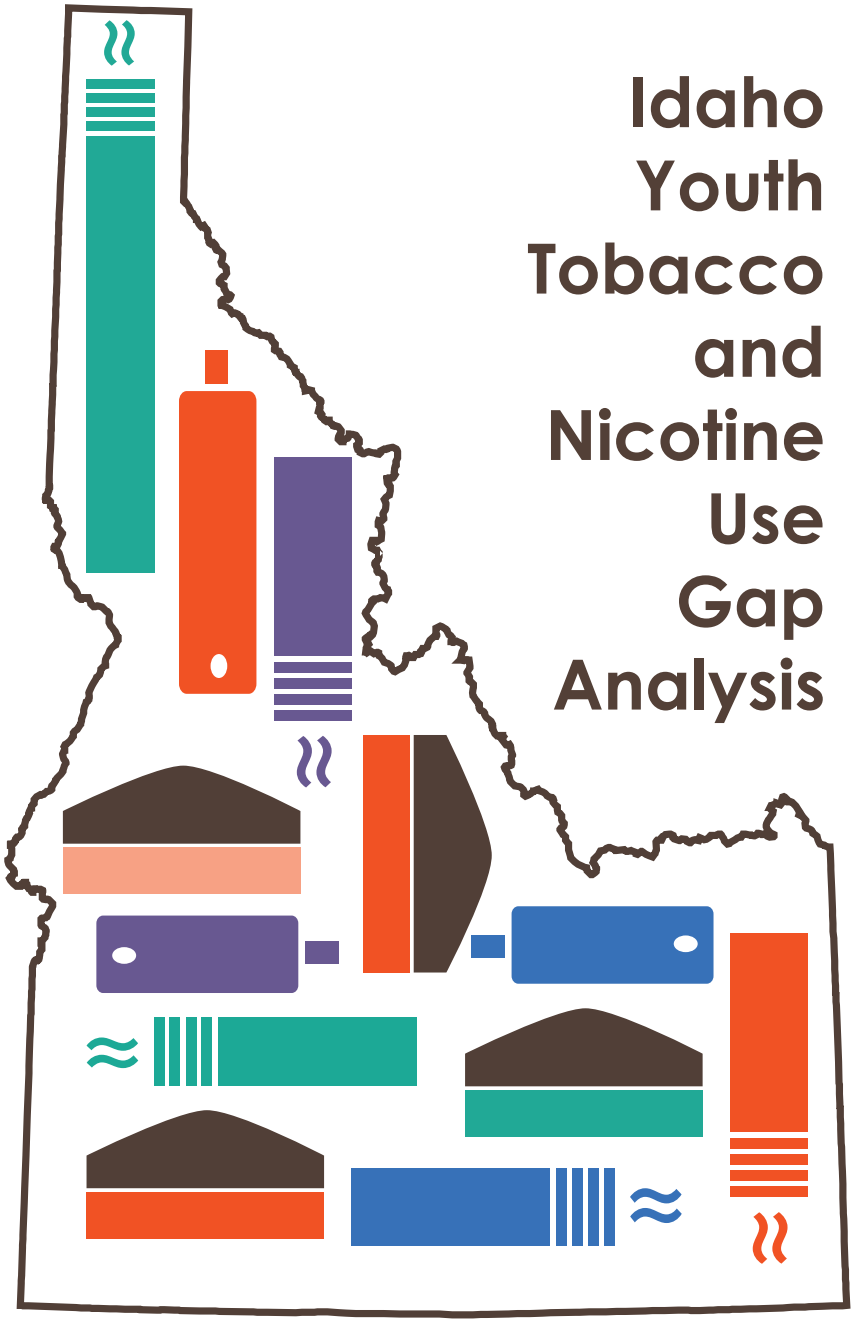

Idaho Youth Tobacco and Nicotine Use Gap Analysis

JULY 2019

Prepared for:
Idaho Tobacco Prevention and Control Program, Project Filter
Bureau of Community and Environmental Health
Idaho Department of Health and Welfare

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We extend thanks to the many dedicated individuals representing organizations whom either administer or utilize youth tobacco use data. We thank them for their dedication and for the time and insight they provided to help us better understand the scope, reach, methods, and processes in place to collect youth tobacco and nicotine use and related data in Idaho. This report is possible because of your willingness to share your knowledge, expertise and tobacco/nicotine data.

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List of Abbreviation of Terms

ACHA	American College Health Association
ATOD	Alcohol Tobacco and Other Drug Use
BRFSS	Behavioral Risk Factor Surveillance System
CDC	Centers for Disease Control and Prevention
ENDS	Electronic Nicotine Delivery Systems
ETS	Environmental Tobacco Smoke
GATS	Global Adult Tobacco Survey
GYTS	Global Youth Tobacco Survey
PHD	Public Health District
IDHW	Idaho Department of Health and Welfare
IHYS	Idaho Healthy Youth Survey
KAP	Knowledge, attitudes, perceptions
MTF	Monitoring the Future
NATS	National Adult Tobaco Survey
NCHA	National College Health Assessment
NTCP	National Tobacco Control Program
NYTS	National Youth Tobacco Survey
PHD	Public Health District
PRAMS	Pregnancy Risk Assessment Monitoring System
PRATS	Pregnancy Risk Assessment Tracking System
SDE	Idaho State Department of Education
SHS	Secondhand Smoke
YRBS	Youth Risk Behavior Survey
YRBSS	Youth Risk Behavior Surveillance System
YTS	Youth Tobacco Survey

GLOSSARY OF TERMS

Combustible cigarettes- a term used to distinguish smoked cigarettes from electronic cigarettes.

Current use- determined by respondents to indicate that they have used a tobacco product on at least one day during the past 30 days.

Determinants of health- the social, economic, and physical environment, and a person's individual characteristics and behaviors which influence overall health.

Dual use- use of both e-cigarettes and combustible cigarettes.

E-liquids- which e-cigarette users inhale. It is usually made up of various ingredients such as nicotine, propylene, glycerin, water, and added flavors also known as e-juice, vape-juice, e-liquid is the liquid (often flavored) used in e-cigarettes that is heated up and converted to an aerosol which e-cigarettes users inhale. It is usually made up of various ingredients such as nicotine, propylene, glycerin, and water, and flavors.

Electronic cigarettes (E-cigarettes), electronic nicotine delivery systems, and other electronic nicotine products- battery-powered devices that use nicotine liquid rather than tobacco leaves and produce vapor instead of smoke. May include vape pens, e-hookahs, hookah pens, e-cigars, e-pipes and JUUL type products.

Electronic Nicotine Delivery Systems (ENDS)- ENDS are noncombustible tobacco products. Vapes, vaporizers, vape pens, hookah pens, electronic cigarettes (or e-cigs), and e-pipes are some of the terms used to describe ENDS.

Electronic vapor products- also known as e-cigarettes or electronic nicotine delivery systems (ENDS).

Ever Use of Tobacco- refers to any lifetime use of a tobacco product, including as small as one or two puffs of a cigarette or e-cigarette, one pinch of smokeless tobacco, etc.

Experimental smoking or tobacco use- includes trying combustible cigarettes or any tobacco product once or twice in a person's lifetime.

Global Youth Tobacco Survey-a school based survey developed by the World Health Organization which is designed to enhance the capacity of countries to monitor tobacco use among youth and to guide the implementation and evaluation of tobacco prevention and control programs.

Low birth weight- a live birth weight weighing under 2,500 grams (5 ½ pounds or less).

Multiple-class Sampling- the number of schools needed for one survey is multiplied by the number of surveys being coordinated. This method produces nonoverlapping samples within schools.

Multiple-school Sampling- multiple surveys are conducted simultaneously in separate classes in the same sample of schools. This method produces nonoverlapping samples of schools.

Nicotine (or tobacco) dependence- an addiction to tobacco products caused by the drug nicotine.

Nicotine Salts E-Liquids- compounds containing salt-based nicotine, typically less harsh to vape, allowing for a smoother vaping experience at higher nicotine strength.

Premature birth- a non-induced birth occurring at less than 37 weeks gestation.

Project Filter- the name of the Idaho Tobacco Prevention and Control Program.

Smokeless Tobacco- a tobacco product that is not smoked or burned. Use of smokeless tobacco includes chewing, sniffing, or placing the product between the gum and the cheek or lip.

Synar Program- The Synar Amendment, included in the 1992 Alcohol, Drug Abuse, and Mental Health Administration Reorganization Act (P.L. 102-321, (section 1926), aimed to decrease youth access to tobacco by requiring states to enact and enforce laws to prohibit the sale and distribution of tobacco products to individuals under the age of 18. Each state is required to conduct annual, random, and unannounced inspections of retail tobacco outlets and report findings to the Secretary of the Department of Health and Human Services.

Surveillance- the ongoing collection, analysis, and interpretation of data from generalizable samples.

Tobacco Products- includes cigarettes, cigars, smokeless tobacco (including chewing tobacco, snuff, dip, snus, and dissolvable tobacco), tobacco pipes, bidis, hookah, and electronic cigarettes.

Tobacco Use Risk- the probability or threat of use of any tobacco or nicotine product.

Youth Tobacco Data Supplement- a compendium of all data available for Idaho youth (ages 10-24) of tobacco products initiation and use, tobacco knowledge, attitudes and beliefs, exposure to environmental tobacco smoke, and other tobacco indicators.

Executive Summary

The Centers for Disease Control and Prevention (CDC) National Tobacco Control Programs (NTCP) outlines four primary goals for comprehensive tobacco control programs: eliminate exposure to secondhand smoke; promote quitting among adults and youth; prevent initiation among youth and young adults; and identify and eliminate tobacco-related disparities. Conducting surveillance and evaluation is a recommended strategy for reaching these goals. [1,2]. To this end, the Idaho Tobacco Prevention and Control Program (Project Filter) contracted with the University of Idaho to conduct a youth (ages 10-24) data gap analysis on current youth tobacco surveillance efforts and report recommendations on the feasibility, scope, methodology, and cost of additional youth tobacco data collection.

Six Idaho surveillance systems were identified to contain youth tobacco use and opinion data, including:

1. **Idaho Healthy Youth Survey (IHYS)** - Idaho Office of Drug Policy;
2. **Idaho Youth Risk Behavior Survey (YRBS)** - Idaho State Department of Education; Idaho Behavioral Risk Factor Surveillance System (BRFSS)- Idaho Department of Health and Welfare;
3. **National College Health Survey II (NCHS II)** - American College Health Association (ACHA);
4. **Idaho Vital Statistics, Natality 2017**- Idaho Department of Health and Welfare;
5. **Pregnancy Risk Assessment Tracking (PRATS)** - Idaho Department of Health and Welfare. The analysis also included the Idaho School Health Profiles-Idaho State Department of Health and Welfare, a biennial survey reporting on school tobacco policy and tobacco health education.

The report includes descriptions of all surveys in Idaho with tobacco content, current tobacco data findings, and a discussion of the strengths, gaps, and opportunities to enhance youth tobacco data surveillance. The recommendations to fill gaps in Idaho youth tobacco data were derived from national and state youth tobacco surveillance system findings, current tobacco control literature, interviews with key stakeholders, and input from Project Filter staff.

Major Conclusions

1. Current youth tobacco data surveillance does not include all youth between 10-24 years of age. Youth grades 6, 8, 10, and 12 are included in the Idaho Health Youth Survey and youth grades 9, 10, 11, 12 are included in the Youth Risk Behavior Survey. Youth ages 18-24 are under-represented in the Idaho Behavioral Risk Factor Surveillance System. Pregnant and postpartum women under the age of 18 are not included in the Idaho Pregnancy Risk Assessment Tracking System (PRATS).
2. Some youth are excluded from all current surveillance systems, including youth attending alternative, non-public, and tribal schools, and youth in Idaho juvenile corrections facilities.
3. Comprehensive tobacco surveillance is lacking in Idaho. While the current surveillance systems do provide needed information on tobacco use, tobacco control programs require comprehensive tobacco surveillance to identify emerging tobacco use and opinion trends, sub-populations at highest risk, and evaluation indicators to measures outcomes of intervention efforts. Incorporating the range of tobacco questions that are needed for comprehensive tobacco control surveillance and program evaluation into existing Idaho health behavior surveys lies outside of the scope and intent of these surveys.
4. The current collection of tobacco use data amongst Idaho health behavior surveys is not always standardized and is sometimes inconsistent with nationally-validated surveys. Using nationally-standardized tobacco question items increases data validity and allows for national comparisons.

5. Some of the Idaho health surveys have incorporated e-cigarettes as question items. More information is needed to more fully understand the rapid increase of e-cigarette use in order to determine populations which are the most susceptible to and at risk for nicotine dependence.
6. Gaining access to administer surveys in Idaho schools is increasingly difficult. Coordination of external health behavior surveys is key to decreasing the burden to schools and student respondents.
7. Changes in communication patterns necessitate advances in data collection methodology among youth populations. Web-based and mobile friendly data collection is better received by youth and decreases survey completion time.
8. The population of Idaho is rapidly increasing, while the ability of state agencies to collect needed tobacco data has diminished. Much of the tobacco data collected for Idaho youth can only be reported statewide and it is difficult to distinguish tobacco use data among youth ages 18-24 from all adults in Idaho. More localized data is required to target, plan, and evaluate tobacco control efforts. Additional resources are needed to increase sample sizes in Idaho to allow for data analysis and reporting by regions.
9. Overall, the findings suggest that the Idaho Tobacco Control Program would benefit most from initiating a comprehensive, nationally-validated youth tobacco surveillance. Given the resistance to external school surveys, this must be done in close coordination with schools and the administrators of other Idaho health surveys. In additions, recommendations are made to fill some of the identified and most pressing youth tobacco data gaps in Idaho.

A critical infrastructural component of any comprehensive tobacco control program is a surveillance and evaluation system that can monitor and document key short-term, intermediate, and long-term outcomes within populations. Data from surveillance and evaluation systems can be used to inform program and policy directions, demonstrate program effectiveness, monitor progress on reducing health disparities, ensure accountability to those with fiscal oversight, and engage stakeholders.

—Best Practices for Comprehensive Tobacco Control Programs [2]

Idaho Youth Tobacco and Nicotine Use Gap Analysis

PROJECT OVERVIEW AND DESCRIPTION

The Idaho Tobacco Prevention and Control Program, Project Filter, contracted with faculty at the University of Idaho to conduct a gap analysis of Idaho youth tobacco use data and report recommendations on the feasibility, scope, methodology, and cost of additional youth tobacco data collection. The project's scope of work included the following:

Gaps Analysis Research

1. Investigate current youth tobacco and nicotine use data in Idaho (ages 10-24), to understand the scope and magnitude of tobacco use, habits, and norms for youth in Idaho.
2. Identify trends between age groups of 10-13; 14-18; 19-24.
3. Identify gaps in existing data for target populations.
4. Identify sub-populations of the target populations that are underrepresented.
5. Investigate primary youth tobacco and nicotine use data collection methods used by other states with similar demographics.
6. Investigate recommended evidence-based methodologies used for collecting primary youth data in urban and rural settings.
7. Investigate and assess potential barriers to collecting data.

Report and Proposal of Methodology

1. Report on gaps analysis findings and highlight areas of greatest need.
2. Provide recommendations identifying where additional data collection is warranted and feasible.
3. If determined that additional data collection is warranted and feasible, provide an outline proposal for methodology to collect primary youth tobacco and nicotine use data.
4. Create a projected cost billing for potential methodology.

Nationwide combustible cigarette use rates have declined while and electronic vapor device current use (use in the past 30 days) has risen dramatically, resulting in an overall increase in tobacco product use [3].

METHODS

The University of Idaho evaluator met with Project Filter staff to discuss project goals, expectations, known youth tobacco and nicotine use data sources, and define project timelines and logistics. The project was deemed as evaluation not research; as a results Human Subjects Assurances were not required by the University of Idaho Institutional Review Board. A data gaps analysis plan was discussed with Project Filter staff and approvals to interview key stakeholders were sought and granted. The evaluator arranged and conducted interviews (face-to-face and via phone) with persons responsible for current youth tobacco and nicotine use survey instruments, as well as others engaged with youth tobacco prevention, policies, and education (Idaho School Administrators Association, Idaho School Board Association, American Lung Association in Idaho, and some Public Health District (PHD) Directors and PHD staff). With the exception of two phone conversations, all interviews were recorded and transcribed verbatim at which time the recordings were destroyed.

Analysis and comparisons were made of the on-going, statewide surveillance of youth tobacco use, among youth, ages 12-24. In Idaho, there are three distinct categories of available data by age: youth grades 6 through 12, young adults, ages 18-24, and pregnant and postpartum women ages <15-24. There is one source of tobacco health education and tobacco policy data that is collected for Idaho schools. The intent of the project was to identify tobacco data gaps in present and continuous surveillance systems. For that reason, we did not include data that have been collected for a specific geographic region, or a one-time investigation. The data sets analyzed include:

Youth grades 6-12th

Idaho Healthy Youth Survey (IHYS) - Idaho Office of Drug Policy (Idaho ODP) [4]

Idaho Youth Risk Behavior Survey (YRBS) - Idaho State Department of Education (Idaho SDE) [5]

Young Adult: Ages 18-24

National College Health Survey II (NCHS II) - American College Health Association (ACHA) [6]

Idaho Behavioral Risk Factor Surveillance System (BRFSS)- Idaho Department of Health and Welfare [7]

Pregnancy and Postpartum Women: Ages <15-24

Idaho Vital Statistics, Natality 2017- Idaho Department of Health and Welfare [8]

Pregnancy Risk Assessment Tracking (PRATS) - Idaho Department of Health and Welfare [9]

Idaho School Health Profiles- Idaho State Department of Education (SDE) [10]

The tobacco-related questions in each survey were compared to the CDC National Youth Tobacco Survey (NYTS) [11], the CDC National Adult Tobacco Survey (NATS) [12], and current scientific literature describing youth tobacco assessment. The CDC surveys provided benchmarks to evaluate the comprehensiveness of the youth tobacco data available in Idaho.

Each Idaho tobacco survey/questionnaire was analyzed and described according to:

- Type, specificity, and number of questions (e.g., use, attitudes, quit attempts, etc.)
- Analysis of tobacco data and other health indicators
- Populations included and excluded from the sample
- Methodology, administration, and procedures used
- Concordance with recent tobacco use trends and research findings

The question item categories used in the CDC National Youth Tobacco Survey (NYTS) and Idaho surveys were analyzed and coded to reflect 11 question categories. A comparison of the types of tobacco questions in Idaho surveys are compared to the comprehensive 2018 CDC National Youth Tobacco Survey (NYTS) which may be found in Appendix 1 Note that states have the option to conduct a survey based on the NYTS, the Youth Tobacco Survey, or YTS.

The 11 tobacco question item categories include:

1. Use- any lifetime use, past 12 month and past 30-day use, age of initiation, frequency, and quantity of tobacco product use.
2. Knowledge, attitudes, perceptions (KAP) and reasons volunteered for use- all questions pertaining to tobacco product knowledge, perceptions of harm, risk, product availability, personal and perceived family and peers' attitudes towards use, and any reasons given for tobacco product use.
3. Access- routes of access to tobacco products, e.g., purchasing from stores, getting tobacco products from friends or family, etc.
4. Exposure- any environmental exposure to secondhand smoke (SHS) and/or e-cigarette vapor in homes, cars, in public spaces, or at work.
5. Advertisements (Ads)- reports of tobacco product marketing in the environment, in print, television, radio, social media, and other mediums.
6. Peer/Family- peer and family use, approval, and influence for youth use of tobacco products.
7. Quit- desire to quit, quit attempts, and questions pertaining to tobacco cessation.
8. Information- any tobacco product education or information received from parents, teachers, health care professionals, etc.
9. Dependence- behaviors and physical symptoms reflective of nicotine dependence (addiction).
10. Brand- includes name brands of tobacco products, flavors and/or devices used in cigarettes, cigars, smokeless tobacco, and e-liquids.
11. Policy- any awareness of tobacco policies in schools, workplaces, or public settings.

GAP ANALYSIS FINDINGS

The format of the following gap analysis includes:

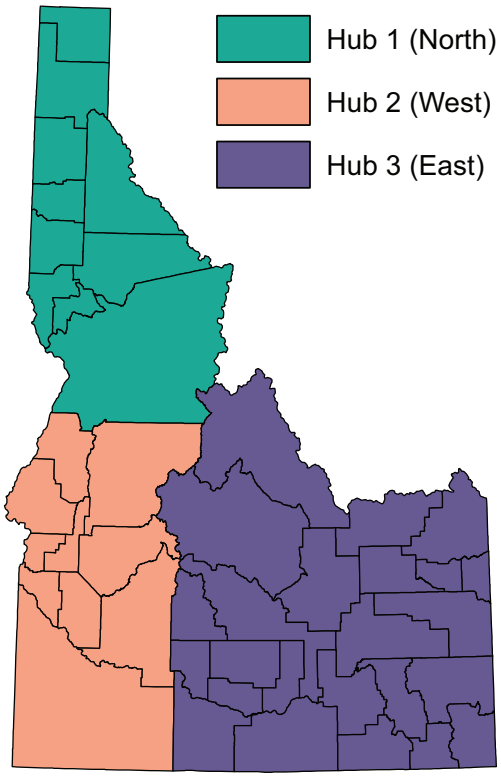
- A description of each survey
- A summary of the survey's characteristics
- Survey questions and the current data findings by county, region, or state
- Additional figures and tables depicting the survey findings
- The strengths, gaps, and opportunities to enhance youth tobacco data by each data category
- Data frequency tables and additional data figures and tables for each survey found in Youth Tobacco Data Supplement.

YOUTH GRADES 6 THROUGH 12

Idaho Healthy Youth Survey, 2017 State Report

The Idaho Healthy Youth Survey (IHYS), sponsored by the Idaho Governor's Office of Drug Policy (ODP), was designed to measure substance abuse, risk and protective factors, mental health, suicide, and other health behaviors of students enrolled in public and charter schools in grades 6, 8, 10, and 12. The goal of the IHYS is to, '*…gather local-level data to aid in targeting efforts to prevent youth behavioral risk issues* [4].' The survey provides data by state and by three geographical hubs (North, West, and East). Each participating school districts received the data for their district. The survey was last administered fall 2017; administration of the IHYS is planned for fall 2019 as well as subsequent odd-numbered years.

A state sample was drawn with the intent of gathering county-level data. Lower than anticipated participation resulted in data weighted by three Idaho State Department of Education (SDE) regions: North Hub, SDE Regions 1 and 2; East Hub, SDE Region 3; and West Hub, SDE regions 4, 5, and 6. The IHYS report compares some data points to the national Monitoring the Future Survey [13]. (See Youth Tobacco Data Supplement)



Source: IHYS, 2017

The IHYS addressed the following tobacco topic areas:

- **Lifetime substance use**- the percentage of students that reported using tobacco (cigarettes and chewing tobacco) or nicotine products (e.g., e-cigarettes) at least one time in the individual's lifetime.
- **Past-month substance use**- the percentage of students using tobacco products at least once in the past 30 days.
- **Perceived harmfulness**- the percentage of students who perceive "great risk" in using tobacco products.
- **Perceived availability**- percentage of students who identify that it as "easy" or "very easy" to obtain tobacco products.
- **Sources of obtaining tobacco products**- the percentage of students purchasing tobacco products at stores, on-line, stealing, getting the products from friends, etc.
- **Perceived parental approval of tobacco use**- the percentage that reported their parents believe it would be "very wrong" to use tobacco.
- **Perceived peer support for tobacco use**- the percentage that reported their friends believe it would be "very wrong" to use tobacco.

- **Personal approval of substance abuse**- the percentage that believe it is "very wrong" for someone their age to use tobacco.
- **Discussion with parents about substance use**- the percentage that report having a conversation with their parents about the dangers of tobacco use in the past year.

DATA SOURCE SUMMARY

Source

Idaho Healthy Youth Survey- Idaho Office of Drug Policy

Survey characteristics

Of the 112 total questions in the IHYS, 24 were tobacco-related questions constituting approximately 21.4% of the survey. The 24 questions included tobacco use (n=6, 38%); tobacco knowledge, attitudes, and perceptions (n=6, 38%); tobacco access (n=2, 6%); peer/parent use (n=1, 6%); and tobacco information (n=1, 6%), in this instance, discussion with parents/caregivers.

Sampling frame

All schools serving students in grades 6, 8, 10, 12; excluding special education buildings, juvenile justice centers, alternative schools, and Schools for the Blind and Deaf. The sample for 2017 IHYS included a census of students in 35 counties and a random sample of schools in 9 counties of with a larger student population.

Population surveyed

About 10,000 students in each grade, totaling 43,100 were included in the statewide sample covering the seven Idaho School Education Districts (SDE). Of the 30,000 questionnaires allocated, 20,927 were regarded as honest (respondents by grades: 6^{th} = 4,874; 8^{th} = 5,690; 10^{th} = 5,528 and 12^{th} = 4,835). A number of surveys, 1,024, were eliminated based upon four predetermined dishonesty indicators. These indicators include: 1) the students reported that they were not honest at all during completion, 2) students reported that they had used a non-existent drug named lorezerb, 3) students reported multiple drug use at an impossibly high level, and 4) students reported an age inconsistent with their grade level.

Participation

Throughout Idaho, 45 school districts within which 149 schools participated in the IHYS. Data were weighted by the three Hub Regions. School districts in 14 counties declined to participate including Bingham, Blaine, Boundary, Camas, Elmore, Franklin, Fremont, Gooding, Idaho, Jerome, Minidoka, Oneida, Shoshone, and Valley.

Methods

Bach Harrison was contracted to administer the survey and conduct the analysis. Each school recruited was given the option to administer the survey online or via paper and pencil. Paper surveys were mailed to each school, and teachers in an assigned class period proctored the survey. Data collection occurred between October and December 2017. Bach Harrison compiled the findings, including some key data associations, and provided Idaho ODP with the raw data. (See Youth Tobacco Data Supplement)

Limitations

Schools serving students in special education buildings, juvenile justice centers, alternative schools and Schools for the Deaf and Blind were not included in the sample. Some students omitted from the survey may present a high risk for tobacco/nicotine use risk [14]. Smaller than anticipated sample sizes restrict data analysis and reporting to three hubs (North, West, East) versus the intended seven Idaho school education districts.

Web link

https://odp.idaho.gov/wp-content/uploads/sites/58/2018/07/Idaho-Healthy-Youth-Survey-2017-State-Report.pdf

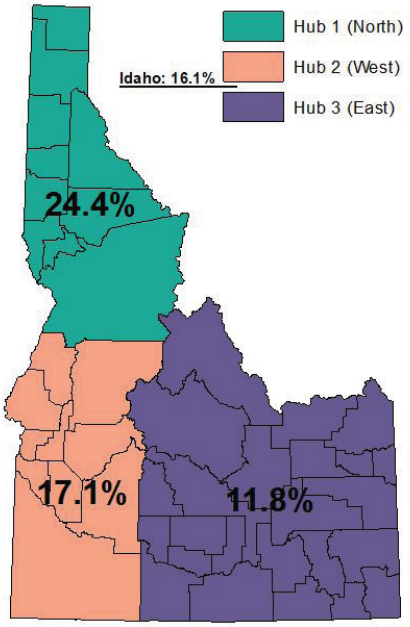
SUMMARY OF IDAHO HEALHTY YOUTH SURVEY FINDINGS

Idaho Healthy Youth Survey (IHYS), 2017 (biennial)	Idaho data, %, grades 6, 8, 10, 12			
	State	Hub 1 North	Hub 2 West	Hub 3 East
During your life, how many times have you used tobacco? (one or more times)	16.1	24.2	17.1	11.8
During the past 12 months, have you talked with at least one of your parents/caregivers about the dangers of tobacco, alcohol, or drug use? (yes)	54.5	55.5	52.6	56.5
Closest friends' use of tobacco (most/all)	6.1	10.3	5.9	4.7
During the past 30 days, how did you get the tobacco products you used?				
Bought in convenience store, supermarket, discount store, or gas station	11.3	15.4	9.2	11.0
Bought on the internet	5.7	5.8	5.7	5.6
Gave money to someone I knew to buy	39.6	45.8	36.2	39.3
Gave money to someone I didn't know to buy	6.9	6.9	6.6	7.4
A friend gave them to me for free	51.4	58.1	51.4	45.2
A family member gave them to me for free	13.5	16.4	12.6	12.5
I took them from a store or family member	13.0	14.2	13.2	11.5
I got them some other way	22.8	19.1	22.4	27.0
How wrong do your parents/caregivers feel it would be for you to use tobacco? (very wrong)	81.8	74.9	80.7	86.0
How wrong do your friends feel it would be for you to use tobacco? (very wrong)	65.8	54.4	63.2	73.4
How wrong do you feel it would be for someone your age to use tobacco? (very wrong)	72.2	63.1	70.0	78.5
How easy would it be to acquire tobacco? (fairly easy/very easy)	28.6	37.8	30.8	22.4
How many times have you used tobacco? (0 times)	83.9			
How old were you when you first used tobacco? (12 or younger, tobacco users)	34.4			
How much risk do you think people have by smoking a pack or more a day? (great risk)	70.4	68.7	69.7	71.8
During the past 30 days, how many days did you smoke? (one or more days)	5.6	8.3	5.8	4.3
How much risk do you think people have by using smokeless tobacco products? (great risk)	63.2	53.9	62.6	67.8
During the past 30 days, how many days did you use smokeless tobacco products? (one of more days)	3.1	5.8	3.0	2.2
How much risk do you think people have by using electronic vapor products? (great risk)	37.5	28.5	34.6	44.5
During the past 30 days, how many days did you use electronic vapor products? (one or more days)	13.9	19.6	13.6	11.8
During your life, how many days did you use electronic vapor products? (0 days)	76.1			

Key IHYS Findings

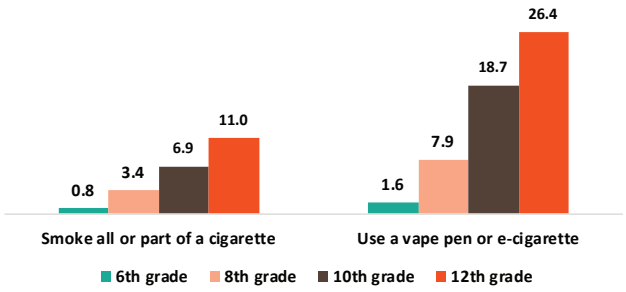
The IHYS provides important tobacco product use information (combustible cigarettes, e-cigarettes, and smokeless tobacco) by grade, gender, race/ethnicity, and geographical hub. The reported use of tobacco products in the past 30-days increases with age and is not evenly distributed across the three geographical hubs; in particular, e-cigarette use in the North Hub region is 40.9% greater than e-cigarette use in Idaho overall.

Any lifetime use of a tobacco product (one or more times), grades 6, 8, 10, 12, %, 2017



Source: IHYS, 2017

Tobacco use one or more days in the past 30 days, %, 2017

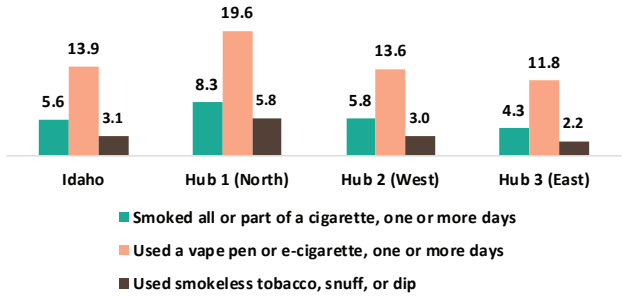


Source: IHYS, 2017

E-cigarette use is by far the most used nicotine-containing substance in the three Idaho hubs. The use of all of types of tobacco products is highest in the North Hub region. Male-identifying students use tobacco and nicotine products slightly more than female-identifying students, and students selecting 'other' for their gender use cigarettes and e-cigarettes at over twice the rate of those identifying as male or female. About 272 students (1.3% of respondents) reported their gender as 'other.'

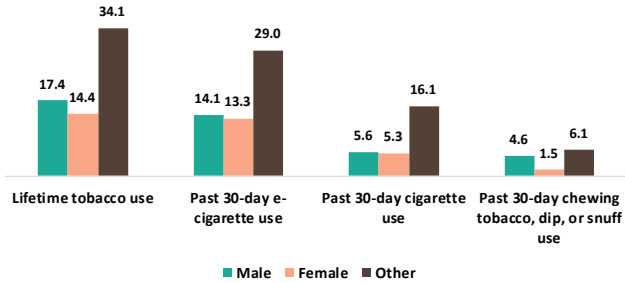
(See Youth Tobacco Data Supplement for survey frequency tables and other tables and figures.)

Past 30 day use, grades 6, 8, 10, 12, %, 2017



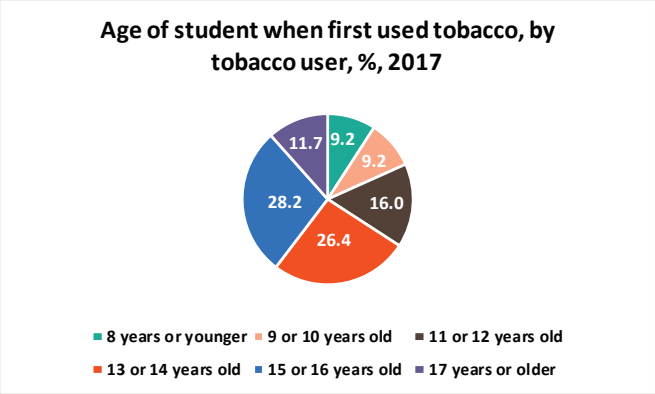
Source: IHYS, 2017

Tobacco use by gender, %, 2017

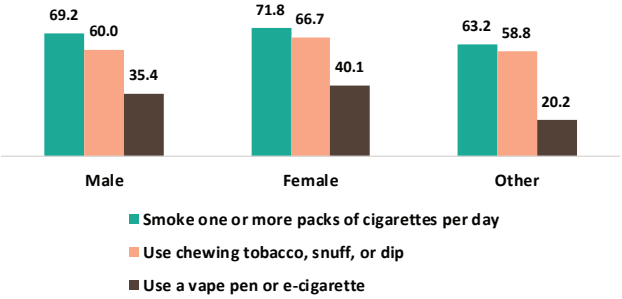


Source- IHYS, 2017

Furthermore, over one-third of Idaho students report first using tobacco before age 13, and 18.4% report using tobacco before age 11 (prior to 6th grade for the majority of student participants).

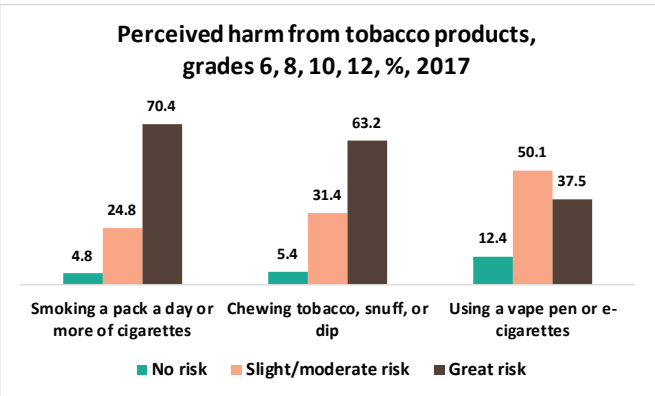


Source- IHYS, 2017



Source: IHYS, 2017

Perceptions of harm from tobacco products vary greatly by type of tobacco; almost twice as many students report that smoking cigarettes poses the greatest threat when comparing traditional and e-cigarette use [15]. Perceptions of tobacco use risk decrease by grade which contrasts with findings from the national Monitoring the Future survey [13]. Fewer males perceive 'great risk' from using all three types of tobacco products than females. Students identifying as 'other' than male or female are least likely to perceive 'great risk' from using all types of tobacco and only 20.2% of these students perceived 'great risk' from using e-cigarettes.



Source: IHYS, 2017

Youth Risk Behavioral Surveillance System (YRBSS)

The YRBSS was developed by the Centers for Disease Control and Prevention (CDC) to, "…1) describe the prevalence of health-risk behaviors among youths, 2) assess trends in health-risk behaviors over time, and 3) evaluate improvements in health-related policies and programs [4]." The YRBSS was developed to provide comparable data and to monitor progress toward the obtainment of national health objectives (Healthy People 2020) [16]. CDC made the decision that the system should focus on health-risk behaviors, rather than the determinants of health (e.g., knowledge, attitudes, beliefs, and skills). The YRBSS monitors six categories of high-risk health behaviors among youth and young adults, include:

1. Behaviors that contribute to unintentional injuries and intentional injuries (such as violence)
2. Tobacco use
3. Alcohol and other drug use
4. Sexual behaviors contributing to unintended pregnancy and sexually-transmitted disease
5. Unhealthy dietary patterns
6. Inadequate physical activity

The YRBSS includes a national school-based survey (Youth Risk Behavior Survey- YRBS) that is conducted by the CDC, in conjunction with state, territory, local education and health agencies, and tribal governments from a representative sample of 9th through 12th grade students. YRBSS includes an additional middle school survey conducted by some states, territories, tribal governments, and large urban school districts. A National Alternative High School Youth Risk Behaviors Assessment was conducted in 1998 [17].

The Idaho YRBS is administered through the Idaho State Department of Education (SDE), School Health Services [18]. In addition to the six behavior categories identified above, the 2017 Idaho YRBS collected information on obesity, oral health, asthma, sunlight and UV light exposure, food insecurity, homelessness, and school-based social support.

The 2017 Idaho YRBS included 10 questions about tobacco and nicotine and addressed the following topics:

- Cigarette, e-cigarette, and smokeless tobacco use and experimentation
- Current smoking patterns
- Age of any tobacco or nicotine initiation
- Adherence to Federal regulations regarding sale of cigarettes
- Smoking on school property
- Attempts to quit smoking

Idaho YRBS was conducted in spring 2017; the survey is conducted in odd-numbered years and administered directly by Idaho SDE staff to students in grades 9 through 12 attending traditional public and charter schools in Idaho. Students attending alternative, private, non-public, residential schools, or correctional schools or facilities are not included in the survey, nor are students who have voluntarily dropped out of school. Findings of the Idaho YRBS are representative of the overall state demographics; however, the sample size of 1,818 does not allow for comparison by school education districts. The CDC has created an interactive 'dynamic' interface to explore Idaho YRBS data and make comparisons with the nation and other states [19]. *(https://nccd.cdc.gov/youthonline/App/Results.aspx?LID=ID)*

DATA SOURCE SUMMARY

Source

Idaho Youth Risk Behavior Survey (Idaho YRBS)- Idaho Department of Education

Survey characteristics

Of the 97 questions in the Idaho YRBS, 10 are related to tobacco (10.3%). Of the 10 questions, 80% (n=8) are about tobacco use and primarily focus on cigarette smoking. There is one question about access to tobacco products and one question about individuals' quit attempts for any tobacco product.

Sampling frame

The Idaho YRBS used a two-stage cluster sample design. The first stage incorporated all traditional public and charter schools serving students in any grades 9-12. The second stage included a randomly selected set of intact classes of a required subject or period [20]. All students in these classes were considered eligible.

Population surveyed

Of the schools and individual students provided with the survey, the school response rate was 92%, the student response rate was 85%, and the overall response rate was 79%. Weighted demographic characteristics include: Female - 49.0%, Male - 51.0%, 9th grade - 27.6%, 10th grade - 26.1%, 11th grade - 24.1%, 12th grade - 22.1%, Black - 0.9%, Hispanic- 16.5%, White - 77.2%, All other races - 2.6%, and Multiple races - 2.8%.

Participation

The Idaho YRBS was completed by 1,818 students in 53 high schools.

Methods

Westat, an independent contractor with the CDC, developed the sampling frame and conducted the analysis and YRBS report preparation. Idaho's State Department of Education (SDE) staff last administered the paper and pencil survey during the 2017 spring semester. The YRBS is historically administered in odd-numbered years including 1991-1995 and 2001-2017.

Limitations

The Idaho YRBS survey was only provided to traditional public or charter schools which excludes some youth (e.g., students attending alternative schools) who are potentially at high risk for unhealthy behaviors [21]. Also, the self-reporting aspect of this survey tends to underrepresent unhealthy behaviors and over-represent socially desirable behaviors [18]. The sample size is representative of the state, however a much larger sample is required to report data by geographical regions or counties.

Web link

http://www.sde.idaho.gov/student-engagement/school-health/files/youth/2017-Youth-Risk-Behavior-Survey-Results.pdf

SUMMARY OF IDAHO YOUTH BEHAVIORAL RISK SURVEILLANCE (YRBS) 2017

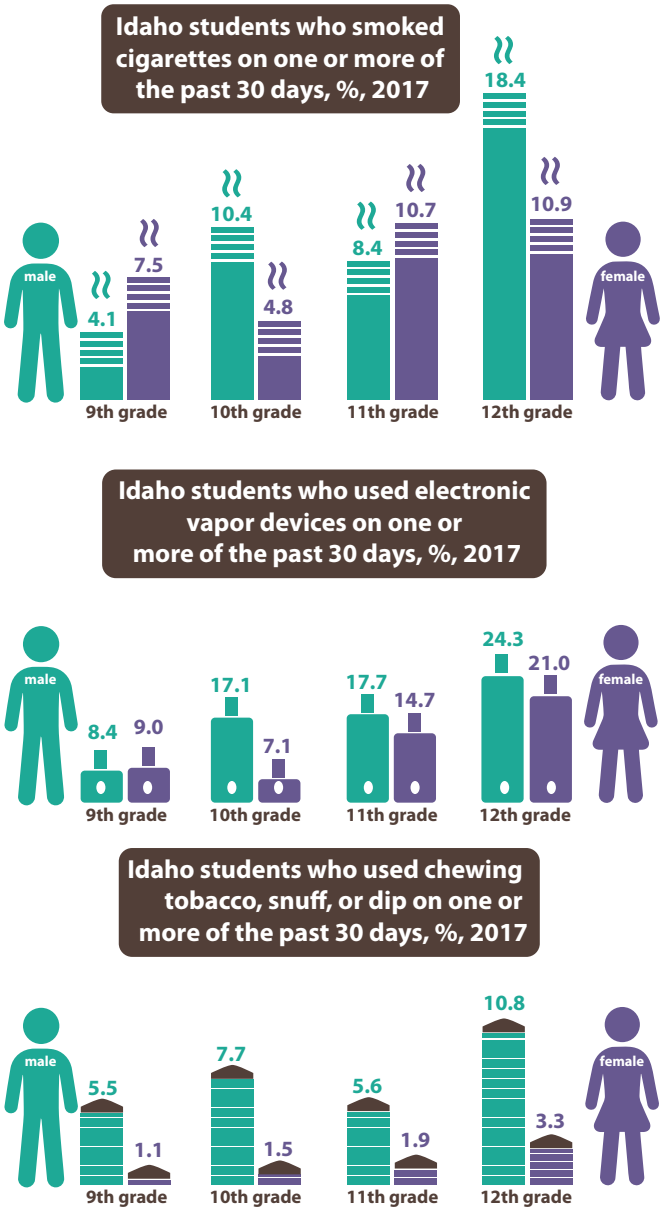
Youth Behavioral Risk Surveillance System (YBRSS) High School YRBS, 2017 (biennial)	Idaho data, %	U.S. data, %
	State	
Students who reported ever having tried cigarette smoking, even one or two puffs	27.6	28.9
Students who smoked a whole cigarette for the first time before age 13 years	8.5	9.5
Students who have ever used an electronic vapor device (including e-cigarettes, e-cigars, e-pipes, vape pipes, vaping pens, e-hookah, and hookah)	41.3	42.2
Students who smoked cigarettes on one or more of the past 30 days	9.1	8.8
Students who smoked cigarettes on 20 or more of the past 30 days	2.6	2.6
Students who smoked cigarettes daily (i.e., on 30 of the past 30 days)	1.4	2.0
Among those students that report current cigarette use, percentage who smoked more than 10 cigarettes per day on the days they smoked during the past 30 days	6.2	9.7
Among those students less than 18 years of age who report current cigarette use, percent who usually got their own cigarettes by buying them in a store or gas station during the past 30 days	10.0	*
Students who currently used an electronic vapor device one or more of the past 30 days	14.3	13.2
Students who used chewing tobacco or snuff on one or more of the past 30 days	4.7	5.5
Students who smoked cigars, cigarillos, or little cigars on one or more of the past 30 days	6.3	8.0
Students who currently used tobacco (cigarette, smokeless tobacco, or cigar on one or more of the past 30 days)	12.5	14.0
Students who currently used tobacco (cigarette, smokeless tobacco, cigar, or electronic vapor product on one or more of the past 30 days)	18.5	19.5
Students who tried to quit using all tobacco products, including cigarettes, cigars, smokeless tobacco, shisha or hookah tobacco, and electronic vapor products	50.4	41.4

* Data not available- State specific question

See Youth Tobacco Data Supplement for survey frequency tables and other Idaho YRBS data.

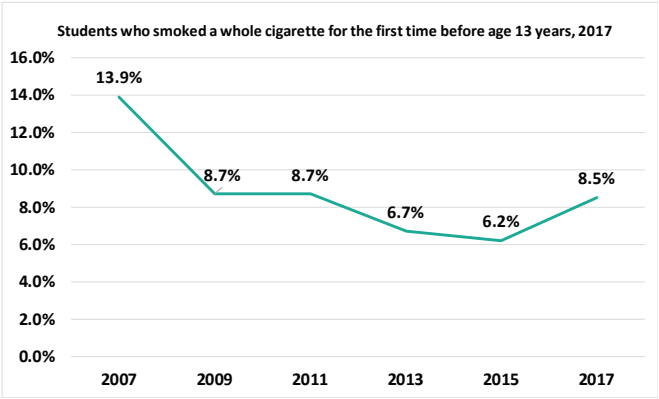
Key Idaho YRBS Findings

The YRBS provides important tobacco product use information (combustible cigarettes, e-cigarettes, and smokeless tobacco by grade and sex. The past 30-day use of all tobacco products increases with age and by gender (males). E-cigarettes are the most often used tobacco product among males and females [15].



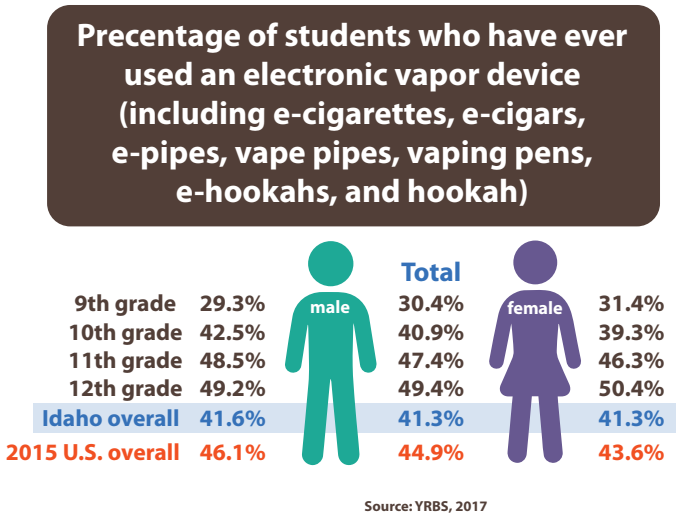
IHYS 2017

The YRBS has measured trends for tobacco use since 2007. It is important to note that students who reported trying a cigarette before age 13 (8.5%) increased between 2015 and 2017 to levels close to 2011 (8.7%). This is a finding worth tracking as cigarette use steadily declined in 2007. Hispanic youth report more "ever use" of e-cigarettes (50%) than the state "ever use" rate (41.3%) (Youth Tobacco Data Supplement) [22].



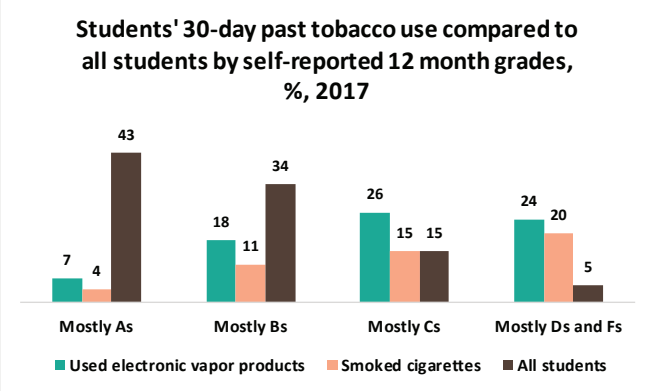
Source: YRBS, 2017

The percentage of students reporting ever using e-cigarettes increases from 9th grade to 12th grade with males "ever use" of e-cigarettes changing from 29.3% to 49.2% respectively, and females from 31.4% to 50.4%. Idaho students report lower e-cigarette use than students nationwide. Idaho e-cigarette trend data available are not currently available. See trend data for other tobacco products in the Youth Tobacco Data Supplement.



Source: YRBS, 2017

Associations between e-cigarette use and below average school performance (as measured by reported grades) follow a similar pattern as cigarette use and academic achievement; students who report tobacco use in the past 30 days also report lower grades [18]. However, students using electronic vaping products report somewhat higher grades than students who smoke cigarettes.



Source: Idaho YRBS, 2017

DISCUSSION- Idaho Tobacco Data Strengths Grades 6 through 12

IHYS Strengths

- The IHYS offers important insight into tobacco product use, attitudes and perceptions of harm, availability, and personal, peer, and parental approval among Idaho males, females, and students identifying as 'other' in grades 6, 8,10, and 12.
- The IHYS is the only survey in Idaho that provides tobacco data for students in grades 6 and 8 and the only survey offered in an electronic form, which reduces time spent taking the survey and decreases associated administrative burdens.
- The IHYS provides data for three Idaho SDE regions (North, West, and East) and school district level data for participating schools (which are not published for public consumption).
- The survey includes a question on tobacco product use susceptibility. This trait is associated with other risk behavior characteristics that are important to clarify, (e.g. other drug and alcohol use) [23].
- The IHYS school level data have the potential to guide school level policy and health education curriculum to prevent and reduce tobacco product use and decrease harm from tobacco exposure.
- Compatibility and comparability of the IHYS survey with the Monitoring the Future (MTF) survey allows for national comparisons across time, gender, grade level, and race/ethnicity.
- Important school measures (truancy, perceptions of school, academic achievement, and post-high school intention), student health indicators (mental health and suicide risk), and parent/caregiver characteristics (such as approval of youth tobacco use, history of incarceration, etc.) are available for greater understanding of health and risk behaviors.

Idaho YRBS Strengths

- Idaho YRBS provides insight into health behavior trends over time. Statistically significant change over time may be determined when three or more years of data are available.
- Individual academic achievement is measured and compared to the risk factors of smoking cigarettes, using smokeless tobacco, and electronic vapor products in the last 30 days.
- Idaho YRBS tracks cigarette use quantity and defines *frequent smoking* as smoking 20 or more days in the past 30; Idaho YRBS has tracked frequent smoking rates since 2007.
- Multiple brand names of popular electronic vapor products are used to increase the reliability of the results. This is important as students do not always associate a popular brand, such as JUUL, as an e-cigarette or tobacco/ nicotine product.
- Quit attempts are measured among cigarette-using youth.
- Including electronic vapor products for the 'any tobacco or E-cig use' analysis presents a more accurate representation of nicotine use and exposure among Idaho high school students.
- The questionnaire includes a question about the source of any tobacco products used.

Gaps Analysis and Opportunities Grades 6 through 12

Tobacco Survey Questions

It is well understood that creating, adapting, or adding to current youth surveys is challenging from both a financial and an administrative perspective, and that funding agencies may not permit changes to the questions or the survey length. In light of these understandings, the following analysis and identification of opportunities are provided:

Tobacco product use

- There are no data available for Idaho youth in the under 11 or 12 years of age. There are health behavior risk surveys designed for grades 4 through 6 that include tobacco questions (e.g. the PRIDE survey) [22].
- There are inconsistent data indicators for 'heavy' or 'frequent' use of tobacco products in youth tobacco surveys. Using standardized terms, and in their absence, defining usage terms is important to track prevention efforts and to measure the impact of e-cigarette use on cigarette use trends. MTF and the CDC NYTS offer usage level definitions.
- Including images of tobacco products and devices in surveys is recommended to ensure more reliable tobacco product use reporting [23].
- Age of initiation of tobacco products other than cigarettes is needed to better understand all tobacco product initiation patterns. Susceptibility to use (accepting tobacco if offered by a friend) is an important measure to include as greater susceptibility cognition is associated with higher tobacco product use [25].
- The greatest tobacco gaps exist around e-cigarette use, knowledge, attitudes, perceptions and reasons for use. Filling these gaps will require either modifying existing surveys or developing a stand-alone survey with greater attention to uncover the drivers for the rapid rise of e-cigarette use and dual use of e-cigarettes and cigarettes [24, 25].
- The CDC NYTS offers multiple e-cigarette questions. Many states across the U.S. conduct the YTS and incorporate additional e-cigarette questions; additional questions include such as attitudes toward e-cigarette use bans, product preferences, exposure, etc. [23, 28].
- American Indian youth have the highest tobacco use rates in Idaho. Tobacco surveys developed specifically for American Indian youth are recommended; adaptations can be made to include specific tribal customs and traditions around the ceremonial use of tobacco [27]. One suggestion is to offer support to tribes in Idaho to conduct their own culturally-responsive youth tobacco surveys.
- The terms 'e-cigarette' and 'vape pens' are often used in surveys [31]. The research suggests that listing the name brands (e.g., JUUL) is important as students do not always identify popular brands as e-cigarettes [32]. The MTF uses the phrase "vape and e-liquid with nicotine" to include all electronic nicotine delivery systems (ENDS).
- Include tobacco products that appeal to youth nationwide that are not currently included on the IHYS, but are included on MTF. These products include: cigars (large, regular, and flavored), vaping flavorings, and tobacco using a hookah or hookah pen [31].

Knowledge, attitudes, perceptions, and reasons for use

- More information is needed on perceptions of safety and harm of tobacco products (especially electronic vapor products) to better inform health education information and prevention campaigns.
- With the soaring rise of electronic vaping products, more information is needed to better understand youth knowledge, attitudes, perceptions, and reasons for use. Reasons for use is included in the NYTS and recent research offers guidance for e-cigarette attitude and reasons for use questions [13, 15].

Access

- Questions about access to tobacco products did not identify specific types of tobacco, reframing survey questions to identify sources used to obtain tobacco products, particularly electronic vapor provide useful information.
- At least 20% of tobacco-using students report obtaining tobacco from sources other than the options available on the Idaho IHYS. Conduct focus groups to better understand youth tobacco product access; this is especially important among higher using groups, e.g., older students, Hispanics, and students identifying as 'other' (neither cis-gender male or female).

Exposure

- The CDC NYTS includes questions on environmental tobacco smoke (ETS) in homes, cars, and at work. Idaho youth tobacco exposure data are not available for school-aged children. This is important to include to clarify the ETS risk experienced by children in order to inform ETS risk reduction regulations, policies, and practices.

Advertisements and Media (Ads)

- Youth are increasingly exposed to advertisements for e-cigarettes. The 2018 CDC NYTS [34] the Global Youth Tobacco Survey (GYTS) [35] and the Global Adult Tobacco Survey (GATS) [36] include questions on exposure to tobacco product marketing; these data does not exist in Idaho [37].
- Understanding what youth find positive, attractive, and inviting about the tobacco product ads they are exposed to could offer insight into tobacco counter-marketing strategies [38].
- Assess exposure to tobacco media and promotions and awareness of anti-tobacco messaging as is assessed in the NYTS.

Peer/Family

- There is little information available about parent/caregiver or peer approval of youth tobacco use. Clearer understanding of Idaho parent/caregiver and peer attitudes and norms around youth tobacco use is needed.

Quit Attempts/Cessation

- There is little information available for youth tobacco user's intention and efforts to quit tobacco. When questions are asked, they are asked solely about quit attempts for cigarettes.
- Youth are not asked about their interest in, or awareness of, tobacco cessation resources.

Information

- Idaho Project Filter actively promotes tobacco free and cessation messages; consider assessing awareness of and/or access to cessation support for all tobacco and nicotine products. The GATS contains useful questions about noticing tobacco product information and warning labels [36].
- Students are asked if they received information but are not asked about the source of the information or what information that they would like most to obtain. Querying students about what they would like to know about tobacco and electronic vapor products could inform health education content.

Dependence

- Assessment of youth tobacco dependence is lacking and needed. No questions currently address individual level of addiction or dependence to tobacco and nicotine products. The 2018 CDC NYTS includes questions to assess cigarette dependency for adults. Dependency scales have been evaluated for adult e-cigarette users [39]. Recent literature has validated psychometric measures of youth e-cigarette dependence using a 4-item survey [40, 41].
- More research is needed to identify valid tobacco dependence questions for a variety of tobacco products.

Brands

- Given the large number of electronic vapor products on the market and the lack of regulation of nicotine products, it is difficult to assess quantity of nicotine consumed from e-cigarettes. Identifying product brands and use patterns may help identify risk of nicotine use and dependence.
- Some state and national surveys include pictures of various tobacco products and ask about the strength of the e-cigarettes used (by milligrams of nicotine) [23]. (See Appendix 1)
- The CDC NYTS queries youth about brands as well as e-cigarette and other tobacco flavors. Research increasingly supports that vaping behavior changes depending on the flavors and types of e-liquids used which influences total nicotine intake [42]. This information can help inform public health educational campaigns and provide needed information for students, families and schools [43].

Policy

- Recent surveys have included questions on the awareness of and support for tobacco free policies that restrict e-cigarette use, ban sales, regulate nicotine levels in vaping products, etc. Students in other states have had preferable opinions about restrictions on e-cigarettes which may help supply justification for policy and regulations [23].

Tobacco data analysis

- Funding limitations restrict deeper youth tobacco data analysis. This analysis is needed to identify youth at highest risk for nicotine dependence and to target strategic prevention and cessation interventions.
- Youth health behavior surveys collect other behavior risk and health-related measures that offer opportunities for comparison to tobacco use, including asthma, mental health, food insecurity, unreliable housing, intention to complete a post high school program, past or present incarceration of a parent, etc. Identifying important associations between tobacco use and risk behaviors, and health indicators could help define prevention targets and cessation efforts.
- With rates of electronic vapor products higher amongst Hispanic youth, consider reporting use by race/ethnicity whenever possible. No data are available for American Indian youth.
- Greater insight into the determinants of health (economic status, knowledge, attitudes, perceptions, beliefs, skills, etc.) of e-cigarette use is needed. Conducting focus groups and e-cigarette use attitudes surveys among youth is warranted, particularly among Hispanic (Latinx) youth, the highest users of e-cigarettes [15].
- The opportunity exists to explore associations between tobacco product use and other substance use, e.g., alcohol consumption, marijuana use [44], etc. It is important to explore parallels of vaping nicotine and vaping cannabis [45].
- Data suggest that e-cigarette use is associated with increased cigarette use and nicotine intake [26]. Exploring dual use by grade, gender, academic achievement, and other indicators can offer important information to address nicotine use and addiction.

Population Reach

- Increased survey participation is needed to report data by Idaho SDE or PHD. Increasing survey sampling would require additional resources of funding and staff time. If this is not feasible, it is possible to explore other analytical methods which exist such as small area estimates to provide more localized data.
- Information on tobacco use is limited to students in public and charter schools. Obtaining information among students attending alternative schools, other non-private schools, and in juvenile correction facilities is important to understand use among students with other high-risk behaviors. CDC last conducted a National Alternative High School Risk Behavior survey in 1998 [46]; nationwide, 64.1% of students at alternative schools reported current cigarette use and 44% reported frequent use.
- American Indian youth face the high risk of tobacco use and nicotine dependence [47]. Students attending non-public Tribal schools in Idaho are not included in the IHYS or YRBS sample population.

Methodology

- Oversampling or conducting special studies of sub-populations of youth most at risk for nicotine dependence and resulting poor health is one avenue for obtaining needed data [2] (e.g., youth attending alternative schools, Hispanic/Latinx youth, youth residing in high tobacco using PHDs.
- Electronic surveys [37] may take less time to administer and lessen the burden for students, survey administrators and school staff [48] if adequate electronic devices are available. The CDC is exploring online data collection with reported success [20].
- School administrators are sometimes reluctant to permit external survey collection due to the burden this may place on students, faculty, and educational time. This is particularly true when more than one health-risk survey is administered [46], as is the case with the IHYS and the YRBS. CDC suggests decreasing any burden to schools and ensuring the success of surveys with coordinated sampling approaches. Two examples of coordinated sampling are offered: multiple-school sampling and multi-class sampling [20]. (see Glossary of Terms).

Youth ages 18-24

The CDC Behavioral Risk Factor Surveillance System (BRFSS) is the nation's premier system of collecting health-related risk behaviors, chronic health conditions, and use of preventive services. The annual questionnaire has three parts: 1) the core component (consisting of the fixed core, rotating core, and emerging core questions), 2) optional modules, and 3) state-added questions. There are 10 core sections in the 2017 BRFSS, including include tobacco use and e-cigarette use [49]. It is important to note that the 2018 BRFSS did not include e-cigarette questions in the core; two questions e-cigarette questions were offered as an optional module [50].

Idaho has worked with CDC to administer the BRFSS since its inception in 1984 [51]. The Idaho BRFSS uses random-digit-dialed (RDDS) surveys of landlines and cellular telephone users who are 18 years and older. In 2016, Idaho BRFSS collected at least 695 interviews in each of the six Idaho public health districts (PHD).

The 2017 Idaho BRFSS contained the fixed core CDC tobacco questions, and the emerging core e-cigarette use questions. In 2018, the Idaho BRFSS included the e-cigarette module; the CDC BRFSS did not include e-cigarette use in the core set of questions. Idaho BRFSS has surveyed e-cigarette use since 2014. Adults ages 18-24 were not represented proportionally in the sample due to lack of response to the survey and were accounted for by data weighting. The lack of 18-24-year-old respondents in the 2017 BRFSS resulted in unreliable estimates that could not be reported.

Tobacco-related questions in the 2017 Idaho BRFSS include:

- Cigarette use by at least 100 cigarettes smoked
- Current cigarette use frequency
- Cigarette quit attempts in the past year
- Length of time since quitting smoking
- Current use of smokeless tobacco (chew, snuff, snus)
- Ever use of e-cigarette or electronic vaping products
- Current use of e-cigarettes or electronic vaping product.

DATA SOURCE SUMMARY

Source

Behavioral Risk Factor Surveillance System (BRFSS), 2017- Idaho Department of Health and Welfare

Survey characteristics

Of seven questions in the Idaho BRFSS, six were about tobacco use and one asked about smoking quit attempts. Idaho BRFSS added two e-cigarette questions, 'ever used' and use frequency ('every day,' 'some days,' 'not at all').

Sampling frame

The survey method was a random-digit-dial of cellular and landline phones of people 18 years and older. At least 695 interviews were held in each of the 7 public health districts. The sample is stratified by public health district.

Population surveyed

A total of 5,258 interviews were conducted; 2,857 by landline and 2,401 by cell phone. Younger people were more likely to use cell phones over landlines.

Participation

The response rate for the landline was 51.7% and cell phone was 46.7%, with the weighted combined rate of 57.1%.

Methods

This survey is conducted annually. Interviewers are trained to use computer-assisted telephone interviewing software to record the responses, made in English or Spanish according to the choice of the interviewee. Sampling is stratified by PHD, not by age. Since 2011, Idaho BRFSS implemented the weighting method known as iterative proportional fitting. The 2011 data are considered the baseline for data comparisons.

Limitations:

Self-reporting can underreport certain behaviors. Excluded from the survey are individuals who were incarcerated, in medical facilities, exclusively spoke another language other than English or Spanish, or who could not communicate by phone [50]. The small sample size limits the ability to report by PHD and to identify statistical differences.

Web link

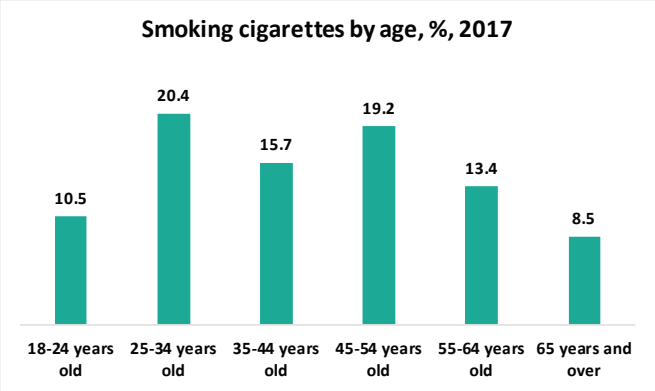
http://healthandwelfare.idaho.gov/Portals/0/Health/Statistics/BRFSS%20Reports/Idaho_BRFSS_Annual_Report_2016.pdf

Idaho Behavioral Risk Factor Surveillance System (BRFSS), 2017 (annual)	Idaho data, %		
	State (all ages)	Aged 18-24	Aged 24+
Have you smoked at least 100 cigarettes in your entire life? (Yes)	38.2	20.3	41.0
Do you now smoke cigarettes every day, some days, or not at all? (Every day) (Among those reporting smoking 100 cigarettes).	27.4	27.2	27.4
During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking? (Yes)	54.4	*	52.7
How long has it been since you last smoked a cigarette, even one or two puffs? (Within the past 10 years)	42.1	*	38.6
Do you currently use chewing tobacco, snuff, or snus every day, some days, or not at all? (Every day)	2.9	1.4	3.2
Have you ever used an e-cigarette or other electronic vaping product, even just one time, in your entire life? (Yes)	22.5	37.5	19.0
Do you now use e- cigarettes or other electronic vaping products every day, some days, or not at all? (Every day)	8.5	6.3	9.2

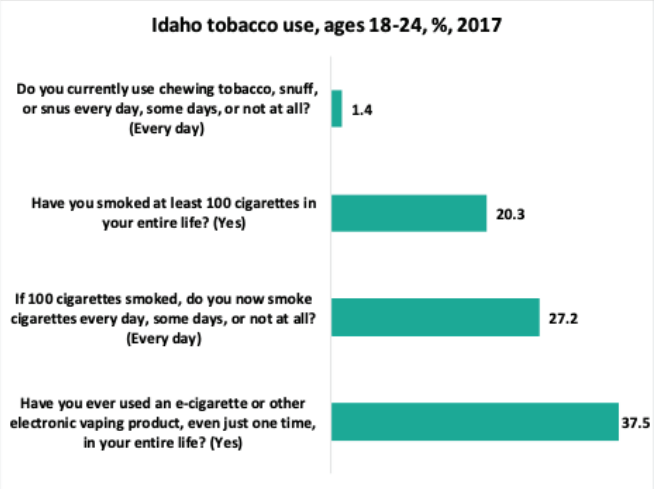
Key Idaho BRFSS Findings

Given the small sample size of 18-24- year-olds it is difficult to draw many conclusions about the risk factors associated with tobacco use among this age group. Generally, the Idaho BRFSS is able to depict tobacco use rates by sex, income, employment, education and ethnicity. (See Youth Tobacco Data Supplement). Overall, 18-24-year-olds reported lower cigarette, smokeless tobacco and use of e-cigarette daily use than adult respondents overall, but this age group reports more 'ever use' of e-cigarettes. There were too few responses to report reliably by PHD except for PHD 4 and 7.

Idaho Behavioral Risk Factor Surveillance System (BRFSS), 2017 (annual)	Idaho data, %							
	State	PHD1	PHD2	PHD3	PHD4	PHD5	PHD6	PHD7
Adult smoking total	14.3	18.4	14.5	13.4	13.9	14.5	12.9	12.9
Adult smoking, by sex (male)	15.7	20.0	15.7	13.5	14.6	18.9	13.7	14.6
Adult smoking, by age (18-24 year olds)	10.5	*	*	*	5.4	*	*	11.0
Adult smoking, by sex and age (male and 18-34)	17.4	*	18.0	16.1	14.3	*	13.7	15.0
Adult smoking, by income (less than $15,000)	25.7	33.1	23.0	23.8	28.4	*	20.4	22.6
Adult smoking, by employment (employed)	15.2	19.6	16.7	13.1	13.7	16.7	15.7	14.6
Adult smoking, by education (12th grade or GED)	19.2	20.9	20.9	13.2	24.3	19.5	14.6	19.8
Adult smoking, by ethnicity (white, non-Hispanic)	14.9	18.3	15.1	14.1	14.5	16.0	13.7	12.7

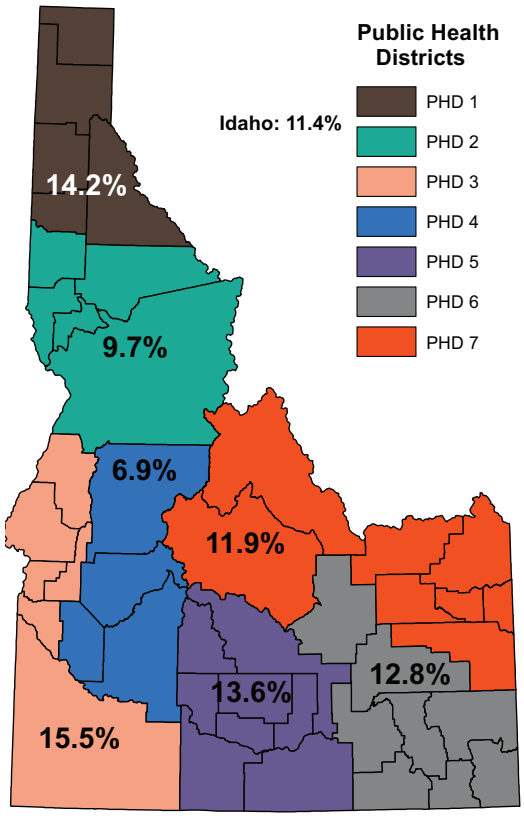


Source: BRFSS, 2017



Source: BRFSS, 2017

Idaho BRFSS aggregated three years of data (2015, 2016, and 2017) to provide sample sizes large enough to make mostly reliable estimates for the age group 18-24 by PHD. The maps below represent past 30-day tobacco use by PHD for the state as a whole and for the age group 18-24.



Source BRFSS, 2017

American College Health Association (ACHA), National College Health Assessment II

The ACHA National College Health Assessment (NCHA) is a nationally recognized research survey that assists college and universities to collect data about students' health habits, behaviors, and perceptions [6]. The NCHA covers a wide range of health issues, including:

- Alcohol, tobacco, and other drug (ATOD) use
- Sexual health
- Weight, nutrition, and exercise
- Mental health
- Personal safety and violence

The ACHA-NCHA customizes sampling strategies and survey methodologies for each institution. The survey can be offered in either fall or spring semesters. This report describes the data findings for five Idaho institutions of higher learning that formed a consortium in 2017. It is uncertain if the five Idaho institutions will continue to administer the ACHA-NCHA or if it will be possible to obtain aggregated results as they appear in this report.

The tobacco-related questions in the 2017 ACHA-NCHA ll are limited to questions about 30-day tobacco product use and perceptions of use among other students. Students also report if they desire and if they have received information about tobacco use from their institution. Campuses may purchase additional questions as desired. ACHA-NCHA provides institutions with descriptive analysis of the results and the institutions raw data. The next version, the NCHA lll, is currently under revision.

DATA SOURCE SUMMARY

Source

American College Health Association, National College Health Assessment II (ACHA, NCHA II), 2017

NCHA-II Fall 2017 Idaho Consortium Reference Group

Survey characteristics

Of the 66 questions in the 2017 NCHA II, 5 questions discussed tobacco use, perceptions of use and tobacco use information. The 2019 NCHA lll proposes to continue asking tobacco use questions, but they intend to eliminate questions about receiving and desiring tobacco use information due to the length of the survey.

Sampling frame

Institutions are expected to generate their own random sample. ACHA recommends desired sample sizes from differing student populations (i.e., for a student population of 10,000 – 19,999, 800 returned and completed surveys are best for a 95% Confidence level with a Confidence Interval of +/-3%. The average response rate is 19-20% and institutions are directed to survey an appropriate number of their students to deliver approximately this many usable surveys for analysis. 72.7% of those surveyed were between 18-24 years of age.

Population surveyed

The Fall 2017 ACHA National College Health Assessment included 61 self-selected postsecondary institutions totaling 37,638 surveys nationally. The Idaho Consortium includes 5 schools and 2,745 students.

Participation

The mean response rate in the Idaho Consortium was 17%.

Methods

The ACHA-NCHA Program Office uses Qualtrics Research Suite to design and administer the survey. ACHA recommends that the institution holds survey data collection open for 2-3 weeks with email messages to non-respondents every 4-7 days. The survey usually takes 20-30 minutes to complete. The survey link can be returned to later if the student does not finish it in one session. The. survey can be taken on a mobile phone and the student can use different devices to return to their in-progress survey.

Limitations

Data at the state level are not readily available online. Institutions have access to the raw data and may have inadequate human and financial resources to conduct analysis beyond descriptive data findings. Data are not available by state; permission is needed to obtain data from individual institutions.

Web link

https://www.acha.org/NCHA/ACHA-NCHA_Data/Publications_and_Reports/NCHA/Data/Reports_ACHA-NCHAIIc.aspx

SUMMARY OF NATIONAL COLLEGE HEALTH ASSESSMENT (NCHA II) SURVEY FINDINGS

American College Health Association, National College Health Assessment, (ACHA, NCHA II), Fall 2017	Idaho data, %		US data, %
	State	University of Idaho	US
Within the last thirty days, on how many days did you use:			
Cigarettes (Never used)	73.5	70.8	79.6
E-cigarettes (Never used)	78.9	75.5	80.9
Tobacco from a water pipe (hookah) (Never used)	81.9	79.8	84.2
Cigars, little cigars, clove cigarettes (Never used)	79.3	74.1	82.9
Smokeless tobacco (Never used)	88.2	85.3	91.8
Within the last thirty days, how often to you think a typical student at your school used:			
Cigarettes (Never used)	10.2	8.8	14.1
E-cigarettes (Never used)	10.1	8.5	13.3
Tobacco from a water pipe (hookah) (Never used)	17.4	15.9	21.5
Cigars, little cigars, clove cigarettes (Never used)	19.4	17.0	23.6
Smokeless tobacco (Never used)	17.9	16.1	26.5
Within the last 30 days, what percent of students at your school used cigarettes? State your best estimate (71-80%)	26.8	1.4	2.3
Have you received information on the following topics from your college or university? **Tobacco use**	44.0	65.1	44.3
Are you interested in receiving information on the following topics from your college or university? **Tobacco use**	26.2	30.3	30.1

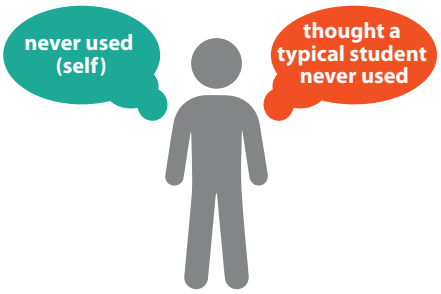
Key ACHA-NCHA II FINDINGS

For all categories of tobacco product use in the last thirty days, more Idaho students report never using tobacco products than similar studied populations in the US overall. Students perceive that a much lower percentage of students have never used tobacco products than is reported. This is an important finding as misperceptions of peer substance use norms may contribute as a risk factor for substance use [53].

Except for the University of Idaho, less than half of Idaho students (44%) reported receiving tobacco-use information and 26.2% volunteered their interest in receiving tobacco-use information. The type of tobacco information (cigarette, e-cigarette, etc.) was not specified.

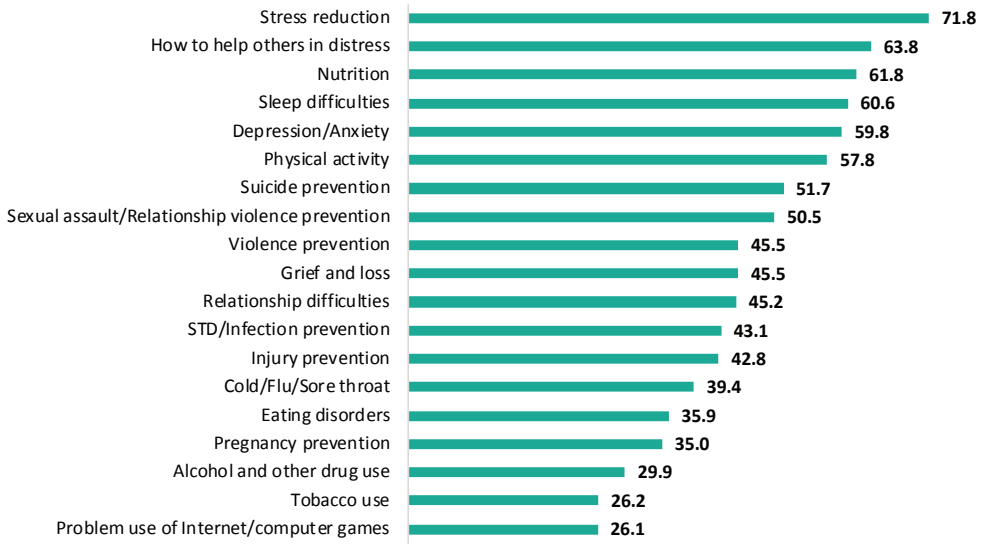
30 day use and perception of use, 2017

73.5% Cigarettes **10.2%**
78.9% E-cigarettes **10.1%**
81.9% Tobacco from a water pipe (hookah) **17.4%**
79.3% Cigars, little cigars, clove cigarettes **19.4%**
88.2% Smokeless tobacco **17.9%**



Source: NCHA II, 2017

Interest in receiving information about topics from college or university, %, 2017



NCHA II, 2017

DISCUSSION
Idaho Tobacco Data Strengths
Youth ages 18-24

BRFSS Strengths

- Collected since 1984, BRFSS provides consistent and important health behavior and health conditions data by PHD on a wide variety of health topics.
- BRFSS has opted to add state questions to ensure e-cigarette use data are collected.
- With an adequate sample size, associations between tobacco use and other related factors such as income, education, employment, and health conditions (e.g., asthma and hypertension) can be analyzed.
- BRFSS seeks input for state added questions on emerging health issues and conditions.
- Trend data for most tobacco product use are available from 2011 to the present for most tobacco products and for e-cigarette use since 2014.
- It is possible to aggregate data to reach a sufficient sample size to publish data for sub-populations.

NCHA II Strengths

- A probability sample of five colleges and universities provides important health and behavioral risk factor information, including tobacco use, perceptions, and information. The NCHA III (2019) will include questions on perceptions of tobacco harm and attempts to quit tobacco product use.
- Identifying tobacco use misperceptions is an important first step to correct use norms to prevent increased use.
- Institutions are provided with the raw data to conduct deeper analysis.
- Institutions have the option to add questions of specific interest for a fee.
- The NCHA II survey was used to guide the goals and objectives for Healthy Campus 2020 and the NCHA lll was developed with the upcoming Healthy Campus 2030 goals and objectives in mind (https://www.acha.org/healthycampus) [54]

Gaps Analysis and Opportunities
Youth ages 18-24

Tobacco Questions

- Overall, there are limited tobacco data for youth ages 18-24 outside of tobacco use and quit attempts. Both surveys include questions addressing most forms of tobacco. Maintaining consistency within data is important for surveillance and evaluation of tobacco control efforts.
- Both surveys include e-cigarette use. It is important to continue asking e-cigarette use questions given the escalating use of this product.
- Both surveys are limited to the core questions provided unless increased resources are made available to pay for additional questions. For example, the cost for adding up to five unique variables for the ACHA-NCHA lll is $700-$1000.
- There are no data available on many key tobacco issues including: perception of harm, nicotine dependence, reasons for use, awareness and/or access to tobacco cessation resources, environmental tobacco exposure, etc. Conducting the Adult Tobacco Survey or creating a similar survey would offer a more comprehensive understanding of tobacco use and determinants than are currently available for youth ages 18-24 [12].

Tobacco Data Analysis

- The ACHA-NCHA provides the raw data which provides great opportunity for institutions to conduct deeper analysis. The survey collects data on tobacco-related health conditions (e.g., asthma) and conditions associated with tobacco use (anxiety, alcohol intake, and substance use and misuse). Institutions would benefit from support to conduct more extensive data.
- Idaho BRFSS provides tobacco use data by PHD for all adults. The sample size of adults using tobacco products in 2017 was too small to reliably report by PHD. BRFSS would benefit from additional support to increase the sample size, thus making it possible to conduct analysis for youth ages 18-24.

Methodology

- Youth and young adults are considered "hard to reach" populations and are less likely to respond to phone-based surveys such as the BRFSS [52]. Recent research supports an address-based sampling (ABS)-to-online methodology to recruit youth and young adults for online for screening,

consent, and surveying [55].

- CDC allows states to pilot new BRFSS methodology approaches, e.g., piloting a mobile application version of the survey to reach younger adults. With resource support, Idaho BRFSS could conduct a web and/or mobile-based platform pilot to improve participation.
- The ACHA-NCHA is a web-based platform and that has proven fairly effective. Raising awareness of the survey could increase campus participation rates.

Reach

- The ACHA-NCHA offers an important opportunity to gain insight about tobacco use among college students. It is unknown what percentage of Idaho college and universities participate in the ACHA-NCHA.
- Without a larger sample frame, BRFSS tobacco data are mostly unreliable for the population of 18-24-year-olds. Resources are needed to increase BRFSS participation in Idaho.
- To improve BRFSS participation among 18-24-year-olds, survey methodologies utilizing mobile applications are recommended.

Pregnancy and Postpartum- 18-24 year olds

Idaho Vital Statistics, Natality 2017- Idaho Department of Health and Welfare

The Idaho Bureau of Vital Records and Health Statistics has the responsibility to manage Idaho's vital records program and to provide health statistics and analysis for natality. Beginning in 2004, the Idaho birth certificate includes four data items for cigarette smoking - the average number of cigarettes smoked per day during the three months prior to pregnancy and during the first, second, and third three months (trimesters) of pregnancy. Tobacco use data are available by county and by Public Health District, age groups, as well as by participant race/ethnicity. Prevalence of low birthweight is compared between among women who smoked during pregnancy and women who did not smoke during pregnancy. Smoking status is included as a maternal characteristic for entry into prenatal care by trimester and number and percentage of births by birthweight.

Pregnancy and Postpartum- <15 to 24 years of age

DATA SOURCE SUMMARY

Source

Idaho Vital Statistics, Natality 2017- Idaho Department of Health and Welfare

Survey Characteristics

Cigarette use in the three months prior to pregnancy and during each of the three trimesters is reported. Other measures related to tobacco use in pregnancy include weight gain during pregnancy, gestational age and infant birth weight.

Sampling frame

It is a legal requirement to register birth certificates. All live and still births are reported.

Population surveyed

Birth data are registered for all Idaho residents no matter where the birth occurred. An agreement between all registration areas in the U.S. assures exchanges of resident birth certificate copies. Population includes all women giving live or still birth who are residents of Idaho. Live births in 2017 numbered 22,159.

Participation

As reporting Idaho resident births is a requirement by law, these data should have a 100% participation rate.

Methods

Certificates of birth occurring in Idaho hospitals are collected and filed electronically. Idaho is required to maintain a complete and compulsory vital registration system. Each record is inspected for accuracy and inconsistencies.

Limitations

Records that have been sent from other registration areas are not included or amended in their statistics for analysis. The data available for women ages <15-24 years is limited to the number and percentage of births by mother's cigarette smoking and the age of the mother. Data are not available to describe cigarette smoking among women ages of <15-24 by perinatal risks, birth outcomes, or place of birth. The quantity of cigarettes smoked per day is not included in the data analysis or reporting.

Web link

https://healthandwelfare.idaho.gov/Portals/0/Health/Statistics/2017-Reports/2017_Births.pdf

IDAHO VITAL STATISTICS- FINDINGS

Idaho Vital Statistics-Natality, 2017 (annual)	Idaho data, %
	State
Cigarette smoking during pregnancy	8.8
Cigarette smoking before pregnancy	12.0
Cigarette smoking during pregnancy by age (less than 15)	10.0
Cigarette smoking during pregnancy by race (white)	9.2
Cigarette smoking during pregnancy by ethnicity (non-Hispanic)	9.7
Cigarette smoking during pregnancy by birth weight (<2,500 grams)	10.9

Key 2017 Natality- Idaho Vital Statistics Findings

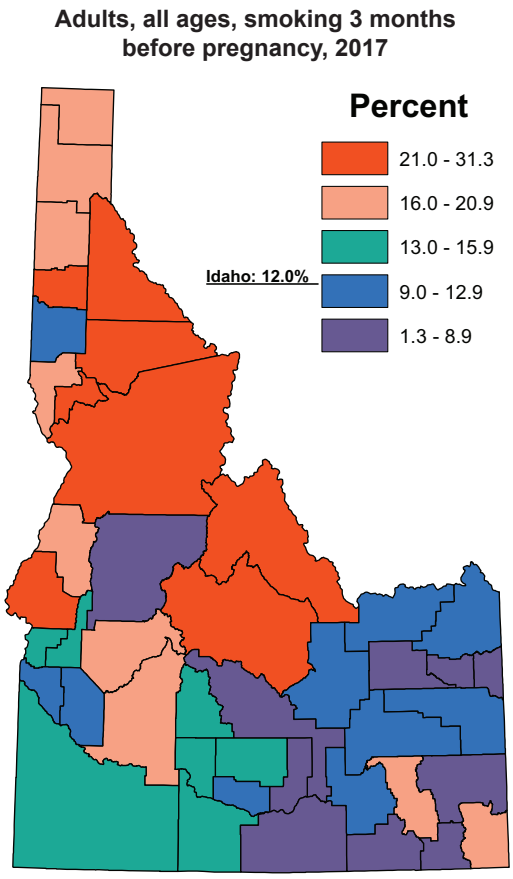
Cigarette smoking among women <15 to 24 years of age was broken down into 5 age categories with the highest cigarette smoking in pregnancy reported among women 18-19 years of age (16.6%). Cigarette smoking before and during each trimester of pregnancy was not available for women ages <15-24. Cigarette smoking during pregnancy is associated with a number of detrimental effects on offspring, including low birth weight. In 2017 7.0 percent of all live births were born with low birthweight [56]. Of the 1,937 births to women who acknowledge that they smoked during pregnancy, 10.9% infants were low birthweight compared with 6.65% of infants born low birthweight to non-smokers [8].

Age group	Total live births	Cigarette smoking during pregnancy			
		Yes		No	
		Number	Percent	Number	Percent
Idaho total	**22,159**	**1,937**	**8.8**	**20,176**	**91.2**
<15	10	1	10.0	9	90.0
15-19	1,105	168	15.2	935	84.8
15-17	216	21	9.8	194	90.2
18-19	889	147	16.6	741	83.4
20-24	5,387	647	12.0	4,728	88.0
25-29	7,278	600	8.3	6,666	91.7
30-34	5,428	330	6.1	5,088	93.9
35-39	2,466	166	6.7	2,294	93.3
40-44	445	23	5.2	420	94.8
45+	38	2	5.3	36	94.7
Not stated	2	NA	NA	NA	NA

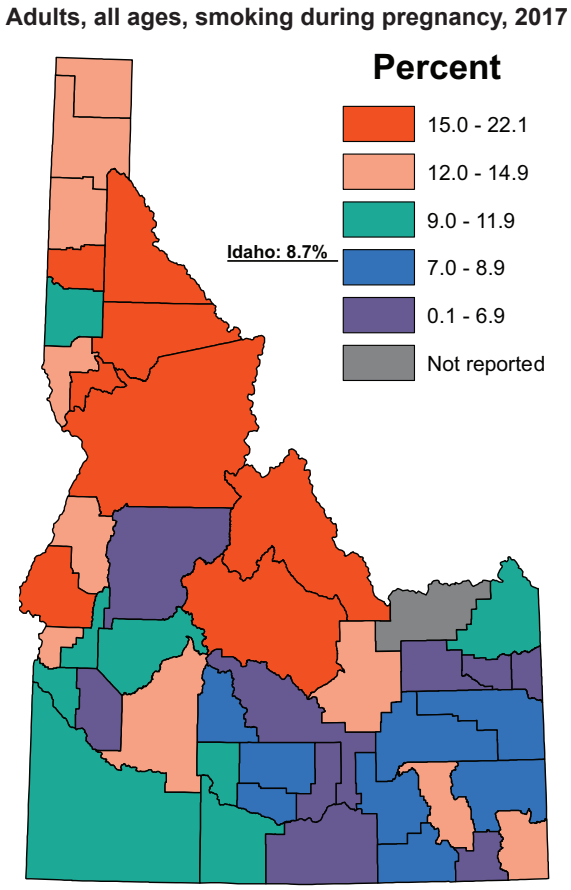
Source: Idaho Vital Statistics- Natality, 2017

Although data are not available by county or PHD for women ages 15-24, it is important to note that women in this age group accounted for 66.3% of all women who smoked during pregnancy in 2017.

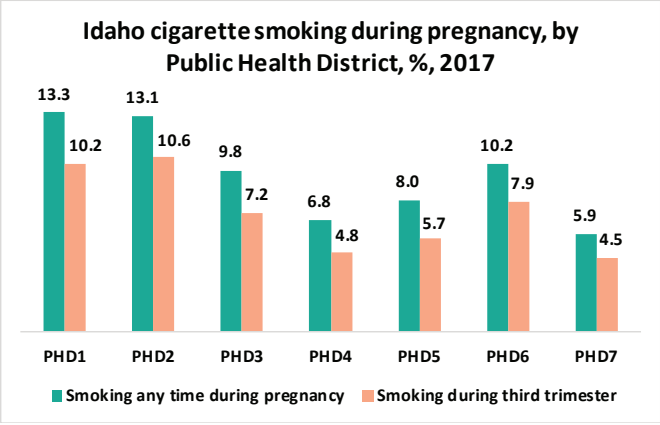
Smoking during pregnancy by county.



Source: Idaho Vital Statistics, 2017



Source: Idaho Vital Statistics, 2017



Idaho Vital Statistics, 2017

Women report less smoking during the third trimester than smoking any time during pregnancy. Women in PHD 1 and 2 report the highest third trimester smoking.

Pregnancy Risk Assessment Tracking System

The Pregnancy Risk Assessment Tracking System (PRATS) is an annual two-part survey of new mothers who have given birth in Idaho. PRATS provides information on maternal attitudes, experiences, and behaviors during and shortly after pregnancy. PRATS is directed by the Idaho Bureau of Vital Records and Health Statistics and is made possible by grants through the State Systems Development Initiative (SSDI) Grant Program and the Title V Maternal Child Health (MCH) Services Block Grant Program. PRATS was first conducted in Idaho in 1999 and is modeled after the CDC Pregnancy Risk Assessment Monitoring System (PRAMS) [57]. Like PRAMS, PRATS data can be used to identify groups of women and infants (by PHD) who are at high risk for health issues and to measure progress in improving health outcomes for mothers and infants. PRATS data are reported statewide and by PHD. Results from PRATS are used to track progress toward health goals, assess trends, and provide needed insight to target at-risk maternal and child health populations [58].

Idaho PRATS contains questions identifying tobacco use, tobacco information received, and the number of hours per day of infant second-hand smoke exposure. Women reporting having smoked at least 100 cigarettes in their entire life were asked the number of cigarettes and the number of packs of cigarettes smoked per day in the 3 months before pregnancy, the last 3 months of pregnancy, and current cigarette use. Two major distinctions between PRATS and PRAMS tobacco-related questions is that 1) PRAMS asks about other tobacco product use and use frequency (e-cigarettes and hookah) and 2) PRAMS asks if the woman has smoked any cigarettes in the past 2 years, rather than asking if the woman has smoked 100 cigarettes in her entire life [59]. PRAMS includes optional standard questions about secondhand smoke exposure, tobacco information provided by health care providers, quitting tobacco, rules about smoking inside the home, and other tobacco control questions. See Appendix 2 for a PRAMS and PRATS tobacco question comparison.

DATA SOURCE SUMMARY

Source

Pregnancy Risk Assessment Tracking System (PRATS), 2016 - Idaho Department of Health and Welfare.

Survey characteristics

Tobacco use questions are limited to cigarette-smoking occuring before, during, and three months after pregnancy. Women identify if they were asked about smoking during a prenatal visit and report if their child is exposed to environmental tobacco smoke.

Sampling frame

PRATS includes Idaho female residents aged 18 and older who had an in-state live birth between January 1, 2016 and December 31, 2016. A multiple birth occured, only the firstborn infant was included in the data set.

Population surveyed

In order to equally represent women in each of the 7 public health districts, the sample design was a disproportionate stratified systematic random sampling method.

Participation

Of the 4,200 randomly selected for participation, 1,547 mothers responded to the survey (36.8% participation).

Methods

After the introductory letter which includes a toll-free number to call for a telephone interview, a full questionnaire packet is sent; an English and Spanish version is available. Up to two more questionnaire packets were sent during a two-month period, after which non-responders were attempted to be reached by telephone. Women were allowed to complete the survey by either telephone, with a trained interviewer speaking English or Spanish, or by the multilingual packet.

Limitations

The self-reported nature of PRATS data may result in information bias and estimation error [51]. Data are weighted to adjust for the disproportionate sampling, making it more likely for a mother from a health district with a small population to be sampled than a health district with a larger population base. There is an inadequate sample size to report data by PHDs for 18-19-year-olds.

Web link

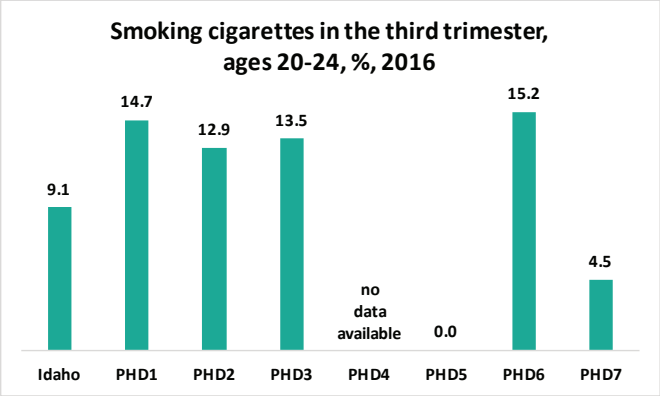
http://healthandwelfare.idaho.gov/Portals/0/Health/Statistics/Prats/2016PRATSAnnualReport.pdf

SUMMARY OF PREGNANCY RISK ASSESSMENT TRACKING SYSTEM (PRATS) SURVEY FINDINGS

Pregnancy Risk Assessment Tracking System (PRATS), 2016 (annual)	Idaho data, %
	State
Did you smoke during the last 3 months of pregnancy (yes)	4.6
During prenatal care, were you informed how smoking during pregnancy could affect your baby (yes)	87.6
Were you asked during a prenatal visit if you were smoking cigarettes during pregnancy (yes)	84.0
Have you smoked 100 or more cigarettes in your entire life (yes)	23.4
if yes: In the 3 months before you got pregnant, how many cigarettes did you smoke a day (0 cigarettes)	45.6
if yes: In the last 3 months of your pregnancy, how many cigarettes did you smoke a day (0 cigarettes)	80.5
if yes: How many cigarettes did you smoke a day now (0 cigarettes)	68.3
How many hours a day is your baby in the same room as someone who is smoking (never)	98.1

Key PRATS Findings

As the sample size of women 18-24 prevents reliable reporting for this age group by PHD, most of the findings are reported for all women. Overall, rates for smoking in the last three months of pregnancy have declined since 2009. PHD 6 reported the highest percentage of smoking in the last three months of pregnancy in 2016 (8.8% compared to 4.6% statewide). Most women (87.6%) report they were provided information about how smoking could affect their baby. Smoking during pregnancy was significantly higher among women with high maternal stress, lower income, K-11th grade education, who reported an unintended pregnancy, unmarried women and non-Hispanic women. Women ages 20-24 report higher rates of smoking in the third trimester than women overall, with the highest rates in PHD 6 and 1.



Source: PRATS, 2016

DISCUSSION
Idaho Tobacco Data Strengths

Pregnancy and Postpartum-18-24-year-old

Strengths

Idaho Vital Statistics

- Tobacco use data are collected from all women completing birth certificates, allowing for county level and PHD data comparisons of women 20-24.
- Associations between tobacco and known health risks such as low birthweight and prematurity are analyzed. Additional natality analysis is available upon request.
- Surveys provide sufficient data to target counties and PHDs with high tobacco use rates.
- Existing cigarette use data are readily available online.

PRATS

- In addition to tobacco use pre-pregnancy and during the last 3 months of pregnancy, women report tobacco use postpartum.
- Data are available statewide and by PHD given an adequate sample size.
- Provides associations between smoking and maternal risk factors (stress, low income, etc.).
- This is the only survey that reports child environmental tobacco exposure.
- PRATS examines associations between cigarette use and maternal risk factors and has the capability to explore health disparities of sub-populations.

Gaps Analysis and Opportunities

Tobacco Questions

- Both surveys limit tobacco use to cigarettes. The CDC Pregnancy Risk Assessment Monitoring System (PRAMS) includes a greater variety of tobacco-related questions, including e-cigarette use. As possible, expand PRATS tobacco use questions to include e-cigarettes and tobacco cessation resources and barriers.
- It is unlikely that additional questions would be added to the birth certificate worksheet.
- Both data sets include the average number of cigarettes smoked daily allowing for deeper analysis on the impacts of smoking on birth outcomes (low birthweight, prematurity, etc.).

Reach

- Idaho Vital Statistics currently reaches every woman giving birth in Idaho.
- PRATS reports difficulty reaching an adequate sample size in all PHDs.

Methodology

- Employing an ABS sampling frame could improve the response rate to PRATS, especially amongst younger women who are considered hard to reach.
- The state of Oregon has found success asking the total number of cigarettes smoked per day, versus number of cigarettes and number of packs.
- Oversampling in higher tobacco using PHDs is recommended to gain insight into factors associated with smoking (prenatal stress, poverty, etc.) to inform public health interventions.

TOBACCO USE POLICIES AND PRACTICES

School Health Profiles

The School Health Profiles (Profiles) is a system composed of surveys developed to assess middle and high school health policies and practices throughout the U.S. Profiles is conducted biennially among a sample of secondary schools in a state, large urban school district, or territory. Profiles data are collected from self-administered questionnaires from the principal and the lead health education teacher at each sampled school. The questionnaires were developed by the Division of Adolescent and School Health (DASH), National Center for HIV/AIDS, Viral Hepatitis, STD,

and TB Prevention, and Centers for Disease Control and Prevention (CDC) in conjunction with local, state, and territorial departments of health and education. More information about the School Health Profiles can be found on the Centers for Disease Control and Prevention website: www.cdc.gov/healthyyouth/profiles/index.htm

School Health Profiles monitors the current status of:

- School health education requirements and content
- Physical education and physical activity
- Practices related to bullying and sexual harassment
- School health policies related to tobacco-use prevention and nutrition
- School-based health services
- Family engagement and community involvement
- School health coordination

Idaho School Health Profiles in Health & Physical Education, State of Idaho Department of Education

The 2018 Idaho School Health Profiles used a systematic equal probability sampling strategy (i.e., surveys were mailed to a random sample of principal and lead health education teachers in any regular public, charter, alternative, or vocational school that serves students in any of grades 6 though 12 [10]. The 2018 Idaho Profiles utilized the two Profiles questionnaires, one for school principals, and one for lead health education teachers: *https://www.cdc.gov/healthyyouth/data/profiles/questionnaires.htm.* The findings are presented statewide.

The principal questionnaire addresses self-assessment of tobacco policies and the presence of school policies regulating tobacco use among students, faculty and visitors on campus, for off-campus, and at school sponsored events. The lead health education teacher questionnaire provides data on the percentage of schools that require and teach tobacco education and the percentage of teachers who receive and would like to receive tobacco education professional development.

Tobacco Use Policies and Practices

DATA SOURCE SUMMARY

Source

Idaho School Health Profiles in Health & Physical Education, 2018- State of Idaho Department of Education.

Survey characteristics

The surveys sent to the principals include questions from an administrative perspective. Those sent to the lead health education teachers were geared towards health and physical education from the instructional perspective.

Sampling frame

Surveys were mailed to a randomly generated sample of principals and lead health education teachers serving in public, charter, alternative, or vocational schools with any of grades 6-12.

Population surveyed

Questionnaires were mailed to 259 schools during spring 2018.

Participation

Returned surveys that were deemed useable included 185 principal questionnaires and 182 from lead health education teachers with a response rate of 71% and 70% respectively.

Methods

As Idaho's response rates were ≥ 70%, the results are considered representative of all Idaho public, charter, alternative, or vocational schools with students in any grades from 6 to 12.

Limitations

It is not possible to report the data by Idaho SDE. There are not always lead health education teachers in each school.

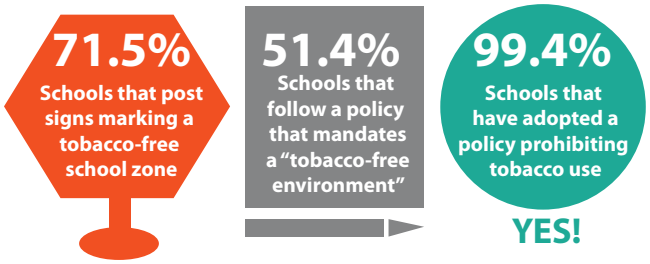
Web link

http://www.sde.idaho.gov/student-engagement/school-health/files/profiles/2018-Idaho-School-Health-Profiles.pdf

Idaho School Health Profiles Key Findings

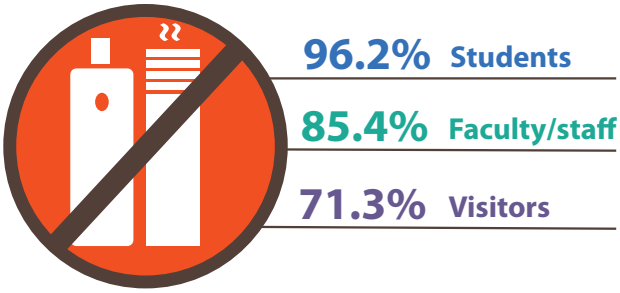
Overall, Idaho principals report strong support for student tobacco use policies for all tobacco products, including e-cigarettes.

School policies for tobacco use, 2018



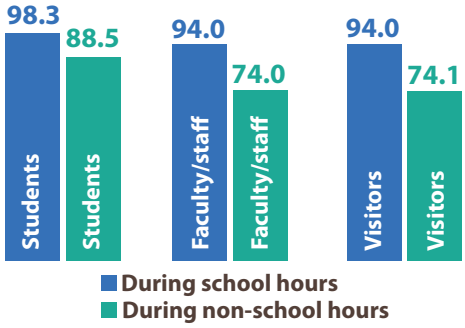
Fewer principals report tobacco use policies for faculty and visitor use on and off campus.

Schools with policies prohibiting tobacco use at off-campus, school-sponsored events, 2018



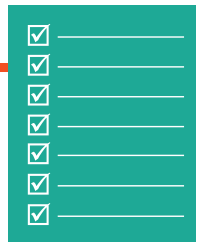
More principals report policies in place to restrict tobacco use during school hours than during non-school hours for school sponsored events. Less than 75% of principals report policies restricting visitor tobacco use during non-school hours.

Percentage of schools with policies that prohibit tobacco use, 2018



Few principals report conducting the School Health Index or other self-assessment tools to assess school tobacco policies, activities, and programs.

36.2%
Assess tobacco-use prevention policies using a self-assessment tool



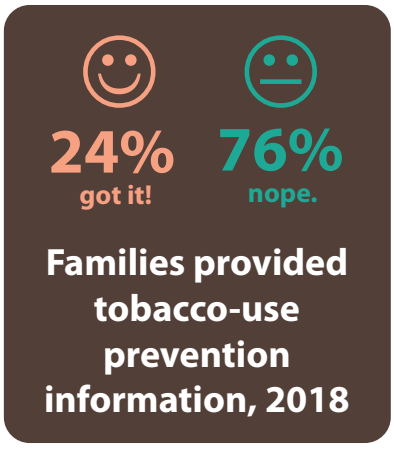
Overall, Idaho lead health education teachers report teaching tobacco use topics.

Idaho School Health Profile (ISHP), Lead Health Education Teacher, 2018 (biennial)	Idaho data, % State
Identifying tobacco products and the harmful substances they contain	95.2
Making accurate assessments of how many peers use tobacco	95.7
Identifying short- and long-term health consequences of tobacco use	94.6
Using interpersonal communication skills to avoid tobacco use (e.g., refusal skills, assertiveness)	96.7
Identifying social, economic, and cosmetic consequences of tobacco use	89.4
Using goal-setting and decision-making skills related to not using tobacco	89.1
Understanding the addictive nature of nicotine	94.1
Finding valid information and services related to tobacco-use prevention and cessation	95.5
Effects of nicotine on the adolescent brain	93.9
Supporting others who abstain from or want to quit using tobacco	79.5
Effects of tobacco use on athletic performance	93.1
Identifying harmful effects of tobacco use on fetal development	82.4
Effects of second-hand smoke and benefits of a smoke-free environment	83.5
Relationship between using tobacco and alcohol or other drugs	83.3
Understanding the social influences on tobacco use, including media, family, peers, and culture	88.1
How addiction to tobacco use can be treated	95.3
Identifying reasons why students do and do not use tobacco	85.3
Understanding school policies and community laws related to the sale and use of tobacco products	90.0
Benefits of tobacco cessation programs	76.0
Schools that taught all 19 tobacco-use topics	**57.1**

57.1%
taught all 19 topics

90%
taught 10 of 19 topics

More Idaho teachers desire than receive tobacco prevention professional development.



Few teachers report reaching parents with tobacco use information.

DISCUSSION
Idaho Tobacco Data Strengths
Health Profiles

- The on-going collection of Profile data allows for comparisons over time and provides information to measure progress towards strong tobacco policy in Idaho schools.
- Measuring the tobacco topics taught provides health teachers and principals with expectancies for comprehensive tobacco education.
- Profile outcomes are compatible and comparable to other states and the US overall.

Gaps Analysis and Opportunities

Policies

- School Profile data are reported statewide; tobacco policy and tobacco health education data are not available on a regional or school district level. Public Health District tobacco control programs have the opportunity to collect district level data using the Profile questionnaires.
- The Profile does not clearly identify if the specific topic of e-cigarette use is taught.
- Few schools report providing tobacco education to families. With the rise of e-cigarette use, providing e-cigarette education to families is recommended.
- E-cigarettes are not included in any section of Idaho's statutes defining, "Tobacco Products" and are therefore not included in policies and laws that serve to protect youth from marketing, advertising, product placement, etc. [60].
- The Idaho Annual Synar Report (ASR) does not include e-cigarettes when monitoring for youth access to tobacco. E-cigarettes must be considered a tobacco product under state law is to include them in the Synar Program. It is important to include e-cigarettes as a tobacco product to ensure youth access to e-cigarette products, liquids and devices is monitored and regulated in Idaho as it is in at least 16 states (31.4%) (as of March 15, 2019) [61].
- Idaho does not require a license to sell either e-cigarettes or vaping liquid. Nationwide, 21 states and the District of Columbia require a license (41.2%). License requirements to sell vaping products would restrict proximity of electronic vapor product retail outlets near youth (schools, youth facilities), restrict marketing and provide the potential to tax the products [62].

CONCLUSIONS AND RECOMMENDATIONS

Over the past two decades, teen cigarette use has declined but recent national data findings indicate no decline in cigarette use for students in 8th and 10th grade (MTF) [13]. Nationwide, between 2017 and 2018, 12th graders reported a nearly double increase in past 30-day vaping nicotine (11% to 21%). This increase in adolescent substance use is the largest increase of a substance recorded in the past 43 years [63]. Idaho youth (grades 9, 10, 11 and 12) are using e-cigarette products (30-day use) at a rate slightly higher than the national average (14.3% to US 13.2%) [19].

Maintaining and expanding youth tobacco surveillance in Idaho is critical. More data are needed to guide strategic youth tobacco use prevention and cessation efforts given the lack of e-cigarette regulation in Idaho, the rapid development of new ENDS products, confusion about the risks of ENDS use, and evidence of dual use of tobacco products,

Currently, what is known in Idaho about youth tobacco use is restricted to tobacco product questions in surveys designed to assess health behaviors and risks for a broad spectrum of associated health issues. Idaho does not administer the CDC Youth Tobacco Survey, or any type of a comprehensive tobacco survey. Without a comprehensive tobacco survey targeting youth ages 11-24, it is difficult to identify populations at greatest risk, develop strategic interventions, and evaluate the impact of prevention and intervention efforts.

Specific recommendations to address youth tobacco data gaps were provided by each category of youth data available in Idaho. The concluding remarks highlight the key findings and offer opportunities to address and reduce tobacco data gaps for even more effective tobacco prevention and control efforts.

Tobacco Survey Participation

Youth Grades 6 through 12

The primary obstacles to survey participation among school-aged youth include school refusal to participate in external surveys, lack of financial and human resources to administer and conduct surveys, consent barriers, and exclusion of some groups of students from health behavior surveys. Suggestions to enhance survey participation and reduce the burden of administering and taking surveys include:

- **Eliminate real or perceived redundancy**- Survey administrators and school leaders expressed the need for greater coordination of existing youth surveys to reduce the impression of redundancy and burdens placed on schools and student respondents. Coordinate efforts to reduce redundancy and to expand the types of tobacco question item offered.
- **Include students excluded from current surveys**- Include students attending alternative schools, youth in juvenile corrections, and those who have dropped out of school as they are at high-risk for tobacco and nicotine dependence [64]. Conduct a comprehensive youth tobacco survey (e.g., the YTS) among the over 5,000 students attending alternative schools on a biennial basis, and as feasible, among the approximately 450 youth under the care of the Idaho Department of Juvenile Correction and the 5,000 juveniles on probation in Idaho [65]. See Appendix 4 for a list of the names, locations, and student population of alternative schools in Idaho.
- **Expand electronic data collection methodology**- Build capacity and support for electronic data collection to reduce time spent completing tobacco product questionnaires and the burden of survey administration.
- **Promote tobacco data collection**-Provide information to parents and students on the importance of youth tobacco use assessment to gain parental permission and student support for participating in tobacco data collection.
- **Disseminate survey findings**-Present tobacco data findings in an easy to access and easy to understand format to build trust and encourage future participation youth health behavior surveys and other data collection methods, e.g., focus groups, talking circles, etc.

Youth 18-24 participation

The only opportunities that exist to assess tobacco use and opinions among youth ages 18-24 are the BRFSS and the ACHA-NCHA, for those attending Idaho colleges and universities that administer the survey. PRATS is designed to reach perinatal women ages 18-24 and excludes perinatal women under the age of 17. Suggestions to increase survey participation include:

- **Increase survey sample sizes**-Both BRFSS and PRATS require adequate sample sizes to reliably report data among youth ages 18-24 at a PHD level. However, increasing the sample size would require additional financial support and perhaps adoption of new web and/or mobile-based methology.
- **Increase the number of Idaho colleges and universities administering the ACHA-NCHA**- Currently six of the higher education institutions in Idaho administer the ACHA-NCHA survey. The ACHA-NCHA offers an opportunity to identify tobacco use and opinions among college-aged students and provides an opportunity to identity associations between tobacco and other health risk behaviors and health determinants.

Tobacco Data Quantity and Quality

Most of the available youth tobacco data are limited to tobacco use and quit attempts. With the limited number of tobacco-related questions available on the current health behavior surveys, it is not possible to deeply explore tobacco use patterns, exposure, barriers to cessation, and other important opinions and perceptions. Acquiring this information could inform tobacco prevention and cessation interventions for highest risk regions and sub-populations. Some states have developed questions to identify support for tobacco policies and regulations [23]. See Appendix 3 for examples of tobacco question items from other states. Comparisons of youth tobacco questions are found in Appendix 1. A comparison of PRAMS and PRATS tobacco-related questions are found in Appendix 2.

Recommendations for data quantity and quality include:

- **Prioritize tobacco data needs**- Robust tobacco data are needed to enable strategic planning and to evaluate progress toward meeting state and PHD tobacco control goals and objectives. See Appendix 1 and 2 for comparisons of tobacco use, opinion, exposure, and cessation questions to assist in prioritization of current tobacco data needs.
- **Expand e-cigarette use assessment**- Continue to include and expand e-cigarette core questions to include question items on perceptions of harm, dual use, nicotine consumption and dependence, quit attempts, attitudes towards regulation, etc. The YTS, PRAMS and other states offer expanded e-cigarette questions options that could be added to existing surveys. Current literature provides recommendations for core question items to assess e-cigarette use [66].
- **Expand tobacco quitting and cessation assessment**- Currently only quit attempt information is collected in Idaho. The YTS, ATS, and surveys from other states contain questions that address intention, readiness, self-efficacy, use of formal assistance to quit, and other questions that pertain to quit attempts and tobacco cessation [23]. See Appendix 1 and 2.
- **Standardization and understandability of questions**- Use of standardized and nationally-validated question items is important for state and nationwide comparisons. For example:
  - Use standardized definitions to quantify use of cigarettes (e.g., heavy, medium, light) and consistent measures of nicotine consumption to improve data quality [23].
  - Use name brands of tobacco products and provide product definitions and pictures [23].
  - Ensure that any translations of surveys administered are translated properly and that any phone-based surveys are provided to non-English speakers with proper translation.
- **Engage target audiences**- The research supports youth engagement in the development, design and dissemination of tobacco surveys and questionnaires [67, 68]. Recommendations include:
  - Conduct focus groups with youth who are representative of Idaho population demographics to better understand current tobacco use practices and reasons for tobacco use, attitudes, knowledge and other related factors that impact tobacco initiation, use, and cessation.
  - Conduct focus groups among high-risk tobacco users ages 18-24 to help develop tobacco question items and methodology preferences.
- **Cultural Responsiveness**- Tobacco products are not used equally across different groups. Designing tobacco question items and survey methodology

to gain insight into different groups is important for targeted and strategic tobacco prevention and cessation planning. Examples include:

- Important distinctions are made between traditional and commercial tobacco among American Indian youth. Recommend support for tribes in Idaho to administer a survey inclusive of traditional tobacco. Adding a traditional tobacco use question in existing surveys would better serve American Indian youth respondents [27, 29}.
- Patterns of tobacco use and perceptions of harm were different among youth identifying as neither male or female. Consistent use of a non-binary gender/sex descriptor is important to identify population differences.
- More information is needed to understand emerging use patterns, for example, Hispanic (Latinx) youth e-cigarette rates surpass state rates [47]. This is particularly concerning as Hispanic youth tobacco rates have historically been lower than non-Hispanic use rates.

- **Increase survey sample size**- To better understand tobacco use and opinions an adequate sample is needed to identify high risk populations, explore associations and relationships to other health risks, assess emerging trends, and to evaluate tobacco intervention impacts. Data quality is reliant on an adequate sample size, particularly among sub-populations.

Methodology and Data Analysis

- Oversampling or conducting special studies of sub-populations is recommended to reach youth identified as most at risk for tobacco initiation, exposure, and nicotine dependence.
- Research supports moving away from phone-based to mobile and web-based surveys, such as address-based sampling (ABS) [55]. Piloting phone-based survey strategies is recommended.
- Many opportunities exist to explore associations between tobacco use and health conditions, the determinants of health, substance use, and other risks associated with tobacco use, however, this can only be realized with adequate resources.

PROPOSED STRATEGIES TO FILL YOUTH TOBACCO DATA GAPS

After careful analysis of the existing youth tobacco data available in Idaho and comparisons of tobacco data available across the nation, the author concludes that Idaho lacks and needs to conduct a comprehensive tobacco assessment amongst youth in grades 6 through 12 and amongst young adults, ages 18-24 [1, 2]. It may be possible to fill a few of the tobacco data gaps by adding questions to existing surveys; however, it is not practical or feasible to expect that the current health surveys conducted in Idaho could be adapted to support the rigorous tobacco surveillance that is recommended by the National Tobacco Control Program [1]. The issue of undue burden and perceived redundancy of health surveys is a critical concern, and implementing an additional survey in Idaho would require much coordination and cooperation between agencies and programs.

Some additional suggestions to fill tobacco data gaps are listed below.Dollar signs are included to indicate variability of cost with $= lowest cost, $$= mid cost, $$$= highest cost.

1. **Idaho Alternative School Students Tobacco Assessment- $**
    - Rationale- Students attending Idaho Alternative Schools are excluded from youth surveys that collect tobacco use data; students within this population have typically demonstrated higher than average tobacco use rates.
    - Sample- Utilize the publicly available list of alternative schools in Idaho and stratify the sample by Idaho SDE or PHD. The target population is Idaho residents 15 to 19 years of age. The current population is approximately 5,000 in 62 schools.
    - Proposed Methods- Web-based mobile friendly anonymous survey, coded only by school to allow for data analysis by region or district.
    - Specifications:
        - Conduct exploratory focus groups, talking circles, etc. to inform survey development and methodology. Continue to engage students in the co-creation of the survey instrument.

- Core questionnaire content will contain nationally-validated youth tobacco question items and questions derived from youth participation and input. The survey will take approximately 15 minutes to complete.

2. **Idaho Youth E-cigarette Assessment – Grades 6-8 and Grades 9 - 12 $$**
   - Rationale- Idaho school administrators express grave concern about e-cigarette use amongst middle and high school students. It is feasible that school administrators would support a web-based, mobile-friendly e-cigarette survey to assess e-cigarette use and opinions.
   - Sample- Utilize publicly available list of secondary schools in Idaho as a sampling frame and stratify the sample by Idaho SDE or PHD. Total 212 high schools in 136 districts. Number of schools in grades 6-8 to be determined.
   - Proposed Methods- Web-based and mobile friendly anonymous survey, coded only by school to allow for data analysis by region or district.
   - Specifications- Same procedure as recommended for the alternative school population.
3. **Idaho Young Adult E-cigarette Assessment- Ages 18-24 $ to $$$**
   - Rationale- Young adults are underrepresented in the BRFSS and the BRFSS has limited capacity to add additional tobacco question items to the survey. Young adult e-cigarette use is rapidly increasing, and it is important to determine if e-cigarette use increases dual use of combustible tobacco and/or reduces tobacco quit attempts and cessation success.
   - Sample- Purchase sample frame to reach youth ages 18-24. According to the U.S. Census Bureau, 9.5% of the Idaho population is in 18-24 year old age group.
   - Proposed Methods:
     - Random Sample- Recommend a mail-push-to-web method (ABS), followed by paper questionnaire for non-respondents. - $$$
     - Convenient Sample- Could include crowdsourcing, social media (Facebook, Instagram) as an approach (this approach does not produces generalizable findings). - $
   - Specifications:
     - Conduct exploratory focus groups to inform survey development and methodology. Continue to engage young adults in the co-creation of the instrument.
     - The survey will contain nationally-validated e-cigarette questions and take 15 minutes to complete.
4. **Tobacco Policy in Idaho Schools-Idaho School Administrators-$$**
   - Rationale- Currently tobacco policy data are limited and available only at a statewide basis. School administrators express concern about escalating e-cigarette use and creating and enforcing policies among students, staff, and visitors.
   - Sample- Obtain a publicly available list of middle and secondary schools from the Idaho State Department of Education. Stratify the sample by Idaho SDE or PHD.
   - Proposed Methods- Sequential mixed-mode survey with email invitation to a web-based survey, followed by a short phone interview to gather qualitative information regarding deeper opinions on the e-cigarette and tobacco use policies.
   - Specifications:
     - Conduct focus group with regional leaders of the Idaho School Administrators Association to inform the survey and interview content.
     - The survey will include nationally-validated questions and take 15 minutes to complete.

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Appendix

Appendix 1: 2018 National Youth Tobacco Survey (NYTS) by Question Categories

To better understand the gaps in Idaho youth tobacco data, the NYTS question items were compared to tobacco questions contained in Idaho surveys and questionnaires. Each NYTS question was coded to reflect the 11 tobacco question categories described in the report.

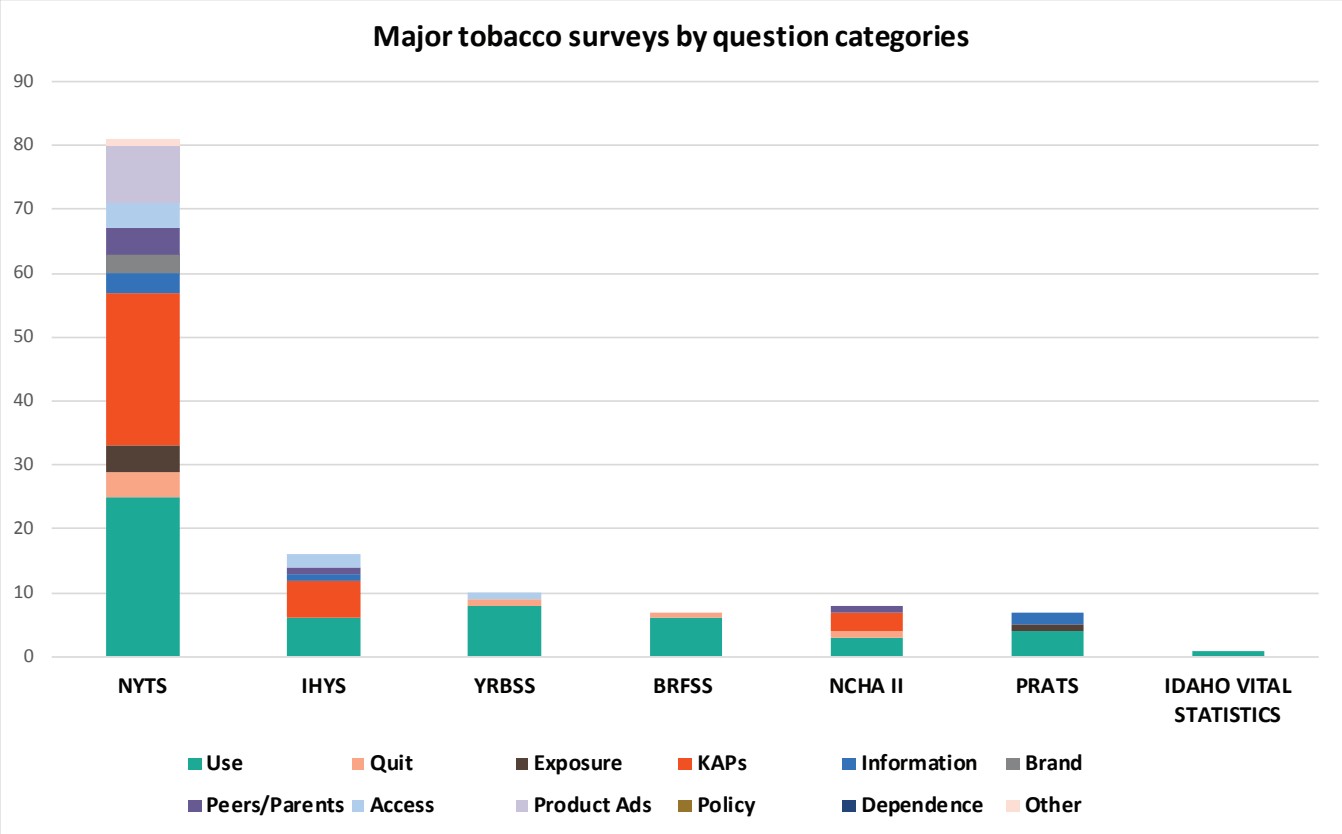
National Youth Tobacco Survey (NYTS)	Category
Have you ever been curious about smoking a cigarette?	KAP
Have you ever tried cigarette smoking, even one or two puffs?	Use
How old were you when you first tried cigarette smoking, even one or two puffs?	Use
About how many cigarettes have you smoked in your entire life?	Use
When was the last time you smoked a cigarette, even one or two puffs?	Use
During the past 30 days, on how many days did you smoke cigarettes?	Use
During the past 30 days, on the days you smoked, about how many cigarettes did you smoke per day?	Use
During the past 30 days, what brand of cigarettes did you usually smoke?	Brand
Menthol cigarettes are cigarettes that taste like mint. During the past 30 days, were the cigarettes that you usually smoked menthol?	Brand
Do you think that you will try a cigarette soon?	KAP
Do you think you will smoke a cigarette in the next year?	KAP
If one of your best friends were to offer you a cigarette, would you smoke it?	Peer/Family
Have you ever been curious about smoking a cigar, cigarillo, or little cigar?	KAP
Have you ever tried smoking cigars, cigarillos, or little cigars, such as Black and Milds, Swisher Sweets, Dutch Masters, White Owl, or Phillies Blunts, even one or two puffs?	Use
How old were you when you first tried smoking a cigar, cigarillo, or little cigar, even one or two puffs?	Use
During the past 30 days, on how many days did you smoke cigars, cigarillos, or little cigars?	Use
During the past 30 days, on the days that you smoked, about how many cigars, cigarillos, or little cigars did you smoke per day?	Use
Have you ever been curious about using chewing tobacco, snuff, or dip?	KAP
Have you ever used chewing tobacco, snuff, or dip, such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen, even just a small amount?	Use
How old were you when you used chewing tobacco, snuff, or dip for the first time?	Use
During the past 30 days, on how many days did you use chewing tobacco, snuff, or dip?	Use
Have you ever been curious about using an e-cigarette?	KAP
Have you ever used an e-cigarette, even once or twice?	Use
How old were you when you first tried using an e-cigarette, even once or twice?	Use
In total, on how many days have you used e-cigarettes in your entire life?	Use
During the past 30 days, on how many days did you use e-cigarettes?	Use
During the past 30 days, where did you get or buy the e-cigarettes that you have used?	Access
What are the reasons you have used e-cigarettes?	KAP
Have you ever used marijuana, marijuana concentrates, marijuana waxes, THC, or hash oils in an e-cigarette?	Use
Do you think that you will try an e-cigarette soon?	KAP

Do you think you will use an e-cigarette in the next year?	KAP
If one of your best friends were to offer you an e-cigarette, would you use it?	Peer/Family
Have you ever been curious about smoking tobacco in a hookah or waterpipe?	KAP
Have you ever tried smoking tobacco in a hookah or waterpipe, even one or two puffs?	Use
How old were you when you first tried smoking tobacco in a hookah or waterpipe, even one or two puffs?	Use
During the past 30 days, on how many days did you smoke tobacco in a hookah or waterpipe?	Use
During the past 30 days, where did you smoke tobacco in a hookah or waterpipe?	Use
Do you think that you will try smoking tobacco in a hookah or waterpipe soon?	KAP
Do you think you will smoke tobacco in a hookah or waterpipe in the next year?	KAP
If one of your best friends were to offer you a hookah or waterpipe with tobacco, would you try it?	Peer/Family
Which of the following tobacco products have you ever tried, even just one time?	Use
In the past 30 days, which of the following products have you used on at least one day?	Brand
During the past 30 days, on how many days did you use any tobacco product(s)?	Use
Which of the following tobacco products that you used in the past 30 days were flavored to taste like menthol (mint), alcohol (wine, cognac), candy, fruit, chocolate or any other flavors?	Use
What flavors of tobacco products have you used in the past 30 days?	Use
During the past 30 days, have you had a strong craving or felt like you really needed to use a tobacco product of any kind?	KAP
How soon after you wake up do you want to use a tobacco product?	KAP
Are you seriously thinking about quitting the use of all tobacco products?	Quit
During the past 12 months, how many times have you stopped using all tobacco products for one day or longer because you were trying to quit all tobacco products for good?	Quit
Are you seriously thinking about quitting cigarettes?	Quit
During the past 12 months, how many times have you stopped smoking cigarettes for one day or longer because you were trying to quit smoking cigarettes for good?	Quit
During the past 30 days, how did you get your own tobacco products?	Access
During the past 30 days, where did you buy your own tobacco products?	Access
During the past 30 days, did anyone refuse to sell you any tobacco products because of your age?	Access
How easy do you think it is for kids your age to buy tobacco products in a store?	KAP
During the past 30 days, how often did you see a warning label on a cigar, cigarillo, or little cigar package?	Information
During the past 30 days, how often did you see a warning label on an e-cigarette package?	Information
During the past 30 days, how often did you see a warning label on a package of hookah tobacco?	Information
In the past 12 months, have you seen or heard The Real Cost, on television, the internet, social media, or radio as part of ads about tobacco?	Ads & Media
How much do you think people harm themselves when they smoke cigarettes some days but not every day?	KAP
How much do you think people harm themselves when they use chewing tobacco, snuff, dip, or snus, some days but not every day?	KAP
Do you believe that chewing tobacco, snuff, dip, or snus is (LESS ADDICTIVE, EQUALLY ADDICTIVE, or MORE ADDICTIVE) than cigarettes?	KAP

How much do you think people harm themselves when they use e-cigarettes some days but not every day?	KAP
Do you believe that e-cigarettes are (LESS ADDICTIVE, EQUALLY ADDICTIVE, or MORE ADDICTIVE) than cigarettes?	KAP
How much do you think people harm themselves when they smoke tobacco in a hookah or waterpipe some days but not every day?	KAP
Do you believe that smoking tobacco in a hookah or waterpipe is (LESS ADDICTIVE, EQUALLY ADDICTIVE, or MORE ADDICTIVE) than cigarettes?	KAP
How strongly do you agree with the statement 'All tobacco products are dangerous'?	KAP
Not including the vapor from e-cigarettes, do you think that breathing smoke from other people's cigarettes or other tobacco products causes… [	KAP
When you are using the Internet, how often do you see ads or promotions for cigarettes or other tobacco products?	Ads & Media
When you read newspapers or magazines, how often do you see ads or promotions for cigarettes or other tobacco products?	Ads & Media
When you go to a convenience store, supermarket, or gas station, how often do you see ads or promotions for cigarettes or other tobacco products?	Ads & Media
When you watch TV or go to the movies, how often do you see ads or promotions for cigarettes or other tobacco products?	Ads & Media
When you are using the Internet, how often do you see ads or promotions for e-cigarettes?	Ads & Media
When you read newspapers or magazines, how often do you see ads or promotions for e-cigarettes?	Ads & Media
When you go to a convenience store, supermarket, or gas station, how often do you see ads or promotions for e-cigarettes?	Ads & Media
When you watch TV, how often do you see ads or promotions for e-cigarettes?	Ads & Media
During the past 7 days, on how many days did someone smoke tobacco products in your home while you were there?	Exposure
During the past 7 days, on how many days did you ride in a vehicle when someone was smoking a tobacco product?	Exposure
During the past 30 days, on how many days did you breathe the smoke from someone who was smoking tobacco products in an indoor or outdoor public place?	Exposure
During the past 30 days, on how many days did you breathe the vapor from someone who was using an e-cigarette in an indoor or outdoor public place?	Exposure
Does anyone who lives with you now	Peer/Family

Using the NYTS as the standard of comparison, each Idaho survey generating youth tobacco data was analyzed to determine the number of each different type of tobacco question contained in the survey. The tobacco questions were defined using the 11 tobacco question categories described in the report (e.g., use, knowledge, attitudes, perceptions, etc.).

Overall, tobacco use is the most frequently type of tobacco question included in all of the surveys identified, followed by questions about knowledge, attitudes and perceptions. The IHYS included the greatest number of different types of tobacco questions of any survey conducted in Idaho among youth ages 11-24.



Appendix 2: PRAMS and PRATS Comparison of Tobacco Question Comparisons

PRAMS provides a variety of tobacco questions that are not currently included in Idaho PRATS. The following comparison table provides the tobacco questions in each survey. Each question is classified by the tobacco question category described in the report.

PRAMS	PRATS	Question Topic
**Before* you got pregnant with your new baby, did a doctor, nurse, or other health care worker talk with you about any of the things listed below about preparing for a pregnancy? How smoking during pregnancy can affect a baby	During any of your prenatal care visits, did a doctor, nurse, or other health care provider give you information about any of the issues listed below? How smoking during pregnancy could affect your baby	Information
During any of your health care visits in the *12 months before* you got pregnant, did a doctor, nurse, or other health care worker do any of the following things? Ask me if I was smoking cigarettes	During any of your prenatal care visits, did a doctor, nurse, or other health care provider ask you...? If you were smoking cigarettes during your pregnancy	Use

During any of your prenatal care visits, did a doctor, nurse, or other health care worker ask you any of the things listed below? If I was smoking cigarettes	Have you smoked at least 100 cigarettes (5 packs) in your entire life? A pack has 20 cigarettes.	Use
Have you smoked any cigarettes in the *past 2 years*?		
In the *3 months before* you got pregnant, how many cigarettes did you smoke on an average day? A pack has 20 cigarettes.	In the 3 months before you got pregnant, how many cigarettes did you smoke on an average day?	Use
In the *last 3 months* of your pregnancy, how many cigarettes did you smoke on an average day? A pack has 20 cigarettes.	In the last 3 months of your pregnancy, how many cigarettes did you smoke on an average day?	Use
How many cigarettes do you smoke on an average day *now*? A pack has 20 cigarettes.	How many cigarettes do you smoke on an average day now?	Use
Have you used any of the following products in the *past 2 years*? - E-cigarettes or other electronic nicotine products/ hookah/snus, snuff, dip/cigars	No comparable question	Use
During the *3 months before* you got pregnant, on average, how often did you use e-cigarettes or other electronic nicotine products?	No comparable question	Use
During the *last 3 months* of your pregnancy, on average, how often did you use e-cigarettes or other electronic nicotine products?	No comparable question	Use
During your postpartum checkup, did a doctor, nurse, or other health care worker do any of the following things? Ask me if I was smoking cigarettes	No comparable question	Use
*Does your husband or partner smoke inside your home?	No comparable question	Exposure
*Not including yourself or your husband or partner, does anyone else smoke cigarettes inside your home?	No comparable question	Exposure
*During *your most recent* pregnancy, did you feel you *needed* any of the following services? Help to quit smoking	No comparable question	Quit
*During *your most recent* pregnancy, did you *receive* any of the following services? Help to quit smoking	No comparable question	Information
*During *your most recent* pregnancy, did the home visitor who came to your home talk with you about any of the things listed below? How smoking during pregnancy could affect my baby	No comparable question	Information

**During any of your prenatal care visits*, did a doctor, nurse, or other health care worker advise you to quit smoking?	No comparable question	Quit
*During *your most recent* pregnancy, did you do any of the following things about quitting smoking?	No comparable question	Quit
*Listed below are some things about quitting smoking that a doctor, nurse, or other health care worker might have done *during any of your prenatal care visits*.	No comparable question	Information
*Which of the following statements best describes the rules about smoking *inside* your home during *your most recent* pregnancy, even if no one who lived in your home was a smoker? Check ONE answer	No comparable question	Exposure
*Did you quit smoking around the time of *your most recent* pregnancy?	No comparable question	Quit
*Which of the following statements best describes the rules about smoking *inside* your home *now*, even if no one who lives in your home is a smoker?	No comparable question	Exposure
*How many cigarette smokers, not including yourself, lived in your home during *your most recent* pregnancy?	No comparable question	Exposure
*How many cigarette smokers, not including yourself, live in your home *now*?	No comparable question	Exposure
*Listed below are some things that can make it hard for some people to quit smoking. For each item, check No if it is not something that might make it hard for you or Yes if it is.	No comparable question	Information
*During *your most recent* pregnancy, did your health insurance pay for medications or any other services to help you quit smoking?	No comparable question	Quit
*In the *3 months before* you got pregnant, on average, how often did you smoke hookah?	No comparable question	Use
*In the *last 3 months* of your pregnancy, on average, how often did you smoke hookah?	No comparable question	Use

Appendix 3. State Youth Tobacco Question Comparisons

Approximately 33 U.S. states conduct a comprehensive youth tobacco assessment using the CDC YTS survey. Some states have built youth tobacco surveys using core CDC YTS and NYTS questions along with unique state added questions. The following is a compilation of unique survey question items coded by the 11 NYTS tobacco question item categories described in the report. If a question item did not fit into one of the 11 categories, the question was designated as "other."

State: California

- Name of Survey: California Student Tobacco Survey
- https://www.cdph.ca.gov/Programs/CCDPHP/DCDIC/CTCB/CDPH%20Document%20Library/ResearchandEvaluation/SurveyInstrumentsTrainingManualsAndProtocols/201516CaliforniaStudentTobaccoSurveyCSTSQuestionnaire-nglishCTCP.pdf
- Age/Grade of Students: Students grades 6-12 (ages 11-19)
- Survey Methodology- Paper (Answer booklet)
- Survey Questions of Interest-
  - What strength e-cigarette do you use most often? (Brand)
  - E-cigarettes are just as addictive as regular cigarettes. (KAP)
  - E-cigarettes should be allowed in indoor spaces such as malls and theaters (Policy)
  - Do you call yourself a vaper? (KAP)

State: Oregon

- Name of Survey: Oregon Healthy Teens Survey
- Age/Grade of Students: Students in 8th and 11th grade
- Survey Methodology- Paper
- Survey Questions of Interest-
  - Do you agree or disagree with the following statement: Cigarette companies deliberately advertise and promote cigarettes to encourage youth under 18 to smoke? (KAP)
  - Do you think tobacco companies have been honest or dishonest with the public about the dangers of tobacco use? (KAP)

State: North Carolina

- Name of Survey: North Carolina Youth Tobacco Survey
- https://www.tobaccopreventionandcontrol.ncdhhs.gov/data/yts/docs/2017-NC-YTS-Questionnaire-FINAL.pdf
- Age/Grade of Students: Grades 6-12
- Survey Methodology- Paper
- Survey Questions of Interest-
  - Have you ever "Liked" or commented positively about any tobacco product on a website such as Facebook, Twitter, Instagram, YouTube, or Snapchat? (Ads and Media)
  - During the past 7 days, on how many days did someone use an e-cigarette in your home while you were there? (Exposure)
  - Do you think young people who smoke cigarettes have more friends? (KAP)
  - Do you think smoking cigarettes makes young people look cool or fit in? (KAP)

- Have you ever seen or heard any anti-smoking advertising or campaigns with the following themes or slogans? (Information)

State: Florida

- Name of Survey: Florida Youth Tobacco Survey
- http://www.floridahealth.gov/statistics-and-data/survey-data/fl-youth-tobacco-survey/_documents/2014-questionnaire.pdf
- Age/Grade of Students: Grades 6-12
- Survey Methodology- Paper
- Survey Questions of Interest-
  - When you bought or tried to buy cigarettes during the past 30 days, did you use or try to use a fake ID? (Access)
  - How long can you go without smoking before you feel like you need a cigarette? (Dependence)
  - During this school year, were you taught in any of your classes about tobacco use? (Information)
  - Do you think people can get addicted to the following products just like they can get addicted to cocaine or heroin? (KAP)
  - Do you think using the following products helps people feel more comfortable at parties or in other social situations? (KAP)
  - Do you think smoking cigarettes helps people maintain or control body weight? (KAP)
  - In the past 12 months, have you ever asked someone not to smoke? (Peer/Family)
  - Have you or anyone you know gotten a ticket, paid a fine, or had to go to court for using or possessing tobacco? (Other)

State: Nebraska

Name of Survey: Nebraska Youth Tobacco Survey

- https://bosr.unl.edu/2018%20YTS%20Questionnaire_Final_Draft5.pdf
- Age/Grade of Students: Grades 6-12
- Survey Methodology- Paper
- Survey Questions of Interest-
- Out of every 10 students in your grade at school, how many do you think use e-cigarettes? (KAP)
- Out of every 10 students in your grade at school, how many do you think smoke cigarettes? (KAP)
- Thinking about all types of e-cigarettes, have you used the disposable kind or rechargeable/ refillable/tank kind? (Brand)
- How often do you use an e-cigarette with nicotine? (Use)
- State: Hawaii
- Name of Survey: Hawaii Youth Tobacco Survey
- Age/Grade of Students: Grades 6-12
- Survey Methodology- Paper
- Survey Questions of Interest-
  - What are the reasons you have used e-cigarettes? (Use)

Appendix 4: Idaho Alternative Schools, grades 6-12, by 2018-2019 enrollment

Tobacco use data for Idaho Alternative School students is unavailable. The following chart provides information on each Alternative Schools in Idaho, the grades served, and the 2018-2019 enrollment for each school.

2018-2019 Idaho Alternative Schools - Regular Session				
Region	School District/LEA	School	Grades	Enrollment
I	CDA #251	Venture High School	8-12	185
I	Post Falls SD #273	New Vision High School	9-12	190
I	LEA # 469	Kootenai Bridge Academy	9-12	300
I	LPO #84	Lake Pend Oreille High School	9-12	98
I	Lakeland Jt. #272	Mountain View Alternative High School	7-12	120
I	St. Maries #41	St. Maries Community Education Alternative	9-12	37
II	Orofino #171	Idaho Youth Challenge Academy	9-12	300
II	Moscow SD #281	Paradise Creek Regional High School	9-12	51
II	Lewiston SD #340	Tammany Alternative School	9-12	
III	Mtn. Home #193	Bennett Mountain High School	7-12	115
III	Emmett #22`	Black Canyon High School	9-12	67
III	COSSA #555	Cossa Academy	7-12	117
III	West Ada #2	Crossroads Middle School	6-8	158
III	West Ada #2	Eagle Academy	9-12	156
III	Boise Independent #1	Frank Church High School	6-12	537
III	Fruitland #373	Fruitland Preparatory Academy	6-12	6
III	McCall-Donnelly #421	Heartland High School	9-12	16
III	LEA # 469	Idaho Connects Online Alternative School	6-12	210
III	Idaho Virtual LEA 452	Idaho Vision High School	9-12	250
III	Weiser #431	Indianhead Academy High School	9-12	16
III	Kuna #3	Initial Point High School	6-12	118
III	LEA #466	iSucceed Academy	9-12	75
III	West Ada #2	Meridian Academy	9-12	176
III	Middleton $134	Middleton Academy (formerly Atlas High School)	7-12	91
III	Midvale #433	Midvale Alternative School	7-12	13
III	West Ada #2	Pathways Middle School	6-8	160
III	West Ada	Rebound School of Opportunity	6-12	154
III	LEA 453	Richard McKenna Charter High School	9-12	
III	Vallivue #139	Rivervue Middle School	6-8	75
III	Emmett SD #221	The Patriot Center	6-12	36
III	Vallivue #139	Vallivue Academy	9-12	120
III	Caldwell #132	Canyon Springs High School	6-12	280
III	Nampa SD #131	Union High School	9-12	
III	LEA 453	Richard McKenna Charter High School	9-12	200
IV	Buhl #412	Wakapa Academy	9-12	
IV	Cassia #151	Cassia Jr/Sr High School	7-12	134

IV	Jerome #261	Northside Jr/Sr High School	6-12	36
IV	Blaine Co #51	Silver Creek High School	8-12	59
IV	Twin Falls #411	Magic Valley High School	9-12	175
IV	Minidoka #331	Mt. Harrison Jr.-Sr. High	6-12	245
IV	Shoshone SD #312	High Desert	9-12	24
IV	Twin Falls #411	Bridge Academy	6-8	74
V	American Falls #381	American Falls Academy	6-12	39
V	Pocatello #25	Kinport Middle School	6-8	30
V	Pocatello #25	New Horizon High School	9-12	260
V	Oneida #351	Oneida High School	9-12	16
V	Preston #201	Franklin County High School	9-12	52
V	Bear Lake #33	Clover Creek High School	9-12	11
VI	Teton SD #401	Basin Alternative High School	6-12	10
VI	Idaho Falls #91	Emerson High School	9-12	250
VI	Blackfoot #55	Independence Alternative High School	9-12	146
VI	Sugar-Salem #322	Valley View Alternative High School	9-12	16
VI	Bonneville #93	Lincoln High School	7-12	147
VI	Madison SD 321	Central High School	6-12	117
III	West Ada #2	Central Academy High School	9-12	
VI	Jefferson Co. #251	Jefferson High School	7-12	
VI	Salmon SD #291	Salmon Alternative High School	9-12	15
VI	Blackfoot #55	Mountain View Middle School Alt	6-8	15-20
				Total range: 6298-6303

Appendix 5: Idaho School Health Profile – 2018 Findings

Principal Survey, 2018

Idaho School Health Profile (ISHP), Principal Survey, 2018 (biennial)	Idaho data, %
	State
Has your school ever used the School Health Index or other self-assessment tool to assess your school's policies, activities, and programs in the following areas? (Tobacco-use prevention)	36.2
Has your school adopted a policy prohibiting tobacco use?	99.4
Percentage of school that have a tobacco-use prevention policy that specifically prohibits use of each type of tobacco for **students** during any school-related activity.	
Cigarettes	98.9
Smokeless tobacco	98.3
Cigars	95.6
Pipes	95.6
Electronic vapor products	97.7
Percentage of school that have a tobacco-use prevention policy that specifically prohibits use of each type of tobacco for **faculty/staff** during any school-related activity.	
Cigarettes	98.9

Smokeless tobacco	98.3
Cigars	95.6
Pipes	95.6
Electronic vapor products	97.9
Percentage of school that have a tobacco-use prevention policy that specifically prohibits use of each type of tobacco for **visitors** during any school-related activity.	
Cigarettes	96.7
Smokeless tobacco	92.8
Cigars	93.4
Pipes	92.9
Electronic vapor products	92.8
Does your school post signs marking a tobacco-free school zone, that is, a specified distance from school grounds where tobacco use is not allowed?	71.5
Percentage of school that have a tobacco-use prevention policy that specifically prohibits tobacco use during each of the following times for **students.**	
During school hours	98.3
During non-school hours	88.5
Percentage of school that have a tobacco-use prevention policy that specifically prohibits tobacco use during each of the following times for **faculty/staff**.	
During school hours	94.0
During non-school hours	74.0
Percentage of school that have a tobacco-use prevention policy that specifically prohibits tobacco use during each of the following times for **visitors**.	
During school hours	94.0
During non-school hours	74.1
Percentage of schools that have a tobacco-use prevention policy that specifically prohibits tobacco use in each of the following locations for **students**	
In school buildings	99.4
Outside on school grounds, including parking lots and playing fields	99.4
On school buses or other vehicles used to transport students	98.8
At off campus, school-sponsored events	96.2
Percentage of schools that have a tobacco-use prevention policy that specifically prohibits tobacco use in each of the following locations for **faculty/staff**	
In school buildings	97.3
Outside on school grounds, including parking lots and playing fields	96
On school buses or other vehicles used to transport students	96
At off campus, school-sponsored events	85.4
Percentage of schools that have a tobacco-use prevention policy that specifically prohibits tobacco use in each of the following locations for **visitors**	
In school buildings	97.3
Outside on school grounds, including parking lots and playing fields	93.8
On school buses or other vehicles used to transport students	93.3
At off campus, school-sponsored events	71.3

Idaho School Health Profile – Lead Health Education Teacher Survey, 2018

Idaho School Health Profile (ISHP), Lead Health Teacher Survey, 2018 (biennial)	Idaho data, %
	State
Identifying tobacco products and the harmful substances they contain	95.2
Making accurate assessments of how many peers use tobacco	95.7
Identifying short and longterm health consequences of tobacco use	94.6
Using interpersonal communication skills to avoid tobacco use (e.g., refusal skills, assertiveness)	96.7
Identifying social, economic, and cosmetic consequences of tobacco use	89.4
Using goalsetting and decisionmaking skills related to not using tobacco	89.1
Understanding the addictive nature of nicotine	94.1
Finding valid information and services related to tobacco use prevention and cessation	95.5
Effects of nicotine on the adolescent brain	93.9
Supporting others who abstain from or want to quit using tobacco	79.5
Effects of tobacco use on athletic performance	93.1
Identifying harmful effects of tobacco use on fetal development	82.4
Effects of secondhand smoke and benefits of a smokefree environment	83.5
Relationship between using tobacco and alcohol or other drugs	83.3
Understanding the social influences on tobacco use, including media, family, peers, and culture	88.1
How addiction to tobacco use can be treated	95.3
Identifying reasons why students do and do not use tobacco	85.3
Understanding school policies and community laws related to the sale and use of tobacco products	90.0
Benefits of tobacco cessation programs	76.0
Schools that taught all 19 tobaccouse topics	57.1
Percentage of schools that provided parents and families with health information designed to increase parent and family knowledge of the following topics during the current school year	
Tobacco-use prevention	24.4
Percentage of schools in which the lead health education teacher received professional development (e.g., workshops, conferences, continuing education, or any other kind of inservice) on each of the following topics during the past two years	
Tobacco-use prevention	19.4
Percentage of schools in which the lead health education teacher would like to receive professional development on each of the following topics.	
Tobacco-use prevention	59.6

Appendix 6: Idaho Youth Tobacco and Nicotine Data Gap Analysis Interview Guide

Several interviews were conducted to explore the youth tobacco surveys and questionnaires in use in Idaho and to better understand any constraints and barriers which limit survey participation. The following Interview Guide served as a template and was modified as needed for each unique survey administrator interview.

Idaho Youth Tobacco and Nicotine Data Gap Analysis Interview Guide

1. **Project introduction and assurances of anonymity**
2. **Description of surveillance system and/or survey administered**
   - Please describe the surveillance system and/or survey you administer or manage, including reach, frequency, etc.
   - Please describe how the survey is conducted and coordinated.
   - What, if any, flexibility exists to change or expand tobacco-related questions?
   - How is the data generated from this system used and disseminated?
3. **Current youth tobacco and nicotine data sources for youth ages 10-24**
   - What population of youth ages 10-24 are reached by the surveillance systems or survey you administer? Who is not included or under-represented?
   - What can be done to increase representation from these groups?
4. **Characteristics of tobacco questions asked**
   - Please describe the type and number of tobacco-related questions in the survey you administer. How long have these data been collected?
   - What influences the types of questions used and the specific wording of the questions?
   - Please describe the process of determining the type and content of tobacco questions.
5. **Methodology and Mode**
   - Sample
     - Please describe the sampling methods used (probability, non-probability)
     - How is consent granted (passive/active)?
     - Please describe any oversampling or targeted sampling used to reach sub-populations.
     - Please describe sample stratification methods.
   - Survey Mode
     - Please describe survey modes in use now; what is working well or not so well?
     - What is the feasibility of adding to or changing survey modes?
6. **Analysis**
   - Please describe how the data analysis is done and what flexibility you have for generating associations to tobacco use data.
   - If you do not generate the data, are raw data available for further analysis?
   - At what level of granularity can you reliably report on the tobacco data generated? (County, region, statewide, etc.)
   - Is it possible to aggregate data for sub-populations?
7. **Dissemination of Results**
   - How is the tobacco-related data shared and with whom?
   - How are the data generated used in decision making?

8. **Barriers**
    - What if any barriers do you encounter in administering this survey and acquiring sufficient participation? (Probe for time, refusal rate, adequate resources, perceived burden, etc.).
    - What barriers and/or limitations do you encounter conducting tobacco data analysis and dissemination of the results?
    - What barriers do you encounter to include or change tobacco-related questions?
9. **Emerging tobacco use issues**
    - What emerging tobacco issues have you been aware of that impact the types of tobacco questions included in the survey you administer?
    - Are there changes you think are important to make and if so, what are they?
10. **Future considerations**
    - What are your concerns about the tobacco data currently generated?
    - What are your hopes for additional tobacco data generation and/or use?
    - What is needed to expand tobacco data quality and quantity?
11. Who else do you recommend I speak with about youth tobacco data gaps?

Appendix 7: Estimated Youth Tobacco Data Collection and Analysis Timeline

The length of time required to conduct a new youth tobacco survey/questionnaire is dependent on many factors, both internal (e.g., completing contractual agreements) and external (e.g., obtaining permissions to conduct the survey). The following timeline is offered as an estimate of the minimum time needed to thoroughly and systematically assess some of the identified Idaho youth tobacco data gaps. More time may be needed, depending on the scope, reach, methodology, and the level of permissions required to move forward with data collection.