DEPARTMENT OF PUBLIC HEALTH AND HUMAN SERVICES

ADDICTIVE AND MENTAL DISORDERS DIVISION, CHEMICAL DEPENDENCY BUREAU

Prevention Needs Assessment Survey Results for 2004

Report for Hill County

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Introduction

2004 State of Montana Prevention Needs Assessment Survey

School Summary Report for
Hill County

This report summarizes the findings from the State of Montana Prevention Needs Assessment (PNA) Survey that was conducted during the spring of 2004 in grades 8, 10, and 12. The survey has been conducted every other year since 1998 by the Montana Department of Public Health and Human Services, Addictive and Mental Disorders Division, Chemical Dependency Bureau. The results for your county are presented along with comparisons to the results for the State of Montana.

The survey was designed to assess adolescent substance use, anti-social behavior, and the risk and protective factors that predict these adolescent problem behaviors. Table 1 contains the characteristics of the students who completed the survey from your county and the State of Montana.

Contents:

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- Risk & Protective Factor Profiles

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Table 1. Characteristics of Participants

Year of Survey	2000		2002		2004		2004	
	County		County		County		State	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Students	532	100	418	100	375	100	18579	100
Grade								
8	195	36.7	146	34.9	51	13.6	6207	33.4
10	178	33.5	161	38.5	191	50.9	6688	36.0
12	159	29.9	111	26.6	133	35.5	5684	30.6
Gender								
Male	268	53.7	223	53.5	196	52.7	9125	49.9
Female	231	46.3	194	46.5	176	47.3	9167	50.1
Ethnicity								
White	360	69.2	322	78.0	231	62.4	15485	84.6
Native American	131	25.2	68	16.5	115	31.1	1316	7.2
Hispanic	8	1.5	5	1.2	2	0.5	492	2.7
African American	1	0.2	2	0.5	5	1.4	166	0.9
Asian	6*	1.2*	4*	1*	1	0.3	223	1.2
Pacific Islander					4	1.1	110	0.6

* 2000 & 2002 surveys combined categories 'Asian' and 'Pacific Islander'

The Risk and Protective Factor Model of Prevention

Many states and local agencies have adopted the Risk and Protective Factor Model to guide their prevention efforts. The Risk and Protective Factor Model of Prevention is based on the simple premise that to prevent a problem from happening, we need to identify the factors that increase the risk of that problem developing and then find ways to reduce the risks. Just as medical researchers have found risk factors for heart disease such as diets high in fat, lack of exercise, and smoking; a team of researchers at the University of Washington have defined a set of risk factors for youth problem behaviors. Risk factors are characteristics of school, community, and family environments, as well as characteristics of students and their peer groups that are known to predict increased likelihood of drug use, delinquency, school dropout, teen pregnancy, and violent behavior among youth.

Dr. J. David Hawkins, Dr. Richard F. Catalano, and their colleagues at the University of Washington, Social Development Research Group have investigated the relationship between risk and protective factors and youth problem behavior. For example, they have found that children who live in families with high levels of conflict are more likely to become involved in problem behaviors such as delinquency and drug use than children who live in families with low levels of family conflict.

Protective factors exert a positive influence or buffer against the negative influence of risk, thus reducing the likelihood that adolescents will engage in problem behaviors.

2004 Prevention Needs Assessment Risk and Protective Factors

Protective factors identified through research reviewed by Drs. Hawkins and Catalano include social bonding to family, school, community and peers; healthy beliefs and clear standards for behavior; and individual characteristics. For bonding to serve as a protective influence, it must occur through involvement with peers and adults who communicate healthy values and set clear standards for behavior.

Research on risk and protective factors has important implications for prevention efforts. The premise of this approach is that in order to promote positive youth development and prevent problem behaviors, it is necessary to address those factors that predict the problem. By measuring risk and protective factors in a population, prevention programs can be implemented that will reduce the elevated risk factors and increase the protective factors. For example, if academic failure is identified as an elevated risk factor in a community, then mentoring, tutoring, and increased opportunities and rewards for classroom participation can be provided to improve academic performance.

The chart at the right shows the links between the 16 risk factors and the five problem behaviors. The check marks have been placed in the chart to indicate where at least two well designed, published research studies have shown a link between the risk factor and the problem behavior.

RISK FACTORS	PROBLEM BEHAVIORS				
	Substance Abuse	Delinquency	Teen Pregnancy	School Drop-Out	Violence
Community					
Availability of drugs and 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 and social 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 in elementary school	✓	✓	✓	✓	✓
Lack of commitment to school	✓	✓	✓	✓	✓
Individual/Peer					
Early and persistent antisocial behavior	✓	✓	✓	✓	✓
Alienation and rebelliousness	✓	✓		✓	
Friends who engage in the problem behavior	✓	✓	✓	✓	✓
Gang involvement	✓	✓			✓
Favorable attitudes toward the problem behavior	✓	✓	✓	✓	
Early initiation of the problem behavior	✓	✓	✓	✓	✓
Constitutional factors	✓	✓			✓

Tools for Assessment and Planning

School and Community Improvement Using Survey Data

Why Conduct the Prevention Needs Assessment Survey?

Data from the Prevention Needs Assessment Survey can be used to help school and community planners assess current conditions and prioritize areas of greatest need.

Each risk and protective factor can be linked to specific types of interventions that have been shown to be effective in either reducing risk(s) or enhancing protection(s). The steps outlined here will help your county make key decisions regarding allocation of resources, how and when to address specific needs, and which strategies are most effective and known to produce results.

What are the numbers telling you?

Review the charts and data tables presented in this report. Using the table below, note your findings as you discuss the following questions.

- Which 3-5 risk factors appear to be higher than you would want?
- Which 3-5 protective factors appear to be lower than you would want?
- Which levels of 30-day drug use are increasing and/or unacceptably high?
    - Which substances are your students using the most?
    - At which grades do you see unacceptable usage levels?
- Which levels of antisocial behaviors are increasing and/or unacceptably high?
    - Which behaviors are your students exhibiting the most?
    - At which grades do you see unacceptable behavior levels?

How to decide if a rate is "unacceptable."

- **Look across the charts** – which items stand out as either much higher or much lower than the other?
- **Compare your data with statewide, and national data** – differences of 5% between local and other data are probably significant.
- **Determine the standards and values held within your community** – For example: Is it acceptable in your community for 50% of high school seniors to drink alcohol regularly even when the statewide percentage is 60%?

Use these data for planning.

- **Substance use and antisocial behavior data** – raise awareness about the problems and promote dialogue
- **Risk and protective factor data** – identify exactly where the community needs to take action
- **Promising approaches** – access resources listed on the last page of this report for ideas about programs that have proven effective in addressing the risk factors that are high in your community, and improving the protective factors that are low

MEASURE	Unacceptable Rate #1	Unacceptable Rate #2	Unacceptable Rate #3	Unacceptable Rate #4
Risk Factors				
Protective Factors				
Substance Use				
Antisocial Behaviors				

Tools for Assessment and Planning

School and Community Improvement Using Survey Data

How do I decide which intervention(s) to employ?

• Strategies should be selected based on the risk factors that are high in your community and the protective factors that are low.

• Strategies should be age appropriate and employed prior to the onset of the problem behavior.

• Strategies chosen should address more than a single risk and protective factor.

• No single prevention program offers the complete solution.

An isolated prevention program does not provide the complete solution to reducing youth problem behaviors. A comprehensive prevention strategy addresses ATOD use, antisocial behavior, and risk and protective factors.

How do I know whether or not the intervention was effective?

Participation in the bi-annual administration of the survey provides trend data necessary for determining the effectiveness of the implemented intervention(s) and also provides data for determining any new efforts that are needed.

How to Read the Charts: Substance Use and Antisocial Behavior Charts

There are three types of charts presented in this report: 1) substance use and antisocial behavior charts, 2) risk factor charts, and 3) protective factor charts. All the charts show the results of the 2000, 2002, and 2004 PNA Surveys, and the actual percentages from the charts are presented in Tables 3 through 9.

Substance Use and Antisocial Behavior Charts

This report contains information about alcohol, tobacco and other drug use (referred to as ATOD use throughout this report) and other problem behaviors of students. The bars on each chart represent the percentage of students in that grade who reported the behavior. The four sections in the charts represent different types of problem behaviors. The definitions of each of the types of behavior are provided below.

- **Ever-used** is a measure of the percentage of students who tried the particular substance at least once in their lifetime and is used to show the percentage of students who have had experience with a particular substance.
- **30-day use** is a measure of the percentage of students who used the substance at least once in the 30 days prior to taking the survey and is a more sensitive indicator of the level of current use of the substance.
- **Binge drinking** and **Pack or more of cigarettes per day** are measures of heavy use of alcohol and tobacco. Binge drinking is defined as having five or more drinks in a row during the two weeks prior to taking the survey.
- **Antisocial behavior (ASB)** is a measure of the percentage of students who report **any involvement** with the eight antisocial behaviors listed in the charts **in the past year.** In the charts, antisocial behavior will often be abreviated as ASB.
- **Dots** are used on the charts to show the overall state average of all of the youth in each grade who participated in the survey for each behavior. More information about the dots is contained on the following page.

How to Read the Charts: Risk and Protective Factor Charts

Risk and Protective Factor Charts

There are three components of the risk and protective factor charts that are key to understanding the information that the charts contain: 1) the cut-points for the risk and protective factor scales, 2) the dots that indicate the state values, and 3) the dashed lines that indicate a more "national" value.

Cut-Points

Before the percentage of youth at risk on a given scale could be calculated, a scale value or cut-point needed to be determined that would separate the at-risk group from the not at-risk group. The Prevention Needs Assessment (PNA) survey was designed to assess adolescent substance use, anti-social behavior, and the risk and protective factors that predict these adolescent problem behaviors. Since the PNA survey had been given to over 200,000 youth nationwide, it was possible to select two groups of youth, one that was more at risk for problem behaviors and another group that was less at risk. A cut-point score was then determined for each risk and protective factor scale that best divided the youth from the two groups into their appropriate group, more at-risk or less at-risk. The criteria for separating youth into the more at-risk and the less at-risk groups included academic grades (the more at-risk group received "D" and "F" grades, the less at-risk group received "A" and "B" grades), ATOD use (the more at-risk group had more regular use, the less at-risk group had no drug use and use of alcohol or tobacco on only a few occasions), and antisocial behavior (the more at-risk group had two or more serious delinquent acts in the past year, the less at-risk group had no serious delinquent acts).

The cut-points that were determined by analyzing the results of the more at-risk and less at-risk groups will remain constant and will be used to produce the profiles for future surveys.

Since the cut-points for each scale will remain fixed, the percentage of youth above the cut-point on a scale (at-risk) will provide a method for evaluating the progress of prevention programs over time. For example, if the percentage of youth at risk for family conflict in a community prior to implementing a community-wide family/parenting program was 60% and then decreased to 45% one year after the program was implemented, the program would be viewed as helping to reduce family conflict.

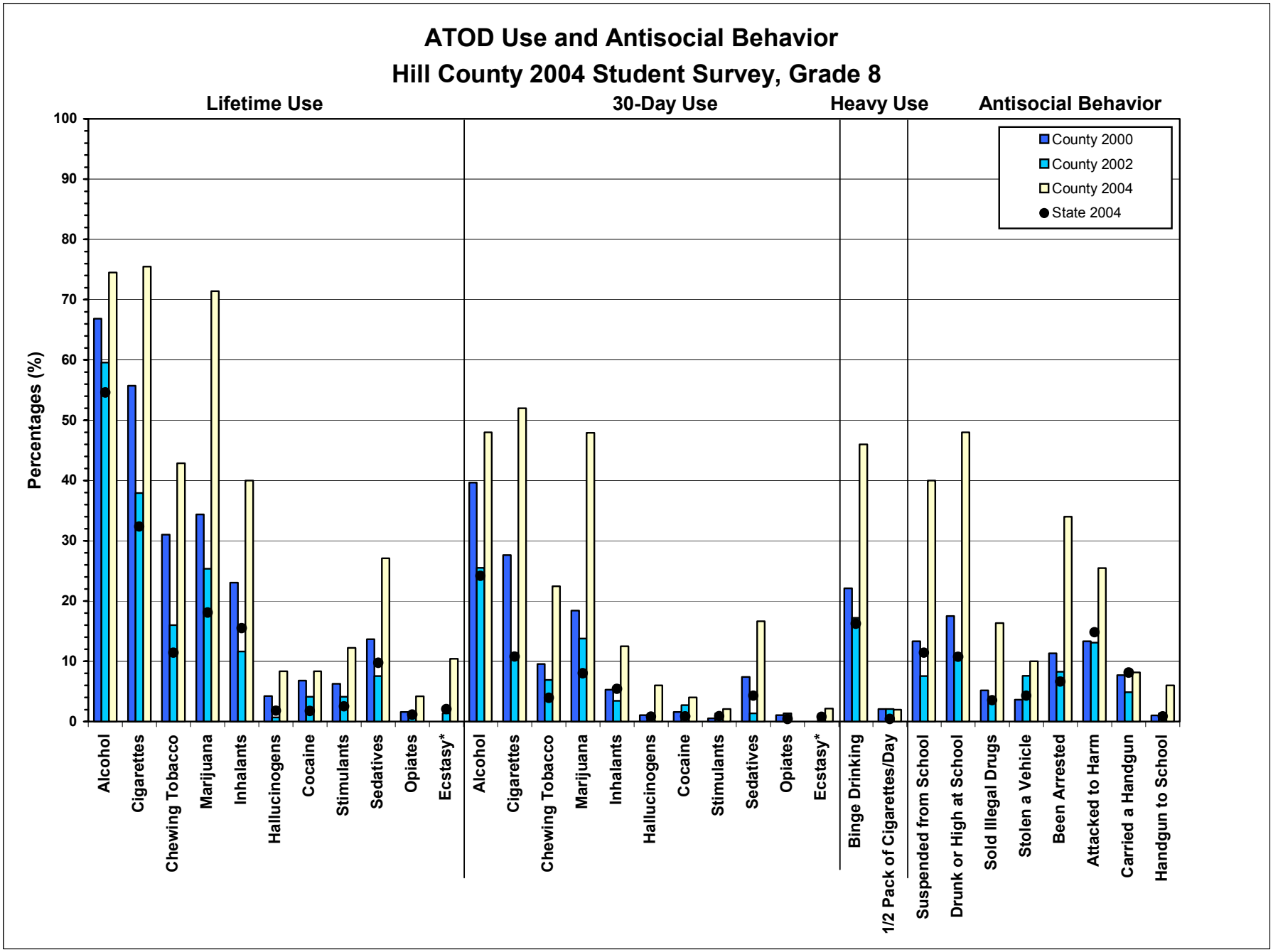
Dots

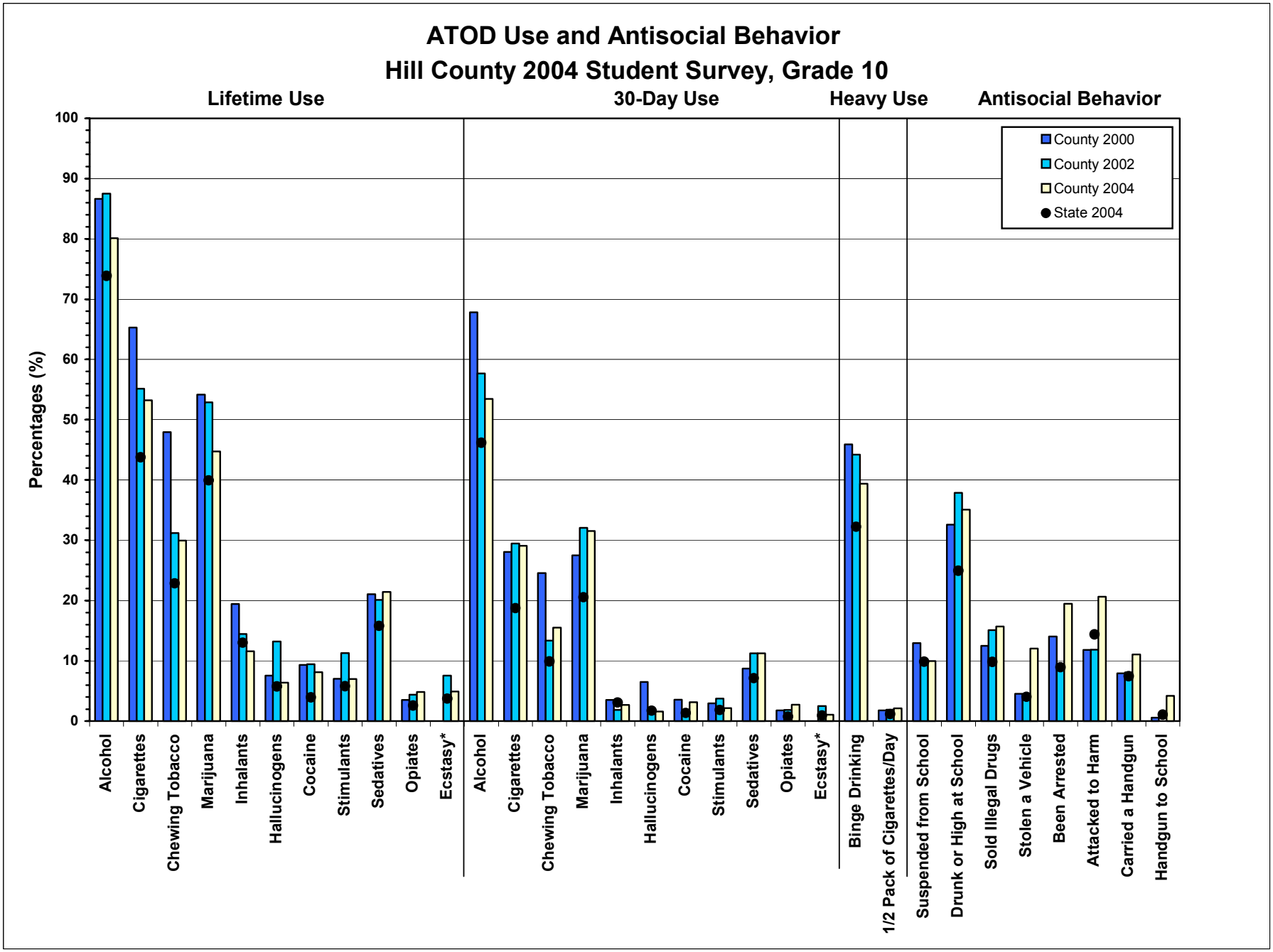
The dots on the charts represent the percentage of all of the youth surveyed from Montana who reported 'elevated risk' or 'elevated protection'. The comparison to the state-wide sample provides additional information for your community in determining the relative importance of each risk or protective factor level. Scanning across the charts, you can easily determine which factors are most (or least) prevalent for your community. This is the first step in identifying the levels of risk and protection that are operating in your community and which factors your community may choose to address.

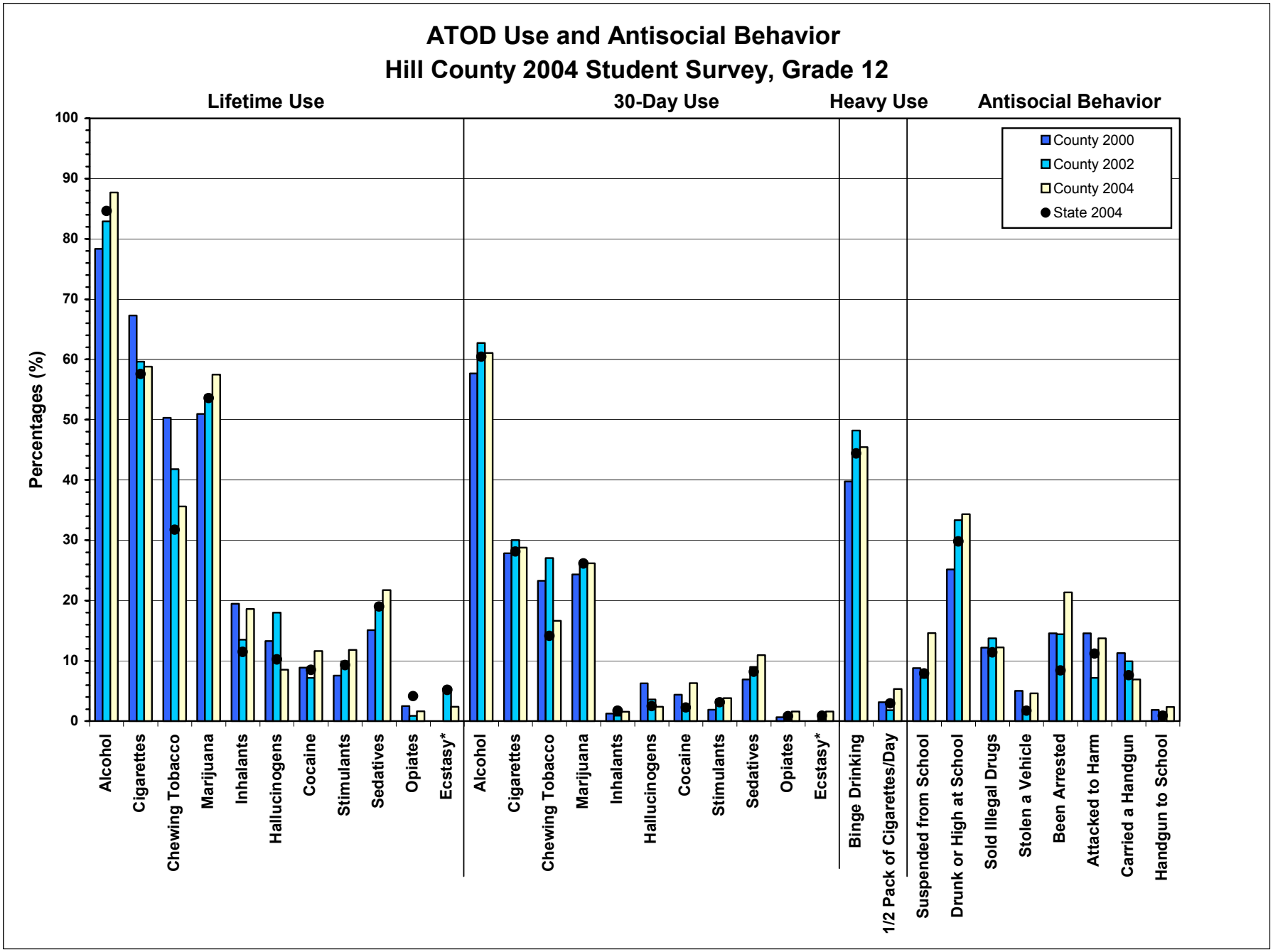
Dashed Line

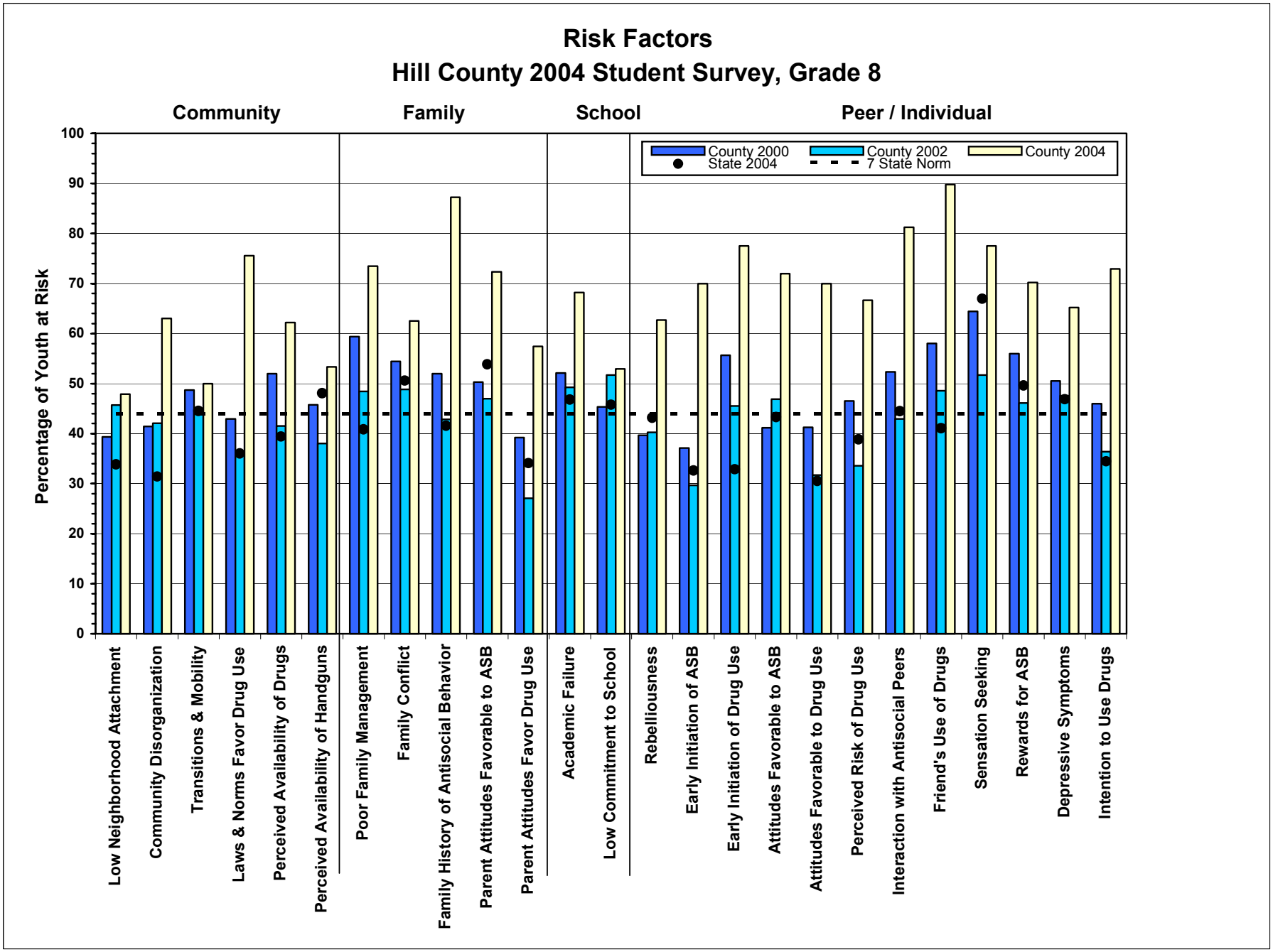
Levels of risk and protection in your community also can be compared to a more national sample. The dashed line on each risk and protective factor chart represents the percentage of youth at risk or with protection for the seven state sample upon which the cut-points were developed. The seven states included in the norm group were Colorado, Illinois, Kansas, Maine, Oregon, Utah, and Washington. All the states have a mix of urban and rural students.

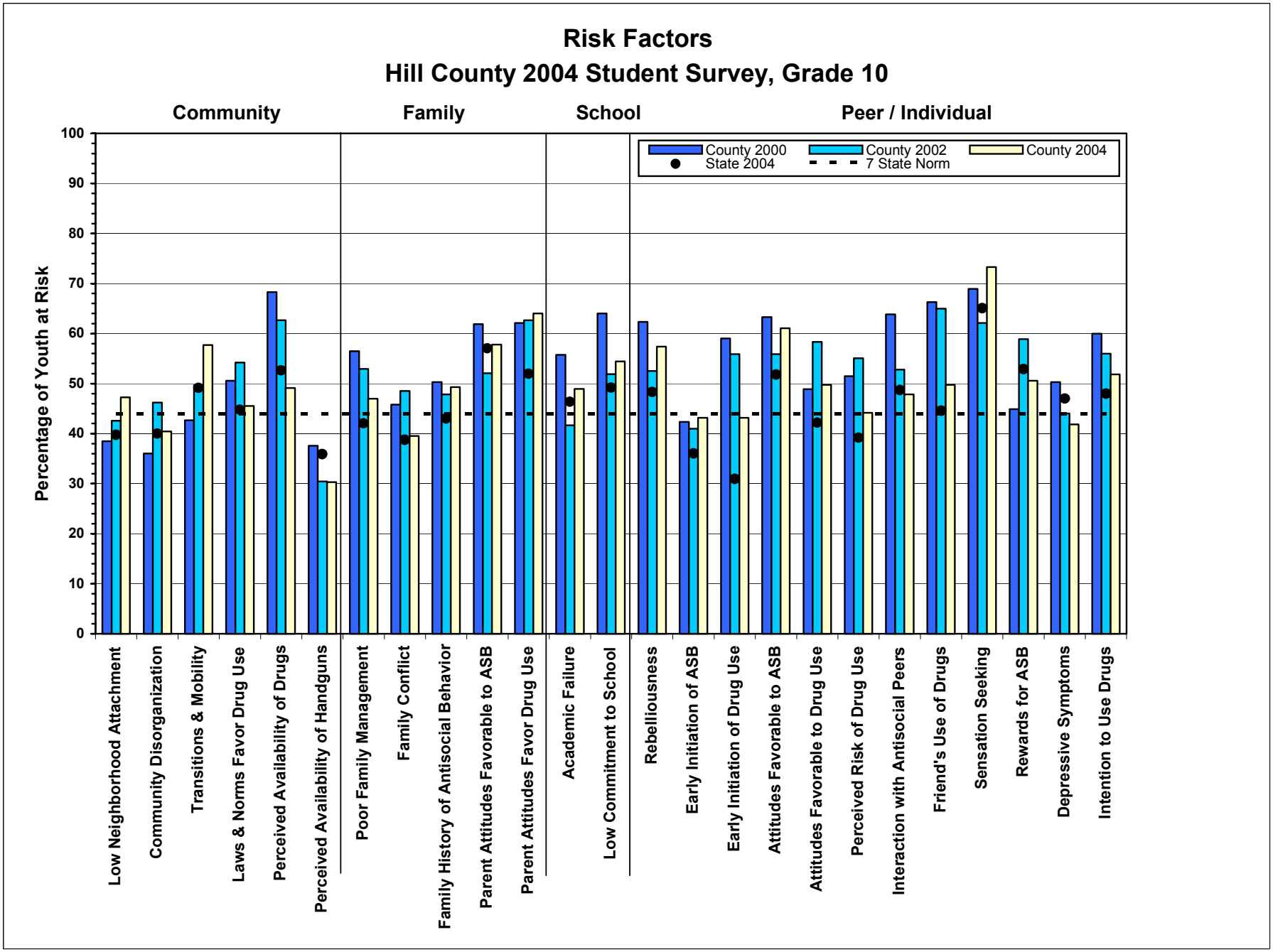
Brief definitions of the risk and protective factors are provided following the profile charts. For more information about risk and protective factors, please refer to the resources listed on the last page of this report under Contacts for Prevention.


ATOD Use and Antisocial Behavior
Hill County 2004 Student Survey, Grade 8
Lifetime Use
30-Day Use
Heavy Use
Antisocial Behavior
Percentages (%)
0
10
20
30
40
50
60
70
80
90
100
County 2000
County 2002
County 2004
State 2004
Alcohol
Cigarettes
Chewing Tobacco
Marijuana
Inhalants
Hallucinogens
Cocaine
Stimulants
Sedatives
Opiates
Ecstasy*
Alcohol
Cigarettes
Chewing Tobacco
Marijuana
Inhalants
Hallucinogens
Cocaine
Stimulants
Sedatives
Opiates
Ecstasy*
Binge Drinking
1/2 Pack of Cigarettes/Day
Suspended from School
Drunk or High at School
Sold Illegal Drugs
Stolen a Vehicle
Been Arrested
Attacked to Harm
Carried a Handgun
Handgun to School


ATOD Use and Antisocial Behavior
Hill County 2004 Student Survey, Grade 10
Lifetime Use
30-Day Use
Heavy Use
Antisocial Behavior
Percentages (%)
0
10
20
30
40
50
60
70
80
90
100
County 2000
County 2002
County 2004
State 2004
Alcohol
Cigarettes
Chewing Tobacco
Marijuana
Inhalants
Hallucinogens
Cocaine
Stimulants
Sedatives
Opiates
Ecstasy*
Alcohol
Cigarettes
Chewing Tobacco
Marijuana
Inhalants
Hallucinogens
Cocaine
Stimulants
Sedatives
Opiates
Ecstasy*
Binge Drinking
1/2 Pack of Cigarettes/Day
Suspended from School
Drunk or High at School
Sold Illegal Drugs
Stolen a Vehicle
Been Arrested
Attacked to Harm
Carried a Handgun
Handgun to School


ATOD Use and Antisocial Behavior
Hill County 2004 Student Survey, Grade 12
Lifetime Use
30-Day Use
Heavy Use
Antisocial Behavior
Percentages (%)
0
10
20
30
40
50
60
70
80
90
100
County 2000
County 2002
County 2004
State 2004
Alcohol
Cigarettes
Chewing Tobacco
Marijuana
Inhalants
Hallucinogens
Cocaine
Stimulants
Sedatives
Opiates
Ecstasy*
Alcohol
Cigarettes
Chewing Tobacco
Marijuana
Inhalants
Hallucinogens
Cocaine
Stimulants
Sedatives
Opiates
Ecstasy*
Binge Drinking
1/2 Pack of Cigarettes/Day
Suspended from School
Drunk or High at School
Sold Illegal Drugs
Stolen a Vehicle
Been Arrested
Attacked to Harm
Carried a Handgun
Handgun to School


Risk Factors
Hill County 2004 Student Survey, Grade 8
Community
Family
School
Peer / Individual
County 2000
County 2002
County 2004
State 2004
7 State Norm
Percentage of Youth at Risk
100
90
80
70
60
50
40
30
20
10
0
Low Neighborhood Attachment
Community Disorganization
Transitions & Mobility
Laws & Norms Favor Drug Use
Perceived Availability of Drugs
Perceived Availability of Handguns
Poor Family Management
Family Conflict
Family History of Antisocial Behavior
Parent Attitudes Favorable to ASB
Parent Attitudes Favor Drug Use
Academic Failure
Low Commitment to School
Rebelliousness
Early Initiation of ASB
Early Initiation of Drug Use
Attitudes Favorable to ASB
Attitudes Favorable to Drug Use
Perceived Risk of Drug Use
Interaction with Antisocial Peers
Friend's Use of Drugs
Sensation Seeking
Rewards for ASB
Depressive Symptoms
Intention to Use Drugs


Risk Factors
Hill County 2004 Student Survey, Grade 10
Community
Family
School
Peer / Individual
County 2000
County 2002
County 2004
State 2004
7 State Norm
Percentage of Youth at Risk
100
90
80
70
60
50
40
30
20
10
0
Low Neighborhood Attachment
Community Disorganization
Transitions & Mobility
Laws & Norms Favor Drug Use
Perceived Availability of Drugs
Perceived Availability of Handguns
Poor Family Management
Family Conflict
Family History of Antisocial Behavior
Parent Attitudes Favorable to ASB
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Academic Failure
Low Commitment to School
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Early Initiation of ASB
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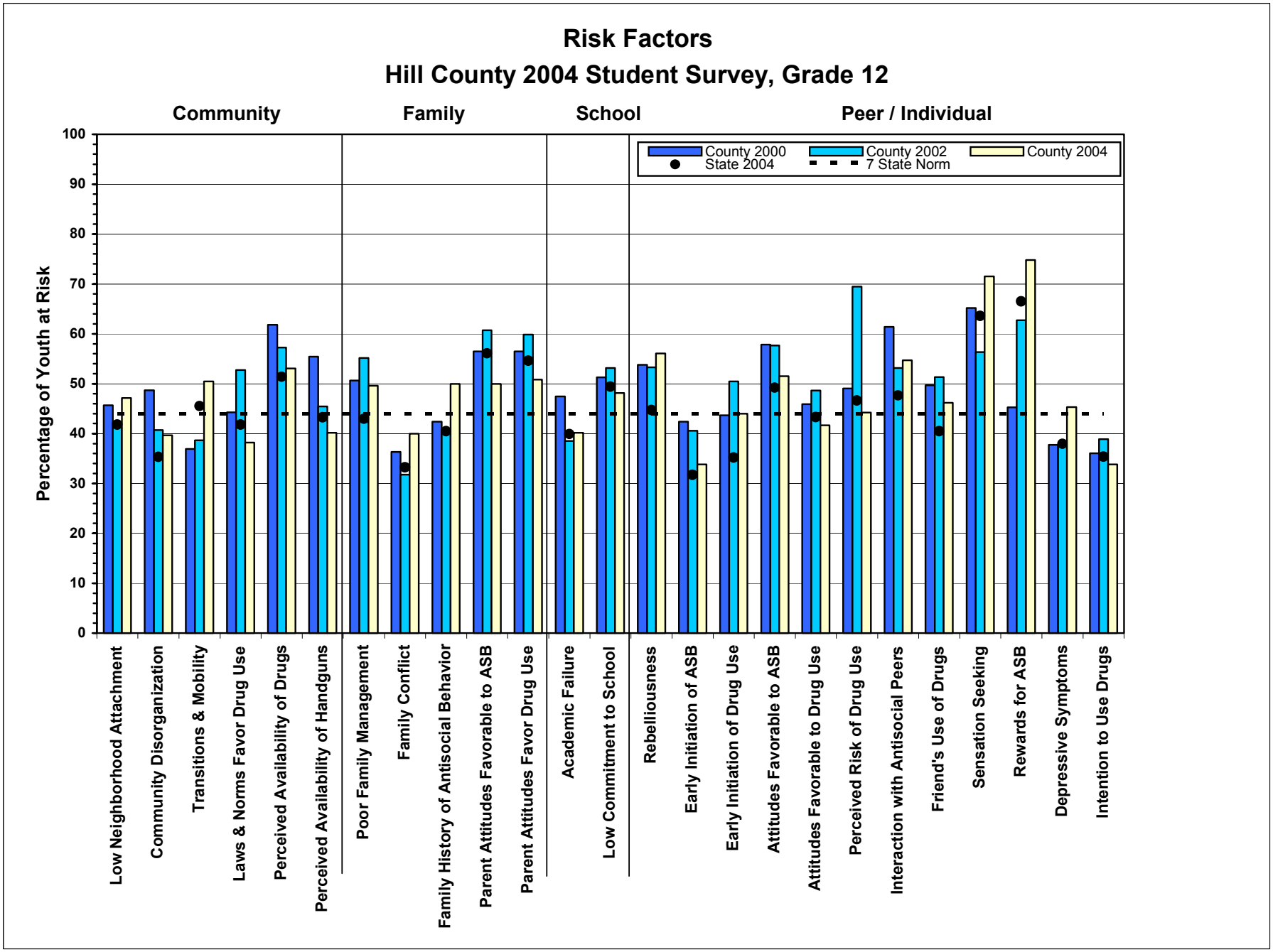
Perceived Risk of Drug Use
Interaction with Antisocial Peers
Friend's Use of Drugs
Sensation Seeking
Rewards for ASB
Depressive Symptoms
Intention to Use Drugs


Risk Factors
Hill County 2004 Student Survey, Grade 12
Community
Family
School
Peer / Individual
County 2000
County 2002
County 2004
State 2004
7 State Norm
Percentage of Youth at Risk
100
90
80
70
60
50
40
30
20
10
0
Low Neighborhood Attachment
Community Disorganization
Transitions & Mobility
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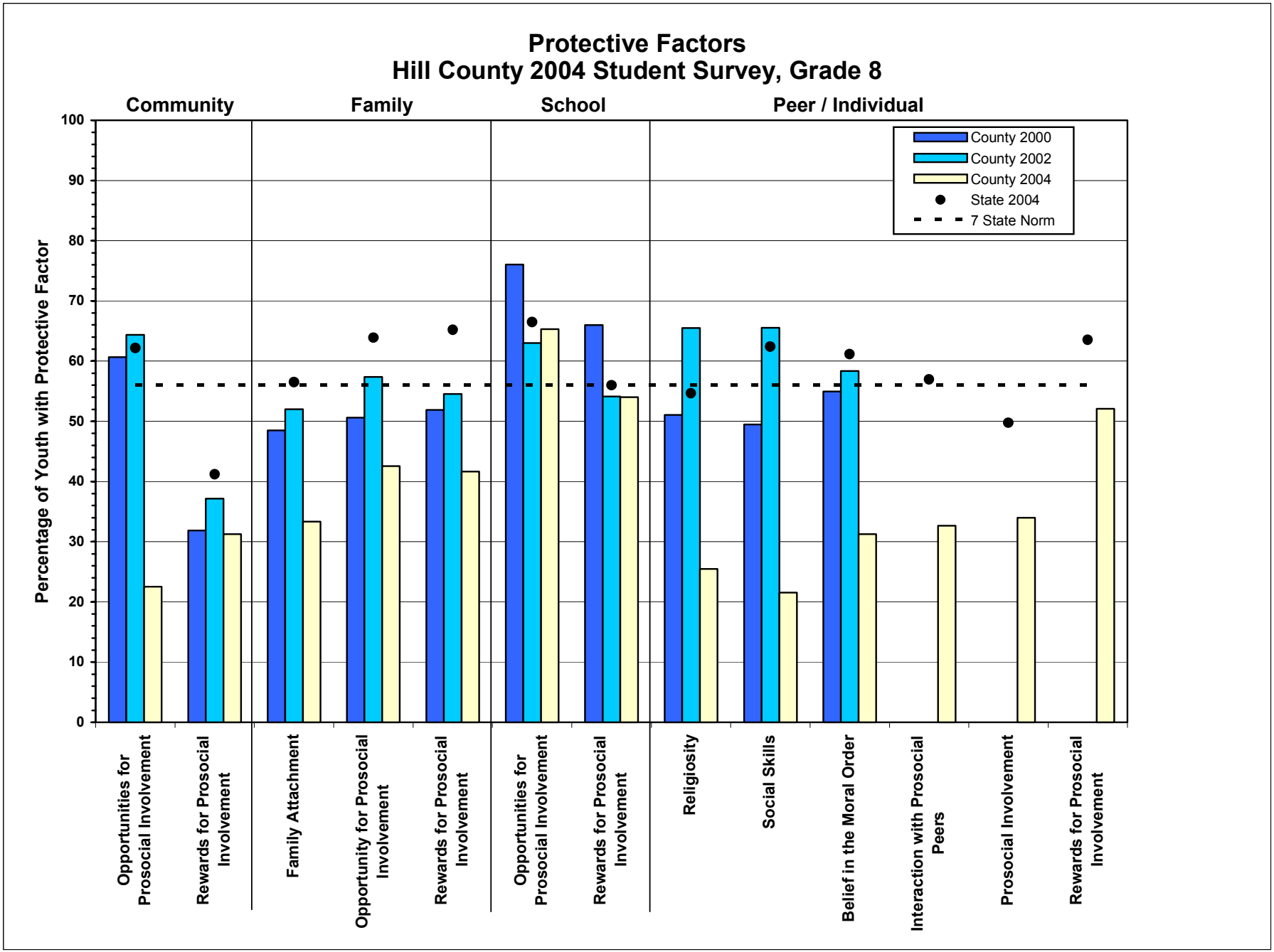
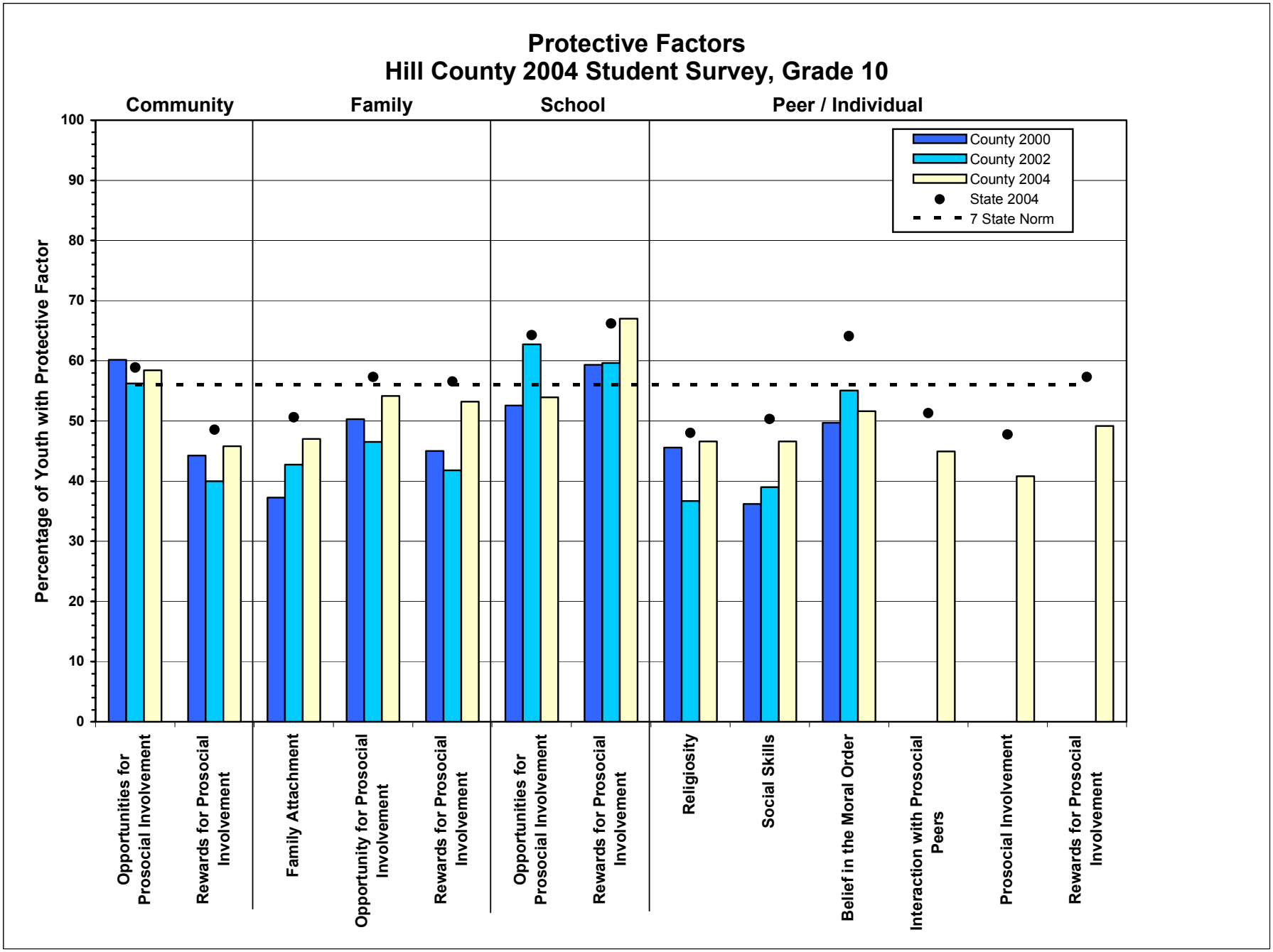

Protective Factors
Hill County 2004 Student Survey, Grade 8
Community
Family
School
Peer / Individual
Percentage of Youth with Protective Factor
0
10
20
30
40
50
60
70
80
90
100
County 2000
County 2002
County 2004
State 2004
7 State Norm
Opportunities for Prosocial Involvement
Rewards for Prosocial Involvement
Family Attachment
Opportunity for Prosocial Involvement
Rewards for Prosocial Involvement
Opportunities for Prosocial Involvement
Rewards for Prosocial Involvement
Religiosity
Social Skills
Belief in the Moral Order
Interaction with Prosocial Peers
Prosocial Involvement
Rewards for Prosocial Involvement


Protective Factors
Hill County 2004 Student Survey, Grade 10
Community
Family
School
Peer / Individual
Percentage of Youth with Protective Factor
100
90
80
70
60
50
40
30
20
10
0
County 2000
County 2002
County 2004
State 2004
7 State Norm
Opportunities for Prosocial Involvement
Rewards for Prosocial Involvement
Family Attachment
Opportunity for Prosocial Involvement
Rewards for Prosocial Involvement
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Religiosity
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Prosocial Involvement
Rewards for Prosocial Involvement

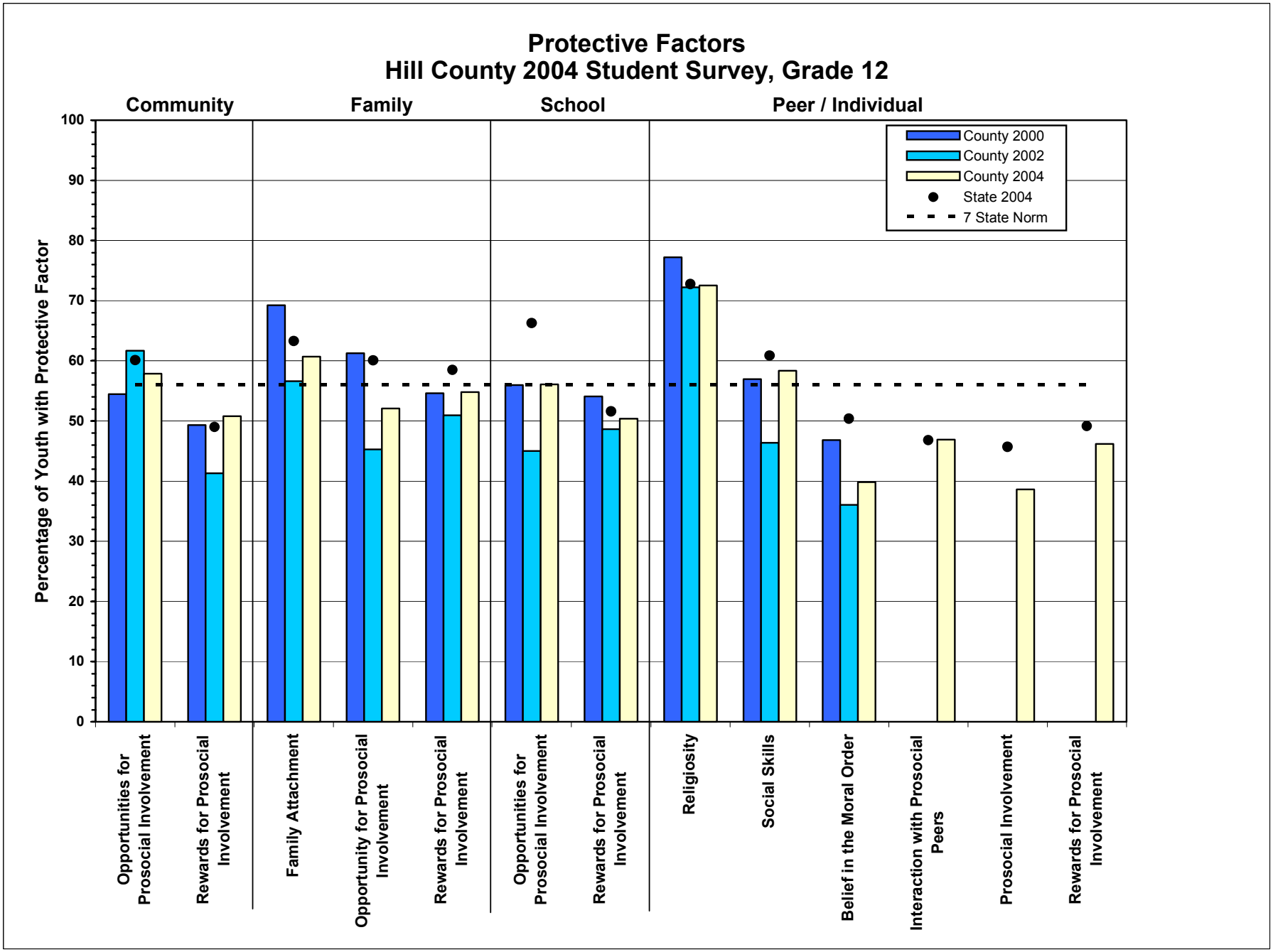
Protective Factors
Hill County 2004 Student Survey, Grade 12
Community
Family
School
Peer / Individual
Percentage of Youth with Protective Factor
100
90
80
70
60
50
40
30
20
10
0
County 2000
County 2002
County 2004
State 2004
7 State Norm
Opportunities for Prosocial Involvement
Rewards for Prosocial Involvement
Family Attachment
Opportunity for Prosocial Involvement
Rewards for Prosocial Involvement
Opportunities for Prosocial Involvement
Rewards for Prosocial Involvement
Religiosity
Social Skills
Belief in the Moral Order
Interaction with Prosocial Peers
Prosocial Involvement
Rewards for Prosocial Involvement

Table 2. Risk and Protective Factor Scale Definitions

Community Domain Risk Factors	
Community and Personal Transitions & Mobility	Neighborhoods with high rates of residential mobility have been shown to have higher rates of juvenile crime and drug selling, while children who experience frequent residential moves and stressful life transitions have been shown to have higher risk for school failure, delinquency, and drug use.
Community Disorganization	Research has shown that neighborhoods with high population density, lack of natural surveillance of public places, physical deterioration, and high rates of adult crime also have higher rates of juvenile crime and drug selling.
Low Neighborhood Attachment	A low level of bonding to the neighborhood is related to higher levels of juvenile crime and drug selling.
Laws and Norms Favorable Toward Drug Use	Research has shown that legal restrictions on alcohol and tobacco use, such as raising the legal drinking age, restricting smoking in public places, and increased taxation have been followed by decreases in consumption. Moreover, national surveys of high school seniors have shown that shifts in normative attitudes toward drug use have preceded changes in prevalence of use.
Perceived Availability of Drugs and Handguns	The availability of cigarettes, alcohol, marijuana, and other illegal drugs has been related to the use of these substances by adolescents. The availability of handguns is also related to a higher risk of crime and substance use by adolescents.
Community Domain Protective Factors	
Opportunities for Positive Involvement	When opportunities are available in a community for positive participation, children are less likely to engage in substance use and other problem behaviors.
Rewards for Positive Involvement	Rewards for positive participation in activities helps children bond to the community, thus lowering their risk for substance use.
Family Domain Risk Factors	
Family History of Antisocial Behavior	When children are raised in a family with a history of problem behaviors (e.g., violence or ATOD use), the children are more likely to engage in these behaviors.
Family Conflict	Children raised in families high in conflict, whether or not the child is directly involved in the conflict, appear at risk for both delinquency and drug use.
Parental Attitudes Favorable Toward Antisocial Behavior & Drugs	In families where parents use illegal drugs, are heavy users of alcohol, or are tolerant of children's use, children are more likely to become drug abusers during adolescence. The risk is further increased if parents involve children in their own drug (or alcohol) using behavior, for example, asking the child to light the parent's cigarette or get the parent a beer from the refrigerator.
Poor Family Management	Parents' use of inconsistent and/or unusually harsh or severe punishment with their children places them at higher risk for substance use and other problem behaviors. Also, parents' failure to provide clear expectations and to monitor their children's behavior makes it more likely that they will engage in drug abuse whether or not there are family drug problems
Family Domain Protective Factors	
Family Attachment	Young people who feel that they are a valued part of their family are less likely to engage in substance use and other problem behaviors.
Opportunities for Positive Involvement	Young people who are exposed to more opportunities to participate meaningfully in the responsibilities and activities of the family are less likely to engage in drug use and other problem behaviors.
Rewards for Positive Involvement	When parents, siblings, and other family members praise, encourage, and attend to things done well by their child, children are less likely to engage in substance use and problem behaviors.
School Domain Risk Factors	
Academic Failure	Beginning in the late elementary grades (grades 4-6) academic failure increases the risk of both drug abuse and delinquency. It appears that the experience of failure itself, for whatever reasons, increases the risk of problem behaviors.

Table 2. Risk and Protective Factor Scale Definitions (Continued)	
Low Commitment to School	Surveys of high school seniors have shown that the use of hallucinogens, cocaine, heroin, stimulants, and sedatives or non-medically prescribed tranquilizers is significantly lower among students who expect to attend college than among those who do not. Factors such as liking school, spending time on homework, and perceiving the coursework as relevant are also negatively related to drug use.
School Domain Protective Factors	
Opportunities for Positive Involvement	When young people are given more opportunities to participate meaningfully in important activities at school, they are less likely to engage in drug use and other problem behaviors.
Rewards for Positive Involvement	When young people are recognized and rewarded for their contributions at school, they are less likely to be involved in substance use and other problem behaviors
Peer-Individual Risk Factors	
Early Initiation of Antisocial Behavior and Drug Use	Early onset of drug use predicts misuse of drugs. The earlier the onset of any drug use, the greater the involvement in other drug use and the greater frequency of use. Onset of drug use prior to the age of 15 is a consistent predictor of drug abuse, and a later age of onset of drug use has been shown to predict lower drug involvement and a greater probability of discontinuation of use.
Attitudes Favorable Toward Antisocial Behavior and Drug Use	During the elementary school years, most children express anti-drug, anti-crime, and pro-social attitudes and have difficulty imagining why people use drugs or engage in antisocial behaviors. However, in middle school, as more youth are exposed to others who use drugs and engage in antisocial behavior, their attitudes often shift toward greater acceptance of these behaviors. Youth who express positive attitudes toward drug use and antisocial behavior are more likely to engage in a variety of problem behaviors, including drug use.
Friends' Use of Drugs	Young people who associate with peers who engage in alcohol or substance abuse are much more likely to engage in the same behavior. Peer drug use has consistently been found to be among the strongest predictors of substance use among youth. Even when young people come from well-managed families and do not experience other risk factors, spending time with friends who use drugs greatly increases the risk of that problem developing.
Interaction with Antisocial Peers	Young people who associate with peers who engage in problem behaviors are at higher risk for engaging in antisocial behavior themselves.
Perceived Risk of Drug Use	Young people who do not perceive drug use to be risky are far more likely to engage in drug use.
Rewards for Antisocial Behavior	Young people who receive rewards for their antisocial behavior are at higher risk for engaging further in antisocial behavior and substance use.
Rebelliousness	Young people who do not feel part of society, are not bound by rules, don't believe in trying to be successful or responsible, or who take an active rebellious stance toward society, are at higher risk of abusing drugs. In addition, high tolerance for deviance, a strong need for independence and normlessness have all been linked with drug use.
Sensation Seeking	Young people who seek out opportunities for dangerous, risky behavior in general are at higher risk for participating in drug use and other problem behaviors.
Intention to Use ATODs	Many prevention programs focus on reducing the intention of participants to use ATODs later in life. Reduction of intention to use ATODs often follows successful prevention interventions.
Depressive Symptoms	Young people who are depressed are overrepresented in the criminal justice system and are more likely to use drugs. Survey research and other studies have shown a link between depression and other youth problem behaviors.
Gang Involvement	Youth who belong to gangs are more at risk for antisocial behavior and drug use.
Peer-Individual Protective Factors	
Religiosity	Young people who regularly attend religious services are less likely to engage in problem behaviors.
Social Skills	Young people who are socially competent and engage in positive interpersonal relations with their peers are less likely to use drugs and engage in other problem behaviors.
Belief in the Moral Order	Young people who have a belief in what is "right" or "wrong" are less likely to use drugs.
Prosocial Involvement	Participation in positive school and community activities helps provide protection for youth.
Prosocial Norms	Young people who view working hard in school and the community are less likely to engage in problem behavior.
Involvement with Prosocial Peers	Young people who associate with peers who engage in prosocial behavior are more protected from engaging in antisocial behavior and substance use.

Table 3. Number of Students Who Completed the Survey

Year Survey Completed	Grade 8				Grade 10				Grade 12			
	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004
Number of Youth	195	146	51	6207	178	161	191	6688	159	111	133	5684

Table 4. Percentage of Students Who Used ATODs During Their Lifetime

Drug Used	Grade 8				Grade 10				Grade 12			
	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004
Alcohol	66.8	59.6	74.5	54.6	86.6	87.5	80.1	73.8	78.3	82.9	87.7	84.6
Cigarettes	55.7	37.9	75.5	32.4	65.3	55.1	53.2	43.8	67.3	59.6	58.8	57.6
Chewing Tobacco	31.0	16.0	42.9	11.4	48.0	31.2	29.9	22.8	50.3	41.8	35.6	31.8
Marijuana	34.4	25.3	71.4	18.1	54.2	52.9	44.7	39.9	50.9	54.1	57.5	53.6
Inhalants	23.0	11.6	40.0	15.5	19.4	14.5	11.6	13.0	19.5	13.5	18.6	11.5
Hallucinogens	4.2	0.7	8.3	1.8	7.6	13.2	6.4	5.8	13.3	18.0	8.5	10.2
Cocaine	6.8	4.1	8.3	1.7	9.3	9.4	8.1	3.9	8.9	7.2	11.6	8.5
Stimulants	6.3	4.1	12.2	2.5	7.0	11.3	7.0	5.8	7.5	9.9	11.8	9.3
Sedatives	13.7	7.5	27.1	9.7	21.1	20.1	21.4	15.8	15.1	18.9	21.7	19.0
Opiates	1.6	1.4	4.2	1.1	3.5	4.4	4.9	2.6	2.5	0.9	1.6	4.2
Ecstasy*	*	1.4	10.4	2.1	*	7.5	4.9	3.7	*	5.4	2.4	5.2
Any Drug	46.8	32.9	79.6	32.5	61.5	60.5	53.6	49.8	55.3	60.4	64.8	60.2

Table 5. Percentage of Students Who Used ATODs During the Past 30 Days

Drug Used	Grade 8				Grade 10				Grade 12			
	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004
Alcohol	39.7	25.5	48.0	24.2	67.8	57.7	53.4	46.2	57.7	62.7	61.1	60.5
Cigarettes	27.6	10.4	52.0	10.8	28.1	29.5	29.1	18.7	27.8	30.0	28.8	28.1
Chewing Tobacco	9.6	6.9	22.4	3.9	24.6	13.4	15.5	9.9	23.3	27.0	16.7	14.2
Marijuana	18.4	13.8	47.9	8.0	27.5	32.1	31.6	20.5	24.4	26.4	26.2	26.2
Inhalants	5.3	3.4	12.5	5.4	3.5	1.9	2.7	3.1	1.3	0.9	1.6	1.7
Hallucinogens	1.0	0.7	6.0	0.8	6.5	1.3	1.6	1.7	6.3	3.6	2.4	2.5
Cocaine	1.6	2.7	4.0	0.8	3.5	1.3	3.2	1.3	4.4	1.8	6.3	2.3
Stimulants	0.5	1.4	2.1	0.9	2.9	3.8	2.2	1.8	1.9	3.6	3.8	3.1
Sedatives	7.4	1.4	16.7	4.3	8.7	11.3	11.2	7.1	6.9	9.0	10.9	8.2
Opiates	1.1	1.4	0.0	0.4	1.8	1.9	2.7	0.8	0.6	0.0	1.6	0.8
Ecstasy*	*	0.7	2.2	0.8	*	2.5	1.1	0.9	*	0.9	1.6	0.9
Any Drug	25.0	17.8	59.6	15.9	32.9	38.7	37.2	27.1	27.6	30.6	34.4	32.0

Table 6. Percentage of Students With Heavy Use of Alcohol and Cigarettes

Drug Used	Grade 8				Grade 10				Grade 12			
	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004
Binge Drinking	22.1	17.2	46.0	16.2	45.9	44.2	39.4	32.3	39.7	48.2	45.5	44.4
1/2 Pack of Cigarettes/Day	2.1	2.1	2.0	0.4	1.8	1.9	2.1	1.2	3.2	1.8	5.3	2.9

Table 7. Percentage of Students With Antisocial Behavior in the Past Year

Behavior	Grade 8				Grade 10				Grade 12			
	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004
Suspended from School	13.3	7.5	40.0	11.4	12.9	10.0	9.9	9.8	8.8	7.2	14.6	7.9
Drunk or High at School	17.5	10.3	48.0	10.7	32.6	37.9	35.1	25.0	25.2	33.3	34.4	29.8
Sold Illegal Drugs	5.2	3.5	16.3	3.5	12.5	15.1	15.7	9.8	12.2	13.8	12.2	11.4
Stolen a Vehicle	3.6	7.6	10.0	4.3	4.5	4.3	12.0	4.0	5.0	1.8	4.6	1.8
Been Arrested	11.3	8.3	34.0	6.6	14.0	9.4	19.5	8.9	14.6	14.4	21.4	8.4
Attacked to Harm	13.3	13.1	25.5	14.8	11.8	11.9	20.6	14.4	14.6	7.2	13.7	11.2
Carried a Handgun	7.7	4.9	8.2	8.1	8.0	8.1	11.1	7.4	11.3	9.9	6.9	7.6
Handgun to School	1.0	1.4	6.0	0.8	0.6	0.0	4.2	1.1	1.9	0.0	2.3	0.9

* not available, question not included in survey

Table 8. Percentage of Students Reporting Risk

Risk Factor	Grade 8				Grade 10				Grade 12			
	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004
Community Domain												
Low Neighborhood Attachment	39.4	45.7	47.9	33.8	38.5	42.6	47.3	39.7	45.7	42.2	47.2	41.8
Community Disorganization	41.5	42.1	63.0	31.4	36.0	46.2	40.4	40.0	48.7	40.7	39.7	35.3
Transitions & Mobility	48.7	44.8	50.0	44.5	42.7	49.7	57.7	49.1	36.9	38.7	50.4	45.5
Laws & Norms Favor Drug Use	42.9	36.0	75.6	36.0	50.6	54.2	45.5	44.8	44.3	52.7	38.2	41.8
Perceived Availability of Drugs	52.0	41.5	62.2	39.4	68.3	62.7	49.1	52.6	61.8	57.3	53.0	51.4
Perceived Availability of Handguns	45.8	38.0	53.3	48.1	37.6	30.5	30.3	35.9	55.4	45.5	40.2	43.2
Family Domain												
Poor Family Management	59.4	48.4	73.5	40.9	56.5	52.9	47.0	42.1	50.7	55.1	49.6	43.0
Family Conflict	54.4	48.8	62.5	50.6	45.8	48.5	39.5	38.8	36.3	31.8	40.0	33.2
Family History of Antisocial Behavior	52.0	42.9	87.2	41.6	50.3	47.9	49.3	43.0	42.4	40.2	50.0	40.5
Parent Attitudes Favorable to ASB	50.3	47.0	72.3	53.9	61.9	52.1	57.8	57.0	56.5	60.7	50.0	56.1
Parent Attitudes Favor Drug Use	39.2	27.1	57.4	34.1	62.1	62.7	64.0	52.0	56.5	59.8	50.8	54.6
School Domain												
Academic Failure	52.2	49.3	68.2	46.8	55.7	41.7	48.9	46.4	47.4	38.5	40.2	39.9
Low Commitment to School	45.4	51.7	52.9	45.8	64.0	51.9	54.5	49.2	51.3	53.2	48.1	49.4
Peer-Individual Domain												
Rebelliousness	39.7	40.3	62.7	43.2	62.4	52.5	57.4	48.3	53.8	53.3	56.1	44.7
Early Initiation of ASB	37.1	29.7	70.0	32.6	42.4	41.0	43.2	36.0	42.4	40.5	33.8	31.7
Early Initiation of Drug Use	55.7	45.5	77.6	32.9	59.0	55.9	43.2	31.0	43.7	50.5	44.0	35.2
Attitudes Favorable to ASB	41.1	46.9	72.0	43.3	63.3	55.9	61.1	51.8	57.9	57.7	51.5	49.2
Attitudes Favorable to Drug Use	41.2	31.7	70.0	30.5	48.9	58.4	49.7	42.2	45.9	48.6	41.7	43.3
Perceived Risk of Drug Use	46.5	33.6	66.7	38.8	51.5	55.1	44.1	39.2	49.0	69.4	44.2	46.6
Interaction with Antisocial Peers	52.3	43.0	81.3	44.5	63.8	52.8	47.8	48.7	61.4	53.2	54.7	47.7
Friend's Use of Drugs	58.0	48.6	89.8	41.1	66.3	65.0	49.7	44.6	49.7	51.4	46.2	40.5
Sensation Seeking	64.4	51.7	77.6	66.9	68.9	62.1	73.3	65.1	65.2	56.4	71.5	63.6
Rewards for ASB	56.0	46.1	70.2	49.6	44.9	58.9	50.5	52.9	45.3	62.7	74.8	66.5
Depressive Symptoms	50.5	47.6	65.2	46.9	50.3	44.0	41.8	47.0	37.7	37.8	45.3	37.9
Intention to Use Drugs	46.0	36.4	72.9	34.5	60.0	56.0	51.9	48.0	36.1	38.9	33.8	35.4

Table 9. Percentage of Students Reporting Protection

Protective Factor	Grade 8				Grade 10				Grade 12			
	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004	County 2000	County 2002	County 2004	State 2004
Community Domain												
Opportunities for Prosocial Involvement	60.7	64.4	22.5	62.2	60.1	56.3	58.4	58.9	54.5	61.7	57.9	60.1
Rewards for Prosocial Involvement	31.8	37.1	31.3	41.2	44.2	40.0	45.8	48.5	49.3	41.3	50.8	49.0
Family Domain												
Family Attachment	48.5	52.0	33.3	56.5	37.3	42.7	47.0	50.6	69.2	56.6	60.7	63.3
Opportunity for Prosocial Involvement	50.6	57.4	42.6	63.9	50.3	46.5	54.1	57.3	61.3	45.3	52.1	60.1
Rewards for Prosocial Involvement	51.9	54.5	41.7	65.2	45.0	41.8	53.2	56.6	54.6	51.0	54.8	58.5
School Domain												
Opportunities for Prosocial Involvement	76.0	63.0	65.3	66.5	52.5	62.7	53.9	64.3	56.0	45.0	56.1	66.3
Rewards for Prosocial Involvement	66.0	54.1	54.0	56.0	59.3	59.6	67.0	66.2	54.1	48.6	50.4	51.6
Peer-Individual Domain												
Religiosity	51.1	65.5	25.5	54.7	45.6	36.7	46.6	48.0	77.2	72.2	72.5	72.8
Social Skills	49.5	65.5	21.6	62.4	36.2	39.0	46.6	50.3	57.0	46.4	58.3	60.8
Belief in the Moral Order	55.0	58.3	31.3	61.2	49.7	55.1	51.6	64.1	46.8	36.0	39.8	50.4
Interaction with Prosocial Peers	*	*	32.7	57.0	*	*	44.9	51.3	*	*	46.9	46.8
Prosocial Involvement	*	*	34.0	49.8	*	*	40.8	47.8	*	*	38.6	45.7
Rewards for Prosocial Involvement	*	*	52.1	63.5	*	*	49.2	57.3	*	*	46.2	49.1

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The Montana Prevention Web Site: The Addictive and Mental Disorders Division's Chemical Dependency Bureau's Drug and Alcohol Prevention Risk and Protective Factor Reporting System.
http://oraweb.hhs.state.mt.us:9999/prev_index

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Additional Information About the Montana 2002 PNA Survey

The survey booklets were designed and scanned, the data analyzed, and the various reports produced by Bach Harrison, L.L.C., under contract with the Chemical Dependency Bureau. Questions regarding the survey can be directed to Jackie Jandt, PNA Project Director, Chemical Dependency Bureau, Addictive and Mental Disorders Division, Department of Public Health and Human Services, PO Box 202905, Helena, MT 59620-2905, phone (406) 444-9656, fax (406) 444-9389, or e-mail jjandt@state.mt.us. Additional information on risk and protective factors can be found at the Chemical Dependency Bureau website. The website contains data on 35 social indicators. In many cases the data is reported for a ten year period. The website is located at: http://oraweb.hhs.state.mt.us:9999/prev_index. Or, the website may be accessed by going to the Addictive and Mental Disorders Division web page located at http://www.dphhs.state.mt.us/, scroll down and click on Addictive and Mental Disorder Division, scroll down to bottom of the page and click on "Drug and Alcohol Prevention risk and Protective Factor Reporting System Web Site.