

DOCUMENT RESUME

ED 464 776

RC 023 481

TITLE The State of Native American Youth Health.
INSTITUTION Minnesota Univ., Minneapolis. Div. of General Pediatrics and Adolescent Health.
SPONS AGENCY Indian Health Service (PHS/HSA), Rockville, MD.; Health Resources and Services Administration (DHHS/PHS), Washington, DC. Maternal and Child Health Bureau.; Robert Wood Johnson Foundation, New Brunswick, NJ.
PUB DATE 1992-02-00
NOTE 64p.
PUB TYPE Numerical/Quantitative Data (110) -- Reports - Research (143)
EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS Academic Achievement; *Adolescent Attitudes; *Adolescents; Alaska Natives; Delinquency; Family Environment; Family Influence; *Health Behavior; Mental Health; Obesity; Physical Health; *Reservation American Indians; *Rural American Indians; Rural Youth; School Attitudes; Secondary Education; Secondary School Students; Sexuality; Student Surveys; Substance Abuse; Suicide; Tobacco
IDENTIFIERS Health Surveys; *Native Americans; Risk Taking

ABSTRACT

This survey on the health status of Native American adolescents living on or near reservations was completed by 14,000 American Indian and Alaska Native youths from 50 tribes attending 200 schools in 12 states. Results indicate that most Native teenagers felt their family cared about them a great deal, and many would go to a family member first for help. Youths whose parents had high expectations of them did better in school. Twenty percent of respondents reported their health as only fair or poor. Those with poor health also reported numerous other problems in school and at home and tended to abuse drugs and be suicidal as well. Obesity was a serious problem, which was compounded in many communities where diabetes was a significant risk. Deaths from unintentional injuries, particularly motor vehicle injuries, were higher among American Indian youth than among any other ethnic and age group. These youth frequently engaged in behaviors that increased their risk for injuries. Alcohol use and tobacco use were very prevalent, followed by marijuana and inhalant use. Heavy use of substances, particularly alcohol and marijuana, was linked to every risk behavior discussed in this report. As the second leading cause of death for American Indians, suicide is a serious problem, and was strongly associated with emotional stress, substance abuse, and family problems. About two-thirds of American Indian high school seniors reported sexual activity, but contraceptive use was inconsistent. Challenges and opportunities related to these findings are discussed. (TD)

The State of Native American Youth Health

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
 Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

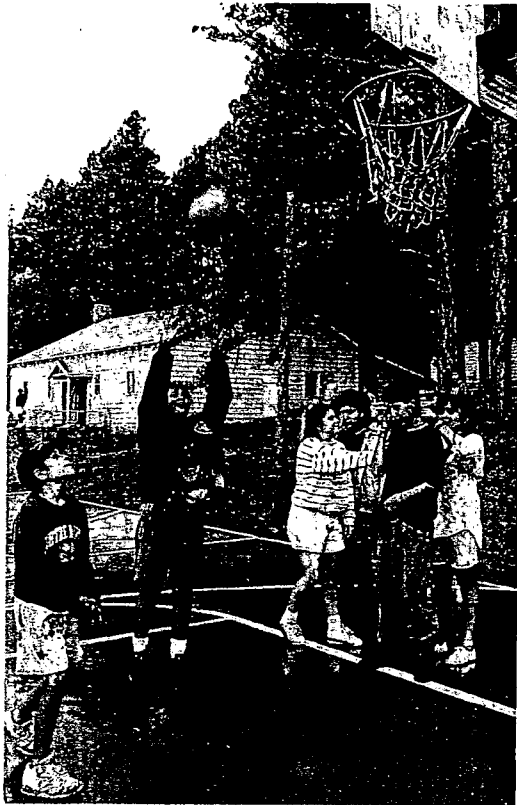
PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

Robert
Blum

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

February 1992



BEST COPY AVAILABLE

Table of Contents

I. Description of the Study	1
II. Student and Family Characteristics	6
III. School: Academic Performance and Attitudes	9
IV. Physical Health and Well-Being	12
V. Vehicle Related Risks	18
VI. Anti-Social Activities	21
VII. Emotional Health	26
VIII. Sexual Behaviors	35
IX. Substance Use and Abuse	41
X. Native American Youth in a National Context	47
XI. Conclusion: Challenges & Opportunities	54

Acknowledgements

The survey was made possible through the generous support of the Indian Health Service and the Maternal and Child Health Bureau. Support for publication and dissemination of this report came, in part, from the Robert Wood Johnson Foundation.

Those to whom the greatest thanks for this study should go are the 14,000 young people who each spent an hour answering questions about their personal life. Great thanks also are due to the parents who consented to allow their teenagers to participate in the study. This report is submitted with the hope that this glimpse into the lives of these young people will result in greater understanding of the concerns and challenges they face.

When one conceptualizes the logistics involved in surveying 14,000 students distributed across 15 states and 350 schools, it is clear that large numbers of trained people were needed to facilitate the survey process. The majority of these people were recruited from their routine jobs and busy schedules to assist in administering the Adolescent Health Survey. Their care and efforts are directly responsible for the high quality of the information obtained. Thanks for your time, your patience, and your willingness to help in this endeavor. We hope you will continue with your good work, and can utilize this information to benefit youths like those who participated in this survey.

There were a number of people in the Indian Health Service Area and Service Unit Offices who played the role of advocate and coordinator for the survey by working to secure the cooperation of tribal officials, of school officials, and of other groups, such as parent organizations. It was sometimes a difficult task to convey the importance of this survey to local officials. This report is proof that they succeeded. In many situations by explicitly broaching the issue of youth health with community

leaders they helped trigger collective action. Special thanks go to the IHS Area Coordinators who worked very hard to make this project a success, including Dr. Diane Pittman of the Bemidji Area Office, Jacqueline Greenman of the Alaska Area Native Health Service, Carol Milligan of the Navajo Area IHS Office, Dottie Meyer of the Phoenix Area Office, Darlene Garneaux and Tom Welte of the Aberdeen Area Office, Dean Effler of the Billings Office, and in the Nashville Area Office, Betty Claymore, and Jean Harmon. There are, of course, too many IHS Service Unit personnel to name here that worked in local areas in conjunction to Service Area Coordinators but a heartfelt note of appreciation goes to them.

In the Indian Health Service Drs. George Brenneman and Craig Vanderwagon were primarily responsible for providing the momentum, logistical support and, of course, funding to undertake this survey. Through this effort, IHS is once again showing its commitment and leadership to improving the health of Native peoples. The Indian Health Service worked in tandem with the Maternal and Child Health Bureau in supporting this effort. And special thanks are due Dr. Vince Hutchins and Joan Gephart for their guidance and support through this and every survey of youth health we have undertaken. They are strong advocates for youth health in the United States.

For support in the publication and dissemination of this monograph thanks are due to the Robert Wood Johnson Foundation and especially Vicki Weisberg for her guidance, support and consultation.

Within the Adolescent Health Program at the University of Minnesota, numerous people lent their expertise and energies to making this project succeed over the course of the five years which this project spanned. The analysis of this tremendous database as well as the preparation of this document took over a year to put together. Brian Harmon had the task of reducing over six million pieces of information into concise and coherent data. Annette Robles not only prepared numerous drafts of the monograph but rode herd on all contributors to this final project so it was completed on time. With great patience she collected rough drafts, and listened to vague and conflicting ideas of how all concerned thought the final product should look, and managed to translate these drafts into the finished piece you see here. Laura Hutton, Brenda Miller, Zhining Qin, Kim Rosenwinkel, Chad Stutelberg, Karen Stutelberg, and Michelle Warne all contributed time and numerous talents to this project.

Aaron Fairbanks, a professional photographer of the Cass Lake Band of Chippewa Indians, provided the visual images of Native youths shown herein and, we think, succeeded in reminding readers that this sometimes dry set of numbers has 14,000 beautiful human faces behind them.

Finally, a special thanks goes to Lois Geer-Bergeisen from whose vision, dedication and commitment this survey was born. It was Lois' efforts which secured funding and won the support of national, area and tribal level groups that made this report possible. On behalf of all who will be the beneficiaries of this report, Lois: thank you.

Executive Summary

Between 1988 and 1990, nearly 14,000 American Indian/Alaska Native adolescents living in rural areas and on reservations participated in a survey at their school on health and risk behaviors. Although the findings may not be representative of Native American adolescents nationally, as a convenience sample was used, the comprehensive information provided by this study gives insight into the lives and health habits of these youth. The following are some of the highlights of this study:

Family as a Source of Strength and of Stress

Native teenagers live in a variety of family constellations; less than half of study participants live with two parents.

- Nearly *eight* out of *ten* teens say their family cares about them a great deal
- Many would go to a family member first for help

Youth who report their parents have high expectations of them tend to report doing better in school as well.

Troubles in the home affect adolescents greatly: 36% worry a great deal about the economic survival of their family; a fifth worry about domestic abuse; many worry about their parents' use of substances. Teens with such worries tend to report poorer levels of health and more involvement in risk behaviors.

Physical Health

While 8 out of 10 American Indian youths report good health, 20% say their health is only fair or poor. Those with poor health also tend to report numerous other problems in school and at

home. They tend to abuse drugs and be suicidal as well.

A high proportion of American Indian youths report that they believe they are overweight (40% of females, 21% of males); and although far from conclusive, their height and weight self-reports tend to suggest that obesity is a serious problem which is compounded in many communities where diabetes is a significant risk.

American Indian youths engage in behaviors, or consume foods which predispose them to health problems as adults. Approximately 14% may be at high risk for these problems due to insufficient exercise, use of tobacco, diets high in fat, cholesterol, or low in vegetable, fruits and fibers.

Only about half the youths surveyed received any type of preventive health exams or visits in the past two years. Unfortunately, those who rate their health as poor were also less likely to have obtained care.

Vehicle-Related Risks

Deaths from unintentional injuries, particularly motor vehicle injuries, are higher among American Indian youth than among any other ethnic and age group in this country. Survey data show that these youth frequently engage in certain predictable behaviors which increase their risk for serious injuries.

- 33% of all youth surveyed report ever having driven under the influence of alcohol.
- 22% have ridden with a driver under the influence of substances.
- 33% ride a motorcycle regularly, and 33% ride in the back of pick ups regularly.



- 44% do not wear seat belts regularly in a car.

All of these risk behaviors were much more prevalent among youth who report use of alcohol on at least a weekly basis. These data strongly demonstrate the association between substance abuse and risk of motor vehicle-related injury.

Emotional Health and Suicide

Most reservation youth surveyed report being happy (80%) and not depressed (82%). Many, however, are bored (65%), tense, stressed, burnt out (20-27%), and nearly half are very worried

about their future job prospects. About six percent report very significant levels of emotional stress.

Emotional distress is often associated with family troubles and lack of supportive adults. Such problems are highly correlated with other risk behaviors.

Eighteen percent of the youths surveyed report having been the victim of sexual or physical abuse, or both. Females report being victimized at much higher rates than males (e.g., 20% of senior high girls).

Suicide is the second leading cause of death for American Indian/Alaska Native adolescents.

Suicide is among the most serious problems of American Indian adolescents. Among the youths surveyed, 21% of females, and 12% of males reported ever having attempted suicide. Over half of these youth had attempted suicide more than once. Eleven percent of study participants know someone who has killed him/herself.

Suicidal attempts and ideation are strongly associated with emotional stress, history of abuse, chemical use, and family problems (particularly suicide by other family members).

Sexual Relationships

About two-thirds of American Indian high school seniors report they had had sexual intercourse, but nearly half report engaging in sexual intercourse only a couple of times a year or less. Among females who report they have not engaged in sexual intercourse, concerns about pregnancy were the most frequent reason cited for abstinence (46%). Among sexually active females, 42% worry a great deal about becoming pregnant. This worry, however, does not translate into consistent use of contraception. While relatively few of the sexually active adolescents report

having a sexually transmitted disease (three percent of males, five percent of females), nearly 60% were quite concerned about getting AIDS or an STD.

Condoms were the most common type of contraception used by sexually active teens; 49% of males report using condoms, 24% of females report their partners used condoms. Unfortunately, a high proportion of sexually active youth used no contraception at all — 29% of males and 44% of females.

7.2% of sexually active females surveyed report they have been pregnant at least once, while 5% of comparable males report having caused a pregnancy. This rate, of course, reflects those youths who were enrolled in school and present the day of the survey. A much higher pregnancy rate is likely for youths who have dropped out and those frequently absent from school. Unplanned pregnancy remains a major concern of American Indian youths.

Substance Use and Abuse

Regular use of tobacco among American Indian adolescents is high; among high school students, over half have tried cigarettes and about 15% smoke daily. Use of smokeless tobacco products is particularly common among boys, as at least one in six boys use chew daily.

Alcohol use is also very prevalent — half of the junior high students and two-thirds of senior high students have tried alcohol and by 12th grade 27% of males and 14% of females consume alcohol at least weekly. The frequency of use is compounded by the high volume (often five drinks or more) consumed by many of these “regular” teenage drinkers.

Of other substances, marijuana and inhalants are used with most frequency by the teenagers surveyed. Among seniors a fifth of males and 12% of females use marijuana on a weekly basis.

Inhalants were more commonly used by younger students — about 12% of junior high students had ever used inhalants, declining to six percent of senior high youth.

The heavy use of substances, particularly alcohol and marijuana, is linked to every single risk behavior discussed in this report. Many youth with physical health problems, or with mental health problems abuse substances; youth with family problems or who have been abused also use substances, especially alcohol, to excess.

Table of Contents

I. Description of the Study	1
II. Student and Family Characteristics	6
III. School: Academic Performance and Attitudes	9
IV. Physical Health and Well-Being	12
V. Vehicle Related Risks	18
VI. Anti-Social Activities	21
VII. Emotional Health	26
VIII. Sexual Behaviors	35
IX. Substance Use and Abuse	41
X. Native American Youth in a National Context	47
XI. Conclusion: Challenges & Opportunities	54



I. Description of the Study

Overview

Between 1988 and 1990, the Adolescent Health Program at the University of Minnesota in conjunction with the Indian Health Service conducted a survey of 14,000 American Indian and Alaskan Native youths across the country. Students from 50 different tribes, across nearly 200 schools in a dozen states participated. This study represents the largest and most comprehensive survey to date of the health status of Native American youths living on or near reservations. Each of these 14,000 youths spent nearly an hour answering questions ranging from their feelings about school, family relationships, their physical health status and practices, to their emotional health, chemical health, as well as their sexual behavior, anti-social behavior, and risk-taking behaviors. The portrait which is painted by their collective voices gives us rich insight into the daily lives, the health habits, and the worries and concerns of rural Native American youth.

Background of the Study

The Indian Health Service commissioned the national survey of Native American adolescents in 1988. The Indian Health Service (IHS) is a branch of the Public Health Service dedicated to serving the health care needs of Native Americans and Alaskan Natives across the country. Relatively little data exist on the health status and habits of rural Native American adolescents; what is known about this population comes primarily from mortal-

ity and morbidity data which reveal that Native American teens have high rates of mortality due to suicide, and motor vehicle-related deaths. More health-related data are available on Native American adults, and show alarmingly high rates of diabetes, alcoholism, and suicide. While these data suggest lifestyle factors are at least partially responsible for these high rates of morbidity and mortality, more information is needed to design effective programs to prevent the onset of these problems, and to implement effective intervention programs aimed at youth who are at high risk for these and other problems.

Who Participated in the Survey?

Fifteen thousand, five hundred and eighty-five (15,585) youths participated in the Adolescent Health Survey across the nation. Of

these 13,923 identified themselves as American Indian or Alaska Natives. The other 1,662 respondents to the survey were persons of other ethnic backgrounds or those who chose not to respond to the question asking for the respondent's race. The responses of these individuals are not included in the analysis presented in this report.

The sample of Native American adolescents upon which the findings reported here are based was not a random sample, and does not represent the full range of tribal and cultural diversity of Native American peoples living in the United States. Caution should therefore be used in attempting to make generalizations of the findings from this sample to the national population of Native American teenagers. Likewise, caution should be used when applying these findings

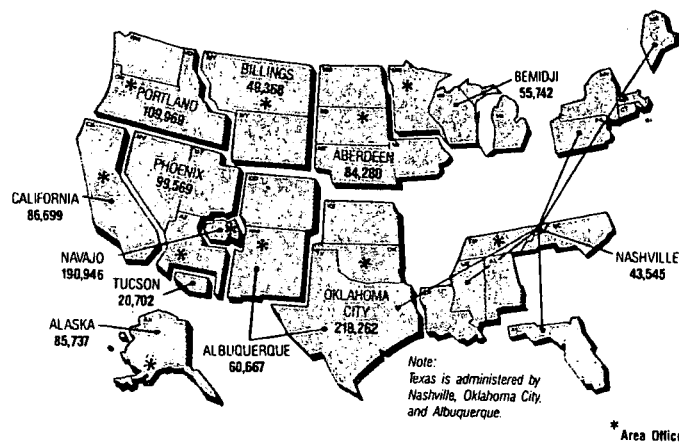
to a specific tribe where conditions may vary substantially from the majority of communities participating in the study.

The Adolescent Health Survey

The Adolescent Health Survey was chosen by the IHS as the survey instrument for this study. This instrument was developed at the University of Minnesota under a grant from the Maternal and Child Health Bureau and used to survey 36,000 public school youth in Minnesota in 1987. The findings from the Minnesota Adolescent Health Survey were widely used in many Minnesota communities for health promotion and prevention programs in the educational system, to develop and implement community programs particularly in the areas of chemical use, pregnancy prevention and suicide prevention. The findings were used to advocate for policy changes in mental health services, and to promote changes in EPSDT restrictions. Many local communities also used local data provided to them to seek funding for health promotion programs.

The Adolescent Health Survey instrument is a paper and pencil questionnaire administered in supervised settings to school-based populations. It contains 170 questions for which the students are asked to choose an answer from a list of pre-formulated options. Most of the questions in this survey were previously used in the study of Minnesota

Indian Health Service Areas with Population



youth, with most questions having been examined for reliability and validity. (A detailed description of the instrument is available upon request.) A national steering committee assisted in the development of the instrument to ensure it appropriately addressed the major concerns for the Native American population. The instrument was pretested on a group of 1,000 Native Americans before the national study was fielded.

The survey was intended to be anonymous and confidential and students were instructed not to put their name on their questionnaire. The survey was designed at a fifth grade reading level, with a completion time of approximately an hour. It tended to take somewhat longer for younger students (e.g., 7th graders), and those with poorer reading skills.

How Decisions Were Made About Participating in the Survey

The Indian Health Service primarily serves Native Americans living on or near reservations, traditional Indian lands and villages in 33 states. As a result, IHS provides services to many people distributed across a huge geographic area. Organizationally, IHS divides the country into 12 "areas". Areas are subdivided into "service units" (see Map). Each office area was offered the opportunity to participate in the survey, and nine chose to implement the survey in at least one service unit. Four areas did not participate in the survey, including most of the California Area, most of the Oklahoma Area, all of the Portland and Tucson Areas.

Decisions to participate in the survey were made at many different "levels". With each of the participating IHS Areas, individual service units, tribal governing bodies, school officials, parents and the youths themselves had to consent to conduct or participate in the survey.

In some cases, there were too few Native Americans in the school (under 50%) to make it economically feasible to administer the survey to the entire school.

How Was Data Collection Coordinated?

In each area, an IHS representative acted as Area Coordinator for the survey. The Area Coordinator most often was the individual charged with Maternal and Child Health programs; and most coordinators had backgrounds in nursing, medicine, and/or health education. The Area Coordinator had the major responsibility for enlisting the participation of schools and for seeking the cooperation of school boards, tribal boards and other oversight groups. The tasks of coordinating this survey at the area level, as well as the barriers encountered while trying to do so, varied across and even within the service areas. In some areas, nearly all the youths attended Bureau of Indian Affairs (BIA) or reservation schools. In such situations, the survey was comparatively easy to implement. In other areas, the students were enrolled in public schools necessitating approval from the school or school board to conduct the survey.

Once the necessary permissions were secured from all of the organizations and individuals, the Area Coordinator made arrangements for

an individual to go to the school and administer the survey to the students. Except for Alaska where active parental consent was sought, at all other sites parents were notified of the planned survey and had the opportunity to review the questionnaire. If they did not wish their child to participate they so indicated; if there were no objections then the students were invited to participate.

The majority of the surveys were administered in classroom settings, although special arrangements were made in some cases for youth to take the surveys outside of schools such as at community centers. The survey administrator was on hand to answer student questions and assure response privacy. Survey administrators were provided instructions on how to administer the survey such that the instructions given to students, and the answers to students' questions were standardized across all administration settings. Additionally, administrators were provided forms and detailed instructions to collect information on enrollment, absenteeism, and parent/student refusals for use in calculating response rates.

Participation Rates Based Upon Population Estimates

There are two ways to assess the representativeness of the sample. The first involves computing the participation rate: the proportion of Native American youth who participated in the survey (the numerator) from the population of Native American youth living in areas served by IHS (the denominator).

Approximately eight and a half percent of the estimated 165,659 age-eligible youth within the service areas served by IHS across the nation participated in the survey. When the areas and the service units in which no survey activity are excluded, 20% of the potentially eligible population participated.

The population estimates upon which these participation rates were generated were based upon projections of the American Indian/Alaskan Native population living in IHS service areas. These projections were made from the 1980 Census data and incorporated an estimated growth factor. It is thought that these growth estimates might be somewhat high, thereby yielding population denominator data which over-estimates the size of the population. If this is true, the participation rates, therefore, are likely to be conservative and "low" estimates.

The proportion of the population who are youth was estimated to be approximately 20% of the total population. This standard proportion was used for calculating the youth population even though the actual proportion which "youth" represent within the population varies across the service areas as a function of many demographic factors (birth rate, migration, etc.).

The service areas in which the highest proportion of youths participated included the Navajo Service Area — 25.1%; the Bemidji Service Area with 15.9% of youth surveyed; Billings where 13.7% of the youth were surveyed, and Alaska where 12.1% of all age-eligible Alaskan Native youths were surveyed.

By excluding segments of the area populations who were not given the opportunity to participate, the participation rates are even higher. the Navajo area (25.1%), the Billings area (23.5%), and the Bemidji area (20.1%) had the highest participation rates, and surveyed a majority of the service units. Only one service unit of the 16 within the Nashville Service Area participated in the survey and of youth living in this area, 45.8% participated.

Survey Response Rates

The second way to determine the representativeness of the sample is response rate. A response rate focuses on the portion of the population for which a direct attempt to collect data was actually made. For school-based surveys such as this, the "target population" consists of the students enrolled in a participating school. The 'response rate' represents the percent of students enrolled in that class who completed the survey. If this rate is less than 100%, the difference is usually accounted for by the proportion of enrolled students who did not respond to the survey for the following reasons: they were absent when the survey was given, their parents refused to allow them to take the survey, or they themselves refused to take the survey.

The overall response rate for the study is 69.8%. Enrollment information was not provided for 31 schools, (3,500 survey participants). It is unknown whether the response rates in these schools were significantly different than the rates in the schools for which enrollment data was provided.

The response rate was comparatively low in some of the areas. In Aberdeen, for example, only about half of the enrolled students participated in the survey. The response rate for Alaska was also rather low — 58%. As noted previously, Alaska mandated "active" parental consent — resulting in a higher parental non-consent rate than in other areas where "passive" parental consent was used which allowed parents to refuse participation of their teenager but did not require a signed affirmative agreement to participate.

Who Was Not Represented in the Survey Findings

The findings presented here are based on what is essentially a large scale convenience sample of students. Many youths, parents, and communities were not given the opportunity to participate in the survey because other individuals or organizations had made that decision for them. The bias introduced by this filtering process can be speculated on but never accurately measured. It is important, therefore, to point out which groups of Native Americans were excluded from the survey, and which groups were under-represented.

Youth living in certain areas did not participate in the survey at all, and are not represented by these findings:

Those excluded include:

- youths from the Portland, Tuscon, Oklahoma and California Service Areas;
- youth who were absent on the day of the survey and those not enrolled in school; and
- those from urban areas.

In addition, *under-represented* youth populations include:

- youth who attend schools in rural areas where less than 50% of the school's students are Native American; and
- most youth living in the Nashville Service Area (except for the Choctaw Tribes of Mississippi).

Certain groups may also have been *over-represented* in this study:

- students attending boarding schools (eight percent of the sample); and
- students living in the Navajo Area were also over-represented in this study due to relatively high levels of participation in the study.

Given the sample structure, it is important to bear in mind the limitations as one digests the data: the sample is skewed towards those Native American/Alaskan Native students who remain enrolled in, and attend school (some of which are boarding schools) and those who live in rural areas.

Data Processing

Some of the student data records were deleted from the final sample during the compilation process. This was done to maximize the validity of the self-reported data set, by eliminating responses of those who appeared to have provided less than honest and trustworthy responses. Approximately two percent of the survey-records were deleted based on one or more of the following criteria:

- 1) respondents who failed to answer 50% or more of the questions,

- 2) those who endorsed use of a fake drug item, or

- 3) those who exhibited "response set biases" across two or more scales. Example: one who endorsed "daily use" of all of the substances, or marking all the same responses in a column, even when there is an item which is stated in the reverse, and appears to strongly contradict the other responses.

Local Reporting of the Findings

One intent of this survey was to provide local communities their own survey data. There is a significant lack of information on the health status of Native American adolescents at the national and regional levels; at the local level very little information beyond anecdotal and observational information is available. This poses an obstacle for health educators and health providers in these communities in their efforts to design, evaluate and obtain funding for programs for their youths. Provision of local data in an accessible format (e.g., a community specific report) served as a tangible incentive for communities to participate in the study.

Data reports were sent through the Area Coordinator to individuals from the community who coordinated the survey efforts — often IHS personnel. In order to protect the confidentiality of student responses, data were only reported on groups of 50 or more students, and care was used to not report data based on combinations of demographic characteristics which might permit identification of particular students.

The results of this study were provided back to the communities who conducted the

study. Preliminary tabulations of responses for specific schools or clusters of schools were initially provided, and when the survey was completed in 1990 reports were provided to service units and service areas concerning how local areas compared to the findings for the entire service area, and to national findings.

How Native Communities Use This Information

There was a wide variety in how communities have used the findings. The findings comparing the community to the larger service area, and to the national findings, were useful for communities in assessing which potential health problems were more prevalent in their communities.

The findings have been used to educate the larger community including health care providers, tribal leaders, parents, and the youth themselves about local teen health status and problems. This study has the capacity to inform the community about the social and environmental conditions which appear to exacerbate youth problems, such as stressful family settings, and school settings in which drugs, alcohol or violence are prevalent. More importantly, those conditions which seem to serve as protective factors for youth can be identified. In these ways the strengths of the community can be built upon to ensure the future health of adolescents.

The findings can be used to develop prevention and health promotion programs lowering the risk of certain mortalities and morbidities. Such prevention and intervention programs in the areas of tobacco, alcohol and drug abuse, prevention of teen

pregnancy, prevention of suicide and mental health problems have been developed in Minnesota where the study was initially done, and in some of the communities in which the Native health study was conducted.

The Native American Adolescent Health Survey can be used to ascertain trends in youth health across time. Several communities have conducted subsequent surveys in the same schools as were surveyed initially. This allows them to track trends, and gauge the effectiveness of programs implemented to reduce risk behaviors, and strengthen the community's capacity to promote youth health.

Table 1
Population Estimates, Participation and Survey Response Rates for the National Sample

Population Estimate*	
Total estimated youth population served by IHS 12 services areas: 128 units	165,659
Estimated population in the particular service units in which survey activity took place 9 service areas: 37 service units	69,585
Survey Sample	
Total Native American Youth Population Surveyed	13,923
Participation Rates**	
Percent of total estimated age eligible population	8.4%
Percent of estimated population in service units in which survey conducted	20.0%
Survey Response Rates***	
Percent of students enrolled in classes who participated in the survey	69.8%

* Source of population estimate; 20% of total IHS-served population, based on projection to 1988 from 1980 census.

** "Participation" rates based on number of youth surveyed out of total estimated age-eligible youth within service units in which survey activity took place.

*** "Survey" response rates based on the proportion of youth enrolled in classes who took the survey. This response rate excludes youth in 31 schools for which enrollment information was not reported.

Table 2
Population Estimates, Participation and Survey Response Rates for each Indian Health Service Area in which Survey Activity took place

	Estimated Youth Population ¹	Estimated Populations in Areas Surveyed ²	Survey Sample Size ³	Participation Rates based on Total Population ⁴	Participation Rates based on Population in Areas Surveyed ⁵	Participation Response Rates based on Student Enrollment Population ⁶
Aberdeen	12,651	3,903	736	5.8%	18.9%	49.2%
Alaska	12,809	7,429	1,553	12.1	16.5	58.1
Albuquerque	9,332	5,931	247	2.6	4.2	86.7
Bemidji	8,537	6,113	1,356	15.9	20.1	69.9
Billings	7,142	4,153	977	13.7	23.5	73.6
Nashville	5,274	831	381	7.2	45.8	95.3
Navajo	29,032	29,032	7,281	25.1	25.1	71.5
Phoenix*	14,804	9,394	1,211	8.2	12.9	84.0

* Survey totals for Phoenix includes one tribe in California

¹ Total estimated youth population, based on projection to 1984 from 1980 Census data on Native American populations living in areas served by the IHS "youth" population calculated to be approximately 20.0% of total population.

² Total estimated youth population living in service units in which any survey activity took place... (i.e., those youth who may have had an opportunity to participate in the survey).

³ Youth reporting their ethnic background as "Native American" or "Alaska Native", who participated in the survey.

⁴ Percent surveyed of total youth population estimated to be living in the entire service area.

⁵ Percent surveyed of youth population estimated to be living in the service units within the service area in which any survey activity took place.

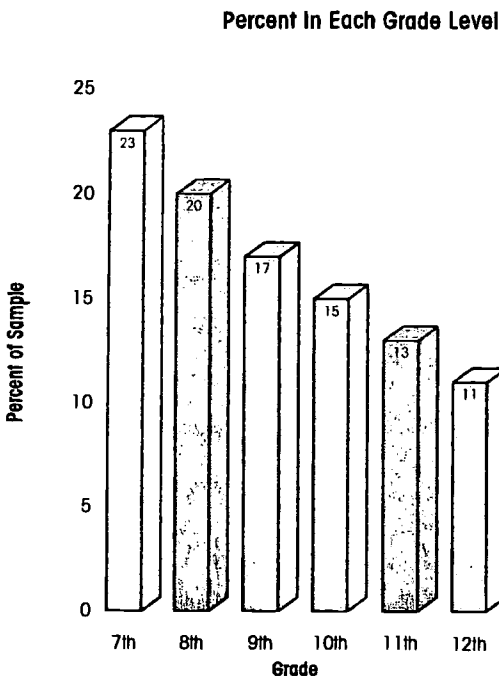
⁶ Percent of youth reported to be enrolled if those classrooms in which the survey was conducted. The denominator for this percent excludes 31 schools and approximately 3,500 youth for whom no enrollment information was reported and/or available. The denominator, does however include, some non-Native American youth since enrollment totals included all youth enrolled. The survey response rate, consequently is a conservative estimate of the response rate of Native American youth, since the numerator (the number of Native American youth participating in the survey) is more specific or restrictive than the denominator.



II. Student and Family Characteristics

Of the 13,923 students surveyed:

- 49.3% were male.
- 50.7% were female.

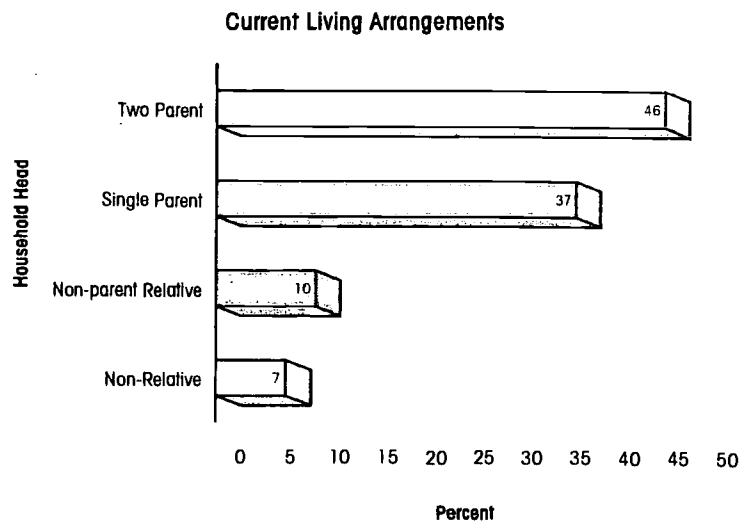


The comparatively low representation of high school students in the sample reflects in part the high school drop out rate for Native youths estimated to be as high as 40% by 12th grade.

Seventh graders are somewhat overrepresented because of including sixth graders from those schools where the middle school concept is used. We found no essential differences between sixth and seventh graders on any of the key demographic variables.

Many of the American Indian/Alaska Native youth surveyed live in "extended" family situations:

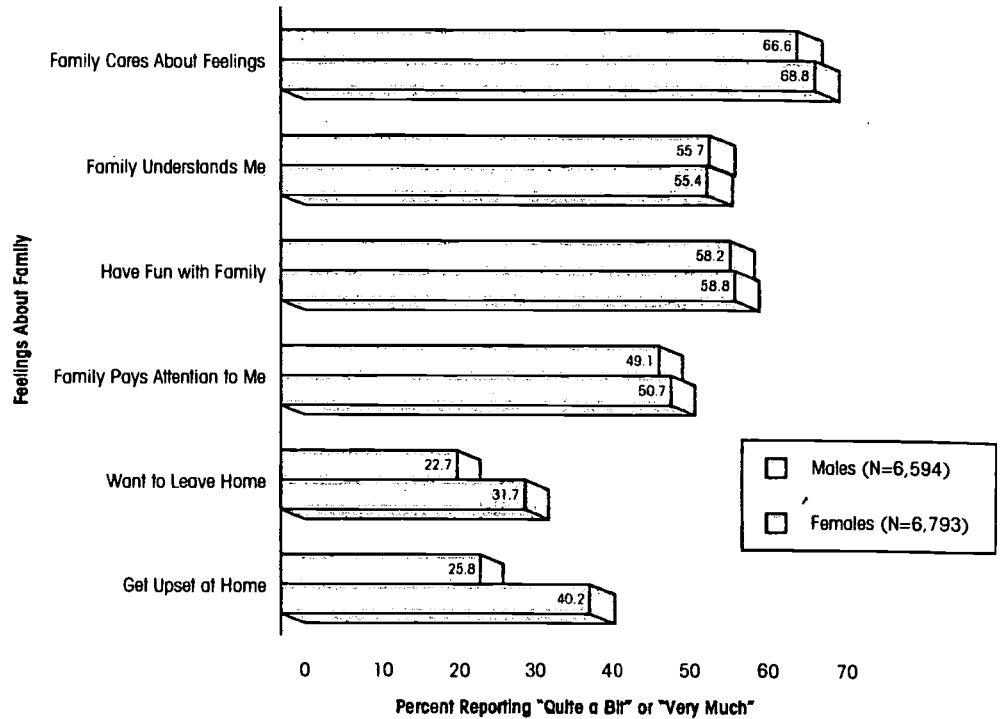
- 9.5% report an aunt/uncle or cousin lives in their household.
- 11.5% report a grandparent lives with them.
- Just under half of the youth surveyed report living in homes with two parents.
- 37% live in homes with only one parent.



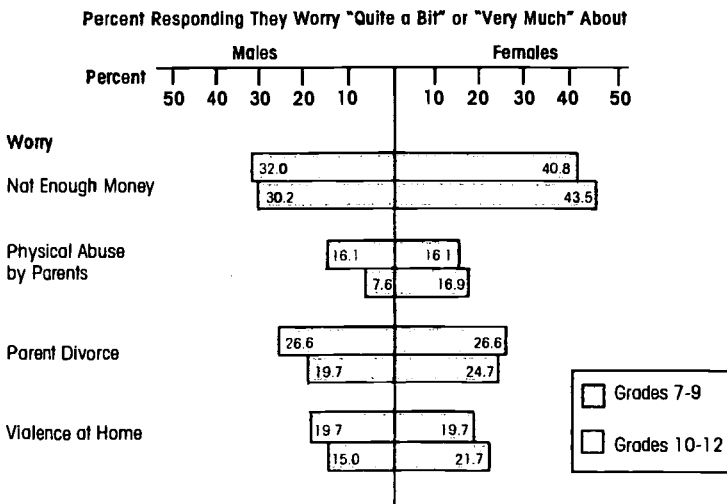
- Just under one-third (30.6%) of teens report their parents are divorced or separated.
- 11% report that one or both parents are dead.
- Over 13% of the youth surveyed claim they live with seven or more people in a dwelling with less than four rooms. An additional 14% say they live with five or six people in a dwelling with less than four rooms.
- The average family size is nearly six people with two-thirds of the students surveyed living in households of between four and eight persons.
- Nearly four out of five (78.9%) of the students characterize their families as being caring; 55.5% describe them as understanding, 58.5% as fun to be with, and 49.9% as attentive to them.
- Younger teens are also slightly more apt to feel a stronger sense of reinforcement from their families than older ones.
- On the other hand, 24.4% of those surveyed feel that people in their family understand them "not at all" or "only a little."
- Females are more likely to express frustration with or a desire to leave home than males, with nearly one-third of girls expressing such a desire.

- Adolescents are far from oblivious to the economic problems of their families. Well over a third (36%) of all students worry "quite a bit" or "very much" about the economic survival of their families.
- The possibilities of their parents divorcing worries many young people.
- Interpersonal violence and fear for personal safety are major worries for between five and 15% of Native American youth.
- As the size of the family increases so too do family worries; for example, worry over parental abuse was reported by 14.6% of respondents who lived in households of four or less, while 21.4% of those who live with seven or more people in their home were concerned about abuse. Similar trends were seen for domestic violence (16.8% vs. 27.3%) and poverty (32.7% vs. 40.6%).

Perceptions of Family Relations by Gender



Family Worries by Gender & Grade



III. School: Academic Performance and Attitudes

Since school is one of the most important arenas in an adolescent's life, a number of questions were asked about how they felt about school, how they were doing in school, how frequently they cut or skipped classes, and the degree to which they were aware of deviant activities going on at their school.

Feelings About School

- Most students feel good about going to school — 58% like it a good deal and 27% somewhat like school.
- Nine percent report they do not like school very much and six percent claim to hate it.
- More girls (61%) than boys (55%) like school; more boys (17%) than girls (14%) dislike or hate school.
- 19.5% of boys and 14.4% of girls report having been in special education.

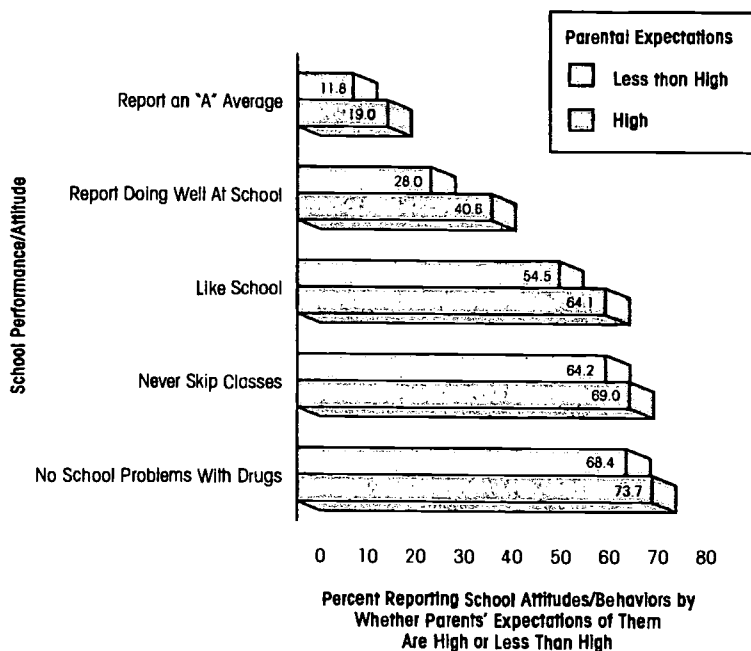
School Performance

- When the students were asked to rate how well they do in school compared to those their age, eight percent said they do much above average, a quarter said they did above average

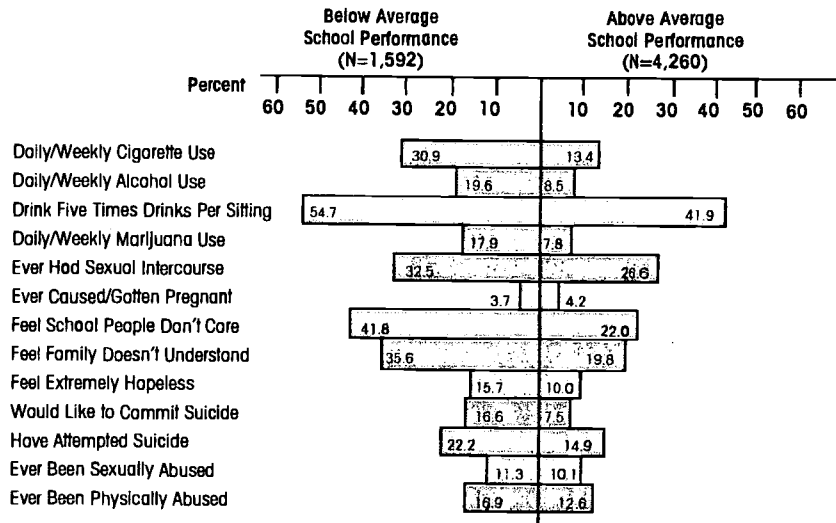
(24%), and over half (56%) said they did about average. About 10% said they do below average, and a significant few (two percent) tell us that their school performance is much below average.

- Students' performance in school and their attitudes toward it appear to be related to parental expectations. Teens who report high expectations from their parents consistently show better school performance and a more positive attitude toward their school work.

School Performance and Attitudes by Level of Parental Expectations



Relationship of Self-Reported School Performance & School Avoidance with Risk Behaviors¹



*Percent of Those Who Report Below and Above Average School Performance Who Also Report Each of the Associated Behaviors and Feelings

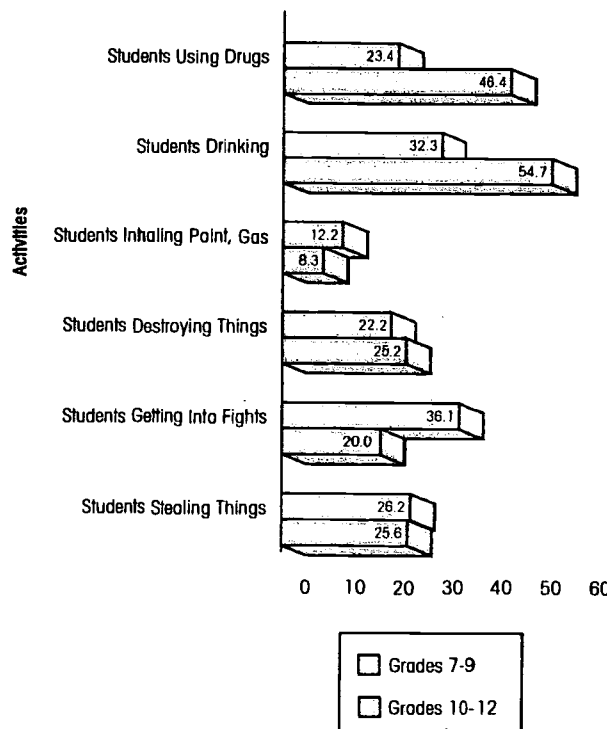
Avoidance Behaviors

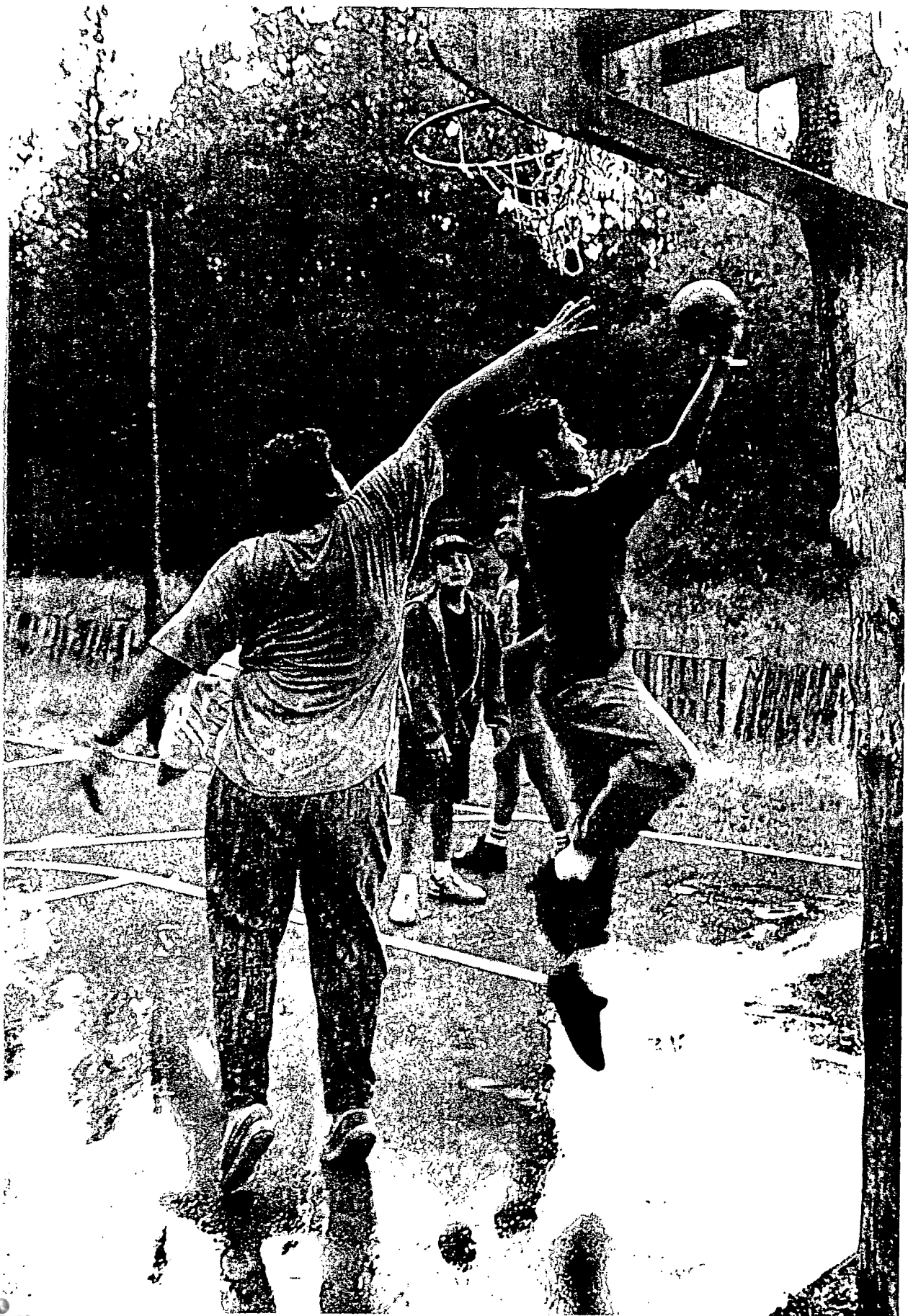
- Two-thirds of the teens report they did not skip a single class during the month prior to the survey.
- 12% skipped three or more classes in the last month.
- Surprisingly, only 35% of those who do poorly in school dislike it. Also, a relatively small number of students who do poorly skip frequently (20.6%). And contrary to popular belief, relatively few of those who dislike school report skipping regularly (20.7%).

School Environment

- Students at all grade levels report drinking and drug use were the most common deviant behaviors on and off school grounds.
- Fighting and inhalant use were more common among younger (grades 7-9) students than those in upper grades.
- Students who skip class frequently were also more likely to be involved in the risky behaviors previously cited above.

Percent Who Say the Following Activities Occur On or Off School Grounds





IV. Physical Health and Well-Being

The complex set of relationships between physical, emotional and social health are suggested by the data presented in this section. In the Adolescent Health Survey, students were asked to report on the condition of their physical health and health problems they have experienced. Students were asked how they felt about their bodies as well as about the practices they adopt to control their weight. They were also asked about the regularity with which they obtain preventive health care and engage in preventive health practices such as exercise and proper diet.

Perceptions of Physical Health

- About 78% of Native American teenagers rate their physical health to be good to excellent.
- Females are somewhat more likely than males to rate their health as fair or poor (24.3% vs. 19.5%).
- Compared with those who report their health status as good to excellent, those whose health was reported as poor report more risky behavior. This relationship

Correlates of Poor Health

Correlates of Perceived Health Status	Perceived Health Status	
	Poor (N = 264)	Good or Excellent (N = 10,386)
Ever Attempted Suicide	33.9	14.8
Below Average School Performance	34.8	9.2
Use Three or More Drugs at Least Monthly	10.6	4.7
Feel Overweight	64.1	26.1
Sexually Active	36.7	29.9
Experienced Abuse	29.2	15.1

is most pronounced for suicide attempts (34% vs. 15%), perception of self as overweight (64% vs. 26%), and poor school performance (35% vs. 9%).

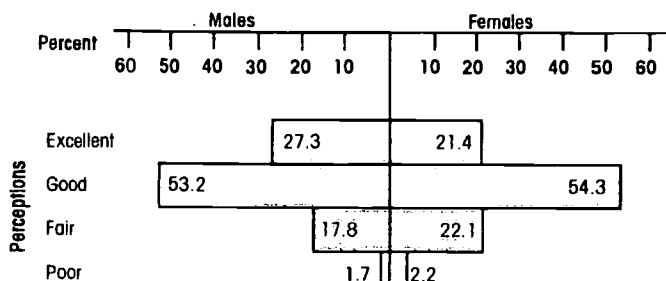
Body Image

- Many adolescents, particularly girls, are uncomfortable with the changes their bodies undergo as they mature. Over a third of the students report concerns about whether their bodies are developing normally.
- The mainstream social ideals of thinness appear to have been internalized by Native American youths, affecting their attitudes about themselves:

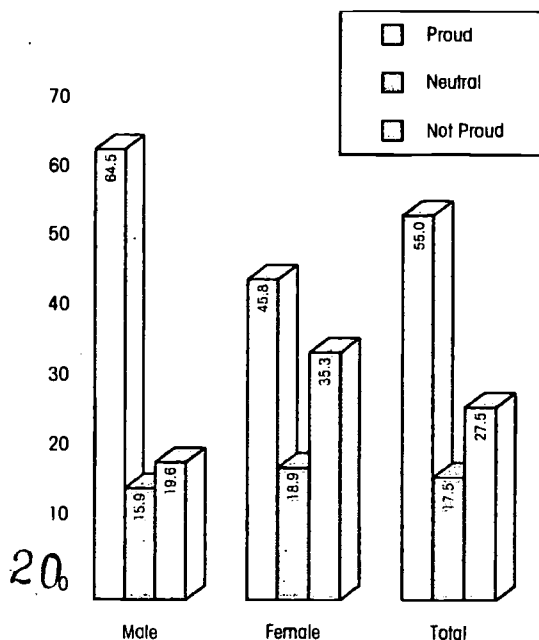
- 43.5% of females and 22.0% of males worry a great deal about being overweight.
- 35.3% of females and 19.6% of males are not proud of their bodies.
- 27.8% of females and 14.4% of males are very dissatisfied with their weight.

- Poorer physical health is related to worries about being overweight:
 - ♦ 28.9% of those who rate their health as excellent worry about being overweight, whereas 58.2% of those who rate their health as poor share these same concerns.
 - ♦ Similarly, students who rate their own health poorly are less likely to be proud of their bodies. Only 15% of those who view their health as excellent are not proud of their bodies, while 66.9% who see their health as poor have the same poor body image.

Self Perceptions of Physical Health



Body Image



Adolescent Antecedents for Adult Chronic Illness

Antecedent	Males	Females	Total
Are obese	24.7	25.0	24.9
Eat red meat daily	41.4	37.1	39.2
Eat eggs daily	40.6	33.8	37.2
Eat fruit and vegetables less than daily	14.4	12.8	13.6
Eat junk food three or more times daily	39.6	42.3	41.0
Smoke cigarettes daily	10.8	12.5	11.7
Use chewing tobacco daily	14.5	7.7	11.1
Never exercise	18.3	19.4	18.9
Have at least four of these problems	15.8	13.1	14.4

Nutritional and Fitness Status

- Adolescent obesity is one factor which is predictive of adult health problems. This is especially true in many American Indian communities where there is a tendency toward adult onset diabetes. Other behaviors such as tobacco use, a diet rich in cholesterol, and inadequate exercise, are also known to be associated with the development of some serious and chronic adult health problems such as cardiovascular disease, cancer and adult-onset diabetes. The table above shows the proportion of Native American students

surveyed who *may* be at risk for developing these problems as adults based on their own reports of certain behaviors or health status as adolescents.

- The link between good health and proper nutrition appears to be understood by Native American youth. Those who were most positive about their health were more likely to eat from all food groups daily and less apt to worry about being overweight.

The Southwest Cardiovascular Curriculum Project

Preventing Adult Chronic Illness from an Early Age

The Southwest Cardiovascular Curriculum Project is a detailed curriculum for fifth grade teachers in Native American communities that covers four areas: heart and circulatory system, exercise, nutrition and obesity and tobacco use. The teacher's guide includes learning objectives, ideas for class activities, handouts, resource guides to audiovisual materials, posters and software. While targeting Navajo and Pueblo communities, the Project provides assistance to other Native Schools interested in developing heart disease prevention and health promotion curriculums.

Center for Indian Youth Program
Development, University of New Mexico
School of Medicine, Albuquerque, NM
87131

Eating and Nutrition

- Over half (53.2%) of the students surveyed fail to eat foods from one or more food groups daily, and consequently are more likely than peers to have nutritionally inadequate diets.
- Eight percent of males and nine percent of females potentially have seriously deficient diets in that they fail to eat foods from three or four food groups on a daily basis.
- Over two-thirds (67.8%) of students eat a junk food (sweets or salty snacks) at least daily, and 41% eat them two or more times daily.
- Less than 10% (9.6%) of students consume a subsistence food on a daily basis, such as moose, caribou, walrus or seal.
- 40% of males and 34% of females report eating eggs daily.

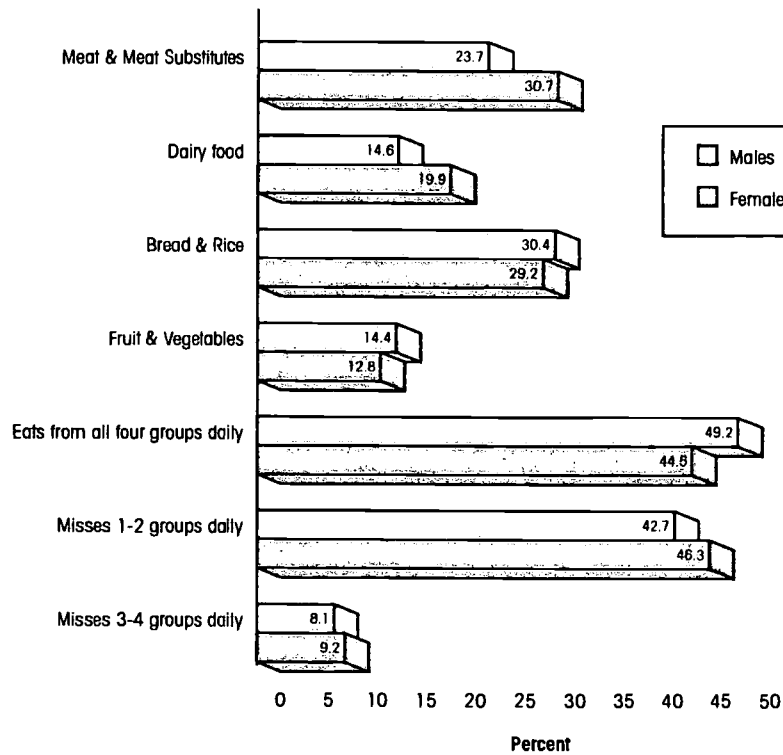
Self Perception of Physical Health and Dietary Inadequacies*

Food Group	Physical Health			
	Excellent	Good	Fair	Poor
Meat & Meat Substitutes	23.7	26.8	32.8	33.0
Dairy Foods	13.4	16.0	24.1	29.2
Bread & Rice	26.7	29.3	34.0	40.9
Fruits & Vegetables	10.0	12.8	18.3	28.6

*Percent not eating from a food group daily

Food Group Inadequacies

Percent Reporting Not Eating Each Food Group Daily



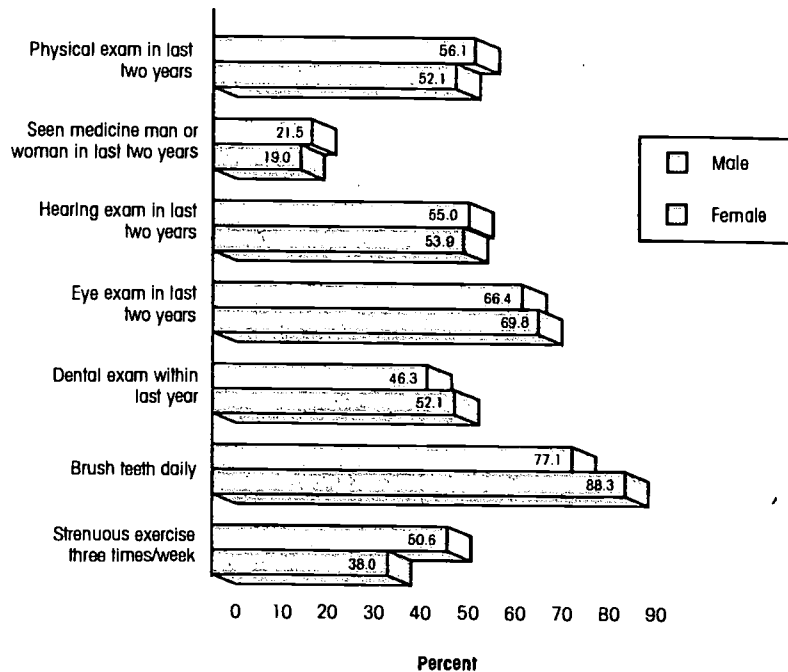
Disordered Eating Behaviors

- The female students surveyed diet frequently — 35.2% did so between one and four times in the past year; 6.1% dieted five to 10 times, 3.4% dieted more than 10 times over the past year; and an additional 3.2% reported that they were always dieting.
- 41.7% of the females and 31.7% of the males surveyed report having been on a food binge.
- 22.9% of females and 12.4% of males report they have fears about not being able to stop eating.
- 27.1% of females and 19.3% of males report ever having induced vomiting. 9.2% of females vomit two or more times a month; and 2.4% do so once a week. 4.6% of males induce vomiting two or more times a month and just over one percent claimed to do it weekly.
- Slightly over two percent of all youths report ever having used laxatives, diuretics or ipecac as means of losing weight.
- Diet pills are used by 3.2% of females on at least a monthly basis, compared to just over one percent by males. Almost four percent of 10-12th grade females report using diet pills monthly or more often compared with one percent of males.

Health Care Utilization and Preventive Care

- Youths participating in this survey are most likely to receive their medical care at a public health hospital or clinic (64.6%), a village clinic (6.4%), a school clinic (5.8%), a hospital emergency room (4.4%) or from a combination of sources (9.8%).
- Eight percent of the youth surveyed say they have no usual source of health care.

Utilization of Preventive Health Care Services



Physical Conditions Reported by Native American Youth

Category	Condition	Percent of Total Reported Having the Condition	Percent of Total Reported Limits from the Condition
Nerve-Sensory	Hearing Impairment	5.0	0.8
	Speech Problems	12.7	1.4
	Vision Problems	30.0	4.0
	Learning Disabilities	12.6	1.7
Emotional/Somatic	Seizures/Convulsions	1.5	0.5
	Nervous/Emotional Problems	16.4	2.4
	Abdominal Problems	27.1	2.0
Chronic	Headaches	73.5	4.9
	Respiratory Problems	11.8	1.5
	Diabetes	1.7	0.4
	Allergies/Hay Fever	19.1	1.6
Other	Mononucleosis	1.8	0.3
	Concentration Problems	27.0	2.7
	Sexually Transmitted Disease	1.8	0.4
	Condition Limiting School	8.4	8.4

Acoma Teen Center*

Providing Comprehensive, Accessible Services to Youth in Rural Areas

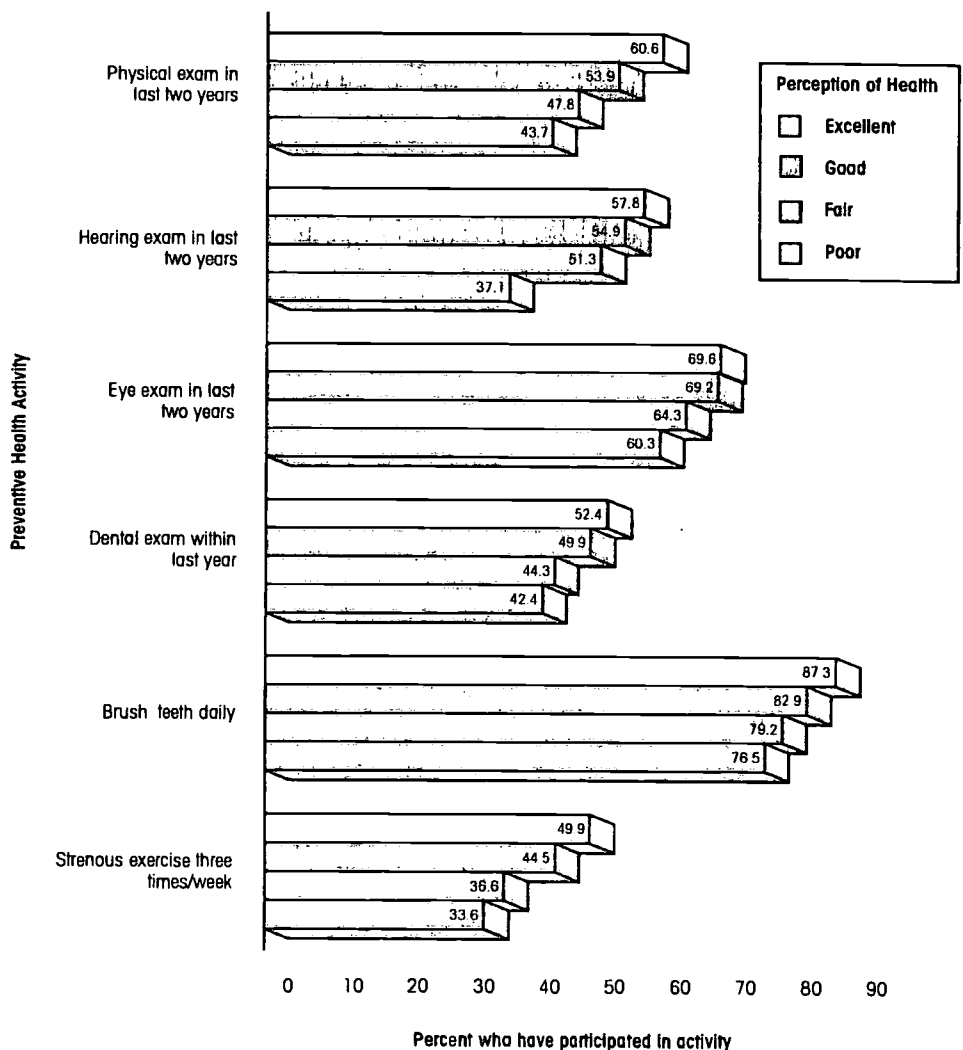
The health status of Indian teenagers in the United States is below that of the general population. The usual barriers to the use of health care services that young people, including young Indians, encounter are compounded in rural areas by distance, isolation, and lack of appropriate services. To overcome these barriers in rural New Mexico, a public health demonstration project: (a) established a single location where adolescents can receive multiple, integrated health care services free of charge; (b) set up the initial program of services at a rural school; (c) established links with existing agencies; and (d) incorporated community action toward creating change.

The project began as a joint effort of three communities, the University of New Mexico (UNM), and the Albuquerque Area Indian Health Service (IHS) of the Public Health Service; a secondary level public school soon became a participant. The project is being replicated in two other communities that have formed separate partnerships with UNM and the area IHS; also the New Mexico Health and Environment Department has joined the effort in one community. Preliminary data suggest that the services are being used by a majority of the target population, with the proportions of boys and girls about equal.

*Department of Pediatrics, University of New Mexico School of Medicine, Albuquerque, NM 87173.

- While there are no overall differences between males and females in obtaining preventive health care, it appears that females may have slightly better personal hygiene habits (e.g., brushing teeth) than males, though males appear more apt to get adequate physical exercise than females.
- There is a strong relationship between perceiving oneself as healthy and accessing health promotion services. For example: Among those who perceive their health as "excellent" 60.6% have had a physical exam in the past two years, compared to only 43.7% of those who say they are in "poor" health.
- The most limiting conditions identified by Native American youth include:
 - Headaches
 - Needing to use eye-glasses
 - Stomach problems
 - Concentration problems
 - Allergies/hay fever
 - Nervous/emotional problems
- Conditions reported to be most limiting of time in school included headaches, concentration difficulties and nervous/emotional problems.

Utilization of Preventive Health Activities by Self-Perceived Health Status





V. Vehicle Related Risks

Accidental deaths are the number one killer of adolescents and young adults in the United States. The survey included a number of questions about behaviors which are indicative of risk for unintentional injuries or death including: drinking and driving, poor motor vehicle safety practices and involvement in anti-social behaviors.

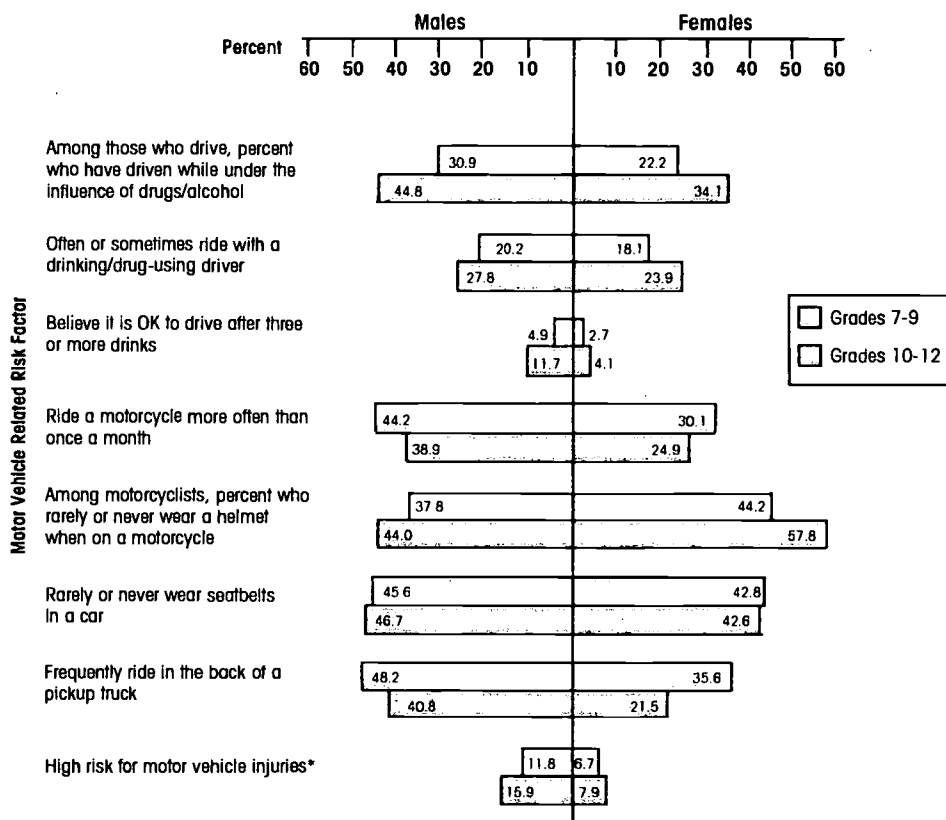
Drivers at Risk

- Because the use of alcohol is associated with a majority of the vehicular deaths of teenagers, drinking and driving is among the most deadly of motor vehicle risks.
- Males are more likely to drive under the influence. Of those who drink, 44.8% of males in grades 10-12 and over a third of females of the same age report they have driven after drinking. Males of this age are also more likely to believe it is OK to drive after having had three or more drinks.

- Of all Native American students surveyed, 21.8% claim that they often or sometimes ride in a vehicle being operated by someone who has been drinking.
- The survey asked students how many times they had ever been knocked unconscious from an unintentional injury (not necessarily motor vehicle related). Those who reported mixing drinking and driving were more likely to have been knocked unconscious at least twice in a variety of circumstances:

- ♦ 15.2% of those who have driven after drinking have been knocked out at least twice, compared to 8.1% of those who do not drink and drive.

Percent Who Participate in Motor Vehicle Related Injury Risk Behaviors



*High risk is based on respondents endorsing four or more motor vehicle related risk factors.

- ♦ 13.3% of those who have been in a car driven by someone who has been drinking report having been knocked unconscious at least twice, in contrast to 4.5% who have never been in such a car.

- ♦ Of those who believe it is acceptable to drive after consuming three or more drinks, 16.8% have had injuries resulting in loss of consciousness. Only six percent of those who believe it is unacceptable to drink at all before driving have been knocked out at least twice.

While we cannot infer from these data that any of these more serious injuries were caused by drinking and driving, they do suggest that students who are more tolerant of drinking and driving are more at risk for a variety of injuries than their more cautious peers who neither drink and drive nor ride with a drinking driver.

Parent Drinking

- 7.4% report that they have seen their parents drink three or more drinks prior to driving.
- Parental behaviors influence teen behavior: among students who have seen their parents drink three or more drinks before driving, nearly half of those of driving age report that they themselves have done the same. These students are also more likely than peers to report they believe it is acceptable to drive after three or more drinks.
- Over 70% of students report they have never seen their parents drink and drive. Of those:
 - ◆ 85% say they would never ride with a drinking driver.
 - ◆ 71.6% said that even though they drink, they would never mix alcohol and driving.

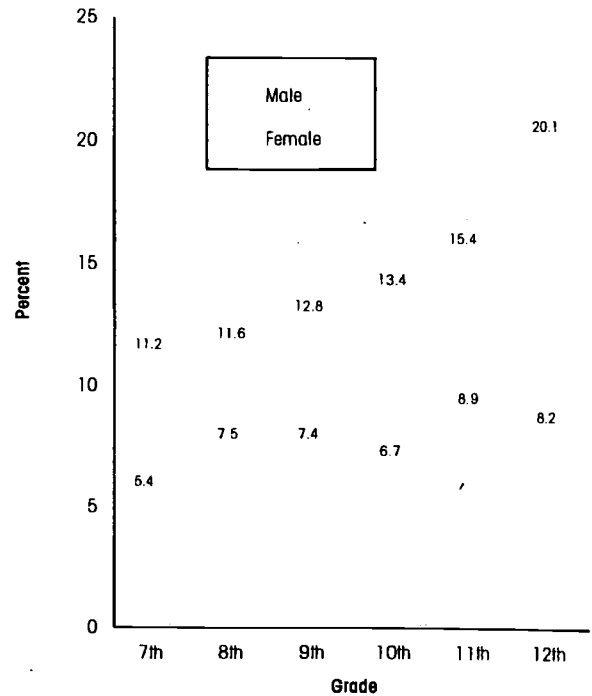
Other Injury Risks

- Among all the youth surveyed, over 40% of the males and 28% of the females report they ride a motorcycle at least once a month. Of those, 40% of males and nearly half of the females claim they rarely or never wear a helmet.
- Well over 40% of both male and female respondents say they rarely or never use seatbelts while riding in an automobile.
- Another dangerous practice among the Native youths surveyed who live on reservations, involves riding in the back of open pickup trucks. While less than eight percent of the respondents claimed to do this frequently, nearly half the males and 30% of the females ride in the back of open pickups at least occasionally.

Who is at Highest Risk for Motor Vehicle Injury?

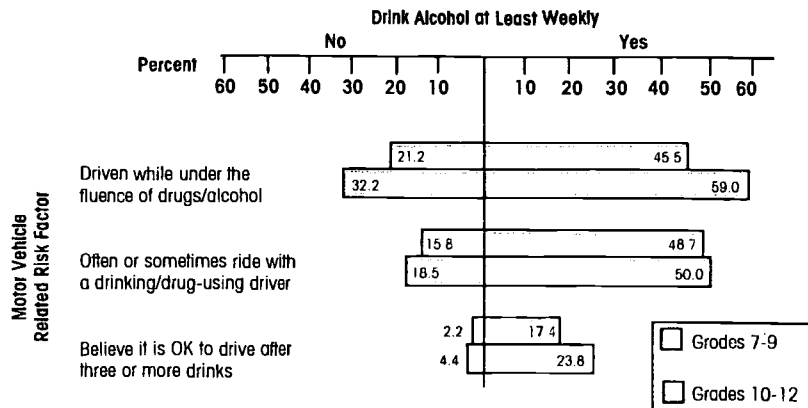
- Older adolescent males are at highest risk for motor vehicle injuries.
- There is a high interrelationship between high risk for motor vehicle injury and risk for social-emotional problems.
- High risk for motor vehicle injuries is also related to many other high risk behaviors. For example:
 - ◆ 20.6% of teens who have attempted suicide are at high risk for motor vehicle injuries. Only 9.4% of those who have never attempted suicide share the same motor vehicle risk.
 - ◆ Most significantly and least surprisingly of those who consume alcohol at least weekly:
 - ▲ 28% are at high risk for motor vehicle injuries.
 - ▲ 60% have driven after drinking or have ridden with an intoxicated driver.
 - ▲ 25% think it is OK to drive after three or more drinks.

Youth at High Risk for Motor Vehicle Related Injuries By Grade and Gender



- Among regular alcohol users, the presence of motor vehicle risk factors increases with age. In addition, young alcohol users are more likely to engage in these risky behaviors than non-using older teens.

Motor Vehicle Related Injury Risk Behaviors by Grade & Frequency of Alcohol Use





VI. Anti-Social Activities

"Anti-social activity" is a term which includes socially unacceptable behaviors. Some are status offenses (running away, skipping school), while others represent delinquent offenses (assault, vandalism, shoplifting). Several questions on the survey explored the extent of these activities among Native American youths.

Fighting and Bullying

- Nearly four out of ten adolescents said they have hit or beaten someone up at least once in the past year. Six percent have done so three-to-five times in the past year, while four percent have hit or beaten someone six or more times in the past year.
- Almost half of males in grades 7-9 and over a third of their female counterparts have been involved with interpersonal violence at least in the past year.
- It is clear that students who are regular users of alcohol and marijuana are more apt to engage in violent activities than others.

Group Fighting

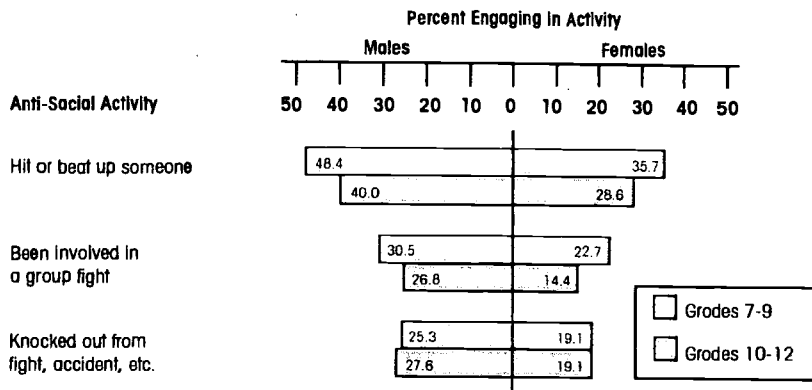
- Almost a quarter of the Native American teens surveyed have been involved in a group fight at least once in the past year. Seven percent have done it three or more times.
- As with individual violence, group fighting is more common among males. Over 30% of males in grades 7-9 and 27% in grades 10-12 have participated in a group fight at least once over the past

year. Twenty-three percent of females in grades 7-9 and only 14% of females in grades 10-12 have done the same. Younger males are also slightly more likely to have been involved in group fighting three or more times over the past year.

Gang Involvement

- Just over 15% of Native American youth report some level of personal affiliation with a gang. While there is no difference in gang affiliation by gender, 18.7% of the students in grades 7-9 report some connection with gangs compared to 10% of those in grades 10-12.
- Almost five percent of all students reported that they spend a lot of time in gangs.
- Students involved in gangs are more likely to report being involved in multiple instances of violent behavior. Eighteen percent of those in gangs claimed they had struck or beaten someone up three or more times in the past year,

Violent Anti-Social Activities in the Past 12 Months (of least once*)



*Represents total of "once or twice" and "three or more times"

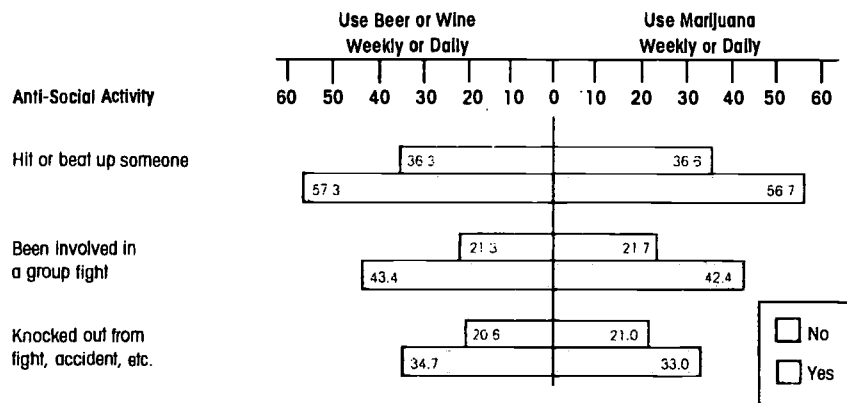
Violent Anti-Social Activities in the Past 12 Months

Anti-Social Activity		Percent Engaging in Activity			
		Males		Females	
		Grades 7-9 (N=3,407)	Grades 10-12 (N=2,095)	Grades 7-9 (N=3,548)	Grades 10-12 (N=2,372)
Hit or beat up someone	Once or twice	34.4	29.7	26.2	22.6
	3 or more times	14.0	10.3	9.5	6.0
Been involved in a group fight	Once or twice	20.3	19.6	16.3	11.6
	3 or more times	10.2	7.2	6.4	2.8
Knocked out from fight, accident, etc.	Once or twice	20.6	23.1	16.2	17.4
	3 or more times	4.7	4.5	2.9	1.7

Compared to nine percent of those not affiliated with gangs. Similarly, 17% of students in gangs had been in three or more group fights in the past year. Only five percent of those not in gangs had been in a similar number of group fights.

- Frequent drug and alcohol use is also more widespread among gang affiliated students. Of those in gangs, 26% reported weekly or daily alcohol use and 25.7% weekly or daily marijuana use. Less than 14% of those not in gangs reported similar usage patterns.

Relationship Between Interpersonal Violence in the Past 12 Months and Substance Use (at least once*)



*Represents total for "once or twice" and "three or more times"

Victims of Violence

- As a victim of violence, almost a fifth of students said they have been knocked out at least once or twice, though less than four percent have been so injured three or more times.
- While males more frequently experience such violence than females (26% vs. 19%), there are almost no grade differences.

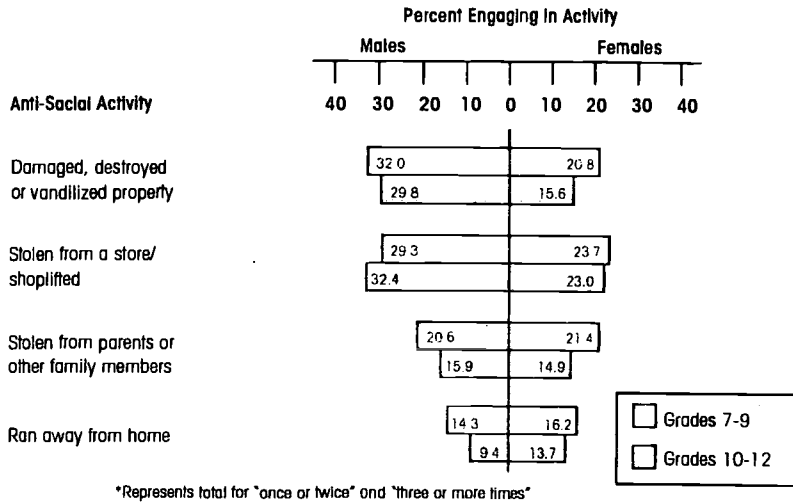
Relationship Between Interpersonal Violence in the Past 12 Months and Substance Use

Anti-Social Activity		Percent Engaging in Activity			
		Use Beer or Wine Weekly or Daily		Use Marijuana Weekly or Daily	
		No	Yes	No	Yes
Hit or beat up someone	Once or twice	27.3	38.2	27.4	38.3
	3 or more times	9.0	19.1	9.2	18.4
Been Involved In a group fight	Once or twice	15.7	27.5	15.7	27.9
	3 or more times	5.6	15.9	6.0	14.5
Knocked out from fight, accident, etc.	Once or twice	17.9	26.9	18.0	26.0
	3 or more times	2.7	7.8	3.0	7.0

Vandalism

- Vandalism in the past year was almost as common among males in grades 10-12 (29.8%) as among males in grades 7-9 (32.0%).
- Over one-in-five females in grades 7-9 and nearly one-in-six in grades 10-12 participated in vandalism over the past year.
- Delinquent or status offense behaviors are more likely to occur among youths who are regular users of alcohol or marijuana than among those who use less.

Delinquent Behaviors in the Past 12 Months (at least once*)



Shoplifting

- When asked how often they had taken something from a store without paying for it:
 - ♦ Nearly three quarters of students said they had *not* done so at all within the past year.
 - ♦ 18.1% said they had shoplifted once or twice in the past year.
 - ♦ 8.7% indicated they had shoplifted three or more times.
- Though males appear slightly more likely to report having shoplifted than females, there are no striking age differences among shoplifters.

Delinquent Behaviors in the Past 12 Months

Anti-Social Activity		Percent Engaging in Activity			
		Males		Females	
		Grades 7-9	Grades 10-12	Grades 7-9	Grades 10-12
Damaged, destroyed or vandalized property	Once or twice	23.1	22.5	16.5	12.6
	3 or more times	8.9	7.3	4.3	3.0
Stolen from a store/shoplifted	Once or twice	18.5	22.6	16.3	16.1
	3 or more times	10.8	9.8	7.4	6.9
Stolen from parents or other family members	Once or twice	15.4	12.0	17.0	12.4
	3 or more times	5.2	3.9	4.4	2.5
Ran away from home	Once or twice	9.5	6.7	10.8	9.8
	3 or more times	4.8	2.7	5.4	3.9

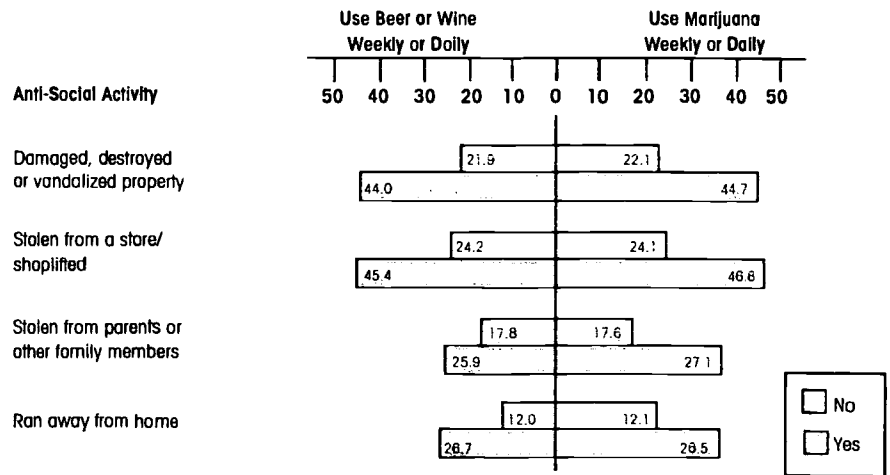
Stealing From Parents or Home

- Nearly 20% of youths say they have stolen from their parents in the last year; four percent have done it repeatedly.
- Stealing from home is slightly more common among younger than older students, though roughly equivalent by gender.

Running Away From Home

- While most youths never run away from home, 14% have done so at least once in the past year.
- 4.4% say they have run away three or more times.
- Runaways are more apt to come from backgrounds of abuse. 29.1% of Native American youths who reported that they had been physically abused have run away from home at least once in the past year; only 11% of those who have not been physically abused have done the same. Similarly, 24% of sexual abuse victims have run away from home in the past year, in contrast to 12.2% of those who have not been sexually abused.

Relationship between Delinquent Behaviors in the Past 12 Months and Substance Use (at least once*)



*Represents total for "once or twice" and "three or more times"

Relationship between Delinquent Behaviors in the Past 12 Months and Substance Use

Anti-Social Activity		Percent Engaging in Activity			
		Use Beer or Wine Weekly or Daily		Use Marijuana Weekly or Daily	
		No	Yes	No	Yes
Damaged, destroyed or vandalized property	Once or twice	17.3	28.6	17.4	28.9
	3 or more times	4.6	15.4	4.7	15.8
Stolen from a store/shoplifted	Once or twice	17.1	25.0	17.0	26.1
	3 or more times	7.1	20.4	7.1	20.7
Stolen from parents or other family members	Once or twice	14.3	17.5	14.0	19.2
	3 or more times	3.5	8.4	3.6	7.9
Ran away from home	Once or twice	8.5	15.5	8.4	17.1
	3 or more times	3.5	11.2	3.7	9.4



VII. Emotional Health

Emotional health is integral to how well one carries out day-to-day activities and functions in social and family settings. Students participating in the survey were asked questions about their current emotional state and about the sort of things which worried them. They were asked specifically about physical and sexual abuse. A number of questions were asked about thoughts and experiences with suicide. While the picture painted of the emotional health of Native American youth in this section is not always reassuring,

it points out the need to address the more serious sources of the distress of teens, and the self-destructive ways in which some youths deal with their problems.

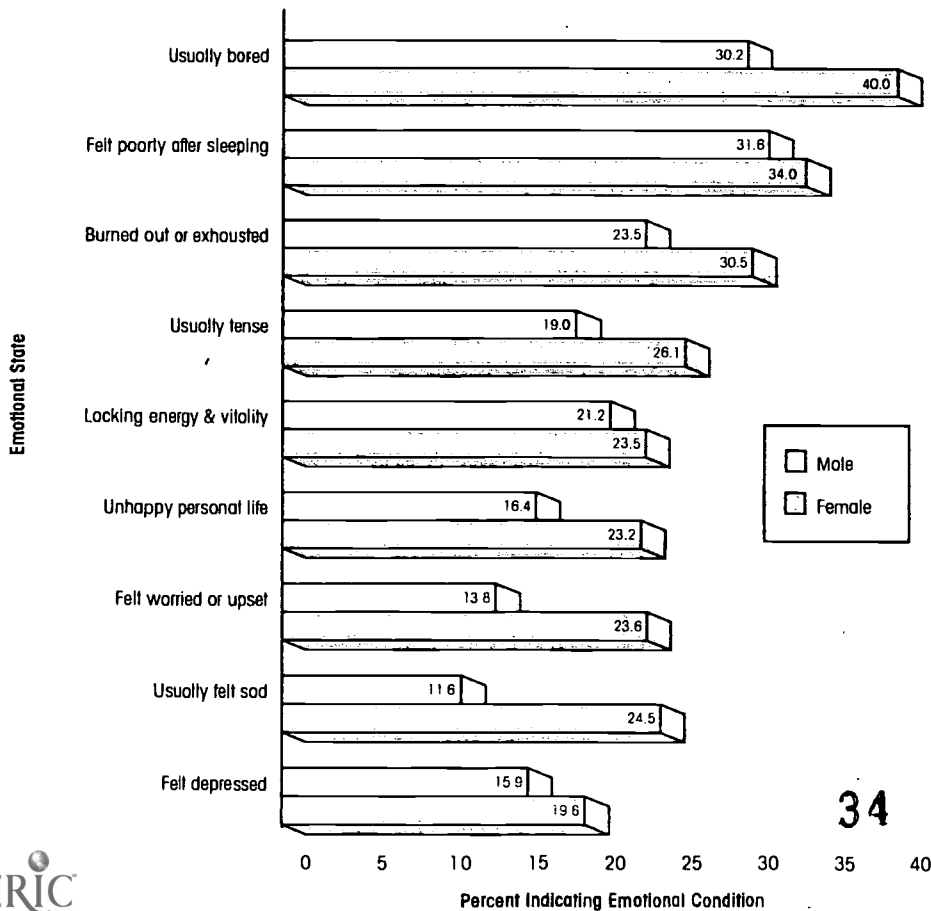
Worries and Concerns

- The major concerns of students reflect their worries about doing well in school, the possibility of losing their parents, and being accepted by friends.
- Nearly half of all students also worry a great deal about getting AIDS.

Rank Order of Five Top Worries for Males and Females by Grade

	Males	Percent	Females	Percent
Grades 7-9	1. Parent dying	55.3	1. School performance	64.5
	2. School performance	51.1	2. Parent dying	63.2
	3. Getting AIDS	49.3	3. Losing best friend	61.6
	4. Losing best friend	38.6	4. Getting AIDS	49.7
	5. Body development	35.6	5. Appearance/Looks	48.6
Grades 10-12	1. Parent dying	55.4	1. School performance	72.9
	2. School performance	54.6	2. Parent dying	63.8
	3. Getting AIDS	48.6	3. Losing best friend	57.1
	4. Losing best friend	39.9	4. Future employment	48.8
	5. Future employment	37.7	5. Getting AIDS	48.4

Indicators of Poor Well-Being Over the Past Month

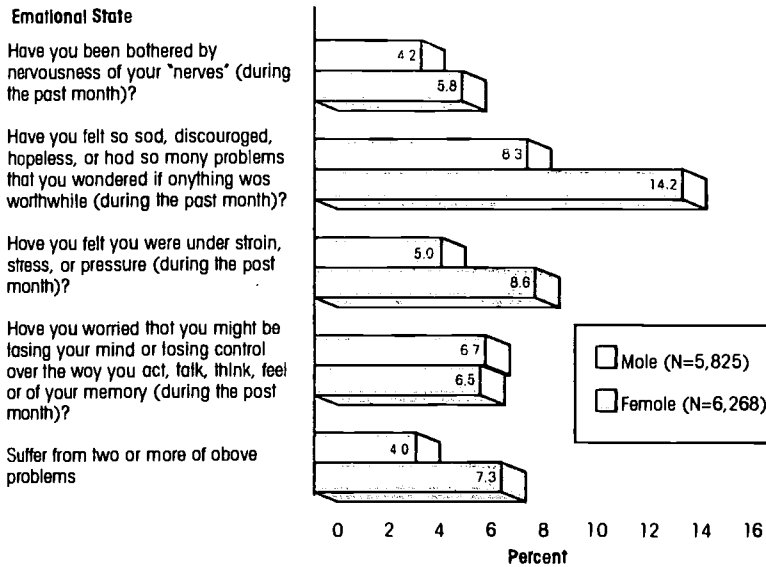


- Students in grades 10-12 worry about future employment. By the 12th grade, 42.2% of males and 53.5% of females are greatly concerned about their future job prospects. Correspondingly, concern about school performance also peaks by the 12th grade: 54.2% of male and 75.3% of female high school seniors rank school performance among their top five concerns.

Emotional Distress

- While most of the adolescents surveyed report high levels of emotional well-being, between a quarter and almost a half report that in the past month they found daily life boring, felt burnt out or exhausted, or emotionally insecure. Females appear slightly more likely than males to experience difficult emotional periods.
- Over 14% of females and eight percent of males report they felt so weighted down by their problems in

Indicators of Very High Levels of Stress* or Depression in Past Month



*Very high levels of stress is defined as those who suffer from two or more of the above problems.

the past month they sometimes wondered if anything was worthwhile. A somewhat smaller proportion report they were under more pressure, strain or stress than they felt they could tolerate.

- Overall, almost seven percent worried they were losing their minds, or losing control over themselves during the past month.
- Looking at the measures of severe distress, while 80% of students report no such concerns, nearly six percent endorse multiple signs of distress.
- Clearly, teens who suffer from high levels of emotional distress are more likely to indicate other symptoms of poor emotional health. Highly distressed teens are especially more apt to feel sad, bored, upset, tense and depressed than their less distressed counterparts.

- There is some evidence to suggest that highly distressed teens may have a different self perception than those feeling less burdened. When asked what types of activities they "do best", highly distressed youth are more apt than

others to say "nothing" (16.7% vs. 6.5%). They appear slightly more confident in their abilities to engage in more intimate behaviors (make friends, listen), but feel less adept at the external activities most highly rewarded by

society (sports, school work, getting things done). This greater sense of disconnectedness from socially sanctioned activities may result in some of the distress these teens are feeling.

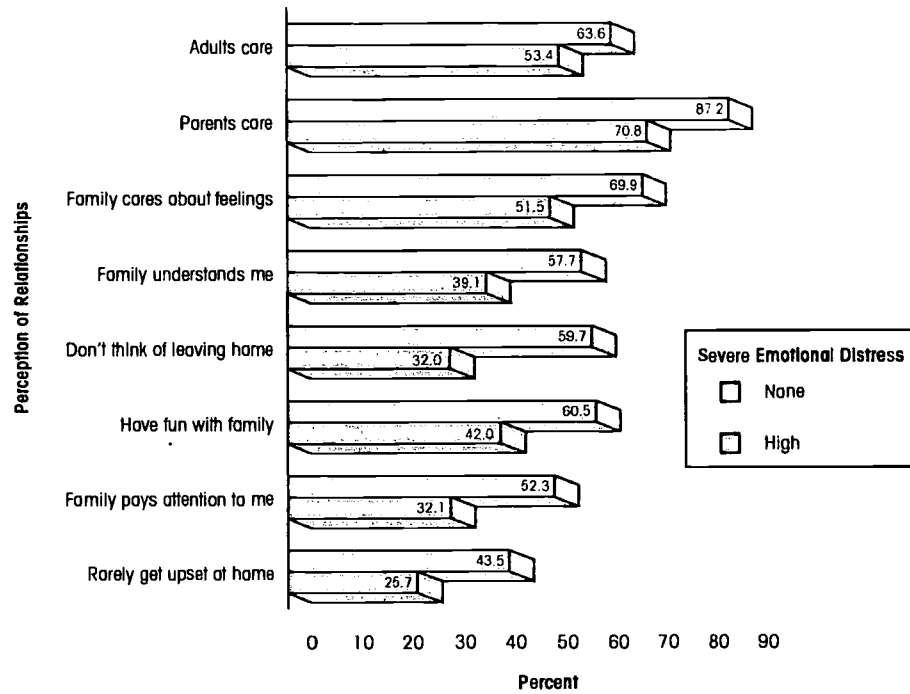
- High distress among the adolescents surveyed is strongly interrelated with other high risk behaviors: sexual activity, pregnancy, poor school performance and frequent school absences.
- Over 20% of adolescents who are highly stressed have been sexually abused, and almost a third have been physically abused.
- Perhaps the most striking and significant difference between adolescents who are emotionally stressed and those who are not is the risk for suicide. Almost half (44.6%) of emotionally distressed adolescents have attempted suicide, compared to 16.9% of all youths. Highly stressed youths are also much more likely to be seriously thinking about suicide.

Characteristics of Adolescents Who Have Been Highly Emotionally Stressed In the Past Month

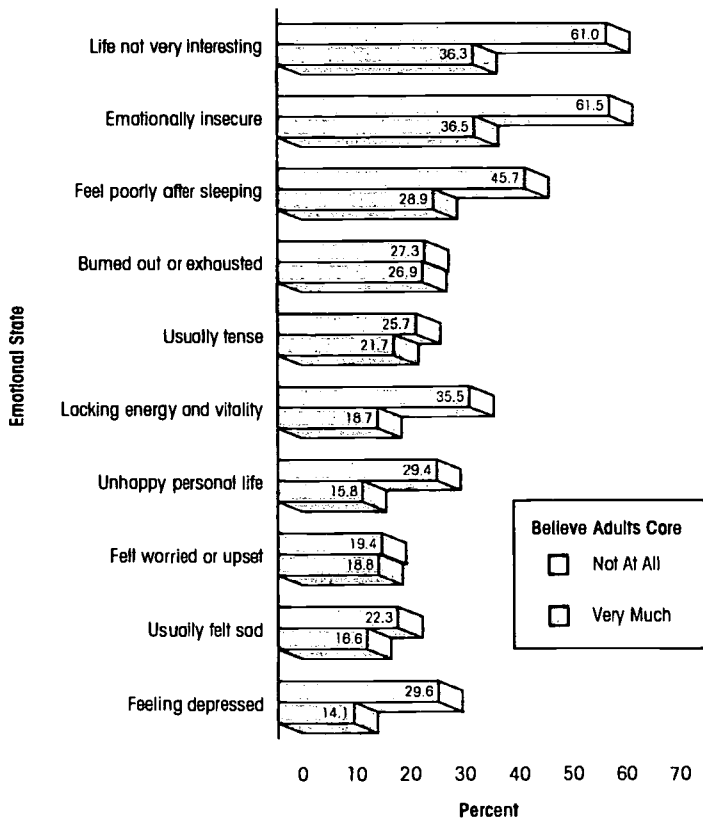
Categories	Characteristic	Percent Reporting the Following Conditions	
		All Adolescents (N = 13,226)	High Stress (N = 750)
Family Relations	Live in single parent or alternative family structures	54.1	60.3
	Biological parents divorced or separated	31.3	36.4
	Worries a great deal that parents will divorce	26.2	30.4
	Feels family does not understand them	24.4	44.0
Physical/Sexual Abuse	Reports have been sexually abused	10.1	21.9
	Reports have been physically abused	13.3	31.7
School Problems	Reports doing below average in school	11.9	17.3
	Frequently absent from school due to illness	7.6	12.8
Suicidal Tendencies	Has ever attempted suicide	16.9	44.6
	Reports they would like to commit suicide or would if they had the chance	9.2	26.0
Sexual Risk Taking	Has had sexual intercourse	30.9	42.8
	Has been pregnant or caused a pregnancy	6.1	10.8

- Emotional distress level is consistently linked with perceptions about family and social relationships. Students who are highly distressed are less likely to report a sense of caring and connectedness with family or other adults.
- The greater the level of perceived caring by adults the less likely are teens to report feeling bored, insecure or depressed.
- Adolescents who report having someone with whom to discuss problems are also less likely to report negative emotional feelings.

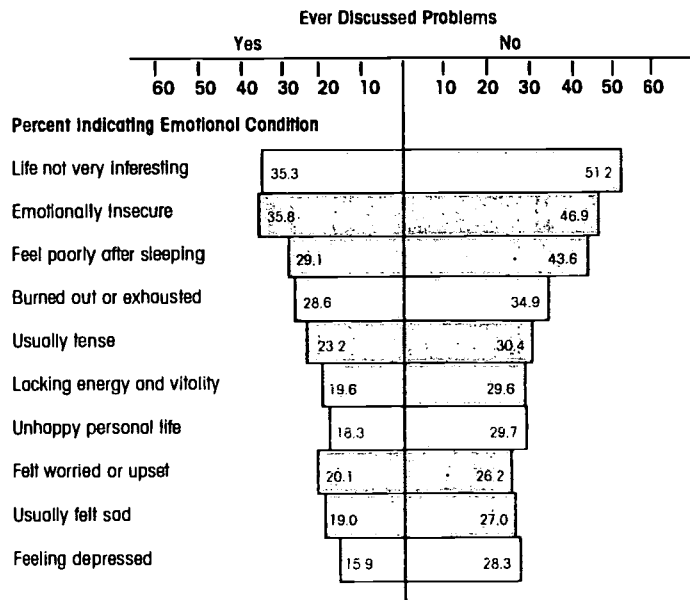
Relationship Between Feelings About Family and Emotional Distress



Relationship Between Emotional Problems and Adult Caring



Indicators of Poor Emotional Well-Being Over the Past Month By Whether Student has Discussed Emotional Problems with Anyone



Sexual and Physical Abuse

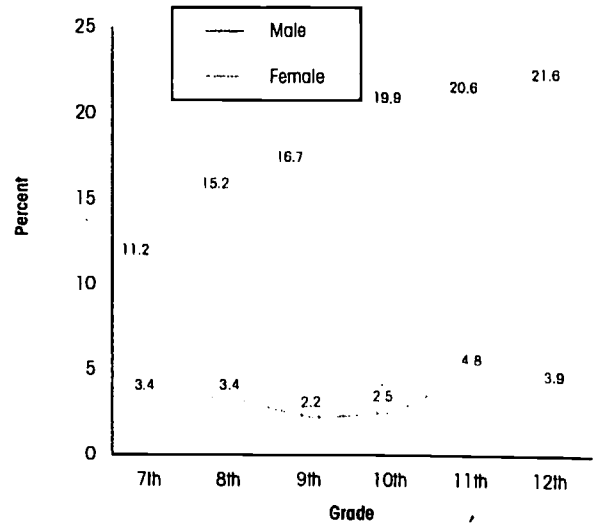
The Questions

Have you ever been physically abused or mistreated by anyone in your family or by anyone else?

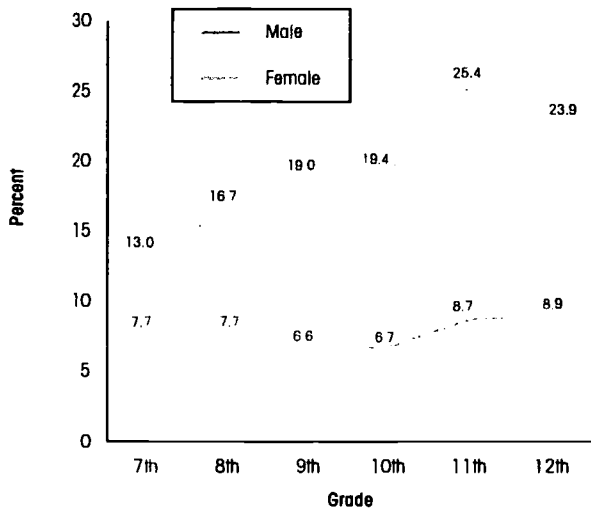
Have you ever been sexually abused? Sexual abuse is when someone in your family or someone else touches you in a place you did not want to be touched or does something sexually which they shouldn't have done.

Students participating in the survey were asked whether they had ever been physically or sexually abused. It is important to note that the perpetrator of the abuse was not identified. Thus, the figures presented below, do not represent the data of intrafamilial abuse but rather reflect youths' perceptions of having been abused.

Percent Reporting Ever Having Been Sexually Abused by Grade and Gender



Percent Reporting Ever Having Been Physically Abused by Grade and Gender



Types of Abuse Experienced by Male and Females

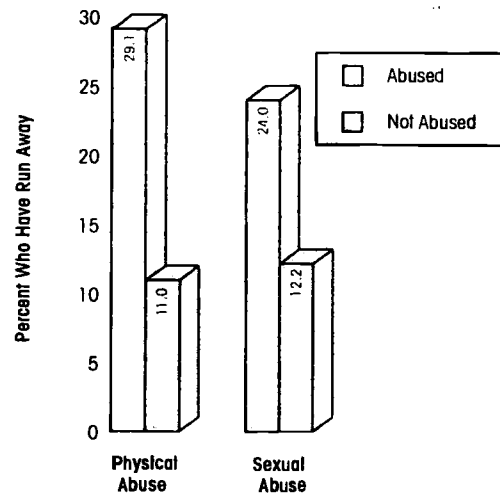
Abuse History	Percent Reporting Types of Abuse		
	Males	Females	Total
No history of abuse	90.9	73.6	82.0
Been sexually but not physically abused	1.6	7.7	4.7
Been physically but not sexually abused	6.0	9.7	7.9
Been both physically and sexually abused	1.5	9.0	5.4

- 18% of the total sample who responded to the abuse questions report that they have been a victim of one or both types of abuse.
- 10% of the total sample report they have been sexually abused.
- 13% of all youths surveyed report they have been physically abused.
- 17% of females report being sexually abused and 19% report physical abuse.

- Fewer males report abuse than females:
 - ♦ 3% report sexual abuse
 - ♦ 8% report physical abuse
- Nine percent of Native American female adolescents surveyed report having been subjected to both sexual and physical abuse.
- A total of almost 27% of female youths have been physically and/or sexually abused.

- Over 20% of girls in grades 10-12 report that they had been sexually abused.
- Among males 1.5% have been both physically and sexually abused. Additionally, 1.6% have been sexually abused only and another six percent have been physically abused only.
- Those who have been abused are significantly more likely to run away from home than their non-abused peers.

Relationship between Abuse and Run Away



Whom Do Abused Youths Tell?

- Many adolescent abuse victims tell no one. Forty-one percent of those who have been physically abused, and 46% of those who have been sexually abused report they have not discussed the abuse with anyone.
- Males are most likely to sustain abuse silently. Almost 60% of the males who have been sexually abused and 55% of those who have been physically abused have not told anyone. This compares with almost two-thirds of physically abused and 57% of sexually abused females who have discussed their experience with someone.

Among Abuse Victims Who Have Ever Discussed the Abuse, Percent Distribution of Whom Adolescents Tell

Abuse Confidant	Physical Abuse		Sexual Abuse	
	Males (N=198)	Females (N=711)	Males (N=74)	Females (N=558)
Family member	67.5	59.6	49.3	67.9
Close friend	57.6	83.3	55.6	77.4
School counselor or teacher	25.7	27.5	22.5	16.5
Social worker	23.0	25.8	27.0	25.9
School nurse/public health nurse	13.1	9.6	17.6	8.3
Physician	11.9	6.8	19.1	7.7
Mental Health counselor	11.4	11.8	18.6	13.8
Dorm Aide or counselor	13.2	9.4	16.4	7.8
CHR Village Health aide	6.9	1.4	14.3	2.5
Minister or Priest	9.1	4.8	14.7	4.8

- Female physical abuse victims are more likely than males to rely predominantly on sharing their problems with a close friend.

- Few male victims of sexual abuse discuss their problem with anyone. Of those who have, roughly half have told a family member, and over half a close friend.

Males report that they are somewhat more likely than females to have discussed their experience with a helping professional.

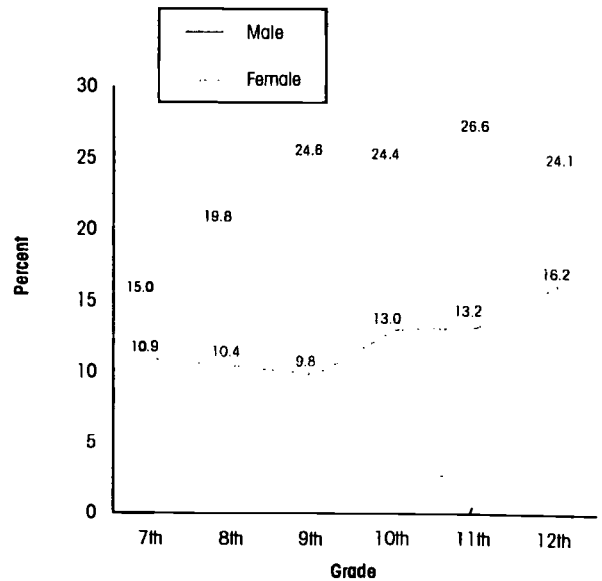
- Roughly eight out of ten female sexual abuse victims who have shared their problem have done so with a close friend, and almost 70% have told a family member.
- The unveiled magnitude of abuse among Native American youth is considerable. Many victims tell no one. Those that do, turn to friends and family. Few victims tell helping professionals, who are more prepared to assist. Clearly, there is a need to help youth deal with abuse — both those who have been abused and those who are confidants.

Suicide

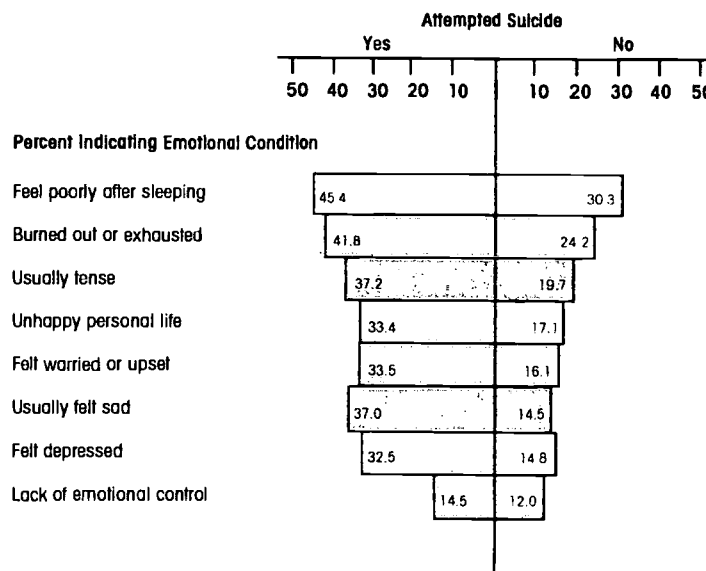
- As with all other data, the information on suicide is based on self perception. It is not that every suicide gesture or attempt reported by teenagers would be so classified by professionals but rather that from the perspective of the teenager, he or she took an action for the purpose of deliberate self harm or destruction.
- Seventeen percent of Native American youth report they have ever attempted suicide. More females than males have made an attempt — 21.6% vs. 11.8%
- Of those who have attempted suicide, 43% tried to kill themselves once, 32% attempted suicide twice, and a quarter attempted suicide three or more times. Males are about as likely as females to be repeat attempters.
- Almost two thirds of those who have attempted suicide have had their most recent attempt within the previous year:

- Over a third (36.5%) of those who have a history of attempted suicide made an attempt within the previous six months.
- 26.9% had attempted suicide between six months and a year ago, and 36.6% had made their most recent attempt over a year ago.
- There are no significant gender differences as to when the last suicide attempt occurred.
- Students who have made suicide attempts are more likely to exhibit characteristics of poor emotional well being. These include: exhaustion, tension, worry and sadness.

Percent of Adolescents Who Have Ever Attempted Suicide By Grade and Gender



Indicators of Poor Emotional Well-Being Over the Past Month By Attempted Suicide



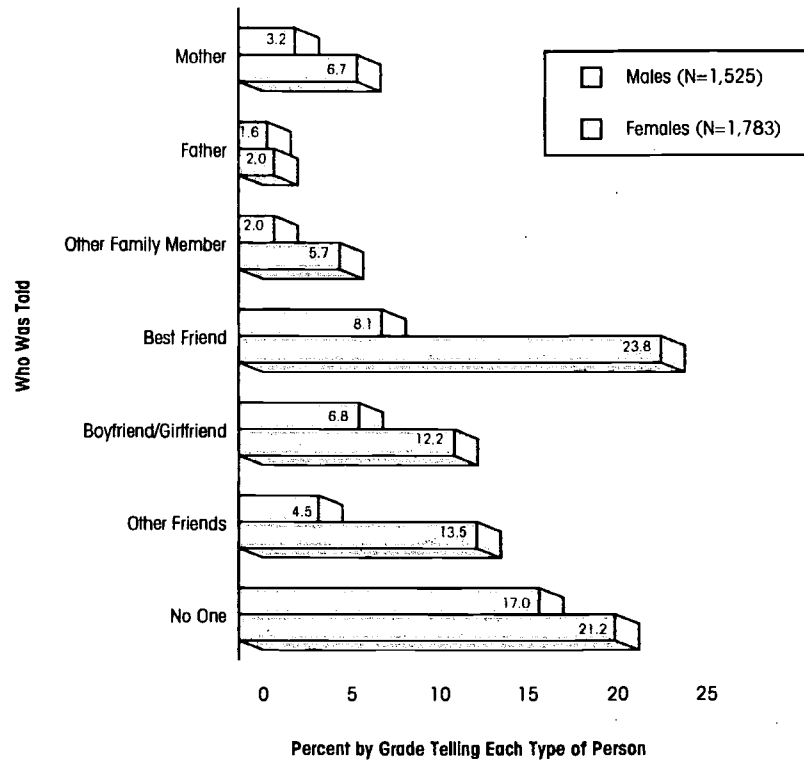
Who They Told About Their Suicide Attempt

- Most suicide attempts by Native American youth go unmentioned. Just over a quarter of the males and about half of the females report they told at least one person about their most recent attempt.
- Adolescents who have attempted suicide are more likely to have told their friends than anyone else.
- Within the family, youths are slightly more likely to tell their mothers than other family members about the suicide attempts — almost seven percent of girls and three percent of the boys told their moms. About two percent of each group told their fathers. Girls are slightly more likely than boys to have told other family members. Overall, however, teens do not turn to their family for helping them with their distress.
- Relatively few teens — 17.4% of males and 16.2% of females — report they required medical attention after their most recent suicide attempt.

Suicide Environment: Family Suicide

- Twenty-two percent of the Native American youths say they have a family member who they are aware attempted or completed a suicide, over a third of which occurred in the past year.

Who Students Not Receiving Medical Attention Told About Their Most Recent Suicide Attempt



Teen Suicide Attempts by Family Attempts or Completions

Youth Suicide Attempts	Family Suicide History	
	No Attempts	Attempts/Completions
No Attempts	86.8	69.7
Ever Attempted Suicide	13.2	30.3
Column Totals	100%	100%

- Suicides by family members are related to suicide attempts among youths from those families. Thirty percent of youth who have had a family member

attempt suicide report they themselves have made an attempt compared with 13% of youth with no suicidal family members.

Suicide Environment

- Twenty-eight percent of the youths report that at least one of their friends has attempted suicide, and about a third of these youths (or one in 10 Native American teenagers) say they have a friend who died from suicide.
- A suicide attempt or completion by an adolescent's friend clearly places that teenager at more than twice the risk for suicide attempts than peers (males 20% vs. 8%; females 33% vs. 13%).

Suicide Risk: Ideation vs. Attempts

While a suicide attempt is an extreme sign of distress, how seriously one contemplates suicide is another important warning of an attempt in the future.

- Almost three quarters of all youths report they have not had any thought about killing themselves in the past month.
- Eighteen percent say they had thought about killing themselves, but would not carry out these thoughts.
- 3.9% say they would like to kill themselves and 5.3% say they would kill themselves if they had the chance.

Youths At High Risk for Suicide

- For the purposes of better understanding who is at high risk for suicide, further analysis was undertaken for youths who: 1) attempted suicide within the past year; 2) think seriously about killing themselves; and have made repeated attempts, even though the attempts may have been more than a year ago.
- Eighty-four percent of youths surveyed do not have any of these elements of suicide history or ideation. Nine percent have one out of the three characteristics, five percent have two of the three and two percent (N = 293) have all three characteristics.

Suicide Ideation by Suicide Attempt History

Thoughts About Suicide Last Month	Suicide Attempt History			
	No History or Attempts	Attempted Over Year Ago	Attempted Six Months to One Year Ago	Attempted Within Last Six Months
No Thoughts	80.3	56.8	37.9	21.0
Thought of It, Wouldn't Do It	13.5	31.7	39.3	43.4
Would Like to Do It	2.3	5.0	10.5	17.8
Would Do It If Had Chance	3.9	6.5	12.3	17.8
Column Totals	100%	100%	100%	100%

How Do Those at High & Low Risk for Suicide Differ?

	Risk for Suicide		
	High (N = 2,171)	Low (N = 11,283)	Percent Difference
A. Associated Behaviors			
Heavy Drinking	30.6	17.4	13.2
Marijuana Weekly or Daily	20.1	10.2	9.9
Had Sexual Intercourse	44.0	28.4	15.6
Caused/Had Pregnancy	10.2	5.3	4.9
Sexual/Physical Abuse	12.5	4.0	8.5
Induced Vomiting Weekly	7.5	3.2	4.3
B. Support Systems Factors			
Family Doesn't Understand	39.3	21.3	18.0
Friend Attempted Suicide	26.6	16.4	10.2
Adults Don't Care	26.6	15.0	11.6
Friend Completed Suicide	18.9	7.6	11.3
Family Member Tried Suicide	36.4	18.8	17.6

- Adolescents at high risk for suicide are more likely to frequently use alcohol and marijuana, to have had intercourse and to have been involved in a pregnancy than those at low-risk for suicide.
- Youth at high risk for suicide are over three times more likely to report a history of abuse, and over twice as likely to deliberately induce vomiting at least weekly.
- Low risk adolescents feel more connected to their families and adults. High risk youth are more likely to have friends who have attempted or completed suicide, or a family member who has attempted suicide.



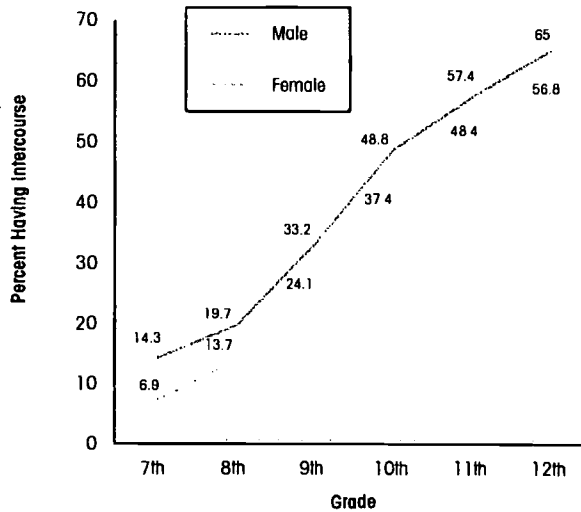
VIII. Sexual Behaviors

Students participating in the survey were asked several questions about their sexual behavior including: whether they had been sexually active, used birth control and experienced or caused a pregnancy. In addition, they were asked about their sexual orientation as well as a range of other attitudes about issues related to intimate relationships.

Sexual Activity

- 30.9% of all students surveyed report they have had sexual intercourse: 35.1% of the males and 27.0% of females.
- Native American males are more likely to be sexually active than females for all grade levels. There are no gender differences regarding frequency of intercourse.
- By the 12th grade, 65% of males and 56.8% of females have had sexual intercourse.

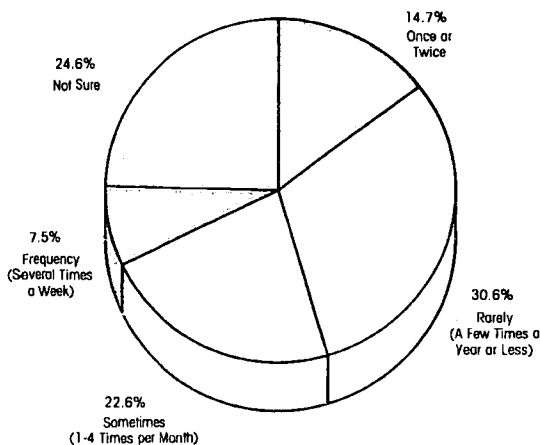
Percent of Adolescents Who Have Had Sexual Intercourse By Grade



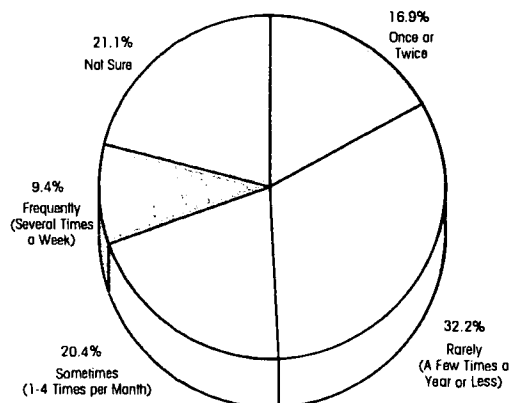
- The average age of first intercourse (counting only those who were sexually active) is 14.2 years for females and 13.6 years for males.
- As would be expected, older teens are more apt to report a higher frequency of intercourse than younger ones.

- 24.4% of males who reported never having had sexual intercourse do report that they have had some non-intercourse based sexual relationships with a female. 16.4% of the females who have not had intercourse report having had sexual experiences short of intercourse with a male.
- Among those who have not had sexual intercourse, females were more apt to want to wait until marriage, to avoid the risk of pregnancy, conform to their parents values and be better emotionally prepared for sex than were males. More males than females claimed that they had not yet had sex because they had not been asked or had yet to have the opportunity.

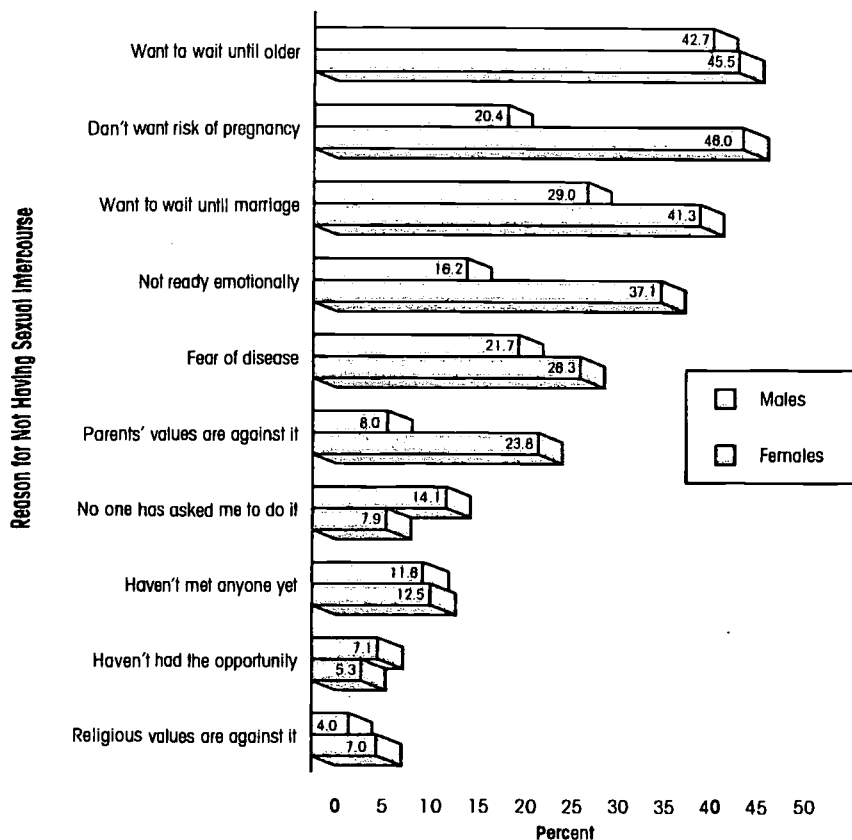
Frequency of Sexual Intercourse — Males (Among Those Who Have Had Intercourse)



Frequency of Sexual Intercourse — Females (Among Those Who Have Had Intercourse)



Reasons Teens Give For Not Having Sexual Intercourse



Characteristics of Sexually Active Teens

As we have seen in previous sections of this monograph, students who are sexually active are more likely to be linked to other high risk behaviors and attitudes. The figures presented below provide further confirmation of this linkage.

- In general, teens who have ever had intercourse are more likely to also suffer from signs of emotional stress than those who have not. These include signs of exhaustion; feeling upset, worried and sad, unhappy, tense and depressed. The exception is emotional insecurity; students who have had sexual intercourse are less likely to report feeling insecure within the month than those who do not.

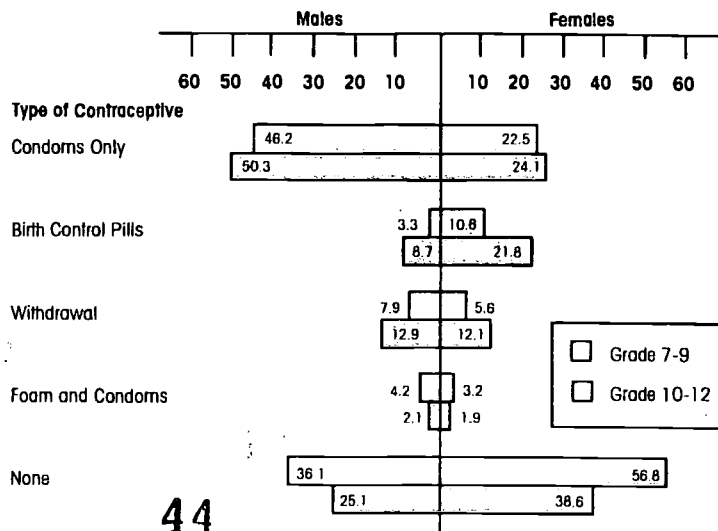
- Students who have suffered from physical or sexual abuse are more likely to report that they have had sexual intercourse than non-abused youths. 49.3% of those who report having been physically abused have had intercourse compared with 28.1% of non physically abused peers. The same pattern holds for sexual abuse victims: 50.3% vs. 28.7%.
- Strength of religious feelings and beliefs do appear to have an effect on students' sexual activity. While only 5.6% of non-sexually active teens listed their religious beliefs as a reason for not having sex, sexual activity is lower among students who feel that they are religious. 25.3% of those students who feel they are religious have had sexual inter-

course, whereas 34.5% of those who do not feel they are religious have been sexually active.

Contraceptive Usage

- Condoms are the most commonly used type of contraceptive across all age and gender groups. 48.7% of males and 23.6% of females use condoms only.
- Among females, birth control pills are the second most popular form of contraception. While 18.3% of all sexually active females are on the pill, older females are twice as likely to be using the pill than are younger teens.
- Withdrawal is the primary contraception for about one-tenth of both males and females. Surprisingly it is somewhat more likely to be practiced by older teens.
- Well over a third of males and over half of females in grades 7-9 report having had sexual intercourse and not using birth control. These numbers diminish for older teens (25.1% of males and 38.6% of females), yet the non-contraceptive rate remains very high.

Primary Types of Contraception Used Among Sexually Active Teens



- Forty percent of males and half of the females who are sexually active report that they always used birth control. While the percentages of males who always use birth control are roughly equivalent for younger (grades 7-9) and older (grades 10-12) teens, older females show a somewhat greater propensity to consistent birth control (51.3%) use than do younger ones (43.6%).
- Nearly a third of males and one in five females who are sexually active indicate that they rarely use birth control. There does not seem to be much change in these percentages as teenagers get older.

Reasons for Not Using Contraceptives

- Among sexually active teens, the most frequently given reasons for not using birth control were because adolescents didn't think about it, and because having sex was unexpected.
- Less than 10% of sexually active adolescents indicated they did not use contraception because of embarrassment, concern about side effects or because pregnancy was desired.

- For females, a community clinic was the overwhelming choice for accessing birth control (51.9%). Others sources included a school clinic (13.8%), drug store (12.4%) and friends (12.3%).
- When asked where they would go first for help if they had a problem with birth control or needed information on birth control, 28.4% of the females said a doctor, clinic or health aide and 20% said a parent or guardian. More than one-third of males indicated they would not go to anyone for help with birth control, while almost a quarter said they would visit a doctor or clinic.
- For both males and females, older teens showed a greater inclination to go to health professionals (doctor, clinic, school nurse, etc.) for help with birth control and less likelihood of consulting their parents for such help than did younger teens.

Reasons for Not Using Contraception Among Those Who Are Sexually Active

Type of Contraceptive	Grade	Percent Of:	
		Males	Females
Didn't think of it	7-9	37.7	33.0
	10-12	31.3	22.7
Sex was unexpected; no time to prepare	7-9	22.1	27.4
	10-12	30.7	29.6
Didn't worry about pregnancy	7-9	8.7	7.5
	10-12	8.8	9.6
Partner doesn't want to use birth control	7-9	6.7	2.8
	10-12	5.6	4.2
Embarrassed to try to get birth control	7-9	1.3	7.5
	10-12	2.4	7.2
Want pregnancy	7-9	5.1	2.8
	10-12	2.7	5.6
Partner's problem, not mine	7-9	12.8	5.6
	10-12	9.6	2.5
Worried about side effects of birth control	7-9	0.8	3.4
	10-12	4.2	8.2

Sources of Birth Control & Information

- When asked where they would feel most comfortable getting birth control, most males said either at a community clinic (27.8%) or a drug store (27.5%). Friends (17.1%) and public restrooms (11.7%) were also relatively common sources of contraception for males.

Preferred Source of Help for Birth Control

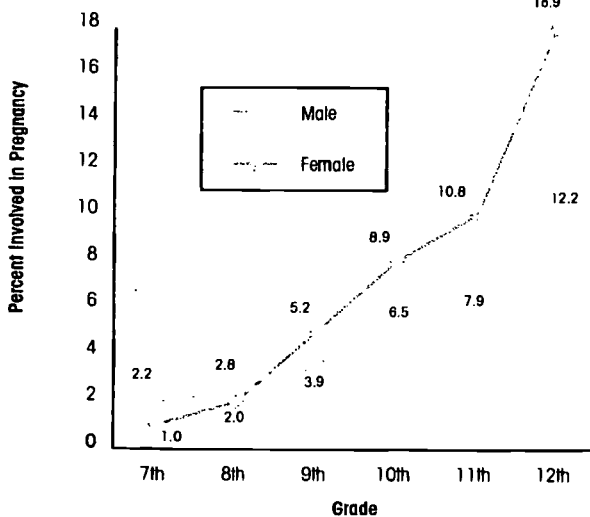
Source of Help	Percent	
	Males	Females
Doctor, Clinic, Health Aide	24.2	28.4
Parent or Guardian	12.4	20.1
Friends	8.3	7.7
School Nurse	7.0	15.0
Adult Friend	5.2	7.4
Teacher or School Counselor	1.9	1.8
No One	36.4	13.6

Pregnancy

- Overall, 7.2% of sexually active females have been pregnant at least once, and five percent of sexually active males are aware that they ever caused a pregnancy. It is quite possible that some teens dropped out of school due to a pregnancy — they would not be reflected here.

- Pregnancy appears to be more likely among teens who report having been physically and sexually abused: 13.5% of teens who have been physically abused have been pregnant compared to only five percent of those who have not been abused. Pregnancy involvement includes 11.7% of those who have been sexually abused, and 5.5% of those who have not.

Percent of Females Who Have Been Pregnant and Males Who Have Caused a Pregnancy (Of Sexually Active Students Only)



Ever Experienced or Caused a Pregnancy

History of Abuse		Male	Female	Overall
Been Physically Abused	No	4.6	5.5	5.0
	Yes	10.7	14.6	13.5
Been Sexually Abused	No	4.8	6.4	5.5
	Yes	12.7	11.5	11.7

Worries About Pregnancy

- Becoming pregnant is a major fear of sexually active adolescents; however, it is a fear that does not appear to consistently translate into contraceptive use.
- In contrast only 25% of males and 27% of females who had not experienced a pregnancy reported having sex at least once a month. Only 5.5% of these males and 6.9% of females claimed to be having sex several times a week.
- Among sexually active males, a quarter (25.4%) report they are very worried about getting someone pregnant. Among males who have already got someone pregnant, over a third (37.7%) are very worried.
- Among sexually active females, more than forty percent (41.6%) worry a great deal about getting pregnant. For those who have already been pregnant, 43.9% worry a great deal.
- Those who have already been pregnant appear to have an especially good reason to worry about another pregnancy. Youths who had caused or experienced a pregnancy are having sex much more frequently than those who had not. Well over a half of the males who had caused a pregnancy reported they had sex at least monthly, and one fifth said they had sex several times a week. Among comparable females, 43% of those who had been pregnant report they were having sex at least once a month, and 18% were having sex

several times a week, thereby putting themselves at greater risk for pregnancy and sexually transmitted diseases.

- In contrast only 25% of males and 27% of females who had not experienced a pregnancy reported having sex at least once a month. Only 5.5% of these males and 6.9% of females claimed to be having sex several times a week.

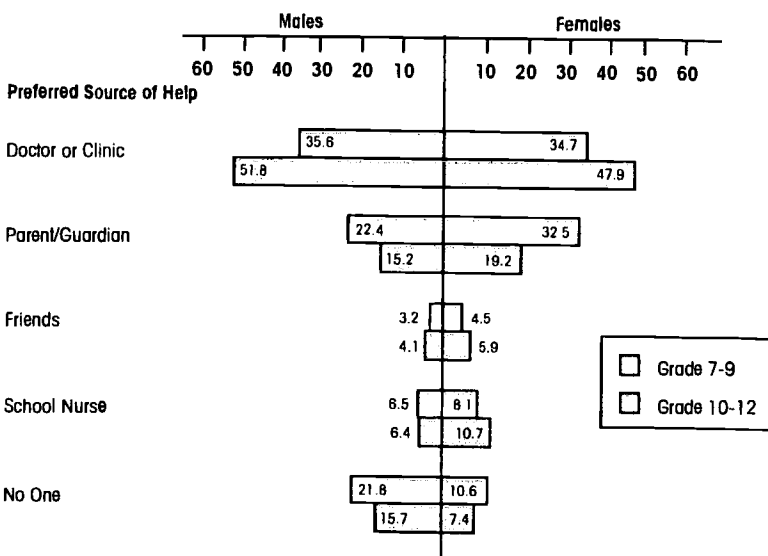
Where To Go For Help When Pregnant

- When students were asked where they would go first for help if they were to become pregnant or cause a pregnancy:
 - ♦ Thirty-nine percent of females and 31.5% of males identified their parents as the first source of help.
 - ♦ 22.4% of females and 12.3% of males said friends their own age.
 - ♦ About 11% of both males and females said they would go to a doctor, clinic, school nurse or other health professional.
 - ♦ 28.5% of the males and 7.2% of females report they would not seek help from anyone.

Attitudes and Fears About Sexually Transmitted Diseases

- Among sexually active adolescents, four percent (3.3% of males and 4.8% of females) reported they have or have had a sexually transmitted disease (STD) such as gonorrhea, herpes or chlamydia.
- About 40% of all students, regardless of gender or sexual activity, are quite concerned about getting AIDS or other STDs.
- Twenty percent of males and 27% of females report they would go to their parents first with concerns about STDs. For both males and females seeking help for STDs, the inclination to go to a doctor or clinic increases and the desire to go to parents diminishes as teens get older.
- Males were more likely than females to report they would not go to anyone for help if they had an STD - 19.4% of males compared to 9.3% of females - but this is a less attractive option for both males and females as they get older.

Preferred Source for Help with Sexually Transmitted Diseases





IX. Substance Use and Abuse

Students participating in the survey were asked about their use of a number of substances ranging from tobacco to crack.

Cigarette Smoking

Ever Tried

- In grades 7-9, 41.6% of males and 46.3% of females have ever smoked cigarettes.
- In grades 10-12, 50.1% of males and 54.2% of females have ever smoked cigarettes.

Daily Use

- As one would expect, daily use of cigarettes rises by grade.
- For almost every grade level, girls are more apt to smoke cigarettes on a daily basis than boys.

Chewing Tobacco

- Though females may smoke tobacco on a daily basis more than males, a far greater percentage of males use smokeless tobacco than females.

Percent Who Have Ever Tried the Following Substances

Substance	Grades 7-9		Grades 10-12	
	Males	Females	Males	Females
Cigarettes	41.6	46.3	50.1	54.2
Beer/Wine	45.3	45.3	74.0	69.1
Hard Liquor	28.8	24.2	56.2	46.2
Chewing Tobacco/Snuff	44.8	29.4	49.3	25.1
Marijuana	32.9	29.5	51.7	48.4
Peypate	23.4	20.4	25.0	21.5
Inhalants	12.7	15.0	6.6	7.4
Amphetamines	7.8	7.7	13.8	12.7
Cocaine	4.6	4.1	8.9	6.7
Sedatives	3.6	3.2	3.9	3.8
Codeine/Morphine/Other Opiates	2.9	2.1	5.7	5.0
Psychedelics	4.3	2.9	9.3	6.3
Diet Pills to Lose Weight	4.2	8.4	3.7	14.6
Look-a-Like Drugs	4.5	4.5	2.7	3.0
PCP/Angel Dust	2.5	2.5	3.7	2.4
Crack/Rock Cocaine	2.7	2.5	4.1	2.8
Heroin	1.6	1.2	1.1	1.0

- While use of smokeless tobacco rises by grade for males, female usage seems to peak in the early senior high school grades.

Alcohol Use

- Nearly half (45.3%) of males and females in grades 7-9 report ever having used beer or wine. 28.8% of males and 24.2% of females in these grades have used hard liquor.

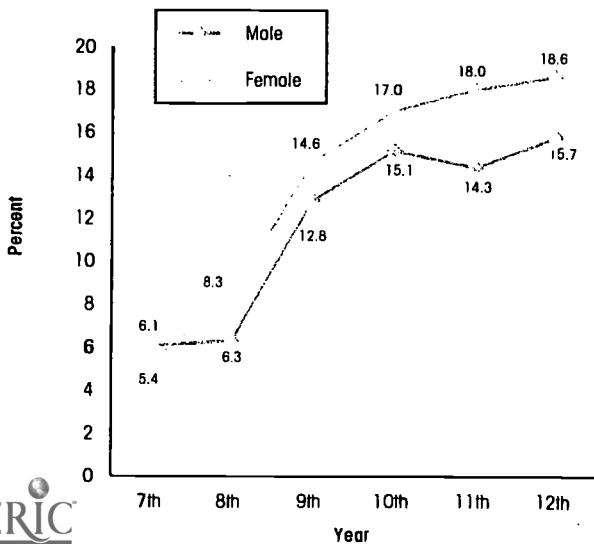
- Among students in grades 10-12, over two-thirds of females (69.1%) and almost three quarters of males (74%) report ever drinking beer or wine, while over half the boys and just under half the girls report ever drinking hard liquor.

- Much the same pattern holds for hard liquor. 20.7% of male and 15.3% of female seventh graders report ever having tried hard liquor. By grade 12, the figures are 63.3% for males and 50.2% for females.

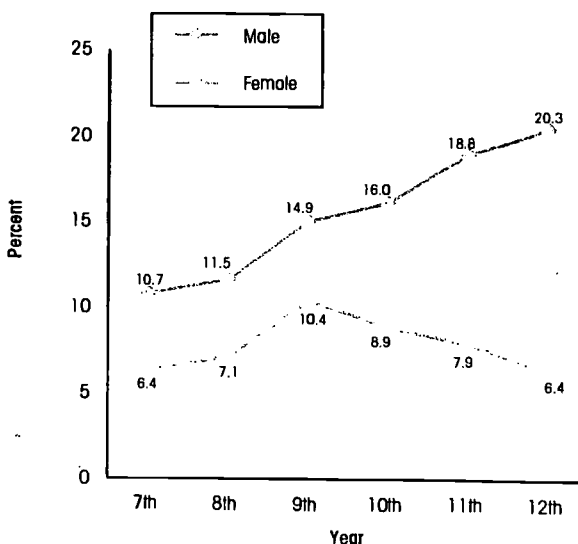
- By grade 12, 80.8% of males and 71.9% of females report ever having tried beer or wine, compared to 35.5% of males and 32.5% of females in grade seven who report having tried it.

- At almost every grade level, frequent alcohol use is more prevalent among males than females. While frequent alcohol use by

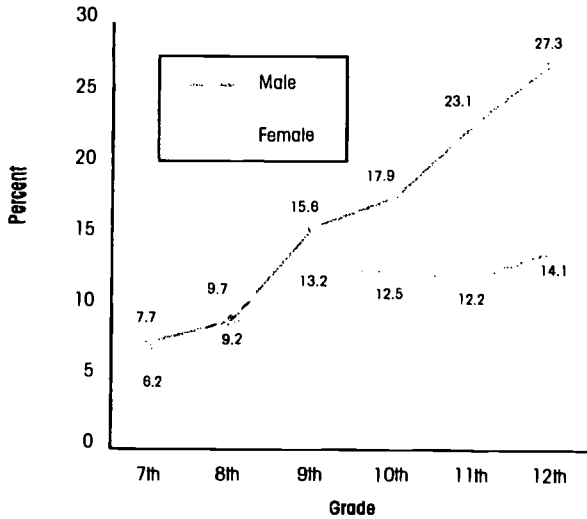
Percent of Who Smoke Cigarettes Daily



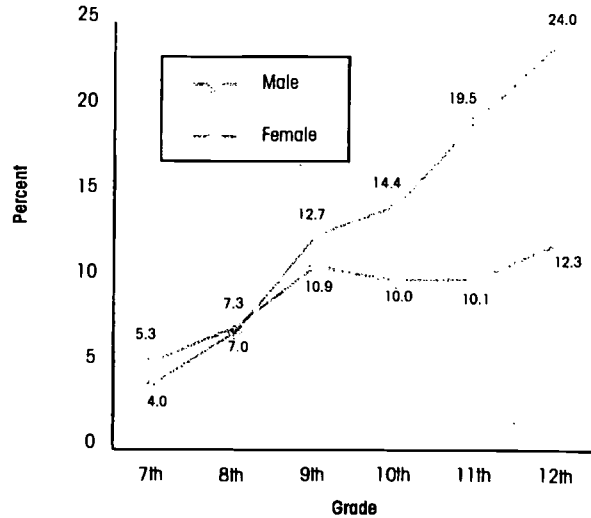
Percent of Who Use Smokeless tobacco on a Daily Basis



Percent Who Use Alcohol at Least Weekly



Potential Problem Drinkers by Grade & Gender



males increases by grade to almost 30% by 12th grade, among females the level plateaus at under 15% for every grade after 9th.

Potential Problem Drinkers

Drinking is of course illegal and therefore problematic for all adolescents. By focusing on those who drink heavily, however, we can identify those youths who are at risk for developing drinking problems and are at special risk for motor vehicle injuries.

- For most Native American youths, alcohol use is not a serious problem. 59.8% of all teens surveyed claim that they either do not drink or have not used alcohol in over a year. An additional 20.7% (over half of those who report that they drink) are *casual drinkers*; they drink less frequently than once a week and rarely more than two or three drinks at one sitting.

- 9.3% of the teens (23% of those who drink) could be classified as *"socially heavy"* drinkers. These are students who may not drink

very frequently (usually no more than once a month) but consume large quantities of alcohol when they do (five or more drinks per sitting). While there is not enough evidence to suggest that these youth have a chronic problem with alcohol, their behavior does put them at a higher risk of certain dangers (drinking and driving, traffic related injuries, vandalism, fighting) that could adversely affect their future.

- Just over 10% of those surveyed (a quarter of those who drink) can be identified as *potential problem*

drinkers. These are the students who are at the most serious risk for both short term or lifelong chronic problems with alcohol. They drink at least once a week and usually more than three drinks each time.

- Overall, 12.2% of males and 8.5% of females can be identified as potential problem drinkers.
- Males are much more likely to emerge as potential problem drinkers as they get older. In keeping with the fairly consistent pattern of chemical use among the

Native youths surveyed, the number of potential problem drinkers among males rises by grade, reaching 24% by the 12th grade. For females, however, there is a steady rise into the early high school years, yet the number of potential problem drinkers seems to plateau at 10-12% throughout grades 10-12.

- There is not much of a difference in potential problem drinking among youths in two parent (8.8%) vs. one parent (11.1%) households.

Experience of Problems Associated with Substance Use By Type of Adolescent Drinking Behaviors

Have Experiences Problems Due to Alcohol or Drug Use	Percent of:		
	Casual Drinkers	Heavy Social Drinkers	Potential Problem Drinkers
Injury	13.6	18.4	25.5
Physical or Emotional Reaction	11.0	13.6	18.6
School Problems	30.3	38.5	48.0
Family Problems	20.4	29.5	35.7
Loss of Friends	22.9	24.8	27.8
Loss of Work	3.2	2.6	5.6
Legal Problems	14.5	22.7	33.5
Became Violent	13.3	20.6	30.7
Relationship Problems	29.6	31.9	42.4
Been in Chemical Dependency Treatment	9.0	14.1	18.1

- Youth whom we are calling potential problem drinkers are more likely to have problems due to their drinking habits than those who are not problem drinkers:
 - ♦ Forty-eight percent report they have had school problems related to their alcohol use, and 42.4% have had break-ups or other problems with their significant other relationships.
 - ♦ Over a third report they have had problems with their families due to their alcohol use, and as well over a quarter say they have had legal problems, lost friends or become violent in some way that is related to drinking.
 - ♦ A quarter have had injuries related to drinking, and over 18% report having had serious physical or emotional reactions from it.
- Though less severe than potential problem drinkers, socially heavy drinkers are still more apt to suffer from problems due to drinking than casual drinkers.
- Youth who drink heavily tend to have parents who drink frequently:
 - ♦ Of those whose parents do not drink, 70% of youth do not drink, and less than 15% of such youths are potential problem drinkers.
 - ♦ Of those whose parents drink on a daily basis, 43% say they do not drink while 23% are potential problem drinkers.
 - ♦ Fourteen percent who perceive their parents as having a drinking or drug problem are potential problem drinkers, while nine percent of those who do not believe their parents have chemical abuse problems are potential problem drinkers.

Soaring Eagles*

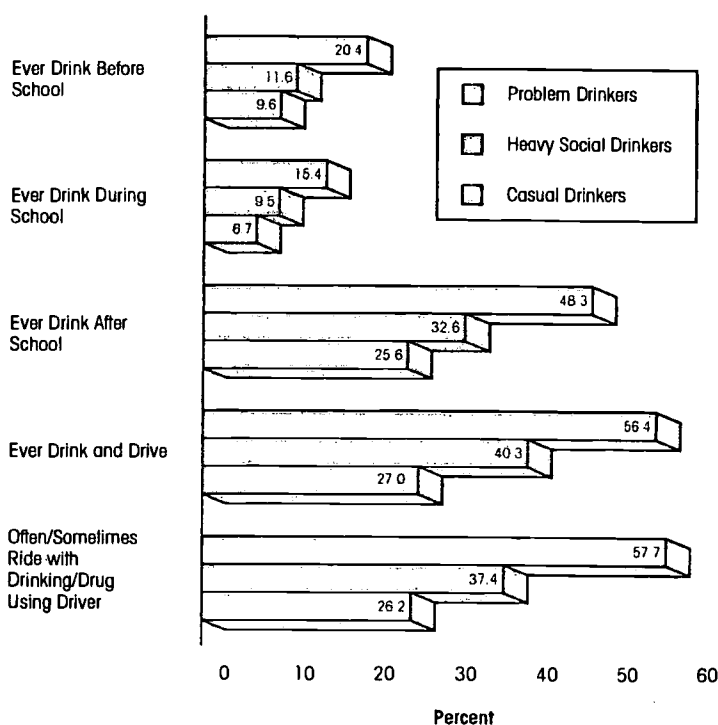
A Program to Help Prevent Substance Abuse and Other Behaviors By Strengthening Sense of Self and Community

A social center for youth and families is the site for the delivery of this set of community-based prevention services for children aged 3-20 and their families. The availability of these services to all Indian families in the urban Minneapolis area makes this effort promotive in nature. Twice a month the children meet with the program staff for an evening of events that serve several purposes: to recognize each child's academic achievements, to provide positive adult role models, and to promote positive social skills in the children. Specific classes address decision-making skills and knowledge about Indian culture.

Drug free alternatives for socialization are offered through on-site recreational activities and field trips. An annual family retreat allows the entire extended family the opportunity to participate in these activities as well. The youth engage in community service projects that demonstrate the values of being a contributing citizen of the wider community. At the beginning of each youth's participation in the groups, an individual assessment is completed that addresses these dimensions: alcohol and other drug use/abuse, family issues, academic needs and strengths, self-esteem, and depression. Youth who have been identified as having specialized needs are then referred for psychotherapy or other appropriate services.

Indian Health Board, Minneapolis, Minnesota

Problem Drinking Behaviors



- Thirteen percent of youths who are potential problem drinkers report their parents drink and drive after three or more drinks compared with only five percent of the youths who are nondrinkers.
- Over 15% of problem drinkers are using alcohol before or during school, while almost half claim to drink after school hours.
- Over half of potential problem drinkers ever drive after drinking; and almost 60% frequently ride with a drinking driver.
- Potential problem drinkers are much less likely to be concerned about problems with drinking and drugs than others. When asked how worried they were

about "all the drugs and drinking I see around me," 61% of potential problem drinkers said not at all or very little, and only 21% said quite a bit or very much. This is in contrast to the over 40% of non-drinkers who claimed to be very concerned about this problem.

- In most cases, there are smaller percentages of potential problem drinkers among those who feel that the adults around them care very much and higher percentages of them among those who do not feel adults care much at all.
- Potential problem drinkers are also more likely to be found among students suffering from emotional strains.

Other Characteristics of Heavy Substance Users

Students who engage in chemical abuse are also more likely to be involved with other high risk behaviors and to have more disaffected attitudes about the world around them.

- Teens who could be labeled as the heaviest abusers are typically abusing more than one chemical. Sixty-two percent of all students who claim to use marijuana weekly or more often can also be classified as potential problem or socially heavy drinkers.
- Fifty-eight percent of students who use two drugs monthly or more often and over two thirds who use three or more drugs regularly can be classified as potential problem or socially heavy drinkers.
- Not surprisingly, the heaviest abusers come from environments where use of drugs is considered most prevalent. 27.9% of those who believed that there is a substantial amount of drinking going on at their school are potential problem or socially heavy drinkers; 12.8% of those who think there is very little drinking going on at their school are potential problem drinkers. In contrast, 70.4% of those who witness very little drinking among classmates are nondrinkers, and less than half of those who witness a great deal of alcohol use among classmates are nondrinkers.
- This same patterns holds for frequent users of marijuana and multi-drug users. A fifth of those who say drugs are prevalent at their school use marijuana regularly. Only five percent of those who say the drug problem at school is minor are also frequent marijuana

users. For those who use two or more drugs regularly, the comparable numbers are 26% of those who believe drugs at school are rampant and less than 10% of those who think drugs at school a minor problem.

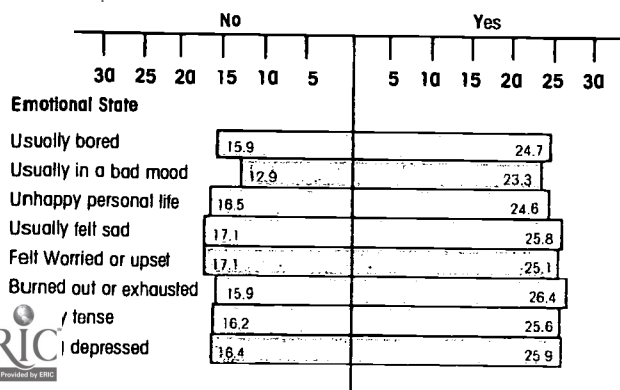
- Heavy substance users are also more apt to do poorly in school. Twenty-seven percent of potential problem or socially heavy drinkers, 24% of two or more drug users and 18% of frequent marijuana users claim to do below average in school. Only 15% of potential problem drinkers, 13% of multi-drug users and eight percent of frequent marijuana users say they do above average work in school.
- Similarly, students who have attempted suicide are more likely to come from these groups. A third of those who have tried to kill themselves can be identified as potential problem or socially heavy drinkers, while only 17% of those who have not attempted suicide have similar problem drinking habits.
- Suicide attempts are also more prevalent among multi-drug and frequent marijuana users. Over a fifth of adolescents who have attempted suicide are frequent marijuana users; less than a tenth of those who have not tried to kill themselves use marijuana as frequently. The comparable numbers for multi-drug users are 12.2% and four percent, respectively.
- Compared with peers, potential problem drinkers, multi-drug users, and frequent marijuana users are also engaged in more anti-social behavior, including vandalism, fighting, group fighting and running away from home.

Perceptions of Adult Caring Among Potential Problem Drinkers/Socially Heavy Drinkers

Percent of Potential Problem/Socially Heavy Drinkers Who Believe the Following People Care

	Adult Caring	
	Not at All	Very Much
School People Care	22.5	16.1
Church Leaders Care	24.5	14.7
Tribal Leaders Care	22.4	15.3
Parents Care	25.1	18.8
Family Cares About Feelings	24.2	18.0
Family Understands Me	24.6	16.9
Don't Think of Leaving Home	27.1	14.8
Have Fun with Family	24.5	16.2
Family Pays Attention to Me	23.0	16.3
Rarely Get Upset at Home	23.4	16.7

Percent of Potential Problem/Socially Heavy Drinkers Who Experience the Following Feelings:



Heavy Drug Use and Anti-Social Activities

Drug Use Category	Never	Once or Twice	3 or More
Percent Who Have Engaged in Vandalism			
Problem/Socially Heavy Drinker	15.8	28.2	43.6
Marijuana Weekly or Daily	8.7	18.3	31.5
Use 2+ Drugs Regularly	13.2	25.6	42.4
Percent Who Have Beat Up Another Person			
Problem/Socially Heavy Drinker	14.5	26.1	33.1
Marijuana Weekly or Daily	8.4	15.8	21.2
Use 2+ Drugs Regularly	12.9	21.9	30.0
Percent Who Have Engaged in Group Fighting			
Problem/Socially Heavy Drinker	16.1	29.3	35.1
Marijuana Weekly or Daily	9.0	19.3	24.7
Use 2+ Drugs Regularly	13.3	26.5	36.7
Percent Who Have Run Away From Home			
Problem/Socially Heavy Drinker	17.5	31.0	39.9
Marijuana Weekly or Daily	10.1	21.5	25.4
Use 2+ Drugs Regularly	14.4	31.2	41.5

Occasional manifestations of physical and emotional health problems among heavy drinkers and drug users are apparent from survey results. Problem drinkers comprise 28% and multi-drug users a quarter of those who complained that they have had nervous or emotional problems. Only 18% of problem drinkers and 15% of regular two or more drug users did not claim to have emotional problems. In addition, potential problem drinkers show a somewhat greater propensity for concentration problems, and multi-drug users are slightly more apt to engage in self-induced vomiting.

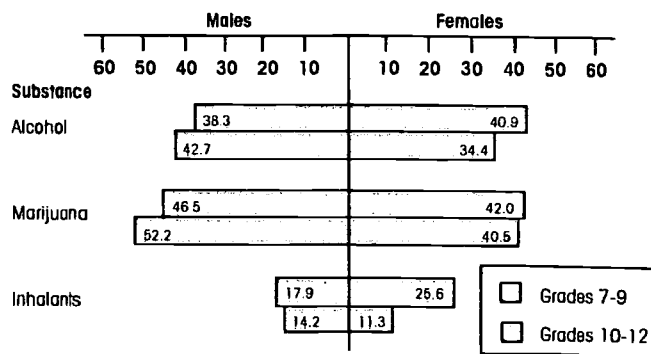
Students who say they are religious appear to be less apt to be major chemical abusers. 26.5% of those who feel they are not religious are potential problem or socially heavy drinkers, while only 13.8% who feel they are religious have comparable drinking habits. A similar pattern is seen among frequent marijuana and multi-drug users. 18.5% of the non-religious are frequent marijuana users and 23.5% use two or more drugs regularly, while only 8.5% of religious youth are as heavily into marijuana and 12.8% are multi-drug users.

In contrast, 68.3% of teens who report they are religious are also nondrinkers, while just over half of those not religious are also nondrinkers.

A quarter of those who do not believe that church leaders care about them are potential problem drinkers. Fifteen percent of those who feel that church leaders care very much are problem drinkers. Similarly, 22% of those who feel clergy is apathetic toward them use two or more drugs regularly; only 12% who feel church leaders care deeply use substances to a comparable extent. Thus, religion may be influencing substance use decisions of Native American youth.

It is relatively common for those who use substances to report being high or drunk within the past week. Among users, older males were more likely to report recently being drunk or high than older females. Among younger students, females were more likely than males to report being high from inhalant use within the past week.

Percent of Users Who Were High or Drunk from Specific Substances Within the Past Week



National Indian Fetal Alcohol Syndrome Prevention Program

A comprehensive, macrolevel FAS prevention program for American Indians and Alaska Natives was funded by the Indian Health Service from 1983 to 1985. The program was designed to provide native communities throughout the United States with the knowledge, skills, and strategies to initiate primary, secondary, and tertiary prevention measures on their own. The key to the program was the training of a cadre of trainers/advocates in all local Indian and Alaska Native communities served by the Indian Health Service. These people were then supported and assisted in their efforts through a variety of means, such as the dissemination of state-of-the-art information and the provision of technical assistance. Evaluation of knowledge gained indicated that the local trainers had substantial success in imparting FAS information to a variety of audiences (pregnant groups, school children, and community groups). Further, the evaluation samples indicated that the knowledge was retained by these groups over time (2-4 months) and diffused among peers in local communities.



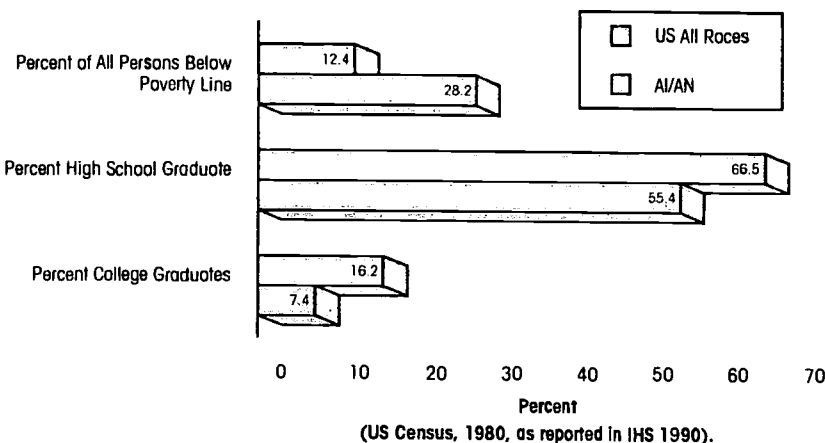
X. Native American Youth in a National Context

This section provides comparative data on key variables so that trends in Indian Adolescent Health can be interpreted in a wider context. Where possible, national statistics are used, as are large scale studies of Indian youths. In addition, where national data are not available, present findings are compared with rural Minnesota. When such comparisons are made those participating in the present study are referred to as: "National Native American Sample". In 1986-87, 36,250 Minnesota youths were surveyed using an instrument with many comparable questions to the present survey. For purposes of comparison, a sub-sample of 6,184 rural youths have been selected, they are referred to as "Rural Minnesota Non-Native."

Student and Family Characteristics

- Based on U.S. Census information:
 - Most of the American Indian/Alaskan Native population served by IHS lives in eleven states: Alaska, Arizona, Minnesota, Montana, New Mexico, North Dakota, Oklahoma, South Dakota, Washington, and Wisconsin.
 - Contrary to popular opinion, over half of Native Americans live in or near urban areas, although many retain close ties to their home communities. Urban youths did not participate in the present survey.
 - The American Indian/Alaskan Native population is comparatively young: while nine percent of the US All Races population is

Comparison of Economic and Educational Status of American Indian/Alaskan Native population with U.S. All Races Population



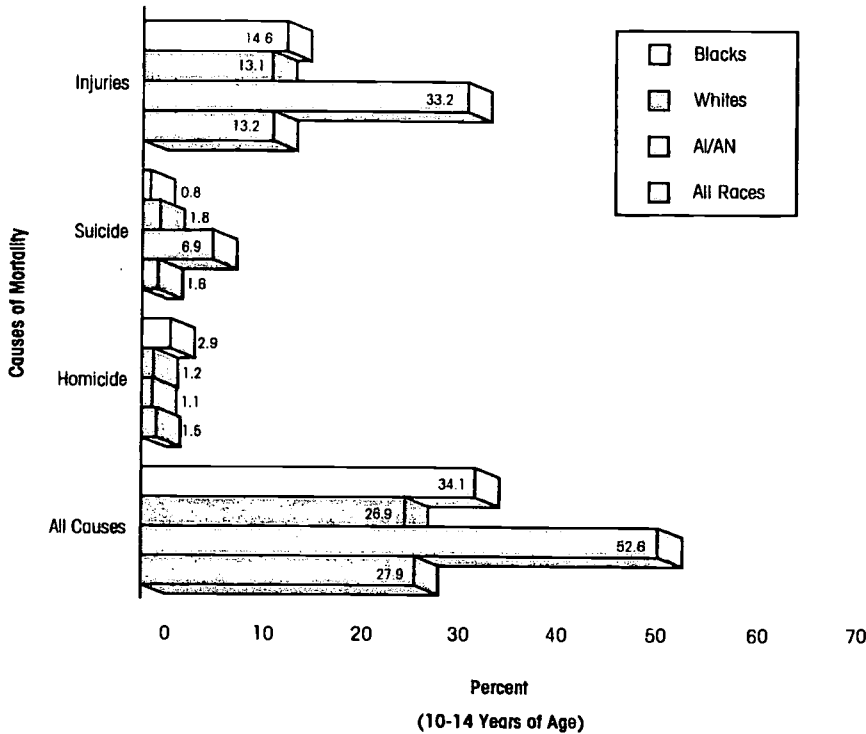
- between 10 and 19 years of age, 12% of Native Americans are in the second decade of life. (U.S. Census, 1980)
- Over twice as many American Indians/Alaska Natives fall below poverty line compared to US All Races, while the proportion graduating from high school or college is less than half all other groups.

- Half the Native teens in the present survey live with two parents compared with Minnesota youth (eg., 8th grade: 44.0% vs. 87.6%). Conversely, Native American teenagers are more than three times as likely to live in a single parent household when compared with Anglo peers in rural Minnesota.

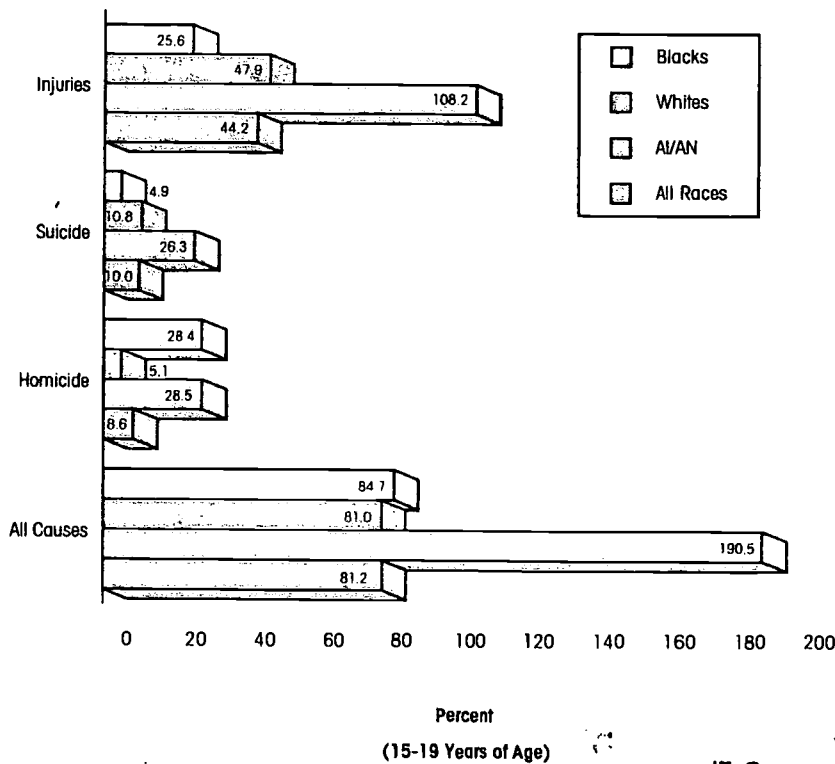
Comparison of Native and Rural Minnesota Teens on Family Structure & Living Arrangements

Family Characteristics	8th Grade		11th Grade	
	National Native American Sample	Rural Minnesota Non-Natives	National Native American Sample	Rural Minnesota Non-Natives
Family Structure				
Two Parent	44.0	87.6	47.1	86.9
Single Parent	40.4	11.0	35.0	10.0
Other	15.5	1.4	17.9	3.2
Live with Grandparents	11.0	0.6	8.7	1.1
Live with Aunts/Uncles Cousins or Other Relatives	9.7	1.6	9.0	1.7
Parents' Marital Status				
Married	53.7	80.1	52.1	78.7
Divorced/Separated	31.3	15.9	31.8	14.7
Other	15.0	4.0	16.1	6.6

Age-Specific Mortality Rates for Selected Causes of Death (1986)
(Rate per 100,000)



Age-Specific Mortality Rates for Selected Causes of Death (1986)
(Rate per 100,000)



Physical Health

Mortality Rates

- The death rate for American Indian/Alaskan Native adolescents is twice that of adolescents of other racial / ethnic backgrounds. Unintentional injuries and suicide account for nearly 75% of the total death rate (OTA, 1990).
- Comparing Indian males ages 10 to 19 with U.S. All Races data for the same age, the death rate for Indian males is nearly three times higher than those of U.S. All Races. It is 2.7 times higher than for Blacks. For females, the differential is over 1.8 times higher than for U.S. All Races.
- The nutritional health status of Indian adolescents is largely unknown. A number of studies of specific tribes have found that anywhere from a third to two thirds of Indian adolescents are obese (Broussard, 1990).
- Concern about nutritional behavior in Indian adolescents is warranted when one considers the prevalence of adult onset diabetes and hypertension in the Native American population. In 1986, the age-adjusted diabetes mellitus death rate for Indians was 2.1 times that of the U.S. All Races (20.6 per 100,000, vs. 9.6) (OTA, 1990)
- In 1983, the IHS found that by 17, Indian teens had five and one half times the decayed, missing, filled teeth (DMFT) of other teens. The DMFT for 13- to 19-year-old Native ranges from 50-77%.
- Native males are three times as likely to rate their health as fair to poor compared to non-Native rural youth in Minnesota; for females there is twice the differential.

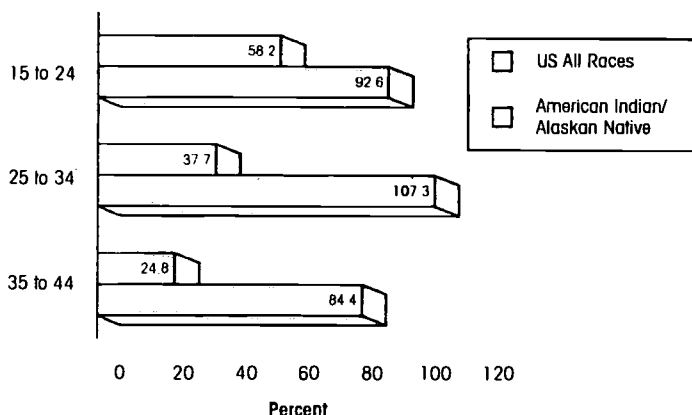
Comparison of Native and Rural Minnesota Youths on Perceived Health Status and Behaviors

Physical Health	Male		Female	
	National Native American Sample	Rural Minnesota Non-Natives	National Native American Sample	Rural Minnesota Non-Natives
Self-Reported Physical Health				
Excellent	27.3	42.2	21.4	25.8
Good	53.2	50.4	54.4	60.7
Fair	17.8	6.6	22.1	12.7
Poor	1.7	0.8	2.2	0.8
Involvement in Behaviors Associated with Adult Chronic Illness				
Perceiving Self as Overweight	21.0	17.7	45.0	42.9
Eat Red Meat Daily	41.4	66.2	37.1	54.7
Eat Eggs Daily	40.7	15.7	33.9	7.9
Eat Fruit & Vegetables Daily	85.6	80.3	87.2	82.8
Smoke Cigarettes Daily	10.8	7.9	12.5	8.3
Use Chewing Tobacco Daily	14.5	6.3	7.7	—
Exercise less than three Times Weekly	49.3	22.0	62.0	31.1
Inadequate Diet in three or more food Groups	8.2	4.4	9.3	6.4

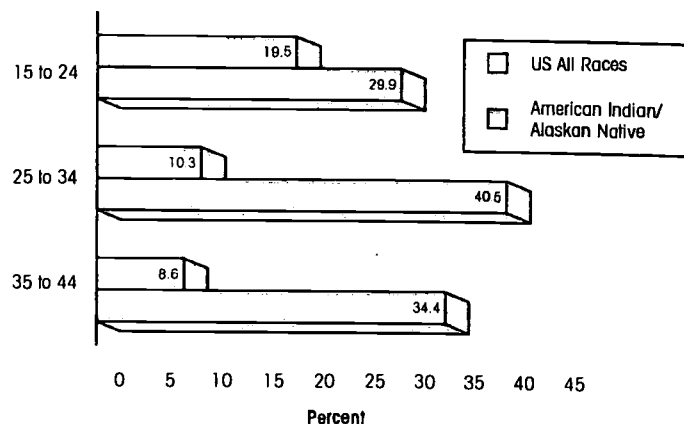
Motor Vehicle Related Risks

- Among 15-to 19-year-old Native American youths, death from motor vehicle injuries occur at twice the rate than for US All Races (IHS, 1990).
- When one looks at behaviors and beliefs which predispose to motor vehicle injuries (such as not wearing seat belts, riding with a driver who had been drinking and beliefs about drinking and driving) despite the stunning differences in motor vehicle injury rates, one sees almost no differences between Native teens and Non-Natives in rural Minnesota.

Motor Vehicle Male Injury Rates, by Age and Sex, 1986
(Rate Per 100,000)



Motor Vehicle Female Injury Rates, by Age and Sex, 1986
(Rate Per 100,000)



Comparison of Native and Rural Minnesota Youth by Grade on Motor Vehicle Risk Behaviors and Belief

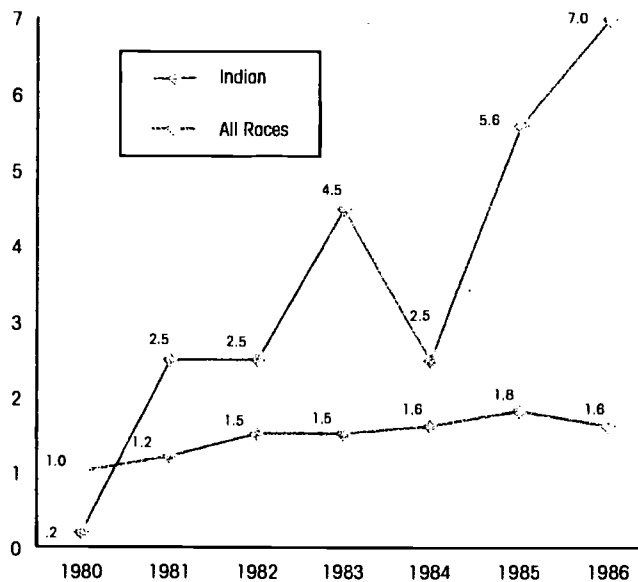
Vehicle Related Risks	8th Grade		11th Grade	
	National Native American Sample	Rural Minnesota Non-Natives	National Native American Sample	Rural Minnesota Non-Natives
Often or Sometimes Ride With an Intoxicated Driver	19.3	14.6	25.5	34.2
Believe it's Okay to Drive after 3+ Drinks	3.3	3.3	8.2	12.6
Barely or Never Wear Seatbelts in a Car	45.3	41.9	45.2	48.4

Emotional Health

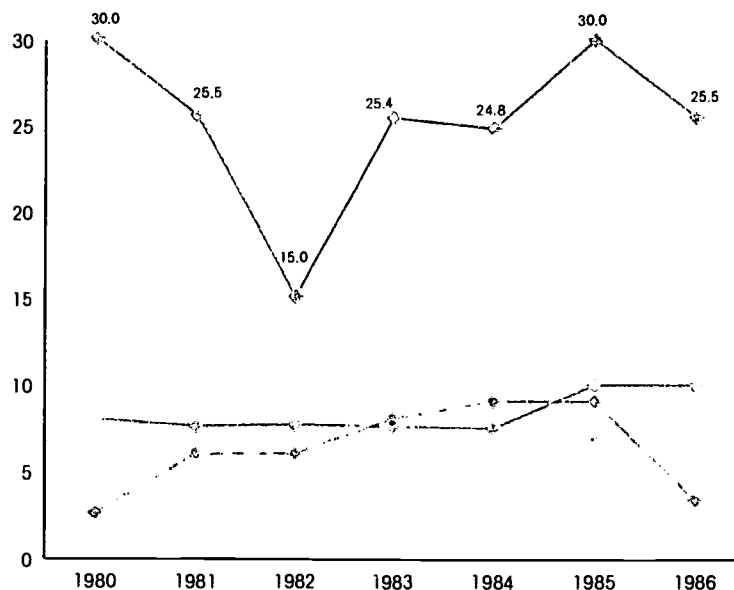
Suicide

- Suicide is the second leading cause of death for American Indians and Alaskan Native adolescents. In 1986, the age-specific mortality rates for suicide for 15-19 year old Indians was an estimated 26.3 deaths per 100,000. In comparison, the figure for the same age group for US All Races was 10.0 per 100,000. Suicide rates for 10-14 year olds are approximately four times higher than that for U.S. All Races (OTA, 1990).
- The age-specific suicide death rate (1985-87) for Indian males was higher for all age groups in comparison to Indian females. The Indian male rate exceeded 40.0 deaths per 100,000 population for age groups 15 through 34.
- In the present study Native youth were more than twice as likely to contemplate suicide or to have attempted it than their Anglo age-mates in Minnesota.
- Family suicide attempts were reported more than three times as frequently in Native as in rural Minnesota households.

Indian and U.S.
All Races Suicide Death Rates per 100,000 Population
for Youth 10-14 Years of Age (1980-1986)



Indian and U.S.
All Races Suicide Death Rates per 100,000 Population
for Youth 15-19 Years of Age (1980-1986)



Abuse

There is a wide variation in estimates of the prevalence of child and adolescent abuse and neglect. In community studies (as opposed to chart/medical record reviews, or based on referred cases), rates seem to range from 13% to 33%. Records of 1988 abuse reports and investigations to BIA show that a minimum of one percent of Indian children in BIA Service Areas may have been abused or neglected in a single year (OTA, 1990).

- Sexual abuse with or without physical maltreatment is more prevalent in Native communities surveyed than among rural Minnesota female adolescents (16.7% vs. 12.7%).
- For both males and females, physical abuse appears to be twice as common among Native American youths surveyed as was found among rural Minnesota teenagers.

	Male		Female	
	National Native American Sample	Rural Minnesota Non-Natives	National Native American Sample	Rural Minnesota Non-Natives
Suicide				
Ever Have Attempted Suicide	11.8	5.6	21.6	12.4
Family Member Ever Attempted Suicide	19.5	6.2	25.3	9.4
Serious Thoughts About Suicide in Past Month	10.1	4.0	8.3	4.7

Abuse	Male		Female	
	National Native American Sample	Rural Minnesota Non-Natives	National Native American Sample	Rural Minnesota Non-Natives
Abuse History				
No History	90.9	95.1	73.7	82.3
Sexual Abuse	1.6	1.0	7.7	6.3
Physical Abuse	6.0	3.1	9.7	5.0
Both Physical & Sexual Abuse	1.5	0.7	9.0	6.4

Sexual Relationships

- No national data are available on Native American adolescent's involvement in sexual behaviors or use of contraceptives. Fertility rates, however, for Indian adolescents ages 15-17 were over 2.5 times higher than for U.S. All Races. In 1986, just over 23% of births in the IHS service areas were to women under the age of 20. This compares to 13% for U.S. All Races and 23% for African Americans. While the proportion of births to adolescents has been declining for the general U.S. population, it has remained stable for Native Americans (OTA, 1990).
- Infant mortality rates among Native Americans have declined 84% from the mid 1950's. This rate is currently six percent lower than the U.S. All Races rate for 1986, which is 10.4 per 1,000 (IHS, 1990).
- Data on prenatal visits by Native American adolescents indicate that about a third of adolescents under 15 sought prenatal care in the first trimester, compared to 42% of 15-17 year olds, and 47% of 18-19 year olds (OTA, 1990).

Sexual Behavior	Male		Female	
	National Native American Sample	Rural Minnesota Non-Natives	National Native American Sample	Rural Minnesota Non-Natives
Ever Had Sexual Intercourse	35.1	27.9	27.0	24.3
Frequency of Using Birth Control				
Always	27.1	49.8	26.9	55.1
Quite Often/Sometimes	21.4	24.1	16.0	24.6
Rarely/Never	51.4	26.1	57.1	20.3
Percent Ever Been/ Ever Caused Pregnancy	5.1	4.7	7.3	2.6

- In comparison with non-Native rural Minnesota teens, Native males are more likely to have had intercourse (35.1% vs. 27.9%) while differences between female groups is minimal.
- On the other hand, among those who are sexually active Native youths - both male and female - are about half as likely to always use contraception as are their rural Anglo peers in Minnesota.

Chemical Use	Male		Female	
	National Native American Sample	Rural Minnesota Non-Natives	National Native American Sample	Rural Minnesota Non-Natives
Use Cigarettes Weekly or Daily	20.0	11.0	18.3	11.7
Use Chewing Tobacco Weekly or Daily	24.0	9.5	12.6	0.1
Use Beer/Wine Weekly or Daily	14.1	17.1	10.2	15.8
Use Marijuana Weekly or Daily	14.0	1.5	9.7	1.0
Use Inhalants Monthly, Weekly or Daily	1.3	0.3	2.0	0.6
Potential Problem Drinker	12.2	15.2	8.5	14.3

Substance Use

Few national studies of substance use have included adequate samples of Native American youth upon which to make estimations. Compared to national data on drug use, such as the annual Monitoring the Future Survey and NIDA's household surveys, Indian youth appear to be more likely to have tried most substances than other groups of teens. While more than 70% appear to be at fairly low levels of risk for chemical dependency in the present survey approximately 20% are at high levels of risk, based upon frequency of use, and number of substances regularly used.

More importantly, it appears that American Indians begin abusing various substances at a younger age than their Anglo counterparts. By the time they are in the 7th grade, 28% of Indian youth report at least one episode of getting drunk, 44% have tried marijuana, 22% inhalants, 12% stimulants and 72% cigarettes.

The high rates of mortality among youth related to suicide and motor vehicle crashes are no doubt associated with substance abuse. Among adults, mortality associated with alcoholism is nearly twice that of other races. This striking difference is first observable in the age group 25 to 34, and increases with the two subsequent age groups (IHS, 1990).

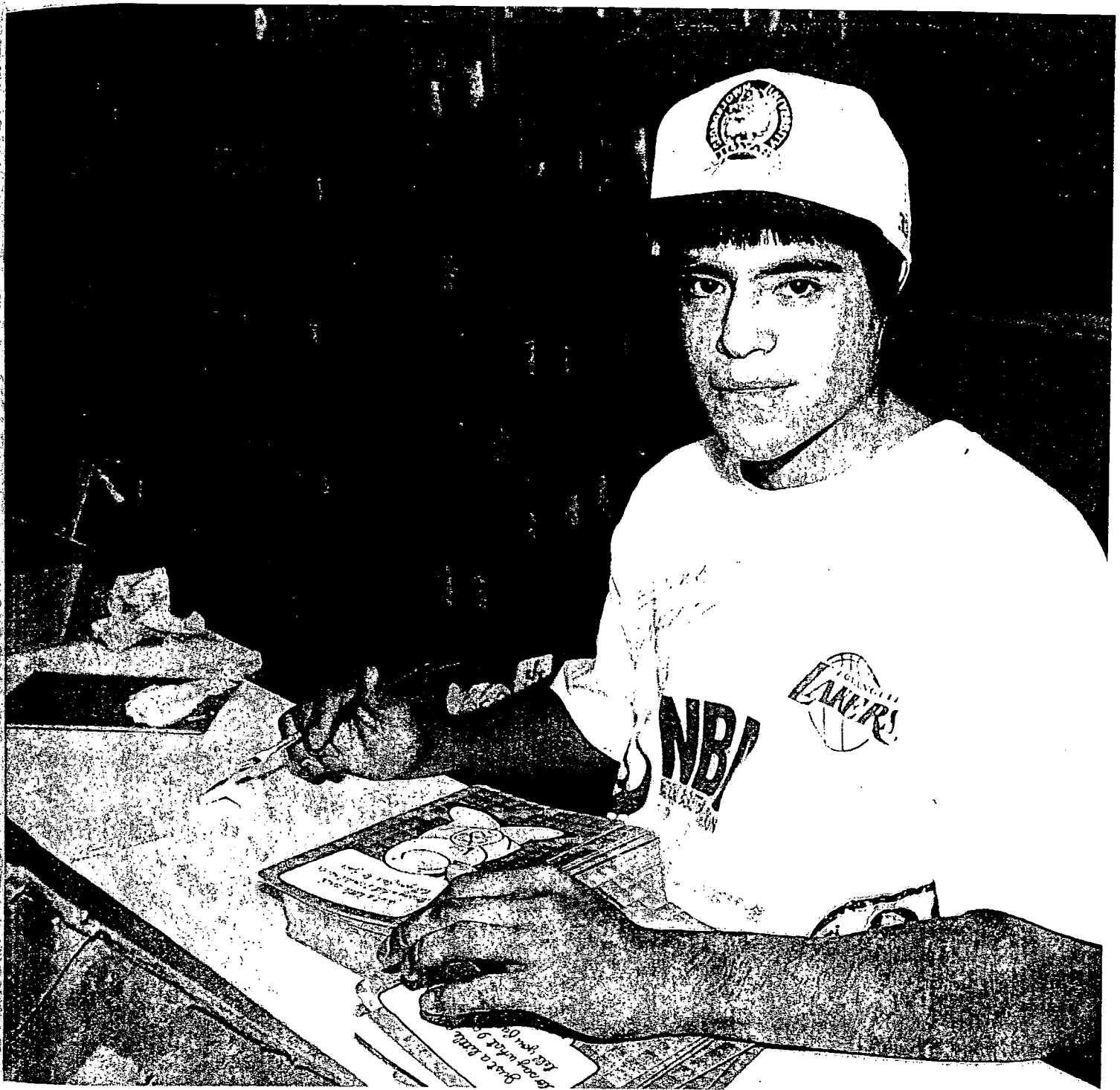
- Regular marijuana use is far more prevalent among Native youths than in rural Minnesota.
- By the 11th grade regular use of beer or wine is comparable between rural Anglo youths and among the Native teens surveyed.
- Younger Native adolescents use all substances more commonly than do their Minnesota age-mates in rural Minnesota.

References

- Bergeisen, L. Indian adolescent physical health. Unpublished manuscript prepared for the Office of Technology Assessment, US Congress; November 12, 1989.
- Broussard, BA, Johnson, A, Himes, JH, et al. Prevalence of Obesity in American Indians and Alaska Natives. *American Journal of Clinical Nutrition*, (Vol. 53) 15:35-42* June 1991 Supplement.
- Indian Health Service. *Trends in Indian Health, 1990*, Rockville, MD: US Department of Health and Human Services, Public Health Service, 1990.
- U.S. Congress, Office of Technology Assessment. *Indian Adolescent Mental Health*. Washington, DC: U.S. Government Printing Office, 1990.
- US Census, 1990

Comparison of Native and Rural Minnesota Youth's on Regular Substance Use

Chemical Use	8th Grade		11th Grade	
	National Native American Sample	Rural Minnesota Non-Natives	National Native American Sample	Rural Minnesota Non-Natives
Use Cigarettes Weekly or Daily	15.4	4.7	27.3	17.4
Use Chewing Tobacco Weekly or Daily	17.0	2.1	10.1	6.7
Use Beer/Wine Weekly or Daily	8.9	5.0	25.0	24.9
Use Marijuana Weekly or Daily	9.0	0.3	7.8	1.4
Use Inhalants Monthly, Weekly or Daily	2.3	0.6	3.2	0.5



XI. Conclusion: Challenges & Opportunities

Many of the problems that face Native American communities and Native youth are well known:

- Alcohol abuse and alcoholism with all its sequelae are legend. Today, Native Americans have a rate of alcoholism six times that of all races in America.
- Poverty has been repeatedly cited as a major health issue. A decade ago the median household income for Native Americans was \$11,471 compared with \$16,841 for all races. There is no evidence that over the last decade the gap has narrowed.
- Native American youths ages 15-24 years die with three times the frequency from unintentional injuries compared with all other races.
- In 1986 the age specific death rate for 10- to 14-year-old Native youths was 1.5 times that of African-American youths and twice that of white young people the same age. For older teens the ethnic disparity only increases.

The present report on Native American youth health raises a warning flag and suggests some potential points of intervention. While the portrait we have painted should be a cause of alarm, one should not conclude that the picture is without hope. For every problem area there are a vast array of professionals and concerned citizens — both Native and Anglo — who have dedicated their lives and developed innovative strategies. Throughout this report we have tried to highlight a few such efforts.

The Warning and The Hopes

1. Youth Involvement

While the intent of this report is to highlight the major health issues and concerns confronting Native American teenagers there are many areas where their strength and resilience shine. It is evident that most teenagers are *not* depressed, *not* chemically dependent and have *not* been pregnant. Most are happy, have supportive families, like school and live in nurturing environments. Most Native teenagers do *not* engage in delinquent acts, have *not* experienced abuse and have *not* attempted suicide.

Challenge #1: The challenge is to recruit teenagers into being active players in improving their own health care, in developing health promotion strategies and in serving as peer teachers and educators. In addition, there is need to recruit adults throughout the community to work with youth as empathetic and supportive role models.

2. The Family

Native American youths have a familiarity and intimacy with death and loss within families comparable to few other young people in our society. Eleven percent have at least one parent who is dead; this compares with five percent of other youths we have surveyed. Death is not the only threat to Native American families. Far fewer teens growing up in Native households live with two parents compared with other groups we have surveyed. Poverty is more common; unemployment is more prevalent; and both physical and sexual abuse are reported with greater frequency by Native youths than by other groups.

On the other hand, the family is a source of strength and nurturance for many Native American teenagers. Two-thirds of those surveyed believe their families care a lot about them. The majority enjoy their families and have fun together. For significant numbers, nurturance comes from extended family where relatives and other tribal members provide caring and support. The concerns and caring Native youths have for their families is reflected in their worries — worries about family poverty, domestic violence and parental divorce.

And while the family is a source of concern and worry so, too, is it the source of heritage, culture and hope. As one Native community leader said: "Basic to the problems of Native American adolescents are the problems of cultural disintegration threatening the fundamental existence of many Indian communities. Strengthening Indian communities and

families... is critical to attacking the social blight which exists in so many Indian communities."

Challenge #2: There is need to support and strengthen Native American families so they can serve as a source of spiritual and cultural strength and economic security for their children.

3. Stress and Depression

Native American youths experience stress and depression at alarming rates. Beyond the common concerns experienced by many teens in our society (e.g., school performance, death of a parent and loss of a best friend) significant numbers of Native teenagers experience profound stress such as extreme hopelessness (11.4%), worries about losing their mind (6.6%) and constant sadness (18.3%).

While four out of five teenagers do not show signs of severe emotional distress, the fifth that do are twice as likely to have been abused sexually (21.9% vs. 10.1%), two and a half times more likely to have been physically abused compared with their low stress peers (31.7% vs. 13.3%), and are more than half again as likely to do poorly in school (17.3% vs. 11.9%) and have become or have caused a pregnancy (10.8% vs. 6.1%).

Even more telling is that emotional distress translates into suicide attempts. Nearly one in six teenagers in the present survey have attempted suicide. Eleven percent know someone who has died from suicide and 5.3% say they would kill themselves were they to have

the chance. Clearly, for a significant subset of Native American youths suicide is considered to be a viable way of dealing with what such teens see as an intolerable situation. Females are nearly twice as likely as males to consider this alternative (21.6% vs. 11.8%) though males succeed at much higher rates.

Challenge #3: There is need to acknowledge the profound stress experienced by a significant minority of Native American youths and to develop community-wide interventions grounded in the culture and customs of the tribe. In doing so, support must be provided those who are the natural resources for troubled teens: parents, family, spiritual leaders and peers.

4. Violence and Drugs

Native American mortality is persistently associated with violence and violence is far in excess of other populations. In 1986, actual deaths for Native teenagers exceeded anticipated deaths by 55%. Most deaths are related to unintentional injuries, homicides and suicides.

For males, drugs and violence are closely interwoven. The association holds whether it is vandalism, fighting or running away from home. Heavy drinkers tend to come from heavy drug using family and school environments. They are twice as likely to drive while intoxicated than casual drinking peers (56.4% vs. 27.0%). Likewise, they are more than twice as likely to have become violent (30.7% vs. 13.3%) and to have had legal problems (33.5% vs. 14.5%). A large percent of deaths - especially male deaths - from unintentional injuries are associated with substance use.

When we look closely at adolescent drinking and drug use behaviors we see something profoundly worrisome. For males, early adolescents' patterns of use are similar to other groups of teens we have surveyed. For females, use patterns continue to parallel other ethnic groups throughout high school. Starting in the ninth grade, however, use begins to skyrocket among males: by the 9th grade at least weekly alcohol use is double that of 7th grade (15.8% vs. 7.7%); by 11th grade it is triple (23.1%) and by the 12th grade it is nearly four times that of 7th grade (27.3%). By the 12th grade more than one in four males can be identified as problem drinkers.

Challenge #4: Given that early patterns of use for males parallel that of their female counterparts there is a window of opportunity in those years — the 6th through 8th grades — to develop culturally appropriate interventions in support of chemical health especially for Native American males. Success in reducing drug use particularly among males will lower every major cause of mortality for Native youth.

5. Access to Health Services

Despite the fact that treaties more than a century old have assured health care services on all the reservations we surveyed, Native American youth access health care services far less than other American teenagers. Compared with Minnesota youth for example, Native teens are far less likely to have had a physical exam in the last two years, to have had either their vision or hearing checked or to have had a dental exam in the past year.

We know that there is a strong association between perceiving oneself as healthy and accessing health promotion services. For example, of those youths who saw their health as excellent 60.6% had a physical exam in the past two years compared with 43.7% of those who assessed their health as poor.

We also know that poor health is highly intercorrelated with many other negative outcomes. For example, compared with those who assess their health as good or excellent those in poor health are: twice as likely to have ever attempted suicide (33.9% vs. 14.8%); twice as likely to have experienced abuse (29.2% vs. 15.1%) and four times more likely to do poorly in school (34.8% vs. 9.2%).

Challenge #5: While it is clear that Native American youth have major health needs it is likewise evident that services are frequently unavailable or inaccessible. Innovative youth specific, community based health services need to be developed which better meet the needs of teenagers. Services need to be integrated between physical and mental health and those, in turn, need to be coordinated with the education system.

6. Native Cultures and Traditions

Finally, while not a major focus of the present survey, one is struck by the strong cultural values and heritage which transcend the poverty and negative statistics we have confronted. In many communities there is an orientation to collective values over individual decisions — a strong cultural base for prevention programs. In many homes, cultural values and spirituality buffer youth from the often brutal economic realities which surround them. Language, arts, music and religion can serve as the basis for building common values.

Challenge #6: The challenge is to build on the cultures, religions and traditions of the American Indian and Alaskan Native communities in addressing the problems which face their youth. Then and only then can we be assured that the solutions sought will be rooted in community values so critical to their success.

Steering Committee and Project Staff

Indian Health Service Steering Committee

George Brenneman
Joann Gephart
Robert Blum
Michael Resnick
Carol Milligan
Jake Whitecrow*
Craig Vanderwagon
Lois Geer Bergeisen
Bill Mahoja
Yvonne Jackson

*Deceased

University of Minnesota Adolescent Health Program

Robert Blum
Principal Investigator
Brian Harmon
Data Analyst
Linda Harris
Data Analyst
Michael Resnick
Research Coordinator
Karen Stutelberg
Project Administrator
Annette Robles
Project Specialist
Lois Geer Bergeisen
Laura Hutton
Kim Rosenwinkel
Lee Cook
Zin Quining
Chad Stutelberg

Area Coordinators for the Indian Health Service

Jacqueline Greenman
*Alaska Area Native Health
Office*
Dorothy Meyer
Phoenix Area Office
Carol Milligan
Navajo Area Office
Dean Effler
Billings Area Office
Darlene Garneaux &
Tom Welty
Aberdeen Area Office
Diane Pittman
Bemidji Area Office
Pat Gideon
Oklahoma Area Office
Betty Claymore &
Jean Harmon
Nashville Area Office
Cherie Lyons
Albuquerque Area Office

Photographs

Aaron Fairbanks
Cass Lake, Minnesota

Division of General Pediatrics
and Adolescent Health
Box 721-UMHC
Harvard Street at East River Road
Minneapolis, MN 55455

U.S. Department of Education
Office of Educational Research and Improvement (OERI)
National Library of Education (NLE)
Educational Resources Information Center (ERIC)

ERIC REPRODUCTION RELEASE

I. Document Identification:

Title: *The State of Native American Health*

Author: *Blum, R., Harmon B., Harris L., Resnick M.*

Corporate Source: *U of Minnesota*

Publication Date: *1992*

II. Reproduction Release:

In order to disseminate as widely as possible timely and significant materials of interest to the educational community, documents announced in the monthly abstract journal of the ERIC system, Resources in Education (RIE), are usually made available to users in microfiche, reproduced paper copy, and electronic media, and sold through the ERIC Document Reproduction Service (EDRS). Credit is given to the source of each document, and, if reproduction release is granted, one of the following notices is affixed to the document.

If permission is granted to reproduce and disseminate the identified document, please check one of the following three options and sign the release form.

Level 1 - Permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g. electronic) and paper copy.

Level 2A - Permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only.

Level 2B - Permitting reproduction and dissemination in microfiche only.

Documents will be processed as indicated provided reproduction quality permits. If permission to reproduce is granted, but no option is marked, documents will be processed at Level 1.

Sign Here: "I hereby grant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquiries."

Signature: *[Signature]* Position: *Professor + Director Gen Pediatrics + Adolescent Health*

Printed Name: *Robert Blum, MD* Organization: *U of Minnesota*

Address: *200 Oak St SE* Telephone No: *612-626-2820*

Ste 260 Date: *5/17/02*

Mpls. MN 55455

III. Document Availability Information (from Non-ERIC Source):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the

document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:

Address:

Price per copy:

Quantity price:

IV. Referral of ERIC to Copyright/Reproduction Rights Holder:

If the right to grant this reproduction release is held by someone other than the addressee, please complete the following:

Name:

Address:

V. Attach this form to the document being submitted and send both to:

Velma Mitchell, Acquisitions Coordinator
ERIC Clearinghouse on Rural Education and Small Schools
P.O. Box 1348
1031 Quarrier Street
Charleston, WV 25325-1348

Phone and electronic mail numbers:

800-624-9120 (Clearinghouse toll-free number)

304-347-0467 (Clearinghouse FAX number)

mitchelv@ael.org