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ABSTRACT

This report presents findings from a spring 1997 survey of all middle-school students (grades 6-8) enrolled in schools funded by the Bureau of Indian Affairs (BIA). The Centers for Disease Control Youth Risk Behavior Survey (YRBS) was completed by 6,990 students in 115 of the 122 BIA-funded middle schools; the overall response rate was 74 percent. The self-administered Middle School YRBS is a 55-item questionnaire that assesses the prevalence of six categories of behaviors that contribute substantially to death, illness, and social problems among U.S. youth and adults: (1) unintentional and intentional injuries; (2) tobacco use; (3) alcohol and other drug use; (4) sexual behaviors that contribute to unintended pregnancy and sexually transmitted disease, including HIV infection; (5) dietary behaviors; and (6) physical activity. Findings in each category are detailed in narrative and chart form and compared to national and high school findings. Some findings include: (1) less seat belt use among males, less use of helmets among males, 37 percent of all students took a gun to school, 64 percent engaged in a fight, and one-third had considered suicide; (2) over 78 percent had tried cigarette smoking; (3) three in five had used alcohol, and 51 percent had used marijuana; (4) 20 percent had sexual intercourse; (5) 23 percent thought of themselves as overweight; and (6) 69 percent participated in vigorous physical activity. A chart shows ages of initiation for various survey activities. Tables break down findings by sex and grade. Suggestions are offered for the role of schools in addressing the risk behaviors examined in this survey. (SAS)

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1997 Youth Risk Behavior Survey of Middle School Students Attending Bureau Funded Schools



Bureau of Indian Affairs Office of Indian Education Programs

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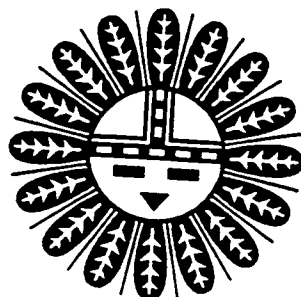
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FOREWORD

In the Spring of 1997, a Bureau wide survey was conducted for the first time of all middle school students enrolled in Bureau funded schools in grades 6 through 8. According to the Center for Disease Control (CDC) this is the first nationwide survey of its kind among this age group. The survey instrument used was the Youth Risk Behavior Survey (YRBS). The Center for Disease Control (CDC) developed the YRBS and uses it to conduct a national survey every two years in over 100 selected public schools across the country. Although the information is disaggregated to provide information about racial/ethnic groups of students, American Indians are too small a sample nationally to be statistically reliable. Therefore, this report based on the YRBS conducted solely with our American Indian students can be used as a source of information for schools and communities to assist with the planning and implementation of violence and substance abuse prevention programs.

Tribal leaders were informed about the YRBS and our survey effort through a letter from the Assistant Secretary - Indian Affairs and myself. Schools provided parents with information about the YRBS. All stakeholders including students understood that participation, although encouraged, was completely voluntary. Representatives from each area, agency and individual schools were given training by the CDC staff about the YRBS and how to conduct the survey. One hour of one day was selected in the month of April at each of the participating schools to implement the survey. There were no make ups for absences. The survey was conducted in part to assess the risk behaviors that our young people are engaging in and to better focus prevention programs to address these identified behaviors.

I hope that the detailed findings will be useful to school board members, school administrators, teachers, program coordinators, and parents to support and justify your prevention efforts. The information may also suggest needed program modifications to better address the needs of students. Please use these survey results to improve our efforts to protect our young people and provide them with the best educational programs and services we can.



Joann Sebastian Morris
Director, Office of Indian Education Programs

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Gratitude is expressed to Tribal leaders, Education Line Officers, School Board Members, parents, students, principals, teachers and other staff at participating Bureau funded schools; Donna Leno of the Indian Health Service; Dr. Sherry Everett, Steve Ranslow and Wick Warren of the Centers for Disease Control; and Cheryl Branum and Gail Veney of the Office of Indian Education Programs. Without their support and assistance, the survey and this report would not have been possible.



Introduction

The Office of Indian Education Programs (OIEP) is located within the Bureau of Indian Affairs (BIA) in the U. S. Dept. of Interior. The BIA/OIEP provides funding for 185 schools located on 63 reservations in 23 states. These schools provide educational programs for 50,373 students in school year 1997-1998. The health problems experienced by Indian youth are caused by a few preventable behaviors, such as alcohol abuse and unprotected sexual behaviors. Tobacco use, dietary patterns that cause disease, and physical inactivity are other risk behaviors established during youth which lead to health and other social problems later in life, including increased social dysfunction of families. The negative impact that such behaviors have on individuals, schools, communities, and Indian culture demand that we teach our youth about health and encourage them to adopt and maintain healthy behaviors.

Since the first Youth Risk Behavior Survey (YRBS) was conducted in 1994 on high school students enrolled in Bureau funded schools, the OIEP has promoted the following initiatives to address the survey findings:

- * conducted six comprehensive school health trainings
- * developed ROPES courses at 17 schools to provide for outdoor adventure based counseling
- * provided targeted Title IV (Safe and Drug Free Schools and Communities) funding to 15 schools
- * piloted K-6 HIV/AIDS prevention education with the Circle of Life Curriculum in 12 schools
- * required that each Bureau funded school set a goal for the reduction of violence and substance abuse incidents

The identified risk behaviors exhibited by our youth today were not part of Indian life generations ago. Schools must now play a key role in promoting and teaching our youth about Indian traditions and the importance of attaining and maintaining health of body, mind and spirit. Successful schools such as those identified by the U. S. Department of Education, Office of Educational Research and Improvement for national recognition have implemented programs which incorporate several interdependent components, such as:

- * a healthy school environment
- * physical education
- * after school or extended day activities
- * nutrition and healthy snacks
- * school nurse and health services
- * comprehensive school health education
- * parental involvement
- * American Indian languages and traditions

The most effective health education emphasizes behavior change and risk avoidance. Behaviors are learned and behaviors become habits. Learned healthy behaviors developed at a young age which are supported at home and promoted at school become healthy habits for a lifetime and are the best protection we can provide to our youth against the six risk behaviors identified in this report.

We encourage all Bureau funded schools to implement a planned, sequential, K-12 instructional program which integrates health education about each of the risk behaviors along with teaching risk avoidance skills. Intervention programs and activities employed within a culturally appropriate framework are also essential to assisting our youth break the habits and the cycle of risk taking behaviors.

This report summarizes the results of the first BIA/OIEP Middle School YRBS which was completed in the spring of 1997 by 6,990 middle school students out of a total BIA middle school student population of 8,932. One-hundred fifteen (115) out of 122 Bureau funded middle schools with grades 6-8 participated. This represents a 78% student participation rate and a 94% school response rate. These survey results are statistically reliable and representative of all BIA students in grades 6 through 8.

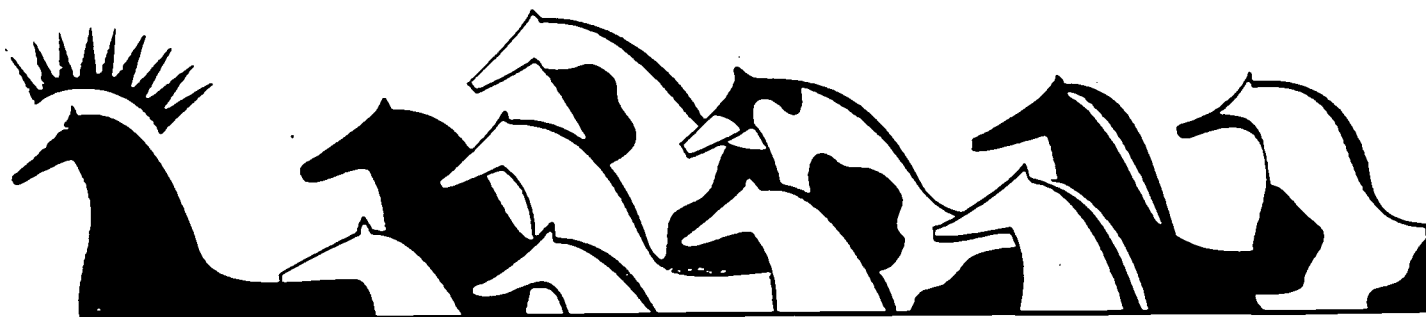
The 94% school response rate multiplied by the 78% student participation rate equals the overall response rate which is 74%. A weighting factor was applied to each student questionnaire to adjust for non-response. Weighting is a statistical procedure used so that the results reflect the likelihood of sampling each student and to reduce bias by adjusting for students who did not complete a questionnaire.

This report is designed to stimulate useful discussions among educators, parents, and youth in BIA funded schools about effective ways, programs and activities to address risk behaviors. Individual school data and this report could combine to provide statistically reliable information to support and demonstrate need when grant writing or seeking other funding opportunities to address health risks and youth activity.

Description of the Survey and Survey Administration

The Middle School YRBS is a 55 item questionnaire that assesses the prevalence of six categories of behavior that contribute substantially to the leading causes of death, illness, and social problems among youth and adults in the United States. The six priority risk behaviors assessed by the Middle School YRBS are: (1) unintentional and intentional injuries; (2) tobacco use; (3) alcohol and other drug use; (4) sexual behaviors that contribute to unintended pregnancy and sexually transmitted disease, including HIV infection; (5) dietary behaviors; and (6) physical activity.

The survey is self-administered. It was given to students on a particular day during a regular class period. The survey takes approximately 30 minutes to complete. Each participating school determined the one day and one class period assigned for the survey. Students recorded their answers directly on a booklet that was later scanned by a computer. Survey procedures were designed to protect students' privacy. Students were told their participation was voluntary and when taking the survey to leave no identifying markings on the booklet such as their name or student identification number.



Unintentional Injury Seat Belt Use

Seat belt use is estimated to reduce motor vehicle fatalities nationally by 40% to 50% and serious injuries by 45% to 55%. Increasing the use of seat belts from the current 68% nationally to 85% could save an estimated 10,000 lives per year.

* Overall, 30% of the middle school students rarely or never used seat belts when riding in a car or truck driven by someone else. This is 7% lower than the high school students.

* The percent of students who never or rarely wore seat belts decreased from grade 8 at 34% to grade 6 at 25%.

* Overall, middle school males reported less seat belt usage. Males reported 33% rarely or never using seat belt and females reported 26%.

Bicycle, Rollerblade and Skateboard Safety

Head injury is the leading cause of death in motorcycle and bicycle crashes nationally. Unhelmeted bicyclists increase their risk of head injury six times more than helmeted riders.

* 71% rarely or never wore helmets while riding a bicycle. This is 23% lower than high school students.

* 77% of middle school males rarely or never wore helmets while riding a bicycle compared to 65% of the females reporting this behavior.

* Among rollerbladers and skateboard riders 47% rarely or never wore helmets.

Motor Vehicle Safety

Nationally, the leading cause of death among youth ages 10-20 is motor vehicle crashes. Half of these crashes are alcohol related. The leading cause of spinal cord injury among youth is an alcohol related vehicle crash. During the thirty days preceding the survey, students reported:

* Overall, 52% rode in a car or vehicle with a driver who had been drinking. This risk behavior significantly increases by grade level. 42% of 6th graders, 52% of 7th graders and 63% of eighth graders report riding in a vehicle with a driver who had been drinking.

Intentional Injury Carrying a Weapon

Homicide is the second leading cause of death among youth ages 15-24 nationally. According to the Indian Health Service (IHS), it is the third leading cause of death for 10-14 year olds. During adolescence, the national homicide rate increases 15 times.

* 37% of students reported carrying a gun to school during the past month. This behavior was significantly higher than the 13.5% reported by high school students.

* Significantly more males at 51% report carrying a gun to school than females at 22.5%

Physical Fighting

Middle school students report being involved in physical fighting at 64% which is significantly higher than high school students report at 44%. Middle school students surveyed on physical fighting reported that over the past 12 months:

- * Significantly more males (72%) than females (56%) report being involved in a physical fight.

- * Students report an increase of physical fighting by grade level. 56.5% of 6th graders, 64% of 7th graders and 73% of 8th graders are involved in physical fighting

- * 9% of the students or approximately one in ten were injured from being in a physical fight and required medical attention for injuries.

Suicide

Nationally, suicide is the fourth leading cause of death for 10-14 year olds. According to IHS the suicide death rate for American Indian youth is 2.4 times higher than the national rate. The percentage of BIA middle school students considering suicide is 29% which is significantly higher than high school students (22%).

- * 29% of students or approximately one-third of students have considered suicide during the past 12 months.

- * More middle school females (37%) than males (21.5%) seriously consider suicide. This remains true for high school students with 28% of females and 15.5% reporting this behavior.

- * 16% of students surveyed have made a suicide plan. The percent increases each year from 6th grade at 13% to 17% in 7th grade and 19% in 8th grade.

- * 16% of middle school students have attempted suicide. By grade level the percentage increases. 13% of 6th graders, 16% of 7th graders and 19% of 8th graders report having attempted suicide.

- * The percentage for attempted suicide by females is 20% which is significantly higher than males at 11%. This remains true for high school students. Females at 18% is significantly higher than males at 11% for attempted suicide.



Tobacco Use

Tobacco use is the chief preventable cause of death nationwide. One million teenagers begin smoking each year and 3,000 begin smoking each day. Ninety percent of smokers begin before the age of 21 and 50% begin before the age of 14. Of the BIA high school students surveyed, 11% smoked their first cigarette by the age of 8.

* 78.5% of middle school students had tried cigarette smoking. Smoking increased by grade level. 69% of 6th graders, 79% of 7th graders and 88% of 8th graders reported having tried cigarette smoking.

* 49% of students reported smoking within the past 30 days. This behavior increased by grade level. 39% of 6th graders, 50% of 7th graders and 59% of 8th graders reported smoking within the past 30 days.

* Overall, 10% of students reported frequent cigarette smoking. This increases to 31% for high school students. Frequent smoking is defined as smoking cigarettes on 20 or more of the 30 days preceding the survey.

* Overall, 41% of students have ever used smokeless tobacco which is significantly higher than the 23% reported by high school students. Males reported significantly higher use of smokeless tobacco at 46% than females at 36%. Both middle school groups are significantly higher than high school students who report 30% of males and 16% of females ever used smokeless tobacco.

Alcohol Use

Alcohol is a major factor in half of all homicides, suicides and motor vehicle crashes. Drinking can also be associated with physical fights, damaged property, trouble with the law and poor academic performance. Nationally, the reported use of alcohol by 12th grade is 88% which is also the percentage for BIA 12th graders. However, the alcoholism death rate for Indian youth ages 15-24 is 17 times the national average.

* Lifetime alcohol use reported for students in grades 6-8 is 59% or three in five middle school students report having had at least one alcoholic drink for other than religious reasons in their lifetime.

Other Drug Use

Documented drug use in America is greater among high school students and young adults than in any other industrialized country worldwide. Drug use can be related to unwanted pregnancy, poor or failing academic achievement, delinquency, and the transmission of sexually transmitted diseases including HIV, in addition to death or injury.

* Overall, 51% of middle school students have ever used marijuana. Marijuana use increases by grade level. 35% of 6th graders, 52% of 7th graders and 68% of 8th graders report this behavior.

* Overall, 11% of students or 1 in 10 have tried cocaine. Cocaine use increases by grade level. 7% of 6th graders, 10% of 7th graders and 16% of 8th graders report on cocaine use.

* Overall, 28.5% of students ever inhaled (sniffed or huffed) glue, the contents of aerosol cans, or paint sprays to get high. This behavior was significantly higher in 7th (30.5%) and 8th grade (32%) than 6th grade (24%).

* 4% of students report ever having used steroids. High school students overall report steroid use at 8%.

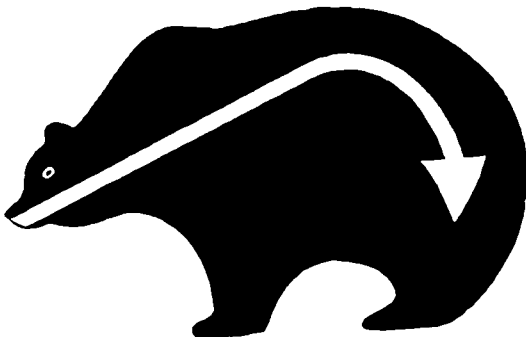
* 3% of students report ever injecting illegal drugs. 6% of high school students report this behavior.

HIV Education

AIDS is the 8th leading cause of death for youth aged 10-14 in the United States and 6th for youth ages 15-24. The IHS documented 2 cases of AIDS among American Indians for all ages in 1983. Ten years later, in 1993 there were 348 AIDS cases among Indians. The last reported number was 1,783 in December of 1997. HIV/AIDS is very much a growing concern in Indian country.

* Overall, 61% of middle school students and 85% of high school students have received instruction about HIV/AIDS while attending school.

* 7th (64%) and 8th (71%) graders were significantly higher to report HIV/AIDS instruction than 6th graders at 50%.



Sexual Behavior

Early sexual activity is associated with unwanted pregnancy, sexually transmitted diseases, including HIV infection, as well as having negative effects on social and psychological development. Nationally, more than one million teenage girls each year become pregnant. Among American Indians, 45% of mothers have their first child before the age of 20.

* Overall, 20% or one in five middle school students report ever having sexual intercourse. Significantly more males (24%) than females (16%) report this behavior.

* Overall, 6% report having three or more sexual partners in their lifetime. Significantly more males (9%) than females (4%) report this behavior.

* Among students who had ever had sexual intercourse, 60% used a condom.

Dietary Behaviors

Among adolescents ages 6-17 nationwide, there are 4.5 million who are overweight. Of these youth, 11% are male and 10% are female. Unfortunately, overweight children tend to become overweight adults which can have serious consequences to their health and lifestyles. Chronic conditions such as diabetes, heart disease, and high blood pressure can stem from being overweight. In addition, overweight adolescents often experience social and psychological stress related to their body shape. Overweight adolescents are at greater risk for depression, poor school performance and problems in family and other relationships. An overemphasis on thinness, particularly for this age group, can

lead to eating disorders which may include bulimia and anorexia nervosa. Females are more at risk for bulimia and anorexia nervosa as they account for 90% of all cases nationally.

* Overall, 23% report thinking of themselves as overweight. Significantly more females (26%) than males (21%) report this belief. This remains true among high school students with 43% females and 27% of males thinking of themselves as overweight.

* 36% of students had ever dieted to lose weight. Females were significantly higher (41%) than males (31%) in reporting this behavior.

* 57% of students reported exercising for the purpose of losing weight which is the same percent reported by high school students.

* 11% or one in ten students vomited after eating or took laxatives to keep from gaining weight.

* 7% of students took diet pills to lose weight or keep from gaining weight which is the same percent reported by high school students.

* On the day preceding the survey, 60% of students reported eating no more than two servings of high fat foods. Female students (63%) were significantly more likely than male students (57%) to report this behavior.

* On the day preceding the survey, 41.5% of students reported eating five or more servings of fruits and/or vegetables.

Physical Activity

Engaging in physical activity on a regular basis has been proven to increase both life expectancy and better overall health. Additionally, physical activity is associated with good mental health and self esteem. It assists in the prevention and/or management of heart disease, hypertension, diabetes and mental health problems. School physical education programs can have a significant positive effect on the health-related fitness of children.

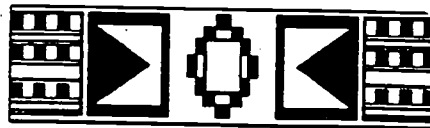
* Overall, 69% of students participated in vigorous physical activity on three or more of the seven days preceding the survey. This is significantly higher than high school students at 57%.

* 84% of the students report participating in a physical education class at least one time per week which is significantly higher than high school students at 46%.

* 29% of middle school students attend physical education class daily.

* 60% of students played on a school sports team.

* 45% of the students played on a sports team not affiliated with the school. Significantly more females (47%) than males (42.5%) report playing on a team not affiliated with their school.



Ages of Initiation

The ages of 11 and 13 were selected to define ages of initiation as they more likely correspond to middle school student ages in grades 6, 7 and 8.

- * By age 11, 36% of students smoked a cigarette.
- * By age 11, 26% of students had their first alcoholic drink.
- * By age 11, 18% of students had smoked marijuana.
- * By age 11, 5% of students had sexual intercourse.
- * By age 13, 62% of students had smoked a cigarette.
- * By age 13, 50% of students had their first alcoholic drink.
- * By age 13, 40% of students had smoked marijuana.
- * By age 13, 11% of students had sexual intercourse.



Table 1. Percentage of middle school students involved in unintentional injury risk behaviors, by sex and grade — Bureau of Indian Affairs, Youth Risk Behavior Survey, 1997

	Sex		Grade		
	Total	Female	Male	7	8
Rarely or never used seat belts ^{1,a,b}	29.6 (26.8-32.4) ¹	26.2 (23.1-29.2)	33.1 (30.0-36.2)	24.8 (22.2-27.4)	34.3 (30.1-38.5)
Among bicycle riders, rarely/never wore helmets ^a	70.9 (68.9-72.9)	65.2 (62.4-67.9)	76.6 (74.6-78.6)	69.3 (66.5-72.1)	71.6 (69.1-74.1)
Among rollerbladers and skateboard riders, rarely/never wore helmets	46.6 (44.4-48.8)	47.1 (44.1-50.0)	46.2 (44.0-48.4)	47.8 (44.8-50.8)	43.1 (40.2-45.9)
Ever rode with a drinking driver ^c	52.2 (49.8-54.5)	53.7 (51.0-56.4)	50.9 (48.3-53.5)	41.8 (38.9-44.7)	63.8 (61.0-66.6)

¹ 95% confidence interval.

^a Female students significantly different from male students.

^b 6th grade students significantly different from 8th grade students.

^c Each grade level significantly more likely than preceding grade level to report this behavior.

Table 2. Percentage of middle school students involved in intentional injury risk behaviors, by sex and grade — Bureau of Indian Affairs, Youth Risk Behavior Survey, 1997

	Sex		Grade		
	Total	Female	Male	7	8
Ever carried a gun ^{a,b}	36.9 (34.5-39.3) ³	22.5 (20.3-24.6)	51.4 (48.3-54.4)	32.6 (29.7-35.6)	41.6 (37.5-45.7)
Ever carried any other type of weapon ^{a,b}	48.1 (45.8-50.5)	34.5 (31.8-37.3)	61.5 (58.8-64.2)	42.6 (39.5-45.6)	53.6 (50.2-57.1)
Ever in a physical fight ^{a,c}	64.3 (62.1-66.5)	56.3 (53.5-59.0)	72.4 (70.1-74.7)	56.5 (53.3-59.7)	73.4 (70.6-76.2)
Ever injured in a physical fight ^{a,b}	9.3 (8.1-10.4)	7.5 (6.6-8.4)	11.1 (9.2-12.9)	7.5 (6.4-8.5)	11.3 (9.6-13.0)
Ever considered suicide ^{a,b,d}	29.2 (27.7-30.8)	37.0 (34.9-39.2)	21.5 (19.8-23.2)	24.1 (21.4-26.7)	34.1 (32.0-36.3)
Ever made a suicide plan ^{a,b,d}	16.3 (15.1-17.5)	20.4 (18.5-22.2)	12.2 (10.9-13.4)	12.7 (10.9-14.5)	19.4 (17.7-21.2)
Ever attempted suicide ^{a,b}	15.6 (14.4-16.8)	20.3 (18.6-22.1)	10.9 (9.6-12.2)	12.6 (10.8-14.3)	18.6 (16.9-20.3)

¹ Such as a knife or club.

² Had to be treated by a doctor or nurse.

³ 95% confidence interval.

^a Female students significantly different from male students.

^b 6th grade students significantly different from 8th grade students.

^c Each grade level significantly more likely than preceding grade level to report this behavior.

^d 6th grade students significantly different from 7th grade students.

Table 3. Percentage of middle school students who used tobacco, by sex and grade — Bureau of Indian Affairs, Youth Risk Behavior Survey, 1997

	Sex				Grade		
	<u>Total</u>	<u>Female</u>	<u>Male</u>	<u>6</u>	<u>7</u>	<u>8</u>	
Lifetime cigarette use ^{1,b}	78.5 (76.6-80.4) ^c	80.4 (78.1-82.6)	76.7 (74.4-79.1)	68.7 (65.5-72.0)	79.1 (76.8-81.4)	88.2 (86.4-90.0)	
Current cigarette use ^{2,b}	49.3 (47.0-51.7)	51.0 (48.2-53.7)	47.8 (44.6-50.9)	38.6 (35.3-41.9)	50.4 (47.4-53.4)	59.2 (56.0-62.4)	
Frequent cigarette use ^{3,b}	9.6 (8.1-11.0)	10.0 (8.1-11.8)	9.1 (7.7-10.5)	3.9 (2.9-4.9)	9.6 (7.6-11.7)	15.2 (12.5-17.9)	
Ever used smokeless tobacco ^{4,a,c}	41.0 (37.4-44.5)	35.7 (31.3-40.1)	46.2 (42.6-49.8)	35.0 (30.7-39.3)	42.0 (38.0-46.1)	46.4 (42.0-50.9)	

¹ Ever tried cigarette smoking.

² Smoked cigarettes on one or more of the 30 days preceding the survey.

³ Smoked cigarettes on 20 or more of the 30 days preceding the survey.

⁴ Ever used chewing tobacco or snuff.

⁵ 95% confidence interval.

^a Female students significantly different from male students.

^b Each grade level significantly more likely than preceding grade level to report this behavior.

^c 6th grade students significantly different from 8th grade students.

Table 4. Percentage of middle school students who used alcohol or other drugs, by sex and grade — Bureau of Indian Affairs, Youth Risk Behavior Survey, 1997

	Sex				Grade		
	Total	Female	Male		6	7	8
Lifetime alcohol use ^{1,a}	59.3 (56.5-62.0) ⁷	60.7 (57.6-63.9)	57.9 (54.7-61.0)		44.3 (40.4-48.2)	60.9 (57.5-64.3)	74.1 (71.4-76.7)
Lifetime marijuana use ^{2,a}	51.4 (48.1-54.7)	49.0 (45.4-52.5)	53.8 (50.3-57.2)		35.3 (31.9-38.7)	52.3 (47.8-56.8)	67.8 (63.9-71.6)
Lifetime cocaine use ^{3,b,c}	10.7 (9.2-12.2)	10.6 (9.1-12.1)	10.8 (9.0-12.6)		6.9 (5.5-8.3)	9.8 (8.2-11.5)	15.8 (13.2-18.4)
Lifetime inhalant use ^{4,b,d}	28.5 (25.8-31.1)	31.3 (27.9-34.6)	25.8 (23.1-28.4)		23.7 (20.5-26.9)	30.5 (27.4-33.6)	31.9 (28.1-35.7)
Lifetime steroid use ⁵	4.3 (3.7-4.8)	3.6 (3.0-4.2)	4.8 (4.0-5.6)		3.8 (3.0-4.5)	4.5 (3.5-5.5)	4.3 (3.4-5.2)
Lifetime injected drug use ⁶	3.4 (2.8-4.1)	3.4 (2.6-4.2)	3.3 (2.6-4.1)		3.1 (2.3-3.9)	3.0 (2.1-3.8)	4.0 (3.1-4.9)

¹ Ever had at least one drink of alcohol for other than religious reasons.

² Ever used marijuana.

³ Ever tried any form of cocaine.

⁴ Ever inhaled (sniffed or huffed) glue, contents of aerosol spray cans, or paint sprays to get high.

⁵ Ever used steroids.

⁶ Ever injected illegal drugs.

⁷ 95% confidence interval.

^a Each grade level significantly more likely than preceding grade level to report this behavior.

^b 6th grade students significantly different from 8th grade students.

^c 7th grade students significantly different from 8th grade students.

^d 6th grade students significantly different from 7th grade students.

Table 5. Percentage of middle school students who reported sexual behaviors, by sex and grade — Bureau of Indian Affairs, Youth Risk Behavior Survey, 1997

	Sex		Grade		
	Total	Female	Male	7	8
Ever taught about HIV/AIDS in school ^{b,c}	60.7 (56.9-64.6) ²	63.7 (59.8-67.7)	58.2 (54.1-62.2)	63.6 (58.9-68.2)	70.5 (66.8-74.2)
Ever had sexual intercourse ^{a,d}	19.7 (17.3-22.2)	15.9 (13.8-18.1)	23.9 (20.6-27.1)	20.1 (17.0-23.1)	30.9 (26.7-35.1)
Three or more sexual partners during lifetime ^{a,d}	6.2 (5.2-7.2)	3.9 (3.0-4.8)	8.6 (7.0-10.2)	5.5 (4.3-6.6)	10.8 (8.6-12.9)
Condom use during last sexual intercourse ¹	59.9 (56.4-63.4)	55.0 (50.9-59.1)	63.2 (58.5-67.8)	64.6 (59.0-70.2)	59.4 (54.4-64.4)

¹ Among students who ever had sexual intercourse.

² 95% confidence interval.

^a Female students significantly different from male students.

^b 6th grade students significantly different from 7th grade students.

^c 6th grade students significantly different from 8th grade students.

^d Each grade level significantly more likely than preceding grade level to report this behavior.

Table 6. Percentage of middle school students who reported nutrition behaviors, by sex and grade — Bureau of Indian Affairs, Youth Risk Behavior Survey, 1997

	Sex			Grade		
	Total	Female	Male	7	8	8
Thought they were overweight ^{a,b}	23.3 (21.6-25.0) ²	25.8 (23.6-27.9)	21.0 (19.2-22.8)	19.3 (17.0-21.6)	23.8 (21.3-26.2)	27.3 (24.9-29.6)
Ever dieted to lose weight or keep from gaining weight ^{a,b}	36.1 (34.7-37.6)	41.4 (39.1-43.8)	30.9 (29.1-32.7)	33.0 (30.5-35.4)	37.6 (35.2-40.0)	38.1 (35.7-40.4)
Ever exercised to lose weight or keep from gaining weight ^b	57.8 (55.5-60.1)	60.0 (57.2-62.6)	55.8 (53.2-58.4)	53.3 (49.9-56.6)	58.8 (56.2-61.5)	61.9 (59.1-64.7)
Ever vomited or took laxatives to lose weight or keep from gaining weight ^{a,b}	10.6 (9.7-11.5)	12.2 (10.8-13.5)	8.9 (7.5-10.2)	9.0 (7.9-10.1)	10.2 (8.9-11.5)	12.8 (11.0-14.5)
Ever took diet pills to lose weight or keep from gaining weight ^{a,b}	7.3 (6.5-8.0)	8.9 (7.6-10.1)	5.7 (4.9-6.4)	5.7 (4.6-6.7)	7.0 (5.8-8.3)	8.8 (7.2-10.4)
Ate fruit ¹	82.2 (80.9-83.6)	83.1 (81.5-84.8)	81.3 (79.6-82.9)	83.1 (81.4-84.7)	80.9 (78.5-83.2)	82.6 (80.5-84.8)
Drank fruit juice ¹	68.1 (66.3-69.9)	67.2 (64.7-69.7)	69.1 (67.1-71.1)	68.3 (65.7-70.9)	68.5 (66.3-70.6)	67.7 (65.0-70.5)
Ate green salad ¹	37.7 (35.4-40.0)	37.8 (34.8-40.8)	37.7 (35.2-40.1)	37.5 (34.3-40.7)	37.5 (34.8-40.2)	37.9 (34.3-41.4)
Ate cooked vegetables ¹	53.4 (51.5-55.4)	55.7 (53.1-58.3)	51.2 (48.9-53.5)	53.2 (50.5-55.8)	52.2 (49.5-55.0)	54.7 (51.8-57.6)
Ate hamburgers, hot dogs, or sausage ^{1,a}	56.2 (53.8-58.5)	53.0 (50.3-55.6)	59.3 (56.8-61.8)	55.8 (53.2-58.5)	55.5 (52.0-59.0)	56.9 (53.8-59.9)
Ate french fries or potato chips ¹	56.9 (54.9-58.8)	55.1 (52.8-57.4)	58.4 (56.2-60.6)	54.2 (51.4-56.9)	57.4 (54.2-60.5)	59.0 (56.0-61.9)
Ate cookies, doughnuts, pie, or cake ¹	51.4 (49.5-53.3)	51.2 (48.7-53.7)	51.6 (49.3-53.8)	51.3 (48.4-54.1)	51.1 (48.5-53.7)	51.6 (48.9-54.3)
Ate no more than 2 servings of high fat food ^{1,a}	59.7 (57.8-61.6)	62.5 (60.3-64.8)	57.0 (54.7-59.2)	60.1 (57.3-62.8)	59.9 (57.3-62.5)	59.7 (56.8-62.5)
Ate 5 or more servings of fruits and vegetables ¹	41.5 (39.4-43.6)	41.5 (38.6-44.4)	41.4 (39.3-43.5)	44.1 (40.8-47.3)	39.8 (36.8-42.7)	40.5 (37.6-43.4)

¹ Yesterday.² 95% confidence interval.^a Female students significantly different from male students.^b 6th grade students significantly different from 8th grade students.

Table 7. Percentage of middle school students who reported physical activity behaviors, by sex and grade — Bureau of Indian Affairs, Youth Risk Behavior Survey, 1997

	Sex			Grade		
	Total	Female	Male	6	7	8
Exercised or played sports ^{1,a,b}	69.2 (67.5-70.8) ³	67.1 (65.0-69.3)	71.3 (69.5-73.2)	65.6 (63.1-68.1)	70.7 (68.1-73.2)	71.8 (69.2-74.5)
Enrolled in physical education class ²	84.0 (80.7-87.4)	83.9 (80.0-87.7)	84.2 (80.9-87.5)	84.9 (79.4-90.5)	86.5 (82.8-90.2)	80.4 (72.7-88.1)
Attended physical education daily	29.0 (22.2-35.9)	29.2 (21.9-36.4)	29.0 (22.4-35.7)	21.5 (15.6-27.5)	33.0 (24.4-41.6)	33.3 (24.2-42.4)
Played on sports team run by the school	60.4 (58.4-62.4)	58.1 (55.7-60.5)	62.6 (60.4-64.8)	61.2 (58.5-63.8)	60.3 (57.9-62.8)	59.8 (57.0-62.7)
Played on sports team unaffiliated with the school ^a	44.9 (43.0-46.7)	47.4 (45.2-49.7)	42.5 (40.3-44.7)	45.8 (43.2-48.3)	43.8 (41.1-46.6)	45.0 (42.4-47.6)

¹ On three or more of the seven days preceding the survey.

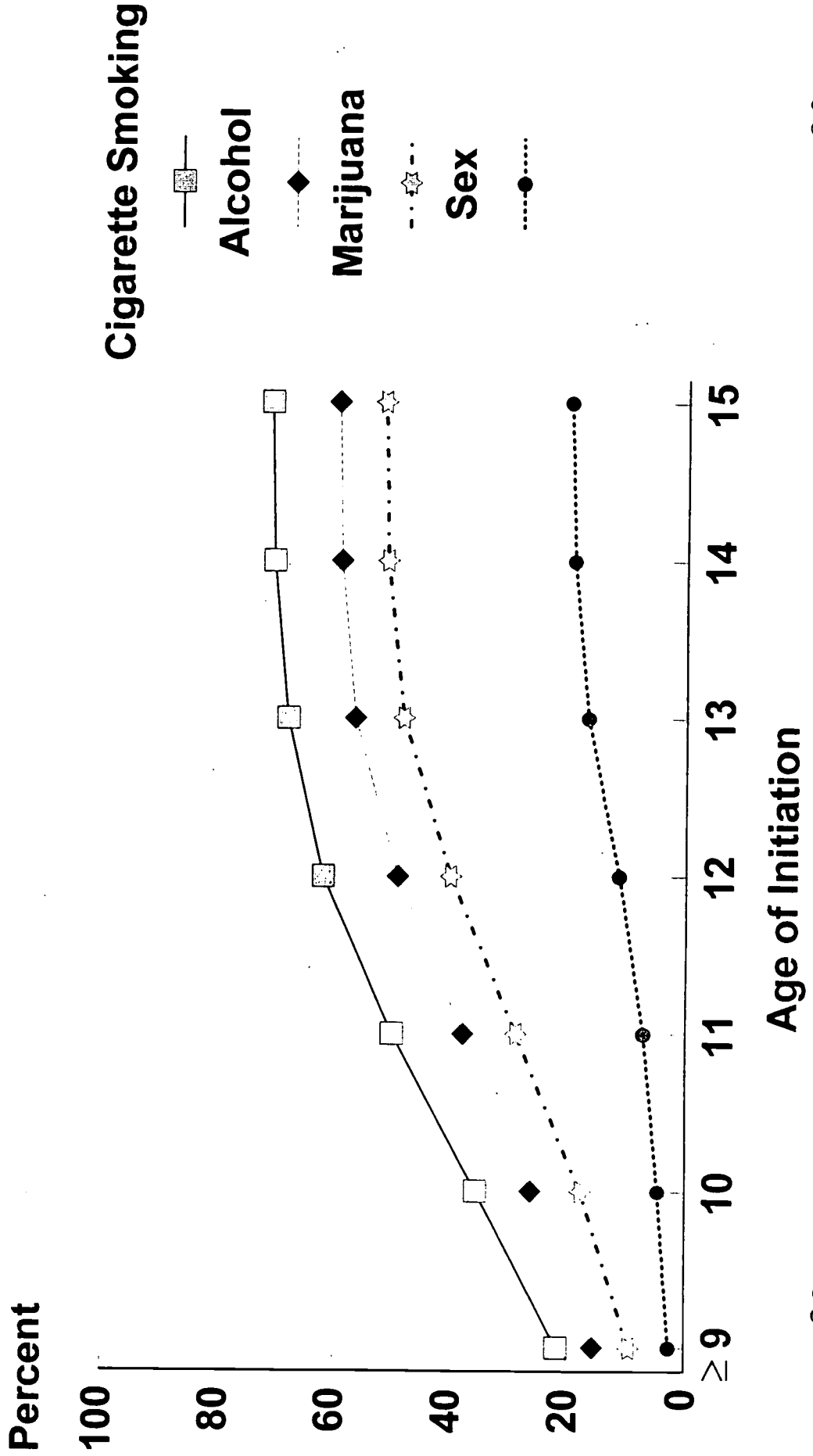
² Enrolled in physical education class at least one day per week.

³ 95% confidence interval.

^a Female students significantly different from male students.

^b 6th grade students significantly different from 8th grade students.

**Figure 1:
Age of Initiation of Selected Risk Behaviors
By Age 18, 1997 BIA Middle School YRBS**



Summary and Conclusions

Attitudes and behaviors developed in early adolescence have health consequences that continue into adulthood. The data collected and presented in this report gives evidence of the need for and the importance of prevention education and related activities in American Indian communities and Bureau funded schools. It is critical to the future lives of our young people as well as the very survival and vitality of Indian communities that our students have multiple opportunities to develop healthy behaviors in order to replace the behaviors which are currently putting them at risk for future health and social problems.

Male middle school students were *significantly more likely* than female students to report rarely or never use seat belts or wear bicycle helmets. Male students were *significantly more likely* than female students to carry a gun or any other type of weapon; to engage in a physical fight or get injured in a physical fight. Male students were *significantly more likely* than female students to use chewing tobacco or snuff. Male students were *significantly more likely* than female students to ever have sexual intercourse and report having three or more sexual partners. Male students were *significantly more likely* than female students to exercise and play sports.

Female middle school students were *significantly more likely* than male students to consider suicide, make a suicide plan and actually attempt suicide. Female students were *significantly more likely* than male students to think they are overweight, diet, vomit, take laxatives and or diet pills to lose or maintain weight. Female students were *significantly more likely* than males to eat no more than two servings of high fat foods per day.

Female students were *significantly more likely* than males to play on a sports team unaffiliated with their school.

Middle school students in 6th, 7th and 8th grade respectively were *significantly more likely* than students at each preceding grade level to: ride with a driver who had been drinking alcohol; engage in a physical fight; report lifetime, current and frequent cigarette smoking; drink alcohol; use marijuana; ever have sexual intercourse and report having three or more sexual partners.

Eighth grade students were *significantly more likely* than 6th grade students to: rarely or never use seat belts; carry a gun or any other type of weapon; get injured in a physical fight; attempt suicide; use chewing tobacco or snuff, inhalants or cocaine; think they are overweight, diet, exercise, vomit, take laxatives and/or diet pills to lose or maintain weight; and exercise or play sports.

It is evident from the data collected in this first Middle School YRBS that middle school students attending Bureau funded schools need the active support of all of us. We call upon all stakeholders: tribal leaders, school administrators, school board members, teachers, parents and community members to address the risk behaviors identified in this first survey report. These risk behaviors carry a substantial financial and social cost on both an individual and collective level. Hopefully, this report will stimulate discussion as well as useful and appropriate school and community action to design and implement improved prevention programs, opportunities and services in our Indian schools and communities.



U.S. DEPARTMENT OF EDUCATION
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