initiation and the tobacco-using behavior of Wyoming's young adults, WYSAC's analyses of the results of this 2016 Young Adult Tobacco Survey (YATS) assessed the discrepancies between researchers' definitions of smoking status and how respondents label themselves, including the idea of self-labeling as a social smoker. The survey also assessed cigarette and electronic nicotine delivery system (ENDS) use and cessation; social acceptance of smoking; perceptions of risk for those who smoke and vape; and the relationships between smoking and drinking alcohol, stress, and weight.

# Methods

## Sampling & Survey Administration

WYSAC purchased three telephone samples to target young adults for this survey: targeted landline, targeted cellular, and RDD cellular. The sampling protocol for this survey was specifically designed to achieve roughly 60–70% of all completions on cell phones.

WYSAC's Survey Research Center administered the survey from September 29, 2015, through November 29, 2015. WYSAC interviewers screened each respondent to ensure eligibility (18–25 year-olds living in a Wyoming county). WYSAC called phone numbers up to 12 times to complete surveys. The average time to complete a survey was 9 minutes and 22 seconds. WYSAC made 114,376 call attempts on a total sample size of 26,345 telephone numbers.

WYSAC completed 539 interviews with 18–25-year-olds in Wyoming, an overall response rate of 9.8%. Over 60% of surveys were completed in the RDD cellular frame, 4% were completed in the targeted cellular frame and 36% were completed in the targeted landline frame. Of all working, eligible phone numbers, the overall response rate was 9.8%. Of all working phone numbers, 38% were screened as ineligible (had no 18–25-year-olds in the household).

## Analysis

The YATS sample appeared representative for all priority populations without the need for weighting. The Appendix shows the demographics of WYSAC's young adult sample.

WYSAC conducted statistical tests to determine if variables of interest differed for demographic groups. To determine if differences were statistically significantly, WYSAC conducted Pearson's chi-squared tests and Fisher's one tailed exact tests ( $\alpha = 0.05$ ) in Stata 12.1. Along with observed, expected, and p-values, WYSAC researchers used adjusted residuals to assist with interpreting the direction and strength of statistically significant associations. With 95% confidence, WYSAC's random sample of 539 yields a margin of error of about ±4.2 percentage points. Some percentages in the charts and tables do not total to 100% because of rounding.

## **Tobacco Usage Rates**

### Cigarettes

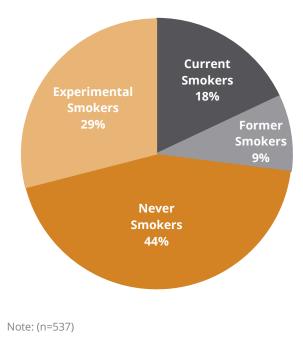
Using guidance from the Centers for Disease Control and Prevention (CDC, 2009), WYSAC defines current smokers as those who have smoked at least 100 cigarettes in their lifetime and

who currently smoke cigarettes some days or every day. Former smokers are those who smoked at least 100 cigarettes in their lifetime but do not currently smoke. Experimental smokers are those who have tried cigarette smoking, even one or two puffs, but have smoked fewer than 100 cigarettes in their lifetime. Never smokers are those who have never tried smoking, not even a puff. In the YATS, 44% of young adults reported never smoking (Figure 1). The young adult smoking rate of 18% is comparable to the smoking rate of 19% in the Wyoming adult population (Wyoming Department of Health, 2016).

The average age that young adults reported first smoking part or all of a cigarette, even one or two puffs, was 16.5 years, below the legal limit of 18. Again, this is comparable to the Wyoming adult population (WYSAC, 2016).

### Figure 1: Fewer than One in Five Young Adults Currently Smoke

Smoking status of young adults in Wyoming



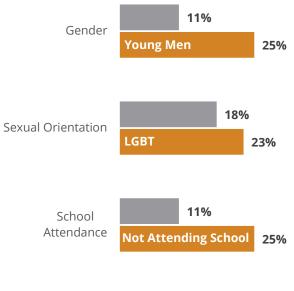
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### DISPARITIES

Three groups stood out as having high smoking rates: young men, those not attending school, and young adults who identified as LGBT (Figure 2). These findings are consistent with research that has shown that cigarette smoking is higher among individuals who are LGBT and among those who have obtained less than a college degree (CDC, 2015).

### **Figure 2: Smoking Status Disparities**

*Percentage of young adults reporting current smoking status* 



Note: (n=537)

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The YATS found that young men are more likely to smoke in Wyoming, compared to young women. This differs from findings for adult men and women, which has traditionally been comparable (WYSAC, 2016). However, other evidence shows that nationally, men differ from women in their smoking behaviors (National Institute on Drug Abuse, 2012; CDC, 2016) and young men may be less responsive to tobacco control strategies than young women (Ellis, Perl, Davis, & Vichinsky, 2008).

In the United States, cigarette smoking is more common among people serving in the military than among civilians. In 2011, 24% of active-duty military personnel reported current cigarette smoking compared to 19% of civilians (Barlas, Higgins, Pflieger, & Diecker, 2013). Although the sample of military personnel in the YATS was too small to run a

significance test, the frequencies show that the smoking rate among military personnel (55%) appeared to be higher than non-military (17%).

### SMOKING STATUS AND SELF-LABELING

To test the differences between researchers' definitions of cigarette smoking status and how young adults label themselves, including the idea of self-labeling as a social smoker, WYSAC asked young adults if they consider themselves to be a smoker, social smoker, ex-smoker, nonsmoker, or something else. More than one fourth (27%) of current smokers considered themselves to be social smokers. This finding could inform marketing and education efforts, which may be more effective if they were tailored to young adult "social smokers" as well as "smokers."

More than one fourth (27%) of current smokers considered themselves to be social smokers.

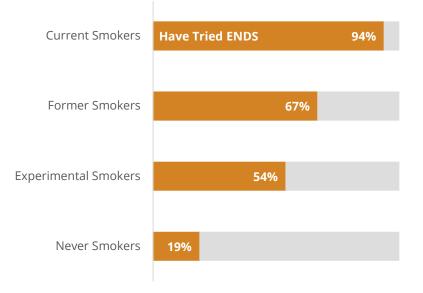
### Electronic Nicotine Delivery Systems (ENDS)

The YATS found that 47% of young adults reported trying e-cigarettes, electronic, or vapor cigarettes with nicotine at least once in their lifetime. Current cigarette smokers were significantly more likely to have tried ENDS than former, experimental, or never smokers (Figure 3).

Young men (58%) were significantly more likely to have tried ENDS than young women (35%). Young adults identifying as Hispanic (63%) were significantly more likely to have tried ENDS than non-Hispanic young adults (45%).

## Figure 3: Current Cigarette Smokers More Likely to Try ENDS

Have you ever tried e-cigarettes, electronic, or vapor cigarettes with nicotine, even just one time in your entire life?



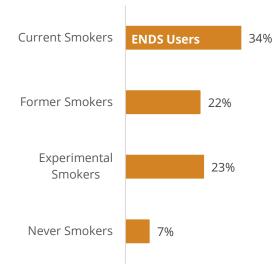
Note: (n=536)

The majority (82%) of young adults in Wyoming reported having never tried ENDS or not currently using them, while 7% reported using them every day or some days (Figure 5). Significantly more young men reported using ENDS every day or some days (12%), compared to young women (3%).

Young adults who have smoked cigarettes were significantly more likely to report current ENDS use (every day, some days, or rarely; Figure 4). Former cigarette smokers (17%) reported using ENDS every day more frequently than current cigarette smokers (6%) and experimental cigarette smokers (2%).

## Figure 4: Most Current ENDS Users are in a Cigarette Smoker Category

Young adults reporting ENDS use "some days," "every day," or "rarely" by cigarette smoking status

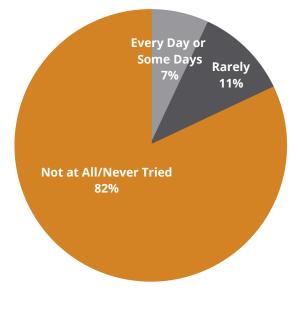


#### Note: (n=536)

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### Figure 5: Most Young Adults Report No Current ENDS Use

*Do you now use e-cigarettes, electronic, or vapor cigarettes with nicotine...* 



Note: (n=538)

When asked about the main reason(s) for trying ENDS, almost half of Wyoming young adults (46%) said *to try something new; I was curious*. Another 31% said they tried ENDS *as part of a social activity, for fun, someone invited me to try it* (Table 1).

#### Table 1: Curiosity is the Main Reason Young Adults Try ENDS

What is your main reason for trying e-cigarettes or vaping?

	Percent
To try something new; I was curious	46%
As part of a social activity, for fun, someone invited me to try	31%
I wanted to quit smoking cigarettes	19%
Because of the taste or flavor options	17%
l thought it would be safer than cigarettes	13%
l wanted to cut back on cigarettes	11%
Other	10%
To not disturb other people with smoke	9%
To save money	6%
To use nicotine in a place where cigarette smoking is banned	5%

Note: Asked only of respondents who reported trying ENDS at least once in their lifetime (n=253). Respondents chose all that apply, so responses do not total 100%. "Other" responses included: the smoke is cool, better for my health, fresher air, to smoke around kids, I was drinking when I tried it, help with stress, control nicotine, when friends have one, magic/vape tricks, studies say they are safer, to quit using chew.

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## Cessation

While 18% of young adults in Wyoming currently smoke cigarettes, 86% of current smokers have made at least one quit attempt in the past year. The majority of former smokers (55%) and experimental smokers (65%) last smoked more than six months ago.

# **Perceptions of Social Norms**

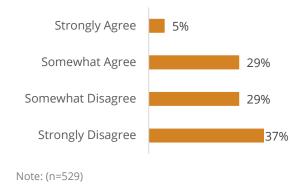
The majority of young adults (66%) disagreed that smoking is socially acceptable (Figure 6). However, this means that more than one third agreed that smoking is socially acceptable.

Compared to young men, young women were significantly more likely to disagree that smoking is socially acceptable. In all, 74% of young women disagreed, either strongly or somewhat, that smoking is socially acceptable, compared to 58% of young men.

Those who had never smoked, not even a puff, were significantly more likely to disagree that smoking is socially acceptable,

### Figure 6: Most Young Adults Disagree that Smoking Is Socially Acceptable

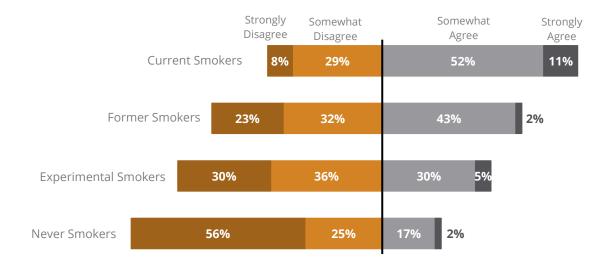
"Smoking is socially acceptable." Do you...



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compared to those who have smoked (Figure 7). Very few, including just 11% of current smokers, *strongly agreed* that smoking is socially acceptable.

### Figure 7: Never Smokers More Likely to Disagree that Smoking Is Socially Acceptable



"Smoking is socially acceptable." Do you...

Note: Totals may not add to 100% due to rounding. (n= 527)

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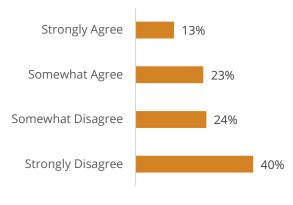
## Social Acceptability among Close Friends

Most young adults in Wyoming (64%) disagreed that smoking is socially acceptable among their close friends (Figure 8).

Three groups were significantly more likely to disagree that smoking is socially acceptable among their close friends: young women (compared to young men), never smokers (compared to current, former, and experimental smokers), and those not attending school (compared to those attending school; Figure 9).

### Figure 8: Most Young Adults **Disagreed that Smoking Is Socially Acceptable among Close Friends**

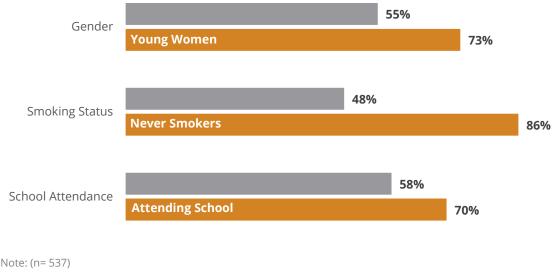
"Among my close friends, smoking is socially acceptable."



Note: (n=537)

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### Figure 9: Some Groups More Likely to Disagree that Smoking Is Socially **Accepable among Close Friends**



Percentage of young adults who disagreed that smoking was socially acceptable among their close friends

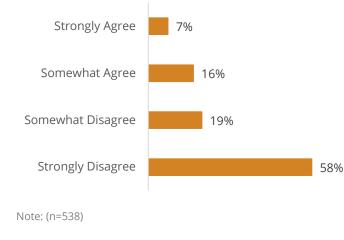
Note: (n= 537)

## Social Acceptability among Family

Most young adults in Wyoming (67%) disagreed that smoking is socially acceptable among family (Figure 10). Two groups were significantly more likely to disagree that smoking is socially acceptable among family: young women (compared to young men), and never smokers (compared to current, former and experimental smokers; Figure 11).

### Figure 10: Most Young Adults Disagreed that Smoking Is Socially Acceptable among Family

"Among my family, smoking is socially acceptable." Do you...



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### Figure 11: Young Women and Never Smokers More Likely to Disagree that Smoking Is Socially Acceptable among Family



Percentage of young adults who disagreed that smoking was socially acceptable among their family

Note: (n= 536)

# **Perceptions of Risk**

## Cigarettes

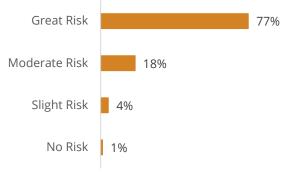
## SMOKING CIGARETTES EVERY DAY

Almost all young adults in Wyoming (95%) think people their age put themselves at great or moderate risk if they smoke cigarettes every day (Figure 12).

Three groups were more likely to perceive great risk in daily cigarette smoking: young women (compared to young men), never smokers (compared to current, former, and experimental smokers), and those attending school (compared to those not attending school; Figure 13).

### Figure 12: Most Young Adults Perceive Great Risk in Smoking Cigarettes Every Day

Do you think people your age put themselves at no risk, slight risk, moderate risk, or great risk if they smoke cigarettes every day?

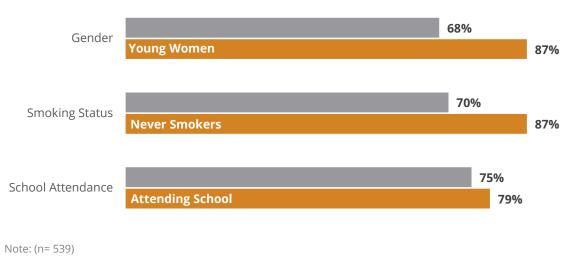


Note: (n=539)

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### Figure 13: Some Groups More Likely to Perceive Great Risk of Every Day Cigarette Smoking

*Percentage of young adults who reported that smoking cigarettes every day puts people their age at "great risk"* 



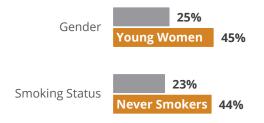
### SMOKING CIGARETTES OCCASIONALLY

The majority of young adults in Wyoming (78%) think people their age put themselves at great or moderate risk if they smoke cigarettes occasionally, like in social settings (Figure 14).

Two groups were more likely to perceive great risk in occasional cigarette smoking: young women (compared to young men) and never smokers (compared to current, former, and experimental smokers; Figure 15).

### Figure 15: Young Women and Never Smokers More Likely to Perceive Great Risk of Occasional Cigarette Smoking

Percentage of young adults who reported that smoking cigarettes occasionally puts people their age at "great risk"



Note: (n= 539)

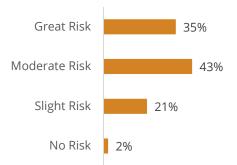
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### SMOKING WHILE PREGNANT

Almost all young adults in Wyoming (97%) think that a woman who smokes while pregnant puts her developing infant at great or moderate risk of health problems (Figure 16). Never smokers were more likely to perceive great risk, compared to current, former, and experimental smokers.

### Figure 14: Most Young Adults Perceive Risk in Smoking Cigarettes Occasionally

Do you think people your age put themselves at no risk, slight risk, moderate risk, or great risk if they smoke cigarettes occasionally, like in social settings?

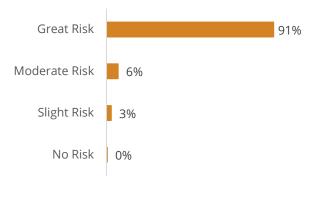


Note: Totals do not add to 100% due to rounding. (n=539)

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### Figure 16: Most Young Adults Perceive Great Risk of Smoking While Pregnant

Do you think a woman who smokes while pregnant puts her developing infant at no risk, slight risk, moderate risk, or great risk of health problems?



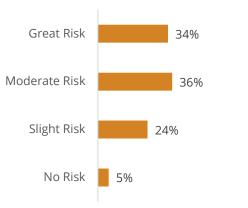


## Electronic Nicotine Delivery Systems (ENDS)

### USING ENDS EVERY DAY

Fewer young adults in Wyoming see great or moderate risk in daily ENDS use than every day cigarette use. Still, the majority of young adults in Wyoming (70%) think people their age put themselves at great or moderate risk if they use ecigarettes or vape every day (Figure 17). Figure 17: Most Young Adults See Some Risk in Smoking E-Cigarettes Every Day

*Do you think people your age put themselves at no risk, slight risk, moderate risk, or great risk if they use e-cigarettes or vape every day?* 



Two groups were more likely to perceive great risk in every day ENDS use: young women (compared to young

Note: Totals do not add to 100% due to rounding. (n=517)

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men) and never smokers (compared to current, former, and experimental smokers; Figure 18).

### Figure 18: Young Women and Never Smokers More Likely to Perceive Great Risk of Using E-Cigarettes Every Day

Gender
25%

Young Women
44%

Smoking Status
28%

Never Smokers
43%

Percentage of young adults who reported that every day ENDS use puts people their age at "great risk"

Note: (n=517)

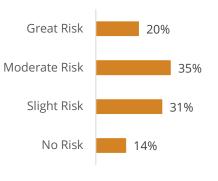
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### USING ENDS OCCASIONALLY

Fewer young adults in Wyoming see great or moderate risk in occasional ENDS use than in occasional cigarette use. Just over half of young adults in Wyoming (55%) thought people their age put themselves at great or moderate risk if they smoke e-cigarettes or vape occasionally, like in social settings (Figure 19). Young women were significantly

## Figure 19: Most Young Adults See Some Risk in Smoking E-Cigarettes Occasionally

*Do you think people your age put themselves at no risk, slight risk, moderate risk, or great risk if they use e-cigs occasionally?* 



Note: (n= 524)

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more likely to perceive great risk with occasional ENDS use than young men.

# **Factors Related to Smoking**

## Drinking and Smoking

Just over half (51%) of young adults reported currently drinking alcoholic beverages like beer, wine, or liquor. Of this group, 56% were older than the legal drinking age of 21 and 44% were younger. Of young adults who reported currently drinking, half (50%) reported most frequently drinking at home. Bars were the second most reported drinking location (24%), followed by parties (11%). Less than 10% of respondents reported drinking at restaurants, friends' houses, work, or other locations.

About half of young adults in Wyoming (51%) who had smoked at least once in their lifetime and who reported current alcohol use reported that they were more likely to smoke when they were drinking and another 12% reported that they exclusively smoke when they were drinking (Table 2).

WYSAC examined the relationship between self-described smoking labels and drinking; 58% of self-described social smokers and 49% of self-described smokers reported that they were more likely to smoke when they were drinking.

### **Table 2: Smoking and Drinking**

*Please choose the option that best describes your cigarette smoking behaviors when you drink alcohol. Would you say...* 

	Percent
You exclusively smoke when you're drinking	12%
You are more likely to smoke when you're drinking	51%
You smoke about the same with or without alcohol	16%
You're less likely to smoke when you're drinking	4%
You never smoke when you're drinking	18%

Note: Data represent young adults who reported currently drinking alcohol and smoking at least one puff in the past year. Totals do not add to 100% due to rounding. (n=138)

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### Stress and Smoking

The majority (64%) of every day or some-day young adult smokers reported smoking more when they were stressed (Table 3).

## Weight and Smoking

Almost all every day or some-day young adult smokers in Wyoming (98%) reported that weight played no role in their choice to start smoking. The YATS asked

### Table 3: Stress Has Influence on Young Adult Smokers

How does stress relate to your smoking? Would you say...

	Percent
You smoke more when you're stressed	64%
You smoke about the same amount whether you're stressed or not	28%
You smoke less when you're stressed	9%

Note: Only asked of young adults who reported smoking every day or some days or those who self-identified as a smoker or social smoker. Totals do not add to 100% due to rounding (n=127).

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respondents, "If you planned to quit smoking, how concerned would you be about weight gain?" Most (82%) responded not at all concerned, while less than one in five (18%) responded that they would be very or somewhat concerned about weight gain.

# Discussion

The overall prevalence of tobacco use among young adults in Wyoming is comparable to the general population. Young men, those who identify as LGBT, and those not attending school smoke cigarettes at higher rates than their counterparts. Eliminating disparities in tobacco use for these groups will lead to health equity (CDC, 2015).

Confirming our original hypothesis, many young adults consider themselves social smokers and are more likely to smoke while drinking alcohol. There is also a strong relationship between stress and smoking. Tobacco prevention efforts focused on reducing these associations could ultimately lead to a reduction in tobacco consumption.

In general, young adults in Wyoming perceive cigarette smoking as socially unacceptable and risky to people's health, which suggests an anti-cigarette social norm. However, three groups (smokers, young men, and those not attending school) were generally more likely to perceive smoking as socially acceptable. They were also less likely to see them as risky. Educating these groups could change social norms even more.

While most young adults in Wyoming do not currently use ENDS, current, former, and experimental smokers are more likely to try ENDS and become regular users, compared to never smokers. Former smokers were more likely to report using ENDS every day more frequently than current smokers and experimental smokers. Most ENDS users reported trying them for the first time because they wanted to try something new, they were curious, or they tried them as part of a social activity. While most young adults perceive some health risk of using ENDS, fewer young adults see ENDS as risky compared to seeing cigarettes as risky. When working to change prevalence rates, tobacco prevention and control efforts should include a focus on ENDS as well as cigarettes.

# References

- Barlas, F.M., Higgins, W.B., Pflieger, J.C., & Diecker K. (2013). 2011 department of defense health related behaviors survey of active duty military personnel. Washington, DC: U.S. Department of Defense.
- Centers for Disease Control and Prevention. (2009). *National center for health statistics: National health interview survey: General concepts*. Retrieved from http://www.cdc.gov/nchs/nhis/tobacco/tobacco\_glossary.htm
- Centers for Disease Control and Prevention. (2015). *Best practices user guide: health equity in tobacco prevention and control.* Retrieved from <a href="https://www.cdc.gov/tobacco/stateandcommunity/best-practices-health-equity/pdfs/bp-health-equity.pdf">https://www.cdc.gov/tobacco/stateandcommunity/best-practices-health-equity/pdfs/bp-health-equity.pdf</a>
- Centers for Disease Control and Prevention. (2016). *Current cigarette smoking among adults in the United States.* Retrieved from <u>https://www.cdc.gov/tobacco/data\_statistics/fact\_sheets/adult\_data/cig\_smoking/</u>
- Ellis, J. A., Perl, S. B., Davis, K., & Vichinsky, L. (2008). Gender differences in smoking and cessation behaviors among young adults after implementation of local comprehensive tobacco control. *American Journal of Public Health*, *98*(2), 310–316.
- National Institute on Drug Abuse. (2012). *Tobacco/Nicotine*. Retrieved from <u>https://www.drugabuse.gov/publications/research-reports/tobacco/are-there-gender-differences-in-tobacco-smoking</u>
- Wyoming Department of Health: Chronic Disease and Maternal Child Health Epidemilogy Unit. (2016). *Wyoming Behavioral Risk Factor Surveillance System—BRFSS*. Retrieved from <u>https://health.wyo.gov/publichealth/chronic-disease-and-maternal-child-health-epidemiology-unit/wyoming-behavior-risk-factor-surveillance-system-2/</u>
- WYSAC. (2010). Literature review of young adult smoking initiation, by N. M. Nelson, K. S.
   Freedman, & L. L. Feldman. (WYSAC Technical Report No. GROUP-1002). Laramie,
   WY: Wyoming Survey & Analysis Center, University of Wyoming.
- WYSAC. (2011). Results of focus groups on young adult smoking initiation, 2011 by K.S. Freedman,
   & L.L. Feldman (WYSAC Technical Report No. CHES-1107). Laramie, WY: Wyoming
   Survey & Analysis Center, University of Wyoming.
- WYSAC. (2014). Report on the 2012 Wyoming Adult Tobacco Survey, by M. Kato, L. H. Despain & T. Comer Cook. (WYSAC Technical Report No. CHES-1408). Laramie, WY: Wyoming Survey & Analysis Center, University of Wyoming.
- WYSAC. (2016). The impact of tobacco in Wyoming: 2016 annual summary by L. H. Despain, S. K. O'Donnell, & J. R. Simpson. (WYSAC Technical CHES-1615.) Laramie, WY: Wyoming Survey and Analysis Center, University of Wyoming.

# **Appendix: Demographics**

### Table A-1: Demographics in Sample

Age, gender, race, ethnicity, and sexual orientation.

Demographic		Frequency	Percent
AGE	18	87	16.1
	19	80	14.8
	20	69	12.8
	21	59	11.0
	22	64	11.9
	23	62	11.5
	24	67	12.4
	25	51	9.5
	Male	275	51.0
GENDER	Female	264	49.0
RACE	White only	443	82.7
	Black only	8	1.5
	Asian only	8	1.5
	Native Hawaiian or other Pacific Islander only	4	0.8
	American Indian or Alaska Native only	10	1.9
	Other race only	23	4.3
	Multiracial	40	7.5
	Hispanic	56	10.4
ETHNICITY	Non-Hispanic	481	89.6
SEXUAL ORIENTATION	Straight	476	90.2
	Gay or Lesbian	10	1.9
	Bisexual	32	6.1
	Other	10	1.9

Note: Some totals may not equal 100% due to rounding. Only valid responses were counted, so sample size may vary across variables.

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### Table A-2: Supplemental Demographics in Sample

Military service, school attendance, and working sector.

Demographic		Frequency	Percent
MILITARY SERVICE	Current Military	11	2.0
	Veteran/Former Military	9	1.7
	No Military Service	519	96.3
CURRENTLY ATTENDING SCHOOL	Yes	276	51.2
	No	263	48.8
	A GED Program	2	0.7
	High School	39	14.1
TYPE OF	Community College	100	36.3
SCHOOL ENROLLED IN	Occupational, Technical, or Vocation	8	2.9
(If attending school)	Four-Year University (seeking a Bachelor's Degree)	106	38.4
	Graduate School	12	4.4
	Other	9	3.3
	Mining, Oil, Gas, Energy	33	6.2
	Manufacturing, Transportation, or Construction	45	8.4
	Retail, Food, or Service Industry	94	17.5
	Healthcare	30	5.6
WORKING	Government or Education	41	7.6
SECTOR	Finance, Banking, Insurance or Real Estate	7	1.3
	Student	76	14.2
	Not Currently Working	60	11.2
	Other	38	7.1
	Multiple Sectors	113	21.0

Note: Some totals may not equal 100% due to rounding. Only valid responses were counted, so sample size may vary across variables.