

Youth Drug Survey 2022: Stanly County, North Carolina

Summary Report of Survey Results

Report prepared Spring 2022 for the Center for Prevention Services
by Common Good Data Consulting, LLC.

Investigators

Drew Reynolds, PhD, MSW, MEd

Principal Consultant

Common Good Data Consulting, LLC | drew@commongooddata.com

Angela Allen, MA

Executive Director

Center for Prevention Services | allen@preventionservices.org

Eliza Thomas, MPH

Program Manager, Partnerships for Success

Center for Prevention Services | Eliza.Thomas@preventionservices.org



Center for
Prevention Services

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EXECUTIVE SUMMARY

In the Spring of 2020, the Center for Prevention Services began implementing the Youth Drug Survey (YDS) in Stanly County, NC, to begin to track youth substance use behaviors over time using a population-level survey. This report summarizes results from the second survey, completed in the Spring of 2022. These data are collected to determine the current level of incidence and prevalence of alcohol, tobacco, marijuana, and other drug use among middle and high school age youth. Due to the repeated cross-sectional survey design, changes in local patterns and trends can be observed.

The 2022 survey included some improvements over the 2020 survey. First, the survey added new questions to keep pace with changes in substance use behavior, including adding questions on fentanyl use, as well as a question on social media use. The latter will be used to help identify communications strategies to reach youth with prevention messaging that reinforces healthy behaviors. The 2022 survey also had an improved sample of students, particularly in the 12th grade, which we believe will provide a more accurate read of substance use among Stanly County youth.

KEY FINDINGS

Below are some of the key findings from this research:

- **4 in 5 youth in grades 6, 8, 10, and 12 in Stanly County are living drug-free.** Though this survey explores a variety of factors related to youth substance use behaviors, it cannot be understated that most youth in Stanly County are not using drugs.
- **The leading substance chosen by youth was e-cigarettes,** with 11.7% of Stanly County 6th, 8th, 10th, and 12th graders reporting using e-cigarettes in the past 30 days.
- When compared to **state and national benchmarks,** Stanly County high school students have relatively lower rates of substance use.
- **Middle school youth were at greater risk for prescription drug use** while high school youth were at greater risk for alcohol, e-cigarettes, and marijuana.
- **Key protective factors for substance use include parent disapproval, peer disapproval, perception of risk, and limits to access.** For many substances, youth were considerably less likely to use when these protective factors were present.

- The number one reason that youth report that youth are using e-cigarettes and prescription drugs without a prescription **is to deal with problems at school**, suggesting links between substance use, mental health, and the need for healthy coping skills.
- Youth reported using substances at higher rates in locations where adults are not present – in cars, in parks, and at home on their own - relative to the 2020 survey.
- The **average age of onset** – or the first time a youth tries a substance – **is between 12-14 years of age** for many substances.
- Youth are regularly on social media, with 9 in 10 using YouTube and 3 in 4 using Tik Tok and Snapchat. Over half (53.3%) of youth reported using four or more different platforms.

RECOMMENDATIONS

Considering these findings, we propose the following recommendations:

- **Promote healthy coping strategies:** When youth who use were asked about why they think youth use substances, coping with the stresses of school and home and finding ways to relax were consistently cited. These data suggest that prevention strategies that help youth learn positive and healthy strategies for coping with stress may serve as a key pathway to reducing youth substance use.
- **Substance use in isolation could be a rising public health concern.** It's not the case that youth substance use is solely a youth social and party activity. Youth reported using substances at increased rates at home alone, at a park, and in a car. It is possible that isolation driven by the Covid-19 pandemic has shifted youth use patterns into more solitary places. Prevention messaging should focus on addressing this changing use context and help youth develop healthy coping strategies when isolated from friends and peers.
- **Share positive messages.** Data in this report clearly indicate that most Stanly County youth are not using substances. Using messaging that highlights the popularity of living substance-free may help youth accurately assess the choices made by their peers and in turn make healthy choices themselves.
- **Reach youth on social media:** Prevention messaging that targets youth over social media platforms should focus on meeting youth where they are. The leading social media platforms used by youth are YouTube, Tik Tok, and Snapchat. Because both YouTube

and Tik Tok are video-based platforms, prevention messaging should consider video creation as one of their health promotion strategies when reaching youth.

- **To reduce e-cigarette use, focus on changing peer norms:** Peer disapproval emerged as a key protective factor for e-cigarette use, with youth 80% less likely to use when their peers did not approve of use. Prevention strategies should find ways to engage youth peers and friendship groups to change norms around the acceptability of e-cigarette use.
- **To address alcohol use, focus on parent-child communications:** Parent disapproval was a primary protective factor for alcohol use. Conversely, youth reported that parents were the #1 source for accessing alcohol. Prevention strategies focusing on reducing alcohol use need to engage parents about the risks of underage drinking and provide them with information and health promotion strategies to engage their children and teens in conversations about eliminating or delaying alcohol use.
- It's important to talk to **middle school youth about substance use** – especially about **prescription drug use**. The average age of onset for most youth was between 12-14 years of age. Moreover, middle school youth are at greater risk for prescription drug use without a prescription compared to high school youth. These data point to the need to begin conversations with youth early to delay the onset of use and to prepare them with healthy and strong social/emotional and coping skillsets when they encounter substances throughout the life course.

We believe the findings of the 2022 Youth Drug Survey will provide Stanly County critical data to understand youth substance use and focus prevention efforts. We hope that the results in this report contribute to the work of professionals across disciplines and fields to engage in reducing youth substance use behaviors across the county.

Sincerely,

Drew Reynolds, PhD, MSW, MEd
Principal Consultant, Common Good Data

Angela Allen, MA
Executive Director, Center for Prevention Services

Eliza Thomas, MPH
Program Manager, Partnerships for Success, Center for Prevention Services

METHODOLOGY

The YDS is a repeated cross-sectional school-based survey of youth substance use behaviors. Starting in 2020, the Center for Prevention Services and Common Good Data have worked with Stanly County Schools to administer the survey every two years to track youth substance use behaviors in a through this population-level survey. This survey is the result of a deep collaboration between these organizations and funded by the [Strategic Prevention Framework - Partnership for Success \(PFS\)](#) grant from the Substance Abuse and Mental Health Services Administration.

In Fall and early Spring 2022, the investigators partnered with school leaders to administer the survey. Testing coordinators and representatives from each school were trained on survey procedures and administered the survey in February and March of 2022. The survey was administered in-person using an online tool called Checkbox. Each testing coordinator developed an administration plan unique to the needs of each school, with testing coordinators working with school administrators to identify the best times to administer the survey to maximize survey participation.

The consent procedure included opportunities for parental opt-out and student assent. Parents and guardians of all students in 6th, 8th, 10th, and 12th grade were notified about the survey with a written consent letter and email and phone messages from the school to students and their families. Parents and guardians were offered two weeks to opt-out their child. Student whose parents and guardians choose not to opt out their child were provided an opportunity to participate in the survey and had an opportunity to opt-out using a student assent form. The survey was conducted in both English and Spanish.

To protect student participants, the YDS is voluntary and anonymous. Data collected from the survey are protected according to research protocols to ensure student privacy and maintain the confidentiality of responses. The data collection and survey design was reviewed by Solutions IRB Institutional Review Board to ensure the survey met standards for ethical conduct of research, and was approved by The Stanly County Schools School Board.

SAMPLE

The target sample for the survey was all 6th, 8th, 10th, and 12th graders enrolled in Stanly County Schools. The sample was obtained by surveying middle and high school students across 10 Stanly County schools, including six high schools and four middle schools.

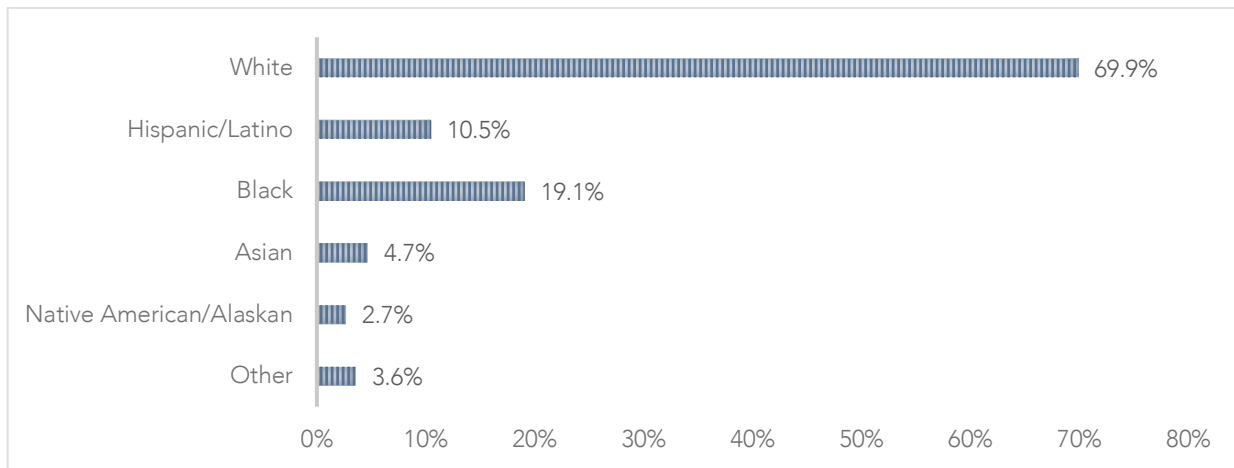
A total of 1,335 students participated in the survey. The sample was reduced to 1,196 students after data cleaning: 72 observations were removed as these students elected not to consent to participate, 14 observations were removed for answering incorrectly to response-checker questions to remove potential biased responses, and 53 observations were removed due to missing values on the grade-level question.

The data shared in this report includes responses from in Stanly County Schools (49.0% male, 47.5% female, 3.4% who preferred not to answer).

The sample included 32.5% 6th grade students, 31.4% 8th grade students, 25.3% 10th grade students, and 10.1% 12th grade students. Students in higher grade levels have lower representation in the survey as many high school students more irregular class schedules compared to middle school students, and 12th grade students had the opportunity to take courses online or off-campus, limiting their presence in school for the in-person survey. However, the sample here is an improvement compared to the 2020 survey, which had a very limited number of 12th grade students.

Figure 1 presents students' self-reported race and ethnicity (not exclusive), with youth having the option to select more than one group.

Figure 1: Sample race and ethnicity for 2022 Youth Drug Survey



2.2% First generation immigrants

In the 2022 Youth Drug Survey, sub-samples within Asian and Latino race/ethnicities were also obtained to further examine racial and ethnic sub-groups. However, due to small sample sizes we were not able to report all the sub-groups. For students who reported Latino ethnicity, the

vast majority (75.0%) were Mexican, followed by Puerto Rican (8.1%). Other Latino and Asian subgroups were represented but not reported due to small sample sizes.

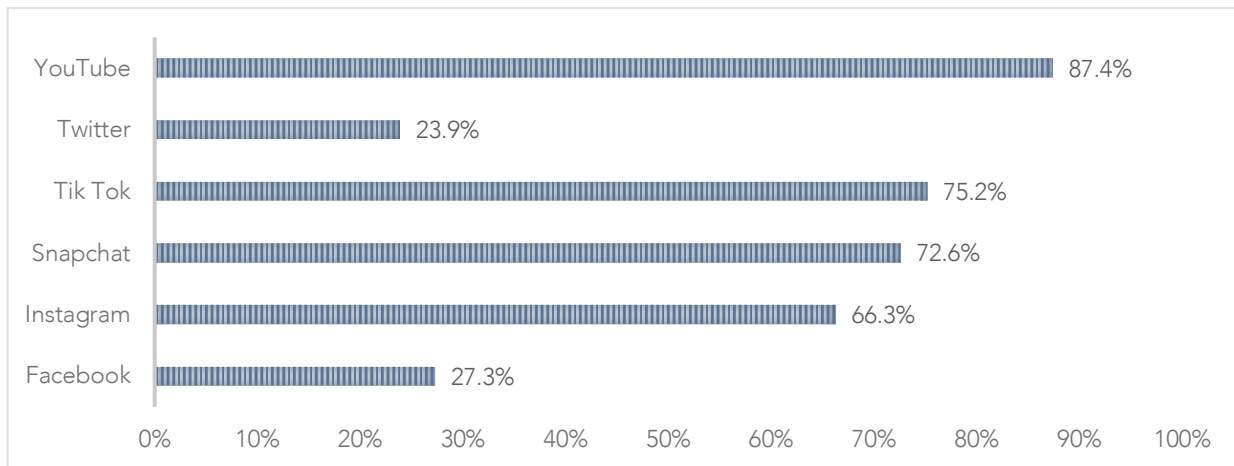
The majority of students reported living with both their mother and father (52.8%), followed by those living with parent and step-parent (16.9%), living with their mother only (15.6%), and living with other family structures (grandparents, father only, parents and siblings, aunts and uncles, or child welfare) (14.7%).

11.7% of respondents indicated that the highest education level reached by an adult in their home was less than a high school degree, 24.7% reported a high school degree or GED, and 63.7% reported some vocational school, college, or a college degree or higher.

12.8% of students reported that they receive “none” or “a little bit” of parental supervision at home. Average student grades were reported as follows: A=35.2%, B=35.1%, C=19.6%, D=6.5%, F=3.7% . Approximately 16.6% of students reported missing more than 11 days of school in the prior year.

For the first time, the 2022 Youth Drug Survey invited students to share information about their social media usage. Figure 2 presents these data on which platforms students use. YouTube, Twitter, and Tik Tok emerged as the top social media platforms used by students.

Figure 2: % of students indicating social media use by platform



Many students also reported using multiple forms of social media. Over half (53.3%) reported using four or more different platforms in this survey. Only 4.1% of student respondents reported using no social media at all.

LIMITATIONS

While the results presented here inform the prevalence of youth substance use in Stanly County, it is recommended that they be interpreted with caution for several reasons. First, the sample of high school seniors was small (n=130) in comparison to other grade levels, leading to potential sample bias. The 10th grade sample was also smaller (n=302) relative to the 6th (n=375) and 8th (n=389) grade samples. It is possible that this sample bias may impact the findings of this survey. For example, students who completed the survey may engage in risky behaviors and substance use differently when compared to students who did not complete the survey, who may be more likely to engage in substance use and may be underrepresented in the current sample.

To address this limitation, we artificially expanded the sample of the sophomore and senior classes by drawing from the existing sophomore and senior data and using statistical techniques to estimate responses from non-respondents. Though this approach is limited by not being able to draw actual responses from the missing sample respondents, it provides an opportunity to correct for potential sample bias and provides some estimates of key substance use measures across all four grade levels. Because the sample we drew from was a likely more pro-social sample of students, we believe that the results in this survey may still underestimate the actual use of substances in the true population of Stanly County youth even with this statistical correction.

Another limitation is the small sample size of some racial and ethnic groups including Asian, Native American/Alaskan, Hawaiian/Pacific Islander, and other racial groups. Responses from questions where specific racial/ethnic groups had 10 or less respondents are not reported in this report to preserve the confidentiality and anonymity of students. For example, if there were only 2 Native American students who answered a question about substance use, those two students may be easily identifiable in the survey report. To protect student privacy and confidentiality, all cell sizes with fewer than n=10 responses were omitted from the report.

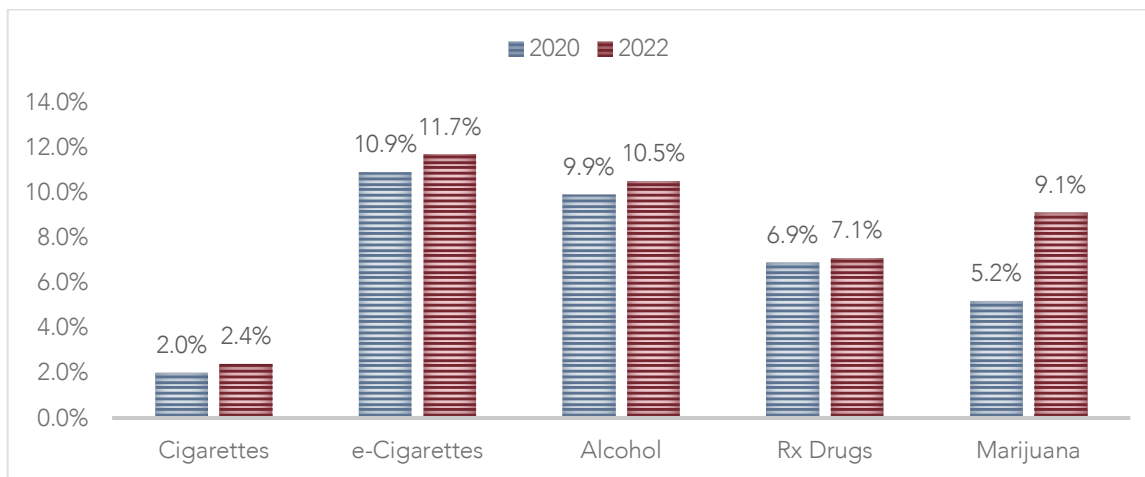
Survey Results

30-DAY USE CHANGES FROM 2020 TO 2022

Because the survey was administered in both 2020 and 2022, substance use patterns over time can be observed. The 2022 survey observed similar substance use patterns for cigarettes, e-cigarettes, alcohol, prescription drugs, and marijuana for youth in Stanly County from 2020 to 2022. There was a statistically significant increase for marijuana from 5.2% to 9.1%. There were no statistically significant changes observed for other substances. As noted in the 2020 report, there were limitations in sample size that may explain lower reported marijuana use in 2020.

Taken together, the data from the 2022 survey indicate that 20.1% of youth in the survey reported using any substance (alcohol, marijuana, tobacco, prescription drugs) in the past 30 days. This means that roughly 4 in 5 youth in Stanly County were drug-free in the past 30 days.

Figure 3: 30-day use changes from 2020-2022 in Stanly County by substance



COMPARISON WITH STATE AND NATIONAL DATA

As in 2020, e-cigarettes were the primary substance used in middle and high school students in 2022 (11.7%), followed by alcohol (10.5%), and prescription drugs without a prescription (7.1%) in Stanly County youth. Use of combustible cigarettes is low (2.4%). Data from the 2022 Youth Drug Survey in Stanly County suggest that usage rates locally differ from Mecklenburg county, state, and national levels.

Rates for 30-day use in high school students in Stanly County using data from the 2022 Youth Drug Survey were compared against the 2020 Youth Drug Survey in Mecklenburg County, state (North Carolina), and national benchmarks using data from the 2019 Youth Risk Behavior Survey, a national survey of youth risk behaviors administered by the Centers for Disease Control and

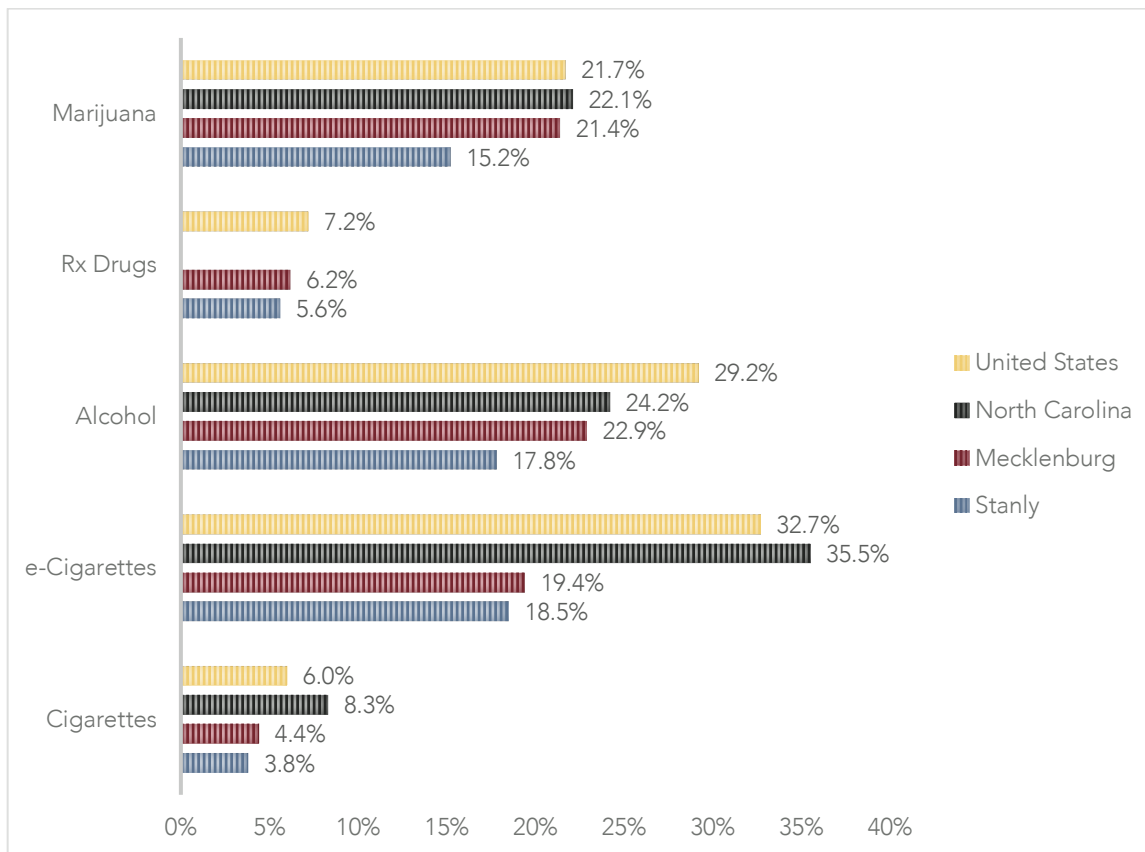
Prevention (see Figure 4). Aggregate data from the 2019 YRBS are available online and accessible to the public¹.

In general, rates for cigarette use, alcohol use, marijuana use, and prescription drug use without a prescription were lower in Stanly in comparison to these benchmarks.

Results should be interpreted with caution, as data at state and national levels were from three years (2019) prior to the 2022 YDS. A number of contextual factors, including changing laws, cultures, and norms across these three years may also account for some of these differences. In addition, a lower relative sample size of Stanly County 12th grade students may have impacted these results.

Note that the question on prescription drugs in the United States and North Carolina Surveys (YRBS) focused specifically on prescription pain drugs without a prescription, while YDS data include any prescription drug taken without a prescription.

Figure 4: Stanly, Mecklenburg, North Carolina, and US 30-day use rates for high school (10th & 12th grade) students



¹ Access is available to YRBS data at <https://nccd.cdc.gov/Youthonline>

30-DAY SUBSTANCE USE BY AGE, GENDER, AND CLASS

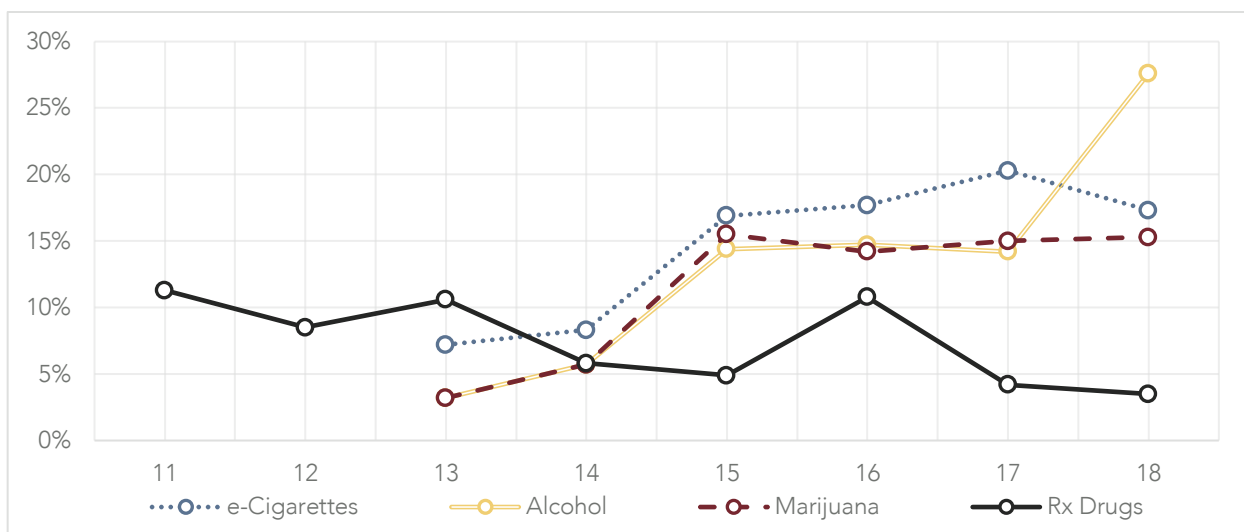
In general, youth substance use tends to increase with age across all substances except for traditional cigarettes which are not included here due to small sample sizes. Table 1 presents the age of onset for five substances. In general, most students begin using at ages 13-14 years of age, with onset for prescription drugs being earlier (age 12) compared to marijuana coming later (age 15).

Table 1: Average age of onset by substance

Question: Average Age of Onset	
	Average Age
Cigarettes	14
e-cigarettes	14
Alcohol	14
Marijuana	15
Stimulants (Adderall/Ritalin)	14
Pain w/o Rx (Hydrocodone, OxyContin, Vicodin)	12
Pain w/ Rx w/ Fentanyl (Actiq, Duragesic, etc)	12

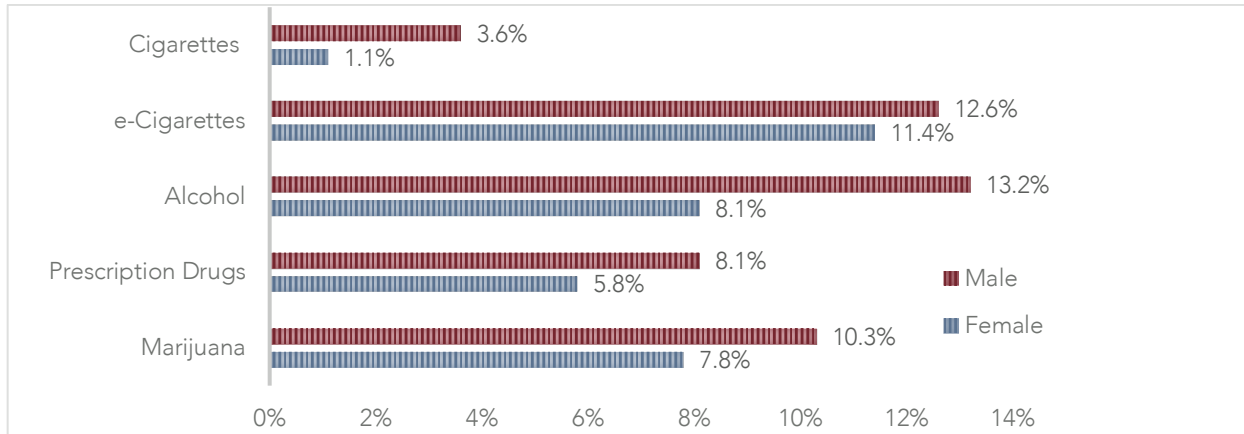
Figure 4 shows that **by age 15, 16.9% of youth are using e-cigarettes, 14.4% are using alcohol, 15.5% are using marijuana, and 4.9% are using prescription drugs.** By age 18, this number increases to 27.6% for alcohol and to 17.3% for e-cigarettes. The use of prescription drugs without a prescription follows a unique pattern with use being higher in the earlier years and decreasing as student progress through high school.

Figure 5: 30-day substance use by age



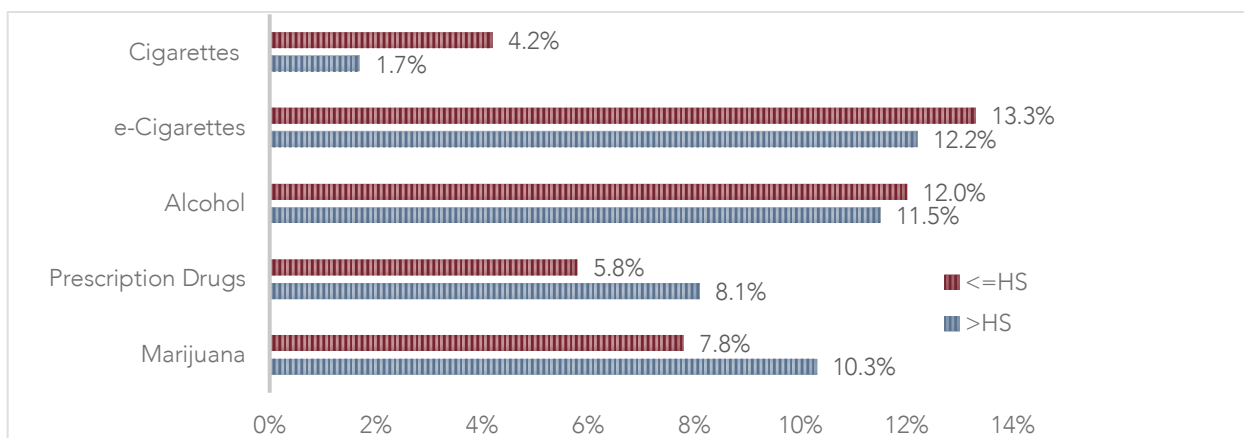
There were also some notable differences in substance use by gender (see Figure 6). For cigarette use, alcohol, prescription drugs, and marijuana, male youth were statistically more likely to use substances compared to female youth. In the case of alcohol, the difference was over 5 percentage points (12.3% male vs. 8.1% female). This is a new finding compared to the 2020 survey, where differences were more mixed. Note that results for students who preferred not to provide their gender are not included due to small sample size.

Figure 6: 30-day substance use by gender



There were also notable differences in social class. In the YDS, a proxy measure for social class - parent's education level - is used to examine these differences. Figure 7 presents these differences. Students whose parent's education level was less than or equal to a high school degree were more likely to smoke cigarettes (4.2%) compared to students whose parents had post-high school education (1.7%) ($p < .001$). The opposite trend was observed for both prescription drug use ($p < .01$) and marijuana use ($p < .01$), suggesting that students of a higher social class were more likely to use both substances.

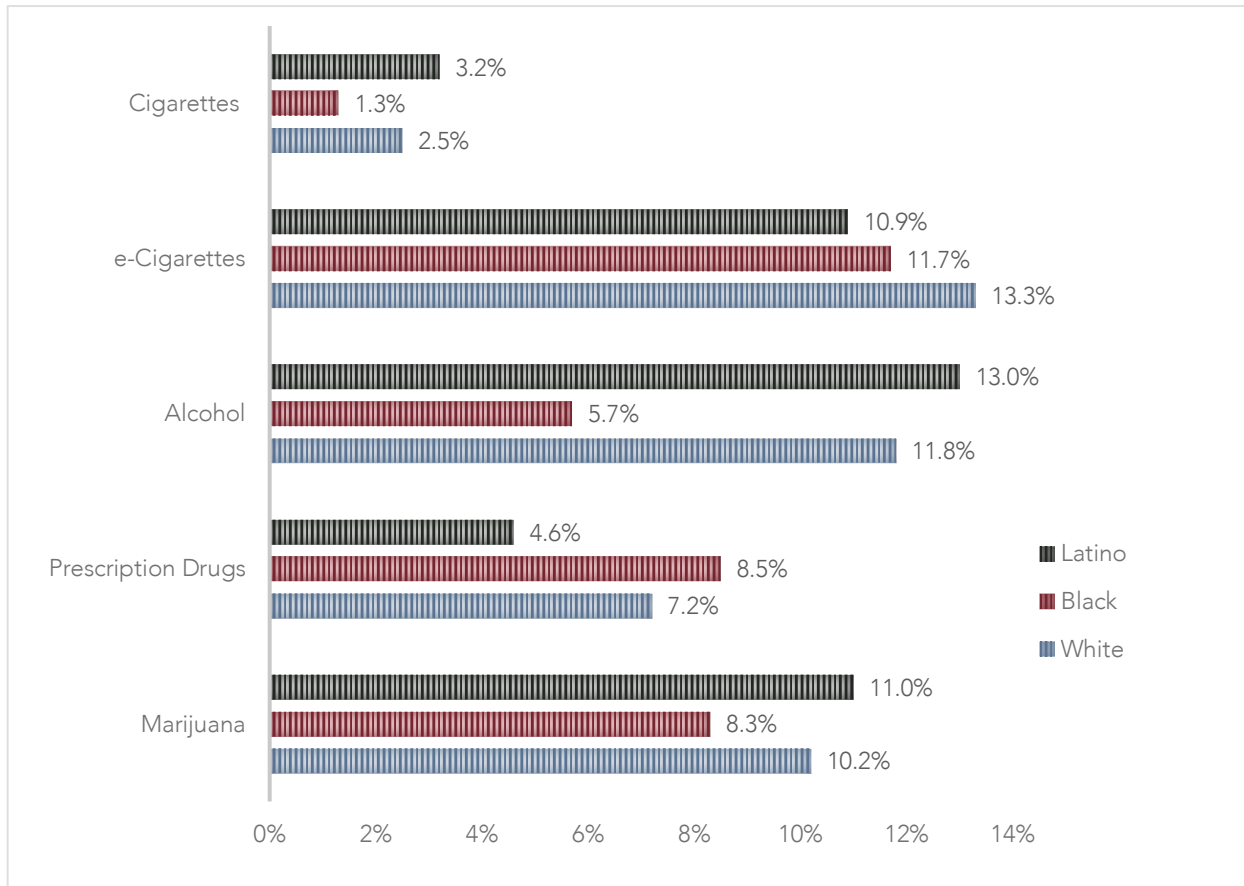
Figure 7: 30-day substance use by social class



30-DAY SUBSTANCE USE BY RACE/ETHNICITY

Figure 8 presents differences in substance use pattern across White, Black, and Latino youth. There were differences observed, with White youth being most at risk for e-cigarette use while Latino youth were most at risk for alcohol and marijuana use. Black youth reported the highest level of prescription drug use without a prescription and the lowest use of alcohol.

Figure 8: 30-day substance use among White, Black, and Latino youth



TOBACCO

The following section shares YDS results for youth use of tobacco.

30-DAY TOBACCO USE

Table 1 presents the overall results for past 30-day use for five separate tobacco products. Following recent national trends and similar to the 2020 survey, **e-cigarettes emerged as the preferred method for tobacco consumption among youth in the sample.**

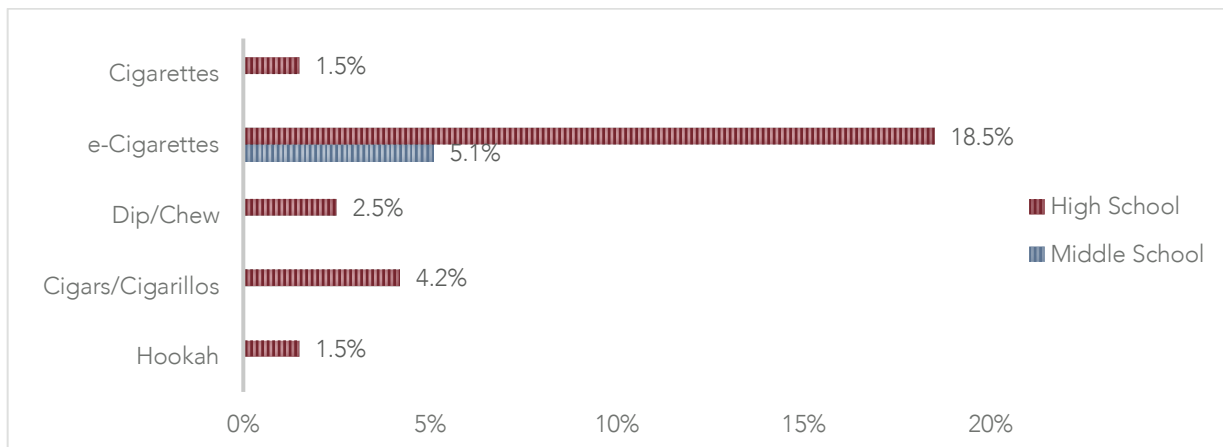
Table 2: Tobacco 30-day use, 6th, 8th, 10th, and 12th grade youth

Question: How often in the past 30 days have you used the following?				
	Never Used	Used, but not in the past 30 days	2020: Used in the past 30 days	2022: Used in the past 30 days
Cigarettes	92.6%	5.1%	2.0%	2.4%
e-cigarettes	82.0%	6.3%	10.9%	11.7%
Dip/chew	95.9%	2.5%	1.3%	1.7%
Cigars/Cigarillos	94.4%	3.1%	2.7%	2.6%
Hookah	97.0%	2.0%	1.1%	1.1%

30-DAY TOBACCO USE BY SCHOOL LEVEL

Another notable finding is the rate of e-cigarette use among high school youth. Nearly 1 in 5 high school youth reported using e-cigarettes in the past 30 days. E-cigarettes remains the primary means by which youth use tobacco. Data for middle school were reported only for e-cigarettes due to small counts for the other tobacco products.

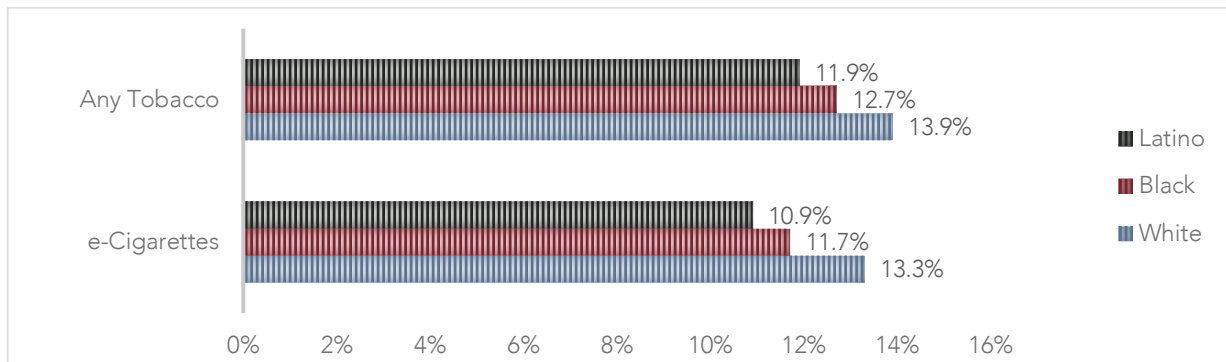
Figure 9: 30-day tobacco use by school level (middle and high school)



30-DAY TOBACCO USE BY RACE/ETHNICITY

There were also differences in tobacco use by race and ethnicity. Note that results for all substances are not included for Asian, Native American/Alaskan, Middle Eastern, Hawaiian/Pacific Islander, or Other race/ethnicities due to small sample counts. Figure 10 presents differences between white, black, and Latino youth in the sample for e-cigarette use only. White youth were the group most likely to indicate both any tobacco as well as e-cigarette use.

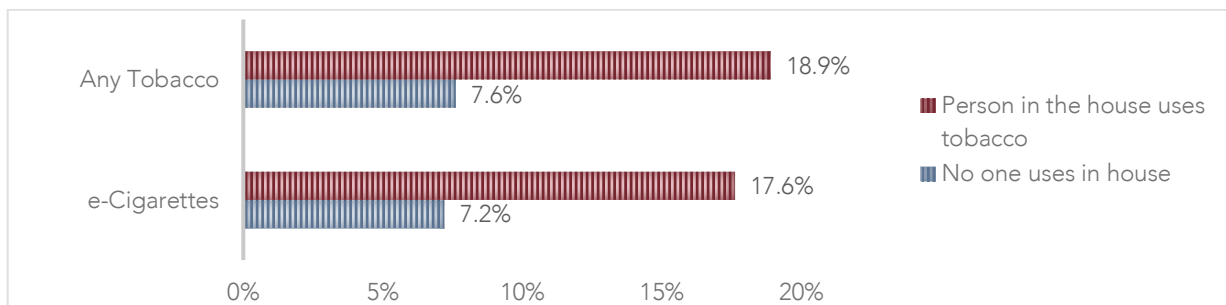
Figure 10: 30-day tobacco use by race/ethnicity



TOBACCO USE IN THE HOME

Results of the survey also indicated a correlation between the use of tobacco in the home by others and an individual youth's use of tobacco. Figure 11 presents this relationship for e-cigarettes and for use of all tobacco products combined. Results indicate that having another person in the home using tobacco is strongly correlated with a youth's decision to use. In the case of e-cigarettes, 17.6% of youth report using e-cigarettes if someone else is using in the household, compared to 7.2% for those who report that no one else use ($p < .001$).

Figure 11: Home tobacco use (any) and youth use by substance



ACCESS TO TOBACCO AND USE LOCATIONS FOR YOUTH UNDER 18

YDS data captured information on youth tobacco access as well as locations for use. In 2020, the data were reported for youth under 18 years old because the law had only recently been changed outlawing tobacco products to youth under 21. In the 2022 sample, data are reported for all youth as the legal limit for tobacco products at 21 years of age had been in place for two years prior to the survey.

The leading source of tobacco products for youth are their peers and friends. There was an increase in the number of youth who reported purchasing tobacco products from a store, increasing to 15.6% from 9.6% two years prior. All other locations in the question response were lower than 5%.

Table 3: Access to tobacco

Question: The last time you used tobacco, where did you <u>get</u> it?		
	2020	2022
A friend gave it to me	39.4%	32.4%
Got it from a party	12.4%	10.5%
I bought it at a store myself	9.6%	15.6%
Someone else bought it for me	17.9%	16.0%

Several trends changed in the location of use of tobacco products. **In the 2022 data, youth chose more solitary locations, including at home alone (18.3%) and in a car (14.4%), while use with friends decreased.**

Table 4: Tobacco use locations

Question: The last time you used tobacco, where did you <u>use</u> it?		
	2020	2022
At a friend's house	20.4%	16.3%
At home alone	14.5%	18.3%
At home with friends	10.6%	4.4%
In a car	7.8%	14.4%
At some other place	15.2%	17.6%

PARENT RULES AND TOBACCO USE

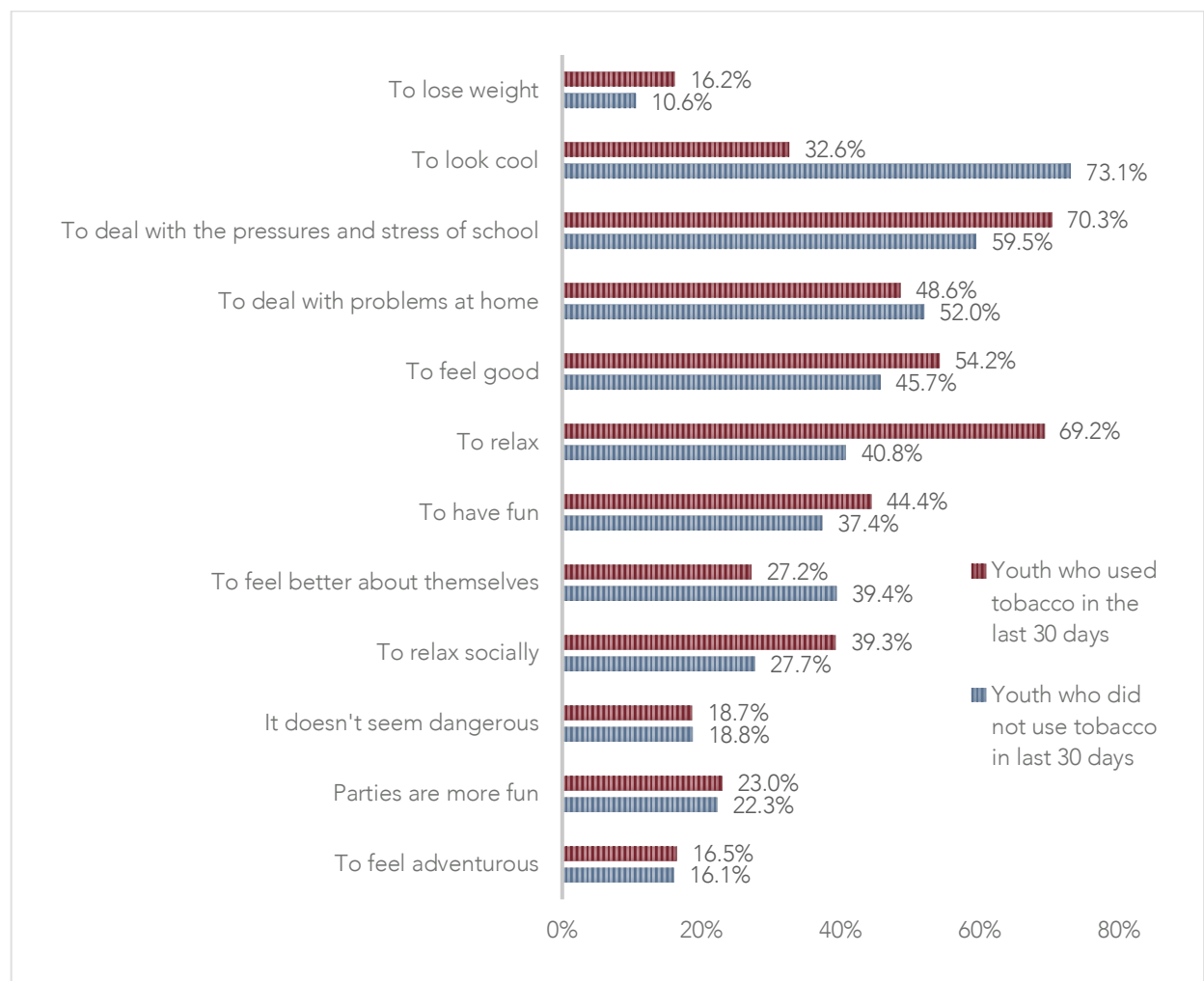
The YDS asked youth whether their parents had clear rules about the use of tobacco in their homes, and 79.2% of youth reported that they did. However, there was no statistically significant difference in tobacco use among youth who had parents with clear parental rules on tobacco use versus those who did not. These results should be interpreted with caution – it is possible that rules are used primarily as a response, rather than a precursor to, youth tobacco use.

PERCEPTIONS ON WHY YOUTH USE TOBACCO

Youth were invited to share why they thought others used tobacco products. Youth were allowed to choose more than one response. Among all youth, there was a slight difference in the 2022 and 2020 surveys. In the 2022 survey, the number of youth reporting coping being one of the reasons youth used alcohol increased to 60.6% from 56.9% for dealing with pressure and stress at school and increased 51.0% from 44.3% for dealing with problems at home.

There were important differences in how youth responded to why they think youth use tobacco. **Among non-users, the leading perception (70.3% of respondents indicated) is that youth use tobacco “to look cool”.** In contrast, tobacco users cited coping and relaxing as the key drivers for use - “to deal with pressures and stress of school” (70.3%) and “to relax” (69.2%) being the top responses.

Figure 12: Reasons youth provided for others using tobacco among users and non-users



EXAMINING FACTORS RELATED TO E-CIGARETTE USE

There are a number of patterns that also emerge from the data with respect to the most salient risk and protective factors for e-cigarette use. Using multi-level logistic regression modeling techniques, the results in Figure 13 indicate the relative importance of risk and protective factors while controlling for known covariates and demographic factors like age, sex, race and ethnicity, and socioeconomic status (adult's education level).

Controlling for other factors, the data suggest that parent and peer disapproval of use of e-cigarettes are clear protective factors against use, while access is a primary risk factor for use.

Figure 13: Risk and protective factors for e-cigarette use

Parental Disapproval: Youth who reported that their parents would say it is "wrong" or "very wrong" for them to use e-cigarettes are nearly 60% less likely to use them.



Use in the Home: Youth who reported that someone in their home used tobacco were 1.7X more likely to use e-cigarettes.



Perceived Risk: Youth were 40% less likely to use e-cigarettes if they thought that there was a "moderate" or "great" risk to using them.



Peer Disapproval: Youth were 80% less likely to use e-cigarettes if they thought that their friends would think it was "wrong" or "very wrong" if they used them.



Access: Youth who report that it is "fairly easy" or "very easy" to access e-cigarettes are nearly 5X as likely to use them.



ALCOHOL

30-DAY ALCOHOL USE

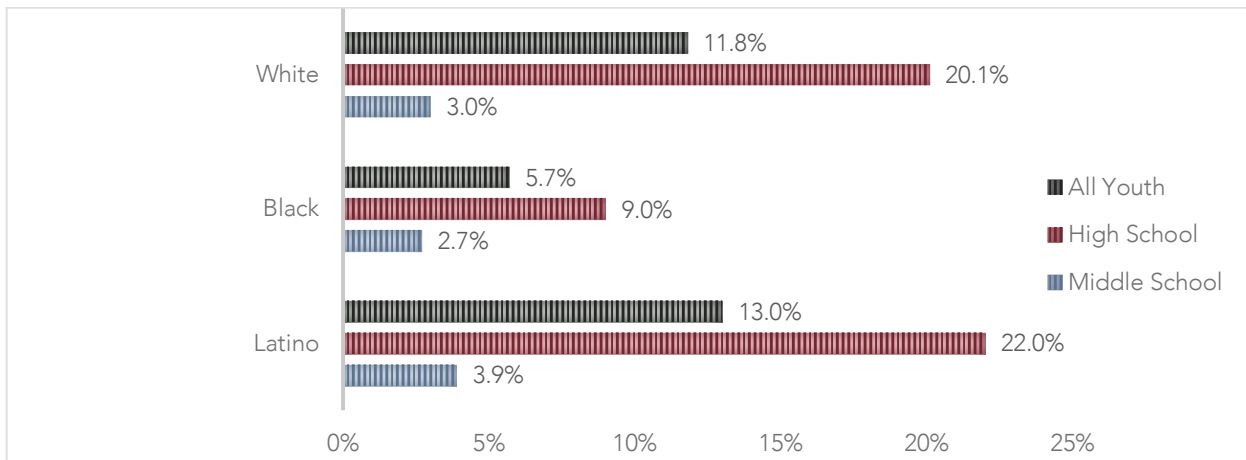
Table 5 presents the overall results for past 30-day alcohol use, defined as having one or more drinks of an alcoholic beverage (beer, wine, wine coolers, liquor) in the past 30 days. The number of high school youth reporting using alcohol rose to 17.8% from 13.4% in the 2022 survey, while the number of middle school youth reporting using alcohol dropped to 3.4% from 6.8%.

Table 5: 30-day alcohol use, by school type

Question: How often in the past 30 days have you had one or more drinks of an alcoholic beverage (beer, wine, wine coolers, liquor)?				
	Never Used	Used, but not in the past 30 days	2020: Used in the past 30 days	2022: Used in the past 30 days
Middle School	88.2%	8.4%	6.8%	3.4%
High School	62.4%	19.8%	13.4%	17.8%
All Respondents	75.5%	14.1%	9.9%	10.5%

In addition to differences between high school and middle school youth, there were also differences across racial and ethnic lines (see Figure 14). White and Latino high school youth were at greater risk for 30-day alcohol use compared to Black high school youth. Alcohol use for all other races are not included due to small sample counts.

Figure 14: 30-day alcohol use by race/ethnicity and school type

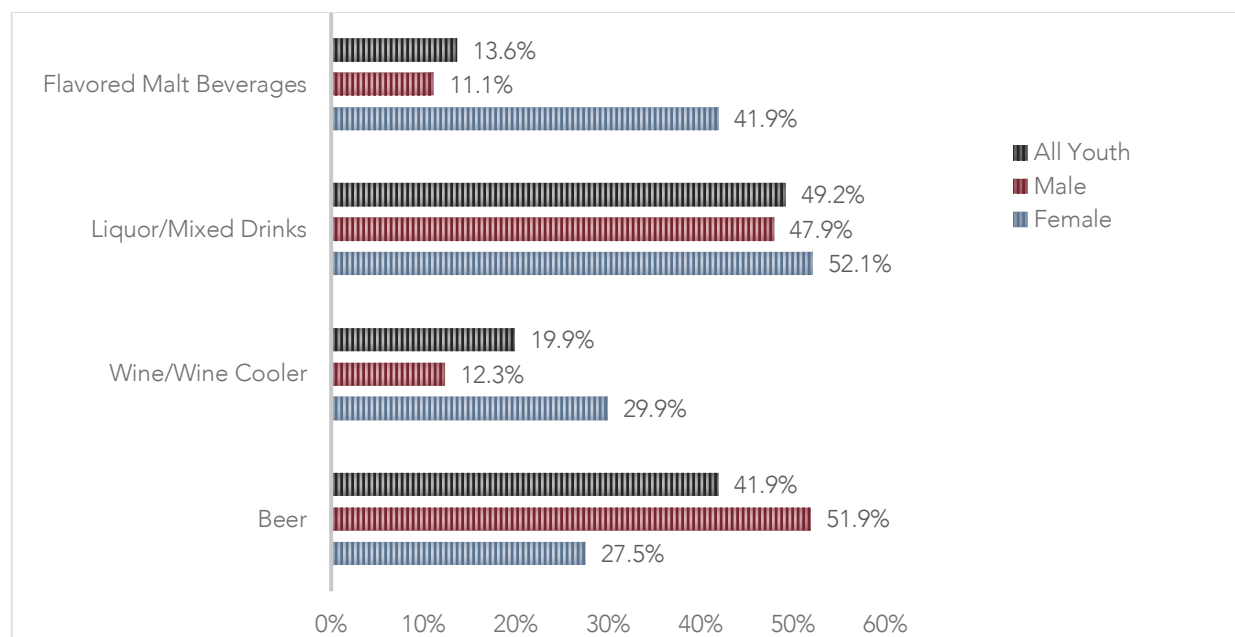


GENDER DIFFERENCES IN DRINK TYPE

The survey asked youth who used alcohol to report on the type of alcohol they used. Figure 15 reports the results of these drink choices together and by gender (male, female, and other).

Male youth were more likely to choose beer while female youth were more likely to choose wine/wine coolers and flavored malt beverages. Of all the alcohol types, liquor/mixed drinks were the main type of alcohol used by youth. Note that youth who preferred not to respond to the gender question were not included due to small sample size.

Figure 15: Gender differences in drink type



AGE OF ONSET

Youth reported on the age they first tried alcohol. The average age of onset for users was 14 years old. Of those who reported starting alcohol use before age 14, 40.1% reported using alcohol in the past 30 days.

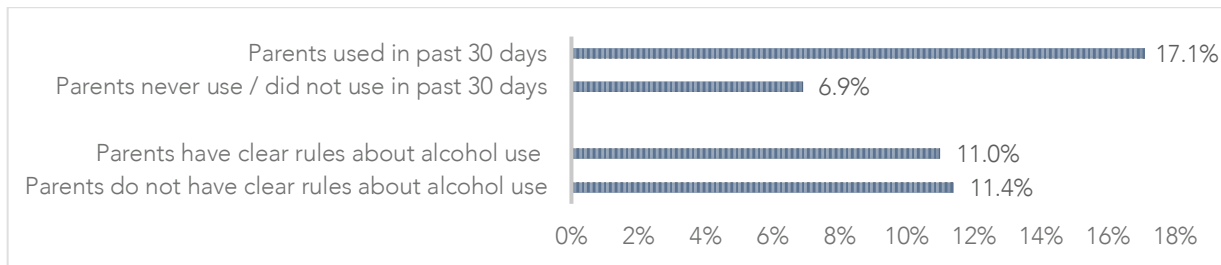
30-DAY ALCOHOL USE: BINGE DRINKING

Survey respondents described binge-drinking behaviors, defined as having 4 or more drinks of alcohol for females or 5 or more drinks of alcohol for males, on a single occasion. On average, 4.7% of female youth 7.8% of male youth reported binge drinking in the past 30 days. Among all youth of, between 1 in 2 youth who report using alcohol also report engaging in binge drinking behaviors. Of youth who binge drink, most reported binge drinking 1-5 days a month.

PARENTAL INFLUENCE

A trend in the data suggests that both parental rules about alcohol use and parental use of alcohol in front of their children are related to a youth’s 30-day alcohol use. Figure 16 presents these results. Middle and high school youth who reported that their parents used alcohol in front of them were almost three times as likely to use alcohol themselves in comparison to youth who reported their parents have never used alcohol or have not used alcohol in the past 30 days. There were no statistically significant differences between youth who reported their parents had specific rules about alcohol than those who did not, though we interpret these data with caution as it is possible that parents are more likely to be explicit with rules around child alcohol use after their child begins using.

Figure 16: Parent influence and 30-day youth alcohol use



ACCESS TO ALCOHOL AND USE LOCATIONS

Figure 17 presents where youth accessed alcohol the last time they got it, for those youth who used alcohol in the past 30 days. Roughly 1 in 3 youth who used alcohol in the past 30 days reported that they either got alcohol from their parents or from their home, and another third reported getting it from a friend or that someone purchased it for them.

Figure 17: Reported location of access to alcohol during last use

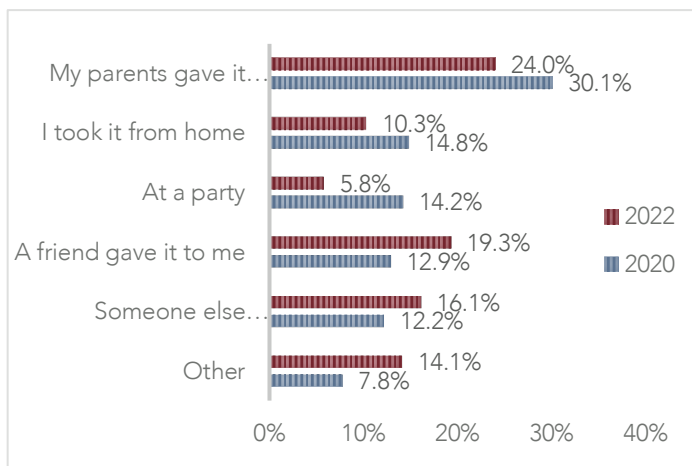
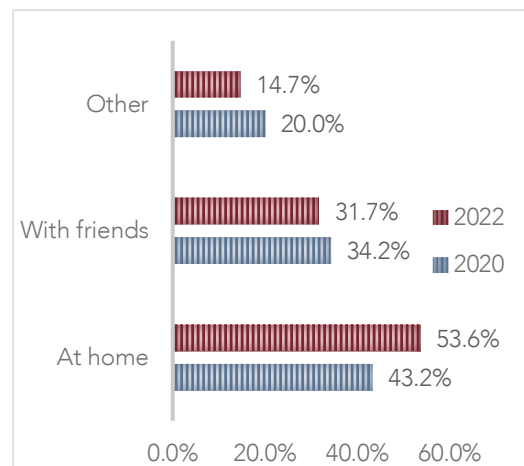


Figure 18: Alcohol use by location

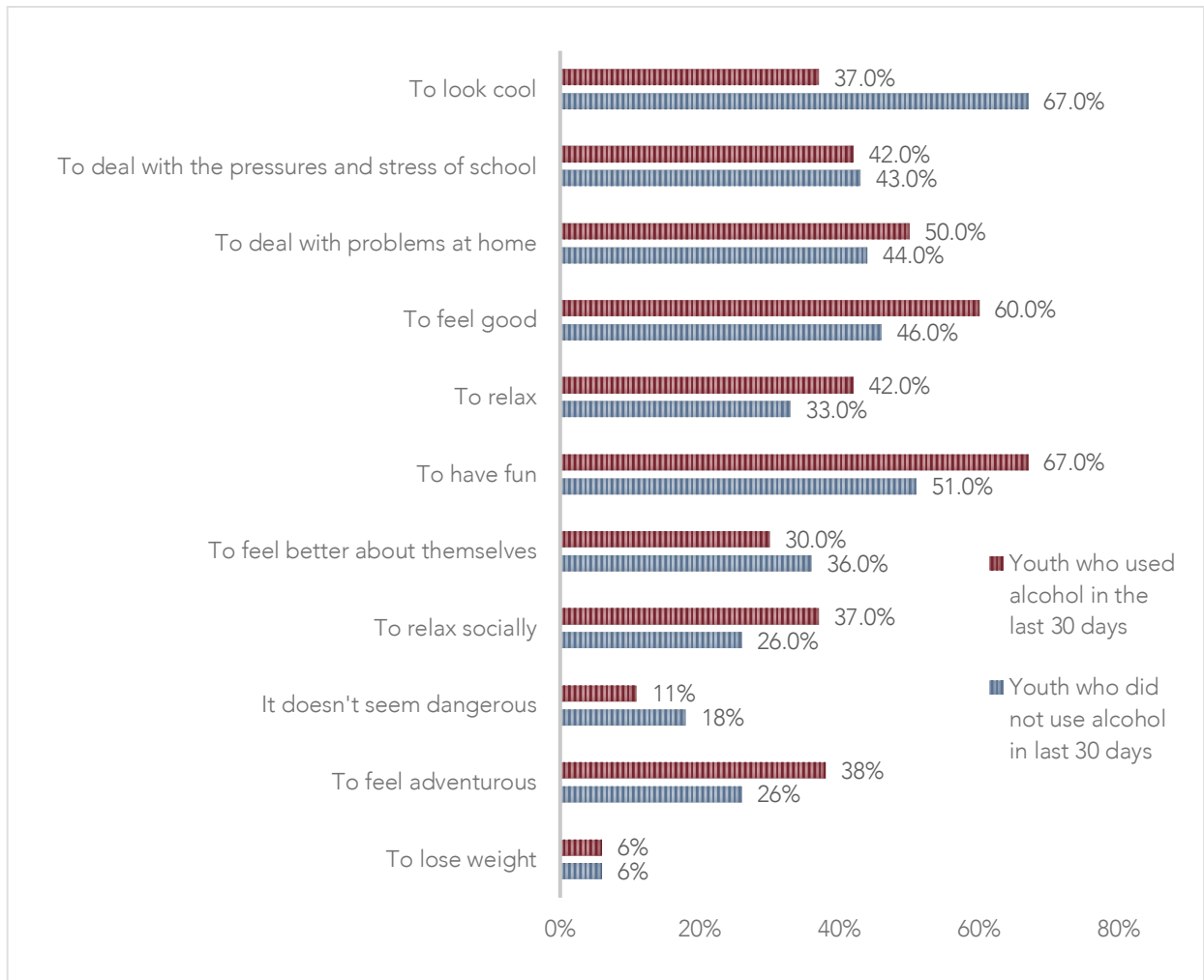


The YDS survey also asked youth to report where they used alcohol the last time they drank it (Figure 18). **In contrast to 2020, the majority of respondents (53.6%) to the 2022 survey indicated that they used alcohol at home the last time they used it.** Among those who reported using alcohol at home, the majority reported using alcohol with their parents (23.1%), followed by using alcohol at home alone (16.5%).

PERCEPTIONS ON WHY YOUTH USE ALCOHOL

Figure 19 present results of why youth thought others used alcohol. For users, the primary reasons for using were “to have fun” (67%) and “to feel good” (60%), while 67% of non-users reported “to look cool” as a reason for using alcohol. Respondents who reported using alcohol also indicated that dealing with school pressures (42%) and problems at home (50%) were reasons for using alcohol.

Figure 19: Reasons youth provided for others using alcohol among users and non-users



ALCOHOL AT PUBLIC EVENTS

The YDS asked youth specifically about use of alcohol at concerts or festivals as well as at sporting events. Of youth who reported using alcohol in the past 30 days, 29.8% had used alcohol at a concert or festival sometime in the past and 15.8% had used alcohol at a professional sporting event sometime in the past. These rates indicate that **access through public events, particularly concerts or festivals may be an area of concern.**

EXAMINING FACTORS RELEATED TO ALCOHOL USE

There are a number of patterns that also emerge from the data with respect to the most salient risk and protective factors for e-cigarette use. Using multi-level logistic regression modeling techniques, the results in Figure 20 indicate the relative importance of risk and protective factors while controlling for known covariates and demographic factors like age, sex, race and ethnicity, and socioeconomic status (adult's education level). Controlling for other factors, the data suggest that perceived risk and parent and peer disapproval are clear protective factors against use, while access and parental use are a primary risk factors for use.

Figure 20: Risk and protective factors for alcohol use

Parental Use: Youth who reported that their parents used alcohol in front of them were twice as likely to report using themselves



Parental Disapproval: Youth who reported that their parents would say it is "wrong" or "very wrong" for them to drink alcohol 1-2 times daily are nearly 50% less likely to use them.



Perceived Risk: Youth were 40% less likely to drink alcohol if they thought that there was a "moderate" or "great" risk to drinking 1-2 times daily.



Peer Disapproval: Youth were 40% less likely to drink alcohol if they thought that their friends would think it was "wrong" or "very wrong" if they drank 1-2 times daily.



Access: Youth who report that it is "fairly easy" or "very easy" to access alcohol are nearly 4X as likely to drink.



PRESCRIPTION DRUGS

Increasing attention has been given to the rise of prescription drug use and its relationship to the opioid epidemic. The YDS asked youth to report their own use as well as attitudes and behaviors toward prescription drug misuse. Results indicate that roughly 1 in 4 youth have a medication prescription, while 7.1% report using a prescription drug without a prescription, which is not a statistically significant increase from the 2020 report (6.9%).

25.2% have a prescription
7.1% have used prescription drugs without a prescription

For all prescription drug questions, each category of prescription drug was defined as follows:

A prescription drug is a medicine or drug that is dispensed legally from a pharmacy. Some examples of these drugs include pain medications (e.g. Hydrocodone, OxyContin, Vicodin), ADD/ADHD medications (e.g. Adderall, Ritalin), steroids (e.g. Cortisone, Prednisolone, Androstenedione), Benzodiazepines or "Benzos" (e.g. Valium, Xanax), and antidepressants (e.g. Zoloft, Prozac, Celexa, Lexapro).

30-DAY USE OF RX DRUGS WITHOUT A PRESCRIPTION

Table 6 presents 30-day youth use of prescription drugs without a prescription, including pain and ADD/ADHD medications. There was a statistically significant ($p < .001$) difference in use rates between middle school (8.1%) and high school youth (4.8%),

Table 6: 30-day use of prescription drugs without a prescription, by school type

Question: How often in the past 30 days have you used prescription drug without a prescription?				
	Never Used	Used, but not in the past 30 days	2020: Used in the past 30 days	2022: Used in the past 30 days
Middle School	83.2%	8.1%	8.7%	8.6%
High School	84.8%	9.6%	4.8%	5.6%
All Respondents	84.1%	8.9%	6.9%	7.1%

TYPES OF RX DRUGS

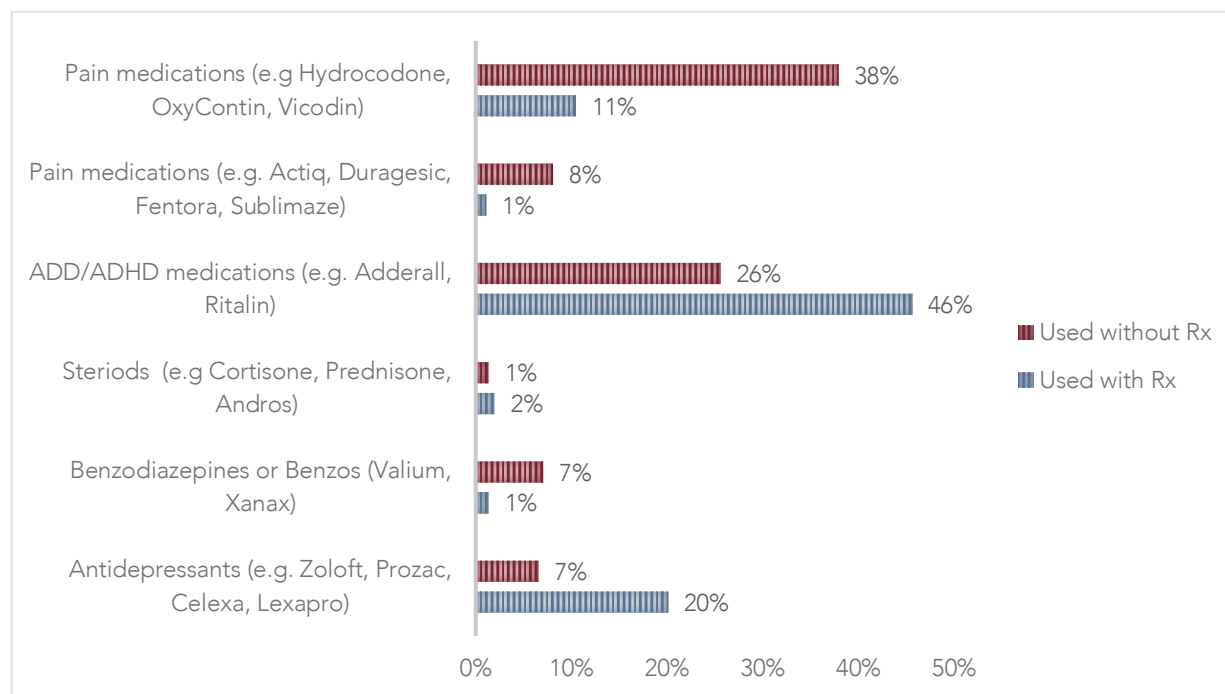
The YDS also asked both youth using prescription medications with a prescription and those using prescription medications without a prescription to report on the types of medications they use (Figure 21). Of note, **11% of youth using a prescription medication had a prescribed pain**

medication, and 38% of youth were using prescription medications without a prescription were using prescription pain medications. These results indicate that youth are using prescription pain medications without a prescription at higher rates relative to other medications.

A slightly different pattern emerged with ADD/ADHD medications and antidepressants. 46% of youth had a prescription for an ADD/ADHD medication, and 26% of youth who used prescription drugs without a prescription were using an ADD/ADHD medication. These results indicate that ADD/ADHD medications are prescribed to youth at higher rates relative to other medications. Additionally, the pattern of 20% and 7%, respectively, emerged for antidepressants.

These results suggest that youth who are using prescription drugs without a prescription are primarily taking either pain medications like Hydrocodone, OxyContin, and Vicodin, or ADD/ADHD medications like Adderall and Ritalin.

Figure 21: Youth self-report of drug type among youth using prescription drugs with and without a prescription



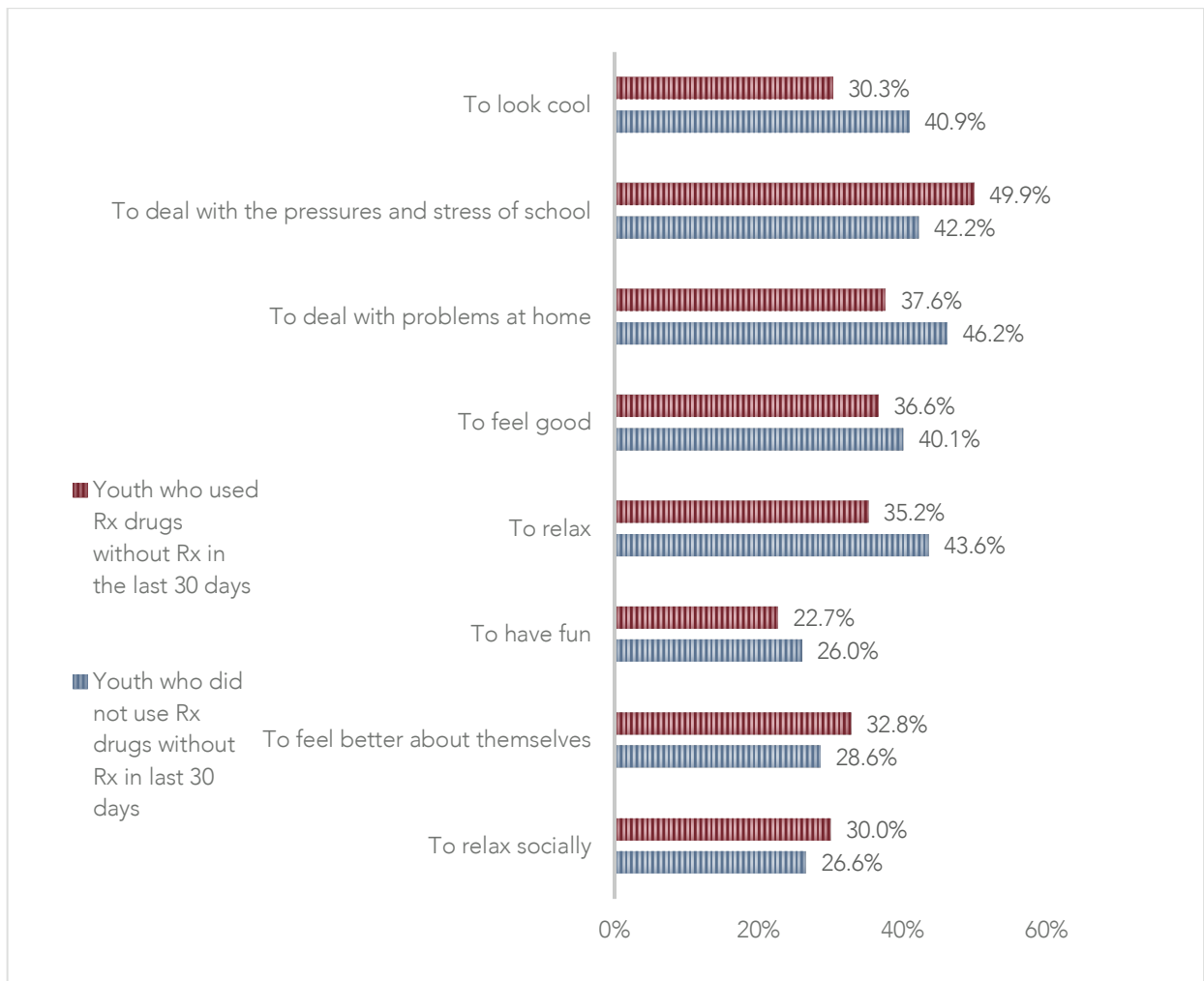
In addition to use, the survey asked questions related to misuse and sharing of prescription drugs. Of youth using these types of prescription drugs with or without a prescription, only 4.6% report having sold their medication to others. **However, 31.0% of youth who are using prescription drugs with or without a prescription report having taken more than prescribed.** Of this group, over half (55.4%) reported taking pain medications like Hydrocodone, OxyContin, and Vicodin more than prescribed.

USE OF PRESCRIPTION DRUGS: ACCESS, AND USE PATTERNS

Regarding access, most youth obtained prescription drugs from their parents (51.2%), followed by taking it from home (11.7%), buying it from a store (11.1%), receiving it from a friend (9.9%), or another place (8.0%). Most youth reported using it at home with a parent (65.6%) or at home alone (13.4%).

PERCEPTIONS ON WHY YOUTH USE RX DRUGS WITHOUT A RX

Youth in the YDS were asked to report on the reasons they use prescription drugs without a prescription, how they access these substances, and where they use them. **The top two reasons for that were identified by youth using prescription drugs without a prescription were “to deal with the pressures and stress of school” (49.9%) and “to deal with problems at home” (37.6%)**



EXAMINING FACTORS RELATED TO RX DRUG USE

Using multi-level logistic regression modeling techniques, the results in Figure 22 indicate the relative importance of risk and protective factors for prescription drug use without a prescription while controlling for known covariates and demographic factors like age, sex, race and ethnicity, and socioeconomic status (adult's education level).

Controlling for other factors, the data suggest that parent and peer disapproval are clear protective factors against use, while access is a primary risk factor for use. Contrary to other models in this report, youth perception of risk did not emerge as a protective factor after controlling for other covariates.

Figure 22: Risk and protective factors for alcohol use

Parental Disapproval: Youth who reported that their parents would say it is "wrong" or "very wrong" for them to use rx drugs without an rx are 60% less likely to use them.



Peer Disapproval: Youth were 50% less likely to use rx drugs without an rx if they thought that their friends would think it was "wrong" or "very wrong" if they used them.



Access: Youth who report that it is "fairly easy" or "very easy" to access rx drugs without an rx are nearly 3X as likely to use them.



MARIJUANA

30-DAY MARIJUANA USE

Table 7 presents the results for past 30-day marijuana use for middle school, high school, and all youth. Among all respondents, 9.1% reported using marijuana in the past 30 days. While this is higher than the amount reported in 2020, caution is encouraged as data collection in 2020 suggested that counts for 30-day substance use, especially for marijuana, may have been undercounted. **Nearly 1 in 4 high school youth have used marijuana in their lifetime.**

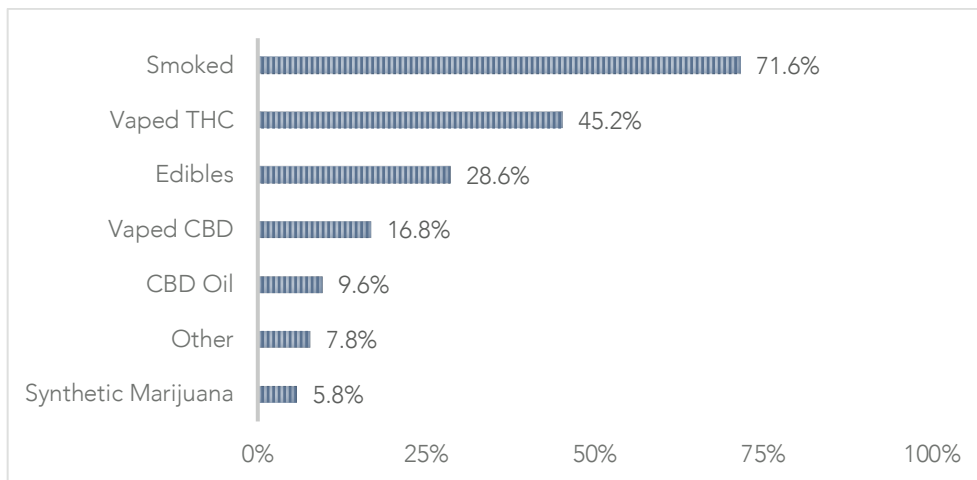
Table 7: Marijuana 30-day use, by school type

Question: How often in the past 30 days have you used marijuana (weed, pot, grass)?				
	Never Used	No times in the past 30 days	2020: Used in the past 30 days	2022: Used in the past 30 days
Middle School	93.5%	3.5%	3.6%	3.1%
High School	75.4%	9.4%	7.1%	15.2%
All Respondents	84.5%	6.4%	5.2%	9.1%

MARIJUANA USE TYPE

Youth were asked to report on the types of marijuana they used and had the option to select more than one type. Of youth who used marijuana in the past 30 days, the majority smoked it (71.6%), though roughly half (49%) reported using more than one form of marijuana. Vaped THC (45.2%) and edibles (28.6%) were the second to most common forms of using marijuana.

Figure 23: Marijuana use by type



ACCESS TO MARIJUANA AND USE LOCATIONS

Youth were asked to report how they access marijuana. Of those who reported ever using marijuana, 51.8% reported getting it from a friend, which was the primary source for youth. Smaller groups of youth reported accessing marijuana through other means.

Youth also reported on where they used marijuana the last time they used it. The primary use locations included at a friend's house (25.4%), at home alone (16.0%), at home with friends (13.1%), at a party (11.4%), at home with parents (11.0%), and in a car (9.3%).

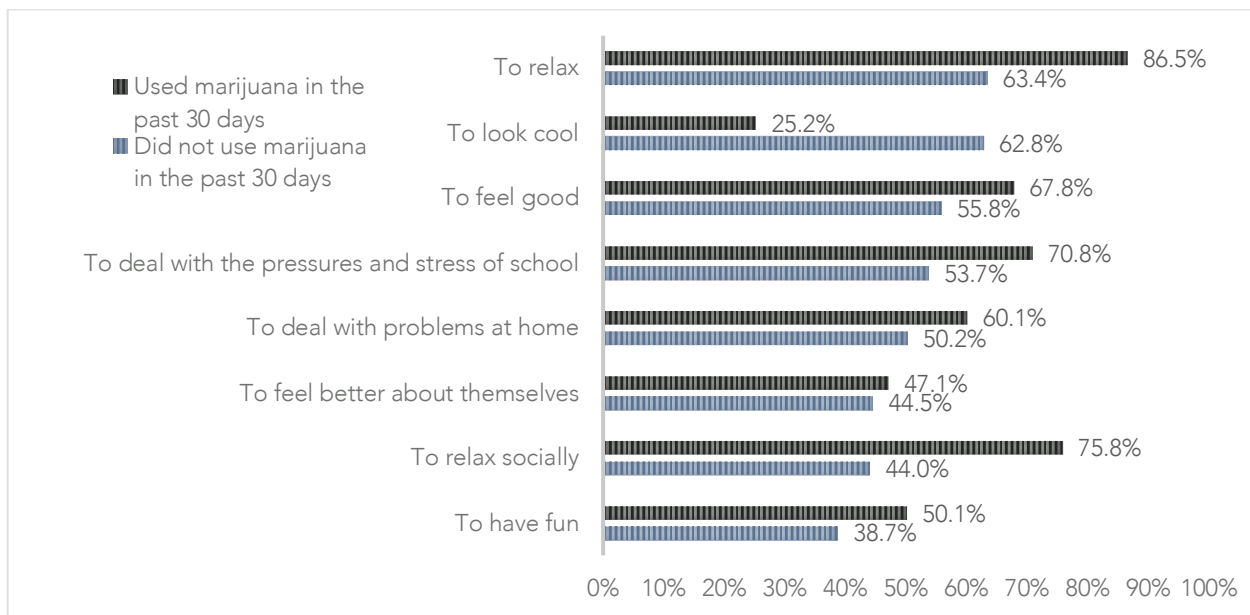
MARIJUANA USE IN THE HOME

A relationship was found between the use of marijuana in the home by others and an individual youth's use of marijuana. **Approximately 43.6% of youth who reported using marijuana in the past 30 days also reported that there was someone above or below 18 years of age also using marijuana in the home.** Taken together, these findings suggest a strong relationship between home use by others (parents, siblings, and others) and a youth's decision to use marijuana.

WHY MARIJUANA IS USED

Figure 24 presents self-reported results of youth sharing why they believe others use marijuana, separated between users and non-users. Among those who use marijuana, the top cited reasons were to relax (86.5%), to relax socially (75.8%), and to deal with the pressures and stress of school (70.8%). Non-users placed a higher emphasis on the social benefits of marijuana use, citing "to look cool" (62.8%) as one of the reasons youth use marijuana.

Figure 24: Reasons youth provided for others using marijuana



EXAMINING FACTORS RELATED TO MARIJUANA USE

Using multi-level logistic regression modeling techniques, the results in Figure 25 indicate the relative importance of risk and protective factors for marijuana use while controlling for known covariates and demographic factors like age, sex, race and ethnicity, and socioeconomic status (adult's education level).

Controlling for other factors, the data suggest that perceived risk along with parent and peer disapproval are clear protective factors against use, while access is a primary risk factor for use. In addition, use in the home by another individual was a clear risk factor for marijuana use.

Figure 25: Risk and protective factors for alcohol

Parental Disapproval: Youth who reported that their parents would say it is "wrong" or "very wrong" for them to use marijuana are nearly 70% less likely to use it.



Use in the Home: Youth who report that someone over or under 18 years of age are using marijuana are nearly 5 times as likely to use it themselves.



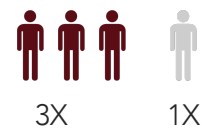
Perceived Risk: Youth were 70% less likely to use marijuana if they thought that there was a "moderate" or "great" risk to using it.



Peer Disapproval: Youth were 80% less likely to use marijuana if they thought that their friends would think it was "wrong" or "very wrong" if they used it.



Access: Youth who report that it is "fairly easy" or "very easy" to access marijuana are nearly 3X as likely to use.



OTHER SUBSTANCE USE

The 2022 YDS also collected data on other drug use. Table 8 presents the results of these findings, including the use rates and the median age of onset for each substance. Alcoholic energy drinks were the most frequently used substance, with other substances used by fewer than 2.5% of youth.

Table 8: Substance use frequency and median age of onset for other substances

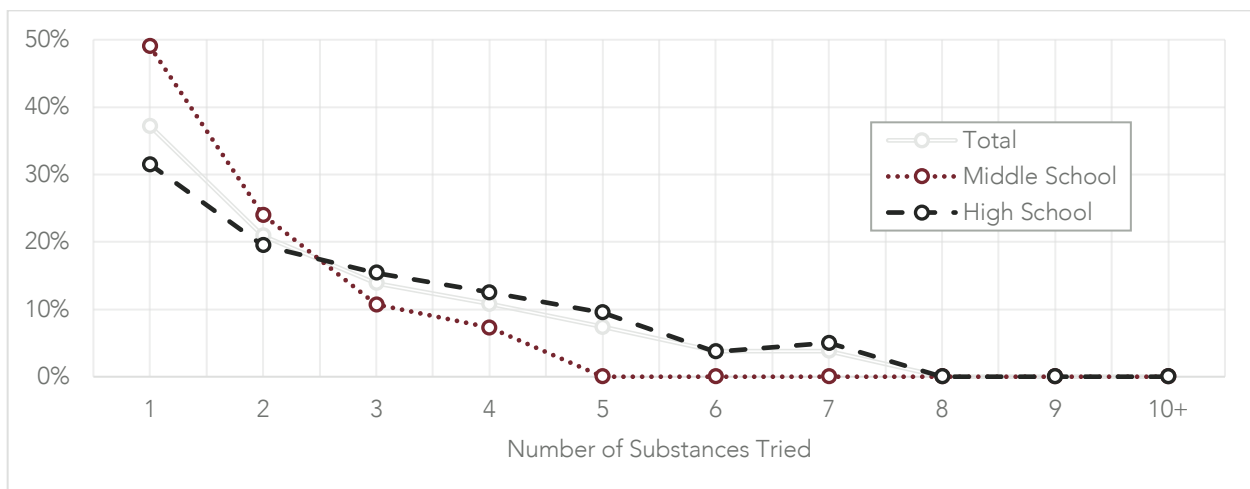
	Median age of Onset	2020: % Used in the past 30 days	2022: % Used in the past 30 days
Cocaine (powder, crack, freebase)	15	*	0.7%
Methamphetamines (speed, crystal, meth, crank, chalk, ice)	*	*	*
Synthetic Marijuana (K2, Spice, fake weed, King Kong, Yucatan Fire, Skunk, Moon rocks)	14	0.7%	1.2%
Inhalants (glue, paints or sprays, aerosol spray cans)	12	2.2%	2.5%
Alcoholic Energy Drinks (Four Loco, Tilt)	15	3.2%	6.5%
Hallucinogens (LSD, salvia, mushrooms, Acid, tabs)	16	2.2%	1.6%
Heroin (smack, junk, China White)	*	*	*
Ecstasy (Molly, E, X, MDMA)	15	0.7%	0.8%

*Cell sizes with low responses omitted

TRYING MULTIPLE SUBSTANCES

Figure 26 presents data for how many substances youth who use report having tried. Each respondent was offered 15 substances to choose from, with tobacco products making up 5 different options (e.g. combustible cigarette, e-cigarette, dip/chew, etc.). The majority of all users have only tried one or two substances.

Figure 26: Number of substances tried by total, middle, and high school youth

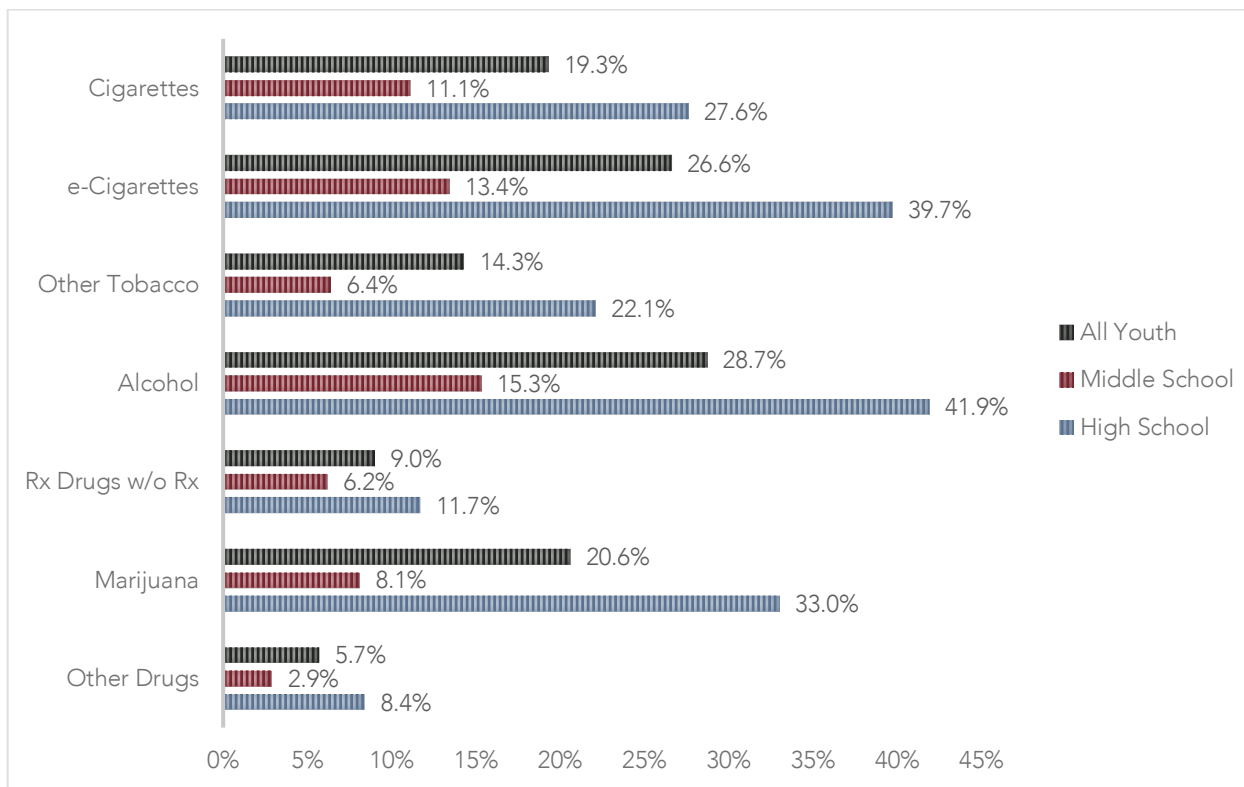


YOUTH BEHAVIORS AND PERCEPTIONS

ACCESS

Figure 27 presents how youth perceive ease of access to six substances, separated by middle and high school grade levels. Alcohol (28.7%), e-cigarettes (26.6%), and marijuana (20.6%) emerged as the substances that youth report as easiest to obtain. The next easiest to access were cigarettes and other tobacco. The more difficult substances for youth to access were prescription medications without a prescription and other drugs.

Figure 27: Percent of youth who report access as "fairly easy" or "very easy"

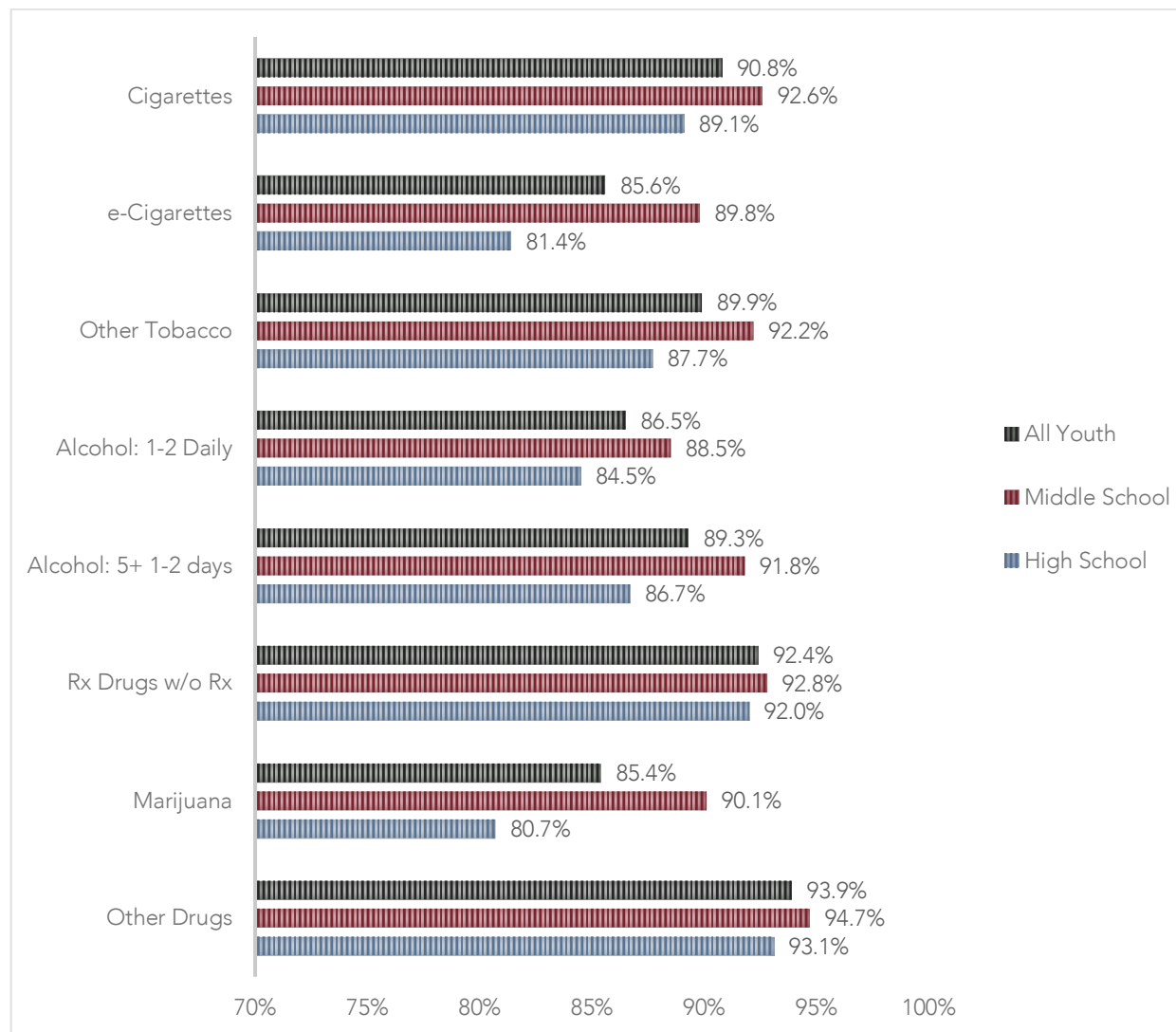


PARENT DISAPPROVAL

Youth in the survey were asked to report on their parents' level of disapproval, responding to the question "How wrong do your parents feel it would be for you to use [substance]", with response choices "not at all wrong", "a little bit wrong", "wrong", or "very wrong". Figure 28 presents rates of parental disapproval for each substance, measured as those who reported that their parents would say that is "wrong" or "very wrong" to use, separated between middle and high school youth. Across substances, the strong majority of youth (more than 4 in 5) reported consistently that their parents would disapprove of their use of substances.

However, rates do vary by substance. For example, among high school youth, 80.7% reported that their parents would disapprove of their use of marijuana and 81.4% that they would disapprove of e-cigarette use, each at rates lower than other substances.

Figure 28: Percentage of youth who say their parents would say it is "wrong" or "very wrong" to use the substance

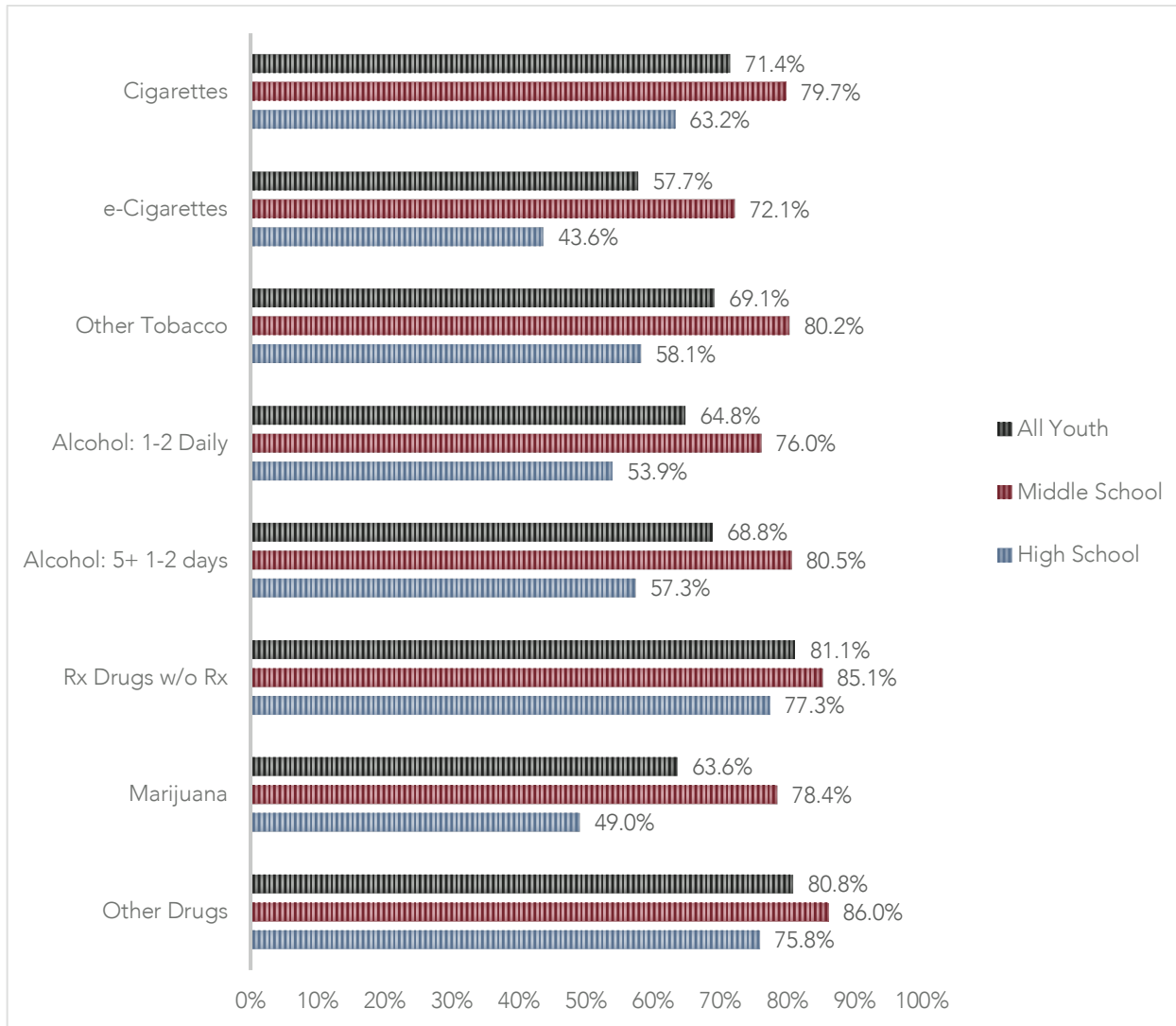


PEER DISAPPROVAL

Youth were also asked to report on how they viewed their peer's perception of their own use of various substances. Youth were asked how wrong their friends would feel it would be for them to use each substance. Figure 28 presents the percentage of youth who indicated that it would be "wrong" or "very wrong" to use the substance as described.

Between 3 of 4 and 4 of 5 middle school youth reported that their friends would have found it “wrong” or “very wrong” for them to use most substances. There was greater variance, however, among high school youth. In particular, only 43.6% of high school youth reported that their friends would think it was “wrong” or “very wrong” for them to use e-cigarettes, a sharp decrease from 75.3% reported in the 2020 YDS.

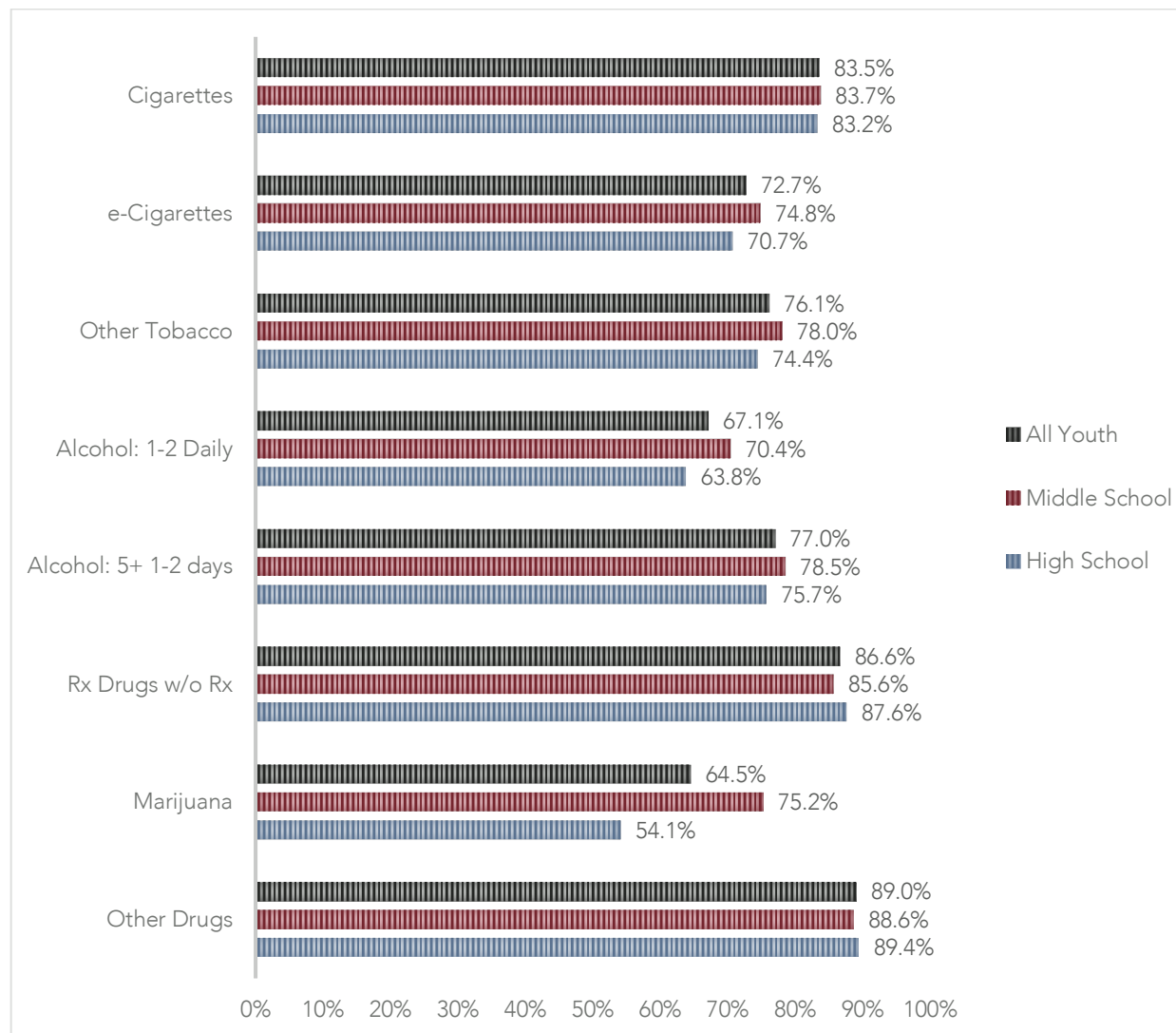
Figure 29: Percentage of youth who say their peers would say it is “wrong” or “very wrong” to use the substance



PERCIEVED RISK

Youth were asked to report on their own perceptions of substance use risk. Figure 30 summarizes these responses, including the percentage of youth who reported that there was “moderate” or “great” risk to using each of the substances. Perception of risk for marijuana was lower than other substances – only 54.1% of high school youth indicated that there was “moderate” or “great” risk to using marijuana.

Figure 30: Percentage of youth who say there is a moderate” or “great” risk to using the substance



PERCEPTIONS OF USE

Figure 30 presents youth perceptions of their peers’ use – the number of youth reporting that “several”, “many”, or “all of” their peers used the listed substance. High school youth perceived e-cigarettes (35.2%), alcohol (33.8%), and marijuana (32.8%) to be the top substances used by peers in their network. However, the majority of youth report that only “a few” or “none” of the friends in their network are using across all substances.

Figure 31: Percentage of youth who say "several", "many", or "all of" their peers are using the substance

