

# Youth Risk Behaviors

## Duval County High School Students 2009

### Alcohol, Tobacco, and Other Drug Behaviors

#### Key Findings

- \*34% of students have never consumed alcohol
- \*Approximately 40% of students have had at least one drink in the past 30 days
- \*Health Zone 1 has the lowest percentage of episodic drinking of all health zones
- \*Almost half of all students that drink alcohol obtain it from someone else
- \*71.6% of students have never smoked a cigarette
- \*About 15% of students have smoked at least one cigarette in the past 30 days
- \*61.4% of students have never tried marijuana

### Youth Risk Behaviors

The Youth Risk Behavior Survey (YRBS) is a self-administered, school-based, confidential, and anonymous survey that was conducted in Duval County Public Schools during the spring of 2009. This is part of a national effort by the Centers for Disease Control and Prevention (CDC) to obtain information pertaining to youth social behaviors. These behaviors include but are not limited to: violence, safety, sex, nutrition and weight management, suicide, and more. In the 19 public high schools in Duval County, 2,542 students participated.

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### Why Monitor Alcohol, Tobacco and Other Drug Use?

The use of alcohol, tobacco, and other drugs is a widespread sociological and public health problem, not only in Duval County, but also in the state and the nation. The underage use of alcohol has been combated for many for many decades and continues to be an issue.

Experimental use of alcohol, tobacco and other drugs is common among teenagers, although, most use does

not develop into more significant issues. However, some teenagers may develop dependency, engage in risky behaviors, and/or go on to use more dangerous drugs possibly causing long term harm to themselves or others. Teens with a family history of substance use/abuse, who are depressed and/or lack self-esteem and who don't feel like they belong are more likely to develop serious alcohol and drug problems.<sup>1</sup> Teens who drink

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### Why Monitor Alcohol, Tobacco and Other Drug use?

(continued from page 1)

alcohol are more likely to be sexually active and to have unsafe, unprotected sex. Teens who drink excessively at an early age are also more likely to have high blood pressure as a young adult, be overweight, and to become an alcoholic than their non-drinking peers.<sup>1,2</sup> Intervention strategies that attempt to postpone early use strive to prevent alcohol-related problems later in life.

Tobacco use in particular has negative long-term health outcomes. According to the CDC, more than 3,000 young people become regular smokers every day, and many of them continue to smoke regularly into adulthood, thereby increasing their risk of dying prematurely from smoking-related diseases, such as lung cancer, heart disease, and stroke. The CDC also reports that 'Teen smoking is often an early warning sign of future problems. Teens who smoke are three times as likely as nonsmokers to use alcohol, eight times as likely to use marijuana, and 22 times as likely to use cocaine. Smoking is also associated with numerous other high risk behaviors, including fighting and having unprotected sex.' Communitywide, comprehensive tobacco-control programs that use coordinated evidence-based strategies should be implemented and revitalized to further limit cigarette use by high school students.<sup>3</sup>

### Why Monitor Youth Behaviors?

Monitoring risky behaviors within the high school population is critical for school and public health officials to understand the cause and effect of these behaviors and how they may or may not continue into adulthood. Health behavior patterns are often established in childhood and adolescence, leading to a lifestyle that contributes to many of the chronic diseases that plague our society today, including obesity, diabetes and heart disease. This transition into adolescence also prompts a rise in risky behaviors, which frequently leads to increases in motor vehicle accidents, violence, unprotected sexual activity, and drug and alcohol use.<sup>4</sup> As part of the National Initiative to Improve Adolescent Health by the Year 2010, the CDC and the Health Resources and Services Administration (HRSA) have identified six critical health behaviors for adolescents including alcohol and drug use, injury and violence (including suicide), tobacco use, nutrition, physical activity, and risky sexual behaviors.<sup>5</sup> These measurable indicators are used to assess the status and progress of each of these health behaviors. It is these behaviors that the YRBS is designed to examine in the youth population. By implementing this type of self-reporting surveillance, one can, with a significant measure of reliability, monitor the behavior of the youth and readily identify those groups that may or may not be at risk. This allows for the development of interventions and programs that directly target

those groups that may be at most risk.

Adolescents are influenced by various levels and types of interpersonal relationships, which in turn, contribute to an adolescent's health and well-being.<sup>4</sup> Because of this complex system of adolescent influences, developing comprehensive approaches and interventions to promote adolescent health is often difficult. In addition, adolescent health is influenced by a wide array of socioeconomic factors, such as education and poverty, which require more primary intervention techniques that can lead to societal and environmental changes, frequently resulting in policy change. Addressing these factors is challenging, costly and time consuming, and requires many levels of decision-making. In order to address adolescent health issues, surveillance of adolescent health indicators is necessary for planning, program implementation, evaluation, and policy change.



## Duval County, Florida and U.S. High School Report Card

The Duval County data report card provides a comparison between local, state, and national data for youth risk behaviors for which data was available. U.S. data were not available for 2009 at the time of this report. Confidence Intervals (CIs) of 95% are used to provide statistical markers to gauge real trends versus differences that are more likely to reflect insignificant variation of data. Confidence intervals that do not overlap indicate statistical significance. The terms “significant”, and “statistically significant” are used interchangeably throughout this report. Data shows that the number of students who have ever tried cigarettes in Duval County (28.4%) was significantly lower than for the United States (50.3%). This same trend is seen with high school students who have ever used alcohol, with Duval County being significantly lower (66.0%) than the United States (75.0%). For Duval County students, the percentage of those

(continued on page 4)

<b>Risk Factors</b>	<b>Duval County Students 2009 95% (CI's)</b>	<b>Florida Students 2009 95% (CI's)</b>	<b>U.S. Students 2007 95% (CI's)</b>
<b><i>Tobacco</i></b>			
<b>Lifetime cigarette use</b> (ever tried cigarette smoking, even one or two puffs)	28.4% <sup>2</sup> (26.14 - 30.67)	DNA	50.3% (47.2 - 53.5)
<b>Current cigarette use</b> (smoked cigarettes at least one day during the 30 days before the survey)	15.4% (13.4 - 17.7)	16.1% (14.8 - 17.5)	20.0% (17.6 - 22.6)
<b>Current smokeless tobacco</b> (used chewing tobacco, snuff, or dip at least 1 day during the 30 days before the survey)	9.2% (7.4 - 11.3)	7.1% (6.1 - 8.2)	7.9% (6.3 - 9.8)
<b><i>Alcohol</i></b>			
<b>Lifetime alcohol use</b> (had at least one drink of alcohol at least one day during their life)	66.0% <sup>2</sup> (63.5 - 68.4)	65% *	75.0% (72.4 - 77.4)
<b>Current alcohol use</b> (had at least one drink of alcohol at least one day during the 30 days before the survey)	38.8% <sup>2</sup> (35.9 - 41.9)	40.5% (38.5 - 42.6)	44.7% (42.4 - 47.0)
<b>Episodic heavy drinking</b> (had five or more drinks of alcohol in a row within a couple hours at least one day during the 30 days before the survey)	19.7% <sup>2</sup> (17.43 - 22.21)	21.1 (19.6 - 22.8)	26.0% (24.0 - 28.0)
<b><i>Other Drug Use</i></b>			
<b>Lifetime marijuana use</b> (use marijuana at least one or more times during their lifetime)	38.6% (35.9 - 41.5)	36.4% (34.7 - 38.1)	38.1% (35.5 - 40.7)
<b>Lifetime cocaine use</b> (used any form of cocaine, including powder, crack or free-base one or more times during their life)	7.4% (6.03 - 9.1)	6.9% (6.2 - 7.7)	7.2% (6.2 - 8.2)
<b>Lifetime methamphetamine use</b> (used methamphetamine [also called speed, crystal, crank, or ice] one or more times during their life)	6.9% <sup>1, 2</sup> (5.5 - 8.6)	4.2%+ (3.5- 5.1)	4.4% (3.7 - 5.3)
<b>Lifetime inhalant use</b> (sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life)	14.3% <sup>1</sup> (12.4 - 16.5)	10.8%+ (9.5-12.3)	13.3% (12.1 -14.6)
<b>Offered, sold, or gave an illegal drug to someone on school property</b> (during the 12 months before the survey)	36.8% <sup>1, 2</sup> (34.3 - 39.4)	21.8% (20.4 - 23.3)	22.3% (20.3 - 24.4)

Confidence Intervals (CIs) of 95% are used to provide statistical markers to gauge real trends versus differences that are more likely to reflect insignificant variation of data from year to year. <sup>1</sup>Duval County statistically different from Florida; <sup>2</sup>Duval County statistically different from the United States; DNA = Data Not Available; \*Confidence Intervals Not Available; +Data is from 2007

## Duval County, Florida and U.S. High School Report Card (continued from page 3)

that currently use alcohol (38.8%) and engage in episodic heavy drinking (19.7%) was significantly lower than for the nation (44.7% and 26.0%, respectively). Duval County high school students have a lower current alcohol use and a higher lifetime drug use when compared to Florida and the nation. Lifetime methamphetamine use for the county is higher compared to the state and nation (6.9%, 4.2%, and 4.4%, respectively). Lifetime inhalant use is significantly higher in Duval County (14.3%) than for Florida (10.8%). Data also reveals the percentage of Duval County students offered, sold, or gave an illegal drug to someone on school property, in the past 12 months, was significantly higher (36.8%) than for Florida (21.8%) and the nation (22.3%).

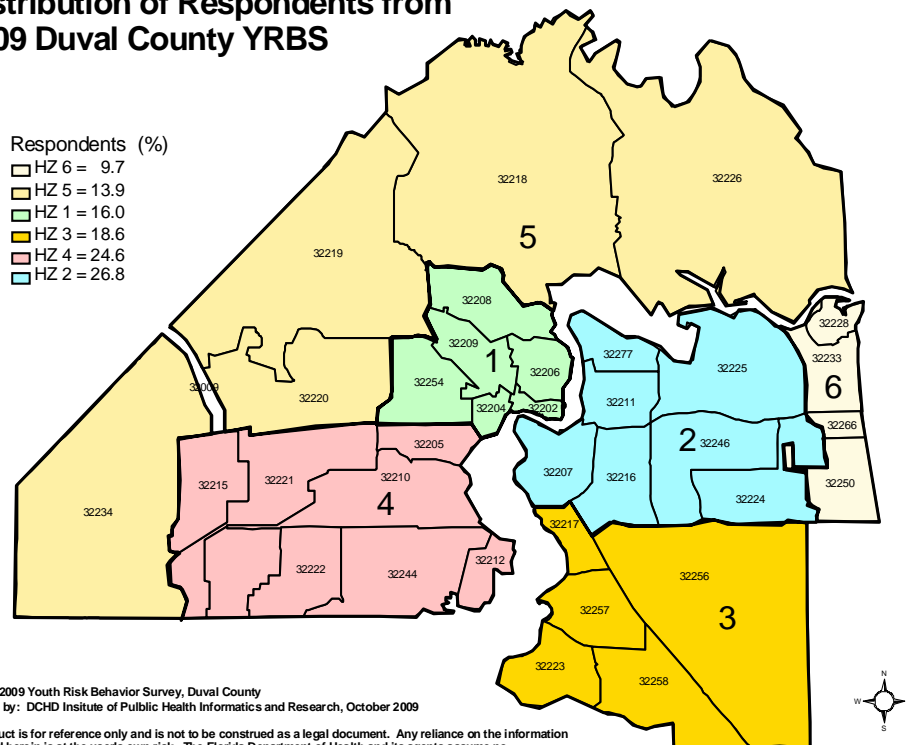
### Duval County High School Report Card by Health Zone

Duval County is located on the northeast coast of Florida. The county is divided into six health zones made up of zip codes. These zones are based on Duval County Public Schools, Jacksonville Sheriff's Office, and Community Planning Action Council's existing geographic boundaries. Health zones, made of mutually exclusive zip codes, were created to increase the statistical reliability of zip code data for more targeted program planning, practical surveillance of health indicators, and to ensure confidentiality of data. Figure 1 shows the distribution of all student respondents, according to where they reside, from the Duval County YRBS by health zone.

*(continued on page 5)*

Figure 1

#### Distribution of Respondents from 2009 Duval County YRBS



## Youth Risk Behaviors

### Duval County High School Report Card by Health Zone (continued from page 4)

Comparison of data across the health zones reveals few statistically significant differences; however, there are some notable disparities. High school students residing in Health Zone 4 had the highest percent of current cigarette use (16.8%) compared to Health Zone 1, with the lowest percent (6.8%) although the difference was not statistically significant. The percentage of high school students residing in Health Zone 5 (69.5%) who have ever consumed alcohol was higher than students in Health Zone 1 with the lowest percent (59.8%). Health Zone 6 had the highest percentage of high school students who reported episodic heavy drinking (27.1%). It was statistically higher than Health Zone 1 with

*(continued on page 6)*

Risk Factors	Health Zone 1 2009 95% (CI's)	Health Zone 2 2009 95% (CI's)	Health Zone 3 2009 95% (CI's)	Health Zone 4 2009 95% (CI's)	Health Zone 5 2009 95% (CI's)	Health Zone 6 2009 95% (CI's)	Duval County 2009 95% (CI's)
<b>Tobacco</b>							
<b>Lifetime cigarette use</b> (ever tried cigarette smoking, even one or two puffs)	15.5% <sup>4</sup> (9.4 - 24.3)	26.6% (22.5 - 31.2)	28.4% (23.9 - 33.5)	28.8% (24.0 - 34.0)	25.1% (18.7 - 32.9)	30.6% (21.4 - 41.6)	28.4% <sup>2</sup> (26.1 - 30.7)
<b>Current cigarette use</b> (smoked cigarettes at least one day during the 30 days before the survey)	6.8% (2.8 - 15.8)	12.9% (9.8 - 16.8)	14.6% (10.2 - 20.5)	16.8% (13.1 - 21.2)	14.2% (9.8 - 20.2)	11.1% (5.8 - 20.2)	15.4% (13.4 - 17.7)
<b>Current smokeless tobacco</b> (used chewing tobacco, snuff, or dip at least 1 day during the 30 days before the survey)	7.7% (3.8 - 14.9)	9.3% (6.7 - 12.8)	8.1% (5.1 - 12.6)	7.2% (5.1 - 10.1)	6.4% (4.1 - 10.0)	11.9% (6.6 - 20.5)	9.2% (7.4 - 11.3)
<b>Alcohol</b>							
<b>Lifetime alcohol use</b> (had at least one drink of alcohol at least one day during their life)	59.8% (51.9 - 67.3)	66.9% (62.8 - 70.8)	68.0% (61.8 - 73.7)	63.5% (58.5 - 68.3)	69.5% (61.8 - 76.2)	64.7% (54.8 - 73.5)	66.0% <sup>2</sup> (63.5 - 68.4)
<b>Current alcohol use</b> (had at least one drink of alcohol at least one day during the 30 days before the survey)	28.3% (19.9 - 38.4)	39.9% (35.9 - 44.0)	40.7% (33.7 - 48.2)	36.6% (31.1 - 42.9)	36.1% (29.7 - 43.1)	38.7% (28.8 - 49.7)	38.8% <sup>2</sup> (35.9 - 41.9)
<b>Episodic heavy drinking</b> (had five or more drinks of alcohol in a row within a couple hours at least one day during the 30 days before the survey)	10.6% <sup>3</sup> (6.2 - 17.7)	21.6% (17.9 - 25.8)	20.9% (16.3 - 26.4)	16.2% (12.5 - 20.7)	14.7% (10.7 - 20.0)	27.1% (18.4 - 37.9)	19.7% <sup>2</sup> (17.4 - 22.2)

Confidence Intervals (CIs) of 95% are used to provide statistical markers to gauge real trends versus differences that are more likely to reflect insignificant variation of data from year to year.

<sup>1</sup>Duval County statistically different from Florida; <sup>2</sup>Duval County statistically different from the United States

<sup>3</sup>Health Zone 1 statistically different from Health Zone 2 and 6; <sup>4</sup>Health Zone statistically different from Duval County

## Youth Risk Behaviors

### Duval County High School Report Card by Health Zone (continued from page 5)

only 10.6%. Health Zone 1 was also significantly lower than Health Zone 2 for episodic heaving drinking reporting 21.6% for the same behavior. Students residing in Health Zone 6 (43.7%) had the highest percent of lifetime marijuana use compared to students living in Health Zone 4, with the lowest percentage (37.3%). On the contrary, for the percentage of high school students who have used any form of cocaine in their lifetime, Health Zone 6 (4.8%) was the lowest of all the zones and Health Zone 4 was the highest with 7.2% reporting that behavior. Health Zone 2 had the highest percentage of students who reported lifetime methamphetamine use (7.5%); Health Zone 5 had the lowest percentage of students reporting that same behavior (3.3%). Lifetime inhalant use was also the lowest in Health Zone 6 (9.2%) compared to Health Zone 1, with the highest percent with 18.4% reporting the behavior.

Risk Factors	Health Zone 1 2009 95% (CI's)	Health Zone 2 2009 95% (CI's)	Health Zone 3 2009 95% (CI's)	Health Zone 4 2009 95% (CI's)	Health Zone 5 2009 95% (CI's)	Health Zone 6 2009 95% (CI's)	Duval County 2009 95% (CI's)
<b>Other Drug Use</b>							
<b>Lifetime marijuana use</b> (used marijuana at least one or more times during their lifetime)	39.6% (30.1 - 49.9)	38.3% (33.2 - 43.6)	37.7% (31.2 - 44.7)	37.3% (32.7 - 42.2)	40.0% (32.0 - 48.5)	43.7% (33.1—55.0)	38.6% (35.9 - 41.5)
<b>Lifetime cocaine use</b> (used any form of cocaine, including powder, crack or freebase one or more times during their life)	6.1% (2.8 -12.7)	5.6% (3.5 - 8.9)	6.0% (3.6 -9.7)	7.2% (4.9 - 10.4)	7.0% (4.3 -10.9)	4.8% (2.1 - 10.8)	7.4% (6.03 - 9.1)
<b>Lifetime methamphetamine use</b> (used methamphetamine [also called speed, crystal, crank, or ice] one or more times during their life)	7.3% (3.2 - 15.6)	7.5% (5.4 - 10.4)	5.2% (3.0 - 8.8)	5.7% (3.7 - 8.6)	3.3% (1.6 - 6.6)	6.8% (3.1 - 14.3)	6.9% <sup>1, 2</sup> (5.5 - 8.6)
<b>Lifetime inhalant use</b> (sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life)	18.4% (10.5 - 30.1)	11.4% (8.6 - 14.9)	11.8% (8.2 -16.7)	15.1% (11.4 -19.7)	13.5% (9.7 -18.6)	9.2% (4.6 - 17.4)	14.3% <sup>1</sup> (12.4 - 16.5)
<b>Offered, sold, or given an illegal drug to someone on school property</b> (during the 12 months before the survey)	35.8% (26.0 - 46.9)	38.1% (32.5 - 43.0)	34.4% (28.6 - 40.7)	37.6% (32.9 - 42.5)	34.8% (28.2 - 42.0)	42.0% (31.5 - 53.2)	36.8% <sup>1, 2</sup> (34.3 - 39.4)

Confidence Intervals (CIs) of 95% are used to provide statistical markers to gauge real trends versus differences that are more likely to reflect insignificant variation of data from year to year.

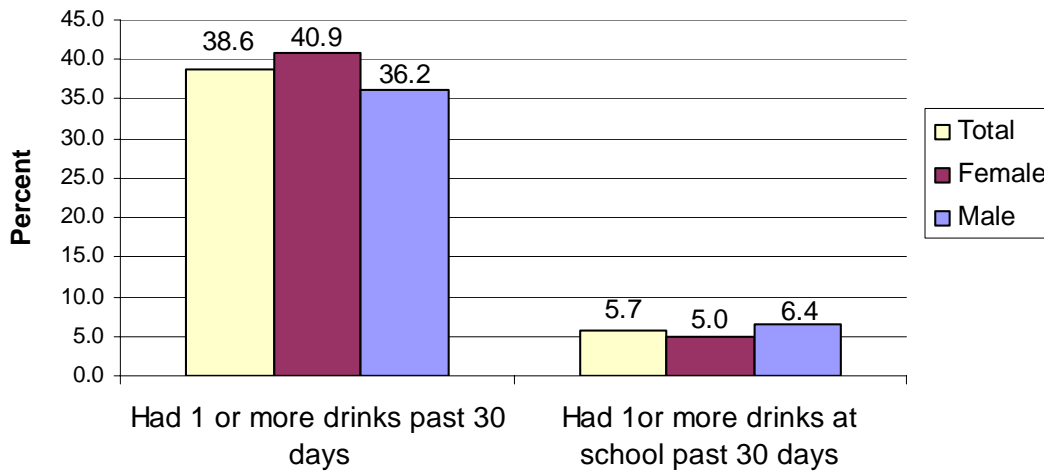
<sup>1</sup>Duval County statistically different from Florida; <sup>2</sup>Duval County statistically different from the United States

## Alcohol

In the 30 days previous to the survey, 40.9% of females and 36.2% of males had one or more drink(s). This difference between gender is not significant. This included 5.0% of females and 6.4% of males that stated they had one or more drinks in the last 30 days while on school property. This equates to 38.6% of high school students having current drinking behaviors (see Figure 2).

Figure 2

### Percentage of Students who Drank alcohol in the Last 30 Days



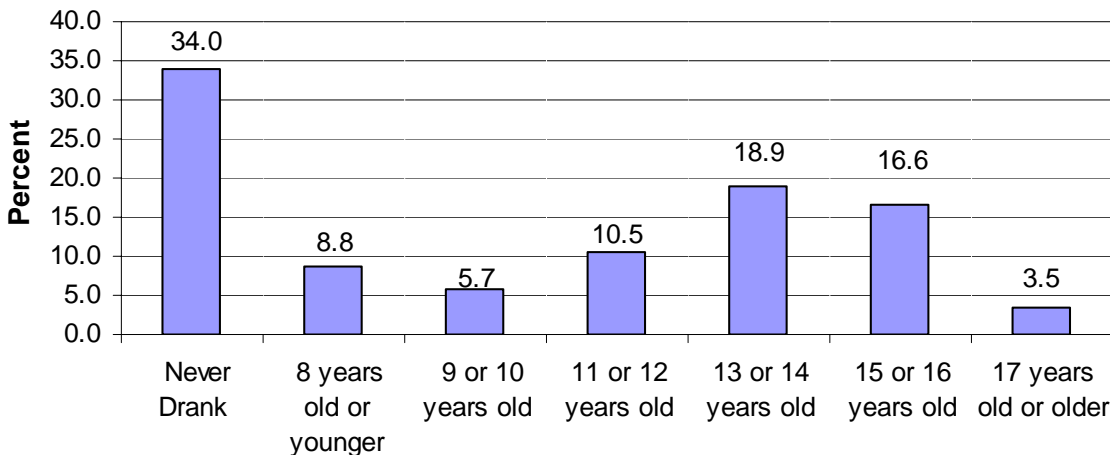
*Approximately 40% of students have had at least one drink in the past 30 days*

Source: Youth Risk Behavior Survey, Duval County, 2009

Early age of first alcohol consumption is a predictor of higher alcohol consumption and increased risk of alcohol related problems.<sup>3</sup> Of the 66% of high school students that have consumed alcohol, 61% were 16 or younger at age of first drinking experience. One-quarter of students who have drunk alcohol, had their first drink at ages 12 or younger. The age of first drinking experiences ranges from 8 years or younger (8.8%) to 17 years or older (3.5%) (see Figure 3).

Figure 3

### Students Age at First Drink of Alcohol



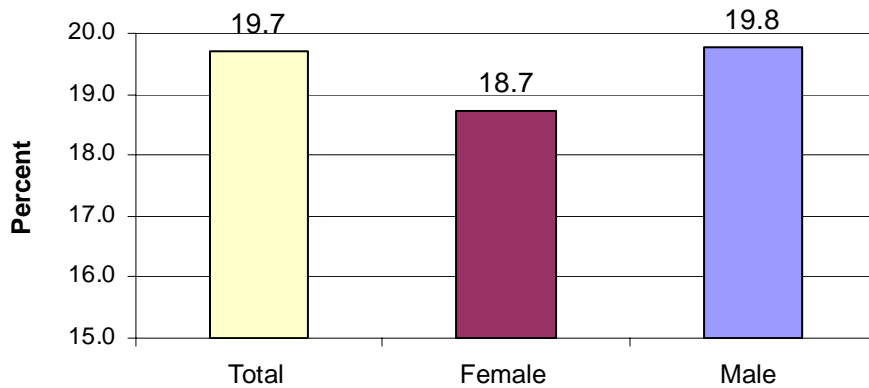
*34% of students have never drunk alcohol*

Source: Youth Risk Behavior Survey, Duval County, 2009

## Alcohol

Almost 20% of students who drink alcohol have engaged in episodic heavy drinking in the past 30 days. Although not statistically significant, males are slightly more likely to report the behavior than females (see Figure 4). Data for episodic heavy drinking behaviors by health zone show significant differences with Health Zone 6 having the highest percentage reporting episodic heavy drinking (27.1%). It was statistically different than Health Zone 1 with only 10.6%. Health Zone 1 was also significantly lower than Health Zone 2 for episodic heavy drinking reporting 21.6 for the same behavior (see Figure 10).

Figure 4 **Percentage of Students who Engaged in Episodic Heavy Drinking in the Past 30 Days**

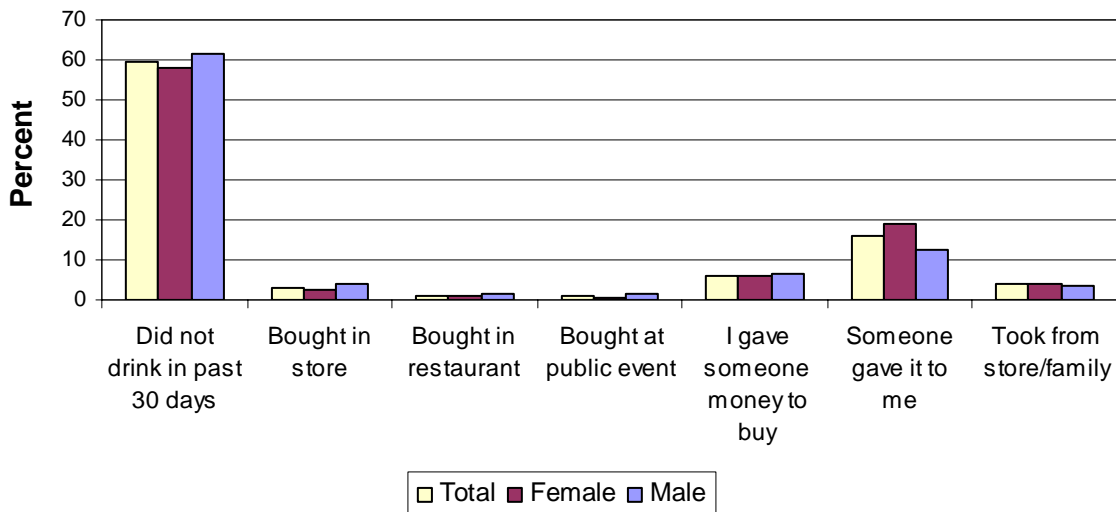


*Health Zone 1 has the lowest percentage of episodic heavy drinking of all health zones*

Source: Youth Risk Behavior Survey, Duval County, 2009

Of the approximately 38% of students who report drinking in the past 30 days, the reported sources of alcohol were: Bought in a store (4.2%); Bought in a restaurant (1.3%); Bought at a public event (1.6%), Gave someone money to buy for me (6.4%); Someone gave it to me (12.3%); Took from store/family (3.7%). Please note that there may be additional ways not accounted for in the survey responses (see Figure 5).

Figure 5 **Methods Students Used for Obtaining Alcohol**



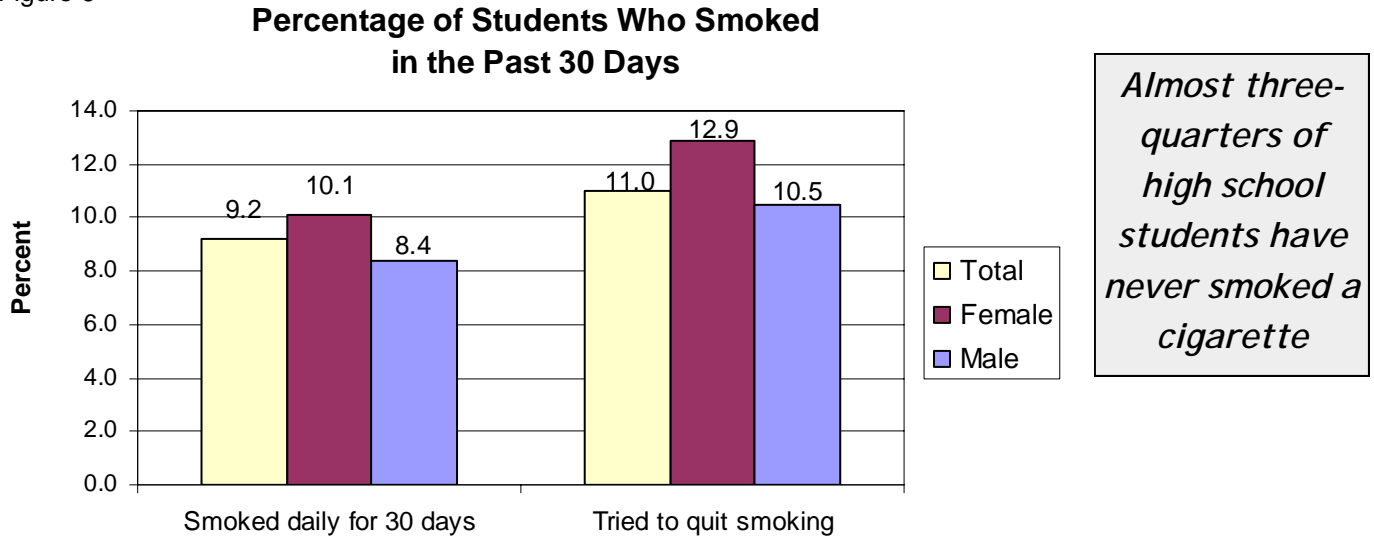
*Of students that report drinking alcohol, the highest percentage got it from someone else*

Source: Youth Risk Behavior Survey, Duval County, 2009

## Tobacco

More than 70% of Duval County high school students indicated they have never smoked a cigarette. Of those that have smoked, 8.3% reported they first smoked when they were 13 or 14 years old. Approximately 5% of students first smoked when they were 8 years old or younger. Overall, 9.2% of students smoked daily in the past 30 days. There was not a statistically significant difference between males and females for use of cigarettes. Eleven percent of students that smoke have tried to quit smoking, with more females (12.9%) having tried than males (10.5%), although not significant (see Figure 6).

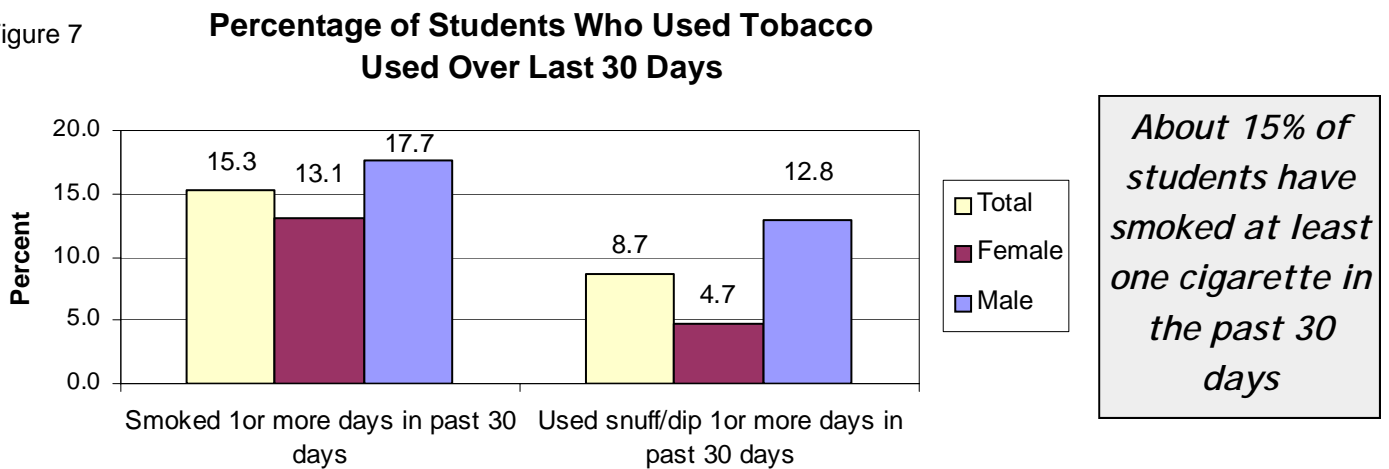
Figure 6



Source: Youth Risk Behavior Survey, Duval County, 2009

Overall, 15.4% of high school students smoked one or more times in the past 30 days and 9.2% used smokeless tobacco (snuff/dip) one or more times in the past 30 days (see Figure 7). Males (12.8%) (95%CI=10.4, 15.8) showed greater statistical significance in the use of smokeless tobacco, than females, with 4.7% (95%CI=3.4, 6.7).

Figure 7



Source: Youth Risk Behavior Survey, Duval County, 2009

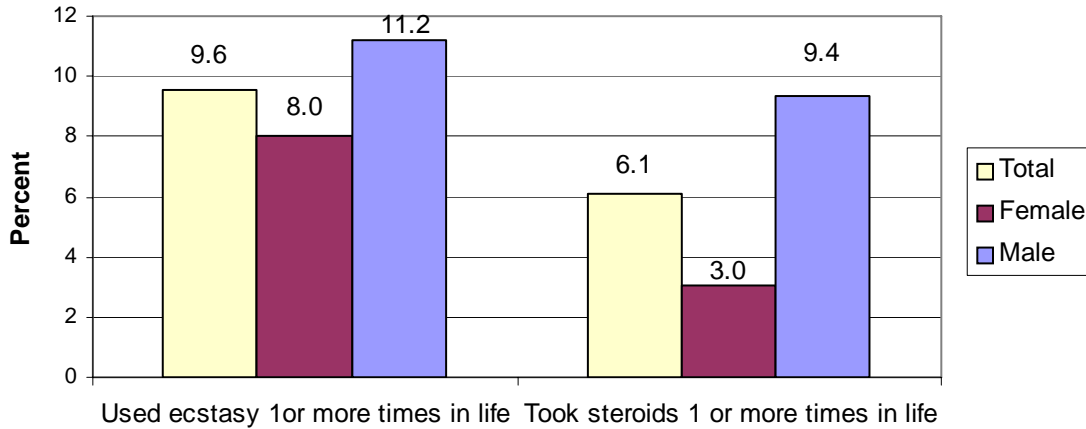
\*Data statistically significant between gender for used snuff/dip

## Other Drugs

The lifetime use of drugs is relatively high in Duval County as compared to the state and the nation (see Report Card 1). As seen in Figure 8, there is a high percentage of students having ever tried ecstasy and/or steroids in their life. There is a larger percentage of males than females that have tried either. Males with 9.4% were higher than females with 3.0% although this difference is not significant (see Figure 8).

Figure 8

**Percentage of Students Who Used Ecstasy and Steroids at Least Once**



*Over 3 times as many males have taken steroids than females*

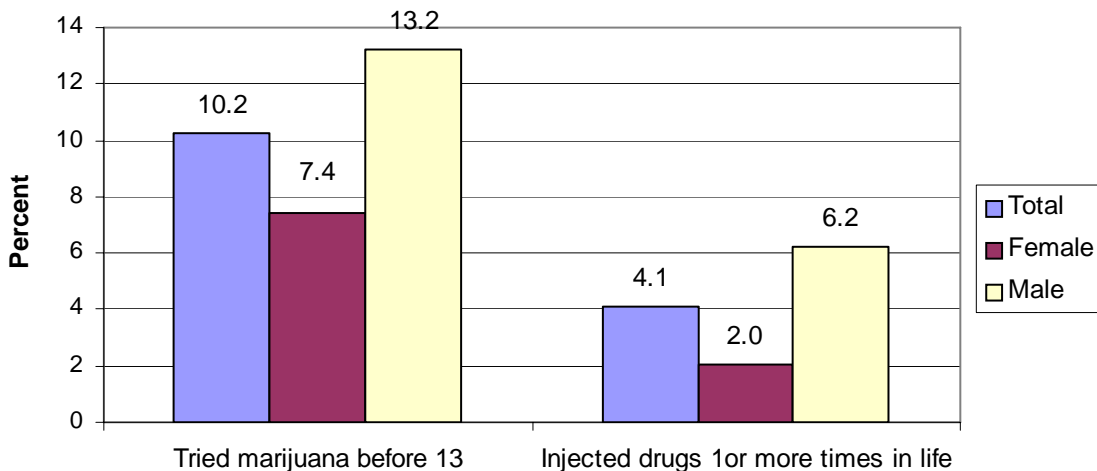
Source: Youth Risk Behavior Survey, Duval County, 2009

\*Data is significantly different between gender for *took steroids*

Of the 38.6% who have ever tried marijuana (see Report Card 1), 13.2% (95%CI=11.2,15.7) of those males and 7.4% (95%CI=5.9,9.4) of those females tried marijuana before age 13, indicating a significant difference. Similarly, males are significantly more likely to have injected drugs with 6.2% (95%CI=4.5,8.6) than females with 2.0% (95%CI=1.3,3.1).

Figure 9

**Percentage of Students Who Have Ever Used Other Drugs**



*Over 14% of males tried marijuana before age 13*

Source: Youth Risk Behavior Survey, Duval County, 2009

\*Data is significantly different between gender for *tried marijuana before age 13* and *injected drugs*

### Data Collection Methods

#### Description of the YRBS

The Youth Risk Behavior Survey (YRBS) is a self-administered, school-based, confidential, and anonymous survey that was conducted in the Duval County Public Schools in the spring of 2009. In Florida, weighted YRBS data has been collected at the state level every two years since 2001. Five Florida counties (Orange, Hillsborough, Palm Beach, Broward, and Miami-Dade) are funded by the CDC to collect county-level data. In the spring of 2009, Duval County, for the first time, received federal funding by the CDC to administer a specific county-level YRBS even though it has been included in the state-level data collection in the past. The YRBS is part of a national effort by the CDC to obtain information pertaining to social behaviors. These behaviors include, but are not limited to: violence, safety, sex, nutrition and weight management, suicide, and more. In the 19 public high schools in Duval County, there were 2,542 students who participated. Initial county-level analysis was performed by Westat, a CDC contractor. Sub-county analysis was conducted through a joint effort by the Duval County Public Schools and the Duval County Health Department. A stratified analysis according to the six defined health zones was conducted to identify the risk for these behaviors at the sub-county level. This sub-county analysis allows Duval County to be unique in its ability to identify geographically, within its community, those groups at risk.

#### Data Collection Methods

Nationally, schools are selected with probability proportional to the size of student enrollment in grades 9 - 12. Then, required classes are randomly selected to participate within selected schools with equal probability. The questionnaire is administered to all students in sampled classes in sampled schools. However, in Duval County, all schools were included in the study with the classes randomly selected, which resulted in the students being randomly selected. This ensures the reliability and validity of the sample to be a randomly generated one, which is important to the statistical process behind the administration of surveys and their analysis. Within selected classes, students are eligible to participate voluntarily, anonymously, and confidentially. Parental notification was provided. Survey administrators were Duval County Public Schools classroom instructors and were trained as to the appropriate method of administering and collecting the surveys. These precautions were necessary in order to ensure the complete privacy of the students.

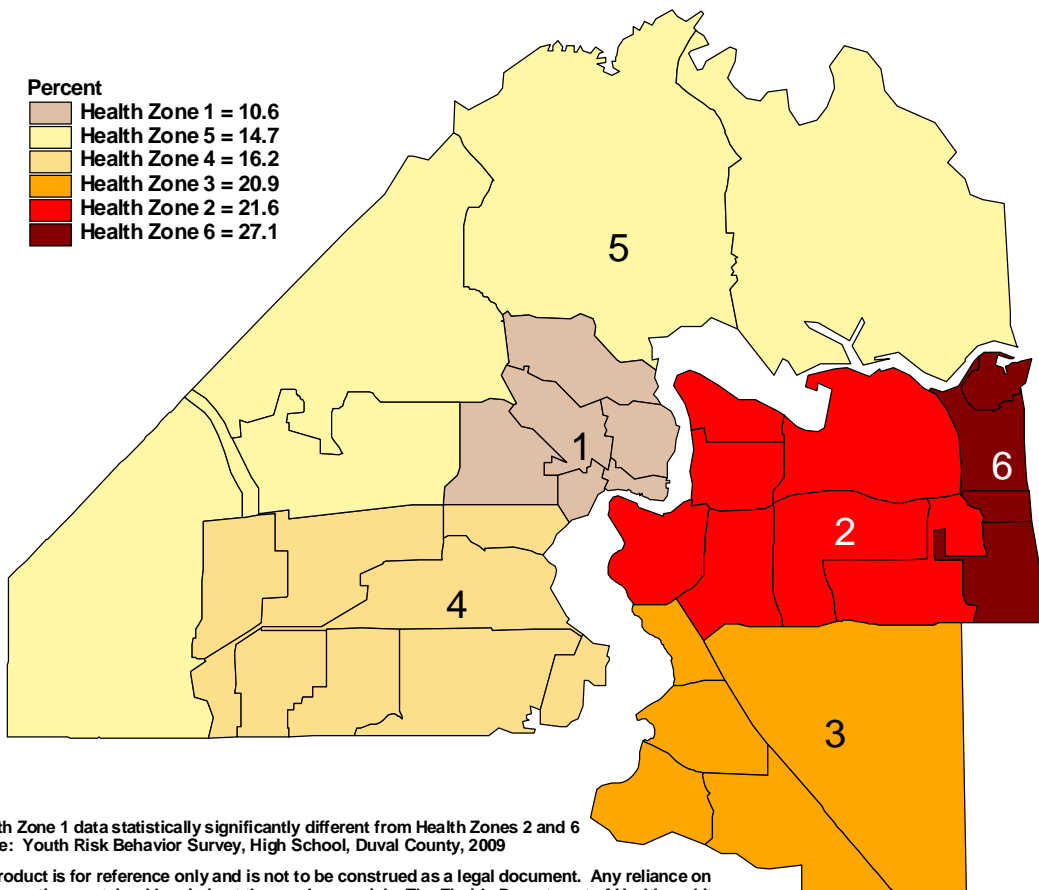
The CDC states "Weighted results means that the survey got an overall response rate of at least 60%. Weighted results are representative of all students in grades 9 - 12 attending public schools in each jurisdiction. With weighted data, it is possible to say, for example, 'X% of students in state Y never or rarely wore a seat belt when riding in a car driven by someone else.'" This means that a weight has been associated with each questionnaire to reflect the likelihood of sampling each student and to reduce bias by compensating for differing patterns of non-response. The objective of the weighting process is to develop sample weights that can be employed during analysis to generate results that accurately represent the entire student population in the county. The weighted results can be used to make important inferences concerning the priority health-risk behaviors of all regular public school students in grades 9 through 12.

#### References

- <sup>1</sup>American Academy of Child and Adolescent Psychiatry. #3 Teens: Alcohol and Other Drugs, 2006,
- <sup>2</sup>DeWit DJ, Adlaf EM, Offord DR, Ogborne AC: Age at first alcohol use: a risk factor for the development of alcohol disorders. *Am J Psychiatry* 2000; 157:745-750
- <sup>3</sup>CDC. Cigarette Use Among High School Students: 1991-2007. *MMWR* 2008;57 (689-391)
- <sup>4</sup><http://www.cdc.gov/healthyyouth/adolescenthealth/index.htm>
- <sup>5</sup>Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion. *Improving the Health of Adolescents & Young Adults: A Guide for States and Communities*. 2004

Figure 10

### Episodic Heavy Drinking by Health Zone, Duval County, 2009



\* Health Zone 1 data statistically significantly different from Health Zones 2 and 6  
Source: Youth Risk Behavior Survey, High School, Duval County, 2009

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