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ROLE OF SELECTED RISKY BEHAVIORS IN UNDERAGE BINGE DRINKING:

A DESCRIPTIVE STUDY

A Manuscript Style Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of Master of Public Health in Community Health Education

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ABSTRACT

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Wisconsin's culture promotes even condones alcohol use making substance abuse a major public health issue for all ages in the State. Since 1981, Wisconsin State Statutes, Chapter 125 describing "alcohol beverages" allows a parent, guardian or spouse to serve their child or spouse, who is under legal drinking age, alcohol. *Operating while Intoxicated* (OWI) is merely a traffic violation on the first offense and not a felony until the fifth offense (Wisconsin Statutes Database, 2007). The *Wisconsin Epidemiological Profile on Alcohol and Other Drug Abuse* indicated that underage binge drinking rose significantly between 2003 and 2005, bringing use to the second highest rate in the Nation (28%) (Wisconsin Department of Health Services, 2008). This study looks at data from the Wisconsin Youth Risk Behavior Survey for Marshfield high school students who binge drank and describes the role selected risky behaviors (riding in a car with someone who had been drinking or driving after drinking, suicide rates and parent acceptance of binge drinking) play and their implication for selecting comprehensive interventions.

Key Words: underage drinking, binge drinking, drunk driving, parental approval, suicide

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INTRODUCTION

Introduction of Community Studied

This research explores a small, rural, central Wisconsin city, Marshfield, located in Wood County. The 2006 census for Marshfield recorded a population of 19,136. Approximately seven percent of the population of Marshfield falls within the high school age range of 14-18, the priority population for this study, representing approximately 1,327 youth (School Digger, 2008).

Need for the Study

The *Wisconsin Epidemiological Profile on Alcohol and Other Drug Abuse* report indicated that Wisconsin has the highest rates in the Nation of current drinking among high school students (49%); current underage drinking (39%); current drinking among adults (22%); and chronic heavy drinking among adults (8%). In addition, Wisconsin's rate of underage binge drinking rose significantly between 2003 and 2005, bringing use to the second highest rate in the Nation (28%) (Wisconsin Department of Health Services, 2008). Binge drinking is defined as having five or more drinks in a row for males within a couple of hours and four or more drinking in a row for females within a couple of hours (Moritsugu, 2007).

Alcohol abuse is also connected to other health priorities, specifically high-risk sexual behavior, intentional and unintentional injuries and violence, and mental health and mental disorders. The cost of underage drinking (including crime, injury, health care

costs, property damage, victimization, suicide, treatment, and early death) has been estimated at \$985 million each year (Wisconsin Department of Health Services, 2009).

Focus of the Study

This research focuses on underage binge drinking instead of underage drinking in general because concern lies in the consumption of large amounts of alcohol versus the occasional glass that youth may have because they are experimenting and Wisconsin's culture promotes alcohol use. This research uses secondary self-reported use data from the Wisconsin Youth Risk Behavior Survey (YRBS) for high school age students who engage in underage binge drinking in Marshfield compared to those who do not engage in this behavior. This study describes the role that selected risky behaviors play and its implication for selecting interventions to reduce these risky behaviors. Selected risk factors studied included: traffic safety such as riding in a car with someone who had been drinking or driving after drinking, suicide rates and parent acceptance of binge drinking.

BACKGROUND/LITERATURE REVIEW

Overview of Alcohol Trends Nationally

According to the National Traffic Highway Administration, since 1984 when the drinking age was changed to 21, 900 lives were saved per year from alcohol-related traffic crashes. In fact, in 1984 when the drinking age was 18, only eight percent of high school seniors had never used alcohol in their lifetime. Over time, that percent of seniors has risen to 28 percent, according to the National Institute on Drug Abuse's 2007 Monitoring the Future Survey (Community Anti-Drug Coalitions of America, 2009). Additionally, research has shown that the adolescent brain continues to develop from 12 years old to the mid 20s, which are the years in which critical periods of brain

development take place and where the effects of alcohol can impair learning and memory (White, 2001). It has also been shown that when an adolescent drinks before the age of 15, they are four times more likely to become an alcoholic as an adult (Moritsugu, 2007).

Furthermore, Nationally, everyday three teens die from drinking and driving and at least six youth under 21 die each day of non-driving alcohol-related causes, such as homicide, suicide, and drowning. (Bonnie & O'Connell, 2003). From 2003 to 2007, 1,648 people died in 1,489 alcohol-related vehicle crashes in Wisconsin (Wisconsin Department of Transportation, 2008).

Overview of Alcohol Trends in Wisconsin

As mentioned in the “Need for the Study” Wisconsin has the highest rates of current drinking among high school students, current underage drinking, current drinking among adults, chronic heavy drinking among adults and ranks second for underage binge drinking. These statistics represent the strong Wisconsin culture that promotes even condones alcohol use making substance abuse a major public health issue. Since 1981, Wisconsin State Statutes, Chapter 125 describing “alcohol beverages” allows a parent, guardian or spouse to serve their child or spouse, who is under legal drinking age, alcohol. This statute has been reviewed in 2005 and 2007 with no amendment to this law. *Operating while Intoxicated* (OWI) is merely a traffic violation on the first offense and not a felony until the fifth offense (Wisconsin Statutes Database, 2007). One might wonder if this has encouraged Wisconsin to rank high in alcohol use, to encourage youth to begin drinking well before the legal drinking age and to encourage drinking after driving.

Despite the perceived decrease in substance abuse between 1991 and 2005, changes in Wisconsin's state behavioral risk surveys among youth have shown no improvement over the past five years. Youth are beginning to experiment and establish life long behaviors during childhood and adolescence. The Wisconsin Youth Risk Behavior Survey (YRBS), conducted as part of a national effort by the U.S. Centers for Disease Control and Prevention, indicated in 2007 that 49% of high school students reported using alcohol in the past 30 days with 31.6% reporting binge drinking in the past 30 days, clearly underlining the continued prevalence of substance abuse among Wisconsin youth (Wisconsin Department of Public Instruction, 2007).

Overview of Underage Binge Drinking in Marshfield

Statistics for Marshfield closely reflect those noted statewide. Highlighting a few results from 2008 Marshfield High School students: 68.9% had a drink of alcohol other than a few sips, 30.1% had their first drink of alcohol prior to the age of 13 (five percent above the State average), 44.6% in the past 30 days have had at least one drink (one percent above the State average), and 28.7% binge drank in the past 30 days (three percent above the State average). See Appendix B for a complete summary of the Alcohol, Tobacco and Other Drug (AODA) results for Marshfield High School students.

Binge Drinking and Selected Risky Behaviors

Since concern lies in the consumption of large amounts of alcohol versus the occasional glass that youth may have because they are experimenting, research focuses on underage binge drinking. Specifically looking at the impact of underage binge drinking, one will find that it is connected to other health priorities, specifically high-risk sexual behavior, intentional and unintentional injuries and violence, and mental health

and mental disorders. Intentional injuries are those resulting from purposeful human action to include self-inflicted violence such as suicide. Unintentional injuries refer to injuries that were unplanned such as motor vehicle crashes, falls, fires, burns, drowning, poisoning and aspirations (Maine Center for Disease Control and Prevention, 2006).

This study pays particular attention to the following selected risk factors/ behaviors: traffic safety, suicide, and parental acceptance and how they relate to underage binge drinking. The selected risk factors have been chosen for the subsequent reasons:

Traffic Safety: As it relates to traffic safety, the number of youth that have reported riding in a car with someone that has been drinking was 26%, while 13% drove after drinking alcohol in Marshfield. In 2008, there were 163 underage drinking citations in Marshfield and 174 written by Wood County. In this same year, there were also 167 *Operating While Intoxicated* (OWI) violations in Marshfield and 326 in Wood County; of which about 12.4% percent were underage OWI's; 20 in Marshfield and 41 in Wood County (personal communication, Rick Gramza, Marshfield Police Department, April 8, 2009). As a comparison, in another Wisconsin city, LaCrosse, that has more than double the population of Marshfield, only 10% of citations issued for OWI's were under the age of 21 (Frisch, 2008).

Nationally, 5,000 people under the age of 21 die from a result of underage drinking; this includes 1,900 deaths from motor vehicles, 1,600 as a result of homicides, 300 from suicide, as well as hundreds of injuries (U.S. Department of Health and Human Services, 2006).

Suicide: Suicide is the third leading cause of death among youth ages 15-24 and the second leading cause of death among white males ages 15-24. The suicide rate for

persons ages 15-24 has tripled since 1950 (Rhode Island Department of Education, 1999). In Marshfield alone, 11.2% of High School students reporting binge drinking in the past 30 days have attempted suicide while only 3.2% of those that do not drink have attempted suicide (see Table 1). According to antidotal data from the Marshfield Clinic Youth Net after school program that provides support to over 350 at-risk enrolled youth, many youth that attend the program suffer from low self-esteem and mental disorders such as depression and anxiety. This has lead to many thoughts about attempting suicide. The majority of youth involved in the program also say that parents are not really that involved with their lives (personal communication, Connie Jagielo, Marshfield Clinic Youth Net Staff, September 3, 2009).

Parental Acceptance: According to the YRBS, youth surveyed in Marshfield reported that only 70.7% believes that their parent(s) would feel it is very wrong or wrong to drink beer, wine or hard liquor regularly (Wisconsin Department of Public Instruction, 2008). This is of particular interests because 29.3% seem to think that it is okay if their children drink.

According to the National Institute on Alcohol Abuse and Alcoholism, parents who are involved in their child's life not only drink less, but the likelihood of binge drinking is greatly reduced. Take for example, in northeastern Minnesota, 22 schools that participated in *Project Northland*, a comprehensive program that involves family, schools and community, underage drinking was far less in these communities then those that did not focus on this intervention. Furthermore, underage binge drinking can be attributed to a family history of alcoholism, parents that do not condone early drinking and/or having a

home environment provides little emotional support (Center for Applied Research Solutions, no date).

Summary

Parental involvement and the selected risk factor: traffic safety, correlate with each other because research shows that parents who are involved with their children and monitor where their children are greatly reduces the number of traffic fatalities (Simons-Morton, 2002).

Those self-reporting driving while under the influence rises significantly with the frequency of binge drinking. Take for example, in California, youth that binge drink are ten times more likely to drink and drive and five times more likely to commit suicide (Center for Applied Research Solutions, no date).

The methods section will attempt to illustrate how underage binge drinking contributes to risky behaviors such as riding in a car with someone who has been drinking, driving after drinking, attempting suicide and having a lack of parental support/rejection for alcohol use.

METHODS/STRATEGIES/INTERVENTION APPLICATIONS

The most significant data source available to portray local substance abuse problems is the Wisconsin Youth Risk Behavior Survey (YRBS) conducted as part of a national effort by the U.S. Centers for Disease Control and Prevention to monitor health-risk behaviors of the nation's youth. These behaviors, in turn, result in the most significant causes of both mortality and morbidity during youth and adulthood. The behaviors monitored by the Wisconsin YRBS include traffic safety; weapons and violence; suicide; tobacco use; alcohol and other drug use; sexual behavior; and diet,

nutrition and exercise. The survey is updated annually with questions to reflect Wisconsin's health priorities. The data from this survey will also correlate what risk factors in Marshfield predispose youth to participate in underage drinking or binge drinking. The Wisconsin Department of Public Instruction (DPI) has administered the YRBS beginning in 1993 to students in Wisconsin's public high schools. Survey procedures were designed to protect the privacy of students by allowing anonymous and voluntary participation (Wisconsin Department of Public Instruction, no date).

A passive permission consent letter to parents of 10th, and 12th grade students was put into the school newsletter in January 2008 for Marshfield Public School students and an e-mail was sent to parents at the Marshfield Area Catholic School System (Columbus). The letter (Appendix A) explained the purpose of the survey and requested parents call if they did not wish for their child to take part in the survey.

Students in 10th and 12th grade participated in the survey in 2006 and were given the opportunity again to take the survey during English class periods on January 25, 2008. In total, there were (N=652) high school surveys completed with 580 from Marshfield Public High School and 72 were from Marshfield Area Columbus Catholic High School. The completed surveys were returned to the Marshfield Clinic Research Foundation Biomedical Informatics department for data entry and analysis. Biomedical Informatics staff members including, Lorelle Benetti and Vidhu Choudhary, Research Programmers/Analysts compiled raw data and then Danielle Luther, Prevention Specialist from the Marshfield Clinic Center for Community Outreach department created a table (Appendix B) summarizing the trends in alcohol and other drug abuse. This table of aggregate data was released to the public at a school board meeting on April 9, 2008.

During the summer of 2009, the Marshfield Clinic Research Foundation Biomedical Informatics department took the same raw data that was compiled a year previous and ran a comparison with those students who reported binge drinking and those that didn't compared to selected risky behaviors. The researcher created tables summarizing data comparisons. See Table 1. Note - the survey was administered again in January 2009 and will continue to be administered annually in the future.

DISCUSSION

Table 1 looks into multiple risk factors compared to those reporting no use of alcohol in the past 30 days to those that have engaged in binge drinking, having 5 or more drinks in a row, at least one day within the past 30 days. While this study only highlights a couple of these risk factors, the table shows other factors that correlate strongly with underage binge drinking.

TABLE 1
Alcohol Use and Selected Risky Behaviors (N=652)

Survey Question	Those reporting no use in the past 30 days	Those reporting binge drinking at least 1 day within the past 30 days
Alcohol		
Rode in a car driven by someone that had been drinking alcohol.	12.3%	59.9%
Drove a car or other vehicle when they had been drinking.	2.4%	39.6%
Perception of risk or harm: Moderate or great risk of harming themselves (physically or in other ways) if they take one or two drinks of an alcoholic beverage nearly every day.	64.0%	45.7%
Perception of risk if they have 5 or more drinks of alcohol in a row, that is, whiting a couple of hours once or twice each weekend.	80.8%	51.6%
Perception of parental disapproval: Student believes parent would feel it is very wrong or wrong to drink at least twice a month	80.5%	46.2%
Tobacco		
Age of onset: Smoked whole cigarette for first time prior to age 13.	2.8%	23.1%
Frequency of use in the past 30 days: Smoked 1 or more times.	8.6%	67.7%
Perception of parental disapproval: Student believes parent would feel it is very wrong or wrong to smoke cigarettes.	93.8%	75.4%
Other Drugs		
Age of onset: Tried marijuana for the first time before age 13.	1.3%	16.6%
Used any form of cocaine 1 or more times during their life.	2.8%	32.1%
Used any form of cocaine 1 or more times during the past 30 days.	0.6%	15.8%
Sniffed glue, breathed aerosol spray can contents, or inhaled paints or sprays to get high 1 or more times during their life.	6.7%	18.5%
Used club drugs, such as ecstasy, Special K, or GHB one or more times during their lifetime.	0.6%	20.8%
Used methamphetamines one or more times during their life.	4.3%	28.3%
Used heroin one or more times during their life.	0.4%	8.7%
Additional Questions		
Obtain mostly a "C" or above for grades.	95.2%	89.2%
In the past 12 months, did they attempt suicide.	3.2%	11.2%
Strongly agree and agree that family loves and supports them	90.7%	80.4%

NOTE: Bold type = Selected risk factors.

Traffic Safety: This data above shows that there are differences in those that do not drink versus those that engage in underage drinking. Nationally, statistics for those that self-report binge drinking increases the risk for impaired driving (Center for Applied Research Solutions, no date). In Table 1, this reflects the National research in that 39.6% of Marshfield high school students who reported binge drinking have reported driving while only 2.4% of those who have reported no use of alcohol in the past 30 days have driven a car after drinking. Similarly those that binge drank were over five times more likely to ride with someone else who was drinking and driving.

Suicide: Besides engaging in risky behaviors with a vehicle, researchers looked at a person's self worth. This seemed to directly correlate mostly with suicidal behaviors. Research has demonstrated that binge drinking has been associated with attempted suicide and of the Marshfield high school students who binge drank, 11.2% have reported attempting suicide while only 3.2% of non-drinkers have.

Parental Acceptance: Research has discussed that all types of social classes of children drink, but that if parents showed a concern for their children in not drinking or doing drugs that this would make a difference. This indeed has shown to make a difference according to the data above. Close to twice as many youth who do not report binge drinking in the past thirty days feel that their parents would think that it is wrong or very wrong for a high school age youth to drink at least twice a month. A similar question that also relates to this is if a child felt that their parent loved and supported them. Youth who binge drink and those that did not drink reported high percentages of feeling like their parents loved and supported them (80.4, 90.7 respectively).

CONCLUSIONS

In conclusion, traffic safety, suicide and parental acceptance of drinking seem to be risk factors in binge drinking, but it is difficult to determine which one leads us a step closer in the realization of why youth drink. This is why preventing underage drinking and encouraging youth to act responsibly can be so challenging.

Recommendations

Research studies indicate that there are many reasons why youth choose to drink and while this study only focuses on a few selected risky behaviors of those who chose to binge drink, it is difficult to infer which risky behavior takes a greater precedence over the other. From this research, youth who engage in excessive drinking are more likely to engage in other harmful behaviors. Marshfield should continue to monitor these risky behaviors against the trends for binge drinking to determine if a comprehensive underage drinking program can be effective at reducing the number of youth who report drinking using the annually comparison of the YRBS. Those 10th grade students who participated in the YRBS in 2008 will be taking the survey as 12th graders in 2010 and so forth. Future studies could focus on the trends of these particular students to analyze areas for improvement. These trends should continue to be shared with the Marshfield community to stimulate positive dialogue about reducing underage drinking. More dialogue could work to change the Wisconsin culture of underage drinking.

Implications for Applications

From this study one implication is that community stakeholders should be a part of the local coalition, Marshfield Area Coalition for Youth (MACY). MACY's mission is to focus on substance abuse prevention for youth including underage drinking and vision

is to make Marshfield the best place to raise a family. Stakeholders should create a long term action plan of proven strategies that work, otherwise known as environmental strategies. The comprehensive underage drinking action plan should follow recommendations of the 2020 *Healthiest Wisconsin* state plan when that is made available to possibly include a reduction of the following: alcohol marketing to youth and the number of alcohol density in communities. In Marshfield's eleven square miles, there are 57 establishments that sell alcohol, so alcohol is easily accessible.

Traffic Safety: Marshfield needs to rally around youth and their adult role models who continue to engage in driving after drinking and to let the community know this is not okay. Perhaps as Wisconsin continues to identify underage drinking as a priority, stricter laws will be implemented to help deter youth from drinking. A couple of suggestions are to increase OWI penalties and to make underage drinking violations greater. Underage drinking violations could be strengthening by increasing the forfeiture that a youth would have to pay and then encouraging them to participate in Marshfield's comprehensive alcohol diversion program. This program consists of a screening tool, an educational component as to the risks of choosing to drink and an active form of punishment, community service. The Marshfield Municipal Court, Marshfield Clinic and the Marshfield School District have partnered with the MACY to enhance this program this past summer.

Suicide: More assistance needs to be made available for those that are having suicidal thoughts or who have engaged in drinking behaviors that are harmful or addictive. Parents, educators and community members need awareness of the signs and

symptoms of suicidal behavior. Training and education is needed for community members in Marshfield.

Parental Acceptance: Additionally, in order for parents to feel comfortable talking to their children about alcohol use, including binge drinking, it is important that parents are confident on the signs and systems of alcohol use and that parents believe they can have an impact on whether or not their child chooses to use alcohol or not by setting clear expectations. Parents should also be encouraged to know where their children are going and who their friends are. To help in this process, Marshfield has started a parent network, where parents sign a contract agreeing not to serve their children alcohol or their children's friends, and in turn, they have access to a password protected directory of parents who have also signed the contract. The directory is located on a blog where parents can talk back and forth. Parents are also invited to dinner meetings where they learn about youth substance abuse and are able to talk to other parents. Currently there are over 500 parents in the network. Parents should get involved with this network including those parents that have children in late elementary school, so conversations can be had with children even before they are even faced with that decision point of drinking alcohol.

Parents should also set a good example for their children. The National Center on Addiction and Substance Abuse recently released a report stating that, "teens who have seen their parent(s) drunk are more likely to drink" (The National Center on Addiction and Substance Abuse, 2009).

While a large number of parents clearly do not support binge drinking among their children, there is still room for improvement in parental attitudes. More parents who

clearly articulate that they feel binge drinking is wrong and hopefully, trends move closer to 100% of not accepting alcohol use.

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APPENDIX A

PARENT PERMISSION LETTER

PARENT PERMISSION LETTER

Core Wisconsin Youth Risk Behavior Survey

The Youth Risk Behavior Survey will be administered to our 10th & 12th graders during their English classes on January 25, 2008. Administration of this survey is part of the *Engaging Wisconsin Communities for Substance Abuse Prevention* project administered through Marshfield Clinic Center for Community Outreach on behalf of Marshfield Area Coalition for Youth. This survey focuses on risky behaviors. Students will be asked about their violence related behaviors, their alcohol and drug use, and their perceptions of the safety and support provided to them by their family and school. The survey is anonymous. No individual students will be identified. The surveys will be compiled by the Marshfield Clinic Research Foundation Biomedical Informatics department.

Parents can request a copy of the survey by calling Liz Dostal at Marshfield High School (MHS).

You may opt your child out by writing a note and sending it to the MHS office before January 25, 2008.

APPENDIX B

SUMMARY OF SELECTED HIGH SCHOOL AODA USE

SUMMARY OF SELECTED HIGH SCHOOL AODA USE

Survey Question	US ¹ 2005	WI ² 2007	Marshfield ³ 2008
Alcohol			
Had drink of alcohol other than a few sips	74.3%	NA	68.9%
<i>Age of onset: Those reporting use - first drink of alcohol before age 13.</i> (Healthiest WI 2010 Target is 24.1%)	25.6%	23.5%	30.1%
<i>Frequency of use in the past 30 days: One drink of alcohol.</i>	43.3%	48.9%	44.6%
Five or more drinks of alcohol in a row within a couple of hours one or more days within the past 30 days. (Healthiest WI 2010 Target is 26.7%)	25.5%	31.6%	28.7%
Those reporting use obtained alcohol from a person 21 years or older.	NA	NA	34.5%
Disapprove or strongly disapprove of people having 5 or more drinks of alcohol in a row, within a couple of hours, once or twice each weekend.	NA	NA	40.3%
Think most or all people their age would say it is okay to have 5 or more drinks of alcohol in a row, within a couple of hours, once or twice each weekend.	NA	NA	47.9%
<i>Perception of risk or harm: Moderate or great risk of harming themselves (physically or in other ways) if they take one or two drinks of an alcoholic beverage nearly every day.</i>	NA	NA	58.8%
Moderate or great risk of harming themselves (physically or in other ways) if they have 5 or more drinks of alcohol in a row, within a couple of hours once or twice each weekend.	NA	NA	72.5%
<i>Perception of disapproval of use by parents: Student believes parent would feel it is very wrong or wrong to drink beer, wine or hard liquor regularly.</i>	NA	NA	70.7%
Tobacco			
Tried smoking a cigarette, even one puff.	54.3%	49.0%	43.5%
<i>Age of onset: Those reporting use - smoked whole cigarette for first time before age 13 years.</i>	16.0%	11.5%	24.2%
<i>Frequency of use in the past 30 days: Smoked 1 or more times.</i> (Healthiest WI 2010 Target is 22.4%)	23.0%	20.5%	25.5%
Smoked more than 10 cigarettes per day on days they smoked within past 30 days.	10.7%	9.3%	9.6%
Used chewing tobacco, snuff or dip on 1 or more days within the past 30 days.	8.0%	7.7%	10.4%
Smoked cigars, cigarillos, or little cigars on 1 or more days within past 30 days.	14.0%	15.8%	16.4%
<i>Perception of risk or harm: Students who believe a moderate or great risk of harming themselves if they smoke 1 or more packs of cigarettes per day.</i>	NA	NA	86.6%
<i>Perception of disapproval of use by parents: Student believes parent would feel it is very wrong or wrong to smoke cigarettes.</i>	NA	NA	88.5%
Other Drugs			
Used marijuana 1 or more times during their life.	38.4%	37.1%	28.3%
<i>Age of onset: Those reporting use - tried marijuana for the first time before age 13 years.</i>	8.7%	7.8%	19.4%
<i>Frequency of use in the past 30 days: Used marijuana 1 or more</i>	20.2%	20.3%	16.2%

<i>times.</i>			
Students who disapprove of people smoking marijuana occasionally.	NA	NA	57.8%
Students who think most or all people their age would say it is okay to smoke marijuana occasionally.	NA	NA	30.5%
<i>Perception of risk or harm: Students who think people have a moderate or great risk of harming themselves if they smoke marijuana occasionally.</i>	NA	NA	60.9%
Used any form of cocaine 1 or more times during their life.	7.6%	7.3%	11.2%
Used any form of cocaine 1 or more times during the past 30 days.	3.4%	3.1%	4.9%
Sniffed glue, breathed aerosol spray can contents, or inhaled paints or sprays to get high 1 or more times during their life.	12.4%	10.5%	11.7%
Used club drugs, such as ecstasy, Special K, or GHB one or more times during their lifetime.	NA	NA	6.3%
Used methamphetamines one or more times during their life.	6.2%	3.9%	11.1%
Used heroin one or more times during their life.	2.4%	2.2%	2.8%

Shading indicates the local rate is above US and/or WI if available.

1. Centers for Disease Control and Prevention (CDC). (2005). *2005 Youth Risk Behavior Surveillance Survey System (YRBSS) – United States* taken from the World Wide Web on March 4, 2008: <http://www.cdc.gov/mmwr/PDF/SS/SS5505.pdf>
2. Wisconsin Department of Public Instruction (2007). *2007 Wisconsin Youth Risk Behavior Survey (YRBS)* taken from the World Wide Web on March 4, 2008: http://www.dpi.state.wi.us/sspw/pdf/yrbs93_07trends.pdf
3. Wisconsin Department of Public Instruction. (2008). *2008 adapted Wisconsin Youth Risk Behavior Survey (YRBS)*. A total of 652 surveys were conducted by Marshfield Public High School and Marshfield Columbus Catholic High School 10th and 12th grade students.

APPENDIX C

WISCONSIN 2008 YOUTH RISK BEHAVIOR SURVEY

WISCONSIN 2008 YOUTH RISK BEHAVIOR SURVEY
High School Questionnaire

This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. The information you give will be used to develop better health education for young people like yourself.

DO NOT write your name on this survey. The answers you give will be kept private. No one will know what you write. Answer the questions based on what you really do.

Completing the survey is voluntary. Whether or not you answer the questions will not affect your grade in this class. If you are not comfortable answering a question, just leave it blank.

The questions that ask about your background will be used only to describe the types of students completing this survey. The information will not be used to find out your name. No names will ever be reported.

Make sure to read every question. Check only one box for each question. When you are finished, follow the instructions of the person giving you the survey.

Thank you very much for your help.

Directions: Check only one box per question, except Question 4.

1. How old are you?
 12 years old or younger
 13 years old
 14 years old
 15 years old
 16 years old
 17 years old
 18 years old or older
2. What is your sex?
 Female
 Male
3. In what grade are you?
 9th grade
 10th grade
 11th grade
 12th grade
 Ungraded or other grade
4. How do you describe yourself? (**Select one or more responses.**)
 American Indian or Alaska Native
 Asian
 Black or African American
 Hispanic or Latino
 Native Hawaiian or Other Pacific Islander
 White
5. During the past 12 months, how would you describe your grades in school?
 Mostly A's
 Mostly B's
 Mostly C's
 Mostly D's
 Mostly F's
 None of these grades
 Not sure
6. Please estimate how tall you are without your shoes on.

_____ Feet

_____ Inches

7. Please estimate your weight without your shoes on.

_____ lbs.

8. How do you describe your health in general?
 Excellent
 Very good
 Good
 Fair
 Poor

The next 4 questions ask about personal safety.

9. **When you rode a bicycle** during the past 12 months, how often did you wear a helmet?
 I did not ride a bicycle during the past 12 months
 Never wore a helmet
 Rarely wore a helmet
 Sometimes wore a helmet
 Most of the time wore a helmet
 Always wore a helmet
10. How often do you wear a seat belt when **riding in** a car driven by someone else?
 Never
 Rarely
 Sometimes
 Most of the time
 Always
11. During the past 30 days, how many times did you **ride** in a car or other vehicle **driven by someone who had been drinking alcohol**?
 0 times
 1 time
 2 or 3 times
 4 or 5 times
 6 or more times

12. During the past 30 days, how many times did you **drive** a car or other vehicle **when you had been drinking alcohol**?

- 0 times
- 1 time
- 2 or 3 times
- 4 or 5 times
- 6 or more times

The next 17 questions ask about violence-related behaviors.

13. During the past 30 days, on how many days did you carry a **weapon**, such as a gun, knife, or club?

- 0 days
- 1 day
- 2 or 3 days
- 4 or 5 days
- 6 or more days

14. During the past 30 days, on how many days did you carry a **gun**?

- 0 days
- 1 day
- 2 or 3 days
- 4 or 5 days
- 6 or more days

15. During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club **on school property**?

- 0 days
- 1 day
- 2 or 3 days
- 4 or 5 days
- 6 or more days

16. During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club **on school property**?

- 0 times
- 1 time
- 2 or 3 times
- 4 or 5 times
- 6 or 7 times
- 8 or 9 times
- 10 or 11 times
- 12 or more times

17. During the past 12 months, how many times were you in a physical fight?

- 0 times
- 1 time
- 2 or 3 times
- 4 or 5 times
- 6 or 7 times
- 8 or 9 times
- 10 or 11 times
- 12 or more times

18. During the past 12 months, how many times were you in a physical fight **on school property**?

- 0 times
- 1 time
- 2 or 3 times
- 4 or 5 times
- 6 or 7 times
- 8 or 9 times
- 10 or 11 times
- 12 or more times

19. During the past 12 months, how many times has someone tried to hurt you by hitting, punching, or kicking you while **on school property**?

- 0 times
- 1 time
- 2 or 3 times
- 4 or 5 times
- 6 or 7 times
- 8 or 9 times
- 10 or 11 times
- 12 or more times

20. During the past 12 months, have you been repeatedly harassed, picked on, or bullied to the point that you felt unsafe at school or that it was hard to do your best at school?

- Yes
- No
- Not sure

21. 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 or from school?

- 0 days
- 1 day
- 2 or 3 days
- 4 or 5 days
- 6 or more days

22. When you are at school, how safe do you feel from physical harm?

- Always feel safe
- Usually feel safe
- Usually don't feel safe
- Never feel safe

23. During the past 12 months, how many times has someone stolen or deliberately damaged your property such as your car, clothing, or books **on school property**?

- 0 times
- 1 time
- 2 or 3 times
- 4 or 5 times
- 6 or 7 times
- 8 or 9 times
- 10 or 11 times
- 12 or more times

24. Has anyone at your school ever touched you, said something to you, or displayed a picture or photograph that was sexual in nature and made you uncomfortable?

- Yes
- No
- Not sure

25. During the past 12 months, did your boyfriend or girlfriend ever hit, slap or physically hurt you on purpose?

- Yes
- No

26. Have you ever been forced, either verbally or physically, to take part in a sexual activity?

- Yes
- No
- Not sure

27. How much do you approve or disapprove of people using violence against another person?

- Strongly approve
- Approve
- Neither approve nor disapprove
- Disapprove
- Strongly disapprove

28. How many people your age do you think would say it's okay to use violence against another person?

- None
- A few
- Some
- Most
- All
- Not sure

29. How much do you think people risk harming themselves (physically or in other ways) if they use violence against another person?

- No risk
- Slight risk
- Moderate risk
- Great risk
- Not sure

The next 5 questions ask about sad feelings and attempted suicide. Sometimes people feel so depressed about the future that they may consider attempting suicide, that is, taking some action to end their own life.

30. During the past 12 months, did you ever feel so sad or hopeless almost every day for **two weeks or more in a row** that you stopped doing some usual activities?

- Yes
- No

31. During the past 12 months, did you ever **seriously** consider attempting suicide?

- Yes
- No

32. During the past 12 months, did you make a plan about how you would attempt suicide?

- Yes
- No

33. During the past 12 months, how many times did you actually attempt suicide?

- 0 times
- 1 time
- 2 or 3 times
- 4 or 5 times
- 6 or more times

34. **If you attempted suicide** during the past 12 months, did any attempt result in an injury, poisoning, or overdose that had to be treated by a doctor or nurse?

I did not attempt suicide during the past 12 months

- Yes
- No

The next 13 questions ask about tobacco use.

35. Have you ever tried cigarette smoking, even one or two puffs?

- Yes
- No

36. How old were you when you smoked a whole cigarette for the first time?

I have never smoked a whole cigarette

8 years old or younger

9 or 10 years old

11 or 12 years old

13 or 14 years old

15 or 16 years old

17 years old or older

37. Have you ever smoked cigarettes daily, that is, at least one cigarette every day for 30 days?

Yes

No

38. During the past 30 days, on how many days did you smoke cigarettes?

0 days

1 or 2 days

3 to 5 days

6 to 9 days

10 to 19 days

20 to 29 days

All 30 days

39. During the past 30 days, on the days you smoked, how many cigarettes did you smoke **per day**?

I did not smoke cigarettes during the past 30 days

Less than 1 cigarette per day

1 cigarette per day

2 to 5 cigarettes per day

6 to 10 cigarettes per day

11 to 20 cigarettes per day

More than 20 cigarettes per day

40. During the past 30 days, how did you **usually** get your own cigarettes? (Select only **one** response.)

I did not smoke cigarettes during the past 30 days

I bought them in a store such as a convenience store, supermarket, discount store, or gas station

I bought them from a vending machine

I gave someone else money to buy them for me

I borrowed (or bummed) them from someone else

A person 18 years old or older gave them to me

I took them from a store or family member

I got them some other way

41. During the past 30 days, on how many days did you smoke cigarettes **on school property**?

0 days

1 or 2 days

3 to 5 days

6 to 9 days

10 to 19 days

20 to 29 days

All 30 days

42. During the past 12 months, did you ever try **to quit** smoking cigarettes?

I did not smoke during the past 12 months

Yes

No

43. Is there an adult in your household who is a regular smoker?

- Yes
- No

44. During the past 30 days, on how many days did you use **chewing tobacco, snuff, or dip** such as Redman, Levi Garrett, Beechnut, Skoal, Skoal Bandits, or Copenhagen?

- 0 days
- 1 or 2 days
- 3 to 5 days
- 6 to 9 days
- 10 to 19 days
- 20 to 29 days
- All 30 days

45. During the past 30 days, on how many days did you smoke **cigars, cigarillos, or little cigars**?

- 0 days
- 1 or 2 days
- 3 to 5 days
- 6 to 9 days
- 10 to 19 days
- 20 to 29 days
- All 30 days

46. How much do you think people risk harming themselves (physically, or in other ways) if they: Smoke one or more packs of cigarettes per day?

- No risk
- Slight risk
- Moderate risk
- Great risk

47. How wrong do your parents feel it would be for you to: Smoke cigarettes?

- Very wrong
- Wrong
- A little bit wrong
- Not at all wrong

The next 9 questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

48. How old were you when you had your first drink of alcohol other than a few sips?

- I have never had a drink of alcohol other than a few sips
- 8 years old or younger
- 9 or 10 years old
- 11 or 12 years old
- 13 or 14 years old
- 15 or 16 years old
- 17 years old or older

49. During the past 30 days, on how many days did you have at least one drink of alcohol?

- 0 days
- 1 or 2 days
- 3 to 5 days
- 6 to 9 days
- 10 to 19 days
- 20 to 29 days
- All 30 days

50. During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?

- 0 days
- 1 day
- 2 days
- 3 to 5 days
- 6 to 9 days
- 10 to 19 days
- 20 or more days

51. During the past 30 days, how did you **usually** get your alcohol? (Select only **one** response.)

- I did not drink alcohol during the past 30 days
- I bought it in a store such as a liquor store, convenience store, supermarket, discount store, or gas station
- I bought it at a restaurant, bar, or club
- I bought it at a public event such as a concert or sporting event
- I gave someone else money to buy it for me
- A person 21 years old or older gave it to me
- I took it from a store or family member
- I got it some other way

52. How much do you approve or disapprove of people having 5 or more drinks of alcohol in a row, that is, within a couple of hours once or twice each weekend?

- Strongly approve
- Approve
- Neither approve nor disapprove
- Disapprove
- Strongly disapprove

53. How many people your age do you think would say it is okay to have 5 or more drinks of alcohol in a row, that is, within a couple of hours once or twice each weekend?

- None
- A few
- Some
- Most
- All
- Not sure

54. How much do you think people risk harming themselves (physically or in other ways) if they: Take one or two drinks of an alcoholic beverage (beer, wine, liquor) nearly every day?

- No risk
- Slight risk
- Moderate risk
- Great risk

55. How much do you think people risk harming themselves (physically or in other ways) if they have 5 or more drinks of alcohol in a row, that is, within a couple of hours once or twice each weekend?

- No risk
- Slight risk
- Moderate risk
- Great risk
- Not sure

56. How wrong do your parents feel it would be for you to: Drink beer, wine or hard liquor (for example, vodka, whiskey or gin) regularly (at least twice a month)?

- Very wrong
- Wrong
- A little bit wrong
- Not at all wrong

The next 6 questions ask about marijuana use. Marijuana also is called grass or pot.

57. During your life, how many times have you used marijuana?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 to 99 times
- 100 or more times

58. How old were you when you tried marijuana for the first time?

- I have never tried marijuana
- 8 years old or younger
- 9 or 10 years old
- 11 or 12 years old
- 13 or 14 years old
- 15 or 16 years old
- 17 years old or older

59. During the past 30 days, how many times did you use marijuana?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

60. How much do you approve or disapprove of people smoking marijuana occasionally?

- Strongly approve
- Approve
- Neither approve nor disapprove
- Disapprove
- Strongly disapprove

61. How many people your age do you think would say it's okay to smoke marijuana occasionally?

- None
- A few
- Some
- Most
- All
- Not sure

62. How much do you think people risk harming themselves (physically or in other ways) if they smoke marijuana occasionally?

- No risk
- Slight risk
- Moderate risk
- Great risk
- Not sure

The next 9 questions ask about other drugs.

63. During your life, how many times have you used **any** form of cocaine, including powder, crack, or freebase?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

64. How old were you when you tried any form of cocaine, including powder, crack, or freebase for the first time?

- I have never tried cocaine
- 8 years old or younger
- 9 or 10 years old
- 11 or 12 years old
- 13 or 14 years old
- 15 or 16 years old
- 17 years old or older

65. During the past 30 days, how many times did you use **any** form of cocaine, including powder, crack, or freebase?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

66. During your life, how many times have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

67. During your life, how many times have you used club drugs, such as ecstasy, Special K, or GHB?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

68. During your life, how many times have you used **methamphetamines** (also called speed, crystal, crank, or ice)?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

69. During your life, how many times have you used **heroin** (also called smack, junk, or China White)?

- 0 times
- 1 or 2 times
- 3 to 9 times
- 10 to 19 times
- 20 to 39 times
- 40 or more times

70. During the past 12 months, has anyone offered, sold, or given you an illegal drug **on school property**?

- Yes
- No

71. During the past 12 months, how many times have you attended school under the influence of **alcohol or other illegal drugs**, like marijuana or cocaine?

- 0 times
- 1 time
- 2 or 3 times
- 4 or 5 times
- 6 or more times

The next 2 questions ask about HIV/AIDS education and information.

72. Have you ever been taught about ways to prevent pregnancy, AIDS/HIV, or other sexually transmitted diseases (STDs) in school?

- Yes
- No
- Not sure

73. Have you ever talked about AIDS or HIV infection with your parents or other adults in your family?

- Yes
- No
- Not sure

The next 4 questions are general questions about you.

74. Do you agree or disagree that your family loves you and gives you help and support when you need it?

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Not sure

75. Do you agree or disagree that your teachers really care about you and give you a lot of encouragement?

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Not sure

76. Do you agree or disagree that you feel like you belong at this school?

- Strongly agree
- Agree
- Disagree
- Strongly disagree
- Not sure

In this survey “parents” mean the adults who are most responsible for raising you. They could be foster parents, stepparents, or guardians.

77. Besides your parents, how many adults would you feel comfortable seeking help from if you had an important question affecting your life?

- None
- 1 adult
- 2 adults
- 3 adults
- 4 adults
- 5 or more adults

**This is the end of the survey.
Thank you very much for your help.**