Biennial Report of

The Wood County Youth Survey

2018

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

Featuring

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

William J. Ivoska, Ph.D.

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Acknowledgements

The Wood County Alcohol, Drug Addiction, and Mental Health Services Board (ADAMHS) Youth Survey reflects twelve 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 without who, this report would not be possible.

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

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YOUTH SURVEY RESULTS

WOOD COUNTY, 2018

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. Finally, in 2018 ten questions from the Adolescent Childhood Experience (ACEs) study were added.

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 November and December 2017, 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.

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

The following results of the 2018 survey are based on the approximate population of all students in grades 5 through 12 (n=8,526 useable surveys). Surveys were distributed to all fifth through twelfth grade public school students in Wood County during November and December, 2017. The results do not include Penta Career Center so that local results can be compared to national results (national studies do not include career centers). Results of this year's findings are summarized below.

Nicotine. Wood County continued to show decreases in 30-day cigarette use with only 4.4 percent of seniors reporting use (down from 6.1 percent of seniors reporting use in 2016). The use of smokeless tobacco remained at 2.8 percent among 11th graders and dropped to 2.3 percent among 12th graders. Electronic cigarette (vaping) use is emerging among Wood County youth with rates ranging from 9.4 percent among 9th graders to 17.2 percent among 12th graders (up from 14 percent in 2016). It appears that the use of electronic cigarettes may be replacing cigarette use. Among teens who vape, the use of flavored oils is preferred over nicotine (in grades 8 and 10), with THC a distant third. Seniors report vaping nicotine (56%) over vaping flavored oils (45%) and THC (9%).

Alcohol. Annual and monthly alcohol use has declined very dramatically since 2008; faster than the national rate of decline. This decline has continued and 38 percent of seniors report annual use (down from 46 % in 2016). Binge drinking also declined across all grades with seniors declining to 14.1 percent, down from 17.2 percent in 2016. Teen attitudes towards alcohol use continue to show peer disapproval of use and a perceived great risk of harm from use.

Marijuana. In Wood County, both annual and monthly rates held steady with some grades reporting minor increases and some minor decreases. Approximately 21 percent of 12th graders reported annual use (22.4% in 2016) and 11 percent reported 30-day use (14.3% in 2016). Peer disapproval and fear of harm are much more liberal than in cigarette and alcohol use. Fear of harm is decreasing with only 23 percent of seniors perceive great risk of harm in marijuana use and only 37 percent perceive strong disapproval from peers. Parents are perceived to remain steadfastly opposed to adolescent marijuana use.

However, marijuana can be used in an electronic cigarette or vaping device, as an edible (in a brownie, candy, etc.), and in concentrated form (wax or dabs). Marijuana use in these forms has been increasing. In the past 30 days among Wood County 12th graders, 9 percent reported using marijuana in an e-cig or vaping device (6.9% in 2016), 7.7 percent reported using marijuana as an edible (9.8% in 2016), and 5.5 percent reported marijuana use in concentrated form (4.1% in 2016). Males were nearly twice as likely to report these non-smoking types of marijuana use as were females.

Inhalants. Prevalence rates remain very low with 8th graders reporting the highest rate of all grades at 2.9 percent. Use among all grades is down.

MDMA/Ecstasy. Prevalence rates are at all-time lows in Wood County with only 2.3 percent of seniors reporting use. The Monitoring the Future (December, 2017) also reported significant decreases in grades 8, 10 and 12.

Stimulants. The misuse of Ritalin®, Concerta® and amphetamine preparations like Adderall declined in all grades and are at the lowest levels ever reported in Wood County.

LSD. Among 11 and 12th graders, LSD in Wood County increased slightly from 2016. In 2016, rates are 2.7 percent among 11th graders (down from 3.3 percent in 2016) and 3.3 percent among 12th graders (down from 3.7 percent in 2016). Tenth graders reported an increase from 1.6 to 2.8 percent from 2016 to 2018. All grades combined shows a slight increase.

Narcotic Painkillers. The annual use of narcotic painkillers, as reported by Wood County youth, has continued to decline in nearly all grade levels since 2004 with 2018 levels reaching historic lows. Monthly use of narcotic painkillers are lower than previous years.

Cocaine. Cocaine prevalence is at the lowest levels seen in Wood County, with only 2.4 percent of seniors reporting annual use.

Cough Medicine. Among all teens, the rates of cough and cold medicine among Wood County 7 through 12th graders are down over 2016. However, slight increases were reported in grades 10 and 11.

Caffeinated Energy Drinks. Energy drink prevalence increased across all grades since 2016. Prevalence among 12th graders is 38 percent (34.1% in 2016).

Heroin. The rates of heroin use, among Wood County youth, are less than one percent between grades 7 and 9; 0 percent among 10th graders; .1 percent among 11th graders; and .8 among 12th graders. A total of 16 school aged youth in Wood County reported having tried heroin at least once in the 2018 survey

Sleep and Anxiety Medications. The use of barbiturates and benzodiazepine declined in grades 10 through 12th, but increase in grades 7, 8 and 9. Rates remain low.

The Botvin LifeSkills Training program. By June, 2015, approximately 25,033 Wood County students received LifeSkills Training. Due to the comprehensive saturation of training, there are no comparison groups for analysis. In the past, those teens who received school-based LifeSkills Training, or other research-based prevention training programs reported lower rates of substance use among a broad range of substances.

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

- 7.8% of Wood County youth report significant mental health problems, a decrease of 1.1 percent over 2016's rate of 8.7 percent
- 15.3% of Wood County youth report "moderate" mental health problems, an increase of about 1 percent over 2016.
- Youth who report more mental health problems are more likely to engage in substance use across a broad variety of substances.
- Youth who report significant mental health problems are much more likely to think about suicide or attempt suicide.
- 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 were reported no mental health problem

Bullying. Bullying increased for the first time since 2012 when declines began. Verbal and cyber bulling increased in almost all grades, while indirect bullying increased in most grades and physical bullying was mixed. Verbal and cyber bullying, while increasing, remain lower than their highest levels in 2012.

- Victims of bullying are more likely to report substance use.
- The frequency of bullying seems to be related to substance use and to mental health problems, especially in Junior High.
- Victims of bullying are more likely to report moderate, severe, or intense mental health issues than non-victims.
- Victims of bullying are more likely to think about or attempt suicide.

Adverse Childhood Experiences (ACEs). According to SAMHSA, adverse childhood experiences (ACEs) are stressful or traumatic events, including abuse and neglect and household dysfunction. ACEs are strongly related to the development and prevalence of a wide range of health problems including risky health behaviors, chronic health conditions, low life potential, and early death. Approximately 5,870 Wood County adolescents from grades 7 through 12 completed the ACEs survey in November and December, 2017.

Three of the top five most prevalent ACEs reported by 7 through 12th grade youth in Wood County involved family dysfunction; separation/divorce (34.6%); family mental illness (19.6%); and living with someone who went to jail or prison (17.1%). The remaining two of the top five ACEs involved emotional abuse (19.1%) and emotional neglect (16.8%). The ACEs with the lowest prevalence involved domestic violence (4.4%) and sexual abuse (4.4%).

A very strong relationship was found between the number of ACEs reported and level of emotional problem severity and suicide. The higher the number of ACEs the more likely teens thought about or tried to commit suicide.

Disordered Gambling. The prevalence rate of disordered gambling remained at 3 percent among 7 through 12th graders as measured by the NODS-Clip brief scale. The prevalence of daily and weekly gambling activities reported by teens, however, is generally lower, but varies by type of gambling activity and by gender. For example, 12.8 percent of all youth reportedly bet on sports teams, and 4.5 percent bet on daily fantasy sports games, such as FanDuel and DraftKings. However, those rates jump to 18.4 percent and 6.8 percent respectively among males.

The most prevalent types of gambling activities among Wood County adolescents are betting money on sports: sports teams (pro, college, or amateur), on fantasy sports or games with an

entry fee to play, on daily fantasy sports such as FanDuel or DraftKings, or on betting money on games of personal skill. The second highest level of prevalence occurs in Ohio Lottery games such as purchasing Ohio Lottery tickets or purchasing scratch off tickets. Surprisingly low in prevalence were online gaming activities and betting using a smart phone or mobile device.

STUDY DESIGN AND METHODS

This is a report on the 2018 ADAMHS Board/Wood County Educational Service Center Survey on Alcohol and Other Drug Use among elementary, junior high, and high school adolescents in Wood County, Ohio. It is the eighth biennial report of a series that began in 2004.

The 2018 survey was collected from a total of 10,106 students (7714 among 7 through 12 graders: 2392 among 5th and 6th graders) in grades five through twelve in Wood County in November and December, 2017. Males comprised 51 percent (N=4970) of the population and females comprised 49 percent (N=4778). Grade differences were as follows:

Grade	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
Total	1182	1209	1153	1218	1190	1243	1309	1095

Students were asked to assign themselves to one of eight racial/ethnic groups. Students described themselves as White (82.7%), Black or African American (2.8%), Latino (4.8%), Multicultural (3.5%), Asian (2.0%) or other (4.1% - combines choice of Pacific Islander, Middle Eastern, Native American, and Other).

Students who reported using a fake drug were excluded from the analysis (n=91). Students who reported using all drugs at all times in the maximum amounts were excluded from the survey (n=14). Those students who provided responses to items that were inconsistent (for example, a student may have reported to have used a substance during the past month, but not during the past year) were also excluded from the analysis (n=49). Students who reported participating in all gambling activities on a daily basis were excluded (n=101). Students who did not complete at least 70 percent of the survey were excluded (n=118). Students whose problem severity score equaled 100 (in other words, they reported the maximum severity on each and every question) were deleted (n=35). An additional 38 surveys were not scanned as students misused the scan (drew pictures on scan, made designs, wrote essays, created new categories, etc.). A total of 10,106 surveys were collected and 393 surveys (3.9%) were excluded, leaving 9,713 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 and report using all substances in excess). Finally, Penta Career Center (1,104) data is not included in the overall analysis, reducing the number of surveys in this report to 8,526. Penta is excluded so that survey results will more closely compare to the Monitoring the Future results, where career centers are not included in the analysis.

Substance use indicators were taken from the "Monitoring the Future" study by Johnston, O'Malley and Bachman (The University of Michigan's Institute for Social Research).

Unless otherwise noted, all charts and figures report the "percentage" of respondents. For example, in Figure 1, among 12th graders in 2012, 15.2 percent of 12th graders reported that they smoked cigarettes in the past 30 days.

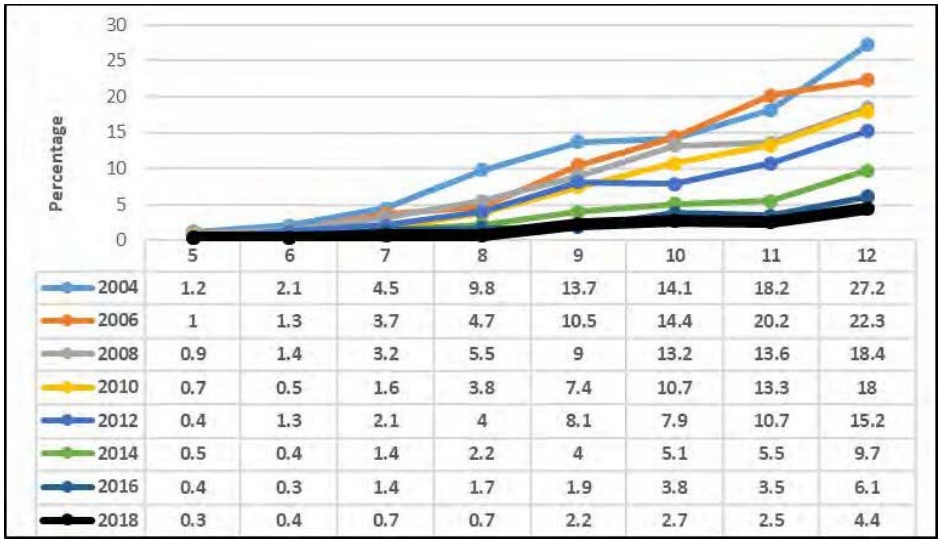
NICOTINE

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. 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.

Results from the 2018 survey reveal that nicotine use continues to decline since data was first collected in 2004. However, the changes in the past six 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 1 percent among 5th and 6th graders to 4.4 percent among 12th graders. Similar declines in use were reported in the December, 2017 release of the University of Michigan's Monitoring the Future (MTF) report. Wood County youth report lower levels of use than all grades in the U of M report, where cigarette use was reported by 1.9 percent of 8th graders, 5.0 percent of 10th graders, and 9.7 percent of 12th graders.

The continued declines in cigarette use may be explained, in part, because fewer young people initiate smoking than in the past. For example, the rate of smoking among Wood County 12th graders has declined by 83.8 percent since 2004. Additionally, the decline in use is attributable to the higher costs of cigarettes, further limitations on where smoking is permitted, strong ant-smoking ad campaigns and easily available quit smoking campaigns.

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



	5	6	7	8	9	10	11	12
2004	1.2	2.1	4.5	9.8	13.7	14.1	18.2	27.2
2006	1	1.3	3.7	4.7	10.5	14.4	20.2	22.3
2008	0.9	1.4	3.2	5.5	9	13.2	13.6	18.4
2010	0.7	0.5	1.6	3.8	7.4	10.7	13.3	18
2012	0.4	1.3	2.1	4	8.1	7.9	10.7	15.2
2014	0.5	0.4	1.4	2.2	4	5.1	5.5	9.7
2016	0.4	0.3	1.4	1.7	1.9	3.8	3.5	6.1
2018	0.3	0.4	0.7	0.7	2.2	2.7	2.5	4.4

"The health implications of these dramatic declines in smoking are enormous for this generation of young people."

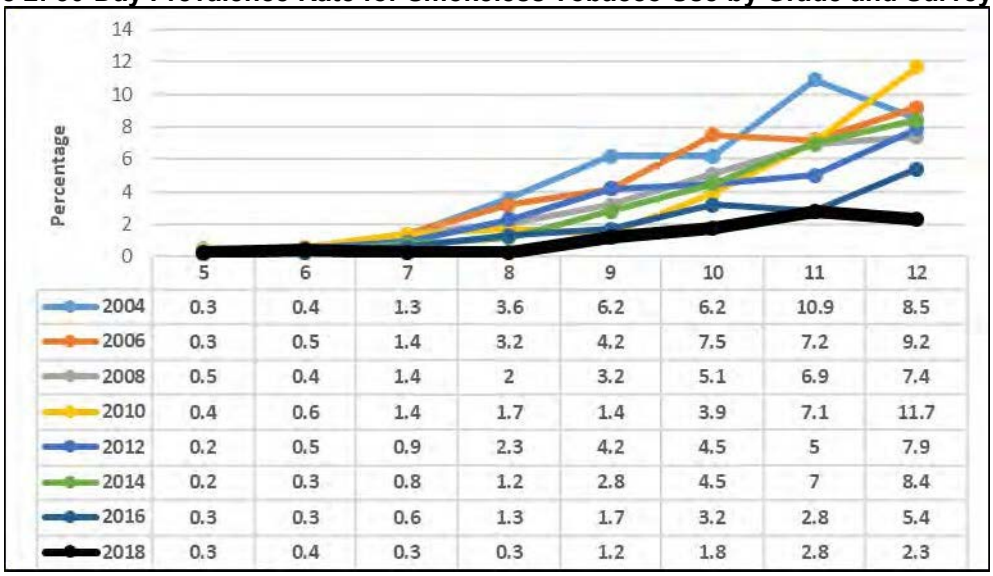
Lloyd Johnson (2017), University of Michigan's Institute for Social Research.

The percentage of cigarette smoking by frequency, by grade is presented below (2018).

		Grade					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Not at all	**2018**	99.3	99.3	97.8	97.3	97.5	95.6
< 1 per day	**2018**	.6	.6	.9	1.7	1.3	3
1-5 per day	**2018**	0	.1	.9	.6	.8	.8
6-10 per day	**2018**	0	0	.1	.3	.1	.5
½ pack day	**2018**	0	0	.2	.1	.1	0
Pack day	**2018**	.1	0	.2	0	.1	.2

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



	5	6	7	8	9	10	11	12
2004	0.3	0.4	1.3	3.6	6.2	6.2	10.9	8.5
2006	0.3	0.5	1.4	3.2	4.2	7.5	7.2	9.2
2008	0.5	0.4	1.4	2	3.2	5.1	6.9	7.4
2010	0.4	0.6	1.4	1.7	1.4	3.9	7.1	11.7
2012	0.2	0.5	0.9	2.3	4.2	4.5	5	7.9
2014	0.2	0.3	0.8	1.2	2.8	4.5	7	8.4
2016	0.3	0.3	0.6	1.3	1.7	3.2	2.8	5.4
2018	0.3	0.4	0.3	0.3	1.2	1.8	2.8	2.3

Figure 3: 30-Day Prevalence Rate for Cigarette Use by Gender, 2018

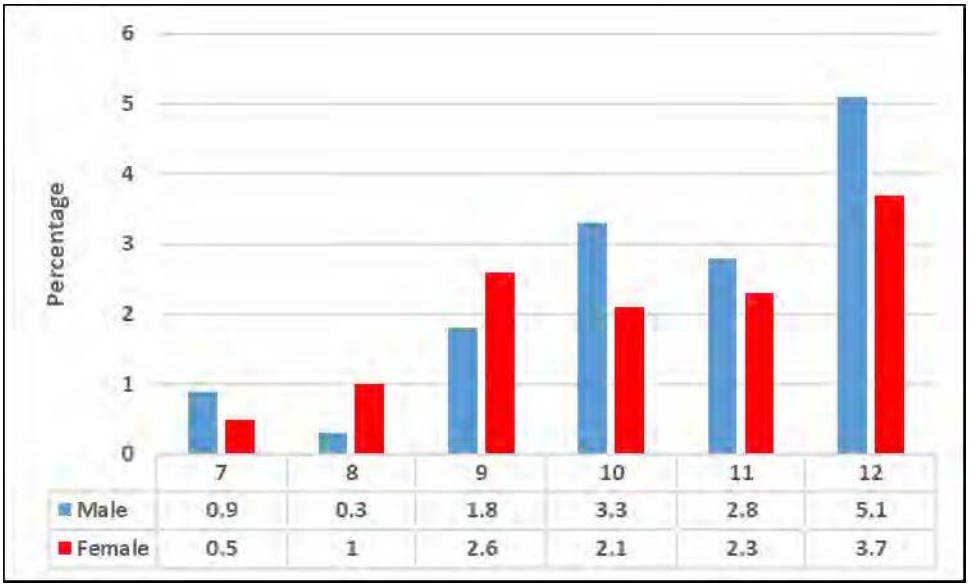
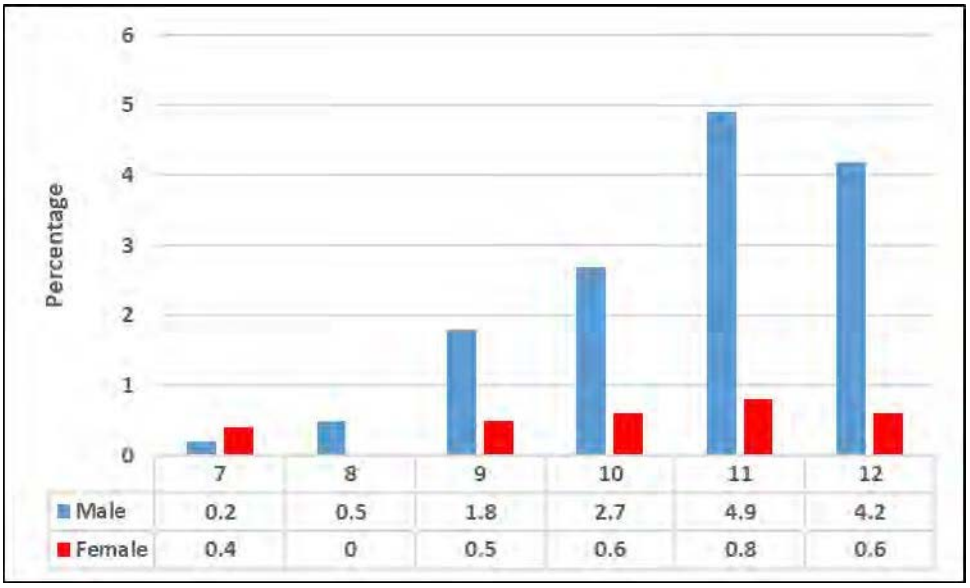


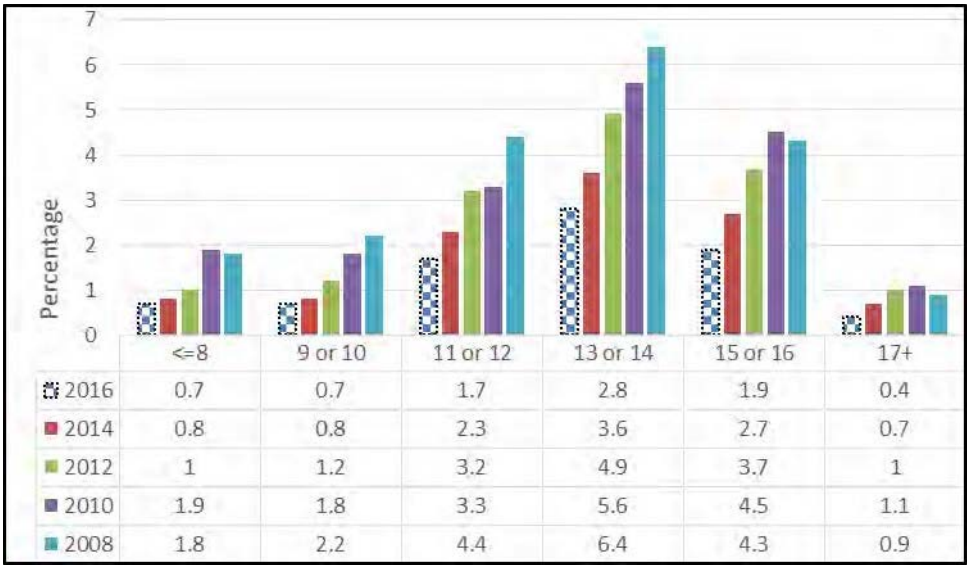
Figure 4: 30-Day Prevalence Rate for Smokeless Tobacco Use by Gender, 2018



The 2018 survey contained questions asking youth when they started using alcohol, e-cigarettes, and marijuana. The following chart shows that fewer youth are initiating cigarettes. It would appear that nicotine initiation is tapers at about age 17. In Wood County the age of first use, as reported in the ADAMHS Youth Survey, has increased 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 2018, the cigarette age-of-onset question was replaced by an e-cigarette use age-of-onset question.

The 2016 data report that fewer youth are smoking, but among those who smoke, the age of initiation increased over the past few years.

Figure 5: Age of Onset for Cigarette Use by Survey Year, 7-12th Graders

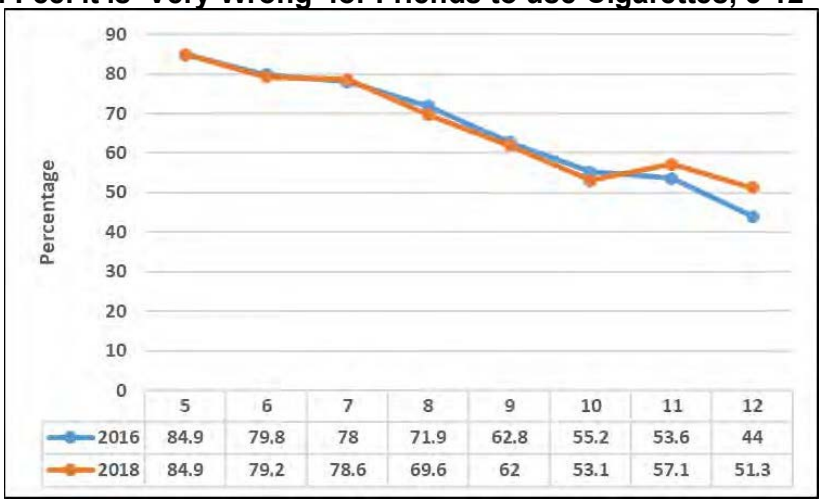


	<=8	9 or 10	11 or 12	13 or 14	15 or 16	17+
2016	0.7	0.7	1.7	2.8	1.9	0.4
2014	0.8	0.8	2.3	3.6	2.7	0.7
2012	1	1.2	3.2	4.9	3.7	1
2010	1.9	1.8	3.3	5.6	4.5	1.1
2008	1.8	2.2	4.4	6.4	4.3	0.9

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.

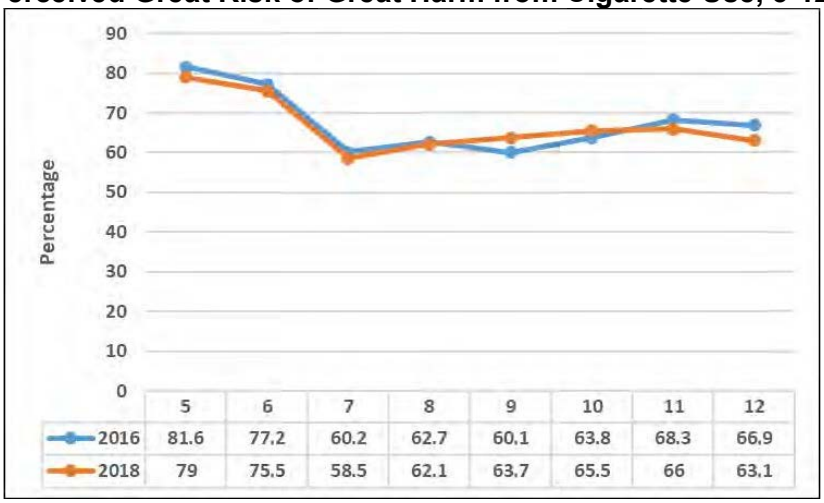
Figure 6: Feel it is 'Very Wrong' for Friends to use Cigarettes, 5-12th Graders



	5	6	7	8	9	10	11	12
2016	84.9	79.8	78	71.9	62.8	55.2	53.6	44
2018	84.9	79.2	78.6	69.6	62	53.1	57.1	51.3

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

Figure 7: Perceived Great Risk of Great Harm from Cigarette Use, 5-12th Graders



	5	6	7	8	9	10	11	12
2016	81.6	77.2	60.2	62.7	60.1	63.8	68.3	66.9
2018	79	75.5	58.5	62.1	63.7	65.5	66	63.1

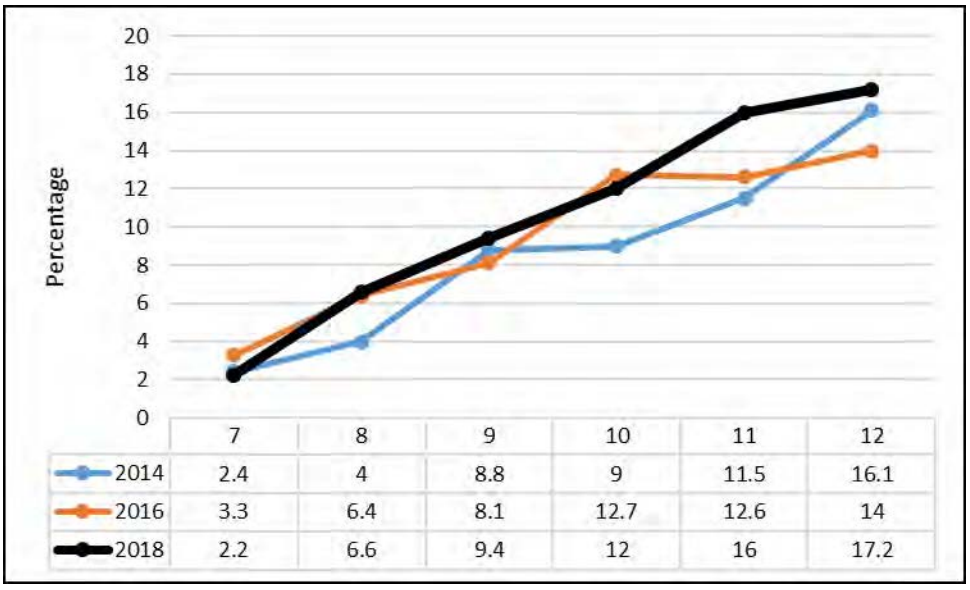
Electronic Cigarettes

Electronic Cigarettes are battery operated devices that look like and some say, mimic the sensation of smoking a cigarette. While electronic cigarettes do not actually burn tobacco, they 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 e-cigs 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 e-cigs are especially concerned with how e-cigarettes will act as a gateway to use of other tobacco products, especially among non-smoking youth and young adults (Dawkins, 2012).

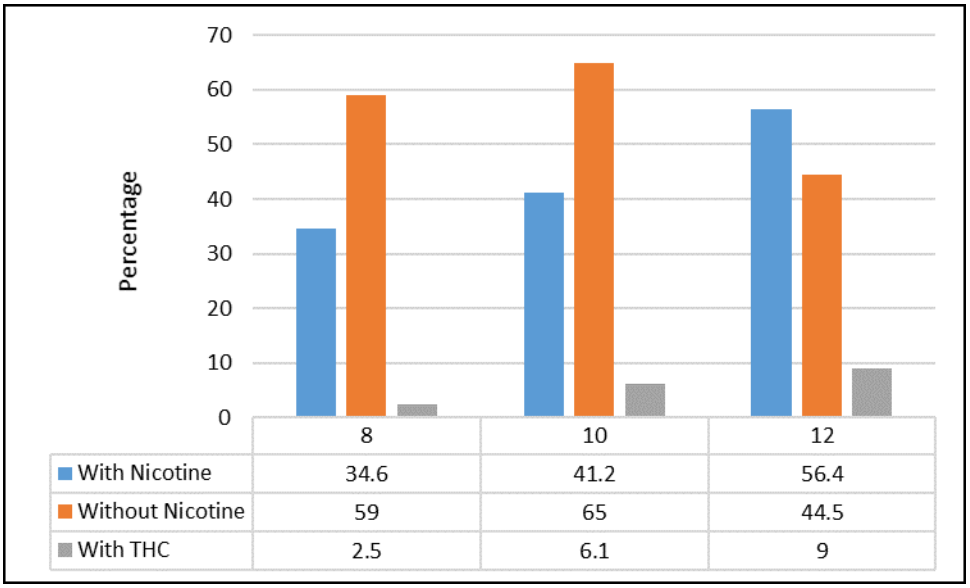
Beginning in 2014. the ADAMHS Youth Surveys included a question of the use of e-cigarettes. We asked "during the past 30 days, on how many occasions have you used e-cigarette (electronic cigarette, e-cig) products?" Respondents could answer 'not at all,' '1 to 5 times,' '6-20 times,' '21-100 times,' or '100+ times.' In the 2018 ADAMHS Youth Survey we asked which type of product was being inhaled. We wanted to know if respondents were inhaling nicotine, food flavorings, vegetable glycerin, or THC. Results of the e-cigarette questions are presented in Figures 8 and 9 below

Figure 8: 30-Day Prevalence Rate for Electronic Cigarettes by Grade Level and Survey Year



	7	8	9	10	11	12
2014	2.4	4	8.8	9	11.5	16.1
2016	3.3	6.4	8.1	12.7	12.6	14
2018	2.2	6.6	9.4	12	16	17.2

Figure 9: E-Liquid Content Among 30-Day E-Cig Users by Grade



	8	10	12
With Nicotine	34.6	41.2	56.4
Without Nicotine	59	65	44.5
With THC	2.5	6.1	9

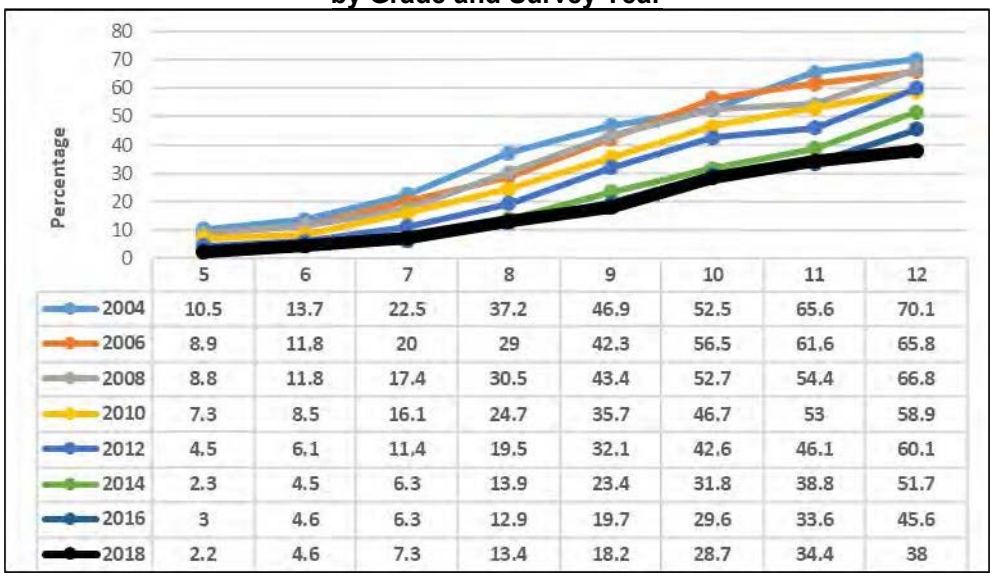
ALCOHOL

In the 2018 survey, alcohol remains the drug of choice for Wood County youth as it has the highest prevalence rate among the drugs surveyed (Figure 10). Students were asked on how many occasions during the past year and during the past month they had alcohol to drink (beer, wine, wine coolers, malt liquor, liquor – more than just a few sips – excluding religious services). Since 2010, annual alcohol use declined in all grade levels. Monthly use of alcohol also shows considerable declines since 2010.

Wood County 8th, 10th, and 12th grade students report annual alcohol rates of 13.4 percent, 28.7 percent, and 38 percent, respectively. The University of Michigan's national study released in December 2017 reported rates of 18.2 percent, 37.7 percent, and 55.7 percent (respectively), placing Wood County youth lower than the national rates for annual alcohol use in these three grades. Annual alcohol use declined in all grades in the national study, as did annual alcohol use in Wood County. However, Wood County's annual rates continued to decline more dramatically than did national rates.

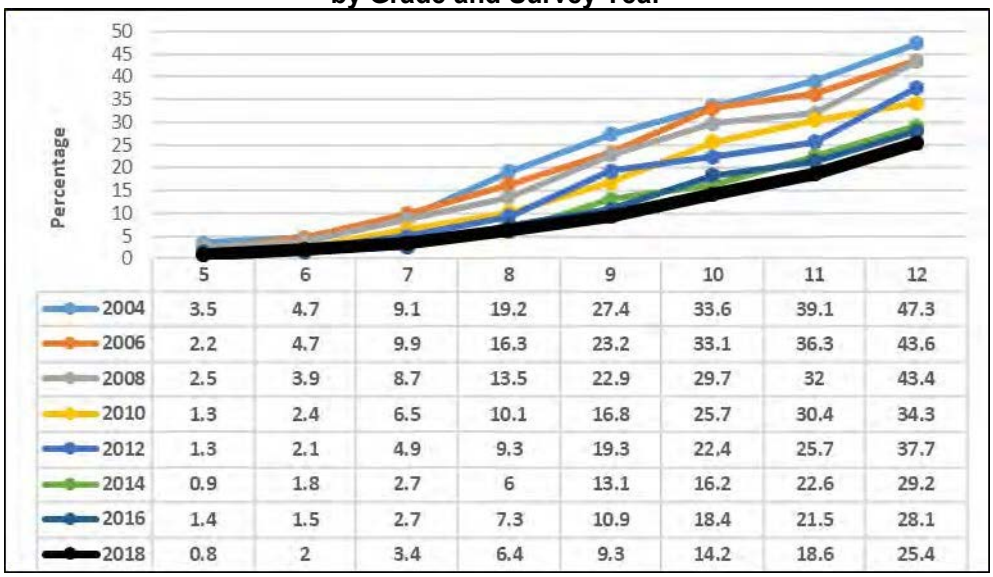
Monthly use was reported by 8th, 10th and 12th grade as 6.4, 14.2, and 25.4 percent, whereas the national study reported the same three grades at 8.0, 19.7, and 33.2 percent (respectively). Wood County youth were lower than the national average for monthly alcohol use in these three grades and again reported declines in 2018 over previous survey years.

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



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

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



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

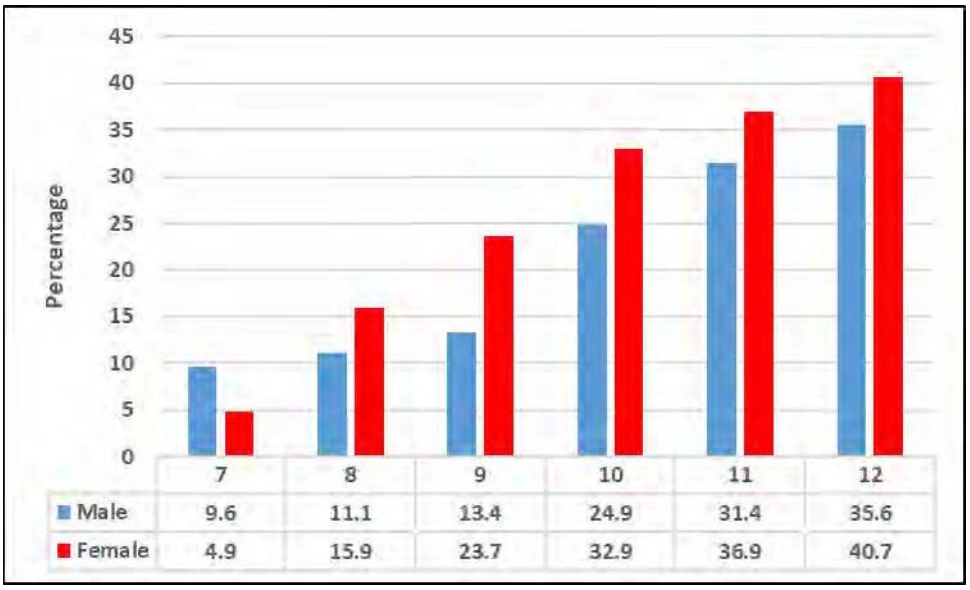
Prevalence rates for alcohol consumption, however, do not tell the whole story. The rates cited above report the proportion of youth who have used alcohol regardless of the amount in the past month or year. Equally important is the proportion of youth who are consuming larger quantities of alcohol on a regular basis. The table below shows a breakdown of how often Wood County adolescents reported consuming alcohol in the past year (2018 data).

		Grade					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2018**	92.7	86.6	81.8	71.3	65.6	62.0
1-2 times	**2018**	5.6	8.7	10	14	14.3	13.1
3-5 times	**2018**	1	2.4	4.5	7.8	8.3	10.3
6-10 times	**2018**	.2	1.3	2.1	2.8	6.1	6.5
11+ times	**2018**	.5	1.0	1.6	4.1	5.7	8.3

"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.

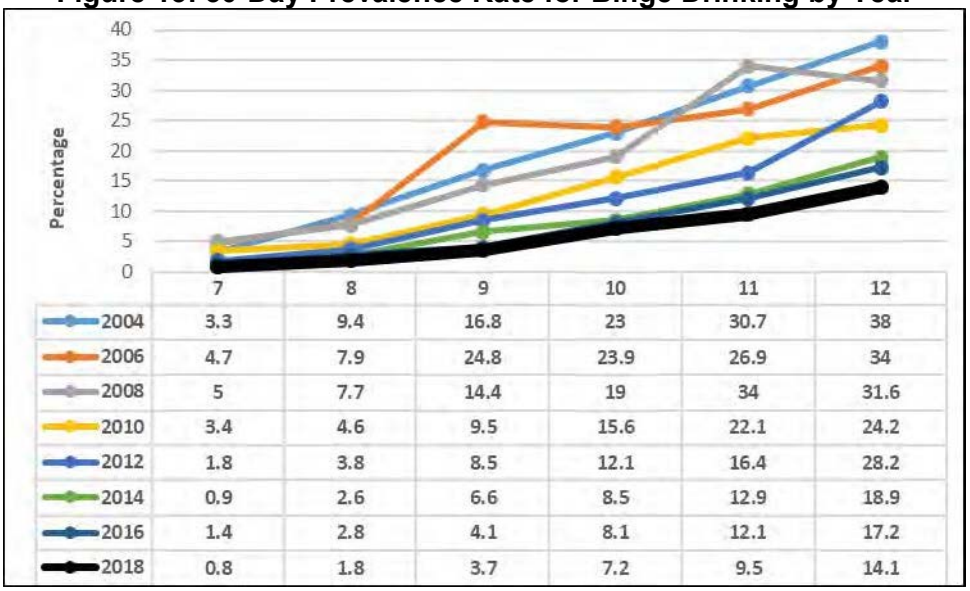
Drinking to get drunk within the past 30 days among Wood County youth was reported as follows: grade 8, 1.8%; grade 10, 7.2%; and, grade 12, 14.1%. National levels of 8th, 10th, and 12th graders, drinking to get drunk within the past month are 2.2%, 8.9%, and 19.2% respectively. Binge drinking prevalence is lower in Wood County than nationally, and national rates are in decline.

Figure 12: Annual Prevalence Rate for Alcohol Use by Gender, 2018



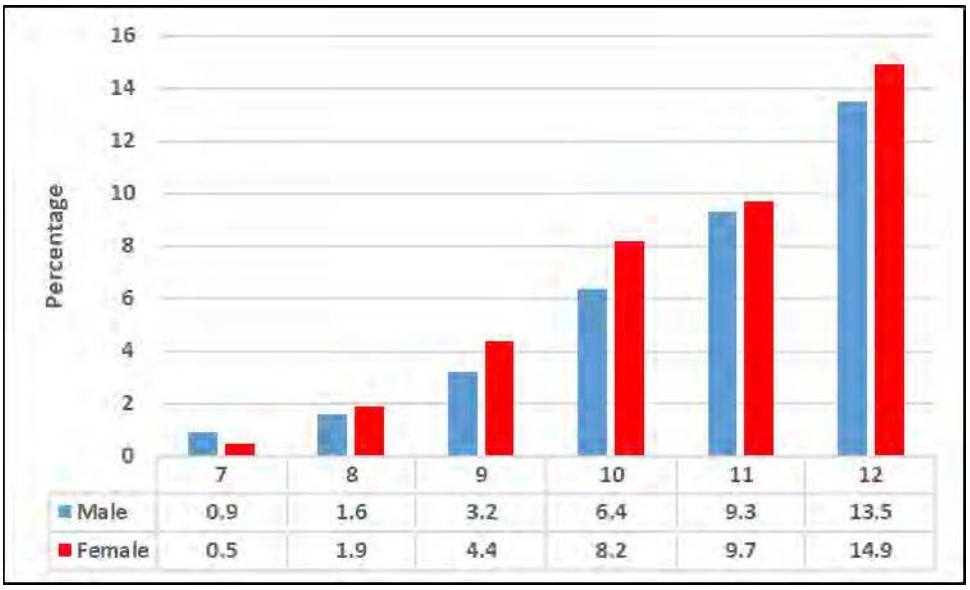
	7	8	9	10	11	12
Male	9.6	11.1	13.4	24.9	31.4	35.6
Female	4.9	15.9	23.7	32.9	36.9	40.7

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



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

Figure 14: 30-Day Prevalence Rate for Binge Drinking by Gender, 2018

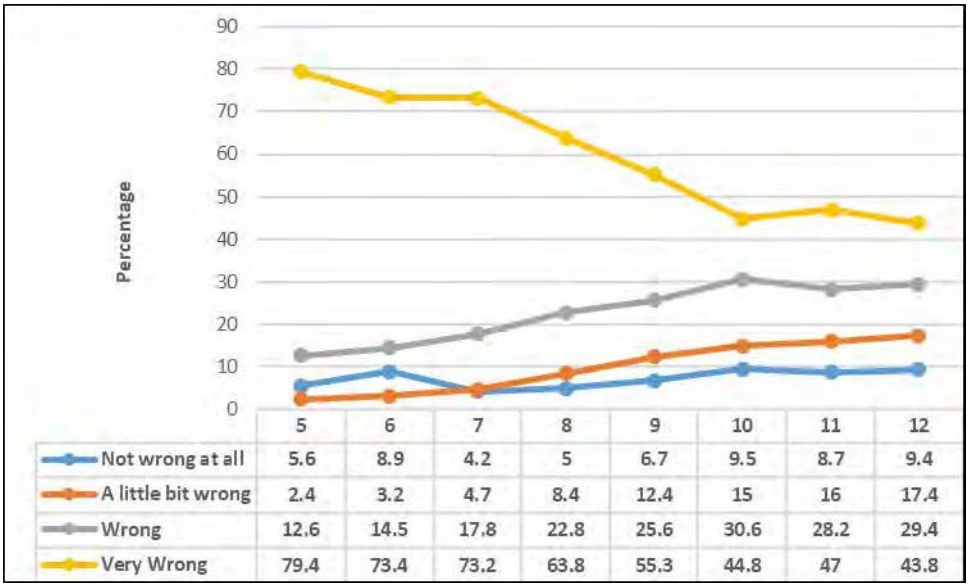


Attitudes Towards Alcohol Use

Similar to the reductions 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 in 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.' Prior years asked youth if they disapproved of their friends or classmates drinking. Since the question and the response options both changed, comparisons to prior years would be invalid. These data are reported in Figures 15 and 16.

Figure 15. Peer Approval of Alcohol Use, 2018.



	5	6	7	8	9	10	11	12
Not wrong at all	5.6	8.9	4.2	5	6.7	9.5	8.7	9.4
A little bit wrong	2.4	3.2	4.7	8.4	12.4	15	16	17.4
Wrong	12.6	14.5	17.8	22.8	25.6	30.6	28.2	29.4
Very Wrong	79.4	73.4	73.2	63.8	55.3	44.8	47	43.8

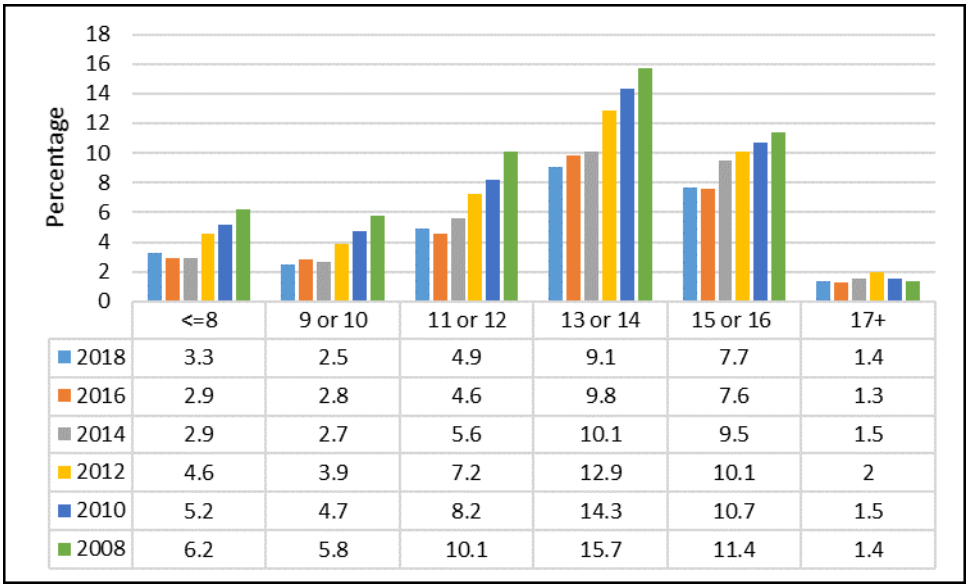
Figure 16: Perception of Great Harm from Binge Drinking Once or Twice per Week, 2016 - 2018

	5	6	7	8	9	10	11	12
2016	57.2	52.6	30.3	31.9	32.4	32.3	36.1	29.8
2018	56.4	51.2	27.7	30.4	29.3	31.3	33.1	32.7

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 2018 data, fewer teens reported alcohol initiation, and those who did initiate, did so at a younger age than in 2014.

Figure 17: Age of Onset of Alcohol by Survey Year



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

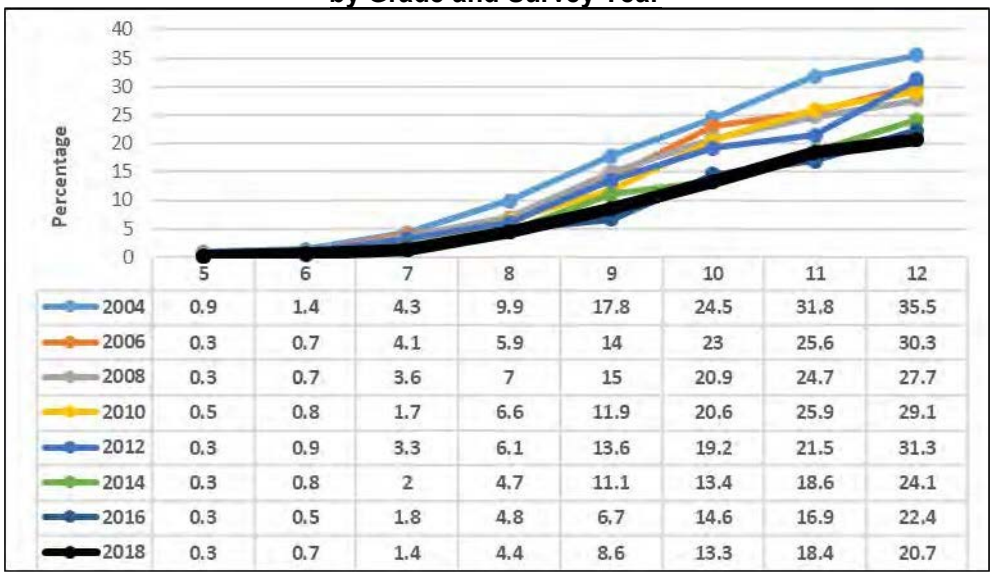
Marijuana is the most widely used of the illicit substances. Its use is relatively minor among elementary and junior high school students, but it becomes increasingly wide-spread among high school aged students. In fact, in 2018 Wood County, use increases from less than one percent in elementary school to 8.6 percent in 9th grade; and nearly triples (20.7%) by 12th grade. The data show that males are slightly more likely to smoke marijuana than females.

In 2009, increases in teen marijuana rates were reported by the two national studies: the University of Michigan and the Partnership for a Drug Free America Studies. U of M reported the reversal of a steady decline in use since its peak in the late 1990's. In Wood County, both annual and monthly rates were generally increasing. However, in 2018 annual monthly use, Wood County youth reported slight increases in grades 6, 9, and 11 and decreases in grades 5, 7, 8, 10, and 12. The 2018 rates are half the rates from 2004, the year the survey began.

In 2018, Wood County 8th, 10th, and 12th grade students report annual marijuana rates of 4.4 percent, 13.3 percent, and 20.7 percent respectively. These rates are declines for grades 8, 10, and 12. The University of Michigan in December 2017, reported annual rates of 10.1 percent, 25.5 percent, and 37.1 percent, respectively (nationally, grades 10, and 12 increased slightly while the Wood County rates declined). Wood County youth report lower annual use than national averages.

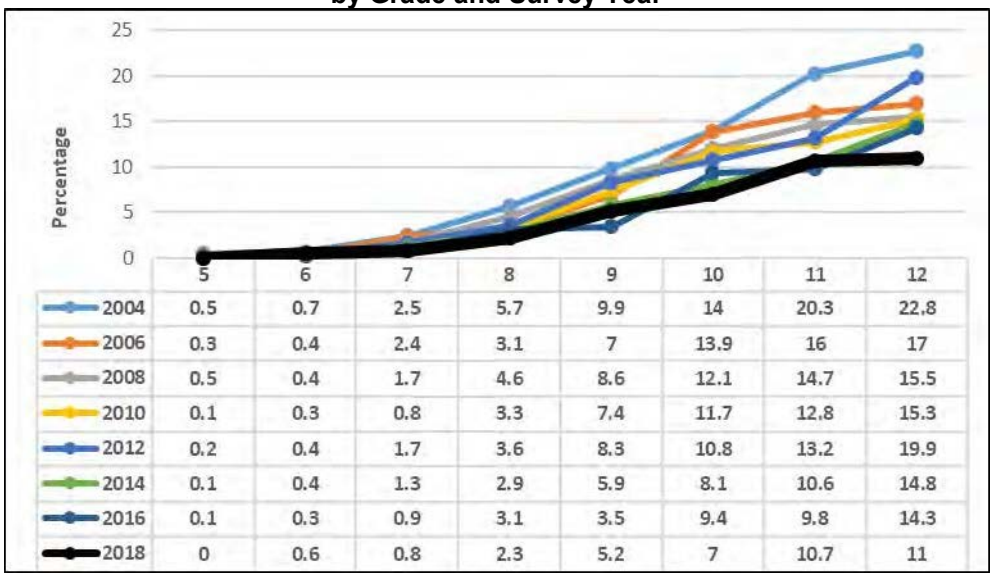
Monthly use was reported by 8th, 10th and 12th grade Wood County teens at 2.3, 7.0, and 11.0 percent, whereas the national study reported the same three grades at 5.5, 15.7, and 22.9 percent, respectively (nationally, grade 10, and 12 increased slightly during the same two year time period where Wood County rates declined). Wood County youth report lower monthly use than national average in all grades.

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



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

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



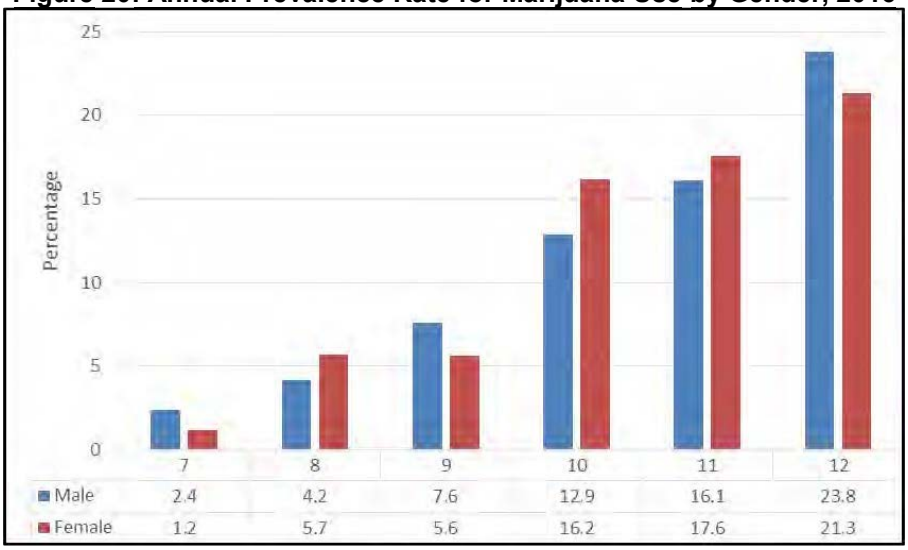
	5	6	7	8	9	10	11	12
2004	0.5	0.7	2.5	5.7	9.9	14	20.3	22.8
2006	0.3	0.4	2.4	3.1	7	13.9	16	17
2008	0.5	0.4	1.7	4.6	8.6	12.1	14.7	15.5
2010	0.1	0.3	0.8	3.3	7.4	11.7	12.8	15.3
2012	0.2	0.4	1.7	3.6	8.3	10.8	13.2	19.9
2014	0.1	0.4	1.3	2.9	5.9	8.1	10.6	14.8
2016	0.1	0.3	0.9	3.1	3.5	9.4	9.8	14.3
2018	0	0.6	0.8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

The table below shows the percentage of Wood County adolescents in 2018 that reported using marijuana in the past year by frequency of reported use and grade level.

		Grade					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2018**	98.6	95.6	91.4	86.7	81.6	79.3
1-2 times	**2018**	.6	2.1	3.1	4.6	5.8	5.7
3-5 times	**2018**	.2	.8	1.7	2.4	3.0	3.5
6-10 times	**2018**	.2	.3	1.2	1.4	2.2	3.1
11+ times	**2018**	.4	1.1	2.5	4.9	7.4	8.5

Decreases in annual and thirty-day marijuana use were reported in 2018 compared to 2016 among Wood County youth in grades 10 and 12 with increases in grade 11. In all previous survey administrations, the sharpest increases in marijuana use typically appeared around grades 8 or 9 and continued to increase through grade 12.

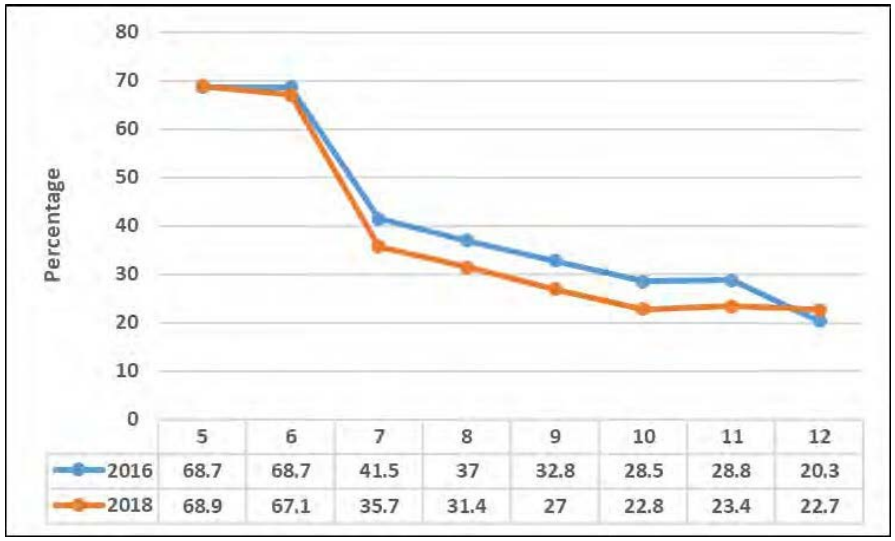
Figure 20: Annual Prevalence Rate for Marijuana Use by Gender, 2016



Attitudes Towards Marijuana Use and Age of Onset

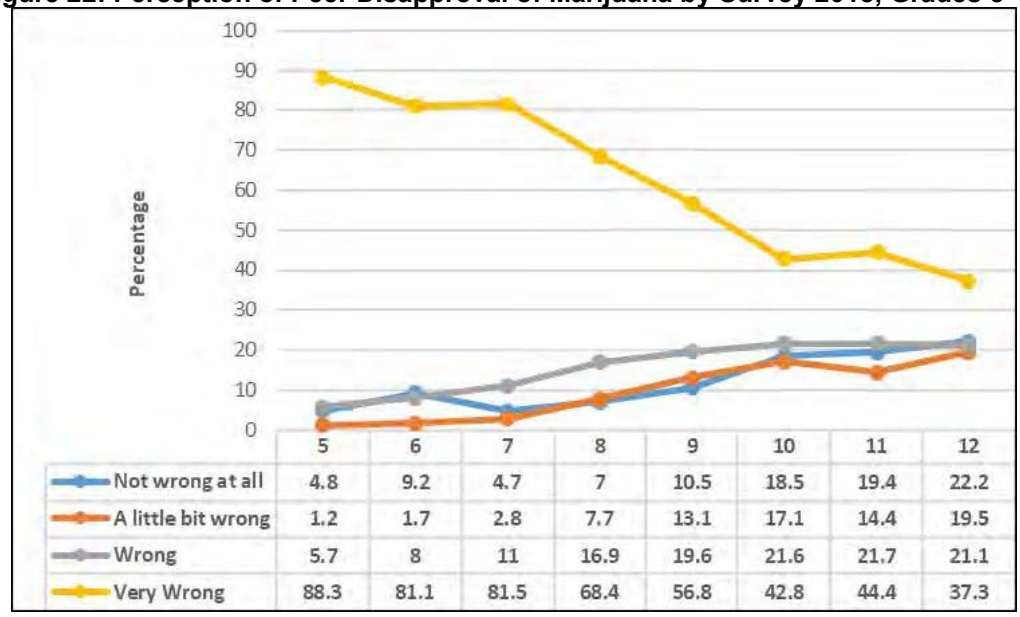
An inverse relationship exists between use of marijuana and peer disapproval of smoking marijuana. That is, as peer disapproval declines, use of marijuana increases. Comparisons to past years cannot be made in 2016 because of a change in federal reporting requirements. A new required question asks 'how wrong do your friends feel it would be for you to smoke marijuana.' Prior years asked youth if they disapproved of their friends or classmates smoking marijuana. Since the question and the response options both changed, comparisons to prior years would be invalid. Comparing 2016 with 2018 for those who perceive a great risk from marijuana use is listed below.

Figure 21: Perception of Great Harm from Marijuana Use 2016-2018



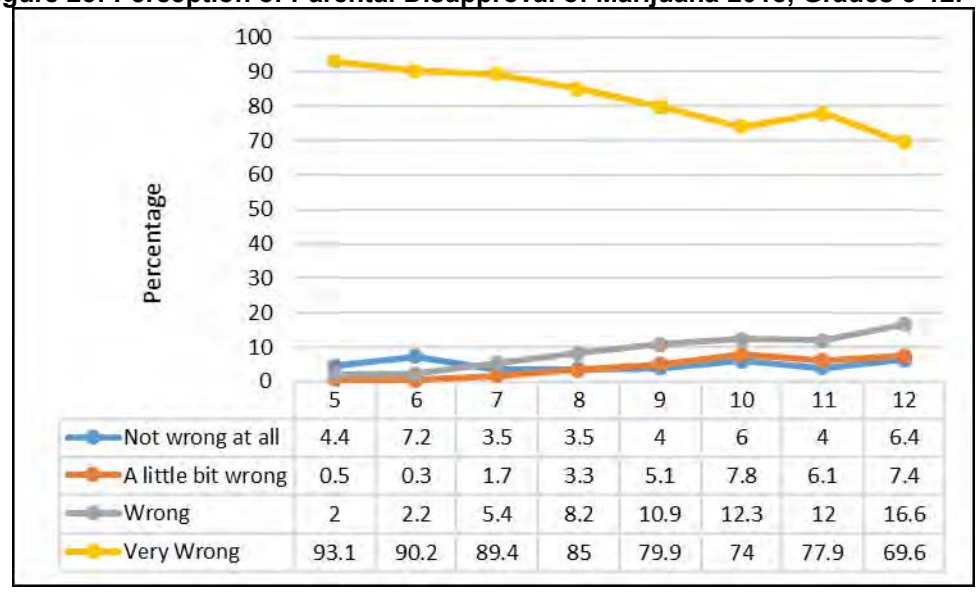
A similar inverse relationship exists between perceived risk of smoking marijuana and marijuana use. That is, marijuana use increases inversely to the perceived risk of harm from use. Again, comparisons to past years cannot be made in 2016 because of a change in federal reporting requirements. The response categories for the 'fear of harm' question changed, invalidating comparisons between 2016 and prior years.

Figure 22: Perception of Peer Disapproval of Marijuana by Survey 2018, Grades 5-12.



	5	6	7	8	9	10	11	12
Not wrong at all	4.8	9.2	4.7	7	10.5	18.5	19.4	22.2
A little bit wrong	1.2	1.7	2.8	7.7	13.1	17.1	14.4	19.5
Wrong	5.7	8	11	16.9	19.6	21.6	21.7	21.1
Very Wrong	88.3	81.1	81.5	68.4	56.8	42.8	44.4	37.3

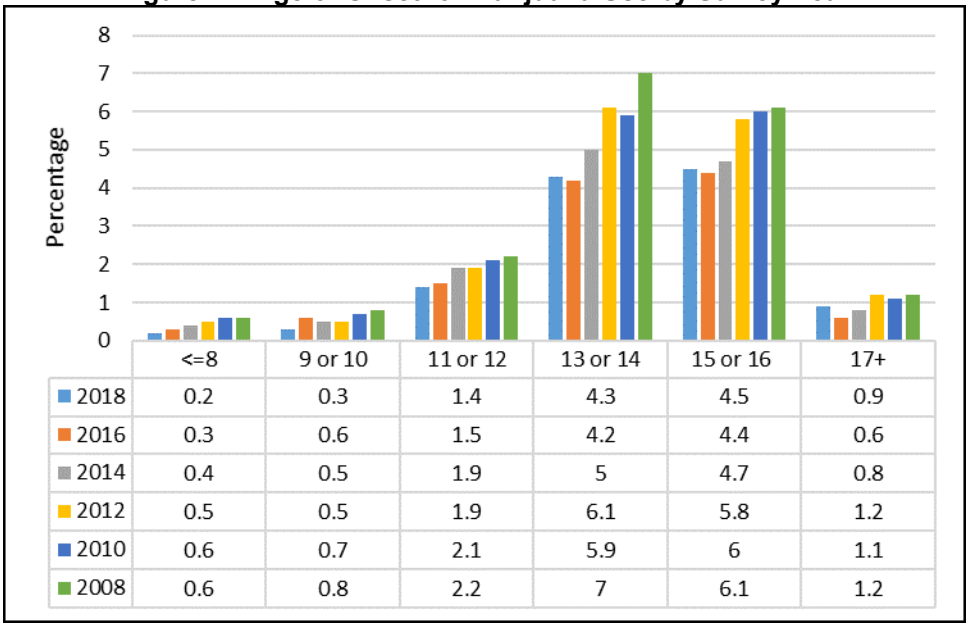
Figure 23: Perception of Parental Disapproval of Marijuana 2018, Grades 5-12.



	5	6	7	8	9	10	11	12
Not wrong at all	4.4	7.2	3.5	3.5	4	6	4	6.4
A little bit wrong	0.5	0.3	1.7	3.3	5.1	7.8	6.1	7.4
Wrong	2	2.2	5.4	8.2	10.9	12.3	12	16.6
Very Wrong	93.1	90.2	89.4	85	79.9	74	77.9	69.6

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

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



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

Edibles, Dabs, and Concentrates

In the 2016 and 2018 surveys, new questions asked about the use of marijuana in e-cig or vaping devices, as an edible (brownie or candy, etc.) and in concentrated forms (wax or dabs). We asked 'During the past 30 days, have you ever used marijuana in the following forms: in an e-cig or vaping device; as an edible (brownie candy, etc.); in concentrated form (wax or dabs)? Results are presented in Tables 1 and 2 below.

Table 1: Prevalence of 30 Day Marijuana use - Non-Smoking, 2016

grade	ecig	edible	wax or dab
7	na	0.8	1.2
8	2.5	2.3	1.9
9	7.3	3.2	2.8
10	6.1	4.2	3.7
11	11.4	7.4	4.9
12	9	7.7	5.5

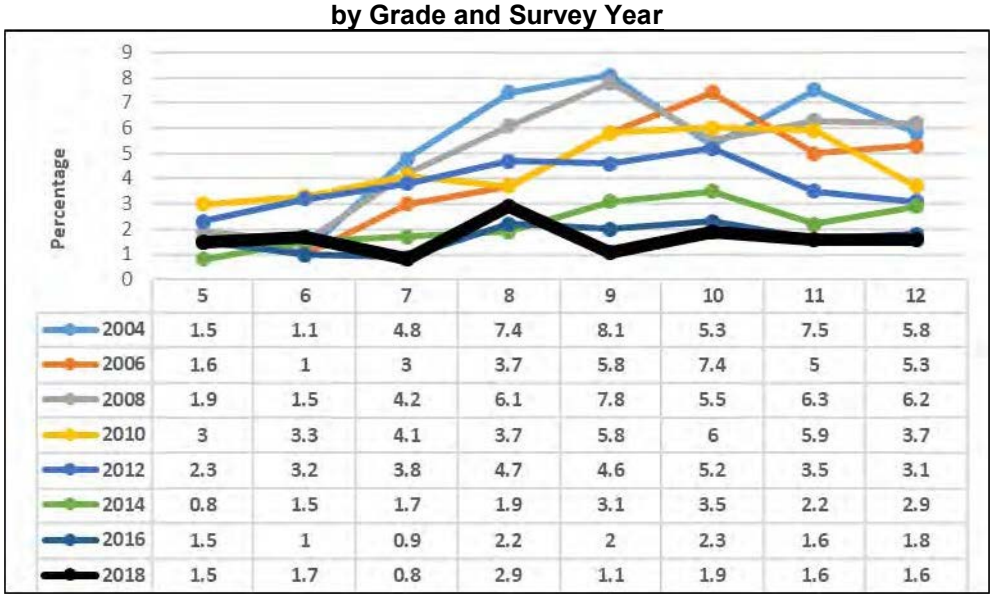
Table 2: Prevalence of 30 Day Marijuana use - Non-Smoking, by Gender, 2016

	Edible		Wax or Dab	
	Male	Female	Male	Female
7	0.9	0.7	1.3	3.2
8	2.1	2.5	1.6	1.1
9	2.5	4	2.7	2.9
10	3.7	4.5	5	2.4
11	7.5	7.2	5.7	4.2
12	8	7.5	4.8	6.2

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 the Figure 25. In the 2018 survey administration, the prevalence of inhalants remains at its lowest levels for nearly all grades.

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

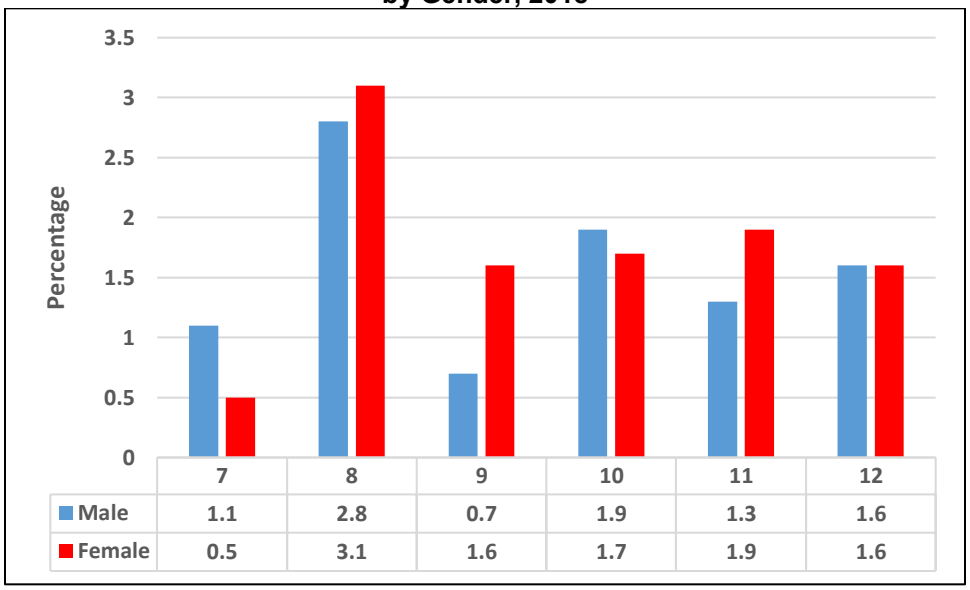


	5	6	7	8	9	10	11	12
2004	1.5	1.1	4.8	7.4	8.1	5.3	7.5	5.8
2006	1.6	1	3	3.7	5.8	7.4	5	5.3
2008	1.9	1.5	4.2	6.1	7.8	5.5	6.3	6.2
2010	3	3.3	4.1	3.7	5.8	6	5.9	3.7
2012	2.3	3.2	3.8	4.7	4.6	5.2	3.5	3.1
2014	0.8	1.5	1.7	1.9	3.1	3.5	2.2	2.9
2016	1.5	1	0.9	2.2	2	2.3	1.6	1.8
2018	1.5	1.7	0.8	2.9	1.1	1.9	1.6	1.6

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 (2018 data).

		Grade					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2018**	99.2	97.1	98.9	98.1	98.4	98.4
1-2 times	**2018**	.5	2.3	.9	1	1	.8
3-5 times	**2018**	.2	.3	.3	.3	.1	.6
6-10 times	**2018**	0	0	0	.4	.2	0
11+ times	**2018**	.2	.3	0	.1	.2	.2

Figure 26: Annual Prevalence Rate for Inhalant Use by Gender, 2018



	7	8	9	10	11	12
Male	1.1	2.8	0.7	1.9	1.3	1.6
Female	0.5	3.1	1.6	1.7	1.9	1.6

Inhalant use had been declining in the nation over the past two years. National rates of annual inhalant use in December 2017 were 4.7 percent among 8th graders, 2.3 percent among 10th graders, and 1.5 percent among 12th graders, all in decline over the past two years. In 2018, Wood County youth reported rates of 2.9 percent among 8th graders, 1.9 percent among 10th graders, and 1.6 percent among 12th grade. Wood County rates are all lower than national averages. Both national data and Wood County data reported declines in inhalant use, except in 8th grade where Wood County reported an increase.

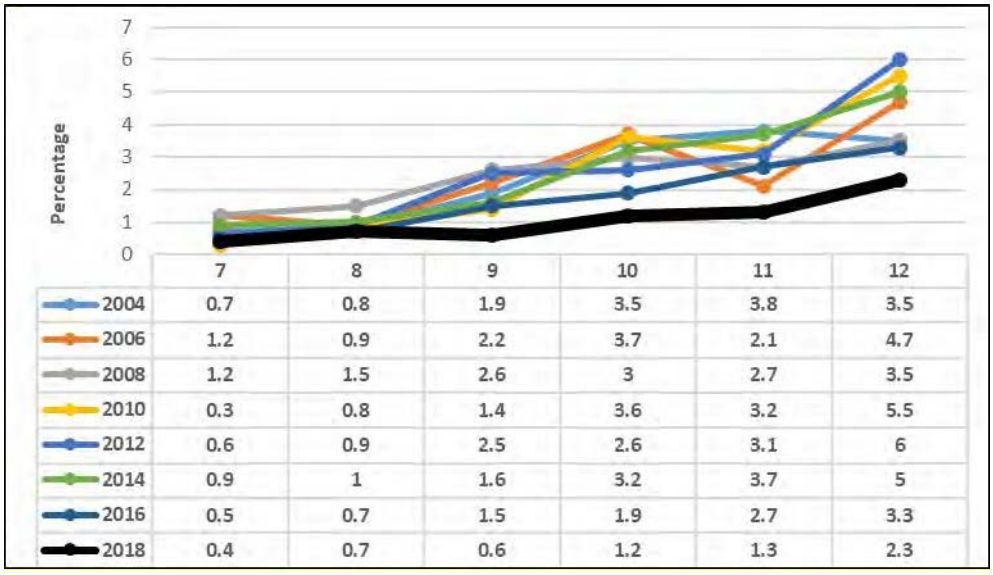
MDMA / ECSTASY

Ecstasy, also known as MDMA (3,4-methylenedioxy methamphetamine), 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 2018, Wood County youth reported decreases in all grade levels. The University of Michigan (December, 2017) also reported decreases in grades 8 (.9%), 10 (1.7%), and 12 (2.6%). Wood County rates for ecstasy use are consistently lower than those reported nationally.

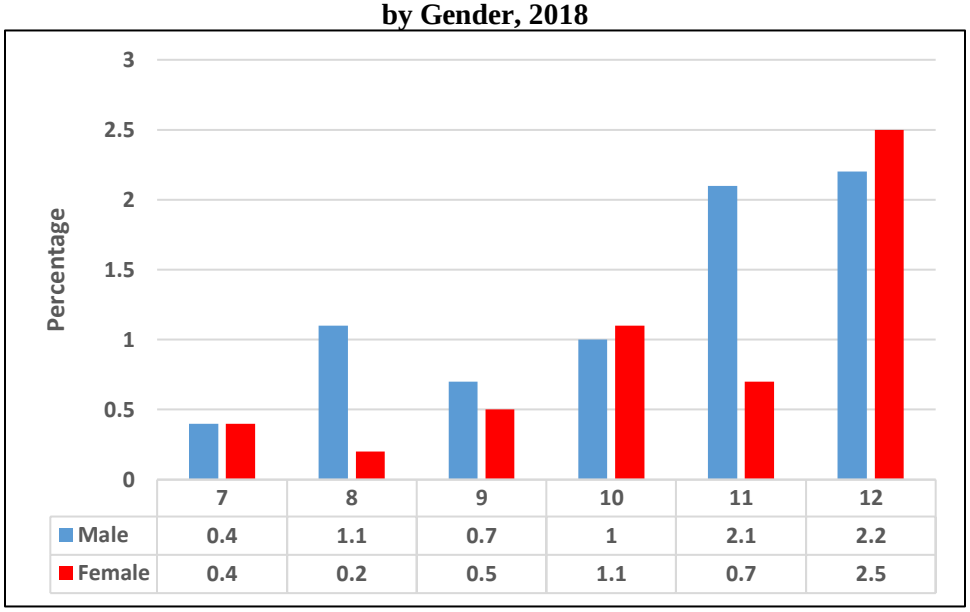
Ecstasy became popular in the late 90's but use plummeted among fears of harmful consequences from use. A rebound in the use of ecstasy could be explained by "generational forgetting," where a new cohort of youth try the drug without the knowledge of harmful consequences that was acquired by their predecessors.

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



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

Figure 28: Annual Prevalence Rate for Ecstasy Use by Gender, 2018



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

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

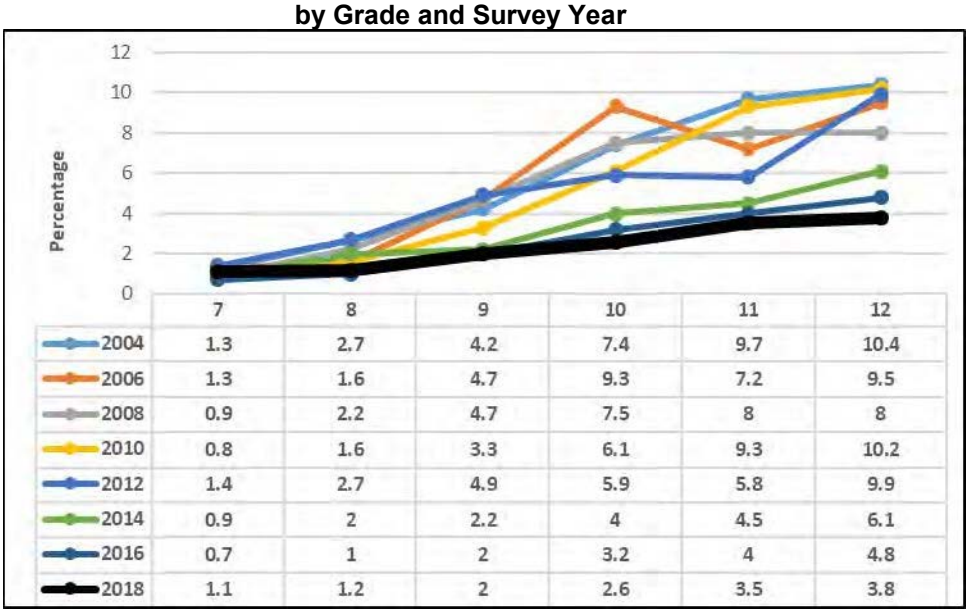
		Grade					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2018**	99.6	99.3	99.4	98.8	98.7	97.7
1-2 times	**2018**	.2	.4	.4	.9	.9	1.1
3-5 times	**2018**	.1	.1	.1	.2	.2	1.3
6-10 times	**2018**	0	0	.1	0	.1	0
11+ times	**2018**	.1	.2	0	0	.1	0

STIMULANTS

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

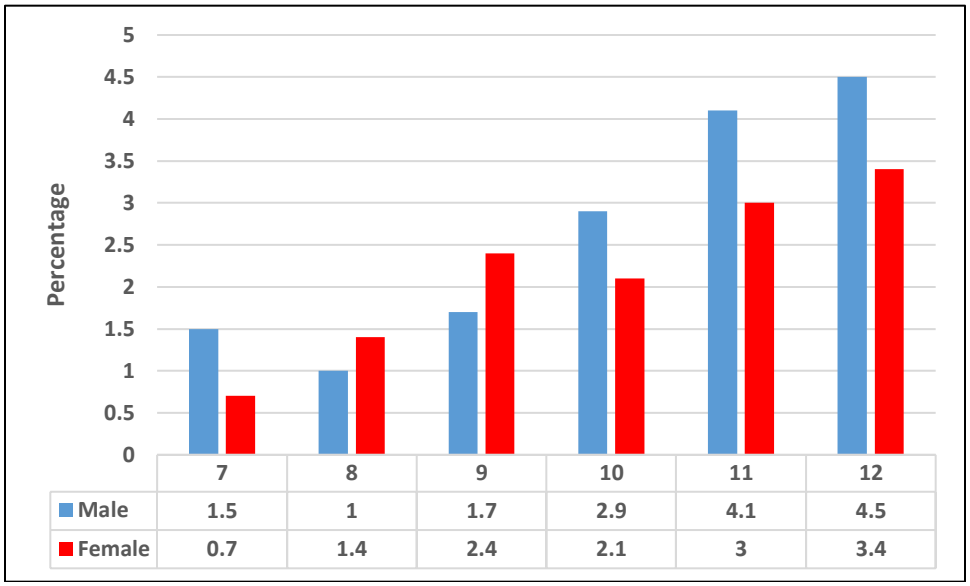
Wood County youth report consistent decrease in all grades since 2012. Wood County rates appear in Figure 29. The U of M study asks separate questions for Ritalin and Adderall while the Wood County Youth survey groups these substances into one question. U of M's 2017 results reported that Ritalin rates for grades 8, 10, and 12 were .4, .8., and 1.3 percent respectively, while for Adderall rates were 1.3, 4.0, and 5.5 percent respectively. The Wood County rates of 1.2, 2.6 and 8.8 percent for grades 8, 10, and 12 are lower than the Adderall, but higher than the Ritalin rates reported by Michigan.

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



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

Figure 30: Annual Prevalence Rate for Methylphenidate Use by Gender, 2018



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

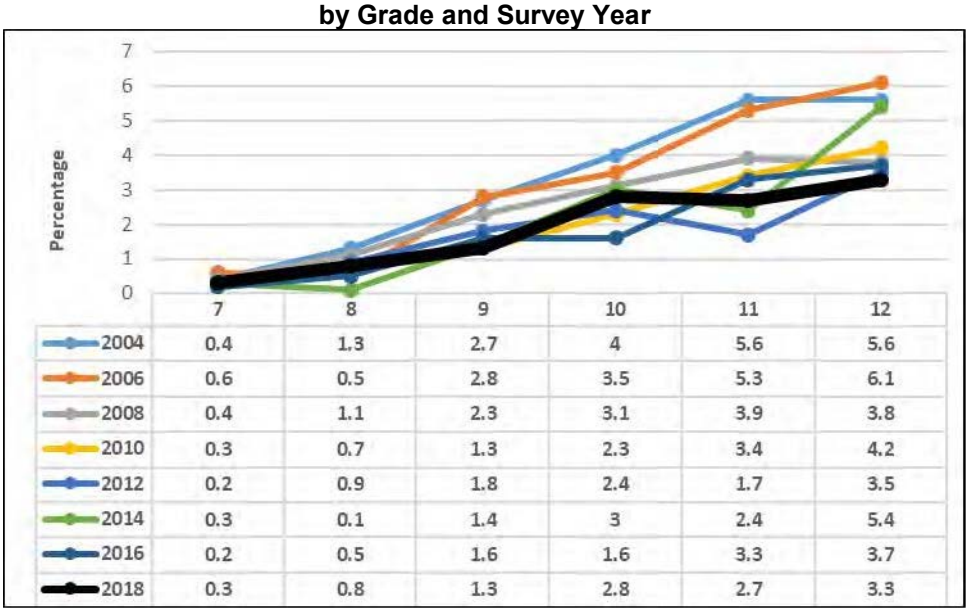
		Grade					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2018**	98.9	98.8	98	97.4	96.5	96.1
1-2 times	**2018**	.8	.7	1.1	1.2	2.2	2.8
3-5 times	**2018**	.2	.2	.2	.9	.7	.6
6-10 times	**2018**	0	.3	.3	.2	.5	.2
11+ times	**2018**	.1	.1	.4	.3	.1	.3

LSD

Lysergic acid diethylamide (LSD) use in Wood County declined rapidly from 2006 through 2010 where the rate of decline slowed. However, in the 2012 survey, the LSD use in Wood County increased in grades 8, 9, and 10, while decreases continued in grades 11 and 12. In 2014 increases were again reported in grades 10, 11, and 12, with decreases in grades 8 and 9. In 2016 the rates in Wood County declined in all grades except grade 11 where a slight increase was reported. In 2018, Wood County increased in grades 8 and 10, but decreased in grade 12.

National rates of LSD had been in decline since 1996 and in sharp decline since 2000, but increased slightly in 2015. National rates from 2017 are .9 percent, 2.1 percent, and 3.3 percent among 8th, 10th, and 12th graders, an increase over the past few years. Wood County rates of LSD use are the same as national rates in grade 12. These Wood County increases in grades 8 and 10 may suggest the need for greater attention to the dangers of LSD use by our media messages and by in-school prevention programs in Wood County.

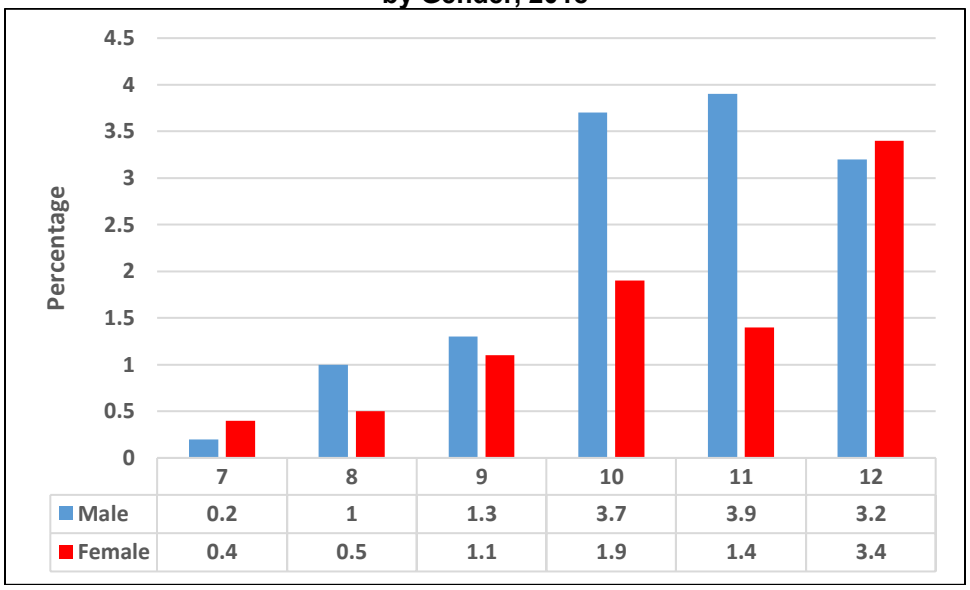
Figure 31: Annual Prevalence Rate for LSD Use by Grade and Survey Year



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

Males reported twice the use of LSD than females.

Figure 32: Annual Prevalence Rate for LSD Use by Gender, 2018



The percentage of Wood County youth who report LSD use in 2018, by grade and by frequency of use is presented below.

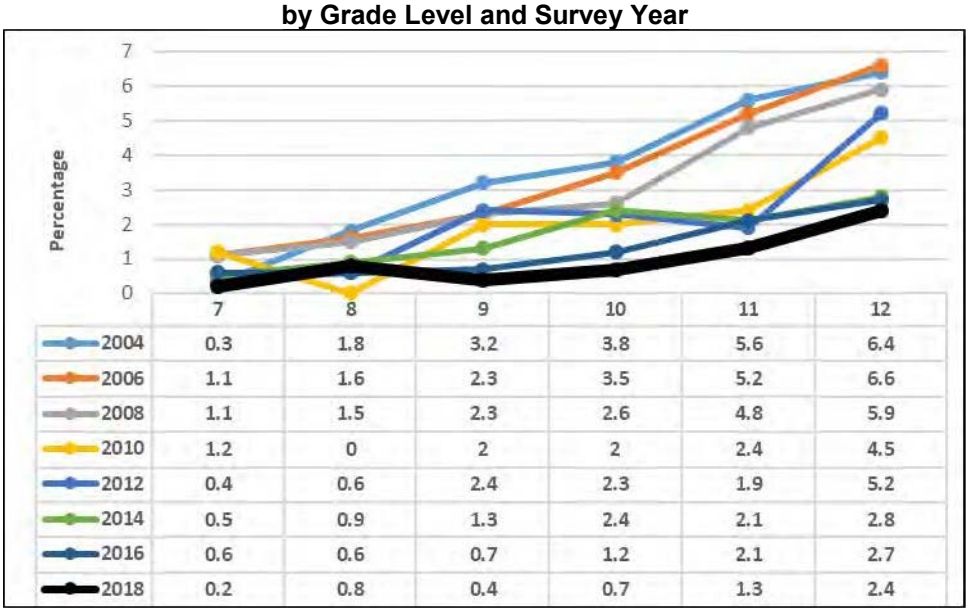
		Annual LSD Use, Wood County					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2018**	99.7	99.2	98.7	97.2	97.3	96.7
1-2 times	**2018**	0	.5	.7	1.9	1.5	1.9
3-5 times	**2018**	.2	.2	.5	.5	5	.6
6-10 times	**2018**	.1	.0	.1	.2	.4	.8
11+ times	**2018**	0	.1	0	.2	.4	0

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



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

The percentage of Wood County youth who reported cocaine use in 2018, by grade and by frequency of use is presented below.

		Annual Cocaine Use, Wood County					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2018**	99.8	99.2	99.6	99.3	98.7	98.6
1-2 times	**2018**	0	.5	.4	.3	.5	.8
3-5 times	**2018**	.1	0	0	.2	.5	.3
6-10 times	**2018**	.1	.1	0	0	.1	.0
11+ times	**2018**	0	.3	0	.2	.2	.3

Cocaine use rates in Wood County resemble national rates. The U of M study reported powdered cocaine use at .8 percent, 1.4 percent and 2.7 percent among 8, 10, and 12th graders. Wood County reported rates of .8 percent, .7 percent, and 2.4 percent for grades 8, 10, and 12. Wood County rates are lower than the national rates in grade 10 and 12, and identical in grade 8.

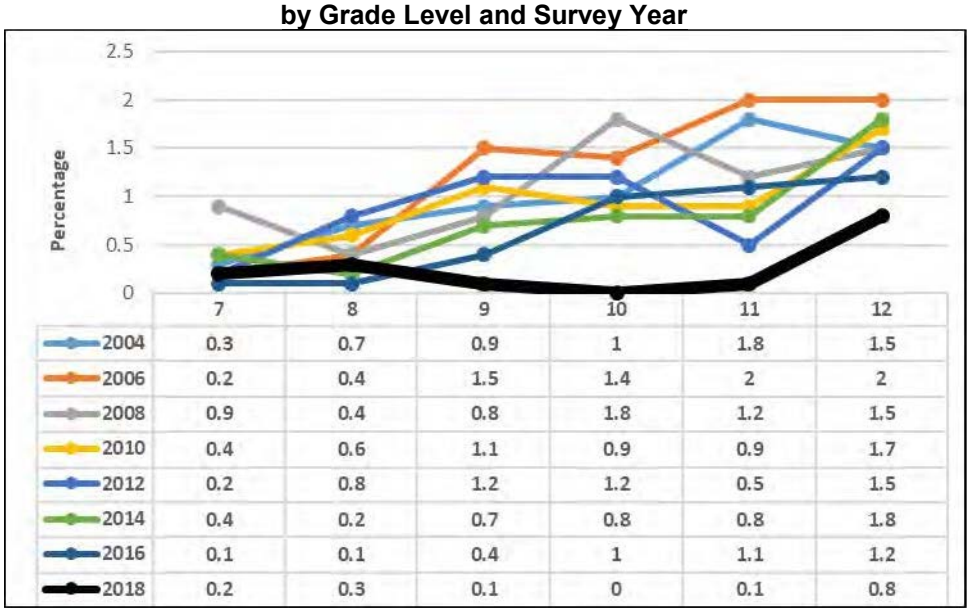
HEROIN

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 2018, heroin prevalence was reported as less than 1 percent in all grades in Wood County. These rates are mostly down from all previous years, except for grades 7 and 9 where use was slightly up over 2016 rates. 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



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

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 2017 MTF study shows heroin prevalence in grades 8, 10, and 12 at .3 percent, .2 percent, and .4 percent of use respectively. National rates are in decline.

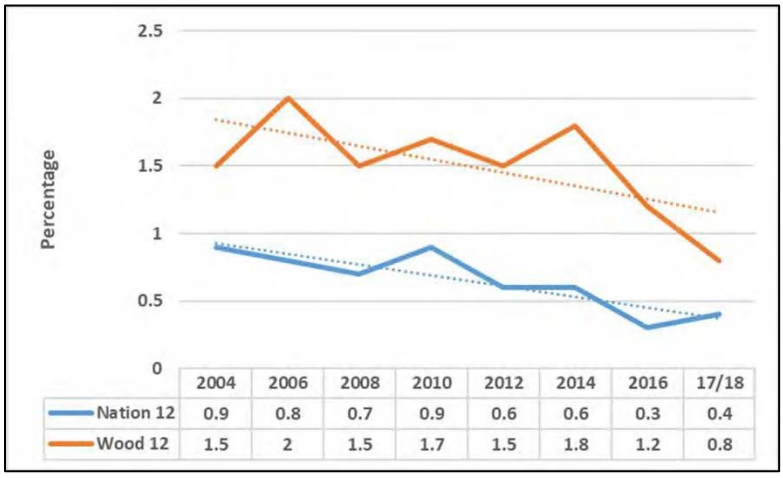
Figure 35: Actual Number of Respondents Reporting Annual Heroin Use

Frequency	Year	Annual Heroin Use, Wood County Number of Respondents 7	8	9	10	11	12
Never	**2018**	1107	1185	1155	952	819	634
1-2 times	**2018**	2	1	0	0	0	1
3-5 times	**2018**	0	3	0	0	0	1
6-10 times	**2018**	0	0	1	0	1	0
11+ times	**2018**	0	0	0	0	0	3

A total of 16 school aged youth in Wood County reported having tried heroin at least once in the 2018 survey. Figure 35 shows 13 youth trying heroin because 3 were lost in the crosstabulation (3 heroin users did not report their grade level). Additionally, these data exclude Penta Career Center Sophomores, Juniors, and Seniors and their addition would likely increase the count somewhat. Penta is excluded so that survey results will more closely compare to the Monitoring the Future results, where career centers are not included in the analysis.

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

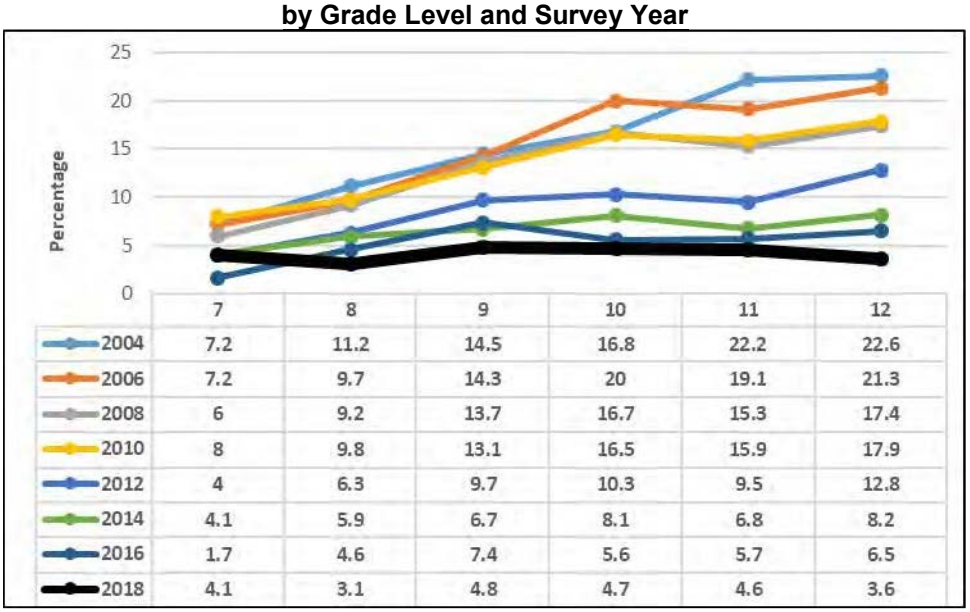
National and Local Trends in Annual Heroin Use, 2004-2018, Among 12th Graders



NARCOTIC PAINKILLERS

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

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



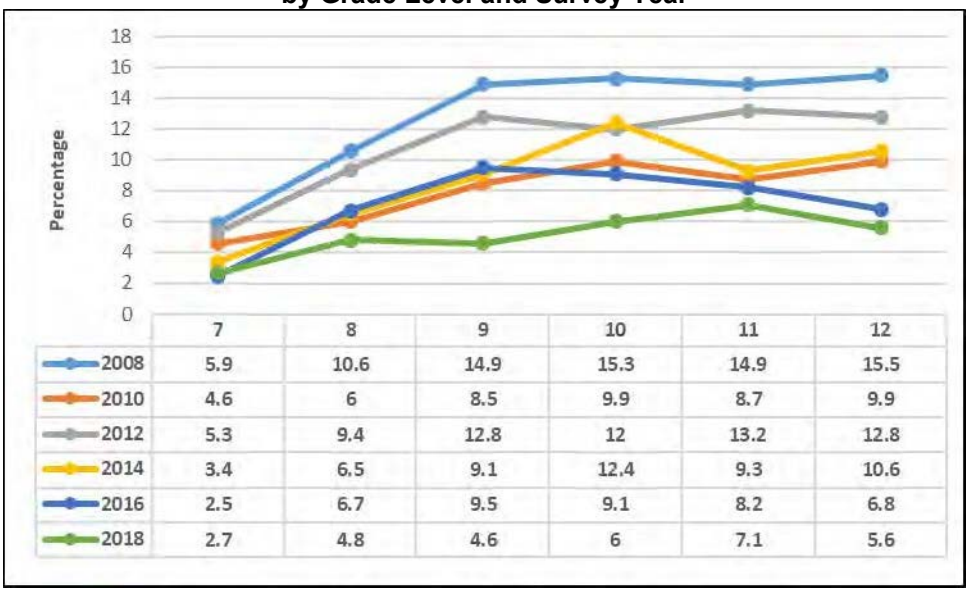
	7	8	9	10	11	12
2004	7.2	11.2	14.5	16.8	22.2	22.6
2006	7.2	9.7	14.3	20	19.1	21.3
2008	6	9.2	13.7	16.7	15.3	17.4
2010	8	9.8	13.1	16.5	15.9	17.9
2012	4	6.3	9.7	10.3	9.5	12.8
2014	4.1	5.9	6.7	8.1	6.8	8.2
2016	1.7	4.6	7.4	5.6	5.7	6.5
2018	4.1	3.1	4.8	4.7	4.6	3.6

The annual use of narcotic painkillers, as reported by Wood County youth has shown considerable decline in nearly all grade levels over 2004. The decline among 11th graders from 22.2 percent in 2004 to 4.6 percent in 2018 represents a 79.3 percent decrease, which translates to exactly 500 fewer 7 through 12th graders using narcotic painkillers in 2018 compared to 2004. All grades have decreased since 2010.

However, rates of use are much higher than the rates reported nationally. Admittedly, the MTF study asks about OxyContin use and Vicodin use in two separate questions, whereas the Wood County survey asks one question about Narcotic Painkiller use, without a prescription (OxyContin and Vicodin are used as references in only one Wood County question). Nonetheless, on that one question, Wood County reports rates of 3.1 percent, 4.7 percent, and 3.6 percent for grades 8, 10, and 12. The 2017 U of M report rates for the same three grades as .7 percent, 1.5 percent and 2.0 percent for the Vicodin question, and .8 percent, 2.2 percent, and 2.7 percent for the OxyContin question.

The data reported for monthly use of narcotic painkillers tells a similar story to those data reported for annual use. Annual and monthly use appears to have declined in all grades except grade 7 where increases were observed.

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

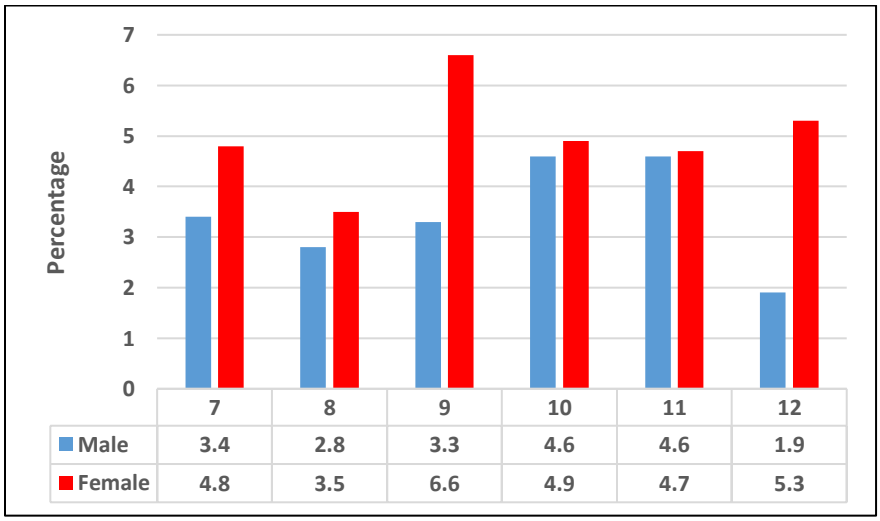


	7	8	9	10	11	12
2008	5.9	10.6	14.9	15.3	14.9	15.5
2010	4.6	6	8.5	9.9	8.7	9.9
2012	5.3	9.4	12.8	12	13.2	12.8
2014	3.4	6.5	9.1	12.4	9.3	10.6
2016	2.5	6.7	9.5	9.1	8.2	6.8
2018	2.7	4.8	4.6	6	7.1	5.6

The University of Michigan survey asks where students got the drugs that they used without a prescription. For amphetamines, tranquilizers and narcotics, 70 percent of youth reported they were given the drugs 'for free' by a friend or relative. About 40 percent 'purchased them' from a friend or relative. Only 20 percent 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, 2018



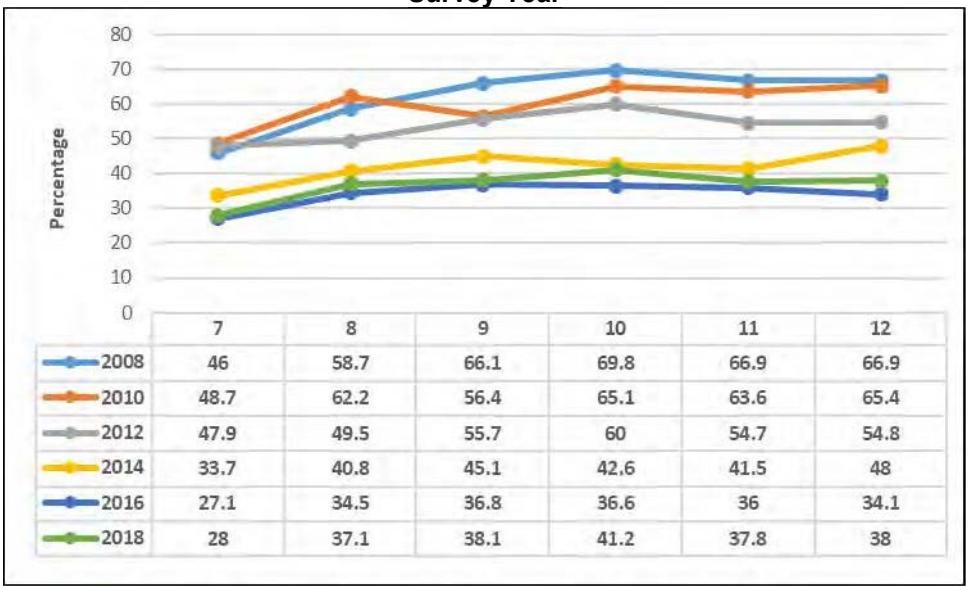
	7	8	9	10	11	12
Male	3.4	2.8	3.3	4.6	4.6	1.9
Female	4.8	3.5	6.6	4.9	4.7	5.3

CAFFEINATED ENERGY DRINKS

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

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

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



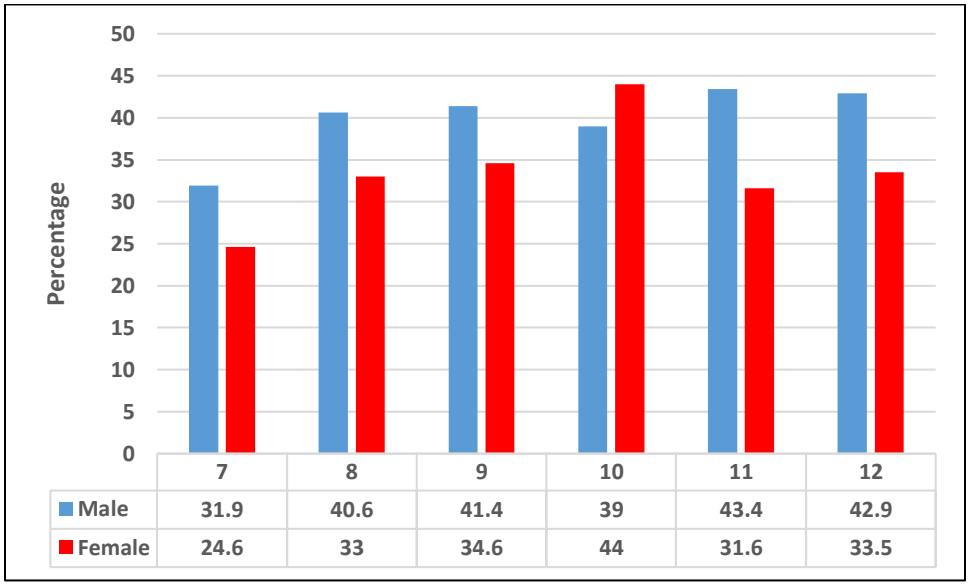
	7	8	9	10	11	12
2008	46	58.7	66.1	69.8	66.9	66.9
2010	48.7	62.2	56.4	65.1	63.6	65.4
2012	47.9	49.5	55.7	60	54.7	54.8
2014	33.7	40.8	45.1	42.6	41.5	48
2016	27.1	34.5	36.8	36.6	36	34.1
2018	28	37.1	38.1	41.2	37.8	38

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, 2018					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2018**	72.0	62.9	61.9	58.8	62.2	62.0
1-2 times	**2018**	14.5	15.6	16.2	16.1	16.8	13.5
3-5 times	**2018**	6.3	7.9	8.4	9.9	7.7	8.9
6-10 times	**2018**	1.9	4.5	4.2	5.2	3.3	4.2
11+ times	**2018**	5.3	9.1	9.4	10.1	10.0	11.3

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

Figure 40: Annual Prevalence Rate for Caffeinated Energy Drink Use by Gender, 2016-2018



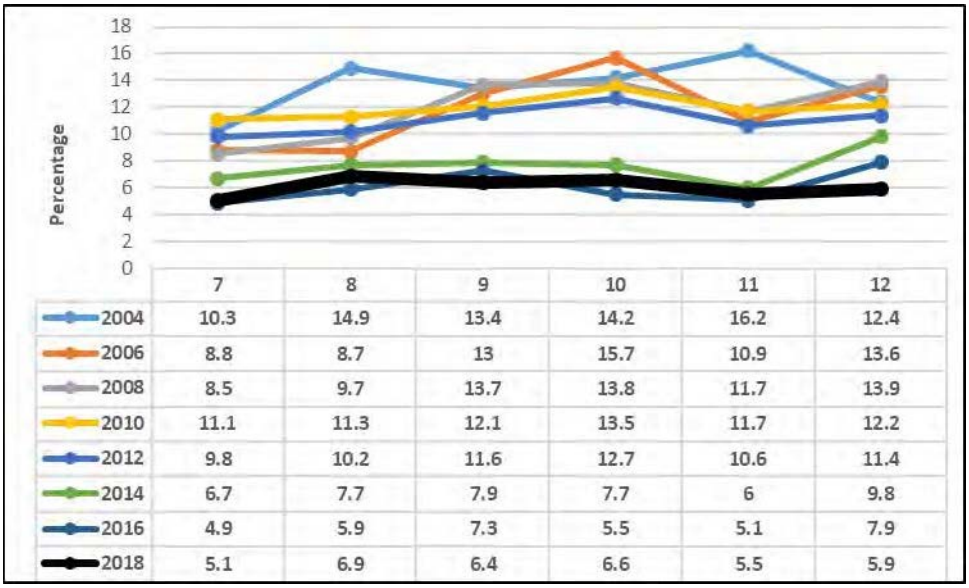
	7	8	9	10	11	12
Male	31.9	40.6	41.4	39	43.4	42.9
Female	24.6	33	34.6	44	31.6	33.5

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

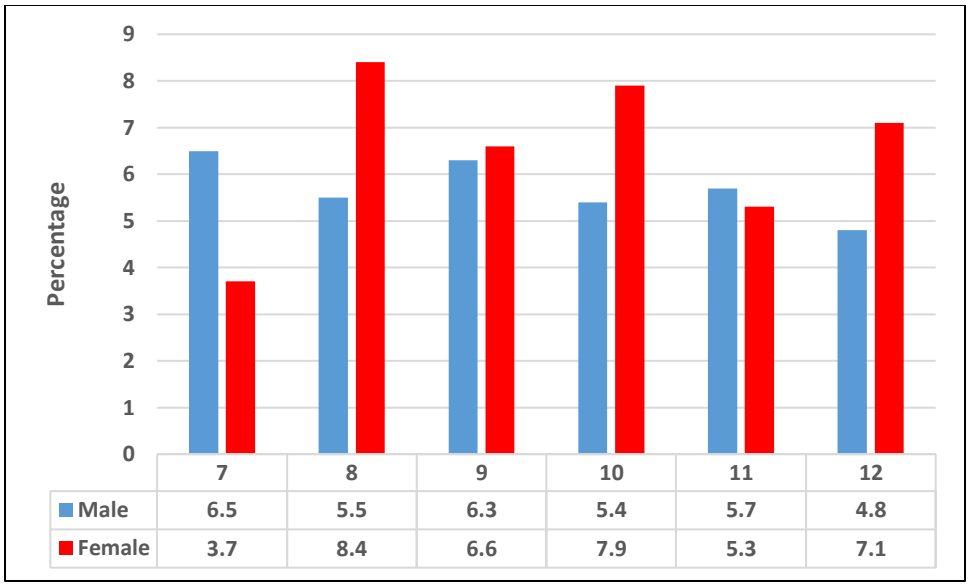


	7	8	9	10	11	12
2004	10.3	14.9	13.4	14.2	16.2	12.4
2006	8.8	8.7	13	15.7	10.9	13.6
2008	8.5	9.7	13.7	13.8	11.7	13.9
2010	11.1	11.3	12.1	13.5	11.7	12.2
2012	9.8	10.2	11.6	12.7	10.6	11.4
2014	6.7	7.7	7.9	7.7	6	9.8
2016	4.9	5.9	7.3	5.5	5.1	7.9
2018	5.1	6.9	6.4	6.6	5.5	5.9

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, 2018					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2018**	94.9	93.1	93.6	93.4	94.5	94.1
1-2 times	**2018**	3.3	3.8	4.0	4.5	3.9	3.0
3-5 times	**2018**	1.5	1.9	2.0	1.7	1.3	1.7
6-10 times	**2018**	.2	.8	.3	.2	.1	.2
11+ times	**2018**	.1	.5	.2	.2	.1	.2

Figure 42: Annual Prevalence Rate for Cough Medicine Use by Gender, 2018



	7	8	9	10	11	12
Male	6.5	5.5	6.3	5.4	5.7	4.8
Female	3.7	8.4	6.6	7.9	5.3	7.1

Female students report higher rates of cough medicine use than male students at all grade levels except for grades 7 and 11.

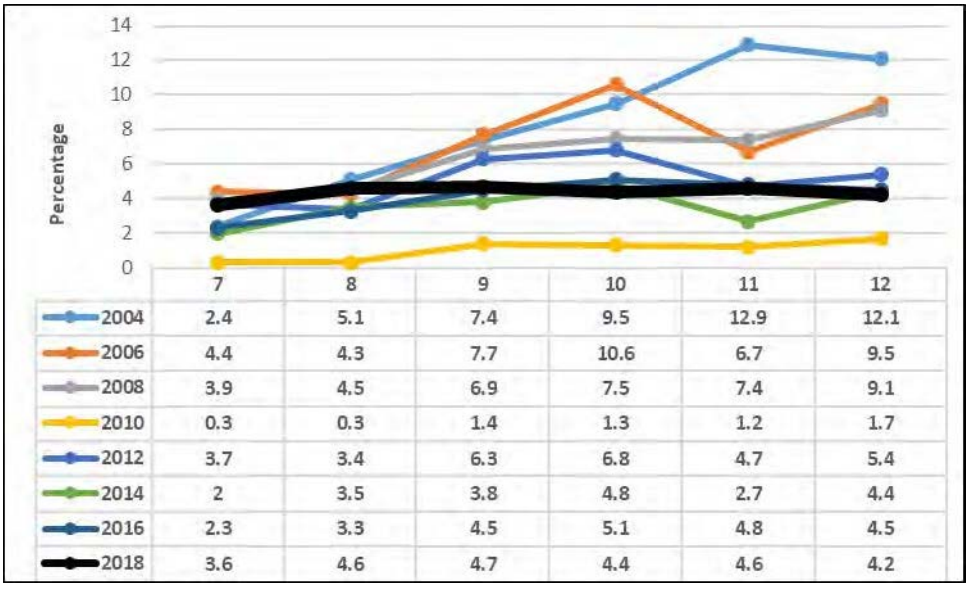
The rates of cough and cold medicine among all grades in Wood County were at historic low levels, but 2018 reported increase in all grades except 9 and 12 where continued decreases were reported. Despite the historic lows, Wood County rates of use are much higher than national averages. The 2017 U of M study reports rates in grades 8, 10, and 12 at 2.1 percent, 3.6 percent, and 3.2 percent respectively. Wood County rates for grades 8, 10 and 12 are 6.9 percent 6.6 percent and 5.9 percent respectively.

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

In the 2016 and 2018 surveys, the barbiturate question was replaced with a question about using sleep or anxiety medication (like Xanax® or Klonopin®) that was not prescribed to you. These drugs are a class of drugs with hypnotic or anxiolytic properties. Benzodiazepines are often used for short-term relief of severe, disabling anxiety and their long-term use can lead to dependency. They are preferred to the use of barbiturates because they have a lower abuse potential and fewer adverse reactions.

In Figure 43 below, the annual prevalence rates for barbiturates and benzodiazepine are presented for Wood County.

Figure 43: Annual Prevalence Rate for Barbiturate (2004-2014) and Benzodiazepine (2016, 2018) Use by Grade Level and Survey Year



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

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

		Percentage of use of Benzodiazepine, Wood County, 2018					
Frequency	**Year**	**7**	**8**	**9**	**10**	**11**	**12**
Never	**2018**	96.4	95.4	95.3	95.6	95.4	95.8
1-2 times	**2018**	2.8	3.3	2.9	1.9	3.0	2.3
3-5 times	**2018**	.4	.8	.9	1.4	1.0	1.6
6-10 times	**2018**	.2	.2	.3	.4	.1	.3
11+ times	**2018**	.3	.4	.5	.7	.4	.0

OTHER ILLICIT DRUGS

The percentage 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.

A question regarding the use of bath salts and K2, the synthetic drug, were asked for the first time in the 2012 survey. The percentages of use, by grade, are reported below.

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

	Grade					
Substance	**7**	**8**	**9**	**10**	**11**	**12**
Methamphetamines, 2004	.9	1.8	1.8	3.1	6	3.3
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
Steroids, 2004	1.4	2.6	2.2	3	3.1	2.8
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
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

DISCUSSION OF TRENDS IN WOOD COUNTY

The results of the 2018 ADAMHS Youth Survey continued to show significant decreases in the adolescent prevalence rates for cigarettes, alcohol and other illicit drugs. In the 2018 survey only vaping and caffeinated energy drinks reported clear increases over 2016. Most other drugs reported decreases with a few exceptions in a few grade levels (for example, minor increases were observed for marijuana in grades 9 and 11; cough medicine in grades 7, 8, 10, and 11). Other periodic increases occurred at some grade levels by some drugs.

The declines on the 2018 survey for cigarettes and alcohol were not surprising for two reasons. First, our declining rates compare to similar declines reported in the 2017 Monitoring the Future study; and, since 2004 our local results have generally followed the national patterns. However, as cigarette and alcohol rates were already low in 2016, we expected rates to stabilize. However, in 2018 rates continued to decline to historic lows for Wood County. For example, since 2004, the percentage of declines for 30-day cigarette use, 30-day alcohol and 30-day marijuana use among 8th, 10th and 12th graders are reported below.

	CIGARETTES		ALCOHOL		MARIJUANA	
GRADE	Change since 2004	2018 Rate	Change since 2004	2018 Rate	Change since 2004	2018 Rate
8	-92.8%	.7	-66.7%	12.9	-59.6%	4.8
10	-80.8%	2.7	-57.7%	29.6	-50%	14.6
12	-83.8%	4.4	-46.3%	45.6	-51.8%	22.4

Wood County had mixed signals for marijuana, and the signals differed from national trends. The University of Michigan's Monitoring the Future's 2017 results reported a slight decrease in annual and 30-day marijuana use among 8th graders, but an increase among 10th and 12th graders, while Wood County reported a decrease in annual and 30-day use among 8th, 10th, and 12th graders. But because we survey all years we were able to notice increases in grades 9 and 11.

Trends in the decreased use of cigarettes and alcohol in Wood County are consistent with national trends where similar decreases were reported. However, Wood County declines are far greater than national declines. The increase in electronic cigarettes may be partly responsible for our decrease in cigarette use.

The 2018 data also reveals the changing rank order of teenage substance use. As cigarette use continues to decline, its 30-day prevalence rate is now lower than the 30-day prevalence rate for both marijuana and narcotic painkillers. That is, 7th through 12th grade adolescents are more likely to smoke marijuana or use someone else's narcotic painkiller prescription, than to smoke cigarettes.

However, the use of electronic cigarettes has emerged as a rival for the top three prevalence rates among Wood County adolescents, as e-cig use is second only to alcohol use. E-cig use occurs more frequently than marijuana use.

Why do prevalence rates for adolescent drug use in Wood County continue to decline and why do rates decline faster than national averages for the same drugs over the same time periods?

While we cannot definitively explain the decline in prevalence rates, several contributing factors may partly explain the declines. These factors include adolescent attitudes towards drugs, mental health, evidence-based drug prevention programming, and environmental factors unique to Wood County. Each of these factors will be reviewed.

Adolescent attitudes towards alcohol and other drugs are directly related to adolescent alcohol, tobacco and other drug prevalence rates. Adolescent attitudes about substance use are typically measured in three ways: how youth perceive their friends' approval or disapproval of their use; how youth perceive their parents' approval or disapproval of their use; and how youth perceive the risk of harming themselves physically or in other ways if they use a substance. There is an inverse relationship between substance use and peer disapproval and fear of harm.

The federally required survey questions used to measure these three variables were changed in 2016, thus eliminating our ability to compare how youth feel in 2018 over their feelings in prior years. However, as they have in prior years, Wood County youth continue to report high levels of perceived peer disapproval from smoking tobacco and drinking alcohol. Peer disapproval is much softer regarding marijuana, but more teens feel marijuana smoking is 'very wrong' than 'not wrong at all.'

Wood County youth report high levels of perceived peer disapproval from cigarette smoking, followed by drinking alcohol and smoking marijuana. Among 12th graders, 51.3 percent feel their friends would feel it was 'very wrong' for them to smoke tobacco, 43.8 percent feel their friends would feel it was 'very wrong' for them drink alcohol, and only 37.3 percent feel similarly about smoking marijuana. Attitudes for all substances become more accepting as youth advance into senior high school.

On all three substances, youth perceive that their parents do not approve of their use. Even among high school seniors, parents are perceived as having strong levels of disapproval about smoking marijuana (69.6 percent among 12th graders).

Regarding fear of harm from substance use, Wood County youth perceive smoking cigarettes as having a great risk (63 percent of seniors perceive a 'great risk' of harm from cigarette smoking). On the other hand, fear of harm from binge drinking or from smoking marijuana is much softer. Among 12th graders, only 32.7 percent perceive a great risk of harm from binge drinking and even fewer (22.7 percent) perceive great harm from smoking marijuana. However, fear of harm from binge drinking and from smoking marijuana is generally agreed to be more harmful than not harmful. It is not until 11 and 12th grade that youth begin to perceive smoking marijuana with a lesser rather than greater risk of harm. Binge drinking remains to be seen as more harmful than less harmful even among upperclassmen.

As noted earlier, the mental health of youth is directly related to the likelihood of substance use. The more mental wellness youth feel, the less likely they report substance use of any type. Those youth reporting problems in their mental health are much more likely to use substances. With that relationship in mind, we can recall that youth in Wood County in 2018 continue to report high levels of 'no problems' and declining levels of 'low problems' as indicated on the Ohio Scales. Youth in 2018 reported slight uptick in the levels of 'moderate' level of problems as indicated on the Ohio Scales. However, the numbers of youth in these categories were probably too few to have an effect on the declining rates of ATOD prevalence reported.

The OLWEUS bullying prevention program is one of several programs currently being conducted in some Wood County schools. Regarding local participation in 'evidence based' prevention programming, for the past ten years, the Wood County Educational Service Center (WCESC) School- and Community- Based Alcohol, Tobacco, and Other Drug (ATOD) Prevention Program has partnered with the Wood County Alcohol, Drug Addiction and Mental Health Services (ADAMHS) Board to provide prevention services for the youth and community of Wood County. The Prevention Programming has implemented a wide array of 'evidence based' prevention programming into the schools, most of which are included on the Substance Abuse and Mental Health Services Administration's (SAMHSA) National Registry of Evidence–based Programs and Practices. Previous research has demonstrated that students who receive training in these programs later used less alcohol and other drugs (Griffin, Botvin, Nichols, & Doyle, 2003), reported lower normative beliefs about peer alcohol and drug use (Spoth, Randall, Trudeau, Shin,& Redmond, 2008) and exhibited less violence and delinquency (Botvin, Griffin, & Nichols, 2006) than those students who did not receive training. The LifeSkills program 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).

The WCESC's ATOD programs include the following: Beginning Alcohol Basic Education Series (B.A.B.E.S.), the Olweus Bullying Prevention Program, Challenge Day, Class Action, Communities Mobilizing for Change, Dialogue nights, Expect Respect, Fetal Alcohol Syndrome Teaching and Research Campaign (FASTRAC), Guiding Good Choices, Hooked on Fishing – Not on Drugs, Insight, LifeSkills, Positive Action, Problem Identification and Referral, Teen Institute and Junior Teen Institute.

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

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

Program / Academic Year	03-04	04-05	05-06	06-07	07-08	08-09	09-10	10-11	11-12	12-13	13-14	14-15	15-16	16-17	Total
B.A.B.E.S	60	NA	NA	350	330	601	839	694	853	767	744	491	592	622	6042
Bullying Education								220	11	15					246
Challenge Day				146	405	479		121	135	101					1241
Class Action					220	475	418	125	403	378	239	136	182	122	2698
Communities Mobilizing						25	25	25	26						101
Dialogue Nights						96	96	96	96						384
Expect Respect							1147	962	1085	697	472	535	365	284	5547
FASTRAC								98	225	212	264	150			949
Guiding Good Choices								30	49	48	32				159
Hooked on Fishing					150			191	172	187	129	244	460	447	1980
Insight						63	63	63	62						251
J.D.C. Life Skills / Art				159	407	553	286	272	261	381	311	416	515	425	3827
Parent Project / Why Try	41	41	41	41	41	41	35	50	46	53	50	10	4	8	338
Positive Action / STARS								637	648	432	526	534	463	914	3257
Life Skills	1600	1600	1600	2600	1051	4339	4116	4090	3329	3081	3193	2885	2294	932	39004
Problem ID/Referral	650	167	167	405	369			305	322	295		146	288	209	1934
Teen Institute		85	148	108	250	134	221	169	221	152	221	100	120	136	1724
Jr. Teen Institute					100	46	41	42	44	49	168	79	44	90	690
Total No. Students Served															**70372**
Supported by RASS grant															
supoorted by ADAMHS board and rass grant															
supoorted by SS/HS grant															
drug testing grant 2008-2012															
JDC 06-07 (150 students) reflects only March 5, 2007 - June 1, 2007															
Bullying numbers indicate trained teachers and staff only.															

Given the magnitude of the prevention effort and the demonstrated success of each program, the prevention programing likely contributed to the reduction in adolescent ATOD use. However, in Wood County, the implementation of prevention programming does not tell the whole story. Additionally, the reduction in underage ATOD prevalence reported in 2018 could also be explained, in part, from environmental and system changes that occurred in Wood County over the past seven years. The environmental and system changes that occurred during the past 7 years include the following:

1. Alcohol compliance checks in local businesses done in collaboration with the local sheriff's office, local law departments, and the Ohio Investigative Unit.
2. Drug testing programs. From 2008 through 2012, the WCESC, in collaboration with local school boards, implemented a Federal grant for school-based student drug testing.
3. Seller-server training conducted in collaboration with the local sheriff's office, local law departments and the Ohio Investigative Unit.
4. Drug Take Back efforts initiated and advertised by local law enforcement, BGSU, the Committee on Aging, and the Prevention Coalition.
5. Information disseminated in the Wood County community, including the annual Red Ribbon Campaign, ATOD and Town Hall presentations in the community, news articles, "In-Service" programs for school teachers and staff, and mail distributions.

6. In school counselors provided by the Children's Resource Center provide assistance to students in all Wood County school districts.
7. The efforts of the Wood County Prevention Coalition where information, aimed at substance use reduction, is disseminated county wide.

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

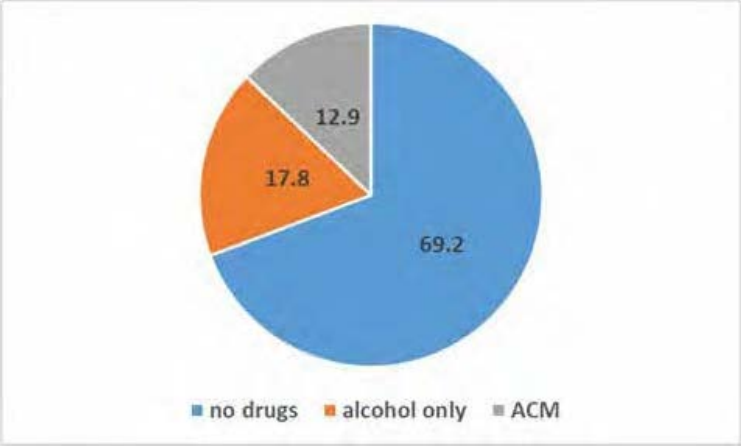
Viewed at a personal level, a 12th grade student in any school district in Wood County, would likely have been affected by multiple administrations of multiple programs through his or her elementary, middle, and secondary school life span. For example, a 12th grader in 2018, would likely have had B.A.B.E.S. 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. The community in which this student lives would have reduced its access to alcohol and cigarettes due to the collaborative initiatives with local law enforcement.

In summary, changes in adolescent ATOD prevalence occurs with changes in peer approval, perceived fear of harm, access to substances, and from participation in evidence-based prevention programming. Adolescent attitudes towards 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 adolescent 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 any substance in the past year; (2) alcohol only users; and (3) persons who report using alcohol, cigarettes, e-cigarette, and marijuana (ACM), but not other substances. 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.

The three comparison groups are comprised of 1254 juniors and seniors from public schools in Wood County. Male students comprised 45.3 percent (N=592) of the sample, while females comprised 54.7 percent (N=655). There were 869 (69.2%) individuals who reported that they had not used in the past year; 223 (17.8%) individuals who reported using only alcohol in the past year; and only 162 (12.9%) individuals who reported using alcohol, cigarettes, 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 2018 surveys. A review of the 2004 Wood County survey report revealed that the comparison groups consisted of 48 percent non-users (69.3% in 2018), 42 percent alcohol-only users (17.8% in 2018), and 10 percent ACM users (12.9% in 2018). It is apparent that among Wood County 11 and 12th graders, there has been a shift toward either abstinence or marijuana, and a shift away from using alcohol alone.

ALCOHOL USE BY TYPE OF USER

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

Figure 45: Frequency of Alcohol Use in Past Month by Type of User, 2018

	Frequency of Alcohol Use Past Month				
Group	Never	1-2x	3-5x	6-10x	11+x
Alcohol-Only	61.9	30.0	6.7	1.3	0.0
ACM	19.8	45.1	25.9	4.9	4.3

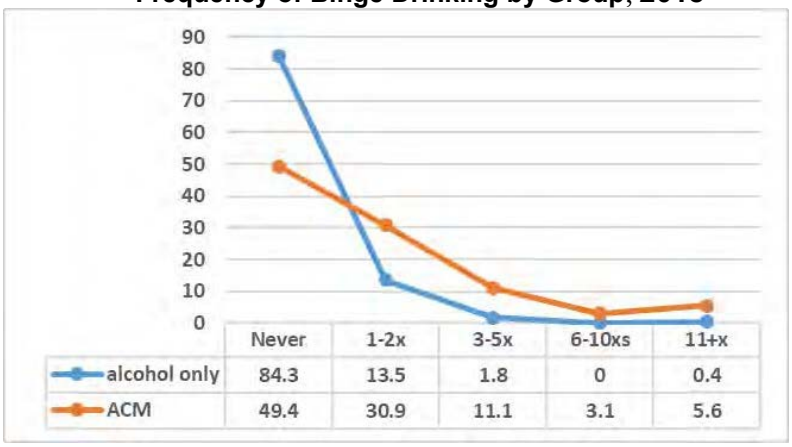
The above table indicates that the alcohol-only group is less likely to engage in heavy monthly use than the ACM group. Nearly 62 percent of the alcohol-only group reports not using alcohol in the 30 days prior to the survey, while one-third that amount, 19.8 percent of the ACM group, reports the same. 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, 2018

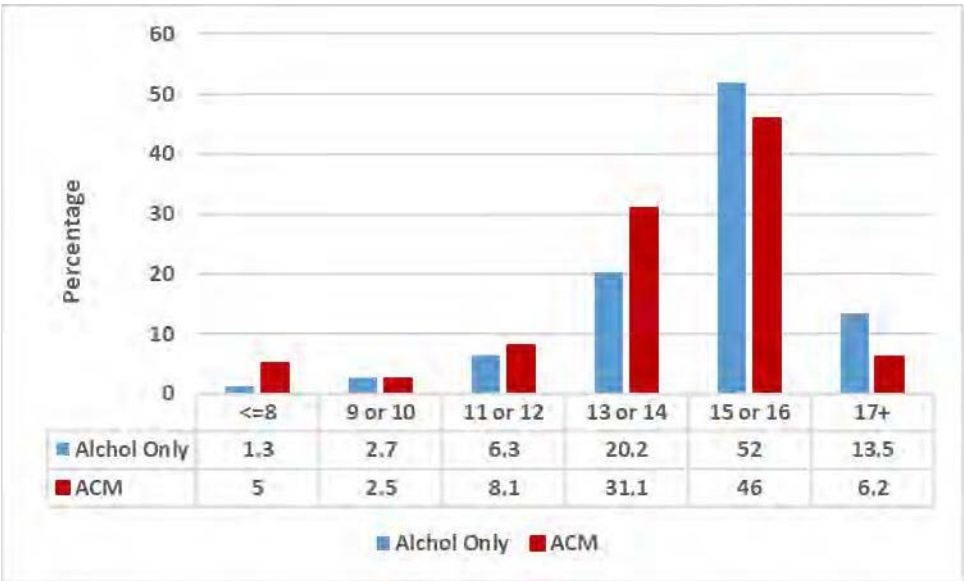
	Frequency of Binge Drinking				
Group	Never	1-2x	3-5x	6-10x	11+x
Alcohol-Only	84.3	13.5	1.8	0.0	0.4
ACM	49.4	30.9	11.1	3.1	5.6

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.



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, 2018



SOCIAL FUNCTIONING BY TYPE OF USER

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

Figure 48: Percentage Missing School by Type of User, 2018

Group	Yes	No
Alcohol-Only	1.3	98.7
ACM	11.1	88.9

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

Figure 49: Percent Attending School after Using a Substance, 2018

Group	Yes	No
Alcohol-Only	2.2	97.8
ACM	35.8	64.2

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

Figure 50: Percent Using Substances While at School, 2016

Group	Yes	No
Alcohol-Only	1.8	98.2
ACM	13.6	86.4

One concern is the effect that substance use may have on the school environment. We were specifically concerned if non-users felt safer at school than did substance using students. The following table reveals that all three groups feel fairly safe while attending school.

Figure 51: Percent Using their phone while driving (talk or text), 2018

Group	All the time	Sometimes	Only when other cars aren't around	Never
Non-User	4.2	16.0	19.4	60.4
Alcohol only	8.5	30.5	21.1	39.9
ACM	22.4	27.3	19.3	31.1

Figure 52: Percent of Students Who Rode as a Passenger in a Car with a Driver Who Had Just Used Alcohol or Other Drugs, 2018

Group	Yes	No
Non-User	6.0	94.0
Alcohol Only	18.0	82.0
ACM	60.9	39.1

Figure 53: Drove a Vehicle Just After Smoking Marijuana, 2018

Group	Yes	No
ACM	44.4	55.6

Figure 54: Drove a Vehicle Just After Drinking, 2018

Group	Yes	No
Alcohol only	4.5	95.5
ACM	17.9	82.1

Figure 55: Use of Marijuana as an edible, past 30 days, 2018

Group	Yes	No
ACM	43.5	56.5

Figure 56: Thought About Killing Yourself Last Year, 2018

Group	Yes	No
Non-User	11.9	88.1
Alcohol only	22.9	77.1
ACM	33.3	66.7

Figure 57: Attempted Suicide Last Year, 2018

Group	Yes	No
Non-User	3.2	96.8
Alcohol only	4.5	95.5
ACM	15.4	84.6

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. Finally, both alcohol only and ACM users were more likely to report that they live in a home where there is a loaded and unlocked firearm. 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 33 percent of ACM users have thought about killing themselves in the last year and 15 percent have made an attempt. This strongly suggests that these individuals, once identified, would substantially benefit from mental health screenings, intervention and treatment.

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

Figure 58: Perceived Risk Associated with Binge Drinking, 2018

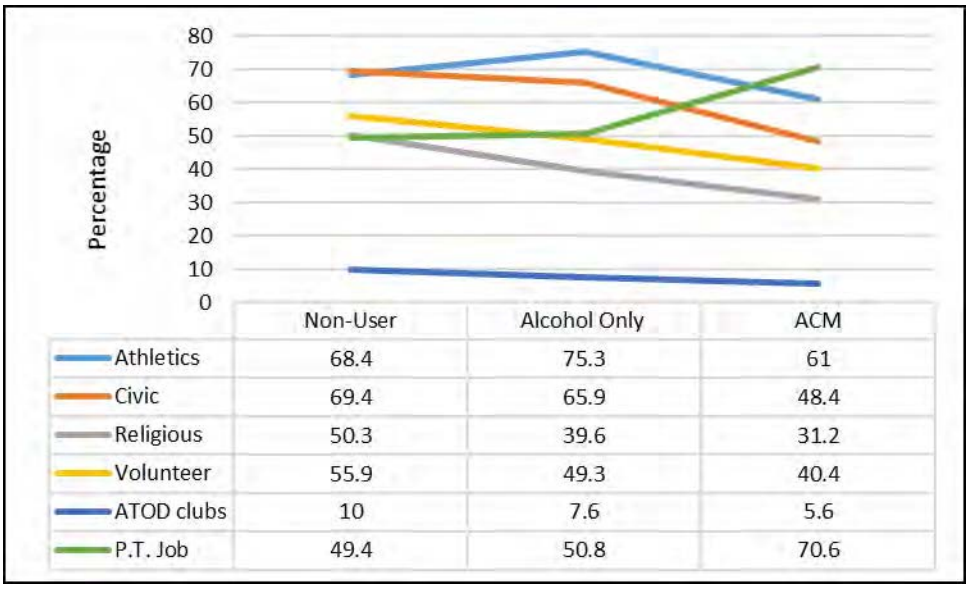
Group	None	Slight	Moderate	Great
Non-Users	12.0	15.8	33.2	39.1
Alcohol Only	11.7	24.8	36.0	27.5
ACM	15.0	34.4	34.4	16.3

Figure 59: Perceived Risk Associated with Marijuana Use, 2018

Group	None	Slight	Moderate	Great
Non-Users	19.0	23.3	25.7	32.0
Alcohol Only	22.5	34.2	26.1	17.1
ACM	63.0	26.5	8.6	1.9

Students were asked to report on activities that were designed for personal or community betterment. These activities include participation in athletics, civic activities (such as arts or civic activity, theatre, band, choir, orchestra, school clubs, honor society, etc.), religious activities (going to service, church/synagogue activities, belong to church youth group, etc.), and volunteering. The data show that students reporting weekly participation in positive school, community or religious activity is inversely related to drug use. Work is positively related to use.

Figure 60: Percentage of Involvement by Type of Activity and by Type of Drug User, 2018



	Non-User	Alcohol Only	ACM
Athletics	68.4	75.3	61
Civic	69.4	65.9	48.4
Religious	50.3	39.6	31.2
Volunteer	55.9	49.3	40.4
ATOD clubs	10	7.6	5.6
P.T. Job	49.4	50.8	70.6

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.

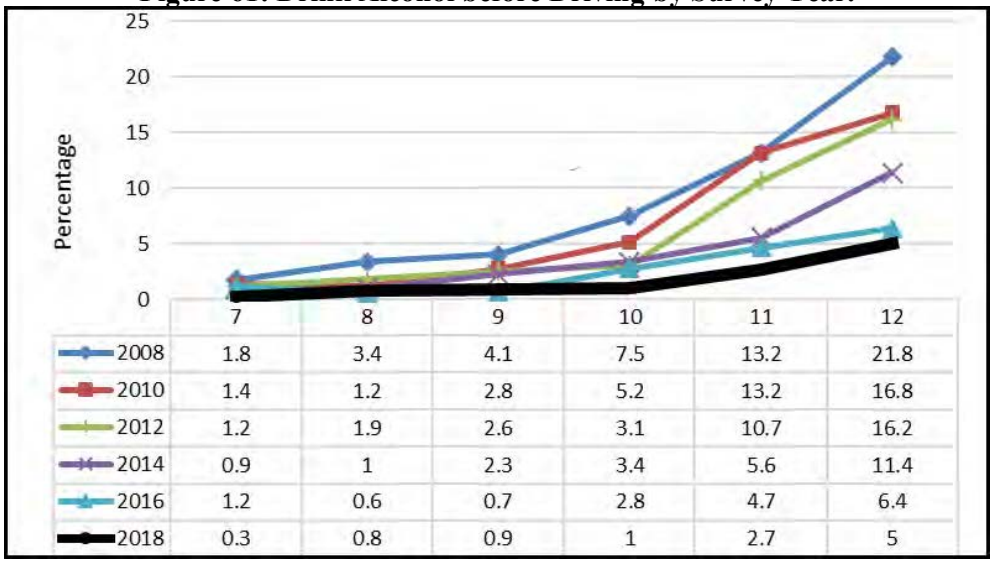
While no longer asked on recent youth surveys, the 2010 survey asked the question "If you have alcohol at a party, who provides it?" Responses had indicated that as age increases, respondents report a corresponding increase in obtaining alcohol from an older friend or relative. Additionally, as age increases, respondents were less likely to report that they have no alcohol at parties. Fortunately, parents in Wood County did not seem to be an active source of alcohol acquisition for teenagers.

GRADE	HAVE NO ALCOHOL AT PARTIES	OLDER SIBLING	OTHER PARENTS	OLDER FRIEND OR RELATIVE	MY PARENTS
7	87.5	1.1	1.5	5.0	5.0
8	86.8	1.5	2.6	5.4	3.7
9	79.7	2.2	2.9	12.4	2.8
10	70.2	3.6	3.7	19.8	2.7
11	60.4	5.4	3.2	28.7	2.3
12	56.7	5.1	2.5	34.0	1.7

The combination of motor vehicles and intoxicating substances appears to remain problematic in Wood County in 2018. The percentage of incidence is reported below.

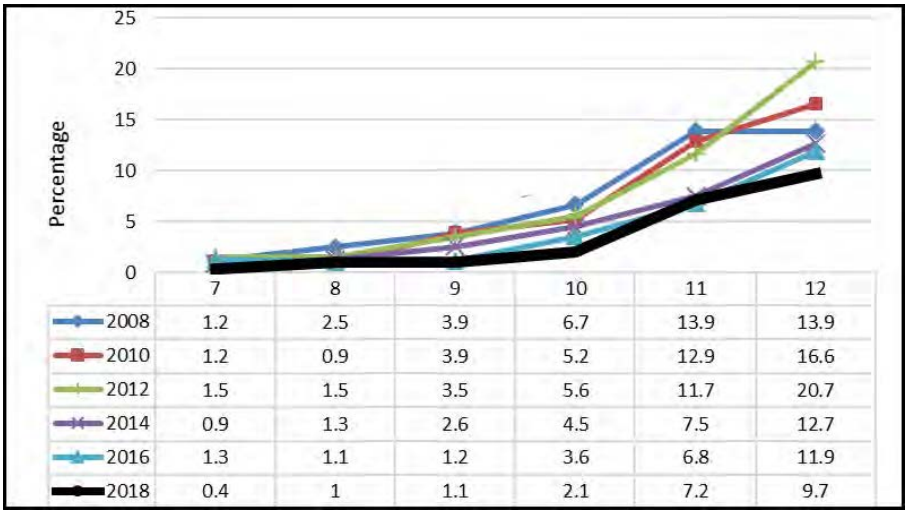
DRIVING BEHAVIORS / GRADE IN SCHOOL (2018)	7	8	9	10	11	12
Drove after I just drank alcohol	.3	.8	.9	1.0	2.7	5.0
Drove after I just smoked marijuana	.4	1.0	1.1	2.1	7.2	9.7
Was a passenger when the driver just drank or smoked marijuana	10.9	15.5	15.1	18	18.1	17.7

Figure 61: Drink Alcohol before Driving by Survey Year.



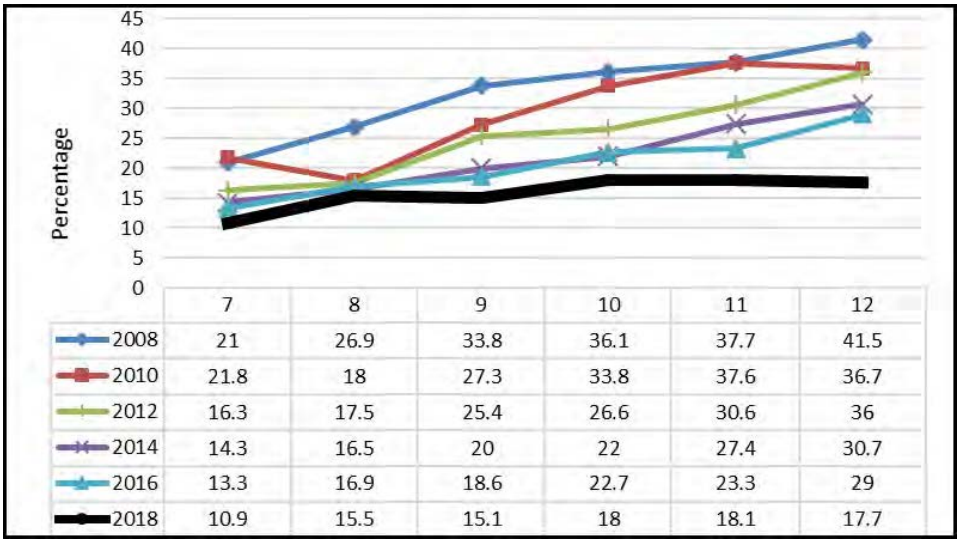
	7	8	9	10	11	12
2008	1.8	3.4	4.1	7.5	13.2	21.8
2010	1.4	1.2	2.8	5.2	13.2	16.8
2012	1.2	1.9	2.6	3.1	10.7	16.2
2014	0.9	1	2.3	3.4	5.6	11.4
2016	1.2	0.6	0.7	2.8	4.7	6.4
2018	0.3	0.8	0.9	1	2.7	5

Figure 62: Smoked Marijuana before Driving by Survey Year



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

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



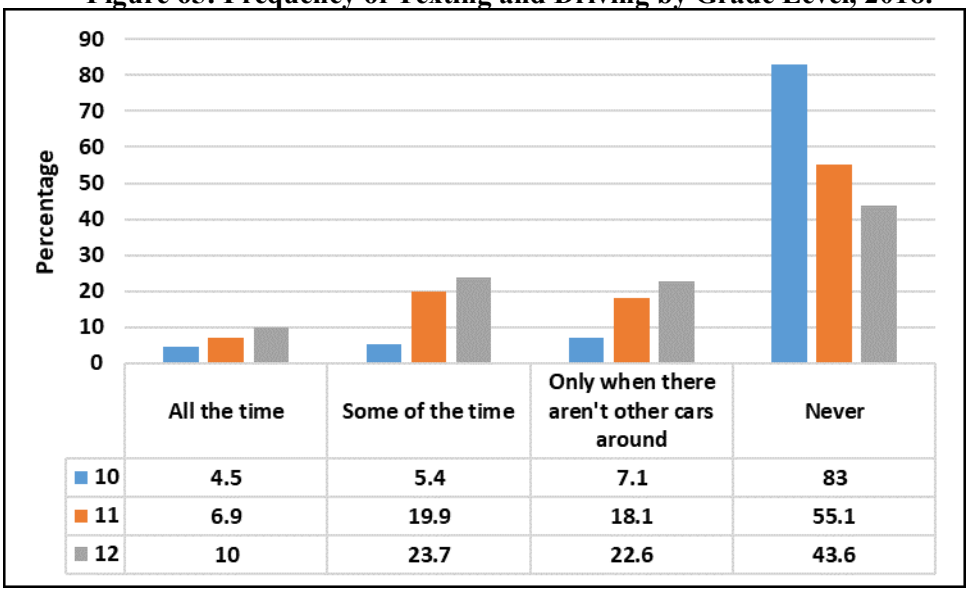
	7	8	9	10	11	12
2008	21	26.9	33.8	36.1	37.7	41.5
2010	21.8	18	27.3	33.8	37.6	36.7
2012	16.3	17.5	25.4	26.6	30.6	36
2014	14.3	16.5	20	22	27.4	30.7
2016	13.3	16.9	18.6	22.7	23.3	29
2018	10.9	15.5	15.1	18	18.1	17.7

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 2018).

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

The 2018 survey asked about texting and driving. The question was asked "I use my phone while driving (talk or text)?" Responses among students in grades 10 through 12 are reported below.

Figure 65: Frequency of Texting and Driving by Grade Level, 2018.



The number of 12th graders represented in Figure 65 is 637, meaning that 43.6 percent, or 278 of the 637 seniors reported that they either do not drive or text while driving. The remaining 56.4 percent, or 359 teens, report texting while driving at least some of the time.

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

Figure 66. Number of 11 and 12th Graders who Drank Alcohol within the Past Month and Reportedly Texted While Driving 2018

I read or send texts while driving:		All the time	Some of the time	Only when there aren't other cars around	Never	Total
Frequency of alcohol last month	never	64	204	230	645	1143
	1-2x	33	80	44	57	214
	3-5x	17	18	16	17	68
	6-10x	1	10	2	6	19
	11+x	6	2	0	4	12
	Total	121	314	292	729	1456

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

The 2018 survey was administered to 2,389 5th and 6th grade youth. Fifth graders comprised about 49 percent of the sample, while sixth graders comprised about 51 percent. Males comprised 58 percent of the sample, while 51 percent was female. The following table summarizes the data pertaining to participants.

	Gender		
Grade	**Male**	**Female**	**Total**
5	545	636	1,181
6	611	597	1,208
Total	1,156	1,233	2,389

NICOTINE

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

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

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

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

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

ALCOHOL

The prevalence rates for annual and monthly alcohol use have declined since the 2004 survey. Large decreases were reported both in annual and in 30-day use among elementary aged youth between 2004 and 2018.

Figure 69: Annual Alcohol Prevalence by Grade and by Year

	2004	2006	2008	2010	2012	2014	2016	2018
5	10.5	8.9	8.8	6.3	4.5	2.3	3.0	2.2
6	13.7	11.8	11.8	8.5	6.1	4.5	4.6	4.6

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

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

INHALANTS

In Wood County, the annual prevalence rates of inhalant use are reported below. Among 5th and 6th graders the prevalence rate for inhalant use declined since 2010. The lowest rate ever reported in Wood County occurred among 6th graders. Among 5th graders, the prevalence rate has increased over 2016, yet remains lower than other years.

Figure 71: Annual Inhalant Prevalence by Grade and by Year

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

MARIJUANA

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

Figure 72: Annual Marijuana Prevalence by Grade and by Year

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

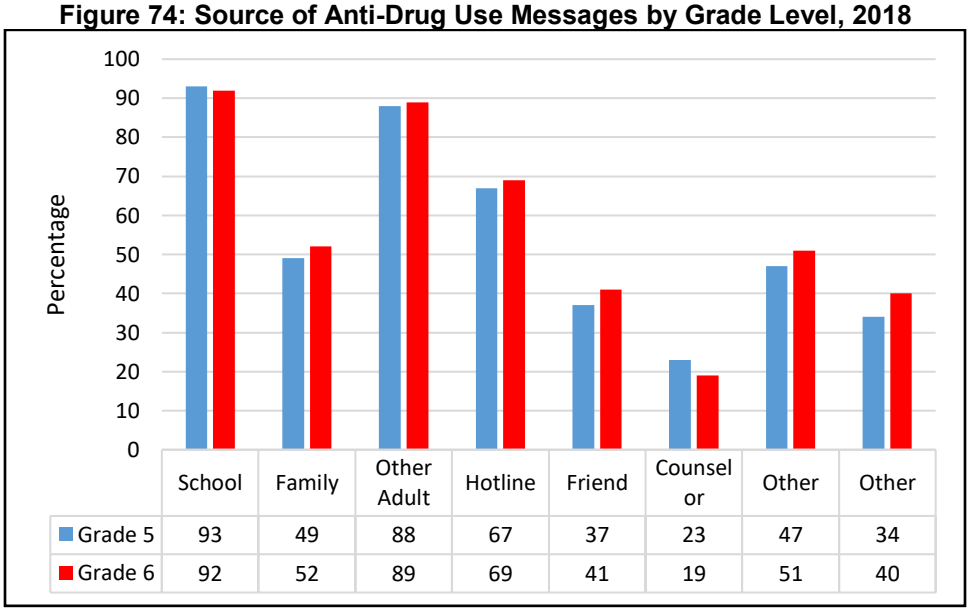
Figure 73: 30-Day Marijuana Prevalence by Grade and by Year

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

SOURCES OF ASSISTANCE

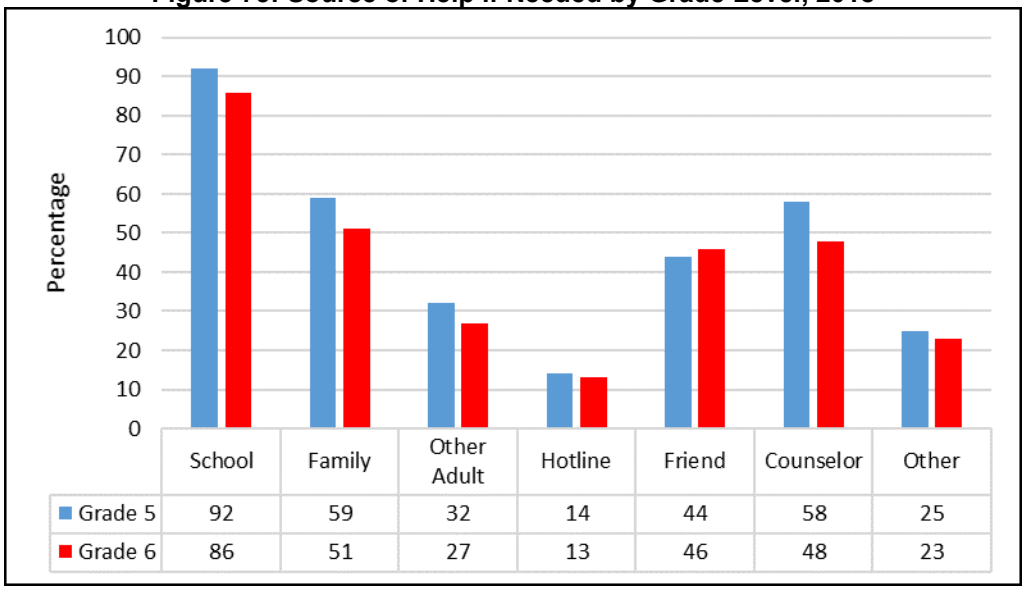
The survey for grades 5 and 6 also asked each respondent who has told you not to use alcohol or other drugs, and who you would turn to if you had a problem with alcohol or other drugs. Data for this item are summarized in the table below.

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



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

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



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

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

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

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

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

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

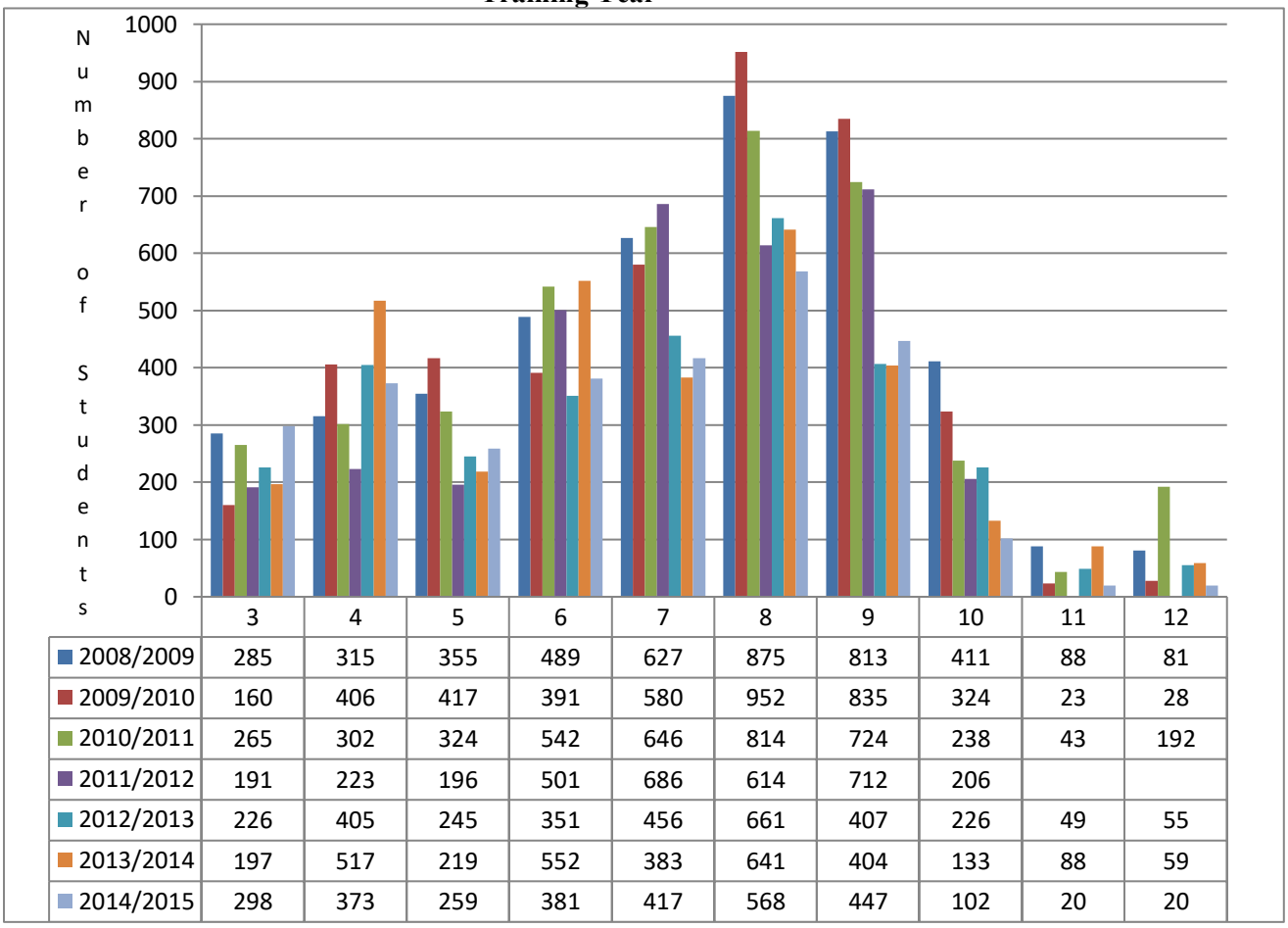
Results

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

Between September 2008 and September 2017, approximately 39,004 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 2018, 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



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

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

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

As a result of the comprehensive coverage of LST training by 2018, it now remains impossible to compare the drug prevalence rates of those who received LST training versus those who did not. Nearly everyone has received training. Comparisons would have been possible if we could isolate individual students within grades and within schools. In the latter case, we could compare those students within the same grade levels, and even within the same school, who received LST training

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

THE OHIO SCALES

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

From 2008 through 2018, 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.

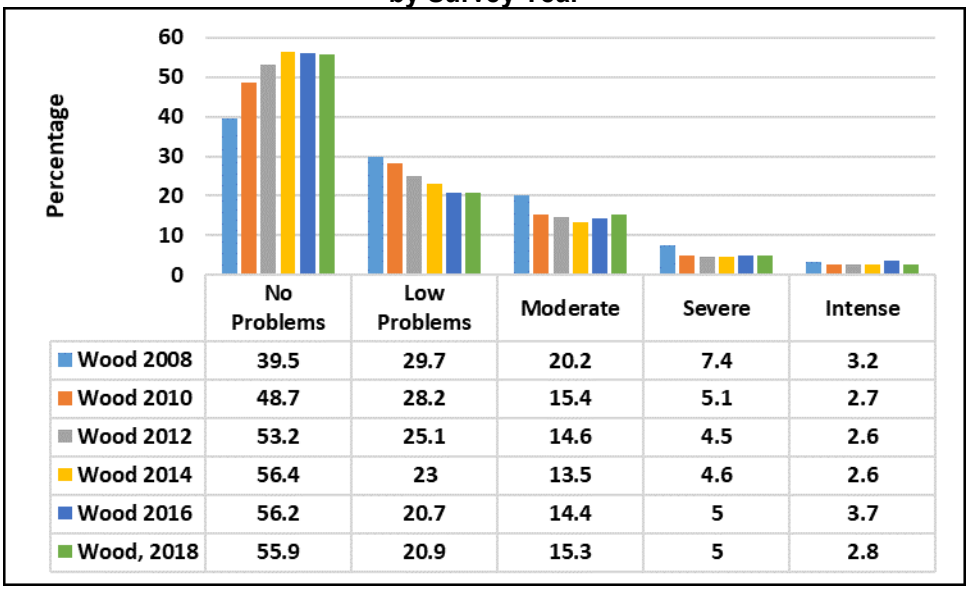
The Ohio Department of Mental Health (ODMH) previously established the Ohio Scales as a mandated outcomes instrument for all ODMH-certified agencies providing mental health services to children. While this mandate has since been removed, data is still available for much of the clinical population of 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 2018 Wood County Youth Survey also used these categorical labels to summarize the scores of all respondents.

The following chart shows the distribution of scores by category and by year for all 7th through 12th grade students in Wood County, as of January, 2018.

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



	No Problems	Low Problems	Moderate	Severe	Intense
Wood 2008	39.5	29.7	20.2	7.4	3.2
Wood 2010	48.7	28.2	15.4	5.1	2.7
Wood 2012	53.2	25.1	14.6	4.5	2.6
Wood 2014	56.4	23	13.5	4.6	2.6
Wood 2016	56.2	20.7	14.4	5	3.7
Wood, 2018	55.9	20.9	15.3	5	2.8

The following chart provides the percentage and raw number of Wood County youth that fell into the Problem Severity Scales categories in 2018. 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.

	None	Low	Moderate	Severe	Intense	Total
Wood County	55.9%	20.9%	15.3%	5%	2.8%	100%
Population Size, 2018	3284	1230	900	292	167	5873

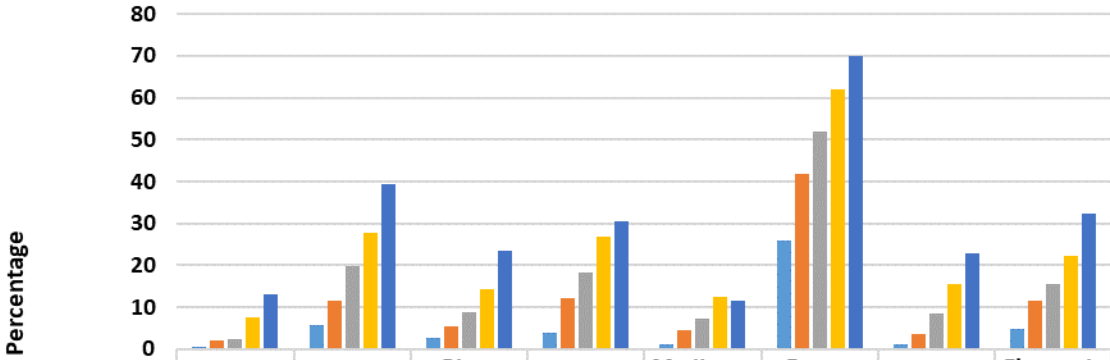
THE OHIO SCALES AND SUBSTANCE USE

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 percent 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 2018.

Figure 78: Prevalence of Substance Use by Problem Severity Scale, 2018

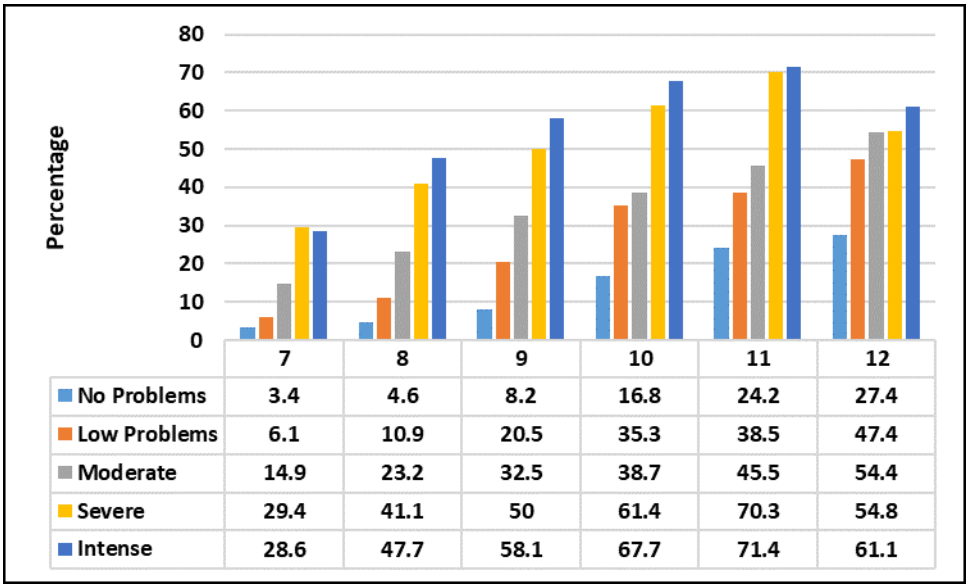


	Cigarettes	Alcohol	Binge Drink	Marijuana	Marijuana edibles	Energy Drinks	Painkillers	Electronic Cigarettes
No Problems	0.6	5.6	2.6	3.9	1.2	25.8	1.3	4.8
Low Problems	2.2	11.7	5.4	12.1	4.6	41.8	3.7	11.6
Moderate	2.3	19.9	8.8	18.2	7.2	52	8.5	15.5
Severe	7.6	27.9	14.4	26.8	12.5	62.1	15.5	22.3
Intense	13.2	39.5	23.4	30.5	11.4	69.9	22.8	32.3

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 5.6 percent for the "no problem" group to 39.5 percent for those youth who are reporting significant mental health problems (i.e., those youth scoring in the "severe" and "intense" problem severity ranges). Similarly, the use of marijuana varies considerably by level of mental health reported.

Figure 79 looks in more detail at the relationship between problem severity and annual alcohol use in grades 7 through 12. In general, it remains true across grade levels that as problem severity increases, so does the likelihood of alcohol use. For each grade level, as problem severity increase, so does self-reported alcohol use. That effect is more striking in the lower grade levels. In 7th grade only 3.4 percent of the "no problem" and 6.1 percent of the "low problem" groups report alcohol use, whereas 28.6 percent of the intense group uses alcohol. As youth get older, regardless of their state of mental health, they are more likely to report use of alcohol. Even in the "no problems" 12th grade group, nearly one third (27.4 percent) report alcohol use. Despite this, alcohol use for 12th graders still rises with increase in problem severity, to over 61.1 percent and higher for the "intense" and "severe" groups.

Figure 79: Prevalence of Annual Alcohol Use by Problem Severity Scale, 2018



	7	8	9	10	11	12
No Problems	3.4	4.6	8.2	16.8	24.2	27.4
Low Problems	6.1	10.9	20.5	35.3	38.5	47.4
Moderate	14.9	23.2	32.5	38.7	45.5	54.4
Severe	29.4	41.1	50	61.4	70.3	54.8
Intense	28.6	47.7	58.1	67.7	71.4	61.1

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 2.4 percent of youth reported drinking and driving and 3.8 percent of youth reported smoking marijuana and driving. Looking at 10 through 12th graders and comparing risky behaviors by the Problem Severity Scale, the results are reported below. As youth problem severity increases, risky behaviors, such as driving under the influence, increase dramatically

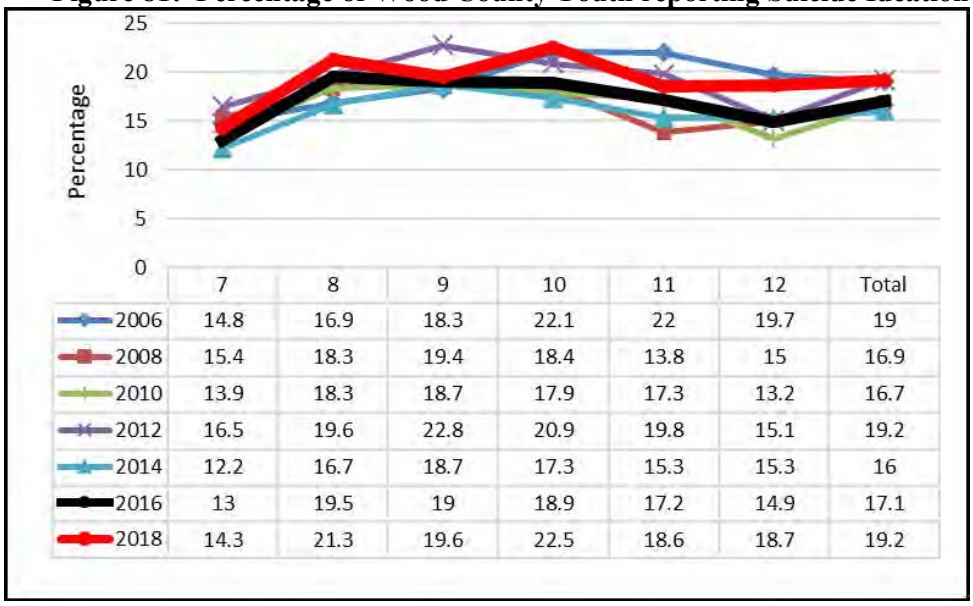
Figure 80: Percentage of Wood County youth who reported driving after drinking alcohol or smoking marijuana by level of Problem Severity Scale in Grades 10, 11, and 12, 2018

	No Problems	Low Level	Moderate	Severe	Intense
Drinking Alcohol	1.0	3.1	4.4	7.1	12.7
Smoking Marijuana	2.9	7.1	9.1	12.5	23.8

SUICIDE

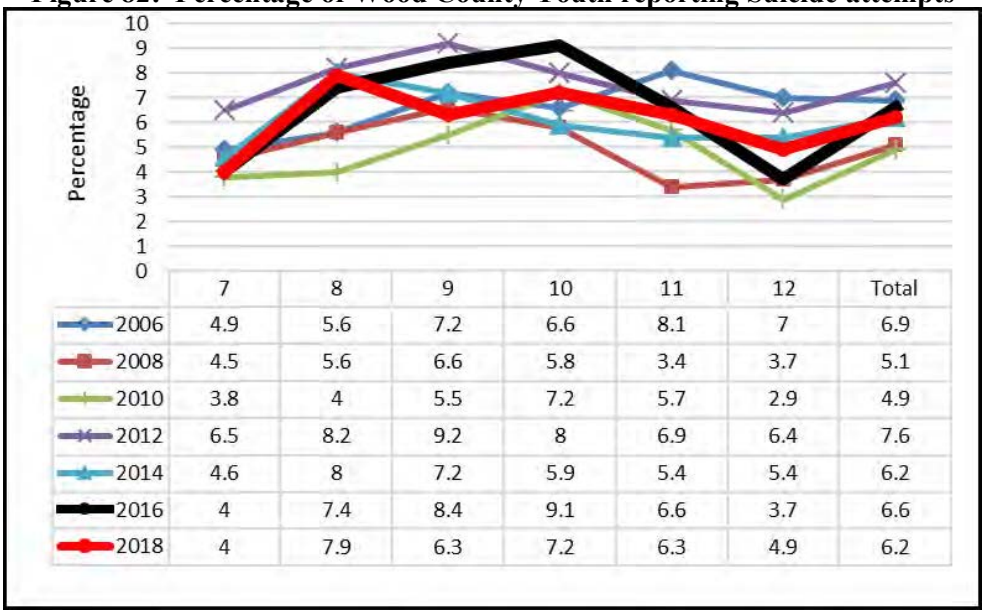
Suicide is the second leading cause of death for the ages 10 through 34. In Figure 81 below, the percentage of Wood County youth reporting suicide ideation between 2006 and 2018 is reported. In Figure 82, the percentage of Wood County youth reporting suicide attempts, by grade level, between 2006 and 2018 is reported.

Figure 81: Percentage of Wood County Youth reporting Suicide Ideation



	7	8	9	10	11	12	Total
2006	14.8	16.9	18.3	22.1	22	19.7	19
2008	15.4	18.3	19.4	18.4	13.8	15	16.9
2010	13.9	18.3	18.7	17.9	17.3	13.2	16.7
2012	16.5	19.6	22.8	20.9	19.8	15.1	19.2
2014	12.2	16.7	18.7	17.3	15.3	15.3	16
2016	13	19.5	19	18.9	17.2	14.9	17.1
2018	14.3	21.3	19.6	22.5	18.6	18.7	19.2

Figure 82: Percentage of Wood County Youth reporting Suicide attempts



	7	8	9	10	11	12	Total
2006	4.9	5.6	7.2	6.6	8.1	7	6.9
2008	4.5	5.6	6.6	5.8	3.4	3.7	5.1
2010	3.8	4	5.5	7.2	5.7	2.9	4.9
2012	6.5	8.2	9.2	8	6.9	6.4	7.6
2014	4.6	8	7.2	5.9	5.4	5.4	6.2
2016	4	7.4	8.4	9.1	6.6	3.7	6.6
2018	4	7.9	6.3	7.2	6.3	4.9	6.2

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 3.5 percent and 18.2 percent of youth in the no/low problem severity range report that they think about suicide; that figure jumps to 75.5 percent and 77.2 percent, respectively, in the "severe" and "intense" groups. Similarly, 4.3 percent of the no/low problem severity group report that they attempted suicide, while 32.1 percent of the "severe" and 50 percent of the "intense" groups indicates a suicide attempt.

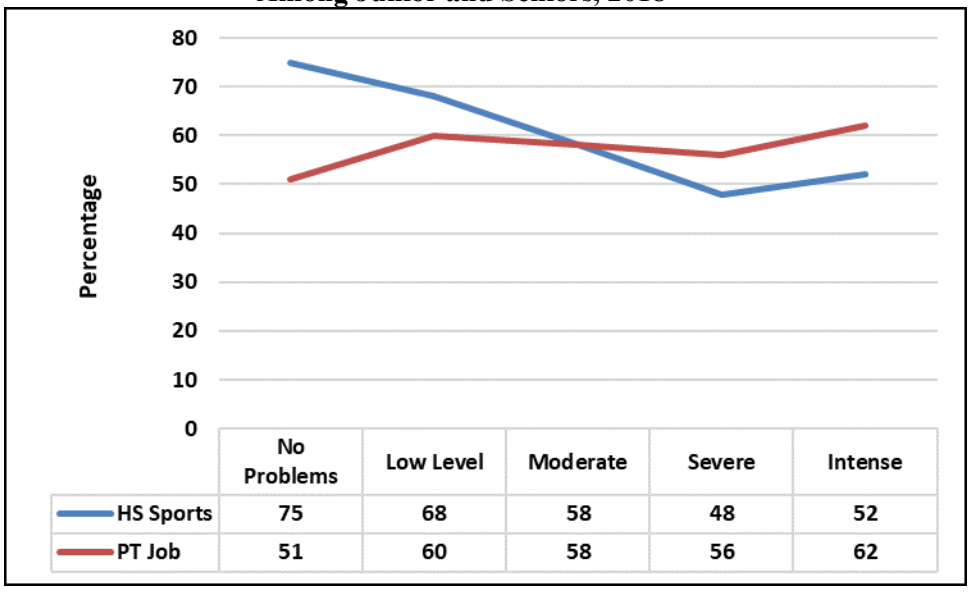
Figure 83: Wood County Youth Who Reported "Yes" to Suicide Ideation or Suicide Attempts by Level of Problem Severity Scale, 2018

	No Problems	Low Level	Moderate	Severe	Intense	Total
Suicide Ideation **(%)**	**3.5**	**18.2**	**46.6**	**75.5**	**77.2**	**18.8**
Number	114	223	418	219	129	1103
Suicide Attempts **(%)**	**1.0**	**3.3**	**12.1**	**32.1**	**50.0**	**6.1**
Number	33	41	109	93	83	359

The 2018 Youth Survey asked questions to explore involvement in school sports, community activities, volunteerism and part time work. Asked were 'during the school year, how often have you participated in any of the following activities?" In the table below, the relationship between participation in sports, participation in part time employment, and mental health is explored.

A negative relationship exists between participation in school sports and level of problem severity. That is, those who participate in sports as less likely to report severe or intense levels of problems. The opposite is true for part time employment where a negative relationship exists: that is, those who work are more likely to report a higher level of problem severity.

Figure 84: Participation in HS Sports and PT Work by Level of Problem Severity Scale Among Junior and Seniors, 2018



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. The major findings from this effort were:

1. In 2004, 10.6 percent of Wood County 7th through 12th graders report significant mental health problems, with problem severity scores in the "severe" or "intense" range. By 2018, that percentage declined to 7.8 percent reporting similar symptoms.
2. The percentage of students reporting "moderate" levels of problem severity has declined from 20.2 percent in 2008 to 15.3 percent in 2018.
3. 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.
4. Youth who report significant mental health problems, with problem severity scores in the "severe" or "intense" range, are much more likely to think about suicide or make a suicide attempt.

BULLYING

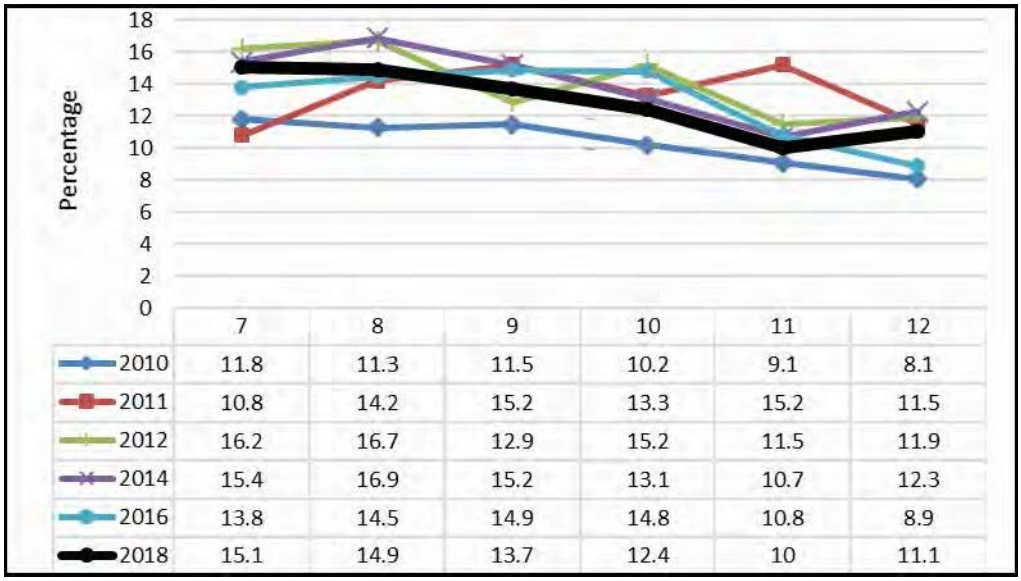
Reports of bullying by students and rates of physical injury resulting from school bullying have remained a pervasive problem affecting millions of students annually. Bullying in educational research is defined as an action that involves three elements: aggressive acts made with a harmful intent; repetition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

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

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

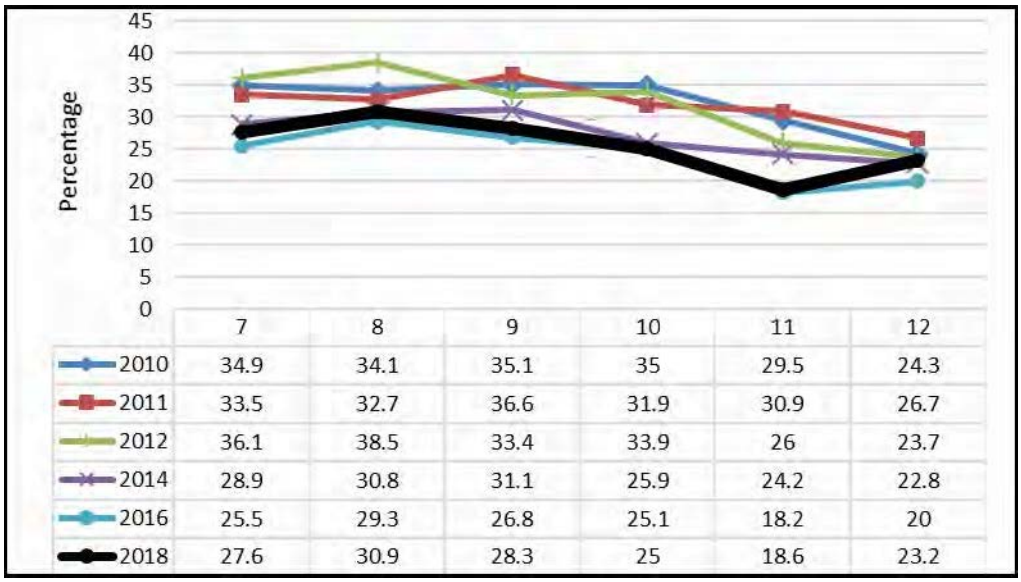
In Wood County, bullying has been measured on two different surveys. First, the Wood County Student Survey measured bullying in February 2010, 2012, and 2014; and, in November 2015. Second, the S.H.A.P.E.S. (Shaping Health Atmospheres that Promote Education and Safety) survey measured bullying in 2011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

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



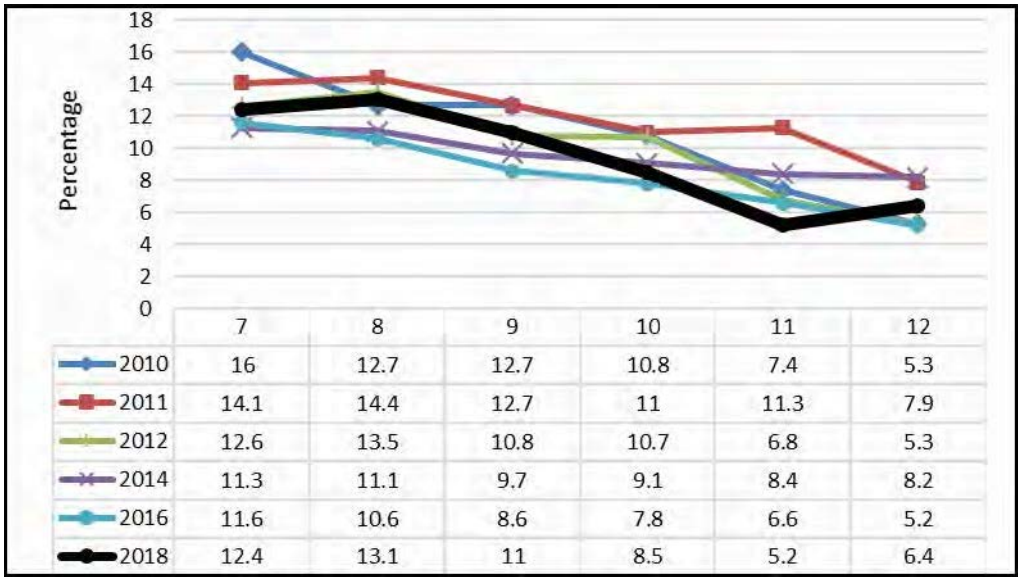
	7	8	9	10	11	12
2010	11.8	11.3	11.5	10.2	9.1	8.1
2011	10.8	14.2	15.2	13.3	15.2	11.5
2012	16.2	16.7	12.9	15.2	11.5	11.9
2014	15.4	16.9	15.2	13.1	10.7	12.3
2016	13.8	14.5	14.9	14.8	10.8	8.9
2018	15.1	14.9	13.7	12.4	10	11.1

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



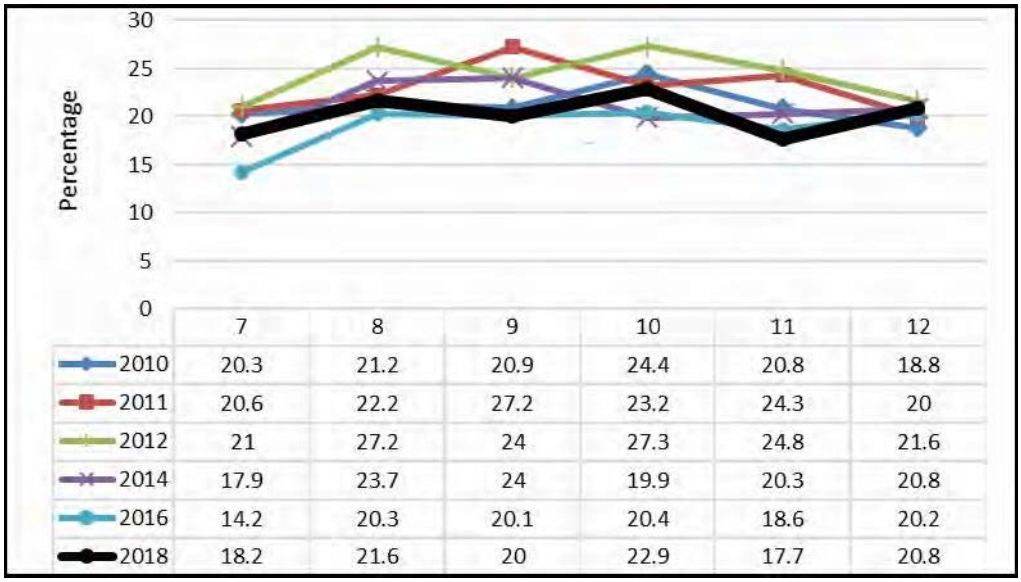
	7	8	9	10	11	12
2010	34.9	34.1	35.1	35	29.5	24.3
2011	33.5	32.7	36.6	31.9	30.9	26.7
2012	36.1	38.5	33.4	33.9	26	23.7
2014	28.9	30.8	31.1	25.9	24.2	22.8
2016	25.5	29.3	26.8	25.1	18.2	20
2018	27.6	30.9	28.3	25	18.6	23.2

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



	7	8	9	10	11	12
2010	16	12.7	12.7	10.8	7.4	5.3
2011	14.1	14.4	12.7	11	11.3	7.9
2012	12.6	13.5	10.8	10.7	6.8	5.3
2014	11.3	11.1	9.7	9.1	8.4	8.2
2016	11.6	10.6	8.6	7.8	6.6	5.2
2018	12.4	13.1	11	8.5	5.2	6.4

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



	7	8	9	10	11	12
2010	20.3	21.2	20.9	24.4	20.8	18.8
2011	20.6	22.2	27.2	23.2	24.3	20
2012	21	27.2	24	27.3	24.8	21.6
2014	17.9	23.7	24	19.9	20.3	20.8
2016	14.2	20.3	20.1	20.4	18.6	20.2
2018	18.2	21.6	20	22.9	17.7	20.8

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

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

	Not at All					one or twice					several times					often					most of the time				
Grade	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018
7	88.2	83.8	84.6	86.2	84.9	6.8	9.3	9.1	8.2	7.6	2	3.2	2.7	2.6	4	1.4	2.2	2	1.7	1.7	1.6	1.5	1.6	1.4	1.9
8	88.7	83.3	83.1	85.5	85.1	6.8	9.6	9	7.4	8.1	2.1	3.4	3.7	3.8	2.9	1.5	1.9	2.5	1.9	1.8	0.9	1.9	1.7	1.3	2.2
9	88.5	87.1	84.8	85.1	86.3	6.4	7.6	7	6.9	7.4	2.3	2.7	3.8	3.1	3.3	1.5	1.5	2.4	3	1.6	1.4	1.1	2	1.8	1.4
10	89.8	84.8	86.9	85.2	87.6	5.5	9	8.3	8.2	6.6	1.9	3	2.6	2.9	2.6	1.1	1.8	1	1.8	1.4	1.7	1.5	1.2	1.9	1.8
11	90.9	88.5	89.3	89.8	90	5.5	5.6	5.6	5.7	5.7	2.5	2.2	2.3	2.6	2.2	0.6	0.7	1.2	0.9	1.3	0.5	1.9	1.7	1	0.7
12	91.9	88.1	87.7	91.1	88.9	6.1	7.4	6.3	5.6	5.3	1	2.2	2.6	2.1	3	0.4	1.5	1.7	0.5	1.1	0.6	0.7	1.7	0.8	1.7

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

	Not at All					one or twice					several times					often					most of the time				
	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018
7	65.1	63.9	71.1	74.5	72.4	18.1	20.8	17	13.7	13.6	8.4	8	5.6	5.5	6.3	3.3	4	3.5	3.5	4	5.1	3.2	2.7	2.7	3.3
8	65.9	61.5	69.2	70.7	69.1	8.2	21.2	16.6	12.9	15.9	8.1	9.1	8	8	6.7	4	4.3	3.1	5.3	4.5	3.8	3.9	3.2	3.1	3.9
9	64.9	66.6	68.9	73.2	71.7	21.2	19.6	16.7	14.1	15	7.4	7.9	7.5	5.9	5.9	3.5	3.4	3.8	3.7	4	3.1	2.5	3.2	3.1	3.5
10	65	66.1	74.1	74.9	75	20.6	19.5	14.8	12.8	13.5	8	7.5	6.2	6.3	6	3.2	4.4	2.7	2.6	2.9	3.1	2.5	2.1	3.4	2.5
11	70.5	74	75.8	81.8	81.4	18.1	16.2	13.7	10.9	10.8	6.9	5.6	5.4	2.7	4.5	2.1	2	2.7	2.7	1.9	2.5	2.1	2.3	1.9	1.3
12	75.7	76.3	77.2	80	76.8	16.9	16.1	12.8	11.5	12.4	4.8	5.2	5.3	4.1	4.4	2	2.2	2.5	2.3	4.4	0.7	1.1	2.2	2.1	2

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

	Not at All					one or twice					several times					often					most of the time				
	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018
7	84	87.4	88.7	88.4	87.6	10.6	8.8	6.9	7.5	7.7	3	1.9	1.2	1.7	2.3	0.8	1.1	1.3	1.6	1.4	1.6	0.7	1.8	0.8	1.1
8	87.3	86.5	88.9	89.4	86.9	9.3	8.8	7.2	6.3	8.8	1.5	2	1.5	2.6	1.9	0.9	1.2	1.2	1	1	1	1.5	1.1	0.8	1.4
9	87.3	89.2	90.3	91.4	89	8.3	6.9	5.3	6.1	7.9	2.5	2.4	1.8	0.9	1.5	0.7	0.6	1.4	0.6	0.9	1.3	0.9	1.2	0.9	0.8
10	89.2	89.3	90.9	92.2	91.5	7.2	7	5	4.3	5	1.7	1.6	1.4	1.3	1.3	0.6	1.4	0.9	0.8	1.1	1.3	0.8	1.6	1.3	1.2
11	92.6	93.2	91.6	93.4	84.8	4.6	3.5	4	3.7	3.5	1.8	0.9	1.9	1.7	0.6	0.5	1	0.5	0.7	0.4	0.5	1.4	1.9	0.4	0.7
12	94.7	94.7	91.8	94.8	93.6	4.2	2.9	3.2	2.9	3.6	0.8	1.4	1.7	0.9	1.3	0.4	0.4	1.7	0.8	0.5	0.1	0.6	1.7	0.6	1.1

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

	Not at All					one or twice					several times					often					most of the time				
	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018	2010	2012	2014	2016	2018
7	79.7	79	82.1	85.8	81.8	12.1	12.1	10.4	8.8	9.7	3.6	4.1	2.8	2.1	3.6	2.4	2.2	2.3	1.4	2.5	2.2	2.6	2.3	1.9	2.3
8	78.8	92.8	76.3	79.7	78.4	12.7	15.8	12.4	10.3	11.5	4.4	4.5	6.3	5.5	5.1	2	3.7	2.4	2.8	2.3	2	3.2	2.8	1.7	2.8
9	79.1	76	76	79.9	80	11.5	13.1	12.1	10.3	10.9	5.3	5.8	6	4.2	4.5	1.9	2.4	3.2	3.4	2.3	2.3	2.7	2.7	2.2	2.3
10	75.6	72.7	80.1	79.6	77.1	14.4	15.7	11.7	10.3	12.6	4.4	5.5	4.3	4.6	4.8	2.5	2.7	1.7	2.7	3.3	3.1	3.3	2.2	2.9	2.2
11	79.2	75.2	79.7	81.4	82.3	12.1	15.9	10.9	10.2	10.2	5.6	4.6	4.7	5	3.5	1.6	2	2.5	1.4	1.9	1.6	2.4	2.3	2	2.1
12	81.2	78.4	79.2	79.8	79.2	14.2	13.6	10.1	10.9	9.7	2.7	4.6	5.6	5.2	5.6	1.3	2.2	2.2	2.1	2.3	0.6	1.1	2.9	2	3.1

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

Figure 94: Percentage of Wood County Youth Reporting Being Bullied Last Month by Frequency and by Type of Bullying, 2018.

	physically	verbally	cyber bullied	indirectly
not at all	90	73.8	86.8	79.8
1-2 times	6.5	13.9	7	10.8
several times	1.5	5.8	3	4.5
often	0.9	3.7	1.5	2.5
most of time	1.1	2.9	1.7	2.5

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

Figure 95: Percentage of Wood County Youth Who Report Being Bullied Last Month by Gender, by Frequency, and by Type of Bullying, 2018.

	Physical		Verbal		Cyber		Indirect	
	Male	Female	Male	Female	Male	Female	Male	Female
not at all	89.9	90.2	78.4	69.3	90.9	87	86.2	73.3
1-2 times	6.3	6.7	11.4	16.2	5	6.5	7.9	13.9
several times	1.8	1.2	4.5	7.1	1.8	4	2.9	6.1
often	0.7	1	3	4.3	0.9	1.2	1.2	3.7
most of time	1.3	0.8	2.6	3	1.4	1.2	1.8	3

Bullying and Substance Use

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

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

Figure 96: Percentage of Youth Who Report Using Substances by Grade and by Bullying Victimization, 2018.

Grade	Cigarettes		Alcohol		Marijuana		Caffeinated Drinks		Painkillers	
	Not Bullied	Bullied	Not Bullied	Bullied	Not Bullied	Bullied	Not Bullied	Bullied	Not Bullied	Bullied
7	0.3	1.5	5.4	10.4	1.1	1.7	21.1	40.2	2.4	6.9
8	0.5	0.9	9.5	19.6	3	6.7	30.6	47.4	1.8	5.3
9	1.3	3.7	13.6	27.1	6.4	12.7	32.2	49.4	2.5	9.2
10	1.5	5	24.4	37.8	11.1	18	35.2	54.2	2.3	9.7
11	2	4.2	31.2	43.9	16.9	23.1	35	46	4.1	6.1
12	2.8	8.4	36.4	42.1	18.9	25.4	34	48.3	2.2	7.7

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 alcohol is the most commonly used substance, we compared the rates of alcohol use last year by gender and by frequency of reports of having been bullied. Results are reported in the following figure:

Figure 97: Percentage of Youth Who Report Drinking Alcohol Last Year By Type and Frequency of Bullying Victimization and by Gender, 2018.

	Physical		Verbal		Cyber		Indirect	
	Male	Female	Male	Female	Male	Female	Male	Female
not at all	17.6	22.7	17.1	20.8	17.6	21.7	17	20.6
1-2 times	25.8	34.5	21.2	27.1	27.3	32.7	23.3	27.3
several times	32.1	38.9	29.3	34.1	34.5	34.6	37.9	41.9
often	41.7	33.3	25.8	35.2	34.6	40.3	40.5	36.1
most of time	28.2	45.8	29.1	40	28.9	36.5	32.1	39.3

Again, it is evident that the lowest rates of substance use were found among those youth who reported that they were never bullied. This finding is apparent for both males and females. Additionally, the highest rates of alcohol use are found among those youth who report being bullied 'often.' However, the use of alcohol 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 alcohol use. Nonetheless, while the current research does not show causality, the association between self-reports of alcohol use 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 5873 youth in grades 7 through 12. Of these students, 55.9 percent reported 'no problems' on the Problem Severity Scale (n=3284). An additional 20.9 percent indicate that they experienced a 'low level' of Problem Severity (n=1230). Another 15.3 percent reported moderate levels (n=900); 5 percent indicated severe Problem Severity (n167); and, 2.8 percent (n=167) reported intense Problem Severity.

	None	Low	Moderate	Severe	Intense	Total
Wood County	55.9%	20.9%	15.3%	5%	2.8%	100%
Population Size, 2018	3284	1230	900	292	167	5873

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

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

Figure 98: Percentage of Youth Who Report being Verbally Bullied Last Month By Frequency of Bullying and by Level of Problem Severity, 2018.

Verbal	No Problems	Low Problems	Moderate	Severe	Intense	Total
not at all	65.9	19.4	11	2.8	0.9	100
1-2 times	34.8	28.6	25.2	8	3.4	100
several times	22.4	28.6	31.6	12.7	4.7	100
often	17.5	17.5	33.2	16.1	15.6	100
most of time	12.4	13.6	27.2	17.8	29	100

Figure 99: Percentage of Youth Who Report being Cyber Bullied Last Month By Frequency of Bullying and by Level of Problem Severity, 2018.

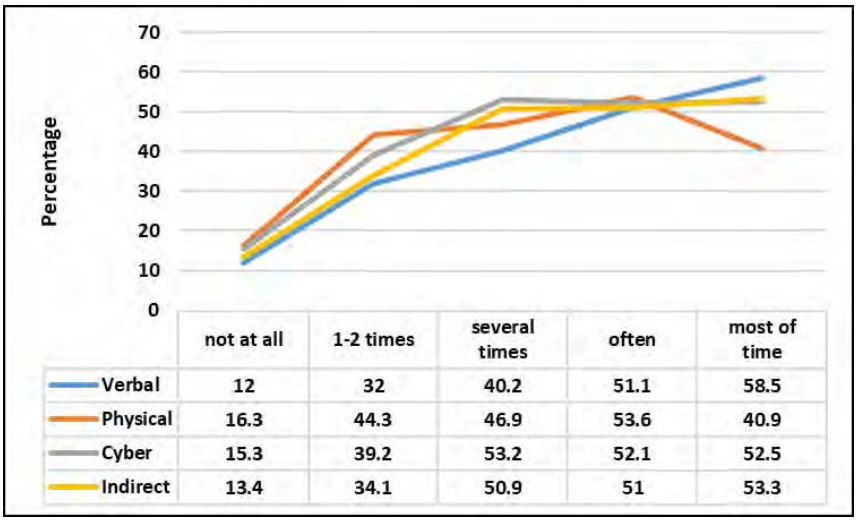
Cyber	No Problems	Low Problems	Moderate	Severe	Intense	Total
not at all	60.8	20.4	13.6	3.7	1.4	100
1-2 times	26.4	31	22.9	11.8	7.9	100
several times	17	20.5	36.4	14.8	11.4	100
often	19.5	17.2	27.6	17.2	18.4	100
most of time	20.5	8	26.1	13.6	31.8	100

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, 2012). 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.

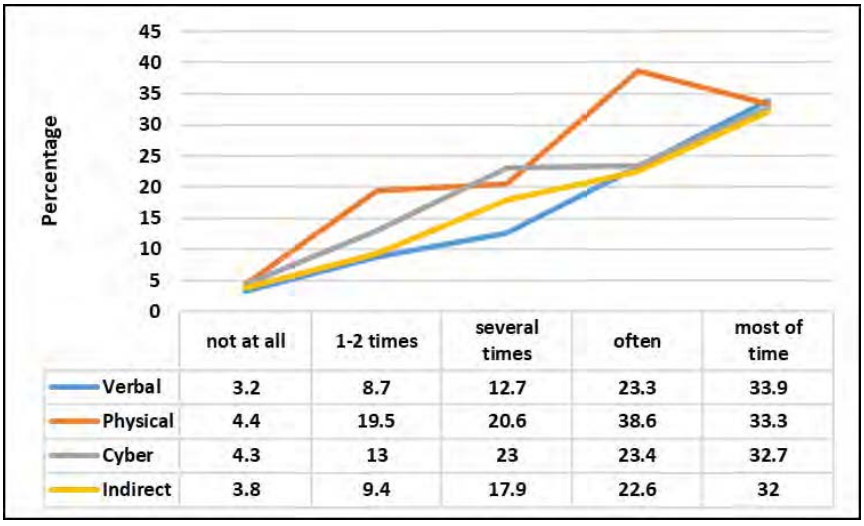
Figure 100: Percentage of Youth Who Report Suicide Ideation by Frequency of Being Bullied by Type of Bullying, 2018.



	not at all	1-2 times	several times	often	most of time
Verbal	12	32	40.2	51.1	58.5
Physical	16.3	44.3	46.9	53.6	40.9
Cyber	15.3	39.2	53.2	52.1	52.5
Indirect	13.4	34.1	50.9	51	53.3

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, 2018.



	not at all	1-2 times	several times	often	most of time
Verbal	3.2	8.7	12.7	23.3	33.9
Physical	4.4	19.5	20.6	38.6	33.3
Cyber	4.3	13	23	23.4	32.7
Indirect	3.8	9.4	17.9	22.6	32

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.

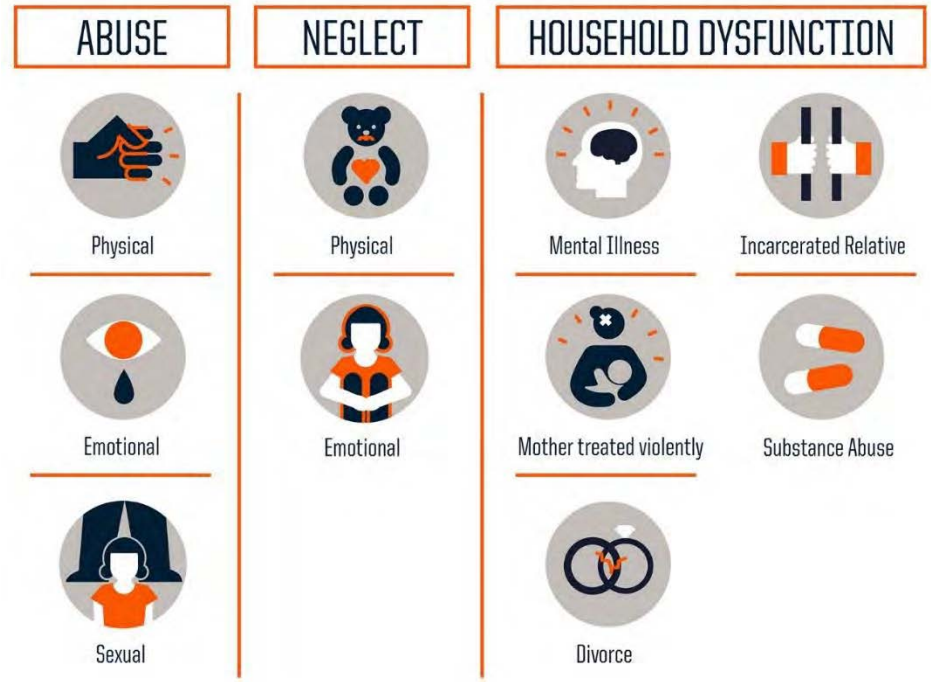
ADVERSE CHILDHOOD EXPERIENCES (ACES)

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 percent experienced at least four ACEs. Their study revealed a relationship between adverse childhood experiences and adult health issues.

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

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



Data on adverse childhood experiences (ACEs) were collected using a modified version of the Behavioral Risk Factor Surveillance System survey (BRFSS) available from the Centers for Disease Control and Prevention (2015). In the 2018 ADAMHS 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 5,870 Wood County adolescents from grades 7 through 12 completed the ACEs survey in November and December, 2017. The prevalence of each item, overall and by grade level, is reported in Table 4 below. Questions 1 through 5 indicate family dysfunction; questions 6 through 8 indicate abuse; and questions 9 and 10 indicate neglect.

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

ACEs Question	Grade in School		Grade in School					
	Grades 7-12 Combined		7	8	9	10	11	12
In the time before you were 18 years of age:	Rate	Count	Rate	Rate	Rate	Rate	Rate	Rate
Did you live with anyone who was depressed, mentally ill, or attempted suicide?	19.6	1147	16.2	18.6	18.1	21.8	21.1	24.7
Did you live with anyone who was a problem drinker or alcoholic or used street drugs?	15.7	920	13	15.7	15.5	18.5	15.4	16.8
Did you live with anyone who went to jail or prison?	17.1	1002	18.4	19.9	15.7	18	15.4	13
Were your parents separated or divorced?	34.6	2029	34.9	35.7	34	34.7	35.2	32.5
Did a parent or adult in your home often or very often slap, hit, kick, punch or beat each other up?	4.4	259	3.7	4.9	4.1	5.5	4	4.4
Did a parent or adult in your home often or very often hit, beat, kick or physically hurt you in any way?	5.5	322	4	7.9	6.3	7.2	6.3	4.9
Parent or adult in home often or very often swear at you, insult you, or put you down.	19.1	1123	16.9	20.3	19.8	19.5	18.1	20.5
Did anyone 5 years older than you or an adult, ever touch you or have you touch them sexually. Or, attempt to have sex with you.	4.4	259	3.6	4.8	4.7	5.4	2.9	5.2
Did you often or vey often feel that you didn't have enough to eat, had to wear dirty clothes & had no one to protect you.	4.7	276	5	5.6	4.9	4.6	2.8	4.5
Did you often or very often feel that no one in your family loved you or thought you were important or special?	16.8	982	16.1	20.1	15.6	17.9	14.1	15.5

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

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

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

Number of ACEs	Males (Nationally, ages 18+)	Females (Nationally, ages 18+)	Males (Wood County, ages 12-18)	Females (Wood County, ages 12-18)
0	41.4%	40.0%	56.6%	44.6%
1	24.9%	22.4%	21.8%	22.9%
2	13.2%	13.4%	9.5%	10.8%
3	8.1%	8.0%	5.2%	7.5%
4 or more	12.3%	16.2%	6.8%	14.2%

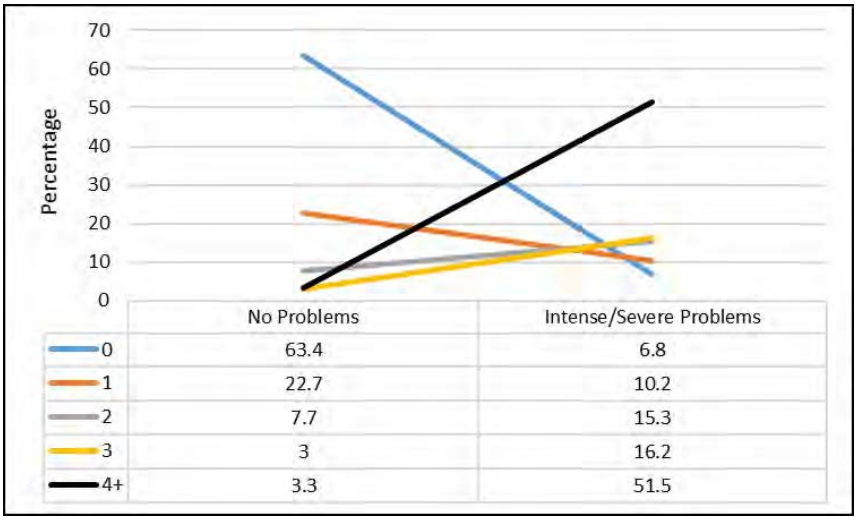
Multiple CDC studies describes the effect of cumulative childhood stress on physical and emotional well-being in adult life. They use the term 'dose response' to describe the relationship between ACEs and negative health and well-being outcomes. A dose response describes the negative relationships between 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 2018, the Wood County Youth Surveys contained the 20 item Problem Severity Scale. Problem Severity scores were used to calculate a rough estimate of the prevalence of Wood County youth who reported mental health problems, to follow trends in adolescent mental health, and to explore the relationship between level of problem severity and youth substance use.

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

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



	No Problems	Intense/Severe Problems
0	63.4	6.8
1	22.7	10.2
2	7.7	15.3
3	3	16.2
4+	3.3	51.5

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 63 to 23 percent; and among those reporting 2 ACEs, only 7.7 percent 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 percent; 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.

Number of Reported ACEs	Thought about suicide	Tried to commit suicide
0	4.6% (110)	1.1% (26)
1	9.9% (104)	2.6% (27)
2	24.3% (116)	6.9% (33)
3	36.1% (107)	8.8% (26)
4	43.3% (81)	16.6% (31)
5	49.1% (52)	15.1% (16)
6	54.9% (45)	24.7% (20)
7 or more	53.9% (62)	34.8% (40)

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

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

GAMBLING PREVALENCE

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

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

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

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

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

Survey Results

School aged youth from grades 7 through 12 were surveyed in November and December, 2017 regarding gambling activities, gambling attitudes, and likelihood for a gambling disorder. The results of the survey, including all students in grades 7 through 12 (n=6217), are as follows:

Table 8. Prevalence of Gambling Activities among Adolescents (ages 12 to 18) in Wood County (n=6217), 2018.

	Daily	About once a week	About once a month	Less than once a month	Not at all
Played cards for money	.6	1.1	2.3	7.1	88.9
Bet money on games of person skill like pool, golf, or bowling	.8	1.4	2.8	7.8	87.3
Bet money on sports teams (pro, college, or amateur)	.7	1.8	2.8	7.6	87.2
Bought lottery tickets (mega millions, Powerball, etc.)	.4	.8	1.9	4.6	92.2
Bought scratch offs	.4	1.1	2.3	7.1	89.2
Played poker online (Full Tile, Poker Stars, 888. BetOnline, Etc.)	.4	.5	1.0	1.5	96.6
Placed a bet using your mobile device or smartphone	.5	.7	.9	1.6	96.3
Played Bingo for money	.5	.6	1.2	4.6	93.1
Bet money on Keno	.4	.6	1.0	2.7	95.3
Bet money on fantasy sports or games (with an entry fee to play)	.7	1.2	1.5	3.6	93.0
Bet money on daily fantasy sports (FanDuel or DraftKings, etc)	.8	.9	1.0	1.8	95.5

The most prevalent types of gambling activities among Wood County adolescents are betting money on sports: sports teams (pro, college, or amateur), on fantasy sports or games with an entry fee to play, or on daily fantasy sports such as FanDuel or DraftKings. The second highest level of prevalence occurs in playing cards (poker), and Ohio Lottery games such as purchasing Ohio Lottery tickets or purchasing scratch off tickets. Surprisingly low in prevalence were online gaming activities and betting using a smart phone or mobile device.

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

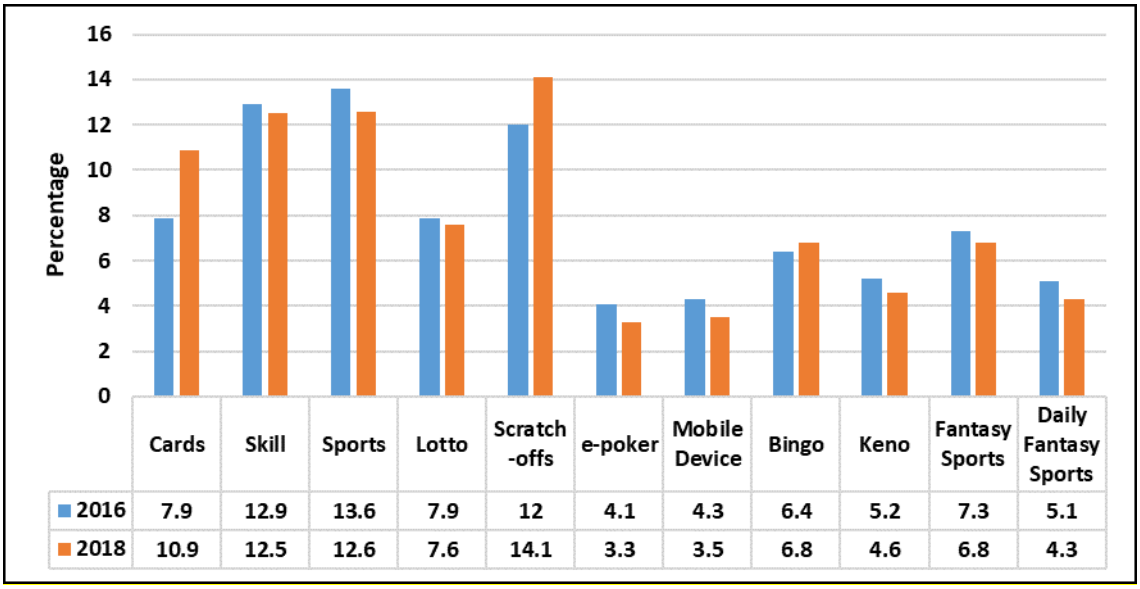
Gambling activities are more prevalent among males than females in Wood County and among older adolescents, aged 17 to 19, than younger adolescents aged 14 to 16.

Table 9. Prevalence of Gambling Activities by Gender among Adolescents (ages 12 to 18) in Wood County (n=5970), 2018.

	Gender	Daily	About once a week	About once a month	Less than once a month	Not at all
Played cards for money	Female	.3	.4	1.3	4.7	93.3
	Male	.7	1.6	3.2	9.5	85.1
Bet money on games of person skill like pool, golf, or bowling	Female	.4	.4	1.7	5.6	91.9
	Male	1.1	2.0	3.8	9.9	83.1
Bet money on sports teams (pro, college, or amateur)	Female	.3	1.0	1.4	4.2	93.2
	Male	1.2	2.2	4.0	11.0	81.6
Bought lottery tickets (mega millions, Powerball, etc.)	Female	.2	.5	1.6	4.4	93.2
	Male	.6	1.0	2.0	4.9	91.5
Bought scratch offs	Female	.2	.7	1.9	7.3	90
	Male	.5	1.2	2.6	7.1	88.6
Played poker online (Full Tilt, Poker Starts, 888, BetOnline, etc.)	Female	.2	.2	.5	.7	98.3
	Male	.5	.7	1.5	2.1	95.3
Placed a bet using your mobile device or smartphone	Female	.6	.3	.9	1.1	97.4
	Male	.3	1.0	.8	2.1	95.6
Played Bingo for money	Female	.3	.4	1.1	4.7	93.5
	Male	.7	.6	1.4	4.4	92.9
Bet money on Keno	Female	.1	.2	.7	2.2	96.7
	Male	.6	.7	1.3	3.1	94.4
Bet money on fantasy sports or games (with an entry fee to play)	Female	.1	.3	.8	1.5	97.2
	Male	1.3	1.9	2.0	5.5	89.3
Bet or wager on daily fantasy sports (FanDuel or DraftKings, etc.)	Female	.1	.4	.5	.6	98.3
	Male	1.4	1.2	1.2	3.0	93.2

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

Table 10. Trends in Gambling Prevalence, 2016-2018 Among Youth in Wood County.



	Cards	Skill	Sports	Lotto	Scratch -offs	e-poker	Mobile Device	Bingo	Keno	Fantasy Sports	Daily Fantasy Sports
2016	7.9	12.9	13.6	7.9	12	4.1	4.3	6.4	5.2	7.3	5.1
2018	10.9	12.5	12.6	7.6	14.1	3.3	3.5	6.8	4.6	6.8	4.3

The rates of gambling prevalence among Wood County youth show no discernable increase or decrease by type of activity between 2016 and 2018. Increases appear in playing cards for money and in the purchase of scratch offs, but decreases appear in most other activities.

DISORDERED GAMBLING

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

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

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

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

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

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

In 2016, among the population of 5000 Wood County adolescents, 3.0 percent reported disordered gambling tendencies as measured by the NODS-CliP; in 2018, among 6100 Wood County adolescents, the rate remained at 3.0 percent. These results are similar to other research-based studies designed to assess the level of disordered gambling among adolescents. Disordered gambling varied by age and gender, with Wood County males more likely to report disordered gambling characteristics.

REFERENCES

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

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

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

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

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

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

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

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

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

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

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

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

Dube SR, Anda RF, Felitti VJ, Chapman DP, Williamson DF, Giles WH. (2001). Childhood Abuse, Household Dysfunction, and the Risk of Attempted Suicide Throughout the Life

SpanFindings From the Adverse Childhood Experiences Study. *JAMA*. 2001;286(24):3089–3096. doi:10.1001/jama.286.24.3089

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

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

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

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

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

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

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

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

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

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

Ivoska, W.J. (2014). Biennial report of the Wood County youth survey, 2014. The Wood County ADAMHS Board. Bowling Green, Ohio.

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

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

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

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

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

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

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

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

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

Ogles, B.M., Lunnen, K.M., Gillespie, D.K., and Trout, S.C. (1996). Conceptualization and Initial Development of the Ohio Scales. In C. Liberton, K. Kutash, and R. Friedman (Eds.), The 8th Annual Research Conference Proceedings: A System of Care for Children's Mental Health: Expanding the Research Base. (33-37). University of South Florida.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

APPENDIX

Wood County 2017 Youth Survey

This survey is being given to students in grades 5 and 6. Your answers will be added to the survey to help us learn about kids your age. We hope to learn about your experiences, your feelings, and what you have to say. We will use the results to create programs and services that will be helpful for you.

Please be truthful and honest with your answers. The answers you give cannot be used to identify you. Your answers will not be shown to anyone. No one will know your personal answers to the questions. DO NOT write your name on the survey.

Please read each question carefully before marking your answers. Mark your answers on the answer sheet.

Please feel free to talk with your teacher or guidance counselor about your experiences with any of these questions.

Please mark the responses which describe you best.

1. How old are you?
   - A. 8 or younger
   - B. 9
   - C. 10
   - D. 11
   - E. 12
   - F. 13
   - G. 14
2. What is your gender?
   - A. Male
   - B. Female
3. During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to and from school?
   - A. None
   - B. 1 day
   - C. 2 or 3 days
   - D. 4 or 5 days
   - E. 6 or more days
4. During the last year, how many times on school property have you been in a physical fight?
   - A. 0 times
   - B. 1 time
   - C. 2 or 3 times
   - D. 4 or more times
5. During the past 30 days, on how many occasions have you used electronic cigarette (e-cig, vaping) products?
   - A. Not at all
   - B. 1 to 5 times
   - C. 6 to 20 times
   - D. 21 to 100 times
   - E. Over 100 times
6. During the past 30 days have you used prescription drugs not prescribed to you?
   - A. Yes
   - B. No
7. During the last year, have you taken Ritalin, Adderall, Concerta, Focalin, or Vyvance without a doctor's prescription?
   - A. Never
   - B. 1-2 times
   - C. 3-5 times
   - D. 6-10 times
   - E. 11+ times
8. During the past 30 days, have you smoked cigarettes?
   - A. Never
   - B. Sometimes, but not regularly
   - C. One to five cigarettes per day
   - D. About one-half pack per day
   - E. About one pack or more per day
9. During the past 30 days, have you used smokeless tobacco (chewing tobacco, etc.)?
   - A. Not at all
   - B. Once or twice
   - C. Once or twice per week
   - D. 3 to 5 times per week
   - E. Once or more per day
10. What people or places have told you not to use alcohol or other drugs (mark all that apply)?
    - A. School
    - B. Friends
    - C. Parents
    - D. Relatives
    - E. Church
    - F. Clubs
    - G. Media (TV, Radio)
    - H. Other
11. If you thought you had a problem with alcohol and/or other drugs, who would you talk to (mark all that apply)?
    - A. Parents/stepparent
    - B. Other family member
    - C. Other adult
    - D. Hotline
    - E. Friend
    - F. School counselor
    - G. Other
12. During the last year, have you had alcohol (beer, wine coolers, wine, liquor) to drink (more than just a taste - not including religious services)?
    - A. Never
    - B. 1 - 2 times
    - C. 3 - 5 times
    - D. 6 - 10 times
    - E. 11 + times
13. During the past 30 days, have you had alcohol (beer, wine coolers, wine, liquor) to drink (more than just a taste - not including religious services)?
    - A. Never
    - B. 1 - 2 times
    - C. 3 - 5 times
    - D. 6 - 10 times
    - E. 11 + times
14. During the last year, have you used marijuana (chronic, pot, weed)?
    - A. Never
    - B. 1 - 2 times
    - C. 3 - 5 times
    - D. 6 - 10 times
    - E. 11 + times

Please answer questions on other side.

15. During the past 30 days, have you used marijuana (chronic, pot, weed)?

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

16. During the last year, have you ever huffed or sniffed something in order to get high?

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

17. During the last year, have you used cozamine (coz, maze, ozzy)?

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

18. If you have used alcohol (beer, wine, wine coolers, liquor), how old were you when you first started?

A. Never used
B. 8 or younger
C. 9
D. 10
E. 11
F. 12
G. 13
H. 14

19. If you have used marijuana (chronic, pot, weed), how old were you when you first started?

A. Never used
B. 8 or younger
C. 9
D. 10
E. 11
F. 12
G. 13
H. 14

20. If you have used tobacco products (cigarettes, chewing tobacco, snuff), how old were you when you first started?

A. Never used
B. 8 or younger
C. 9
D. 10
E. 11
F. 12
G. 13
H. 14

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

Bullying happens in four basic ways: physical, verbal, cyber 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
21.	Physically bullied	A	B	C	D	E
22.	Verbally bullied	A	B	C	D	E
23.	Cyber bullied	A	B	C	D	E
24.	Indirectly bullied	A	B	C	D	E

How wrong do your friends feel it would be for you to:		Not at all wrong	A little bit wrong	Wrong	Very wrong
25.	have one or two drinks of an alcoholic beverage nearly every day?	A	B	C	D
26.	smoke tobacco?	A	B	C	D
27.	smoke marijuana?	A	B	C	D
28.	use prescription drugs not prescribed to you?	A	B	C	D
29.	gamble or make bets for money?	A	B	C	D

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

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

Thank You! We appreciate your help.

Wood County 2017 Youth Survey

This survey is being given to students in grades 7 through 12. Your answers will be added to the survey to help us learn about kids your age. We hope to learn about your experiences, your feelings, and what you have to say. We will use the results to create programs and services that will be helpful for you.

Please be truthful and honest with your answers. The answers you give cannot be used to identify you. Your answers will not be shown to anyone. No one will know your personal answers to the questions. DO NOT write your name on the survey.

Please read each question carefully before marking your answers. Mark your answers on the answer sheet.

Please feel free to talk with your teacher or guidance counselor about your experiences with any of these questions.

Please mark the responses which describe you best.

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

2. How old were you when you used a 'vaping' device, like an e-cig or e-pen, or the like, for the first time?
   A. I have never tried vaping or an e-cigarette
   B. 8 or younger
   C. 9 or 10
   D. 11 or 12
   E. 13 or 14
   F. 15 or16
   G. 17 or older

3. How old were you when you used marijuana (chronic, pot, weed) for the first time?
   A. I have never used marijuana
   B. 8 or younger
   C. 9 or 10
   D. 11 or 12
   E. 13 or 14
   F. 15 or16
   G. 17 or older

4. How old were you when you drank alcohol (beer, wine, wine coolers, liquor) for the first time?
   A. I have never drank
   B. 8 or younger
   C. 9 or 10
   D. 11 or 12
   E. 13 or 14
   F. 15 or16
   G. 17 or older

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

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

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

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

9. During the last 30 days, on how many occasions have you had five or more drinks in a row (a "drink" is a bottle of beer, a wine cooler, a glass of wine, a shot glass of liquor, or a mixed drink)?
   A. Never
   B. 1 - 2 times
   C. 3 - 5 times
   D. 6 - 10 times
   E. 11+ times

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

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

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

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

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

15. During the last year, on how many occasions have you taken training drugs (called steroids, roids, juice) without a doctor telling you to take them?

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

16. During the last year, on how many occasions have you used caffeinated energy drinks (Red Bull, Rock Star, Monster)?

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

17. During the last year, on how many occasions have you used Ritalin, Adderall, Concerta, Focalin, or Vyvance, on your own, without a prescription?

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

18. During the last year, how often have you taken cough medicine when you weren't sick (Robitussin, Vicks, Coricidin, Triple C, etc.)?

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

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

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

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

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

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

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

22. During the last year, on how many occasions have you used vitra-tabs or viteral (vits, vt's)?

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

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

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

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

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

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

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

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

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

27. During the past 30 days, on how many occasions have you used electronic cigarette (e-cig, vape) products?

A. Not at all
B. 1 to 5 times
C. 6 to 20 times
D. 21 to 100 times
E. Over 100 times

28. If you were vaping, in the past 30 days, with an e-cig, e-pen, or other electronic vaping devise, what did you put in it? (check all the products you used)

A. e-liquid or e-juice with nicotine
B. e-liquid or e-juice without nicotine
C. Homemade e-liquid or e-juice
D. Marijuana or THC in your e-liquid
E. I did not vape in the past 30 days

29. During the past 30 days, on how many occasions have you used marijuana dabs, also know as wax?

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

		YES	NO
30.	During this school year have you ever missed school, been tardy, or cut school because of your alcohol or other drug use?	A	B
31.	In the last year, did you ever go to school after using alcohol or other drugs?	A	B
32.	In the last year, did you ever use alcohol or other drugs while in school?	A	B
33.	In the last year, have you ever driven a car, truck, or motor vehicle after you drank alcohol?	A	B
34.	In the last year, have you ever driven a car, truck or motor vehicle after you used marijuana (chronic, pot, weed, edibles)?	A	B
35.	Have you seriously thought about killing yourself in the last year?	A	B
36.	Have you tried to commit suicide in the last year?	A	B
37.	In the last year, have you ever been a passenger in a car, truck or motor vehicle when you know the driver just drank alcohol or used marijuana?	A	B
38.	During the past 30 days, have you ever used marijuana as an edible (brownie, candy. etc)?	A	B

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

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

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

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

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

In the last year, how often have you done the following activities?		Daily	About once a week	About once a month	Less than once month	Not at all
68.	Played cards for money					
69.	Bet money on games of personal skill like pool, golf, or bowling	A	B	C	D	E
70.	Bet money on sports teams (pro, college, or amateur)	A	B	C	D	E
71.	Bought lottery tickets (mega millons powerball, etc.)	A	B	C	D	E
72.	Bought scratch-offs	A	B	C	D	E
73.	Played poker online (Full Tilt, PokerStars, 888, BetOnline, etc.)	A	B	C	D	E
74.	Placed a bet using your mobile device or smart phone	A	B	C	D	E
75.	Played bingo for money	A	B	C	D	E
76.	Bet money on Keno	A	B	C	D	E
77.	Bet money on fantasy sports or games (with an entry fee to play)	A	B	C	D	E
78.	Bet money on daily fantasy sports (FanDuel or DraftKings, etc.)	A	B	C	D	E

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

82. I use my phone while driving (talk or text):

A. All the time
B. Some of the time
C. Only when there aren't other cars around
D. Never

During the school year, how often have you participated in any of the following activities?		Never	1-2 times a month	1-2 times a week	Almost Daily
83.	Sports or athletic activities (ex. team sports like football, basketball, track, or dance class, swimming, etc.)	A	B	C	D
84.	Arts or civic activity (ex. theatre, band, choir, orchestra, school clubs, honor society, etc.)	A	B	C	D
85.	Religious activities (ex. going to church service/synagogue, belong to church youth groups, etc.)	A	B	C	D
86.	Volunteering or community activities (ex. YMCA, boy scouts, girl scouts, etc.)	A	B	C	D
87.	Alcohol and drug prevention clubs in school (ex. Teen Institute, PASA, Teen Pep, Stand United, etc.)	A	B	C	D
88.	Working at a part-time job?	A	B	C	D

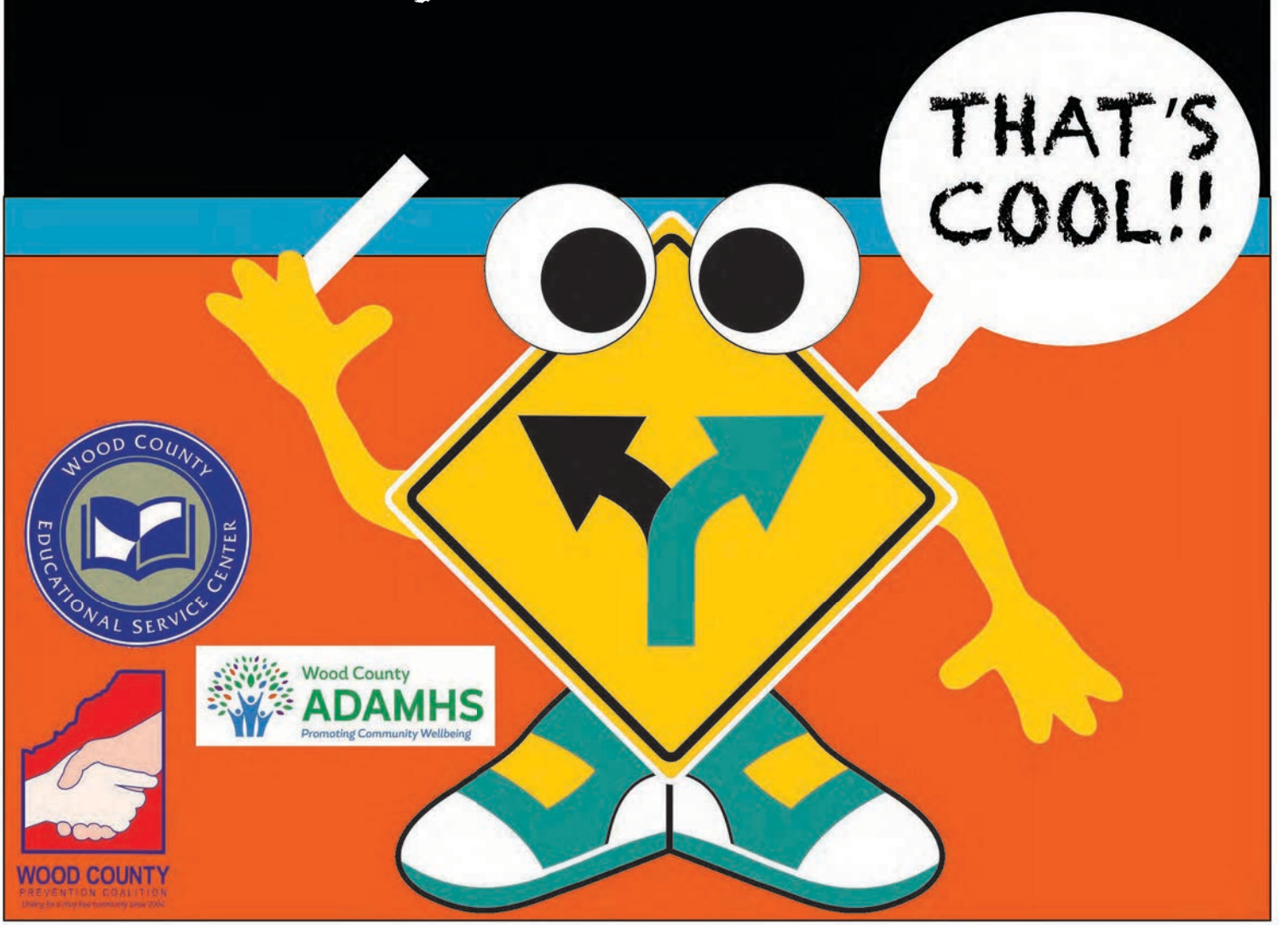
Please rate the degree to which you have experienced the following problems in the past 30 days.		Not at All	Once or Twice	Several Times	Often	Most of the Time	All of the Time
89.	Arguing with others	A	B	C	D	E	F
90.	Getting into fights	A	B	C	D	E	F
91.	Yelling, swearing, or screaming at others	A	B	C	D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

Thank You! We appreciate your help.


Mr. B Cool says 95.7%
of Wood County Youth
in grades 5-12 have
been drug free in the
past 30 days!
THAT is COOL
WOOD COUNTY EDUCATIONAL SERVICE CENTER
Wood County
ADAMHS
Promoting Community Wellbeing
WOOD COUNTY
PREVENTION COALITION

Since 2004, we have seen the following reductions among 12th graders:

Cigarette Use - 84%
Annual Alcohol Use - 46%
30-Day Binge Drinking - 63%
Annual Marijuana Use - 52%



WOOD COUNTY EDUCATIONAL SERVICE CENTER

Wood County ADAMHS
Promoting Community Wellbeing

WOOD COUNTY PREVENTION COALITION