



2008 Florida Youth Substance Abuse Survey



Hamilton County Report



**Executive Office
of the Governor**

2008 Florida Youth Substance Abuse Survey

Hamilton County Report

EXECUTIVE SUMMARY

The Florida Legislature's 1999 Drug Control Summit recommended the establishment of an annual, multi-agency-directed, statewide school-based survey effort, combining several survey instruments, with specific variations in odd and even years. The *Florida Youth Substance Abuse Survey (FYSAS)*, one of these instruments and the focus of this report, is administered to a county-level sample of students in even years, and a smaller statewide sample in odd years.

The *FYSAS* is based on the *Communities That Care Youth Survey*, developed from the nationally recognized work of Dr. J. David Hawkins and Dr. Richard F. Catalano. It not only measures the prevalence of alcohol, tobacco and other drug use and delinquent behavior, but also measures the risk and protective factors related to these behaviors.

The 2008 *FYSAS* was administered to 301 Hamilton County students in grades 6 through 12 in the spring of 2008. The results supply a valuable source of information to help reduce and prevent the use of alcohol, tobacco and other drugs by school-aged youth.

Key Survey Results

Strengths to Build on

- Marijuana use has declined in Hamilton County. Overall lifetime marijuana use has gone from 27.1% in 2000 to 17.5% in 2008. Overall past-30-day marijuana use has gone from 14.0% in 2000 to 8.5% in 2008.
- Surveyed students reported a substantial reduction in past-30-day cigarette use. The rate dropped from 23.2% in 2000 to 10.0% in 2008.
- No respondents in middle school reported lifetime usage of methamphetamine. No middle school past-30-day usage was reported for club drugs, cocaine or crack cocaine, methamphetamine or heroin. No respondents in high school reported lifetime usage of Rohypnol. No high school past-30-day usage was reported for Ecstasy, Rohypnol, LSD or PCP or steroids.
- Among Hamilton County middle school students, past-30-day prevalence rates for LSD, PCP or mushrooms (1.9%), depressants (2.0%) and steroids (1.1%) are all 2.0% or less. Among Hamilton County high school students, past-30-day prevalence rates for GHB (1.7%), ketamine (1.7%), cocaine (1.6%), heroin (1.3%), depressants (1.1%) and prescription amphetamines (1.9%) are all less than 2.0%.
- Among Hamilton County high school students, past-30-day prevalence rates for crack cocaine (0.6%) and methamphetamine (1.0%) are both 1.0% or less.
- Relatively few students reported that they would be seen as “cool” by their peers if they drink alcohol regularly (11.1%), smoke cigarettes (8.6%) or smoke marijuana (9.6%).
- A substantial proportion of students indicated that it would be “wrong” or “very wrong” for someone their age to smoke cigarettes (75.6%), smoke marijuana (83.3%) or use other illicit drugs (93.4%).
- A majority of respondents reported that each of the following behaviors poses a “great risk” of harm: smoking a pack or more of cigarettes every day (53.3%) and regular use of marijuana (55.2%).
- Middle school students reported a particularly low rate of risk for one risk factor scale that is directly associated with alcohol, tobacco and other drug use: *Perceived Availability of Drugs* (49%). High school students reported particularly low rates of risk for two risk factor scales that are directly associated with alcohol, tobacco and other drug use: *Laws and Norms Favorable to Drug Use* (34%) and *Perceived Availability of Drugs* (36%).

- Prevalence rates for *Selling Drugs* (4.4%), *Attempting to Steal a Vehicle* (3.4%) and *Taking a Handgun to School* (3.6%) are all less than 5.0%.

Opportunities for Improvement

- With overall prevalence rates of 51.8% for lifetime use and 28.1% for past-30-day use, alcohol is the most commonly used drug among Hamilton County students.
- After alcohol, students reported cigarettes (33.0% lifetime and 10.0% past-30-day) and marijuana (17.5% lifetime and 8.5% past-30-day) as the most commonly used drugs. Prevalence rates for other drugs are substantially lower.
- Among Hamilton County middle school students, 43.0% reported being verbally bullied within the past 30 days.
- Hamilton County students reported one of their highest cutpoint scores for a risk factor scale that is directly associated with alcohol, tobacco and other drug use: *Low Perceived Risks of Drug Use* (65%).
- Hamilton County students reported one of their highest cutpoint scores for the community risk factor scale *Community Disorganization* (61%). This means that students are less likely to become involved with prosocial organizations and positive role models in their communities.
- Hamilton County students reported some of their lowest rates of protection for two reward-based protective factor scales: *School Rewards for Prosocial Involvement* (41%) and *Family Rewards for Prosocial Involvement* (49%). This means that schools and families need to provide additional positive feedback to students, to help them form prosocial bonds in their schools and families.
- Fewer students reported the perception that near daily use of alcohol is harmful than did so in the past. The percentage of students reporting that having one or more drinks nearly every day poses a “great risk” of harm decreased from 39.6% in 2000 to 33.0% in 2008. Similarly, the perception of harm from smoking a pack or more of cigarettes per day decreased from 60.4% in 2000 to 53.3% in 2008. The perception of harm from smoking marijuana regularly decreased from 58.4% in 2000 to 55.2% in 2008.
- Of surveyed Hamilton County students, 29.6% reported *Getting Suspended* and 17.2% reported *Attacking Someone with Intent to Harm*.

These key findings illustrate the complexity of drug use and antisocial behavior among Hamilton County’s youth and the possible factors that may contribute to these activities. While some of the findings compare favorably to the national findings, Hamilton County youth are still reporting drug use and delinquent behavior that will negatively affect their lives and our society.

The *FYSAS* data will enable Hamilton County’s planners to learn which risk and protective factors to target for their prevention, intervention and treatment programs.

Table of Contents

METHODOLOGY	1
QUESTIONNAIRES	1
VALIDITY OF SURVEY DATA	2
WEIGHTING	2
CONFIDENCE INTERVALS	2
DEMOGRAPHICS.....	2
ALCOHOL, TOBACCO AND OTHER DRUG USE	3
ALCOHOL	4
TOBACCO.....	5
MARIJUANA OR HASHISH	6
INHALANTS.....	6
CLUB DRUGS	7
<i>Club Drugs in Middle School</i>	7
<i>Club Drugs in High School</i>	7
OVER-THE-COUNTER DRUGS IN MIDDLE SCHOOL	7
PRESCRIPTION DRUGS	8
OTHER ILLICIT DRUGS.....	8
<i>Other Illicit Drugs in Middle School</i>	8
<i>Other Illicit Drugs in High School</i>	9
DRUG COMBINATION RATES	9
<i>Any Illicit Drug</i>	9
<i>Any Illicit Drug Other than Marijuana</i>	9
<i>Alcohol Only</i>	9
<i>Alcohol or Any Illicit Drug</i>	10
<i>Any Illicit Drug, but No Alcohol</i>	10
OTHER ANTISOCIAL BEHAVIORS.....	10
RISK AND PROTECTIVE FACTORS	12
THE SOCIAL DEVELOPMENT STRATEGY	12
MEASUREMENT	14
<i>Calculation of Risk and Protective Factor Thresholds</i>	15
<i>Comparing Risk and Protective Factor Prevalence Rates</i>	16
<i>Normative Data</i>	16
<i>Trend Analysis</i>	16
<i>The Middle School Questionnaire</i>	16
USING YOUR RISK AND PROTECTIVE FACTOR DATA	16
<i>Risk and Protective Factor Prioritization</i>	17
<i>Choosing Effective Prevention Strategies</i>	20
SPECIAL TOPICS	21
EARLY INITIATION OF ATOD USE.....	21
PERCEIVED RISK OF HARM	21
PERSONAL DISAPPROVAL	22
PEER APPROVAL	22
EXTRACURRICULAR ACTIVITIES	23



BULLYING BEHAVIOR..... 24

APPENDIX A: DETAILED TABLES 27

APPENDIX B: REFERENCES..... 49

APPENDIX C: THE SOCIAL DEVELOPMENT STRATEGY..... 51

APPENDIX D: OTHER RESOURCES..... 53



2008 Florida Youth Substance Abuse Survey

Hamilton County Report

The 2008 Florida Youth Substance Abuse Survey (FYSAS) provides scientifically sound information to communities on the prevalence of alcohol, tobacco and other drug (ATOD) use, and risk and protective factors among 6th through 12th grade students. This information is essential to support effective substance abuse needs-assessment and services planning, and to measure performance outcomes at local and state levels.

This report is one in a series of reports that describes the findings from the FYSAS. As part of the 2008 Florida Youth Survey effort, the FYSAS was administered to Florida youth jointly with the Florida Youth Tobacco Survey in May of 2008. The Florida Youth Survey effort was a collaboration among the Florida Departments of Health, Education, Children and Families, Juvenile Justice, and the Florida Office of Drug Control. This report was prepared by Rothenbach Research and Consulting, LLC.

The FYSAS was previously administered at the county level to Hamilton County students in December of 1999 and January of 2000, and in the spring of 2002, 2004 and 2006. While the survey form has been updated over this period, the majority of the instrument has remained unchanged. As a result, the present report includes both an analysis of current survey results and comparisons with the 2000, 2002, 2004 and 2006 survey findings.

This report contains only a brief discussion of methodology. More extensive information on survey administration, methodology and statewide findings can be found in the statewide report, available online at:

www.dcf.state.fl.us/mentalhealth/publications/fysas/.

Methodology

The sampling strategy was designed to produce survey results that are representative at both the state and county levels, with a minimal margin of error. In Hamilton County, this method resulted in a final sample of 133 middle school students and 168 high school students.

Questionnaires

In 2008, for the first time, two versions of the questionnaire were administered to Florida students. High school students received a questionnaire identical to the one used in recent FYSAS efforts. Middle school students received a shortened version of the questionnaire.

While the survey has an excellent track record of yielding high-quality data, concerns have been raised by the FYSAS Workgroup about the ability of some middle school students to complete the questionnaire in a standard classroom period. Analysis of historical data revealed that for some of the items positioned toward the end of the questionnaire, more than 25% of 6th grade students fail to provide valid responses.

To address this issue, a shorter version of the standard FYSAS questionnaire—with 176 items compared to 211 on the standard questionnaire—was developed for middle school students. To reach this reduced length, items were removed for eight risk factor scales and four protective factor scales deemed less critical for middle school prevention planning. Also, several ATOD items with very low prevalence among young respondents were either removed or aggregated. Finally, two items that measure the use of over-the-counter drugs in order to get high and eight items that assess bullying behavior were added.

A field test of the new middle school questionnaire, conducted as part of the 2007 FYSAS, yielded

missing value rates that were about 15 percentage points lower than standard questionnaire among 6th graders, and about 10 percentage points lower among 7th and 8th graders.

Validity of Survey Data

Five strategies were used to assess the validity of survey responses. Data were eliminated from the analysis for students who (1) reported unrealistically high levels of substance use, (2) reported unrealistically high levels of other antisocial behaviors, (3) reported use of a fictitious drug, (4) reported logically inconsistent patterns of substance use, or (5) answered less than 25% of the questions on the survey. These five strategies have been shown to consistently identify most surveys that were completed in a random fashion, those that were not taken seriously, and/or those that were not valid for other reasons.

Weighting

Before analysis, a set of statistical weights was applied to the 2008 FYSAS dataset. The application of the weights served three purposes. First, weighting compensates for certain elements of the sample design so that the sample selection probability for each student was equal. Second, weighting adjusts for nonresponse at both the school and classroom levels.

Third, weighting adjusts the distribution of the sample across grade levels and gender groups to match the distribution across the full population of Hamilton County public school students. Through this process, responses from the grade levels and gender groups that were underrepresented relative to the population are given more weight in the data analysis, while responses from the grade levels and gender groups that were overrepresented are given less weight. The step, called post-stratification, is important because variations in participation across grade levels are common with statewide, school-based survey projects like the FYSAS. Post-stratification makes the sample more representative of the population, and improves the comparability of samples over time.

The 2000, 2002 and 2004 Hamilton County datasets were weighted across grade levels but not gender groups. Additional weights were also applied to the 2000 dataset to help adjust for the earlier administration dates (December and January) that were employed in that survey effort. (See the 2002 FYSAS statewide report for a complete description of the methods used to prepare the 2000 data for analysis.)

Confidence Intervals

For the full sample of Hamilton County respondents, the maximum 95% confidence interval estimate (“the margin of error”) is ± 8.2 percentage points for prevalence rates approximating 50% (such as alcohol or tobacco). The maximum 95% confidence interval estimate is ± 4.9 percentage points for prevalence rates of 10% or lower (such as Ecstasy or cocaine). The level of certainty, in this case 95%, means that 95 out of 100 times the “true” population value will fall within the range of the confidence interval. For example, if 40% of the sample indicate using alcohol and the confidence interval is $\pm 2.0\%$, then the population value should fall within a range of 38% to 42%.

For subgroup analyses, confidence intervals are larger. Estimates for Hamilton County middle school students have confidence intervals ranging from ± 12.4 percentage points (50% prevalence rates) to ± 7.5 percentage points (10% prevalence rates). Estimates for high school students have confidence intervals ranging from ± 10.9 percentage points (50% prevalence rates) to ± 6.5 percentage points (10% prevalence rates).

Also note that the variance estimates used for these confidence interval calculations include a design effect of 3.0 to adjust for the complex design of the 2008 FYSAS sample.

Demographics

The survey measures a variety of demographic characteristics. The first two data columns of Table 1 (see Appendix A for data tables) describe the demographic profile of the Hamilton County sample before weights were applied. Please note that some categories do not sum to 100% due to missing values.

Consisting of four out of seven surveyed grades, high school students constituted slightly more than half of the sample (55.8% high school versus 44.2% middle school). A higher percentage of the respondents were female (53.8% female versus 42.5% male). African American students represent 41.5% of the sample. The next largest population is White, non-Hispanic students (33.9%), followed by Hispanic/Latino students (11.0%). The rest of the ethnic breakdown ranges from 1.0% for Asian students to 11.0% for students who indicated Other/Multiple ethnic backgrounds.

The second set of data columns in Table 1 presents the demographic profile information for the statewide sample.

Alcohol, Tobacco and Other Drug Use

Alcohol, tobacco and other drug (ATOD) use is measured by a set of 39 items on the 2008 *FYSAS*. While most of the survey items are identical to those used in previous waves of the survey, several key changes have been made.

Starting in 2001, the survey included items measuring: (a) the use of so-called “club drugs” such as Ecstasy, GHB, ketamine and Rohypnol, (b) the use of hallucinogenic mushrooms, and (c) the use of amphetamines, including Ritalin® and Adderall®, without a doctor’s orders. In addition, the use of marijuana and the use of hashish were combined into a single item, and the use of “LSD and other psychedelics” was reworded to read “LSD or PCP.” Also starting in 2001, a parenthetical mentioning the street names “ice” and “crystal meth” was added to the methamphetamine item.

Three changes were made to the ATOD section in 2002: (a) a new item measuring the use of OxyContin® without a doctor’s orders, (b) the prescription drug Xanax® was added to the list of examples given in the “depressants and downers” question, and (c) the “other narcotics” item was replaced by a new question measuring the use of “prescription pain relievers” without a doctor’s

orders.

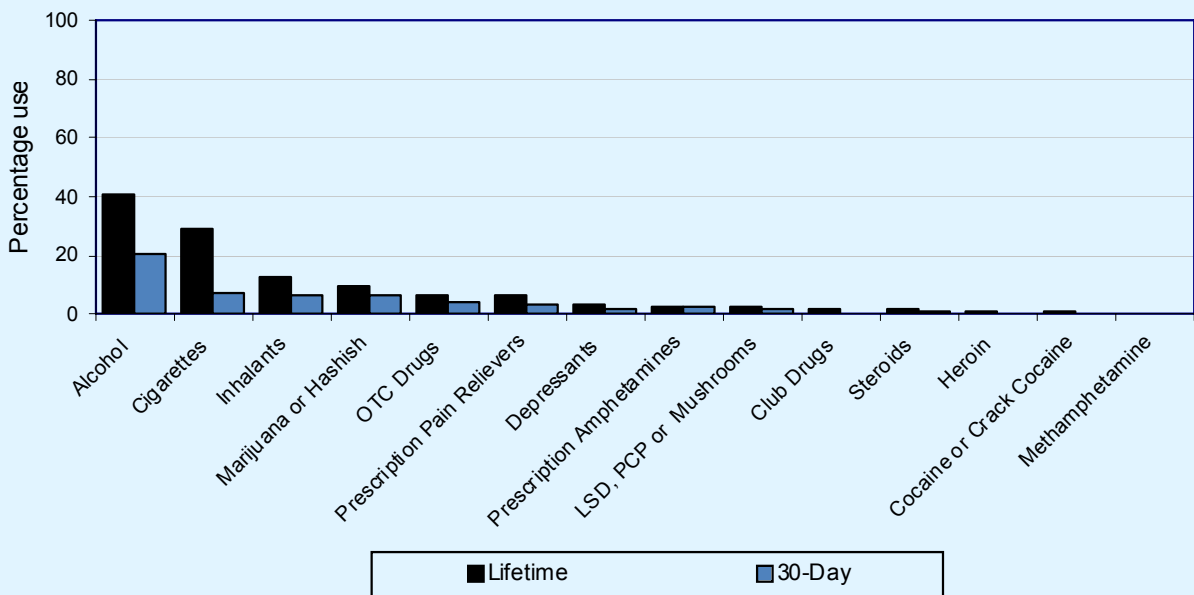
On the 2006 questionnaire, OxyContin® was removed as an individual item and added to the list of examples included in the prescription pain reliever item. Also, the question for GHB was changed to include a more up-to-date set of slang or street names for the drug.

In 2008, the questionnaire administered to high school students remained unchanged, but the ATOD section of the new middle school questionnaire reduced the number of items by asking broader categories of ATOD use rather than only asking about individual drugs. The new middle school questionnaire also introduces an important new category of ATOD use to the *FYSAS*. A description of these changes is below:

- Items for smokeless tobacco have been removed.
- Items for the club drugs Ecstasy, GHB, ketamine and Rohypnol have been replaced by single items that ask about the use of “club drugs such as Ecstasy, Rohypnol, GHB or ketamine.”
- Items for LSD/PCP and hallucinogenic mushroom use have been combined into a pair of single items that ask about all three drugs.
- Items for cocaine and crack cocaine use have

Graph 1

Lifetime and past-30-day use of alcohol, tobacco and other drugs among Hamilton County MIDDLE SCHOOL students, 2008



been combined into a pair of single items that ask about both drugs.

- Items that measure the use of over-the-counter drugs in order to get high have been added.

Tables 2 through 5 and Graphs 1 and 2 show the percentage of surveyed Hamilton County students who reported using ATODs. These results are presented for both lifetime and past-30-day prevalence of use periods. Lifetime prevalence of use (whether the student has ever used the drug) is a good measure of student experimentation. Past-30-day prevalence of use (whether the student has used the drug within the last month) is a good measure of current use. In addition to the standard lifetime and past-30-day prevalence rates for alcohol use, binge drinking behavior (defined as a report of five or more drinks in a row within the past two weeks) is also measured.

Comparisons to the statewide results of the 2008 survey are presented in Tables 2 through 5 and Graphs 3 through 6. Trend comparisons to Hamilton County results from the 2000, 2002, 2004 and 2006 surveys are presented in Tables 6 through 9 and Graphs 3 through 6.

Alcohol

In most communities, alcohol is the drug used by the largest number of adolescents. As Graphs 1 and 2

show, this is indeed the case in Hamilton County.

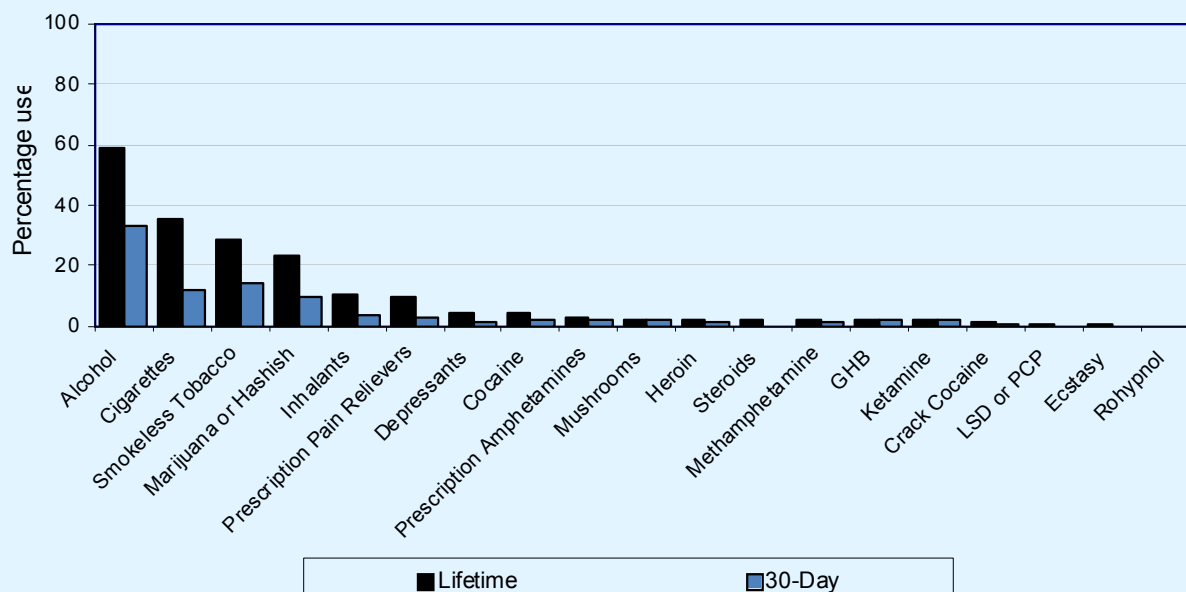
Prevalence of Use. Of the students surveyed in Hamilton County in 2008, 51.8% have used alcohol on at least one occasion in their lifetimes. This corresponds to a rate of 41.0% among middle school students and 59.1% among high school students. Current use is substantially lower. Overall, 28.1% of surveyed Hamilton County students reported the use of alcohol in the past 30 days, with grade-cohort averages of 20.8% for middle school students and 33.3% for high school students.

Statewide Comparison. As Graph 3 shows, the prevalence of past-30-day alcohol use for 2008 is lower in Hamilton County compared to the state of Florida as a whole. Overall, 28.1% of surveyed Hamilton County students reported the use of alcohol in the past 30 days compared to 29.8% of surveyed students statewide. Grade-cohort analysis shows that this overall lower rate of use is due to the lower rate of usage in high school (33.3% for Hamilton County versus 39.5% statewide). Usage in middle school is actually higher in Hamilton County than the state as a whole (20.8% for Hamilton County versus 17.3% statewide).

2000-2008 Trend. In Hamilton County, between 2000 and 2008, overall past-30-day alcohol use decreased 2.5 percentage points. Among middle school students, use increased 5.0 percentage points,

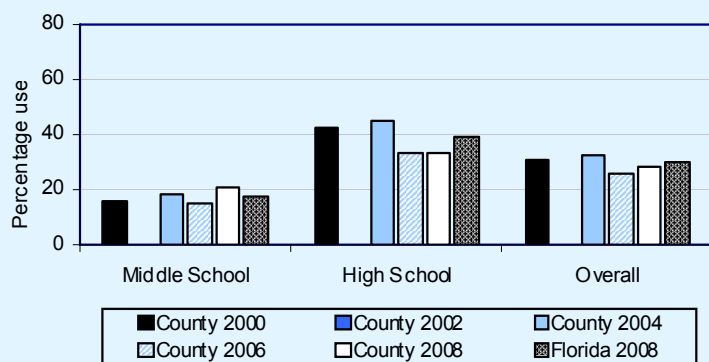
**Graph
2**

Lifetime and past-30-day use of alcohol, tobacco and other drugs among Hamilton County HIGH SCHOOL students, 2008



Graph 3

Past-30-day alcohol use, Hamilton County 2000-2008 and Florida 2008



and among high school students, use decreased 9.2 percentage points. Between 2006 and 2008, the two most recent waves of the Hamilton County survey, overall past-30-day alcohol use increased 2.6 percentage points. Among middle school students, use increased 5.9 percentage points, and among high school students, use decreased 0.5 percentage points.

Binge Drinking. Findings on binge drinking (defined as consuming five or more drinks in a row within the past two weeks) are likely to be among the most important findings related to alcohol use (Johnston, O'Malley, Bachman & Schulenberg, 2008). In Hamilton County, 21.2% of surveyed students reported binge drinking, with corresponding rates of 18.2% among middle school students and 23.2% among high school students. This represents higher rates of middle and high school binge drinking compared to the state as a whole (6.2% for middle school and 21.5% for high school).

Tobacco

This section of the report discusses the prevalence of tobacco use as measured by the 2008 FYSAS. Another survey, the 2008 Florida Youth Tobacco Survey (Florida Department of Health), was administered simultaneously with the 2008 FYSAS, and was specifically tobacco related. That survey is Florida's official source for youth tobacco use information. The information presented in this report is consistent with findings reported in the 2008 Florida Youth Tobacco Survey.

Prevalence of Use. Of the students surveyed in Hamilton County in 2008, 33.0% have used cigarettes on at least one occasion in their lifetimes. This

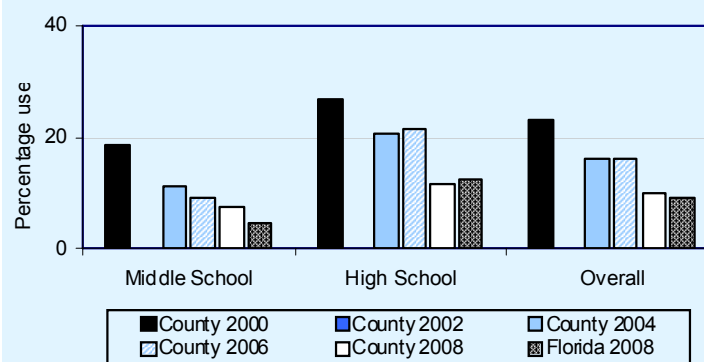
corresponds to a rate of 28.9% among middle school students and 35.7% among high school students. Current use is substantially lower. Overall, 10.0% of surveyed Hamilton County students reported the use of cigarettes in the past 30 days, with grade-cohort averages of 7.5% for middle school students and 11.7% for high school students.

Statewide Comparison. As Graph 4 shows, the prevalence of past-30-day cigarette use for 2008 in Hamilton County is similar to the rate for the state of Florida as a whole. Overall, 10.0% of surveyed Hamilton County students reported the use of cigarettes in the past 30 days compared to 9.1% of surveyed students statewide. Grade-cohort analysis shows that this overall similarity in the rates of use is concentrated in high school (11.7% for Hamilton County versus 12.6% statewide). Usage in middle school is 2.8 percentage points higher in Hamilton County than the state as a whole (7.5% for Hamilton County versus 4.7% statewide).

2000-2008 Trend. In Hamilton County, between 2000 and 2008, overall past-30-day cigarette use decreased 13.2 percentage points. Among middle school students, use decreased 11.3 percentage points, and among high school students, use decreased 15.3 percentage points. Between 2006 and 2008, the two most recent waves of the Hamilton County survey, overall past-30-day cigarette use decreased 6.2 percentage points. Among middle school students, use decreased 1.5 percentage points, and among high school students, use decreased 9.9 percentage points.

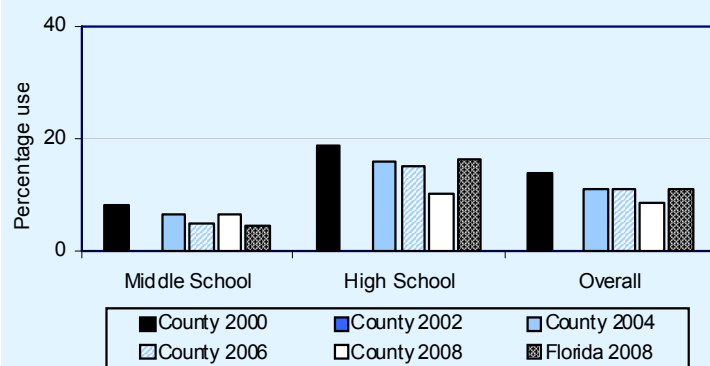
Graph 4

Past-30-day cigarette use, Hamilton County 2000-2008 and Florida 2008



Graph 5

Past-30-day marijuana or hashish use, Hamilton County 2000-2008 and Florida 2008



Smokeless Tobacco. The prevalence of current use of smokeless tobacco among high school students is actually higher than current use of cigarettes. Overall, 28.4% of surveyed Hamilton County high school students reported using smokeless tobacco in their lifetimes and 14.4% reported using it within the past 30 days.

Marijuana or Hashish

During the 1990s, there were major changes in trends of marijuana use throughout the United States. Results from the *Monitoring the Future* study show dramatic increases in both lifetime and past-30-day prevalence rates through the early and mid 1990s (Johnston et al., 2008). For 8th and 10th graders the past-30-day rates more than doubled during this period. Since 1996 and 1997, when marijuana use peaked, rates have declined.

Prevalence of Use. Of the students surveyed in Hamilton County in 2008, 17.5% have used marijuana or hashish on at least one occasion in their lifetimes. This corresponds to a rate of 9.5% among middle school students and 23.2% among high school students. Current use is substantially lower. Overall, 8.5% of surveyed Hamilton County students reported the use of marijuana or hashish in the past 30 days, with grade-cohort averages of 6.3% for middle school students and 10.0% for high school students.

Statewide Comparison. As Graph 5 shows, the prevalence of past-30-day marijuana or hashish use for 2008 is lower in Hamilton County compared to the state of Florida as a whole. Overall, 8.5% of surveyed Hamilton County students reported the use of marijuana or hashish in the past 30 days compared to 11.1% of surveyed students statewide. Grade-cohort analysis shows that this overall lower rate of use is due to the lower rate of usage in high school (10.0% for Hamilton County versus 16.2% statewide). Usage in middle school is actually higher in Hamilton County than the state as a whole (6.3% for Hamilton County versus 4.4%

statewide).

2000-2008 Trend. In Hamilton County, between 2000 and 2008, overall past-30-day marijuana use decreased 5.5 percentage points. Among middle school students, use decreased 1.8 percentage points, and among high school students, use decreased 8.8 percentage points. Between 2006 and 2008, the two most recent waves of the Hamilton County survey, overall past-30-day marijuana use decreased 2.2 percentage points. Among middle school students, use increased 1.4 percentage points, and among high school students, use decreased 5.1 percentage points.

Inhalants

After alcohol, tobacco and marijuana, the most commonly used drug among Florida students is inhalants. Inhalant use is measured by the survey question, "On how many occasions (if any) have you used inhalants (whippets, butane, paint thinner, or glue to sniff, etc.)?" Inhalant use is more prevalent with younger students, perhaps because it is often the easiest drug for them to obtain. The negative consequences of inhalant use can be substantial; one of them being that it is associated with the use of other illicit drugs later in life.

Prevalence of Use. Of the students surveyed in Hamilton County in 2008, 11.3% have used inhalants on at least one occasion in their lifetimes. This corresponds to a rate of 12.5% among middle school students and 10.5% among high school students. Current use is substantially lower. Overall, 4.4% of surveyed Hamilton County students reported the use of inhalants in the past 30 days, with grade-cohort averages of 6.1% for middle school students and 3.2% for high school students.

Statewide Comparison. As Graph 6 shows, the prevalence of past-30-day inhalant use for 2008 in Hamilton County is similar to the rate for the state of Florida as a whole. Across all surveyed grades, 4.4% of surveyed Hamilton County students reported the use of inhalants in the past 30 days compared to 3.5% of surveyed students statewide. Hamilton County middle school students reported a rate of 6.1% versus 5.2% for middle school students statewide. Hamilton County high school students reported a rate of 3.2% versus 2.2% for high school students statewide.

2000-2008 Trend. In Hamilton County, between 2000 and 2008, overall past-30-day inhalant use decreased 1.8 percentage points. Among middle school students, the rate of use did not change and among high school students, use decreased 3.2 percentage points. Between 2006 and 2008, the two most recent waves of the Hamilton County survey, overall past-30-day inhalant use decreased 0.4 percentage points. Among middle school students, use decreased 1.9 percentage points, and among high school students, use increased 0.8 percentage points.

Club Drugs

Club drugs are a broad category of illicit substances that are classified together because their use started at dance clubs and “raves,” not because they are of a similar chemical class (like amphetamines). Their use, however, has expanded beyond these settings. For the purpose of the 2008 FYSAS, club drugs include Ecstasy, GHB, ketamine and Rohypnol. Note that this list is not meant to be exclusive, as other drugs are used at clubs and raves.

Club Drugs in Middle School

Prevalence of Use. Of the middle school students surveyed in Hamilton County in 2008, 1.8% have used club drugs on at least one occasion in their lifetimes and

0.0% have used club drugs in the past 30 days.

Statewide Comparison. The prevalence of past-30-day club drug use for 2008 in Hamilton County is similar to the rate for the state of Florida as a whole. In middle school, 0.0% of surveyed Hamilton County students reported the use of club drugs in the past 30 days compared to 0.6% of surveyed students statewide.

Club Drugs in High School

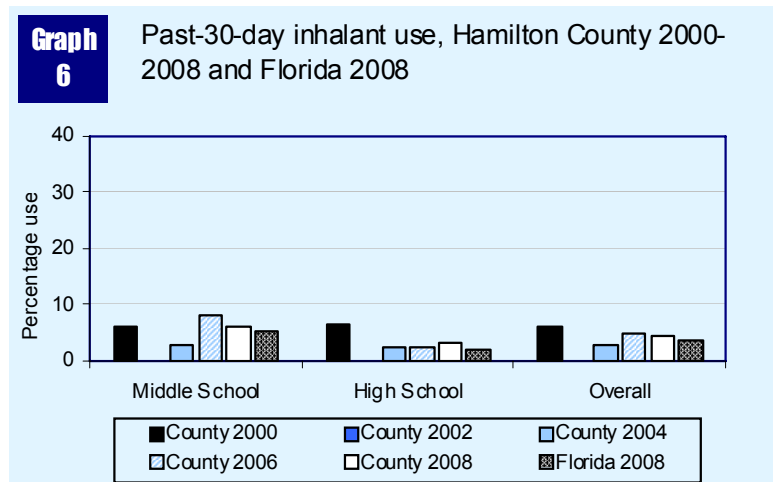
Prevalence of Use. Hamilton County high school students reported lifetime prevalence-of-use rates of 0.7% for Ecstasy, 0.0% for Rohypnol, 1.6% for GHB, and 1.6% for ketamine.

Statewide Comparison. In high school, lifetime prevalence rates for club drug use are lower in Hamilton County than in the state of Florida as a whole. In particular, Hamilton County students reported lower rates of Ecstasy use (0.7% in Hamilton County versus 4.9% in Florida) and use of Rohypnol (0.0% in Hamilton County versus 1.2% in Florida) than their counterparts from across the state. Past-30-day prevalence rates are too low to allow a meaningful comparison between the samples.

Over-The-Counter Drugs in Middle School

The use of over-the-counter (OTC) drugs was measured by asking: “On how many occasions (if any) have you used drugs that can be purchased from a store without a prescription—such as cold and cough medication—in order to get high in your lifetime?” and “... in the past 30 days?”

Prevalence of Use. Of the middle school students surveyed in Hamilton County in 2008, 6.3% have used OTC drugs on at least one occasion in their lifetimes and 4.1% have used OTC drugs in the past



30 days.

Statewide Comparison. The prevalence of past-30-day OTC drug use for 2008 is higher in Hamilton County compared to the state of Florida as a whole. In middle school, 4.1% of surveyed Hamilton County students reported the use of OTC drugs in the past 30 days compared to 2.2% of surveyed students statewide.

Prescription Drugs

While students across the country have reported declining rates of use for many illicit drugs over the past 10 years, prescription drugs have largely bucked this trend. As a result, prevalence rates for using prescription drugs without a doctor's orders are higher than for many illicit drugs (Johnston et al., 2008). The 2008 FYSAS includes questions that assess the use of prescription pain relievers, depressants and amphetamines. Results for these prescription drugs are presented in Tables 3, 5, 7 and 9.

Prevalence of Use. Hamilton County middle school and high school students reported lifetime prevalence-of-use rates for this group of drugs that range from a high of 8.1% for prescription pain relievers and 3.9% for depressants to a low of just 2.5% for amphetamines. The prevalence of use within the past 30 days is lower, with highs of 3.1% for prescription pain relievers and 2.2% for

amphetamines. The remaining illicit drugs have past-30-day prevalence rates of less than 2.0%.

Statewide Comparison. Lifetime prevalence rates for prescription drug use are lower in Hamilton County than in the state of Florida as a whole. In particular, Hamilton County students reported lower rates of depressant use (3.9% in Hamilton County versus 6.0% in Florida) and use of amphetamines (2.5% in Hamilton County versus 3.7% in Florida) than their counterparts from across the state. Past-30-day prevalence rates are too low to allow a meaningful comparison between the samples.

Other Illicit Drugs

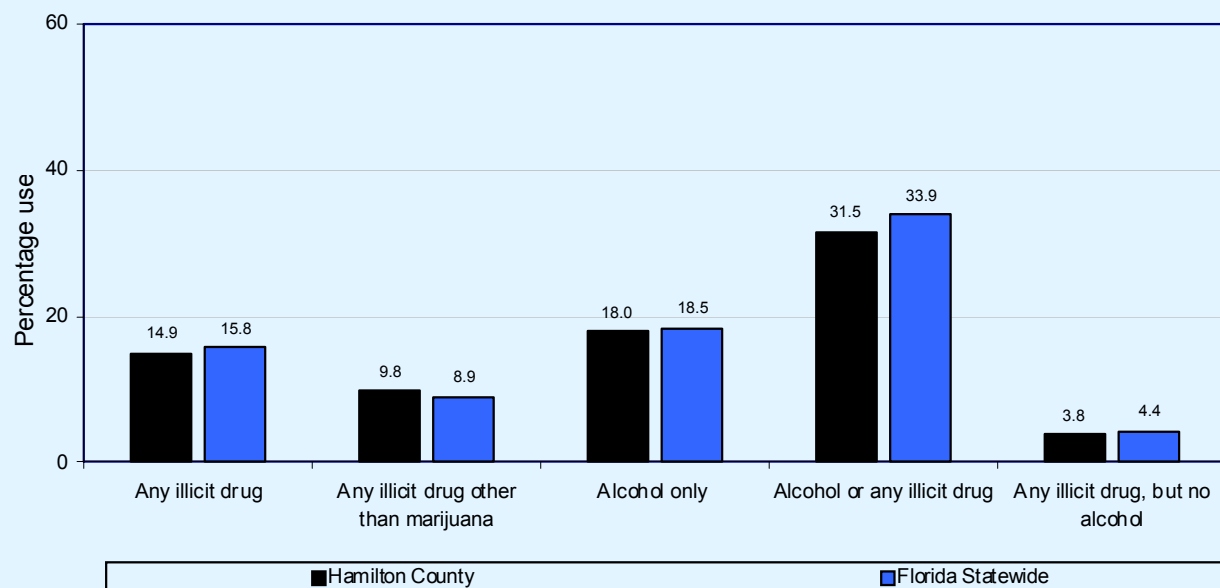
The 2008 FYSAS also measured the prevalence of use of a variety of other illicit drugs among Hamilton County students. This includes the use of the following: LSD or PCP, hallucinogenic mushrooms, cocaine, crack cocaine, methamphetamine, heroin and steroids. Results for these illicit drugs are presented in Tables 3, 5, 7 and 9.

Other Illicit Drugs in Middle School

Prevalence of Use. Among middle school students, lifetime prevalence-of-use rates for this group of drugs range from a high of 2.6% for LSD, PCP or mushrooms to a low of 0.0% for methamphetamine. The prevalence of use within the past 30 days is lower, going from a high of 1.9% for LSD, PCP or

**Graph
7**

Past-30-day drug combination rates for Hamilton County and Florida Statewide, 2008



.....

mushrooms to a low of 0.0% for heroin, methamphetamine and cocaine or crack cocaine.

Statewide Comparison. In middle school, lifetime prevalence rates for other illicit drug use in Hamilton County are similar to those found for the state of Florida as a whole. The two largest differences were for methamphetamine use (0.0% in Hamilton County versus 1.2% in Florida) and LSD, PCP or mushrooms use (2.6% in Hamilton County versus 1.5% in Florida). Past-30-day prevalence rates are too low to allow a meaningful comparison between the samples.

Other Illicit Drugs in High School

Prevalence of Use. Among high school students, lifetime prevalence-of-use rates for this group of drugs range from a high of 4.2% for cocaine to a low of 0.7% for LSD or PCP. The prevalence of use within the past 30 days is lower, going from a high of 2.3% for mushrooms to a low of 0.0% for steroids and LSD or PCP.

Statewide Comparison. In high school, lifetime prevalence rates for other illicit drug use in Hamilton County are similar to those found for the state of Florida as a whole. The two largest differences were for hallucinogenic mushroom use (2.2% in Hamilton County versus 5.3% in Florida) and LSD or PCP use (0.7% in Hamilton County versus 3.0% in Florida). Past-30-day prevalence rates are too low to allow a meaningful comparison between the samples.

Drug Combination Rates

Prevalence-of-use rates for combinations of drugs provide a helpful summary of drug use behavior. Tables 2, 4, 6 and 8 and Graph 7 provide lifetime and past-30-day prevalence rates for the use of one or more drugs from a set of illicit drugs. Illicit drugs are substances that are illegal for adults to use, so they include all drugs on the survey except alcohol, cigarettes and smokeless tobacco. Five types of drug combination rates are presented here:

Any illicit drug – Use of at least one illicit drug

Any illicit drug other than marijuana – Use of at least one illicit drug other than marijuana

Alcohol only – The use of alcohol and no illicit drugs

Alcohol or any illicit drug – Use of alcohol or at least one illicit drug

Any illicit drug but no alcohol – Use of at least one illicit drug, without any use of alcohol

These combination categories are created using all the illicit drug items on the current high school questionnaire: marijuana or hashish, inhalants, Ecstasy, Rohypnol, GHB, ketamine, LSD or PCP, hallucinogenic mushrooms, methamphetamine, cocaine, crack cocaine, depressants, heroin, prescription pain relievers, amphetamines and steroids. Please note that the combination categories for middle school respondents include the same illicit drugs, but as described at the beginning of this section, a reduced set of items is used to ask about these drugs.

Trend comparisons for these drug combination rates begin in 2002. This is because a number of the illicit drugs were not included on the 2000 questionnaire. Also, OxyContin® was combined with prescription pain relievers in 2006, but this change is minor and has almost no impact on the drug combination trend lines.

Any Illicit Drug

Overall, 29.3% of surveyed Hamilton County students reported at least one use of *any illicit drug* in their lifetimes, and 14.9% reported use in the past 30 days. The past-30-day prevalence rate corresponds to 12.9% among middle school students and 16.3% among high school students. As Graph 7 shows, use of *any illicit drug* in the past 30 days is similar in Hamilton County and the state (14.9% for Hamilton County versus 15.8% statewide).

Any Illicit Drug Other than Marijuana

The purpose of this drug combination rate is to provide prevention planners with an overall indicator of so-called “hard” drug use (Johnston et al., 2008). Overall, 19.6% of surveyed Hamilton County students reported at least one use of *any illicit drug other than marijuana* in their lifetimes, and 9.8% reported use in the past 30 days. The past-30-day prevalence rate corresponds to 10.6% among middle school students and 9.2% among high school students. As Graph 7 shows, use of *any illicit drug other than marijuana* in the past 30 days is similar in Hamilton County and the state (9.8% for Hamilton County versus 8.9% statewide).

Alcohol Only

Overall, 26.4% of surveyed Hamilton County students reported at least one use of *alcohol only*—the use of alcohol and no illicit drugs—in their lifetimes, and 18.0% reported use in the past 30 days. The past-30-day prevalence rate corresponds to 12.7% among middle school students and 21.6% among high school students. As Graph 7 shows, use

of *alcohol only* in the past 30 days is similar in Hamilton County and the state (18.0% for Hamilton County versus 18.5% statewide).

Alcohol or Any Illicit Drug

Alcohol or any illicit drug use is a summary measure that included all drugs from the 2008 survey, with the exception of cigarettes and smokeless tobacco. Overall, 56.1% of surveyed Hamilton County students reported at least one use of *alcohol or any illicit drug* in their lifetimes, and 31.5% reported use in the past 30 days. The past-30-day prevalence rate corresponds to 24.8% among middle school students and 36.3% among high school students. As Graph 7 shows, use of *alcohol or any illicit drug* in the past 30 days is lower in Hamilton County than across the state of Florida as a whole (31.5% for Hamilton County versus 33.9% statewide).

Any Illicit Drug, but No Alcohol

The final drug combination category measures the use of illicit drugs by students who are not using alcohol. As Tables 2 and 4 show, this combination is quite rare. Overall, 5.0% of surveyed Hamilton County students reported having used illicit drugs in their lifetimes but never using alcohol. Current use of illicit drugs (within the past 30 days) without the accompanying use of alcohol is also rare (3.8%). The past-30-day prevalence rate corresponds to 4.7% among middle school students and 3.3% among high

school students. As Graph 7 shows, use of *any illicit drug, but no alcohol* in the past 30 days is similar in Hamilton County and the state (3.8% for Hamilton County versus 4.4% statewide).

Other Antisocial Behaviors

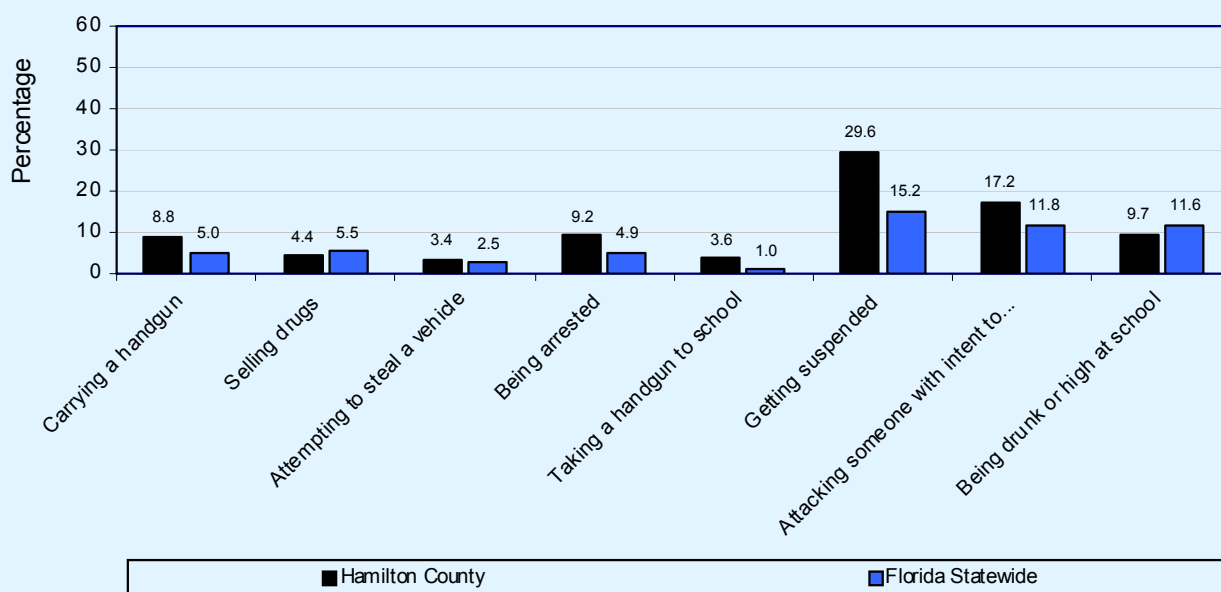
The 2008 *FYSAS* also measures a series of eight other problem or antisocial behaviors—that is, behaviors that run counter to established norms of good behavior. Note that information on antisocial behaviors is collected only for a prevalence period of the past 12 months. The survey measured the following antisocial behaviors: *Carrying a Handgun*, *Selling Drugs*, *Attempting to Steal a Vehicle*, *Being Arrested*, *Taking a Handgun to School*, *Getting Suspended*, *Attacking Someone with Intent to Harm* and *Being Drunk or High at School*.

Prevalence rates for these behaviors among Hamilton County students, as well as comparison rates from the statewide survey, are presented in Table 10 and Graph 8. Trend comparisons to Hamilton County results from the 2000, 2002, 2004 and 2006 surveys are presented in Table 16.

As Table 10 shows, the prevalence rates reported by Hamilton County students differ substantially across the eight antisocial behaviors measured in the survey. Reports of *Attempting to Steal a Vehicle* (3.4%), *Taking a Handgun to School* (3.6%), and *Selling*

Graph 8

Comparisons of past-12-month delinquent behavior for Hamilton County and Florida Statewide, 2008



.....

Drugs (4.4%) are rare, while *Getting Suspended* (29.6%), *Attacking Someone with Intent to Harm* (17.2%), and *Being Drunk or High at School* (9.7%) are more common.

Carrying a Handgun. In Hamilton County, 8.8% of students reported carrying a handgun in the past year, with rates of 9.8% and 8.1% for middle school and high school students, respectively. Male students (14.4%) were more likely than female students (4.0%) to have reported this behavior. Across the state as a whole, 5.0% of students reported carrying a handgun.

Selling Drugs. In Hamilton County, 4.4% of students reported selling drugs in the past year, with rates of 2.9% and 5.5% for middle school and high school students, respectively. Male students (7.2%) were more likely than female students (2.1%) to have reported this behavior. Across the state as a whole, 5.5% of students reported selling drugs.

Attempting to Steal a Vehicle. In Hamilton County, 3.4% of students reported attempting to steal a vehicle in the past year, with rates of 2.0% and 4.4% for middle school and high school students, respectively. Male students (2.6%) were less likely than female students (4.4%) to have reported this behavior. Across the state as a whole, 2.5% of students reported attempting to steal a vehicle.

Being Arrested. In Hamilton County, 9.2% of students reported being arrested in the past year, with rates of 9.1% and 9.2% for middle school and high school students, respectively. Male students (11.0%) were more likely than female students (6.9%) to have reported this behavior. Across the state as a whole, 4.9% of students reported being arrested.

Taking a Handgun to School. In Hamilton County, 3.6% of students reported taking a handgun to school in the past year, with rates of 2.8% and 4.2% for middle school and high school students, respectively. Male students (3.7%) and female students (3.8%) reported similar rates for this behavior. Across the state as a whole, 1.0% of students reported taking a handgun to school.

Getting Suspended. In Hamilton County, 29.6% of students reported getting suspended in the past year, with rates of 28.6% and 30.3% for middle school and high school students, respectively. Male students (32.1%) were more likely than female students (26.4%) to have reported this behavior. Across the state as a whole, 15.2% of students reported getting suspended.

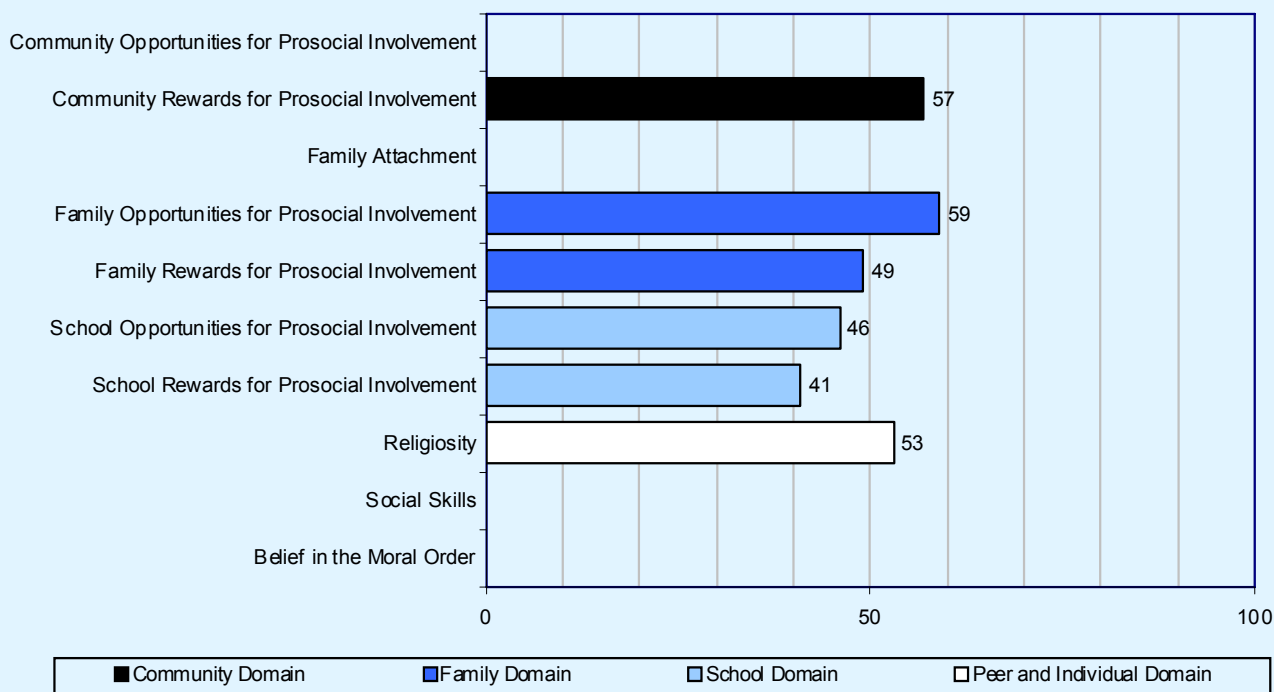
Note, however, that the questionnaire item used to measure *Getting Suspended* does not define “suspension.” Rather, it is left to the individual respondent to define. Because suspension policies vary substantially from county to county, comparisons to statewide results should be interpreted with caution for this item.

Attacking Someone with Intent to Harm. In Hamilton County, 17.2% of students reported attacking someone with intent to harm in the past year, with rates of 18.7% and 16.0% for middle school and high school students, respectively. Male students (18.0%) were more likely than female students (15.9%) to have reported this behavior. Across the state as a whole, 11.8% of students reported attacking someone with intent to harm.

Being Drunk or High at School. In Hamilton County, 9.7% of students reported being drunk or high at school in the past year, with rates of 5.2% and 13.0% for middle school and high school students, respectively. There was no difference in prevalence rates between male and female students for this behavior. Across the state as a whole, 11.6% of students reported being drunk or high at school.

**Graph
9**

MIDDLE SCHOOL protective factor prevalence rates for Hamilton County, 2008



Risk and Protective Factors

Just as smoking is a risk factor for heart disease and getting regular exercise is a protective factor against heart disease and other health problems, there are factors that can help protect youth from, or put them at risk for, drug use and other problem behaviors.

Protective factors, also known as “assets,” are conditions that buffer children and youth from exposure to risk by either reducing the impact of the risks or changing the way that young people respond to risks.

Risk factors are conditions that increase the likelihood of a young person becoming involved in drug use, delinquency, school dropout and/or violence. For example, children living in families with poor family supervision are more likely to become involved in these problems.

Research during the past 30 years supports the view that delinquency; alcohol, tobacco and other drug use; school achievement; and other important outcomes in adolescence are associated with specific risk and protective factors in the student’s community, school and family environments, as well as with characteristics of the individual (Hawkins,

Catalano & Miller, 1992). In fact, these risk and protective factors have been shown to be more important in understanding these behaviors than ethnicity, income or family structure (Blum et al., 2000).

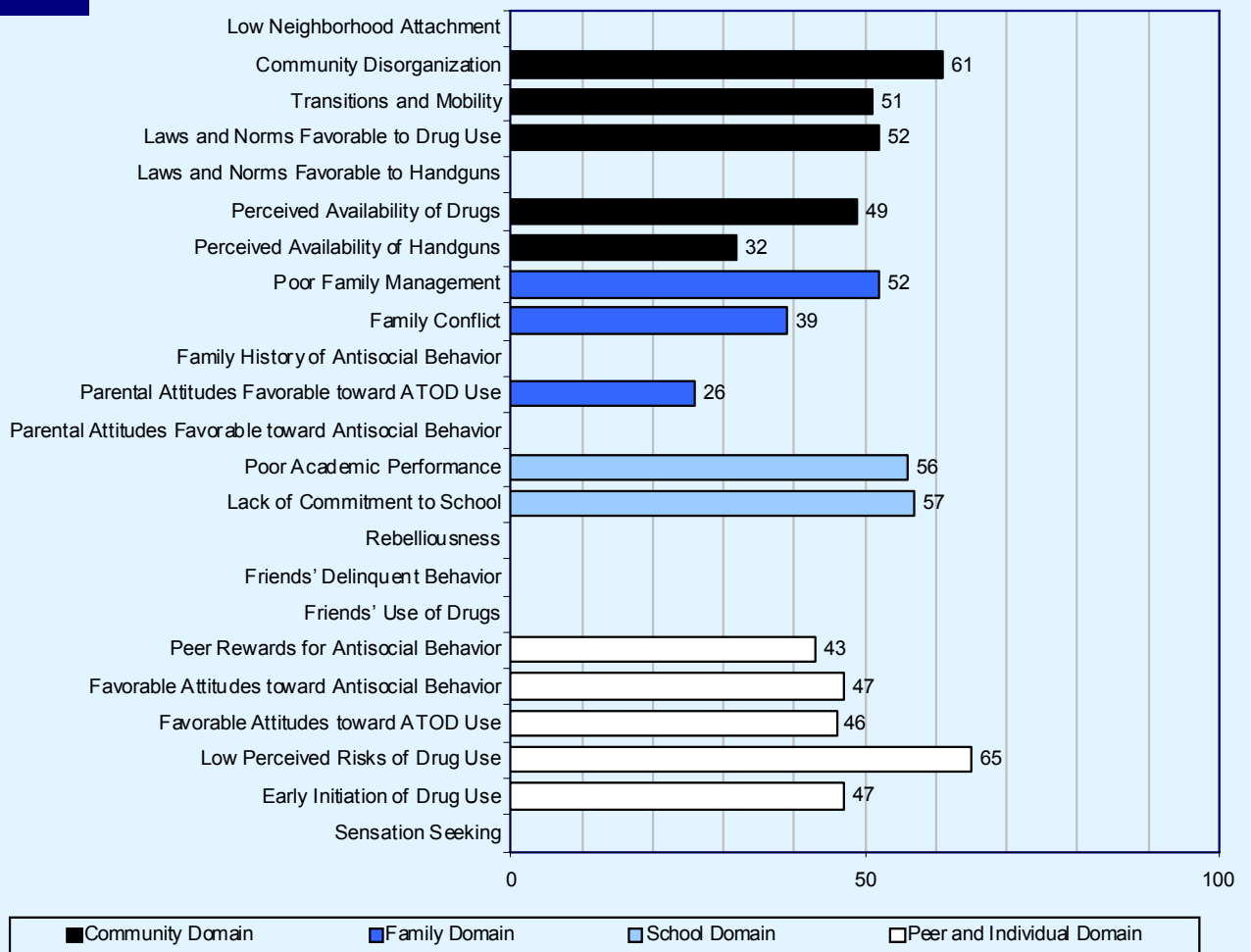
There is a substantial amount of research showing that adolescents’ exposure to a greater number of risk factors is associated with more drug use and delinquency. There is also evidence that exposure to a number of protective factors is associated with lower prevalence of these problem behaviors (Bry, McKeon & Pandina, 1982; Newcomb, Maddahian & Skager, 1987; Newcomb & Felix-Ortiz, 1992; Newcomb, 1995; Pollard et al., 1999).

The Social Development Strategy

The Social Development Strategy (Hawkins, Catalano & Associates, 1992) organizes these risk and protective factors into a framework that families, schools and communities can use to help children develop healthy behaviors. This strategy, which is graphically depicted in Appendix C, shows how three broad categories of protective factors—healthy beliefs and clear standards, bonding, and individual characteristics—work together to promote positive youth development and healthy behaviors (Hawkins, Arthur & Catalano, 1995). The Social Development

**Graph
10**

MIDDLE SCHOOL risk factor prevalence rates for Hamilton County, 2008



Strategy begins with a goal of healthy behaviors for all children and youth. In order for young people to develop healthy behaviors, adults must communicate healthy beliefs and clear standards for behavior to young people (Catalano & Hawkins, 1996). Bonding (an attached, committed relationship) between a child and an adult who communicates healthy beliefs and clear standards motivates the child to follow healthy beliefs and clear standards. A child who forges a bond with an adult is less likely to threaten the relationship by violating the beliefs and standards held by the adult. Research has identified three conditions for bonding (Catalano & Hawkins, 1996):

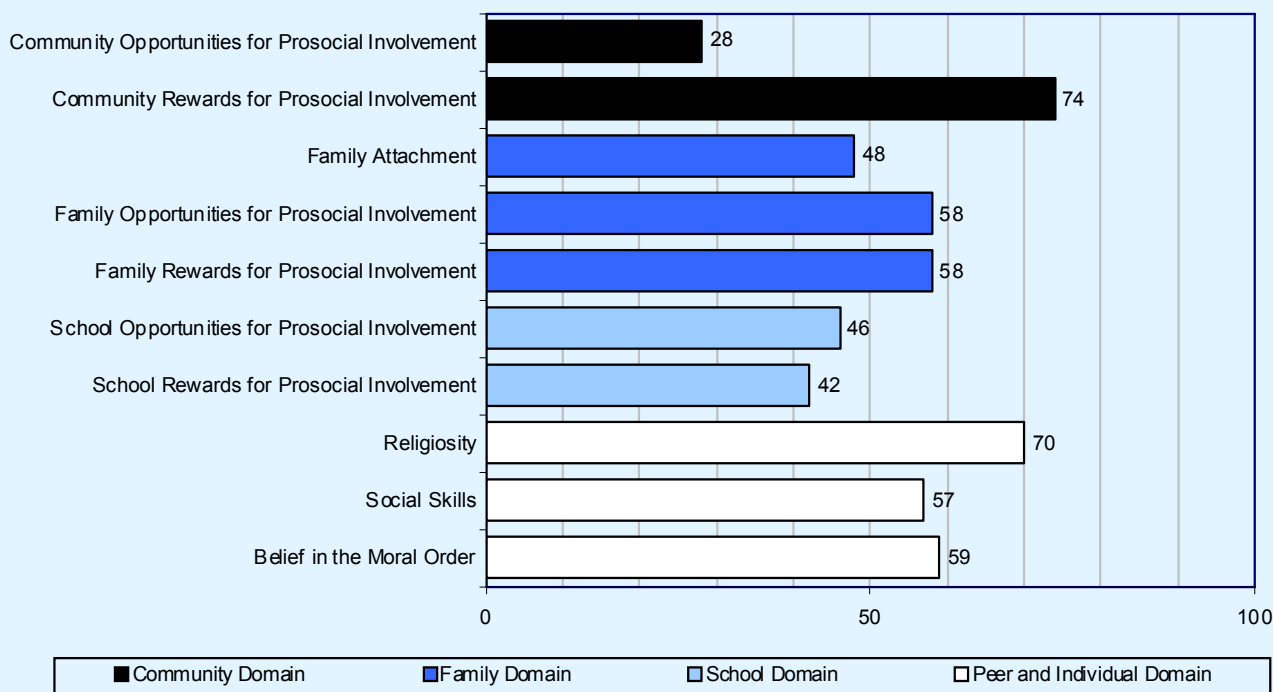
- First, children need developmentally appropriate opportunities for meaningful involvement with a positive social group (community, family, school, etc.) or individual.

- Second, children need the emotional, cognitive, social and behavioral skills to successfully take advantage of opportunities.
- Third, children must be recognized for their involvement. Recognition sets up a reinforcing cycle in which children continue to look for opportunities and learn skills and, therefore, receive recognition.

Certain characteristics with which some children come into the world (positive social orientation, resilient temperament and high intelligence) can also help protect children from risk. For children who do not have the protective advantages of these characteristics, in order to build strong bonds to family, school and community, it is even more important for community members to:

**Graph
11**

HIGH SCHOOL protective factor prevalence rates for Hamilton County, 2008



- make extra efforts to provide opportunities for involvement
- teach the social, emotional, and cognitive skills needed to be successful
- recognize children's efforts as well as their successes.

The developmental process outlined in this model has important implications for prevention planning. Programs that seek to change the attitudes young people hold about the pros and cons of ATOD use, for example, may produce an immediate reduction in the prevalence of problem behaviors. The effectiveness of these efforts will be limited, however, by the risk and protective factors that underlie the acquisition of healthy beliefs and clear standards. If young people have weak bonds to prosocial groups and strong bonds to antisocial groups, they will be less receptive to drug abuse prevention messages.

An alternative prevention strategy might involve targeting the risk and protective factors that operate at an earlier point in the developmental process. While programs and policies that increase the opportunities for prosocial involvement in the family,

at school and in the community may not yield an immediate reduction in the rates of ATOD use, they will encourage young people to form attachments to sources of positive social influence, thereby building the foundation for healthy behavioral choices in the future.

Measurement

The *FYSAS* assesses 23 risk factors and 10 protective factors across four domains: Community Domain, Family Domain, School Domain, and Peer and Individual Domain. Each factor is measured by a set of survey items called a scale.

The 2008 *FYSAS* uses the same risk and protective factors scales employed in previous survey efforts. In other words, the same survey items are still used to construct each scale. (Please note that the middle school survey employs a reduced set of risk and protective factor scales. The difference between the middle school and high school questionnaires is described below.)

This year, a new method is being used to convert these scales into scores. This change is a response to requests for a risk and protective factor scoring system that is more intuitive, and therefore easier to incorporate into the prevention planning process.

For each risk and protective factor scale, the new scoring method sets a threshold above which respondents are considered to have a high level of risk or protection and below which they are considered to have a low level of risk or protection. It then becomes possible to count the number of students with high levels of risk or protection on each scale. This approach, in turn, allows risk and protective factor data to be reported in the same way as ATOD data: as prevalence rates.

Under this new system, a score of 60 for the protective factor *School Rewards for Prosocial Involvement* would indicate that 60% of surveyed students reported a high level of protection for this protective factor, while 40% reported a low level of protection. Risk factor scales are scored in the same way. For example, a score of 55 for the risk factor *Friends' Use of Drugs* would indicate that 55% of surveyed students reported a high level of risk for this

risk factor, while 45% reported a low level of risk.

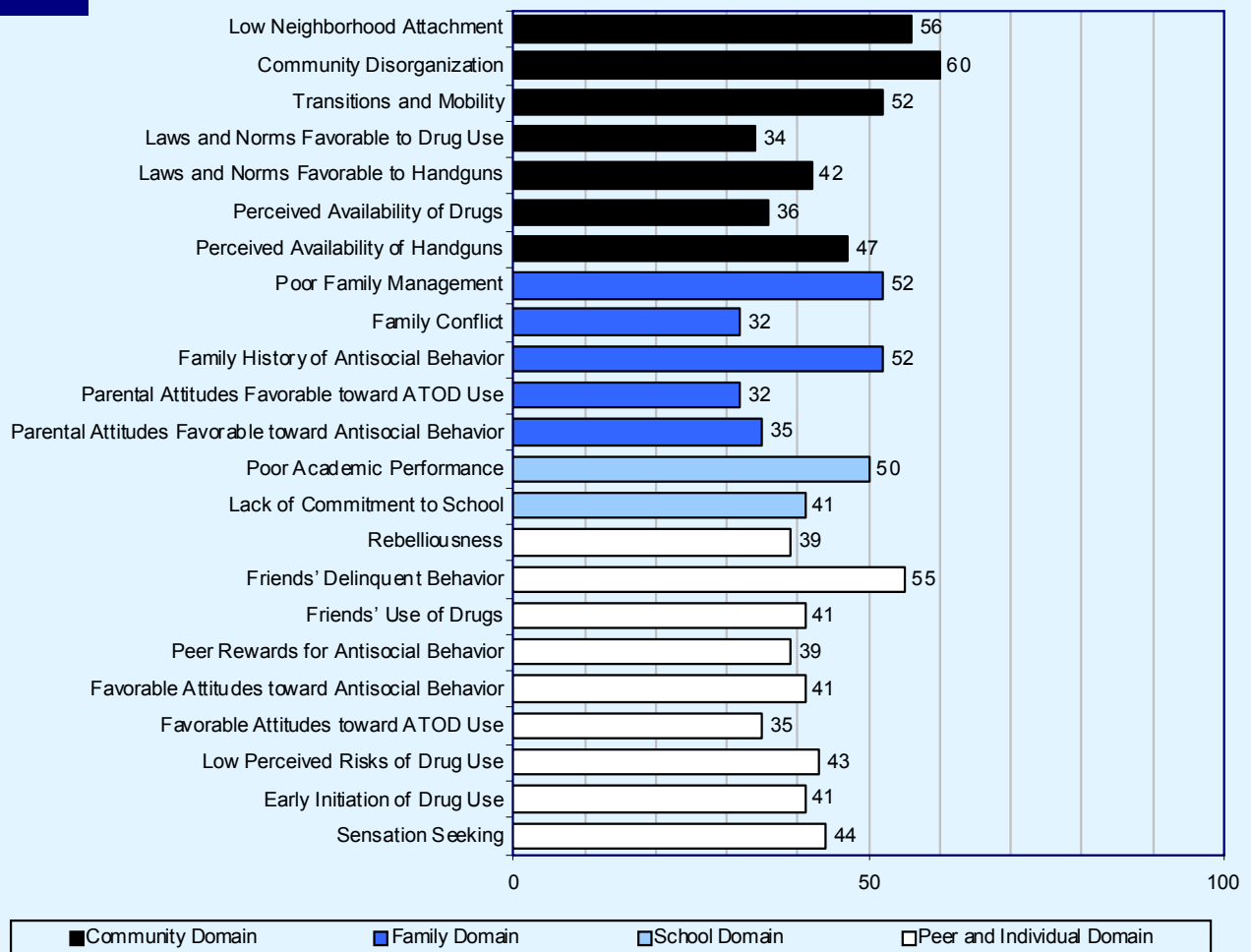
Risk and protective factor scale prevalence rates for the overall sample of Hamilton County middle school and high school students are presented in Tables 18 and 19 and Graphs 9 to 12.

Calculation of Risk and Protective Factor Thresholds

The high-risk and high-protection thresholds used to calculate the risk and protective factor prevalence rates were calculated using a method recommended by Arthur et al. (2007). For risk factor scales, the high-risk threshold is the normative median—that is the scale's median value in the *Communities That Care* normative database—plus .15 times the mean absolute deviation (a measure of central tendency similar to the standard deviation). In other words, risk factor thresholds are set slightly above the normative median. For protective factor scales, the high-

**Graph
12**

HIGH SCHOOL risk factor prevalence rates for Hamilton County, 2008



protection threshold is the normative median minus .15 times the mean absolute deviation. In other words, protective factor thresholds are set slightly below the normative median.

It is also important to note that risk and protection thresholds are calculated separately for each grade level. For most risk factors, this means that older students must report a higher level of risk before crossing the scoring threshold and being designated as at risk. For most protective factors, this means that older students must report a lower level of protection before crossing the scoring threshold and being designated as protected.

Comparing Risk and Protective Factor Prevalence Rates

The simplicity of the new prevalence rate scoring method will make it easier for prevention planners to analyze and compare risk and protective factor scores. However, comparisons to national risk and protective factor norms from the *Communities That Care* normative database must now be done differently.

Under the old percentile scoring system, the national median score was 50 for all risk and protective factor scales. Scores above 50 were, by definition, higher than the national median and scores below 50 were lower than the national median. Under the new method, median scores from the *Communities That Care* normative database differ for each risk and protective factor scale. These new national risk and protective factor norms are presented in Tables 18 and 19.

The risk factor scale *Early Initiation of Drug Use* provides an example. As shown in Table 52, 36% of surveyed Florida middle school and high school students reported scale scores above the high-risk threshold. In other words, 36% of surveyed Florida students are at risk due to early experimentation with drugs. Table 54 shows that across the national *Communities That Care* normative sample, 43% of survey students are at risk due to early experimentation with drugs. Florida's score of 36% is seven percentage points below the normative score.

Normative Data

The *Communities That Care* normative database contains survey responses from over 280,000 students in grades 6 through 12. It was compiled by combining the results of selected *Communities That Care Youth Survey* efforts that were completed in 2000, 2001 and 2002. To enhance representativeness,

statistical weights were applied to adjust the sample to exactly match the population of U.S. public school students on four key demographic variables: ethnicity, sex, socioeconomic status and urbanicity. Information on the U.S. public school student population was obtained from the Common Core of Data program at the U.S. Department of Education's National Center for Education Statistics.

Trend Analysis

Risk and protective factor scale scores generated with the new prevalence rate scoring system are not directly comparable to scores generated with the previous percentile scoring system. As a result, scores from the 2000 to 2008 FYSAS have been recalculated using the new methodology in order to support trend analysis. These results are presented in Tables 20 through 23.

The Middle School Questionnaire

As previously noted, middle school students were given a shorter version of the FYSAS questionnaire. The following 12 risk and protective factor scales, which were deemed less critical for middle school prevention planning, are not included in the middle school survey:

- *Community Opportunities for Prosocial Involvement*
- *Family Attachment*
- *Social Skills*
- *Belief in the Moral Order*
- *Low Neighborhood Attachment*
- *Laws and Norms Favorable to Handguns*
- *Family History of Antisocial Behavior*
- *Parental Attitudes Favorable toward Antisocial Behavior*
- *Rebelliousness*
- *Friends' Delinquent Behavior*
- *Friends' Use of Drugs*
- *Sensation Seeking*

For these risk and protective factor scales, results are only presented for high school students.

Using Your Risk and Protective Factor Data

The analysis of risk and protective factors is the most powerful tool available for understanding what promotes both positive and negative adolescent

behavior and for helping design successful prevention programs for young people. To promote positive development and prevent problem behavior, it is necessary to address the factors that predict these outcomes. By measuring these risk and protective factors, specific factors that are elevated can be prioritized in the community. This process also helps in selecting tested-effective prevention programming shown to address those elevated factors and consequently provide the greatest likelihood for success.

Risk and Protective Factor Prioritization

In general, a prevention strategy that focuses on a relatively narrow set of developmental factors can be more effective than a strategy that spreads resources across a broad set of factors. Risk and protective factor data from the *FYSAS* can provide critical guidance in this prioritization process. That is, prevention planners can use the information gathered by the survey to identify youth development areas where programs, policies and practices are likely to have the greatest positive impact.

Start the prioritization process by identifying the protective factor scales with the lowest percentage of protected students and the risk factor scales with the highest percentage of at risk students. It may also be helpful to identify scales with particularly high percentages of protected students or low percentages of at risk students. These areas represent strengths that prevention planners in Hamilton County may wish to build on. In addition, it is also important to compare the rates of risk and protection reported by Hamilton County students to the rates reported by students in the national normative sample.

Lowest Protective Factor Scales

- Across all 10 protective factor scales, middle school students in Hamilton County reported the lowest level of protection for the *School Rewards for Prosocial Involvement* scale. Their score of 41% was four points lower than the statewide average of 45%. In the national normative sample, 53% reported an elevated level of protection, 12 points higher than Hamilton County. Low scores on this scale indicate that students receive less praise and encouragement when they work hard and do well in school. This lack of positive feedback, in turn, may weaken the bonds students form with teachers, coaches and prosocial peers.
- High school students in Hamilton County reported the lowest level of protection for the

Community Opportunities for Prosocial Involvement scale. Their score of 28% was 11 points lower than the statewide average of 39%. In the national normative sample, 52% reported an elevated level of protection, 24 points higher than Hamilton County. Students who reported low scores on this scale have fewer opportunities to interact closely with positive adult role models in their neighborhoods and to participate in sports, clubs and other prosocial community activities. As a result, these students are less likely to form strong community bonds that encourage the adoption of prosocial norms and values.

- Additionally, middle school students in Hamilton County also reported a low level of protection for the *School Opportunities for Prosocial Involvement* scale. Their score of 46% was one point lower than the statewide average of 47%. In the national normative sample, 57% reported an elevated level of protection, 11 points higher than Hamilton County. Students with low scores on this scale have fewer opportunities to interact closely with teachers, get involved with special projects and activities in the classroom, and participate in sports, clubs and other school activities outside of the classroom. This lack of involvement deprives students of the opportunity to form healthy relationships with teachers and prosocial peers.
- High school students in Hamilton County also reported a low level of protection for the *School Rewards for Prosocial Involvement* scale. Their score of 42% was 14 points lower than the statewide average of 56%. In the national normative sample, 58% reported an elevated level of protection, 16 points higher than Hamilton County.

Highest Risk Factor Scales

Community Domain:

- Within the Community Domain, both middle school and high school students in Hamilton County reported the highest level of risk for the *Community Disorganization* scale. Among middle school students, 61% reported an elevated level of risk, 13 points higher than the statewide average of 48%. In the national normative sample, 47% reported an elevated level of risk, 14 points lower than Hamilton County. Among high school students, 60% reported an elevated level of risk, 11 points

higher than the statewide average of 49%. In the national normative sample, 47% reported an elevated level of risk, 13 points lower than Hamilton County. Students with high scores on this scale reported the presence of abandoned buildings, fighting, drug selling and other indicators of social turmoil in their neighborhoods. Not surprisingly, communities experiencing these problems tend to suffer from higher rates of juvenile crime.

Family Domain:

- Within the Family Domain, both middle school and high school students in Hamilton County reported the highest level of risk for the *Poor Family Management* scale. Among middle school students, 52% reported an elevated level of risk, three points higher than the statewide average of 49%. In the national normative sample, 44% reported an elevated level of risk, eight points lower than Hamilton County. Among high school students, 52% reported an elevated level of risk, three points higher than the statewide average of 49%. In the national normative sample, 45% reported an elevated level of risk, seven points lower than Hamilton County. Students with high scores on this scale live in families in which child supervision is a lower priority. Parents in these families place less emphasis on making sure homework is completed on time, monitoring children's activities outside of the home, and setting clear rules about alcohol and drug use. Delinquent behaviors such as drug use, skipping school and carrying a weapon are also less likely to be noticed and punished.
- High school students also reported the highest level of risk for one scale within the Family Domain, *Family History of Antisocial Behavior*. Their score of 52% was nine points higher than the statewide average of 43%. In the national normative sample, 45% reported an elevated level of protection, seven points lower than Hamilton County. Students with high scores on this scale indicated that their families have a history of antisocial behavior, such as substance use or criminal behavior. When family members model the use of alcohol, tobacco or other drugs, their children are more likely to initiate ATOD use, and if they start using, they are likely to use more frequently. For example, research has shown that having a household member who smokes cigarettes nearly doubles the chances

that a child either has smoked or expects to start smoking.

School Domain:

- Within the School Domain, middle school students in Hamilton County reported the highest level of risk for the *Lack of Commitment to School* scale. Their score of 57% was two points higher than the statewide average of 55%. In the national normative sample, 47% reported an elevated level of protection, 10 points lower than Hamilton County. Students with high scores on this scale have negative feelings about school, and are less likely to report that school work is meaningful or important for their future. Young people who have lost this commitment to school are at higher risk for a variety of problem behaviors.
- High school students in Hamilton County reported the highest level of risk for the *Poor Academic Performance* scale. Their score of 50% was six points higher than the statewide average of 44%. In the national normative sample, 48% reported an elevated level of protection, two points lower than Hamilton County. Beginning in the late elementary grades, poor academic performance increases the risk of drug use, delinquency, violence and school dropout. Children fail for many reasons, but it appears that the experience of failure increases the risk of these problem behaviors.

Peer and Individual Domain:

- Within the Peer and Individual Domain, middle school students in Hamilton County reported the highest level of risk for the *Low Perceived Risks of Drug Use* scale. Their score of 65% was 24 points higher than the statewide average of 41%. In the national normative sample, 40% reported an elevated level of protection, 25 points lower than Hamilton County. Students with high scores on this scale believe that alcohol, cigarette and marijuana use pose only a low to moderate risk. When young people perceive the risk of drug use to be low they are more likely to experiment with these substances. In many communities, beliefs about the risks associated with ATOD use are a leading indicator of future usage patterns. That is, when perceived risk goes up, use often goes down. Alternatively, when perceived risk goes down, use often goes up.

- High school students in Hamilton County reported the highest level of risk for the *Friends' Delinquent Behavior* scale. Their score of 55% was 11 points higher than the statewide average of 44%. In the national normative sample, 41% reported an elevated level of protection, 14 points lower than Hamilton County. Students with high scores on this scale have a greater number of friends who are involved with antisocial behaviors like selling drugs or carrying a weapon, or who have gotten into trouble with school officials or police. Young people who associate with delinquent peers are more likely to become involved with delinquent behavior themselves.

Strengths to Build on

In addition to specifying problem areas, the prioritization process also benefits from identifying the scales for which students reported the highest levels of protection and the lowest levels of risk. These areas represent strengths that Hamilton County may wish to build on.

Highest Protective Factor Scales:

- Across all 10 protective factor scales, middle school students in Hamilton County reported the highest level of protection for the *Family Opportunities for Prosocial Involvement* scale. Their score of 59% was three points higher than the statewide average of 56%. In the national normative sample, 59% reported an elevated level of protection, the same as Hamilton County. High scores on this scale indicate that activities that promote family attachment—such as family recreation and involvement in family decisions—are available to students. These prosocial activities reinforce family bonds and cause students to more easily adopt the norms projected by their families. For instance, children whose parents have high expectations for their school achievement are less likely to drop out of school.
- High school students in Hamilton County reported the highest level of protection for the *Community Rewards for Prosocial Involvement* scale. Their score of 74% was 13 points higher than the statewide average of 61%. In the national normative sample, 63% reported an elevated level of protection, 11 points lower than Hamilton County. Students who reported high scores on this scale receive encouragement and praise from neighbors and other members of

their communities. With this type of support, young people may be more likely to accept the guidance available from the positive role models in their communities.

- Similarly, middle school students in Hamilton County also reported a high level of protection for the *Community Rewards for Prosocial Involvement* scale. Their score of 57% was six points higher than the statewide average of 51%. In the national normative sample, 56% reported an elevated level of protection, one point lower than Hamilton County.
- High school students in Hamilton County also reported a high level of protection for the *Religiosity* scale. Their score of 70% was nine points higher than the statewide average of 61%. In the national normative sample, 62% reported an elevated level of protection, eight points lower than Hamilton County. Students who reported high scores on this scale attend religious services and activities more frequently. As a result, they are more likely to benefit from relationships with prosocial adults and peers, opportunities for prosocial activities, and the teaching of prosocial values that are often part of religious involvement.

Lowest Risk Factor Scales:

- Across all 23 risk factor scales, both middle school and high school students in Hamilton County reported the lowest level of risk for the *Parental Attitudes Favorable toward ATOD Use* scale. Among middle school students, 26% reported an elevated level of risk, four points higher than the statewide average of 22%. In the national normative sample, 23% reported an elevated level of risk, three points lower than Hamilton County. Among high school students, 32% reported an elevated level of risk, six points lower than the statewide average of 38%. In the national normative sample, 41% reported an elevated level of risk, nine points higher than Hamilton County. Students with low scores on this scale have parents who strenuously disapprove of youth ATOD use. Parental attitudes is one of the strongest predictors of youth ATOD use.
- High school students also reported the lowest level of risk for one scale, *Family Conflict*. Their score of 32% was five points lower than the statewide average of 37%. In the national normative sample, 37% reported an elevated

level of protection, five points higher than Hamilton County. Students with low scores on this scale live in families where serious arguments are less common. Bonding between family members, especially between children and their parents or guardians, is a key component in the development of positive social norms. Low levels of family conflict promote the development of these bonds, and decrease the likelihood that young people will engage in illegal drug use and other forms of delinquent behavior.

- Middle school students also reported a low level of risk for one other scale, *Perceived Availability of Handguns*. Their score of 32% was five points higher than the statewide average of 27%. In the national normative sample, 25% reported an elevated level of protection, seven points lower than Hamilton County. A low score on this scale indicates that it is difficult for students to get a handgun.

Further Considerations

In addition to identifying the highest risk factor scales and lowest protective factor scales, the prevention prioritization process may include several supplemental steps, such as:

- Compare county-level results to state-level results. Risk and protective factor scale scores from the statewide *FYSAS* are presented in Tables 18 and 19. A comparison to statewide results may reveal additional strengths and weaknesses in Hamilton County's risk and protective factor profile. For example, a risk factor scale that is not the most elevated within its domain may be designated as a target for prevention programming because it is notably higher in Hamilton County than across the state as a whole.
- Review the prevalence of ATOD use and other antisocial behaviors in your community. A high rate of alcohol use, for example, may dictate a different prevention strategy than a high rate of youth violence. The table on the second page in Appendix C provides a resource for this analysis by showing the behavioral outcomes that have been linked, in multiple longitudinal studies, to each risk factor.
- Use archival data to fill the gaps in the *FYSAS* data, and to support findings in the survey. For example, Teen Pregnancy and School Drop-Out

are problem behaviors not measured by the survey that may influence prevention planning. Archival data are information sources that have already been collected and/or documented at the local, state or national level. They can include records that are kept by governmental and other agencies, and records that are normally kept as part of the operation of an institution or organization.

- Consider which risk and protective factors the community can realistically tackle at this time. Some factors may be too big, or there may be other efforts already underway in the community to address them. If your community does not have extensive financial or human resources, then it may be appropriate to narrow the list down to one or two priority factors.
- Consider political, social and economic factors in the community. What is best for the community? Which risk and protective factors would policy makers find acceptable to address at this time?

Choosing Effective Prevention Strategies

After completing the prioritization process and identifying key risk and protective factors for focused prevention efforts, the next step for communities is to select research-based, proven-effective programs that target these problem areas.

A major breakthrough in the field of positive youth development in the past two decades has been the development and testing of programs, policies and practices that are shown to work to reduce adolescent drug use, violence, risky sexual behavior and school failure. State and national agencies have become increasingly interested in and committed to programs, policies and practices that have been rigorously tested for effectiveness.

Prevention strategies identified as "tested, effective" are those that have been tested in well-controlled trials comparing schools, families, young people or communities that received the strategy with those that did not. Results of those trials showed that those who received the strategies were better off than those that did not, in terms of lower risk, greater protection and better behavioral outcomes.

A good first step in the strategy selection process is to review published lists of tested, effective prevention resources. A number of organizations have constructed lists that link research-based programs with the risk and protective factors they have been shown to effectively address. Additional

information on the four lists presented below is available in Appendix D of this report.

- The *Communities That Care* Prevention Strategies Guide
- The U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration's (SAMHSA) Model Programs list
- The University of Colorado at Boulder's Blueprints for Violence Prevention initiative, sponsored by the Office of Juvenile Justice and Delinquency Prevention (OJJDP)
- The Western Center for the Application of Prevention Technologies (CAPT) list of Best Practices and Promising Practices

In addition to selecting research-based, proven-effective programs to target areas of low protection and high risk, communities should also consider the impact of environmental factors and public policies. For example, a strategy to combat a high level of *Perceived Availability of Drugs* might incorporate changes to local laws or provide resources to strengthen the enforcement of existing laws.

Special Topics

Several analyses were conducted to investigate alcohol, tobacco and other drug (ATOD) use results. These include early initiation of ATOD use and attitudes toward ATOD use (perceived risk of harm, personal disapproval and peer approval).

Early Initiation of ATOD Use

Students were asked to report on when they began using alcohol, cigarettes and marijuana. Early initiation for these drugs is of special importance, since they are often precursors to the use of harder drugs, such as methamphetamine and cocaine. The question related to cigarettes is "How old were you when you first smoked a cigarette, even just a puff?" The question about marijuana is "How old were you when you first smoked marijuana?" Two questions about alcohol were asked, one asking when the student first "had more than a sip or two of beer, wine or hard liquor (for example, vodka, whiskey or gin)" and one asking the student when he or she "began drinking alcoholic beverages regularly, that is, at least once or twice a month."

Tables 13 and 17 present the percentage of high school students, age 14 years or older, who started using alcohol, cigarettes or marijuana at age 13 or younger. This percentage is the early initiation rate.

Hamilton County high school students reported the highest rate of early ATOD initiation for "more than a sip or two" of alcohol (40.6%), followed by cigarette use (30.0%), marijuana use (9.3%) and drinking at least once a month (7.4%).

Perceived Risk of Harm

Perception of risk is an important determinant in the decision-making process young people go through when deciding whether or not to use alcohol, tobacco or other drugs. Evidence also suggests that the perceptions of the risks and benefits associated with drug use sometimes serve as a leading indicator of future drug use patterns in a community (Bachman, Johnston, O'Malley & Humphrey, 1986). Tables 14 and 17 present prevalence rates for surveyed Hamilton County students assigning "great risk" of harm to four drug use behaviors: near daily use of alcohol, daily use of cigarettes, regular use of marijuana, and trying marijuana once or twice.

Surveyed Hamilton County students assigned the highest risk of harm to regular use of marijuana (55.2%), followed by daily use of cigarettes (53.3%), near daily use of alcohol (33.0%) and trying marijuana once or twice (32.1%).

Daily Use of Alcohol. In Hamilton County, 33.0% of students reported that having one or more drinks nearly every day would pose a "great risk" of harm. This is down 6.6 percentage points from 2000. Middle school students reported a rate of 30.3% and high school students reported a rate of 34.8%. Across the state as a whole, 41.9% of students reported that near daily use of alcohol would pose a "great risk" of harm.

Daily Use of Cigarettes. In Hamilton County, 53.3% of students reported that smoking a pack or more of cigarettes every day would pose a "great risk" of harm. This is down 7.1 percentage points from 2000. Middle school students reported a rate of 51.4% and high school students reported a rate of 54.6%. Across the state as a whole, 67.6% of students reported that near daily use of cigarettes would pose a "great risk" of harm.

Regular Use of Marijuana. In Hamilton County, 55.2% of students reported that smoking marijuana regularly would pose a "great risk" of harm. This is down 3.2 percentage points from 2000. Middle

.....

school students reported a rate of 54.0% and high school students reported a rate of 56.0%. Across the state as a whole, 59.8% of students reported that smoking marijuana regularly would pose a “great risk” of harm.

Trying Marijuana Once or Twice. In Hamilton County, 32.1% of students reported that trying marijuana once or twice would pose a “great risk” of harm. This is down 2.5 percentage points from 2000. Middle school students reported a rate of 31.6% and high school students reported a rate of 32.5%. Across the state as a whole, 32.5% of students reported trying marijuana once or twice would pose a “great risk” of harm.

Personal Disapproval

In addition to perceptions of risk, personal approval or disapproval of drugs has been linked to the prevalence of ATOD use (Bachman, Johnston & O’Malley, 1996). Personal disapproval was measured by asking students how wrong it would be for someone their age to drink alcohol regularly, smoke cigarettes, smoke marijuana, or use other illicit drugs (“LSD, cocaine, amphetamines or another illegal drug”). The rates presented in Tables 14 and 17 represent the percentages of students who thought it would be “wrong” or “very wrong” to use each drug.

Surveyed Hamilton County students were most likely to disapprove of other illicit drug use (93.4%), followed by smoking marijuana (83.3%), smoking cigarettes (75.6%) and drinking alcohol regularly (65.1%).

Smoking Cigarettes. In Hamilton County, 75.6% of students reported that they think it would be “wrong” or “very wrong” for someone their age to smoke cigarettes. This is up 5.1 percentage points from 2000. Middle school students reported a rate of 79.5% and high school students reported a rate of 73.0%. Across the state as a whole, 80.5% of students reported disapproval of smoking cigarettes.

Drinking Alcohol Regularly. In Hamilton County, 65.1% of students reported that they think it would be “wrong” or “very wrong” for someone their age to drink alcohol regularly. This is up 0.5 percentage points from 2000. Middle school students reported a rate of 67.9% and high school students reported a rate of 63.1%. Across the state as a whole, 65.4% of students reported disapproval of drinking alcohol regularly.

Smoking Marijuana. In Hamilton County, 83.3% of students reported that they think it would be “wrong”

or “very wrong” for someone their age to smoke marijuana. This is up 3.7 percentage points from 2000. Middle school students reported a rate of 82.4% and high school students reported a rate of 84.0%. Across the state as a whole, 80.2% of students reported disapproval of smoking marijuana.

Using Other Illicit Drugs. In Hamilton County, 93.4% of students reported that they think it would be “wrong” or “very wrong” for someone their age to use other illicit drugs. This is down 2.0 percentage points from 2000. Middle school students reported a rate of 89.6% and high school students reported a rate of 96.0%. Across the state as a whole, 94.9% of students reported disapproval of using other illicit drugs.

Peer Approval

In addition to perceived risk of harm and disapproval, expectations of how one’s peer group might react have an impact on whether or not young people choose to use drugs. The data presented in Tables 14 and 17 show the percentage of students who said that there is a “pretty good” or “very good” chance that they would be seen as cool if they smoked cigarettes, drank alcohol regularly or smoked marijuana.

Drinking Alcohol Regularly. In Hamilton County, 11.1% of students reported that there is a “pretty good” or a “very good” chance that they would be seen as cool if they drank alcohol regularly. This is down 4.4 percentage points from 2000. Middle school students reported a rate of 8.7% and high school students reported a rate of 12.7%. Across the state as a whole, 12.0% of students reported peer approval of drinking alcohol regularly.

Smoking Cigarettes. In Hamilton County, 8.6% of students reported that there is a “pretty good” or a “very good” chance that they would be seen as cool if they smoked cigarettes. This is down 1.8 percentage points from 2000. Middle school students reported a rate of 7.5% and high school students reported a rate of 9.4%. Across the state as a whole, 5.8% of students reported peer approval of smoking cigarettes.

Smoking Marijuana. In Hamilton County, 9.6% of students reported that there is a “pretty good” or a “very good” chance that they would be seen as cool if they smoked marijuana. This is down 1.7 percentage points from 2000. Middle school students reported a rate of 7.6% and high school students reported a rate of 11.0%. Across the state as a whole, 11.3% of students reported peer approval of smoking marijuana.

.....

Extracurricular Activities

In 2006 a new item was added to the *FYSAS* questionnaire that measures participation in five extracurricular activities: school sports, organized sports outside of school, school band, school clubs, and community clubs. Results for these items are presented in Table 15. Participation in these activities help students build stronger ties to their school and community. Through these connections students are also more likely to develop attachments to prosocial peers and to positive adult role models. Since these bonds encourage students to engage in developmentally positive activity, they serve as a buffer against ATOD use and other antisocial behaviors. Please note that this measure is similar to two of the protective factor scales discussed earlier in this report: *Community Opportunities for Prosocial Involvement* and *School Opportunities for Prosocial Involvement*.

School Sports. In Hamilton County, 59.1% of students reported participation in school sports. Middle school students participated at a rate of 50.7% and high school students participated at a rate of 64.9%. Across the state as a whole, the rate of participation was 37.0%.

Organized Sports Outside of School. In Hamilton County, 26.7% of students reported participation in organized sports outside of school. Middle school students participated at a rate of 31.2% and high school students participated at a rate of 23.5%. Across the state as a whole, the rate of participation was 33.7%.

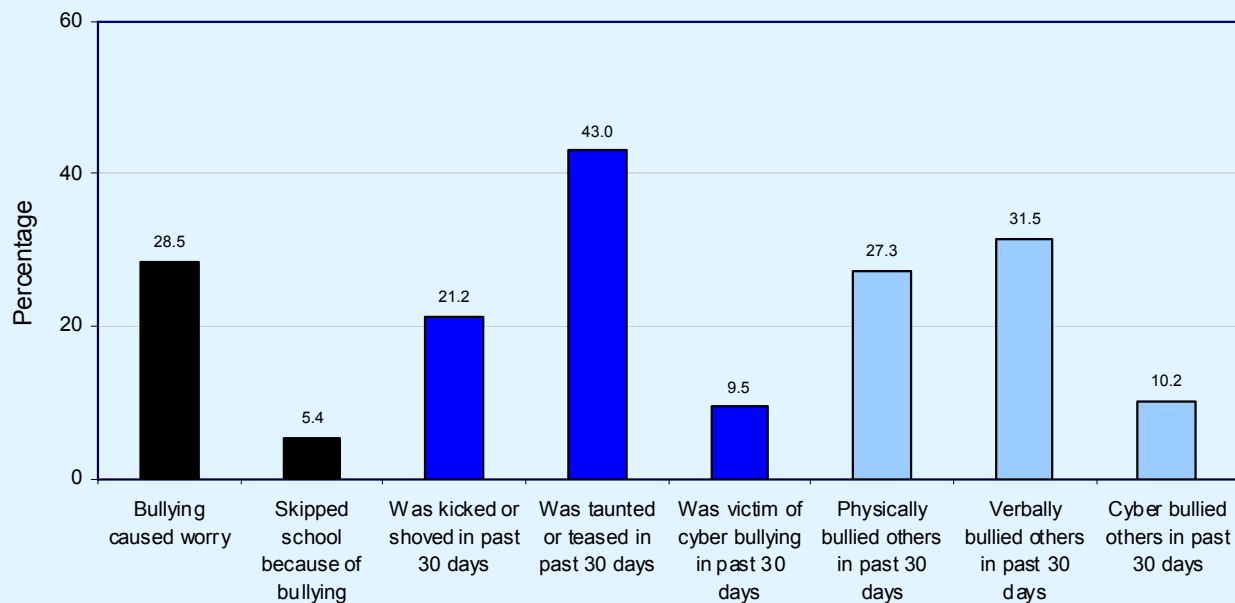
School Band. In Hamilton County, 6.4% of students reported participation in school band. Middle school students participated at a rate of 10.0% and high school students participated at a rate of 3.8%. Across the state as a whole, the rate of participation was 10.0%.

School Clubs. In Hamilton County, 25.1% of students reported participation in school clubs. Middle school students participated at a rate of 16.2% and high school students participated at a rate of 31.4%. Across the state as a whole, the rate of participation was 26.4%.

Community Clubs. In Hamilton County, 11.0% of students reported participation in community clubs. Middle school students participated at a rate of 6.1% and high school students participated at a rate of 14.3%. Across the state as a whole, the rate of participation was 12.4%.

**Graph
13**

Bullying-related behaviors among Hamilton County MIDDLE SCHOOL students, 2008



Bullying Behavior

In 2008 a new item set was added to the *FYSAS* middle school questionnaire that assesses student involvement with bullying. The new items include (1) worry or fear due to bullying, (2) skipping school because of being bullied, (3) being physically bullied (kicking, shoving, stealing, etc.), (4) being verbally bullied (taunting, teasing, name-calling, etc.), (5) being cyber bullied (mean emails, mean text messages, etc.), (6) physically bullying others, (7) verbally bullying others, and (8) cyber bullying others. Table 12 and Graph 13 present prevalence rates for these behaviors.

Worry or Fear. In Hamilton County, 28.5% of middle school students reported that bullying causes them to be “somewhat” or “a whole lot” worried or fearful. Across the state as a whole, 30.1% reported being worried or fearful.

Skipping School. In Hamilton County, 5.4% of middle school students reported skipping school because someone was bullying them. Across the state as a whole, 2.9% reported skipping school because of bullying.

Was Physically Bullied. In Hamilton County, 21.2% of middle school students reported experiencing

“somewhat” or “a whole lot” of physical bullying in the past 30 days. Across the state as a whole, 20.7% reported experiencing physical bullying.

Was Verbally Bullied. In Hamilton County, 43.0% of middle school students reported experiencing “somewhat” or “a whole lot” of verbal bullying in the past 30 days. Across the state as a whole, 41.3% reported experiencing verbal bullying.

Was Cyber Bullied. In Hamilton County, 9.5% of middle school students reported experiencing “somewhat” or “a whole lot” of cyber bullying in the past 30 days. Across the state as a whole, 8.2% reported experiencing cyber bullying.

Physically Bullied Others. In Hamilton County, 27.3% of middle school students reported physically bullying others “somewhat” or “a whole lot” in the past 30 days. Across the state as a whole, 15.8% reported physically bullying others.

Verbally Bullied Others. In Hamilton County, 31.5% of middle school students reported verbally bullying others “somewhat” or “a whole lot” in the past 30 days. Across the state as a whole, 28.0% reported verbally bullying others.



Cyber Bullied Others. In Hamilton County, 10.2% of middle school students reported cyber bullying others “somewhat” or “a whole lot” in the past 30 days. Across the state as a whole, 6.4% reported cyber bullying others.

Appendix A

Detailed Tables

Table 1. Major demographic characteristics of surveyed Hamilton County youth and Florida Statewide youth

	Hamilton County			Florida Statewide	
	N	%		N	%
Sex					
Female	162	53.8		43,913	48.0
Male	128	42.5		45,413	49.6
Race/Ethnic group					
African American	125	41.5		16,647	18.2
American Indian	5	1.7		1,011	1.1
Asian	3	1.0		1,994	2.2
Hispanic/Latino	33	11.0		20,767	22.7
Native Hawaiian/Pacific Islander	0	0.0		490	0.5
Other/Multiple	33	11.0		12,821	14.0
White, non-Hispanic	102	33.9		37,000	40.4
Age					
10	0	0.0		98	0.1
11	13	4.3		3,294	3.6
12	30	10.0		10,971	12.0
13	44	14.6		13,299	14.5
14	48	15.9		14,098	15.4
15	48	15.9		14,339	15.7
16	40	13.3		13,913	15.2
17	41	13.6		12,824	14.0
18	31	10.3		7,552	8.3
19 or older	5	1.7		718	0.8
Grade					
6th	50	16.6		13,265	14.5
7th	49	16.3		13,552	14.8
8th	34	11.3		12,869	14.1
9th	53	17.6		14,738	16.1
10th	42	14.0		13,593	14.9
11th	35	11.6		12,297	13.4
12th	38	12.6		11,157	12.2
Overall Middle School	133	44.2		39,686	43.4
Overall High School	168	55.8		51,785	56.6
Total	301	100.0		91,471	100.0

Note: Some categories do not sum to 100% of the total due to missing values (e.g., not all survey questions were answered). In addition, rounding can produce totals that do not equal 100%. "N" represents the number of valid cases. In this table, county data are unweighted while statewide data are weighted.

Table 2. Percentages of Hamilton County youth and Florida Statewide youth who reported having used various drugs in their lifetimes

	Hamilton County							Florida Statewide						
	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>
Alcohol	41.0	59.1	57.2	48.3	45.7	55.4	51.8	36.3	66.2	54.9	51.5	37.4	65.6	53.2
Cigarettes	28.9	35.7	33.6	34.0	28.4	37.7	33.0	17.4	34.4	27.4	26.4	17.1	34.3	27.0
Smokeless Tobacco	--	28.4	17.4	40.4	--	28.8	--	--	12.5	6.9	18.1	--	12.0	--
Marijuana or Hashish	9.5	23.2	13.4	22.3	9.5	23.8	17.5	8.5	30.8	20.0	22.1	8.4	30.5	21.1
Inhalants	12.5	10.5	14.4	9.1	15.4	8.7	11.3	13.2	10.1	12.9	10.0	13.0	10.5	11.4
Over-The-Counter Drugs	6.3	--	6.3	6.6	7.0	--	--	4.9	--	5.9	3.9	4.6	--	--
Any illicit drug	22.6	34.1	28.1	30.4	24.9	31.9	29.3	21.2	37.5	30.7	30.1	21.1	37.4	30.4
Any illicit drug other than marijuana	18.8	20.1	18.0	21.0	21.1	18.8	19.6	17.5	23.1	21.7	19.6	17.4	23.0	20.7
Alcohol only	22.1	29.4	32.9	21.4	25.4	25.9	26.4	20.8	31.7	28.0	25.9	21.8	31.3	26.9
Alcohol or any illicit drug	44.8	64.0	61.2	52.3	50.4	58.2	56.1	41.9	68.9	58.5	55.7	42.7	68.4	57.1
Any illicit drug, but no alcohol	5.0	5.0	4.4	4.9	5.9	2.8	5.0	5.8	3.0	3.9	4.6	5.6	3.1	4.2

Note: The first set of data rows show results for alcohol, tobacco, marijuana, inhalants and over-the-counter drugs. The second set of data rows show results for various combinations of drugs. The symbol "--" indicates that data are not available.

Table 3. Percentages of Hamilton County youth and Florida Statewide youth who reported having used various drugs in their lifetimes

	Hamilton County							Florida Statewide						
	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>
Club Drugs ¹	1.8	--	0.0	3.3	0.9	--	--	1.6	--	1.4	1.8	1.4	--	--
LSD, PCP or Mushrooms	2.6	--	0.0	4.8	1.8	--	--	1.5	--	1.1	1.9	1.4	--	--
Cocaine or Crack Cocaine	0.8	--	0.0	0.0	0.9	--	--	1.8	--	1.7	1.9	1.7	--	--
Ecstasy	--	0.7	0.0	1.7	--	1.0	--	--	4.9	4.9	5.1	--	4.7	--
Rohypnol	--	0.0	0.0	0.0	--	0.0	--	--	1.2	1.0	1.4	--	1.2	--
GHB	--	1.6	0.0	1.5	--	0.9	--	--	0.7	0.4	0.9	--	0.6	--
Ketamine	--	1.6	0.0	1.5	--	0.9	--	--	0.8	0.6	0.9	--	0.7	--
LSD or PCP	--	0.7	0.0	1.6	--	1.0	--	--	3.0	2.3	3.7	--	2.9	--
Hallucinogenic Mushrooms	--	2.2	1.2	3.7	--	3.0	--	--	5.3	3.9	6.8	--	5.1	--
Cocaine	--	4.2	0.7	8.6	--	5.8	--	--	5.5	5.5	5.6	--	5.4	--
Crack Cocaine	--	1.5	0.0	3.4	--	2.1	--	--	1.8	1.8	1.7	--	1.7	--
Methamphetamine	0.0	1.7	0.0	0.9	0.0	0.9	1.0	1.2	1.5	1.3	1.4	1.2	1.5	1.4
Heroin	1.0	2.0	0.0	3.3	0.0	3.4	1.6	0.8	1.0	0.8	1.1	0.8	1.0	0.9
Depressants	3.3	4.4	3.1	5.1	3.1	4.4	3.9	2.4	8.7	6.5	5.4	2.5	8.5	6.0
Prescription Pain Relievers	6.1	9.4	6.5	10.2	5.8	9.5	8.1	4.9	10.4	8.3	7.6	4.8	10.3	8.0
Prescription Amphetamines	2.6	2.5	1.4	3.9	2.5	2.4	2.5	1.6	5.3	3.8	3.5	1.6	5.0	3.7
Steroids	1.7	1.7	1.4	2.2	0.7	1.6	1.7	0.8	1.2	0.6	1.4	0.8	1.2	1.0

Note: The first set of data rows show results for items that are on the middle school questionnaire. The second set of data rows show results for items that are on the high school questionnaire. The third set of data rows show results for items that are on both questionnaires. The symbol "--" indicates that data are not available.

¹ Ecstasy, Rohypnol, GHB and ketamine are provided as examples in the question about club drugs.

Table 4. Percentages of Hamilton County youth and Florida Statewide youth who reported having used various drugs in the past 30 days

	Hamilton County							Florida Statewide						
	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>
Alcohol	20.8	33.3	29.7	28.2	21.8	34.6	28.1	17.3	39.5	30.6	29.0	17.8	38.6	29.8
Binge Drinking	18.2	23.2	20.4	22.8	18.0	23.5	21.2	6.2	21.5	14.0	15.6	6.4	20.5	14.8
Cigarettes	7.5	11.7	8.1	12.6	6.4	13.4	10.0	4.7	12.6	8.8	9.4	4.5	12.2	9.1
Smokeless Tobacco	--	14.4	7.7	22.7	--	17.0	--	--	5.3	2.4	8.3	--	5.0	--
Marijuana or Hashish	6.3	10.0	4.2	13.6	5.1	12.7	8.5	4.4	16.2	9.8	12.3	4.3	16.1	11.1
Inhalants	6.1	3.2	4.9	4.3	6.9	2.7	4.4	5.2	2.2	4.1	2.8	4.9	2.4	3.5
Over-The-Counter Drugs	4.1	--	5.1	3.5	4.5	--	--	2.2	--	2.6	1.8	2.1	--	--
Any illicit drug	12.9	16.3	10.7	19.4	12.4	18.4	14.9	10.6	19.9	15.2	16.3	10.3	19.8	15.8
Any illicit drug other than marijuana	10.6	9.2	6.6	12.6	10.1	10.2	9.8	8.0	9.7	9.1	8.7	7.8	9.5	8.9
Alcohol only	12.7	21.6	22.6	14.2	14.2	20.9	18.0	11.4	24.0	19.7	17.4	12.0	23.5	18.5
Alcohol or any illicit drug	24.8	36.3	31.9	31.9	25.6	37.5	31.5	21.7	43.3	34.6	33.2	22.0	42.7	33.9
Any illicit drug, but no alcohol	4.7	3.3	2.7	4.2	4.5	3.0	3.8	4.7	4.2	4.2	4.5	4.5	4.4	4.4

Note: The first set of data rows show results for alcohol, tobacco, marijuana, inhalants and over-the-counter drugs. The second set of data rows show results for various combinations of drugs. The symbol "--" indicates that data are not available.

Table 5. Percentages of Hamilton County youth and Florida Statewide youth who reported having used various drugs in the past 30 days

	Hamilton County							Florida Statewide						
	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>
Club Drugs ¹	0.0	--	0.0	0.0	0.0	--	--	0.6	--	0.5	0.7	0.5	--	--
LSD, PCP or Mushrooms	1.9	--	0.0	3.5	1.0	--	--	0.6	--	0.3	0.8	0.5	--	--
Cocaine or Crack Cocaine	0.0	--	0.0	0.0	0.0	--	--	0.6	--	0.5	0.7	0.5	--	--
Ecstasy	--	0.0	0.0	0.0	--	0.0	--	--	1.5	1.2	1.9	--	1.4	--
Rohypnol	--	0.0	0.0	0.0	--	0.0	--	--	0.4	0.3	0.6	--	0.4	--
GHB	--	1.7	0.0	1.6	--	1.0	--	--	0.3	0.1	0.4	--	0.2	--
Ketamine	--	1.7	0.0	1.6	--	1.0	--	--	0.2	0.1	0.3	--	0.2	--
LSD or PCP	--	0.0	0.0	0.0	--	0.0	--	--	1.1	0.7	1.5	--	1.1	--
Hallucinogenic Mushrooms	--	2.3	1.2	3.9	--	3.1	--	--	1.5	0.9	2.0	--	1.3	--
Cocaine	--	1.6	0.0	3.7	--	2.2	--	--	1.6	1.4	1.7	--	1.5	--
Crack Cocaine	--	0.6	0.0	1.5	--	0.9	--	--	0.5	0.4	0.6	--	0.5	--
Methamphetamine	0.0	1.0	0.0	0.0	0.0	0.0	0.6	0.6	0.5	0.4	0.6	0.5	0.5	0.5
Heroin	0.0	1.3	0.0	1.7	0.0	1.7	0.8	0.4	0.3	0.2	0.5	0.3	0.3	0.3
Depressants	2.0	1.1	0.5	2.5	1.9	0.9	1.5	1.0	3.0	2.4	2.0	1.0	3.0	2.1
Prescription Pain Relievers	3.8	2.7	1.9	4.7	2.6	4.4	3.1	2.3	3.9	3.2	3.2	2.3	3.8	3.2
Prescription Amphetamines	2.7	1.9	0.8	3.9	2.6	2.5	2.2	0.6	1.6	1.0	1.3	0.7	1.5	1.2
Steroids	1.1	0.0	0.0	0.9	0.0	0.9	0.4	0.3	0.5	0.2	0.7	0.3	0.5	0.4

Note: The first set of data rows show results for items that are on the middle school questionnaire. The second set of data rows show results for items that are on the high school questionnaire. The third set of data rows show results for items that are on both questionnaires. The symbol "--" indicates that data are not available.

¹ Ecstasy, Rohypnol, GHB and ketamine are provided as examples in the question about club drugs.

Table 6. Lifetime trend in alcohol, tobacco and other drug use for Hamilton County youth, 2000, 2002, 2004, 2006 and 2008

	2000			2002			2004			2006			2008		
	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>
Alcohol	34.9	62.7	50.5	--	--	--	42.4	63.1	52.9	38.6	61.5	51.5	41.0	59.1	51.8
Cigarettes	46.5	62.5	55.7	--	--	--	32.7	55.7	44.2	29.8	51.7	42.0	28.9	35.7	33.0
Smokeless Tobacco	24.1	36.5	31.5	--	--	--	20.5	27.1	23.7	23.9	28.9	26.6	--	28.4	--
Marijuana or Hashish	17.2	35.2	27.1	--	--	--	12.1	34.0	23.1	14.4	33.2	25.4	9.5	23.2	17.5
Inhalants	13.7	15.5	14.9	--	--	--	12.2	9.0	10.5	11.6	7.9	9.5	12.5	10.5	11.3
Over-The-Counter Drugs	--	--	--	--	--	--	--	--	--	--	--	--	6.3	--	--
Any illicit drug	--	--	--	--	--	--	19.3	40.2	29.8	22.2	37.6	31.2	22.6	34.1	29.3
Any illicit drug other than marijuana	--	--	--	--	--	--	15.9	24.6	20.2	16.5	17.6	17.0	18.8	20.1	19.6
Alcohol only	--	--	--	--	--	--	28.5	26.6	27.6	24.4	25.8	25.1	22.1	29.4	26.4
Alcohol or any illicit drug	--	--	--	--	--	--	46.6	66.0	56.4	46.8	62.7	56.0	44.8	64.0	56.1
Any illicit drug, but no alcohol	--	--	--	--	--	--	4.1	3.9	4.0	8.8	3.9	6.1	5.0	5.0	5.0

Note: The first set of data rows show results for alcohol, tobacco, marijuana, inhalants and over-the-counter drugs. The second set of data rows show results for various combinations of drugs. Results for combinations of drugs are not presented for 2000 because new ATOD items were added between 2000 and 2002. The symbol "--" indicates that data are not available.

Table 7. Lifetime trend in alcohol, tobacco and other drug use for Hamilton County youth, 2000, 2002, 2004, 2006 and 2008

	2000			2002			2004			2006			2008		
	Middle School	High School	Total	Middle School	High School	Total	Middle School	High School	Total	Middle School	High School	Total	Middle School	High School	Total
Club Drugs ¹	--	--	--	--	--	--	--	--	--	--	--	--	1.8	--	--
LSD, PCP or Mushrooms	--	--	--	--	--	--	--	--	--	--	--	--	2.6	--	--
Cocaine or Crack Cocaine	--	--	--	--	--	--	--	--	--	--	--	--	0.8	--	--
Ecstasy	--	--	--	--	--	--	3.0	10.6	6.8	1.9	1.3	1.6	--	0.7	--
Rohypnol	--	--	--	--	--	--	0.6	0.8	0.7	0.0	0.0	0.0	--	0.0	--
GHB ²	--	--	--	--	--	--	0.5	0.0	0.2	0.9	0.5	0.7	--	1.6	--
Ketamine	--	--	--	--	--	--	0.0	1.3	0.7	0.0	0.0	0.0	--	1.6	--
LSD or PCP ³	1.5	5.8	3.9	--	--	--	1.4	2.2	1.8	0.0	1.8	1.0	--	0.7	--
Hallucinogenic Mushrooms	--	--	--	--	--	--	3.1	10.7	7.0	3.0	3.3	3.2	--	2.2	--
Cocaine	1.2	6.0	3.9	--	--	--	1.8	8.8	5.4	4.0	3.8	3.9	--	4.2	--
Crack Cocaine	2.0	2.9	2.5	--	--	--	1.4	1.9	1.6	1.9	0.0	0.8	--	1.5	--
Methamphetamine	0.7	2.5	1.7	--	--	--	1.3	1.8	1.5	0.0	0.0	0.0	0.0	1.7	1.0
Heroin	1.2	0.0	0.5	--	--	--	1.3	1.3	1.3	1.0	0.0	0.4	1.0	2.0	1.6
Depressants ⁴	0.0	2.9	1.6	--	--	--	1.6	9.6	5.7	1.8	0.8	1.2	3.3	4.4	3.9
Prescription Pain Relievers ⁵	--	--	--	--	--	--	4.6	11.8	8.3	3.6	8.0	6.1	6.1	9.4	8.1
Prescription Amphetamines	--	--	--	--	--	--	1.2	3.2	2.2	1.0	1.0	1.0	2.6	2.5	2.5
Steroids	6.1	0.4	3.2	--	--	--	1.5	1.9	1.7	0.0	0.0	0.0	1.7	1.7	1.7

Note: The first set of data rows show results for items that are on the middle school questionnaire. The second set of data rows show results for items that are on the high school questionnaire. The third set of data rows show results for items that are on both questionnaires. The symbol "--" indicates that data are not available.

¹ Ecstasy, Rohypnol, GHB and ketamine are provided as examples in the question about club drugs.

² In 2006, the question for GHB was changed to include a more up-to-date set of slang or street names for the drug.

³ Measured as "LSD or other psychedelics" in the 2000 survey, and as "LSD or PCP" in the 2002, 2004, 2006 and 2008 surveys.

⁴ In 2002, the prescription drug Xanax[®] was added to the list of examples given in the depressants question.

⁵ In 2006, OxyContin[®] was removed as an individual item and added to the list of examples included in the prescription pain relievers item.

Table 8. Past-30-day trend in alcohol, tobacco and other drug use for Hamilton County youth, 2000, 2002, 2004, 2006 and 2008

	2000			2002			2004			2006			2008		
	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>
Alcohol	15.8	42.5	30.6	--	--	--	18.6	44.6	32.0	14.9	33.8	25.5	20.8	33.3	28.1
Binge Drinking	8.2	22.1	16.1	--	--	--	13.1	25.9	19.8	8.4	23.3	16.7	18.2	23.2	21.2
Cigarettes	18.8	27.0	23.2	--	--	--	11.5	20.6	16.0	9.0	21.6	16.2	7.5	11.7	10.0
Smokeless Tobacco	11.8	12.5	12.1	--	--	--	9.2	11.7	10.4	6.5	12.7	10.0	--	14.4	--
Marijuana or Hashish	8.1	18.8	14.0	--	--	--	6.4	15.8	11.1	4.9	15.1	10.7	6.3	10.0	8.5
Inhalants	6.1	6.4	6.2	--	--	--	2.9	2.4	2.6	8.0	2.4	4.8	6.1	3.2	4.4
Over-The-Counter Drugs	--	--	--	--	--	--	--	--	--	--	--	--	4.1	--	--
Any illicit drug	--	--	--	--	--	--	9.7	19.5	14.6	11.9	17.9	15.3	12.9	16.3	14.9
Any illicit drug other than marijuana	--	--	--	--	--	--	6.4	8.7	7.5	11.0	5.8	8.0	10.6	9.2	9.8
Alcohol only	--	--	--	--	--	--	12.9	29.4	21.5	10.3	19.6	15.4	12.7	21.6	18.0
Alcohol or any illicit drug	--	--	--	--	--	--	22.0	47.6	35.1	22.8	36.5	30.5	24.8	36.3	31.5
Any illicit drug, but no alcohol	--	--	--	--	--	--	3.5	3.5	3.5	8.2	3.6	5.6	4.7	3.3	3.8

Note: The first set of data rows show results for alcohol, tobacco, marijuana, inhalants and over-the-counter drugs. The second set of data rows show results for various combinations of drugs. Results for combinations of drugs are not presented for 2000 because new ATOD items were added between 2000 and 2002. The symbol "--" indicates that data are not available.

Table 9. Past-30-day trend in alcohol, tobacco and other drug use for Hamilton County youth, 2000, 2002, 2004, 2006 and 2008

	2000			2002			2004			2006			2008		
	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>
Club Drugs ¹	--	--	--	--	--	--	--	--	--	--	--	--	0.0	--	--
LSD, PCP or Mushrooms	--	--	--	--	--	--	--	--	--	--	--	--	1.9	--	--
Cocaine or Crack Cocaine	--	--	--	--	--	--	--	--	--	--	--	--	0.0	--	--
Ecstasy	--	--	--	--	--	--	1.1	1.4	1.2	0.7	0.0	0.3	--	0.0	--
Rohypnol	--	--	--	--	--	--	0.0	0.0	0.0	0.0	0.0	0.0	--	0.0	--
GHB ²	--	--	--	--	--	--	0.5	0.0	0.3	0.0	0.5	0.3	--	1.7	--
Ketamine	--	--	--	--	--	--	0.0	0.5	0.2	0.0	0.0	0.0	--	1.7	--
LSD or PCP ³	0.0	2.5	1.4	--	--	--	0.4	0.0	0.2	0.0	0.0	0.0	--	0.0	--
Hallucinogenic Mushrooms	--	--	--	--	--	--	0.4	1.9	1.1	1.1	0.0	0.4	--	2.3	--
Cocaine	0.7	0.0	0.3	--	--	--	0.9	2.8	1.9	1.1	0.0	0.5	--	1.6	--
Crack Cocaine	0.7	0.0	0.3	--	--	--	0.4	0.0	0.2	0.9	0.0	0.4	--	0.6	--
Methamphetamine	0.7	1.1	0.9	--	--	--	0.9	0.5	0.7	0.0	0.0	0.0	0.0	1.0	0.6
Heroin	0.7	0.0	0.3	--	--	--	1.0	0.5	0.7	0.0	0.0	0.0	0.0	1.3	0.8
Depressants ⁴	0.0	2.2	1.2	--	--	--	0.9	2.4	1.6	1.0	0.8	0.9	2.0	1.1	1.5
Prescription Pain Relievers ⁵	--	--	--	--	--	--	2.9	4.2	3.6	1.7	2.9	2.4	3.8	2.7	3.1
Prescription Amphetamines	--	--	--	--	--	--	0.4	0.5	0.4	0.0	0.0	0.0	2.7	1.9	2.2
Steroids	1.3	0.4	0.8	--	--	--	1.6	0.0	0.8	0.0	0.0	0.0	1.1	0.0	0.4

Note: The first set of data rows show results for items that are on the middle school questionnaire. The second set of data rows show results for items that are on the high school questionnaire. The third set of data rows show results for items that are on both questionnaires. The symbol "--" indicates that data are not available.

¹ Ecstasy, Rohypnol, GHB and ketamine are provided as examples in the question about club drugs.

² In 2006, the question for GHB was changed to include a more up-to-date set of slang or street names for the drug.

³ Measured as "LSD or other psychedelics" in the 2000 survey, and as "LSD or PCP" in the 2002, 2004, 2006 and 2008 surveys.

⁴ In 2002, the prescription drug Xanax[®] was added to the list of examples given in the depressants question.

⁵ In 2006, OxyContin[®] was removed as an individual item and added to the list of examples included in the prescription pain relievers item.

Table 10. Percentages of Hamilton County youth and Florida Statewide youth who reported engaging in delinquent behavior within the past 12 months

	Hamilton County							Florida Statewide						
	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>
Carrying a handgun	9.8	8.1	4.0	14.4	9.5	9.5	8.8	4.3	5.6	2.1	8.0	3.9	5.8	5.0
Selling drugs	2.9	5.5	2.1	7.2	3.2	6.5	4.4	2.7	7.6	3.2	7.8	2.5	7.9	5.5
Attempting to steal a vehicle	2.0	4.4	4.4	2.6	4.3	2.7	3.4	2.4	2.6	1.7	3.3	2.2	2.9	2.5
Being arrested	9.1	9.2	6.9	11.0	7.8	11.3	9.2	4.0	5.6	3.3	6.4	3.6	6.2	4.9
Taking a handgun to school	2.8	4.2	3.8	3.7	4.1	3.9	3.6	0.8	1.1	0.4	1.5	0.8	1.2	1.0
Getting suspended	28.6	30.3	26.4	32.1	30.2	32.7	29.6	16.2	14.4	11.5	18.9	14.9	16.1	15.2
Attacking someone with intent to harm	18.7	16.0	15.9	18.0	18.2	17.4	17.2	11.4	12.1	9.9	13.7	10.9	12.9	11.8
Being drunk or high at school	5.2	13.0	10.1	10.1	6.4	13.5	9.7	6.6	15.5	10.9	12.3	6.4	15.8	11.6

Table 11. Percentages of Hamilton County youth and Florida Statewide youth who reported gambling and arguing about gambling in the past 12 months

	Hamilton County							Florida Statewide						
	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>
Gambling	54.3	57.5	43.9	67.3	59.4	51.0	56.2	57.0	54.0	44.7	65.6	56.8	54.3	55.3
Arguing about gambling	19.5	15.6	10.1	22.2	18.5	15.7	17.2	17.4	14.4	11.5	19.7	17.1	14.8	15.7

Table 12. Percentages of Hamilton County youth and Florida Statewide middle school youth who reported involvement in bullying behavior

	Hamilton County							Florida Statewide						
	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>
Bullying caused worry	28.5	--	35.9	22.0	26.7	--	--	30.1	--	36.0	24.6	30.7	--	--
Skipped school because of bullying	5.4	--	6.7	4.5	3.5	--	--	2.9	--	3.5	2.3	2.8	--	--
Was kicked or shoved in past 30 days	21.2	--	15.3	25.8	20.7	--	--	20.7	--	17.3	23.9	21.1	--	--
Was taunted or teased in past 30 days	43.0	--	46.3	38.0	43.9	--	--	41.3	--	42.3	40.4	41.8	--	--
Was victim of cyber bullying in past 30 days	9.5	--	12.9	4.4	9.0	--	--	8.2	--	11.2	5.2	8.2	--	--
Physically bullied others in past 30 days	27.3	--	22.4	30.0	28.7	--	--	15.8	--	13.3	18.1	15.5	--	--
Verbally bullied others in past 30 days	31.5	--	29.4	32.0	33.5	--	--	28.0	--	27.8	28.2	27.8	--	--
Cyber bullied others in past 30 days	10.2	--	9.2	10.2	9.4	--	--	6.4	--	7.9	4.8	6.2	--	--

The symbol "--" indicates that data are not available.

Table 13. Percentages of Hamilton County youth and Florida Statewide high school youth who started using alcohol at age 13 or younger

	Hamilton County							Florida Statewide						
	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>
More than a sip of alcohol	--	40.6	39.4	37.8	--	37.9	--	--	32.3	31.0	33.9	--	32.4	--
Drinking at least once a month	--	7.4	8.8	5.7	--	9.0	--	--	5.9	5.5	6.4	--	5.9	--
Cigarettes	--	30.0	30.0	30.1	--	31.6	--	--	19.9	19.6	20.3	--	20.2	--
Marijuana	--	9.3	8.9	7.9	--	8.9	--	--	10.6	8.8	12.4	--	10.7	--

Note: The symbol "--" indicates that data are not available.

Table 14. Percentages of Hamilton County youth and Florida Statewide youth who reported a perceived risk of harm, personal disapproval and peer approval

	Hamilton County							Florida Statewide						
	Middle School	High School	Female	Male	Ages 10-14	Ages 15-17	Total	Middle School	High School	Female	Male	Ages 10-14	Ages 15-17	Total
<i>Perceive great risk of harm if...</i>														
One or more drinks every day	30.3	34.8	37.0	31.1	32.8	33.9	33.0	43.2	40.8	46.2	37.6	43.4	40.7	41.9
Smoke a pack or more every day	51.4	54.6	59.8	48.7	55.6	50.8	53.3	67.0	68.0	70.6	64.7	68.3	67.3	67.6
Smoke marijuana regularly	54.0	56.0	59.1	54.1	55.5	57.7	55.2	71.2	51.0	63.8	56.0	71.7	50.7	59.8
Try marijuana once or twice	31.6	32.5	36.0	30.4	33.4	29.3	32.1	42.6	24.7	34.3	30.8	42.0	24.6	32.5
<i>Think it would be wrong for someone their age to...</i>														
Smoke cigarettes	79.5	73.0	77.6	73.1	82.9	69.8	75.6	90.5	72.9	80.7	80.3	90.4	74.9	80.5
Drink alcohol regularly	67.9	63.1	66.3	62.4	66.4	61.0	65.1	81.2	53.5	65.7	65.4	80.2	54.6	65.4
Smoke marijuana	82.4	84.0	86.7	80.0	85.7	79.6	83.3	91.1	71.9	82.2	78.4	91.0	72.3	80.2
Use other illicit drugs	89.6	96.0	96.4	90.0	94.8	91.4	93.4	96.8	93.5	95.6	94.2	96.8	93.4	94.9
<i>Good chance of being seen as cool if...</i>														
Drink alcohol regularly	8.7	12.7	11.2	11.8	8.5	13.9	11.1	8.1	14.9	12.5	11.5	8.4	14.6	12.0
Smoke cigarettes	7.5	9.4	6.8	11.1	7.3	10.4	8.6	6.2	5.6	5.7	6.0	6.1	5.6	5.8
Smoke marijuana	7.6	11.0	8.6	11.3	7.5	12.8	9.6	9.2	12.9	11.1	11.5	9.1	13.4	11.3

Table 15. Percentages of Hamilton County youth and Florida Statewide youth who reported participation in extracurricular activities

	Hamilton County							Florida Statewide						
	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Female</i>	<i>Male</i>	<i>Ages 10-14</i>	<i>Ages 15-17</i>	<i>Total</i>
School Sports	50.7	64.9	59.8	59.2	53.5	60.7	59.1	35.7	37.9	33.2	40.4	35.5	39.2	37.0
Organized Sports Outside of School	31.2	23.5	21.7	32.3	33.5	22.2	26.7	43.9	26.0	29.5	38.0	43.1	26.5	33.7
School Band	10.0	3.8	4.3	8.8	9.0	5.4	6.4	13.5	7.3	9.6	10.4	13.3	7.4	10.0
School Club(s)	16.2	31.4	28.6	23.1	17.9	31.9	25.1	18.5	32.5	35.0	18.1	19.6	31.1	26.4
Community Club(s)	6.1	14.3	12.1	10.7	8.5	12.0	11.0	11.0	13.5	16.4	8.7	11.2	13.1	12.4

Table 16. Trends in delinquent behaviors for Hamilton County youth, 2000, 2002, 2004, 2006 and 2008

	2000			2002			2004			2006			2008		
	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>	<i>Middle School</i>	<i>High School</i>	<i>Total</i>
Carrying a handgun	2.0	12.2	8.0	--	--	--	6.1	7.0	6.5	7.2	6.5	7.2	9.8	8.1	8.8
Selling drugs	7.8	10.4	9.5	--	--	--	2.6	6.1	4.4	1.1	7.0	4.5	2.9	5.5	4.4
Attempting to steal a vehicle	1.3	4.9	3.6	--	--	--	2.4	2.9	2.7	1.9	2.9	2.5	2.0	4.4	3.4
Being arrested	7.8	8.5	8.4	--	--	--	7.6	8.2	7.9	2.0	2.4	2.2	9.1	9.2	9.2
Taking a handgun to school	0.4	2.5	1.9	--	--	--	0.7	2.4	1.6	0.0	1.1	0.6	2.8	4.2	3.6
Getting suspended	36.4	18.2	26.0	--	--	--	30.0	23.9	26.8	32.1	26.3	29.0	28.6	30.3	29.6
Attacking someone with intent to harm	13.4	19.4	16.6	--	--	--	11.4	15.2	13.5	13.8	8.3	10.5	18.7	16.0	17.2
Being drunk or high at school	6.4	21.0	14.8	--	--	--	10.8	19.1	15.0	4.2	16.8	11.5	5.2	13.0	9.7

Table 17. Trends in early ATOD use and attitudes toward substance use for Hamilton County youth, 2000, 2002, 2004, 2006 and 2008

	2000			2002			2004			2006			2008		
	Middle School	High School	Total	Middle School	High School	Total	Middle School	High School	Total	Middle School	High School	Total	Middle School	High School	Total
<i>Early ATOD use (age 13 or younger)</i>															
More than a sip or two of alcohol	--	42.0	--	--	--	--	--	38.1	--	--	31.2	--	--	40.6	--
Drinking at least once a month	--	9.9	--	--	--	--	--	7.8	--	--	7.7	--	--	7.4	--
Cigarettes	--	46.0	--	--	--	--	--	44.8	--	--	38.8	--	--	30.0	--
Marijuana	--	21.0	--	--	--	--	--	18.5	--	--	15.5	--	--	9.3	--
<i>Perceive great risk of harm if...</i>															
One or more drinks every day	38.3	40.5	39.6	--	--	--	37.2	32.5	35.0	44.4	33.5	38.5	30.3	34.8	33.0
Smoke a pack or more every day	55.5	64.8	60.4	--	--	--	54.2	57.6	56.2	59.8	53.2	56.4	51.4	54.6	53.3
Smoke marijuana regularly	62.5	55.3	58.4	--	--	--	63.1	46.0	54.5	71.3	55.0	62.1	54.0	56.0	55.2
Try marijuana once or twice	38.9	31.0	34.6	--	--	--	42.7	24.4	33.5	51.1	30.7	39.5	31.6	32.5	32.1
<i>Think it wrong if...</i>															
Smoke cigarettes	83.5	59.6	70.5	--	--	--	84.1	68.3	76.4	90.5	64.1	75.6	79.5	73.0	75.6
Drink alcohol regularly	78.3	52.9	64.6	--	--	--	72.1	52.6	62.4	72.4	54.9	62.3	67.9	63.1	65.1
Smoke marijuana	87.4	73.0	79.6	--	--	--	85.9	70.6	78.2	94.5	71.1	80.9	82.4	84.0	83.3
Use other illicit drugs	97.2	93.9	95.4	--	--	--	97.8	95.4	96.6	96.3	93.6	94.8	89.6	96.0	93.4
<i>Seen as cool if...</i>															
Drink alcohol regularly	8.0	21.3	15.5	--	--	--	14.0	19.2	16.6	8.0	23.7	16.9	8.7	12.7	11.1
Smoke cigarettes	8.3	11.0	10.4	--	--	--	13.3	7.9	10.6	5.9	14.8	10.8	7.5	9.4	8.6
Smoke marijuana	10.3	11.7	11.3	--	--	--	13.3	19.7	16.6	5.7	17.0	12.2	7.6	11.0	9.6

Note: The symbol "--" indicates that data are not available.

Table 18. Protective factor prevalence rates for Hamilton County, Florida Statewide and the national normative database, 2008

Domain	Scale	Hamilton County		Florida Statewide		National Norms	
		<i>Middle School</i>	<i>High School</i>	<i>Middle School</i>	<i>High School</i>	<i>Middle School</i>	<i>High School</i>
Community	Community Opportunities for Prosocial Involvement	--	28	--	39	--	52
	Community Rewards for Prosocial Involvement	57	74	51	61	56	63
Family	Family Attachment	--	48	--	55	--	56
	Family Opportunities for Prosocial Involvement	59	58	56	53	59	54
	Family Rewards for Prosocial Involvement	49	58	50	54	54	55
School	School Opportunities for Prosocial Involvement	46	46	47	59	57	60
	School Rewards for Prosocial Involvement	41	42	45	56	53	58
Peer and Individual	Religiosity	53	70	51	61	56	62
	Social Skills	--	57	--	62	--	57
	Belief in the Moral Order	--	59	--	59	--	62
Average Prevalence Rate		51	53	50	56	56	57

Note: Because risk is associated with negative behavioral outcomes, it is better to have lower risk factor scale scores, not higher. Conversely, because protective factors are associated with better student behavioral outcomes, it is better to have protective factor scale scores with high values. The symbol "--" indicates that data are not available.

Table 19. Risk factor prevalence rates for Hamilton County, Florida Statewide and the national normative database, 2008

Domain	Scale	Hamilton County		Florida Statewide		National Norms	
		Middle School	High School	Middle School	High School	Middle School	High School
Community	Low Neighborhood Attachment	--	56	--	49	--	44
	Community Disorganization	61	60	48	49	47	47
	Transitions and Mobility	51	52	61	64	47	46
	Laws and Norms Favorable to Drug Use	52	34	44	35	42	42
	Laws and Norms Favorable to Handguns	--	42	--	23	--	23
	Perceived Availability of Drugs	49	36	49	40	45	45
	Perceived Availability of Handguns	32	47	27	41	25	42
Family	Poor Family Management	52	52	49	49	44	45
	Family Conflict	39	32	43	37	42	37
	Family History of Antisocial Behavior	--	52	--	43	--	45
	Parental Attitudes Favorable toward ATOD Use	26	32	22	38	23	41
	Parental Attitudes Favorable toward Antisocial Behavior	--	35	--	45	--	48
School	Poor Academic Performance	56	50	45	44	45	48
	Lack of Commitment to School	57	41	55	47	47	46
Peer and Individual	Rebelliousness	--	39	--	41	--	40
	Friends' Delinquent Behavior	--	55	--	44	--	41
	Friends' Use of Drugs	--	41	--	39	--	47
	Peer Rewards for Antisocial Behavior	43	39	42	42	40	46
	Favorable Attitudes toward Antisocial Behavior	47	41	48	47	40	46
	Favorable Attitudes toward ATOD Use	46	35	40	40	39	45
	Low Perceived Risks of Drug Use	65	43	41	44	40	46
	Early Initiation of Drug Use	47	41	37	35	41	46
	Sensation Seeking	--	44	--	44	--	45
Average Prevalence Rate		48	44	43	43	40	44

Note: Because risk is associated with negative behavioral outcomes, it is better to have lower risk factor scale scores, not higher. Conversely, because protective factors are associated with better student behavioral outcomes, it is better to have protective factor scale scores with high values. The symbol "--" indicates that data are not available.

Table 20. Protective factor prevalence rate trends among middle school students for Hamilton County, 2000, 2002, 2004, 2006 and 2008

Domain	Scale	Hamilton County				
		2000	2002	2004	2006	2008
Community	Community Opportunities for Prosocial Involvement	47	--	--	37	--
	Community Rewards for Prosocial Involvement	62	--	61	59	57
Family	Family Attachment	53	--	46	51	--
	Family Opportunities for Prosocial Involvement	52	--	55	58	59
	Family Rewards for Prosocial Involvement	56	--	47	55	49
School	School Opportunities for Prosocial Involvement	54	--	37	38	46
	School Rewards for Prosocial Involvement	58	--	37	46	41
Peer and Individual	Religiosity	52	--	53	62	53
	Social Skills	56	--	49	52	--
	Belief in the Moral Order	49	--	41	37	--
Average Prevalence Rate		54	--	48	51	51

Note: Because risk is associated with negative behavioral outcomes, it is better to have lower risk factor scale scores, not higher. Conversely, because protective factors are associated with better student behavioral outcomes, it is better to have protective factor scale scores with high values. The symbol "--" indicates that data are not available.

Table 21. Risk factor prevalence rate trends among middle school students for Hamilton County, 2000, 2002, 2004, 2006 and 2008

Domain	Scale	Hamilton County				
		2000	2002	2004	2006	2008
Community	Low Neighborhood Attachment	47	--	47	47	--
	Community Disorganization	53	--	51	60	61
	Transitions and Mobility	62	--	64	52	51
	Laws and Norms Favorable to Drug Use	56	--	52	56	52
	Laws and Norms Favorable to Handguns	57	--	56	54	--
	Perceived Availability of Drugs	51	--	52	37	49
	Perceived Availability of Handguns	23	--	34	31	32
Family	Poor Family Management	46	--	56	52	52
	Family Conflict	52	--	38	39	39
	Family History of Antisocial Behavior	63	--	65	51	--
	Parental Attitudes Favorable toward ATOD Use	21	--	27	22	26
	Parental Attitudes Favorable toward Antisocial Behavior	35	--	34	32	--
School	Poor Academic Performance	61	--	51	42	56
	Lack of Commitment to School	48	--	57	45	57
Peer and Individual	Rebelliousness	62	--	52	47	--
	Friends' Delinquent Behavior	62	--	69	71	--
	Friends' Use of Drugs	58	--	53	52	--
	Peer Rewards for Antisocial Behavior	40	--	49	43	43
	Favorable Attitudes toward Antisocial Behavior	33	--	44	46	47
	Favorable Attitudes toward ATOD Use	42	--	51	49	46
	Low Perceived Risks of Drug Use	49	--	49	37	65
	Early Initiation of Drug Use	58	--	49	54	47
	Sensation Seeking	44	--	47	44	--
Average Prevalence Rate		49	--	50	46	48

Note: Because risk is associated with negative behavioral outcomes, it is better to have lower risk factor scale scores, not higher. Conversely, because protective factors are associated with better student behavioral outcomes, it is better to have protective factor scale scores with high values. The symbol "--" indicates that data are not available.

Table 22. Protective factor prevalence rate trends among high school students for Hamilton County, 2000, 2002, 2004, 2006 and 2008

Domain	Scale	Hamilton County				
		2000	2002	2004	2006	2008
Community	Community Opportunities for Prosocial Involvement	36	--	--	33	28
	Community Rewards for Prosocial Involvement	78	--	72	72	74
Family	Family Attachment	62	--	50	44	48
	Family Opportunities for Prosocial Involvement	52	--	47	51	58
	Family Rewards for Prosocial Involvement	56	--	55	55	58
School	School Opportunities for Prosocial Involvement	39	--	43	38	46
	School Rewards for Prosocial Involvement	47	--	36	35	42
Peer and Individual	Religiosity	80	--	71	71	70
	Social Skills	64	--	58	61	57
	Belief in the Moral Order	58	--	56	58	59
Average Prevalence Rate		57	--	52	51	53

Note: Because risk is associated with negative behavioral outcomes, it is better to have lower risk factor scale scores, not higher. Conversely, because protective factors are associated with better student behavioral outcomes, it is better to have protective factor scale scores with high values. The symbol "--" indicates that data are not available.

Table 23. Risk factor prevalence rate trends among high school students for Hamilton County, 2000, 2002, 2004, 2006 and 2008

Domain	Scale	Hamilton County				
		2000	2002	2004	2006	2008
Community	Low Neighborhood Attachment	46	--	56	51	56
	Community Disorganization	52	--	51	60	60
	Transitions and Mobility	46	--	51	47	52
	Laws and Norms Favorable to Drug Use	35	--	43	39	34
	Laws and Norms Favorable to Handguns	43	--	41	40	42
	Perceived Availability of Drugs	49	--	52	48	36
	Perceived Availability of Handguns	63	--	61	62	47
Family	Poor Family Management	46	--	52	48	52
	Family Conflict	35	--	34	35	32
	Family History of Antisocial Behavior	60	--	66	56	52
	Parental Attitudes Favorable toward ATOD Use	30	--	38	34	32
	Parental Attitudes Favorable toward Antisocial Behavior	37	--	39	36	35
School	Poor Academic Performance	39	--	42	43	50
	Lack of Commitment to School	41	--	50	45	41
Peer and Individual	Rebelliousness	45	--	44	48	39
	Friends' Delinquent Behavior	50	--	57	56	55
	Friends' Use of Drugs	50	--	45	49	41
	Peer Rewards for Antisocial Behavior	44	--	47	55	39
	Favorable Attitudes toward Antisocial Behavior	38	--	41	43	41
	Favorable Attitudes toward ATOD Use	42	--	46	43	35
	Low Perceived Risks of Drug Use	44	--	50	45	43
	Early Initiation of Drug Use	55	--	50	48	41
	Sensation Seeking	47	--	38	39	44
Average Prevalence Rate		46	--	48	47	44

Note: Because risk is associated with negative behavioral outcomes, it is better to have lower risk factor scale scores, not higher. Conversely, because protective factors are associated with better student behavioral outcomes, it is better to have protective factor scale scores with high values.

Appendix B

References

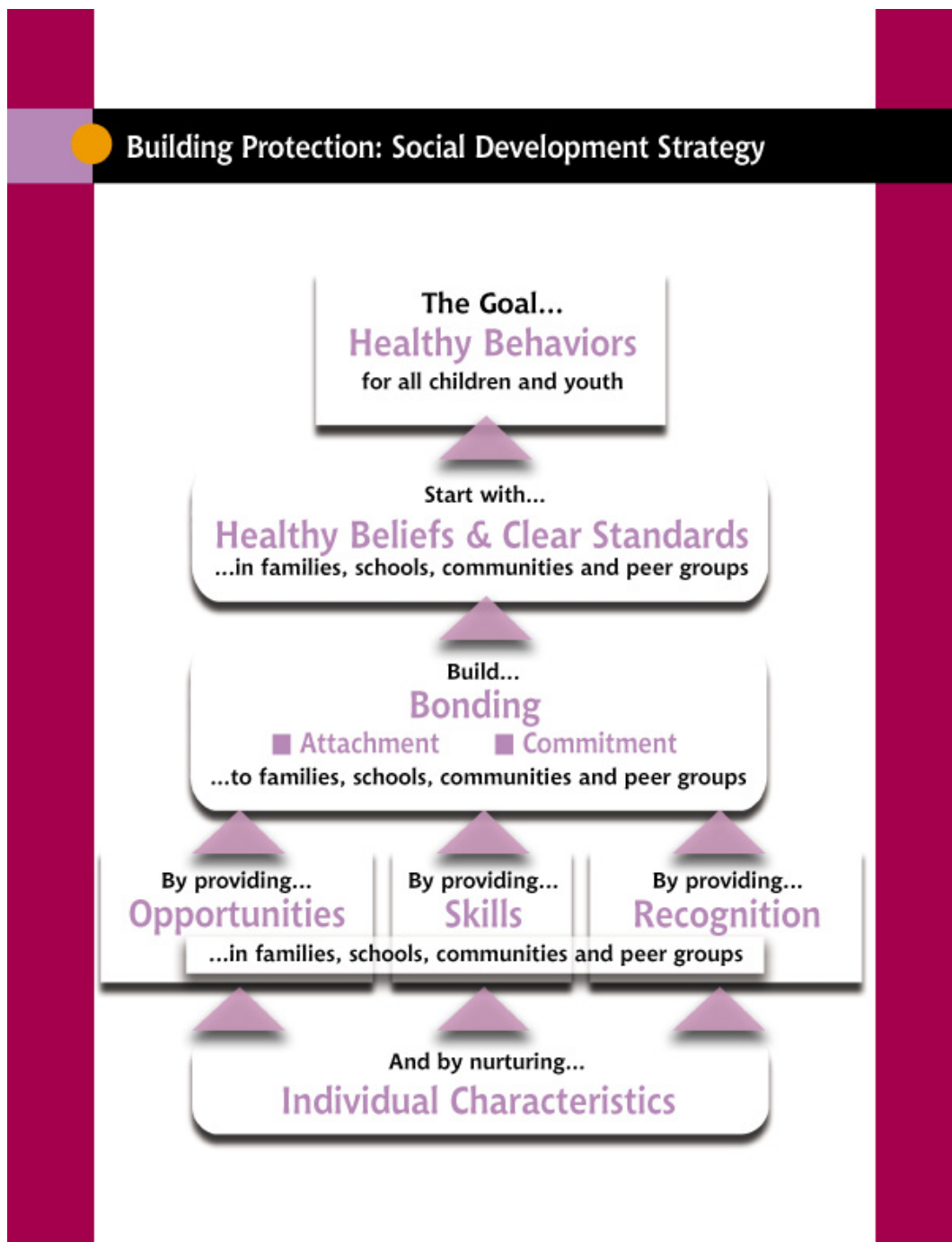
- Arthur, M. W., Briney, J. S., Hawkins, J. D., Abbott, R. D., Brooke-Weiss, B. L. & Catalano, R. F. (2007). Measuring risk and protection in communities using the Communities That Care Youth Survey. *Evaluation and Program Planning, 30*, 197-211.
- Arthur, M. W., Hawkins, J. D., Pollard, J. A., Catalano, R. F. & Baglioni, A. J. (2002). Measuring risk and protective factors for substance use, delinquency, and other adolescent problem behaviors: The communities that care youth survey. *Evaluation Review, 26*, 575-601.
- Bachman, J. G., Johnston, L. D. & O'Malley, P. M. (1996). *The Monitoring the Future project after twenty-two years: Design and procedures*. (Monitoring the Future Occasional Paper No. 38.) Ann Arbor, MI: Institute for Social Research.
- Bachman, J. G., Johnston, L. D., O'Malley, P. M. & Humphrey, R. H. (1986). *Changes in marijuana use linked to changes in perceived risks and disapproval*. (Monitoring the Future Occasional Paper No. 19.) Ann Arbor, MI: Institute for Social Research.
- Blum, R. W., Beuhring, T., Shew, M. L., Bearinger, L. H., Sieving, R. E. & Resnick, M. D. (2000). The effects of race/ethnicity, income, and family structure on adolescent risk behaviors. *American Journal of Public Health, 90*, 1879-1884.
- Bracht, N. & Kingsbury, L. (1990). Community organization principles in health promotion: A five-state model. In N. Bracht (Ed.), *Health promotion at the community level* (pp. 66-88). Beverly Hills, CA: Sage.
- Bry, B. H., McKeon, P. & Pandina, R. J. (1982). Extent of drug use as a function of number of risk factors. *Journal of Abnormal Psychology, 91*, 273-279.
- Catalano, R. F. & Hawkins, J. D. (1996). The social development model: A theory of antisocial behavior. In J. D. Hawkins (Ed.), *Delinquency and crime: Current theories* (pp. 149-197). New York, NY: Cambridge University Press.
- Hawkins, J. D., Arthur, M. W. & Catalano, R. F. (1995). Preventing substance abuse. In M. Tonry & D. Farrington (Eds.), *Building a safer society: Strategic approaches to crime prevention* (Vol. 19, pp. 343-427, Crime and justice: A review of research). Chicago, IL: University of Chicago Press.
- Hawkins, J. D., Catalano, R. F. & Associates. (1992). *Communities that care: Action for drug abuse prevention* (1st ed.). San Francisco: Jossey-Bass.
- Hawkins, J. D., Catalano, R. F. & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin, 112*, 64-105.
- Johnston, L. D., O'Malley, P. M., Bachman, J. G. & Schulenberg, J. E. (2008). *Monitoring the Future national survey results on drug use, 1975-2007. Volume I: Secondary school students* (NIH Publication No. 08-6418A). Bethesda, MD: National Institute on Drug Abuse.

-
- Newcomb, M. D. (1995). Identifying high-risk youth: Prevalence and patterns of adolescent drug abuse. In E. Rahdert & D. Czechowicz (Eds.), *Adolescent drug abuse: Clinical assessment and therapeutic interventions* (NIDA Research Monograph, 156). Washington, DC: U.S. Department of Health and Human Services.
- Newcomb, M. D. & Felix-Ortiz, M. (1992). Multiple protective and risk factors for drug use and abuse: Cross-sectional and prospective findings. *Journal of Personality and Social Psychology*, 51, 564-577.
- Newcomb, M. D., Maddahian, E. & Skager, R. (1987). Substance abuse and psychosocial risk factors among teenagers: Associations with sex, age, ethnicity, and type of school. *American Journal of Drug and Alcohol Abuse*, 13, 413-433.
- Pollard, J. A., Hawkins, J. D. & Arthur, M. W. (1999). Risk and protection: Are both necessary to understand diverse behavioral outcomes in adolescence? *Social Work Research*, 23, 145-158.

Appendix C

The Social Development Strategy

.....



Communities That Care®

Risk Factors

Adolescent Problem Behaviors

Community	Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence
Availability of drugs	●				●
Availability of firearms		●			●
Community laws and norms favorable toward drug use, firearms and crime	●	●			●
Media portrayals of violence					●
Transitions and mobility	●	●		●	
Low neighborhood attachment and community disorganization	●	●			●
Extreme economic deprivation	●	●	●	●	●
Family					
Family history of the problem behavior	●	●	●	●	●
Family management problems	●	●	●	●	●
Family conflict	●	●	●	●	●
Favorable parental attitudes and involvement in the problem behavior	●	●			●
School					
Academic failure beginning in late elementary school	●	●	●	●	●
Lack of commitment to school	●	●	●	●	●
Peer and Individual					
Early and persistent antisocial behavior	●	●	●	●	●
Rebelliousness	●	●		●	
Friends who engage in the problem behavior	●	●	●	●	●
Gang involvement	●	●			●
Favorable attitudes toward the problem behavior	●	●	●	●	
Early initiation of the problem behavior	●	●	●	●	●
Constitutional factors	●	●			●

Appendix D

Other Resources

Web Sites

Office of National Drug Control Policy www.whitehousedrugpolicy.gov

National Clearinghouse for Alcohol and Drug Information www.health.org/index.htm

Substance Abuse and Mental Health Services Administration (SAMHSA) www.samhsa.gov

Monitoring the Future www.monitoringthefuture.org

National Institute on Drug Abuse (NIDA) www.nida.nih.gov and www.drugabuse.gov

National Institute on Alcohol Abuse and Alcoholism (NIAAA) www.niaaa.nih.gov

Social Development Research Group <http://depts.washington.edu/sdrg>

Prevention Program Guides

Center for Substance Abuse Prevention, Western Center for the Application of Prevention Technologies. (2006). *Building a successful prevention program: list of all practices*. [Data file]. Available at the University of Nevada Reno's Web site, <http://casat.unr.edu/bestpractices/alpha-list.php>.

Center for the Study and Prevention of Violence, Institute of Behavioral Science. (2006). *Blueprints for Violence Prevention*. [Data file]. Available from the University of Colorado Boulder's Web site, www.colorado.edu/cspv/blueprints.

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). (2006). *Communities That Care Prevention Strategies Guide*. [Datafile]. Available from the SAMHSA Web site, <http://preventionplatform.samhsa.gov>.

U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). (2006). *Model Programs list*. [Data file]. Available from the SAMHSA Web site, <http://modelprograms.samhsa.gov>.

Prevention Planning

Hawkins, J. D., Catalano, R. F., & Associates. (1992). *Communities that care: Action for drug abuse prevention* (1st ed.). San Francisco: Jossey-Bass.