SUBSTANCE MISUSE IN IDAHO

OVERVIEW OF DATA FROM THE STATE EPIDEMIOLOGICAL OUTCOMES WORKGROUP

Idaho Statistical Analysis Center
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Substance Misuse in Idaho: Overview of Data from the State Epidemiological Outcomes Workgroup

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EXECUTIVE SUMMARY

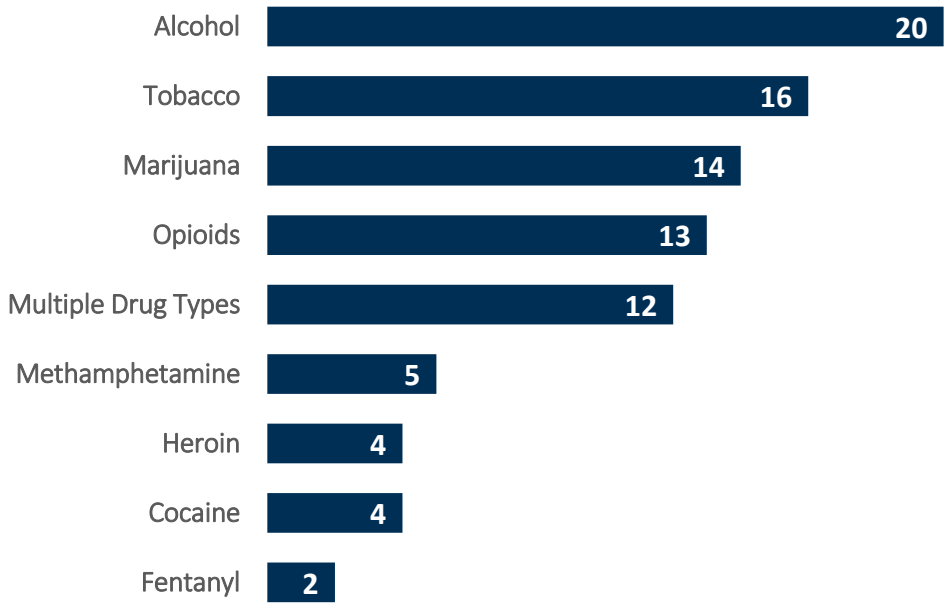
The Idaho Statistical Analysis Center (ISAC) partnered with the Idaho Office of Drug Policy (ODP), which coordinates the state's Statewide Epidemiological Outcomes Workgroup (SEOW), to investigate Idaho's substance use and misuse data and the extent to which it can help policymakers set state policy around substance use and misuse prevention, as well as develop a public-facing data dashboard (available on both ISAC's and ODP's websites) that houses all of the data included in the SEOW's Needs Assessments. This report provides an overview of Idaho's substance use data and discusses both the strengths and weaknesses in currently available data.

What indicators of substance use and misuse currently exist?

Data currently being used by the SEOW comes from a mix of state and national sources and consists of both survey and administrative data. Specifically, surveys tend to focus on indicators of use and attitudes about various substances (such as the respondent's perception of the risk of using substances), while administrative data sets tend to focus on public health and/or safety outcomes (such as vehicle crashes, drug overdose deaths, and drug arrests).

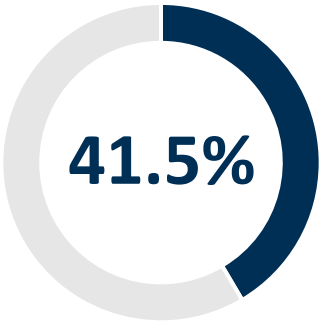
Much more data is available for substances that have historically been of concern to Idaho policymakers than there are for substances that have emerged as a concern in recent years. There is more data on alcohol use/misuse than any other substance (20 available indicators), followed by tobacco (16), marijuana (14), and opioids in general (13). There is far less data available on newer substances of concern such as methamphetamine (5 available indicators) and fentanyl (2).

Number of Available Indicators by Substance Type



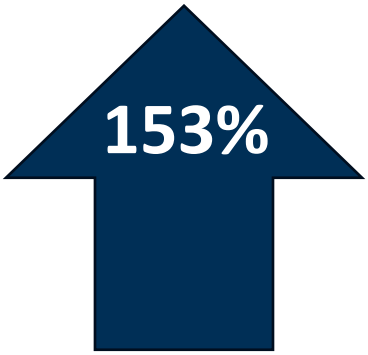
What can existing data tell us about substance use and misuse in Idaho?

The following are some key takeaways from the available data on substance use in Idaho:



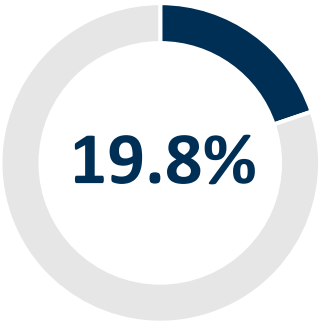
Percentage of Idahoans aged 12+ who reported using **alcohol** in 2021

- About 2 in 5 Idahoans aged 12+ (41.5%) reported using alcohol in 2021, below the national average of 47.6%.
- 23% of Idaho high school students reported using alcohol in 2021, above the national average of 22.7%. About 1-in 6 (17%) reported having their first alcoholic drink before age 13.
- 11.6% of Idahoans aged 12+ reported being diagnosed with alcohol use disorder in 2021, and 10.7% reported needing treatment for alcohol misuse but not receiving it.



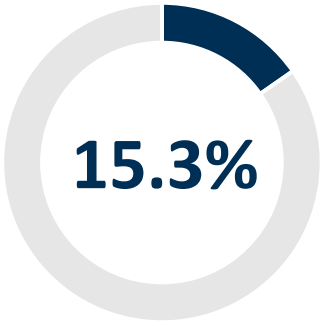
Increase in Idaho's **opioid overdose death rate** between 2012 and 2022

- In 2021, 3.6% of Idaho adults reported taking more opioids than prescribed by their doctor, while 1.2% reported using opioids they had not been prescribed.
- In 2021, 14% of Idaho high school students reported that they had ever misused prescription pain medication.
- Idaho's opioid overdose death rate rose 153% between 2012 and 2022, from 5.5 deaths per 100,000 residents in 2012 to 13.9 in 2022.



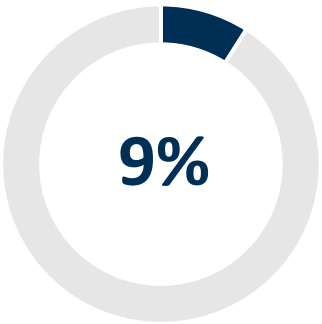
Percentage of Idahoans aged 12+ who reported using **tobacco** in 2021

- About 1 in 5 Idahoans aged 12+ (19.8%) reported using tobacco products in 2021, above the national average of 19.6%.
- In 2021, 19% of Idaho high school students reported ever having tried smoking cigarettes, down from 54% in 2001 but still above the national average of 17.8%.
- In 2021, 39% of Idaho high school students reported ever using an electronic vapor product, down from 45% in 2015 but still above the national average of 36.2%



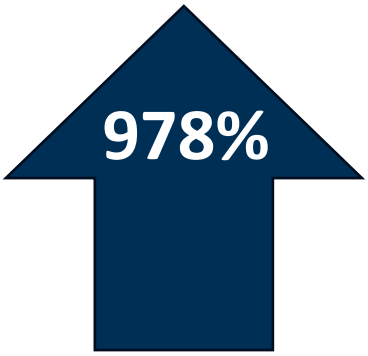
Percentage of Idahoans aged 12+ who reported using **marijuana** in 2021

- 15% of Idahoans aged 12+ reported using marijuana in 2021, below the national average of 18.7%.
- In 2021, 14% of Idaho high school students reported using marijuana in the previous month, down from 18% in 2001 and below the national average of 15.8%.
- The perception of risk from marijuana use has decreased nearly 15 percentage points among adults (from 50.7% reporting a perception of high risk in 2015 to 35.9% in 2021) but has increased among Idaho middle and high school students (from 47.7% in 2017 to 49.6% in 2021).



Percentage of Idahoans aged 18+ who reported they had ever used **methamphetamine**

- 9% of Idahoans aged 18+ reported that they had ever used methamphetamine in 2021, down from 9.8% in 2019.
- In 2021, 1% of Idaho high school students reported they had ever used methamphetamine, down from 7% in 2001 and below the national average of 1.8%.



Increase in Idaho's **fentanyl overdose death rate** between 2012 and 2022

- Idaho's fentanyl overdose death rate rose 978% between 2012 and 2022, from 0.9 deaths per 100,000 residents in 2012 to 9.7 in 2022.

What data improvements can be made to enhance knowledge and fill gaps?

The following are recommendations that the state can implement to improve its understanding of substance use and misuse in Idaho:

Expand current data sources or reporting to capture more county level data and demographics

Develop a model including risk and protective factors that can be used to evaluate and compare counties

Keep the Needs Assessment flexible and utilize SEOW's expertise to keep data and reporting relevant

- The biggest gaps in substance use data are in the lack of county level indicators and indicators that are disaggregated by demographics. There are populations that previous research has identified as more at-risk for adverse or disproportionate effects from substance use, but little data exists to assess these populations. To evaluate substance use and misuse at the county level, these gaps must be addressed.

- To further inform funding, policy, and programming decisions, creating a data model or index around substance misuse indicators would be highly beneficial. Currently, indicators are mostly evaluated individually, but this creates an issue when trying to address the needs from a public health and/or substance use/misuse prevention standpoint. While stakeholders may know a need exists from anecdotal or surveillance data, adopting a public health approach to substance use/misuse prevention efforts requires an understanding of the driving forces behind substance use and misuse, which remains difficult given the current state of available data. Pivoting to a model that incorporates risk and protective factors would help fill this gap in knowledge.

- The SEOW consists of research analysts from multiple entities in the state that have an interest in substance misuse in Idaho. They are a source ripe with knowledge and are likely to know when there is a new trend or topic arising that needs consideration. Flexibility needs to be prioritized so that the group's regular needs assessments can continue to provide the most up to date and relevant information. Continuing to monitor topics through the group also opens the opportunity for SEOW members to contribute data that is already being collected about emerging issues or suggest where data may start to be collected.

BACKGROUND

The Idaho Statistical Analysis Center (ISAC) partnered with the Idaho Office of Drug Policy (ODP) to build a new dashboard with the goals of increasing stakeholder and public access to substance misuse data. This report serves to accompany the dashboard by providing context as well as evaluating the quality of the data that is currently available to inform our understanding of substance use and misuse in Idaho, determine what gaps exist, and suggest steps going forward to fill those gaps.

According to Idaho Code § 67-821, the ODP Administrator is a cabinet-level official, appointed by the Governor and confirmed by the Senate, who coordinates "all drug and substance abuse programs within the state of Idaho." As such, ODP coordinates the State Epidemiological Outcomes Workgroup (SEOW), an advisory group established in 2013 consisting of researchers and data analysts who have an interest in or work with state-level data relating to substance use and behavioral health in Idaho. The SEOW is tasked with producing and maintaining two main resources for the state: an annual needs assessment regarding substance use and misuse in Idaho, and an official list of approved evidence-based programs and strategies for community-based prevention programs. SEOW members include representatives from the Idaho State Police (ISP; including both ISAC and the Bureau of Criminal Identification, which houses Idaho's UCR program and criminal history records repository), the Idaho Department of Correction (IDOC), the Idaho Department of Juvenile Corrections (IDJC), the Idaho Supreme Court (ISC), the Idaho Sheriff's Association (ISA), the Idaho Transportation Department (ITD), the Idaho Department of Health and Welfare (IDHW; multiple bureaus/programs), the Idaho National Guard's (ING) Counter Drug Unit, and the Idaho Office of Information Technology Services' (ITS) Office of the Chief Data Officer.

Although the SEOW is tasked with producing an annual substance misuse needs assessment, the group has fallen short of that goal in recent years. The most recent Substance Misuse Prevention Needs Assessment was completed in 2020 and published in January 2021. The Needs Assessment is divided into eight main topic areas along with an introduction to indicators and a list of data resources for local prevention and resources by public health district. Topic areas include Demographic and Socioeconomic Factors, Risk and Protective Factors, Substance Indicators for Prescription Pain Medicine, Alcohol, Tobacco and Nicotine Products, Marijuana, Methamphetamine, and Heroin. Each of the substance indicator sections are further divided into risk, consumption, and consequence. The risk and protective factors section is solely focused on mental health indicators. Socio-economic factors were briefly addressed with an analysis of correlations between poverty and alcohol related deaths, drug overdose deaths, and drug related crime.

The SEOW had been considering moving the Needs Assessment away from an annual report to an online interactive dashboard format since at least 2019. However, there had been little movement in realizing that goal. The problem lies in large part with the capacity of ODP and SEOW to execute such a project. The SEOW does not have any dedicated staff or funding, making it reliant on ODP staff to produce any documents or other materials relevant to the SEOW's work. Currently, ODP employs one Policy and Research Analyst who, in addition to carrying out any substantive work for the SEOW, is also responsible for coordinating with ODP's contractor to conduct the Idaho Healthy Youth Survey; assisting ODP subgrantees with performance measurement reporting as well as collecting, compiling and analyzing that data for ODP; providing technical assistance to ODP subgrantees by maintaining an online resource repository that includes data and research reports from a myriad of sources as well as ODP-produced fact sheets; and assisting in ODP's strategic planning processes. In trying to balance all of these

responsibilities, the SEOW's Needs Assessment updates have been sporadic and largely based on continuing the same methodology that was established nearly a decade ago with no ongoing, systemic evaluation of the relevance or quality of the data being collected and analyzed. Additionally, the SEOW and ODP have not had the capacity, resources, or expertise needed to build an online dashboard version of the Needs Assessment.

In an effort to fill these gaps, ISAC secured grant funding from the Bureau of Justice Statistics' State Justice Statistics Program to both build the dashboard[1] and carry out a study of data quality and relevance. This technical report addresses the following questions:

- What indicators of substance use/misuse (including risk/protective factors for substance use/misuse) currently exist, and what is the quality of that data?
- What does existing data tell us about the nature of substance use/misuse in Idaho, and what does it tell us about public safety and public health outcomes?
- Are there gaps in knowledge about substance use/misuse, and if so, what are they and how could they be closed?

The dashboard was built utilizing indicators that are thought to be relevant to the SEOW and ODP's mission of directing the state's substance use prevention and intervention initiatives and to expand knowledge of the nature of substance use and misuse to key stakeholders and the public.

The dual-pronged approach to this project provides added knowledge regarding relationships between indicators that can be used to verify that the data included in the dashboard are relevant, are measuring what we think they are, and are appropriate not just for inclusion in the dashboard but also for consideration when planning programs aimed at reducing substance use. Additionally, the information from this report was used to highlight data in the dashboard, when appropriate, to draw users' attention to especially important relationships between indicators.

[1] The SEOW Data Dashboard is available at both ISAC's website (https://isp.idaho.gov/pgr/sac/) and ODP's website (https://odp.idaho.gov/).

OVERVIEW OF DATA

All data previously utilized in the most recent (2020 and 2019) ODP Needs Assessments were gathered from SEOW members or national sources and updated by ISAC. This section provides brief descriptions of each of the data sources and what data points were utilized in the most recent needs assessments. The descriptions are organized by the level at which the data is available, starting with data that is only available at the state level and cannot be further disaggregated.

All the data outlined here are available to the public through different means, but the SEOW Needs Assessment attempts to bring these data together in one location and update them on a yearly basis. This is done to provide a single spot for directors and practitioners of primary prevention programs to access relevant data and for the SEOW to make recommendations to stakeholders for prevention and programming activities[2].

State Level Sources

Idaho State Liquor Division Annual Report

The Idaho State Liquor Division Annual Report provides data collected by the Idaho State Liquor Division including distributions and financials at the state level, with some data at the county level[3]. The data specifically available at the county level includes total distributions and sales by fiscal year. At the state level, the data includes number of stores, 9-liter case sales, sales dollars, gross profit, net income, and distributions per fiscal year along with the profit distributions. The report also includes data about consumption per capita for the calendar year. For the 2020 and 2019 Needs Assessments, state liquor data was used as one indicator of consumption of alcohol and included the sales of 9-liter cases and the per capita consumption at the state level.

CDC: Youth Risk Behavior Survey

The Youth Risk Behavior Survey (YRBS) is a biennial survey conducted by the Centers for Disease Control and Prevention (CDC)[4]. The YRBS captures health risk behaviors among youth in the U.S. through a survey given to a representative sample of students grades 9 through 12. In Idaho, the YRBS was conducted by the State Department of Education and was limited to students enrolled in a traditional public or charter school. While the YRBS contains many data points on different youth behaviors, only the data directly related to drug consumption was used in the 2020 and 2019 Needs Assessment. These data were presented at the state level and compared to the national findings through line graphs and data tables.

DEA ARCOS Retail Drug Summary

The Automated Reports and Consolidated Ordering System (ARCOS) monitors controlled substance transaction data from manufacturers to point-of-sale or distribution (hospitals, retail pharmacies, practitioners, mid-level practitioners, and teaching institutions) as reported to the Drug Enforcement

[2] Idaho Office of Drug Policy. (2021) *Substance misuse prevention needs assessment:2020.* https://odp.idaho.gov/wp-content/uploads/2023/07/2020-Needs-Assessment.pdf

[3] Idaho State Liquor Division. *Idaho State Liquor Division Annual Reports.* https://liquor.idaho.gov/annual-reports.html

[4] Centers for Disease Control and Prevention (2023, April 27). *YRBSS Overview.* https://www.cdc.gov/healthyyouth/data/yrbs/overview.htm

Administration (DEA)[5]. The DEA complies the data and releases annual reports with data available at different levels. Retail drug distribution is released by zip code and state within drug code. Quarterly drug distribution and cumulative distribution are available by state rates per 100,000 residents. Statistical and United States summaries for retail drug purchases are also reported. In the 2019 and 2020 SEOW Needs Assessments, Idaho was compared to the national average of oxycodone and hydrocodone retail distribution for the years 2014-2019. These distributions were presented as an indicator of consumption.

Idaho Healthy Youth Survey

The Idaho Healthy Youth Survey (IHYS) is facilitated by ODP and conducted bi-annually. The sample includes 6th, 8th, 10th, and 12th grade students in Idaho. The survey is designed to measure perceptions, attitudes and behaviors of Idaho youth related to the use and misuse of alcohol, tobacco, vaping, marijuana, prescription medication, and other drugs.[6] In the 2020 and 2019 Needs Assessments, Idaho youth's perception of harm from using a vape pen or e-cigarette was used as an indicator of risk for tobacco and nicotine products. Student perception of misuse of prescription drugs was also presented as an indicator of risk. This was the only data from the IHYS in the most recent Needs Assessments.

SAMHSA National Survey on Drug Use and Health

The Substance Abuse and Mental Health Services Administration's (SAMHSA) National Survey on Drug Use and Health (NSDUH) is conducted annually and releases state specific estimates for specific measures based on two years of combined data. The survey collects data on the use of tobacco, alcohol, and drugs; substance use disorders; mental health issues; and receipt of substance use and mental health treatment among the civilian, noninstitutionalized population over the age of 12 in the United States[7].

In the 2020 and 2019 Needs Assessments, the mental health data from NSDUH was presented under risk and protective factors. Mental illness rates were presented for the US overall and for Idaho from 2015 through 2018. These were also broken down by region, but at the region level data was presented as a rate based on years 2014-2016 combined. Data was provided on Idaho's ranking as a state for those reporting receiving mental health services by age group, those reporting a major depressive episode, and those reporting serious thoughts of suicide. NSDUH data was also used as consumption indicators for multiple substance types and as indicators for perception of risk for alcohol, tobacco, marijuana, and heroin. These were all presented at the state level with comparison to national percentages and by year and age group when available.

Alcohol-related Emergencies and Deaths (ARDI)

ARDI is an "online application that provides national and state estimates of alcohol-related health impacts, including deaths and years of potential life lost."[8] These are reported by age and sex and are currently available for 2015 through 2019. Even with the 5-year data, Idaho estimates are not available for many of the alcohol effects reported out. This data was not presented in the 2020 or 2019 Needs

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[5] Drug Enforcement Administration. *Automation of Reports and Consolidated Orders System (ARCOS).* https://www.deadiversion.usdoj.gov/arcos/arcos.html

[6] Idaho Office of Drug Policy. *Idaho Healthy Youth Survey.* Substance Misuse Prevention. https://prevention.odp.idaho.gov/ihys/

[7] Substance Abuse and Mental Health Services Administration. *National Survey on Drug Use and Health (NSDUH).* https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health

[8] Centers for Disease Control and Prevention. *Alcohol-Related Disease Impact (ARDI) Application.* https://nccd.cdc.gov/DPH_ARDI/default/Default.aspx

Assessment, likely due to the lack of completeness for Idaho, but has been historically collected or considered for inclusion in the Needs Assessment.

Public Health District Level Sources

Idaho Behavior Risk Factor Surveillance System (BRFSS)

The Idaho BRFSS is a public health survey that is conducted annually on a continuous basis. The Idaho BRFSS is collected through random-digit-dialed surveys of residents over the age of 18. Idaho's seven public health districts are used as strata[9]. The survey captures data including health-related risk behaviors, chronic health conditions, and use of preventative services. In the 2020 and 2019 Needs Assessments, BRFSS data presented included adult heavy drinking, binge drinking, and perception of risk of marijuana use. The heavy and binge drinking data are presented as trends for the years 2012 through 2018. The perception data are broken down by public health district, sex, and age and are presented in a table including the years 2015 through 2019.

Idaho Drug Overdose Prevention Program

The Idaho Drug Overdose Prevention Program collects data including death by drug type, emergency department visits related to drug overdose and opioid specific overdose, and annual poison control calls at the state level. These data are presented on the Idaho Drug Overdose Data Dashboard and available publicly[10]. In the 2020 and 2019 Needs Assessments, the rate of opioid overdose emergency department visits was listed under the consequence portion of the prescription pain medicine section. Data for overdose deaths was collected from the Vital Statistics Program, which is discussed in the county level data section of this overview.

County Level Sources

Idaho Incident-Based Reporting System

The Idaho Incident-Based Reporting System (IIBRS) is Idaho's repository of law enforcement data on reported crimes. This data is the most standardized and consistently reported crime data for the state and is available to the public through the yearly *Crime in Idaho* report[11] and a user-friendly dashboard that is maintained by ISAC[12]. The current dashboard includes the years 2005 through 2022 and is also updated on a yearly basis. In the 2019 SEOW Needs Assessment, IIBRS data presented included prescription drug related arrest rates, liquor law violation arrest rates, marijuana related offense arrest rates, and heroin related offense arrest rates. While available at the county level, these data were all reported at the state level in the 2019 Needs Assessment.

CDC: US Opioid Prescribing Rate Maps

The CDC reports retail pharmacy-dispensed opioid prescriptions at the state and county level on an annual basis. The rates are reported per 100 residents. These data are based on IQVIA Xponent data,

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[9] Division of Public Health, Idaho Department of Health and Welfare. (2023, October 31). *Idaho Behavioral Risk Factor Surveillance System.* Get Healthy Idaho. https://www.gethealthy.dhw.idaho.gov/idaho-brfss

[10] Idaho Drug Overdose Prevention Program, Idaho Department of Health and Welfare. (2024, February 13). *Idaho Drug Overdose Data Dashboard.* Get Healthy Idaho. https://www.gethealthy.dhw.idaho.gov/drug-overdose-dashboard

[11] Uniform Crime Reporting, Idaho State Police. *Crime in Idaho.* https://nibrs.isp.idaho.gov/CrimeInIdaho

[12] Idaho Statistical Analysis Center. *Crime in Idaho Data Dashboard.* https://isp.idaho.gov/pgr/sac/dashboards/crime-in-idaho-data-dashboard/

which is based on a sample of approximately 56,500 retail pharmacies that dispense nearly 93% of all retail prescriptions in the U.S.[13] The geographic location is based on the location of the prescriber and mail-order prescriptions are not included. In the 2020 and 2019 Needs Assessments, opioid prescribing rates were included as an indicator of consumption and data presented included the rate for the state and for the Idaho counties that fell within the top 10th percentile of all counties in the nation.

Idaho Drug Overdose Deaths

Drug overdose death data is collected by the Idaho Department of Health and Welfare's Vital Statistics Program. The data is captured from death certificates completed by coroners across the state. The 2020 and 2019 Needs Assessments included data on deaths in Idaho where one or more opioids were identified as compared to total drug overdose deaths from 2009 through 2018. Data was also reported by type of opioid and region.

Idaho Transportation Department

The Idaho Transportation collects multiple types of data across the state including data on alcohol and drug involved crashes. The 2020 and 2019 Needs Assessments included data on the percentage of crashes in which alcohol was involved. These data were listed as a consequence in the alcohol focused portion of the Needs Assessments.

[13] Centers for Disease Control and Prevention. *Opioid Dispensing Rate Maps.* https://www.cdc.gov/drugoverdose/rxrate-maps/opioid.html

DATA ANALYSIS

To better understand the data that is available and currently used by the SEOW for its Needs Assessments, ISAC focused on answering these three key questions:

1. What indicators of substance use/misuse (including risk/protective factors for substance use/misuse) currently exist, and what is the quality of that data?
2. What does existing data tell us about the nature of substance use/misuse in Idaho, and what does it tell us about public safety and public health outcomes?
3. Are there gaps in knowledge about substance use/misuse, and if so, what are they and how could they be closed?

Question #1: What indicators of substance use/misuse (including risk/protective factors for substance use/misuse) currently exist, and what is the quality of that data?

Exploratory analysis of the data that was previously used for SEOW Needs Assessments was conducted. A summary of the datasets is provided in Table 1 (see page 15). Information about specific factors and which data was used from which source is presented as part of the overview of data in the previous section of this report. The summary table highlights the differences and commonalities in the data sources. By understanding these nuances, stakeholders can gain a better understanding of what data may be reliably compared. There are differing levels, source types, populations, years for which data is available, and time periods of collection. Each of these differences complicates analysis and creates potential holes in our knowledge of specific topics.

All the outlined data sources provide multiple data points that can be examined and included in the SEOW Needs Assessment, but analysis is limited based on the differing levels of data, populations sampled, and timeframes available. As seen in the rightmost column of Table 1, some data are related to one specific drug type, and others contain multiple items that capture information related to multiple drug types. The key drug types that have been examined in prior iterations of the Needs Assessment include Alcohol, Opioids, Tobacco, Marijuana, Methamphetamine, and Heroin. Some of these drug types have more indicators or data points available than others (see Figure 1 on page 16). Even if a drug type has a larger number of indicators, the quality may differ for each indicator.

Many (seven) of the data sources only provide data at the state level. While these data may be useful to establish baselines and state trends, they are unable to help identify geographic areas in Idaho that may not follow the state trends. This causes problems when trying to target programming in any given area, especially because Idaho is characterized by the existence of a handful of urban pockets within largely rural surroundings. One data source reports data at the Public Health District level, and only five data sources report data at the county level. These five also report by calendar year, but other data sources report biannually or combine data over multiple years, making it more difficult to compare elements across data sources for any given time period.

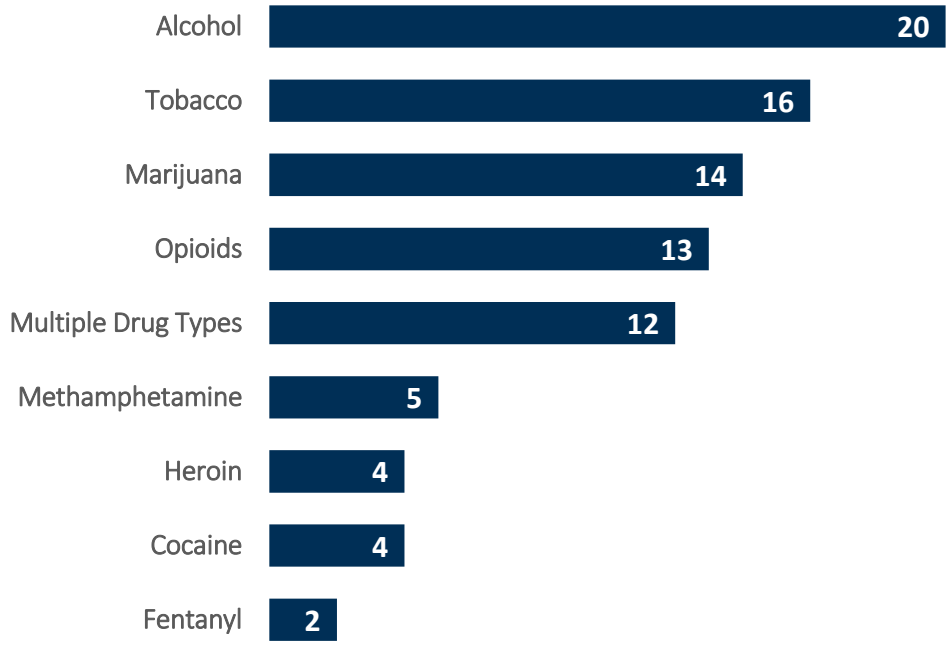
These data reporting and collection issues are especially problematic when trying to apply any statistical tests of relationships at the county level. While county level data analysis would be particularly helpful when trying to target interventions or programs, there are so few overlapping data collection points that the samples become too small to provide reliable statistical analysis. There are some analyses that can be applied at the district level, with limitations.

Table 1. Data source type, geographic levels, populations, reporting periods, and drug types.

Data Source	Data source type	Level of data available	Population	Data Years Available	Reporting Period	Specific Drug types included
Idaho State Liquor Division Annual Report	Administrative	State, some data at county		1999-2022	Some Fiscal, Some calendar	Alcohol
DEA ARCOS Retail Drug Summary	Administrative	State		2006-2022	Calendar year	Opioid*
Idaho Healthy Youth Survey (HYS)	Survey	State, Hub	Youth	2017-2021	Bi-annual release	Alcohol, Marijuana, Prescription, Other
Idaho Youth Risk Behavior Survey (YRBS)	Survey	State	Youth	1991-2021	Bi-annual release	Alcohol, Marijuana, Meth, Heroin
SAMHSA National Survey on Drug Use and Health (NSDUH)	Survey	State	12 and older	2015-2021 (no 2020 data)	Calendar year, state level bi-annual release	Alcohol, Marijuana, Meth, Heroin
Idaho Behavior Risk Factor Surveillance System (BRFSS)	Survey	Public Health District		2011-2021	Calendar year	Alcohol, Marijuana, Meth, Opioid
Idaho Incident-Based Reporting System (IIBRS)	Administrative	County		2005-2022	Calendar year	Alcohol, Marijuana, Meth, Heroin
CDC: US Prescribing Rate Maps	Administrative	County		2006-2022	Calendar year	Opioid
Vital Statistics-Idaho Drug Overdose Deaths	Administrative	County		2012-2022	Calendar year	Marijuana, Opioid, Meth, Heroin, Fentanyl *
Idaho Transportation Department	Administrative	County		2020-2022	Calendar year	Alcohol
US Census Bureau American Community Survey 5-year Estimates	Survey	County		2009-2021	Calendar year	N/A

* Includes multiple other drug types that are not usually specifically highlighted in the SEOW Needs Assessment.

Figure 1. Number of indicators collected by drug type.



To understand how the current data may relate and illustrate considerations that should be taken when analyzing these data, ISAC conducted Pearson and Spearman's Rho[14] correlations with the subset of indicators available at the county level. These correlations are only able to illuminate the direction and strength of relationships between the data items and are not considered causal analysis. Due to the lack of normality in multiple variables, Spearman's Rho correlations are likely the most appropriate to use. Care must be taken to examine outliers as well as there are some particularly small population counties in Idaho that may impact findings, even when examining a larger amount of data points. For example, Clark County, with a population of 756 in 2022, is susceptible to large swings in rates (e.g., drug arrest rates) even when the raw number of occurrences is low. The tables available in the appendix B illustrate how removing one outlier (Clark County 2021 data) impacts the correlation findings and the differences in Pearson and Spearman's Rho results.

After examining county level data, the district and state level data were considered. There are seven Public Health Districts in Idaho and only one data source that reports at the district level. While the sources that reported at the county level can be aggregated up to the district level, there remains too little data to complete much analysis. Due to the small number of districts, there would need to be more years of data available to conduct any meaningful statistical analysis of relationships between items. As was observed in the county level data, there are similar considerations that must be attended to when analyzing Idaho data.

[14] Spearman's Rho correlations coefficients have been found to perform well with data clustering at zero. Spearman estimates are generally more accurate with low and medium correlations at multiple sample sizes and only diminish slightly in accuracy as the proportion of zeros increase (see Huson, L.W. (2007). Performance of Some Correlation Coefficients When Applied to Zero-Clustered Data. *Journal of Modern Applied Statistical Methods*, *6*(2), p. 530-536. doi: 10.22237/jmasm/1193890560).

Question #2: What does existing data tell us about the nature of substance use/misuse in Idaho, and what does it tell us about public safety and public health outcomes?

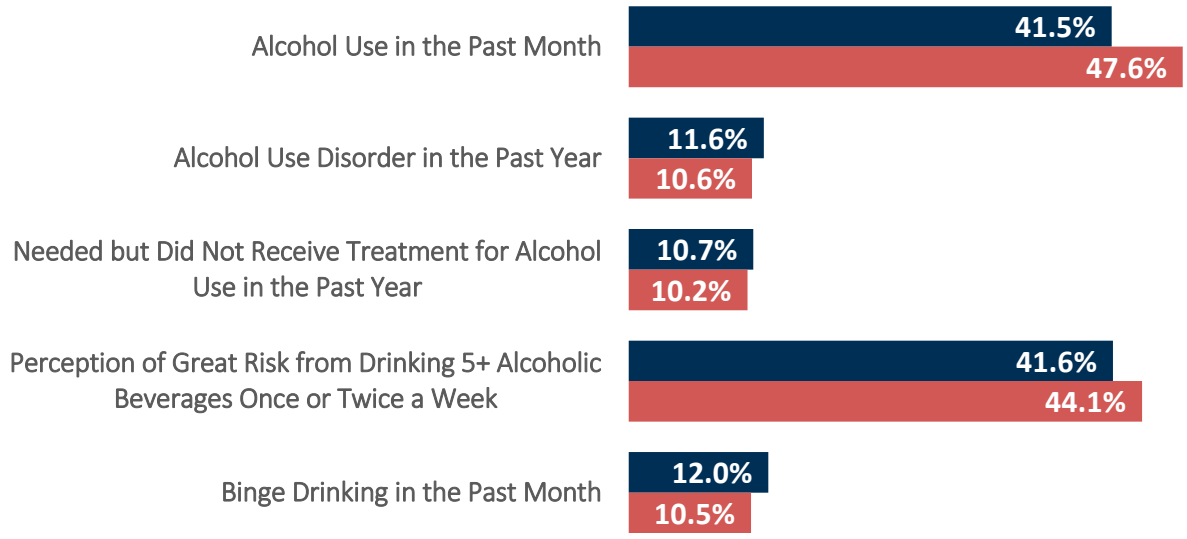
This section provides state level analysis of data included in the SEOW Data Dashboard, with a focus on indicators specific to the individual drug types making up the subsections below. Tables containing the data highlighted here can be found in Appendix A. Correlation matrices for some indicators can be found in Appendix B. Additional data on indicators that refer to more than one type of drug (such as total drug overdose rate, or self-reported illicit drug use) can be explored in the SEOW Data Dashboard. [15]

Alcohol

As noted in Table 2 on page 16, there was more available data for alcohol related indicators than any other substance. ISAC analyzed a total of 20 such indicators. In general, indicators of adult alcohol use in Idaho have been rising and are above the national average. At the same time, youth alcohol use in Idaho is trending lower.

According to SAMHSA's National Survey on Drug Use and Health (NSDUH), Idahoans aged 12 and over reported less alcohol use in the previous month than the US as a whole in 2021 (see Figure 2). However, Idahoans reported a higher rate of alcohol use disorder, binge drinking, and needing but not receiving treatment for alcohol use. Additionally, fewer Idahoans have a perception of great risk from binge drinking.

Figure 2. 2021 NSDUH alcohol use/misuse indicators for Idaho and the United States.



Data from the Behavioral Risk Factor Surveillance Survey (BRFSS) indicates that both binge and heavy drinking has increased among Idaho adults. In 2021, 15.5% of survey respondents reported that they engaged in binge drinking in the past year (see Figure 3 on page 18), up from 14.9% in 2013. Similarly, 7.2% of respondents in 2021 reported engaging in heavy drinking in the past year, up from 6.2% in 2013.

[15] The SEOW Data Dashboard is available at both ISAC's website (https://isp.idaho.gov/pgr/sac/) and ODP's website (https://odp.idaho.gov/).

Per capita consumption of distilled spirits also increased from 1.6 gallons per Idaho resident in 2017 to 1.8 gallons in 2021 but was still below the national average (2.1 gallons in 2021; see Figure 4).

Figure 3. Percentage of Idahoans that reported engaging in binge or heavy drinking during the previous year (2021 BRFSS data).

Figure 4. Idahoans consumed less distilled spirits per capita (gallons per person) than the national average in 2021 (ISLD data).

The rate of alcohol-induced crashes ticked up over a three-year period from 2020 to 2022, while DUI (driving under the influence) arrest rates remained relatively stable. In 2022, the rate of alcohol-induced crashes in Idaho was 7.7 per 10,000 residents, up from 6.6 in 2020 (see Figure 5). Between 2017 and 2021, the DUI arrest rate hovered between 3.9 and 4.6 arrests per 1,000 residents (see Figure 6).

Figure 5. The alcohol-induced crash rate increased 17% between 2020 and 2022 (ITD data).

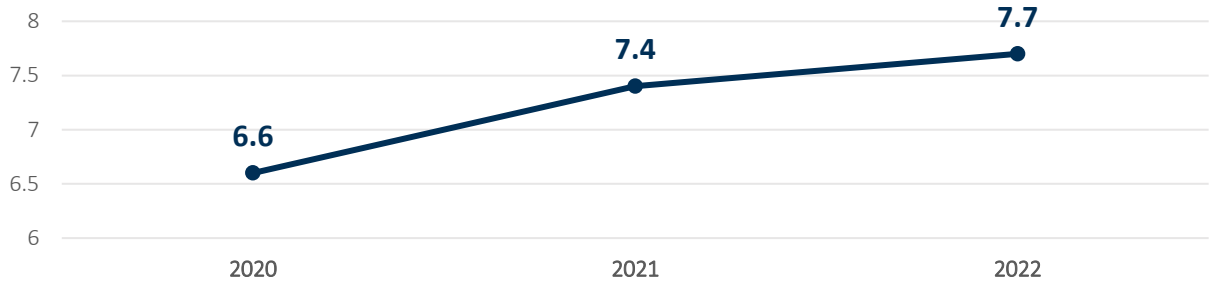
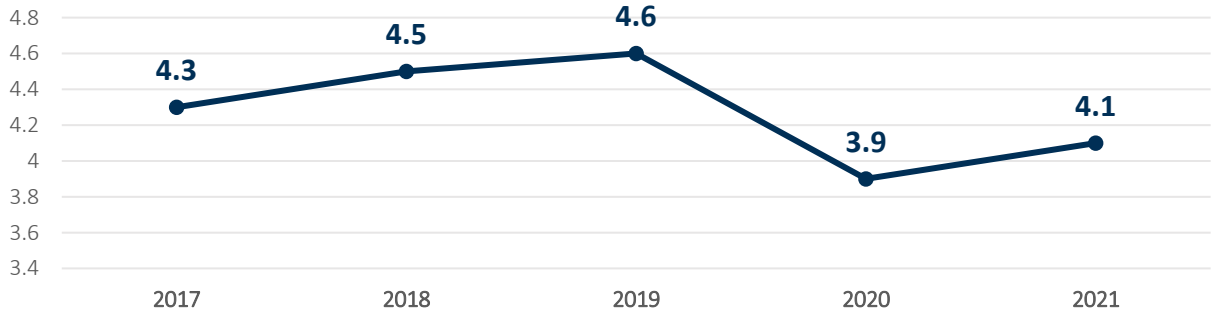
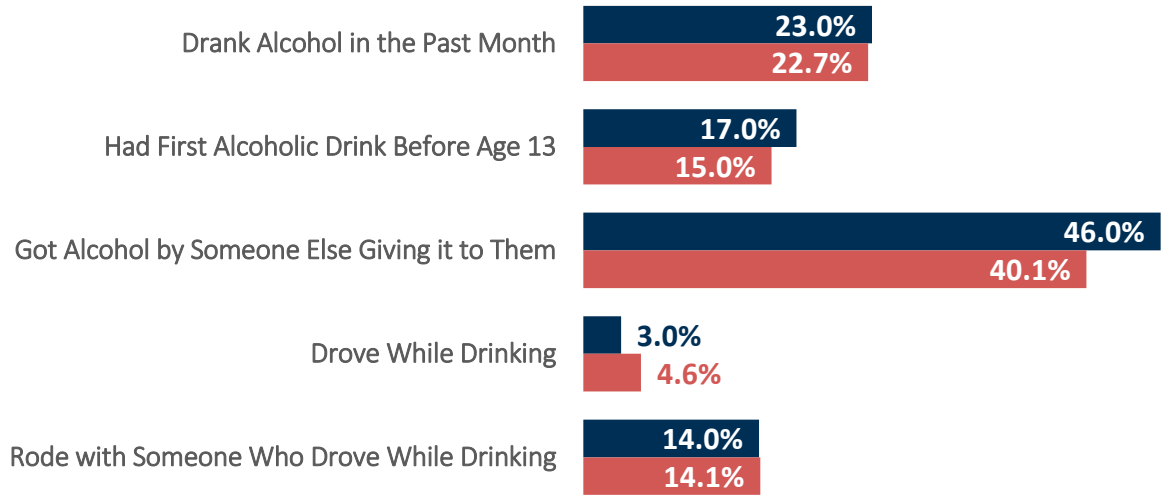


Figure 6. The DUI arrest rate remained relatively stable between 2017 and 2021 (ISP data).



Idaho youth reported similar rates of alcohol use as the national average, according to data from the Youth Risk Behavior Survey (YRBS; see Figure 7). In 2021, 23% of respondents reported drinking alcohol in the prior month, nearly identical to the national rate (22.7%). Additonally, 17% of Idaho youth reported drinking their first alcoholic drink before age 13, compared to 15% nationally. Idaho youth reported drinking and driving less than the national average, with 3% of Idaho youth reporting such activity in the prior month, compared to 4.6% nationally.

Figure 7. 2021 YRBS alcohol use/misuse indicators for Idaho youth and the United States.



According to data from the Idaho Healthy Youth Survey (IHYS), about half of Idaho youth held a perception of great risk from binge and heavy drinking in 2021 (see Figure 8). More than half (57.0%) of respondents reported a perception of great risk from drinking five or more alcoholic beverages once or twice a week, while slightly less than half (47.9%) reported a perception of great risk from drinking one or two alcoholic beverages every day. These numbers are nearly equal to 2017 levels (57.4% and 47.7%, respectively).

Figure 8. About half of Idaho youth reported a perception of great risk from binge and/or heavy drinking in 2021 (IHYS data).

Some indicators of alcohol use/misuse were correlated with other alcohol indicators and/or indicators for other types of drugs (see Appendix B for full correlation matrices). These were generally positive correlations, such as binge drinking among adults and the DUI arrest rate (i.e., as one indicator increases, so does the other). Binge and heavy drinking were also negatively correlated with a high perception of risk for marijuana use, meaning that as the prevalence of binge/heavy drinking increased, fewer adults reported believing that marijuana use is a risky behavior.

Opioids/Prescription Drugs

According to data from the Drug Enforcement Agency's Automated Reports and Consolidated Ordering System (ARCOS), Idaho pharmacies ordered more of some controlled substances (such as amphetamine, hydrocodone, methamphetamine, morphine, oxycodone, and others) per capita than the national average in 2021 (see Figure 9). This is despite orders for 12 out of 15 tracked substances being lower in 2021 than 2017. Similarly, data from the CDC shows that opioid prescriptions per capita also declined between 2019 and 2022 (see Figure 10 on page 21).

Figure 9. 2021 DEA ARCOS data on controlled substances ordered (grams per 100,000 residents) for Idaho and the United States.

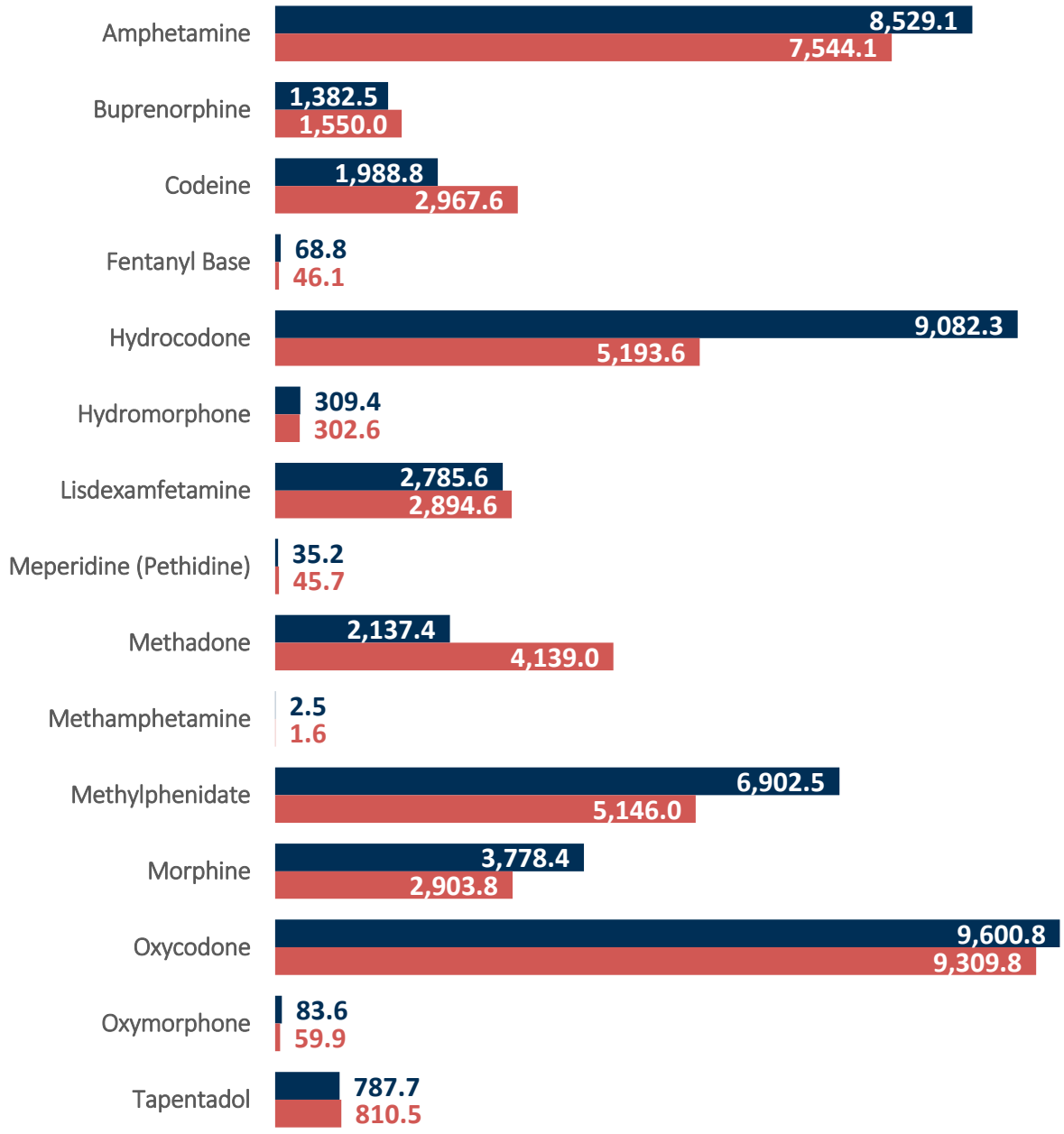
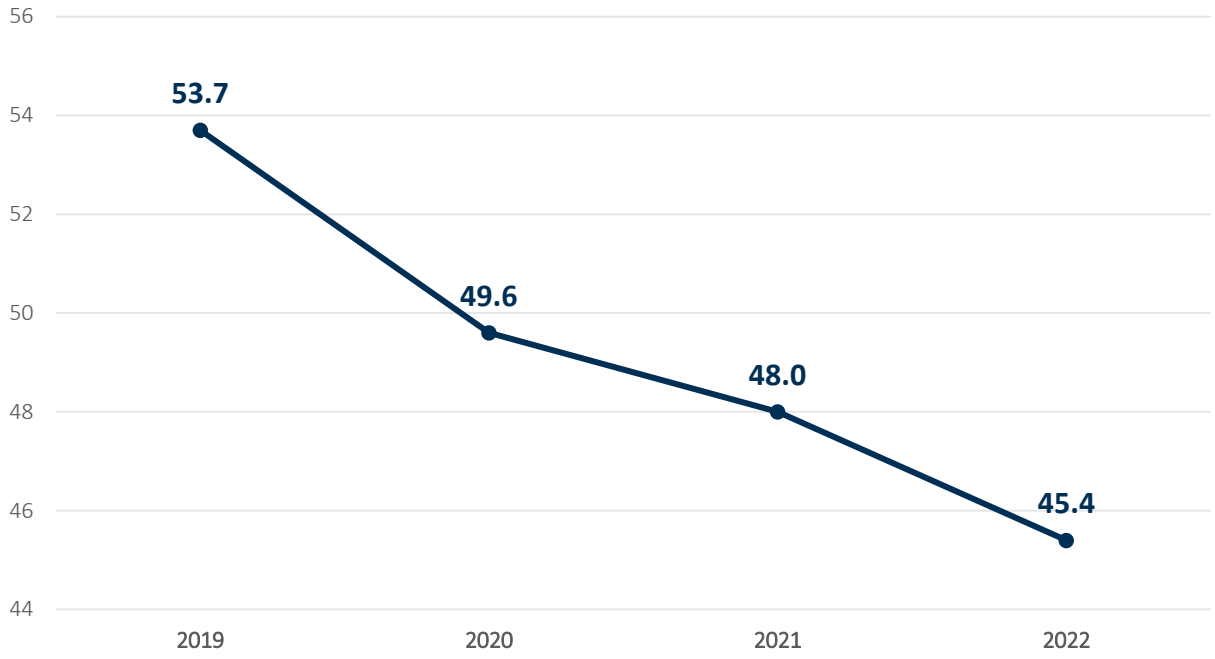
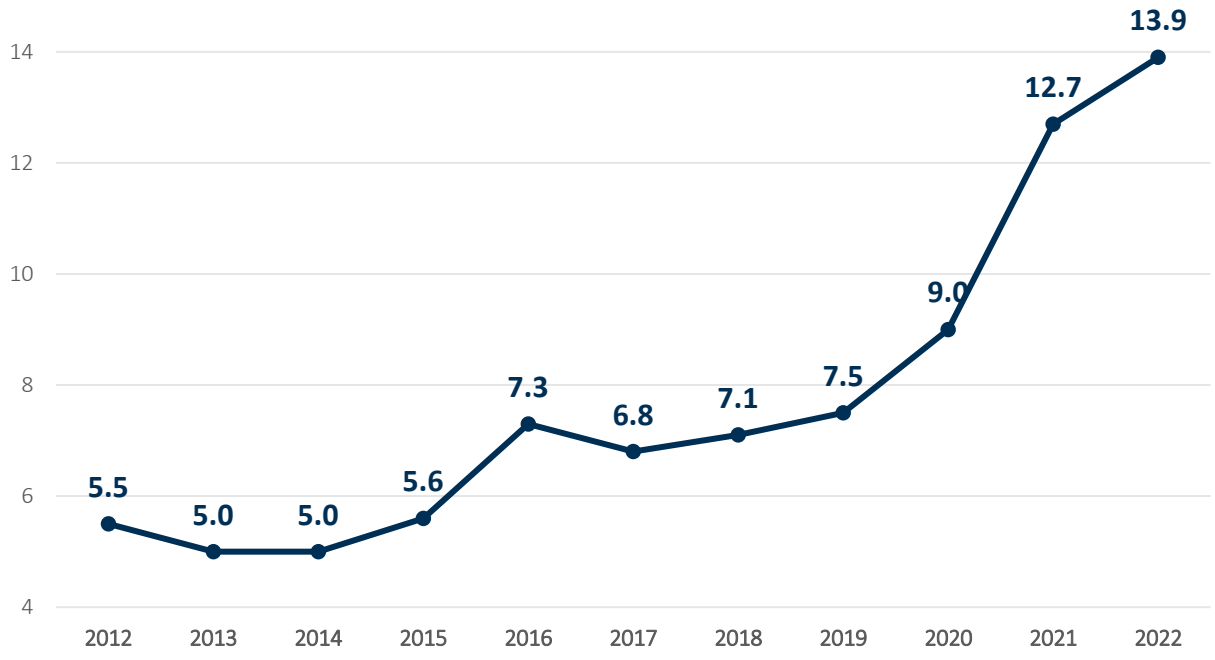


Figure 10. Opioid dispensing rate (prescriptions per 100 Idaho residents) fell between 2019 and 2022 (CDC data).



Conversly, the rate of opioid overdose deaths increased 153% between 2012 and 2022, growing from 5.5 deaths per 100,000 Idaho residents in 2012 to 13.9 in 2022 (see Figure 11) This includes deaths involving heroin, opium, fentanyl, methadone, and other natural and synthetic opioids.

Figure 11. The rate of opioid overdose deaths (per 100,000 Idaho residents) increased 153% between 2012 and 2022 (IDHW data).



Although the rate of opioid overdose deaths has increased dramatically over the last decade, Idahoans tend to report less opioid and prescription misuse than the national average, as well as a high perception of risk from using opioids. NSDUH data from 2021 indicates that a lower percentage of Idahoans reported misusing both opioids and prescription pain relievers than the national average, as well as a lower incidence of substance use disorder for both types of substances (see Figure 12). Additionally, 95% of BRFSS respondents in 2021 reported holding a perception of high risk from using opioids, while less than 4% reported taking more opioids than they were prescribed and about 1% reported taking opioids that were not prescribed to them (see Figure 13).

Figure 12. 2021 NSDUH data on opioid and prescription misuse for Idaho and the United States.

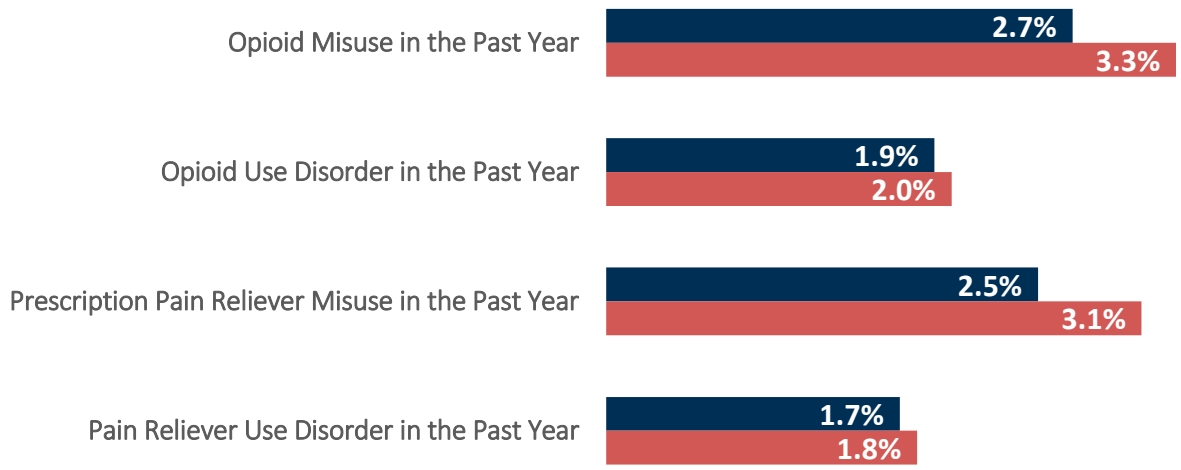
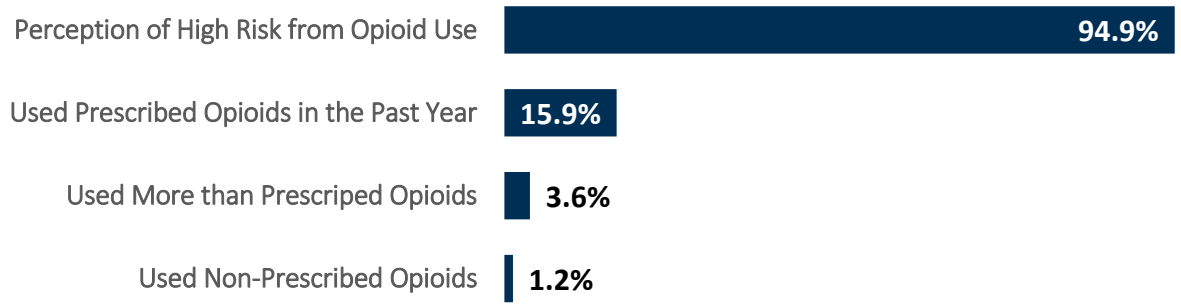


Figure 13. Nearly all Idaho adults reported viewing opioid use as risky, while less than 4% reported misusing prescribed opioids (2021 BRFSS data).



Idaho youth exhibit different reported patterns in prescription misuse than those noted above for adults and opioids. In 2021, about two-thirds (66%) of IHYS respondents reported holding a perception of great risk from misusing prescription drugs (see Figure 14 on page 23), and 14% of YRBS respondents reported taking prescription pain medicine without a prescription or differently than directed by a doctor (compared to 6% nationally; see Figure 15 on page 23).

Figure 14. Percentage of Idaho youth who reported holding a perception of great risk from misusing prescription drugs (2021 IHYS data).

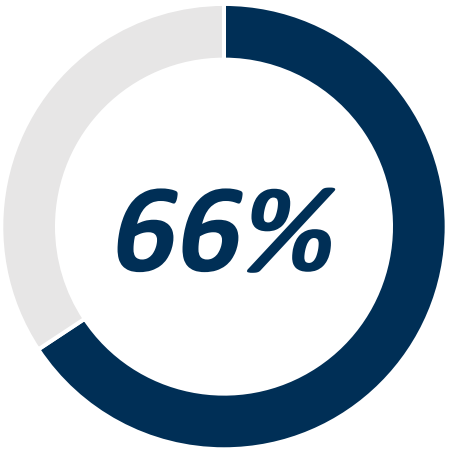
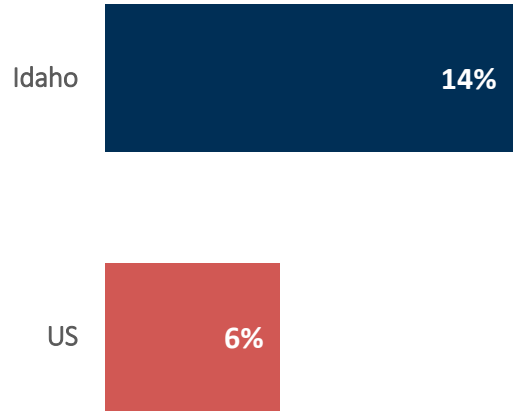


Figure 15. More Idaho youth reported misusing prescription drugs than the national average (2021 YRBS data).

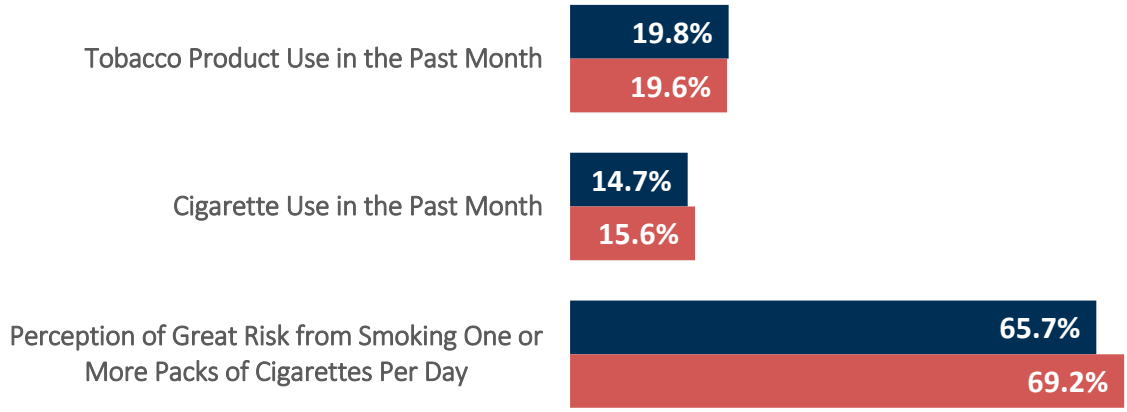


One indicator of opioid use was correlated with adverse impacts of substance misuse (see Appendix B for full correlation matrices). The rate of opioid prescriptions was positively correlated with the total drug overdose death rate, liquor law violation arrest rate, heroin arrest rate, and meth/amphetamines arrest rate.

Tobacco

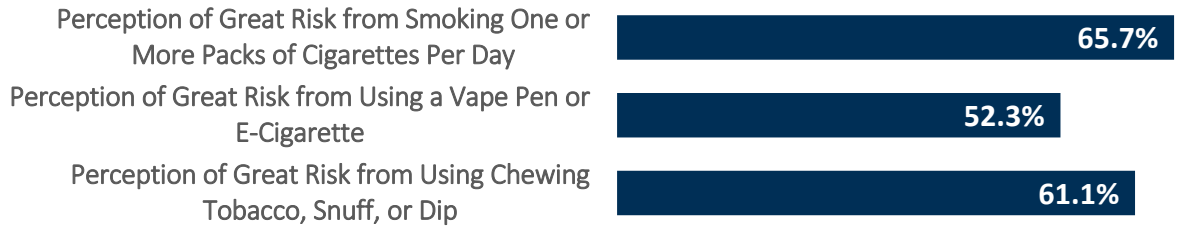
Most of the 16 tobacco use indicators ISAC collected only refer to middle school- and high school-aged children. However, data from the 2021 NSDUH indicates that Idahoans aged 12 and older (including adults) use tobacco products at similar rates as the national average, but a lower percentage of Idahoans hold a perception of great risk from smoking one or more packs of cigarettes per day (see Figure 16) compared to the nation as a whole.

*Figure 16. 2021 NSDUH data on tobacco use for **Idaho** and the **United States**.*



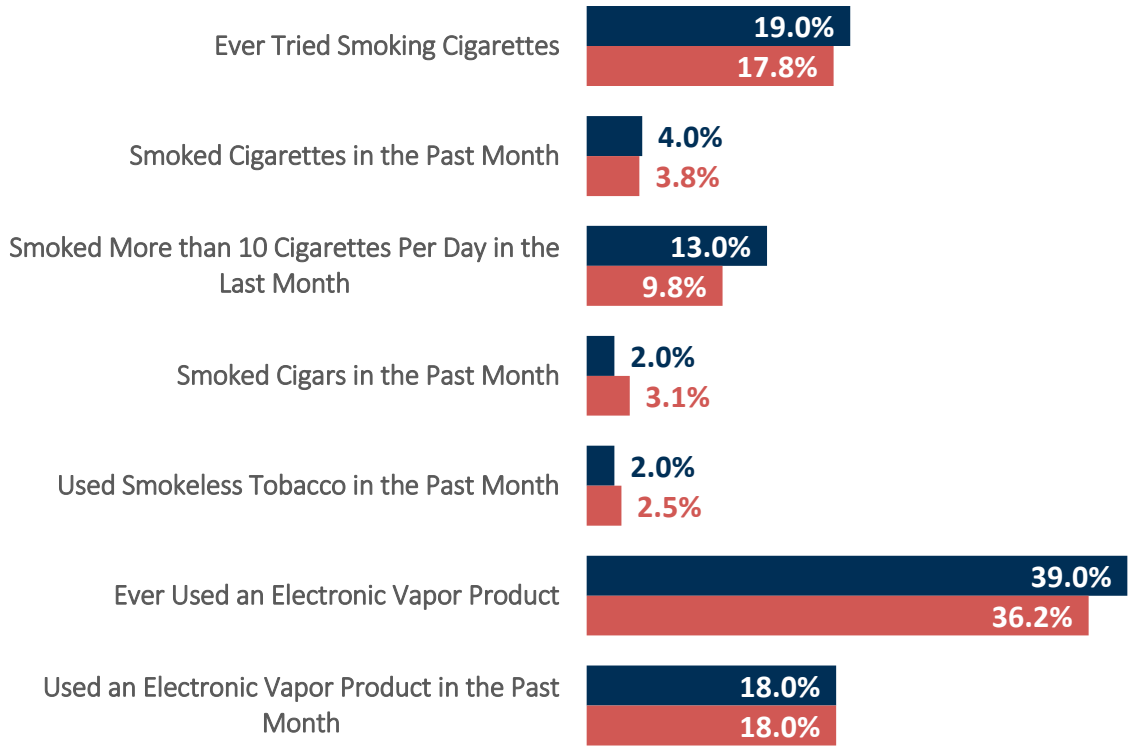
While a greater number of Idaho youth held a perception of great risk from vape/e-cigarette product use in 2021 than in 2017, the percentage of those with a perception of great risk from heavy cigarette use and smokeless tobacco use declined slightly, although the percentages were above 50% for all three categories in 2021 (see Figure 17).

Figure 17. Percentage of Idaho youth who reported holding a perception of great risk from using tobacco products (2021 IHYS data).



In 2021, Idaho youth reported using tobacco products at similar rates as the national average (see Figure 18). About 1-in-5 (19%) had ever tried smoking cigarettes, down from more than half (54%) in 2001. Similarly, about 2-in-5 (39%) had ever tried a vape/e-cigarette product, down from 45% in 2015.

Figure 18. 2021 YRBS data on youth tobacco use for Idaho and the United States.



There were no indicators of tobacco use that were correlated with any other indicators in the full data set.

Marijuana

Available data suggests that attitudes and use of marijuana among Idahoans shifted between 2015 and 2021. Although a smaller percentage of Idahoans reported using marijuana in 2021 than the national average (see Figure 19), use among Idaho adults increased between 2015 and 2021 (see Figure 20), while the percentage of those who hold a perception of high risk from marijuana use declined.

Figure 19. 2021 NSDUH data on marijuana use for Idaho and the United States.

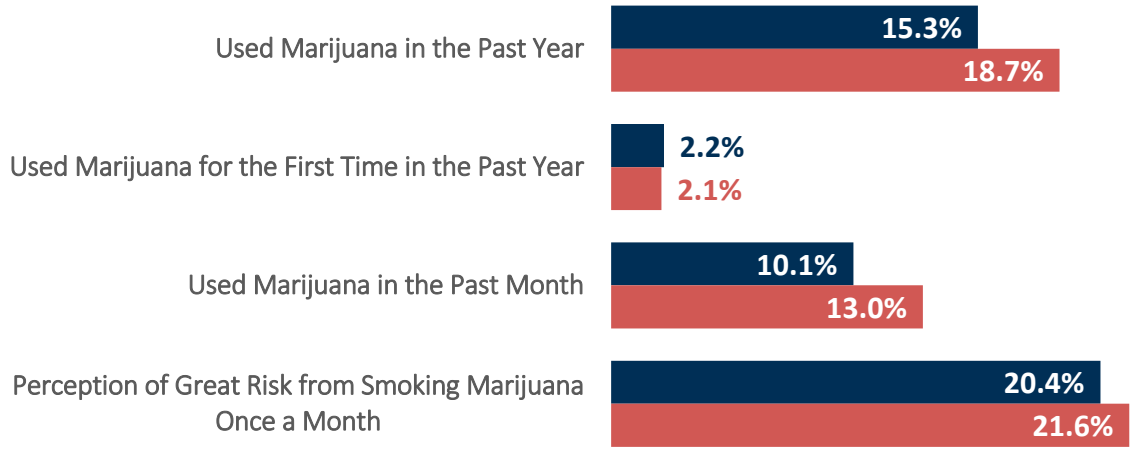
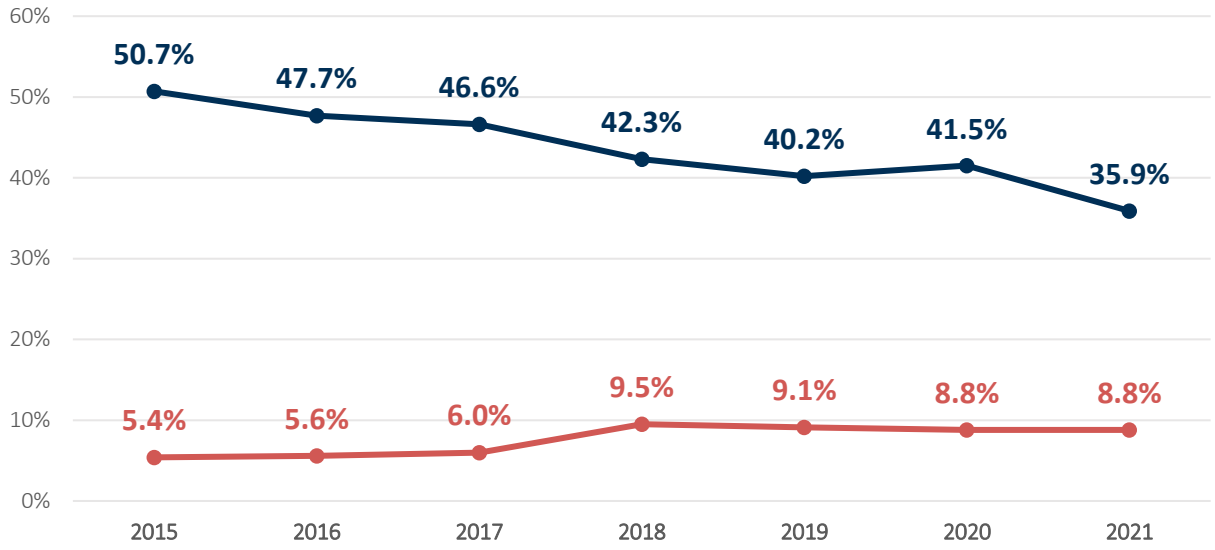


Figure 20. BRFSS data shows an increase in the percentage of Idaho adults who used marijuana in the past month between 2015 and 2021, while the percentage of those holding a perception of high risk from marijuana use declined.

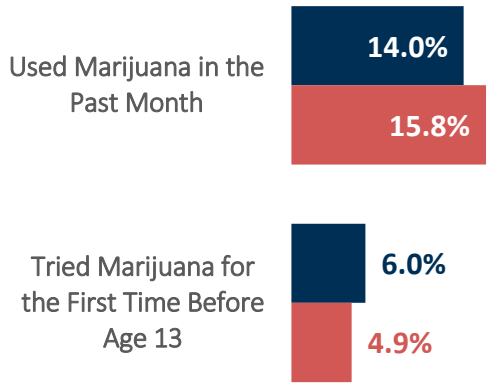


Data from the 2021 YRBS and IHYS indicated that Idaho youth reported using marijuana at higher rates than Idaho adults (14% of Idaho youth used marijuana in the past month, compared to 9% of Idaho adults; see Figure 22 on page 23), but that a larger share of Idaho youth hold a perception of great risk from using marijuana (50%, compared to 36% of Idaho adults; see Figure 21 on page 23). Additionally, a

larger share of Idaho youth reported trying marijuana for the first time before age 13 than the national average (see Figure 22).

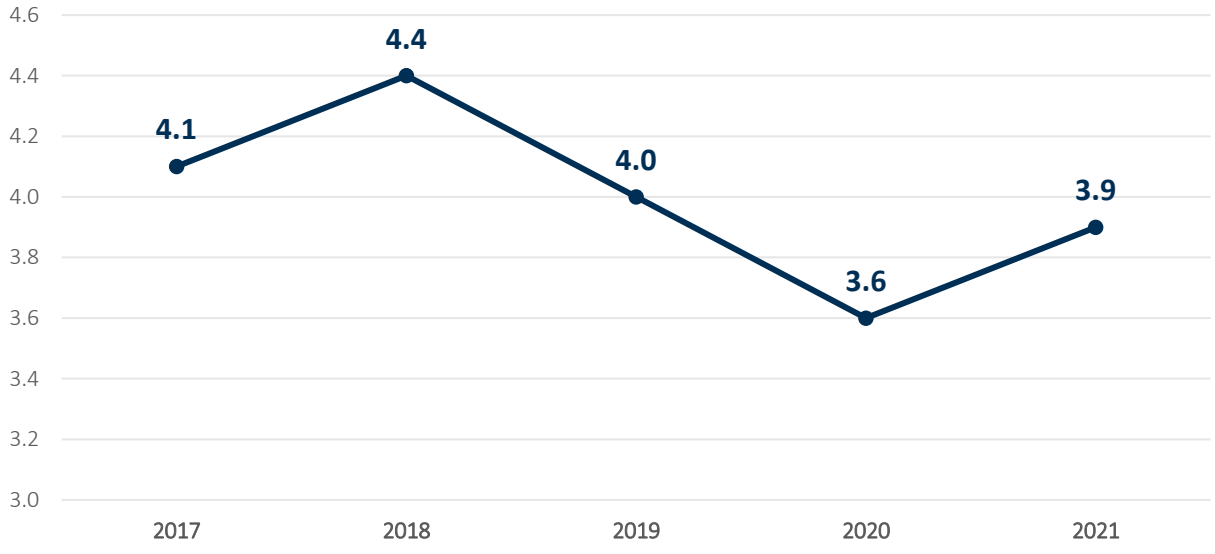
Figure 21. Percentage of Idaho youth who reported holding a perception of great risk from using marijuana (2021 IHYS data).

Figure 22. 2021 YRBS data on youth marijuana use for Idaho and the United States.



Marijuana remains an illicit drug in Idaho, despite some neighboring states legalizing recreational use in recent years. Between 2017 and 2021, arrests for marijuana-related offenses (possession, trafficking, etc.) hovered around 4 per 1,000 Idaho residents (see Figure 23).

Figure 23. The marijuana arrest rate hovered near 4 arrests per 1,000 Idaho residents between 2017 and 2021 (ISP data).



Three indicators of marijuana use were correlated with other indicators in the full dataset. Marijuana arrest rate was positively correlated with DUI arrest rate, liquor law violation arrest rate, heroin arrest rate, meth/amphetamine arrest rate, both drug- and alcohol-induced crash rate, and percentage of Idahoans who have ever used methamphetamine; it was negatively correlated with alcohol-induced crash

rate. High marijuana risk perception was negatively correlated with DUI arrest rate, heroin arrest rate, binge drinking, heavy drinking, and marijuana use in the past month. Marijuana use in the past month was positively correlated with DUI arrest rate, binge drinking, heavy drinking, and percentage of Idahoans who have ever used methamphetamine; it was negatively correlated with high marijuana risk perception.

Methamphetamine

Beyond the DEA ARCOS data on retail drug ordering (see Figure 8 on page 20), three additional measures of methamphetamine use were available for analysis. Data from the BRFSS and YRBS show that while the percentage of Idaho adults who reported they had ever used methamphetamine fluctuated between 8% and 10% from 2019 to 2021 (see Figure 24), that same number for Idaho youth declined steadily between 2001 and 2021 (see Figure 25) and was below the national rate of 1.8% in 2021. Similar to the adult lifetime use pattern, the arrest rate for meth/amphetamines also remained relatively unchanged between 2017 and 2021 (see Figure 26 on page 28).

Figure 24. BRFSS data shows that the percentage of Idaho adults who have ever tried methamphetamine hovered near 9% between 2019 and 2021.

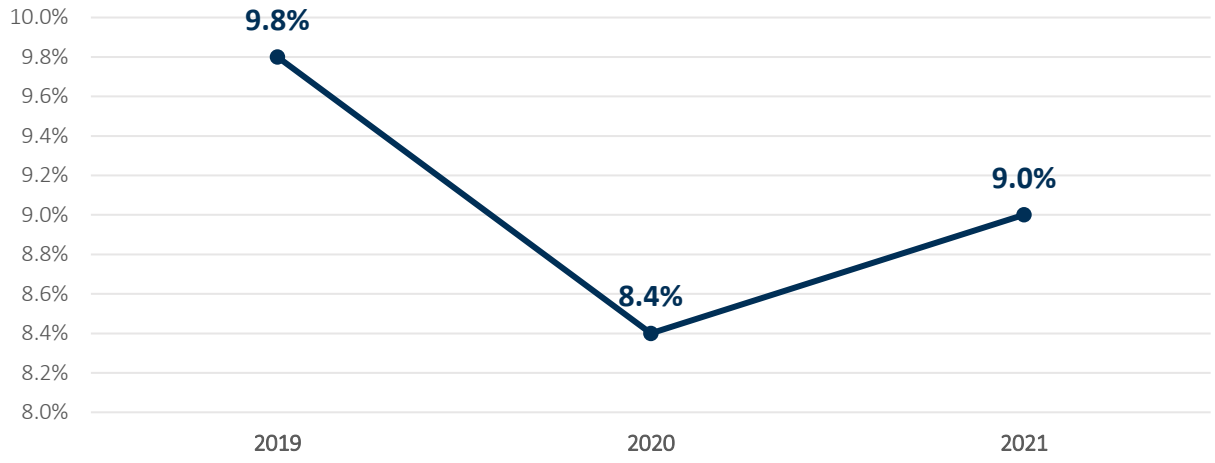


Figure 25. The percentage of Idaho youth who have ever tried methamphetamine declined between 2001 and 2021 (YRBS data).

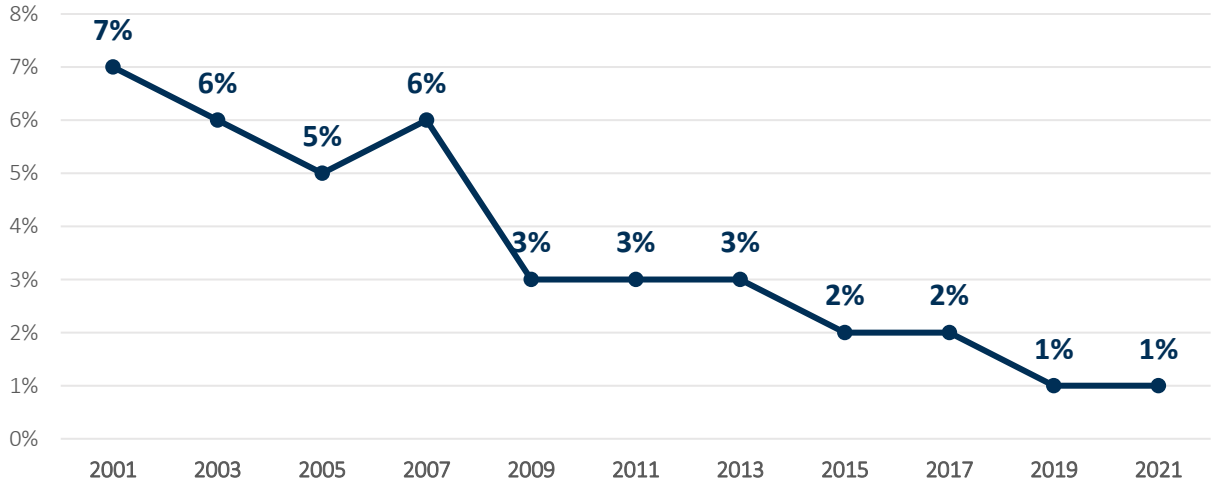
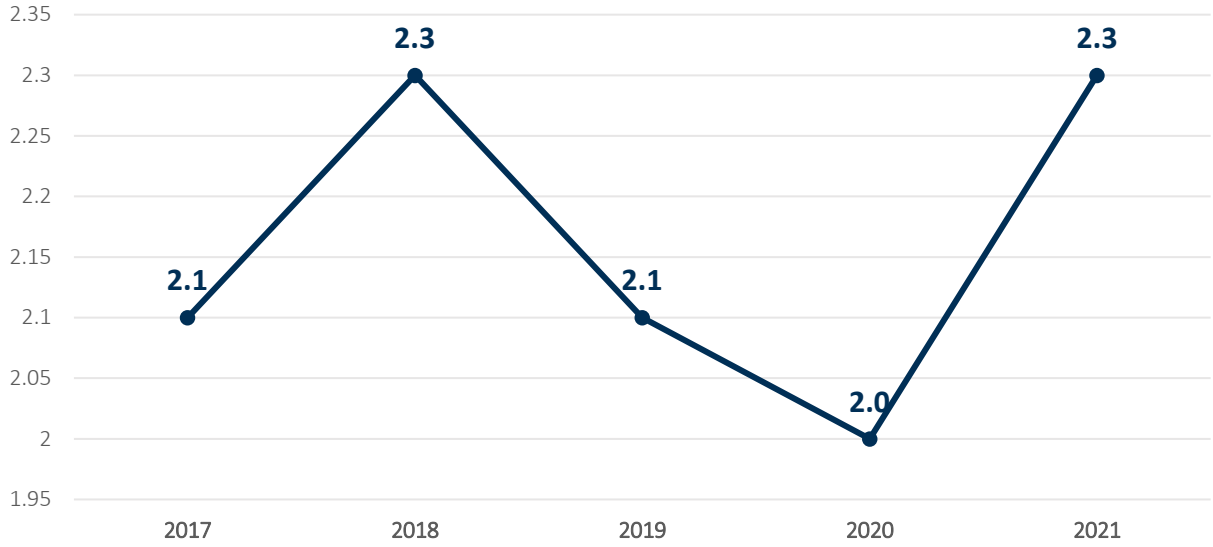


Figure 26. The meth/amphetamine arrest rate hovered near 2 arrests per 1,000 Idaho residents between 2017 and 2021 (ISP data).



Two indicators of methamphetamine use were correlated with other indicators in the full dataset. Meth/amphetamine arrest rate was positively correlated with opioid prescription rate, total drug overdose death rate, DUI arrest rate, liquor law violation arrest rate, heroin arrest rate, marijuana arrest rate, both drug- and alcohol-induced crash rate, and the percentage of Idaho adults who reported ever using methamphetamine. The percentage of Idaho adults who reported ever using methamphetamine was positively correlated with marijuana arrest rate, meth/amphetamine arrest rate, and marijuana use in the past month.

Heroin

Four indicators in the full dataset directly describe heroin use. Among those age 12 and older, 0.3% reported using heroin within the past year in 2021, slightly higher than the national rate of 0.2% (see Figure 27). The percentage of Idaho youth who reported ever having used heroin dropped from 3% in 2001 to 1% in 2021 (see Figure 28 on page 29), just below the national rate of 1.3%. Similar to the arrest rates for other drugs mentioned above, the arrest rate for heroin remained stable near 0.5 arrests per 1,000 Idaho residents between 2017 and 2021 (see Figure 29 on page 29).

Figure 27. 2021 NSDUH data on heroin use for Idaho and the United States.

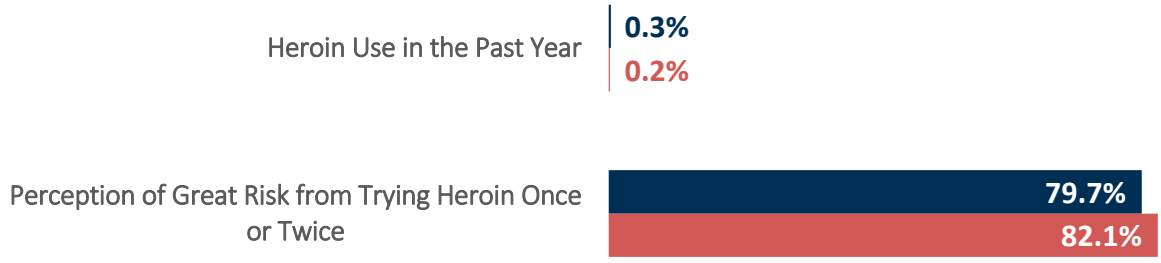


Figure 28. The percentage of Idaho youth who have ever tried heroin declined between 2001 and 2021 (YRBS data).

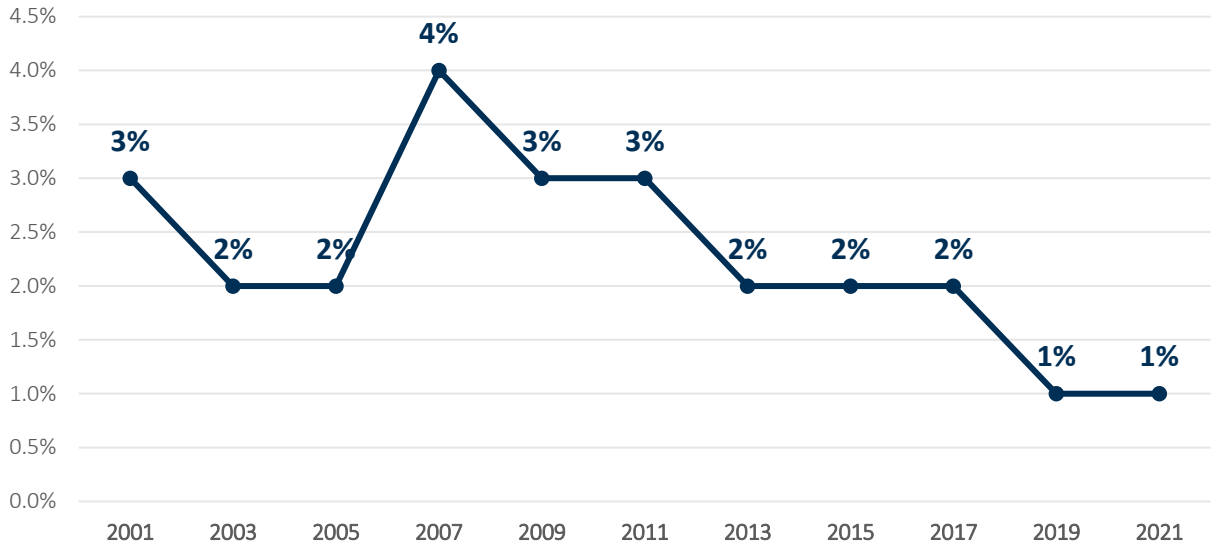
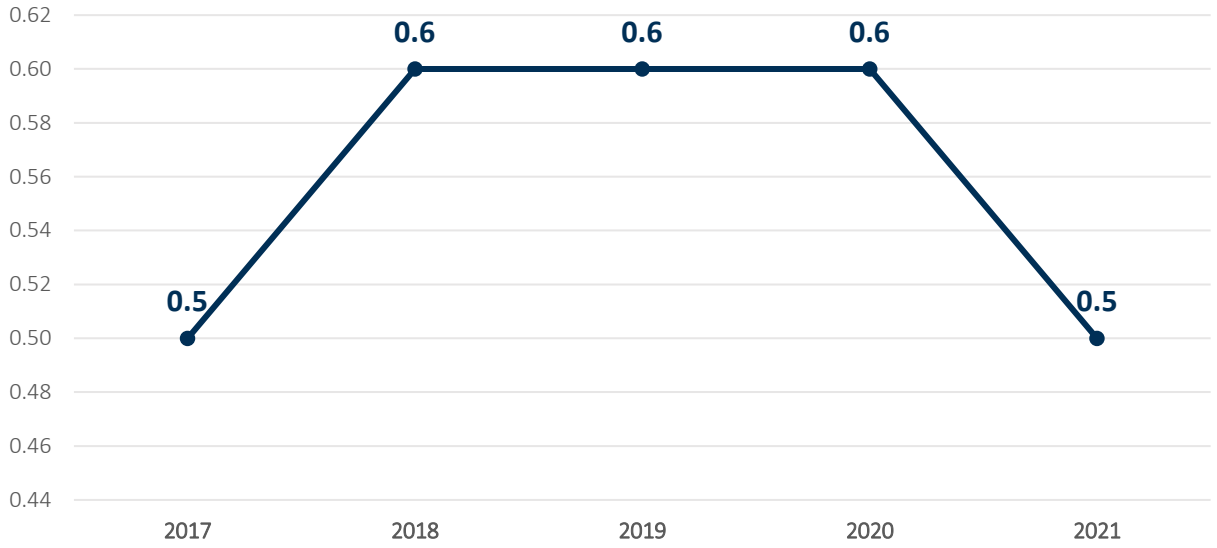


Figure 29. The heroin arrest rate hovered near 0.5 arrests per 1,000 Idaho residents between 2017 and 2021 (ISP data).

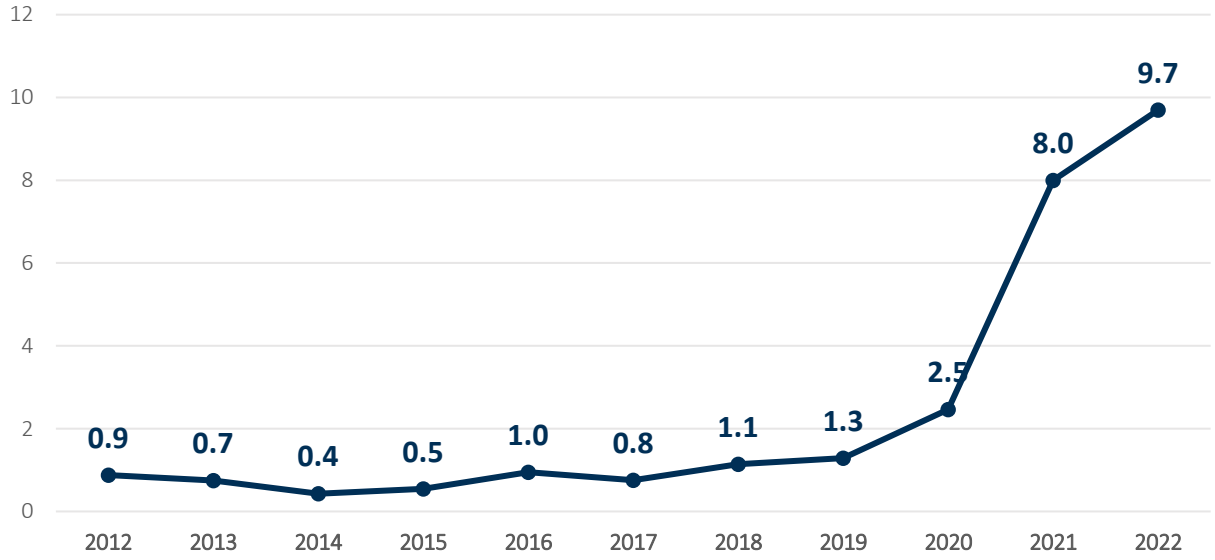


One indicator of heroin use was correlated with other indicators in the full dataset. Heroin arrest rate was positively correlated with opioid prescribing rate, total drug overdose death rate, DUI arrest rate, liquor law violation arrest rate, marijuana arrest rate, meth/amphetamines arrest rate, both drug- and alcohol-induced crash rate, and heavy drinking; it was negatively correlated with high marijuana risk perception.

Fentanyl

Beyond the DEA ARCOS data on retail drug ordering (see Figure 9 on page 20), only one other fentanyl indicator was available for analysis. The fentanyl overdose death rate in Idaho increased from 0.9 deaths per 100,000 Idaho residents in 2012 to 9.7 in 2022 (see Figure 30 on page 30).

Figure 30. The rate of fentanyl overdose deaths (per 100,000 Idaho residents) increased nearly tenfold between 2012 and 2022 (IDHW data).



No indicators of fentanyl use were included in the correlation matrices due to the data only being available at the state level.

COVID-19 Impacts on Data Collection and Quality

Due to the timing of this project, many of the years for which data are available include 2020 and 2021. The COVID-19 pandemic impacted all data collection, and some sources were more affected than others. The largest impact was seen in survey-based data as respondents were often not accessible by researchers and/or survey collection was paused. One example was seen in SAMHSA's decision not to publish any 2020 NSDUH data. NSDUH state estimates are not available for both the combined 2019-2020 and 2020-2021 periods due to the suspension of in-person data collection. The NSDUH was switched to online collection, introducing a mode effect, and causing SAMHSA to conduct further analysis which confirmed that the results did not seem statistically valid[16]. Moving forward, NSDUH plans to continue their new method of data collection, a combination of online and in-person data collection. This means that NSDUH data prior to 2020 is not comparable to succeeding collections based on this mode change.

Beyond impacting data collection, 2020 administrative data indicates that this year was an anomaly in many ways, making trends harder to interpret when 2020 is included. ISAC has observed that in 2020 during Idaho's six-week stay-home-order that was in effect from mid-March until late April, drug and alcohol offenses experienced a significant (45%) decrease when compared to the same period in 2019, and then jumped by 96.7% in 2021[17]. This trend interruption was observed across all types of county

[16] Substance Abuse and Mental Health Services Administration. *State data tables and reports from the 2019-2020 NSDUH*. SAMHSA. https://www.samhsa.gov/data/nsduh/state-reports-NSDUH-2020

[17] Rodgers, K. and Strauss, T. (2023). *Crime in Idaho During COVID-19: Time series analysis of data from the Idaho incident-based reporting system*. https://isp.idaho.gov/pgr/wp-content/uploads/sites/16/2023/05/Crime-in-Idaho-During-COVID-19.pdf

populations (i.e., urban or rural). While not analyzed through statistical tests, data in the Crime in Idaho Data Dashboard created and maintained by ISAC also shows that arrests for many drug types experienced a slight drop in 2020, then a return to previous levels in 2021. Overall, drug overdose death rates also dropped slightly from 15.4 per 100,000 residents in 2019 to 12.5 in 2020, then increased to 20.9 in 2021. Based on these observations, care should be taken when examining trends including the year 2020.

Question #3: Are there gaps in knowledge about substance use/misuse, and if so, what are they and how could they be closed?

The largest data gaps are in collecting data at the community and county level. There are many complexities that may be occurring that are simply not captured in the district or state level data. With data gathered or reported at a more granular level, connections between factors may be observed and areas with different needs may be identified. With the data as it currently stands, individual variables may be compared across counties, but beyond that there is not much analysis that can be conducted at the county or community level.

There are many indicators that may benefit from being measured or reported at a lower geographic level. One example of where this would be beneficial is data indicating the consumption or use of substances. Currently, there is a lack of data on actual use of substances, while more granular data is available for indicators such as arrests or vehicle crashes. While these may be indicators of certain public health or safety problems, they may not be good indicators of substance use overall.

Priority populations have also been identified in prior Needs Assessments, including young adults, veterans, homeless, and racial and ethnic minorities (particularly American Indian and Hispanic populations). Unfortunately, most of the data is not disaggregated as necessary to assess these populations' needs effectively. Census data may be used to create community profiles but many of the other data sources do not report their data with priority populations separated out. This could be due to a lack of collection of this data or concerns about privacy of individual respondents.

Substance types of interest may change through the years, and it is difficult for certain data sources to adjust to capture new and/or emerging substance types. For example, heroin was once a major concern in Idaho and many other states, but in recent years interest in heroin as a major public policy issue seems to have been replaced by fentanyl. Emerging concerns such as fentanyl suffer from a lack of data when they are first identified as an issue worth addressing, when policymakers are most interested. Data will inevitably lag behind current issues in some areas, but identifying where this data is already collected, and where data about emerging substances could be added, is critical to attempt to measure the issues as they arise.

Finally, while data from large national surveys may be useful for collecting data on behaviors and actual use, these data often become quickly outdated. Sampling is also tricky, with some areas in Idaho not having enough respondents for estimates to be reliable. This becomes problematic with any survey data and is a difficult issue to overcome. Idaho would benefit from consistent, state level survey data collection to better capture substance use and perceptions within the state. BRFSS is a good example of a consistent source of data in Idaho that can be disaggregated by multiple demographic variables; however, BRFSS only surveys adults, while most drug and alcohol prevention programs are targeted towards youth. Since Idaho chose to discontinue administration of the YRBS after the 2021 survey, this leaves the Idaho Healthy Youth Survey (IHYS) as the most robust source of data on youth substance use and misuse.

CONCLUSIONS AND POLICY RECOMMENDATIONS

Existing data being used by the SEOW for its Needs Assessments has some strengths, especially when the Needs Assessment is viewed as more of a surveillance tool than a true needs assessment. There is a wealth of data on use of and attitudes towards substances that have been of concern to policymakers for many years, such as alcohol, tobacco, marijuana, and opioids in general. However, for emerging substances of concern like fentanyl, there is far less of this kind of data available. The lack of data for some substances makes it much harder for stakeholders and groups like the SEOW to identify trends in use and misuse of those substances that may be indicative of public health and/or safety concerns, which in turn makes it harder for preventionists and practitioners around the state to identify and implement policies and programs that could help address such concerns.

Until now, data has been presented in the SEOW Needs Assessment as separate factors and attempts to relate indicators or assess risk and protective factors has been limited. While these indicators may be useful, there may be greater use in exploring the relationships between indicators or creating indexes that combine factors at the county level to understand why certain counties may be experiencing more substance misuse than others. By combining factors and creating a more complete profile of the counties individually, programing may be better targeted to address the greatest needs.

The Needs Assessment could also work towards identifying geographic and topical areas that need more attention in the state. Analysis that utilizes theory to guide models and includes multiple factors may help to paint the bigger picture. There is no question that there are always many factors at work in each area that may be impacting substance use. Without putting more thought into the contributing risk and protective factors and attempting to model the problem more holistically, programs may yield inconsistent or even negative results while trying to address a single factor. If these data are to be used to make policy or funding decisions, it would be beneficial to provide more of this type of analysis to consumers. To get to the point where such analysis and models can be completed, the data gaps outlined in response to question three of this report need to be addressed. These gaps in data hinder analysis that could better inform policy in the state.

To address the lack of data and improve the Needs Assessment ISAC makes the following recommendations:

1. *Expand current data sources or reporting to capture more county level data and demographics.* The biggest gaps in substance use data are in the lack of county level indicators and indicators that are disaggregated by demographics. There are priority populations that have been identified in prior research as more at-risk for adverse or disproportionate effects from substance use, but little data exists to assess these populations. To evaluate substance use and misuse at the county level, these gaps must be addressed. Counties and programs would benefit from knowing more about their area at this level, rather than relying on the state level data. Programs would be able to better target their local substance misuse issues and funding could be better targeted to communities and areas that most need it.

2. *Develop a model including risk and protective factors that can be used to evaluate and compare counties.*

   To further inform funding, policy, and programming decisions, creating a model or index of substance misuse would be highly beneficial. Currently, indicators are mostly evaluated individually, but this creates an issue when trying to address the needs from a public health and/or substance use/misuse prevention standpoint. While stakeholders may know a need exists from anecdotal or surveillance data, adopting a public health approach to substance use/misuse prevention efforts requires an understanding of the driving forces behind substance use and misuse, which remains difficult given the current state of available data. Pivoting to a model that incorporates risk and protective factors would help fill this gap in knowledge.

3. *Keep the Needs Assessment flexible and utilize SEOW's expertise to keep data and data reporting relevant.*

   The SEOW consists of research analysts from multiple entities in the state that have an interest in substance misuse in Idaho. They are a source ripe with knowledge and are likely to know when there is a new trend or topic arising that needs consideration. Flexibility needs to be prioritized so that the Needs Assessment can continue to provide the most up to date and relevant information. Continuing to monitor topics through the group also opens the opportunity for SEOW members to contribute data that is already being collected about emerging issues or suggest where data may start to be collected.

APPENDIX A: DATA TABLES BY SUBSTANCE TYPE

All data presented in the following tables is for the state of Idaho unless otherwise noted.

Alcohol

National Survey on Drug Use and Health (NSDUH) – Ages 12+

Indicator	Idaho 2021	*US 2021*
Alcohol Use Disorder in the Past Year	11.6%	*10.6%*
Alcohol Use in the Past Month	41.5%	*47.6%*
Needed but Did Not Receive Treatment for Alcohol Use in the Past Year	10.7%	*10.2%*
Perception of Great Risk from Drinking 5+ Alcoholic Beverages Once or Twice a Week	41.6%	*44.1%*
Binge Drinking in the Past Month	19.3%	*N/A*

Idaho Transportation Department – Crashes per 10,000 Residents

Indicator	2020	2021	2022	
Alcohol-Induced Crash Rate	6.6	7.4	7.7	

Behavioral Risk Factor Surveillance Survey (BRFSS) – Ages 18+

Indicator	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Binge Drinking in the Past Year	14.9%	14.8%	14.1%	16.1%	15.1%	15.1%	16.6%	14.4%	14.0%	15.5%	
Heavy Drinking in the Past Year	6.2%	5.0%	5.3%	7.0%	6.7%	6.7%	7.3%	7.1%	6.8%	7.2%	

Youth Risk Behavior Survey (YRBS) – High School Students

Indicator	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019	2021		*US 2021*
Drank Alcohol in the Past Month	41%	35%	40%	43%	34%	36%	28%	28%	27%	27%	23%		*22.7%*
Had First Alcoholic Drink Before Age 13	28%	23%	26%	23%	19%	18%	15%	15%	16%	15%	17%		*15.0%*
Got Alcohol by Someone Else Giving it to Them				39%	41%	44%	41%	42%	47%	43%	46%		*40.1%*
Drove While Drinking							6%	5%	6%	4%	3%		*4.6%*
Rode with Someone Who Drove While Drinking	29%	24%	28%	30%	22%	21%	19%	16%	16%	13%	14%		*14.1%*

Idaho Incident-Based Reporting System (IIBRS) – Arrest Rate per 1,000 Residents

Indicator	2017	2018	2019	2020	2021	
DUI Arrest Rate	4.3	4.5	4.6	3.9	4.1	
Liquor Law Violation Arrest Rate	0.8	0.7	0.7	0.6	0.6	

Idaho State Liquor Division (ISLD) – Gallons Consumed per Resident

Indicator	2017	2018	2019	2020	2021		*US 2021*
Per Capita Consumption of Distilled Spirits	1.6	1.6	1.7	1.9	1.8		*2.1*

Opioids/Prescriptions

Drug Enforcement Administration (DEA) Automated Reports and Consolidated Ordering System (ARCOS) – Pharmacy Orders in Grams per 100,000 Residents

Indicator	2017	2018	2019	2020	2021		*US 2021*
Amphetamine	6,491.8	7,197.1	7,778.8	8,671.6	8,529.1		*7,544.1*
Buprenorphine	906.9	1,076.4	1,270.9	1,485.3	1,382.5		*1,550.0*
Codeine	3,485.9	3,106.3	2,864.5	2,661.0	1,988.8		*2,967.6*
Fentanyl Base	147.0	126.5	97.6	85.3	68.8		*46.1*
Hydrocodone	14,548.5	12,826.5	11,516.8	10,967.9	9,082.3		*5,193.6*
Hydromorphone	480.1	447.7	337.5	366.9	309.4		*302.6*
Lisdexamfetamine	2,258.1	2,461.7	2,581.2	2,796.0	2,785.6		*2,894.6*
Meperidine (Pethidine)	212.4	177.8	91.2	45.0	35.2		*45.7*
Methadone	3,013.1	2,645.1	2,716.0	2,848.1	2,137.4		*4,139.0*
Methamphetamine		3.5	3.4	3.3	2.5		*1.6*
Methylphenidate	6,990.8	7,047.0	7,206.9	7,221.4	6,902.5		*5,146.0*
Morphine	7,178.4	6,188.2	5,364.8	4,806.8	3,778.4		*2,903.8*
Oxycodone	15,396.5	13,583.1	12,071.5	11,465.4	9,600.8		*9,309.8*
Oxymorphone	328.2	184.1	137.3	113.3	83.6		*59.9*
Tapentadol	1,539.1	1,392.4	1,169.9	1,031.2	787.7		*810.5*

Youth Risk Behavior Survey (YRBS) – High School Students

Indicator	2017	2019	2021		*US 2021*
Ever took prescription pain medicine without a prescription or differently than as directed by a doctor	14%	14%	14%		*6.0%*

Behavioral Risk Factor Surveillance Survey (BRFSS) – Ages 18+

Indicator	2018	2019	2020	2021	
Perception of high risk from opioid use	94.9%	95.7%	93.4%	94.9%	
Used More than Prescriped Opioids	3.4%	5.0%	4.1%	3.6%	
Used Non-Prescribed Opioids	1.1%	1.8%	1.5%	1.2%	
Used Prescribed Opioids in the Past Year	19.5%	18.0%	16.4%	15.9%	

Centers for Disease Control and Prevention (CDC) Opioid Dispensing Rate – Prescriptions per 100 Residents

Indicator	2019	2020	2021	2022		*US 2022*
Opioid Dispensing Rate	53.7	49.6	48.0	45.4		*39.5*

National Survey on Drug Use and Health (NSDUH) – Ages 12+

Indicator	Idaho 2021	*US 2021*
Opioid Misuse in the Past Year	2.7%	*3.3%*
Opioid Use Disorder in the Past Year	1.9%	*2.0%*
Pain Reliever Use Disorder in the Past Year	1.7%	*1.8%*
Prescription Pain Reliever Misuse in the Past Year	2.5%	*3.1%*

Idaho Department of Health and Welfare (IDHW) Bureau of Vital Statistics – Opioid Overdose Death Rate per 100,000 Residents

Indicator	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Opioid Overdose Death Rate	5.5	5.0	5.0	5.6	7.3	6.8	7.1	7.5	9.0	12.7	13.9	

Idaho Healthy Youth Survey – Middle and High School Students (Even-Numbered Grade Levels)

Indicator	2017	2019	2021	
Perception of great risk from misusing prescription drugs	64.1%	61.8%	65.7%	

Tobacco

National Survey on Drug Use and Health (NSDUH) – Ages 12+

Indicator	Idaho 2021	*US 2021*
Tobacco Product Use in the Past Month	19.8%	*19.6%*
Cigarette Use in the Past Month	14.7%	*15.6%*
Perception of Great Risk from Smoking One or More Packs of Cigarettes Per Day	65.7%	*69.2%*

Youth Risk Behavior Survey (YRBS) – High School Students

Indicator	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019	2021		*US 2021*
Ever Tried Smoking Cigarettes	54%	43%	45%	48%	40%	39%	33%	31%	28%	22%	19%		*17.8%*
Smoked Cigarettes in the Past Month	19%	14%	16%	20%	15%	14%	12%	10%	9%	5%	4%		*3.8%*
Smoked More than 10 Cigarettes Per Day in the Last Month	9%	5%	7%	9%	6%	8%	4%	2%	6%	2%	13%		*9.8%*
Smoked Cigars in the Past Month	11%	9%	14%	15%	12%	11%	9%	8%	6%	4%	2%		*3.1%*
Used Smokeless Tobacco in the Past Month									5%	3%	2%		*2.5%*
Ever Used an Electronic Vapor Product								45%	41%	48%	39%		*36.2%*
Used an Electronic Vapor Product in the Past Month								25%	14%	22%	18%		*18.0%*

Idaho Healthy Youth Survey – Middle and High School Students (Even-Numbered Grade Levels)

Indicator	2017	2019	2021	
Perception of Great Risk from Smoking One or More Packs of Cigarettes Per Day	70.4%	66.5%	65.7%	
Perception of Great Risk from Using a Vape Pen or E-Cigarette	37.5%	48.3%	52.3%	
Perception of Great Risk from Using Chewing Tobacco, Snuff, or Dip	63.2%	59.0%	61.1%	

Marijuana

Youth Risk Behavior Survey (YRBS) – High School Students

Indicator	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019	2021		*US 2021*
Used Marijuana in the Past Month	18%	15%	17%	18%	14%	19%	15%	17%	16%	17%	14%		*15.8%*
Tried Marijuana for the First Time Before Age 13	8%	7%	9%	8%	6%	6%	5%	6%	6%	5%	6%		*4.9%*

National Survey on Drug Use and Health (NSDUH) – Ages 12+

Indicator	Idaho 2021	*US 2021*
Used Marijuana in the Past Year	15.3%	*18.7%*
Used Marijuana for the First Time in the Past Year	2.2%	*2.1%*
Used Marijuana in the Past Month	10.1%	*13.0%*
Perception of Great Risk from Smoking Marijuana Once a Month	20.4%	*21.6%*

Behavioral Risk Factor Surveillance Survey (BRFSS) – Ages 18+

Indicator	2015	2016	2017	2018	2019	2020	2021	
Perception of High Risk from Marijuana Use	50.7%	47.7%	46.6%	42.3%	40.2%	41.5%	35.9%	
Marijuana Use in the Past Month	5.4%	5.6%	6.0%	9.5%	9.1%	8.8%	8.8%	

Idaho Incident-Based Reporting System (IIBRS) – Arrest Rate per 1,000 Residents

Indicator	2017	2018	2019	2020	2021	
Marijuana Arrests	4.1	4.4	4.0	3.6	3.9	

Idaho Healthy Youth Survey – Middle and High School Students (Even-Numbered Grade Levels)

Indicator	2017	2019	2021	
Perception of Great Risk from Marijuana Use Once or Twice a Week	47.7%	46.4%	49.6%	

Methamphetamine

Behavioral Risk Factor Surveillance Survey (BRFSS) – Ages 18+

Indicator	2019	2020	2021	
Ever Used Methamphetamine	9.8%	8.4%	9.0%	

Youth Risk Behavior Survey (YRBS) – High School Students

Indicator	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019	2021		*US 2021*
Ever used Methamphetamine	7%	6%	5%	6%	3%	3%	3%	2%	2%	1%	1%		*1.8%*

Idaho Incident-Based Reporting System (IIBRS) – Arrest Rate per 1,000 Residents

Indicator	2017	2018	2019	2020	2021	
Meth/Amphetamine Arrests	2.1	2.3	2.1	2.0	2.3	

Heroin

Youth Risk Behavior Survey (YRBS) – High School Students

Indicator	2001	2003	2005	2007	2009	2011	2013	2015	2017	2019	2021		*US 2021*
Ever Used Heroin	3%	2%	2%	4%	3%	3%	2%	2%	2%	1%	1%		*1.3%*

Idaho Incident-Based Reporting System (IIBRS) – Arrest Rate per 1,000 Residents

Indicator	2017	2018	2019	2020	2021	
Heroin Arrests	0.5	0.6	0.6	0.6	0.5	

National Survey on Drug Use and Health (NSDUH) – Ages 12+

Indicator	Idaho 2021	*US 2021*
Heroin Use in the Past Year	0.3%	*0.2%*
Perception of Great Risk from Trying Heroin Once or Twice	79.7%	*82.1%*

Fentanyl

Idaho Department of Health and Welfare (IDHW) Bureau of Vital Statistics – Opioid Overdose Death Rate per 100,000 Residents

Indicator	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	
Fentanyl Overdose Deaths	0.9	0.7	0.4	0.5	1.0	0.8	1.1	1.3	2.5	8.0	9.7	

APPENDIX B: CORRELATION MATRICES

Pearson Correlations

All County Level Indicators

Indicator	1	2	3	4	5	6	7	8	9	10
1. Opioid dispensing rate	-									
2. Vital Statistics Drug Overdose Rate	.221**	-								
3. Arrest Rate Alcohol DUI	.157	.158*	-							
4. Arrest Rate Liquor Law Violations	.073	.006	.382**	-						
5. Arrest Rate Heroin	.288**	.395**	.305**	.108	-					
6. Arrest Rate Marijuana	.179*	.036	.590**	.342**	.416**	-				
7. Arrest Rate Meth/Amphetamines	.148	.158*	.416**	.155*	.641**	.793**	-			
8. ITD Alcohol Crash Rate	-.083	-.058	.267*	-.115	.011	.365**	.373**	-		
9. ITD Drug Crash Rate	.145	-.049	.400**	.065	.196	.714**	.655**	.309**	-	
10. ITD Alcohol and Drug Crash Rate	.011	-.111	.123	.150	.008	.389**	.255*	.631**	-.079	-

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

County Level Indicators After Removing Outlier (Clark County, 2021)

Indicator	1	2	3	4	5	6	7	8	9	10
1. Opioid dispensing rate	-									
2. Vital Statistics Drug Overdose Rate	.221**	-								
3. Arrest Rate Alcohol DUI	.157	.188**	-							
4. Arrest Rate Liquor Law Violations	.073	.011	.379**	-						
5. Arrest Rate Heroin	.288**	.413**	.271**	.097	-					
6. Arrest Rate Marijuana	.179*	.108	.547**	.391**	.412**	-				
7. Arrest Rate Meth/Amphetamines	.148	.242**	.313**	.140*	.674**	.675**	-			
8. ITD Alcohol Crash Rate	-.083	-.022	-.019	-.255*	-.168	-.264*	-.137	-		
9. ITD Drug Crash Rate	.145	.109	-.103	-.186	-.063	-.185	-.139	.022	-	
10. ITD Alcohol and Drug Crash Rate	.011	-.115	.163	.158	.019	.741**	.435**	.679**	-.123	-

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Spearman's Rho

All County Level Indicators

Indicator	1	2	3	4	5	6	7	8	9	10
1. Opioid dispensing rate	-									
2. Vital Statistics Drug Overdose Rate	.244**	-								
3. Arrest Rate Alcohol DUI	.127	.130	-							
4. Arrest Rate Liquor Law Violations	.192*	.057	.480**	-						
5. Arrest Rate Heroin	.395**	.323**	.313**	.214**	-					
6. Arrest Rate Marijuana	.052	.082	.604**	.465**	.469**	-				
7. Arrest Rate Meth/Amphetamines	.241**	.224**	.407**	.240**	.660**	.691**	-			
8. ITD Alcohol Crash Rate	-.043	.117	.113	-.216*	-.158	-.073	.024	-		
9. ITD Drug Crash Rate	.165	.264**	.094	-.071	.077	-.027	.012	.272**	-	
10. ITD Alcohol and Drug Crash Rate	.066	.168	.125	.104	.371**	.288**	.437**	.145	-.088	-

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

County Level Indicators After Removing Outlier (Clark County, 2021)

Indicator	1	2	3	4	5	6	7	8	9	10
1. Opioid dispensing rate	-									
2. Vital Statistics Drug Overdose Rate	.244**	-								
3. Arrest Rate Alcohol DUI	.127	.142*	-							
4. Arrest Rate Liquor Law Violations	.192*	.066	.475**	-						
5. Arrest Rate Heroin	.395**	.336**	.304**	.207**	-					
6. Arrest Rate Marijuana	.052	.093	.599**	.460**	.462**	-				
7. Arrest Rate Meth/Amphetamines	.241**	.237**	.398**	.232**	.655**	.687**	-			
8. ITD Alcohol Crash Rate	-.043	.138	.082	-.253*	-.196	-.111	-.010	-		
9. ITD Drug Crash Rate	.165	.287**	.062	-.102	.047	-.063	-.022	.256**	-	
10. ITD Alcohol and Drug Crash Rate	.066	.158	.148	.122	.396**	.315**	.466**	.161	-.075	-

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

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