

# **CHOICES 2011**

## **A Report on Risky Behaviors Among Hamilton County Teens**

**Chattanooga-Hamilton County Regional Health Council**

**Chattanooga-Hamilton County Health Department**

*In Partnership with the*

**Medical Foundation of Chattanooga**



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The 2011 Youth Risk Behavior Survey (YRBS) was conducted under the auspices of the Chattanooga-Hamilton County Regional Health Council (RHC), with the oversight of the Council's Information Development Committee, and in partnership with the Medical Foundation of Chattanooga. Members of the Regional Health Council and Information Development Committee are listed in the Appendix.

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## **I. BACKGROUND AND METHODOGY**

### **Background**

The Youth Risk Behavior Survey (YRBS) in Hamilton County was conducted by the Chattanooga-Hamilton County Health Department under the auspices of the Chattanooga-Hamilton County Regional Health Council (RHC), the oversight of the RHC Information Development Committee, and in partnership with the Medical Foundation of Chattanooga.

The Centers for Disease Control and Prevention (CDC) has conducted the YRBS biennially since 1991. The purpose of the YRBS is to monitor the self-reported health habits and risk-taking behaviors of the nation's youth in the following areas:

- Tobacco use
- Dietary behaviors
- Physical activity
- Alcohol and other drug use
- Sexual behaviors
- Behaviors that may result in violence and unintentional injuries

The CDC works in conjunction with departments of health and education in most states and selected large cities to administer the YRBS to provide results that are valid for the state level and for those cities in which surveys are administered. In addition, the CDC conducts a separate nationwide survey. Within this report, state and national comparisons are based on 2009 YRBS results from the CDC.

### **Methodology**

The 2011 Hamilton County YRBS was adapted from protocols developed by the Centers for Disease Control. The local survey included the 87 items from the 2009 YRBS questionnaire and seven locally generated questions addressing bullying, prescription drug use, and oral sex. The 2011 Hamilton County YRBS used two-stage cluster sample design to obtain a representative sample of students in grades nine through 12 who attended public and private schools. Schools with low response rates in the previous Hamilton County YRBS studies were slightly oversampled, per the CDC protocol.<sup>1</sup>

Nineteen Hamilton County public high schools (including two charter schools and Middle College High School) and ten private schools were invited to participate in the survey. Twenty-five of the 29 invited schools participated, yielding a school response rate of 86.2%. Four private schools declined participation. Within each school, a random sample of classrooms from either a required period or required subject was selected to participate. Classroom teachers administered surveys using a protocol to enhance the confidentiality of student responses. Data collection was completed between October 2010 and January 2011.

<sup>1</sup> Centers for Disease Control and Prevention. (Youth Risk Behavior Surveillance – United States, 2009). Surveillance Summaries. (June 4, 2010). MMWR 2010;59 (No. SS-5).

A total of 4,480 students were eligible to participate in this voluntary survey, and 3,492 usable questionnaires remained after the data were scanned and cleaned for inconsistencies, yielding a student response rate of 69.6%. Student non-response factors included absenteeism on survey administration day, student decision not to participate, or parental decline of student participation. The overall response rate was 67.1% (overall response rate = school response rate x student response rate).

The distribution of respondents by grade level, sex, race ethnicity, and type of school are comparable to their actual distribution in the schools surveyed, as illustrated below.

	<b>The Survey</b>	<b>Enrolled in School</b>
Total Students (N)	(3,492)	(15,103)
9 <sup>th</sup> Grade	26%	27%
10 <sup>th</sup> Grade	31%	27%
11 <sup>th</sup> Grade	26%	24%
12 <sup>th</sup> Grade	17%	22%
Males	49%	50%
Females	51%	50%
Black	24%	27%
White	62%	65%
Latino	6%	4%
Other	8%	4%
Public Schools	78%	77%
Private Schools	22%	23%

The “other” race, which makes up 8% of the sample, is comprised of 261 students of Asian, Native American or Alaskan Native, Pacific Islander descent, and non-Latino students who reported multiple races. Responses from students in these “other” races appeared too dissimilar to group together for comparisons to white, black, and Latino students.

## **Data Processing/Analysis**

Students recorded their responses to the questionnaire on a computer scannable form. RTI International, an independent contractor, performed scanning and data cleaning services and assembled the data set in a tab-delimited format. RTI also used answers to height and weight questions to compute a body mass index (BMI) for each respondent.

Using procedures described by the CDC, school and student non-response rates and student demographic characteristics (sex, race/ethnicity, and grade level) were applied to each student record and used to weight the data.<sup>2</sup>

<sup>2</sup> Centers for Disease Control and Prevention. “State and Local Weighting Procedures, 2009 Youth Risk Behavior Survey.”

Weighting compensated for differences between the sample and the population and allowed statistical comparison of Hamilton County results with national and state YRBS findings. Statistical software (SAS) was used to account for the complex sample design and to calculate prevalence estimates for health behaviors and 95 percent confidence intervals. The 95 percent confidence intervals vary by question and range from +/- 0.5% to +/-3.4% for prevalence measures in the overall sample. Further data analysis was performed using the Statistical Package for the Social Sciences (SPSS).

### **Previous Youth Risk Behavior Surveys**

This is the third local YRBS – previous surveys were conducted in 1998 and 2002. In 1998, a sample of 2,990 public school students completed the survey. The 2002 survey included a sample of 2,752 students from both public and three private high schools. The 2011 study included a sample of 3,492 students from both public and six private high schools. All three surveys included a sample of students from each of the Hamilton County public high schools (except for the alternative school).

### **Reporting**

The Regional Health Council released five YRBS summary reports over a six-month period. The first report provided an overview of the data for key risk behaviors and included comparisons to previous local YRBS survey data and to the most recent state and national survey data. Subsequent reports were topic specific. The titles and release dates of these reports are listed below.

- Health Risk Behaviors of Hamilton County High School Students, October, 2011
- Teen Sexual Activity in Hamilton County, October, 2011
- Addictive Substance Use of Hamilton County Youth, November, 2011
- Health and Wellness of Hamilton County Youth, January, 2012
- Bullying and Violent Behaviors of Hamilton County Youth, March 2012

This document represents a compendium of these five reports. In addition, this report includes one-page summaries of two topics not covered in the five summary reports: mental health and injury prevention. Appendix A compares local health risk behavior prevalence to 2009 state and national data. Appendix B includes tables detailing health risk behavior prevalence among Hamilton County student subpopulations.

## II. HEALTH RISK BEHAVIORS OF HAMILTON COUNTY YOUTH

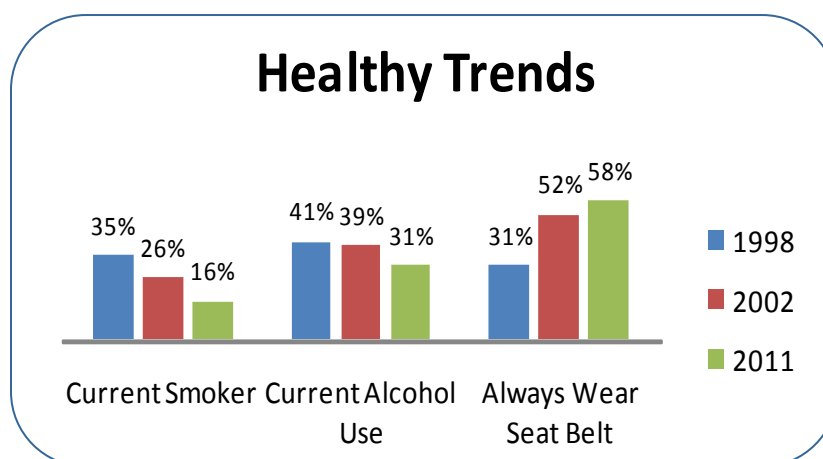
While Hamilton County high school students are still engaging in risk behaviors at concerning rates, a new Youth Risk Behavior Survey (YRBS) showed substantive improvements in almost every risk behavior category, when compared to the first Hamilton County YRBS in 1998. The percentage of students who engaged in two or more risky behaviors – smoking, drinking, marijuana use, and sexual intercourse – decreased from 41 percent in 1998 to 28 percent in 2011, while the percentage of students not engaging in any of the behaviors increased from 38 percent in 1998 to 50 percent in 2011.

Compared to the most recent data for the state of Tennessee, Hamilton County youth were significantly less likely to have ever tried cigarettes, ever had sexual intercourse, have seriously considered suicide in the past 12 months, and to be enrolled in physical education classes. Compared to the most recent nationwide data, Hamilton County youth were significantly less likely to drink alcohol, have been offered illegal drugs at school, have driven or ridden with someone under the influence of alcohol, and to have seriously considered suicide. Hamilton County youth were more likely than youth nationwide to have carried a weapon in the past month and less likely to be enrolled in physical education.

### HEALTHY TRENDS: Teen Smoking and Alcohol Use Down; Seat Belt Use Up

Since 1998, there have been substantive positive changes in smoking, alcohol use and injury risk behaviors among Hamilton County youth.

- Ever tried cigarettes: decreased from 72% in 1998 to 43% in 2011.
- Ever tried alcohol: (more than a few sips) decreased from 72% in 1998 to 63% in 2011.
- Rode with a driver who had been drinking: decreased from 31% in 1998 to 21% in 2011.



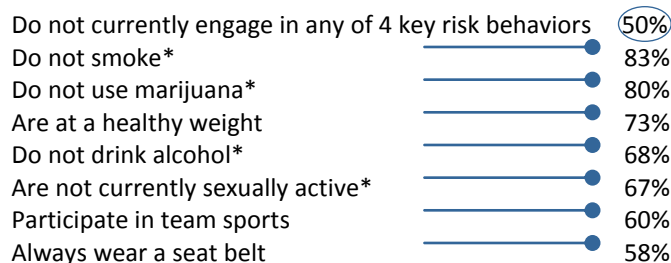


## NON RISK-TAKERS

**Most students did not engage in risky behaviors.**

- 50% of Hamilton County students were categorized as non risk-takers. These students were not currently engaged in any of the four key behaviors: smoking, drinking, using marijuana, or sexual intercourse.
- The percentage of non risk-takers declined with grade level; 66% of 9th graders compared to 36% of 12th graders.

### Healthy Choices



\* Denotes the four key risk behaviors

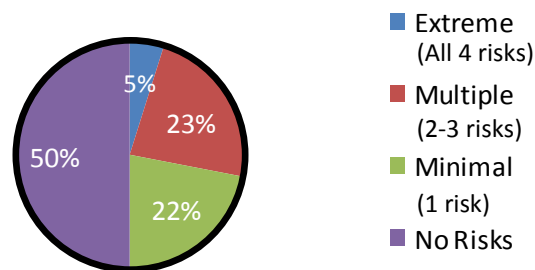
## EXTREME, MULTIPLE AND MINIMAL RISK-TAKERS

**Some students reported currently engaging in multiple risk behaviors.**

Students were classified into 4 risk categories based on their current participation in four key risk behaviors: smoking, alcohol use, marijuana use, and sexual intercourse.

- Extreme risk-takers - all 4 risks (5%)
- Multiple risk-takers - 2 or 3 risks (23%)
- Minimal risk-takers - 1 risk (22%)
- Non risk-takers - no risks (50%)

### Number of Current Risk Behaviors



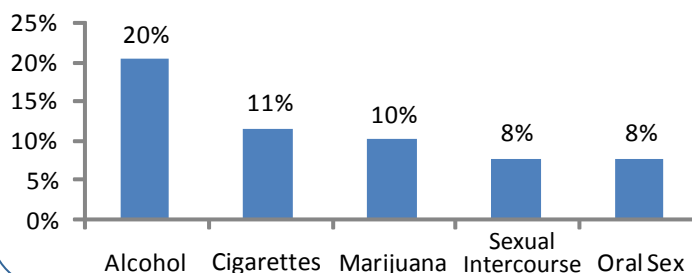
## RISKY BEHAVIORS OFTEN START BEFORE HIGH SCHOOL

**Risky behaviors begin early for some local youth, often before the age of 13.**

Students were asked how old they were when they first experimented with alcohol, cigarettes, marijuana, sexual intercourse, and oral sex. The chart on the right illustrates the percentages of all students reporting trying each behavior before age 13.

- Males students were more likely than female students to report early initiation of all five risk behaviors.
- Black students were more likely than white or Latino students to report early initiation of alcohol use, marijuana use, and sexual behaviors.

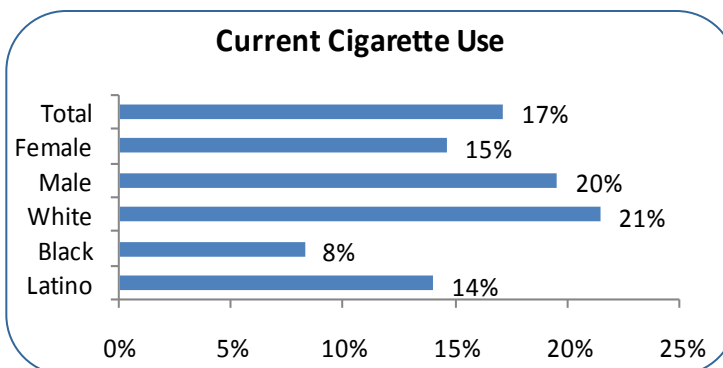
### Reported Behaviors before Age 13



## TOBACCO USE

**17% of students reported they currently smoke cigarettes.\***

- Smoking increased by grade level, rising from 11% of 9th graders to 25% of 12th graders.
- 12% of students who smoked reported smoking a half a pack or more per day.
- Overall, 11% of students reported smokeless tobacco use in the past 30 days. Males were almost seven times more likely to report this behavior than females (20% vs. 3%).

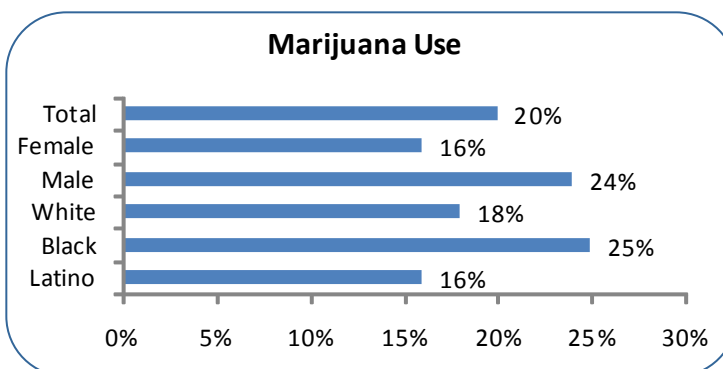


\* Defined as smoking within past 30 days

## MARIJUANA AND OTHER DRUG USE

**One in five students reported having used marijuana within the past 30 days.**

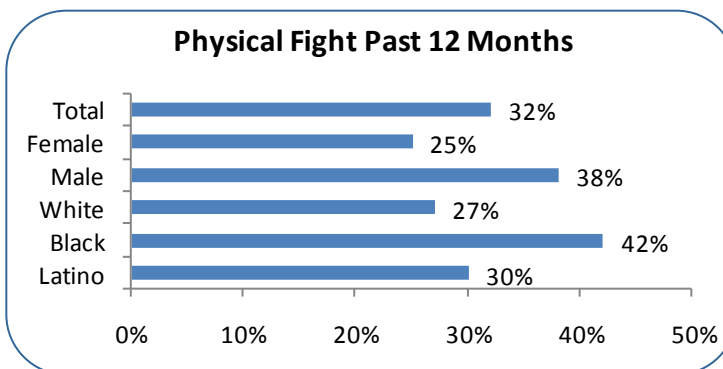
- 36% reported ever trying marijuana.
- 15% reported ever using prescription drugs such as OxyContin, Percocet, Demerol, Adderall, Ritalin, or Xanax without a doctor's prescription.
- 11% of students reported ever using inhalants.
- 6% of student reported having used ecstasy.



## INTENTIONAL INJURIES

**Almost one in three (32%) of students reported having been in a fight over the past 12 months .**

- 22% of students reported carrying a gun, knife, or club within the past 30 days. 24% of white, 17% of black, and 21% of Latinos reported carrying one of these weapons. 8% of students reported carrying a gun.
- 11% of both male and female students reported having been intentionally harmed by a boyfriend or girlfriend within the past 12 months.
- 8% of students reported ever having been forced to have sexual intercourse.



## RISK BEHAVIOR TRENDS AND COMPARISONS

	Hamilton County 1998	Hamilton County 2002	Hamilton County 2011	State of TN 2009	United States 2009
<b>SUBSTANTIVE CHANGES IN HAMILTON COUNTY</b>					
<b>TOBACCO USE</b>					
Ever tried cigarettes	72%	59%	43%	51%*	46%
Current smoker (past 30 days)	35%	26%	17%	21%	20%
<b>ALCOHOL AND DRUG USE</b>					
Ever drank alcohol	72%	72%	63%	68%	73%*
Current alcohol user (past 30 days)	41%	39%	32%	34%	42%*
Current marijuana use (past 30 days)	24%	23%	20%	20%	21%
Ever used inhalants	20%	13%	11%	12%	12%
Offered/sold/given illegal drugs at school (past 12 months)	33%	28%	19%	19%	23%*
<b>INJURY RISKS</b>					
Rarely/never wear seat belt	23%	12%	7%	10%	10%
Rode with driver under influence of alcohol (past 30 days)	31%	27%	21%	22%	28%*
Drove under the influence (past 30 days)	11%	12%	5%	8%	10%*
Seriously considered suicide (past 12 months)	24%	16%	10%	14%*	14%*
<b>SEXUAL BEHAVIORS</b>					
Ever had sexual intercourse	58%	44%	46%	53%*	46%
Had sexual intercourse past 3 months	39%	30%	33%	39%	34%
Had 4+ sexual partners (lifetime)	22%	14%	15%	17%	14%
<b>HEALTH AND WELLNESS</b>					
Enrolled in physical education class	32%	39%	42%	33%*	56%*
3+ hours non-school related computer on typical school day	N/A	14%	26%	26%	25%
<b>MULTIPLE RISK BEHAVIORS</b>					
Extreme risk-taker	10%	8%	5%	N/A	N/A
Multiple risk-taker	31%	26%	23%	N/A	N/A
Minimal risk-taker	22%	22%	22%	N/A	N/A
Non risk-taker	38%	44%	50%	N/A	N/A
<b>NO SUBSTANTIVE CHANGES IN HAMILTON COUNTY</b>					
<b>HEALTH AND WELLNESS</b>					
Overweight (85th percentile)	N/A	15%	15%	16%	16%
Obese (95th percentile)	N/A	12%	12%	16%	12%
<b>YOUTH VIOLENCE</b>					
Carried weapon such as a gun/ knife/club (past 30 days)	24%	22%	22%	21%	18%*
Physical fight (past 12 months)	34%	32%	32%	32%	32%

**State and National Comparisons:** An asterisk (\*) denotes state or national findings which are significantly different from 2011 Hamilton County findings based on non-overlapping 95% confidence intervals. Confidence intervals were calculated using CDC protocols and vary by question, based on question response rates.

**Year-to-Year Comparisons for Hamilton County:** Substantive differences in year-to-year data were identified through chi-square analysis. This is the third local YRBS – previous surveys were conducted in 1998 and 2002. In 1998, a sample of 2,990 public school students completed the survey. The 2002 survey included a sample of 2,752 students from both public and three private high schools. The 2011 study included a sample of 3,492 students from both public and six private high schools. All three (except for the alternative school).

### III: TEEN SEXUAL ACTIVITY IN HAMILTON COUNTY

Nearly half (46%) of high school students in Hamilton County have had sexual intercourse, with eight percent reporting that they had sex for the first time before they were thirteen years old. Forty-three percent of students had engaged in oral sex, with eight percent of all students reporting they had engaged in oral sex before age thirteen. Fifty-five percent of students were sexually experienced, having engaged in either sexual intercourse or oral sex or in both behaviors.

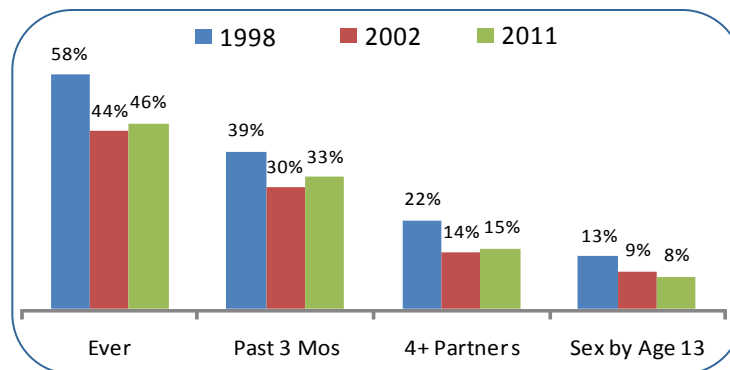
One-third of students indicated they were currently sexually active (have had sexual intercourse in the past three months). Fifteen percent of all students reported having four or more sexual partners in their lifetime. While findings regarding sexual intercourse reflect substantive declines over findings from the first YRBS in 1998, they are similar to 2002 YRBS findings.

Nearly half (47%) of all students who had sexual intercourse in the past three months used condoms as their primary form of birth control the last time they had sex. An additional 22% used either birth control pills or Depo-Provera to prevent pregnancy. Almost one in five (18%) of sexually active students, however, either did not use birth control last time they had sex or could not remember the method, while 10% relied on withdrawal.

Risk behaviors tend to cluster. Sexually active students were 2.5 times more likely to also smoke, drink or use marijuana than students who were not sexually active (65% versus 26%) and 5.3 times more likely to engage in all three other risk behaviors (16% versus 3%). In addition, 21% of sexually active students reported using alcohol or drugs before having sex most recently.

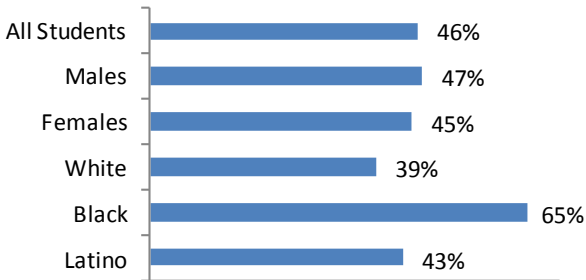
Sexual risk behaviors place adolescents at risk for sexually transmitted diseases. Over one-third (36%) of new chlamydia and gonorrhea diagnoses in Hamilton County in 2009 were to young people age 10 to 19. Among residents in this age group, there were 698 chlamydia diagnoses and 200 gonorrhea diagnoses. Condoms, if used correctly, can greatly reduce, though not eliminate, the risk of STDs. Forty percent of sexually active students indicated they did not use a condom the last time they had sexual intercourse.

**Healthy Trends: Sexual Intercourse**



## SEXUAL BEHAVIORS

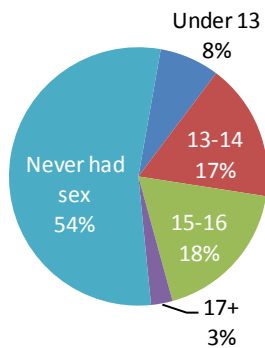
### Ever Had Sexual Intercourse



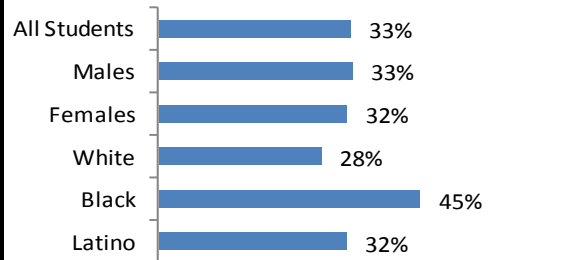
### Sexually Experienced (Ever Had Intercourse/Oral Sex)



### Age at First Sexual Intercourse

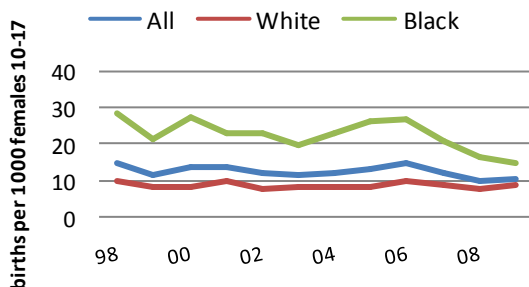


### Sexual Intercourse Past 3 Months



## TEEN BIRTHS IN HAMILTON COUNTY

### Teen Birth Rates (Ages 10-17) Hamilton County 1998-2009

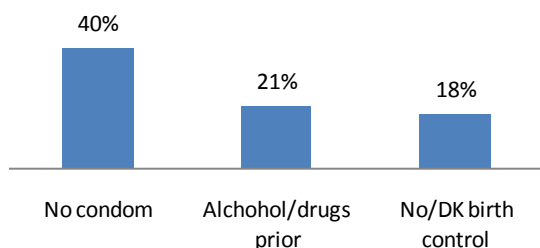


Since 1998, teen birth rates have declined by 29.3%. Among African Americans, the teen birth rate dropped 47.4%. Among whites, the teen birth rate dropped 10.9%

In Hamilton County in 2009, 150 babies were born to mothers between the ages of 10 and 17, or 10.6 births for every 1,000 females aged 10 to 17.

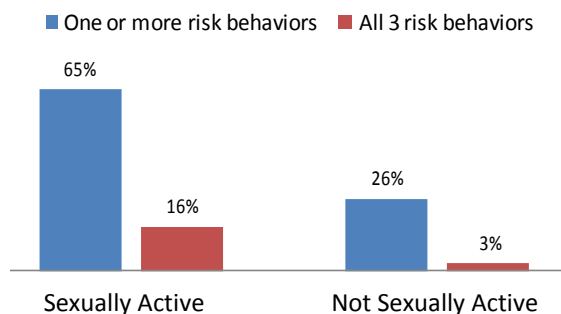
## MULTIPLE RISKS

### Behaviors at Last Sexual Intercourse



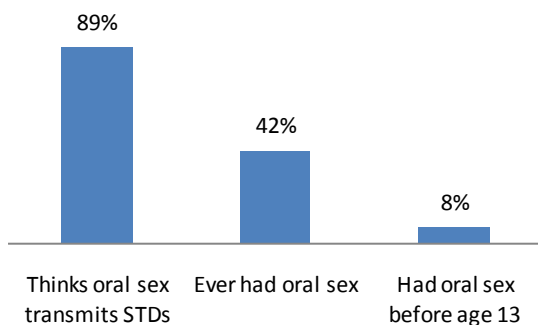
\*Among students having intercourse in past 3 months

### Participation in 3 Other Key Risk Behaviors\*

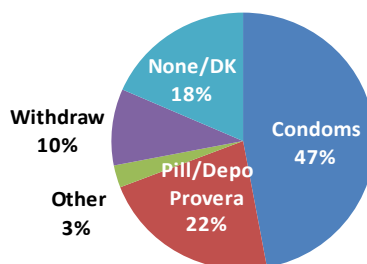


\* Other key risk behaviors: current smoking, drinking, and marijuana use

### Oral Sex



### Primary Birth Control Used Last Time



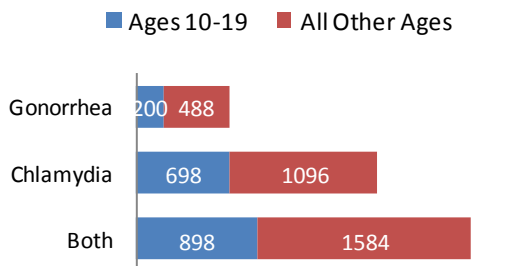
\*Among students having intercourse in past 3 months

## STDs AMONG TEENS IN HAMILTON COUNTY

Over one-third (36%) of the 2,482 of the new chlamydia and gonorrhea diagnoses in Hamilton County in 2009 were to young people ages 10 to 19. Among residents in this age group there were 698 chlamydia diagnoses and 200 gonorrhea diagnoses.

Of the 898 teen diagnoses for Chlamydia and gonorrhea in 2009, 76% were to African American teens, 22% to white teens, and 2% to Latino teens.

### 2009 Hamilton County STDs: Number of Diagnoses



## **The Impacts of Teenage Sexual Behavior**

### **Financial Burden of Teen Childbearing in Hamilton County**

Teen childbearing in Hamilton County cost taxpayers an estimated \$12.9 million in 2008. An analysis from The National Campaign to Prevent Teen and Unplanned Pregnancy (NCPTUP) shows that teen childbearing (mothers under age 20) in Tennessee cost taxpayers at least \$272 million in 2008, or \$24,073 per birth. If we assume that this figure applies at the county level, this translates to \$12.9 million for the 539 births to mothers under age 20. Of the total teen childbearing costs in Tennessee in 2008, 40% were federal costs and 60% were state and local costs. The estimates include costs associated with child welfare, criminal justice, public assistance, and lost tax revenue associated with reduced educational attainment and associated income. (NCPTUP)

Of the 150 babies born to mothers ages 10 to 17 in Hamilton County in 2009, 15.3% had low birth-weight (compared to 10.6% countywide); 4% of these mothers had a previous birth. (Tennessee Department of Health - TDOH)

### **Implications of Teen Childbearing for Education**

Parenthood is the leading cause of school dropout among teen girls – 30% of teen girls cited pregnancy or parenthood as a reason for dropping out of high school. Other data find that fewer than 2% of young teen mothers (those who have a baby before age 18) attain a college degree by age 30. (NCPTUP)

Children of teen mothers are more likely than mothers who gave birth at age 20-21 to drop out of high school. In fact, only two-thirds of children born to teen mothers earned a high school diploma, compared to 81% of children born to older moms. (NCPTUP)

Teens who are more involved in their school are less likely to get pregnant than teens not as involved in their school. Important aspects of school engagement include grades, test scores, class participation, homework completion, and a perception of support and connectedness with teachers and administrators. Planning to attend college after high school is also associated with a lower risk of teen pregnancy. (NCPTUP)

### **Sexually Transmitted Diseases**

Young women are biologically more susceptible to certain STDs, including chlamydia, gonorrhea, and HIV, compared to other age groups of women. (CDC)

At least 25 diseases are shared through sexual contact. At least eight new pathogens have been identified since 1980. Many of these diseases may begin with vague or mild symptoms. Unless tested, most people do not know they are infected until the infection may have caused permanent, lifelong damage. They may have also unknowingly given the infection to past or present partners. (CDC)

Many of these diseases can be transmitted in a variety of ways. According to the National Physicians Center, an STD is one that is passed from one person to another during sexual contact. The contact does not necessarily have to be intercourse, and oral sex presents health risks as well.

### **Association with Other Risky Behaviors**

Research has shown that early sexual debut and subsequent sexual behavior is generally not an isolated behavior, but is most likely to be associated with other risky or problematic behaviors such as substance use, academic difficulties, and delinquent behaviors. These behaviors may occur either before, soon after, or in the adolescent years that follow early sexual debut. (*Journal of Youth and Adolescence*, 2007)

Other research found a relationship between depression and early initiation of sexual behaviors, particularly during the early to middle adolescent years. (*Journal of Adolescence*, 2003)

The Urban Institute notes that “it is perhaps more important to remember that there are many causal factors for early sexual debut which include, but are not limited to: abuse, negative or lacking parental involvement and behavior, negative peer influence, and the onset of other risky behaviors.” The Institute further states that protective assets, such as constructive use of time, boundaries and expectations, positive values, and positive adult support, are associated with a “sizable reduction in ALL risky behaviors.” (Urban Institute)



#### IV. ADDICTIVE SUBSTANCE USE OF HAMILTON COUNTY YOUTH

Seven out of ten high school students in Hamilton County have used at least one addictive substance in their lifetime. Sixty-three percent have drunk alcohol; 43% have smoked cigarettes; 37% have used marijuana; and 5% have used cocaine.

Within the past month, 41% of students had used one or more of these substances and are classified as current substance users. Alcohol is the most commonly used addictive substance, with one-third of students drinking within the past month, followed by marijuana (20%) cigarettes (17%), and cocaine (2%). Current substance use increases with grade in school, rising from 29% of ninth graders to 52% of twelfth graders, and is higher among male students (45%) than female students (38%).

Almost one in five students had engaged in binge drinking (having five or more drinks within a few hours). Twelfth grade boys report more binge drinking than students in other grades (26% versus a range of 7% to 15% among other grade/sex combinations).

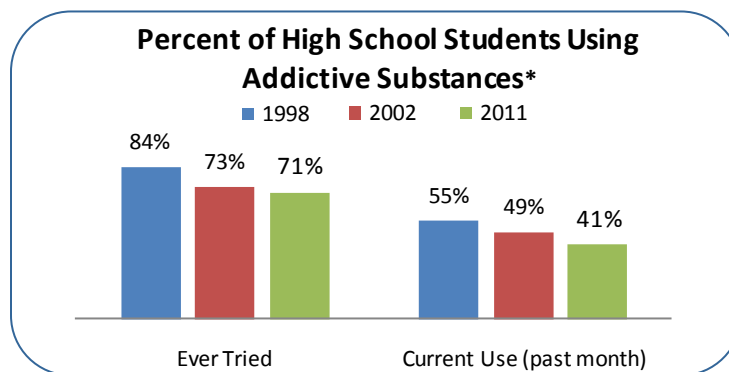
Fifteen percent of students reported that they have ever used prescription drugs, such as OxyContin, Percocet, Demerol, Adderall, Ritalin, or Xanax, without a prescription. The majority of these students get prescription drugs for free, having been given them by a friend or taken from relatives.

Students who smoke cigarettes are 5.5 times more likely to use marijuana, 3.5 times more likely to drink alcohol, and 7.4 times more likely to have used prescription drugs than non-smokers.

##### HEALTHY TRENDS: Decline in Teen Substance Use

Since 1998, there have been substantive positive changes in the use of one or more addictive substances.

- Ever tried one or more addictive substances: Decreased from 84% in 1998 to 71% in 2011
- Currently use one or more addictive substances: Decreased from 55% in 1998 to 41% in 2011

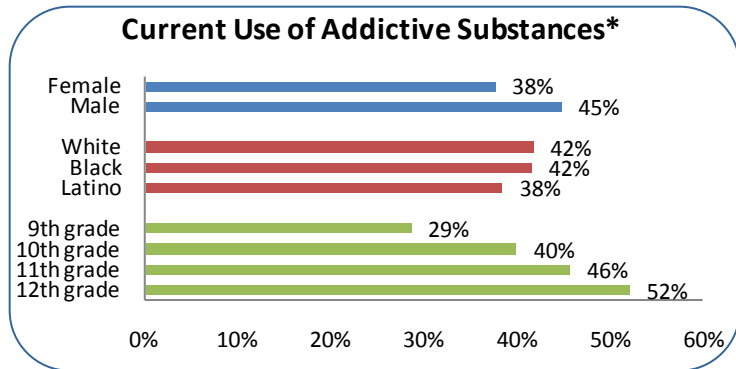


\* Includes one or more of the following: alcohol, cigarettes, marijuana, and cocaine

## CURRENT SUBSTANCE USE

**41% of students had used alcohol, cigarettes, marijuana, or cocaine within the past month.**

- Current substance use increases by grade in school, rising from 29% of 9th graders to 52% of 12th graders.
- Male students were more likely to report being current substance users than female students (45% vs. 38%).
- White students and black students were equally likely to report being current substance users (42%), which was somewhat higher than substance use among Latino students (38%).

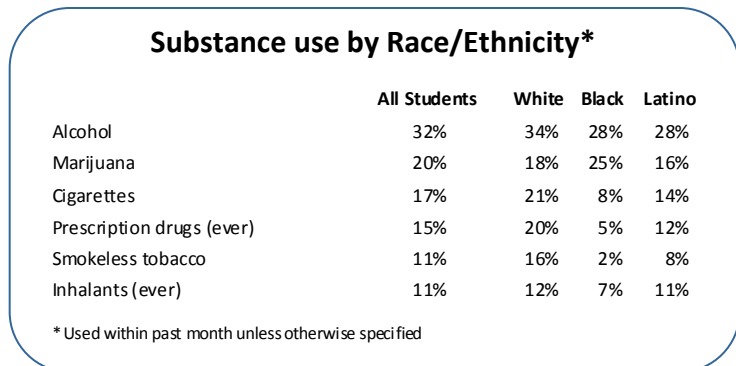


\* Includes past month use of one or more of the following: alcohol, cigarettes, marijuana, and cocaine

## SUBSTANCE USE

**Alcohol is the most commonly used addictive substance; one-third of students are current drinkers.**

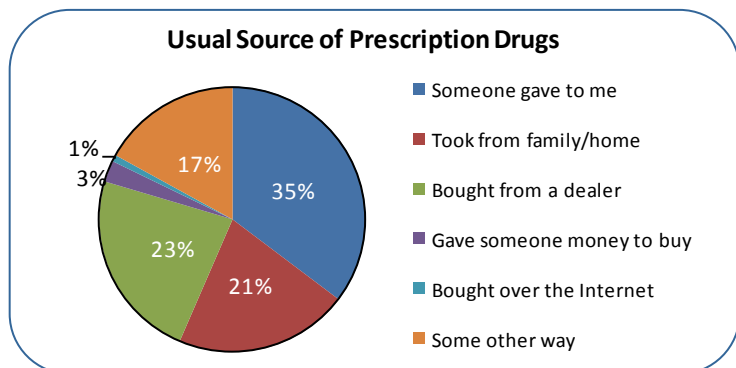
- Use of tobacco products, alcohol, and prescription drugs is highest among white students. Black students were more likely to use marijuana (25%) than white (18%) or Latino (16%) students.
- One in five students (19%) reported that they have ever been offered, sold, or given drugs on school property in the past year.
- Fewer students reported using substances while on school property: smokeless tobacco (8%), cigarettes (6%), alcohol (5%), and marijuana (5%).



## PRESCRIPTION DRUG USE

**15% of students have ever taken prescription drugs without a prescription.**

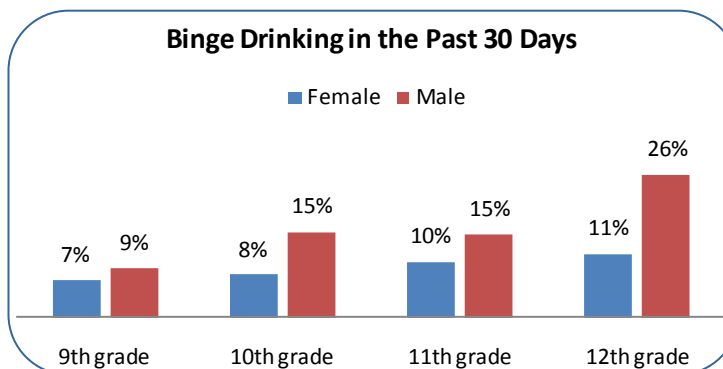
- Among substances students have tried, prescription drugs ranked fourth (15%), after alcohol (63%), cigarettes (43%), and marijuana (37%).
- White students were four times more likely to have used prescription drugs than black students (20% vs. 5%).
- Students using prescription drugs most often said the drugs were given to them (35%); other sources included purchasing from a dealer (23%), or taking from friend or relative (21%).



## BINGE DRINKING

**18% of all students engage in binge drinking; binge drinking is highest among 12th grade boys.**

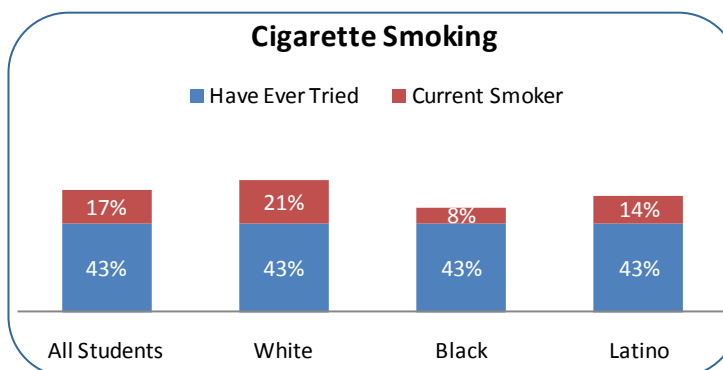
- Within the past month, one in four 12th grade boys had engaged in binge drinking (having 5 or more drinks within a few hours). One in five students had their first drink before the age of 13.
- Binge drinking was significantly higher among white students (20%) than black students (11%) or Latino students (15%).
- Teens are more likely to drink to get drunk than adults. In Hamilton County, high school students who drink are more than twice as likely to binge as adults who drink (55% vs. 22%). (2007 BRFSS)



## TOBACCO USE

**43% of all students have ever tried smoking, but white students were more likely to continue.**

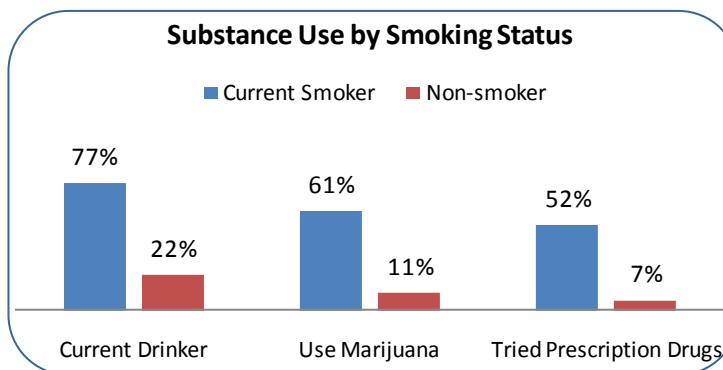
- 21% of white students were current smokers, compared to 8% of black students and 14% of Latino students.
- Among smokers under the age of 18, the legal age to purchase tobacco, black students were twice as likely as white students to report purchasing cigarettes in a store (25% vs. 13%).
- 26% of students used one or more tobacco products in the past 30 days, including cigarettes (17%), cigars (14%), or smokeless tobacco (11%).



## SUBSTANCE USE AND CIGARETTE SMOKING

**Substance use is significantly higher among smokers than non-smokers.**

- Compared with non-smokers, current smokers are 3.5 times more likely to drink (77% vs. 22%), 5.5 times more likely to use marijuana (61% vs. 11%), and 7.4 times more likely to have tried prescription drugs (52% vs. 7%).
- Current drinkers are 6.4 times more likely to smoke marijuana (45% vs. 7%) and 7.2 times more likely to have used prescription drugs (36% vs. 5%) than non-drinkers.
- Two-thirds (66%) of youth who currently both smoke and drink report using marijuana within the past month.



## **Economic Impacts of Addictive Behavior**

### **Smoking**

Hamilton County residents' state and federal tax burden from smoking-related government expenditures is estimated at \$81.5 million annually. A 2011 report from the Campaign for Tobacco Free Kids estimates that the state and federal tax burden at \$596 per household. If we assume that this figure applies at the county level, this translated to \$81.5 million state and federal tax burden for smoking related expenditures. (Campaign for Tobacco Free Kids, U.S. Census)

- More than 90 percent of adult smokers started when they were teens. (World Health Organization)
- Cigarette smoking by young people leads to immediate and serious health problems including respiratory and non-respiratory effects, addiction to nicotine, and the associated risk of other drug use. The younger people begin smoking cigarettes, the more likely they are to become strongly addicted to nicotine. Young people who try to quit suffer the same nicotine withdrawal symptoms as adults who try to quit. (CDC)
- Use of smokeless tobacco causes cancers of the mouth, pharynx and esophagus; gum recession; and an increased risk for heart disease and stroke. (CDC)

### **Alcohol and Drug Use**

Underage drinking cost the citizens of Hamilton County an estimated \$58.6 million in 2009. These costs include medical care, work loss, and pain and suffering associated with the multiple problems resulting from the use of alcohol by youth. The Underage Drinking Enforcement Center (UDEC) calculated that underage drinking costs Tennessee residents \$1.3 billion in 2009, or \$2,182 for each youth in the state. If we assume that this figure applies at the county level, this translates to \$58.6 million in costs associated with underage drinking. (UDEC)

Among youth, the use of alcohol and other drugs has been linked to unintentional injuries, physical fights, academic and occupational problems, and illegal behavior. (Substance Abuse and Mental Health Services Association)

The human brain continues to develop through the 20s. One of the last areas to mature is the pre-frontal cortex, the area of the brain required for planning, judgment, impulse control and foreseeing consequences. Research suggests that since the teen brain is still developing, addictive substances may physically alter the structure and function of teen brain faster and more intensely than adults, further impairing judgment and increasing the risk of addiction. (National Center on Addiction and Substance Abuse at Columbia University)

## 2011 ADDICTIVE SUBSTANCE USE BY DEMOGRAPHIC CHARACTERISTICS

	All Students	Female	Male	White	Black	Latino	9th grade	10th grade	11th grade	12th grade
<b>Tobacco Use</b>										
Ever tried cigarettes	43%	41%	45%	43%	43%	43%	33%	43%	46%	52%
Ever smoked cigarettes daily	10%	9%	11%	13%	4%	9%	7%	10%	11%	15%
Current smoker (past 30 days)	17%	15%	20%	21%	8%	14%	11%	16%	18%	25%
Current frequent smoker (20 out of past 30 days)	7%	5%	8%	9%	4%	2%	4%	7%	6%	11%
Smoked > 10 cigarettes/day- current smokers (past mo)	12%	5%	17%	14%	3%	N/A	12%	10%	11%	14%
Tried to quit smoking - current smokers (past year)	49%	54%	45%	47%	N/A	N/A	50%	52%	47%	47%
Bought cigarettes retail <18 current smoker (past mo)	14%	6%	21%	13%	25%	N/A	4%	12%	20%	19%
Smokeless tobacco - current user (past 30 days)	11%	3%	20%	16%	2%	8%	9%	12%	12%	13%
Cigar-current user (past 30 days)	14%	9%	19%	16%	11%	11%	8%	14%	16%	20%
Use any tobacco product (past 30 days)	26%	19%	33%	31%	16%	20%	17%	25%	28%	34%
<b>Drug and Alcohol Use</b>										
Ever drank alcohol	63%	64%	63%	65%	61%	58%	52%	62%	71%	70%
Current alcohol use (past 30 days)	32%	29%	35%	34%	28%	28%	22%	29%	35%	42%
Binge drinking - 5+ drinks in a row (past 30 days)	18%	13%	22%	20%	11%	15%	10%	16%	18%	27%
Ever use marijuana	37%	32%	41%	34%	44%	28%	23%	39%	42%	45%
Current marijuana use (past 30 days)	20%	16%	24%	18%	25%	16%	12%	22%	23%	25%
Ever use cocaine	5%	3%	6%	6%	1%	7%	3%	5%	5%	6%
Current cocaine use (past 30 days)	2%	1%	3%	2%	1%	5%	1%	2%	2%	2%
Ever use Rx drugs without a prescription	15%	13%	17%	20%	5%	12%	9%	16%	16%	20%
Ever use inhalants	11%	11%	10%	12%	7%	11%	11%	12%	10%	10%
Ever use ecstasy	6%	3%	9%	8%	3%	8%	3%	6%	7%	8%
Ever use methamphetamines	3%	2%	4%	4%	1%	6%	2%	3%	4%	3%
Ever use steroids without a prescription	3%	2%	4%	3%	1%	6%	2%	3%	3%	3%

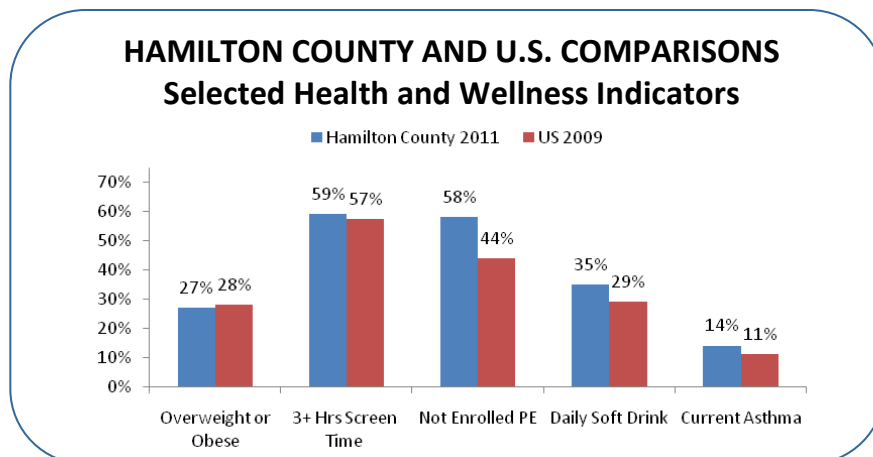
## V. HEALTH AND WELLNESS OF HAMILTON COUNTY YOUTH

The majority of high school students in Hamilton County fail to meet recommended guidelines for physical activity and nutrition. The Centers for Disease Control (CDC) recommends limiting screen time (includes time spent watching television, playing video games, or using the computer for fun) to no more than two hours per day; 59% of students reported three or more hours screen time, and 35% reported five or more hours screen time. Three out of four students did not participate in 60 or more minutes of physical activity on each of the previous 7 days before the survey, as recommended by the CDC. More than one-third (35%) drank at least one sugar-sweetened soft drink daily, while 18% consumed three or more soft drinks per day. Eighty percent ate fewer than five daily servings of fruits and vegetables.

An unhealthy diet and lack of exercise are major risk factors for overweight and obesity and contribute to the development of hypertension, heart disease, stroke, diabetes, some cancers, gall bladder disease, and arthritis. Moreover, diet and physical activity may have a strong impact on learning outcomes and success in the classroom.

Twenty-seven percent of high school students were either overweight (15%) or obese (12%), based on self-reported height and weight. The incidence of overweight and obesity was significantly higher among black (36%) and Latino (37%) students than among white students (23%). Males (14%) were more likely to be obese than females (10%). There were no differences by grade level.

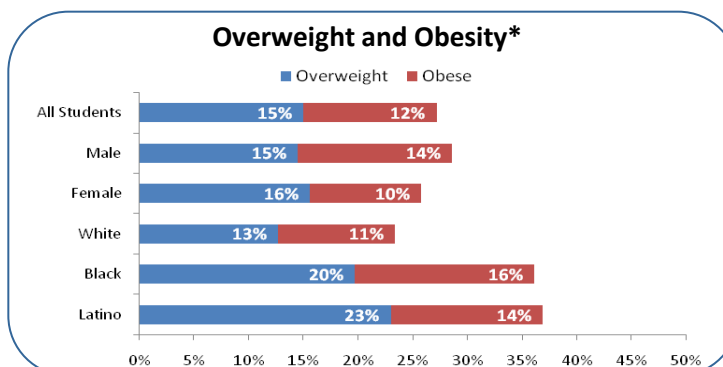
Asthma is one of the most common causes of school absenteeism. Children with asthma miss 2.5 more days of school than their peers, according to national data. The incidence of asthma among local high school students is significantly higher than the state and nation: 26% have ever been diagnosed with asthma (TN 18%; US 22%) and 14% currently have asthma (11% TN; 11% US). Within Hamilton County public schools, 3,200 students have been identified by their parents as having asthma. Of those, 364 are in grades 9 through 12. School officials note that the actual number of students with asthma is probably higher, as some parents do not report medical conditions.



## OVERWEIGHT AND OBESITY

27% of students were either overweight or obese, according to self-reported height/weight.

- Males were significantly more likely to be obese than females (14% vs. 10%). There were no differences in overweight by gender.
- The incidence of overweight and obesity was significantly higher among black (36%) and Latino (37%) students than white students (23%). There were no differences by grade.
- The percentages of students considered overweight or obese did not change from the 2002 survey (when 15% were overweight and 12% were obese).



\*Based on Body Mass Index (BMI)

For individuals under age 18, overweight is defined as the 85th BMI percentile; obese is defined as the 95th BMI percentile.

## RISK FACTORS FOR OVERWEIGHT AND OBESITY AND CHRONIC DISEASE

The majority of students failed to meet recommended guidelines for physical activity and nutrition.

- The majority of students (59%) reported three or more hours of screen time on a typical school day, and 35% reported five or more hours screen time. Three out of four students were not physically active for at least 60 minutes on each of the previous seven days as recommended by the CDC, and 17% were physically inactive the entire week.
- More than one-third of students drank at least one sugar sweetened soft drink daily, and 15% drank 3 or more per day. 80% did not eat the recommended 5 daily servings of fruits and vegetables.

### Physical Inactivity and Dietary Risk Factors

#### Physical Inactivity

3 + hrs screen time on typical school day	59%
→ 5+ hr on typical school day	35%
Physically active fewer than 7 days per week*	75%
→ Zero days per week	17%
Not enrolled in PE	58%

#### Unhealthy Dietary Behaviors

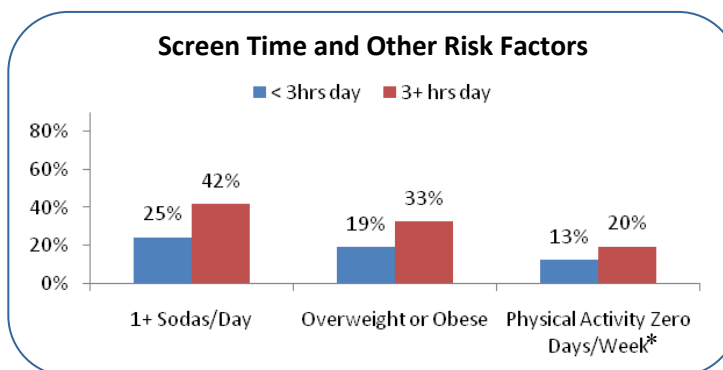
1+ soft drinks (non-diet) per day	35%
→ 3+ per day	15%
Fewer than 5 fruits and vegetables per day	80%

\* For at least 60 minutes per day

## SCREEN TIME—HOURS OF TV, COMPUTER, OR VIDEO GAMES PER DAY

59% of students reported three or more hours of screen time on a typical school day.

- Screen time includes television, video games, or computer use for fun. The CDC recommends limiting screen time to no more than two hours per day.
- Having three or more hours of screen time was associated with higher soft drink consumption, higher rates of overweight and obesity, and less physical activity.
- Excess screen time was more common among males (61%) than females (57%) and among blacks (74%) than Latinos (64%) or whites (54%). There were no differences by grade.



\* For at least 60 minutes per day

## Economic Impacts of Obesity and Asthma

**Overweight and obesity among adults in Hamilton County costs the health care system and the economy an estimated \$302.7 million per year.**

A 2010 research report from George Washington University's School of Public Health identified per-person costs related to obesity and overweight in 2009 dollars. If we assume these costs apply to Hamilton County, where 63.6% of adults are overweight or obese, this translates to \$302.7 million per year in costs related to direct medical expenses, wages, short-term disability, disability pension insurance, lost productivity, fuel costs, and life insurance.

Obese youth are more likely than youth of normal weight to become overweight or obese adults, according to the US Surgeon General. Annually, the average total health expenses for a child treated for obesity under Medicaid is \$6,730, while the average health cost for all children on Medicaid is \$2,446. The average annual health expenses for a child treated for obesity under private insurance is \$3,743, compared to an average of \$1,108 in health cost for all children covered by private insurance. (Robert Wood Johnson Foundation)

**On average, asthma costs an estimated \$19,037 over a lifetime in direct and indirect costs.**

A 2009 study by the Partnership for America's Success calculated a lifetime economic cost of \$7.2 billion in direct and indirect costs for the estimated 380,000 people born in the year 2000 diagnosed with asthma. This translates to \$19,037 per person, including \$8,421 in direct medical costs and \$10,616 in indirect costs related to lost productivity for both parents and the asthma sufferer as he or she enters the workforce. (Partnership for America's Success)

Asthma is one of the most common causes of school absenteeism, a major cause of disability and/or restricted activity among children, and is one of the leading causes of hospitalizations among children. Children with asthma miss 2.48 more days of school than their peers (which means their parents are likely to miss work to care for them), and adults miss 5.7 days of work because of their own illness. (Partnership for America's Success)

HEALTH AND WELLNESS DATA BY DEMOGRAPHIC CHARACTERISTICS										
	All Students	Female	Male	White	Black	Latino	9th grade	10th grade	11th grade	12th grade
<b>Dietary Behaviors</b>										
At least 2 servings fruits or fruit juice/day past week	30%	27%	32%	27%	35%	32%	29%	31%	30%	29%
At least 3 servings vegetables/day past week	15%	14%	17%	14%	16%	24%	16%	16%	14%	14%
5+ fruits & vegetables/day past week	20%	17%	23%	18%	23%	27%	21%	21%	20%	18%
3+ glasses milk per day past week	11%	7%	15%	12%	9%	13%	12%	11%	10%	11%
At least 1 soda per day (non-diet) past week	35%	32%	38%	35%	38%	27%	34%	34%	37%	35%
-- 3+ sodas per day (non-diet) past week	15%	13%	17%	14%	19%	11%	17%	17%	15%	13%
<b>Physical Activity</b>										
Physically active 60+ min on 7 days past week	25%	16%	33%	27%	21%	18%	27%	26%	23%	23%
Physically active 60+ min on 5+ days past week	44%	33%	54%	48%	37%	37%	47%	45%	42%	42%
Physically active 60+ min on 0 days past week	17%	21%	13%	13%	25%	18%	13%	14%	21%	19%
Video games/computer for fun 3+ hrs avg school day	26%	21%	31%	24%	30%	28%	29%	26%	25%	25%
Watched TV 3+ hrs day average school day	36%	37%	36%	27%	57%	38%	36%	36%	36%	37%
Total screen time 3+ hrs (tv,video, computer)	59%	57%	61%	52%	74%	64%	59%	61%	58%	58%
Attend PE	42%	36%	48%	43%	40%	51%	61%	44%	30%	32%
Attend PE daily	25%	20%	29%	25%	24%	24%	34%	29%	17%	18%
Play on at least 1 sports team	60%	54%	67%	62%	58%	56%	64%	61%	60%	57%
<b>Body Weight</b>										
Percentage overweight (85th percentile BMI*)	15%	16%	15%	13%	20%	23%	16%	16%	15%	14%
Percentage obese (95th percentile BMI*)	12%	10%	14%	11%	16%	14%	12%	12%	11%	13%
Describe themselves as slightly or very overweight	26%	31%	21%	26%	25%	30%	26%	24%	26%	26%
Trying to lose weight	41%	55%	28%	42%	38%	43%	43%	42%	40%	38%
Cut food, calories, fat to lose/maintain wgt past month	36%	46%	26%	39%	29%	36%	36%	35%	35%	37%
Exercised to lose/maintain wgt - past month	58%	63%	53%	60%	55%	61%	61%	60%	55%	56%
Fast 24 hrs to lose/maintain wgt - past month	11%	15%	8%	11%	12%	12%	12%	11%	10%	12%
Diet pills, powders, liquids to lose/maintain wgt - past mo	5%	5%	5%	5%	4%	9%	4%	5%	6%	4%
Vomited/laxatives to lose/maintain wgt - past month	3%	4%	3%	3%	3%	5%	3%	4%	4%	3%
<b>Asthma</b>										
Ever had asthma	26%	25%	26%	24%	29%	20%	25%	26%	24%	28%
Current asthma (ever diagnosed and still have)	14%	16%	13%	12%	19%	10%	13%	15%	13%	16%

\*BMI=body mass index; weight in kilograms divided by height in meters squared



## VI. BULLYING AND VIOLENT BEHAVIORS OF HAMILTON COUNTY YOUTH

Youth violence takes many forms, including physical fights, bullying, dating violence and carrying weapons. Within the past year, 32% of Hamilton County high school students were in a physical fight and 18% were bullied at school. Eleven percent of students reported being hit or slapped on purpose by a boyfriend or girlfriend within the past year; 8% reported they had been forced to have sexual intercourse. Twenty-two percent of all students had carried a weapon such as a gun, knife, or club within the past month. Eight percent of students had carried a gun.

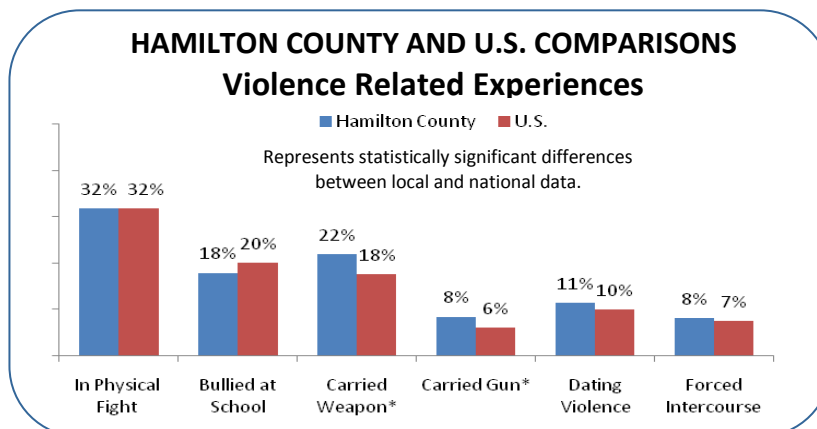
The survey also addressed violent behaviors occurring on school property. Within the past year, 18% of students were bullied at school, 12% were in a physical fight at school, and 7% had been threatened or injured with a weapon at school. Within the previous month, 6% of students reported they had carried a weapon to school and 5% had missed one or more days of school because they felt unsafe at school or on their way to or from school.

Students who were victims of one form of violence were more likely to be victims or participants in other forms of violence. For example, students who had been threatened with a weapon at school at school were more likely than non-threatened students to have also been bullied at school (40% vs. 16%), been in a fight at school (39% vs. 9%), brought a weapon to school (24% vs. 4%), and to have skipped school for safety reasons (27% vs. 3%).

Within the past year, one in four students were victims of bullying, either at school (18%) or online (15%), while 8% experienced both types of bullying. Females were more likely than males to be victims of school bullying (20% vs. 15%) and online bullying (21% vs. 10%) and were more than twice as likely to experience both forms of bullying (11% vs. 5%).

Students who were bullied were at increased risk for other types of violent behaviors, either as a victim or as a participant. This association was strongest among students who had experienced both types of bullying. About one in four victims of both types of bullying skipped one or more days of school (24%) or were threatened at school (21%), while about half had bullied others (50%) or been in a fight (47%).

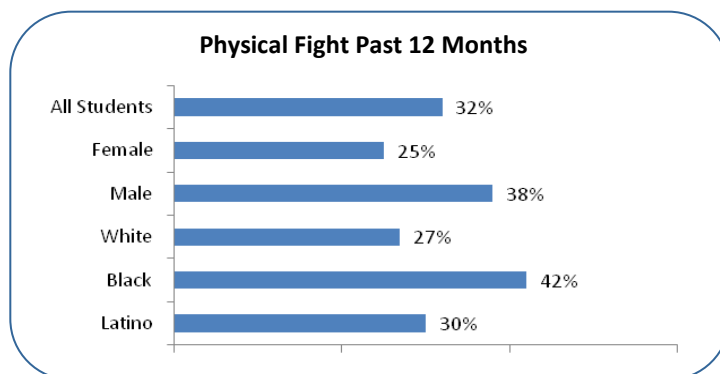
Bullying victimization was also associated with increased risk for psychological distress, including symptoms of depression and suicidal thoughts and attempts. This association was strongest among students who had experienced bullying both at school and online. Over half of victims of both types of bullying reported symptoms of depression, while 31% had seriously considered suicide and 21% had attempted suicide.



## PHYSICAL FIGHT

Almost one in three (32%) students reported having been in a fight over the past 12 months.

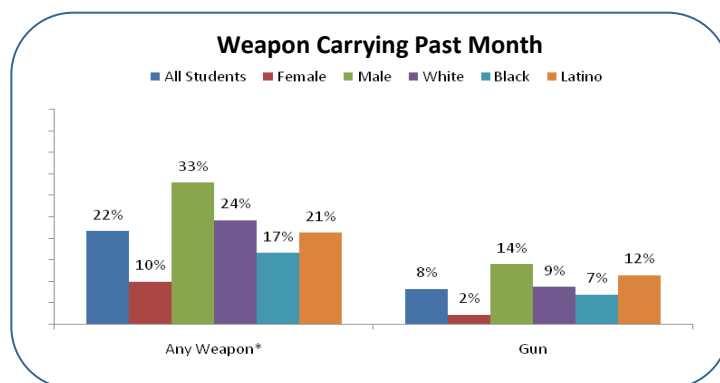
- Four percent of students had sustained injuries in a fight that were treated by a medical professional.
- At least 1 in 4 students in each sex, grade, and race/ethnicity category reported fighting.
- 38% of male students and 25% of female students had been in a fight. The prevalence of fighting was higher among black students (42%) than Latino (30%) or white (27%) students. The prevalence of fighting by grade level ranged from 29% to 34%.



## WEAPONS ON SCHOOL PROPERTY

22% of students had carried a weapon in the past month; 8% had carried a gun.

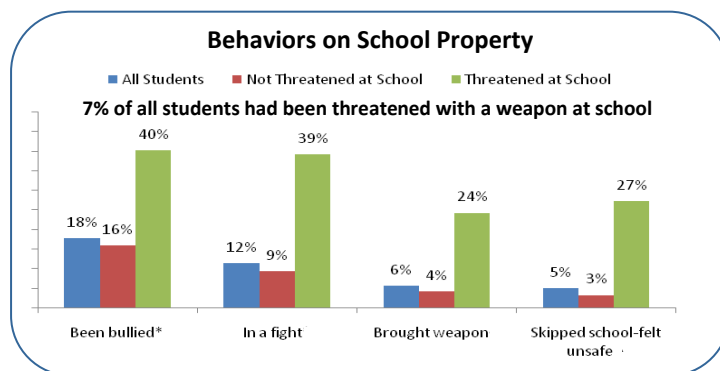
- 22% of students reported carrying a gun, knife, or club within the past 30 days. 24% of white, 17% of black and 21% of Latinos reported carrying those weapons.
- 8% of students reported carrying a gun.
- Male students were more than three times as likely as female students to report having carried a weapon (33% vs. 10%) and seven times more likely to report having carried a gun (14% vs. 2%).



## VIOLENCE ON SCHOOL PROPERTY

Students threatened at school were more likely to be victims or participants in other school violence.

- Among all students, 7% were threatened or injured with a weapon on school property within the past year.
- Among students threatened at school, 40% were also bullied at school and 39% were in a fight at school, versus 16% and 9% of non-threatened students, respectively.
- Threatened students were 9 times more likely to report skipping school in the last month because of safety concerns (27% vs. 3%) and 6 times more likely to report carrying a weapon to school (24% vs. 4%).

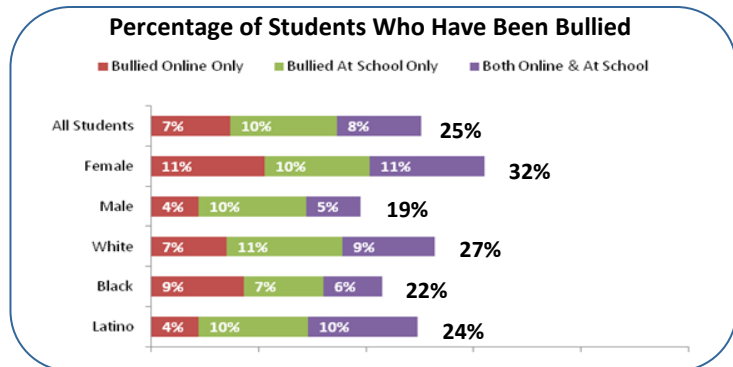


\*Bullying defined as "when 1 or more students tease, threaten, spread rumors about, hit, shove, or hurt another student over and over again. It is not bullying when 2 students of about the same strength or power argue or fight or tease each other in a friendly way."

## BULLYING

**25% of students were bullied online or at school in the past year; 8% had been bullied in both places.**

- Within the past year, 18% of all students had been bullied at school and 15% had been bullied online. 8% of students said they had experienced bullying in both venues.
- Females were much more likely to experience bullying: almost one-third of females had been bullied online or at school in the past year, and 11% had been bullied in both venues.
- Within the past year, 27% of white, 22% of black, and 24% of Latino students were bullied online or in school.

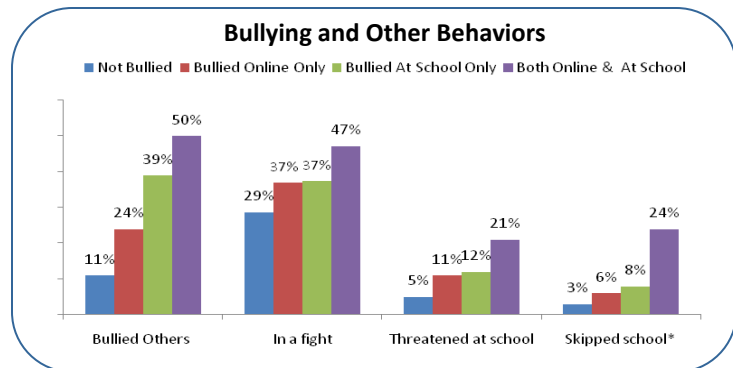


\***Bolded** numbers in black represent the total percentage who had been bullied in either venue.

## BULLYING AND OTHER RISK BEHAVIORS

**Bully victims were at higher risk for other violent behaviors, particularly if bullied both online and at school.**

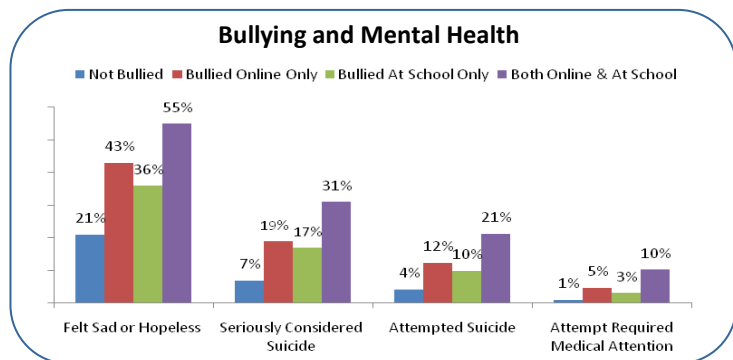
- Students who had been bullied were at greater risk for other violent behaviors, including bullying others. Bullying victims were also more likely than non-victims to have been in a fight, been threatened with a weapon at school, and to have skipped school because of safety concerns.
- Victims of both types of bullying were much more likely to engage in these other violence related behaviors than victims of only one type of bullying.



## BULLYING AND MENTAL HEALTH

**Bully victims report higher levels of mental distress, particularly if bullied online and at school.**

- Bully victims were more likely to report symptoms of depression than non-victims.<sup>1</sup> Among students bullied both at school and online, over half (55%) experienced these symptoms, compared to 21% of non-victims and approximately 40% of students bullied in only one venue.
- There were similar differences for reported suicidal behaviors. Among students bullied both online and at school, 31% seriously considered suicide, 21% attempted suicide, and 10% had a suicide attempt requiring medical treatment.



\*Within the past year

<sup>1</sup> Defined as "feeling so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities."

## Impacts of Youth Violence and Bullying

The cost of youth violence in the United States, including direct and indirect costs, is estimated at \$158 billion per year, including \$7.9 billion attributed to school violence. Further, the study estimates that school violence and bullying contributes between 1 and 5 percent of “early secondary school leaving,” with an associated economic impact ranging from \$6.5 to \$32.4 billion. The two estimates of the costs of school violence suggest that school violence may cost the United States between \$14.4 and \$40.3 billion dollars annually. (The Economic Impact of School Violence: A Report for Plan International, Overseas Development Institute, 2010)

The Bureau of Justice Statistics (BJS) reports that during the 2007-2008 school year, 85 percent of public schools reported at least one violent crime, theft, or other crime in their school. (Indicators of School Crime and Safety: 2009, BJS)

In a survey of American middle and high school students, 66 percent of bullying victims believed that school professionals responded poorly to bullying problems. (OJJDP, 2011)

A 2003 national study by the National Institute of Child Health and Human Development (NICHD) examined the associations between bullying and other types of aggressive behavior. The study found that both children who bullied others and children who had been bullied were more likely than children who had never been bullied to engage in other violent behaviors. The study’s authors concluded that “Findings from this study suggested that programs designed to reduce violent behaviors should address less severe forms of aggressive behavior, particularly bullying. Bullying, as a behavior that is inflicted with the desire to harm another, seems to be an important marker for violence-related behaviors.” (NICHD)

A recent study of high school students in Boston found that victims of online and school bullying were more likely than non-victims to report depressive symptoms and suicide ideation/attempts. In addition, victimization was associated with lower school performance and lower school attachment. These associations were strongest among students who had experienced both types of bullying. (American Journal of Public Health)

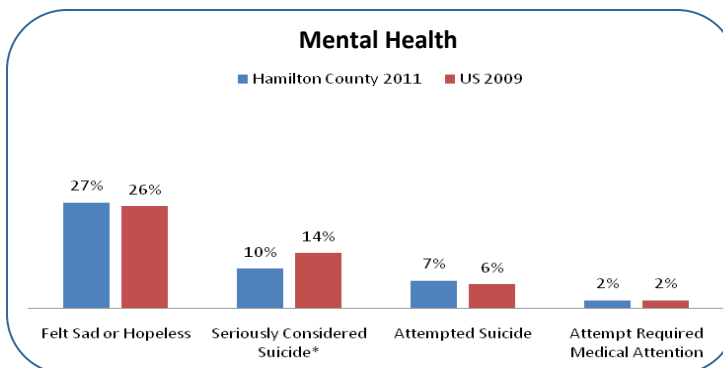
VIOLENCE RELATED BEHAVIORS BY DEMOGRAPHIC CHARACTERISTICS										
	All Students	Female	Male	White	Black	Latino	9th grade	10th grade	11th grade	12th grade
<b>Violence</b>										
Carried weapon in past month	22%	10%	33%	24%	17%	21%	21%	23%	22%	21%
Carried gun in past month	8%	2%	14%	9%	7%	12%	6%	8%	8%	11%
Physical fight past year	32%	25%	38%	27%	42%	30%	33%	34%	30%	29%
Fight required medical attention past year	4%	3%	5%	3%	6%	6%	5%	4%	4%	4%
Dating violence past year	11%	11%	11%	10%	14%	12%	9%	11%	12%	13%
Forced intercourse ever	8%	11%	5%	7%	10%	7%	7%	8%	9%	9%
<b>School Violence</b>										
Physical fight on school property past year	12%	9%	14%	9%	16%	12%	15%	12%	9%	10%
Threatened w/weapon on school property past	7%	6%	9%	5%	11%	10%	7%	6%	8%	8%
Carried weapon on school property in past mo	6%	3%	8%	6%	4%	8%	5%	6%	5%	7%
Missed school because felt unsafe past 30 days year	5%	5%	5%	4%	6%	10%	6%	5%	4%	5%
Bullied on school property past year	18%	20%	15%	19%	13%	20%	22%	18%	16%	15%
<b>Bullying</b>										
Bullied someone else	18%	16%	19%	17%	17%	21%	21%	18%	17%	14%
Bullied on school property past year	18%	20%	15%	19%	13%	20%	22%	18%	16%	15%
Bullied online past year	15%	21%	10%	16%	15%	15%	16%	14%	14%	16%
EITHER at school or online	25%	31%	20%	26%	22%	25%	26%	22%	25%	29%
BOTH at school and online	8%	11%	5%	9%	6%	10%	7%	7%	7%	7%
<b>Mental Health - Past Year</b>										
Sad/hopeless 2 or more weeks	27%	33%	20%	26%	27%	30%	25%	25%	28%	28%
Seriously considered suicide	10%	13%	8%	10%	10%	11%	9%	9%	13%	10%
Planned suicide	10%	12%	8%	10%	10%	11%	9%	9%	13%	10%
Attempted suicide	7%	8%	6%	6%	8%	8%	6%	6%	9%	6%
Suicide attempt required medical treatment	2%	3%	2%	2%	3%	4%	2%	2%	3%	2%

## VII. MENTAL HEALTH OF HAMILTON COUNTY HIGH SCHOOL STUDENTS

### HAMILTON COUNTY AND US COMPARISONS

**27% students reported experiencing symptoms of depression within the past 12 months.\***

- Overall, 27% of students indicated they had experienced symptoms of depression within the past year.
- Among all students, 10% had seriously considered suicide within the past year.
- Among all students, 7% had attempted suicide one or more times in the past year, and 2% had made a suicide attempt that required medical treatment.

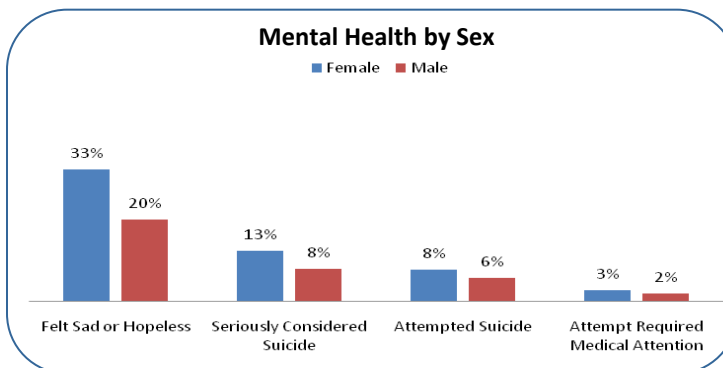


\* Defined as ever feeling "so sad or hopeless almost every day for two weeks or more in a row that stopped you doing some usual activities."

### HAMILTON COUNTY MENTAL HEALTH MEASURES BY SEX

**Girls were more likely than boys to report depression symptoms and suicidal behaviors.**

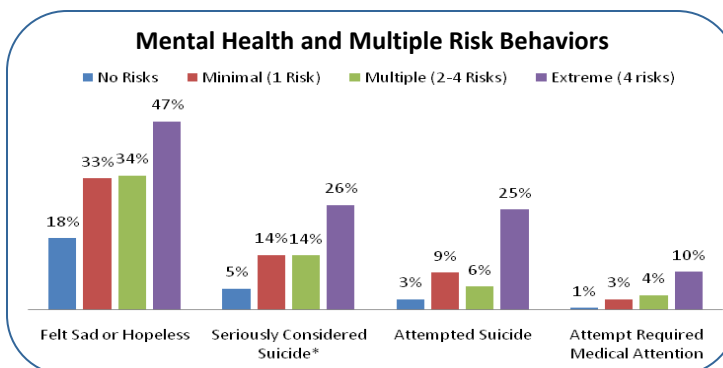
- One-third of female students experienced symptoms of depression in the past 12 months, compared to 20% of male students.
- Girls were more likely than boys to report considering suicide (13% versus 8%) and attempting suicide (8% versus 6%).
- Within the past year, 30% of Latino, 27% of black, and 26% of white students had symptoms of depression.



### MENTAL HEALTH AND RISKY TAKING BEHAVIORS

**Symptoms of depression and suicidal behaviors were associated with other risky behaviors.**

- Reported symptoms of depression and suicidal behaviors were more common among students currently engaged in one or more of four key risk behaviors.\*
- Compared to non-risk takers, students engaging in all four key risk behaviors were 2.6 times as likely to have depression symptoms, 5.2 times as likely to have considered suicide, 8.3 times as likely to have attempted suicide, and 10 times as likely to need medical treatment after attempting suicide.



\* The four key risk behaviors include current participation in smoking cigarettes, drinking alcohol, marijuana use, or sexual intercourse.

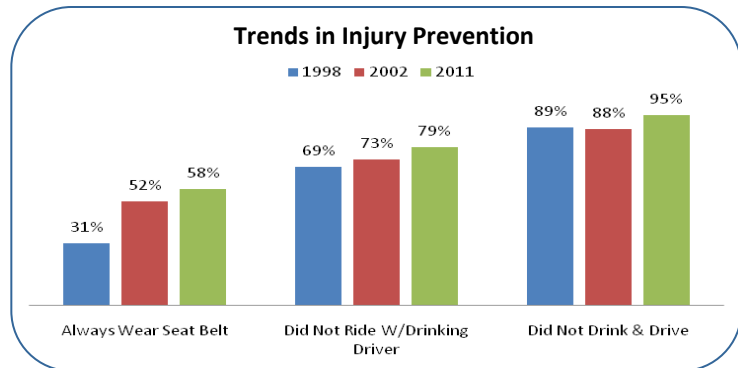
## VIII. Injury Prevention Behaviors of Hamilton County High School Students

### HEALTHY TRENDS

Safe driving habits among Hamilton County high school students have improved since 1998.

Since 1998, there have been substantive positive changes in the percentage of local high school students who report:

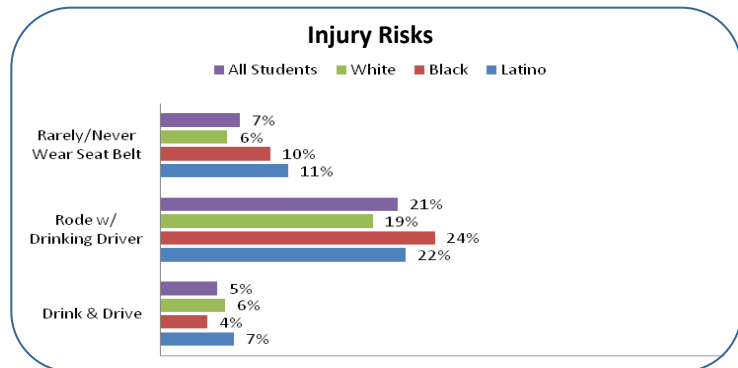
- Always wearing a seat belt — Increased from 31% in 1998 to 58% in 2011
- Did not ride with a drinking driver — increased from 69% in 1998 to 79% in 2012
- Did not drink and drive — Increased from 89% to 95%



### AUTOMOTIVE INJURY RISKS

One in five students rode with a driver who had been drinking in the past month.

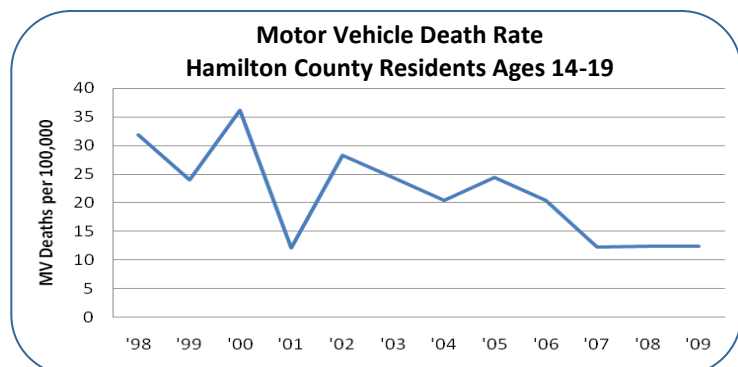
- 24% of black students rode with a drinking driver, compared to 21% of white and 19% of black students.
- 5% of all students reported that they drove a vehicle after drinking.
- Seven percent of all students indicated they rarely or never wore a seat belt. Black (10%) and Latino (11%) students were more likely to avoid using seat belts than white students (6%).



### MOTOR VEHICLE FATALITIES

Since 1998, motor vehicle fatality death rates among teens in Hamilton County declined by 61%.

- In 2004, Tennessee enacted a primary seat belt law, which allows for law enforcement officers to ticket a driver or passenger for not wearing a seat belt, without any other traffic offense taking place.
- In 2001, Tennessee enacted a graduated driver licensing (GDL) for drivers under age 17, which places passenger and night driving restrictions on drivers under 17. It also requires a learner stage lasting a minimum of 6 months with 50 hours of supervised driving.



## 2011 Hamilton County Youth Risk Behavior Survey with State and National Comparisons

	Hamilton County		Tennessee 2009		United States	
	2011				2009	
	%	CI*	%	CI	%	CI
<b>Unintentional Injuries and Violence</b>						
Rarely/never use seat belt	7.3	(6.3-8.2)	9.6	(7.5-12.2)	9.7	(8.2-11.4)
Rode w/ driver under the influence (30 days)	20.6	(18.9-22.4)	22.2	(20.1-24.5)	28.3	(26.7-29.9)
Drove under the influence (30 days)	5.3	(4.4-6.2)	7.9	(5.9-10.4)	9.7	(8.7-10.8)
Rarely/never use bike helmet - riders (12 mos)	82.0	(80.0-83.9)	91.3	(89.0-93.2)	84.7	(81.2-87.6)
Carried weapon (30 days)	21.8	(19.8-23.8)	20.5	(17.3-24.1)	17.5	(16.1-19.0)
Carried gun (30 days)	8.3	(7.0-9.5)	6.5	(5.2-8.3)	5.9	(5.1-6.9)
Physical fight (12 mos)	31.7	(29.6-33.8)	32.3	(29.6-35.0)	31.5	(30.1-32.9)
Dating violence (12 mos)	11.3	(10.0-12.5)	9.9	(8.5-11.4)	9.8	(8.9-10.8)
Forced intercourse ever	8.0	(7.1-8.9)	8.1	(6.8-9.5)	7.4	(6.7-8.3)
Carried weapon on school property (30 days)	5.6	(4.6-6.6)	5.1	(3.8-5.7)	5.6	(5.0-6.3)
Threatened w/weapon on school property (12 mos)	7.2	(6.2-8.2)	7.0	(5.8-8.6)	7.7	(6.9-8.5)
Fight required medical attention (12 mos)	4.1	(3.4-4.8)	3.6	(2.9-4.5)	3.8	(3.3-4.3)
Physical fight on school property (12 mos)	11.5	(10.2-12.8)	11.3	(9.4-13.4)	11.1	(10.0-12.2)
Bullied on school property (12 mos)	17.8	(16.3-19.2)	17.3	(14.9-20.0)	19.9	(18.8-21.1)
Missed school because felt unsafe (30 days)	5.0	(4.2-5.9)	5.6	(4.4-7.2)	5.0	(4.3-5.7)
Bullied online (12 mos)	15.2	(13.9-16.5)	N/A	N/A	N/A	N/A
Bullied someone else (12 mos)	17.5	(15.9-19.0)	N/A	N/A	N/A	N/A
Sad/hopeless 2+ weeks in a row	26.5	(24.9-28.0)	27.6	(25.2-30.2)	26.1	(24.8-27.5)
Seriously considered suicide	10.2	(8.9-11.4)	13.6	(11.5-16.0)	13.8	(13.1-14.6)
Planned suicide	10.1	(8.8-11.4)	11.7	(10.3-13.2)	10.9	(10.0-11.8)
Attempted suicide	6.8	(5.8-7.8)	7.1	(6.1-8.3)	6.3	(5.7-7.0)
Suicide attempt required medical treatment	2.2	(1.6-2.8)	2.2	(1.5-3.2)	1.9	(1.6-2.3)
<b>Tobacco Use</b>						
Ever tried cigarettes	42.9	(40.5-45.3)	50.7	(46.4-55.0)	46.3	(43.7-48.9)
Ever smoked cigarettes daily	10.1	(8.9-11.3)	13.7	(11.1-16.8)	11.2	(10.0-12.6)
Current smoker (30 days)	17.1	(15.4-18.8)	20.9	(17.2-25.1)	19.5	(17.9-21.2)
Current frequent smoker (20 out of 30 days)	6.8	(5.7-7.8)	9.9	(7.8-12.4)	7.3	(6.4-8.3)
Smoked > 10 cigarettes/day - current smokers (30 days)	12.0	(9.1-14.9)	11.4	(8.8-14.7)	7.8	(6.6-9.0)
Tried to quit - current smokers (12 mos)	48.7	(44.1-53.2)	48.8	(44.0-53.6)	50.8	(47.4-54.1)
Bought cigarettes at store - smoker <18 (past 30 days)	14.3	(10.9-17.7)	14.5	(9.9-20.6)	14.1	(11.7-17.0)
Smokeless tobacco - current user (30 days)	11.4	(9.9-12.8)	12.2	(9.3-15.9)	8.9	(7.3-10.8)
Cigar-current user (30 days)	14.3	(12.7-16.0)	17.0	(14.5-19.9)	14.0	(12.8-15.4)
Use any tobacco product (30 days)	26.1	(24.0-28.2)	30.1	(25.7-35.0)	26.0	(23.8-28.3)
<b>Alcohol and Drug Use</b>						
Ever drank alcohol	63.3	(61.0-65.5)	67.9	(64.0-71.6)	72.5	(70.6-74.3)
Current alcohol use (30 days)	32.0	(29.5-34.4)	33.5	(30.1-37.1)	41.8	(40.2-43.4)
5+ drinks in a row (30 days)	17.5	(15.5-19.5)	19.1	(15.7-23.0)	24.2	(22.6-25.9)
Someone gives them alcohol - current drinkers (30)	44.0	(40.6-47.3)	44.1	(38.4-49.9)	42.2	(40.3-44.1)
Lifetime marijuana use	36.8	(34.3-39.3)	37.5	(33.9-41.2)	36.8	(34.8-38.8)
Current marijuana use (30 days)	20.2	(18.3-22.2)	20.1	(17.5-22.9)	20.8	(19.4-22.3)
Lifetime Rx drugs w/no prescription	15.1	(13.5-16.6)	N/A	N/A	20.2	(18.6-21.9)
Lifetime inhalent use	10.7	(9.5-12.0)	12.2	(10.4-14.1)	11.7	(10.6-12.8)
Lifetime ecstasy use	6.1	(5.0-7.2)	5.7	(4.7-6.9)	6.7	(5.8-7.6)
Lifetime cocaine use	4.8	(3.8-5.7)	5.7	(4.5-7.3)	6.4	(5.7-7.1)
Current cocaine use (30 days)	2.1	(1.5-2.6)	2.5	(1.8-3.6)	2.8	(2.4-3.2)
Lifetime heroin use	2.4	(1.8-3.0)	2.2	(1.4-3.3)	2.5	(2.2-2.9)
Lifetime methamphetamine use	2.9	(2.2-3.6)	3.0	(2.2-4.1)	4.1	(3.6-4.6)
Lifetime steroid use (w/out prescription)	2.8	(2.2-3.4)	3.4	(2.6-4.4)	3.3	(2.9-3.8)
Lifetime injected drug use	2.1	(1.6-2.7)	2.2	(1.4-3.3)	2.1	(1.8-2.5)

## 2011 Hamilton County Youth Risk Behavior Survey with State and National Comparisons

	Hamilton County		Tennessee 2009		United States	
	2011		2009		2009	
	%	CI*	%	CI	%	CI
<b>Sexual Behaviors</b>						
Ever had sexual intercourse	45.9	(42.9-48.9)	53.4	(49.2-57.5)	46.0	(42.9-49.2)
Sexual intercourse before age 13	7.5	(6.5-8.6)	7.5	(5.9-9.5)	5.9	(5.1-6.8)
Sexual intercourse w/ 4+ persons lifetime	14.9	(13.1-16.7)	16.6	(13.9-19.7)	13.8	(12.4-15.4)
Currently sexually active (past 3 mos)	32.7	(30.0-35.3)	38.8	(35.2-42.5)	34.2	(31.9-36.5)
Used condom last time (sexually active)	60.3	(56.8-63.8)	59.5	(54.9-63.9)	61.1	(59.0-63.1)
Birth control pill use (sexually active)	16.7	(14.2-19.1)	16.6	(13.8-20.0)	19.8	(17.4-22.5)
Depo-Provera use (sexually active)	5.3	(3.8-6.8)	5.1	(3.4-7.7)	3.1	(2.6-3.7)
Birth control pill or depo provera (sexually active)	21.9	(19.3-24.6)	21.7	(18.1-25.8)	22.9	(20.3-25.7)
Alcohol/drugs before last intercourse (sexually active)	20.6	(18.1-23.1)	18.2	(15.5-21.3)	21.6	(20.0-23.3)
Ever taught about HIV in school	88.1	(86.7-89.4)	84.2	(81.3-86.7)	87.0	(85.7-88.3)
Think oral sex can transmit STDs	87.3	(85.9-88.7)	N/A	N/A	N/A	N/A
Ever had oral sex	42.4	(39.7-45.1)	N/A	N/A	N/A	N/A
<b>Dietary Behaviors</b>						
5+ fruits and veggies/day	20.0	(18.5-21.5)	18.1	(16.1-20.2)	22.3	(21.1-23.7)
3+ glasses milk/day	10.8	(9.7-12.0)	11.2	(10.1-12.4)	14.5	(12.4-16.9)
At least 1 soda/day	34.9	(33.0-36.9)	41.3	(38.6-44.1)	29.2	(27.2-31.2)
Percentage obese	12.2	(10.9-13.5)	15.8	(13.9-18.0)	12.0	(10.9-13.1)
Percentage overweight	15.0	(13.7-16.3)	16.1	(14.5-17.9)	15.8	(14.7-17.0)
Describes self slightly/very overweight	25.7	(24.1-27.4)	28.1	(25.5-30.9)	27.7	(26.7-28.6)
Trying to lose weight	40.8	(38.8-42.8)	45.2	(41.4-49.0)	44.4	(42.8-46.0)
Weight loss/maintenance method (30 days)						
--Less food, fewer calories or low fat foods	35.9	(34.2-37.5)	37.2	(33.9-40.5)	39.5	(38.2-41.0)
--Exercised	58.3	(56.6-60.0)	58.8	(56.3-61.2)	61.5	(60.2-62.8)
--Fasted	11.3	(10.0-12.5)	12.2	(10.6-13.9)	10.6	(9.7-11.5)
--Took diet pills, powders or liquids	4.7	(3.9-5.3)	5.7	(4.7-6.9)	5.0	(4.5-5.5)
--Vomited or took laxatives	3.4	(2.8-4.0)	3.5	(2.6-4.6)	4.0	(3.5-4.4)
<b>Physical Activity</b>						
Physically active 60+ min/day 7 days/wk	24.8	(23.2-26.4)	24.2	(22.1-26.4)	18.4	(17.3-19.5)
Physically active 60+ min/day 5+ days/wk	44.2	(42.0-46.3)	39.7	(37.1-42.5)	37.0	(35.2-38.8)
Physically active 60+ min/day 0 days/wk	16.6	(14.9-18.2)	17.7	(15.3-20.5)	23.1	(21.5-24.8)
Computer 3+ hrs day (non-school related)	26.2	(24.4-28.0)	26.0	(23.7-28.4)	24.9	(22.9-27.0)
TV 3+ hrs day avg school day	36.0	(34.2-37.8)	37.7	(33.3-42.3)	32.8	(30.4-35.3)
Attend PE	42.2	(38.8-45.6)	33.4	(27.6-39.7)	56.4	(48.9-63.9)
Attend PE daily	24.5	(21.6-27.4)	22.9	(18.7-27.7)	33.3	(27.7-39.3)
Play on 1+ sports teams	60.4	(58.5-62.3)	50.1	(46.6-53.7)	58.3	(55.5-61.1)
<b>Asthma</b>						
Ever had asthma	25.6	(24.0-27.2)	17.9	(16.3-19.6)	22.0	(20.8-23.1)
Currently with asthma	14.1	(12.9-15.3)	10.8	(9.6-12.1)	10.8	(9.9-11.7)
<b>Behaviors Before Age 13</b>						
Smoked whole cigarette	11.4	(10.2-12.6)	14.2	(12.4-16.2)	10.7	(9.6-11.9)
Drank alcohol	20.1	(18.4-21.7)	20.4	(18.5-22.4)	21.1	(19.6-22.6)
Tried marijuana	10.0	(8.8-11.1)	9.2	(7.9-10.8)	7.5	(6.7-8.3)
Had sexual intercourse	7.5	(5.4-8.6)	7.5	(5.9-9.5)	5.9	(5.1-6.8)
Had oral sex	7.5	(6.4-8.6)	N/A	N/A	N/A	N/A



## 2011 Hamilton County Youth Risk Behavior Survey with State and National Comparisons

	Hamilton County		Tennessee 2009		United States	
	2011		2009		2009	
	%	CI*	%	CI	%	CI
<b>Behaviors on School Property (Past Month)</b>						
Smoked cigarettes (30 days)	5.9	(4.9-6.8)	6.0	(4.4-8.0)	5.1	(4.5-5.8)
Used smokeless tobacco (30 days)	7.5	(6.3-8.8)	7.5	(5.6-10.1)	5.5	(4.4-6.8)
Drank alcohol (30 days)	4.6	(3.8-5.4)	3.0	(2.3-3.9)	4.5	(3.9-5.1)
Used marijuana (30 days)	4.6	(3.8-5.4)	3.8	(2.6-5.4)	4.6	(4.0-5.4)
Offered, sold, or given drugs (12 mos)	19.0	(17.5-20.5)	18.8	(16.8-21.1)	22.7	(20.7-24.9)
Bullied (12 mos)	17.8	(16.3-19.2)	17.3	(14.9-20.0)	19.9	(18.8-21.1)
Carried weapon (12 mos)	5.6	(4.6-6.5)	5.1	(3.8-6.7)	5.6	(5.0-6.3)
Threatened w/weapon (12 mos)	7.2	(6.2-8.2)	7.0	(5.7-8.6)	7.7	(6.9-8.5)
Physical fight (12 mos)	11.5	(10.2-12.8)	11.3	(9.4-13.4)	11.1	(10.0-12.2)
<b>Number of Risks (currently: smoke, drink, marijuana, sexual intercourse)</b>						
Non-risk taker (0 risks)	50.2	(47.3-53.0)	N/A	N/A	N/A	N/A
Minimal (1 risk)	21.8	(20.2-23.4)	N/A	N/A	N/A	N/A
Multiple (2 or 3 risks)	22.7	(20.1-25.6)	N/A	N/A	N/A	N/A
Extreme (4 risks)	5.2	(4.3-6.1)	N/A	N/A	N/A	N/A

\* CI = 95% Confidence Interval

Percentages are weighted to population characteristics

Shading: Where there is shading, differences among the geographies in the shaded cells are statistically significant for that behavior

Light Gray = lower risk

Dark Gray = higher risk

N/A = Question not asked or computed

## 2011 Hamilton County Youth Risk Behavior Survey by Demographic Characteristics

	All Students	Female	Male	White	Black	Latino	9th grade	10th grade	11th grade	12th grade
<b>Unintentional Injuries and Violence</b>										
<i>Unintentional Injuries</i>										
Rarely/never use seat belt	7.3%	6.1%	8.4%	5.9%	9.7%	11.3%	8.5%	7.2%	6.9%	6.3%
Rode w/ driver under the influence (12 mos)	20.6%	20.1%	21.0%	18.8%	24.3%	21.7%	19.4%	20.1%	20.6%	22.4%
Drove under the influence (12 mos)	5.3%	3.1%	7.4%	5.7%	4.1%	6.5%	2.7%	3.3%	7.1%	8.1%
Rarely/never use bike helmet-riders (12 mos)	82.0%	79.6%	83.6%	77.4%	93.6%	84.4%	80.3%	85.3%	80.8%	81.2%
<i>Violence</i>										
Carried weapon (12 mos)	21.8%	10.1%	33.0%	24.3%	16.6%	21.3%	21.3%	22.8%	22.2%	20.5%
Carried gun (12 mos)	8.3%	2.3%	14.0%	8.8%	7.0%	11.5%	6.4%	7.9%	8.3%	10.5%
Physical fight (12 mos)	31.7%	25.3%	37.8%	27.3%	41.5%	30.0%	33.1%	33.8%	30.1%	29.0%
Dating violence (12 mos)	11.3%	11.2%	11.3%	9.7%	14.4%	12.2%	9.3%	11.0%	11.7%	13.2%
Forced intercourse ever	8.0%	11.0%	5.0%	7.2%	10.1%	6.8%	6.6%	8.1%	8.5%	8.9%
Carried weapon on school property (30 days)	5.6%	3.0%	8.0%	6.0%	4.4%	7.6%	4.5%	6.1%	5.1%	6.5%
Threatened w/weapon on school property (12 mos)	7.2%	5.6%	8.7%	5.3%	10.6%	10.3%	7.3%	6.0%	7.5%	7.8%
Fight required medical attention (12 mos)	4.1%	3.0%	5.1%	3.2%	5.5%	6.3%	4.5%	3.9%	3.6%	4.0%
Physical fight on school property (12 mos)	11.5%	8.8%	14.0%	9.3%	15.9%	11.5%	15.1%	11.9%	8.5%	9.7%
Bullied on school property (12 mos)	17.8%	20.4%	15.2%	19.4%	13.4%	19.8%	22.3%	17.8%	15.9%	14.6%
Missed school because felt unsafe past (30 days)	5.0%	5.0%	5.1%	4.2%	6.2%	9.9%	5.5%	5.1%	3.7%	5.4%
Bullied online (12 mos)	15.2%	21.3%	9.5%	15.5%	14.8%	14.8%	15.8%	14.4%	14.1%	16.3%
Bullied someone else (12 mos)	17.5%	16.1%	18.6%	17.3%	17.3%	20.6%	20.5%	18.2%	16.6%	14.0%
<i>Mental Health</i>										
Sad/hopeless 2 or more weeks (12 mos)	26.5%	32.9%	20.4%	25.8%	27.0%	30.2%	25.2%	25.0%	28.2%	27.6%
Seriously considered suicide (12 mos)	10.2%	12.5%	8.0%	10.0%	10.1%	11.1%	9.3%	9.1%	12.5%	9.6%
Planned suicide (12 mos)	10.1%	12.4%	8.0%	10.0%	10.1%	11.1%	9.3%	9.1%	12.5%	9.6%
Attempted suicide (12 mos)	6.8%	7.8%	5.8%	6.1%	7.6%	8.2%	6.0%	6.0%	8.6%	6.2%
Suicide attempt required medical treatment (12 mos)	2.2%	2.6%	1.8%	1.8%	2.6%	4.3%	1.5%	2.4%	2.7%	1.9%

## 2011 Hamilton County Youth Risk Behavior Survey by Demographic Characteristics

	All Students	Female	Male	White	Black	Latino	9th grade	10th grade	11th grade	12th grade
<b>Tobacco Use</b>										
Ever tried cigarettes	42.9%	40.7%	45.0%	43.0%	43.1%	43.1%	32.5%	42.5%	45.7%	52.1%
Ever smoked cigarettes daily	10.3%	9.2%	11.4%	13.4%	3.9%	43.1%	6.5%	9.5%	10.5%	14.9%
Current smoker (30 days)	17.1%	14.6%	19.5%	21.4%	8.3%	14.0%	10.5%	15.9%	17.6%	24.8%
Current frequent smoker (20 of past 30 days)	6.8%	5.2%	8.3%	9.0%	2.6%	1.9%	3.5%	6.6%	6.1%	11.3%
Smoked > 10 cigarettes/day- current smokers (30 days)	12.0%	5.1%	17.0%	13.5%	2.5%	N/A	11.5%	9.6%	11.3%	14.3%
Tried to quit smoking - current smokers (12 mos)	48.7%	53.6%	44.9%	47.2%	N/A	N/A	49.9%	51.5%	47.4%	46.8%
Bought cigarettes retail- <18 current smoker (30 days)	14.3%	5.8%	20.7%	12.6%	24.9%	N/A	4.1%	12.4%	19.5%	18.8%
Smokeless tobacco - (30 days)	11.4%	2.6%	19.7%	15.9%	2.2%	8.1%	8.6%	12.4%	12.1%	12.5%
Cigar-current user past (30 days)	14.3%	9.0%	19.3%	15.7%	11.4%	10.9%	7.5%	14.0%	16.1%	20.0%
Use any tobacco product (30 days)	26.1%	18.7%	33.1%	31.2%	16.2%	19.8%	17.3%	25.2%	28.2%	34.3%
<b>Drug and Alcohol Use</b>										
Ever drank alcohol	63.3%	64.1%	62.5%	64.6%	61.4%	57.9%	51.8%	61.6%	70.5%	70.0%
Current alcohol use (30 days)	32.0%	29.1%	34.6%	34.2%	27.9%	27.8%	22.4%	29.2%	35.1%	42.1%
5 or more drinks in a row (30 days)	17.5%	12.8%	22.1%	20.4%	11.4%	15.4%	10.0%	15.5%	18.1%	27.1%
Usually get alcohol when someone gives it to them - current drinkers (30 days)	44.0%	53.9%	36.3%	42.3%	49.6%	N/A	48.9%	44.9%	43.6%	40.8%
Lifetime marijuana use	36.8%	32.1%	41.2%	34.1%	43.7%	27.8%	22.7%	38.7%	41.8%	45.0%
Current marijuana use (30 days)	20.2%	16.0%	24.2%	18.4%	25.0%	15.5%	11.6%	21.6%	23.0%	25.1%
Lifetime cocaine use	4.8%	3.3%	6.2%	6.3%	1.2%	6.7%	3.0%	4.9%	5.4%	5.8%
Current cocaine use (30 days)	2.1%	0.9%	3.2%	2.4%	0.7%	5.3%	1.0%	2.4%	2.3%	2.3%
Lifetime inhalant use	10.7%	11.3%	10.1%	12.4%	7.0%	11.4%	10.6%	11.5%	10.3%	10.0%
Lifetime ecstasy use	6.1%	3.3%	8.8%	7.5%	2.5%	7.8%	2.9%	6.0%	7.1%	8.3%
Lifetime heroin use	2.4%	1.4%	3.3%	2.9%	0.7%	5.3%	1.5%	2.0%	3.2%	2.6%
Lifetime methamphetamine use	2.9%	2.0%	3.7%	3.6%	0.6%	5.7%	1.5%	2.9%	4.0%	2.8%
Lifetime steroid use w/out doctor's prescription	2.8%	1.7%	3.9%	3.3%	1.2%	5.5%	1.5%	3.3%	3.0%	2.9%
Lifetime injected drug	2.1%	1.1%	3.1%	2.7%	0.5%	3.6%	1.2%	1.9%	2.7%	2.6%
Lifetime Rx drugs w/ no prescription	15.1%	13.2%	16.9%	19.7%	5.1%	12.4%	8.7%	15.8%	16.1%	19.6%

## 2011 Hamilton County Youth Risk Behavior Survey by Demographic Characteristics

	All Students	Female	Male	White	Black	Latino	9th grade	10th grade	11th grade	12th grade
<b>Sexual Behavior</b>										
Ever had sexual intercourse	45.9%	44.9%	46.7%	38.8%	64.5%	43.3%	29.0%	42.5%	52.6%	61.1%
Had sexual intercourse for the 1st time before age 13	7.5%	3.7%	11.3%	4.1%	14.7%	13.0%	7.9%	7.5%	8.2%	6.2%
Had sexual intercourse w/ 4 or more persons lifetime	14.9%	10.9%	18.6%	11.1%	23.3%	11.6%	6.1%	12.5%	17.3%	24.2%
Currently sexually active - (CSA - past 3 mos)	32.7%	32.1%	33.0%	27.7%	44.5%	32.0%	18.1%	27.8%	39.9%	46.2%
Used condom last time (among CSA)	60.3%	56.9%	63.5%	57.8%	66.7%	40.3%	59.3%	60.3%	59.5%	51.8%
Birth control pill use (among CSA)	16.7%	20.3%	13.0%	21.9%	9.4%	17.1%	12.5%	14.9%	17.9%	18.8%
Depo-Provera use (among CSA)	5.3%	7.3%	3.3%	4.5%	6.2%	4.1%	4.6%	4.5%	4.0%	7.2%
Birth control pill or depo provera (among CSA)	21.9%	27.6%	1.4%	26.4%	15.7%	21.1%	17.1%	19.4%	21.9%	25.9%
Alcohol/drugs before last intercourse (among CSA)	20.6%	14.6%	26.4%	25.5%	12.9%	22.6%	14.9%	24.6%	22.6%	17.6%
Think oral sex can transmit STD	88.9%	92.2%	85.8%	89.3%	89.6%	82.1%	86.0%	87.3%	91.4%	91.7%
Ever had oral sex	42.4%	36.8%	47.6%	43.2%	42.0%	40.4%	27.9%	40.1%	46.7%	56.4%
<b>Dietary Behaviors</b>										
2+ servings fruits or fruit juice/day	29.7%	27.0%	32.3%	27.2%	34.5%	32.2%	29.0%	31.3%	29.6%	29.2%
3+ servings vegetables/day	15.0%	13.5%	16.5%	13.7%	16.4%	23.6%	15.5%	15.8%	14.2%	14.2%
5+ Fruits & vegetables/day	20.0%	17.4%	22.5%	18.2%	22.6%	27.4%	20.5%	20.9%	20.2%	18.1%
3+ glasses milk per day	10.9%	7.0%	14.5%	11.5%	9.3%	12.7%	11.9%	10.5%	10.1%	10.8%
At least 1 soda per day	34.9%	32.3%	37.5%	34.5%	38.1%	26.5%	33.8%	34.3%	36.9%	35.0%
<b>Physical Activity</b>										
Physically active 60+ min on 7 days past week	24.8%	15.9%	33.2%	26.9%	20.9%	18.4%	27.1%	25.6%	22.5%	23.4%
Physically active 60+ min on 5+ days past week	44.1%	33.3%	54.3%	47.7%	37.0%	37.4%	47.3%	45.1%	41.8%	41.6%
Physically active 60+ min on 0 days past week	16.6%	20.5%	12.9%	12.8%	24.6%	18.0%	13.1%	14.4%	20.6%	18.8%
Video games/computer for fun 3+ hrs avg school day	26.2%	20.9%	31.4%	24.3%	30.0%	27.5%	29.0%	25.9%	24.7%	25.3%
Watched tv 3+ hrs day average school day	36.0%	36.7%	35.5%	26.5%	57.3%	38.2%	35.6%	35.9%	35.5%	37.4%
Total screen time 3+ hrs (tv,video,computer)	58.9%	56.7%	61.1%	52.0%	73.8%	63.6%	59.4%	60.7%	57.7%	57.8%
Attend PE	42.2%	36.2%	48.0%	43.0%	40.1%	51.2%	61.0%	44.2%	30.1%	31.6%
Attend PE daily	24.5%	20.0%	28.8%	25.1%	23.6%	23.7%	34.2%	28.6%	16.6%	17.5%
Play on at least 1 sports team	60.4%	54.1%	66.5%	61.7%	58.2%	55.7%	63.6%	60.6%	60.2%	57.1%

## 2011 Hamilton County Youth Risk Behavior Survey by Demographic Characteristics

	All Students	Female	Male	White	Black	Latino	9th grade	10th grade	11th grade	12th grade
<b>Body Weight</b>										
Percentage overweight (85th percentile BMI*)	15.0%	15.6%	14.5%	12.7%	19.7%	23.0%	15.6%	15.7%	15.3%	13.5%
Percentage obese (95th percentile BMI*)	12.2%	10.2%	14.1%	10.7%	16.4%	13.9%	12.2%	12.3%	11.0%	13.4%
Describe themselves as slightly or very overweight	25.7%	31.0%	20.8%	25.7%	25.2%	30.2%	26.4%	24.4%	25.7%	26.2%
Trying to lose weight	40.8%	54.5%	27.8%	41.9%	38.2%	43.0%	42.5%	41.9%	40.4%	38.1%
Cut food/calories to lose/maintain wgt (30 days)	35.9%	45.9%	26.2%	38.6%	29.4%	35.8%	35.5%	35.2%	35.0%	37.4%
Exercised to lose/maintain wgt (30 days)	58.3%	63.4%	53.2%	59.8%	54.6%	61.0%	61.3%	60.3%	55.3%	55.5%
Fast 24 hrs to lose/maintain wgt (30 days)	11.3%	14.5%	8.2%	10.6%	12.4%	11.9%	11.5%	11.3%	10.4%	11.8%
Diet pills, powders, liquids to lose/maintain wgt (30 days)	4.7%	4.8%	4.5%	4.7%	4.0%	8.6%	3.6%	5.1%	5.6%	4.2%
Vomited/laxatives to lose/maintain wgt (30 days)	3.4%	4.1%	2.7%	3.4%	2.9%	5.2%	2.7%	4.2%	3.5%	2.7%
<b>Asthma</b>										
Ever had asthma	25.6%	24.8%	26.2%	24.2%	29.2%	19.8%	25.1%	25.5%	23.8%	28.1%
Current asthma (ever diagnosed and still have)	14.1%	15.6%	12.5%	12.1%	18.6%	9.7%	12.6%	14.7%	13.3%	15.9%
<b>Behaviors Before Age 13</b>										
Smoked whole cigarette before age 13	11.4%	9.4%	13.2%	11.5%	10.7%	15.1%	13.3%	11.8%	9.4%	10.6%
Drank alcohol before age 13	20.1%	15.7%	24.3%	18.0%	24.6%	22.0%	23.6%	19.5%	19.5%	17.3%
Tried marijuana before age 13	10.0%	6.3%	13.4%	8.4%	13.7%	9.3%	9.0%	11.0%	9.5%	9.8%
Had sexual intercourse before age 13	7.5%	3.7%	11.3%	4.1%	14.7%	13.0%	7.9%	7.5%	8.2%	6.2%
Had oral sex before age 13	7.5%	3.3%	11.4%	5.2%	12.1%	8.6%	7.2%	8.2%	6.7%	7.6%
<b>Use on School Property</b>										
Cigarettes (30 days)	5.9%	4.3%	7.3%	7.2%	2.7%	4.8%	3.4%	6.7%	6.0%	7.3%
Smokeless tobacco (30 days)	7.5%	1.1%	13.7%	10.7%	1.0%	5.1%	4.7%	8.9%	8.9%	7.6%
Alcohol (30 days)	4.6%	2.9%	6.2%	4.6%	4.0%	6.0%	2.8%	5.1%	5.0%	5.2%
Marijuana (30 days)	4.6%	2.3%	6.8%	8.4%	13.7%	9.3%	2.3%	5.3%	5.6%	5.1%
Offered, sold, given drugs on school property (12 mos)	19.0%	15.2%	22.6%	19.8%	16.2%	26.2%	16.7%	21.5%	19.9%	17.7%
Carried weapon on school property (30 days)	5.6%	3.0%	8.0%	6.0%	4.4%	7.6%	4.5%	6.1%	5.1%	6.5%
Threatened w/weapon on school property (12 mos)	7.2%	5.6%	8.7%	5.3%	10.6%	10.3%	7.3%	6.0%	7.5%	7.8%
Physical fight on school property (12 mos)	11.5%	8.8%	14.0%	27.3%	41.5%	30.0%	15.1%	11.9%	8.5%	9.7%
<b>Number of Current Risks (smoke, drink, marijuana, sexual intercourse)</b>										
Non-risk taker (0 risks)	50.2%	52.0%	48.6%	52.8%	43.4%	54.8%	66.5%	54.0%	42.8%	35.7%
Minimal (1 risk)	21.8%	24.2%	19.5%	18.2%	29.8%	19.6%	17.2%	20.2%	25.1%	25.4%
Multiple (2 or 3 risks)	22.7%	19.6%	25.8%	22.7%	24.1%	22.7%	13.7%	21.0%	26.5%	31.0%
Extreme (4 risks)	5.2%	4.3%	6.0%	6.4%	2.8%	2.9%	2.6%	4.8%	5.6%	7.9%

BMI=body mass index; weight in kilograms divided by height in meters squared

N/A = Not available if the unweighted sample size for the denominator was &lt; 50

## Chattanooga-Hamilton County Regional Health Council Members (2011 - 2012)

Chris Anderson, (Co-Chair 2012)  
Bluff View Art District

Ronald G. Blankenbaker, M.D.  
UT Health Science Center

Rae Young Bond  
Chattanooga-Hamilton County  
Medical Society and Medical Foundation

Phyllis Casavant, Ed.D, (Co-Chair 2011)  
Southeast TN Development District

Jim Coleman, Jr.  
Parkridge Medical Center

Pastor Ron Cook  
Rock Island Baptist Church

Eva Dillard, (2012 Chair)  
United Way

Jim Dodds, M.D. (Member 2012)  
Retired Physician

Greg Ezell  
Minister

Jim Folkner  
Community Advocate

Vicky Gregg (Rep.by: Donna Roddy)  
Blue Cross Blue Shield of Tennessee

Cy Huffman, MD  
Physician and Community Advocate

Mai Bell Hurley  
Community Advocate

Susan Kirk  
TN Department of Human Services

Earl Medley  
Fortwood Center, Inc.

Thomas P. Miller, M.D.  
Specialist in Pain Management

Ms. Brenda Nunn, RN, BA, CCM (2011)  
Unum

Dr. Carlos Parra  
Southern Adventist University

Deborah Poteet-Johnson, MD  
Private physician

Orenthal Powell  
Chattanooga Services

Sean Richards, PhD  
University of Tennessee at Chattanooga

Manuel Rico  
Chattanooga City Council

Howard Roddy, (2011 Chair)  
Memorial Health Care System

Sheryl Rogers, RN (Member 2011)  
Hamilton County Dept. of Education

Richard Tornquist (Member 2012)  
Retired Government Official

### Ex-Officio Members

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Chattanooga-Hamilton County Health Dept.

Becky Barnes  
Administrator  
Chattanooga-Hamilton County Health Dept.

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Jim Mancke  
McCallie School

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Specialists in Pain Management

Irvin Overton  
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Dr. Kirk Walker  
McCallie School

Dr. Martina Harris  
UTC School of Nursing

**Chattanooga/Hamilton County Health Department Staff:**

Ione Farrar, Program Manager, Assessment and Planning  
Sarah Stuart Sloan, Epidemiologist  
Bill Ulmer, Director, Community Health Services