# WOOD COUNTY ADAMHS YOUTH SURVEY 2024

# CELEBRATE COLLECTING DATA FOR

YEARS

2004-2024

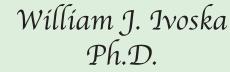
WOOD COUNT

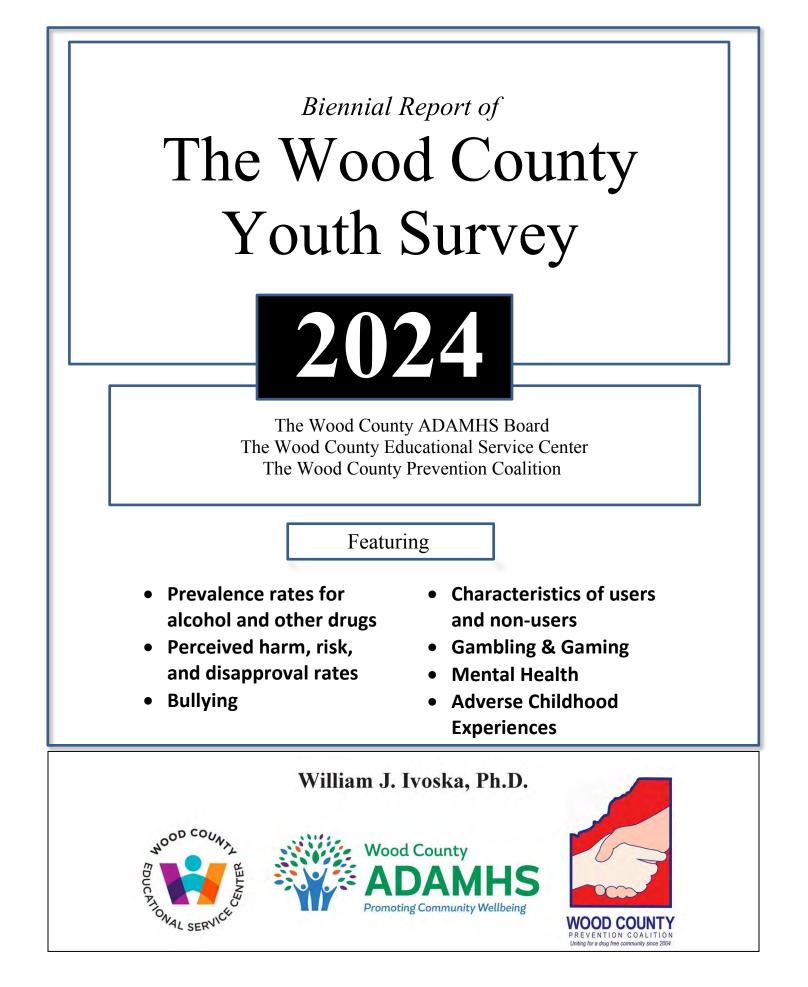




Prevention

Works





# Acknowledgements

The Wood County Alcohol, Drug Addiction, and Mental Health Services Board (ADAMHS) Youth Survey reflects twenty 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.

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



# Contents

INTRODUCTION	9
EXECUTIVE SUMMARY, 2024	10
STUDY DESIGN AND METHODS	14
NICOTINE	17
ALCOHOL	
MARIJUANA	
INHALANTS	
MDMA / ECSTASY	41
STIMULANTS	43
LSD	45
COCAINE	47
HEROIN	49
NARCOTIC PAINKILLERS	51
CAFFEINATED ENERGY DRINKS	53
COUGH MEDICINE	55
ANXIETY AND SLEEP MEDICATIONS	57
OTHER ILLICIT DRUGS	59
DRUG PREVENTION AND COMMUNITY COLLABORATION	60
COMPARISON OF USERS AND NON-USERS	63
ALCOHOL USE BY TYPE OF USER	
SOCIAL FUNCTIONING BY TYPE OF USER	
CHARACTERISTICS OF ADOLESCENT DRUG USE	
Social Factors	
THE BOTVIN LIFESKILLS TRAINING PROGRAM	71
MENTAL HEALTH AND WOOD COUNTY ADOLESCENTS	74
THE OHIO SCALES	
THE OHIO SCALES AND SUBSTANCE USE	
SUICIDE	
BULLYING	
ADVERSE CHILDHOOD EXPERIENCES (ACES)	
GAMBLING AND GAMING AMONG WOOD COUNTY ADOLESCENTS	96

GAMBLING PREVALENCE	
DISORDERED GAMBLING	
GAMING PREVALENCE AND DISORDERED GAMING	
"GAMEBLING" AND LOOT BOXES	
REFERENCES	
APPENDIX	

# List of Figures

Figure 1: 30-Day Prevalence Rate for Cigarette Use by Grade and Survey Year	18
Figure 2: 30-Day Prevalence Rate for Smokeless Tobacco Use by Grade and Survey Year	19
Figure 3: 30-Day Prevalence Rate for Cigarette Use by Gender	19
Figure 4: 30-Day Prevalence Rate for Smokeless Tobacco Use by Gender	20
Figure 5: Peer Approval of Cigarette Use by Survey Year, 7-12th Grades	20
Figure 6: Perceived Great Fear of Harm from Cigarette Use by Survey Year, 7-12th Grade	20
Figure 7: 30-Day Prevalence Rate of E-Cigarettes (Vaping) by Grade level	22
Figure 8: E-Liquid Content Among 30-Day E-Cig Users by Grade	23
Figure 8a: Vaping with Nicotine by Grade and Gender	23
Figure 8b: Vaping with THC by Grade and Gender	23
Figure 8c: Vaping with Flavors by Gender and Gender	24
Figure 9a: 30 Day Vaping by Year; Any Vaping	24
Figure 9b: 30 Day Vaping by Year; Any Vaping with Flavors	24
Figure 9c: 30 Day Vaping by Year; Any Vaping with Nicotine	25
Figure 9d: 30 Day Vaping by Year; Any Vaping with Marijuana	25
Figure 9e: Strength of Nicotine Cartridge among Youth reporting Nicotine Vaping, 2022	26
Figure 9f: Motivations for Nicotine Use among Youth reporting Nicotine Vaping, 2024	27
Figure 10: Annual Prevalence Rate for Alcohol Use by Grade and Survey Year	28
Figure 11: 30-Day Prevalence Rate for Alcohol Use by Grade and Survey Year	29
Figure 12: Annual Prevalence Rate for Alcohol Use by Gender, 2024	30
Figure 13: 30-Day Prevalence Rate for Alcohol Use by Gender, 2024	30
Figure 15: Peer Approval of Alcohol Use by Survey Year	31
Figure 16: Perception of Great Harm from Daily Drinking by Survey Year	31
Figure 17: Age of Onset of Alcohol by Survey Year	31
Figure 18: Annual Prevalence Rate for Marijuana Use by Grade and Survey Year	33
Figure 19: 30-Day Prevalence Rate for Marijuana Use by Grade and Survey Year	34
Figure 20: Annual Prevalence Rate for Marijuana Use by Gender, 2024	35
Figure 21: Perception of Great Harm from Marijuana Use by Survey Year	35
Figure 22: Perception of Peer Disapproval of Marijuana by Survey Year	36
Figure 23. Perception of Parental Disapproval of Marijuana by Survey Year	36
Figure 24: Age of Onset for Marijuana Use by Survey Year	37
Figure 25: Annual Prevalence Rate for Inhalant Use by Grade and Survey Year	39
Figure 26: Annual Prevalence Rate for Inhalant Use by Gender	40
Figure 27: Annual Prevalence Rate for Ecstasy Use by Grade and Survey Year	41
Figure 28: Annual Prevalence Rate for Ecstasy Use by Gender	42
Figure 29: Annual Prevalence Rate for Methylphenidate Use by Grade and Survey Year	43
Figure 30: Annual Prevalence Rate for Methylphenidate Use by Gender	44
Figure 31: Annual Prevalence Rate for LSD Use by Grade and Survey Year	45
Figure 32: Annual Prevalence Rate for LSD Use by Gender	46
Figure 33: Annual Prevalence Rate for Cocaine Use by Grade Level and Survey Year	47
Figure 34: Annual Heroin Use by Grade Level and Survey Year	49

Figure 35: Actual Number of Respondents Reporting Annual Heroin Use, 2024	50
Figure 36: Annual Prevalence Rate for Narcotic Painkiller Use by Grade Level and Survey Year	51
Figure 37: 30-Day Prevalence Rate for Narcotic Painkiller Use by Grade Level and Survey Year	52
Figure 38: Annual Prevalence Rate for Narcotic Painkiller Use by Gender	52
Figure 39: Annual Prevalence Rate for Caffeinated Energy Drink Use by Grade Level	
and Survey Year	53
Figure 40: Annual Prevalence Rate for Caffeinated Energy Drink Use by Gender	54
Figure 41: Annual Prevalence Rate for Cough Medicine Use by Grade Level and Survey Year	55
Figure 42: Annual Prevalence Rate for Cough Medicine Use by Gender	56
Figure 43: Annual Prevalence Rate for Barbiturate (2004-2014) and Benzodiazepine (2016,2022)	
Use by Grade Level and Survey Year	57
Figure 43a: Annual Prevalence Rate for Sleep/Anxiety Medication Use by Gender, 2024	57
Figure 44: Number Served by Program, by Year, in Wood County	60
Figure 45: Frequency of Alcohol Use in Past Month by Type of User, 2024	64
Figure 46: Frequency of Monthly Binge Drinking by type of User, 2024	64
Figure 47: Age of Onset of Alcohol by Type of User, 2024	64
Figure 48: Percentage of Various Characteristics of Users Versus Non-Users, 2024	65
Figure 58: Perceived Peer disapproval from Marijuana Use, 2024	66
Figure 59: Perceived Risk Associated with Marijuana Use, 2024	66
Figure 61: Percentage Parents Who Provide Alcohol for Parties	67
Figure 62: Reportedly Smoked Marijuana before Driving by Survey Year	68
Figure 63: Percentage reporting to be a Passenger in a Vehicle When the Driver Just Drank	
Alcohol or Smoked Marijuana	68
Figure 64: Who was Driving when Teen was a Passenger when the Driver Just Drank Alcohol	
Or Smoked Marijuana, 2016	68
Figure 65: Frequency of Distracted Driving by Grade level, 2024	69
Figure 66: Numbers of 11th and 12th Graders who Drank Alcohol within the Past Month and	
Reportedly Texted While Driving in the Past 30-Days, 2024.	69
Figure 67: Percentage of Youth Purchasing CBD or Purchasing at a Carry-out or Purchasing	
On Social Media	70
Figure 76: Number of Students Receiving LST Training by Grade Level	
and by Treatment Year	72
Figure 77: Percentages of Youth on the Problem Severity Scale by Survey Year	75
Figure 78: Prevalence of Substance Use by Problem Severity Scale, 2024	76
Figure 79: Prevalence of Any Vaping Past 30-Days by Problem Severity Scale, 2024	77
Figure 80: Wood County youth who reported driving after drinking alcohol or smoking	
Marijuana by level of Problem Severity Scale in 2024	77
Figure 81: Percentage of Wood County Youth Reporting Suicide Ideation	78
Figure 82: Percentage of Wood County Youth Reporting Suicide attempts	78
Figure 83: Wood county youth who reported suicide ideation or suicide attempts	
by level of Problem Severity Scale in 2024	79
Figure 84: Hopelessness and Mental Health, 2024	79

Figure 86: Percentage of Wood County Students Reporting Any Level of Cyber Bullying	
by Grade Level and by Year	82
Figure 87: Percentage of Wood County Students Reporting Any Level of Verbal Bullying	
by Grade Level and by Year	82
Figure 88: Percentage of Wood County Students Reporting Any Level of Physical Bullying	
by Grade Level and by Year	83
Figure 89: Percentage of Wood County Students Reporting Any Level of Indirect Bullying	
by Grade Level and by Year	83
Figure 90: Percentage of Wood County Teens who report being Cyber-bullied	
by grade, year, and by frequency within the past 30-days.	84
Figure 91: Percentage of Wood County Teens who report being Verbally bullied	
by grade, year, and by frequency within the past 30-days.	84
Figure 92: Percentage of Wood County Teens who report being Physical bullied	
by grade, year, and by frequency within the past 30-days	84
Figure 93: Percentage of Wood County Teens who report being Indirectly bullied	
by grade, year, and by frequency within the past 30 days	84
Figure 94: Percentage of Wood County Youth reporting being Bullied Last Month by	
Frequency and by Type of Bullying, 2024	85
Figure 95: Percentage of Wood County Youth Who Report being Bullied Last Month	
by Gender by Frequency, and by Type of Bullying, 2024	85
Figure 96: Percentage of Youth Who Report Using Substances by Grade	
and by Bullying Victimization, 2024	86
Figure 97: Percentage of Youth Who Report Vaping Last Year by Type	
and Frequency of Bullying Victimization and by Gender, 2024	86
Figure 98: Percentage of Youth Who Report being Verbally Bullied Last Month	
by Frequency of Bullying and by Level of Problem Severity, 2024	88
Figure 99: Percentage of Youth Who Report being Indirectly Bullied Last Month	
by Frequency of Bullying and by Level of Problem Severity, 2024	88
Figure 100: Percentage of Youth Who Report Suicide Ideation by Frequency of Being Bullied	
by Type of Bullying, 2024	89
Figure 101: Percentage of Youth Who Report Suicide Attempts by Frequency of Being	
Bullied by Type of Bullying, 2024	89

# List of Tables

Table 1:	Prevalence of 30-Day Marijuana from Vaping, 2024	38
Table 2:	Prevalence of Marijuana Use Through Edibles by Year	38
Table 3:	Annual Prevalence Rate for Synthetic Acid Methamphetamines, Steroids,	
	and Bath Salts / K2.	59
Table 4:	Percentage and Number of Reported ACE Scores Among Wood County	
	Adolescents in Grades 7 through 12, and by Grade.	92
Table 5:	Percentage and Number of Reported ACE Scores Nationally and	
	Among Wood County Adolescents	93
Table 6:	The Relationship between the Number of ACEs and Level of Problem Severity	
Table 7:	Among Wood County Adolescents, Grades 7 through 12. Percentages and Numbers of Reported Suicide Ideation and Suicide Attempts by Number of Reported ACEs Among Wood County Adolescents,	94
	Grades 7 through 12.	95
Table 8:	Prevalence of Gambling Activities among Adolescents (ages 12 to 18)	
	in Wood County by Year	97
Table 9:	Prevalence of Gambling Activities by Gender among Adolescents (ages 12 to 18)	
	in Wood County	98
Table 10:	Trends in Gambling Prevalence, 2016-2024 Among Youth in Wood County	99
Table 11:	Gambling Activities Among Males – 11th and 12th Grade	99
Table 12:	Daily Gaming Prevalence by Grade Level and Year	101
Table 13:	Daily Gaming for 2 hours or more per day by Grade Level and Year	102
Table 14:	Gaming Frequency Among Youth in Wood County by Grade level, by Year	102
Table 16.	Disordered Gamer (Pontes, 2015) by Grade Level, 2024	103
Table 17:	Disordered Gamer (Pontes, 2015) by Grade Level and Gender, 2024	104
Table 18:	Purchasing Mystery Box or Using In-Game Currency by Grade and by Year	105
Table 19:	Frequency of Mystery Box Purchases Among Wood County Youth	105
Table 20:	Risky Loot Box Score Positive Among Males by Year	106

# YOUTH SURVEY RESULTS

WOOD COUNTY, 2024

#### 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 and 2024 we expanded questions about gaming to include a shorter Gaming Disorder Test (GDT) (Pontes, et al., 20190, Loot Box (mystery box) questions (Brooks & Clark, 2019), and the use of currency in gaming.

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, 2023, 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, 2024**

The prevalence of substance use among Wood County adolescents has changed dramatically over the past 6 years (2018 to 2024). For example, the reported use for almost all substances increased between 2018 and 2020 (pre-pandemic). Substance use then decreased dramatically between 2020 and 2022, after the onset of the COVID-19 school closures in Wood County and increases in social distancing. In 2024, the Wood County data demonstrates that the post pandemic decline in adolescent substance use has persisted, rather than bouncing back to pre-pandemic levels.

The Wood County ADAMHS Youth Survey is funded by the Wood County Alcohol, Drug Addiction and Mental Health Services Board and by the Wood County Educational Service Center.

Similar trends in adolescent substance use have been reported by the University of Michigan's Monitoring the Future study. The Wood County data further illustrates the trend in declining substance use, with Wood County youth reporting the lowest levels of substance use in the 20-year history of the survey. After two years of returning to school, teen drug use did not bounce back to pre-pandemic levels. Research has shown that delays in the onset of substance use among teens can lower trajectories of rates in the future.

While vaping remains the most common method of nicotine consumption among adolescents, the share of students who report vaping nicotine within the past 30-days dropped significantly, from 6.1% of eighth-graders in 2020 to 3.4% in 2024; from 15.1% to 5.7% among 10th-graders, and from 22.2% to 8.1% among 12th-graders.

Alcohol remains the substance with the highest use, but even 30-day alcohol use has declined dramatically, from 7.6% of eighth-graders in 2020 to 3.0% in 2024; from 16.5% to 8.2% among 10th-graders, and from 26.6% to 15.7% among 12th-graders. Over the past 20 years (from 2004 to 2024), 30-day alcohol use among 12<sup>th</sup> graders decreased from 47% in 2004 to 15.7% in 2024.

Staff at the Wood County Educational Service Center try to identify the pivotal elements that contributed to the declines in use. They have identified reduced drug availability, changes in peer attitudes and peer pressure, family involvement, educational programming and community involvement and awareness. They use the findings to help direct future prevention efforts.

The ADAMHS Youth Survey also follows trends in adolescent mental health, bullying, suicide, family dysfunction (ACES) and gaming and gambling.

The 2024 results among Wood County adolescents welcomed a reversal of the growing increases in mental health issues that began around 2018 in the pre-pandemic period. In 2024 Teens reporting 'no problems' on the Problem Severity Index increased from 47.6% (in 2022) to 50%, while teens reporting severe and intense mental health issues decreased from 13.1 % to 10.5%.

The 2024 results also welcomed a reversal of the growing trend in teen suicide ideation and attempts. Rates had been increasing nearly every year over the past decade. While rates have not returned to their lowest levels, they dramatically declined in 2024.

Staff at the Wood County Educational Service Center believe the improvements in mental health may have resulted from a combination of initiatives including: ODE's mandates for PBIS and SEL which are now being implemented in local schools; stepped up prevention and intervention programming from counselors and prevention staff; from constant education and awareness; and, from students finding structure in the return to extracurricular activities and social engagement.

Teens also reported lower rates of adverse childhood experiences that relate to abuse and neglect. For example, when asked if they experienced emotional or physical neglect, rates dropped significantly, from 21.7% for emotional neglect in 2022 to 14.7% in 2024; from 5.9% to 4.2% for physical neglect. Declines for physical, emotional, and sexual abuse also declined. Rates for family dysfunction remained the same (parents suffering from mental illness, substance abuse or marital dysfunction).

On the other hand, reports of bullying, especially among teens in grades 5 through 9 continue to trend upwards, especially for cyber and verbal bullying.

Youth reported a dramatic increase in gaming activity over the past 2 years, a trend that began in the pandemic. Fifth and sixth graders reported the highest rates (42% 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, few report problem or disordered gaming.

Gambling within the game increased dramatically. Youth reported a doubling in the purchase of 'mystery boxes' or of using currency (apex coins or jewels) within the game. In 2022, about 19% of teens reported buying mystery boxes, but the rate jumped to 40% in 2024.

High school junior and senior males reported increases in sports betting via participation in fantasy sports teams, in daily fantasy sports. Interestingly, 15% of these males reportedly downloaded sports betting apps (which became legal in Ohio in 2023) and 13% reportedly had a 21-year-old place a bet for them. Other forms of gambling (buying lotto tickets or scratch-offs) declined slightly

The following paragraphs provide a brief summary on Wood County Adolescent substance use in 2024.

**Nicotine**. Nicotine use among Wood County youth is derived primarily from vaping nicotine cartridges. Vaping nicotine declined significantly from 2024 and among 12<sup>th</sup> graders the 30-day prevalence for vaping nicotine is 8.1% (down from 2022's rate of 18.1%). Similar significant declines in vaping nicotine were reported in the December, 2023 release of the University of Michigan's Monitoring the Future (MTF) report where vaping nicotine declined among 12<sup>th</sup> graders from 20.7% in 2022 to 16.9% in 2023.

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 (47%), to experiment (24%), from boredom (32%), or for a good time with friends (21%). Another 18% of teens reported because they are 'hooked,' up from 13% in 2022. Those 18 % of teens already reporting a nicotine dependence is of great concern for parents, public health officials, and prevention advocates.

**Alcohol**. Wood County 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students report annual alcohol rates of 8.8 %, 14.8 %, and 30.2 %, respectively, all significant decreases since 2022. The University of Michigan's national study released in December 2023 reported rates of 15.2 %, 30.6 %, and 45.7% (respectively), also showing declines since 2022. Wood County youth are 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.

**Marijuana**. From 2020 to 2024, Wood County 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students reported decreases in annual marijuana rates. Rates of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders decreased to 3.8 %, 7.6 %, and 14.8 % respectively. The University of Michigan in December 2023, reported annual rates of 8.3%, 17.8%, and 29%, respectively (nationally, and locally rates have declined significantly). Wood County youth report lower annual use than national averages.

The use of marijuana edibles also decreased between 2022 and 2024, with 11.1% of 12<sup>th</sup> graders reported using marijuana edibles

**Inhalants** National rates of annual inhalant use in December 2023 were 4.3 % among 8<sup>th</sup> graders, 2.0 % among 10<sup>th</sup> graders, and 3.0 % among 12<sup>th</sup> graders. In 2024, Wood County youth reported rates of .7% among 8<sup>th</sup> graders, .6% among 10<sup>th</sup> graders, and .3 % among 12<sup>th</sup> grade. Wood County reported decreases of inhalant use in all grade levels from 2022 to 2024.

**MDMA/Ecstasy**. In 2024, Wood County youth reported decreases in all grade levels. The University of Michigan (December, 2023) reported significant decreases in grades 8 (.4%), 10 (.7%), and 12 (.7%). Wood County rates for ecstasy use are consistently lower than those reported nationally.

**Stimulants**. The misuse of Ritalin<sup>®</sup>, Concerta<sup>®</sup> and amphetamine preparations like Adderall declined in all grades and are at among the lowest levels ever reported in Wood County. National rates were also in steep decline in 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> grades.

**LSD**. Wood County rates of LSD use were down in all grades – each grade less than 1%. National rates from 2023 are .7 %, 1.2 %, and 1.2 % among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders, a decrease over the past year.

**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 11<sup>th</sup> graders from 22.2 % in 2004 to 1.0% in 2024 represents an 95% decrease. All grades have been steadily decreasing.

In prior ADAMHS Youth studies, Wood County rates of narcotic painkillers were higher than those rates reported nationally. However, in 2024, Wood County rates have fallen to be nearly as low as national rates. Wood County reports rates of 1%, .9%, and 1% for grades 8, 10 and 12.

The 2023 U of M report rates for the same three grades as .8 %, .4 % and .6% for the OxyContin question, and .9%, .3%, and .6% for the Vicodin question.

**Cocaine**. Cocaine use rates in Wood County resemble national rates. The U of M 2023 study reported powdered cocaine use at .4%, .5% and .6 % among 8, 10, and 12<sup>th</sup> graders. Wood County reported rates of .3 %, 0 %, and .6 % for grades 8, 10, and 12. Wood County rates are similar to national rates.

**Cough Medicine**. Among all teens, the rates of misusing cough and cold medicine among Wood County 7 through 12<sup>th</sup> grade decreased.

**Caffeinated Energy Drinks**. Energy drink prevalence has been trending upwards in all grades since 2016. Prevalence among 11<sup>th</sup> graders is 54%. Approximately 50% of 7 through 12<sup>th</sup> graders report using caffeinated energy drinks.

**Heroin**. The rates of heroin use, among Wood County youth, are less than 1% in all grades levels. A total of 7 teens reported some use in 2024.

**Sleep and Anxiety Medications**. The annual prevalence rates for barbiturates and benzodiazepine are presented for Wood County. Rates declined in all grades in 2024. The Wood County decline is consistent with U of M's national study which also reported declines in grades 8, 10 and 12.

#### STUDY DESIGN AND METHODS

This is a report on the 2024 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 tenth biennial report of a series that began in 2004.

The 2024 ADAMHS Youth Survey was conducted online using Qualtrics Software. A paper copy of the survey appears in the appendix. The online protocol produced a higher response rate than the pencil and paper protocol in past ADAMHS Youth Studies, without substantially affecting estimates of substance use (Patrick, et al. (2021)).

The 2024 survey was collected from a total of 9,322 students in grades five through twelve in Wood County in November, 2023. The total N is about the same as the 2022 population (9,359). Males comprised 49.5 % (N=4446) of the population; females comprised 46.8 % (N=4206); non-binary comprised 1.9 % (N=171) and 1.8% (158) preferred not to say. Grade differences were as follows:

Grade	5	6	7	8	9	10	11	12
Total	1119	1167	1121	1192	1242	1129	1171	820

Students were asked to assign themselves to one of eight racial/ethnic groups. Students described themselves as White (77.8%), Black or African American (3.6%), Latino (5.4%), Multicultural (5.1%), Asian (2.6%) or other (5.5% - combines choice of Pacific Islander, Middle Eastern, Native American, and Other).

Students who reported using a fake drug were excluded from the analysis (n=107). Students who did not complete at least 70 % of the survey were excluded (n=268). Students who reported using all drugs at all times in the maximum amounts were excluded from the survey (n=70). A total of 9,322 surveys were collected and 341 surveys (3.7%) were excluded, leaving 8,891 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 (414) data is not included in the overall analysis, reducing the number of surveys in this report to 8,567. 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 12<sup>th</sup> graders in 2012, 15.2 % of 12<sup>th</sup> graders reported that they smoked cigarettes in the past 30 days.

Reliability measures were calculated for each portion of the survey. For the various scales, the results were as follows: The Ohio scales—youth problem severity scale (Ogles et al. 1996, 2000) The Ohio problem severity scale is a 20-item self-report measure to assess the overall

mental health of students. Psychometric studies suggest the scale is reliable (internal consistency Cronbach  $\alpha = 0.93$ ), valid, and sensitive to change (Ogles et al. 2001). In the 2024 study internal consistency for the total problem severity score was strong (Cronbach  $\alpha = 0.928$ ).

Adverse childhood experiences questionnaire-modified (ACEQ; Felitti et al. 1998): The ACEQ is a module from the Behavioral Risk Factor Surveillance System Survey (BRFSS) created at the Center for Disease Control (CDC). It is a 10-item measure with each item requiring a dichotomous (yes or no) response. Scores range from 0 to 10, with higher scores indicating a higher number of ACEs. The ACEQ helps identify childhood abuse, neglect, and family dysfunction (e.g., domestic violence, incarceration, and alcohol, and drug issues). In the 2024 study, internal consistency for the total ACE score was strong (Cronbach  $\alpha = 0.78$ ).

The Risky Loot Box index (RLI), is a five-item scale designed to examine risky engagement with loot box mechanics (Brooks and Clark, 2019). The scale asks participants to rate their agreement (1, strongly disagree– 7, strongly agree) with a number of items assessing their risky cognitions associated with opening loot boxes (e.g., Once I open a loot box, I often feel compelled to open another). In the 2024 study, internal reliability of this scale was high ( $\alpha = .86$ ). Also see: Associations between loot box use, problematic gaming and gambling, and gambling-related cognitions by Gabriel A. Brooks & Luke Clark, 2019, Addictive Behaviors.

Substance Use. A series of questions on the use of various substances was administered to collect descriptive information regarding frequency of alcohol, marijuana, and painkiller (e.g., oxycontin, vicodin, fentanyl, or percocet) use over the past 30 days based on a 5-point scale ranging from "Never = 1" to "11+ times = 5". Frequency of cigarette use over the past 30 days was also measured on a 6-point scale ranging from "Not at all = 0" to "About one pack or more per day = 5". All substance use questions were borrowed, with permissions, from the Monitoring the Future study which has been undertaken at the University of Michigan since the 1970's. See: <a href="https://monitoringthefuture.org/results/">https://monitoringthefuture.org/results/</a> for detailed reports and publications.

Gambling Activity Participation. A set of questions on gambling activities was administered to collect descriptive information regarding the frequency of participation in 11 common gambling activities (e.g., poker, bingo, sports betting, fantasy sports) over the previous 12 months (based on a 5-point scale ranging from "Not at All = 0" to "Daily = 4"). Frequency data was summed for all activities to provide a total gambling participation score. Previous research on adolescent gambling participation suggests that gambling frequency is highly predictive of problem gambling (Elton-Marshall et al. 2016).

The Gaming Disorder Test (GDT) (Pontes et al., 2019). According to the American Psychiatric Association, the clinical diagnosis of internet gaming disorder comprises a behavioral pattern encompassing persistent and recurrent use of the internet to engage in online games, leading to significant impairment or distress over a period of 12 months as indicated by endorsing five (or more) of nine criteria. The proposed diagnostic criteria for IGD in the DSM-5 include the following: (1) preoccupation with games; (2) withdrawal symptoms when gaming is taken away; (3) tolerance, resulting in the need to spend increasing amounts of time engaged in games; (4) unsuccessful attempts to control participation in games; (5) loss of interest in previous hobbies

and entertainment as a result of, and with the exception of, games; (6) continued excessive use of games despite knowledge of psychosocial problems; (7) deceiving family members, therapists, or others regarding the amount of gaming; (8) use of games to escape or relieve negative moods; and (9) jeopardizing or losing a significant relationship, job, or education or career opportunity because of participation in games. The GDT utilizes these criteria to develop the GDT scale. Total scores can be obtained by summing up all responses given to all four items of the GDT and can range from a minimum of 4 to a maximum of 20 points, with higher scores being indicative of a higher degree of gaming disorder. In order to differentiate disordered gamers from non-disordered gamers, researchers should check if participants have endorsed all four diagnostic criteria as assessed by each GDT items by considering answers as '4: Often' or '5: Very often', which translates as endorsement of the criterion.

#### NICOTINE

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.

## Decline in Nicotine Use

Results from the 2024 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 .4 % from grades 5 through 12; it was .5 % among 10<sup>th</sup> graders, and 1.6 % among 12<sup>th</sup> graders. Similar declines in use were reported in the December, 2023 release of the University of Michigan's Monitoring the Future (MTF) report where cigarette use declined among 12<sup>th</sup> graders from 4% in 2022 to 2.9% in 2023.

Inhaling nicotine from vaping is more common than from cigarettes. Vaping nicotine declined significantly from 2024 and among 12<sup>th</sup> graders the 30-day prevalence for vaping nicotine is 8.1% (down from 2022's rate of 18.1%). Similar significant declines in vaping nicotine were reported in the December, 2023 release of the University of Michigan's Monitoring the Future (MTF) report where vaping nicotine declined among 12<sup>th</sup> graders from 20.7% in 2022 to 16.9% in 2023.

In November 2023, FDA and Centers for Disease Control and Prevention (CDC) released data from the 2023 National Youth Tobacco Survey (NYTS) on youth tobacco use in the Morbidity and Mortality Weekly Report: <u>"Tobacco Product Use among Middle and High School Students — United States, 2023."</u> Among U.S. high school students, current overall tobacco product use declined during 2022-2023 (16.5% to 12.6%). This decline was primarily driven by e-cigarettes (14.1% to 10.0%), which translates to 580,000 fewer high school students who currently used e-cigarettes in 2023

The decline since 2022 in vaping is likely attributable to multiple factors, such as ongoing efforts at the national, state, and local levels to implement tobacco control strategies, including Food and Drug Administration (FDA) regulatory actions. Locally we measured shifts in access and attitude. There is a higher cost for cigarettes, 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. Rates in peer perception of harm from smoking increased in both the ADAMHS Youth Survey and the U of M survey.

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

## Cigarette Use

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<b>o</b> 20	-	~	-	-							
<b>60</b> 15	-	-		-	~						
10	~	-					-	1.			
<b>bercentage</b> 10 5 0		-	-	-	-	36			-	-	-
0	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022	2024
	1.2	1	0.9	0.7	0.4	0.5	0.4	0.3	0.1	0.2	0.2
6	2.1	1.3	1.4	0.5	1.3	0.4	0.3	0.4	0.4	0.2	0.2
7	4.5	3.7	3.2	1.6	2.1	1.4	1.4	0.7	0.4	0.6	0.1
8	9.8	4.7	5.5	3.8	4	2.2	1.7	0.7	0.9	0.4	0.2
9	13.7	10.5	9	7.4	8.1	4	1.9	2.2	1.2	0.6	0.2
	14.1	14.4	13.2	10.7	7.9	5.1	3.8	2.7	2.4	1.1	0.5
	18.2	20.2	13.6	13.3	10.7	5.5	3.5	2.5	1.8	1.5	0.8
					1000	1	1.	1.			

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

The Percentage of cigarette smoking by frequency, by grade is presented below (2024).

Frequency						Grade			
	Year	7	8	9	10	11	12		
Not at all	2024	99.9	99.8	99.8	99.5	99.2	98.4		
< 1 per day	2024	0	.2	.1	.4	.5	1.2		
1-5 per day	2024	0	0	0	.1	.1	0		
6-10 per day	2024	.1	0	.1	0	.2	.4		
<sup>1</sup> ⁄ <sub>2</sub> pack day	2024	0	0	0	0	0	.2		
Pack day	2024	0	0	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).

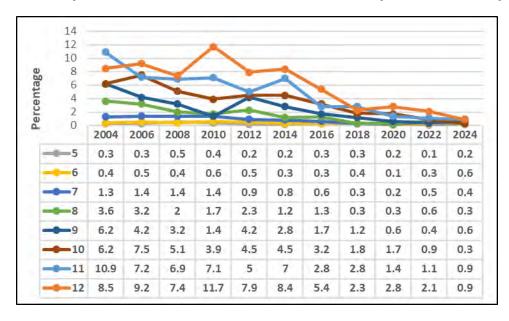
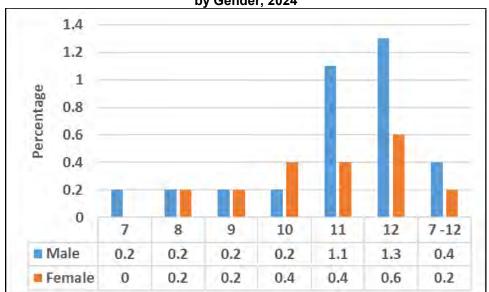


Figure 2: 30-Day Prevalence Rate for Smokeless Tobacco Use by Grade and Survey Year

Figure 3: 30-Day Prevalence Rate for Cigarette Use by Gender, 2024



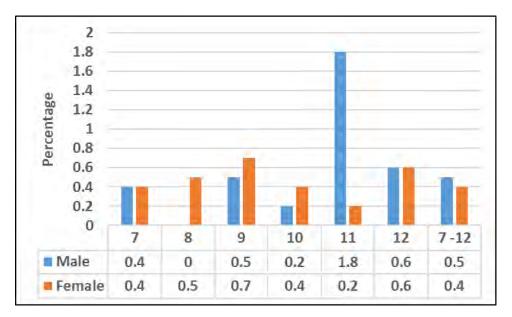


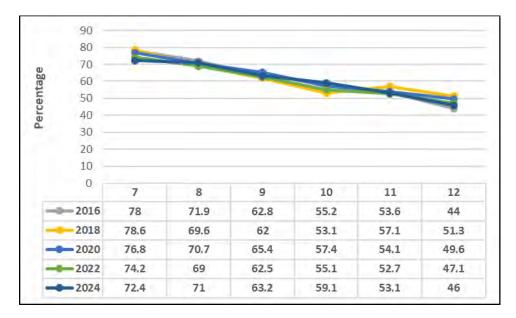
Figure 4: 30-Day Prevalence Rate for Smokeless Tobacco Use by Gender, 2024

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 2022and 2024, the cigarette age-of-onset question was replaced by a series of vaping questions.

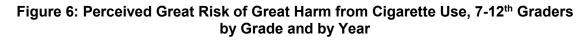
# Attitudes Towards Cigarette Use

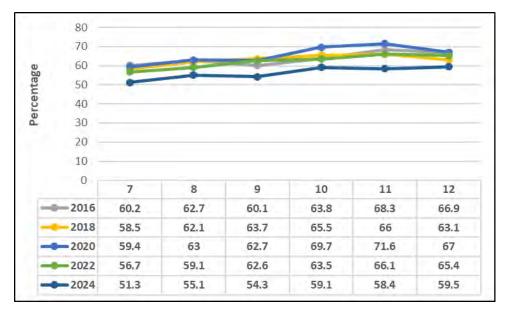
Cigarette smoking continues to have low approval rates among teens. Comparisons years prior to 2016 because of a change in federal reporting requirements. A new required question asks 'how wrong do your friends feel it would be for you to smoke.' Prior to 2016 we asked youth if they disapproved of their 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, 7-12<sup>th</sup> Graders, by grade and by year



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.





## 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 ecigarettes. 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.

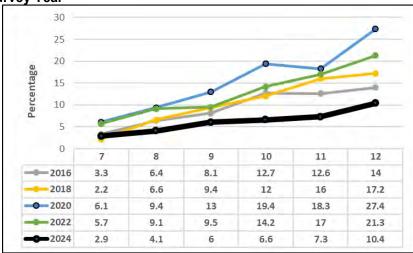


Figure 7: 30-Day Prevalence Rate for Any Vaping (Nicotine, THC, or Flavors) by Grade Level and Survey Year

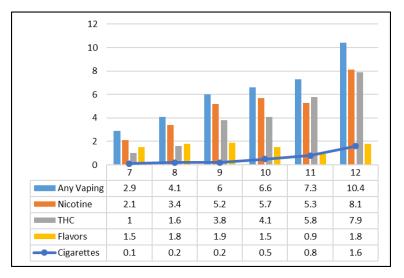
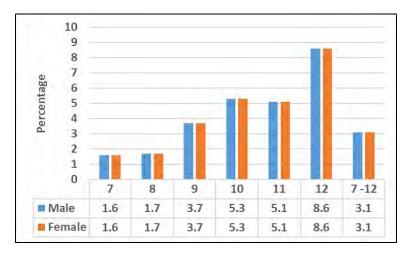


Figure 8: Vape Content Among 30-Day Users by Grade, 2024

Figure 8a: Vaping with Nicotine Among 30-Day Users by Grade and Gender, 2024



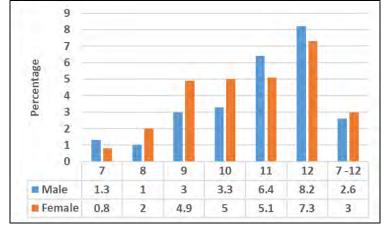


Figure 8b: Vaping with Marijuana Among 30-Day Users by Grade and Gender, 2024



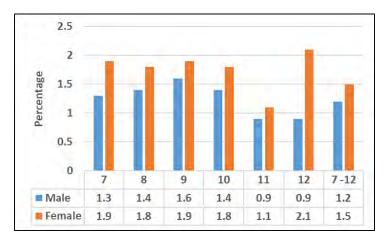
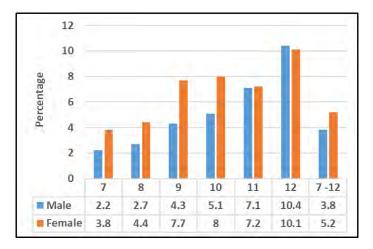


Figure 9a: 30 Day Vaping by Gender, Any Vaping, 2024



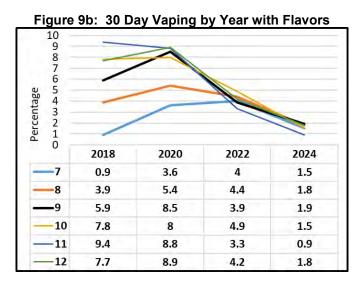
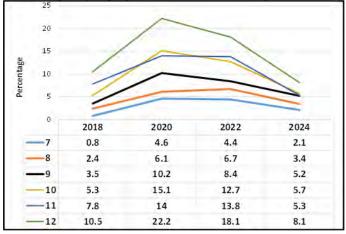
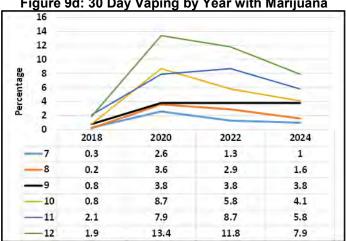
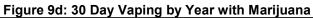


Figure 9c: 30 Day Vaping by Year with Nicotine by Grade and by Year







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 12<sup>th</sup> graders from 1.9 % in 2018 to 13.4 % in 2020, then declined to 11.8 % in 2022. The national study reported 12<sup>th</sup> 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 12<sup>th</sup> graders from 10.5 % in 2018 to 22.3 % in 2020, then declining to 18.1 % in 2022. The national study reported 12<sup>th</sup> 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 8<sup>th</sup> and 10<sup>th</sup> 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. The strength of nicotine question was not asked in 2024.

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

Reasons to Vape Nicotine:	2022	2024
Help quit cigarettes	2.9	2.8
Move convenient than cigarettes	11.2	9.7
Experiment	28.8	24
Relax or relieve tension	52.9	50.3
Get the buzz	45.7	46.9
Looks cool	6.8	12.2
Good time with friends	20.5	20.9
Boredom	21.6	31.6
I am hooked	13.5	18.1
Weight control	10.8	10.8

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

Among those teens who vape nicotine, 50% said they were motivated by a need to relax or relieve tension. Other reasons were to get the buzz (46.9%), to experiment (24%), from boredom (32%), or for a good time with friends (21%). Another 18.1 % of teens reported because they are 'hooked,' up from 13.5% in 2022. Those 18.1 % 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.

The recreational use of marijuana was approved by the voters in 2023. Since access to marijuana will be easier in the future, it is expected that adolescent prevalence will increase as well.

#### ALCOHOL

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 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students report annual alcohol rates of 8.8 %, 14.8 %, and 30.2 %, respectively, all significant decreases since 2022. The University of Michigan's national study released in December 2023 reported rates of 15.2 %, 30.6 %, and 45.7% (respectively), also showing declines since 2022. Wood County youth are 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 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> grade as 3.0, 8.2, and 15.7 %, which are decreases over 2022 rates. The national study (2023) reported the same three grades at 5.9, 13.7, and 24.3 % (respectively), and these rates were in decline. Wood County youth were lower than the national average for monthly alcohol use in these three grades.

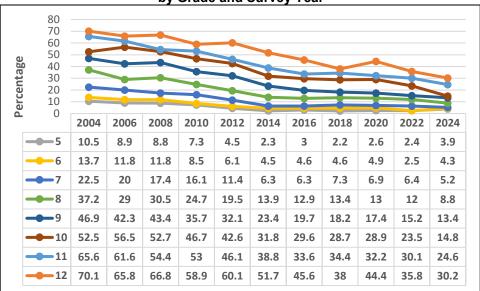


Figure 10: Annual Prevalence Rate for Alcohol Use by Grade and Survey Year

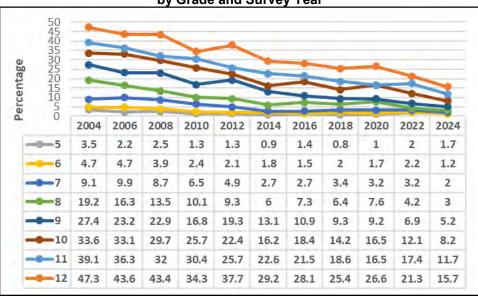


Figure 11: 30-Day Prevalence Rate for Alcohol Use by Grade and Survey Year

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 (2024 data).

Frequency							
	Year	7	8	9	10	11	12
Never	2024	94.8	91.8	86.6	85.2	75.4	69.8
1-2 times	2024	3.3	6.1	8.0	6.7	12.4	12.4
3-5 times	2024	1.3	1.4	3.3	4.0	5.6	7.5
6-10 times	2024	.3	.4	1	2.4	2.4	4.2
11+ times	2024	.4	.3	1.1	1.7	4.2	6.0

"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 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> 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 omitted from the 2022 and 2024 surveys.

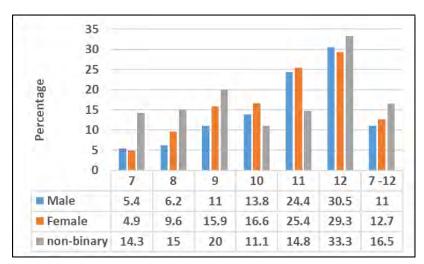


Figure 12: Annual Prevalence Rate for Alcohol Use by Gender, 2024

Figure 13: 30-Day Prevalence Rate for Alcohol Use by Gender, 2024



## 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 five survey iterations – 2016 through 2024. These data are reported in Figures 15 and 16.

# Figure 15. Percentage who view 1 or 2 alcoholic drinks every day as Very Wrong, by year and by grade.

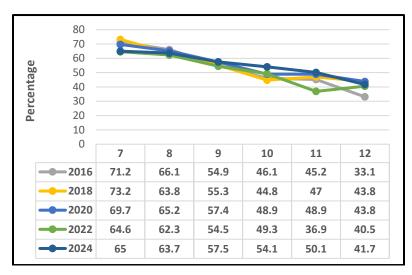
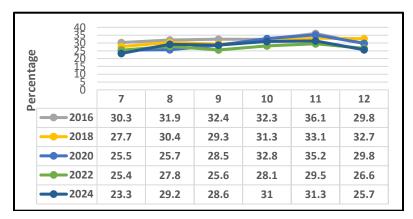


Figure 16: Perception of Great Harm from having 1 or 2 alcoholic drinks every day, by year and by grade



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

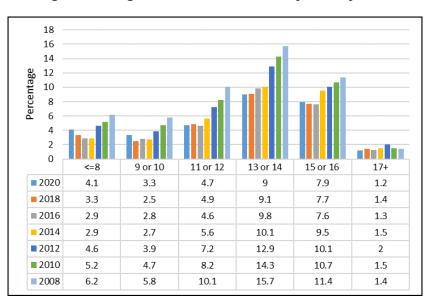


Figure 17: Age of Onset of Alcohol by Survey Year

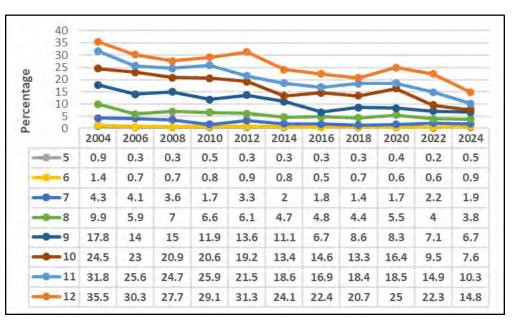
#### MARIJUANA

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.

From 2020 to 2024, Wood County 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students reported decreases in annual marijuana rates. Rates of 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders decreased to 3.8 %, 7.6 %, and 14.8 % respectively. The University of Michigan in December 2023, reported annual rates of 8.3%, 17.8%, and 29%, 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 2024. Rates were reported by 8<sup>th</sup>, 10<sup>th</sup> and 12<sup>th</sup> grade Wood County teens at 1.8, 4.8, and 10.5%, whereas the national study reported the same three grades at 4.7, 10.3, and 18.4%, 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 began during the pandemic and have continued to decline. 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. Since then, fear of harm from marijuana has increased and peer approval for marijuana use has decreased.



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

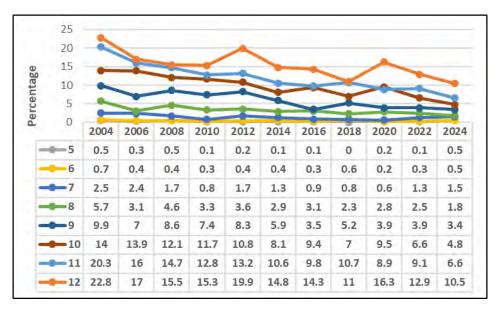


Figure 19: 30-Day Prevalence Rate for Marijuana Use by Grade and Survey Year

The table below shows the Percentage of Wood County adolescents in 2024 that reported using marijuana in the past year by frequency of reported use and grade level.

Frequency	Year	Grade					
		7	8	9	10	11	12
Never	2024	98.1	96.2	93.3	92.4	89.7	85.2
1-2 times	2024	.6	1.4	2.9	2.8	3.2	5.0
3-5 times	2024	.3	.8	1.1	1.1	1.2	1.2
6-10 times	2024	.1	.6	.6	.4	1.0	1.6
11+ times	2024	.1	.6	.6	.4	1.0	1.6

Decreases in annual and thirty-day marijuana use were reported in 2024 compared to 2020 and 2022 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, since the pandemic, there has been a decline in marijuana use, including the use of edibles.

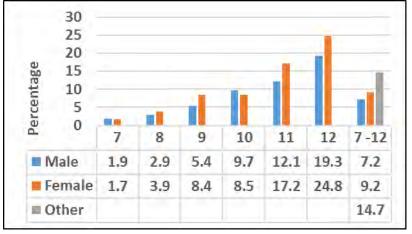


Figure 20: Annual Prevalence Rate for Marijuana Use by Gender, 2024.

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 10<sup>th</sup> and 12<sup>th</sup> graders perceived any great risk in regular marijuana use.

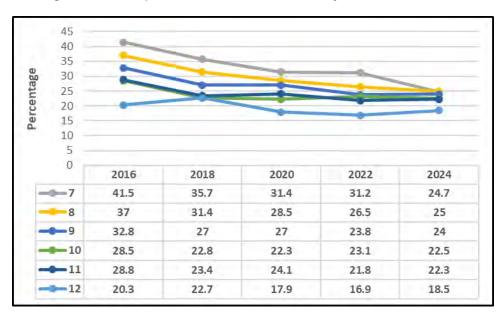


Figure 21: Perception of Great Harm from Marijuana Use 2016-2024

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.

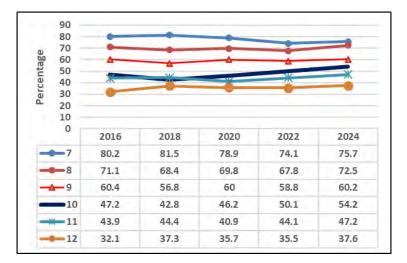
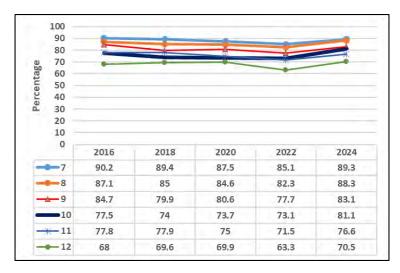


Figure 22: Perception of Peer Disapproval of Marijuana by Survey Year, Grades 5-12.

Figure 23: Perception of Parental Disapproval of Marijuana 2024, Grades 5-12.



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.

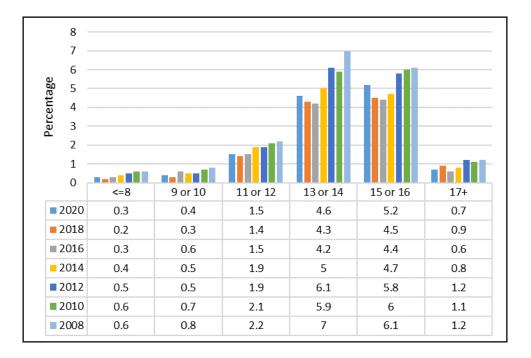


Figure 24: Age of Onset for Marijuana Use by Survey Year

# 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 1 and 2 below. While overall marijuana use declined during the pandemic, Wood County youth also reported a significant decrease in the use of marijuana through edibles as seen in Table 2.

	2018	2020	2022	2024
7	0.3	2.6	1.3	1
8	0.2	3.6	2.9	1.6
9	0.8	3.8	3.8	3.8
10	0.8	8.7	5.8	4.1
11	2.1	7.9	8.7	5.8
12	1.9	13.4	11.8	7.9

#### Table 1: Prevalence of 30-Day Marijuana from Vaping by Year

Table 2 <sup>.</sup>	Prevalence	of Marii	uana Use	Through	Edibles by	v Year
	I I C V di CII C C	or many		rinougn	Luibics b	<i>,</i> 1001

: Preva	lence of M	arijuana U	lse Throug	gh Edibles k	) y
	2018	2020	2022	2024	
7	0.8	1.4	2.7	2.7	
8	2.3	2	4.9	4.6	
9	3.2	3	5.7	6.3	
10	4.2	5.2	7.8	6.5	
11	7.4	3.7	12.5	7.9	
12	7.7	7.7	16.9	11.1	

#### 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 2024 survey administration, the prevalence of inhalants decreased significantly in all grades.

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Õ	2004	2006	2000	2010	2012	2014	2016	2010	2020	2022	2024
_	2004	2006	2008	2010	2012	2014	2016	2018	2020	2022	2024
5	1.5	1.6	1.9	3	2.3	0.8	1.5	1.5	1.3	0.5	0.2
6	1.1	1	1.5	3.3	3.2	1.5	1	1.7	1.9	1	0.7
7	4.8	3	4.2	4.1	3.8	1.7	0.9	0.8	0.7	1.5	0.9
8	7.4	3.7	6.1	3.7	4.7	1.9	2.2	2.9	2.4	1.1	0.7
9	8.1	5.8	7.8	5.8	4.6	3.1	2	1.1	2.1	1.6	0.8
	5.3	7.4	5.5	6	5.2	3.5	2.3	1.9	3.4	1.8	0.6
	7.5	5	6.3	5.9	3.5	2.2	1.6	1.6	2.6	2.7	0.3
	5.8	5.3	6.2	3.7	3.1	2.9	1.8	1.6	3.3	4	0.3

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

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, 2024.

				Grade	e		
Frequency	Year	7	8	9	10	11	12
Never	2024	99.1	99.3	99.2	99.4	99.7	99.7
1-2 times	2022	.7	.6	.6	.3	.1	0
3-5 times	2024	.2	.1	.1	.1	.1	.3
6-10 times	2024	0	0	0	.1	.1	0
11+ times	2024	0	0	.1	.1	0	0

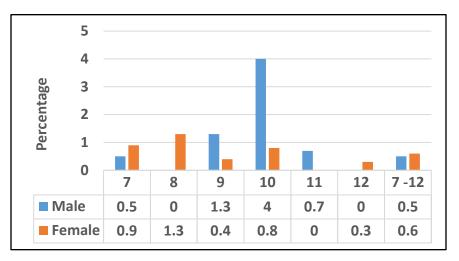


Figure 26: Annual Prevalence Rate for Inhalant Use by Gender, 2022

National rates of annual inhalant use in December 2023 were 4.3 % among 8<sup>th</sup> graders, 2.0 % among 10<sup>th</sup> graders, and 3.0 % among 12<sup>th</sup> graders. In 2024, Wood County youth reported rates of .7% among 8<sup>th</sup> graders, .6% among 10<sup>th</sup> graders, and .3 % among 12<sup>th</sup> grade. Wood County reported decreases of inhalant use in all grade levels from 2022 to 2024.

#### 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 2024, Wood County youth reported decreases in all grade levels. The University of Michigan (December, 2023) reported significant decreases in grades 8 (.4%), 10 (.7%), and 12 (.7%). 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.

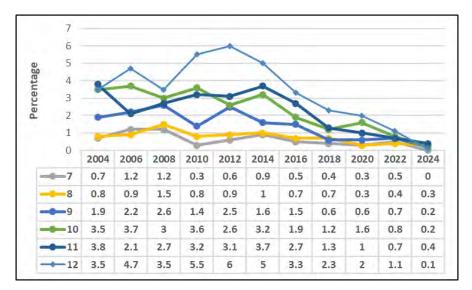


Figure 27: Annual Prevalence Rate for Ecstasy Use by Grade and Survey Year

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

				Gr	ade		
Frequency	Year	7	8	9	10	11	12
Never	2024	100	99.7	99.8	99.8	99.5	99.9
1-2 times	2024	0	.3	0	.1	.4	.1
3-5 times	2024	0	0	.2	0	.1	0
6-10 times	2024	0	0	0	.1	0	0
11+ times	2024	0	0	0	0	0	0

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

#### STIMULANTS

Methylphenidate (Ritalin<sup>®</sup>, Concerta<sup>®</sup>) and amphetamine preparations like Adderall<sup>®</sup> 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 2023 results reported that Ritalin rates for grades 8, 10, and 12 were .6, .5., and .6 %. The Wood County 2024 rates of .4, .7 and .7% for grades 8, 10, and 12 are similar to the rates reported by Michigan.

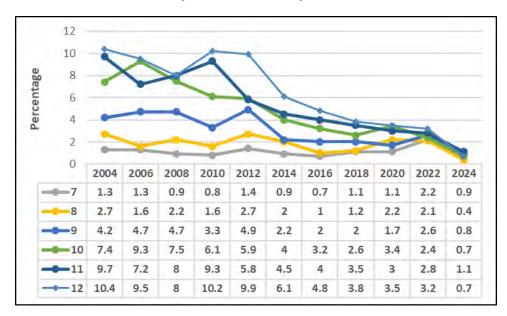


Figure 29: Annual Prevalence Rate for Methylphenidate Use by Grade and Survey Year

				Grade	e		
Frequency	Year	7	8	9	10	11	12
Never	2024	99.1	99.6	99.2	99.3	98.9	99.3
1-2 times	2024	.7	.2	.4	.3	.3	.3
3-5 times	2024	.2	.1	.2	.1	.3	0
6-10 times	2024	0	0	.1	.1	0	.1
11+ times	2024	0	.2	.2	.2	.5	.3

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

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. Rates in 2024 fell in all 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 2023 are .7 %, 1.2 %, and 1.2 % among 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> graders, a decrease over the past year. Wood County rates of LSD use were down in all grades.

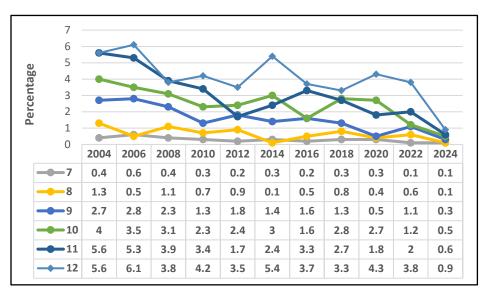


Figure 31: Annual Prevalence Rate for LSD Use by Grade and Survey Year

			Annual	LSD Use,	Wood Co	unty	
Frequency	Year	7	8	9	10	11	12
Never	2024	99.9	99.9	99.7	99.5	999.4	99.1
1-2 times	2024	0	.1	.2	.3	.4	.6
3-5 times	2024	0	0	.2	.1	.2	.1
6-10 times	2024	.1	0	0	.1	0	.1
11+ times	2024	0	0	0	0	0	0

The percentage of Wood County youth who report LSD use in 2024, by grade and by frequency of use is presented below.

#### 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.

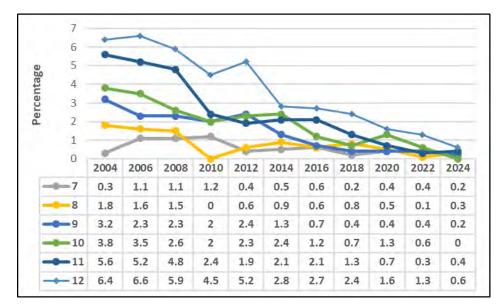


Figure 33: Annual Prevalence Rate for Cocaine Use by Grade Level and Survey Year

The Percentage of Wood County youth who reported cocaine use in 2024, by grade and by frequency of use is presented below.

			Annual Co	ocaine Use,	Wood Co	ounty	
Frequency	Year	7	8	9	10	11	12
Never	2024	99.8	99.7	99.8	100	99.6	99.4
1-2 times	2024	.1	.3	.2	0	.3	.1
3-5 times	2024	.1	0	0	0	0	.3
6-10 times	2024	0	0	0	0	0	0
11+ times	2024	0	0	0	0	.1	.1

Cocaine use rates in Wood County resemble national rates. The U of M 2023 study reported powdered cocaine use at .4%, .5% and .6 % among 8, 10, and 12<sup>th</sup> graders. Wood County reported rates of .3 %, 0 %, and .6 % 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 2024, 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.

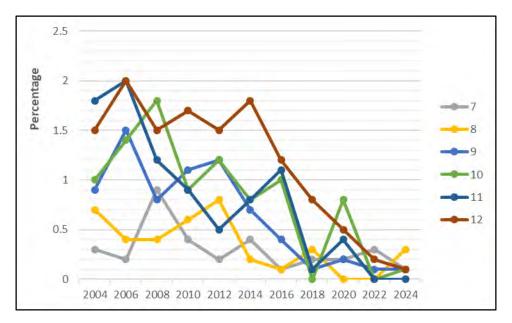


Figure 34: Annual Prevalence Rate for Heroin Use by Grade Level and Survey Year

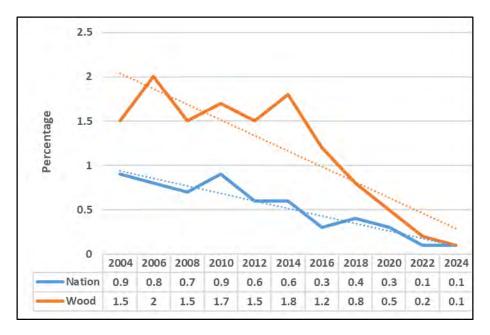
Data comparing results for heroin use from previous surveys are reported above. The data show that almost all grades are lower than previous years, except for 8th graders. Similarly, the use of heroin is low in the University of Michigan's Monitoring the Future study. The 2023 MTF study shows heroin prevalence in grades 8, 10, and 12 at .4 %, .3%, and .1 % of use respectively. National rates are in decline.

				leroin Use, iber of Res	, Wood Cou spondents	ınty	
Frequency	Year	7	8	9	10	11	12
Never	2024	1117	1186	1237	1056	978	680
1-2 times	2024	1	3	0	1	0	0
3-5 times	2024	0	0	0	0	0	0
6-10 times	2024	0	0	1	0	0	1
11+ times	2024	0	0	0	0	0	0

Figure 35: Actual Number of Respondents Reporting Annual Heroin Use, 2024
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A total of 7 school aged youth in Wood County reported having tried heroin at least once in the 2024 survey down from the 18 who reported use in 2022. Additionally, these data exclude Penta Career Center Sophomores, Juniors, and Seniors. 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.

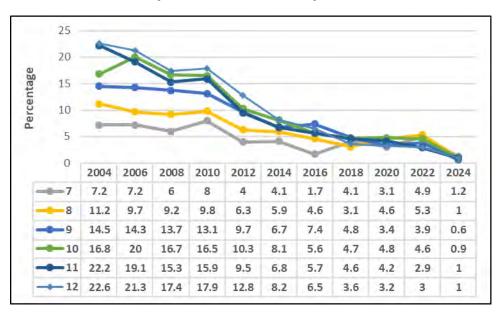
Finally, the illustration below compares the decline in the Percentage of annual heroin users in grade 12 nationally compared to the same group of 12<sup>th</sup> graders in Wood County. A regression line was inserted to emphasize that heroin rates are in decline both nationally and locally.



National and Local Trends in Annual Heroin Use, 2004-2024, Among 12th Graders

#### NARCOTIC PAINKILLERS

This category includes the use of prescription narcotic painkillers (e.g., meperidine [Demerol<sup>®</sup>], propoxyphene [Darvon<sup>®</sup>], hydromorphone (Dilaudid<sup>®</sup>], etc.), and oxycodone (OxyContin<sup>®</sup>). 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

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 11<sup>th</sup> graders from 22.2 % in 2004 to 1.0% in 2022 represents an 95% decrease. All grades have been steadily decreasing.

In prior ADAMHS Youth studies, Wood County rates of narcotic painkillers were higher than those rates reported nationally. However, in 2024, Wood County rates have fallen to be nearly as low as national rates. Wood County reports rates of 1%, .9%, and 1% for grades 8, 10 and 12. The 2023 U of M report rates for the same three grades as .8 %, .4 % and .6% for the OxyContin question, and .9%, .3%, and .6% for the Vicodin question.

Both 30 day and annual rates of narcotic painkiller use has declined in all grades in 2024 among Wood County youth.

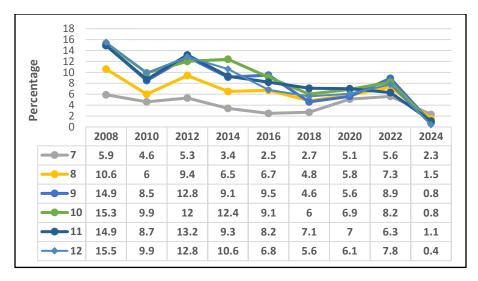


Figure 37: 30-Day Prevalence Rate for Narcotic Painkiller Use by Grade Level and Survey Year

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.

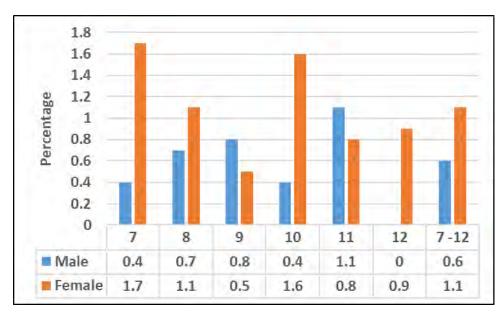
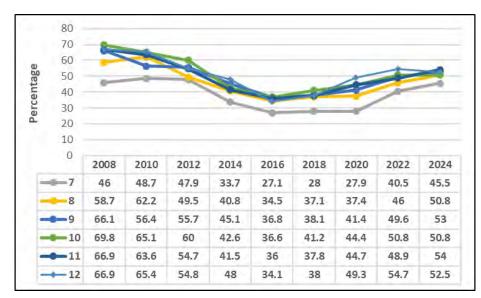


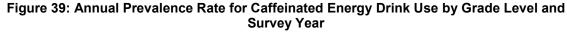
Figure 38: Annual Prevalence Rate for Narcotic Painkiller Use by Gender, 2024

#### 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)?"

Since 2016, the prevalence rate of caffeinated energy drinks has been consistently increasing in Wood County at all grade levels.





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, 2024								
Frequency	Year	7	8	9	10	11	12			
Never	2024	54.5	49.2	47	49.2	46	47.5			
1-2 times	2024	18.5	15.7	13.9	12.8	11.3	10.6			
3-5 times	2024	9.6	9.8	10.6	9.4	8.7	8.5			
6-10 times	2024	4.6	6.8	7.1	6.2	6.3	5.6			
11+ times	2024	12.3	18.5	21.4	22.4	27.8	27.9			

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

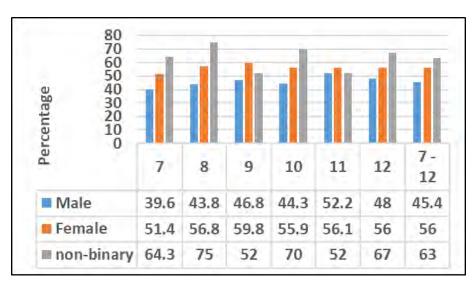


Figure 40: Annual Prevalence Rate for Caffeinated Energy Drink Use by Gender, 2024

#### **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.

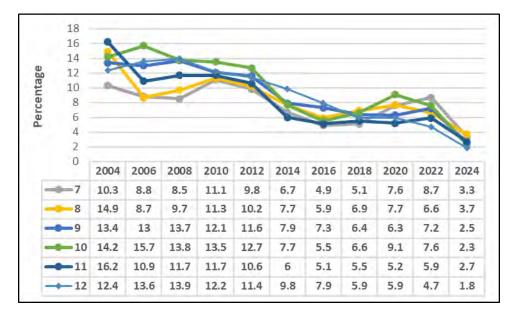


Figure 41: Annual Prevalence Rate for Cough Medicine Use by Grade Level and Survey Year

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,								
Frequency	Year	7	8	9	10	11	12			
Never	2024	96.7	96.3	97.5	97.7	97.3	98.2			
1-2 times	2024	2.5	2.4	1.8	1.7	19	1.3			
3-5 times	2024	.7	.8	.3	.4	.4	.3			
6-10 times	2024	.1	0	.2	.1	.2	0			
11+ times	2024	0	.4	.2	.1	.1	.1			

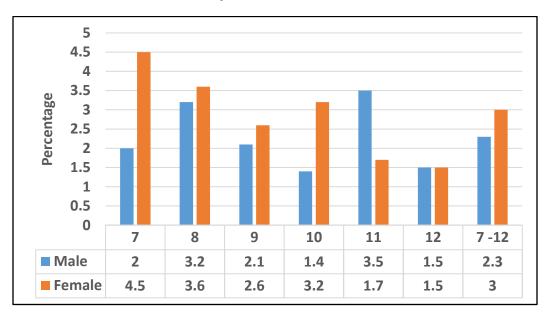


Figure 42: Annual Prevalence Rate for Cough Medicine Use by Gender, 2024

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

The 2024 rates of cough and cold medicine among all grades in Wood County were at historic low levels after a rebound in 2022. In addition to the historic lows, Wood County rates of use are lower than national averages. The 2023 U of M study reports rates in grades 8, 10, and 12 at 4.0%, 3.0%, and 2.4% respectively. Wood County rates for grades 8, 10 and 12 are 3.7 % 2.3% and 1.8% respectively.

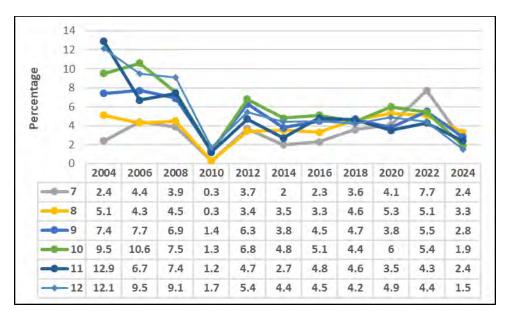
#### ANXIETY AND SLEEP MEDICATIONS

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 12<sup>th</sup> 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 2024 surveys, the barbiturate question was replaced with a question about using sleep or anxiety medication (like Xanax<sup>®</sup> or Klonopin<sup>®</sup>) 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. Rates declined in all grades in 2024. The Wood County decline is consistent with U of M's national study which also reported declines in grades 8, 10 and 12.

#### Figure 43: Annual Prevalence Rate for Barbiturate (2004-2014) and Benzodiazepine (2016-2024) Use by Grade Level and Survey Year



		Percent of use of Benzodiazepine, Wood County, 2024							
Frequency	Year	7	8	9	10	11	12		
Never	2024	97.6	96.7	97.2	98.1	97.6	98.5		
1-2 times	2024	1.3	1.9	1.7	1.0	.9	1.0		
3-5 times	2024	.4	5	.3	.5	.5	.3		
6-10 times	2024	.4	.4	.2	.3	.2	0		
11+ times	2024	.4	.4	.6	.1	.7	.1		

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

Figure 43a: Annual Prevalence Rate for Sleep/Anxiety Medication Use by Gender, 2024

16 14 12 10						1	
Percentage	1	1					
Per	7	8	9	10	11	12	7 - 12
Male	1.4	1.7	2.2	1.2	2.2	0.9	1.7
Female	3.2	4.4	3.3	2.4	2.7	1.5	3
non-binary	7.1	15	8	7.4	0	11.1	7.6

#### **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.

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
Methamphetamines, 2024	0	.4	.2	.1	.2	.3
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
Steroids, 2024	0	.6	.7	.1	.6	.4
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
K2 like products, 2024	0	.2	.1	0	0	.3

#### DRUG PREVENTION AND COMMUNITY COLLABORATION

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.

Program / Academic Year	03-08	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	21-22	22-23	Total
B.A.B.E.S	730	601	839	694	853	767	744	491	592	622	630	602	530	388	507	543	9693
<b>Bullying Education</b>				220	11	15											246
Challenge Day	551	479		121	135	101											1387
Drug Education												310	88	435	270	760	1863
Class Action	220	475	418	125	403	378	239	136	182	122	132	134	38	34	54	95	3185
<b>Communities Mobilizing</b>		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	100	85	6781
FASTRAC				98	225	212	264	150									949
Guiding Good Choices/PAX				30	49	48	32								40		199
Hooked on Fishing	150			191	172	187	129	244	460	447	757	216	0		450	700	4103
Insight/Teen Intervene		63	63	63	62							65	23			4	343
J.D.C.	566	553	286	272	261	381	311	416	515	425	431	267	250	484	939	1140	7587
Mental Health First Aid														186	93	346	625
Parent Project	205	41	35	50	46	53	50	10	4	8	7	16	0		8		532
Why Try												95	21			216	332
Positive Action / STARS				637	648	432	526	534	463	914	985	750	1023	285	415	441	8053
Life Skills	8451	4339	4116	4090	3329	3081	3193	2885	2294	932	1199	1006	1688	1069	1644	1656	44972
Lifelines Suicide Prevention														291	695	1232	2218
Problem ID/Referral	1758			305	322	295		146	288	209	169	160	258	130	136	115	4161
Safe Dates															150	114	264
Teen Institute	591	134	221	169	221	152	221	100	120	136	103	60	62		175	100	2574
Jr. Teen Institute	100	46	41	42	44	49	168	79	44	90	99	44	60				906
Total No. Students Served																	101458

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

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 2024 could also be explained, in part, from environmental and system changes that occurred in Wood County over the past twenty 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. New policies and strategies to address vaping in schools.
- 4. Seller-server training conducted in collaboration with the local sheriff's office, local law departments and the Ohio Investigative Unit.
- Drug Take Back efforts initiated and advertised by local law enforcement, the Wood County ADAMHS Board, BGSU, the Committee on Aging, and the Prevention Coalition.
- 6. 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.
- 7. In school counselors provided by the Children's Resource Center intervention and prevention programming for students in all Wood County school districts.
- 8. The efforts of the Wood County Prevention Coalition where information, aimed at substance use reduction, is disseminated county wide.
- 9. The local school's implementation of the Ohio Department of Educations mandate for Positive Behavioral Intervention Strategies and Social-Emotional Learning Programs.

These 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 12<sup>th</sup> 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 12<sup>th</sup> grader in 2024, 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.

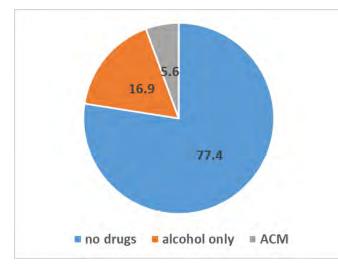
In addition to his or her participation in an evidence-based prevention program, the student's environment would likely have been affected. His or her parents were likely to have received information on adolescent substance abuse prevention, and were likely invited to several town hall or school parent 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.

#### **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 2024, the three comparison groups are comprised of 1166 juniors and seniors from public schools in Wood County. Male students comprised 47.1 % (N=709) of the sample, females comprised 48.9 % (N=737), and Other comprised of 4 % (60). There were 1166 (77.4%) individuals who reported that they had not used in the past year; 255 (16.9%) individuals who reported using only alcohol in the past year; and only 85 (5.6%) 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 2024 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 12<sup>th</sup> 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.

	Frequency of Alcohol Use Past Month							
Group	Never	1-2x	3-5x	6-10x	11+x			
Alcohol-Only	65.1	27.1	5.9	0.0	2.0			
ACM	19.3	31.3	25.3	15.7	8.4			

### Figure 45: Frequency of Alcohol Use in Past Month by Type of User, 2024

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.

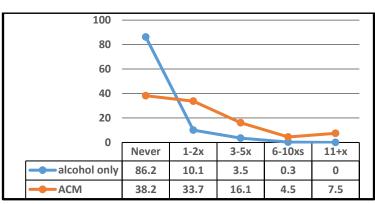
As stated earlier, binge drinking is defined as heavy consumption during a single drinking episode. This research defined binge drinking as consuming five or more alcoholic beverages on any given drinking occasion. The following table indicates that ACM users are much more likely to binge drink than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

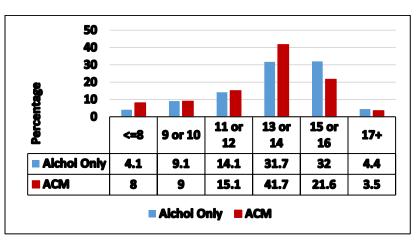


Figure 47: Age of Onset of Alcohol by Type of User, 2020

# 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.

	Non-User	Alcohol Only	ACM
Bought drug products at gas station	0	0	54.2
Bought drug products on social media	2.1	3.5	50.6
Suicide Ideation	13.5	26.3	40.5
Suicide Attempt	4.7	6.3	16.7
Feel Hopeless	20.4	35.3	49
Text and Drive	27.6	56.5	62
Drove after Drinking or Using Marijuana	1.3	3.5	46.4
Been passenger when driver was user	12.1	29.4	68.7
Missed school because of alcohol or drug use	1.1	0	20.2
Used drugs while in school	1.3	0.8	42
Use marijuana edibles	1.6	0.4	70.2
Parents provided alcohol at parties	1.7	15.3	27

Figure 48: Percentage	of Various	Characteristics of	Users	Versus Non-	-Users. 2024
					) -

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 40.5 % of ACM users have thought about killing themselves in the last year and 16.7 % have tried. These numbers represent a decrease over 2022 data where 55 % had suicide ideation and 25 % reported suicide attempts. These data still suggest 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 marijuana. 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.

	Not wrong	A little		Very
	at all	bit wrong	Wrong	wrong
Non User	7.9	6	17.2	69
Alcohol Only	13.1	16.2	24.6	46.2
ACM	56.6	25.4	13.2	4.8

#### Figure 58: How wrong for your friends to use marijuana, 2024

#### Figure 59: Perceived Risk Associated with Marijuana Use, 2024

		Slight	Moderate	Great
	No Risk	Risk	Risk	Risk
Non User	17.6	23.1	32.8	26.5
Alcohol Only	19.5	36.8	29.5	14.2
ACM	46.8	36.7	10.1	6.4

# 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.

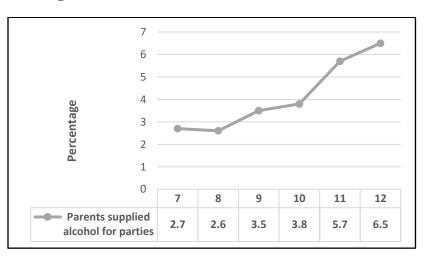


Figure 61: Parents Provided Alcohol for Parties, 2024

The combination of motor vehicles and intoxicating substances appears to remain problematic in Wood County in 2024. The Percentage of incidence is reported below.

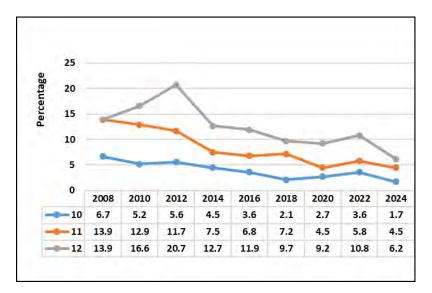


Figure 62: Drank or Smoked Marijuana before Driving by Grade and Survey Year

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

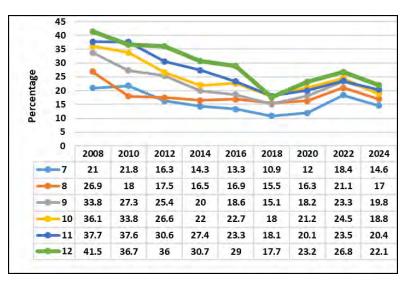


Figure 64: Who was the Driver when Teen was a Passenger when the Driver Just Drank Alcohol or Smoked Marijuana, 2016 (question not asked in 2024).

meener of Smoked Marijuana, 2010 (question not asked in 2021).					
		Parent or	Deerer		Anothor
		Step-	Peer or		Another
	Friend	parent	Classmate	Relative	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 and 2024 surveys 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.

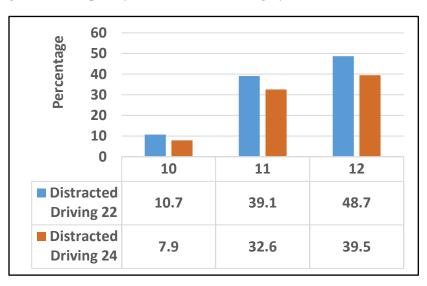


Figure 65: Frequency of Distracted Driving by Grade Level and Year.

The number of 12<sup>th</sup> graders represented in Figure 65 is 683, meaning that 39.5%, or 270 of the 683 seniors report texting while driving at least some of the time. The remaining 60.5%, or 413 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 11<sup>th</sup> and 12<sup>th</sup> graders, the actual numbers of 11<sup>th</sup> and 12<sup>th</sup> graders are reported in Figure 66 below.

l use myph or talk whi		Males	Females	Other
	never	296	337	18
Used alcohol in past 30 days	1-2x	47	54	4
	3-5x	20	16	3
	6-10x	4	3	1
	11+x	9	4	1
	Total	376	414	27

# Figure 66. Raw Numbers of 11 and 12<sup>th</sup> Graders who Both Drank Alcohol within the Past 30 days and Reportedly Distracted Driving, 2024

Three new questions were added to the 2024 Youth Survey. First, we asked youth if during the past year they had ever used CBD type products like Delta 8 or 9; second, we asked if during the past year on how many occasions they bought products at a gas station, carry-out, or vape shop to get buzzed or high; and, third, we asked if they had ever bought vapes, carts, marijuana or other substances via social media (like snapchat, etc.).

The percentage of students who reported making purchases as described is reported below, by grade level.

Grade in	CBD or	Carry	Social
School	Delta 8	Out	Media
7	0.5	0.6	3.4
8	1.4	1.4	3.4
9	1.6	1.3	5.2
10	3.3	1.3	5.9
11	4.9	2.7	5.6
12	7.2	4	7.6

# Figure 67. Percentage of Youth Purchasing CBD, or Purchasing at a Carry-out, or Purchasing on Social Media

#### THE BOTVIN LIFESKILLS TRAINING PROGRAM

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.

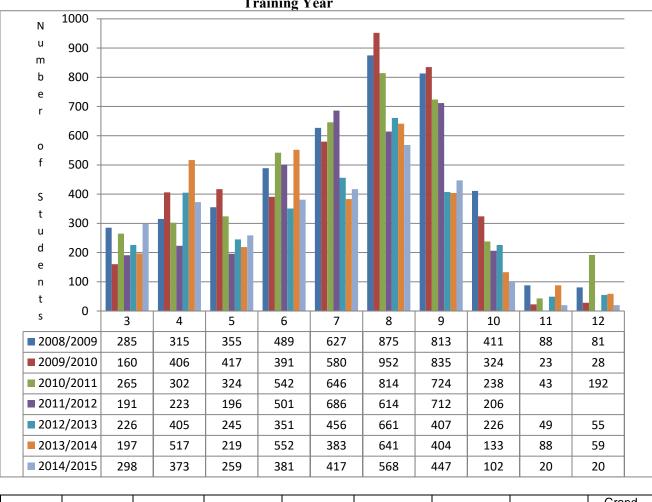


Figure 76: Number of Students Receiving LST Training by Grade Level and by Training Year

								Grand
Year	2008/2009	2009/2010	2010/2011	2011/2012	2012/2013	2013/2014	2014/2015	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 7<sup>th</sup>, 8<sup>th</sup>, or 9<sup>th</sup> graders in any schools that did not receive training at one time or another. Using 9<sup>th</sup> graders, for example, at the time of this survey in November, 2017, all 9<sup>th</sup> graders in all schools had received LST training. Some 9<sup>th</sup> 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.

#### MENTAL HEALTH AND WOOD COUNTY ADOLESCENTS

### 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.

Using the 2024 data, the Cronbach's Alpha test reported .928 reliability.

The following chart shows the distribution of scores by category and by year for all 7<sup>th</sup> through 12<sup>th</sup> grade students in Wood County, as of January, 2024.

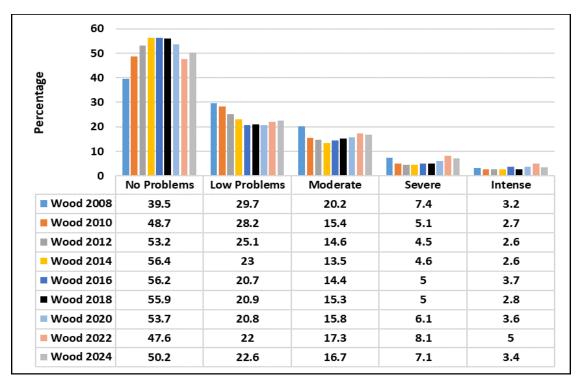


Figure 77: Percentages of Youth on the Problem Severity Scale by Survey Year

The following chart provides the Percentage and raw number of Wood County youth that fell into the Problem Severity Scales categories by year. 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
2024	3043	1354	978	411	193	5979

## 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 2024.

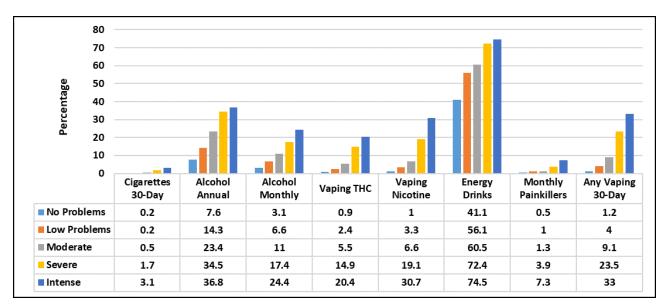


Figure 78: Prevalence of Substance Use by Problem Severity Scale, 2024

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 7.6 % for the "no problem" group to 36.8 % for those youth who are reporting significant mental health problems (i.e., those youth scoring in the "intense" problem severity range). Similarly, the vaping nicotine 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 7<sup>th</sup> grade only .3 % of the "no problem" and 1.5 % of the "low problem" groups report vaping use, whereas 18.9 % of the intense group reported vaping. As youth get older, the same pattern exists between mental health and vaping prevalence. In the "no problems" 12th grade group, 3.6% report vaping in the past 30 days, while vaping prevalence is 57.1 % for the "intense" group.

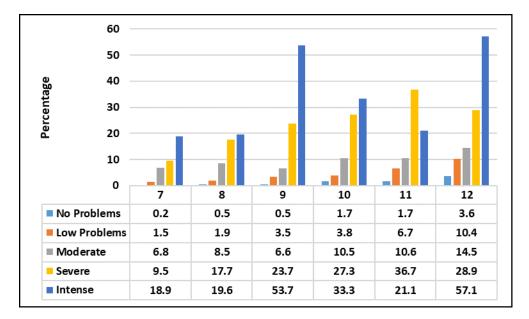


Figure 79: Prevalence of Any Vaping in the Past 3-Days by Problem Severity Scale, 2024

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 12<sup>th</sup> graders reported drinking and driving and 9.2 % of 12<sup>th</sup> graders reported smoking marijuana and driving. Looking at 10 through 12<sup>th</sup> 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 7-12 combined, 2024

	No	Low			
	Problems	Level	Moderate	Severe	Intense
Impaired Driving	1.4	2.5	4.3	3.4	43
Passenger with impaired driver	8.3	19.9	32.1	39.4	52.8

## 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 2012 and 2024 is reported. In Figure 82, the Percentage of Wood County youth reporting suicide attempts, by grade level, between 2012 and 2024 is reported.

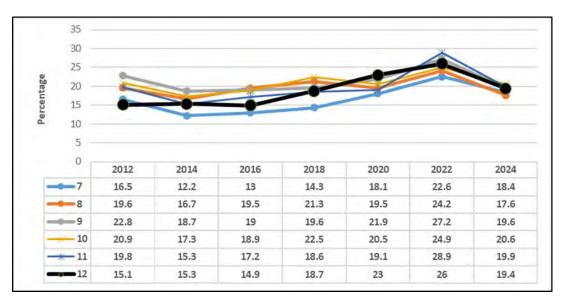
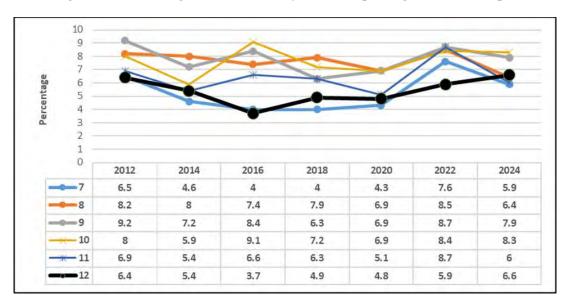


Figure 81: Percentage of Wood County Youth Reporting Suicide Ideation

Figure 82: Percentage of Wood County Youth Reporting Suicide attempts



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 3.8 % and 14.6 % of youth in the no/low problem severity range report that they think about suicide; that figure jumps to 67.2 % and 84.8 %, respectively, in the "severe" and "intense" groups. Similarly, 2.8 % of the no/low problem severity group report that they attempted suicide, while 23.2 % of the "severe" and 52.4 % 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, 2024

	No	Low				
	Problems	Level	Moderate	Severe	Intense	Total
Suicide Ideation (%)	3.8	14.6	39.2	67.2	84.8	19.0
Number	117	198	383	276	162	1136
Suicide Attempts (%)	1.4	4.1	10.7	23.2	52.4	6.7
Number	44	55	104	95	100	398

The 2024 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?" 2024

	No	Low				
	Problems	Level	Moderate	Severe	Intense	Total
Hopelessness (%)	6.0	23.4	53.6	77.5	89.1	25.3

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 2024 survey a reversal of the trend in mental health indicators was reported. Since 2018, the number of youth reporting "no problems" was declining. Similarly, since 2018, the number of students reporting moderate, severe or intense problems were increasing. However, in the 2024 survey, the number of students reporting 'no problems' increased and the numbers of moderate, severe and intense problems declined.

- In 2022 students reported the highest rates of adverse childhood experiences since we began collecting them in 2018. These numbers also reversed themselves in the 2024 survey
- 2. Some patterns remain the same: 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. However, in the 2024 survey, these numbers declined.
- 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. Again, in the 2024 survey, these numbers declined.

## 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.

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)."

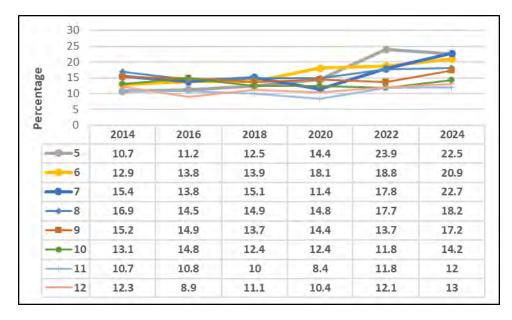
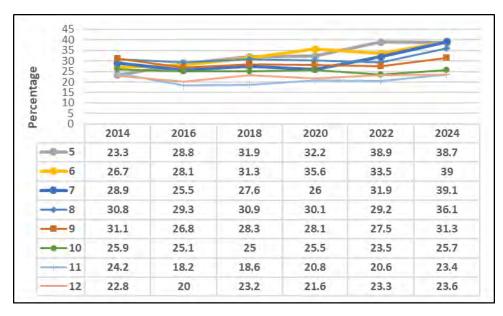


Figure 86: Percentage of Wood County Students Reporting Any Level of Cyber Bullying by Grade Level and by Year

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



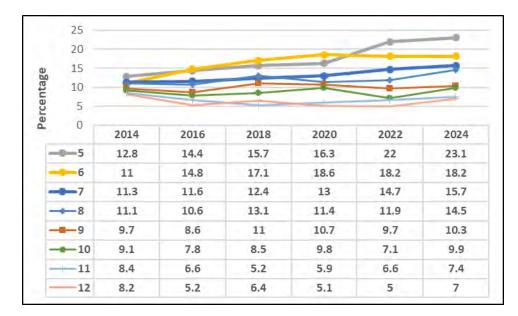
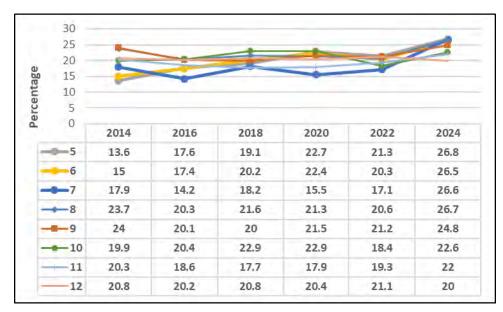


Figure 88: Percentage of Wood County Students Reporting Any Level of Physical Bullying by Grade Level and by Year

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



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.

Cyber	Onc	e or Twi	ice	Sev	veral Times Often				Most of the Time					
Grade	2020	2022	2024	2020	2022	2024	2020	2022	2024	2020	2022	2024		
7	6.3	10.2	13.1	2.2	3.4	4.8	1.3	2	3	1.6	3.3	1.8		
8	8.6	9.7	10.5	3	3.6	4.1	1.8	2.9	2.2	1.4	2.6	1.8		
9	7.2	7.4	9.4	3.2	3.4	4.7	2.1	1.9	1.2	1.9	1	1.9		
10	6.8	6.7	6.9	2.8	2.5	4.2	1.3	1	1.3	1.4	1.6	1.8		
11	4.6	6.2	6.4	1.7	2.4	3.1	1.2	0.8	1	1	2.4	1.5		
12	6.5	5.3	8.2	1.5	3.6	1.5	0.5	0.8	1.8	2	2.2	1.6		

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

Verbal	Once or Twice			Several Times			Often			Most of the Time		
	2020	2022	2024	2020	2022	2024	2020	2022	2024	2020	2022	2024
7	13.4	16.4	20.8	6.3	7.5	9.2	3.9	3.8	4.2	2.4	4.1	4.9
8	15.5	13.2	17.6	7.1	7.1	8.1	3.9	5.5	6.6	3.7	3.4	3.9
9	12.7	16.1	16.8	7.4	5.7	8.2	4.8	3.6	3.4	3.1	2.2	2.9
10	13	13.9	13.4	6.8	4.6	6.1	2.8	2.8	2.9	2.9	2.2	3.2
11	12.2	10.7	11.8	4.1	4.4	6.4	2.6	1.9	3.2	1.9	3.6	2
12	11.3	12.3	13.6	4.8	4.2	4.5	2.9	3	2.5	2.6	3.8	2.9

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

Physical	Once or Twice			Several Times			Often			Most of the Time		
	2020	2022	2024	2020	2022	2024	2020	2022	2024	2020	2022	2024
7	8.5	10.1	11.1	2.1	2.2	2.6	1.4	1	1	1	1.4	1
8	7.3	7.9	9.9	1.7	1.8	2.6	1.3	1.4	1.1	1	0.8	0.8
9	6.6	6.7	7.8	1.9	1.8	1.5	1	1	0.4	1.3	0.2	0.6
10	6.5	4.3	6.5	1	0.9	2.6	1.2	0.9	0.3	1	1	0.6
11	2.9	3.2	4.7	1.8	1.2	1.9	0.2	0.4	0.4	1	1.7	0.5
12	2.9	2.5	4.3	0.6	0.4	0.9	0.3	1	0.7	1.4	1.3	1.2

Figure 93: Percentage of Wood County Teens Who Report Being Indirectly Bullied by Grade, Year, and by Frequency within the Past 30 days.

				2	1	2			2			
Indirect	Once or Twice			Several Times			Often			Most of the Time		
	2020	2022	2024	2020	2022	2024	2020	2022	2024	2020	2022	2024
7	8.3	8.7	16.1	2.7	4.1	5.1	2	2.3	2.8	2.4	2.1	2.6
8	11.4	10.4	14.2	4.7	4.6	5.9	2.3	2.6	3.5	2.9	3	3
9	11	11.8	14.2	3.9	5.2	6.3	3.4	2.5	2.5	3.2	1.8	2.1
10	12.4	10.4	10.8	5.3	4.1	6.4	2.5	2.9	2.8	2.8	2.8	2.6
11	8.9	10.9	12.3	4.9	4.9	5.3	1.9	3.1	2.4	2.2	2.8	2
12	9.7	10.4	11	5.3	5.9	4.3	2	3.8	2.1	3.5	3	2.6

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. Comparing 2022 to 2024 bullying has increased in frequency, a trend that began in 2020.

	Physical		Vei	rbal	Indi	rect	Cyber		
	2022	2024	2022	2024	2022	2024	2022	2024	
not at all	90.2	88.8	73.3	69.4	79.4	75.9	85.5	83.3	
1-2 times	6.3	7.7	14.1	16	10.4	13.3	7.9	9.2	
several times	1.5	2.1	5.8	7.3	4.8	5.6	3.1	3.9	
often	1	0.7	3.6	3.9	2.8	2.7	1.7	1.8	
most of time	1	0.8	3.2	3.4	2.6	2.5	1.8	1.8	

Figure 94: Percentage of Wood County 7-12<sup>th</sup> Grade Youth Reporting Being Bullied Last Month by Frequency and by Type of Bullying by year.

Comparing males and females in all grades in Wood County, the data show that females are more likely to report the incidence physical, 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. Those who identify as non-binary reported the highest levels of bullying.

# Figure 95: Percentage of Wood County Youth Who Report Being Bullied Last Month by Gender, by Frequency, and by Type of Bullying, 2024.

	Physical		al	Verbal		Cyber			Indirect			
	Male	Female	Non-binary	Male	Female	Non-binary	Male	Female	Non-binary	Male	Female	Non-binary
not at all	89.4	88.7	79.4	74.6	65.5	44.3	86.8	81.3	61.8	82.6	71	41.2
1-2 times	7	8	13.7	13.1	18.4	24.4	7.3	10.7	16	10	16.1	25.2
several times	1.9	2.1	4.6	5.9	8.5	11.5	2.9	4.5	9.9	3.7	6.9	19.1
often	0.5	0.7	1.5	3.2	4.3	11.8	1.2	2.1	5.3	1.8	3.1	7.6
most of time	1.1	0.4	0.8	3.1	3.3	11.5	1.9	1.4	6.9	1.9	2.9	6.9

### **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.

	by Grade and by verbai bunying victimization, 2024.										
Grade	Any Va	ping	Alcoh	Alcohol		Marijuana		Caffeinated Drinks		Vaping Nicotine	
	Not Bullied	Bullied	Not Bullied	Bullied	Not Bullied	Bullied	Not Bullied	Bullied	Not Bullied	Bullied	
7	1.2	5.6	3.2	8.3	0.9	3.5	37.3	58	0.6	4.4	
8	2.1	7.3	4.6	14.5	1.5	7.7	45.5	60	1.7	6.1	
9	3.5	11.5	9.7	21.4	4.6	11.4	48.4	63.2	3.1	9.8	
10	4.9	11.6	12.9	20.3	6.5	10.7	46	64.4	4.3	9.6	
11	5.6	12	22.3	32.3	8.4	16.2	52.7	57.8	4.2	8.3	
12	8.1	18.1	25.5	45.3	12.1	23.6	40.1	63.4	5.8	15.5	

#### Figure 96: Percentage of Youth Who Report Using Substances by Grade and by Verbal Bullying Victimization, 2024.

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 nicotine has greater prevalence than other drugs in 2024 survey results, we compared the rates of 30-day vaping nicotine use last year by gender and by frequency of reports of having been bullied. Results are reported in the following figure:

	Physical		cal	Verbal		Cyber			Indirect			
	Male	Female	Non-Binary	Male	Female	Non-Binary	Male	Female	Non-Binary	Male	Female	Non-Binary
not at all	3.6	4.1	6.7	3.2	3.1	5.2	3.4	3.6	4.9	3.4	3.7	7.4
1-2 times	3.7	13.9	5.6	5.2	5.2	9.4	6.3	10.5	9.5	6	6.9	6.1
several times	11.9	16.1	na	6.7	12.4	6.7	6.9	16	0	5.3	10.4	8
often	6.2	15	na	5.1	15	0	0	8.1	14.3	7.3	9.7	0
most of time	15.2	15.4	na	8.5	18.6	20	12.1	26.2	33.3	8.8	18.8	22.2

### Figure 97: Percentage of Youth Who Report Vaping Nicotine Last Month By Type and Frequency of Bullying Victimization and by Gender, 2024.

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, females and those who identified as non-binary. Additionally, the highest rates of vaping are found among those youth who report being bullied 'most of the time.' 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 6000 youth in grades 7 through 12.

2024	None	Low	Moderate	Severe	Intense	Total
Percentage	50.2	22.6	16.7	7.1	3.4	100%
Count	3043	1354	978	411	193	5979

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.

Verbal	No Problems	Low Problems	Moderate	Severe	Intense	Total
not at all	62.2	21.4	11.7	3.4	1.3	100
1-2 times	31.5	30.4	23.7	10.9	3.4	100
several times	23	25.6	29.7	15.7	6	100
often	13.2	19.7	32.5	21.4	13.2	100
most of time	10.6	11.1	28.8	25.3	24.2	100

### Figure 98: Percentage of Youth Who Report being Verbally Bullied Last Month By Frequency of Bullying and by Level of Problem Severity, 2024.

### Figure 99: Percentage of Youth Who Report being Cyber Bullied Last Month By Frequency of Bullying and by Level of Problem Severity, 2024.

Cyber	No Problems	Low Problems	Moderate	Severe	Intense	Total
not at all	57.3	22.3	14	4.8	1.7	100
1-2 times	21.8	58.9	2727	14.7	7	100
several times	15.6	22.5	33.8	19.5	8.7	100
often	14.7	18.6	23.5	20.6	22.5	100
most of time	14.7	12.7	22.5	24.5	25.5	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.

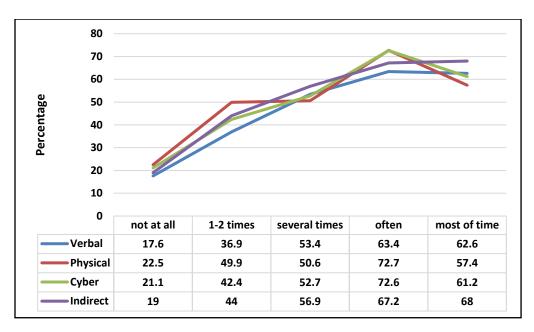


Figure 100: Percentage of Youth Who Report Suicide Ideation by Frequency of Being Bullied by Type of Bullying, 2024.

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.

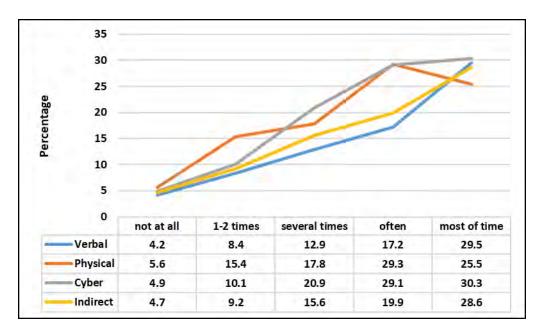


Figure 101: Percentage of Youth Who Report Suicide Attempts by Frequency of Being Bullied by Type of Bullying, 2024.

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.

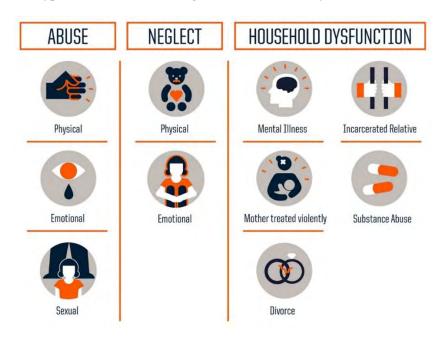
## **ADVERSE CHILDHOOD EXPERIENCES (ACES)**

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 <u>Essentials for Childhood</u> 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 November, 2023. 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.

ACEs Questions			County 2 Combined	
Parent/Household member experienced:	2018	2020	2022	2024
Mental Illness	19.6	22.1	26.6	26.4
Substance Abuse	15.7	15.8	17.7	18.2
Incarcerated Relative	17.1	18.2	19.1	18.3
Separation or Divorce	34.6	35.4	34.7	34.8
Parents/Adults treated violently	4.4	5	6.1	8.9
Physical abuse	5.5	6.2	6.6	5.2
Emotional abuse	19.1	20	22.8	19.3
Sexual abuse	4.4	4.5	6.1	4.4
Physical neglect	4.7	5	5.9	4.2
Emotional neglect	16.8	18.9	21.7	14.7

### Table 4. Percentage of Reported ACE Scores Among Wood County Adolescents in Grades 7 through 12, by year

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.

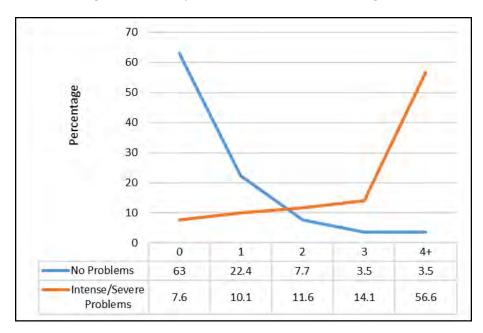
			Males	Females
	Males	Females	(Wood	(Wood
Number of	(Nationally	(Nationally,	County, ages	County, ages
ACEs	, ages 18+)	ages 18+)	12-18)	12-18)
0	41.4%	40.0%	48.4%	38.2%
1	24.9%	22.4%	22.3%	20.9%
2	13.2%	13.4%	11.6%	13.2%
3	8.1%	8.0%	7.5%	8.0%
4 or more	12.3%	16.2%	10.1%	14.7%

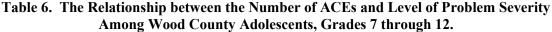
## Table 5. Percentage and Number of Reported ACE Scores Nationally and Among Wood County Adolescents, 2022

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 2024, 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.





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, 2024.

Number of	%	%
Reported	Suicide	Suicide
ACES	Ideation	Attempts
0	5.9	2.3
1	14	3.7
2	26.3	7.2
3	28.8	11
4+	53.6	22.3

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 AND GAMING AMONG WOOD COUNTY ADOLESCENTS

## **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, 2024 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=7000), are as follows:

Bet money or played for money:	Year	Daily	Weekly	Monthly	Few times peryear	Not at all
	2016	0.8	0.9	1.0	5.7	92.1
	2018	0.6	1.1	2.3	7.1	88.9
Cards	2020	0.7	1	2.2	7	89.1
	2022	0.4	1.2	2.1	13.2	83.2
	2024	1.4	0.6	2.2	11.5	84.4
	2016	0.9	1.3	2.9	7.8	87.1
	2018	0.8	1.4	2.8	7.8	87.3
Personal skill	2020	0.7	1.3	2.8	6.9	88.3
	2022	0.6	1.5	2.9	12.8	82.2
	2024	1.5	0.8	2.5	9.3	84.9
	2016	1.1	1.7	3.3	7.4	86.4
	2018	0.7	1.8	2.8	7.6	87.2
Sports teams	2020	0.9	1.9	2.6	6.4	88.2
	2022	0.7	1.9	2.1	10.4	85
	2024	1.7	1.1	1.8	6.5	87.8
	2016	0.8	0.8	1.8	4.6	92.1
	2018	0.4	0.8	1.9	4.6	92.2
Lottery tickets	2020	0.5	1	1.7	4.6	92.2
	2022	0.3	0.8	2	8.9	88
	2024	1.3	0.4	1.3	7	90.1
	2016	0.9	1.1	2.7	7.3	88
	2018	0.4	1.1	2.3	7.1	89.2
Scratch offs	2020	0.5	1.2	2.2	7.1	89
	2022	0.4	1	2.5	14.1	82
	2024	1.3	0.4	1.7	11.7	84.9
	2016	1.1	1.4	1.4	3.4	92.7
	2018	0.7	1.2	1.5	3.6	93
Fantasy sports	2020	0.8	1.4	1.6	3.7	92.5
	2022	0.9	1.2	1.6	5.7	90.6
	2024	1.6	0.9	1.4	5.4	90.7
	2016	1.3	0.9	1.2	1.7	94.9
	2018	0.8	0.9	1	1.8	95.5
Daily fantasy sports	2020	0.5	1	0.9	1.8	95.7
	2020	0.7	1.1	0.9	3.3	94
	2024	1.7	0.8	1	2.8	93.7
	2020	0.6	0.8	0.8	1.8	95.9
esports	2022	1	1	1	2.7	94.2
-	2024	1.5	0.4	0.7	2.5	94.9

 Table 8. Prevalence of Gambling and Gaming Activities among Adolescents by Year

The most prevalent types of gambling activities among Wood County adolescents are betting money on sports: playing cards for money and betting on personal skill, followed by sports betting. The lowest gambling prevalence occurred in betting on e-Sports and scratch offs.

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.

# Table 9. Prevalence of Gambling Activities by Gender among Adolescents (ages 12 to 18) in Wood County (n=6220), 2024.

Gambling/gaming activity	Gender	Daily	Weekly	Monthly	Few x year	Never
	Male	1.9	0.9	3.1	13.3	80.9
Played cards for money	Female	0.8	0.3	1.1	10	87.8
	Non-binary	3.1	0	3.1	6.9	86.9
	Male	2.1	1.4	3.9	11.8	80.9
Bet money on games of person skill like pool, golf, or bowling	Female	0.8	0.2	1	7.2	90.7
	Non-binary	3.8	0	3.1	6.2	86.9
	Male	2.5	2	3	8.9	83.5
Bet money on sports teams (pro, college, or amateur)	Female	0.8	0.3	0.6	4.5	93.8
	Non-binary	3.1	0.8	1.5	1.5	93.1
	Male	1.7	0.5	1.3	6.4	90.2
Bought lottery tickets (mega millions, Powerball, etc.)	Female	0.9	0.3	1.3	7.4	90.1
	Non-binary	2.3	0.8	1.5	10.8	84.6
	Male	1.6	0.5	1.6	11	85.2
Bought scratch offs	Female	0.9	0.3	1.7	12.5	84.6
	Non-binary	3.1	0	1.5	12.3	83.1
	Male	2.4	1.5	2.4	9.3	84.8
Bet money on sports teams or games (with an entry fee to play)	Female	0.8	0.2	0.3	1.6	97.1
	Non-binary	3.1	1.5	0.8	0.85	93.2
	Male	2.5	1.5	1.8	4.5	89.7
Bet money on daily fantasy sports (FanDuel or DraftKings, etc.)	Female	0.8	0.1	0.2	1.1	97.8
	Non-binary	3.1	0.8	1.5	0.8	93.8
	Male	2.1	0.7	1.1	3.8	92.3
Bet money on Esports	Female	0.8	0.1	0.3	1.2	97.6
	Non-binary	3.8	0	0.8	0	95.4
	Male	65.4	22.8	4.4	3.6	3.8
Played games on computer, tablet, gaming console, etc.	Female	39	26.9	11.5	12.7	10
	Non-binary	60.9	22.5	6.6	6.6	3.3
	Male	49.1	29.9	8.3	5.9	6.7
Spent at least two hours daily playing games online of offline	Female	23.8	22.2	13.4	15.8	24.8
	Non-binary	45.7	31.1	8.6	7.9	6.6

Since gambling activities were included in the 2016 ADAMHS Youth Survey, we can compare gambling prevalence between 2016 and 2024. The comparison rates of gambling prevalence among Wood County youth between 2016 and 2024 is reported below.

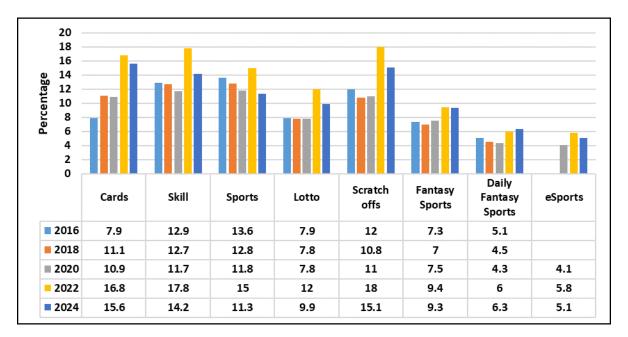


Table 10. Trends in Gambling Prevalence by Year Among 7-12th Graders, Wood County.

The rates of gambling prevalence among Wood County youth had increased during the COVID pandemic, which was measured when students returned to school in December, 2022. The post-pandemic 2-year period (2022-2024) shows a decrease in gambling prevalence among 7 through 12<sup>th</sup> graders. However, among 11<sup>th</sup> and 12<sup>th</sup> grade males, there were increases in sports betting.

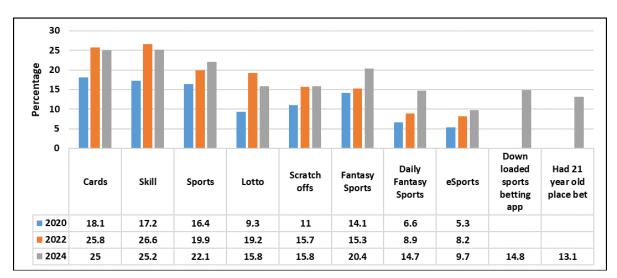


Table 11. GAMBLING ACTIVITIES AMONG MALES – 11th & 12th GRADE

## **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 prior Wood County studies, 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. However, in 2024, we changed measures and introduced the Brief Adolescent Gambling Screen (BAGS)(Stinchfield, R., et al., 2017). The BAGS screen asks teens to answer three questions:

- a. How often have you skipped hanging out with friends who do not gamble/bet to hang out with friends who do gamble/bet?
- b. How often have you felt that you might have a problem with gambling/betting?
- c. How often have you hidden your gambling/betting from your parents, other family members, or teachers?

Each gambling frequency requires a Likert response from never (0), not in the past 12 months (0), sometimes (1), many times (2), or all of the time (3). Summing the three item yields a score range from 0-9. A score of 4 or higher indicates problem gambling.

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 %. However, it 2024 the rate of disordered gamblers dropped to 2.1%. Males reported a rate of 3.0%, females 1.1%, and non-binary 2.8%. It appears that Wood County youth are reporting a significant decrease in 2024 for both gambling activities and in disordered or problem gambling. Disordered gambling in 2024 was measured by the Brief Adolescent Gambling Screen (Stinchfield, et al., 2017), while in prior years it was measured by the NODS-Clip. The decrease in disordered gambling may have resulted from a change in the brief scale used to measure disordered gambling, from an actual decrease in disordered gambling, or from a combination of the two changes.

## 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 and 2024 Youth Surveys 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.

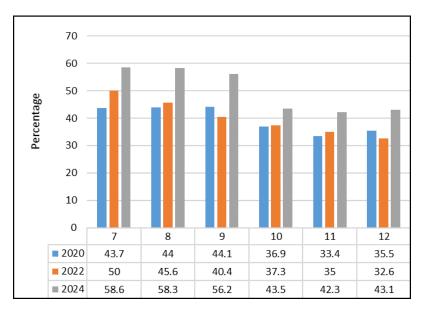


Table 12. 'Daily' Gaming Prevalence Among Youth in Wood County by Grade and Year

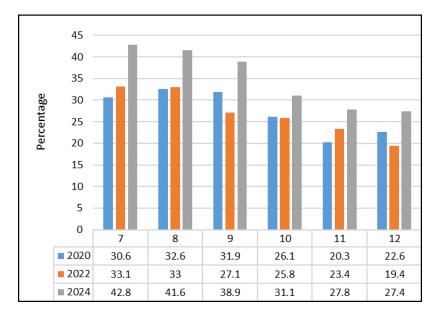
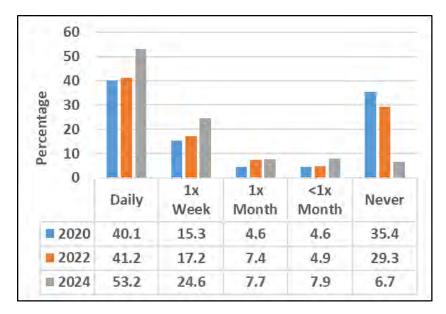


Table 13. 'Daily' Gaming Two or More Hours per Day Among Youth in Wood County – by Grade and Year

Table 14. Gaming Frequency Among Youth in Wood County by grade level, by year.



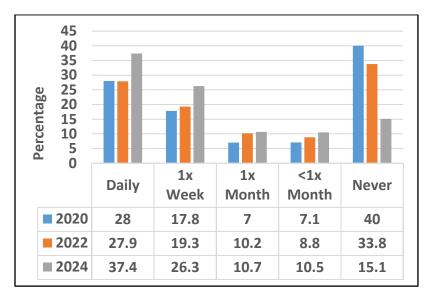
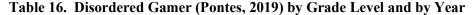
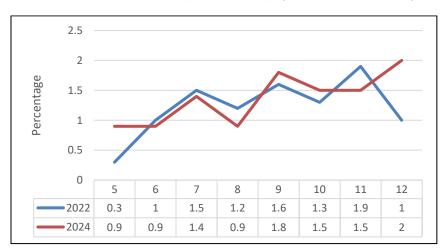


 Table 15. Gaming 2 + hours per day frequency among Wood County Youth

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.





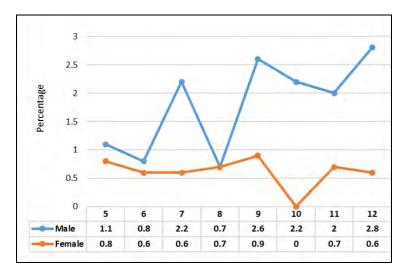


Table 17. Disordered Gamer (Pontes, 2019) by Grade Level and by Gender, 2024

## **"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 question "Have you spent money on loot boxes?"

### RESULTS

Among Wood County youth, the purchasing of mystery boxes (loot boxes) increased dramatically between 2022 and 2024. An additional question about the use of currency within a game also indicates that significant amounts of financial transactions are occurring within the gaming industry.

The Risky Loot Box index (RLI), is a five-item scale designed to examine risky engagement with loot box mechanics (Brooks and Clark, 2019). The scale asks participants to rate their agreement (1, strongly disagree– 7, strongly agree) with a number of items assessing their risky cognitions associated with opening loot boxes (e.g., Once I open a loot box, I often feel compelled to open another). In the 2024 study, internal reliability of this scale was high ( $\alpha = .86$ ). The percentage of Wood County Youth who endorsed they RLI items doubled between 2022 and 2024 for grades between 7 and 12.

	Percenta	ge Buying	Use
	Myster	y Boxes	Currency
Grade in School	2022	2024	2024
7	19	39.8	65.2
8	17	41.2	64.8
9	19	40	63.7
10	19	35.9	55.5
11	19	35.3	50.6
12	17	36.7	47.1

#### Table 18. Purchasing Mystery Box or Using In-Game Currency by Grade, by Year

Table 19. Frequency of Mystery Box purchases among Wood County Youth

	buy loot boxes (2022)/mystery box (2024)				
Grades 7-12	Daily	Weekly	Monthly	Few x Year	Never
2022	2.3	1.5	4.1	10.4	81.6
2024	5.4	2.5	7.3	23.2	61.6
Use Currency 24	6.5	3.4	11.4	38.1	40.6

	RLI+ among males	
Grade in School	2022	2024
7	2.2	6.7
8	3.1	6.6
9	2.7	7.1
10	5.1	6.6
11	4.4	7.8
12	3.2	6.4

Table 20. Risky Loot Box Score Positive Among Males

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### APPENDIX

#### ADAMHS Youth Survey 2023-2024

The survey is administered on-line and students will complete the survey using their Chromebook, laptop computer, or whatever electronic devise that is used in their classroom.

Students in grades 5 and 6 will take an abbreviated survey. Students in grades 7 through 12 will take the complete survey.

The on-line survey is constructed in 'blocks' of questions, labelled block 1 through block 12. The matrix below indicates which 'blocks' of questions the students in grades 5 and 6 will see.

Grade/Block	5-6	7-12
1	Х	Х
2	Х	Х
3		Х
4		Х
5	Х	Х
6		Х
7	Х	Х
8		Х
9		Х
10		Х
11	Х	Х
12		Х

As you review the following survey, keep in mind which blocks are seen by students in grades 5 and 6.

#### Introduction

#### Who we are

This survey is sponsored by the Alcohol, Drug Addiction and Mental Health Board of Wood County. We give the survey to all students in grades 5 through 12 in Wood County. We do the survey every 2 years.

#### Purpose

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 use the results to create new programs in the schools and to fund mental health counselors.

#### Benefit to you

We will use the results to create helpful and needed programs and services.

#### This survey is anonymous

This survey is anonymous. 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. Please read each question carefully before marking your answer. Please be truthful and honest with your answers. Feel free to talk with your teacher or school counselor about your experiences with any of these questions.

Turn the pages by clicking the arrow at the bottom of each page.

#### **Default Question Block**

What grade are you in?

0	5	0 8	0	11
0	6	09	0	12

#### **Block 1**

What is your gender?

- O Male
- O Female
- O Non-binary / third gender
- O Prefer not to say

How old are you?

O 9 or younger	<b>O</b> 11	<b>O</b> 13	0 15	0 17
0 10	0 12	<b>O</b> 14	0 16	O 18 or older

How do you describe yourself?

0	White	0	Multicultural	0	Asian
0	Black or African American	0	Middle Eastern	0	Native Hawaiian or Pacific Islander
0	American Indian or Alaska Native	0	Latino	0	Other

# What school district do you attend?

- O Bowling Green O North Baltimore Eastwood Northwood Otsego  $\bigcirc$
- Elmwood
- O Lake

()

Perrysburg Rossford

O Penta Career Center

You attend Penta, but what is your home school district?

0	Anthony Wayne	0	Genoa	0	Northwood	0	Rossford
0	Bowling Green	0	Lake	Ο	Oak Harbor	0	Springfield
0	Eastwood	0	Maumee	Ο	Otsego	0	Swanton
https://wcesc.qualtrics.com/Q/EditSection/Blocks/Ajax/GetSurveyPrintPreview?ContextSurveyID=SV_9sfHnk3Mys20vjg&ContextLibraryID=UR_1gSa 2/1							

O Elmwood

O Perrysburg



# Block 2

During the last 30 days, how frequently have you smoked cigarettes?

- O Not at all
- O Less than one cigarette per day
- O 1 to 5 cigarettes per day
- O 6 or more cigarettes per day

During the **last 30 days**, how frequently have you used smokeless tobacco (pouch, chewing tobacco, dip, etc.)?

- O Not at all
- Once or twice per week
- 3 or more times per week
- O All the time

During the last 30 days, on how many days (if any) have you:

	0 days	1-2 days	3-5 days	6-9 days	10-19 days	20 or more days
vaped nicotine?	0	0	0	0	0	0
vaped marijuana/THC?	0	0	0	0	0	0
vaped just flavoring, without any nicotine or marijuana in it?	0	0	0	0	0	0

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

To help me quit regular cigarettes	Because it looks cool
Because it is more convenient than smoking cigarettes	To have a good time with my friends
To experiment - to see what it's like	Because of boredom, nothing else to do
To relax or relieve tension	Because I am 'hooked' - I have to have it

To feel good or get the buzz

To lose or control my weight

During the last 30 days, have you ever used prescription drugs not prescribed to you?

- O Yes
- O No

During **the past 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 taste - not including religious services)?

- O Never
- O 1-2 times
- O 3-5 times
- O 6-10 times
- O 11+ times

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 taste - not including religious services)?

- O Never
- 1-2 times
- O 3-5 times
- O 6-10 times
- 11+ times

During the past year, on how many occasions have you used marijuana?

- O Never
- O 1-2 times
- O 3-5 times
- 6-10 times
- 11+ times

During the last 30 days, on how many occasions have you used marijuana?

- O Never
- O 1-2 times
- O 3-5 times
- O 6-10 times
- O 11+ times

During the last 30 days, on how many occasions have you:

	Never	1-2 times	3-5 times	6-10 times	11+ times
taken Ritalin, Adderal, Concerta, Focalin, or Vyvance without a doctor's prescription?	0	0	0	0	0
ever huffed or sniffed something in order to get high (ex. whippets)?	0	0	0	0	0
ever used vitra-tabs or viterall (vits, vt's)?	0	0	0	0	0

Do you recall any of your elementary school teachers using a harmonica to get the attention of your class?

- O Yes
- O No

# Block 3

During the past year, on how many occasions have you:

	Never	1-2 times	3-5 times	6-10 times	11+ times
used cocaine (sometimes called 'coke' or 'rock)?	0	0	0	0	0
taken a sleep or anxiety medication (benzos: like Xanax, Ativan, or Klonopin) that was not prescribed to you?	0	0	0	0	0
taken methamphetamine (meth) in order to get high?	0	0	0	0	0
taken training drugs (called steroids, roids, juice) without a doctor telling you to take them?	0	0	0	0	0
drank caffeinated energy drinks (Celsius, Mountain Dew Kickstart, Red Bull, Monster, etc)?	0	0	0	0	0

	Never	1-2 times	3-5 times	6-10 times	11+ times
ever taken cozmazine (coz, maze, ozzy)?	0	0	0	0	0
used CBD type products, like Delta 8 or 9?	0	0	0	0	0

During the past year, on how many occasions have you:

	Never	1-2 times	3-5 times	6-10 times	11+ times
used LSD or synthetic acid (acid, N bomb 2C- E)?	0	0	0	0	0
used heroin (china, white)?	0	0	0	0	0
used K2 or K2-like products (spice) to get high?	0	0	0	0	0
used MDMA (molly, ecstasy, E)?	0	0	0	0	0
taken a narcotic painkiller/opioid (oxycontin, vicodin, fentanyl, or percocet) without a prescription?	0	0	0	0	0
ever taken cough medicine when you weren't sick (lean, purple drank, Robitussin, Coricidin, Mucinex, etc.)?	0	0	0	0	0
bought products at a gas station, carry-out, or vape shop to get buzzed or high?	0	0	0	0	0

During the **last 30 days**, on how many occasions taken a narcotic painkiller/opioid (oxycontin, vicodin, fentanyl, or percocet) without a prescription?

- O Never
- 1-2 times
- O 3-5 times
- 6-10 times
- 11+ times

Have you ever bough vapes, carts, marijuana, or other substances via social media (snapchat, etc.)?

- O Yes
- O No

#### **Block 4**

# During the past year:

	Yes	No
have you seriously thought about killing yourself?	0	0
have you attempted suicide?	0	0
did you ever feel so sad or hopeless almost every day for 2 weeks or more in a row that you stopped doing some usual activities?	0	0
did you use your phone to text or talk while driving?	0	0
have you ever driven a car, truck or motor vehicle after you drank alcohol or used marijuana?	0	0
have you ever been a passenger in a car, truck or motor vehicle when you know the driver just drank alcohol or used marijuana?	0	0
have you ever missed school, been tardy, or cut classes because of your alcohol or other drug use?	0	0
did you ever use alcohol, marijuana, or other drugs while in school?	0	0
have you ever used marijuana as an edible (gummies, brownie, candy, etc.)?	0	0
my parents, or other family members, provided alcohol to me and my friends for parties (homecoming, prom, graduation, etc.)	0	0

# **Block 5**

How much do you think people risk harming themselves physically or in other ways if they:

	No Risk	Slight Risk	Moderate Risk	Great Risk
have 5 or more drinks of an alcoholic beverage once or twice a week?	0	0	0	0
smoke one or more packs of cigarettes per day?	0	0	0	0
smoke marijuana once or twice a week?	0	0	0	0
use prescription drugs that are not prescribed to them?	0	0	0	0
gamble or make bets for money?	0	0	0	0
How wrong do <b>your friends</b> feel it would be for you to:				
	Not at all wrong	A little bit wrong	Wrong	Very Wrong
have one or two drinks of an alcoholic beverage nearly every day?	0	0	0	0

	Not at all wrong	A little bit wrong	Wrong	Very Wrong
smoke tobacco?	0	0	0	0
smoke marijuana?	0	0	0	0
use prescription drugs that are not prescribed to you?	0	0	0	0
gamble or make bets for money?	0	0	0	0

How wrong do your parents feel it would be for you to:

	Not at all wrong	A little bit wrong	Wrong	Very Wrong
have one or two drinks of an alcoholic beverage nearly every day?	0	0	0	0
smoke tobacco?	0	0	0	0
smoke marijuana?	0	0	0	0
use prescription drugs that are not prescribed to you?	0	0	0	0
gamble or make bets for money?	0	0	0	0

Bullying is 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 happens in 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)

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
Physically bullied	0	0	0	0	0
Verbally bullied	0	0	0	0	0
Cyber bullied	0	0	0	0	0
Indirectly bullied	0	0	0	0	0

# Block 6

9/18/23, 12:44 PM

While you were growing up, during your lifetime:

Don't

	Yes	No	know
did you live with anyone who was depressed, mentally ill, or attempted suicide?	0	0	0
did you live with anyone who was a problem drinker or alcoholic or used street drugs?	0	0	0
did you live with anyone who went to jail or prison?	0	0	0
were your parents separated or divorced?	0	0	0
did your parents or adults in your home ever hit, punch, beat, or threaten to harm each other?	0	0	0
did your parents or adults in your home often or very often hit, beat, kick, or physically hurt you in any way?	0	0	0
did a parent or adult in your home often or very often swear at you, insult you, or put you down?	0	0	0
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?	0	0	0
did you often or very often feel that you didn't have enough to eat, had to wear dirty clothes and had no one to protect you?	0	0	0
did you often or very often feel that no one in your family loved you or thought you were important or special?	0	0	0

#### **Block 7**

The next few question are about your online gaming activities (games like Fortnite, Roblox, Terraria, Super Smash Bros., Rocket League, League of Legends, etc). If you don't play online games, you can skip these questions.

How often have you done the following gaming activities?

	Daily	Weekly	Monthly	Few times per year	Never
Played games on my computer/laptop, table, gaming console or phone	0	0	0	0	0
Spent at least 2 hours per day playing games online or offline	0	0	0	0	0
Spent money to get a mystery box in a game	0	0	0	0	0
Spent money on coins (apex or jewels, etc.)	0	0	0	0	0
Bought more mystery boxes after failing to get valuable items	0	0	0	0	0

	Daily	Weekly	Monthly	Few times per year	Never
Played games longer than I intend to so I can earn mystery boxes	0	0	0	0	0
The thrill of opening mystery boxes encouraged me to buy more	0	0	0	0	0

## Block 11

During the **last year**, how frequently would you say:

	Never	Rarely	Sometimes	Often	Very Often
I have had difficulties controlling my gaming activity	0	0	0	0	0
I have given increasing priority to gaming over other life interests and daily activities	0	0	0	0	0
I have continued gaming despite the occurrence of negative consequences	0	0	0	0	0
I have experienced significant problems in life (friends, family schol) as a result of the severity of my gaming.	0	0	0	0	0

## Block 8

How often have you done the following gambling activities?

Bet money on esports	Daily	Weekly	Monthly	Few times per year	Never
Det money on espons	U	0	U	U	U
Bet money on fantasy sports or games with an entry fee to play	0	0	0	0	0
Bet money on daily fantasy sports (FanDuel, DraftKings, etc.)	0	0	0	0	0
Bought lottery tickets (mega millions, powerball, etc)	0	0	0	0	0
Bought scratch offs	0	0	0	0	0
Played cards for money	0	0	0	0	0
Bet money on sports teams (pro, college, or amateur)	0	0	0	0	0

Bet money on games of personal skill, like golf, pool, bowling, etc.



# Block 9

Legalized sports betting was approved in Ohio in January, 2023. Since then has your sports gambling:

- O Increased
- O Stayed the same
- O Decreased

How frequently do you see sports betting advertised?

- O Never
- O Monthly
- O Weekly
- O Daily
- O All the time

Have you downloaded any sports betting apps?

- O No
- O Yes

Have you had anyone 21 years of age or older (family or friend) place a sports bet for you?

- O No
- O Yes

# Block 10

How often have you skipped hanging out with friends who do not gamble/bet to hang out with friends who do gamble/bet?

9/18/23, 12:44 PM

- O Never
- Not in the past 12 months
- O Sometimes
- O Many times
- O All the time

How often have you felt that you might have a problem with gambling/betting?

- O Never
- O Not in the past 12 months
- O Sometimes
- O Many times
- O All the time

How often have you hidden your gambling/betting from your parents, other family members, or teachers?

- O Never
- Not in the past 12 months
- O Sometimes
- Many times
- O All the time

### Block 12

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
Arguing with others	0	0	0	0	0	0
Getting into fights	0	0	0	0	0	0
Yelling, swearing, or screaming at others	0	0	0	0	0	0
Fits of anger	0	0	0	0	0	0

	Not at all	Once or twice	Several times	Often	Most of the time	All of the time
Refusing to do things teacher or parents ask	0	0	0	0	0	0
Causing trouble for no reason	0	0	0	0	0	0
Using drugs or alcohol	0	0	0	0	0	0
Breaking rules or breaking the law (out past curfew, stealing)	0	0	0	0	0	0
Skipping school or classes	0	0	0	0	0	0
Lying	0	0	0	0	0	0

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
Can't seem to sit still, have too much energy	0	0	0	0	0	0
Hurt myself (cutting or scratching myself, taking pills)	0	0	0	0	0	0
Talking or thinking about death	0	0	0	0	0	0
Feeling worthless or useless	0	0	0	0	0	0
Feeling lonely and having no friends	0	0	0	0	0	0
Feeling anxious or fearful	0	0	0	0	0	0
Worrying that something bad is going to happen	0	0	0	0	0	0
Feeling sad or depressed	0	0	0	0	0	0
Nightmares	0	0	0	0	0	0
Eating problems	0	0	0	0	0	0

This survey is completely anonymous. Your answers cannot be used to identify you. Please be truthful and honest with your answers.

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# Celebrating 20 Years of Prevention Education

Substance/12 <sup>th</sup> Grade	2004 Rate	2024 Rate	% Decrease
Alcohol	70.5	30.2	- 43
Marijuana	35.5	14.8	- 42
Cigarettes (30 day)	27.2	1.6	- 93
Cigs / Nicotine Vape	27.2	8.1	- 70
Painkillers	22.6	1.0	- 96
Cocaine	6.6	0.6	- 91
Barbiturates	12.1	1.5	- 88
Methylphenidate	10.4	0.7	- 93
Ecstasy/MDMA	3.5	0.2	- 94
Inhalants	3.8	0.3	- 92
LSD	5.6	0.9	- 84

But NIDA & NIH notes reported a dramatic rise in overdose deaths from 2019 to 2022. Taken together, these data suggest that while drug use is becoming less common among teens, it is becoming more dangerous.

51.0%	Caffeinated Energy	
14.8%	Alcohol	
6.9%	Vaping (30-day)	
6.9%	Marijuana	
2.8%	Cough Medicine	
2.5%	Benzos	
1.2%	Painkillers (30-day)	
<1%	Methylphenidrate	
<1%	Inhalants	
<1%	LSD	
<1%	Cigarettes	
<1%	All Other Drugs	

Mr. B. Cool says that 94% of youth in grades 5-12 have been drugfree in the past 30 days. THAT is COOL!





Alcohol, Drug Addiction and Mental Health Services Board Bowling Green, Wood County, OH