Biennial Report of

The Wood County Youth Survey

2022

The Wood County ADAMHS Board
The Wood County Educational Service Center
The Wood County Prevention Coalition

Featuring

- **Prevalence rates for alcohol and other drugs**
- **Perceived harm, risk, and disapproval rates**
- **Bullying**
- **Characteristics of users and non-users**
- **Gambling & Gaming**
- **Mental Health**
- **Adverse Childhood Experiences**

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WOOD COUNTY EDUCATIONAL SERVICE CENTER

Wood County ADAMHS
Promoting Community Wellbeing

WOOD COUNTY PREVENTION COALITION
Uniting for a drug free community since 2004

ATOD PREVALANCE

GRADES 7-12 (combined) – 2020-2022

47.7%	Caffeinated Energy	↑
18.4%	Alcohol	↓
11.7%	Vaping (30-day)	↓
8.6%	Marijuana	↓
7.0%	Cough Medicine	↓
5.6%	Barbiturates/Benzos	↓
4.3%	Painkillers (30-day)	↑
2.5%	Methylphenidate	↑
1.9%	Inhalants	↓
1.2%	LSD	↓
0.9%	Cigarettes	↓
<1%	Ecstasy/MDMA	↓
<1%	Cocaine	↓
<1%	Methamphetamines	↓
<1%	Heroin	↓

Acknowledgements

The Wood County Alcohol, Drug Addiction, and Mental Health Services Board (ADAMHS) Youth Survey reflects eighteen years of countywide collaboration that has kept health and safety issues for children and adolescents at the forefront of our community agenda. The Wood County ADAMHS Board would like to thank the people and organizations that helped with the collection of the data.

For their generous contributions of time, effort, and support, the ADAMHS Board is grateful to the school superintendents and principals who collaborated with this project in their school systems. We also convey our appreciation to the teachers, school staff members, and students who made the actual administration of the survey possible. We acknowledge Mark North and Kyle Clark at the Wood County Educational Service Center, Greg VanVorhis, and the Prevention Specialists for their assistance in the implementation and collection of the survey data in their districts. We also thank Laurie White, Information Technology Services at Owens Community College, for her assistance in preparing the data. Finally, the Wood County ADAMHS Board expresses our deepest appreciation to the report author, Dr. William Ivoska, for his sustained interest and commitment to this project.

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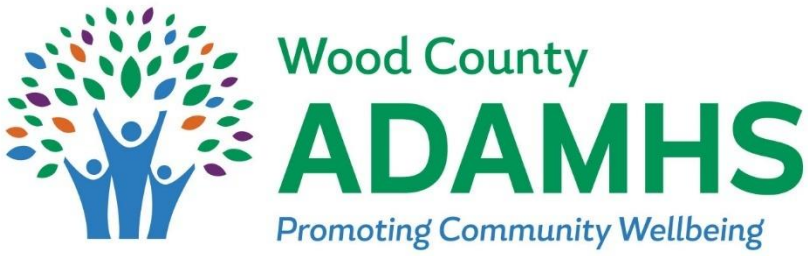
The Wood County Alcohol, Drug Addiction, and Mental Health Services Board



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INTRODUCTION

In 2004, with funding from the Ohio Department of Alcohol and Drug Addiction Services (ODADAS), the Wood County Educational Service Center and the Wood County Alcohol, Drug Addiction and Mental Health Services Board invited survey researchers the opportunity to gather data on alcohol, tobacco, and other drug use from Wood County adolescents. In 2008, the Ohio Scales were added to assess the mental health of Wood County youth and to demonstrate the relationship between mental health and underage substance use. In 2016 questions were added to assess the type and frequency of adolescent gambling activities, including a measure of disordered gambling. In 2018 ten questions from the Adolescent Childhood Experience (ACEs) study were added. In 2020, we added the 9 item Internet Gaming Disorder Scale (short form) (IGDS9-SF) (Pontes & Griffiths, 2015), and in 2022 we expanded questions about gaming to include a shorter Gaming Disorder Test (GDT) (Pontes, et al., 20190, Loot Box questions (Brooks & Clark, 2019), and the Preference for a Virtual Life Scale (Lie & Peng, 2009).

Survey results have been utilized for several purposes. First, the survey provides a consistent method to follow the trends in adolescent alcohol, tobacco and other drug use in Wood County. Second, Wood County school officials have integrated results into the drug use prevention components of school curriculum. As such, the results serve as a summative measure of the effectiveness of current prevention and intervention efforts in the county. Third, Wood County officials have used this data for program planning and other collaborative community ventures designed to decrease drug and alcohol use and improve adolescent mental health and childhood experiences. Finally, the results have been used in requesting federal and state grant money where demonstration of need is part of the requirements.

In October and November, 2019, data was gathered on adolescents in all public-school districts in Wood County, including: Bowling Green, Eastwood, Elmwood, Lake, North Baltimore, Northwood, Otsego, Penta Career Center, Perrysburg, and Rossford. The Wood County public schools are the only schools included in this report as they represent the original 2004 cohort group of schools. All school districts will receive individual reports of the substance use trends reported by the youth in their school districts.

EXECUTIVE SUMMARY, 2022

This summary highlights the results of a survey originally sponsored by the Safe Schools, Healthy Students Initiative (SSHS), the Wood County Educational Service Center and the Alcohol, Drug Addiction and Mental Health Services (ADAMHS) Board of Wood County.

The 2022 survey was collected from a total of 9,359 students (7050 among 7th through 12th graders: 2309 among 5th and 6th graders) in grades five through twelve in Wood County in October and November, 2021. The total N is 8.2% smaller than the 2020 population as COVID protocols and post-secondary enrollment options reduced the student population. The results in this report do not include Penta Career Center so that local results can be compared to national results (national studies do not include career centers). Results of this year's findings are summarized below.

Among school aged adolescents in Wood County, drug use declined during the pandemic time period (2020 to 2022). This includes the use of nicotine, alcohol, marijuana and all other illicit drugs.

Among school aged adolescents in grades 7th through 12th combined, the survey reported declines in the use of cigarettes, alcohol, marijuana cough medicine, benzodiazepines and inhalants. Already below 1%, all other illicit drug use declined, such as LSD, ecstasy, cocaine, methamphetamines, and heroin.

The only increases occurred in the use of caffeinated energy drinks, and small increases in the misuse of narcotic painkillers (in the past 30 days) and the misuse of ADHD type meds (methylphenidate).

Researchers and administrators at the Wood County Educational Service Center believe these declines are the unplanned side effects of the pandemic. Since many Wood County students were at home, they had less access to substances, were less likely to be influenced by their peers, and had increased parental supervision. They may even have had time to reflect upon the harm that comes from substance misuse.

The declines likely occurred as fewer teens had the opportunity to initiate or start drug use, while others discontinued or slowed their use. What is unknown is whether these declines will stick long term or be a simple aberration of the pandemic.

On the other hand, Wood County adolescents reported increases in mental health issues in 2020 and 2021. Teens reporting 'no problems' on the Problem Severity Index declined (54% to 48%), while teens reporting severe and intense mental health issues increased from 9.7 % (pre-pandemic) to 13.1 % in December 2021. Suicide ideation had the highest rates ever reported in the ADAMHS Youth Survey and suicide attempts were also high. Reports of bullying, especially among teens in grades 5 and 6 continue to trend upwards, especially for cyber and verbal bullying. Teens also reported the highest rates of adverse childhood experiences since we began collecting them in 2018. These include living with a family member experiencing mental illness (26.6%), experiencing substance abuse (17.7%) or who was incarcerated (19.1%). Teens also reported higher rates of emotional neglect (21.7%) and emotional abuse (22.8%).

Youth reported an increase in gambling and gaming activity during the pandemic. Most youth report gaming with 5th and 6th graders reporting the highest rates (40% report gaming 2 hours or more every day). Gaming activity is any gaming-related activity that has been played either from a computer/laptop, from a gaming console, or from any other kind of device (phone, tablet) on or offline. While gaming activity increased significantly, fewer than 2 % report problem or disordered gaming. Youth gambling activities also increased, and, unlike problematic gaming, Wood County youth reported a significant increase in problematic or disordered gambling. The highest rates of gambling activity and of problematic gambling was reported by males in grades 11 and 12.

The following paragraphs provide a few summary details.

Nicotine. Nicotine use among Wood County youth is derived primarily from vaping nicotine cartridges. Since 2016, in Wood County, vaping nicotine increased among 12th graders from 14 % to 21.3 %, an increase of 52 %. The national study reported similar increases for the same time period. Meanwhile, cigarette use among seniors declined from 6.1 % to 1.7 % for the same time period; similarly, smokeless tobacco decreased from 5.4 to 2.1 %. Peer disapproval of cigarette smoking, a lack of access to cigarettes (from laws to the cost of cigarettes), and a fear of physical harm from smoking continue to influence the decline in cigarette smoking.

Among those teens who vape nicotine, 53 % said they were motivated by a need to relax or relieve tension. Other reasons were to get the buzz (46%), to experiment (29%), from boredom (22%), or for a good time with friends (21%). Another 13.5 % of teens reported because they are 'hooked.' Those 13.5 % of teens already reporting a nicotine dependence is of great concern for parents, public health officials, and prevention advocates.

Alcohol. Monthly use was reported by 8th, 10th and 12th grade as 4.2, 12.1, and 21.3 %, which are decreases of 47, 26, and 22 % respectively over 2020 rates. The national study (2021) reported the same three grades at 7.3, 13.1, and 25.8 % (respectively), and these rates were also in significantly decline. Wood County youth were lower than the national average for monthly alcohol use in these three grades.

Marijuana. Monthly use also decreased from 2020 to 2022. Rates were reported by 8th, 10th and 12th grade Wood County teens at 2.5, 6.6, and 12.9 %, whereas the national study reported the same three grades at 4.1, 10.1, and 19.5 %, respectively (nationally, grades 8, 10, and 12 decreased during the same two-year time period where Wood County rates also decreased). Wood County youth report lower monthly use than national average in all grades.

As we noted with vaping, researchers and administrators at the Wood County Educational Service Center believe these declines are the unplanned side effects of the pandemic. Since many Wood County students were at home, they had less access to substances, were less likely to be influenced by their peers, and had increased parental supervision. They may even have had time to reflect upon the harm that comes from substance misuse.

While during the pandemic there was a decline in overall marijuana use, the one exception was the use of marijuana edibles which increased at all grade levels, and from 7.7 to 16.9 % and 12th graders.

Inhalants In the 2022 survey administration, the prevalence of inhalants increased slightly in grades 7, 11 and 12, but decreased in grades 5, 6, and 8 through 10. Interestingly, the national study also reported an increase in inhalant use among 12th graders. Wood County rates are higher than national averages.

MDMA/Ecstasy. In 2022, Wood County youth reported decreases in most grade levels. The University of Michigan (December, 2021) reported significant decreases in grades 8 (.6%), 10 (.7%), and 12 (1.1%). Wood County rates for ecstasy use are consistently lower than those reported nationally.

Stimulants. The misuse of Ritalin®, Concerta® and amphetamine preparations like Adderall declined in most grades and are at among the lowest levels ever reported in Wood County. Slight increases were reported in grades 7 and 9. National rates were also in decline.

LSD. Wood County rates of LSD use were down in most grades except where minor increases were reported. These Wood County changes may suggest the need for greater attention to the dangers of LSD use by our media messages and by in-school prevention programs in Wood County.

Narcotic Painkillers. The annual use of narcotic painkillers, as reported by Wood County youth has shown considerable decline in nearly all grade levels over 2004. The decline among 11th graders from 22.2 % in 2004 to 2.9 % in 2022 represents an 87 % decrease, which translates to over 600 fewer 7 through 12th graders using narcotic painkillers in 2022 compared to 2004. Nearly all grades have decreased since 2010.

However, in Wood County, the monthly use of narcotic painkillers increased in most all grade levels except 11, and appears to be trending upwards slightly since 2018.

Cocaine. The declines in the use of cocaine first observed in the 2010 survey show continued decline. Since 2004 it declined in nearly all grades. Cocaine prevalence is at the lowest levels seen in Wood County, with only 1.3 % of seniors reporting annual use.

Cough Medicine. Among all teens, the rates of cough and cold medicine among Wood County 7 through 12th grade is mixed, with increases reported in grades 7, 9, and 11, but decreases in grades 8, 10, and 12. The aggregate prevalence rate of 7.0 % in 2022 is slightly lower than the 2020 rate.

Caffeinated Energy Drinks. Energy drink prevalence has been trending upwards in all grades since 2016. Prevalence among 12th graders is nearly 55 %.

Heroin. The rates of heroin use, among Wood County youth, are less than one % in all grades levels, with insignificant decreases by grade level. A total of 18 teens reported some use in 2022.

Sleep and Anxiety Medications. The use of barbiturates and benzodiazepine declined in grades 7 and 9, but increased in grades 8, 10, 11, and 12. Females report higher misuse than males, with the highest use occurring among 7th grade females at 9.6 %.

The Botvin LifeSkills Training program. By June 2021, approximately 41,672 Wood County youth received LifeSkills Training. Due to the comprehensive saturation of training, there are no comparison groups for analysis. In the past, those teens who received school-based LifeSkills Training, or other research-based prevention training programs reported lower rates of substance use among a broad range of substances.

Mental Health. Wood County adolescents reported increases in mental health issues during the pandemic. Teens reporting 'no problems' on the Problem Severity Index declined (54 to 48 %), while teens reporting severe and intense mental health issues increased from 9.7 % (pre-pandemic) to 13.1 % in December 2021.

A strong positive relationship exists between problem severity (as measured by the Ohio Scales) and substance use. That is, the more teens indicate that they experience internal or external distress, the more likely they are using alcohol, tobacco, and other drugs. Mental Health was assessed using a Problem Severity Scale with the following results:

- 13.1% of Wood County youth report significant mental health problems, an increase of 4.2 % over 2020's rate of 9.9 %.
- 17.3% of Wood County youth report "moderate" mental health problems, an increase of about 1.5 % over 2020.
- Youth who report more mental health problems are more likely to engage in substance use across a broad variety of substance, are much more likely to think about suicide or attempt suicide, and report a greater frequency of being victims of bullying than those youth were reported no mental health problem.

Bullying. All forms of bullying have been trending upwards in grades 5 and 6 since 2014. Cyber and verbal bullying increased the most during the pandemic. All other grades reported insignificant changes over 2020.

- Victims of bullying are more likely to report substance use.
- Victims of bullying are more likely to report moderate, severe, or intense mental health issues than non-victims.
- Victims of bullying are more likely to think about or attempt suicide.

Adverse Childhood Experiences (ACEs). According to SAMHSA, adverse childhood experiences (ACEs) are stressful or traumatic events, including abuse and neglect and household dysfunction. ACEs are strongly related to the development and prevalence of a wide range of health problems including risky health behaviors, chronic health conditions, low life potential, and early death. Approximately 7,050 Wood County adolescents from grades 7 through 12 completed the ACEs survey in October and November, 2021.

During the pandemic, teens reported the highest rates of adverse childhood experiences since we began collecting them in 2018. These include living with a family member experiencing mental illness (26.6%), experiencing substance abuse (17.7%) or who was incarcerated (19.1%). Teens also reported higher rates of emotional neglect (21.7%) and emotional abuse (22.8%).

Disordered Gaming and Gambling. In 2022, the prevalence rate of disordered gambling increased to 6.7 % from 2020's rate of 2.7 % among 7 through 12th graders as measured by the NODS-Clip brief scale. The prevalence of daily and weekly gambling activities reported by teens

increased in 2022, but varies by type of gambling activity and by gender. For example, 17.8 % of all youth reportedly bet on sports teams, and 6 % bet on daily fantasy sports games, such as FanDuel and DraftKings. However, those rates jump to 20.3 % and 9.6 % respectively among males.

The most prevalent types of gambling activities among Wood County adolescents are betting money on sports: sports teams (pro, college, or amateur), on fantasy sports or games with an entry fee to play, on daily fantasy sports such as FanDuel or DraftKings, or on betting money on games of personal skill. The second highest level of prevalence occurs in Ohio Lottery games such as purchasing Ohio Lottery tickets or purchasing scratch off tickets.

In 2022 we asked youth about their gaming activities and we used the Gaming Disorder Test (GDT) as a measure of gaming disorder. Approximately 50 % of 6th graders reported gaming every day last year, with 40 % gaming 2 hours or more per day. Disordered gaming was relatively low, ranging from .3 % among 5th graders to 1.9 % among 11th graders.

STUDY DESIGN AND METHODS

This is a report on the 2022 ADAMHS Board/Wood County Educational Service Center Survey on Alcohol and Other Drug Use among elementary, junior high, and high school adolescents in Wood County, Ohio. It is the eighth biennial report of a series that began in 2004.

The 2022 survey was collected from a total of 9,359 students (7050 among 7 through 12 graders: 2309 among 5th and 6th graders) in grades five through twelve in Wood County in October and November, 2021. The total N is 8.2% smaller than the 2020 population as COVID protocols and post-secondary enrollment options reduced the student population. Males comprised 49.8 % (N=4429) of the population; females comprised 46.4 % (N=4137); and, other comprised 3.8 % (N=334). An additional 327 students either did not answer or the scanner did not read the answer. Grade differences were as follows:

Grade	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Total	1098	1187	1138	1065	1110	1120	1243	918

Students were asked to assign themselves to one of eight racial/ethnic groups. Students described themselves as White (81%), Black or African American (3.7%), Latino (4.9%), Multicultural (3.6%), Asian (2.2%) or other (4.6% - combines choice of Pacific Islander, Middle Eastern, Native American, and Other).

Students who reported using a fake drug were excluded from the analysis (n=70). Students who reported using all drugs at all times in the maximum amounts were excluded from the survey (n=70). Those students who provided responses to items that were inconsistent (for example, a student may have reported to have used a substance during the past month, but not during the past year) were also excluded from the analysis (n=24). Students who reported participating in all gambling activities on a daily basis were excluded (n=59). Students who did not complete at least 70 % of the survey were excluded (n=143). An additional 136 surveys were not scanned as students misused the scan (drew pictures on scan, made designs, wrote essays, created new categories, etc.). Finally, an additional 24 surveys were removed due to inconsistencies in reported vaping (on question 2 these students reported they'd never vaped, yet on question 29 they reported they did vape). A total of 9,359 surveys were collected and 425 surveys (4.5%) were excluded, leaving 9,342 surveys for analysis. It should be noted that duplication of exclusion factors oftentimes exists on the same survey (i.e. respondent will report use of the fake drug, report using all substances in excess, and be inconsistent in their reporting). Finally, Penta Career Center (1056) data is not included in the overall analysis, reducing the number of surveys in this report to 7,861. Penta is excluded so that survey results will more closely compare to the Monitoring the Future results, where career centers are not included in the analysis.

Substance use indicators were taken from the "Monitoring the Future" study by Johnston, O'Malley and Bachman (The University of Michigan's Institute for Social Research). Unless otherwise noted, all charts and figures report the "Percentage" of respondents. For example, in Figure 1, among 12th graders in 2012, 15.2 % of 12th graders reported that they smoked cigarettes in the past 30 days.

Nicotine has traditionally been found to be one of the three most commonly used substances reported by participants. Most nicotine is consumed in the form of smoking cigarettes or through a vaping device. Nicotine, the psychoactive ingredient in tobacco, has long been recognized as a gateway drug and is frequently one of the first drugs that young people experiment (Elders MJ1, Perry CL, Eriksen MP, Giovino GA, 1994). It is often predictive of later drug use.

Rise in Nicotine Use

Results from the 2022 survey reveal that nicotine prevalence through cigarette use continues to decline since data was first collected in 2004 and the changes in the past ten years represent the most dramatic declines reported in the life cycle of this survey. Cigarette use within the past 30 days was reported from less than .5 % from grades 5 through 8, 1.1 % among 10th graders, and 1.7 % among 12th graders. Similar declines in use were reported in the December, 2019 release of the University of Michigan's Monitoring the Future (MTF) report where cigarette use was reported by 1.1 % of 8th graders, 1.8 % of 10th graders, and 4.1 % of 12th graders.

While nicotine from cigarette use is down, nicotine from vaping is up; among 12th graders the 30-day prevalence for cigarettes is 1.7 %, while vaping nicotine is 18.1 % (down from 2020's rate of 22.3 %, but still a significant increase since 2018's rate of 10.5 %).

The reasons for the shift are due to access and attitude. The cigarette decline may be attributable to the higher costs of cigarettes, further limitations on where smoking is permitted, strong anti-smoking ad campaigns and easily available quit smoking campaigns. Peer disapproval for cigarette use is at an all-time high as well as the teen perception that cigarette smoking is harmful.

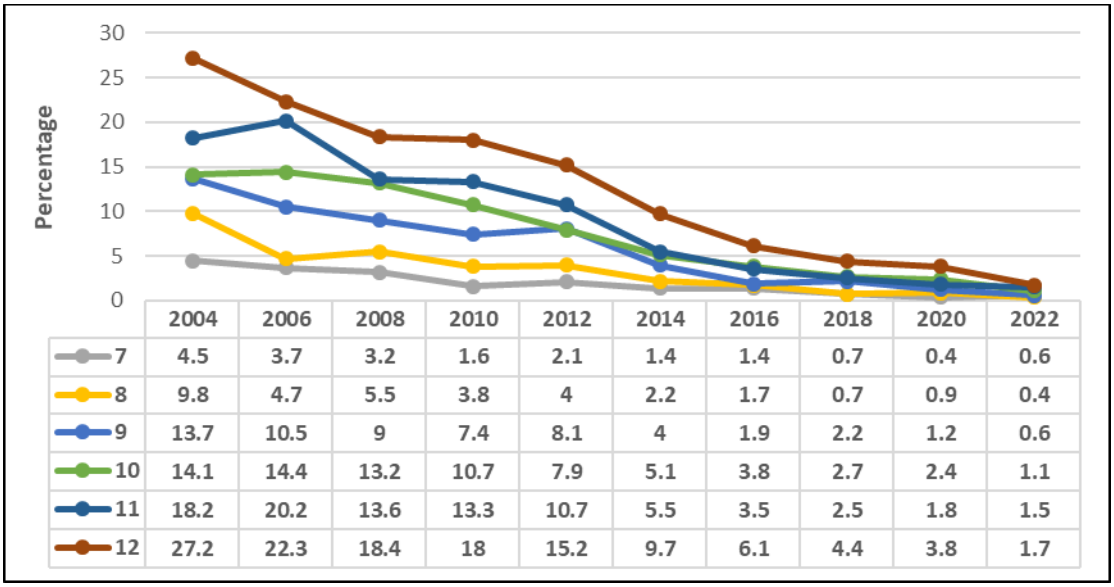
On the other hand, vaping is enjoying a honeymoon period of easy access and, until recently, advertising campaigns targeted towards youth. While this study did not measure attitudes towards vaping, the University of Michigan's Monitoring the Future study reports that teens attitudes favor vaping use. Vaping is perceived as safer and teen approval is higher than approval for cigarette use.

In sum, nicotine use is up. Among 12th graders, nicotine prevalence for vaping in 2022 (18.1%) is similar to the rate for cigarette use in 2008 (18.4%), thus threatening the prevention gains made over the past 14 years. While vaping rates dropped during the COVID pandemic, it is unclear whether the high level of vaping prevalence rate will remain at a high level of prevalence in future years. Perhaps the new vaping laws, designed to reduce accessibility among teens, may help to reduce the high prevalence rate.

In the following section, this report will look more closely at both cigarette and vaping prevalence.

Cigarette Use

Figure 1: 30-Day Prevalence Rate for Cigarette Use by Grade and Survey Year



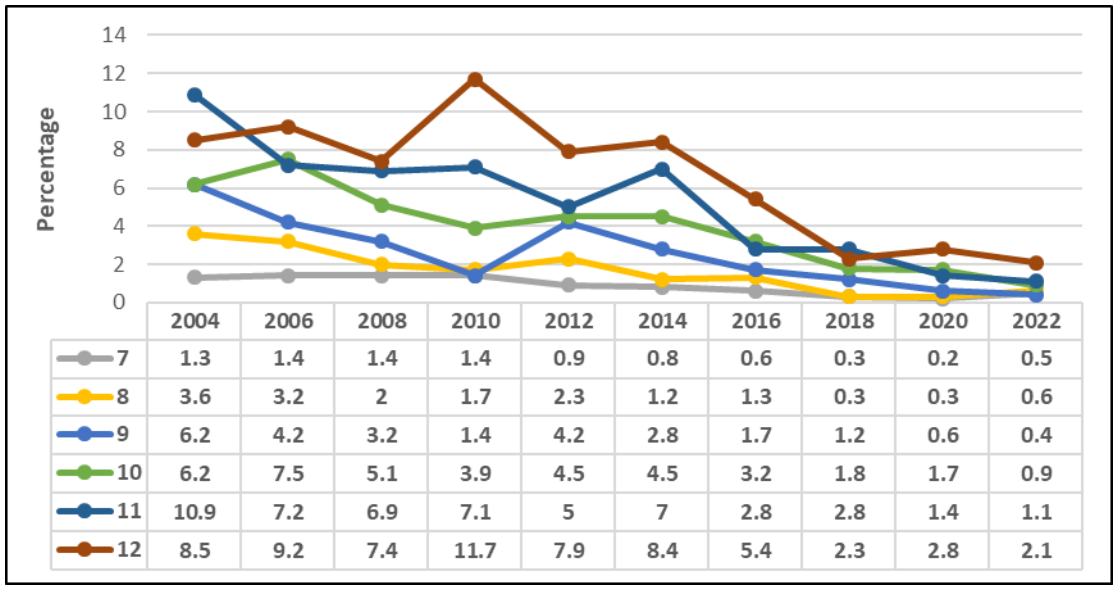
	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
7	4.5	3.7	3.2	1.6	2.1	1.4	1.4	0.7	0.4	0.6
8	9.8	4.7	5.5	3.8	4	2.2	1.7	0.7	0.9	0.4
9	13.7	10.5	9	7.4	8.1	4	1.9	2.2	1.2	0.6
10	14.1	14.4	13.2	10.7	7.9	5.1	3.8	2.7	2.4	1.1
11	18.2	20.2	13.6	13.3	10.7	5.5	3.5	2.5	1.8	1.5
12	27.2	22.3	18.4	18	15.2	9.7	6.1	4.4	3.8	1.7

The Percentage of cigarette smoking by frequency, by grade is presented below (2022).

		Grade					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Not at all	**2022**	99.4	99.6	99.4	98.9	98.5	98.3
< 1 per day	**2022**	.2	.2	.5	1.0	.9	.6
1-5 per day	**2022**	.2	.1	.1	.1	.4	.8
6-10 per day	**2022**	.1	0	.1	0	.1	.2
½ pack day	**2022**	0	0	0	0	0	.2
Pack day	**2022**	.1	.1	0	0	0	0

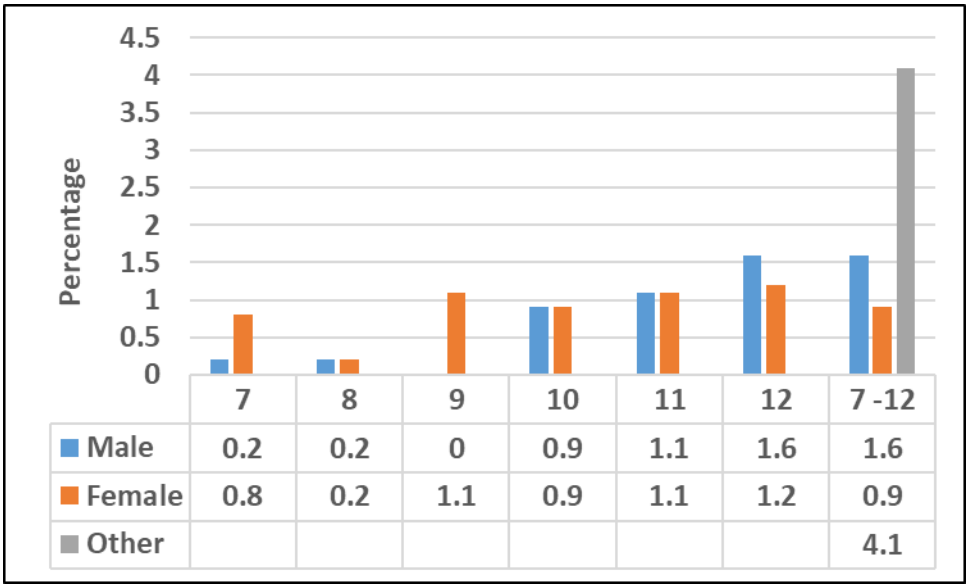
The use of smokeless tobacco had been declining in most grades from 2004 until a slight rebound occurred around 2008 and 2010. Since then, rates declined in grades 9 through 12. Thirty-day prevalence is down since 2004 in all grades. "Long-term increases in perceived risk and personal disapproval of smoking have accompanied these changes, as has a long-term drop in the perceived availability of cigarettes to these age groups" aid Lloyd Johnston (2017).

Figure 2: 30-Day Prevalence Rate for Smokeless Tobacco Use by Grade and Survey Year



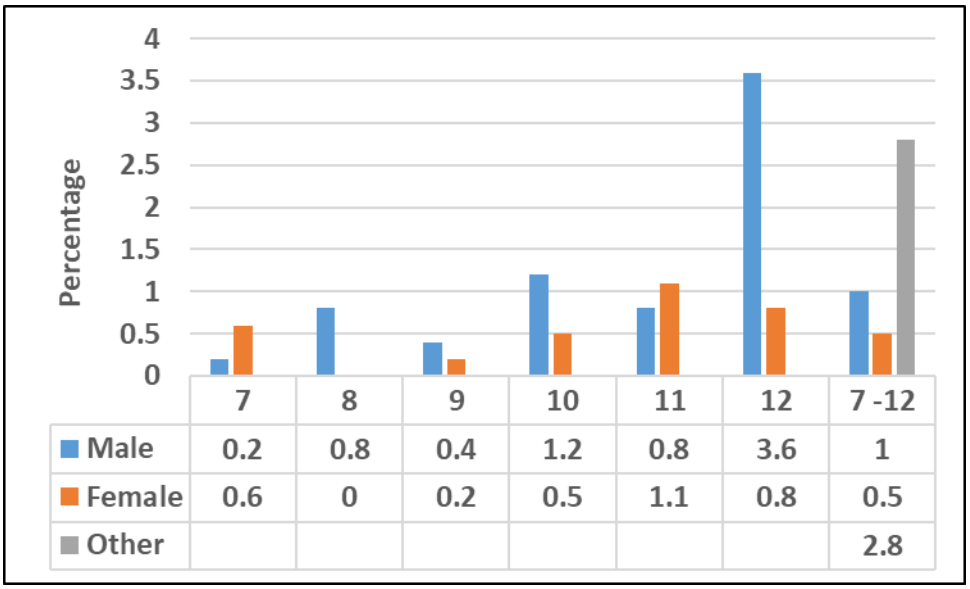
	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
7	1.3	1.4	1.4	1.4	0.9	0.8	0.6	0.3	0.2	0.5
8	3.6	3.2	2	1.7	2.3	1.2	1.3	0.3	0.3	0.6
9	6.2	4.2	3.2	1.4	4.2	2.8	1.7	1.2	0.6	0.4
10	6.2	7.5	5.1	3.9	4.5	4.5	3.2	1.8	1.7	0.9
11	10.9	7.2	6.9	7.1	5	7	2.8	2.8	1.4	1.1
12	8.5	9.2	7.4	11.7	7.9	8.4	5.4	2.3	2.8	2.1

Figure 3: 30-Day Prevalence Rate for Cigarette Use by Gender, 2022



	7	8	9	10	11	12	7 -12
Male	0.2	0.2	0	0.9	1.1	1.6	1.6
Female	0.8	0.2	1.1	0.9	1.1	1.2	0.9
Other							4.1

Figure 4: 30-Day Prevalence Rate for Smokeless Tobacco Use by Gender, 2022



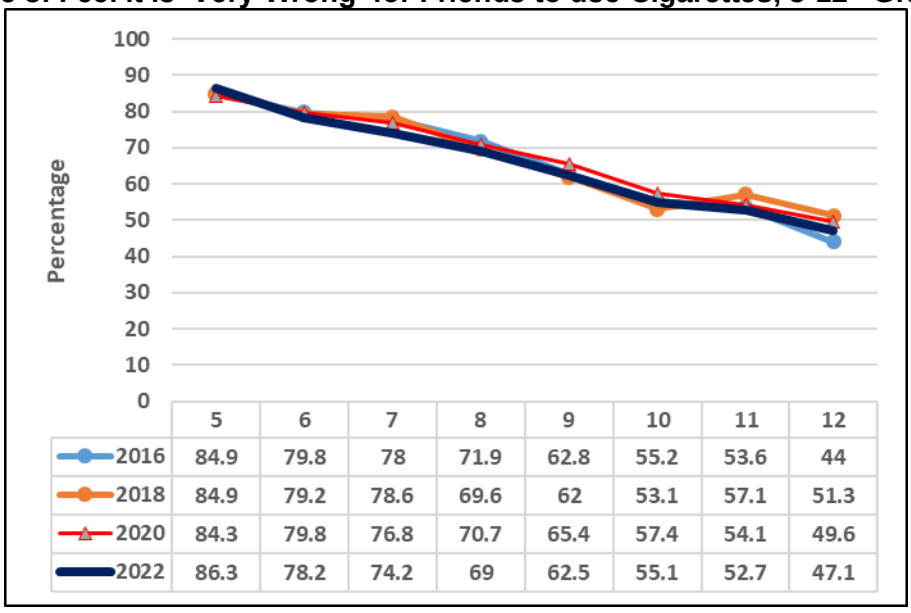
	7	8	9	10	11	12	7 -12
Male	0.2	0.8	0.4	1.2	0.8	3.6	1
Female	0.6	0	0.2	0.5	1.1	0.8	0.5
Other							2.8

In Wood County, the age of first use as reported in the ADAMHS Youth Survey, has increased in each survey administration, except in 2016 where it regressed. Responses are coded 1 for age 8 or less, 2 for age 9 or 10, 3 for age 11 or 12, 4 for age 13 or 14, 5 for age 15 or 16, and 6 for age 17 or older. The mean age for cigarette initiation has been as follows: 2008=3.63, 2010=3.76, 2012=3.81, and 2014=3.88, 2016=3.74. The regression may be partly explained by the increase in e-cig use and by the lower prevalence of 30-day cigarette use. In 2022, the cigarette age-of-onset question was replaced by a series of vaping questions.

Attitudes Towards Cigarette Use

Cigarette smoking continues to have low approval rates among teens. Comparisons years prior to 2016 because of a change in federal reporting requirements. A new required question asks 'how wrong do your friends feel it would be for you to smoke.' Prior to 2016 we asked youth if they disapproved of their friends or classmates smoking. Since the question and the response options both changed, comparisons to earlier years would be invalid. Nonetheless, the Percentage of students who do not disapprove of their friends' use of substances changes as students grow older. The following figure illustrates how most youth believe it is 'very wrong' for their friends to smoke cigarettes.

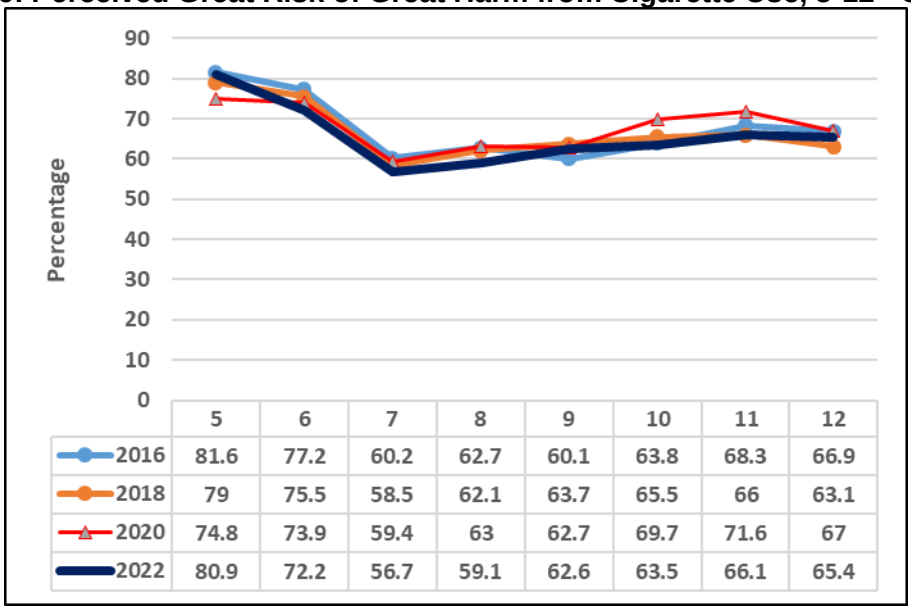
Figure 5: Feel it is 'Very Wrong' for Friends to use Cigarettes, 5-12th Graders



	5	6	7	8	9	10	11	12
2016	84.9	79.8	78	71.9	62.8	55.2	53.6	44
2018	84.9	79.2	78.6	69.6	62	53.1	57.1	51.3
2020	84.3	79.8	76.8	70.7	65.4	57.4	54.1	49.6
2022	86.3	78.2	74.2	69	62.5	55.1	52.7	47.1

Teens were asked to evaluate the relative risks associated with smoking cigarettes regularly, using marijuana occasionally, and drinking regularly. Students of all grades consistently reported a perceived high risk for regular cigarette smoking.

Figure 6: Perceived Great Risk of Great Harm from Cigarette Use, 5-12th Graders



	5	6	7	8	9	10	11	12
2016	81.6	77.2	60.2	62.7	60.1	63.8	68.3	66.9
2018	79	75.5	58.5	62.1	63.7	65.5	66	63.1
2020	74.8	73.9	59.4	63	62.7	69.7	71.6	67
2022	80.9	72.2	56.7	59.1	62.6	63.5	66.1	65.4

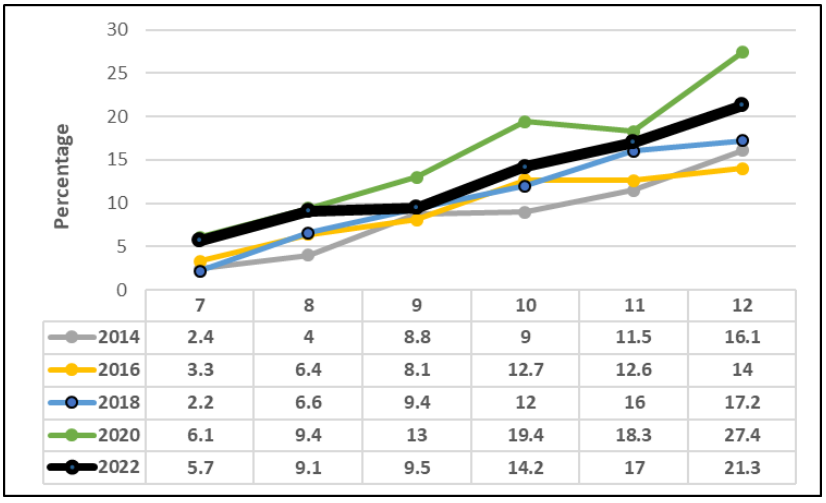
Vaping

Vaping devices include all battery-operated devices that look like and some say, mimic the sensation of smoking a cigarette. While vaping devices do not actually burn tobacco, they may still contain nicotine. Glamorous print and media advertisements for smoking, which have been banned for decades, portray a "cool' look targeted at teens and young adults (Farsalinos, K., Romagna, G., Tsiapras, D., Kyrzopoulos, S., Voudris, V., 2014). Users do not burn tobacco, but instead contain a battery and an electronic device that produces a warm vapor. The vapor may contain such products as propylene glycol, vegetable glycerin, food flavoring, and oftentimes, nicotine. The vapor is inhaled and, as the user exhales, some visible vapor is released, but no tobacco smoke, a practice called 'vaping.' Some e-cigs also contain a light-emitting diode in the tip that glows when the user puffs, to resemble the burning end of a cigarette. The nicotine content may vary by cartridge, and the cartridges usually contain chemical additives and flavors (such as cherry, bubble gum, cherry cream pie, etc). Cartridges and refill bottles usually accompany the purchase of e-cigs (Zezima, K., 2009).

The use of vaping devices has been controversial in public health's practice of tobacco control. Public health advocates have been reluctant to endorse the use of electronic cigarettes because of fears that the tobacco industry cannot be trusted to market the products (Pepper, 2013). However, companies independent of the tobacco industry introduced e-cigs. E-cigs appear to provide some promise in the fight against tobacco-related morbidity and mortality. E-cigarettes proponents claim they provide a harm reduction strategy to stop smoking cigarettes, an argument that fundamentally alter the tobacco harm reduction debate. On the other hand, critics of vaping devices are especially concerned with how e-cigarettes will act as a gateway to use of other tobacco products, especially among non-smoking youth and young adults (Dawkins, 2012).

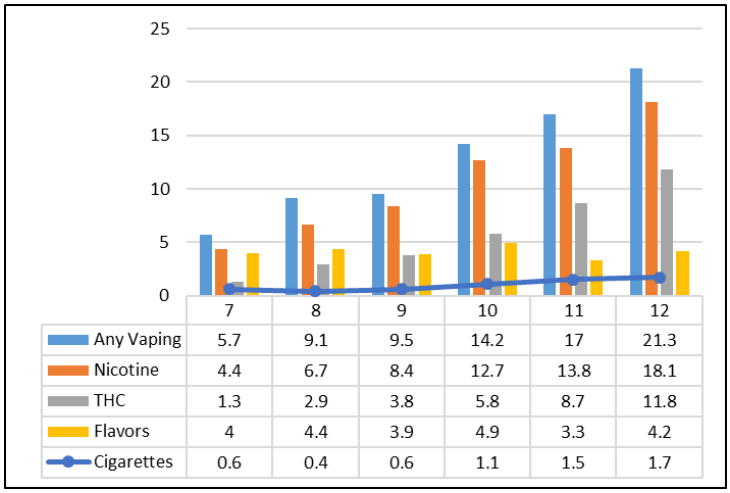
Beginning in 2014. the ADAMHS Youth Surveys included a question of the use of e-cigarettes. In the 2018 ADAMHS Youth Survey we asked which type of product was being inhaled. We wanted to know if respondents were inhaling nicotine, flavorings, or THC. Results of the vaping questions are presented in Figures 7 through 10.

Figure 7: 30-Day Prevalence Rate for E-Cigarettes by Grade Level and Survey Year



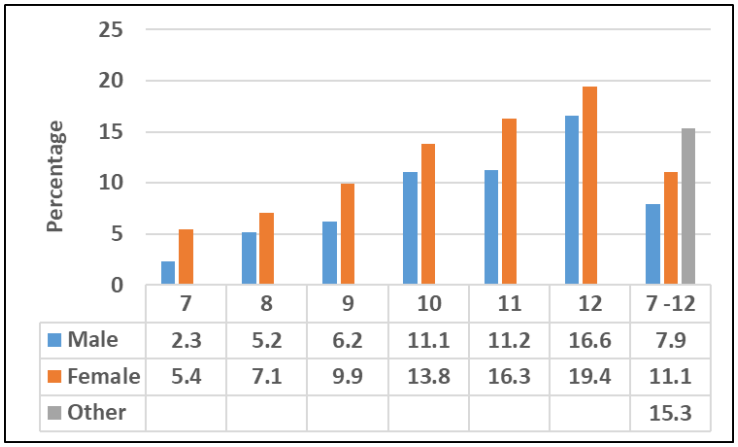
	7	8	9	10	11	12
2014	2.4	4	8.8	9	11.5	16.1
2016	3.3	6.4	8.1	12.7	12.6	14
2018	2.2	6.6	9.4	12	16	17.2
2020	6.1	9.4	13	19.4	18.3	27.4
2022	5.7	9.1	9.5	14.2	17	21.3

Figure 8: E-Liquid Content Among 30-Day E-Cig Users by Grade, 2022



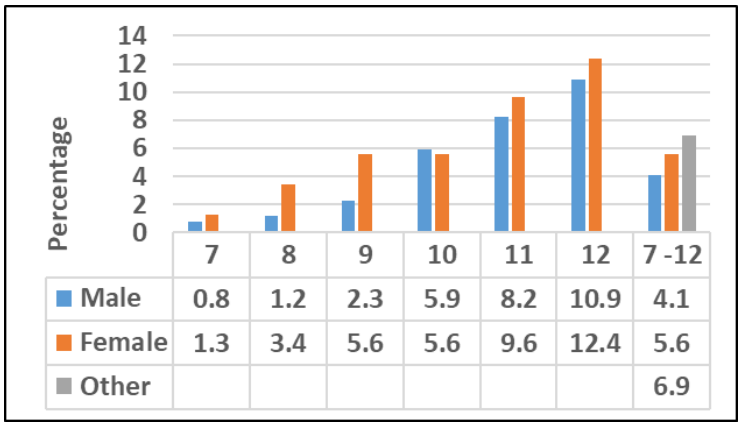
	7	8	9	10	11	12
Any Vaping	5.7	9.1	9.5	14.2	17	21.3
Nicotine	4.4	6.7	8.4	12.7	13.8	18.1
THC	1.3	2.9	3.8	5.8	8.7	11.8
Flavors	4	4.4	3.9	4.9	3.3	4.2
Cigarettes	0.6	0.4	0.6	1.1	1.5	1.7

Figure 8a: Vaping with Nicotine Among 30-Day E-Cig Users by Grade and gender, 2022



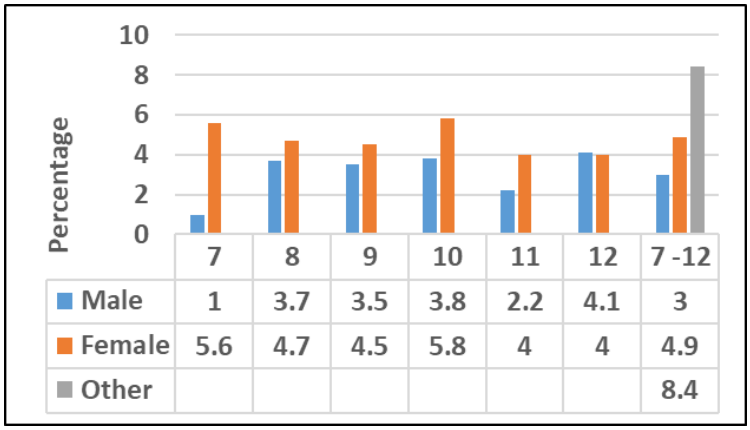
	7	8	9	10	11	12	7 -12
Male	2.3	5.2	6.2	11.1	11.2	16.6	7.9
Female	5.4	7.1	9.9	13.8	16.3	19.4	11.1
Other							15.3

Figure 8b: Vaping with Marijuana Among 30-Day E-Cig Users by Grade and gender, 2022



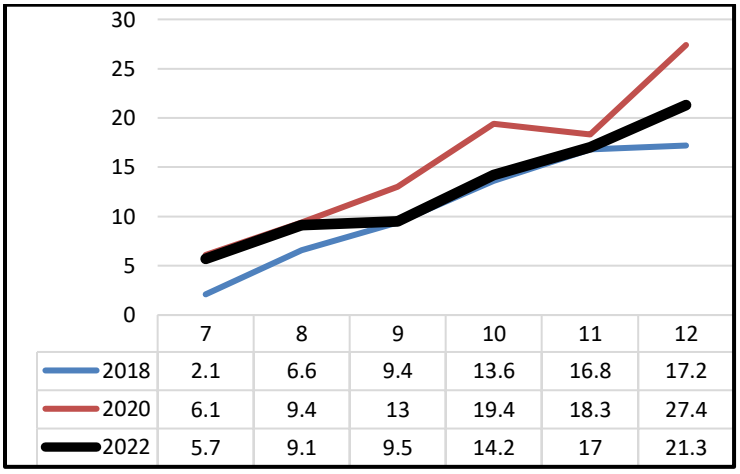
	7	8	9	10	11	12	7 -12
Male	0.8	1.2	2.3	5.9	8.2	10.9	4.1
Female	1.3	3.4	5.6	5.6	9.6	12.4	5.6
Other							6.9

Figure 8c: Vaping with Flavors Among 30-Day E-Cig Users by Grade and gender, 2022



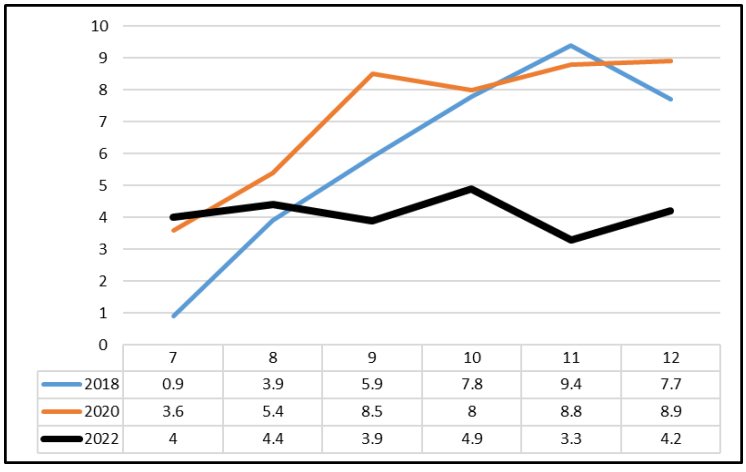
	7	8	9	10	11	12	7 -12
Male	1	3.7	3.5	3.8	2.2	4.1	3
Female	5.6	4.7	4.5	5.8	4	4	4.9
Other							8.4

Figure 9a: 30 Day Vaping by Year; Any Vaping



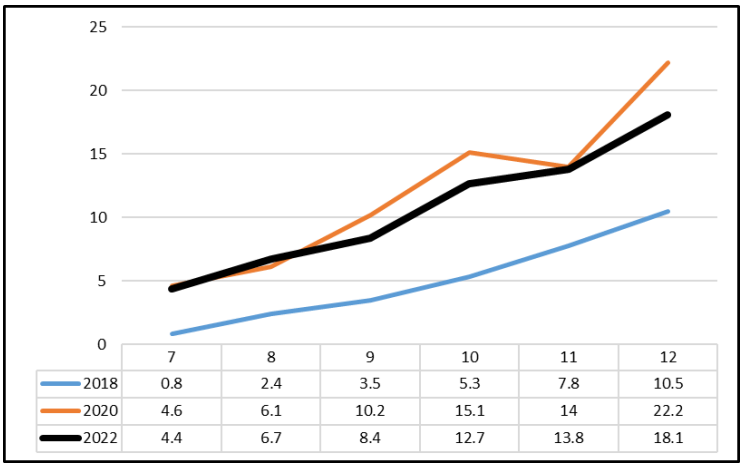
	7	8	9	10	11	12
2018	2.1	6.6	9.4	13.6	16.8	17.2
2020	6.1	9.4	13	19.4	18.3	27.4
2022	5.7	9.1	9.5	14.2	17	21.3

Figure 9b: 30 Day Vaping by Year; with Flavors



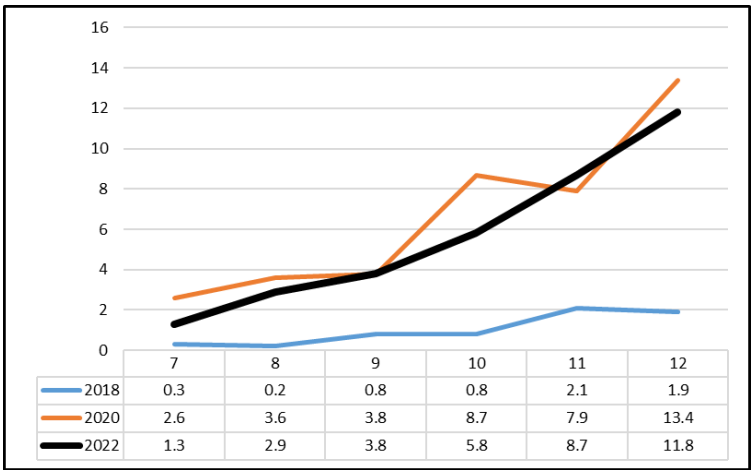
	7	8	9	10	11	12
2018	0.9	3.9	5.9	7.8	9.4	7.7
2020	3.6	5.4	8.5	8	8.8	8.9
2022	4	4.4	3.9	4.9	3.3	4.2

Figure 9c: 30 Day Vaping by Year; with Nicotine



	7	8	9	10	11	12
2018	0.8	2.4	3.5	5.3	7.8	10.5
2020	4.6	6.1	10.2	15.1	14	22.2
2022	4.4	6.7	8.4	12.7	13.8	18.1

Figure 9d: 30 Day Vaping by Year; with Marijuana



	7	8	9	10	11	12
2018	0.3	0.2	0.8	0.8	2.1	1.9
2020	2.6	3.6	3.8	8.7	7.9	13.4
2022	1.3	2.9	3.8	5.8	8.7	11.8

As seen in Figures 9c and 9d, increases in adolescent vaping with nicotine and with marijuana from 2018 to 2022 represents the largest increases in substance use ever recorded in the ADAMHS Youth Survey since its inception in Wood County in 2004. The Wood County increases in vaping marijuana and nicotine parallel the same dramatic increases reported in the Monitoring the Future study released in December, 2019 and as reported by the Journal of the American Medical Association (JAMA), December 18, 2019, **Trends in Reported Marijuana Vaping Among US Adolescents, 2017-2019,**Richard A. Miech; Megan E. Patrick; Patrick M. O'Malley, PhD; et al. Fortunately, post pandemic rates in 2022 appear to have declined from the 2020 levels, both in the Monitoring the Future study (December, 2021) and in the ADAMHS Youth Survey.

In Wood County, vaping marijuana increased among 12th graders from 1.9 % in 2018 to 13.4 % in 2020, then declined to 11.8 % in 2022. The national study reported 12th graders increasing from 4.9 % to 14 % for the same time period, with a similar decline to 12.4 % in December, 2021. In Wood County, vaping nicotine increased among 12th graders from 10.5 % in 2018 to 22.3 % in 2020, then declining to 18.1 % in 2022. The national study reported 12th graders increasing from 11.0 % to 25.5 % for the same time period, then declining to 19.6 % in December, 2021. A similar pattern of increase and decrease for vaping marijuana and nicotine among both 8th and 10th graders occurred, although the prevalence rates were not as high.

"These declines are an unintended consequence of the pandemic," said Richard Miech, principal investigator of the study and research professor at the Institute for Social Research. "Among the many disruptions adolescents have experienced as a result of the pandemic are disruptions in their ability to get drugs, disruptions in their ability to use drugs outside of parental supervision, and disruptions in peer groups that encourage drug use.'

While this shift in the prevalence rates are concerning, so too is the concentration of THC and nicotine in vaping devices. While traditional smoking of marijuana and/or nicotine can cause various medical problems, the use of vaping devices to inhale THC and/or nicotine poses additional medical issues. This because the concentration of THC and/or nicotine in vaping cartridges is often much higher and the concentration of THC and/or nicotine in traditional smoking techniques. In 2022, the Wood County ADAMHS Youth Survey asked questions related to the concentration of THC and/or nicotine in vaping devices, and regarding the motivations for vaping nicotine. These results are presented in Figures 9e and 9f below.

Figure 9e: Strength of Nicotine Cartridge among Youth reporting Nicotine Vaping, 2022

Strength of Nicotine Cartridge	Percent
3-9 mg/ml	23.6
10-19 mg/ml	6
20-29 mg/ml	4.6
30 mg/ml or more	9.7
Don't know	56.2

Figure 9f: Motivations for Nicotine Use among Youth reporting Nicotine Vaping, 2022

Reasons to Vape Nicotine:	Percent
Help quit cigarettes	2.9
Move convenient than cigarettes	11.2
Cigarettes not permitted	1.2
Experiment	28.8
Relax or relieve tension	52.9
Get the buzz	45.7
Looks cool	6.8
Good time with friends	20.5
Boredom	21.6
Tastes good	25
I am hooked	13.5
Weight control	10.8
Healthier than cigarettes	10.8

Among those teens who vape nicotine, 53 % said they were motivated by a need to relax or relieve tension. Other reasons were to get the buzz (46%), to experiment (29%), from boredom (22%), or for a good time with friends (21%). Another 13.5 % of teens reported because they are 'hooked.' Those 13.5 % of teens already reporting a nicotine dependence is of great concern for parents, public health officials, and prevention advocates.

"Current policies and procedures to prevent youth vaping clearly aren't enough," said Richard Meich, the lead investigator of the Monitoring the Future project (12/17/2019). "We need new policies and strategies to prevent unscrupulous businesses from making billions of dollars by addicting children to nicotine. Because the vaping industry is quickly evolving, new, additional, vaping-specific strategies may well be needed in the years to come in order to keep vaping devices out of the hands of youth."

It is also unclear whether the use of vaping devices for nicotine and marijuana represents a substitution or a supplement to traditional nicotine and marijuana use. The substitution hypothesis poses that youth may simply substitute the vaping device to inhale THC as a replacement for the traditional marijuana leaf. The supplemental hypotheses poses that youth continue to smoke marijuana in traditional ways, but supplement, or add the vaping device as another way to inhale THC.

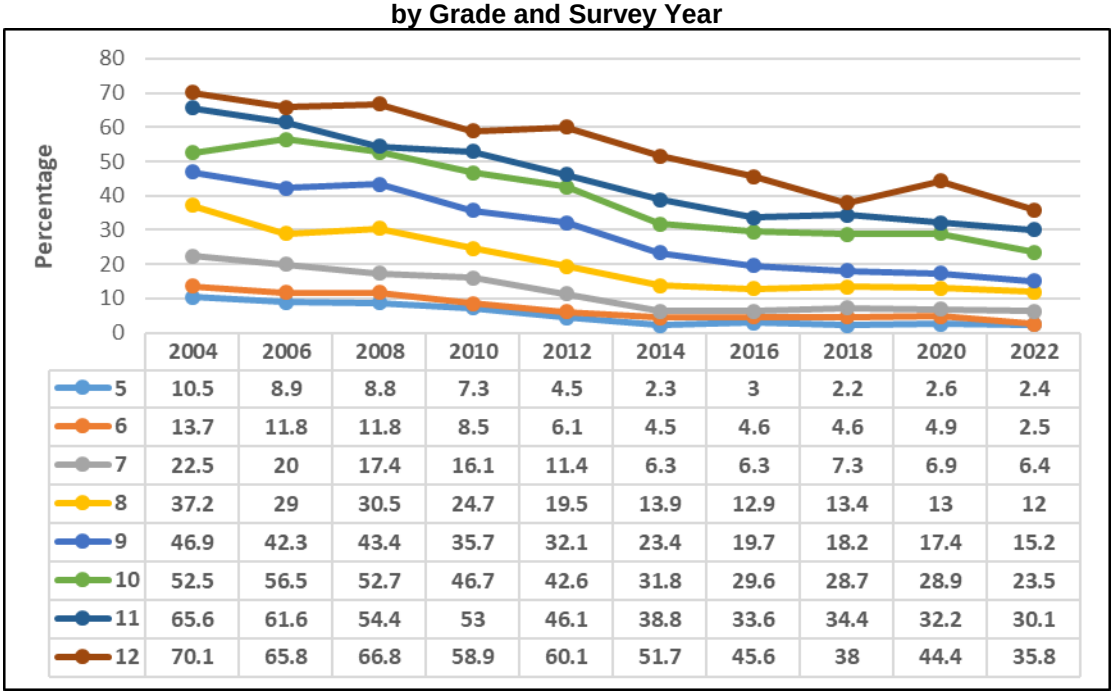
ALCOHOL

While vaping nicotine and marijuana reported the fasting increase in prevalence, alcohol remains the drug of choice for Wood County youth as it has the highest prevalence rate among the drugs surveyed (Figure 10). Students were asked on how many occasions during the past year and during the past month they had alcohol to drink (beer, wine, wine coolers, malt liquor, liquor – more than just a few sips – excluding religious services). Since 2010, annual alcohol use declined in all grade levels. Monthly use of alcohol also shows considerable declines since 2010.

Wood County 8th, 10th, and 12th grade students report annual alcohol rates of 12 %, 23.5 %, and 35.8 %, respectively. The University of Michigan's national study released in December 2021 reported rates of 17.2 %, 28.5 %, and 46.5 %(respectively), placing Wood County youth lower than the national rates for annual alcohol use in these three grades. Annual alcohol use declined significantly in all grades in the national study, and in Wood County.

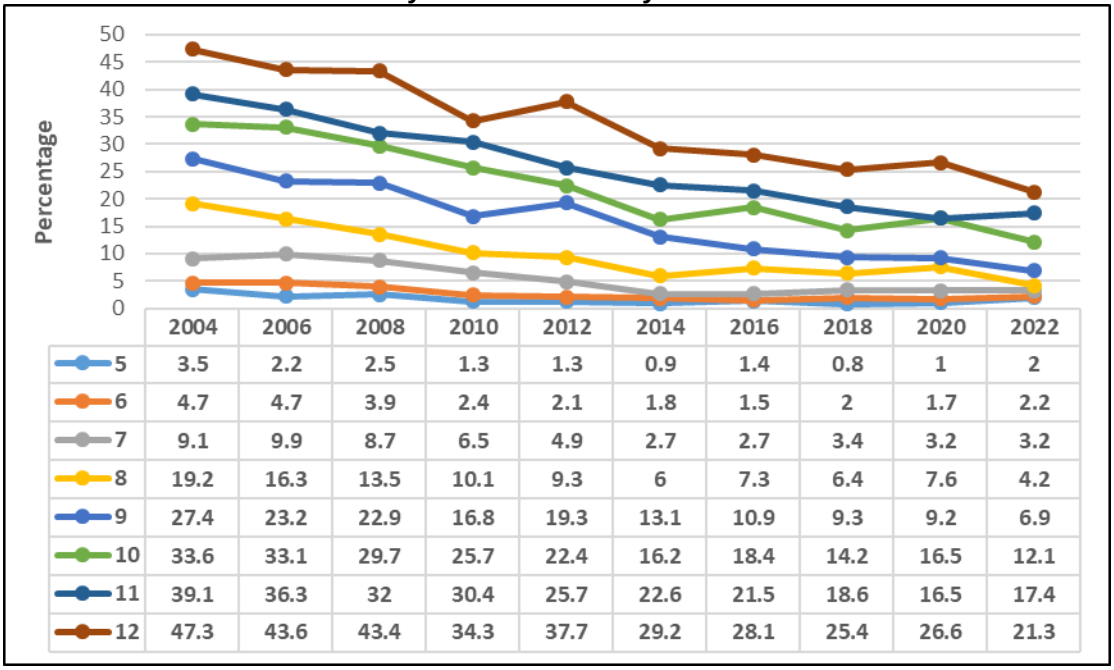
Monthly use was reported by 8th, 10th and 12th grade as 4.2, 12.1, and 21.3 %, which are decreases of 47, 26, and 22 % respectively over 2020 rates. The national study (2021) reported the same three grades at 7.3, 13.1, and 25.8 % (respectively), and these rates were in significantly decline. Wood County youth were lower than the national average for monthly alcohol use in these three grades, but reported some increases and some decreases in 2022 over 2020 rates.

Figure 10: Annual Prevalence Rate for Alcohol Use by Grade and Survey Year



	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
5	10.5	8.9	8.8	7.3	4.5	2.3	3	2.2	2.6	2.4
6	13.7	11.8	11.8	8.5	6.1	4.5	4.6	4.6	4.9	2.5
7	22.5	20	17.4	16.1	11.4	6.3	6.3	7.3	6.9	6.4
8	37.2	29	30.5	24.7	19.5	13.9	12.9	13.4	13	12
9	46.9	42.3	43.4	35.7	32.1	23.4	19.7	18.2	17.4	15.2
10	52.5	56.5	52.7	46.7	42.6	31.8	29.6	28.7	28.9	23.5
11	65.6	61.6	54.4	53	46.1	38.8	33.6	34.4	32.2	30.1
12	70.1	65.8	66.8	58.9	60.1	51.7	45.6	38	44.4	35.8

Figure 11: 30-Day Prevalence Rate for Alcohol Use by Grade and Survey Year



	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
5	3.5	2.2	2.5	1.3	1.3	0.9	1.4	0.8	1	2
6	4.7	4.7	3.9	2.4	2.1	1.8	1.5	2	1.7	2.2
7	9.1	9.9	8.7	6.5	4.9	2.7	2.7	3.4	3.2	3.2
8	19.2	16.3	13.5	10.1	9.3	6	7.3	6.4	7.6	4.2
9	27.4	23.2	22.9	16.8	19.3	13.1	10.9	9.3	9.2	6.9
10	33.6	33.1	29.7	25.7	22.4	16.2	18.4	14.2	16.5	12.1
11	39.1	36.3	32	30.4	25.7	22.6	21.5	18.6	16.5	17.4
12	47.3	43.6	43.4	34.3	37.7	29.2	28.1	25.4	26.6	21.3

Prevalence rates for alcohol consumption, however, do not tell the whole story. The rates cited above report the proportion of youth who have used alcohol regardless of the amount in the past month or year. Equally important is the proportion of youth who are consuming larger quantities of alcohol on a regular basis. The table below shows a breakdown of how often Wood County adolescents reported consuming alcohol in the past year (2022 data).

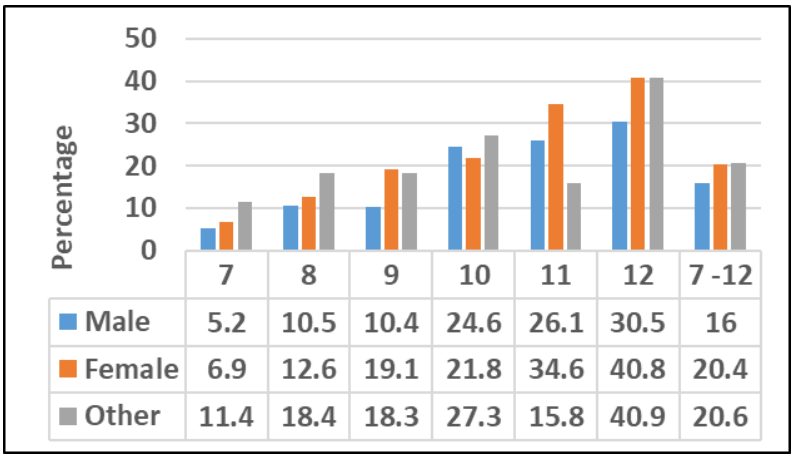
		Grade					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2022**	93.6	88	84.8	76.5	69.9	64.2
1-2 times	**2022**	3.8	8	7.2	9.6	11.3	10.6
3-5 times	**2022**	1.5	3	5	6.8	8.1	10
6-10 times	**2022**	.7	.5	1.6	3.7	5	7
11+ times	**2022**	.4	.6	1.3	3.4	5.8	8.1

"Drinking to get drunk" was defined as drinking five or more drinks in one session (a "drink" is a bottle of beer, a wine cooler, a glass of wine, a shot glass of liquor, or a mixed drink). Monthly binge drinking is lower in all grades.

In 2020, drinking to get drunk within the past 30 days among Wood County youth was reported as follows: grade 8, 2.5%; grade 10, 7.8%; and, grade 12, 17.4%. National levels of 8th, 10th, and 12th graders, drinking to get drunk within the past month are 2.6%, 8.8%, and 17.5% respectively. Binge drinking prevalence is lower in Wood County than nationally, and national

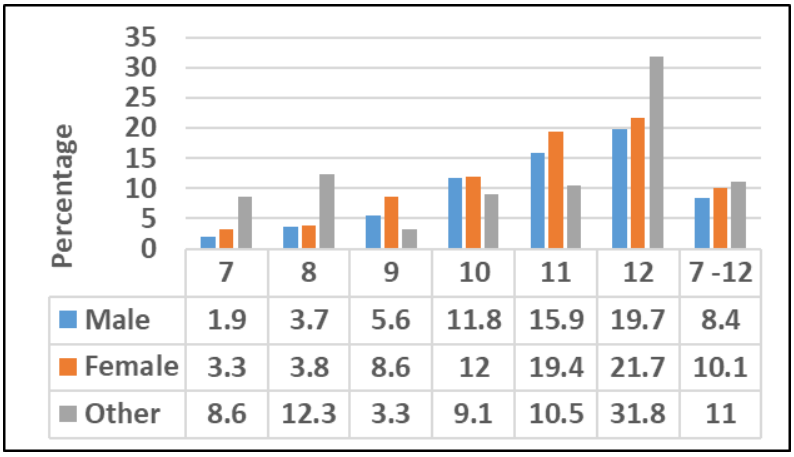
rates are in decline. However, Wood County rates increased in grades 8, 10, and 12 over 2018. The question about drinking to get drunk was mistakenly omitted from the 2022 survey. As such, 2022 binge drinking data is unavailable in this report.

Figure 12: Annual Prevalence Rate for Alcohol Use by Gender, 2022



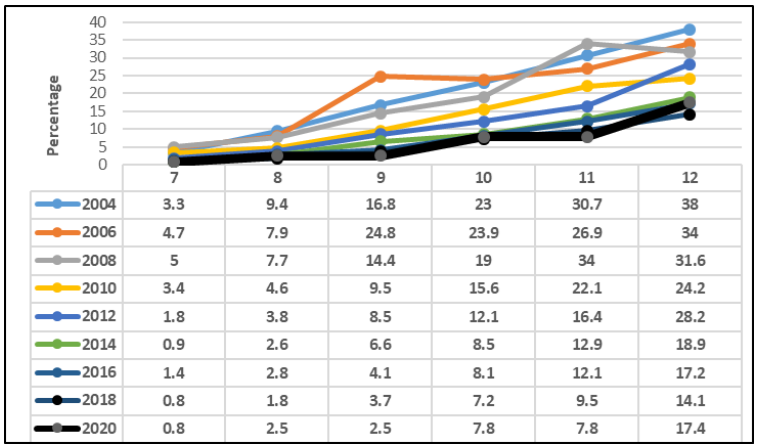
	7	8	9	10	11	12	7 -12
Male	5.2	10.5	10.4	24.6	26.1	30.5	16
Female	6.9	12.6	19.1	21.8	34.6	40.8	20.4
Other	11.4	18.4	18.3	27.3	15.8	40.9	20.6

Figure 13: 30-Day Prevalence Rate for Alcohol Use by Gender, 2022



	7	8	9	10	11	12	7 -12
Male	1.9	3.7	5.6	11.8	15.9	19.7	8.4
Female	3.3	3.8	8.6	12	19.4	21.7	10.1
Other	8.6	12.3	3.3	9.1	10.5	31.8	11

Figure 13: 30-Day Prevalence Rate for Binge Drinking by Year



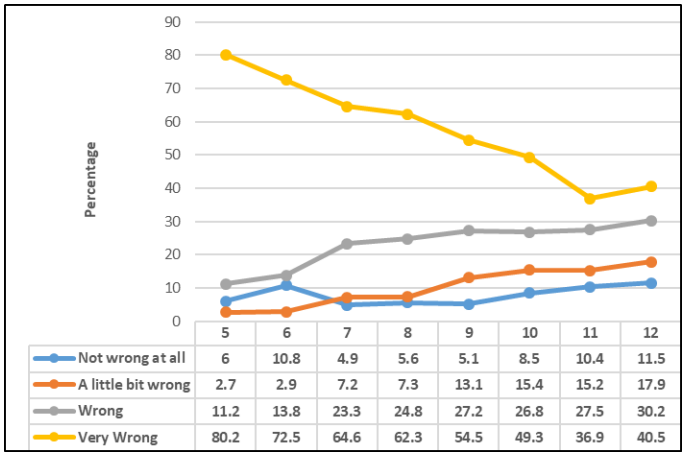
	7	8	9	10	11	12
2004	3.3	9.4	16.8	23	30.7	38
2006	4.7	7.9	24.8	23.9	26.9	34
2008	5	7.7	14.4	19	34	31.6
2010	3.4	4.6	9.5	15.6	22.1	24.2
2012	1.8	3.8	8.5	12.1	16.4	28.2
2014	0.9	2.6	6.6	8.5	12.9	18.9
2016	1.4	2.8	4.1	8.1	12.1	17.2
2018	0.8	1.8	3.7	7.2	9.5	14.1
2020	0.8	2.5	2.5	7.8	7.8	17.4

Attitudes Towards Alcohol Use

Similar to the increases in nicotine use, reductions in alcohol use are related to teen attitudes about use. As peer disapproval rates increase, use of alcohol decreases; if there is an increase in the perception that there is a great risk of harm from drinking alcohol, then alcohol use decreases; and, as availability is reduced, levels of consumption decline.

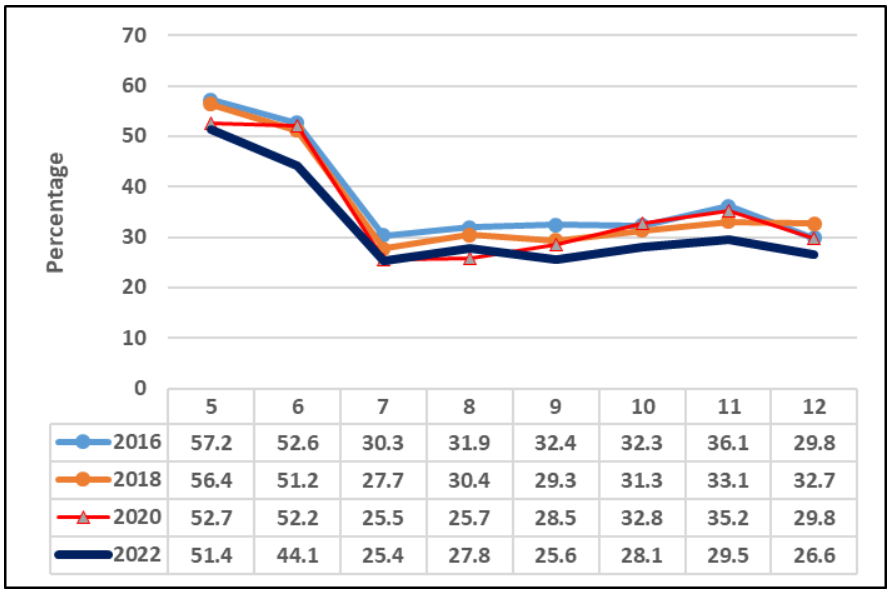
Wood County youth report perception that parents and friends view drinking alcohol in all grades as very wrong. Comparisons to past years cannot be made prior to 2016 because of a change in federal reporting requirements. A new required question asks 'how wrong do your friends feel it would be for you to have one or two drinks of an alcoholic beverage nearly every day.' Data is available for the past four survey iterations – 2016, 2018, 2020 and 2022.These data are reported in Figures 15 and16.

Figure 15. Peer Approval of Alcohol Use, 2022



	5	6	7	8	9	10	11	12
Not wrong at all	6	10.8	4.9	5.6	5.1	8.5	10.4	11.5
A little bit wrong	2.7	2.9	7.2	7.3	13.1	15.4	15.2	17.9
Wrong	11.2	13.8	23.3	24.8	27.2	26.8	27.5	30.2
Very Wrong	80.2	72.5	64.6	62.3	54.5	49.3	36.9	40.5

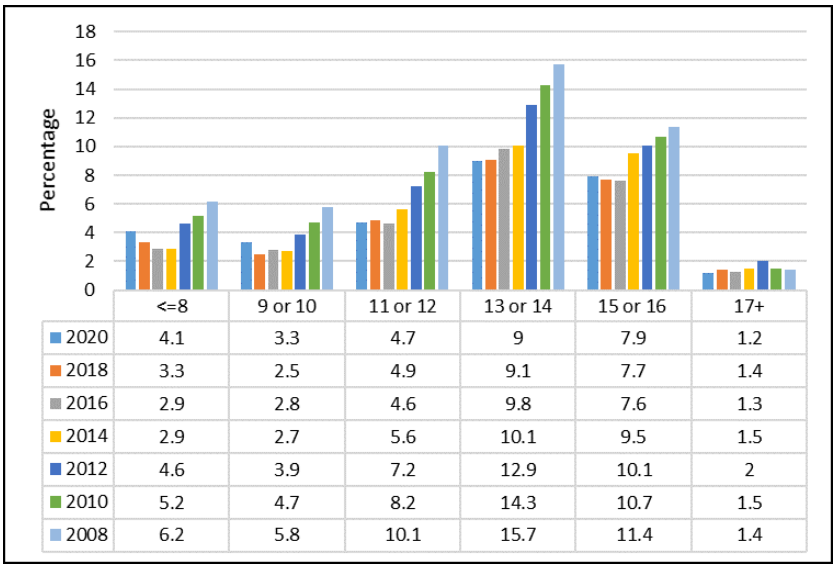
Figure 16: Perception of Great Harm from Binge Drinking Once or Twice per Week, 2016 - 2022



	5	6	7	8	9	10	11	12
2016	57.2	52.6	30.3	31.9	32.4	32.3	36.1	29.8
2018	56.4	51.2	27.7	30.4	29.3	31.3	33.1	32.7
2020	52.7	52.2	25.5	25.7	28.5	32.8	35.2	29.8
2022	51.4	44.1	25.4	27.8	25.6	28.1	29.5	26.6

In the 2020 survey, youth were asked to report the age at which they first used alcohol. The age distribution resembles that of nicotine use, with age of initiation peaking at about age 13 to 14. Initiation of alcohol use, like that of nicotine, appears to be all but complete by age 17. Similar to cigarette smoking, in the 2020 data, fewer teens reported alcohol initiation, and those who did initiate, did so at a younger age than in 2014. The age of first use questions were discontinued in the 2022 survey

Figure 17: Age of Onset of Alcohol by Survey Year



	<=8	9 or 10	11 or 12	13 or 14	15 or 16	17+
2020	4.1	3.3	4.7	9	7.9	1.2
2018	3.3	2.5	4.9	9.1	7.7	1.4
2016	2.9	2.8	4.6	9.8	7.6	1.3
2014	2.9	2.7	5.6	10.1	9.5	1.5
2012	4.6	3.9	7.2	12.9	10.1	2
2010	5.2	4.7	8.2	14.3	10.7	1.5
2008	6.2	5.8	10.1	15.7	11.4	1.4

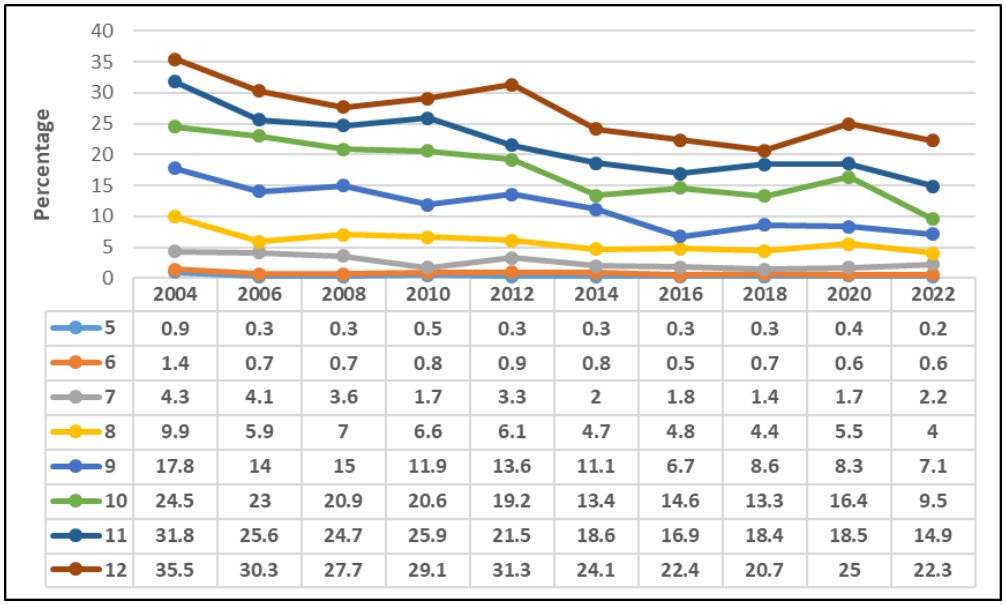
Marijuana is the most widely used of the illicit substances. Its use is relatively minor among elementary and junior high school students, but it becomes increasingly wide-spread among high school aged students. Historically, in Wood County, use increases from less than one % in elementary school to nearly a quarter of high school seniors. The data show that males are slightly more likely to smoke marijuana than females.

However, from 2020 to 2022, Wood County 8th, 10th, and 12th grade students reported decreases in annual marijuana rates. Rates of 8th, 10th, and 12th graders decreased to 4.0 %, 9.5 %, and 22.3 % respectively. The University of Michigan in December 2021, reported annual rates of 7.1 %, 17.3 %, and 30.5 %, respectively (nationally, and locally rates have declined significantly). Wood County youth report lower annual use than national averages.

Monthly use also decreased from 2020 to 2022. Rates were reported by 8th, 10th and 12th grade Wood County teens at 2.5, 6.6, and 12.9 %, whereas the national study reported the same three grades at 4.1, 10.1, and 19.5 %, respectively (nationally, grades 8, 10, and 12 decreased during the same two-year time period where Wood County rates also decreased). Wood County youth report lower monthly use than national average in all grades.

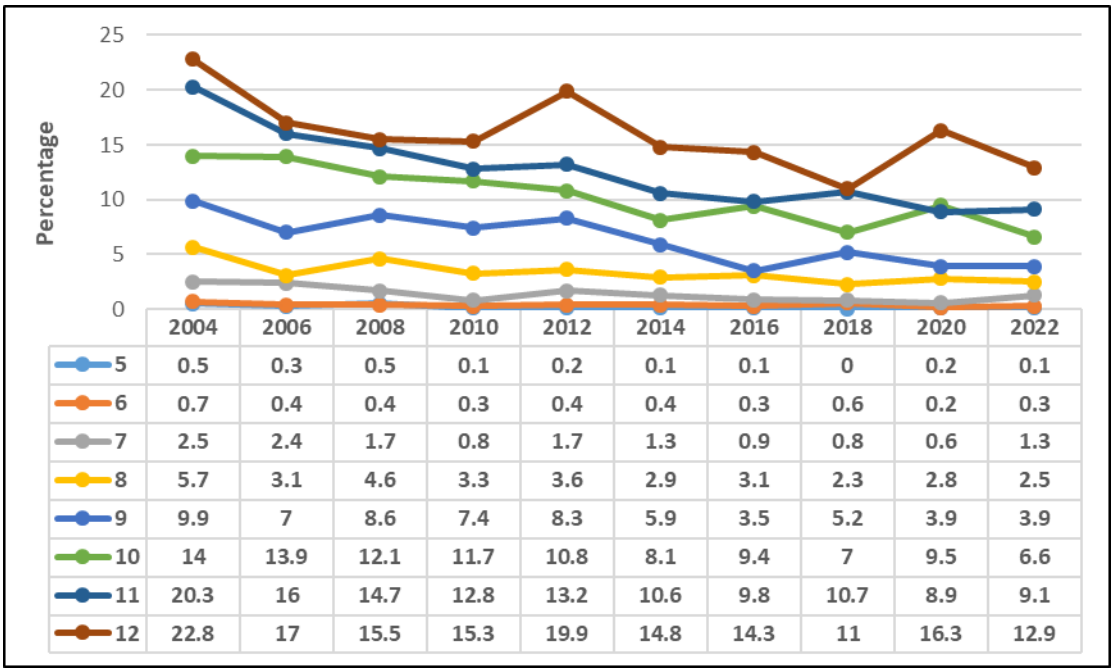
As we noted with vaping, researchers and administrators at the Wood County Educational Service Center believe these declines are the unplanned side effects of the pandemic. Since many Wood County students were at home, they had less access to substances, were less likely to be influenced by their peers, and had increased parental supervision. They may even have had time to reflect upon the harm that comes from substance misuse.

Figure 18: Annual Prevalence Rate for Marijuana Use by Grade and Survey Year



	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
5	0.9	0.3	0.3	0.5	0.3	0.3	0.3	0.3	0.4	0.2
6	1.4	0.7	0.7	0.8	0.9	0.8	0.5	0.7	0.6	0.6
7	4.3	4.1	3.6	1.7	3.3	2	1.8	1.4	1.7	2.2
8	9.9	5.9	7	6.6	6.1	4.7	4.8	4.4	5.5	4
9	17.8	14	15	11.9	13.6	11.1	6.7	8.6	8.3	7.1
10	24.5	23	20.9	20.6	19.2	13.4	14.6	13.3	16.4	9.5
11	31.8	25.6	24.7	25.9	21.5	18.6	16.9	18.4	18.5	14.9
12	35.5	30.3	27.7	29.1	31.3	24.1	22.4	20.7	25	22.3

Figure 19: 30-Day Prevalence Rate for Marijuana Use by Grade and Survey Year



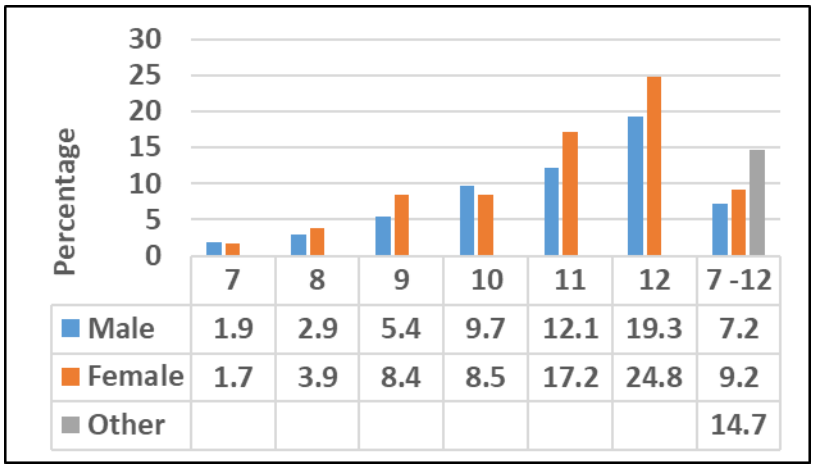
	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
5	0.5	0.3	0.5	0.1	0.2	0.1	0.1	0	0.2	0.1
6	0.7	0.4	0.4	0.3	0.4	0.4	0.3	0.6	0.2	0.3
7	2.5	2.4	1.7	0.8	1.7	1.3	0.9	0.8	0.6	1.3
8	5.7	3.1	4.6	3.3	3.6	2.9	3.1	2.3	2.8	2.5
9	9.9	7	8.6	7.4	8.3	5.9	3.5	5.2	3.9	3.9
10	14	13.9	12.1	11.7	10.8	8.1	9.4	7	9.5	6.6
11	20.3	16	14.7	12.8	13.2	10.6	9.8	10.7	8.9	9.1
12	22.8	17	15.5	15.3	19.9	14.8	14.3	11	16.3	12.9

The table below shows the Percentage of Wood County adolescents in 2022 that reported using marijuana in the past year by frequency of reported use and grade level.

		Grade					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2022**	98.7	97.5	96.1	93.4	90.9	87.1
1-2 times	**2022**	.8	1.5	1.6	2.4	3.6	4.7
3-5 times	**2022**	.5	.4	1.1	1.5	2	3
6-10 times	**2022**	.1	.3	.2	.8	.9	1.1
11+ times	**2022**	0	.3	1	2	2.6	4

Decreases in annual and thirty-day marijuana use were reported in 2022 compared to 2020 among Wood County youth in nearly all grades. In all previous survey administrations, we generally reported increases marijuana use typically around grades 8 or 9 and continued to increase through grade 12. However, during the pandemic, there was a decline in marijuana use, with the exception of the use of marijuana edibles where increases were reported over 2020.

Figure 20: Annual Prevalence Rate for Marijuana Use by Gender, 2022.

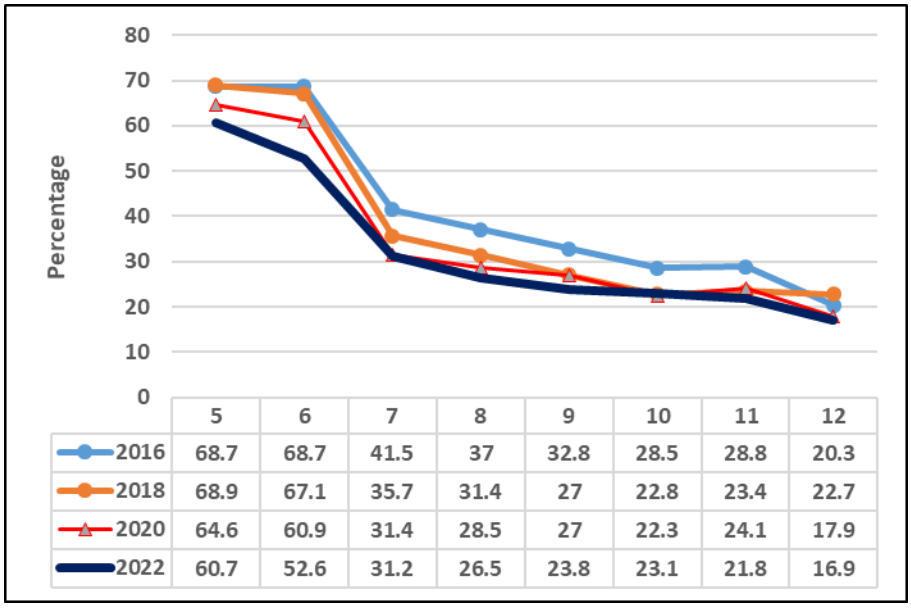


	7	8	9	10	11	12	7 -12
Male	1.9	2.9	5.4	9.7	12.1	19.3	7.2
Female	1.7	3.9	8.4	8.5	17.2	24.8	9.2
Other							14.7

Attitudes Towards Marijuana Use and Age of Onset

The ADAMHS Youth survey found that the perceived risk of marijuana use among teens has declined during the past decade. Even among 7th graders, about a third of teens perceived any great risk in using marijuana regularly. Less than a quarter of 10th and 12th graders perceived any great risk in regular marijuana use.

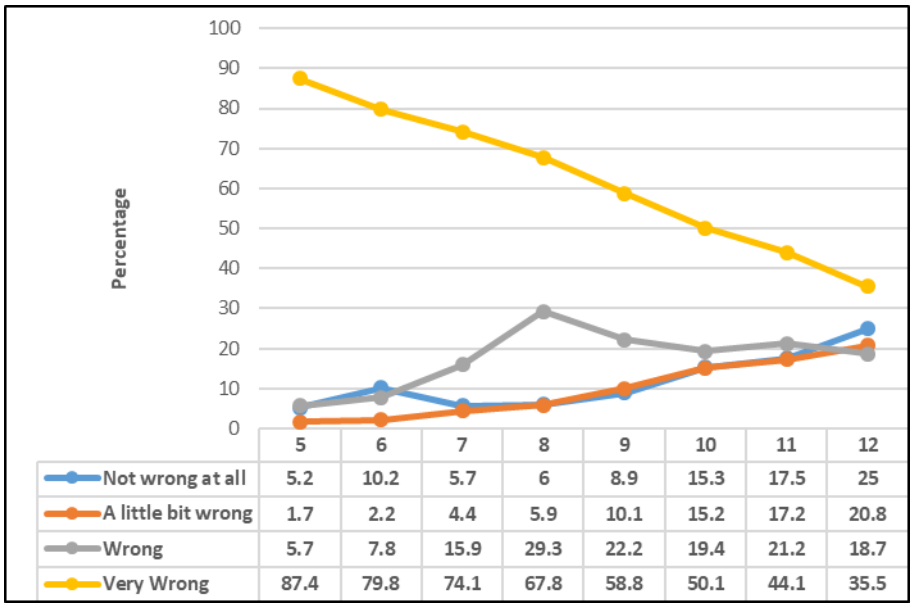
Figure 21: Perception of Great Harm from Marijuana Use 2016-2022



	5	6	7	8	9	10	11	12
2016	68.7	68.7	41.5	37	32.8	28.5	28.8	20.3
2018	68.9	67.1	35.7	31.4	27	22.8	23.4	22.7
2020	64.6	60.9	31.4	28.5	27	22.3	24.1	17.9
2022	60.7	52.6	31.2	26.5	23.8	23.1	21.8	16.9

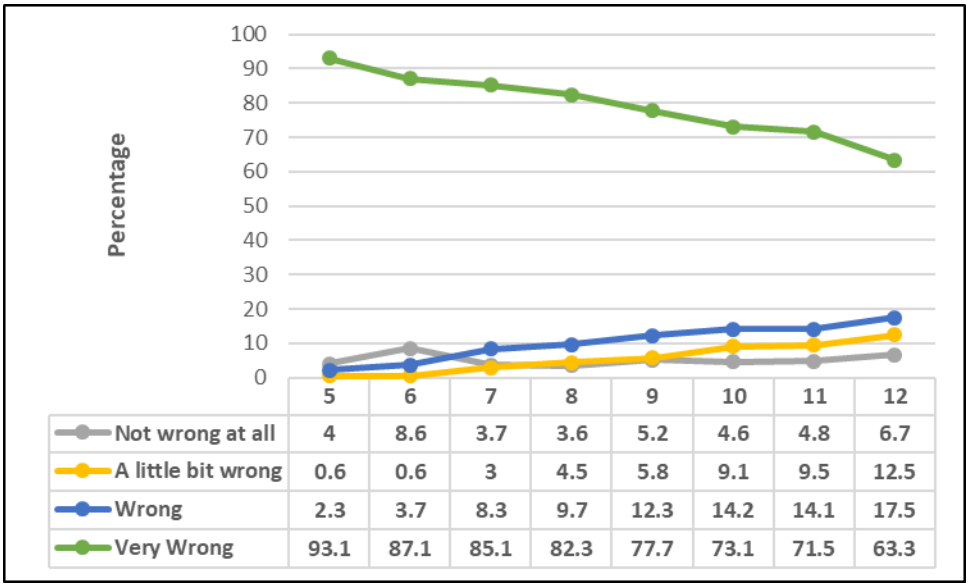
A similar inverse relationship exists between perceived peer disapproval of smoking marijuana and marijuana use. That is, marijuana use increases inversely to how teens view their peers disapproval of the drug. The ADAMHS Youth survey tracked teens' disapproval of marijuana use, and found that these numbers had also dropped over the last decade, with less than half of high schoolers disapproving of teenage marijuana use.

Figure 22: Perception of Peer Disapproval of Marijuana by Survey 2022, Grades 5-12.



	5	6	7	8	9	10	11	12
Not wrong at all	5.2	10.2	5.7	6	8.9	15.3	17.5	25
A little bit wrong	1.7	2.2	4.4	5.9	10.1	15.2	17.2	20.8
Wrong	5.7	7.8	15.9	29.3	22.2	19.4	21.2	18.7
Very Wrong	87.4	79.8	74.1	67.8	58.8	50.1	44.1	35.5

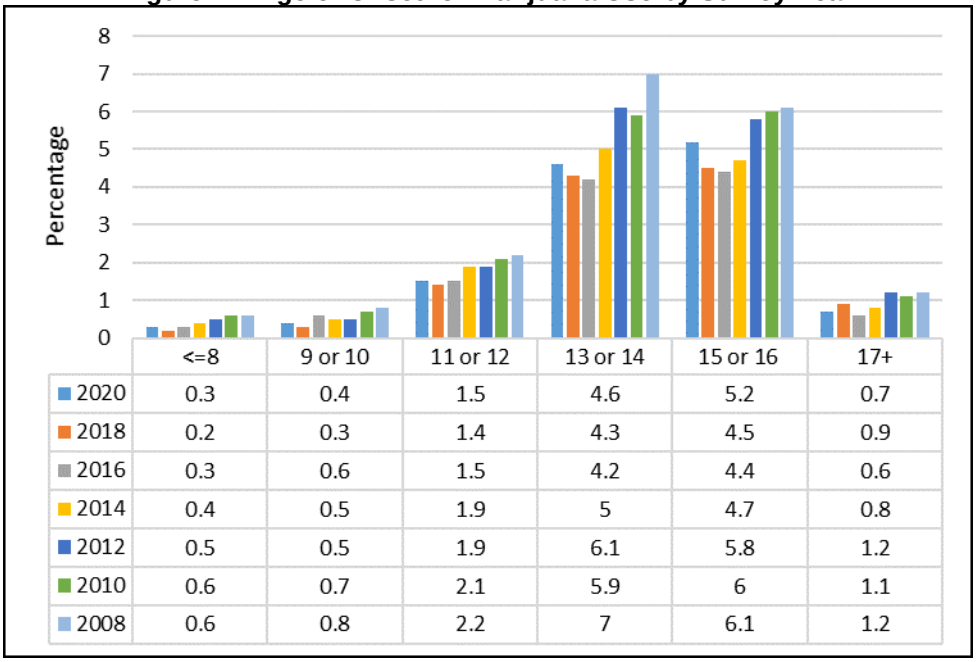
Figure 23: Perception of Parental Disapproval of Marijuana 2022, Grades 5-12.



	5	6	7	8	9	10	11	12
Not wrong at all	4	8.6	3.7	3.6	5.2	4.6	4.8	6.7
A little bit wrong	0.6	0.6	3	4.5	5.8	9.1	9.5	12.5
Wrong	2.3	3.7	8.3	9.7	12.3	14.2	14.1	17.5
Very Wrong	93.1	87.1	85.1	82.3	77.7	73.1	71.5	63.3

Youth were asked to report the age at which they first used marijuana. The age distribution is unlike that of cigarettes and alcohol as peak initiation for cigarettes and alcohol appears at age 13 or 14, with a marked decline thereafter. For marijuana, however, initiation remains through age 15 or 16 before declining at age 17. In other words, the age distribution for marijuana use appears to be more skewed to an older age than the age distributions for cigarette and alcohol use.

Figure 24: Age of Onset for Marijuana Use by Survey Year



	<=8	9 or 10	11 or 12	13 or 14	15 or 16	17+
2020	0.3	0.4	1.5	4.6	5.2	0.7
2018	0.2	0.3	1.4	4.3	4.5	0.9
2016	0.3	0.6	1.5	4.2	4.4	0.6
2014	0.4	0.5	1.9	5	4.7	0.8
2012	0.5	0.5	1.9	6.1	5.8	1.2
2010	0.6	0.7	2.1	5.9	6	1.1
2008	0.6	0.8	2.2	7	6.1	1.2

Edibles, Vaping and Any Monthly Use

Since 2016, the ADAMHS Youth survey asks questions asked about the use of marijuana in vaping devices, in general, or as an edible (brownie or candy, etc.). We asked 'During the past 30 days, have you ever used marijuana in the following forms: in general, in a vaping device or as an edible (brownie candy, etc.)? Results are presented in Tables 1and 2 below. While overall marijuana use declined during the pandemic, Wood County youth report a significant increase in the use of marijuana through edibles as seen in Table 2.

Table 1: Prevalence of 30-Day Marijuana use by Technique - 2022

	Any Use	Vaping	Edibles
7	1.3	1.3	2.7
8	2.5	2.9	4.9
9	3.9	3.8	5.7
10	6.6	5.8	7.8
11	9.1	8.7	12.5
12	12.9	11.8	16.9

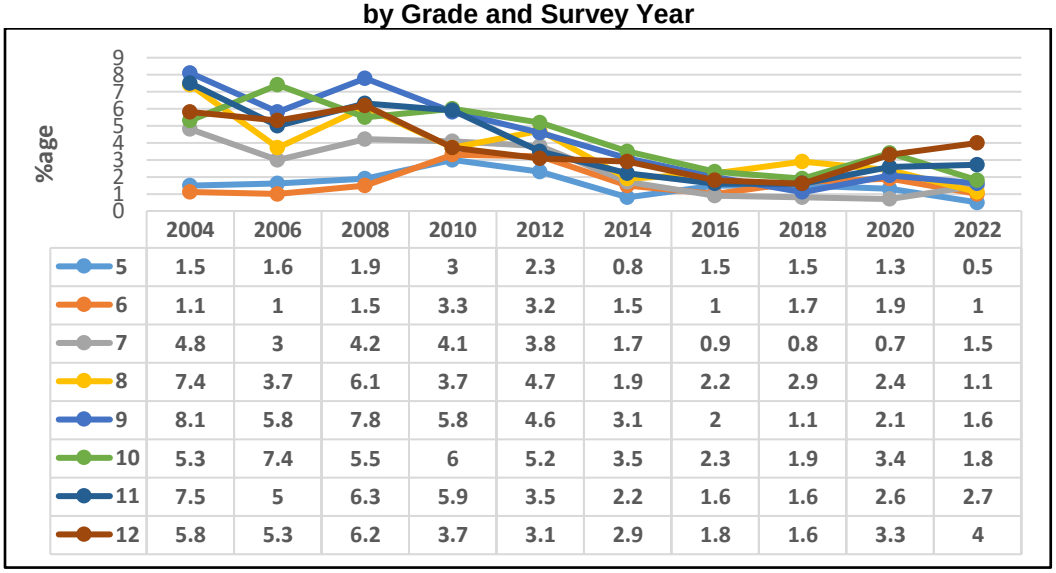
Table 2: Prevalence of Marijuana Use Through Edibles by Year

	2018	2020	2022
7	0.8	1.4	2.7
8	2.3	2	4.9
9	3.2	3	5.7
10	4.2	5.2	7.8
11	7.4	3.7	12.5
12	7.7	7.7	16.9

INHALANTS

Inhalants are volatile substances that are inhaled for intoxicating effects. They act as depressants to the central nervous system. They include household products such as glue, nail polish remover, butane, aerosol spray propellants, marking pens, white out, gasoline, or other solvents. Inhalants are notable in that they are legal substances that are available anywhere and obtainable by anyone regardless of age. Consequently, inhalant use among the very young is exceeded only by alcohol and exceeds that of cigarettes and marijuana until high school. Unlike most other drugs, the use of inhalants declines in the late teens as other substances become available to the user. The Percentage of Wood County youth reporting inhalant use during the past year is indicated in Figure 25. In the 2022 survey administration, the prevalence of inhalants increased in grades 7, 11 and 12, but decreased in grades 5, 6, and 8 through 10.

Figure 25: Annual Prevalence Rate for Inhalant Use by Grade and Survey Year

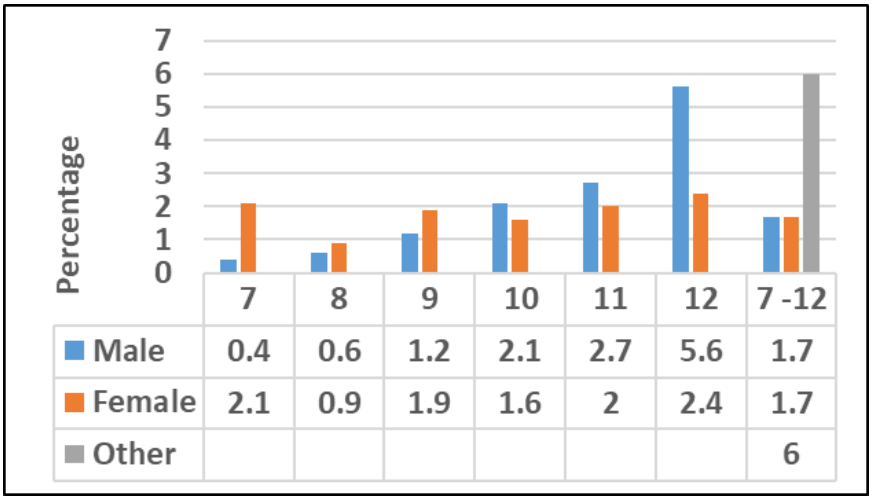


	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
5	1.5	1.6	1.9	3	2.3	0.8	1.5	1.5	1.3	0.5
6	1.1	1	1.5	3.3	3.2	1.5	1	1.7	1.9	1
7	4.8	3	4.2	4.1	3.8	1.7	0.9	0.8	0.7	1.5
8	7.4	3.7	6.1	3.7	4.7	1.9	2.2	2.9	2.4	1.1
9	8.1	5.8	7.8	5.8	4.6	3.1	2	1.1	2.1	1.6
10	5.3	7.4	5.5	6	5.2	3.5	2.3	1.9	3.4	1.8
11	7.5	5	6.3	5.9	3.5	2.2	1.6	1.6	2.6	2.7
12	5.8	5.3	6.2	3.7	3.1	2.9	1.8	1.6	3.3	4

The table below shows the Percentage of Wood County adolescents that used inhalants in the past year by frequency of reported use and by grade level (2022 data).

		Grade					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2022**	98.5	98.9	98.4	98.2	97.3	96
1-2 times	**2022**	.9	.7	.8	1.1	1.5	2.5
3-5 times	**2022**	.3	.1	.4	.1	.3	.2
6-10 times	**2022**	.3	.1	.2	0	.1	.2
11+ times	**2022**	.1	.2	.3	.6	.8	1.1

Figure 26: Annual Prevalence Rate for Inhalant Use by Gender, 2022



	7	8	9	10	11	12	7 -12
Male	0.4	0.6	1.2	2.1	2.7	5.6	1.7
Female	2.1	0.9	1.9	1.6	2	2.4	1.7
Other							6

National rates of annual inhalant use in December 2021 were 4.8 % among 8th graders, 2.0 % among 10th graders, and 1.8 % among 12th graders, with the 1.8 % among seniors representing a slight increase over prior years. In 2022, Wood County youth reported rates of 1.1 % among 8th graders, 1.0 % among 10th graders, and 4.0 % among 12th grade. Wood County reported a similar, yet larger, increase in inhalant use among 12th graders.

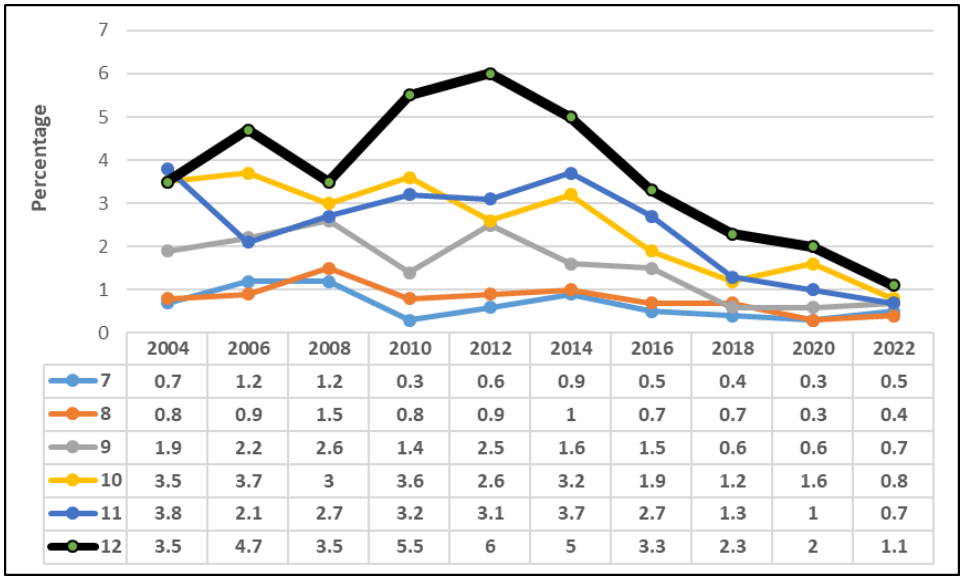
MDMA / ECSTASY

Ecstasy, also known as MDMA (3,4-methylenedioxymethamphetamine), is an illegal drug with both psychedelic and stimulant properties. Ecstasy became popular at "rave" parties and was misconceived as a safe drug because of the feelings of well-being it created. Adolescents might use it to promote euphoria, feelings of closeness, empathy, sexuality, and to reduce inhibitions. The Percentage of Wood County youth reporting ecstasy use is indicated in Figure 27.

In 2022, Wood County youth reported decreases in most grade levels. The University of Michigan (December, 2021) reported significant decreases in grades 8 (.6%), 10 (.7%), and 12 (1.1%). Wood County rates for ecstasy use are consistently lower than those reported nationally.

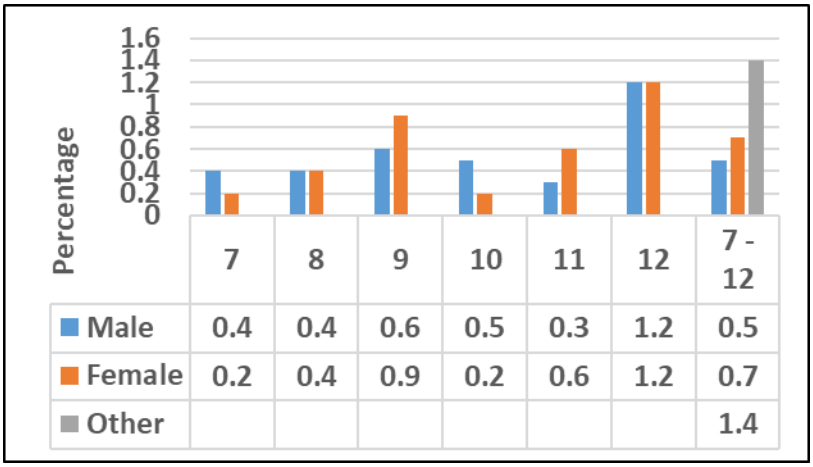
Ecstasy became popular in the late 90's but use plummeted among fears of harmful consequences from use. A rebound in the use of ecstasy could be explained by "generational forgetting," where a new cohort of youth try the drug without the knowledge of harmful consequences that was acquired by their predecessors.

Figure 27: Annual Prevalence Rate for Ecstasy Use by Grade and Survey Year



	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
7	0.7	1.2	1.2	0.3	0.6	0.9	0.5	0.4	0.3	0.5
8	0.8	0.9	1.5	0.8	0.9	1	0.7	0.7	0.3	0.4
9	1.9	2.2	2.6	1.4	2.5	1.6	1.5	0.6	0.6	0.7
10	3.5	3.7	3	3.6	2.6	3.2	1.9	1.2	1.6	0.8
11	3.8	2.1	2.7	3.2	3.1	3.7	2.7	1.3	1	0.7
12	3.5	4.7	3.5	5.5	6	5	3.3	2.3	2	1.1

Figure 28: Annual Prevalence Rate for Ecstasy Use by Gender, 2022



National rates of ecstasy use had shown increases in 2013, but has generally been declining since then.

The percentages of youth who report ecstasy use, by grade, and by frequency of use is presented below.

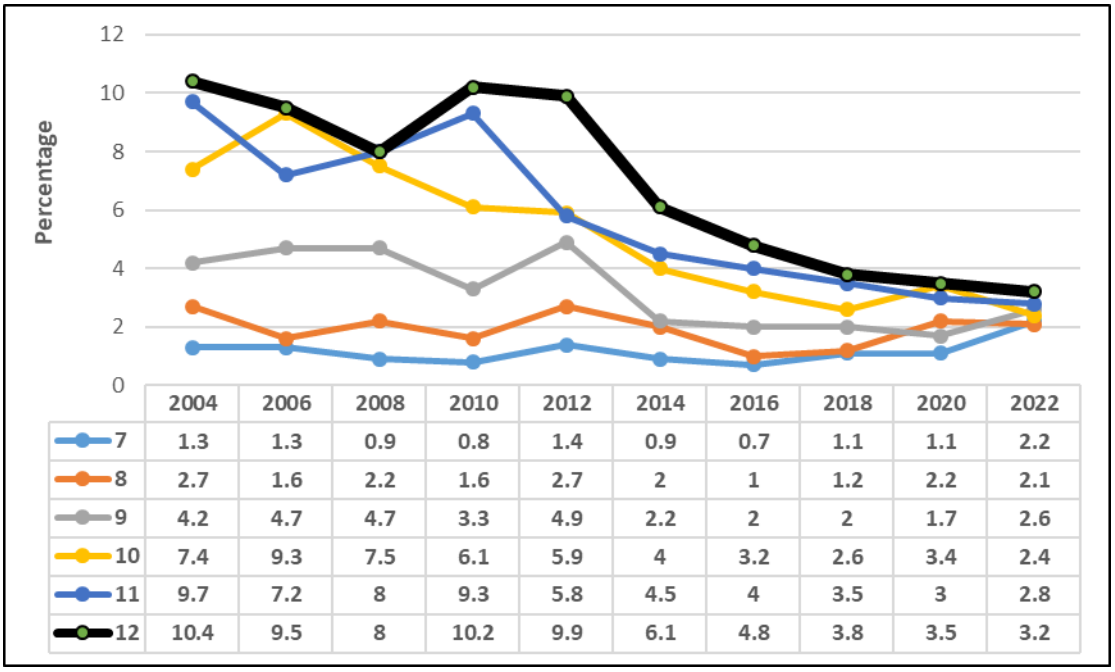
		Grade					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2022**	99.5	99.6	99.3	99.2	99.3	98.9
1-2 times	**2022**	.2	.3	.7	.8	.5	.8
3-5 times	**2022**	.1	.1	0	0	.1	.2
6-10 times	**2022**	.1	0	0	0	0	0
11+ times	**2022**	.1	0	0	0	0	.2

STIMULANTS

Methylphenidate (Ritalin®, Concerta®) and amphetamine preparations like Adderall® are most commonly used in the treatment of Attention-Deficit/Hyperactivity Disorder (ADHD). Because they are central nervous system stimulants, they carry some potential for abuse.

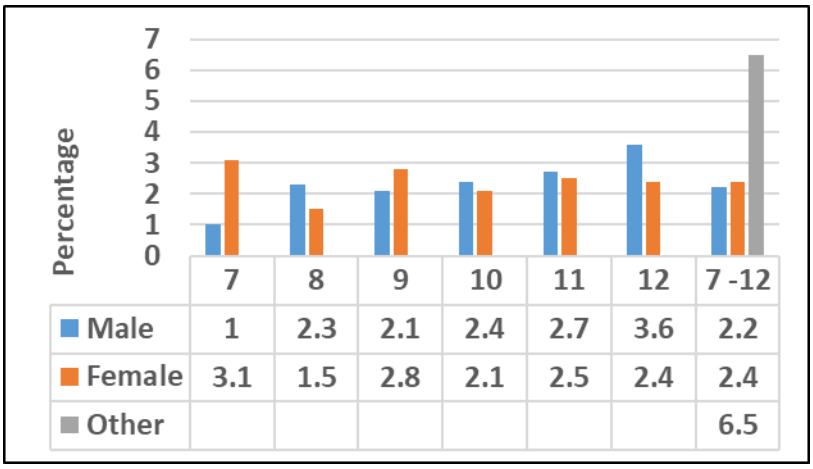
Wood County youth report fairly consistent decrease in most grades since 2012. Wood County rates appear in Figure 29. The U of M study asks separate questions for Ritalin and Adderall while the Wood County Youth survey groups these substances into one question. U of M's 2021 results reported that Ritalin rates for grades 8, 10, and 12 were .6, .3., and .5 % respectively, while for Adderall rates were 1.8, 1.6, and 1.8 % respectively. The Wood County 2022 rates of 2.1, 2.4 and 3.2 % for grades 8, 10, and 12 are higher than both the Adderall and Ritalin rates reported by Michigan.

Figure 29: Annual Prevalence Rate for Methylphenidate Use by Grade and Survey Year



	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
7	1.3	1.3	0.9	0.8	1.4	0.9	0.7	1.1	1.1	2.2
8	2.7	1.6	2.2	1.6	2.7	2	1	1.2	2.2	2.1
9	4.2	4.7	4.7	3.3	4.9	2.2	2	2	1.7	2.6
10	7.4	9.3	7.5	6.1	5.9	4	3.2	2.6	3.4	2.4
11	9.7	7.2	8	9.3	5.8	4.5	4	3.5	3	2.8
12	10.4	9.5	8	10.2	9.9	6.1	4.8	3.8	3.5	3.2

Figure 30: Annual Prevalence Rate for Methylphenidate Use by Gender, 2022



The percentages of Wood County youth who report Methylphenidate use last year, by grade and by frequency is presented below.

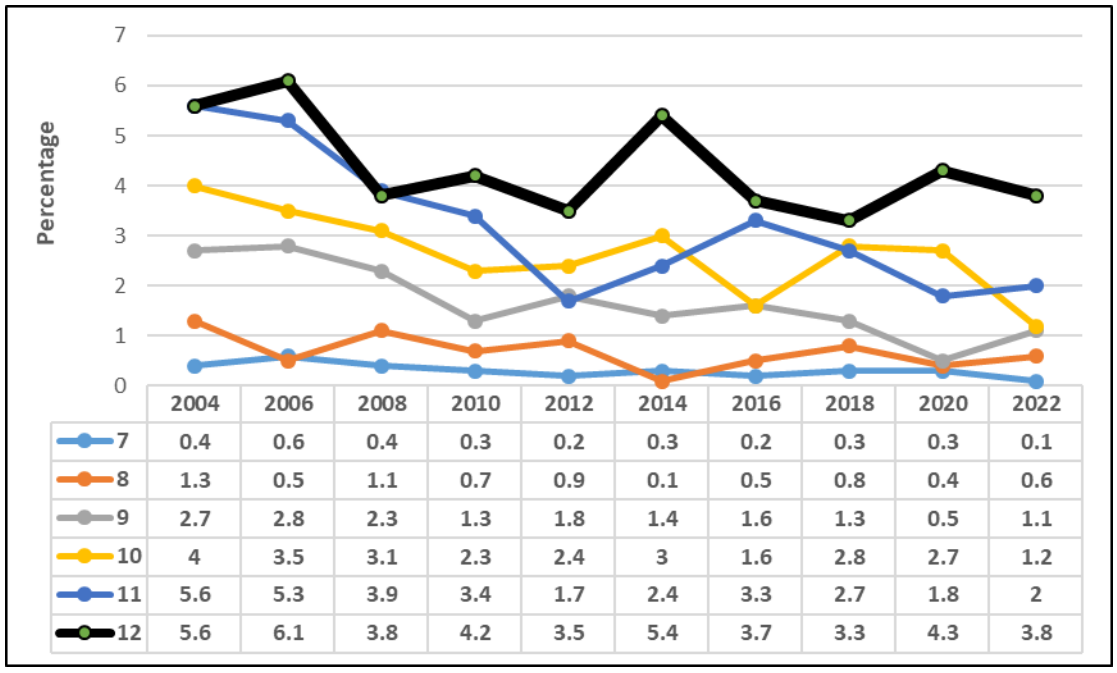
		Grade					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2022**	98.9	97.8	98.3	96.6	97	96.6
1-2 times	**2022**	.4	1.2	1	1.5	1.9	1.5
3-5 times	**2022**	.4	.7	.3	.9	.6	.7
6-10 times	**2022**	0	0	.2	.4	.1	.7
11+ times	**2022**	.3	.3	.3	.6	.3	.7

LSD

Lysergic acid diethylamide (LSD) use in Wood County declined rapidly from 2006 through 2010 where the rate of decline slowed. However, in Wood County the ADAMHS Youth survey has reported a fluctuation of prevalence rates, by differing grade levels, over the past decade. Rates generally fell through from 2004 through 2012, but then have fluctuated since then. The 2020 rates reveal decreases in general, with a few non-significant increase in a few grades.

National rates of LSD had been in decline since 1996 and in sharp decline since 2000, but increased slightly in 2015. National rates from 2021 are .7 %, 1.5 %, and 2.5 % among 8th, 10th, and 12th graders, a decrease over the past year. Wood County rates of LSD use were down in most grades except where minor increases were reported. These Wood County changes may suggest the need for greater attention to the dangers of LSD use by our media messages and by in-school prevention programs in Wood County.

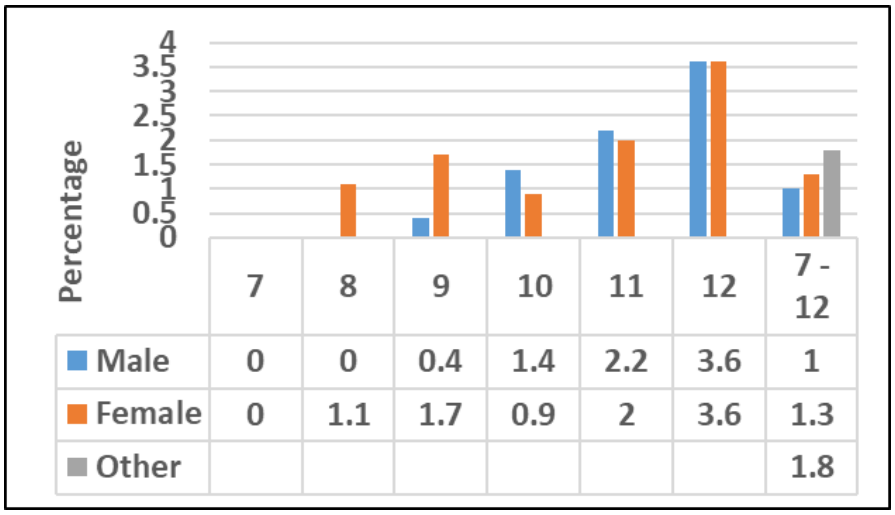
Figure 31: Annual Prevalence Rate for LSD Use by Grade and Survey Year



	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
7	0.4	0.6	0.4	0.3	0.2	0.3	0.2	0.3	0.3	0.1
8	1.3	0.5	1.1	0.7	0.9	0.1	0.5	0.8	0.4	0.6
9	2.7	2.8	2.3	1.3	1.8	1.4	1.6	1.3	0.5	1.1
10	4	3.5	3.1	2.3	2.4	3	1.6	2.8	2.7	1.2
11	5.6	5.3	3.9	3.4	1.7	2.4	3.3	2.7	1.8	2
12	5.6	6.1	3.8	4.2	3.5	5.4	3.7	3.3	4.3	3.8

Males reported twice the use of LSD than females.

Figure 32: Annual Prevalence Rate for LSD Use by Gender, 2022



The percentage of Wood County youth who report LSD use in 2022, by grade and by frequency of use is presented below.

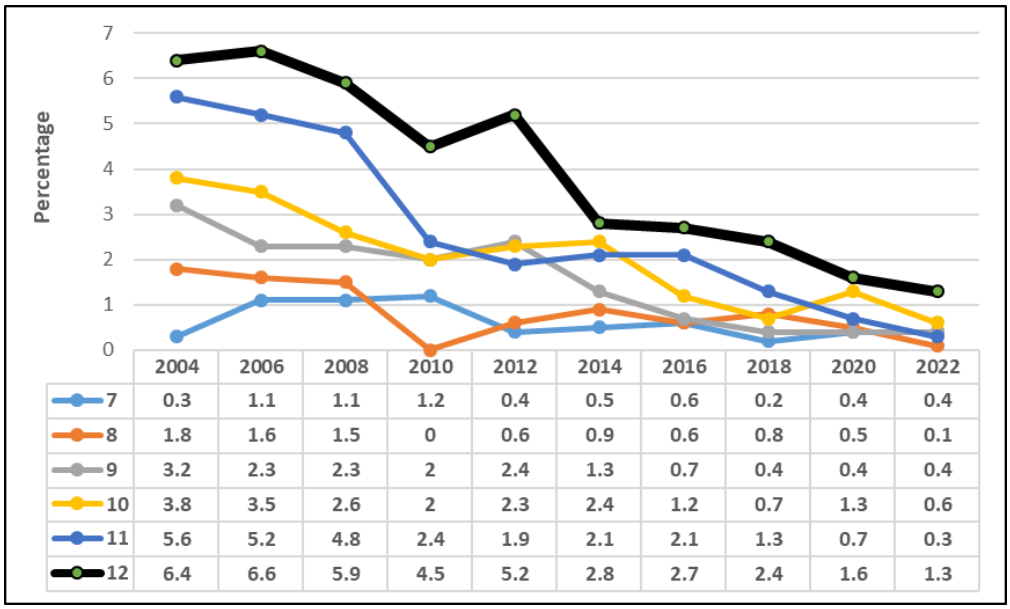
		Annual LSD Use, Wood County					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2022**	99.9	99.4	98.9	98.8	98	96.2
1-2 times	**2022**	0	.5	.7	1.0	1.5	2.1
3-5 times	**2022**	.1	.1	.3	.2	.5	1.1
6-10 times	**2022**	0	0	.1	0	0	.4
11+ times	**2022**	0	0	0	0	0	.2

COCAINE

The Wood County Youth survey asks two questions about cocaine; first, "During the last year, on how many occasions have you used powdered cocaine (sometimes called 'coke')?" and "During the last year, how many occasions have you smoked crack cocaine (sometimes called rock cocaine)?"

The results of the survey for cocaine are presented below. The declines in the use of cocaine first observed in the 2010 survey show continued decline. Since 2004 it declined in nearly all grades.

Figure 33: Annual Prevalence Rate for Cocaine Use by Grade Level and Survey Year



	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
7	0.3	1.1	1.1	1.2	0.4	0.5	0.6	0.2	0.4	0.4
8	1.8	1.6	1.5	0	0.6	0.9	0.6	0.8	0.5	0.1
9	3.2	2.3	2.3	2	2.4	1.3	0.7	0.4	0.4	0.4
10	3.8	3.5	2.6	2	2.3	2.4	1.2	0.7	1.3	0.6
11	5.6	5.2	4.8	2.4	1.9	2.1	2.1	1.3	0.7	0.3
12	6.4	6.6	5.9	4.5	5.2	2.8	2.7	2.4	1.6	1.3

The Percentage of Wood County youth who reported cocaine use in 2022, by grade and by frequency of use is presented below.

		Annual Cocaine Use, Wood County					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2022**	99.6	99.9	99.6	99.4	99.7	98.7
1-2 times	**2022**	.2	.1	.2	.2	.3.	.4
3-5 times	**2022**	.1	0	.2	.1	0	.8
6-10 times	**2022**	0	0	0	0	0	0
11+ times	**2022**	.1	0	0	.2	0	.2

Cocaine use rates in Wood County resemble national rates. The U of M 2021 study reported powdered cocaine use at .2 %, .6 % and 1.2 % among 8, 10, and 12th graders. Wood County reported rates of .1 %, .6 %, and 1.3 % for grades 8, 10, and 12. Wood County rates are similar to national rates.

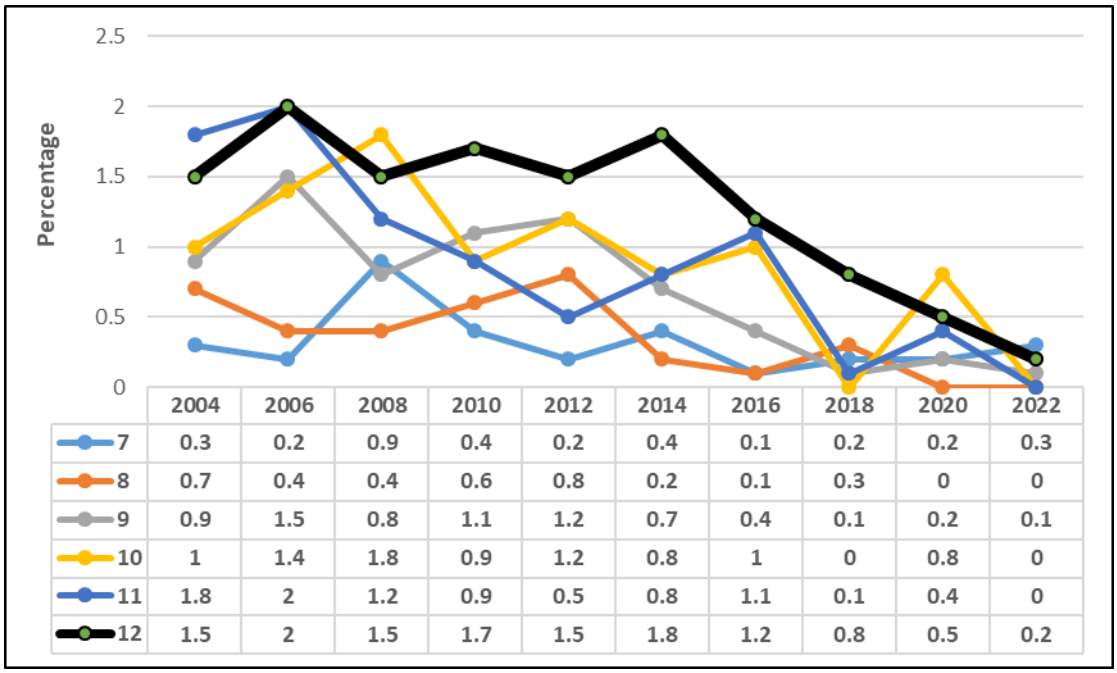
HEROIN

Heroine is a Schedule I drug (high potential for abuse and no legitimate medical use) which is produced from morphine (which is a principal component of opium). Opium is a naturally occurring substance that is extracted from the seedpod of the opium poppy. In the Eastern United States, heroin generally is sold as a powder that is white (or off-white) in color. In the Western United States, some brown colored powdered heroin is sold, bust most of the heroin available is a solid substance that is black in color and may be sticky (like tar) or hard to the touch. Heroin is injected, snorted, or smoked, and users who don't start injecting often move in that direction as their bodies become conditioned to the drug and the effect becomes less intense.

Common names for heroin include china, white, dead on arrival, diesel, dope, H, horse, smack, poppy, black, tar, thunder and train.

In 2022, heroin prevalence was reported as .1 % in all grades in Wood County. Overall, there were insignificant changes since 2014 when prevalence rates began to fall. The prevalence rates of heroin use in Wood County, by grade and by year is presented in Figure 34 below.

Figure 34: Annual Prevalence Rate for Heroin Use by Grade Level and Survey Year



	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
7	0.3	0.2	0.9	0.4	0.2	0.4	0.1	0.2	0.2	0.3
8	0.7	0.4	0.4	0.6	0.8	0.2	0.1	0.3	0	0
9	0.9	1.5	0.8	1.1	1.2	0.7	0.4	0.1	0.2	0.1
10	1	1.4	1.8	0.9	1.2	0.8	1	0	0.8	0
11	1.8	2	1.2	0.9	0.5	0.8	1.1	0.1	0.4	0
12	1.5	2	1.5	1.7	1.5	1.8	1.2	0.8	0.5	0.2

Data comparing results for heroin use from previous surveys are reported above. The data show that almost all grades are lower than previous years, except for 12th graders. Similarly, the use of heroin is low in the University of Michigan's Monitoring the Future study. The 2021 MTF study

shows heroin prevalence in grades 8, 10, and 12 at .2 %, .1 %, and .1 % of use respectively. National rates are in decline.

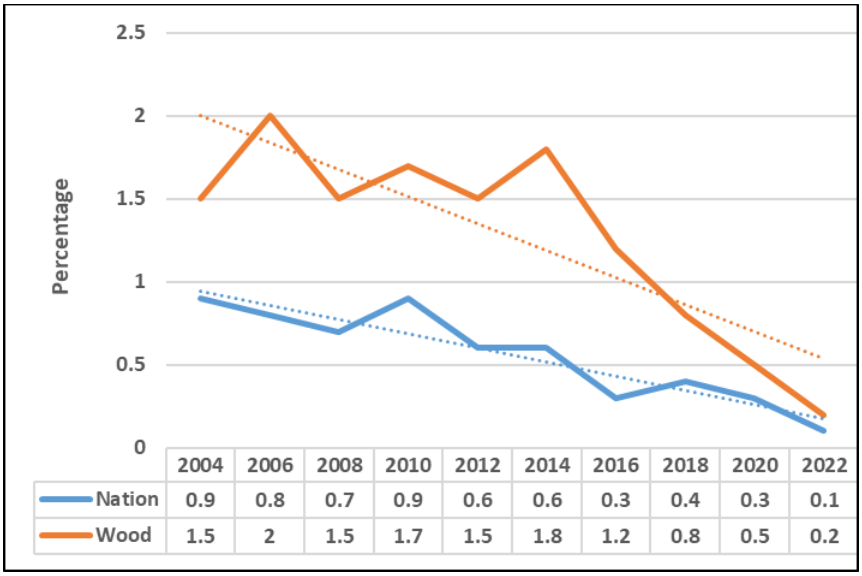
Figure 35: Actual Number of Respondents Reporting Annual Heroin Use

		Annual Heroin Use, Wood County Number of Respondents					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2022**	1045	1015	1093	892	745	522
1-2 times	**2022**	1	0	1	0	0	2
3-5 times	**2022**	1	0	0	0	0	2
6-10 times	**2022**	0	0	0	0	1	0
11+ times	**2022**	1	0	0	0	0	0

A total of 18 school aged youth in Wood County reported having tried heroin at least once in the 2022 survey. Additionally, these data exclude Penta Career Center Sophomores, Juniors, and Seniors and their addition would likely increase the count somewhat. Penta is excluded so that survey results will more closely compare to the Monitoring the Future results, where career centers are not included in the analysis.

Finally, the illustration below compares the decline in the Percentage of annual heroin users in grade 12 nationally compared to the same group of 12th graders in Wood County. A regression line was inserted to emphasize that heroin rates are in decline both nationally and locally.

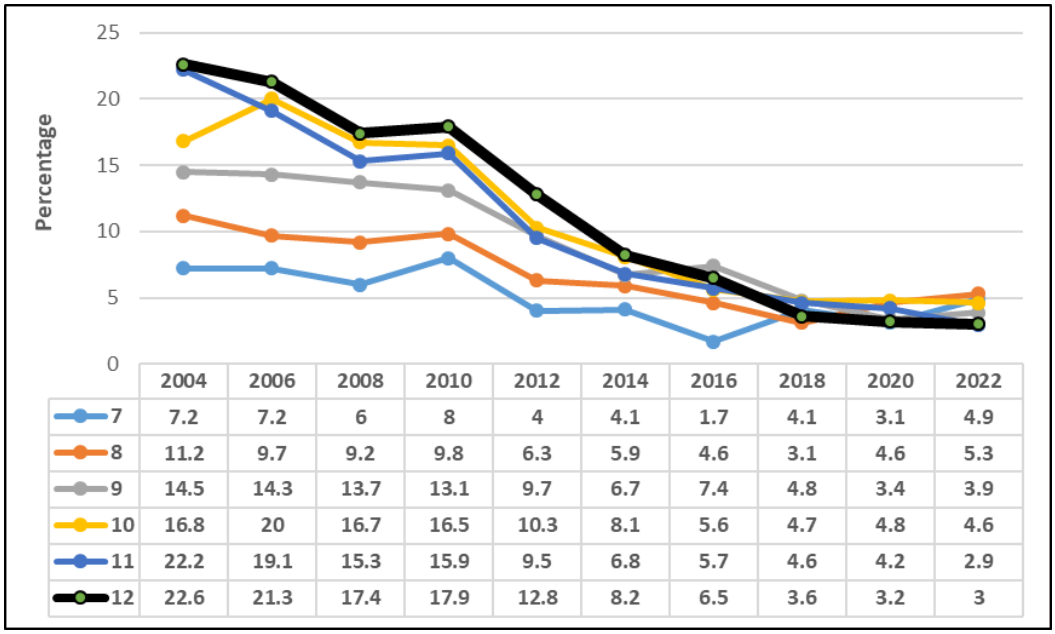
National and Local Trends in Annual Heroin Use, 2004-2022, Among 12th Graders



NARCOTIC PAINKILLERS

This category includes the use of prescription narcotic painkillers (e.g., meperidine [Demerol®], propoxyphene [Darvon®], hydromorphone (Dilaudid®], etc.), and oxycodone (OxyContin®).The results found in Wood County are reported in Figure 36.

Figure 36: Annual Prevalence Rate for Narcotic Painkiller Use by Grade Level and Survey Year



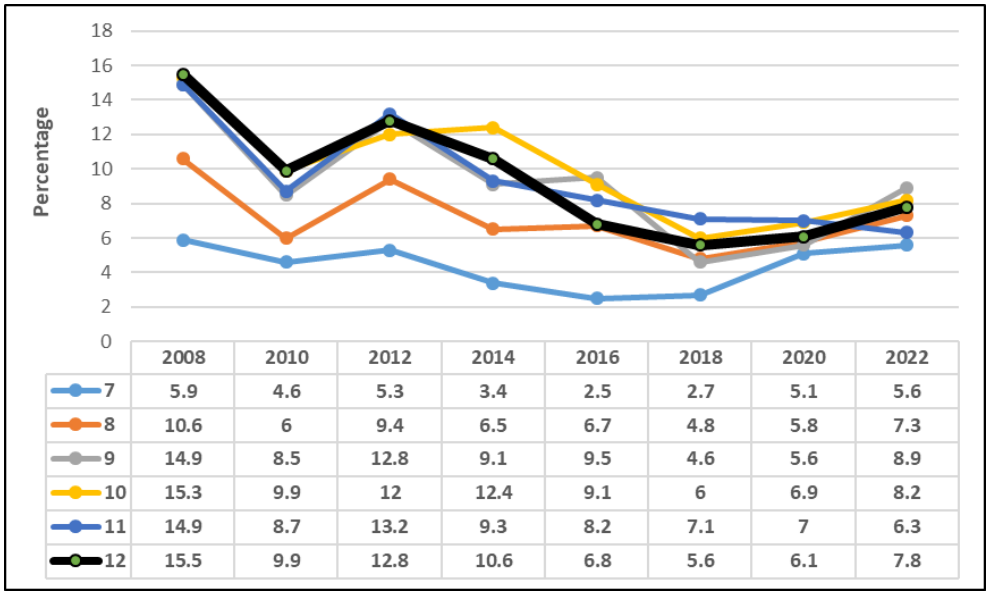
	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
7	7.2	7.2	6	8	4	4.1	1.7	4.1	3.1	4.9
8	11.2	9.7	9.2	9.8	6.3	5.9	4.6	3.1	4.6	5.3
9	14.5	14.3	13.7	13.1	9.7	6.7	7.4	4.8	3.4	3.9
10	16.8	20	16.7	16.5	10.3	8.1	5.6	4.7	4.8	4.6
11	22.2	19.1	15.3	15.9	9.5	6.8	5.7	4.6	4.2	2.9
12	22.6	21.3	17.4	17.9	12.8	8.2	6.5	3.6	3.2	3

The annual use of narcotic painkillers, as reported by Wood County youth has shown considerable decline in nearly all grade levels over 2004. The decline among 11th graders from 22.2 % in 2004 to 2.9 % in 2022 represents an 87 % decrease, which translates to over 600 fewer 7 through 12th graders using narcotic painkillers in 2022 compared to 2004. Nearly all grades have decreased since 2010.

However, rates of use are much higher than the rates reported nationally. Admittedly, the MTF study asks about annual OxyContin use and Vicodin use in two separate questions, whereas the Wood County survey asks one question about annual Narcotic Painkiller use, without a prescription (OxyContin and Vicodin are used as references in only one Wood County question). Nonetheless, on that one question, Wood County reports rates of 5.3 %, 4.6 %, and 3.0 % for grades 8, 10 and 12. The 2021 U of M report rates for the same three grades as .8 %, .9 % and .9 % for the OxyContin question, and .6 %, .5 %, and .9 % for the Vicodin question.

The annual use of narcotic painkillers, as reported by Wood County youth, has continued to decline in grades 10-12, but increased slightly in grades 7-9. Monthly use of narcotic painkillers increased in most all grade levels except 11. National levels are down.

Figure 37: 30-Day Prevalence Rate for Narcotic Painkiller Use by Grade Level and Survey Year

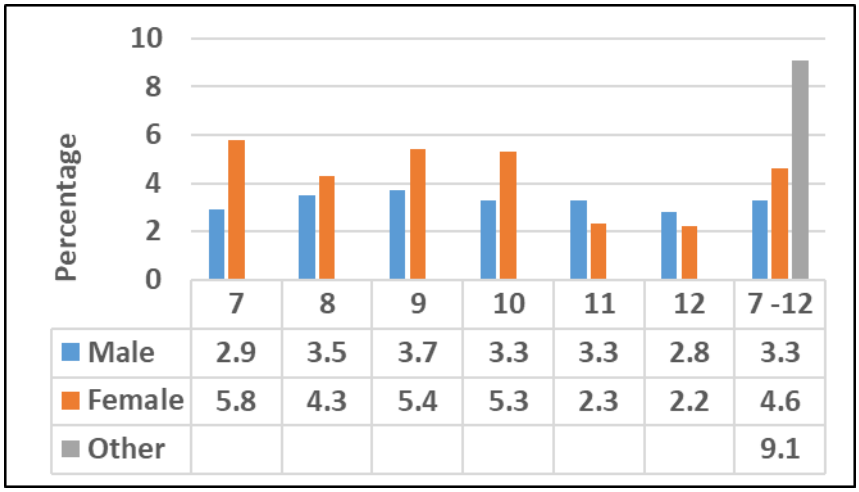


	2008	2010	2012	2014	2016	2018	2020	2022
7	5.9	4.6	5.3	3.4	2.5	2.7	5.1	5.6
8	10.6	6	9.4	6.5	6.7	4.8	5.8	7.3
9	14.9	8.5	12.8	9.1	9.5	4.6	5.6	8.9
10	15.3	9.9	12	12.4	9.1	6	6.9	8.2
11	14.9	8.7	13.2	9.3	8.2	7.1	7	6.3
12	15.5	9.9	12.8	10.6	6.8	5.6	6.1	7.8

The University of Michigan survey asks where students got the drugs that they used without a prescription. For amphetamines, tranquilizers and narcotics, 70 % of youth reported they were given the drugs 'for free' by a friend or relative. About 40 % 'purchased them' from a friend or relative. Only 20 % took the drugs 'without asking' from a friend or relative.

Figure 38 contains information on narcotic painkiller use for gender. As can be seen in Figure 38, females are more likely to report using painkillers than males in all grades.

Figure 38: Annual Prevalence Rate for Narcotic Painkiller Use by Gender, 2022



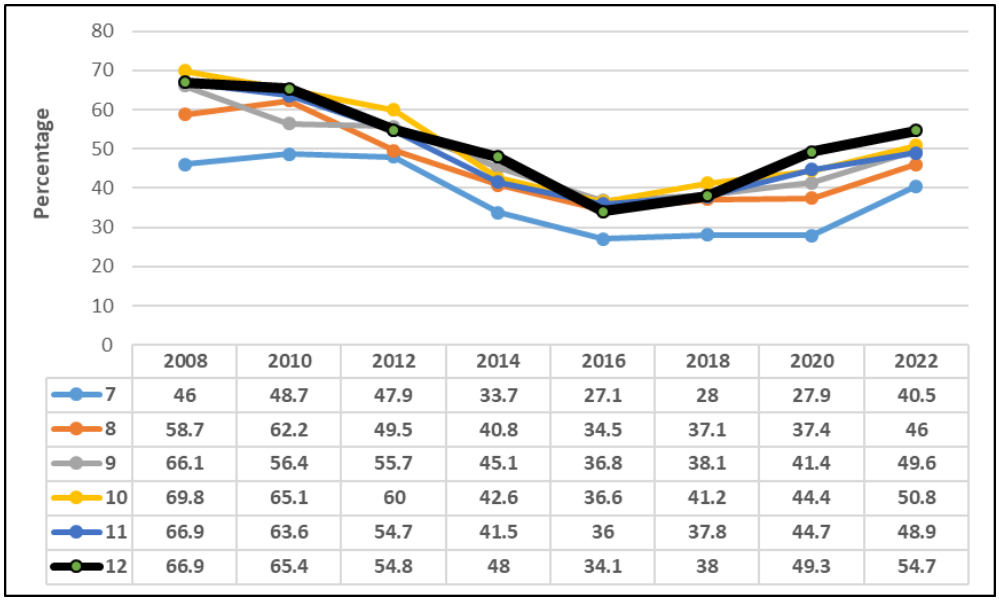
	7	8	9	10	11	12	7 -12
Male	2.9	3.5	3.7	3.3	3.3	2.8	3.3
Female	5.8	4.3	5.4	5.3	2.3	2.2	4.6
Other							9.1

CAFFEINATED ENERGY DRINKS

Caffeinated energy drinks are soft drinks that typically include either caffeine or other products that advertise themselves as providing energy (ex, ginseng, taurine, or guarana extracts). These caffeinated drinks have been the source of much concern for health care providers because of the large amounts of caffeine (50-350 mgs) per drink. In the 2014 survey, we asked "During the last year, on how many occasions have you used caffeinated energy drinks (Red Bull, Rock Star, Monster)?"

The prevalence rate of caffeinated energy drinks is increasing in Wood County at all grade levels.

Figure 39: Annual Prevalence Rate for Caffeinated Energy Drink Use by Grade Level and Survey Year



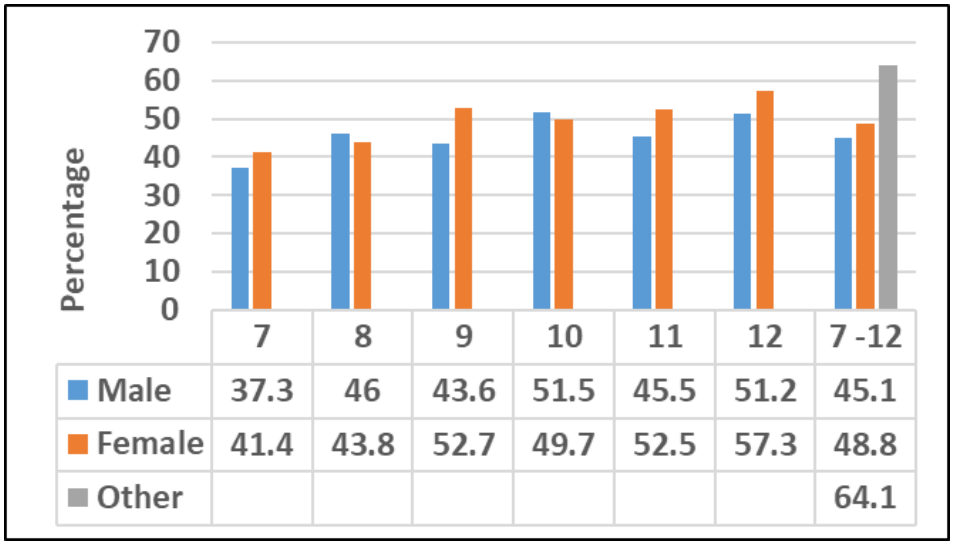
	2008	2010	2012	2014	2016	2018	2020	2022
7	46	48.7	47.9	33.7	27.1	28	27.9	40.5
8	58.7	62.2	49.5	40.8	34.5	37.1	37.4	46
9	66.1	56.4	55.7	45.1	36.8	38.1	41.4	49.6
10	69.8	65.1	60	42.6	36.6	41.2	44.4	50.8
11	66.9	63.6	54.7	41.5	36	37.8	44.7	48.9
12	66.9	65.4	54.8	48	34.1	38	49.3	54.7

The Percentage of Wood County youth who report caffeinated energy drink use, by grade, and by frequency of use, is presented below.

		Percentage of use of Non-Alcoholic Energy Drinks, 2022					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2022**	59.5	54	50.4	49.2	51.1	45.3
1-2 times	**2022**	16	16.9	15.4	12.1	12.2	11
3-5 times	**2022**	7.3	9.4	9.2	11.6	7.1	12.8
6-10 times	**2022**	5.8	5.1	7.1	6.4	5.0	4.2
11+ times	**2022**	11.4	14.6	17.	20.7	24.5	26.7

The use of non-alcoholic caffeinated energy drinks appears to occur slightly more often among males than females.

Figure 40: Annual Prevalence Rate for Caffeinated Energy Drink Use by Gender, 2022



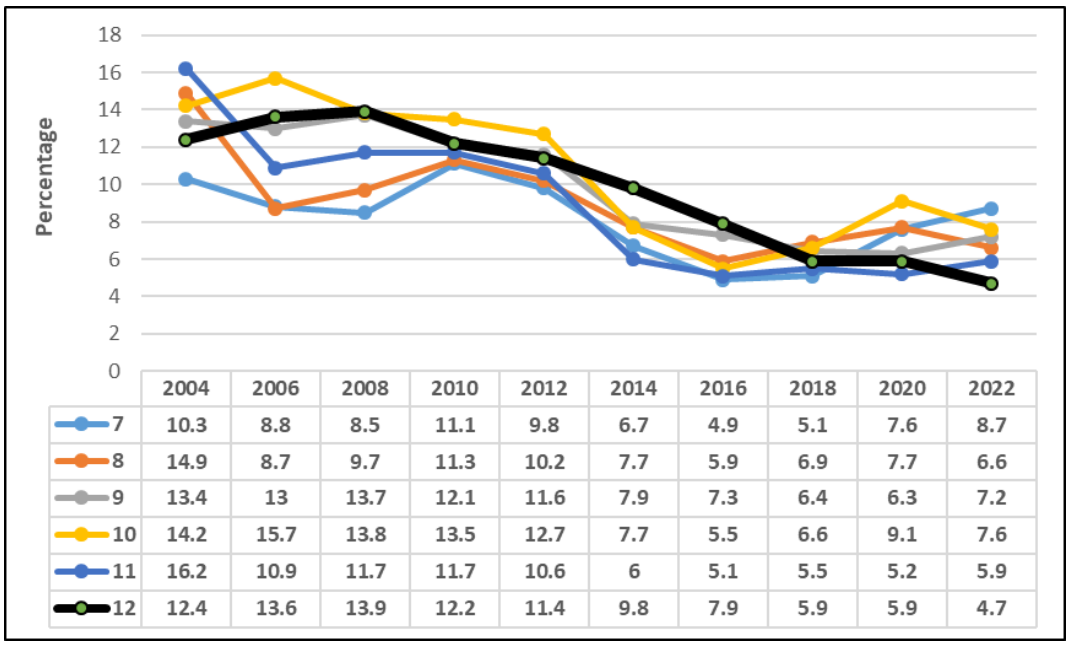
	7	8	9	10	11	12	7 -12
Male	37.3	46	43.6	51.5	45.5	51.2	45.1
Female	41.4	43.8	52.7	49.7	52.5	57.3	48.8
Other							64.1

COUGH MEDICINE

Cough medicines that contain the cough suppressant dextromethorphan and antihistamines like diphenhydramine can produce sedation and other consciousness altering effects. Since these medications are legally obtainable over the counter, users often believe they are a safe way to achieve intoxication without the risk of arrest.

The survey asked the question "During the last year, how often have you taken cough medicine when you weren't sick (Robitussin, Vicks, Coricidin, Triple C, Etc.)?" Those adolescents who responded to any use of cough medicine when they weren't sick are reported in Figure 41.

Figure 41: Annual Prevalence Rate for Cough Medicine Use by Grade Level and Survey Year

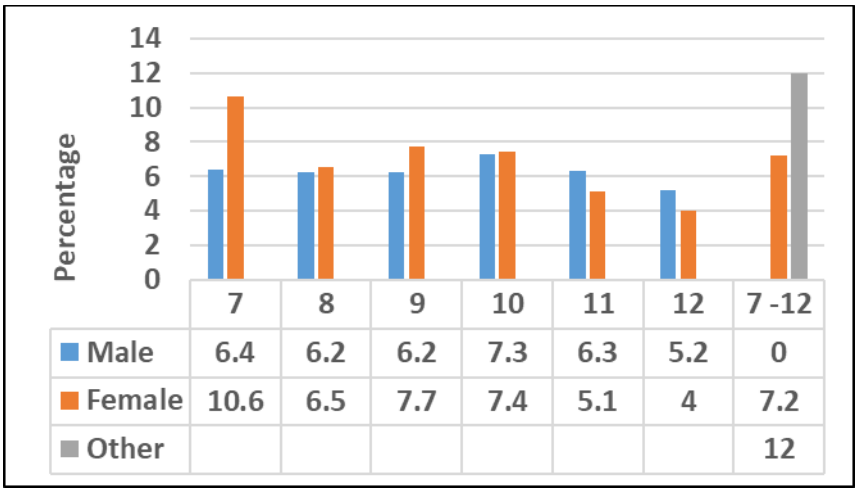


	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
7	10.3	8.8	8.5	11.1	9.8	6.7	4.9	5.1	7.6	8.7
8	14.9	8.7	9.7	11.3	10.2	7.7	5.9	6.9	7.7	6.6
9	13.4	13	13.7	12.1	11.6	7.9	7.3	6.4	6.3	7.2
10	14.2	15.7	13.8	13.5	12.7	7.7	5.5	6.6	9.1	7.6
11	16.2	10.9	11.7	11.7	10.6	6	5.1	5.5	5.2	5.9
12	12.4	13.6	13.9	12.2	11.4	9.8	7.9	5.9	5.9	4.7

The percentage of Wood County youth who report cough medicine use, by grade, and by frequency of use, is presented below.

		Percentage of use of Cough Medicine, Wood County, 2022					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2022**	91.5	93.4	92.8	92.4	94.1	95.3
1-2 times	**2022**	6.3	4.1	4.4	4.9	3.4	2.8
3-5 times	**2022**	1.4	1.7	2	1.9	1.9	1.1
6-10 times	**2022**	.5	.8	.3	.7	.3	.4
11+ times	**2022**	.3	.1	.5	.1	.4	.4

Figure 42: Annual Prevalence Rate for Cough Medicine Use by Gender, 2022



	7	8	9	10	11	12	7 -12
Male	6.4	6.2	6.2	7.3	6.3	5.2	0
Female	10.6	6.5	7.7	7.4	5.1	4	7.2
Other							12

Female students report higher rates of cough medicine use than male students at all grade levels except for grades 11 and 12.

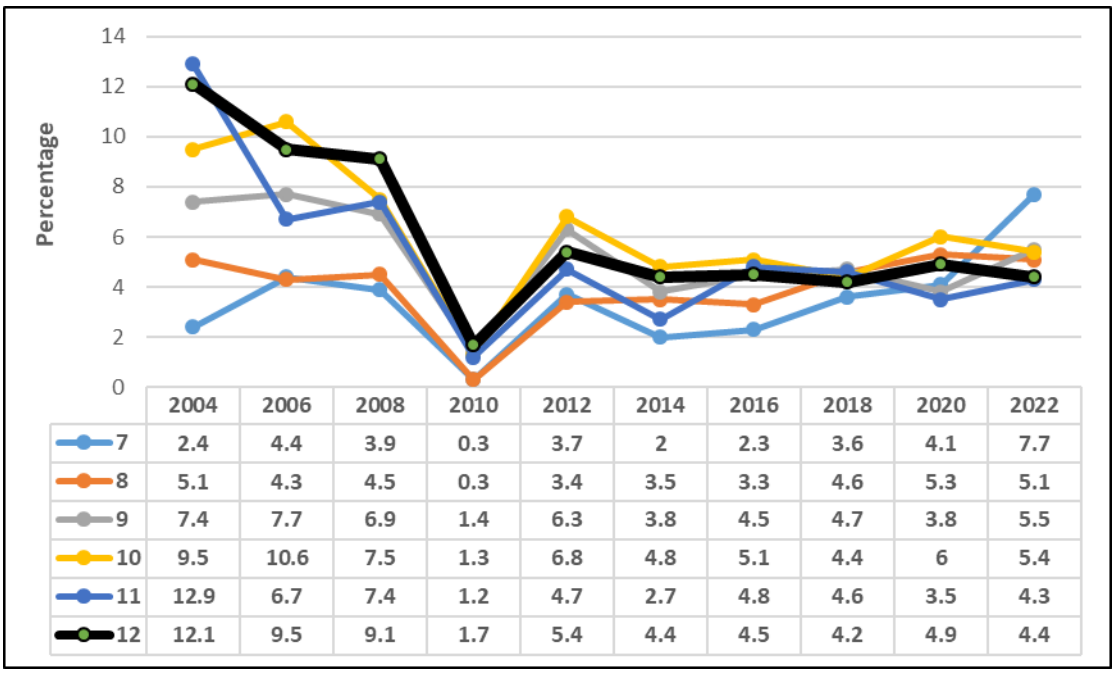
The rates of cough and cold medicine among all grades in Wood County were at historic low levels, but 2020 reported increase in all grades except 9 and 12 where continued decreases were reported. In 2022 rates seemed to rebound to the previous lower levels, except for grades 7 and 11 where increases were reported. Despite the historic lows, Wood County rates of use are much higher than national averages. The 2021 U of M study reports rates in grades 8, 10, and 12 at 3.5 %, 2.7 %, and 1.7 % respectively. Wood County rates for grades 8, 10 and 12 are 4.7 % 7.6 % and 4.7 % respectively.

A change was made in the 2016 survey where our question about barbiturates was changed to a question about benzodiazepine. From 2004 through 2014, we asked students how often they used barbiturates (downers goofballs, sleeping pills, reds, blues, rainbows). The results obtained varied widely and were inconsistent with national data – only 12th graders were asked this question on the national survey. Additionally, local on-site prevention specialists and counselors at the CRC did not report hearing students refer to the barbiturate classification of drugs.

In the 2016 through 2022 surveys, the barbiturate question was replaced with a question about using sleep or anxiety medication (like Xanax® or Klonopin®) that was not prescribed to you. These drugs are a class of drugs with hypnotic or anxiolytic properties. Benzodiazepines are often used for short-term relief of severe, disabling anxiety and their long-term use can lead to dependency. They are preferred to the use of barbiturates because they have a lower abuse potential and fewer adverse reactions.

In Figure 43 below, the annual prevalence rates for barbiturates and benzodiazepine are presented for Wood County. While most rates have fluctuated over time, the constantly increasing rate of benzos among 7th graders, particularly female 7th graders, since 2014, should be of concern.

Figure 43: Annual Prevalence Rate for Barbiturate (2004-2014) and Benzodiazepine (2016-2022) Use by Grade Level and Survey Year

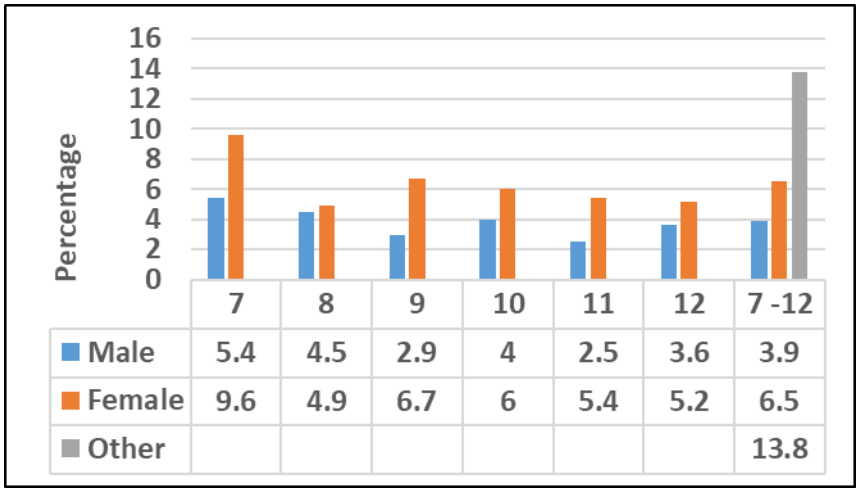


	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
7	2.4	4.4	3.9	0.3	3.7	2	2.3	3.6	4.1	7.7
8	5.1	4.3	4.5	0.3	3.4	3.5	3.3	4.6	5.3	5.1
9	7.4	7.7	6.9	1.4	6.3	3.8	4.5	4.7	3.8	5.5
10	9.5	10.6	7.5	1.3	6.8	4.8	5.1	4.4	6	5.4
11	12.9	6.7	7.4	1.2	4.7	2.7	4.8	4.6	3.5	4.3
12	12.1	9.5	9.1	1.7	5.4	4.4	4.5	4.2	4.9	4.4

The Percentage of Wood County youth who report Benzodiazepine use, by grade, and by frequency of use, is presented below.

Frequency	Year	Percent of use of Benzodiazepine, Wood County, 2022					
		7	8	9	10	11	12
Never	**2022**	95	94.7	96.3	94.1	96.5	94.9
1-2 times	**2022**	2.9	4.4	2.8	3.2	2.2	2.9
3-5 times	**2022**	.8	1	1	1.2	.8	.7
6-10 times	**2022**	.4	0	.3	.3	.1	.7
11+ times	**2022**	.9	1	.7	1.2	.4	.8

Figure 43a: Annual Prevalence Rate for Sleep/Anxiety Medication Use by Gender, 2022



OTHER ILLICIT DRUGS

The Percent of youth reporting the use of various other illicit drugs during the past years in Wood County is presented in the table below. The table reports use if the respondent indicates any use. This table does not differentiate between incidental use, chronic use and problematic use.

Table 3: Annual Prevalence Rate for Methamphetamines, Steroids, and Bath Salts / K2.

	Grade					
Substance	**7**	**8**	**9**	**10**	**11**	**12**
Methamphetamines, 2006	1.1	1.3	2.6	4.1	2.4	3.9
Methamphetamines, 2008	1.4	1.9	2.0	1.1	2.0	2.6
Methamphetamines, 2010	.5	.9	1.8	1.5	.9	1.7
Methamphetamines, 2012	.4	1.6	1.6	1.2	1.2	2.5
Methamphetamines, 2014	.6	.6	.9	1.6	.8	1.7
Methamphetamines, 2016	.3	.1	.6	.7	2.3	1.4
Methamphetamines, 2018	.3	.8	.3	.5	.6	.8
Methamphetamines, 2020	.3	.4	.4	1.1	.4	1.0
Methamphetamines, 2022	.6	.3	.4	.8	.5	.9
Steroids, 2006	1.4	1.1	2.3	2.9	2	3.4
Steroids, 2008	1.3	1.7	1.4	1.6	1.8	1.9
Steroids, 2010	1.0	1.2	1.6	1.8	1.9	2.3
Steroids, 2012	.7	1.4	1.4	1.6	1.1	1.1
Steroids, 2014	.2	.8	1.1	1.0	1.0	1.7
Steroids, 2016	.4	.6	.7	1.3	1.6	1.8
Steroids, 2018	.4	.6	.8	.2	.1	.8
Steroids, 2020	.6	1.0	.8	.8	.3	.7
Steroids, 2022	.8	.5	.8	1.0	1.5	1.3
Bath Salts / K2, 2012	1.2	1.8	3.2	6.5	7	10.6
K2 like products,2014	.9	1.7	3.2	3.4	3.8	4.3
K2 like products,2016	.5	.5	.7	1.4	1.1	.9
K2 like products, 2018	.5	.5	.3	.7	.5	.5
K2 like products, 2020	.4	.3	.8	.8	.5	.5
K2 like products, 2022	.7	.3	.2	.1	.4	.8

Each prevention program meets the qualifications of an evidence-based program aimed at reducing adolescent ATOD use, changing attitudes, and changing at-risk behaviors. Many programs, such as LifeSkills, are asset building programs designed to provide knowledge to increase self-esteem, increase a student's ability to make decisions and solve problems, communicate effectively, avoid misunderstandings, make new friends, and resist pressure to use drugs. Each program in its own right could explain some portion of the reported declines in use. The cumulative effect of multiple programming, over a multi-year period, would likely explain the changes observed in Wood County. Figure 44 below reports the number of students, faculty, administration, staff, and community members served, by program, over the past decade.

Figure 44. Number Served, by Program, by Year, in Wood County

Program / Academic Year	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	Total
B.A.B.E.S	60	NA	NA	350	330	601	839	694	853	767	744	491	592	622	630	602	530	388	9093
Bullying Education								220	11	15									246
Challenge Day				146	405	479		121	135	101									1387
Juuling/Opioids Lessons																310	88	435	833
Class Action					220	475	418	125	403	378	239	136	182	122	132	134	38	34	3036
Communities Mobilizing						25	25	25	26										101
Dialogue Nights						96	96	96	96										384
Expect Respect							1147	962	1085	697	472	535	365	284	281	258	245	165	6596
FASTRAC								98	225	212	264	150							949
Guiding Good Choices								30	49	48	32								159
Hooked on Fishing					150			191	172	187	129	244	460	447	757	216	0		2953
Insight/Teen Intervene						63	63	63	62							65	23		339
J.D.C. Life Skills				159	407	553	286	272	261	381	311	416	515	425	431	267	250	484	5508
Mental Health First Aid																		186	186
Parent Project	41	41	41	41	41	41	35	50	46	53	50	10	4	8	7	16	0		525
Why Try																95	21		116
Positive Action / STARS								637	648	432	526	534	463	914	985	750	1023	285	7197
Life Skills	1600	1600	1600	2600	1051	4339	4116	4090	3329	3081	3193	2885	2294	932	1199	1006	1688	1069	41672
Lifelines Suicide Prevention																		291	291
Problem ID/Referral	650	167	167	405	369			305	322	295		146	288	209	169	160	258	130	3910
Teen Institute		85	148	108	250	134	221	169	221	152	221	100	120	136	103	60	62		2290
Jr. Teen Institute					100	46	41	42	44	49	168	79	44	90	99	44	60		906
Total No. Students Served																			**88677**

Supported by RASS grant

supoorted by ADAMHS board and rass grant

supoorted by SS/HS grant

drug testing grant 2008-2012

JDC 06-07 (150 students) reflects only March 5, 2007 - June 1, 2007

Bullying numbers indicate trained teachers and staff only.

Given the magnitude of the prevention effort and the demonstrated success of each program, the prevention programing likely contributed to the reduction in adolescent ATOD use. However, in Wood County, the implementation of prevention programming does not tell the whole story. Additionally, the reduction in underage ATOD prevalence reported in 2022 could also be explained, in part, from environmental and system changes that occurred in Wood County over the past seven years. The environmental and system changes that occurred during the past 10 years include the following:

1. Alcohol compliance checks in local businesses done in collaboration with the local sheriff's office, local law departments, and the Ohio Investigative Unit.
2. Drug testing programs. From 2008 through 2012, the WCESC, in collaboration with local school boards, implemented a Federal grant for school-based student drug testing.
3. Seller-server training conducted in collaboration with the local sheriff's office, local law departments and the Ohio Investigative Unit.
4. Drug Take Back efforts initiated and advertised by local law enforcement, BGSU, the Committee on Aging, and the Prevention Coalition.
5. Information disseminated in the Wood County community, including the annual Red Ribbon Campaign, ATOD and Town Hall presentations in the community, news articles, "In-Service" programs for school teachers and staff, and mail distributions.
6. In school counselors provided by the Children's Resource Center provide assistance to students in all Wood County school districts.
7. The efforts of the Wood County Prevention Coalition where information, aimed at substance use reduction, is disseminated county wide.

These six broader environmental strategies would likely have contributed to the reduced access to adolescent ATOD use. Retail establishments, both carry-outs and bars, would have been less likely to sell to underage youth given the heightened enforcement of laws by the Wood County Sheriff's Office and local police. As previously noted, reduced access to ATOD is positively correlated with decreases in adolescent ATOD prevalence.

Viewed at a personal level, a 12th grade student in any school district in Wood County, would likely have been affected by multiple administrations of multiple programs through his or her elementary, middle, and secondary school life span. For example, a 12th grader in 2022, would likely have had B.A.B.E.S. education in elementary school; received LifeSkills training on three occasions in elementary, middle school/junior high, and in high school; and had a good chance of participating in additional programs such as Expect Respect or Class Action. If our student needed additional assistance, he or she may have met with either a trained professional from his or her school, with an on-site ATOD Prevention Specialist, or with a school-based therapist from the CRC.

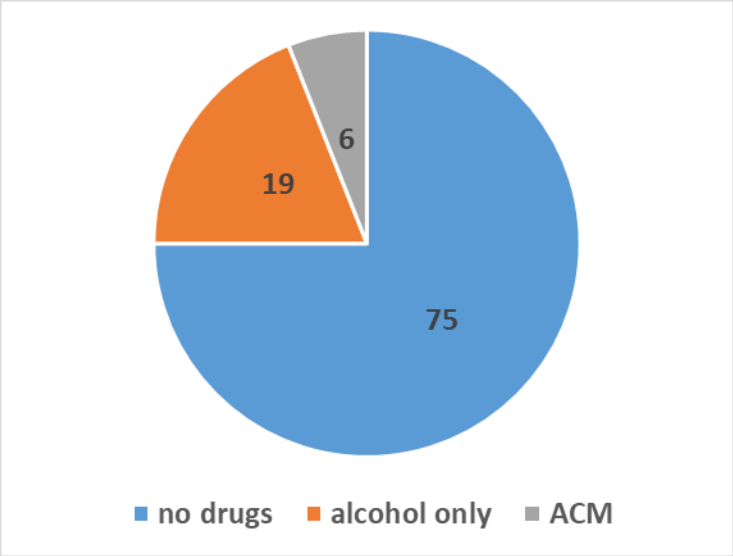
In addition to his or her participation in an evidence-based prevention program, the student's environment would likely have been affected. His or her parents were likely to have received information on adolescent substance abuse prevention, and were likely invited to several town hall or school parent nights related to adolescent ATOD prevention. His or her school faculty would have either received education on adolescent ATOD prevention, or been present when the WCESC staff provided their lessons. As such, the reinforcing effects of ATOD prevention from school faculty may have occurred.

Adolescent attitudes reducing most ATOD use were likely affected from the plethora of 'evidence based' programming implemented in Wood County schools and in the community over the past decade. Prevention programming such as LifeSkills, designed to enhance adolescent developmental assets, likely provided additional support by changing adolescent cognitive and attitudinal functioning related to ATOD use. Collaborations with law enforcement, with businesses, and with parents likely reduced access. Given the implementation of the aforementioned initiatives, it is less surprising, almost predictable, that the reduction in illicit ATOD prevalence rates would have occurred in Wood County.

On the other hand, the plethora of media advertising targeting vaping, as well as the easy access to vaping devices, have increased vaping prevalence. The increase in vaping nicotine and marijuana occurred with the onset of the new technology of vaping, with access to vaping devices and equipment, and with changes in teen attitudes, such as increased peer approval and reduced fear of harm. Additionally, media advertising has contributed to the misperception of the safety of vaping devices.

COMPARISON OF USERS AND NON-USERS

Reporting prevalence data and comparing that with data from previous surveys provides valuable information for understanding substance use trends in Wood County. Prevalence data alone, however, are not sufficient to provide information on who is using alcohol or other drugs, how they are using alcohol or other drugs, and what is happening to those who use alcohol or other drugs.



Users were divided into three comparison groups: (1) nonusers, i.e., those who have not used alcohol, marijuana or nicotine in the past year (2) alcohol only users; and (3) persons who report using alcohol, cigarettes or vaping nicotine, and marijuana, (reporting annual use of alcohol or marijuana). Comparisons are based on survey data obtained from high school juniors and seniors in Wood County. The researchers chose not to compare students at all grade levels because the non-using group was comprised mainly of very young adolescents, while the using group was comprised of older teens. This basic difference made it difficult to compare one group with another. Limiting the analysis to high school juniors and seniors eliminates the confounding variables of age and grade level.

In 2022, the three comparison groups are comprised of 1274 juniors and seniors from public schools in Wood County. Male students comprised 48.7 % (N=613) of the sample, females comprised 48.1 % (N=606), and Other comprised of 3.3 % (41). There were 819 (75%) individuals who reported that they had not used in the past year; 208 (19%) individuals who reported using only alcohol in the past year; and only 67 (6%) individuals who reported using alcohol, nicotine (cigarettes or vaping), and marijuana in the past year (see pie chart). It should be noted, that inclusion in the alcohol-cigarette-marijuana (ACM) group did not require that individuals use these substances at the same time or in combination. Nor did placement in this group require that students currently be using. It was only necessary that students reported using these substances at least once some time during the past year.

It is worth noting a comparison between the 2004 and 2022 surveys. A review of the 2004 Wood County survey report revealed that the comparison groups consisted of 48 % non-users (75% in 2022), 42 % alcohol-only users (19% in 2022), and 10 % ACM users (6% in 2022). It is apparent that among Wood County 11 and 12th graders, there has been a shift toward either abstinence or marijuana, and a shift away from using alcohol alone.

ALCOHOL USE BY TYPE OF USER

The prevalence data reported earlier was for annual use. For those students who reported using alcohol in the past year, it was equally important to determine the Percent that had used in the month prior to the survey. These data are contained in the following table.

Figure 45: Frequency of Alcohol Use in Past Month by Type of User, 2022

	Frequency of Alcohol Use Past Month				
Group	Never	1-2x	3-5x	6-10x	11+x
Alcohol-Only	67.4	23.8	5.6	1.8	1.4
ACM	30.0	42.1	19.3	4.3	4.3

The above table indicates that the alcohol-only group is less likely to engage in heavy monthly use than the ACM group. Approximately 67 % of the alcohol-only group reports not using alcohol in the 30 days prior to the survey, while half that amount, 30 % of the ACM group, reports the same. ACM group is much more likely to engage in heavy monthly use.

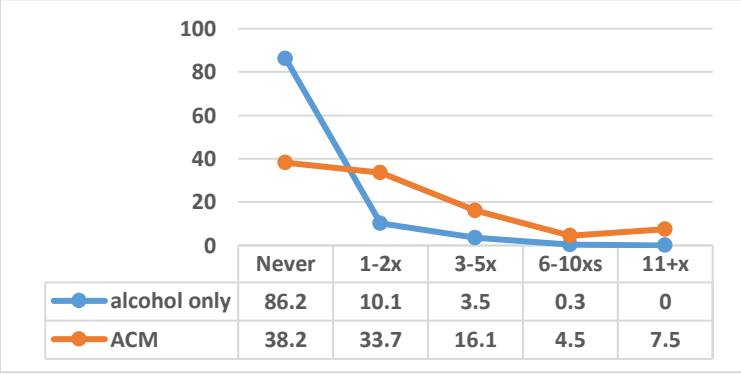
As stated earlier, binge drinking is defined as heavy consumption during a single drinking episode. This research defined binge drinking as consuming five or more alcoholic beverages on any given drinking occasion. The following table indicates that ACM users are much more likely to binge drink than are alcohol-only users, and they binge drink much more frequently.

Figure 46: Frequency of Monthly Binge Drinking by type of User, 2020

	Frequency of Binge Drinking				
Group	Never	1-2x	3-5x	6-10x	11+x
Alcohol-Only	86.2	10.1	3.5	0.3	0.0
ACM	38.2	33.7	16.1	4.5	7.5

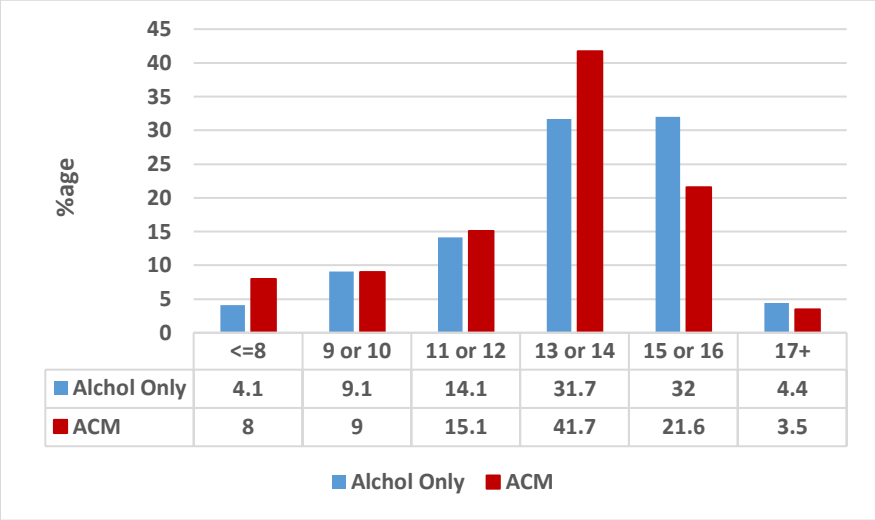
The following figure helps to graphically represent the relationship between the number of substances used and the frequency with which members of a group are likely to binge drink.

Frequency of Binge Drinking by Group, 2020



In addition to being more likely to binge drink, ACM users also report that they start drinking at a younger age than alcohol only users. These data are displayed in the following figure.

Figure 47: Age of Onset of Alcohol by Type of User, 2020



	<=8	9 or 10	11 or 12	13 or 14	15 or 16	17+
Alchol Only	4.1	9.1	14.1	31.7	32	4.4
ACM	8	9	15.1	41.7	21.6	3.5

SOCIAL FUNCTIONING BY TYPE OF USER

Another reason for conducting the Wood County Youth Survey is to investigate the impact of alcohol and other drug use on school performance and attendance. We compared groups on several factors related to school. The first factor we investigated was whether students had ever missed school because of their alcohol or other drug use. What we found was that ACM users were much more likely to report missing school because of their use than alcohol-only users.

Figure 48: Percentage Missing School by Type of User, 2022

Group	Yes	No
Alcohol-Only	2.9	97.1
ACM	15.0	85.0

The following table reveals that ACM users are again more likely to report attending school under the influence than are alcohol-only users.

Figure 49: Percent Attending School after Using a Substance, 2022

Group	Yes	No
Alcohol-Only	0.3	99.7
ACM	3.0	97.0

Schools have traditionally been relatively substance-free areas. The majority of students report that they have not used alcohol or other drugs while at school. Again, the exception is the ACM group who report a much higher rate of using while at school than the alcohol-only group.

Figure 50: Percent Using Substances While at School, 2022

Group	Yes	No
Alcohol-Only	2.5	97.5
ACM	30.0	70.0

One concern is the effect that substance use may have on risky behaviors such as texting while driving. The alcohol only and the ACM group were significantly more likely to engage in risky behaviors such as texting while driving than the non-users.

Figure 51: Texting while driving, 2022

Group	Yes	No
Non-User	9.0	91.0
Alcohol only	31	69
ACM	33	67

Figure 52: Percent of Students Who Rode as a Passenger in a Car with a Driver Who Had Just Used Alcohol or Other Drugs, 2022

Group	Yes	No
Non-User	15.0	85.0
Alcohol Only	40.0	60.0
ACM	70.0	30.0

Figure 53: Drove a Vehicle Just After Smoking Marijuana, 2022

Group	Yes	No
ACM	25.0	74.0

Figure 54: Parents Supply Alcohol for Parties, 2022

Group	Yes	No
Alcohol only	8.5	91.5
ACM	10.0	90.0

Figure 55: Use of Marijuana as an edible, past 30 days, 2022

Group	Yes	No
ACM	64.0	36.0

Figure 56: Thought About Killing Yourself Last Year, 2022

Group	Yes	No
Non-User	18.6	81.4
Alcohol only	43.3	56.7
ACM	55	45

Figure 57: Attempted Suicide Last Year, 2022

Group	Yes	No
Non-User	4.6	95.4
Alcohol only	12.8	87.2
ACM	25	75

The data above indicate that ACM users function in environments where there is a greater risk to their health and safety than do non-users and alcohol only users. ACM users are much more likely to ride as a passenger with a driver who is under the influence of alcohol or other drugs, and they are much more likely to operate a vehicle while under the influence themselves.. These data suggest that the more substances a student reports using, the more familiar they are with high risk situations. It may also reflect a higher comfort level with risky behavior and, perhaps even, a tendency to seek out risky situations.

Suicide ideation refers to thinking about suicide. It is not necessary that the respondents attempt or intend to commit suicide to meet criteria for this variable. Respondents are included if they report to have 'seriously' thought about committing suicide in the past year. The data table show a positive correlation between suicidal ideation and the number of drugs used.

Suicide attempts refer to those students who reported attempting suicide in the last year. As with suicidal ideation, the tendency was for proportions to increase with the number of drugs used.

It should be deeply concerning that 55 % of ACM users have thought about killing themselves in the last year and 25 % have tried. These numbers represent significant increases over 2020 data where 33 % had suicide ideation and 18 % reported suicide attempts. This strongly suggests that these individuals, once identified, would substantially benefit from mental health screenings, intervention and treatment.

The survey also explored students' perceived risk associated with using alcohol or other drugs. The data reveal that students tend to minimize the risk associated with their own behavior, while perceiving more risk associated with substances they choose not to use.

Figure 58: Perceived Risk Associated with Binge Drinking, 2022

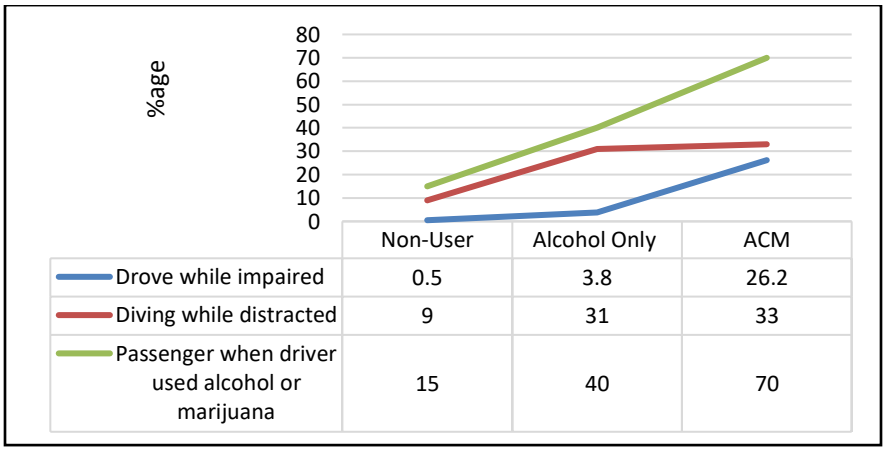
Group	None	Slight	Moderate	Great
Non-Users	13.8	21.7	35.2	29.3
Alcohol Only	16.4	24.4	38.4	20.8
ACM	16.3	44.7	25.5	13.5

Figure 59: Perceived Risk Associated with Marijuana Use, 2022

Group	None	Slight	Moderate	Great
Non-Users	18.3	23.8	29.7	28.2
Alcohol Only	27.3	35.2	23.5	14.1
ACM	51.8	34.8	9.2	4.3

Students were asked to report on driving after drinking, driving after using marijuana, or being a passenger in a vehicle when they were aware that the driver just drank alcohol or used marijuana. Cross tabulating these categories by the three types of drug users (non-users, alcohol only users, and ACM users) we find that ACM users are significantly more likely to engage in risky behaviors such as driving impaired. Only 3.8 % of alcohol only users report drinking and driving, but that rate increases to 31 % when we add marijuana use into the equation.

Figure 60: Driving Activities by Type of Drug User, 2022



	Non-User	Alcohol Only	ACM
Drove while impaired	0.5	3.8	26.2
Diving while distracted	9	31	33
Passenger when driver used alcohol or marijuana	15	40	70

Social Factors

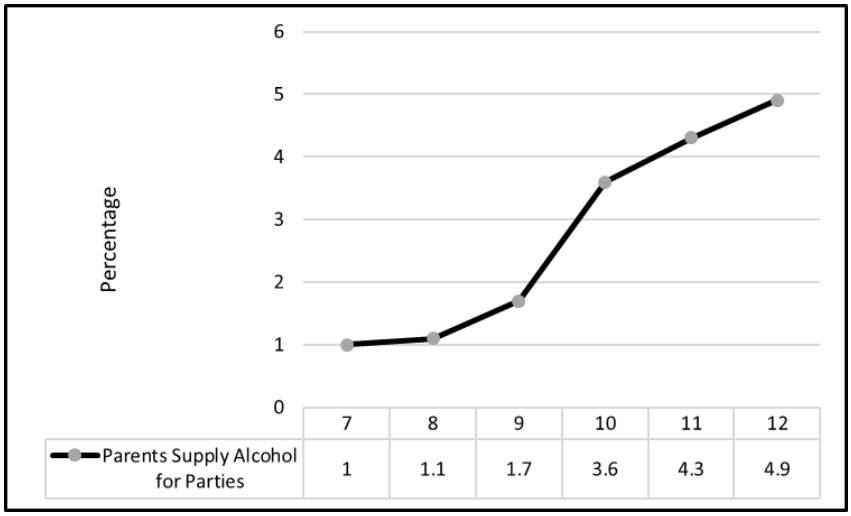
The Wood County Youth Survey investigates the relationship between alcohol use and other social factors. Specifically, these social factors include (a) where do students get access to alcohol, marijuana, other drugs, and from whom; (b) do students disapprove of other students using alcohol or other drugs; and (c) do students believe their parents disapprove of substance use?

The prevalence, frequency, and amount of alcohol use are largely determined by the availability of alcohol to students. Previous surveys have shown that the two most common sources of alcohol have been the home of a friend and stores. Junior high aged adolescents report they do not know where alcohol is obtained, but that uncertainty diminishes as age increases. The following figure shows where students report alcohol can be obtained.

Previous surveys have found that friends' homes and stores continue to be the most common source for obtaining alcohol. These data suggest that parental supervision and enforcement of laws regulating sales to minors are important factors in preventing underage drinking. Surveys have shown that alcohol sales are not made directly to underage users. Instead, sales are usually mediated through a buyer who is of legal age who then "passes" the alcohol along to the underage user.

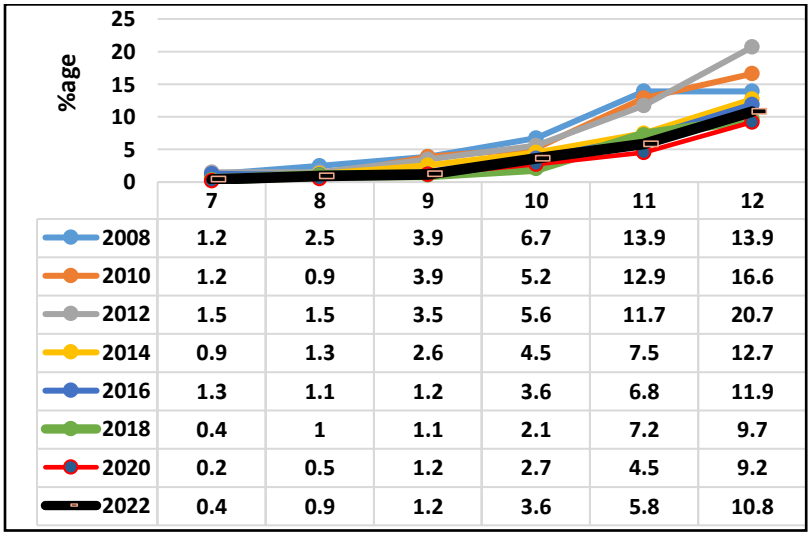
The 2022 survey asked a new question: "My Parents provided alcohol to me and my friends for parties (homecoming, prom, etc,). Reponses were either 'yes'or 'no.' In the Figure below are the Percentages of youth who responded yes.

Figure 61: Parents Provided Alcohol for Parties, 2022



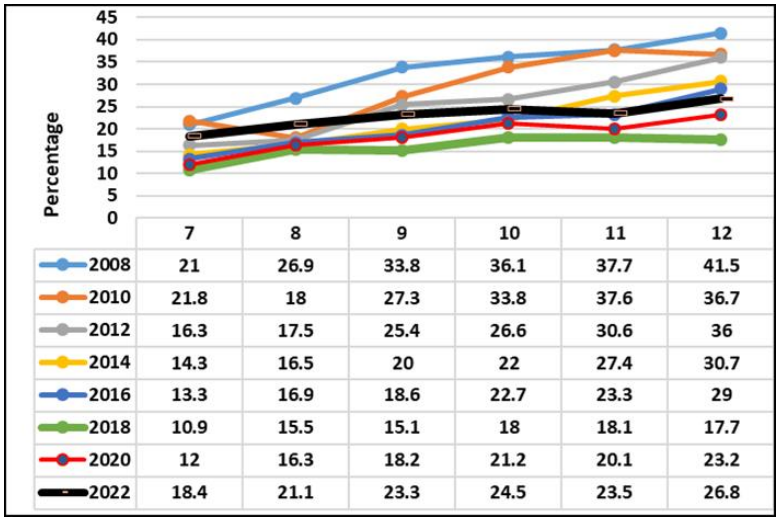
The combination of motor vehicles and intoxicating substances appears to remain problematic in Wood County in 2022. The Percentage of incidence is reported below.

Figure 62: Drank or Smoked Marijuana before Driving by Survey Year



	7	8	9	10	11	12
2008	1.2	2.5	3.9	6.7	13.9	13.9
2010	1.2	0.9	3.9	5.2	12.9	16.6
2012	1.5	1.5	3.5	5.6	11.7	20.7
2014	0.9	1.3	2.6	4.5	7.5	12.7
2016	1.3	1.1	1.2	3.6	6.8	11.9
2018	0.4	1	1.1	2.1	7.2	9.7
2020	0.2	0.5	1.2	2.7	4.5	9.2
2022	0.4	0.9	1.2	3.6	5.8	10.8

Figure 63: Was a Passenger When the Driver Just Drank Alcohol or Smoked Marijuana by Survey Year.



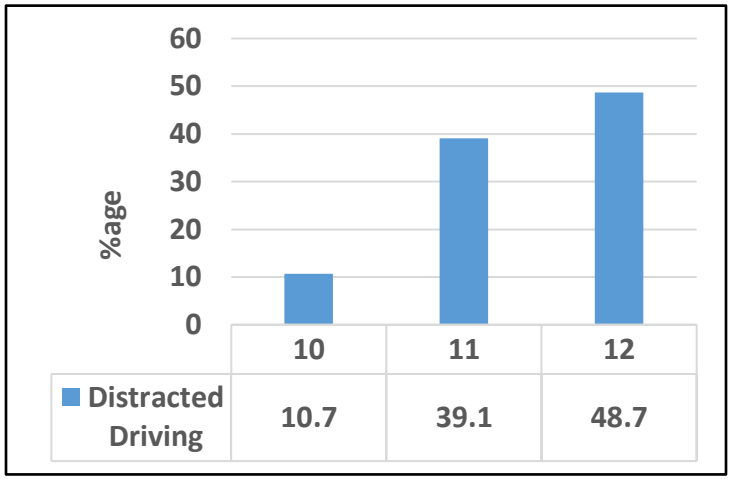
	7	8	9	10	11	12
2008	21	26.9	33.8	36.1	37.7	41.5
2010	21.8	18	27.3	33.8	37.6	36.7
2012	16.3	17.5	25.4	26.6	30.6	36
2014	14.3	16.5	20	22	27.4	30.7
2016	13.3	16.9	18.6	22.7	23.3	29
2018	10.9	15.5	15.1	18	18.1	17.7
2020	12	16.3	18.2	21.2	20.1	23.2
2022	18.4	21.1	23.3	24.5	23.5	26.8

Figure 64: Who was the Driver when Teen was a Passenger when the Driver Just Drank Alcohol or Smoked Marijuana, 2016 (question not asked in 2022).

	Friend	Parent or Step-parent	Peer or Classmate	Relative	Another Adult
7	19.5	33.9	21.4	16.0	9.3
8	19.3	36.0	15.5	19.3	9.9
9	22.7	37.7	17.3	15.0	7.3
10	30.7	26.3	18.5	19.4	5.0
11	45.4	20.6	13.0	14.9	6.1
12	48.2	15.4	14.3	17.3	4.8

The 2022 survey asked about texting and driving. The question was asked "I use my phone while driving (talk or text)?" Responses among students in grades 10 through 12 are reported below.

Figure 65: Frequency of Distracted Driving by Grade Level, 2022.



The number of 12th graders represented in Figure 65 is 526, meaning that 48.7 %, or 256 of the 526 seniors report texting while driving at least some of the time. The remaining 51.3 %, or 270 teens, reported that they either do not drive or do not text while driving.

When cross tabulating those who reported both having consumed alcohol in the past 30 days, and report texting and driving, among 11th and 12th graders, the actual numbers of 11th and 12th graders are reported in Figure 66 below.

Figure 66. Raw Numbers of 11 and 12th Graders who Both Drank Alcohol within the Past Month and Reportedly Texted While Driving 2022

I use my phone to text or talk while driving		Males	Females	Other
Frequency of alcohol last month	never	352	367	17
	1-2x	66	103	4
	3-5x	41	42	3
	6-10x	19	14	0
	11+x	27	12	0
	Total	505	538	25

A separate survey instrument was developed for youth in grades 5 and 6. Prevalence rates for these youth are typically so low that they add little to our understanding of alcohol or other drug use.

The 2022 survey was administered to 2231 5th and 6th grade youth. Fifth graders comprised about 49 % of the sample, while sixth graders comprised about 51 %. Males comprised 51 % of the sample, while 47 % was female and 2.3 % stated "Other'. The following table summarizes the data pertaining to participants.

	Gender			
Grade	**Male**	**Female**	**Other**	**Total**
5	536	530	19	1,085
6	600	514	32	1,146
Total	1,136	1,044	51	2,231

NICOTINE

The prevalence for the use of nicotine among fifth and sixth graders is very low. Less than one % report using smokeless tobacco in the past 30 days and around one % report using cigarettes in the past 30 days.

Figure 67:30-Day Smokeless Tobacco Prevalence by Grade and by Year

	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
5	1.2	1	0.9	.4	.2	.2	.3	.3	.2	.1
6	2.1	1.3	1.4	.6	.5	.3	.3	.4	.1	.3

Figure 68: 30-Day Cigarette Prevalence by Grade and by Year

	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
5	0.3	0.3	0.5	0.7	.4	.5	.4	.3	.1	.2
6	0.4	0.5	0.4	0.5	1.3	.4	.3	.4	.4	.2

ALCOHOL

The prevalence rates for annual and monthly alcohol use have declined since the 2004 survey. Large decreases were reported both in annual use among elementary aged youth between 2004 and 2022. Increases were reported among 5th and 6th graders between 2020 and 2022 for 30-day alcohol use.

Figure 69: Annual Alcohol Prevalence by Grade and by Year

	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
5	10.5	8.9	8.8	6.3	4.5	2.3	3.0	2.2	2.6	2.4
6	13.7	11.8	11.8	8.5	6.1	4.5	4.6	4.6	4.8	2.5

Figure 70: 30-Day Alcohol Prevalence by Grade and by Year

	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
5	3.5	2.2	2.5	1.3	1.3	.9	1.4	.8	1.0	2.0
6	4.7	4.7	3.9	2.4	2.1	1.8	1.5	2.0	1.7	2.2

INHALANTS

In Wood County, the annual prevalence rates of inhalant use are reported below. Among 5thand 6th graders the prevalence rate for inhalant use declined since 2010. One of the lowest rate ever reported in Wood County occurred among 5th and 6th graders.

Figure 71: Annual Inhalant Prevalence by Grade and by Year

	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
5	1.5	1.6	1.9	3.0	2.3	.8	1.5	1.5	1.3	.4
6	1.1	1	1.5	3.2	3.2	1.5	1.0	1.7	1.8	.8

MARIJUANA

The prevalence for the use of marijuana among elementary aged youth in Wood County is very low. Less than one % report using marijuana in the past year and around one-half % report using marijuana in the past 30 days.

Figure 72: Annual Marijuana Prevalence by Grade and by Year

	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022
5	0.9	0.3	0.3	0.5	.3	.3	.3	.3	.4	.2
6	1.4	0.7	0.7	0.8	.9	.8	.5	.7	.6	.6

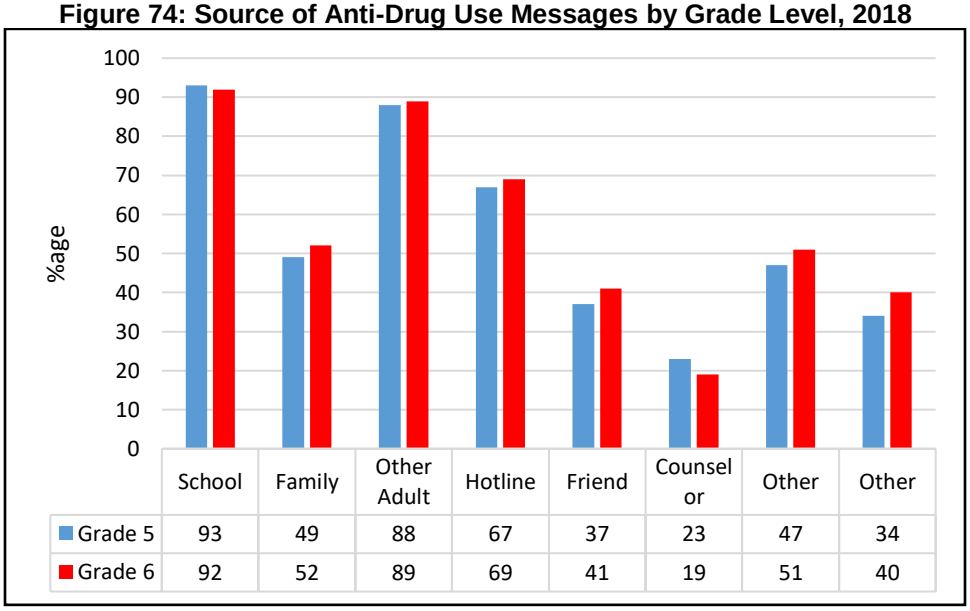
Figure 73: 30-Day Marijuana Prevalence by Grade and by Year

	2004	2006	2008	2010	2012	2014	2016	2018	2002	2022
5	0.5	0.3	0.5	0.1	.2	.1	.1	0	.2	.1
6	0.7	0.4	0.4	0.3	.4	.4	.3	.6	.2	.3

SOURCES OF ASSISTANCE

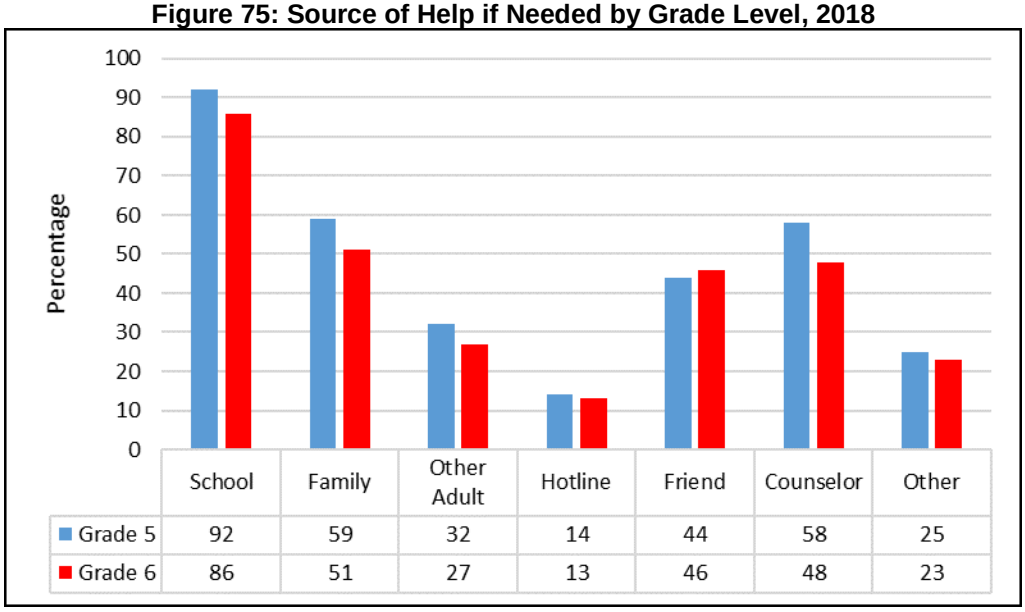
The survey for grades 5 and 6 also asked each respondent who has told you not to use alcohol or other drugs, and who you would turn to if you had a problem with alcohol or other drugs. Data for this item are summarized in the table below.

Figure 74: Source of Anti-Drug Use Messages by Grade Level, 2018



	School	Family	Other Adult	Hotline	Friend	Counselor	Other	Other
Grade 5	93	49	88	67	37	23	47	34
Grade 6	92	52	89	69	41	19	51	40

Figure 75: Source of Help if Needed by Grade Level, 2018



	School	Family	Other Adult	Hotline	Friend	Counselor	Other
Grade 5	92	59	32	14	44	58	25
Grade 6	86	51	27	13	46	48	23

The influence of friends, as a person to share problems, will increase throughout the adolescent years, and the influence of parents typically declines.

The Botvin LifeSkills Training (LST) program is a research-based substance abuse and violence prevention program, geared to upper elementary and junior high school students. The program is designed to assist students to understand the consequences of substance abuse while building their self-esteem and confidence. The program also claims to help youth overcome social anxiety, and give youth the skills to resist peer pressure and avoid high risk behavior.

LST was originally designed for middle/junior high school students, beginning in the sixth or seventh grade. A two-year booster program to reinforce material learned in the first year is recommended. An age-appropriate version has also been created for upper elementary school students, beginning with either the third or fourth grade and continuing for three years.

The Wood County Educational Service Center selected the LifeSkills program for implementation in the Wood County Schools because it is known to be highly effective. LifeSkills has been recognized as a Model Program by SAMHSA, has been identified as an exemplary research-based program (by organizations such as the American Psychological Association, the American Medical Association, and the National Centers for Disease Control and Prevention). LifeSkills has been evaluated extensively in the scientific literature. Overall, LifeSkills provides knowledge to increase self-esteem, increase students' ability to make decisions and solve problems, communicate effectively, avoid misunderstandings, make new friends, and resist pressure to use drugs.

The Wood County Educational Service Center perceives that short-term benefits of the LifeSkills program include youth's development of important social skills that serve as protective factors against the initiation and early stages of substance use and abuse. For instance, more accurate attitudes and beliefs about the harm in ATOD use is believed to be a significant benefit of the LifeSkills program. Students participating in LifeSkills are also expected to begin to more effectively manage peer pressure to smoke, drink, or use marijuana.

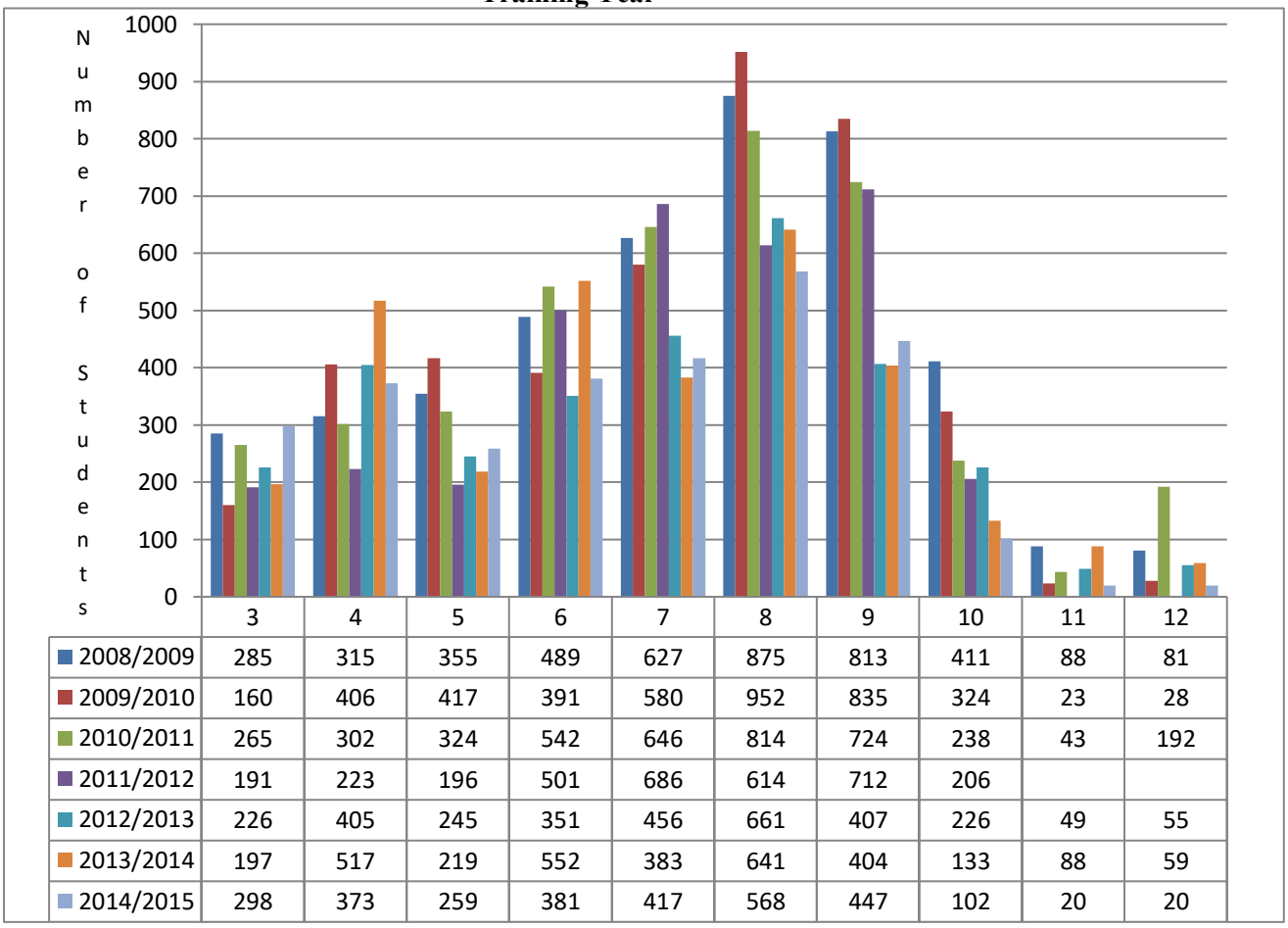
Results

In 2008 and 2010, prevalence rates were compared between youth who received LST training and those youth who did not. The summative outcomes of LST efforts provide comparisons by grade level and by selected substances. The results clearly demonstrated that those who received LST training had lower rates of prevalence than those who did not for almost all drugs and at almost all grade levels.

Between September 2008 and June 2021 approximately 41,672 Wood County students had received LifeSkills Training. The training occurred in grades 3 through 12, with the majority of students receiving training in grades 7, 8, and 9. The number of students receiving training by year of training is seen in Figure 76.

However, by 2022, all students in grades 8, 9, 10, 11, and 12 have received LST training, at multiple times, during their earlier grades in school. There are no upperclassmen in schools that did not receive training to compare to upperclassmen who did receive training.

Figure76: Number of Students Receiving LST Training by Grade Level and by Training Year



	3	4	5	6	7	8	9	10	11	12
2008/2009	285	315	355	489	627	875	813	411	88	81
2009/2010	160	406	417	391	580	952	835	324	23	28
2010/2011	265	302	324	542	646	814	724	238	43	192
2011/2012	191	223	196	501	686	614	712	206		
2012/2013	226	405	245	351	456	661	407	226	49	55
2013/2014	197	517	219	552	383	641	404	133	88	59
2014/2015	298	373	259	381	417	568	447	102	20	20

Year	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	Grand Total
Total	4,339	4,116	4,090	3,329	3,081	3,193	2,885	25,033

In grades 7, 8, and 9 the training remains comprehensive and there are no 7th, 8th, or 9th graders in any schools that did not receive training at one time or another. Using 9th graders, for example, at the time of this survey in November, 2017, all 9th graders in all schools had received LST training. Some 9th graders may be currently receiving it for the first time, while others were receiving it for their second or even third time

As a result of the comprehensive coverage of LST training by 2022, it now remains impossible to compare the drug prevalence rates of those who received LST training versus those who did not. Nearly everyone has received training. Comparisons would have been possible if we could isolate individual students within grades and within schools. In the latter case, we could compare those students within the same grade levels, and even within the same school, who received LST training

The findings suggest that LifeSkills has been effective in changing various attitudes and beliefs about tobacco and other drugs, and in increasing knowledge and building skills needed for drug refusal. It is expected that, over time, these protective factors will contribute to county-wide declines in ATOD use among youth. Student survey data on county-wide drug and alcohol use among youth will continue to be collected biennially in order to monitor such trends. However, based on prior evaluation results, it appears as though we are making strides in the right direction to ensure that all Wood County youth have the skills necessary to reach their full potential.

THE OHIO SCALES

In order to gauge the overall mental health of Wood County adolescents, the ADMAHS Youth Survey adopted The Ohio Scales in 2008. The Ohio Scales (Ogles, Lunnen, Gillespie, and Trout, 1996; Ogles, Melendez, Davis, and Lunnen, 2000) are multi-informant, multi-domain, sets of measures developed for the ongoing assessment of mental health services for children. The scales were created in response to the growing need for efficient evaluation procedures to assist program evaluators and mental health service providers. The set of scales were designed to measure clinical outcomes for youth who receive behavioral health services, such as the Children's Resource Center (CRC) in Bowling Green.

From 2008 through 2022, the Wood County Youth Surveys contained the 20 item Problem Severity Scale. Three factors are included in the scale: Externalizing, Internalizing, and Conduct Disturbance. In the current analysis, only the broader Problem Severity Scales results are reported. Problem Severity scores were used to calculate a rough estimate of the prevalence of Wood County youth who reported mental health problems, to follow trends in adolescent mental health, and to explore the relationship between level of problem severity and youth substance use.

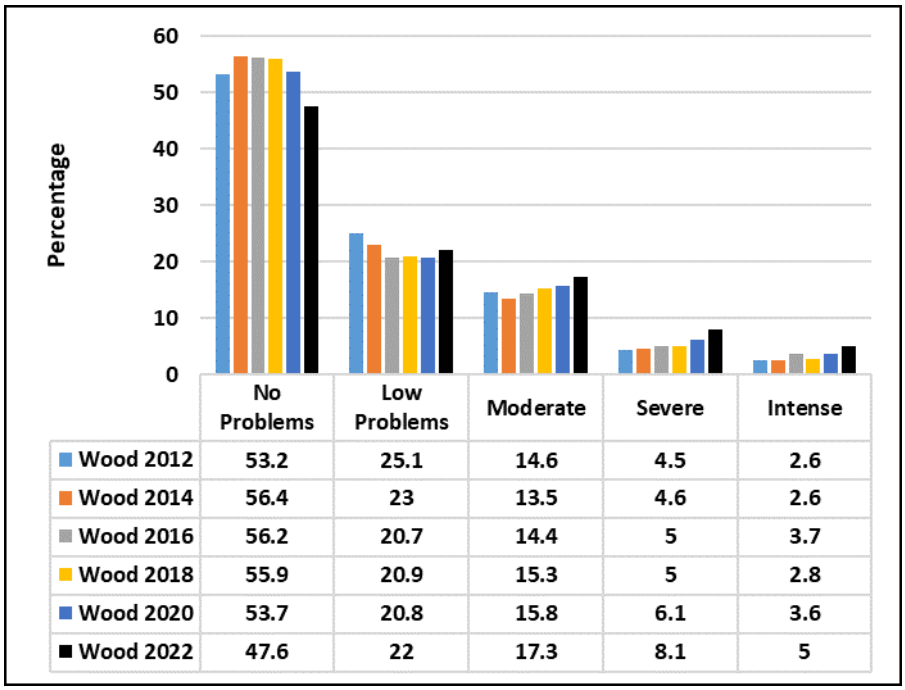
The Ohio Department of Mental Health (ODMH) previously established the Ohio Scales as a mandated outcomes instrument for all ODMH-certified agencies providing mental health services to children. While this mandate has since been removed, data is still available for much of the clinical population of youth. The Ohio Scales are completed when a youth starts mental health services and at scheduled intervals thereafter. For the Youth Problem Severity Scale, problems severity scores are calculated by summing the youth's ratings of each item on a six-point scale for frequency during the past 30 days, ranging from "0" (not at all) to "5" (all the time.) Problem severity scores can range from 0 to 100. ODMH constructed the following categorical labels for estimating level of total problem severity:

0-9	No problems
10-19	Low problems
20-36	Moderate problems
37-52	Severe problems
53+	Intense problems

The 2022 Wood County Youth Survey also used these categorical labels to summarize the scores of all respondents.

The following chart shows the distribution of scores by category and by year for all 7th through 12th grade students in Wood County, as of January, 2022.

Figure 77: Percentages of Youth on the Problem Severity Scale by Survey Year



	No Problems	Low Problems	Moderate	Severe	Intense
Wood 2012	53.2	25.1	14.6	4.5	2.6
Wood 2014	56.4	23	13.5	4.6	2.6
Wood 2016	56.2	20.7	14.4	5	3.7
Wood 2018	55.9	20.9	15.3	5	2.8
Wood 2020	53.7	20.8	15.8	6.1	3.6
Wood 2022	47.6	22	17.3	8.1	5

The following chart provides the Percentage and raw number of Wood County youth that fell into the Problem Severity Scales categories in 2022. These numbers only include those youth who are currently enrolled in grades 7 through 12 and who completed the survey and were not deleted from the analysis. The numbers do not include youth in elementary grades.

Population Size	None	Low	Moderate	Severe	Intense	Total
2018	3284	1230	900	292	167	5873
2020	2905	1127	853	329	193	5407
2022	2340	1079	848	396	248	4911

THE OHIO SCALES AND SUBSTANCE USE

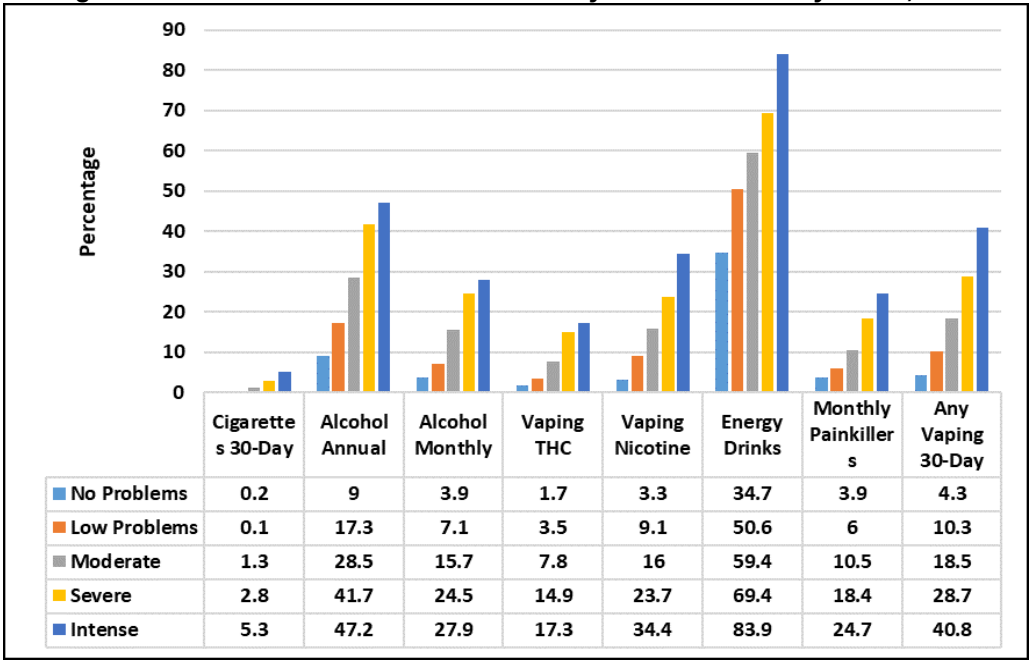
Myers, Aarons, Tomlinson, and Stein (2003) wrote that "affect-regulation models suggest that negative affective states may increase the risk for substance use because of negative reinforcement" (i.e., mood relief), "self-medication," or "social facilitation" (p. 277). Consequently, it was decided to examine the relationship between mood and substance use. The Ohio Scales, a measure of internal and external Problem Severity, were included on the survey to allow researchers to explore this putative relationship.

Data analysis consisted of comparing the proportions or % of youth by level of Problem Severity with the proportion of students reporting cigarette, alcohol, and marijuana use, as well as

other factors. Because of the large number of students participating in the survey, it is possible situations may occur where larger than expected proportions of students exist even though the actual number of students is relatively small. An example of this effect would be if the proportion of smokers who report Intense Problem Severity is greater than expected even though the number of intense smokers is smaller than the number of intense non-smokers.

Below are the relationships between the Problem Severity Scale and substance use among Wood County youth in 2022.

Figure 78: Prevalence of Substance Use by Problem Severity Scale, 2022

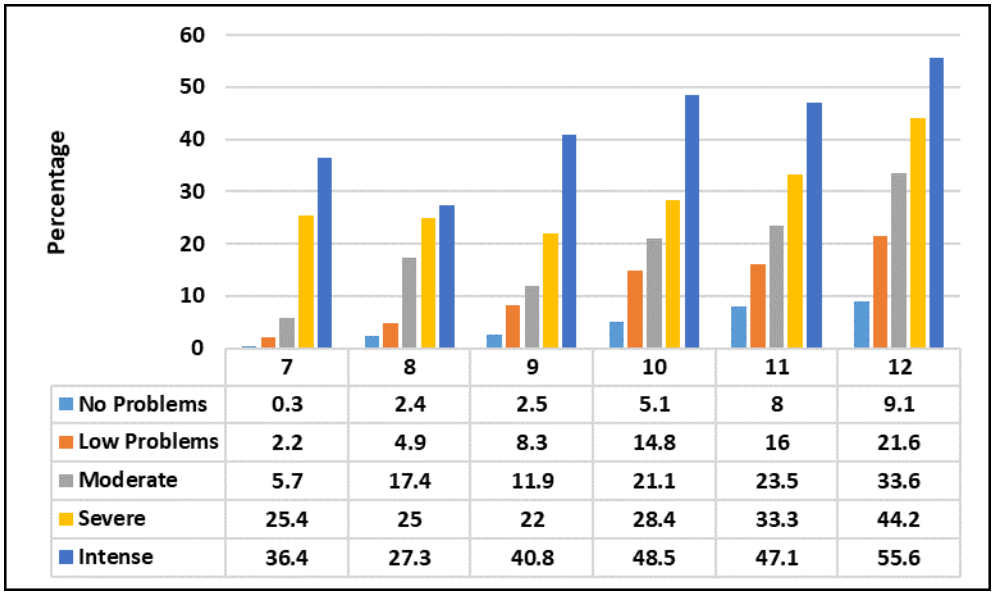


	Cigarettes 30-Day	Alcohol Annual	Alcohol Monthly	Vaping THC	Vaping Nicotine	Energy Drinks	Monthly Painkillers	Any Vaping 30-Day
No Problems	0.2	9	3.9	1.7	3.3	34.7	3.9	4.3
Low Problems	0.1	17.3	7.1	3.5	9.1	50.6	6	10.3
Moderate	1.3	28.5	15.7	7.8	16	59.4	10.5	18.5
Severe	2.8	41.7	24.5	14.9	23.7	69.4	18.4	28.7
Intense	5.3	47.2	27.9	17.3	34.4	83.9	24.7	40.8

There is a striking relationship between level of problem severity and substance use. As problem severity increases, so does the use of cigarettes, alcohol, marijuana, painkillers, cough medicine and energy drinks. As an example, alcohol use increases from 9 % for the "no problem" group to 47.2 % for those youth who are reporting significant mental health problems (i.e., those youth scoring in the "intense" problem severity range). Similarly, the use of marijuana varies considerably by level of mental health reported.

Figure 79 looks in more detail at the relationship between problem severity and vaping (any vaping in the past 30-days) in grades 7 through 12. In general, it remains true across grade levels that as problem severity increases, so does the likelihood of vaping use. For each grade level, as problem severity increase, so does self-reported vaping use. That effect is striking in all grade levels. In 7th grade only .3 % of the "no problem" and 2.2 % of the "low problem" groups report vaping use, whereas 36.4 % of the intense group reported vaping. As youth get older, regardless of their state of mental health, they are more likely to report use of vaping. Even in the "no problems" 12th grade group, nearly one in 10 (19.1 %) report vaping in the past 30 days. Despite this, vaping use for 12th graders still rises with increase in problem severity, to over 55.6 % and higher for the "intense" group.

Figure 79: Prevalence of Any Vaping in the Past 3-Days by Problem Severity Scale, 2022



	7	8	9	10	11	12
No Problems	0.3	2.4	2.5	5.1	8	9.1
Low Problems	2.2	4.9	8.3	14.8	16	21.6
Moderate	5.7	17.4	11.9	21.1	23.5	33.6
Severe	25.4	25	22	28.4	33.3	44.2
Intense	36.4	27.3	40.8	48.5	47.1	55.6

Figure 80 shows the relationship between the Problem Severity Scale and risky behaviors, such as driving after using alcohol or after smoking marijuana. In the earlier section on Social Functioning, it was reported that 6.2 % of 12th graders reported drinking and driving and 9.2 % of 12th graders reported smoking marijuana and driving. Looking at 10 through 12th graders and comparing risky behaviors by the Problem Severity Scale, the results are reported below. As youth problem severity increases, risky behaviors, such as driving under the influence, increase dramatically

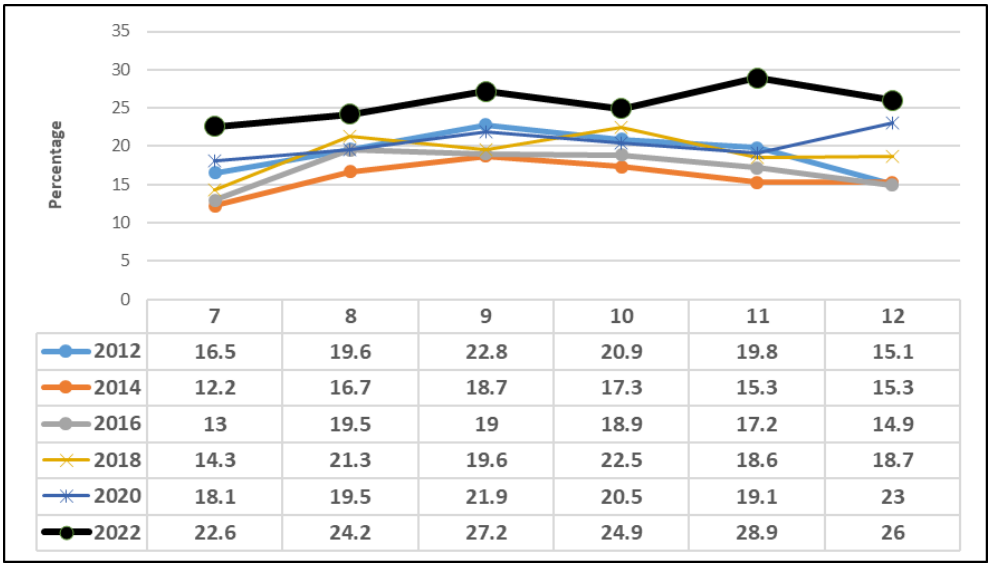
Figure 80: Percentage of Wood County youth who reported driving after drinking alcohol or smoking marijuana by level of Problem Severity Scale in Grades 10, 11, and 12 combined, 2022

	No Problems	Low Level	Moderate	Severe	Intense
Driving Impaired	2.4	5.1	9.6	10.7	19.8
Passenger with Impaired Driver	11.9	24.7	35.8	50	54.7

SUICIDE

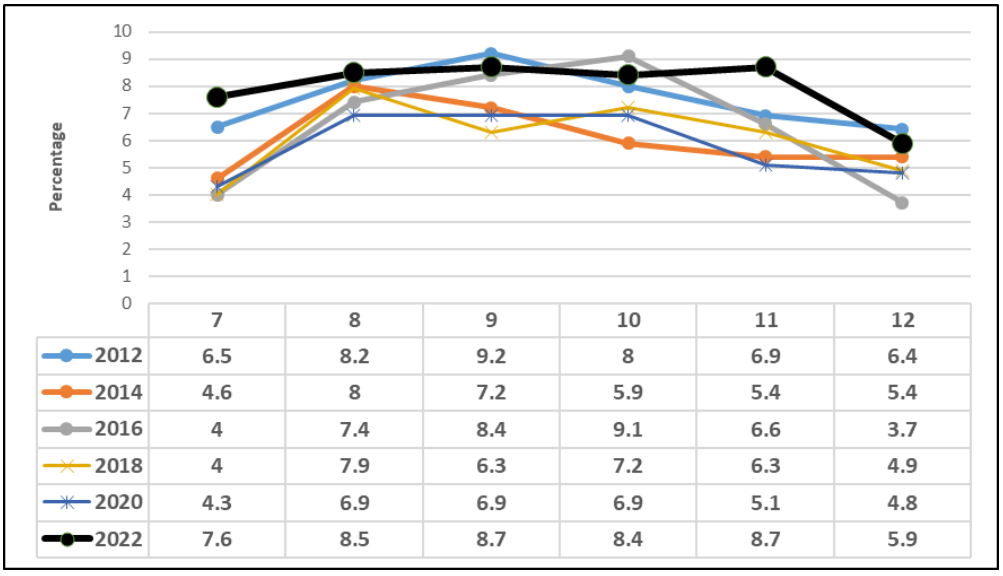
Suicide is the second leading cause of death for the ages 10 through 34. In Figure 81 below, the Percentage of Wood County youth reporting suicide ideation between 2006 and 2022 is reported. In Figure 82, the Percentage of Wood County youth reporting suicide attempts, by grade level, between 2006 and 2022 is reported.

Figure 81: Percentage of Wood County Youth Reporting Suicide Ideation



	7	8	9	10	11	12
2012	16.5	19.6	22.8	20.9	19.8	15.1
2014	12.2	16.7	18.7	17.3	15.3	15.3
2016	13	19.5	19	18.9	17.2	14.9
2018	14.3	21.3	19.6	22.5	18.6	18.7
2020	18.1	19.5	21.9	20.5	19.1	23
2022	22.6	24.2	27.2	24.9	28.9	26

Figure 82: Percentage of Wood County Youth Reporting Suicide attempts



	7	8	9	10	11	12
2012	6.5	8.2	9.2	8	6.9	6.4
2014	4.6	8	7.2	5.9	5.4	5.4
2016	4	7.4	8.4	9.1	6.6	3.7
2018	4	7.9	6.3	7.2	6.3	4.9
2020	4.3	6.9	6.9	6.9	5.1	4.8
2022	7.6	8.5	8.7	8.4	8.7	5.9

Finally, the relationship between problem severity and youth reports of suicidal ideation (thoughts of suicide) and suicide attempts is reported in Figure 83.

As youth problem severity increases, both suicide ideation and suicide attempts increase dramatically. While 4.1 % and 16.5 % of youth in the no/low problem severity range report that they think about suicide; that figure jumps to 72.1 % and 84.5 %, respectively, in the "severe" and "intense" groups. Similarly, 4.0 % of the no/low problem severity group report that they attempted suicide, while 28.3 % of the "severe" and 46.4 % of the "intense" groups indicates a suicide attempt.

Figure 83: Wood County Youth Who Reported "Yes" to Suicide Ideation or Suicide Attempts by Level of Problem Severity Scale, 2022

	No Problems	Low Level	Moderate	Severe	Intense	Total
Suicide Ideation **(%)**	**4.9**	**17.2**	**49.5**	**72.7**	**87**	**24.9**
Number	114	185	417	287	215	1218
Suicide Attempts **(%)**	**1.5**	**3.2**	**9.5**	**24.4**	**56**	**7.8**
Number	35	34	80	96	139	384

The 2022 Youth Survey asked a single question about hopelessness.

Figure 84: Hopelessness and Mental Health. Affirmative responses to question: *During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?"*

	No Problems	Low Level	Moderate	Severe	Intense	Total
Hopelessness (%)	8.7	31.2	63.5	83.6	90.3	33.3

In sum, since 2008, the Wood County Youth Survey incorporated the Youth Problem Severity Scale from the Ohio Scales in order to learn more about the level of mental health problems experienced by Wood County students, and to explore the relationship between mental health problems and youth substance use. Problem Severity scores were calculated and categorized following guidelines from the Ohio Mental Health Consumer Outcomes system created by the Ohio Department of Mental Health.

In the 2022 survey, however, the shift in scores that began around 2016 could be confirmed as a trend – a trend of poorer mental health scores.

1. In 2022 students reported the highest rates of adverse childhood experiences since we began collecting them in 2018. These include living with a family member experiencing mental illness (26.6%), experiencing substance abuse (17.7%) or who was incarcerated (19.1%). Teens also reported higher rates of emotional neglect (21.7%) and emotional abuse (22.8%)

2. Youth who report higher problem severity scores, reflecting more mental health problems, are more likely to engage in substance use across a broad variety of substances.

3. Youth who report significant mental health problems, with problem severity scores in the "severe" or "intense" range, are much more likely to think about suicide or make a suicide attempt.

BULLYING

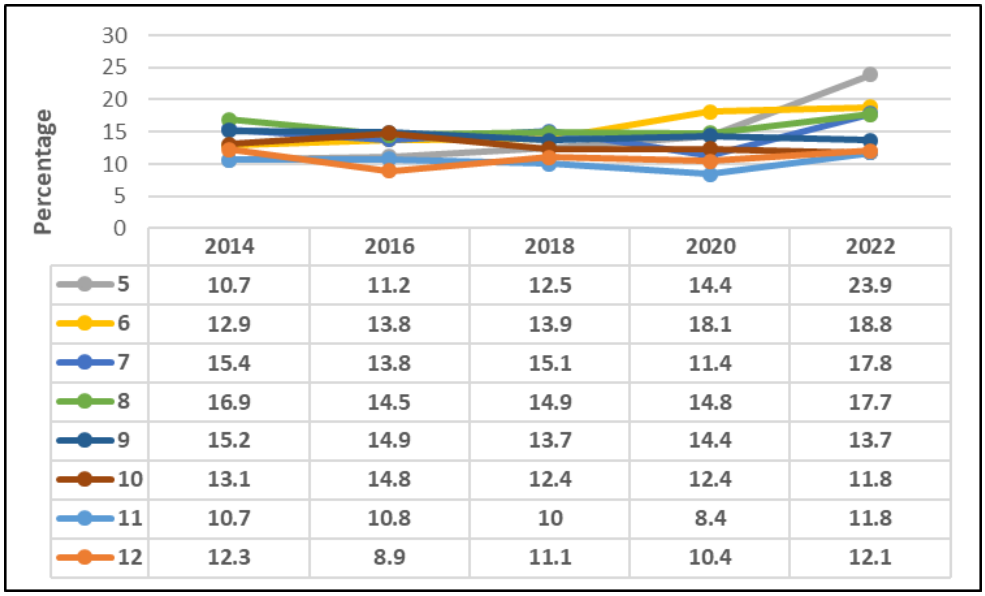
Reports of bullying by students and rates of physical injury resulting from school bullying have remained a pervasive problem affecting millions of students annually. Bullying in educational research is defined as an action that involves three elements: aggressive acts made with a harmful intent; repetition of these acts; and, an imbalance of power between the aggressor and the victim. (Olweus, 1993). This includes aggression that is either direct or indirect. The aggression may be expressed in words (threats, mocking, name-calling),in physical abuse (hitting, pushing, kicking, holding), or in abusive social relationships (ostracizing or manipulating social relationships with the intent to harm) (Houbre, Tarquinio, Thuillier, Hergott, 2006).

"Victims of bullying are more likely to exhibit health problems, have declining grades, contemplate suicide, skip school to avoid being bullied, and experience feelings of depression and low self-esteem that can persist for years after the incidents. Research conducted in three countries also has shown that bullies themselves are much more likely to develop a criminal record" (FBI Bulletin Reports, 2010).

Online harassment, or cyber bullying does not have a wide base of research. Even the definition of bullying is more difficult to apply for online harassment as researchers have not devised a standard definition. As such, the few studies that exist report rates of harassment that vary widely. (Wolak, Mitchell, Findelhor, 2007). The intent of the harasser and the imbalance of power are less clear in the cyber context. The research on the prevalence of cyber harassment is less reliable.

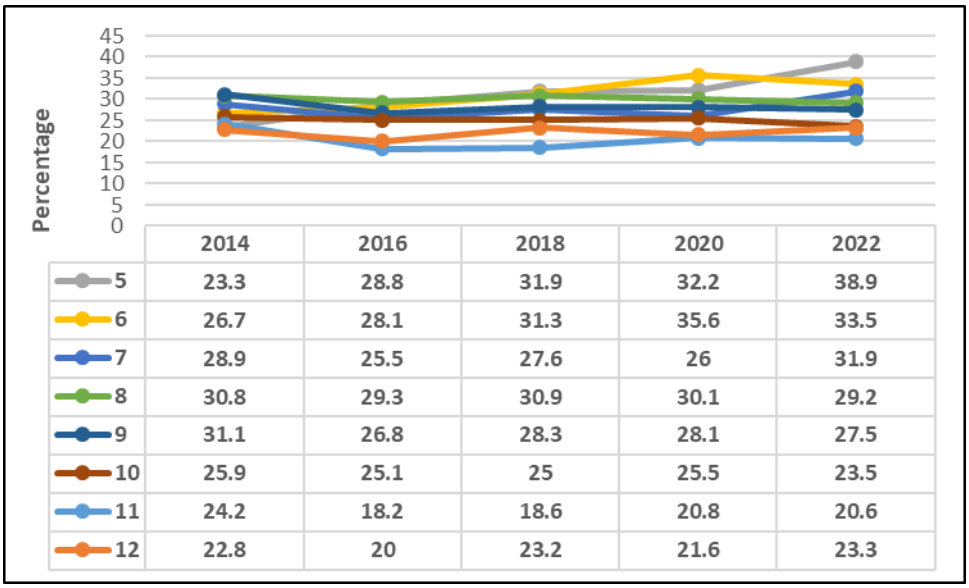
In Wood County, bullying has been measured on two different surveys. First, the Wood County Student Survey measured bullying in February 2010, 2012, and 2014; and, in November 2015. Second, the S.H.A.P.E.S. (Shaping Health Atmospheres that Promote Education and Safety) survey measured bullying in 2011 and 2013. The same questions were asked in both surveys. Incorporating both survey data, the three-year trends for each type of bullying: cyber, physical, verbal and indirect bullying are presented in figure 86 through 89 as follows.

Figure 86: Percentage of Wood County Students Reporting Any Level of Cyber Bullying by Grade Level and by Year



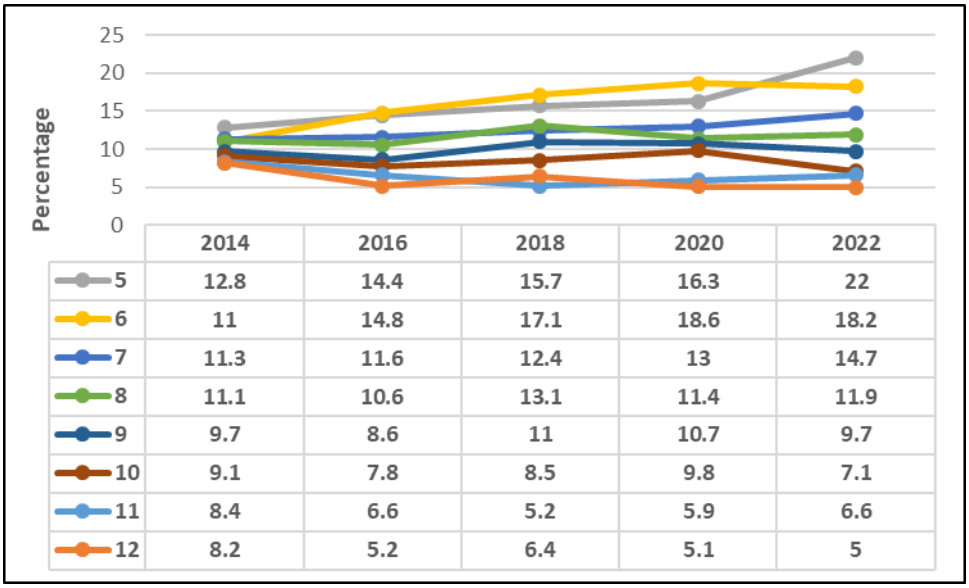
	2014	2016	2018	2020	2022
5	10.7	11.2	12.5	14.4	23.9
6	12.9	13.8	13.9	18.1	18.8
7	15.4	13.8	15.1	11.4	17.8
8	16.9	14.5	14.9	14.8	17.7
9	15.2	14.9	13.7	14.4	13.7
10	13.1	14.8	12.4	12.4	11.8
11	10.7	10.8	10	8.4	11.8
12	12.3	8.9	11.1	10.4	12.1

Figure 87: Percentage of Wood County Students Reporting Any Level of Verbal Bullying by Grade Level and by Year



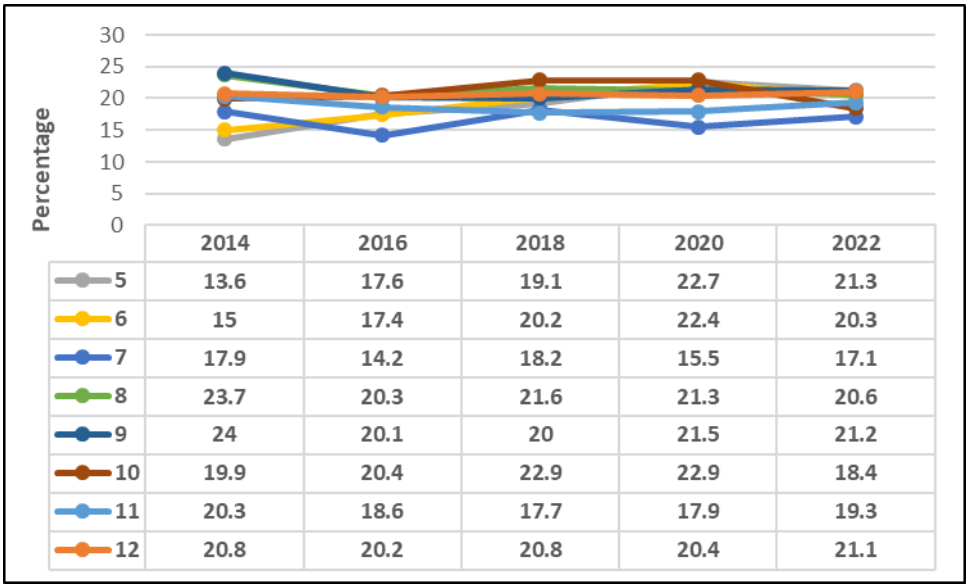
	2014	2016	2018	2020	2022
5	23.3	28.8	31.9	32.2	38.9
6	26.7	28.1	31.3	35.6	33.5
7	28.9	25.5	27.6	26	31.9
8	30.8	29.3	30.9	30.1	29.2
9	31.1	26.8	28.3	28.1	27.5
10	25.9	25.1	25	25.5	23.5
11	24.2	18.2	18.6	20.8	20.6
12	22.8	20	23.2	21.6	23.3

Figure 88: Percentage of Wood County Students Reporting Any Level of Physical Bullying by Grade Level and by Year



	2014	2016	2018	2020	2022
5	12.8	14.4	15.7	16.3	22
6	11	14.8	17.1	18.6	18.2
7	11.3	11.6	12.4	13	14.7
8	11.1	10.6	13.1	11.4	11.9
9	9.7	8.6	11	10.7	9.7
10	9.1	7.8	8.5	9.8	7.1
11	8.4	6.6	5.2	5.9	6.6
12	8.2	5.2	6.4	5.1	5

Figure 89: Percentage of Wood County Students Reporting Any Level of Indirect Bullying by grade Level and by Year



	2014	2016	2018	2020	2022
5	13.6	17.6	19.1	22.7	21.3
6	15	17.4	20.2	22.4	20.3
7	17.9	14.2	18.2	15.5	17.1
8	23.7	20.3	21.6	21.3	20.6
9	24	20.1	20	21.5	21.2
10	19.9	20.4	22.9	22.9	18.4
11	20.3	18.6	17.7	17.9	19.3
12	20.8	20.2	20.8	20.4	21.1

Bullying was defined for the teens on the Wood County Youth Survey, as "*an act that is done on purpose. Bullies use their power (physical size, age, social status, computer skills, etc.) to threaten, harass or hurt others. Bullying can happen over and over to one person or to a group of people. Bullying can happen four basic ways: physical, verbal, cyber bullying or indirectly (like spreading mean rumors or being kept out of a 'group,' or making mean gestures towards someone).*" Once defined, teens were asked "In the past 30 days, how many times have you been bullied?" The response categories involved choosing which type of bullying occurred (physical, verbal, cyber, or indirect) and the frequency of the occurrence, ("not at all," "once or twice," "several times," "often," or "most of the time."). The Percentage of teens who reported being bullied by grade, by frequency, by type, and by year is reported below.

Figure 90: Percentage of Wood County Teens Who Report Being Cyber Bullied by Grade, Year, and by Frequency within the Past 30 days.

	Once or Twice			Several Times			Often			Most of the Time		
Grade	**2018**	**2020**	**2022**	**2018**	**2020**	**2022**	**2018**	**2020**	**2022**	**2018**	**2020**	**2022**
7	7.6	6.3	10.2	4	2.2	3.4	1.7	1.3	2	1.9	1.6	3.3
8	8.1	8.6	9.7	2.9	3	3.6	1.8	1.8	2.9	2.2	1.4	2.6
9	7.4	7.2	7.4	3.3	3.2	3.4	1.6	2.1	1.9	1.4	1.9	1
10	6.6	6.8	6.7	2.6	2.8	2.5	1.4	1.3	1	1.8	1.4	1.6
11	5.7	4.6	6.2	2.2	1.7	2.4	1.3	1.2	0.8	0.7	1	2.4
12	5.3	6.5	5.3	3	1.5	3.6	1.1	0.5	0.8	1.7	2	2.2

Figure 91: Percentage of Wood County Teens Who Report Being Verbally Bullied by grade, Year, and by Frequency within the Past 30 days.

	Once or Twice			Several Times			Often			Most of the Time		
	2018	**2020**	**2022**	**2018**	**2020**	**2022**	**2018**	**2020**	**2022**	**2018**	**2020**	**2022**
7	13.6	13.4	16.4	6.3	6.3	7.5	4	3.9	3.8	3.3	2.4	4.1
8	15.9	15.5	13.2	6.7	7.1	7.1	4.5	3.9	5.5	3.9	3.7	3.4
9	15	12.7	16.1	5.9	7.4	5.7	4	4.8	3.6	3.5	3.1	2.2
10	13.5	13	13.9	6	6.8	4.6	2.9	2.8	2.8	2.5	2.9	2.2
11	10.8	12.2	10.7	4.5	4.1	4.4	1.9	2.6	1.9	1.3	1.9	3.6
12	12.4	11.3	12.3	4.4	4.8	4.2	4.4	2.9	3	2	2.6	3.8

Figure 92: Percentage of Wood County Teens Who Report Being Physically Bullied by Grade, Year, and by Frequency within the Past 30 days.

	Once or Twice			Several Times			Often			Most of the Time		
	2018	**2020**	**2022**	**2018**	**2020**	**2022**	**2018**	**2020**	**2022**	**2018**	**2020**	**2022**
7	7.7	8.5	10.1	2.3	2.1	2.2	1.4	1.4	1	1.1	1	1.4
8	8.8	7.3	7.9	1.9	1.7	1.8	1	1.3	1.4	1.4	1	0.8
9	7.9	6.6	6.7	1.5	1.9	1.8	0.9	1	1	0.8	1.3	0.2
10	5	6.5	4.3	1.3	1	0.9	1.1	1.2	0.9	1.2	1	1
11	3.5	2.9	3.2	0.6	1.8	1.2	0.4	0.2	0.4	0.7	1	1.7
12	3.6	2.9	2.5	1.3	0.6	0.4	0.5	0.3	1	1.1	1.4	1.3

Figure93: Percentage of Wood County Teens Who Report Being Indirectly Bullied by Grade, Year, and by Frequency within the Past 30 days.

	Once or Twice			Several Times			Often			Most of the Time		
	2018	**2020**	**2022**	**2018**	**2020**	**2022**	**2018**	**2020**	**2022**	**2018**	**2020**	**2022**
7	9.7	8.3	8.7	3.6	2.7	4.1	2.5	2	2.3	2.3	2.4	2.1
8	11.5	11.4	10.4	5.1	4.7	4.6	2.3	2.3	2.6	2.8	2.9	3
9	10.9	11	11.8	4.5	3.9	5.2	2.3	3.4	2.5	2.3	3.2	1.8
10	12.6	12.4	10.4	4.8	5.3	4.1	3.3	2.5	2.9	2.2	2.8	2.8
11	10.2	8.9	10.9	3.5	4.9	4.9	1.9	1.9	3.1	2.1	2.2	2.8
12	9.7	9.7	10.4	5.6	5.3	5.9	2.3	2	3.8	3.1	3.5	3

Comparing types of bullying behaviors for all grades among youth in Wood County shows that verbal bullying remains more prevalent than other types of bullying.

Figure 94: Percentage of Wood County Youth Reporting Being Bullied Last Month by Frequency and by Type of Bullying, 2022.

	physical	verbal	cyber	indirect
not at all	90.2	73.3	85.5	79.4
1-2 times	6.3	14.1	7.9	10.4
everal time	1.5	5.8	3.1	4.8
often	1	3.6	1.7	2.8
most of time	1	3.2	1.8	2.6

Comparing males and females in all grades in Wood County, the data show that males are more likely to report the incidence of physical bullying whereas females are more likely to report verbal, cyber and indirect bullying. Verbal bullying appears to be the most prevalent form of harassment in Wood County and females report more verbal bullying than do males.

Figure 95: Percentage of Wood County Youth Who Report Being Bullied Last Month by Gender, by Frequency, and by Type of Bullying, 2022.

	Physical			Verbal			Cyber			Indirect		
	Male	Female	Other	Male	Female	Other	Male	Female	Other	Male	Female	Other
not at all	91.1	90.2	81.1	79.5	69.1	50	88.9	83.3	71.7	85.7	74.7	53.2
1-2 times	5.6	6.7	9.9	11.1	17	18.3	6	9.4	14.3	7	13.5	16.7
several times	1.4	1.4	2.7	4.5	6.4	15.2	2.3	3.6	4.9	2.9	5.7	11.5
often	0.7	0.9	3.6	2.2	4.5	8.5	1.2	1.9	5.4	1.7	3.1	10.7
most of time	1.1	0.8	2.7	2.8	3	8	1.6	1.8	3.6	2.8	3	7.9

Bullying and Substance Use

The relationship between adolescent substance use and the occurrence of bullying has not been extensively researched. This is unusual because the initiation of both behaviors occurs most frequently in early adolescence. Taylor, Haviland, and D'Amico (2009) were among the first to report a strong association between substance use and bully victimization. The authors found that those who reported being the victim of bullying were much more likely to report the use of gateway substances like alcohol, cigarettes, marijuana and inhalants.

In Wood County, the association between adolescent substance use and bullying victimization was assessed by viewing ATOD usage rates for the more frequently used substances, (cigarettes, alcohol, marijuana, and inhalants). The usage rates were compared between those youth who report having been bullied and those who have not reported having been bullied. The findings are presented in figure 96.

Figure 96: Percentage of Youth Who Report Using Substances by Grade and by Verbal Bullying Victimization, 2022.

Grade	Cigarettes		Alcohol		Marijuana		Caffeinated Drinks		Vaping Nicotine	
	Not Bullied	Bullied	Not Bullied	Bullied	Not Bullied	Bullied	Not Bullied	Bullied	Not Bullied	Bullied
7	0.1	1.5	3.5	12.7	0.7	2.7	32.8	56.8	2.7	8.4
8	0.3	0.7	8.2	20.9	1.1	5.4	40.4	59.1	4.2	12.2
9	0.4	1.7	13,3	20.7	2.9	7	45.1	62	6.6	14
10	0.7	2.8	20.1	35.1	6	9	48.2	59.2	10.4	20.5
11	1.3	2	26.9	43.1	7.9	14.4	47	55.3	12	20.9
12	1.2	3.3	30.4	54.1	10.6	20.5	50.2	70.5	14.6	30.3

Clearly, rates of substance use are higher among those students who reported being bullied last month when compared to those who did not report being bullied last month. Having been bullied was defined as having responded to any frequency of being bullied ('only once or twice' last year to 'all of the time' last year).

Since vaping has seen a significant increase in the 2022 survey results, we compared the rates of 30-day vaping use last year by gender and by frequency of reports of having been bullied. Results are reported in the following figure:

Figure 97: Percentage of Youth Who Report Vaping Nicotine Last Month By Type and Frequency of Bullying Victimization and by Gender, 2022.

	Physical			Verbal			Cyber			Indirect		
	Male	Female	Other	Male	Female	Other	Male	Female	Other	Male	Female	Other
not at all	7.1	10.2	13.3	6.9	8.6	14.4	7.2	9.3	12.4	6.8	8.7	16.5
1-2 times	14.6	19.2	26.1	8	16.4	12.4	10.5	18.5	16.1	12.3	19	15.8
several times	27	19.6	0	13.7	18.9	14.7	24.1	30.8	27.3	14.5	14.2	7.7
often	20	26.1	25	18.2	16.7	26.4	16.7	22.4	33.3	30.7	30.4	20
most of time	20.7	35	33.3	22.2	23.4	16.7	24.3	22.2	25	26.2	22.7	11.8

Again, it is evident that the lowest rates of vaping use were found among those youth who reported that they were never bullied. This finding is apparent for both males and females.

Additionally, the highest rates of vaping are found among those youth who report being bullied 'often.' However, the prevalence of vaping does not appear to increase in direct proportion to the amount of bullying experienced. Among females, it appears that having been bullied only one or two times significantly increases the likelihood of vaping. Nonetheless, while the current research does not show causality, the association between self-reports of vaping and bullying victimization seems apparent.

BULLYING AND MENTAL HEALTH

The effects of bullying on the mental health of the victim can be devastating. Victims can feel a wide range of emotions including humiliation, fear, anger, despair, depression and anxiety. The victim continues to attend school while fearing continued victimization (Aluede, Adeleke, Omoike, and Afen-Akpaida, 2008). For the victim, mental health problems include depression, suicide, anxiety (Kerlikowski, 2003), an inability to maintain positive relationships with others (Oliver, Hoover and Hazler, 1994), social isolation, panic attacks, and low self-esteem (Clark and Kiselica, 1997).

This section of the Wood County Youth Survey Report explores the relationship between teen mental health and the prevalence of bullying behaviors.

Teen mental health was measured by using The Ohio Scales and classifying teens on their level of Problem Severity. Problem Severity was reported by 7000 youth in grades 7 through 12.

2022	None	Low	Moderate	Severe	Intense	Total
Percentage	47.6%	33.0%	17.3%	8.1%	5.0&	100%
Count	2340	1079	848	396	248	4911

Bullying was defined for the respondents on the Wood County Youth Survey. Once defined, teens were asked "In the past 30 days, how many times have you been bullied?" The response categories involved choosing which type of bullying occurred (physical, verbal, cyber, or indirect) and the frequency of the occurrence, ("not at all," "once or twice," "several times," "often," or "most of the time.").

Cross tabulations were completed which detail the response categories of each form of bullying, (verbal, physical, and cyber) by level of problem severity. The data from this analysis are reported in the following figures.

Figure 98: Percentage of Youth Who Report being Verbally Bullied Last Month By Frequency of Bullying and by Level of Problem Severity, 2022.

Verbal	No Problems	Low Problems	Moderate	Severe	Intense	Total
not at all	57.4	21.5	14	4.7	2.4	100
1-2 times	24.7	30.1	24.5	14.3	6.4	100
several times	17	19.2	31	18.5	14.4	100
often	12.9	14	31.6	23.4	18.1	100
most of time	12.1	10.7	21.5	24.8	30.9	100

Figure 99: Percentage of Youth Who Report being Cyber Bullied Last Month By Frequency of Bullying and by Level of Problem Severity, 2022.

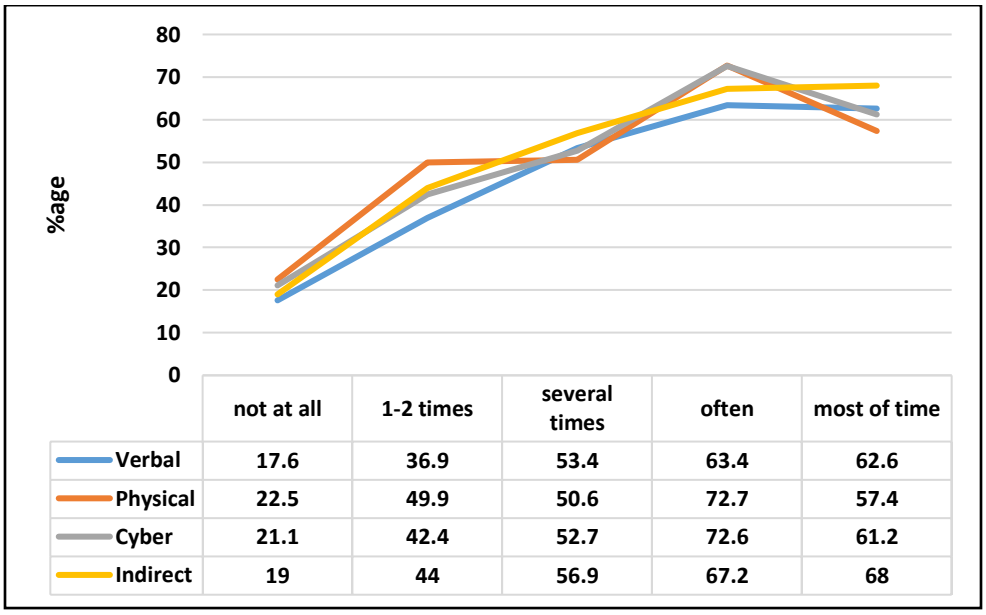
Cyber	No Problems	Low Problems	Moderate	Severe	Intense	Total
not at all	52.9	33.3	26.6	6	3.4	100
1-2 times	16.3	27.5	28.8	18.7	8.8	100
several times	11.9	14	35	21.7	17.5	100
often	12.5	12.5	22.5	25	27.5	100
most of time	16.3	7.5	20	26.3	30	100

In the preceding two tables, the relationship between levels of problem severity and the frequency of being bullied was reviewed among those youth who reported being verbally or cyber bullied in the past 30 days. There appears to be a positive correlation between the frequency of being bullied and the occurrence of mental health problems, as reported on the problem severity scale. Youth who report moderate, severe or intense levels of problem severity were much more likely to report a greater frequency of being victims of bullying than those youth who reported no mental health problems.

The relationship between bullying and suicide ideation and suicide attempts represent a concern among mental health professionals. The Wood County Youth Survey has tracked the rates of suicide ideation and attempts among Wood County youth since 2004. Suicide ideation has been reported higher among those youth who experience higher levels of problem severity than among those youth without problems (Ivoska, 2018). Prewitt (1988) noted that children are more likely to think about and act upon suicide ideation when they are victims of bullying behavior; Kumpulanien (1998) found that victims of bullying are more likely to be referred for psychiatric consultations; Hugh-Jones and Smith (1999) found that being the victim of bullying in school had long lasting effects into adulthood. This research suggests that being the victim of bullying is a distressing experience and that mental health issues are common among victims.

Wood County youth were asked “Have you ever seriously thought about killing yourself in the past year?” and “Have you tried to commit suicide in the past year?” Those youth with an affirmative response were selected and the frequency with which they reported being victims of bullying, by type of bullying, is reported in the following figures.

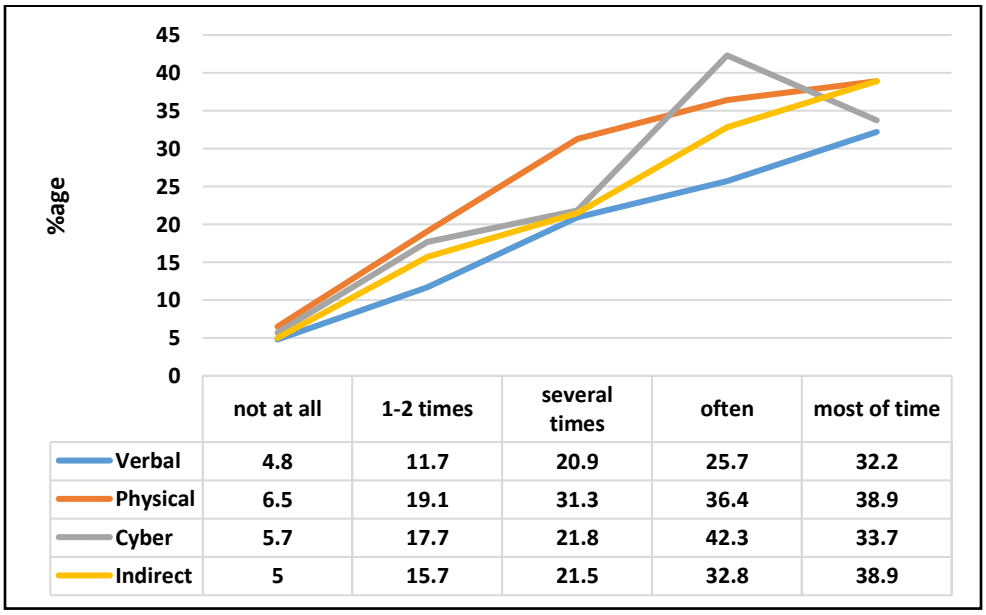
Figure 100: Percentage of Youth Who Report Suicide Ideation by Frequency of Being Bullied by Type of Bullying, 2022.



	not at all	1-2 times	several times	often	most of time
Verbal	17.6	36.9	53.4	63.4	62.6
Physical	22.5	49.9	50.6	72.7	57.4
Cyber	21.1	42.4	52.7	72.6	61.2
Indirect	19	44	56.9	67.2	68

The highest levels of suicide ideation occur among those youth who report the higher frequency of bully victimization, regardless of type of bullying. It should also be noted that this does not appear to be a linear correlation. Those youth who report being bullied 'often' during the past month report as high or higher levels of suicide ideation as those youth who report being bullied 'most of the time' during the past month. As such, it appears that just the occurrence of being bullied represents a highly distressing experience for youth in Wood County.

Figure 101: Percentage of Youth Who Report Suicide Attempts by Frequency of Being Bullied by Type of Bullying, 2022.



	not at all	1-2 times	several times	often	most of time
Verbal	4.8	11.7	20.9	25.7	32.2
Physical	6.5	19.1	31.3	36.4	38.9
Cyber	5.7	17.7	21.8	42.3	33.7
Indirect	5	15.7	21.5	32.8	38.9

Again, those youth who report any level of bullying victimization report a higher level of suicide attempts than those youth who were not bullied. There is a clear linear relationship between the frequency of being bullied and the likelihood of suicide attempt.

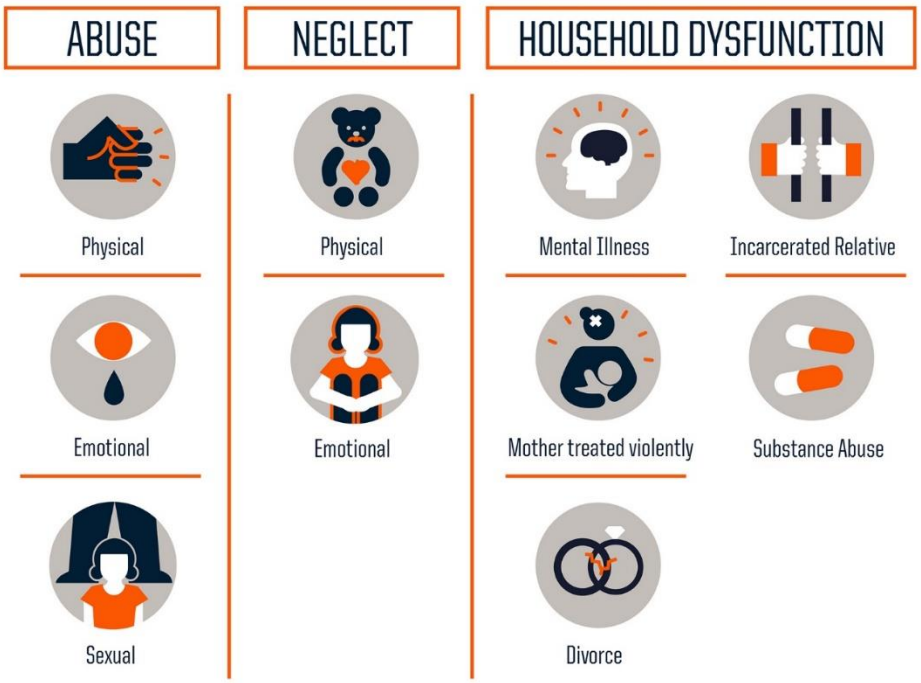
ADVERSE CHILDHOOD EXPERIENCES (ACES)

According to the Substance Abuse and Mental Health Services Administration (SAMHSA), adverse childhood experiences (ACEs) are stressful or traumatic events, including abuse and neglect. They may also include household dysfunction such as witnessing domestic violence or growing up with family members who have substance use disorders. ACEs are strongly related to the development and prevalence of a wide range of health problems including risky health behaviors, chronic health conditions, low life potential, and early death. There is a positive relationship between ACEs and these chronic health problems; that is, as the number of ACEs increase, so does the likelihood of negative outcomes.

Unfortunately, ACEs are more prevalent in society that might be realized. For example, Felitti, Vincent J; Anda, Robert F; et al. (May 1998) found that early childhood trauma had a higher level of prevalence than previously believed. They found that the majority of their subjects reported at least one of the ten categories of ACEs, while 12 % experienced at least four ACEs. Their study revealed a relationship between adverse childhood experiences and adult health issues.

This study is important for many Wood County agencies interested in risk and protective factors for our youth. The ACEs study found that protective factors against ACEs include a safe and positive relationship with an adult, good mental health, a healthy diet and exercise, positive social connections, and more. The broad range of negative consequences from ACEs strongly suggests the need for the prevention of ACEs. A caring community needs to provide the education and support to build resilience among its youth. The CDC promotes their Essentials for Childhood framework for communities to develop strategies that will promote positive relationships and environments for children.

There are three types of ACEs: abuse, neglect and household dysfunction.



Data on adverse childhood experiences (ACEs) were collected using a modified version of the Behavioral Risk Factor Surveillance System survey (BRFSS) available from the Centers for Disease Control and Prevention (2015). In the 2022ADAMHS Youth Survey, the three separate items on sexual abuse in the BRFSS were combined into one single item. Two items were added for neglect: one item for emotional neglect and one item for physical neglect.

Approximately 7000 Wood County adolescents from grades 7 through 12 completed the ACEs survey in October and November, 2021. The prevalence of each item, overall and by grade level, is reported in Table 4 below. Questions 1 through 5 indicate family dysfunction; questions 6 through 8 indicate abuse; and questions 9 and 10 indicate neglect.

Table 4. Percentage and Number of Reported ACE Scores Among Wood County Adolescents in Grades 7 through 12, and by Grade, 2022

ACEs Questions	Wood County			Grade in School: 2022 data					
	Grades 7-12 Combined			7	8	9	10	11	12
Parent/Household member experienced:	2018	2020	2022	2022 Rate	2022 Rate	2022 Rate	2022 Rate	2022 Rate	2022 Rate
Mental Illness	19.6	22.1	26.6	22.3	26	28	28.1	27.9	29.3
Substance Abuse	15.7	15.8	17.7	14.6	16.8	18.4	19.2	20.3	18.1
Incarcerated Relative	17.1	18.2	19.1	19.4	22.6	18	19.1	16.3	18.1
Separation or Divorce	34.6	35.4	34.7	35.7	37	34.9	34.6	32.2	31.2
Parents/Adults treated violently	4.4	5	6.1	5.9	5.4	6.1	6.2	6.9	5.7
Physical abuse	5.5	6.2	6.6	5.6	6.1	7.3	6.5	6.7	7.6
Emotional abuse	19.1	20	22.8	21.2	22.2	24.7	22.1	24.5	21.7
Sexual abuse	4.4	4.5	6.1	4.1	5.7	6.5	6.6	7	7.6
Physical neglect	4.7	5	5.9	8	6.1	6	4.2	4.8	4.9
Emotional neglect	16.8	18.9	21.7	23.5	21.8	24	18.5	2.7	19

Many states are collecting information about Adverse Childhood Experiences (ACEs) through the BRFSS. The BRFSS has been distributed as an annual, state-based, random-digit-dial telephone survey that collects data from non-institutionalized U.S. adults regarding health conditions and risk factors. Since 2009, a total 32 states plus the District of Columbia have included ACE questions for at least one year on their survey.

The national BRFSS survey was distributed to over 50,000 adults in 2010. And while the adult population, upon reflection, may report differently than adolescents who may be currently going through one or more adverse experiences, it is worth comparing the prevalence of ACEs in both adults nationally and adolescents locally. Table 5 reports the number of ACEs reported among adults nationally and youth in Wood County.

Table 5. Percentage and Number of Reported ACE Scores Nationally and Among Wood County Adolescents, 2022

Number of ACEs	**Males** (Nationally, ages 18+)	**Females** (Nationally, ages 18+)	**Males** (Wood County, ages 12-18)	**Females** (Wood County, ages 12-18)
0	41.4%	40.0%	48.4%	38.2%
1	24.9%	22.4%	22.3%	20.9%
2	13.2%	13.4%	11.6%	13.2%
3	8.1%	8.0%	7.5%	8.0%
4 or more	12.3%	16.2%	10.1%	14.7%

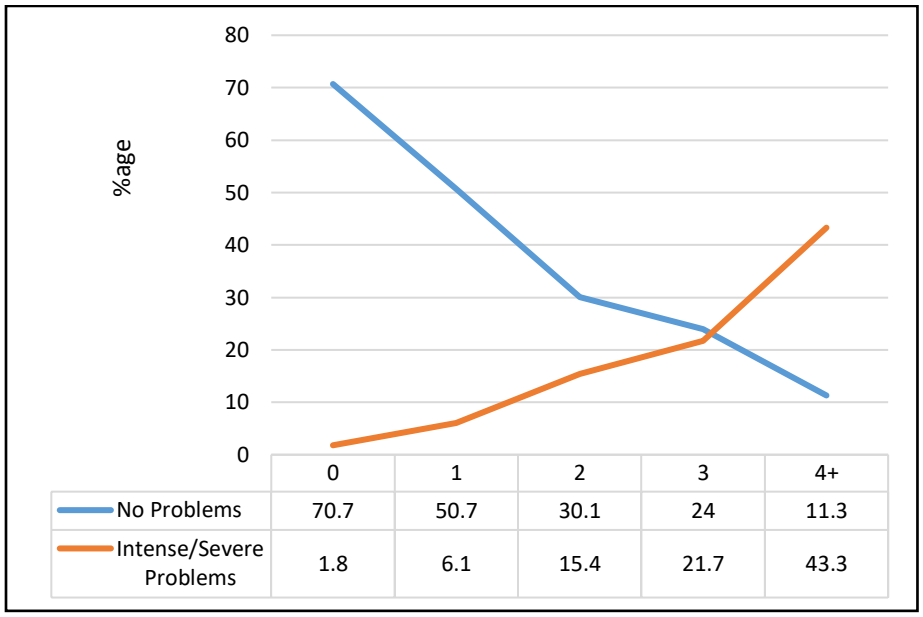
Multiple CDC studies describes the effect of cumulative childhood stress on physical and emotional well-being in adult life. They use the term 'dose response' to describe the relationship between ACEs and negative health and well-being outcomes. A dose response describes the negative relationships between increased 'doses,' or numbers of ACEs and problematic health conditions in adult life (alcoholism, unemployment, depression, smoking, etc.). The higher ones ACE score, the higher the level of problems in adult life.

In one study of the relationship between multiple forms of childhood maltreatment and adult mental health, Edwards, et.al. (2003) found that adults reporting any number of ACEs, lower mental health scores occurred. Their study found that an emotionally abusive family environment, and an increasing number of ACE scores interacting within the family environment, had a significant negative effect on adult mental health scores.

In order to gauge the overall mental health of Wood County adolescents, the ADMAHS Youth Survey adopted The Ohio Scales in 2008. The Ohio Scales (Ogles, Lunnen, Gillespie, and Trout, 1996; Ogles, Melendez, Davis, and Lunnen, 2000) were designed to measure clinical outcomes for youth who receive behavioral health services, such as the Children's Resource Center (CRC) in Bowling Green. From 2008 through 2022, the Wood County Youth Surveys contained the 20 item Problem Severity Scale. Problem Severity scores were used to calculate a rough estimate of the prevalence of Wood County youth who reported mental health problems, to follow trends in adolescent mental health, and to explore the relationship between level of problem severity and youth substance use.

The relationship between the Ohio Scales and ACEs among Wood County adolescents is presented in Table 6 below.

Table 6. The Relationship between the Number of ACEs and Level of Problem Severity Among Wood County Adolescents, Grades 7 through 12.



	0	1	2	3	4+
No Problems	70.7	50.7	30.1	24	11.3
Intense/Severe Problems	1.8	6.1	15.4	21.7	43.3

Clearly, those teens reporting 'no problems' also reported zero number of ACEs. However, even with only one ACE reported, the number of teens reporting 'no problems' dropped from 70.7 to 50.7 %; and among those reporting 2 ACEs, only 30 % reported 'no problems.' It appears that ACEs have a quick and deleterious effect on mental health. An inverse relationship is observed between the number of ACEs and those teens reporting 'intense or severe problems.'

Earlier in this report we observed the negative relationship between higher scores on the problem severity index and substance use. Those Wood County teens reporting higher problem severity scores were more likely to smoke cigarettes, drink alcohol to excess, and use illicit drugs. Additionally, those teens with high problem severity scores were more likely to engage in risky behaviors, such as driving under the influence, attending school after using alcohol or marijuana, and to use their mobile phones while driving.

Of particular interest to the ADAMHS Board has been the incidence and prevalence of suicide ideation and suicide attempts among Wood County youth.

Research has been conducted on the relationship between ACEs and numerous adult mental health conditions, including suicide. For example, Dube, et.al. (2001) found that the lifetime prevalence of having at least 1 suicide attempt was 3.8 %; however, among those with an ACEs score of only 1, the risk of attempted suicide increased 2 to 5 times, depending upon demographics. The authors concluded that a powerful relationship exists between ACEs and the risk of attempted suicide throughout the lifespan.

Brown, et.al (1999) found that children who are victims of certain adverse childhood experiences are 3 to 4 times more likely to become depressed or suicidal as an adolescent or adult. The relationship between ACEs and depression and suicide are complex, but the risk of depression and suicide typically included a family social environment characterized by abuse.

Perez, et.al. (2016) found that higher ACE scores among adolescents were predictive of two maladaptive personality traits among the adolescents he studied: impulsivity and aggression. Perez found that the impulsivity and aggression acted as mediating factors in the increased likelihood of suicide among those teens with higher ACEs.

The positive relationship between ACE scores and suicide was found in the ADAMHS Youth Study. The relationship between ACEs score and suicide ideation and attempt, among Wood County adolescents, is reported in Table 7 below.

Table 7. Percentages and Numbers of Reported Suicide Ideation and Suicide Attempts by Number of Reported ACEs Among Wood County Adolescents, Grades 7 through 12, 2022.

Number of Reported ACEs	Thought about suicide	Attempted suicide
0	7.3% (168)	1.4% (32)
1	19% (212)	3.8% (42)
2	31.8% (222)	7.6% (55)
3	41.1% (184)	12.3% (55)
4+	63.2% (623)	27.7% (454)

Higher ACE scores have been found to be predictors of adverse outcomes, including personality disorders, adolescent problem behavior and suicide ideation and attempts. As such, it would seem that the prevention of the occurrence of ACE's among Wood County youth should be a priority. By preventing ACEs, our Wood County youth could develop in more positive and prosocial ways and avoid the negative personality disorders and problem behaviors associated with ACEs.

The results of the ADAMHS Youth Study suggest the use of programs to prevent children from ACEs. Just as ATOD prevention is a cost-effective strategy for reducing underage ATOD use, and as the Olweus anti-bullying program has effectively reduced bullying prevalence in Wood County, so too might parental assistance programs reduce the occurrence of ACEs, especially for those at-risk of adversity.

GAMBLING PREVALENCE

Adolescents in Wood County, Ohio have grown up in a world where gambling has been legal, available, acceptable and normal. There exists the availability to engage in numerous forms of socially acceptable, government regulated or non-regulated home or community activities. These activities may include home poker gamers, dice or board games with family or friends, peer betting on games of personal skill in sports, video games, lottery purchases, internet gaming sites, video lottery terminals, and more. Advertising gambling activity exists in numerous forms, including internet pop ups both in visual and audio forms

It seems logical to assume that the sizeable number of gambling opportunities for adolescents in Wood County provides a high probability for the initiation of disordered gambling. However, little research exits to suggest that disordered gambling among adolescents is related to the number and types of gambling opportunities (Temcheff, St-Pierre, and Derevensky, 2015). Research has been suggested by Stinchfield, et al. (2010) that age, developmental stages, access (financial and venue access), and fear of harm plays an important role in the preferences for types of gambling and in the initiation of disordered gambling.

Parents do not view gambling as a harmful activity for their children, especially when compared to other potentially risky behaviors (Campbell, Derevensky, Meerkamper&Cutajar, 2011). Campbell, et al. found that only 40 % of parents viewed gambling as a serious issue compared to over 80 % for issues such as drug and alcohol use, drinking and driving, unsafe sex, or bullying.

But similar to underage alcohol prevalence, statutes that restrict underage access do not seem to deter an active participation in gambling activity among adolescents (Volberg, Gupta, Griffiths, Olason, & Defabbro, 2010). Research on adolescent gambling consistently reports that the majority of adolescents engage in some type of gambling activity (Derevensky, 2008). The participation rates for Wood County youth are reported in Tables 7 through 9.

The problem for adolescent gambling is that social or recreational gambling can move along a continuum towards problematic or disordered gambling. Adolescents are considered an at-risk group to develop gambling problems, with male adolescents the gender most likely to experience disordered gambling problems (Jacobs, 2000, 2004).

Survey Results

School aged youth from grades 7 through 12 were surveyed in November and December, 2017 regarding gambling activities, gambling attitudes, and likelihood for a gambling disorder. The results of the survey, including all students in grades 7 through 12 (n=5852), are as follows:

Table 8. Prevalence of Gambling and Gaming Activities among Adolescents (ages12 to 18) in Wood County (n=5852), 2022.

	Daily	About once a week	About once a month	Less than once a month	Not at all
Played cards for money	.4	1.2	2.1	13.2	83.2
Bet money on games of person skill like pool, golf, or bowling	.6	1.5	2.9	12.8	82.2
Bet money on sports teams (pro, college, or amateur)	.7	1.8	2.1	10.4	85
Bought lottery tickets (mega millions, Powerball, etc.)	.3	.8	2.0	8.9	88
Bought scratch offs	.4	1.0	2.5	14.1	82
Bet money on fantasy sports or games (with an entry fee to play)	.9	1.2	1.6	5.7	90.6
Bet money on daily fantasy sports (FanDuel or DraftKings, etc)	.7	1.1	.9	3.3	94
Bet money on e-Sports	1.0	1.0	1.0	2.7	94.2
Played games on computer, tablet, gaming console, etc.	40.7	17.1	7.3	5.1	29.8
Spent at least 2 hours daily playing games online or offline	27.6	19.1	10	8.7	34.6

The most prevalent types of gambling activities among Wood County adolescents are betting money on sports: sports teams (pro, college, or amateur), on fantasy sports or games with an entry fee to play, or on daily fantasy sports such as FanDuel or DraftKings. The second highest level of prevalence occurs in playing cards (poker), and Ohio Lottery games such as purchasing Ohio Lottery tickets or purchasing scratch off tickets. The lowest gambling prevalence occurred in betting on e-Sports.

Overall prevalence remains low for daily or weekly participation. Most activity occurs once per month or less than once per month.

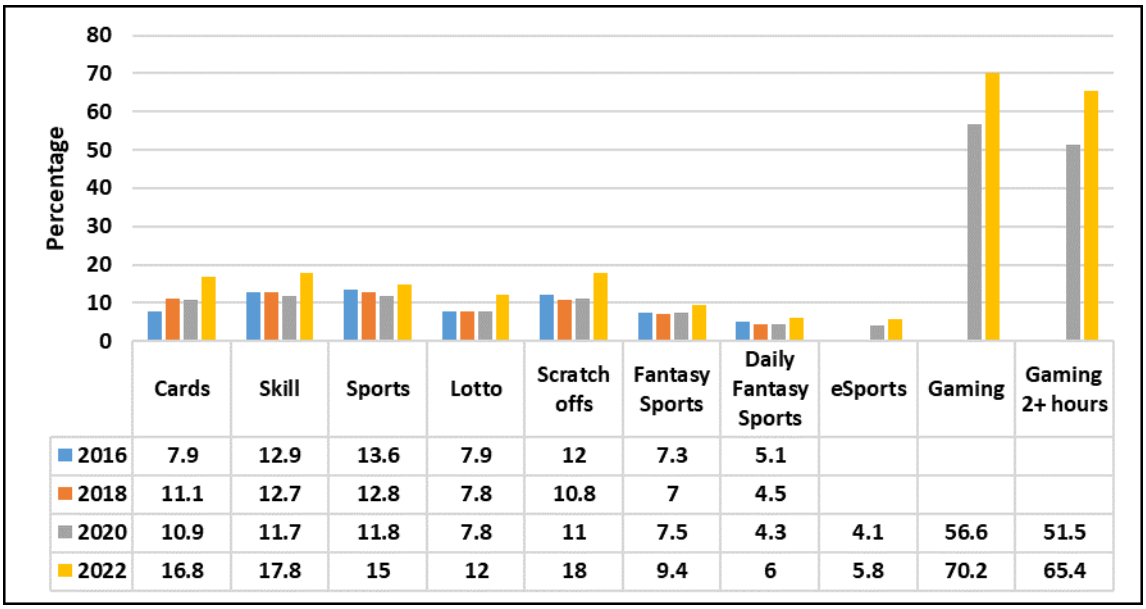
Gambling activities are more prevalent among males than females in Wood County and among older adolescents, aged 17 to 19, than younger adolescents aged 14 to 16.

Table 9. Prevalence of Gambling Activities by Gender among Adolescents (ages 12 to 18) in Wood County (n=5353), 2022.

Gambling/gaming activity	Gender	Daily	Weekly	Monthly	Few x year	Never
Played cards for money	Male	0.3	1.6	3	15.5	79.6
	Female	0.4	0.6	0.9	11	87.1
	Other	1.4	3.2	4.5	7.7	83.3
Bet money on games of person skill like pool, golf, or bowling	Male	0.8	2.3	4.2	16.1	76.6
	Female	0.4	0.5	1.5	9.8	87.8
	Other	0.5	2.3	2.7	8.1	86.5
Bet money on sports teams (pro, college, or amateur)	Male	1.1	3.1	3.2	13	79.7
	Female	0.3	0.5	1.1	8.2	89.9
	Other	1.4	0.9	1.4	5	91.4
Bought lottery tickets (mega millions, Powerball, etc.)	Male	0.3	0.9	2.3	8.7	87.7
	Female	0.3	0.5	1.5	9.4	88.3
	Other	1.8	2.7	2.7	7.2	85.7
Bought scratch offs	Male	0.4	1.1	3.2	13	82.3
	Female	0.3	0.7	1.9	15.6	81.6
	Other	1.4	3.7	2.7	14.2	78.1
Bet money on sports teams or games (with an entry fee to play)	Male	1.5	2.1	2.3	9.3	84.8
	Female	0.2	0.2	0.8	2.6	96.2
	Other	1.8	1.4	0.5	3.2	93.2
Bet money on daily fantasy sports (FanDuel or DraftKings, etc.)	Male	1.3	1.7	1.5	5.3	90.4
	Female	0.2	0.4	0.2	1.5	97.7
	Other	0.5	0.5	2.3	1.4	95.5
Bet money on Esports	Male	1.5	1.4	1.6	4.1	91.5
	Female	0.6	0.5	0.5	1.4	97.1
	Other	0.5	1.8	0.9	3.6	93.2
Played games on computer, tablet, gaming console, etc.	Male	52	16.3	4.3	3.5	24
	Female	29.4	18.1	10.7	6.7	35.1
	Other	50.7	14.5	2.7	4.1	28.1
Spent at least two hours daily playing games online of offline	Male	36.1	23.5	8.9	6.7	24.8
	Female	18.6	15.2	11.1	11.1	44
	Other	38.4	17.8	10	5	28.8
Spent money on loot boxes	Male	3.6	2.1	7.2	18	69.1
	Female	0.4	0.5	1.2	3.3	94.6
	Other	2.7	2.7	4.5	5	85

Since gambling activities were included in the 2016 ADAMHS Youth Survey, we can compare gambling prevalence between 2016, 2018, and 2022. The comparison rates of gambling prevalence among Wood County youth between 2016 and 2022 is reported below.

Table 10. Trends in Gambling and Gaming Prevalence, 2016-2022 Among Youth in Wood County.



	Cards	Skill	Sports	Lotto	Scratch offs	Fantasy Sports	Daily Fantasy Sports	eSports	Gaming	Gaming 2+ hours
2016	7.9	12.9	13.6	7.9	12	7.3	5.1			
2018	11.1	12.7	12.8	7.8	10.8	7	4.5			
2020	10.9	11.7	11.8	7.8	11	7.5	4.3	4.1	56.6	51.5
2022	16.8	17.8	15	12	18	9.4	6	5.8	70.2	65.4

The rates of gambling prevalence among Wood County youth show no discernable increase or decrease by type of activity between 2016 and 2022. Increases appear in betting on fantasy sports and in the purchase of scratch offs, but decreases appear in other activities.

DISORDERED GAMBLING

Rates of disordered gambling vary by country and by research study. Canadian studies have shown the rate of disordered gambling among adolescents to be 3.4 % (Derevensky & Gupta, 2001), 3.2 % (Lussier, Derevensky, & Gupta, 2007), 4.9 % (Hardoon, Derevensky, & Gupta, 2003), and 6.4 % (Poulin, 2000). Two U.S. studies report adolescent disordered gambling prevalence between 3.5 and 5.0 % (National Research Council, 1999) and 2.1 % (Welte et al., 2008).

In our Wood County study, we utilized the NODS-CLiP (Toce-Gerstein, Gerstein, & Volberg, 2009) among high school students as a measure of disordered gambling. The NODS-CLiP is a three-item screen derived from the NODS, a longer 17 measure of the 10 DSM-IV criteria. The 17 item NODS was used as the 'gold standard' to determine the categorization of problem gambler (Toce-Gerstein, Gerstein, & Volberg, 2009). The three NODS items, best identified to reveal problem gambling, include the following:

a. Have there ever been periods lasting 2 weeks or longer when you spent a lot of time thinking about your gambling experiences or planning out future gambling ventures or bets?

b. Have you ever tried to stop, cut down, or control your gambling?

c. Have you ever lied to family members, friends, or others about how much you gamble or how much money you lost on gambling?

Each gambling frequency requires a dichotomous answer (i.e. yes or no). If the respondent answers yes to one or more questions, further assessment is advised.

In 2016, among the population of 5000 Wood County adolescents, 3.0 % reported disordered gambling tendencies as measured by the NODS-CliP; in 2018, among 6100 Wood County adolescents, the rate remained at 3.0 %; and, in 2020, among 5937 adolescents, the rate reported was 2.7 %; however, in 2022 the rate jumped to 6.7 %. It appears that Wood County youth are reporting a significant increase in gambling activities and in disordered or problem gambling. Disordered gambling varied by age and gender, with Wood County males more likely to report gambling activities and disordered gambling characteristics.

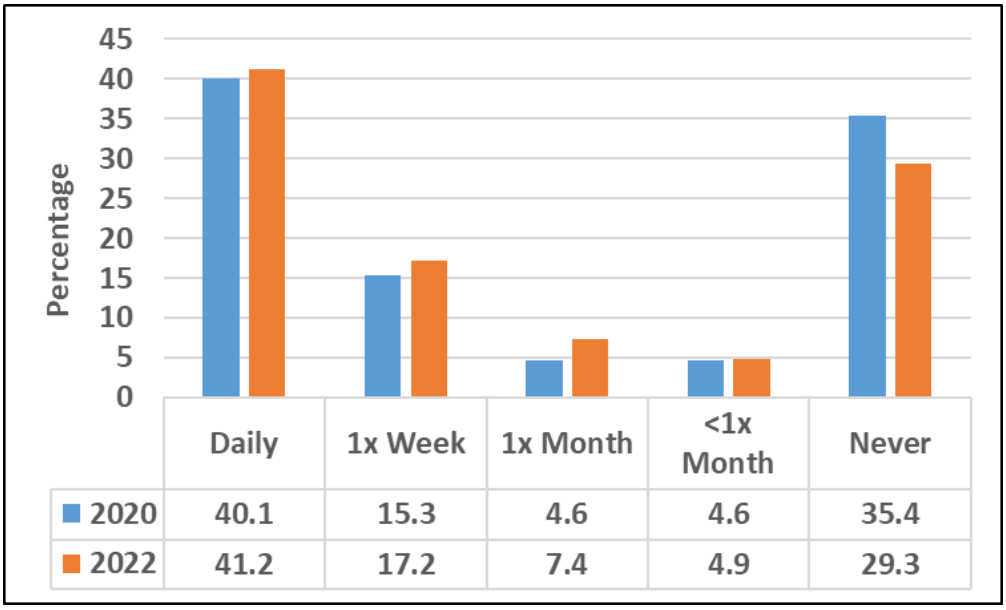
GAMING PREVALENCE AND DISORDERED GAMING

Gaming activities have become increasing prevalent in recent years. The Ohio Department of Mental Health and Addiction Services (OhioMHAS) has created a website called "Change the Game Ohio" to bring awareness to the problem of adolescent gaming. Research has shown that gaming meets basic psychological needs among adolescents that meeting these needs results in more frequent and enjoyable play. The problem becomes when the playing becomes obsessive and replaces other normal adolescent activities. Problematic gaming among adolescents can lead to problematic gambling as an adolescent and as an adult. Additionally, problematic gaming and problematic gambling are related to other addictive behaviors, including addiction to alcohol, nicotine and other drugs.

The 2022 Youth Survey added two new gaming questions and one gaming disorder scale. The gaming activity questions sought to form a baseline of gaming activity among Wood County youth by asking how often they play games on a computer/laptop, tablet, gaming console, or phone, either on or offline. We also asked how often adolescents spent at least two hours daily playing games on or offline. The gaming disorder scale Internet Disorder Gaming Scale Short Form (IDGS9_SF) (Pontes et al., 2015) was the first brief standardized psychometric tool to asses internet gaming disorder. The IDGS9_SF uses the nine internet gaming disorder criteria suggested by the American Psychiatric Association in the latest edition of the DSM-5.

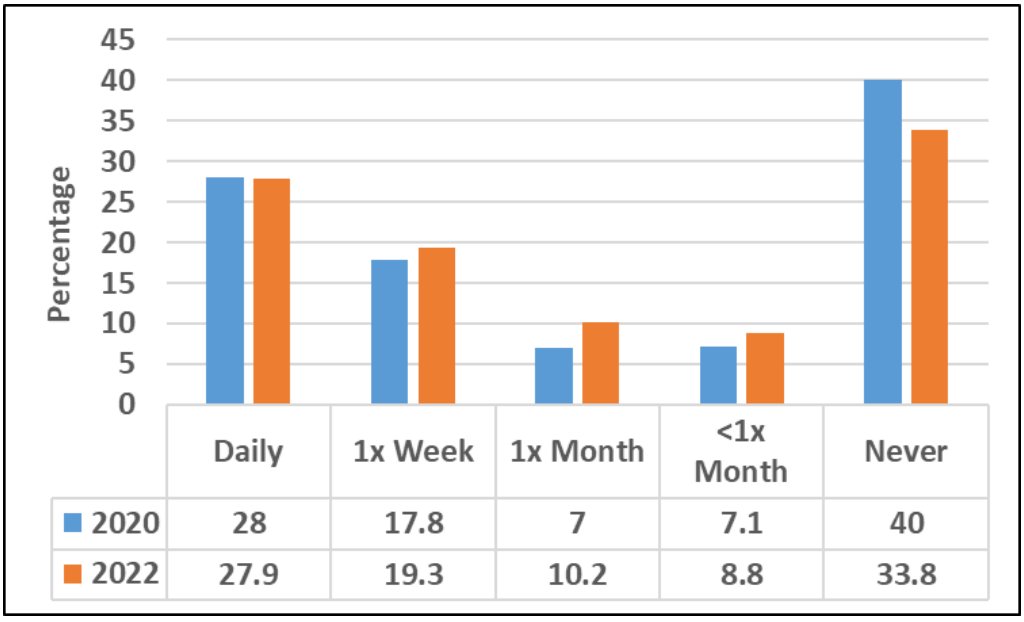
Gaming activity appears to be much more prevalent than gambling activity among Wood County adolescents. Breakdowns of gaming activity by grade level and by gender are presented below in Tables 11 through 13.

Table 11. Gaming Prevalence Among Youth in Wood County – Grades 7 through 12, 2022



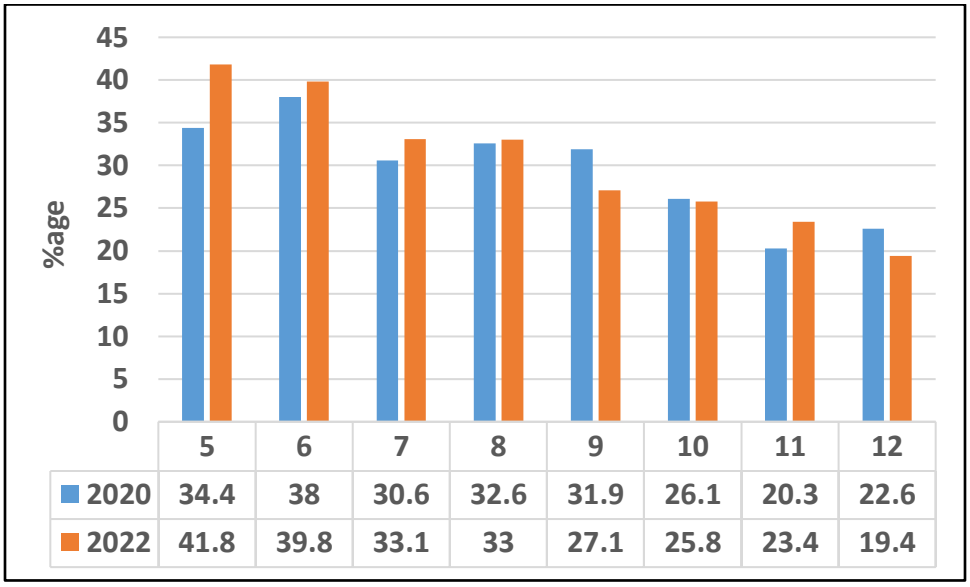
	Daily	1x Week	1x Month	<1x Month	Never
2020	40.1	15.3	4.6	4.6	35.4
2022	41.2	17.2	7.4	4.9	29.3

Table 12. Gaming Two or More Hours Per Day Among Youth in Wood County – Grades 7 through 12, 2022



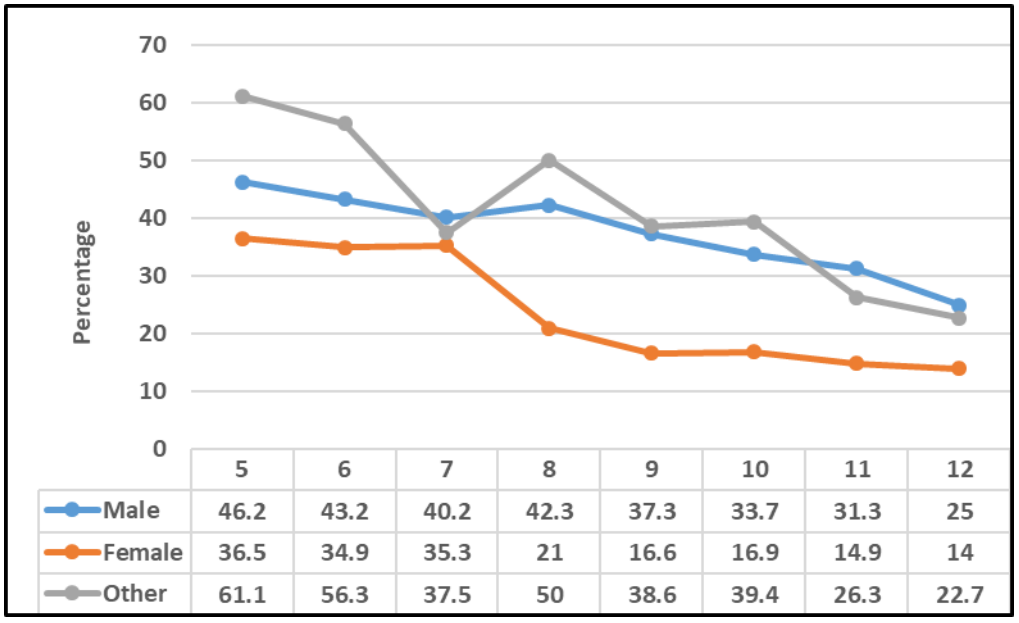
	Daily	1x Week	1x Month	<1x Month	Never
2020	28	17.8	7	7.1	40
2022	27.9	19.3	10.2	8.8	33.8

Table 13. Gaming Two or More Hours Every Day Among Youth in Wood County by grade level, by year.



	5	6	7	8	9	10	11	12
2020	34.4	38	30.6	32.6	31.9	26.1	20.3	22.6
2022	41.8	39.8	33.1	33	27.1	25.8	23.4	19.4

Table 14. Daily Gaming Prevalence Among Youth in Wood County by Grade and Gender, 2022



	5	6	7	8	9	10	11	12
Male	46.2	43.2	40.2	42.3	37.3	33.7	31.3	25
Female	36.5	34.9	35.3	21	16.6	16.9	14.9	14
Other	61.1	56.3	37.5	50	38.6	39.4	26.3	22.7

The prevalence of gaming activity is highest among younger males and declines as both males and females advance in grade. Perhaps gaming activity is replaced by other activities in the upper grades, or perhaps those in the upper grades missed the recent cultural promotion of gaming activity. The prevention idiom of "early and often" is an appropriate approach to gaming prevention among Wood County youth.

The Internet Disorder Gaming Scale Short Form (IDGS9_SF) (Pontes et al., 2015) is scored by summing up all the responses given to all nine items and can range from a minimum score of 9 to a maximum score of 45 points, with higher scores being indicative of a higher degree of Internet Gaming Disorder. Pontes (2015) differentiates disordered gamers from non-disordered gamers if respondents endorse at least 5 criteria out of 9 by considering answers of '5: Very Often,' which translates as endorsement of the criterion. Results of Internet Disorder Gaming Scale Short Form (IDGS9_SF) (Pontes et al., 2015) are presented in Table 14 below.

Table 15. Disordered Gamer (Pontes, 2019) by Grade Level, 2022

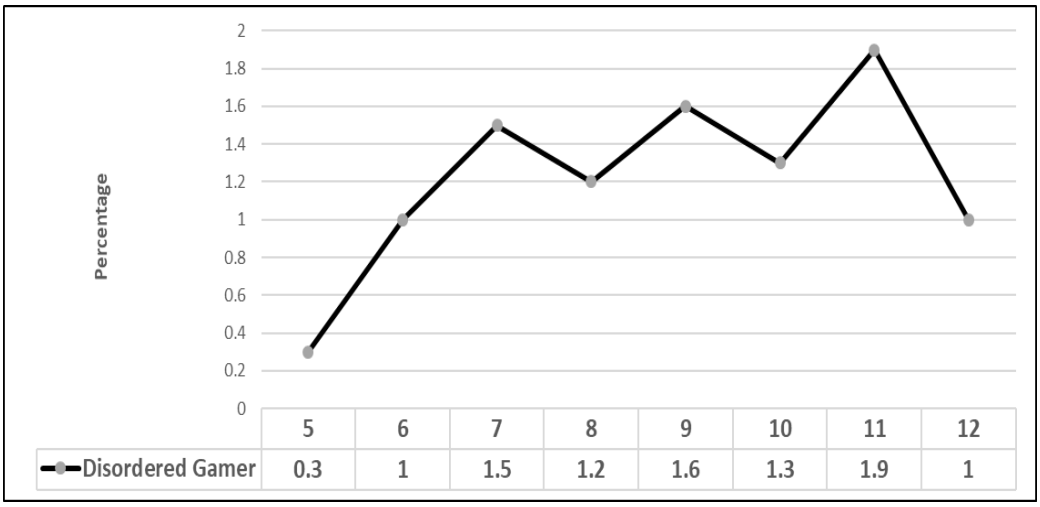


Table 16. Disordered Gamer (Pontes, 2019) by Level of Problem Severity and by Number of ACES 2022

Problem Severity Scale	Disordered Gamer
No Problems	.4
Low Problems	1.4
Moderate	2.2
Severe	2.5
Intense	6.9

ACES	Disordered Gamer
0	.6
1	1.2
2	2.1
3	1.6
4+	2.9

Disordered gamers, among all students in grades 7 through 12, and their relationship to the Ohio Scales and their relationship to the number of ACEs they reported are presented in Table 15. As mental health problems grow in number, so too does the likelihood of disordered gaming among Wood County adolescents. As reported adverse childhood experience numbers increase so too does the likelihood of disordered gaming. This is a cross sectional study, so we cannot say whether disordered gaming was an antecedent or a consequence of the reported mental health or childhood experiences. For Wood County prevention specialists, the co-occurrence of these issues suggests a broader approach to addiction prevention.

PREFERENCE FOR A VIRTUAL LIFE

While time spent gaming was relatively high among Wood County youth, the prevalence of disordered gaming was relatively low. However, this does not mean that parents and educations should not be concerned. It may be that simply spending time playing online games is not as critical to the likelihood of being a developing an internet dependency or becoming a disordered gamer as are the cognitions and the psychological status of the players. Research has suggested that an individual's cognitions or beliefs play a major factor in leading to internet dependency (Davis, 2001). Factors contributing to disordered gaming or internet dependency include a lack of emotional regulation and mindfulness (Marchica, et al, 2020), increased depression (Gonza´lez-Bueso V, et al., 2018), greater anxiety (Wang, et al, 2018) and bullying victimization (Richard, J, et al, 2021)

Davis (2001) and Caplan (2010) suggested that distorted cognitions about the self and the world play a critical role in internet dependency. One type of distorted thinking includes having a self-concept that favors the online self over the offline world (e.g., ''I am a more valuable person in the online game world than in real life''; ''I am more respected in the online game world than in real life.'')

In order to gather a baseline about the thought processes of Wood County youth towards the internet and the online gaming world, we added the Preference for a Virtual Life Scale (Peng and liu, 2010) to our 2022 survey. Results indicate that 79 % of Wood County youth have little preference for a virtual life. However, 14.5 % indicate a lower level of preference and 6.4 % endorse a strong preference. Among those students who game 2 hours or more per day, every day, there is a much higher endorsement of the virtual life.

Table 17. Percentage of Wood County Youth Who Prefer a Virtual Life and PVL by Gaming Two Hours or More Daily, 2022

Grades 7-12	Strongly Disagree	Mostly Disagree	Mostly Agree	Strongly Agree
Prefer a Virtual Life	52.6	26.4	13.5	6.4
Game 2+ hours Daily + prefer virtual life	28.5	32.8	25.4	13.4

Table 18. Percentage of Wood County Youth Who Prefer a Virtual Life by Level of Problem Severity, 2022

Level of Problem Severity	Strongly Disagree	Disagree	Agree	Strongly Agree
No Problems	59.3	41.9	25.6	19
Low	19.9	27.2	22.5	14.2
Moderate	12.6	19	26.9	27.4
Severe	5.3	8.5	14.8	18.6
Intense	2.8	3.4	18.6	20.8

Table 19. Percentage of Wood County Youth Who Prefer a Virtual Life by Number of ACES, 2022

Number of ACES	Strongly Disagree	Disagree	Agree	Strongly Agree
None	48.6	38.7	26	23.3
1	20.5	19.9	19.9	15.1
2	11	15.3	16.6	10.1
3	6.8	8.7	9.5	11.7
4+	13.1	17.4	28	39.7

"GAMEBLING" AND LOOT BOXES

The gambling and gaming industries are showing increasing overlap, as the distinctions between these once separate industries have become blurred (Teichert et al., 2017). Consequently, the convergence of these two industries has elicited many concerns, such as gamers being exposed to gambling content, sometimes in the form of predatory monetization schemes (e.g., loot boxes). Thus, there is a need for further research to investigate the relationship between these two converging industries and the individuals who engage with such content (i.e., gamblers and gamers). A combination of gambling with gaming has been colloquially called 'Gamebling.' Gamebling is online gaming that involves some type of gambling.

Oftentimes, the prevalence of gamebling is associated with the paid acquisition of 'loot boxes.' Loot boxes are rewards on gaming that can either be earned by the player or purchased with real-world money. Loot boxes contain items that give the player an advantage over other players, such as tools or weapons. Like gambling, purchasing a loot box is risky as the contents of the loot box are typically unknown.

Some prevention advocates and researchers believe that the similarities between actual gambling and the purchasing of loot boxes by gamers can lead to problem or disordered gambling.

Puiras, E., Cummings, S., & Mazmanian, D. (2020) found that youth who both gamble and game had higher levels of escapism scores associated with participating in gaming activities rather than gambling activities This result suggests that individuals who play games have different motives to play than do individuals who gamble. Differences in motivation for game play may help in understanding the distinction between gamblers and gamers. Brooks and Clark (2019) who explored the relationship between loot box use, gamebling, and disordered gambling, found that problematic loot box use may arise from a tendency for risky behavior and false beliefs about gambling.

Brooks and Clark (2019) developed an index of risky loot box use, made of five questions about loot box spending and problem use. The ADAMHS Youth Survey added three of the questions, providing some indicators of Wood County youth loot box behaviors. The survey measured the extent to which youth had a preoccupation ("I play games longer than I intend to so I can earn loot boxes"), chasing losses ("I bought more loot boxes after failing to get valuable items"), and impulsivity ("The thrill of opening loot boxes has encouraged me to buy more"). The ADAMHS Youth Survey also asked the straight forward question "Have you spent money on loot boxes?"

RESULTS

Among Wood County youth, 82.1 % report they never purchased a loot box. Another 10.2 % report they purchase loot boxes a few times per year. Two % of Wood County youth (n=112) report they purchase loot boxes daily, and another 1.5 % (n=80), report weekly purchases.

Of those youth who report they game for 2 hours or more per day, every day, 8.3 % include the youth who also purchase loot boxes weekly or daily. Of those youth who report they game for 2 hours or more per day, every day, 82.5 % report they never or rarely purchase loot boxes.

Results of the Risky Loot Box inventory (RLI) include 2.8 % of 7 through 12th graders who report they daily or weekly chased losses; 2.8 % who daily or weekly displayed impulsivity about loot boxes; and, 7.4 % who played longer then they intended, on a daily or weekly basis, in order to earn loot boxes.

REFERENCES

Afifi, T. O., Cox, B. J., & Sareen, J. (2006). Gambling-related problems are chronic and persist for the majority of individuals with a lifetime diagnosis of pathological gambling. American Journal of Psychiatry, 163, 1297.

Aluede, O.(2006). Bullying in Schools: A form of Child Abuse in Schools. Educational Research Quarterly, 30 (1), 37-49.

Aluede, O., Adeleke, F., Omoike, D., Afen-Akpaida, J. (2008). A Review of the Extent, Nature, Characteristics and Effects of Bullying Behavior in Schools. Journal of Instructional Psychology, 35, 151-158.

Botvin, G. J., Griffin, K. W., & Nichols, T. R. (2006). Preventing youth violence and delinquency through a universal school-based prevention approach. Prevention Science, 7(4), 403-408.

Botvin, G. J., Baker, E., Renick, N., Filazzola, A. D., and Botvin, E. M. (1984). A cognitive-behavioral approach to substance abuse prevention. Addictive Behaviors, 9, 137-147.

Campbell, C., Derevensky, J., Meerkamper, E. & Cutajar, J. (2011). Parents' perception of adolescent gambling: A Canadian national study. Journal of Gambling Issues, 25, 26-53.

Caplan, S. E. (2010). Theory and measurement of generalized problematic internet use: A two-step approach. *Computers in Human Behavior, 26*(5), 1089–1097.

Centers for Disease Control and Prevention. (2015) *Behavioral Risk Factor Surveillance System Survey ACE Data, 2009-2014.* Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.

Centers for Disease Control and Prevention. (2014) *Essentials for Childhood: Steps to Create Safe, Stable, Nurturing Relationships and Environments.* Atlanta, Georgia. National Center for Injury Prevention and Control. Division of Violence Prevention.

Clark, E. A. and Kiselica, M.S. (1997). A Systemic Counseling Approach to the Problem of Bulling. Elementary School Guidance and Counseling, 31, 310-324.

Davis R. A. A cognitive-behavioral model of pathological Internet use. Computers in Human Behavior 2001; 17: 187–95

Dawkins, Lynne, et al. "The electronic-cigarette: effects on desire to smoke, withdrawal symptoms and cognition." *Addictive behaviors* 37.8 (2012): 970-973.

Derevensky, J. L. & Gupta, R. (2004). Adolescents with gambling problems: A synopsis of our current knowledge. E-Gambling. The Electronic Journal of Gambling Issues, 1-22.

Derevensky, J. (2008). Gambling behaviors and adolescent substance abuse disorders. In Y. Kaminer& O. G. Bukstein (Eds.), *Adolescent substance abuse: Psychiatric comorbidity and high risk behaviors* (pp 403-433). New York: Haworth Press.

Dube SR, Anda RF, Felitti VJ, Chapman DP, Williamson DF, Giles WH. (2001). Childhood Abuse, Household Dysfunction, and the Risk of Attempted Suicide Throughout the Life Span Findings From the Adverse Childhood Experiences Study. *JAMA.* 2001;286(24):3089–3096. doi:10.1001/jama.286.24.3089

Edwards VJ, Holden GW, Felitti VJ, et al. (2003): Relationship between multiple forms of childhood maltreatment and adult mental health in community respondents: results from the Adverse Childhood Experiences Study. *American Journal of Psychiatry*160:1453–1460.

Elders MJ1, Perry CL, Eriksen MP, Giovino GA. "The report of the Surgeon General: preventing tobacco use among young people." Am J Public Health. 1994 Apr; 84(4):543-7.

Farsalinos, K., Romagna, G., Tsiapras, D., Kyrzopoulos, S., Voudris, V. "Characteristics, perceived side effects and benefits of electronic cigarette use: a worldwide survey of more than 19,000 consumers." Int J Environ Res Public Health. 2014 Apr 22;11(4):4356-73.

Felitti, Vincent J; Anda, Robert F; et al. (May 1998). "Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study." *American Journal of Preventive Medicine*. **14** (4): 245–258.

FBI Uniform Crime Reports (2009). Retrieved from http://www.fbi.gov/ucr/ucr.htm.

Gonza´lez-Bueso V, Santamarı´a JJ, Ferna´ndez D, et al. Association between gaming disorder or pathological video-game use and comorbid psychopathology: a comprehensive review. International Journal of Environmental Research and Public Health 2018; 15:E668

Griffin, K. W., Botvin, G. J., Nichols, T. R., & Doyle, M. M. (2003). Effectiveness of a universal drug abuse prevention approach for youth at high risk for substance use initiation. Preventive Medicine, 36(1), 1-7.

Hardoon, K., Derevensky, J.L., & Gupta R.(2003). Empirical measures vs. perceived gambling severity among youth. Why adolescent problem gamblers fail to seek treatment. Addictive Behaviors, 28, 933-946.

Hawkins, J. D., Catalano, R. F., Miller, J. Y., (1992) Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. Psychological Bulletin, 112(1), 64-105.

Houbre, B., Tarquinio, C., Thuillier, Il, Hergott, E. (2006). Bullying Among Students and its Consequences on Health. European Journal of Psychology of Education, 2, 183-208.

Hugh-Jones, S. and Smith, P. (1999). Self-Reports of Short and Long Term Effects of Bullying on Children Who Stammer. British Journal of Educational Psychology, 69, 141-158.

Ivoska, W.J. (2018). Biennial report of the Wood County youth survey, 2018. The Wood County ADAMHS Board. Bowling Green, Ohio.

Indicators of School Crime and Safety: (2007). National Center for Education Statistics. U.S. Department of Education.
http://nces.ed.gov/programs/crimeindicators/crimeindicators2009/tables/table_11_3.asp

Jacobs, D. F. (2000). Juvenile gambling in North America: An analysis of long term trends and future prospects. Journal of Gambling Studies, 16, 119-152.

Jacobs, D. F. (2004). Youth gambling in North America: An analysis of long term trends and future prospects. In J. Derevensky and R. Gupta (Eds.), *Gambling problems in youth: Theoretical and applied perspectives* (pp 1-26). New York: Kluwer Academic/Plenum Publishers.

Johnston, L.D., O'Malley, P.M., Bachman, J. G. and Schulenberg, J.E. (2015). Monitoring the Future National Survey Results on Drug Use, 1975-2013. Volume I, Secondary School Students. Bethesda, MD: National Institute on Drug Abuse, 7.

Johnston, L.D., O'Malley, P.M., Bachman, J. G. and Schulenberg, J.E. (2011, December 11). "Marijuana Use Continues to Rise Among US Teens, While Alcohol Use Hits Historic Lows" University of Michigan News Service: Ann Arbor, Mi. Retrieved from http://www.monitoringthefuture.org. And, Johnston, L.D., O'Malley, P.M., Bachman, J. G. and Schulenberg, J.E. (2013, December 14). Smoking Continues Gradual Decline Among U.S. Teens; Smokeless Tobacco Threatens a Comeback. University of Michigan News Service: Ann Arbor, MI. Retrieved from http://www.monitoringthefuture.org.

Kerlikowski, G. (2003). One in Six Students Fall Prey to Bullies. Inside School Safety, 6-9.

Kumpulanien K., Rasanen, E., Henttonen, I., Almqvist, F., Kresanov, K., Linna, S., Moilanen, I., Piha, J., Purra, K. and Tamminen, T. (1998). Bullying and Psychiatric Symptoms Among Elementary School-Aged Children. Child Abuse and Neglect, 22, 705-717.

Lussier, I., Derevensky, J., Gupta, R. & Vitaro, F. (2014). Risk, compensatory, protective, and vulnerability processes influencing youth gambling problems and other high-risk behaviors. Psychology of Addictive Behaviors, 28,404-413.

Marchica, L. A., Mills, D. J., Keough, M. T., & Derevensky, J. L. (2020). Exploring differences among video gamers with and without depression: contrasting emotion regulation and mindfulness. *Cyberpsychology, Behavior, and Social Networking*, *23*(2), 119-125.

Montag, C.; Schivinski, B.; Sariyska, R.; Kannen, C.; Demetrovics, Z.; Pontes, H.M. Psychopathological Symptoms and Gaming Motives in Disordered Gaming—A Psychometric Comparison between the WHO and APA Diagnostic Frameworks. *J. Clin. Med.* **2019**, *8*, 1691

National Crime Victimization Study. (2007). U.S. Department of Justice, Bureau of Justice Statistics.

Ogles, B.M., Lunnen, K.M., Gillespie, D.K., and Trout, S.C. (1996). Conceptualization and Initial Development of the Ohio Scales. In C. Liberton, K. Kutash, and R. Friedman (Eds.), The

8th Annual Research Conference Proceedings: A System of Care for Children's Mental Health: Expanding the Research Base. (33-37). University of South Florida.

Ogles, B.M., Melendez, G., Davis, D., and Lunnen, K. (2000). The Ohio Youth Problem, Functioning, and Satisfaction Scales: Technical Manual. Ohio University, Department of Psychology.

Oliver, R., Hoover, J.H., and Hazler, R. (1994). The Perceived Roles of Bullying in Small Town Midwestern Schools. Journal of Counselling and Development. 72, 416-419.

Olweus, D. (1993). Bullying At School: What We Know and What We Can Do. Cambridge, Ma: Blackwell Publishers.

Peng, Wei, and Ming Liu. "Online gaming dependency: a preliminary study in China."*Cyberpsychology, behavior, and social networking*" 13.3 (2010): 329-333.

Pepper, Jessica K., et al. "Adolescent males' awareness of and willingness to try electronic cigarettes." *Journal of Adolescent Health* 52.2 (2013): 144-150.

Petry, N. M., Stinson, F. S., & Grant, B. F. (2005). Comorbidity of DSM-IV pathological gambling and other psychiatric disorders: Results from the National Epidemiologic Survey on Alcohol and Related Conditions. Journal of Gambling Studies, 23, 275-283.

Pontes, H. M., & Griffiths, M. D. (2015). Measuring DSM-5 Internet Gaming Disorder: Development and Validation of a Short Psychometric Scale. *Computers in Human Behavior, 45,* 137-143. doi: 10.1016/j.chb.2014.12.006

Prewitt, P.W. (1988). Dealing with Bullying Among Japanese Students. School Psychology International. 9. 189-195.

Puiras, E., Cummings, S., & Mazmanian, D. (2020). Playing to escape: Examining escapism in gamblers and gamers. *Journal of Gambling Issues*, *46*.

Reininger, B. M., Evans, A. E., Griffin, S. F., Sanderson, M., Vincent, M. L., Valois, R. F., Parra-Medina, D. (2005). Predicting Adolescent Risk Behaviors Based on an Ecological Framework and Assets. American Journal of Health Behavior, 29(2), 150-161.

Richard, J., Potenza, M., Ivoska, W. & Derevensky, J. (2019). The stimulating nature of gambling behaviors: Relationships between stimulant use and gambling amongst adolescents. *Journal of Gambling Studies, 35,* 47-62.

Richard, J.; Marchica, L.; Ivoska, W.; Derevensky, J. Bullying Victimization and Problem Video Gaming: The Mediating Role of Externalizing and Internalizing Problems. *Int. J. Environ. Res. Public Health* **2021**, *18*, 1930. https://doi.org/10.3390/ijerph18041930

Spoth, R. L., Randall, G. K., Trudeau, L., Shin, C., & Redmond, C. (2008). Substance use outcomes 5 1/2 years past baseline for partnership-based, family-school preventive interventions. Drug and Alcohol Dependence, 96(1-2), 57-68.

Stinchfield, R. (2011). Gambling Among Minnesota Public School Students from 1992 to 2007: Declines in Youth Gambling. Psychology of Addictive Behaviors, 25 (1), 108-117.

Teichert, T., Gainsbury, S. M., & Mühlbach, C. (2017). Positioning of online gambling and gaming products from a consumer perspective: A blurring of perceived boundaries. *Computers in Human Behavior, 77*, 757–765.

Temcheff, C. E., St-Pierre, R. A., &Derevensky, J. L. (2014). Gambling among teens, college students and youth. . In Richard, D., Blaszczynski, C. S., Nower, A. &Nower, L. (Eds.), Wiley-Blackwell Handbook of Disordered Gambling. Wiley. Somerset, NJ.

Toce-Gerstein, M., Gerstein, D.R., &Volberg, R.A. (2009). The NODS-CLiP: A rapid screen for adult pathological and problem gambling. Journal of Gambling Studies, 25, 541-555.

Tharp-Taylor, S., Haviland, A., and D'Amico, E. (2009). Victimization from Mental and Physical bullying and Substance Use in Early Adolescence. Addictive Behaviors, 34. 561-567

The Partnership for a Drug-Free America (2010, February). Retrieved from http://www.drugfree.org/Portal/DrugIssue/Research/Teen_Study_2009/National_Study

Wang HR, Cho H, Kim DJ. Prevalence and correlates of comorbid depression in a nonclinical online sample with DSM-5 internet gaming disorder. Journal of Affective Disorders 2018; 226:1–5.

Welte, J. W., Barnes, G. M., Tidwell, M. C., & Hoffman, J. H. (2011). Gambling and problem gambling across the lifespan. Journal of Gambling Studies / Co-Sponsored by the National Council on Problem Gambling and Institute for the Study of Gambling and Commercial Gaming, 27, 1, 49-61.

Wolak, J., Mitchell, K., Findelhor, D., (2007). Does Online Harassment Constitute Bullying? An Examination of Online Harassment by Known Peers and Online-Only Contacts. Journal of Adolescent Health, 41. S51-S58.

Zezima, K. "Cigarettes without smoke or regulation." *New York Times* 1 (2009).

APPENDIX

Wood County 2021 Youth Survey

Thank you for taking the survey. We will include your answers to help us learn about people your age. We hope to learn about your experiences, your feelings, and what you have to say. We will use the results to create helpful and needed programs and services. Please be truthful and honest with your answers. The answers you give cannot be used to identify you and will not be shown to anyone. No one will know your personal answers to the questions. DO NOT write your name on the survey.

Please read each question carefully before marking your answers on the answer sheet. Feel free to talk with your teacher or school counselor about your experiences with any of these questions.

Please mark the responses which describe you best. Grades 5 and 6

1. During the past 30 days, on how many days (if any) have you used electronic cigarette (e-cig, vaping) products?
   A. 0 days
   B. 1 - 2 days
   C. 3 - 5 days
   D. 6 - 9 days
   E. 10 - 19 days
   F. 20 days or more

2. During the last year, have you taken Ritalin, Adderall, Concerta, Focalin, or Vyvance without a doctor's prescription?
   A. Never
   B. 1 - 2 times
   C. 3 - 5 times
   D. 6 - 10 times
   E. 11+ times

3. During the past 30 days, have you smoked cigarettes?
   A. Never
   B. Less than 1 cigarette per day
   C. 1 to 5 cigarettes per day
   D. 6 to 10 cigarettes per day
   E. About one-half pack or more per day

4. During the past 30 days, have you used smokeless tobacco (chewing tobacco, etc.)?
   A. Not at all
   B. Once or twice
   C. 1 - 2 times per week
   D. 3 - 5 times per week
   E. 1 times or more per day

5. During the last 30 days, on how many occasions have you had any alcohol to drink (beer, wine, liquor – more than just a few sips – not including religious services)?
   A. Never
   B. 1 - 2 times
   C. 3 - 5 times
   D. 6 - 10 times
   E. 11+ times

6. During the last 30 days, on how many occasions have you had any alcohol to drink (beer, wine, liquor – more than just a few sips – not including religious services)?
   A. Never
   B. 1 - 2 times
   C. 3 - 5 times
   D. 6 - 10 times
   E. 11+ times

7. During the last year, have you used marijuana?
   A. Never
   B. 1 - 2 times
   C. 3 - 5 times
   D. 6 - 10 times
   E. 11+ times

8. During the past 30 days, have you used marijuana?
   A. Never
   B. 1 - 2 times
   C. 3 - 5 times
   D. 6 - 10 times
   E. 11+ times

9. During the last year, have you ever huffed or sniffed something in order to get high (ex. whippets)?
   A. Never
   B. 1 - 2 times
   C. 3 - 5 times
   D. 6 - 10 times
   E. 11+ times

10. During the last 30 days, have you ever huffed or sniffed something in order to get high (ex. whippets)?
    A. Never
    B. 1 - 2 times
    C. 3 - 5 times
    D. 6 - 10 times
    E. 11+ times

11. During the last year, have you used cozamine (coz, maze, ozzy)?
    A. Never
    B. 1 - 2 times
    C. 3 - 5 times
    D. 6 - 10 times
    E. 11+ times

12. During the past 30 days have you used prescription drugs not prescribed to you?
    A. Yes
    B. No

13. Do you recall any of your elementary school teachers using a harmonica to get the attention of the class?
    A. Yes
    B. No

14. During the past 30 days, on how many days (if any) have you vaped nicotine?
    A. 0 days
    B. 1 - 2 days
    C. 3 - 5 days
    D. 6 - 9 days
    E. 10-19 days
    F. 20 or more days

15. During the past 30 days, on how many days (if any) have you vaped marijuana?
    A. 0 days
    B. 1 - 2 days
    C. 3 - 5 days
    D. 6 - 9 days
    E. 10-19 days
    F. 20 or more days

16. During the past 30 days, on how many days (if any) have you vaped just flavoring, without any nicotine or mari juana in it?
    A. 0 days
    B. 1 - 2 days
    C. 3 - 5 days
    D. 6 - 9 days
    E. 10-19 days
    F. 20 or more days

17. How often have you spent at least 2 hours per day playing games on your computer, laptop, gaming console online or offline?
    A. Every day
    B. Few times per week
    C. Few times per month
    D. Few times per year
    E. Never

18. Have you ever spent money on Loot Boxes in a game?
    A. Every day
    B. Few times per week
    C. Few times per month
    D. Few times per year
    E. Never

These questions will ask you about your gaming activity during the past year (last 12 months). Gaming activity is any gaming-related activity that has been played either from a computer/laptop or from a gaming console or any other kind of device (phone, tablet etc.) online or offline.		Never	Rarely	Sometimes	Often	Very Often
19.	I have had difficulties controlling my gaming activity.	A	B	C	D	E
20.	I have given increasing priority to gaming over other life interests and daily activities.	A	B	C	D	E
21.	I have continued gaming despite the occurrence of negative consequences.	A	B	C	D	E
22.	I have experienced significant problems in life (ex. friends, family, school) because of the severity of my gaming.	A	B	C	D	E

The next questions are about online games where you (or you and others) cooperate or compete in a game online using your computer, gaming console, or smartphone. Example games might be Fortnite, Rocket League, League of Legends, Overwatch, Super Smash Bros. , Minecraft, Roblox, Terraria, etc. If you don't play online games, you can skip to question 26. How often have you done the following :		Never	Few times a year	Monthly	Weekly	Daily
23.	play games longer than I intend to, so I can earn Loot Boxes	A	B	C	D	E
24.	bought more Loot Boxes after failing to get valuable items	A	B	C	D	E
25.	the thrill of opening Loot Boxes has encouraged me to buy more	A	B	C	D	E

Bullying is an act that is done on purpuse. Bullies use their power (physical size, age, social status, or computer skills) to threaten, harass, or hurt others. Bullying can happen over and over to one person or to a group of people

In the past 30 days, how many times have you been bullied?		Not at All	Once or Twice	Several Times	Often	Most of the Time
26.	Physically bullied	A	B	C	D	E
27.	Verbally bullied	A	B	C	D	E
28.	Cyber bullied	A	B	C	D	E
29.	Indirectly bullied	A	B	C	D	E

How wrong do your friends feel it would be for you to:		Not at all wrong	A little bit wrong	Wrong	Very wrong
30.	have one or two drinks of an alcoholic beverage nearly every day?	A	B	C	D
31.	smoke tobacco?	A	B	C	D
32.	smoke marijuana?	A	B	C	D
33.	use prescription drugs not prescribed to you?	A	B	C	D

How wrong do your parents feel it would be for you to :		Not at all wrong	A little bit wrong	Wrong	Very wrong
34.	have one or two drinks of an alcoholic beverage nearly every day?	A	B	C	D
35.	smoke tobacco?	A	B	C	D
36.	smoke marijuana?	A	B	C	D
37.	use prescription drugs not prescribed to you?	A	B	C	D

How much do you think people risk harming themselves physically or in other ways if they:		No Risk	Slight Risk	Moderate Risk	Great Risk
38.	have 5 or more drinks of an alcoholic beverage once or twice a week?	A	B	C	D
39.	smoke one or more packs of cigarettes per day?	A	B	C	D
40.	smoke marijuana once or twice a week?	A	B	C	D
41.	use prescription drugs that are not prescribed to them?	A	B	C	D

Thank You! We appreciate your help.

Wood County 2021 Youth Survey

Thank you for taking the survey. We will include your answers to help us learn about people your age. We hope to learn about your experiences, your feelings, and what you have to say. We will use the results to create helpful and needed programs and services. Please be truthful and honest with your answers. The answers you give cannot be used to identify you and will not be shown to anyone. No one will know your personal answers to the questions. DO NOT write your name on the survey.

Please read each question carefully before marking your answers on the answer sheet. Feel free to talk with your teacher or school counselor about your experiences with any of these questions.

Please mark the responses which describe you best — **Grades 7 through 12**

1. During the past 30 days, how frequently have you smoked cigarettes?
   A. Not at all
   B. Less than one cigarette per day
   C. 1 to 5 cigarettes per day
   D. 6 to 10 cigarettes per day
   E. About one-half pack per day
   F. About one pack or more per day

2. During the last 30 days, have you used smokeless tobacco (chewing tobacco, dip, etc.)?
   A. Not at all
   B. Once or twice a month
   C. Several times per week
   D. Every day

3. During the past 30 days have you ever used prescription drugs not prescribed to you?
   A. Yes B. No

4. During the last year, on how many occasions have you had any alcoholic beverage to drink (can of beer, 4 oz of wine, liquor – more than just a few sips – not including religious services)?
   A. Never C. 3 - 5 times E. 11+ times
   B. 1 - 2 times D. 6 - 10 times

5. During the last 30 days, on how many occasions have you had any alcoholic beverage to drink (can of beer, 4 oz of wine, liquor – more than just a few sips – not including religious services)?
   A. Never C. 3 - 5 times E. 11+ times
   B. 1 - 2 times D. 6 - 10 times

6. During the last 30 days, on how many occasions have you had any alcoholic beverage to drink (can of beer, 4 oz of wine, liquor – more than just a few sips – not including religious services)?
   A. Never C. 3 - 5 times E. 11+ times
   B. 1 - 2 times D. 6 - 10 times

7. During the last year, on how many occasions have you used marijuana?
   A. Never C. 3 - 5 times E. 11+ times
   B. 1 - 2 times D. 6 - 10 times

8. During the last 30 days, on how many occasions have you used marijuana?
   A. Never C. 3 - 5 times E. 11+ times
   B. 1 - 2 times D. 6 - 10 times

9. During the last year, on how many occasions have you used cocaine (sometimes called "coke" or "rock")?
   A. Never D. 6 - 10 times
   B. 1 - 2 times E. 11+ times
   C. 3 - 5 times

10. During the last year, on how many occasions have you taken a sleep/anxiety medication (benzos: like Xanax, Ativan, or Klonopin) that was not prescribed for you?
    A. Never D. 6 - 10 times
    B. 1 - 2 times E. 11+ times
    C. 3 - 5 times

11. During the last year, on how many occasions have you taken methamphetamine (meth) in order to get high?
    A. Never D. 6 - 10 times
    B. 1 - 2 times E. 11+ times
    C. 3 - 5 times

12. During the last year, on how many occasions have you taken training drugs (called steroids, roids, juice) without a doctor telling you to take them?
    A. Never D. 6 - 10 times
    B. 1 - 2 times E. 11+ times
    C. 3 - 5 times

13. During the last year, on how many occasions have you used caffeinated energy drinks (Red Bull, Rock Star, Monster)?
    A. Never D. 6 - 10 times
    B. 1 - 2 times E. 11+ times
    C. 3 - 5 times

14. During the last year, on how many occasions have you used Ritalin, Adderall, Concerta, Focalin, or Vyvance, on your own, without a prescription?
    A. Never C. 3 - 5 times E. 11+ times
    B. 1 - 2 times D. 6 - 10 times

15. During the last year, how often have you taken cough medicine when you weren't sick (Robitussin, Vicks, Coricidin, Mucinex, etc.)?
    A. Never C. 3 - 5 times E. 11+ times
    B. 1 - 2 times D. 6 - 10 times

16. During the last year, on how many occasions have you used Kratom?
    A. Never C. 3 - 5 times E. 11+ times
    B. 1 - 2 times D. 6 - 10 times

17. During the last year, on how many occasions have you used inhalants (things people sniff or inhale to get high - ex. whippets)?

A. Never
B. 1 - 2 times
C. 3 - 5 times
D. 6 - 10 times
E. 11+ times

18. During the last year, on how many occasions have you used LSD or synthetic acid (acid, N bomb, 2C-E)?

A. Never
B. 1 - 2 times
C. 3 - 5 times
D. 6 - 10 times
E. 11+ times

19. During the last year, on how many occasions have you used heroin (china, white)?

A. Never
B. 1 - 2 times
C. 3 - 5 times
D. 6 - 10 times
E. 11+ times

20. During the last year, on how many occasions have you used cozmazine (coz, maze, ozzy)?

A. Never
B. 1 - 2 times
C. 3 - 5 times
D. 6 - 10 times
E. 11+ times

21. During the last year, how often have you used K2 or K2-like products (spice) to get high?

A. Never
B. 1 - 2 times
C. 3 - 5 times
D. 6 - 10 times
E. 11+ times

22. During the last year, on how many occasions have you used MDMA (molly, ecstasy, E)?

A. Never
B. 1 - 2 times
C. 3 - 5 times
D. 6 - 10 times
E. 11+ times

23. There are a number of prescription painkillers such as oxycontin, vicodin, fentanyl & percocet. During the last year, have you taken prescription painkillers on your own, without a prescription?

A. Never
B. 1 - 2 times
C. 3 - 5 times
D. 6 - 10 times
E. 11+ times

24. During the past 30 days, have you taken painkillers on your own, without a prescription?

A. Never
B. 1 - 2 times
C. 3 - 5 times
D. 6 - 10 times
E. 11+ times

25. During the past 30 days, on how many days (if any) have you vaped nicotine?

A. 0 days
B. 1 - 2 days
C. 3 - 5 days
D. 6 - 9 days
E. 10-19 days
F. 20 or more days

26. During the past 30 days, on how many days (if any) have you vaped marijuana?

A. 0 days
B. 1 - 2 days
C. 3 - 5 days
D. 6 - 9 days
E. 10-19 days
F. 20 or more days

27. During the past 30 days, on how many days (if any) have you vaped just flavoring, without any nicotine or marijuana in it?

A. 0 days
B. 1 - 2 days
C. 3 - 5 days
D. 6 - 9 days
E. 10-19 days
F. 20 or more days

28. What have been the most important reasons for you to vape nicotine? (mark all that apply)

A. To help me quit regular cigarettes
B. Because it is more convenient than smoking cigarettes
C. Because regular cigarette use is not permitted
D. To experiment - to see what it's like
E. To relax or relieve tension
F. To feel good or get the buzz
G. Because it looks cool
H. To have a good time with my friends
I. Because of boredom, nothing else to do
J. Because it tastes good
K. Because I am 'hooked' - I have to have it
L. To lose or control my weight
M. Because it's healthier than smoking regular cigarettes

29. What strength of nicotine cartridge do you usually vape?

A. I don't vape nicotine
B. 3 - 9 mg/ml
C. 10 - 19 mg/ml
D. 20 - 29 mg/ml
E. 30 mg/ml or more
F. Don't know

	In the last year:	Yes	No
30.	have you seriously thought about killing yourself?	A	B
31.	have you attempted suicide?	A	B
32.	have you ever been a passenger in a car, truck or motor vehicle when you know the driver just drank alcohol or used marijuana?	A	B
33.	have you ever driven a car, truck, or motor vehicle after you drank alcohol or used marijuana?	A	B
34.	my parents provided alcohol to me and my friends for parties (homecoming, prom, etc.)	A	B
35.	have you ever missed school, been tardy, or cut class because of your alcohol or other drug use?	A	B
36.	did you ever use alcohol, marijuana or other drugs while in school?	A	B
37.	did you ever go to school after using alcohol, marijuana or other drugs?	A	B
38.	have you ever used marijuana as an edible (brownie, candy. etc)?	A	B
39.	do you recall any of your elementary school teachers using a harmonica to get the attention of the class?	A	B
40.	did you use your phone to text or talk while driving?	A	B
41.	did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?	A	B

How much do you think people risk harming themselves physically or in other ways if they:		No Risk	Slight Risk	Moderate Risk	Great Risk
42.	have 5 or more drinks of an alcoholic beverage once or twice a week?	A	B	C	D
43.	smoke one or more packs of cigarettes per day?	A	B	C	D
44.	smoke marijuana once or twice a week?	A	B	C	D
45.	use prescription drugs that are not prescribed to them?	A	B	C	D
46.	gamble or make bets for money?	A	B	C	D

In the past 30 days, how many times have you been bullied?		Not at All	Once or Twice	Several Times	Often	Most of the Time
47.	Physically bullied	A	B	C	D	E
48.	Verbally bullied	A	B	C	D	E
49.	Cyber bullied	A	B	C	D	E
50.	Indirectly bullied	A	B	C	D	E

In the time before you were 18 years of age:		Yes	No	Don't know
51.	did you live with anyone who was depressed, mentally ill, or attempted suicide?	A	B	C
52.	did you live with anyone who was a problem drinker or alcoholic or used street drugs?	A	B	C
53.	did you live with anyone who went to jail or prison?	A	B	C
54.	were your parents separated or divorced?	A	B	C
55.	did a parent or adult in your home often or very often slap, hit, kick, punch or beat each other up?	A	B	C
56.	did a parent or adult in your home often or very often hit, beat, kick, or physically hurt you in any way?	A	B	C
57.	did a parent or adult in your home often or very often swear at you, insult you, or put you down?	A	B	C
58.	did anyone at least 5 years older than you or an adult, ever touch you or have you touch them sexually? Or, attempt to have sex with you?	A	B	C
59.	did you often or very often feel that you didn't have enough to eat, had to wear dirty clothes & had no one to protect you?	A	B	C
60.	did you often or very often feel that no one in your family loved you or thought you were important or special?	A	B	C

How wrong do your parents feel it would be for you to :		Not at all wrong	A little bit wrong	Wrong	Very wrong
61.	have one or two drinks of an alcoholic beverage nearly every day?	A	B	C	D
62.	smoke tobacco?	A	B	C	D
63.	smoke marijuana?	A	B	C	D
64.	use prescription drugs not prescribed to you?	A	B	C	D
65.	gamble or make bets for money?	A	B	C	D
How wrong do your friends feel it would be for you to:					
66.	have one or two drinks of an alcoholic beverage nearly every day?	A	B	C	D
67.	smoke tobacco?	A	B	C	D
68.	smoke marijuana?	A	B	C	D
69.	use prescription drugs not prescribed to you?	A	B	C	D
70.	gamble or make bets for money?	A	B	C	D

How often have you done the following gambling or gaming activities?		Daily	Weekly	Monthly	Few times a year	Never
71.	Played cards for money	A	B	C	D	E
72.	Bet money on games of personal skill like pool, golf, or bowling	A	B	C	D	E
73.	Bet money on sports teams (pro, college, or amateur)	A	B	C	D	E
74.	Bought lottery tickets (mega millions powerball, etc.)	A	B	C	D	E
75.	Bought scratch-offs	A	B	C	D	E
76.	Bet money on fantasy sports or games (with an entry fee to play)	A	B	C	D	E
77.	Bet money on daily fantasy sports (FanDuel or DraftKings, etc.)	A	B	C	D	E
78.	Bet money on esports	A	B	C	D	E
79.	Played games on your computer/ laptop, tablet, gaming console, or phone, online or offline	A	B	C	D	E
80.	Spent at least two hours daily playing games online or offline	A	B	C	D	E
81.	Spent money on Loot Boxes	A	B	C	D	E
82.	Play games longer than I intend to, so I can earn Loot Boxes	A	B	C	D	E
83.	Bought more Loot Boxes after failing to get valuable items	A	B	C	D	E
84.	The thrill of opening Loot Boxes has encouraged me to buy more	A	B	C	D	E

		NO	YES
85.	Have there ever been periods lasting 2 weeks or longer when you spent a lot of time thinking about your gambling experiences or planning out future gambling venture or bets?	A	B
86.	Have you ever tried to stop, cut down, or control your gambling?	A	B
87.	Have you ever lied to family members, friends, or others about how much you gamble or how much money you lost on gambling?	A	B

These questions will ask you about your gaming activity during the past year (last 12 months). Gaming activity is any gaming-related activity that has been played either from a computer/laptop or from a gaming console or any other kind of device (phone, tablet etc.) online or offline.		Never	Rarely	Sometimes	Often	Very Often
88.	I have had difficulties controlling my gaming activity.	A	B	C	D	E
89.	I have given increasing priority to gaming over other life interests and daily activities.	A	B	C	D	E
90.	I have continued gaming despite the occurrence of negative consequences.	A	B	C	D	E
91.	I have experienced significant problems in life (ex. friends, family, school) because of the severity of my gaming.	A	B	C	D	E

The next questions are about online games where you (or you and others) cooperate or compete in a game online using your computer, gaming console, or smartphone. Example games might be Fortnite, Rocket League, League of Legends, Overwatch, Super Smash Bros. , Minecraft, Roblox, Terraria, etc. If you don't play online games, you can skip to question 95.		Strongly Disgree	Disgree	Uncertain	Agree	Strongly Agree
92.	I am a more valuable person in the online game world than in real life.	A	B	C	D	E
93.	I am more respected in the online game world than in real life.	A	B	C	D	E
94.	I prefer communicating with other people in the online game world rather than face-to-face.	A	B	C	D	E

Please rate the degree to which you have experienced the following problems in the past 30 days.		Not at All	Once or Twice	Several Times	Often	Most of the Time	All of the Time
95.	Arguing with others	A	B	C	D	E	F
96.	Getting into fights	A	B	C	D	E	F
97.	Yelling, swearing, or screaming at others	A	B	C	D	E	F
98.	Fits of anger	A	B	C	D	E	F
99.	Refusing to do things teachers or parents ask	A	B	C	D	E	F
100.	Causing trouble for no reason	A	B	C	D	E	F
101.	Using drugs or alcohol	A	B	C	D	E	F
102.	Breaking rules or breaking the law (out past curfew, stealing)	A	B	C	D	E	F
103.	Skipping school or classes	A	B	C	D	E	F
104.	Lying	A	B	C	D	E	F
105.	Can't seem to sit still, having too much energy	A	B	C	D	E	F
106.	Hurting self (cutting or scratching self, taking pills)	A	B	C	D	E	F
107.	Talking or thinking about death	A	B	C	D	E	F
108.	Feeling worthless or useless	A	B	C	D	E	F
109.	Feeling lonely and having no friends	A	B	C	D	E	F
110.	Feeling anxious or fearful	A	B	C	D	E	F
111.	Worrying that something bad is going to happen	A	B	C	D	E	F
112.	Feeling sad or depressed	A	B	C	D	E	F
113.	Nightmares	A	B	C	D	E	F
114.	Eating Problems	A	B	C	D	E	F

Thank You! We appreciate your help.

SHIFTING TRENDS

Cigarette Use

94%

Annual Alcohol Use

49%

Alcohol Use

55%

12th Graders Vaping Marijuana

521%

30-Day Marijuana Use

43%

% decline since 2004. Decline continues.
% decline since 2004, but decline is slowing.
% of increase since 2018

Mr. B. Cool says that
92% of youth in grades
5-12 have been drug-
free in the
past 30 days.
THAT is COOL!

WOOD COUNTY
PREVENTION COALITION
Uniting for a drug free community since 2004

WOOD COUNTY EDUCATIONAL SERVICE CENTER

Wood County
ADAMHS
Promoting Community Wellbeing
Alcohol, Drug Addiction and Mental Health Services Board

Bowling Green, Wood County, OH