

Quantitative

Comparisons and Evaluations:

Eight-site Comparison

HEALTHY NATIONS INITIATIVE EVALUATION

Quantitative Component

The Healthy Nations Initiative: What It Was

The Healthy Nations Initiative (HNI) was created to help American Indians and Alaska Natives reduce the harm caused by substance abuse. It got underway during the early- and mid-1990s at fifteen sites (ultimately fourteen sites). These sites were located on Indian reservations, in large cities, and on tribal trust lands. Tribal health departments and their health promotion and disease prevention programs, urban Indian health centers, and not-for-profit organizations that served Indian people were the most common organizational units that administered Healthy Nations. Simply put, the Healthy Nations Initiative provided money, through grants, to support the development of community-wide efforts to combat substance abuse through efforts that integrated

- public awareness campaigns;
- prevention programs; and
- services for treatment, aftercare, and support.

A great deal of emphasis was placed on the early identification of and prevention of alcohol abuse, illicit drug use, and cigarette smoking. The active use of cultural activities and the incorporation of traditional cultural values throughout every aspect of all Healthy Nations projects were key components of the Initiative.

The HNI was a six-year, two-stage competitive program with a total funding level of \$13.5 million. During the first stage, two-year development and

feasibility grants of up to \$150,000 each were provided to fifteen tribes and community organizations. All grantees successfully completing the first stage then received four-year implementation grants of up to \$1 million each.

Underwritten by the Robert Wood Johnson Foundation the Healthy Nations Initiative was intended to complement ongoing efforts of numerous organizations whose purpose was to address and reduce the harm caused by substance abuse among American Indians and Alaska Natives. These organizations included the Center for Substance Abuse Prevention, the Indian Health Service, state and local government programs, and not-for-profit organizations.

The goal of the initiative was to demonstrate that tribes and communities can, over time, achieve substantial reductions in the demand for—and consequently the use of—alcohol and other harmful substances, including tobacco and illicit drugs.

In order to realize this goal, grantees were expected to conduct the following activities which, in essence, became their major objectives:

1. To implement a public awareness campaign designed to generate broad-based tribal and community support for efforts to reduce demand for tobacco, alcohol, and illicit drugs;
2. To install a multifaceted, community-wide prevention effort targeted especially at children and adolescents that could, for example, include
 - (a) prevention programs in the schools, as well as in community settings;
 - (b) development of recreational and cultural activities promoting self-

esteem; and (c) prevention training for teachers, health care workers, and others;

3. To identify or create and implement special programs to promote early identification and treatment of substance abuse among youth and other high-risk tribal members, such as pregnant women; and
4. To identify and promote a range of accessible options for substance-abuse treatment and relapse prevention as well as for outreach to families of people with substance-abuse problems.

Although these were the objectives of full-fledged grantee programs, grantees were also required to do some important preparatory work prior to receiving the implementation grant award. During the initial twenty-four-month developmental/feasibility phase, grantees were expected to

- document the current magnitude of the substance-abuse problem as it affected various segments of the tribe or community;
- identify and pilot-test segments of the proposed interventions including, as appropriate, traditional cultural approaches;
- develop collaborative arrangements with other organizations and government entities;
- determine the feasibility of implementing a comprehensive, systematic program of prevention, treatment, and relapse prevention within the tribe or community;
- design a public awareness campaign;

- develop a detailed work plan—with clear benchmarks and objectives—for the implementation, coordination, and financing of a comprehensive, community-wide substance-abuse prevention and treatment system; and
- develop a clear strategy for continuing support of the project following the conclusion of Foundation funding.

Grantees that successfully completed the planning phase applied to the Foundation for up to \$1 million for four years of project implementation funds. The exact amount of the implementation grant depended on the scope of the project and the number of people to be served.

Describing and documenting how each grantee planned and implemented these activities is an important part of the qualitative component of the Healthy Nations Initiative Evaluation (HNIE). In addition, through personal interviews, open-ended surveys, and other qualitative methods, the HNIE is interested in learning about

- Grantee community perceptions of their ability to successfully address the harmful effects of substance abuse;
- Grantee community attitudes toward prevention methods and programs;
- Grantee community perceptions of their success at community organization and mobilization;
- Grantee community perceptions of whether or not there have been improvements in the demand for and use of alcohol, illicit drugs, and cigarette smoking; and

- Grantee responses to the question, "What difference did your Healthy Nations Program make?"

The Healthy Nations Initiative: What it Was Not

The Healthy Nations Initiative was not a research program study. The Initiative never specifically intended to rigorously measure changes in the demand for or the use of alcohol, illicit drugs, or cigarettes. For that reason, no baseline measures of alcohol, illicit drug, or cigarette use were taken for the purpose of either empirical research or evaluation. Nor were there any other empirical measures or tests utilized to determine whether or not demand for the use of harmful substances went down as a result of HNI interventions. Other than processing information, such as the numbers of people who attended or participated in Healthy Nations activities, no primary outcome indicator data were generated by the grantees. Because it was not a research study and because the plan for evaluation was developed well after the Initiative began, the opportunity was lost for measuring and thereby establishing cause and effect between reduced demand and use of harmful substances and the interventions of the HNI.

We, therefore, had to consider less rigorous methods for the quantitative component of the HNI evaluation. We found one that—while it cannot address the issue of cause and effect—can tell us something about the relationship between HNI activities and reduced demand for harmful substances in some American Indian and Alaska Native communities.

Social Indicator Analysis

The original aims of the quantitative component of the HNIE were

- to identify, compile, and analyze substance abuse Outcome Indicators;
- and
- to integrate grantee program descriptions and Outcome Indicators.

Outcome indicators are used to measure program performance. But, as noted, no primary outcome indicator data were required or generated by the grantees. In the absence of specific and pre-determined program outcome indicators and specific pre- and post-program methods for measuring them, the HNIE quantitative team focused on selected secondary information sources, called social indicators.

Our intentions were to use social indicators

- to augment the qualitative component of the HNIE by using social indicators to identify alcohol and harmful-substance use trends in grantee communities; and
- to do this by placing social indicator information within the context of each grantee program description.

In recent years, the use of social indicators in this manner has become fairly widespread. Both the National Institute of Drug Abuse's (NIDA) Division of Epidemiology and the Substance Abuse and Mental Health Service Administration's (SAMHSA) Center for Substance Abuse Treatment (CSAT) promote the use of social indicators for

- assessing drug abuse within and across communities; and

- employing Multiple Indicator Analysis, a methodology for using secondary data to analyze illicit-drug use.

Four sources of social indicator information were chosen for the HNIE:

1. National and, where available, individual State Youth Risk Behavior Survey (YRBS) data on tobacco, alcohol, and illicit-drug use.
2. Local law enforcement data such as alcohol-related arrests, accidents, injuries, and deaths.
3. School data such as grade-point averages, dropout rates, and participation in school activities.
4. Tribal and Indian Health Service (IHS) data such as alcohol and drug-related hospitalizations and outpatient visits.

Our experience collecting social indicator information from grantee communities proved to be most interesting and at times quite challenging. Additionally, it has been a learning experience whose lessons we are sure will help inform future initiatives in Indian country. I also wish to acknowledge the generous assistance of former HNI directors, staff at the Indian Health Service, Information Technology Support Center, tribal and community law enforcement officers, and school officials.

The following seven grantees participated in the quantitative component of the HNIE:

- Confederated Salish and Kootenai of the Flathead Reservation
St. Ignatius, Montana
- Confederated Tribes of the Warm Springs Reservation
Warm Springs, Oregon

- Northwest New Mexico Fighting Back
Gallup, New Mexico
- Norton Sound Health Corporation
Nome, Alaska
- United Indian Health Services, Inc.
Eureka, California
- Minneapolis American Indian Center
Minneapolis, Minnesota
- Seattle Indian Health Board
Seattle, Washington

SURVEY DATA

Although national population surveys are very useful for setting policy and examining overall trends, they may not assess the drug use of special segments of the population. Rural youth, for example, may form too small a part of a national probability sample to provide useful data. Minority groups may not be adequately represented, and school-based surveys will miss absentees and dropouts (Beauvais, 1996).

One of the most intractable problems American Indian researchers ever face is the absence of valid and reliable, longitudinal survey information. In most published national surveys, seldom is the American Indian population even considered for representation. While this has been a chronic problem, well known for years, even to this day major surveys of American youth do not include adequate numbers of American Indians to produce useful data. These important national surveys include the following:

- Monitoring the Future (MTF) a national survey that tracks drug-use trends and related attitudes among America's adolescents. This survey is conducted annually by the Institute for Social Research at the University of Michigan with support from the National Institute on Drug Abuse (NIDA).
- Partnership Attitude Tracking Study (PATs) is an ongoing national research study that tracks drug use and drug-related attitudes among children, teenagers, and their parents. It is sponsored by the Partnership for a Drug Free America (PDFA).

- The National Survey of Parents and Youth (NSPY) is sponsored by the National Institute on Drug Abuse (NIDA) to evaluate the Office of National Drug Control Policy's (ONDCP's) National Youth Anti-Drug Media Campaign.

Two other national youth surveys have, however, managed to include sufficient numbers of American Indian youth on a regular, annual basis so that, at least in some cases, useful data may be provided for several years. These surveys are the following:

- **The Youth Risk Behavior Survey (YRBS)** is a component of the Centers for Disease Control and Prevention's Youth Risk Behavior Surveillance System (YRBSS). The YRBS biennially measures the prevalence of six priority health risk behaviors including alcohol and drug use. The YRBS includes national, state, territorial, and local school-based surveys of high school students. However, only a few states adequately represent American Indian and Alaska Native youth in their survey sample.
- **The National Household Survey on Drug Abuse (NHSDA)** is an annual survey sponsored by the Substance Abuse and Mental Health Services Administration (SAMHSA). In its most recent form, the 1999 and 2000 data are based on information obtained from approximately 70,000 people aged twelve or older. The survey collects data by

administering questionnaires to a representative sample of the population through face-to-face interviews at their place of residence.

Before taking a look at the results of these surveys, however, I will mention two researchers who are among the first and foremost to conduct national, annual surveys of American Indian youth and their self-reported use of cigarettes, alcohol, and illicit drugs—E.R. Oetting and Fred Beauvais. In 1996, Beauvais reported trends in drug use among American Indian students and dropouts for the period 1975 to 1994. While it is a challenge to draw a representative sample of American Indian and Alaska Native (AI/AN) youth, Drs. Oetting and Beauvais have successfully done so with far fewer resources than the sponsors of the aforementioned surveys. As with all things, it is a matter of will, and strength of will is often heavily influenced by a judgment of relative importance. Bluntly stated, the health of AI/AN youth, in particular, and AI/AN people, in general, has not been of great importance to our government and our society.

Perhaps the most recent example to which I refer was an amendment to a budget resolution considered by Congress for additional funding for the Indian Health Service for the fiscal year 2005 budget, introduced by Senator Tom Daschle, D-S.D., and defeated on a party line vote.

"The health care currently provided by the Indian Health Service is so inadequate that Native American men, women, and children are routinely denied even the most basic medical care that most of us take for granted, in many cases, would consider essential," Senator Daschle said.

For the general U.S. population, health care spending is at the rate of \$4,400 per person. In Indian country the spending is at \$1,800 per person. More is spent for Medicare, Medicaid, and other beneficiaries by the federal government. It has been established in numerous studies that American Indians and Alaska Natives must endure the consequences of the lowest health status of any group of Americans. Substance abuse, including alcohol and illicit drug use, is one of the most serious health problems among American Indians and Alaska Natives (Office of National Drug Control Policy Report). Some examples follow:

- American Indian/Alaska Native youth aged 12-17 were more likely than youth from other racial/ethnic groups to smoke cigarettes during the past month.
- Among Blacks, Hispanics, Asians, and American Indians, American Indians had the highest rate of underage, past-month alcohol use. (Among all groups, Whites had the highest rate of underage, past-month alcohol use.)
- American Indians/Alaska Natives had the highest past-month drug use for all drug categories with the exception of alcohol use. Current illicit-drug use (past-month) for American Indian/Alaska Native youth aged twelve and older was 10.6 percent in 1999.
- Among youth aged 12-17, American Indians/Alaska Natives had the highest rate of current use of illicit drugs (almost 20 percent).
- Death rates from alcohol-related causes were more than three times higher for American Indians/Alaska Natives than for other groups.

American Indians/Alaska Natives had higher rates of suicide, homicide, and unintentional injuries or accidents, most of which were related to alcohol.

- Although figures on drug use vary greatly from tribe to tribe, statistics show marijuana as the second most widely used drug after alcohol. Over one-half of all American Indian/Alaska Native youth had tried marijuana. On some reservations the level was much higher, while the rates for the general youth population were significantly lower—only 22 percent of all youth reported having tried marijuana.
- The rate of current hallucinogenic use among youth aged 12-17 was also the highest among American Indians/Alaska Natives (3.7 percent) and lowest among African Americans (0.2 percent).
- American Indian/Alaska Native youth reported substantially higher lifetime drug use for marijuana, cocaine, stimulants, and psychedelics than all other racial/ethnic groups.
- American Indians/Alaska Natives made up less than 1 percent of the U.S. population in 1999, yet they accounted for 2.4 percent of all admissions to publicly funded substance-abuse treatment facilities.

Between 1974 and 1994, Dr. Beauvais conducted annual surveys of American Indian youth and reported on their lifetime use of drugs including alcohol, marijuana, inhalants, cocaine, stimulants, psychedelics, and cigarettes. The trend lines he prepared for both AI/AN and non-Indian youth clearly show that there was a dramatic increase in marijuana use from 1975 to 1980 and

thereafter a modest decline in use until 1992. Another notable pattern was the "consistent, exceptionally higher rate of marijuana use among Indian youth." The higher rate of marijuana use is also conspicuous in and consistent with data from the National Household Survey on Drug Abuse.

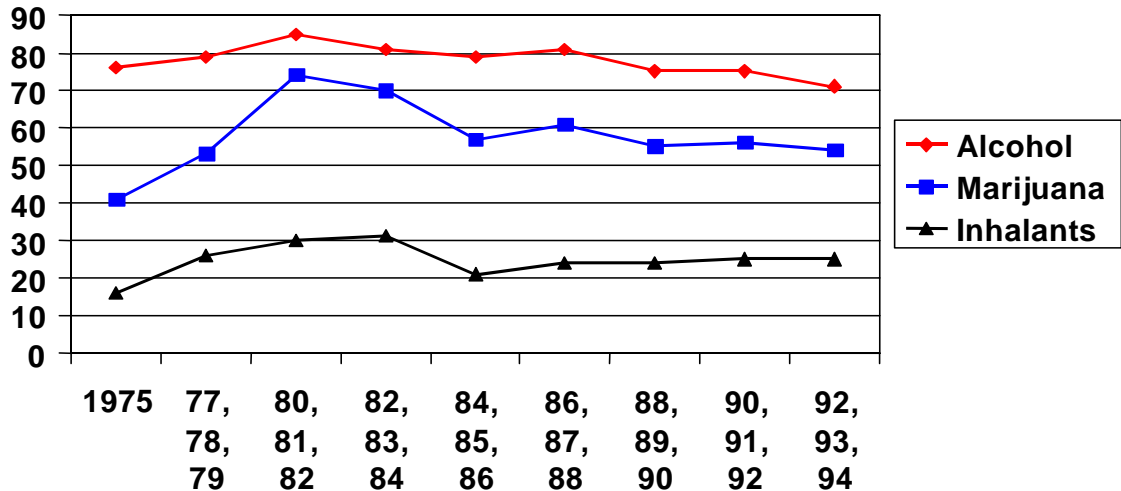
In the surveys conducted by Dr. Beauvais, rates for AI/AN youth lifetime use of marijuana ranged from 41 percent (1975) to 74 percent (1980). During the early 1990s, the rates were about 55 percent. In 1992 the rates were 53 percent for AI/AN youth and 11 percent for non-Indian youth.

For lifetime alcohol use, the AI/AN rates ranged from 71 percent (1994) to 85 percent (1981 and 1982). Lifetime alcohol rates during the early 1990s ranged between 71 and 75 percent.

The trend for lifetime use of inhalants ranged from 16 percent in 1975 to a high of 31 percent in the early 1980s. During the early 1990s, the rate was steady at about 25 percent. (See Figure 1.)

Figure 1 - American Indian Student Lifetime Use of Alcohol, Marijuana, and Inhalants, 1975-1994

Adapted from "Trends in Drug Use among American Indian Students and Dropouts 1975-1994" by Frederick Beauvais, Ph.D., *Am J Public Health*, 1996;86:1594-1598



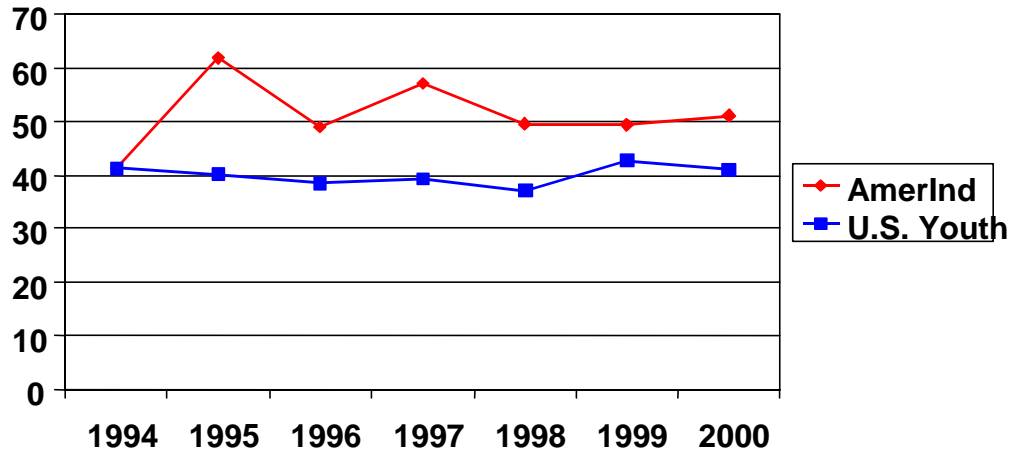
National Household Survey on Drug Abuse (NHSDA). American Indian youth trend data from the NHSDA for the period 1994 to 2000 include

- Lifetime use of alcohol, age 12-17
- Lifetime use of alcohol, age 18-25
- Lifetime use of marijuana, age 12-17
- Lifetime use of marijuana, age 18-25

On the average, for all U.S. youth aged 12-17 years, between 1994 and 2000 about 40 percent reported lifetime use of alcohol (range 37.2% to 42.7%). For American Indian youth, on the average, over 51 percent reported lifetime alcohol use (range 41.2% to 61.8%). The overall trend for U.S. youth was down between 1994 and 1998, rising in 1999 and falling in 2000. The overall trend for American Indian youth from 1994 to 1998 had risen and fallen each year. Since

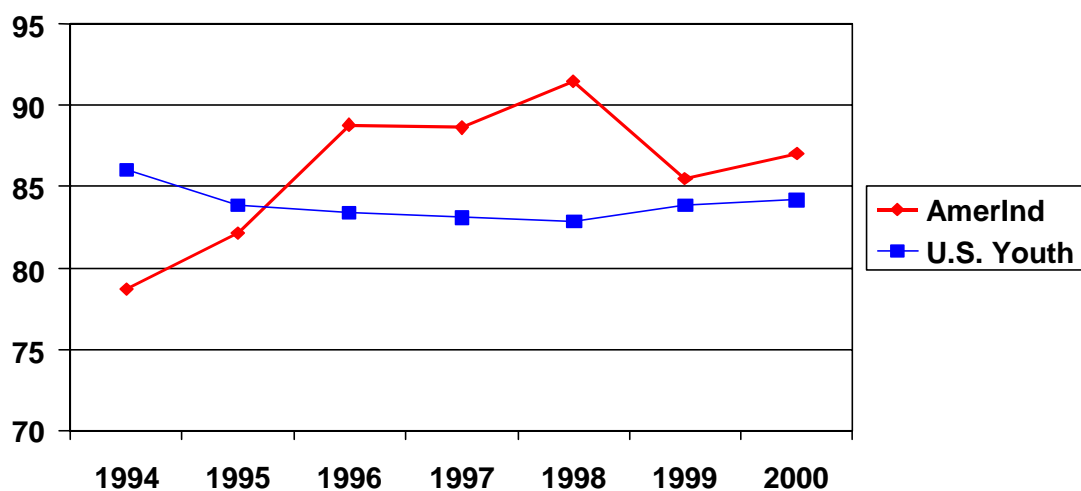
1998 the trend has not varied by much although there was an increase between 1999 and 2000. (See Figure 2.)

Figure 2 - Lifetime Use of Alcohol, American Indian and All U.S. Youth Ages 12-17, 1994-2000
National Household Survey on Drug Abuse (NHSDA)



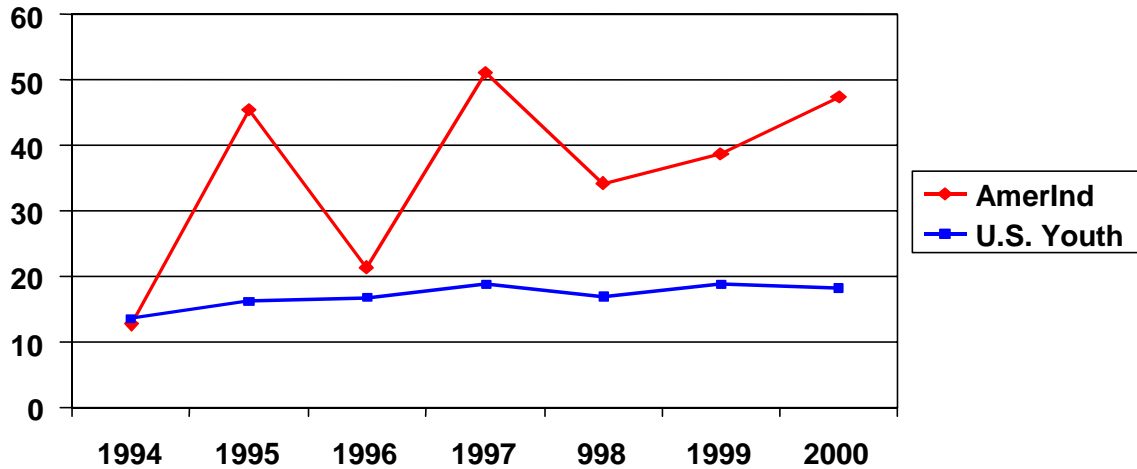
For the age group 18-25 years, the difference between American Indian youth and U.S. youth is not as great. In fact, on the average they are similar—86 percent and 84 percent, respectively. The overall trend for 18-25-year-old American Indian youth was up from 78.7 percent in 1994 to 87 percent in 2000. The overall trend for U.S. youth has been, for the most part steady and slightly down from 86 percent to 84 percent. (See Figure 3.)

Figure 3 - Lifetime Use of Alcohol, American Indian and All U.S. Youth Ages 18-25, 1994-2000
National Household Survey on Drug Abuse (NHSDA)



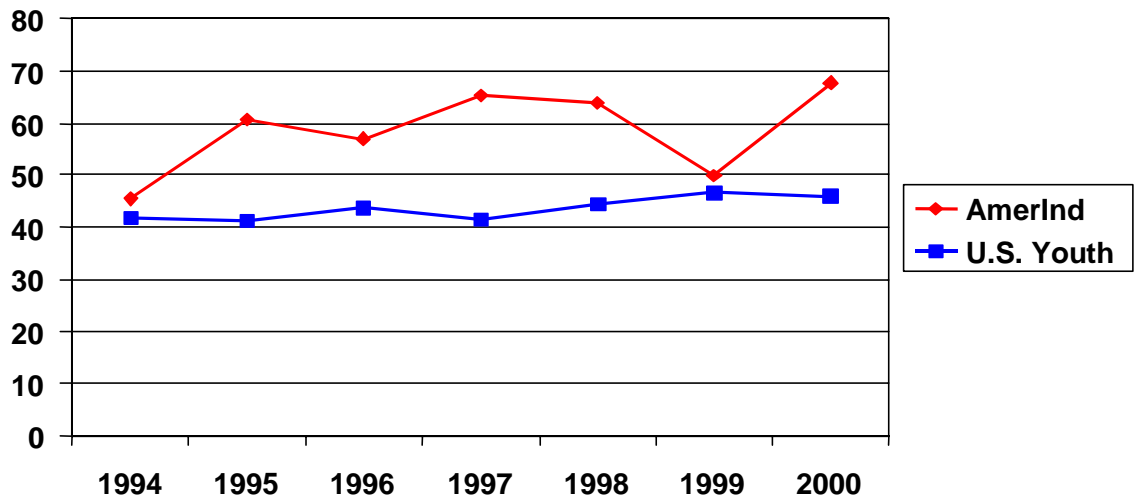
Self-reported lifetime marijuana use among American Indian youth aged 12-17 years is much higher than that of all U.S. youth. The trend data from NHSDA show a sharp upward trend, especially since 1998. Between 1994 and 1997, the trend in lifetime marijuana use rose and fell sharply—from about 13 percent to about 51 percent. The trend fell to 34 percent in 1998 but rose steadily since then to 47.4 percent in 2000. For U.S. youth the overall trend in lifetime marijuana use was up from about 14 percent in 1994 to about 18 percent in 2000. The difference between American Indian and U.S. youth is most striking for this age group and this drug. (See Figure 4.)

Figure 4 - Lifetime Marijuana Use, American Indian and All U.S. Youth ages 12-17, 1994-2000
National Household Survey on Drug Abuse (NHSDA)



The overall trend in lifetime marijuana use among American Indian youth aged 18-25 was up from 45.5 percent in 1994 to almost 68 percent in 2000. The overall trend for U.S. youth was up from about 42 percent in 1994 to about 46 percent in 2000. On the average, for the trend period 1994 to 2000, 58.5 percent of American Indian youth and 43.6 percent of U.S. youth reported lifetime marijuana use. (See Figure 5.)

Figure 5 - Lifetime Marijuana Use, American Indian and All U.S. Youth Ages 18-25, 1994-2000
National Household Survey on Drug Abuse (NHSDA)



Youth Risk Behavior Survey (YRBS). In 1994, 1997, and 2001 the Bureau of Indian Affairs used the YRBS instrument to survey all 9th and 12th graders enrolled in Bureau-funded schools. The YRBS was developed by the Centers for Disease Control and Prevention, and they have used it to conduct a national survey every two years since 1991 in over 100 selected public high schools across the country. As noted earlier there has been a consistent problem with the statistical reliability of the sample because there have been so few American Indian students surveyed. This problem has been somewhat allayed by the survey of BIA students and by at least one statewide survey (Montana) that included enough American Indian students in its sample to produce useful information. The report on the findings of the BIA-YRBS indicates that the YRBS, conducted solely with American Indian students, can be used as a reliable

source of information for schools and communities that wish to address violence and substance-abuse prevention programs.

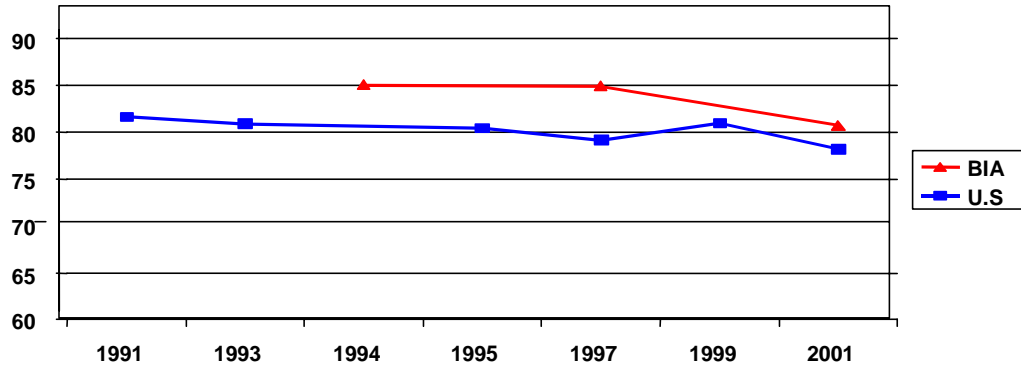
American Indian student trend data from the YRBS for the period 1994 to 2001 include

- lifetime alcohol use
- current alcohol use
- episodic heavy drinking
- lifetime marijuana use
- current marijuana use
- lifetime inhalant use

Trends in each of the above parameters, except for current marijuana use and lifetime inhalant use closely parallel U.S. student trends. However, American Indian student trends also show consistently higher levels of use than that of U.S. students.

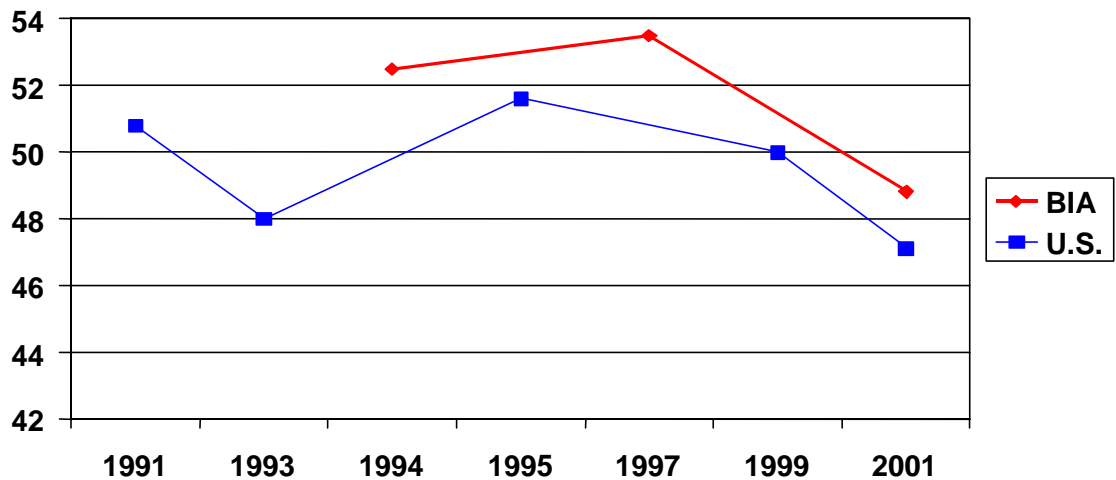
Overall trends in lifetime alcohol use are similar for both American Indian and U.S. students. The trend is down for both groups, falling from 85 percent to about 81 percent for American Indian students and falling from about 82 percent to 78 percent for U.S. students. (See Figure 6.)

Figure 6 - Lifetime Alcohol Use
BIA and U.S. Students, 1991-2001
Youth Risk Behavior Survey (YRBS)



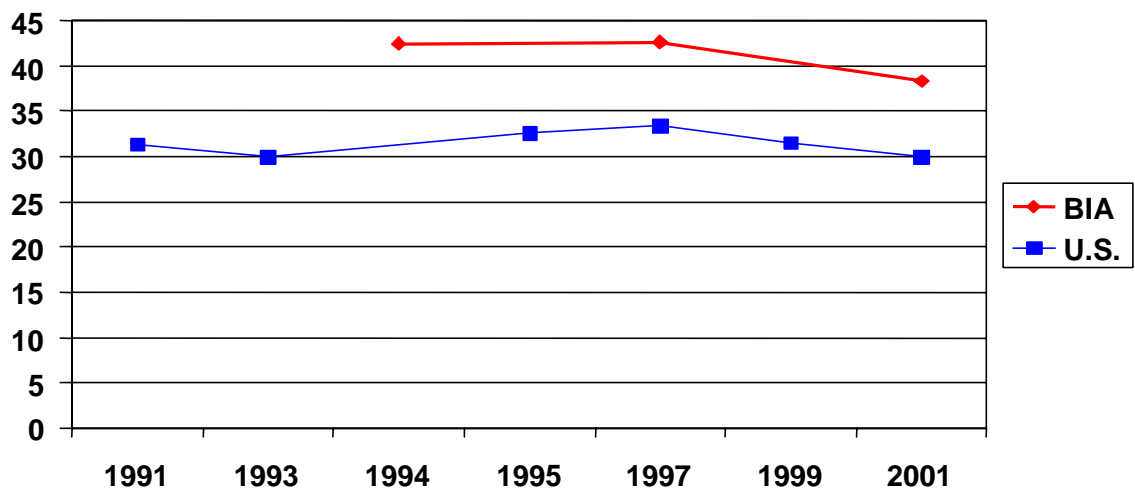
Similarly, the overall trend in current alcohol use is down for both American Indian and U.S. students. The trend fell from 52.5 percent to about 49 percent for American Indian students, and it fell from about 51 percent to about 47 percent for U.S. students. (See Figure 7.)

Figure 7 - Current Alcohol Use
BIA and U.S. Students, 1991-2001
Youth Risk Behavior Survey (YRBS)



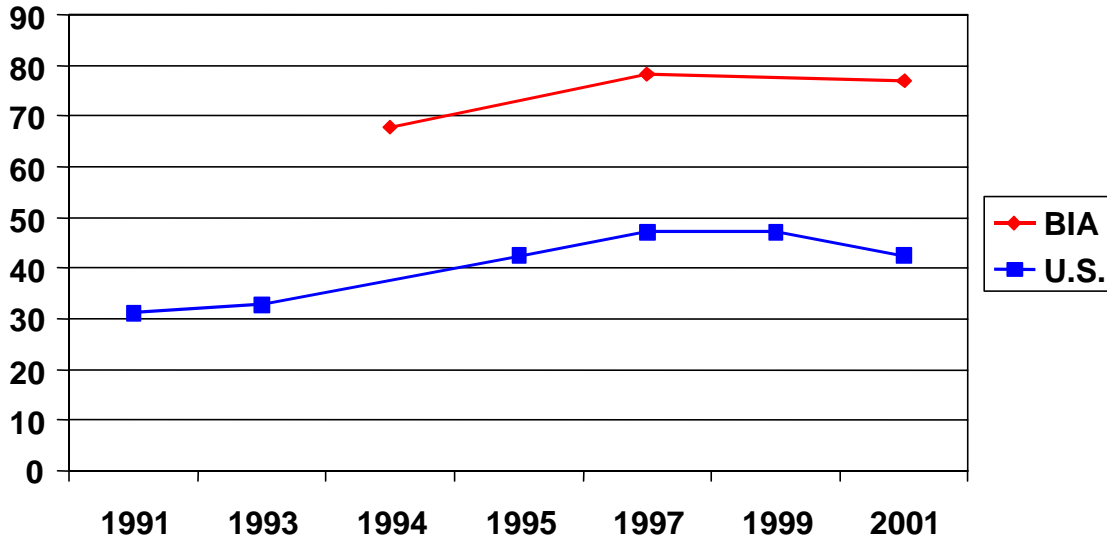
While the overall trend in binge drinking is down slightly for both American Indian and U.S. students, there is great difference in their levels of binge drinking. The average proportion of U.S. students who reported binge drinking from 1991 to 2001 was about 31 percent. For American Indian students, the average proportion for the years 1994, 1997, and 2001 was over 41 percent. Nevertheless, both trends fell from 42.5 percent to 38.4 percent and from about 31 percent to 30 percent. (See Figure 8.)

Figure 8 - Episodic Heavy Drinking
BIA and U.S. Students, 1991-2001
Youth Risk Behavior Survey (YRBS)



The average proportion of U.S. students reporting lifetime marijuana use from 1991 to 2001 was about 41 percent. On the average, American Indian students reported lifetime marijuana use at about 74 percent. The difference is striking, and while both trends fell between 1997 and 2001, the change is much more evident for U.S. students than for American Indian students. (See Figure 9.)

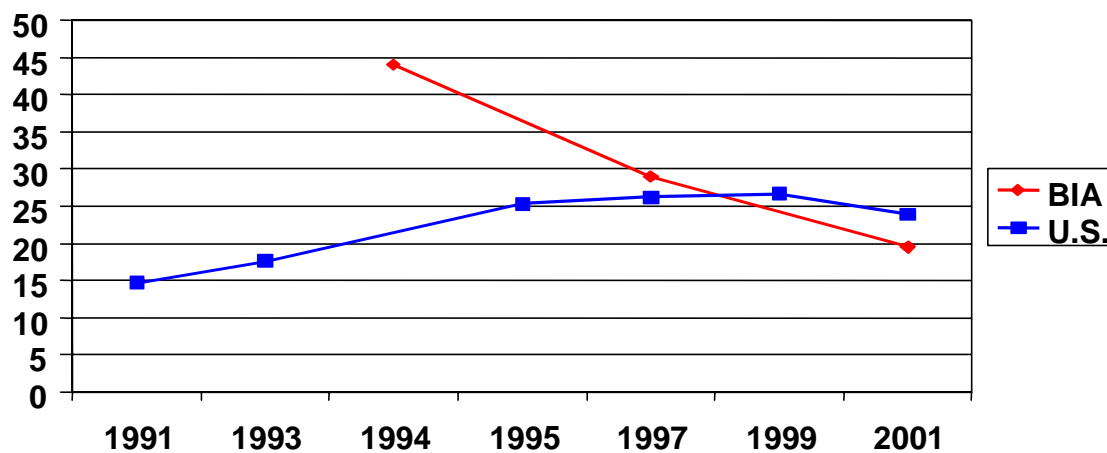
Figure 9 - Lifetime Marijuana Use
BIA and U.S. Students, 1991-2001
Youth Risk Behavior Survey (YRBS)



The overall trend in current marijuana use among U.S. students between 1991 and 1999 was up from almost 15 percent to nearly 27 percent. However, from 1999 to 2001, the trend fell to 19.5 percent.

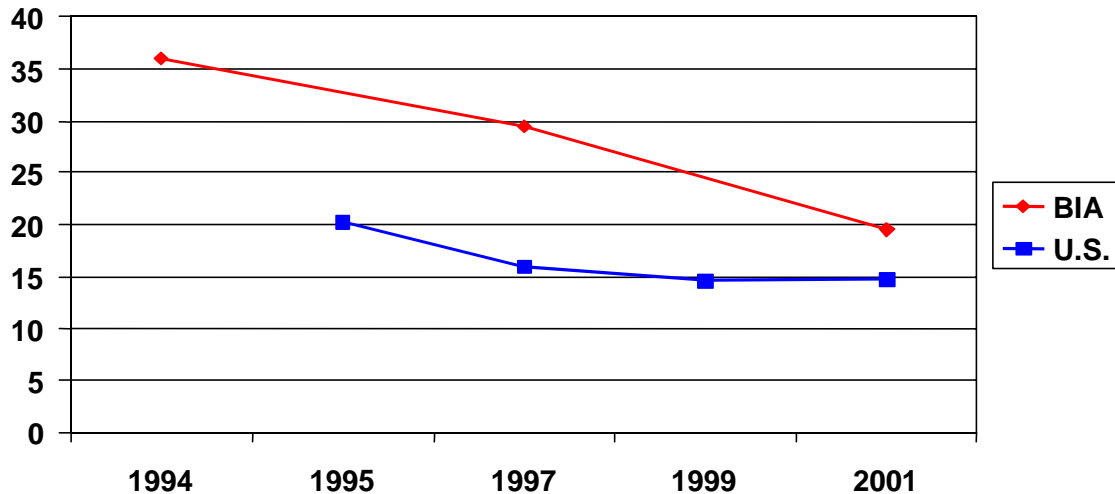
Interestingly, the overall trend in current marijuana use among American Indian BIA students was down sharply—from 44 percent in 1994 to 19.5 percent in 2001. This sharp decline in current marijuana use will be discussed further in the final section of this report, as will the sharp decline in American Indian BIA student lifetime inhalant use. (See Figure 10.)

Figure 10 - Current Marijuana Use
BIA and U.S. Students, 1991-2001
Youth Risk Behavior Survey (YRBS)



Overall trends for both BIA and U.S. students were down, especially for American Indian students. In 1994 almost 36 percent of BIA students reported lifetime inhalant use; by 2001 the proportion had fallen to 19.5 percent. Between 1995 and 2001, the proportion of U.S. students reporting lifetime inhalant use fell from about 20 percent to about 15 percent. (See Figure 11.)

Figure 11 - Lifetime Inhalant Use
BIA and U.S. Students, 1994-2001
Youth Risk Behavior Survey (YRBS)



There is no specific health survey trend data on behavioral health or substance abuse for any of the Healthy Nations grantees. However, the states of Montana and Minnesota have included American Indian students in health surveys they conduct on a regular basis. The state of Montana uses the YRBS instrument and surveys American Indian students who live on reservations and American Indian students who live in urban areas. The Salish-Kootenai Reservation is included in this survey. The state of Minnesota administers the Minnesota Health Survey to students, including American Indian students who reside in the Minneapolis-St. Paul metropolitan area.

Montana Youth Risk Behavior Survey. The following information is available from the Montana YRBS for American Indian reservation and urban students for the period 1993 to 2001.

- current alcohol use
- binge drinkers
- lifetime marijuana use
- current marijuana use
- lifetime inhalant use (1995-2001)

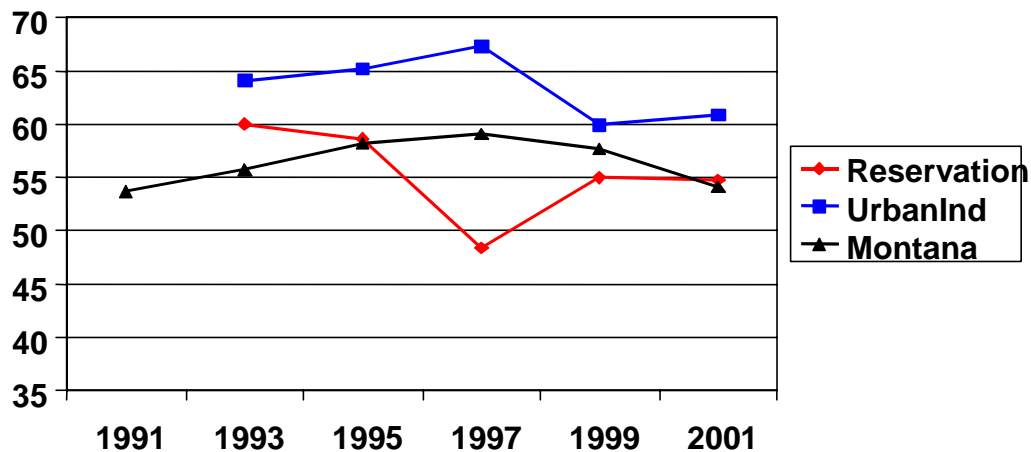
Between 1993 and 2001, the average proportion of American Indian reservation students who reported current alcohol use was about 55 percent (range of 48.4% to 60%). For American Indian students from urban areas in Montana, the proportion was about 57 percent (range of 67.3% to 59.9%). For Montana students in general the average proportion of self-reported current alcohol use between 1991 and 2001 was about 56 percent (range of 53.7% to 59%).

The overall trend for reservation students was down from 1993 to 1997, falling from 60 percent to 48.4 percent. The trend rose in 1999 to 55 percent and fell very slightly to 54.8 percent in 2001.

The overall trend for urban Indian students was up from 1993 to 1997 from about 64 percent to about 67 percent. It then fell to about 60 percent in 1999 before rising to about 61 percent in 2001.

Similarly, the overall trend for Montana students in general rose from about 54 percent in 1991 to 59 percent in 1997. In 1999 the trend fell to 57.6 percent and then to about 54 percent in 2001. (See Figure 12.)

Figure 12 - Current Alcohol Use
American Indian Youth, 1991-2001
Montana Youth Risk Behavior Survey (YRBS)

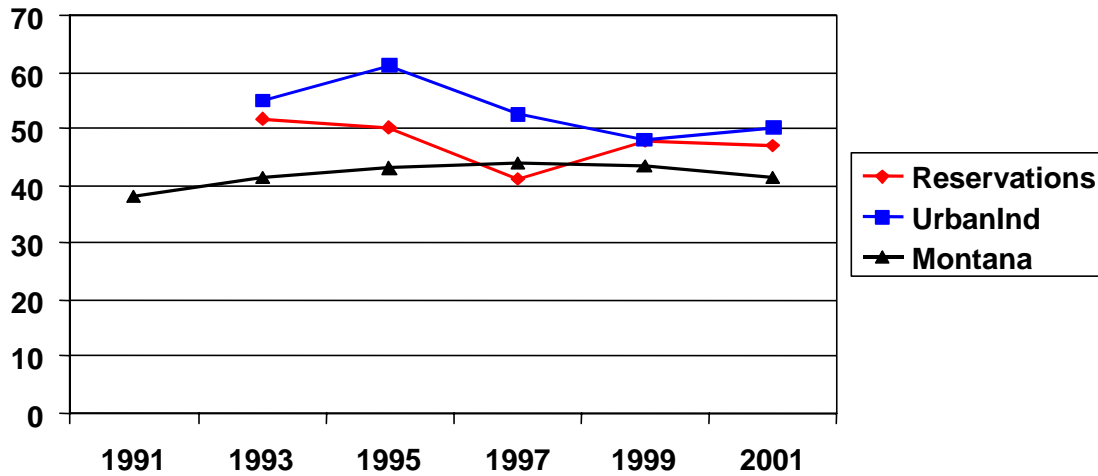


The overall trend in Binge Drinking for Reservation Indian students from 1993 to 2001 was down from about 52 percent at the beginning of the trend period to 47 percent at the end of the trend period. In between the trend fell to its lowest point of 41.2 percent in 1997.

The overall trend for urban Indian students was also down from 55 percent in 1993 to about 50 percent in 2001. In between, the trend rose to a high point of about 61 percent in 1995 and fell to its lowest point of 48 percent in 1999.

The overall trend for Montana students in general was up from about 38 percent in 1991 to about 41 percent in 2001, although the highpoint of the trend period was about 44 percent in 1997. (See Figure 13)

Figure 13 - Binge Drinkers
 American Indian Youth, 1991-2001
 Montana Youth Risk Behavior Survey (YRBS)



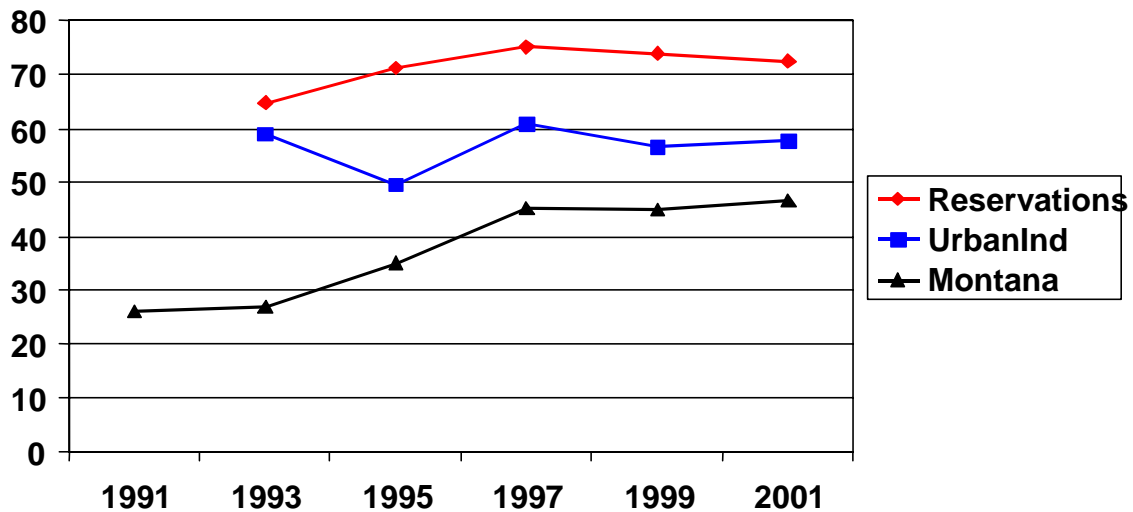
The overall trend in lifetime marijuana use by Indian students who reside on Montana's Indian reservations grew from about 65 percent to almost 73 percent in 2001. The trend reached a high point of over 75 percent in 1997. The average for the trend period was over 71 percent.

The overall trend in lifetime marijuana use by urban Indian students in Montana fell slightly from about 59 percent to about 58 percent in 2001, with a range of about 50 percent in 1995 to almost 61 percent in 1997. The average for the trend period was about 57 percent, 14 percent less than the average for Montana reservation Indian students.

The overall trend for all Montana students between 1991 and 2001 rose dramatically from about 26 percent to almost 47 percent. The trend shows a steady increase over the ten-year trend period. The average for the period was about 37 percent, 34 percent less than the average for Montana reservation Indian students.

In 2001 the proportion of Montana reservation Indian students who reported lifetime marijuana use was over 25 percent greater than that of non-Indian Montana students. (See Figure 14.)

Figure 14 - Ever Used Marijuana
American Indian Youth, 1991-2001
Montana Youth Risk Behavior Survey (YRBS)

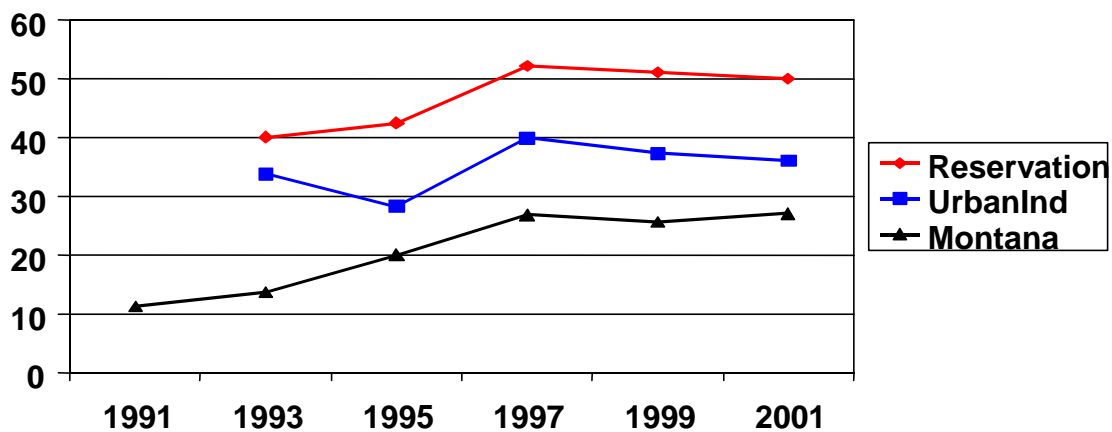


The overall trend in current marijuana use for Montana Indian and non-Indian students is up. For Montana's non-Indian student population, the trend grew from about 11 percent in 1991 to about 27 percent in 2001. The high point during the trend period was about 27 percent in 1997. The average for the period was about 21 percent.

The overall trend for urban Indian students was also up from about 34 percent in 1993 to about 36 percent in 2001. The trend's highpoint was 40 percent in 1997. The average for the period was about 35 percent—14 percent higher than that of Montana's non-Indian students.

Of the three groups of students, reservation Indian students had the highest level of current marijuana use over the period 1993 to 2001. The average level of current marijuana use was about 47 percent, with a range of about 40 percent in 1993 to about 52 percent in 1997. The average was higher than that of urban Indian students and over 25 percent higher than that of Montana non-Indian students. (See Figure 15.)

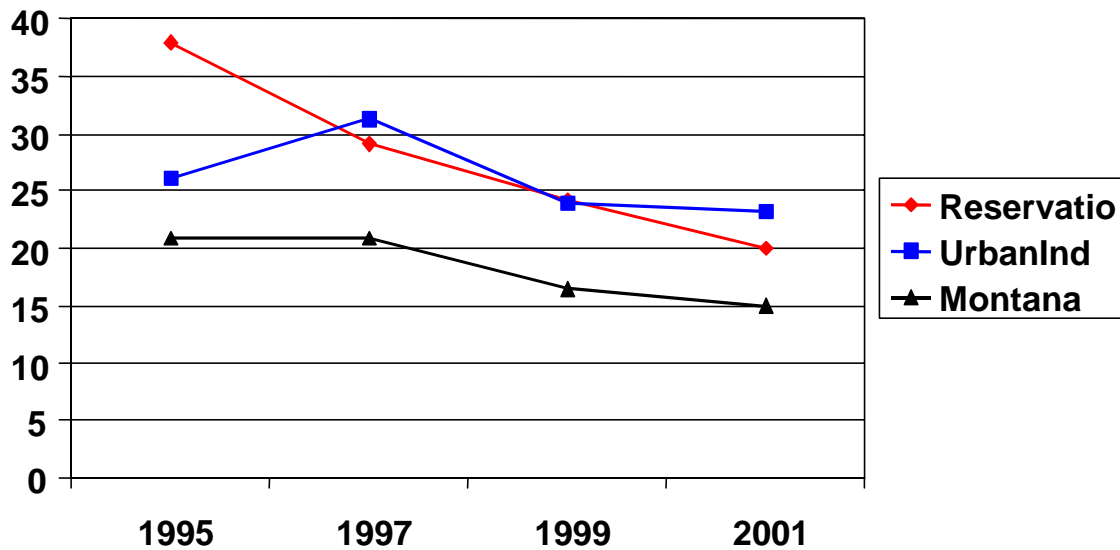
Figure 15 - Current Marijuana Use
American Indian Youth, 1991-2001
Montana Youth Risk Behavior Survey (YRBS)



Overall trends in lifetime inhalant use are down for all three groups. At the beginning of the trend period 1995, the highest level of lifetime inhalant use was among Montana reservation Indian students at almost 38 percent, followed by urban Indian students at about 26 percent and Montana non-Indian students at about 21 percent. Interestingly, by the end of the trend period, 2001, the highest level of lifetime inhalant use was by urban Indian students at about 23 percent, followed by reservation Indian students at 20 percent and Montana non-Indian students at 15 percent. The group with the highest average level of lifetime

inhalant use was reservation Indian students at almost 28 percent, followed by urban Indian students at about 26 percent and Montana non-Indian students at about 18 percent. (See Figure 16.)

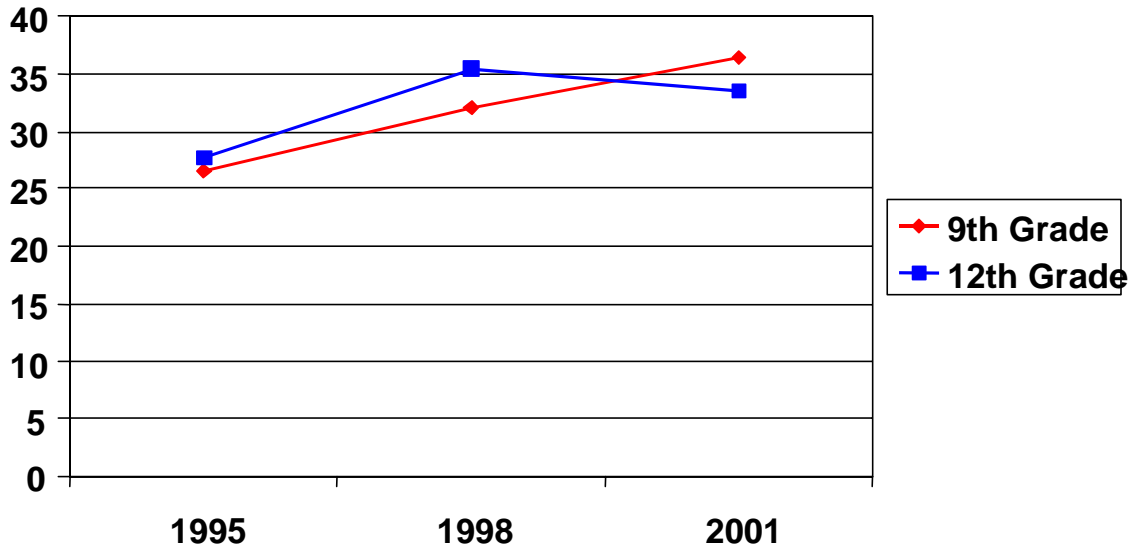
Figure 16 - Lifetime Inhalant Use
American Indian Youth, 1995-2001
Montana Youth Risk Behavior Survey (YRBS)



The Minnesota Student Survey has produced American Indian student trend data for years 1995, 1998, and 2001 for 9th and 12th graders. In 1995, 26.5 and 27.7 percent of American Indian 9th and 12th graders, respectively, reported that alcohol by a family member had repeatedly caused family, health, job, or legal problems. By 1998 the trend had risen to 32 and 35.5 percent for 9th and 12 graders, respectively. The trend continued to rise for American Indian 9th graders to 36.5 percent in 2001. The trend for American Indian 12th graders fell in 2001 to 33.5 percent. (See Figure 17.)

Figure 17 - Minnesota Student Survey

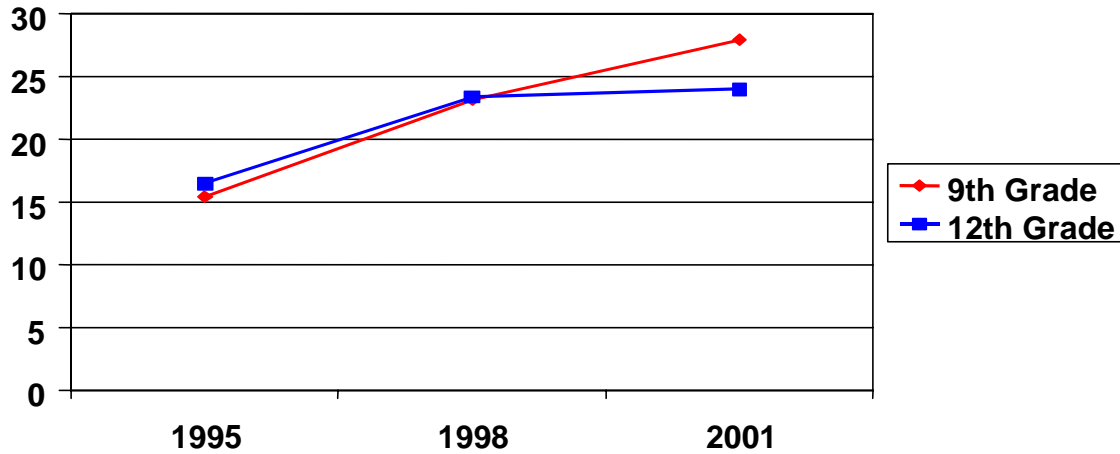
“Has alcohol use by any family member repeatedly caused family, health, job, or legal problems?”



Similarly for the question, "Has drug use by any family member repeatedly caused family, health, job, or legal problems?", the overall trend from 1995 to 2001 was up for American Indian 9th and 12th graders. For American Indian 9th graders the trend rose from 15.5 percent to 28 percent. For American Indian 12th graders the trend rose from 16.5 percent to 24 percent. (See Figure 18.)

Figure 18 - Minnesota Student Survey

“Has drug use by any family member repeatedly caused family, health, job, or legal problems?”



The trend for cigarette smoking among American Indian students in Minnesota is down sharply for 9th and 12th graders. (See Figures 19 and 20.)

Figure 19 - Minnesota Student Survey
Percent of American Indian Students Who Smoked
1-5 Cigarettes or More Per Day During Last 30 Days

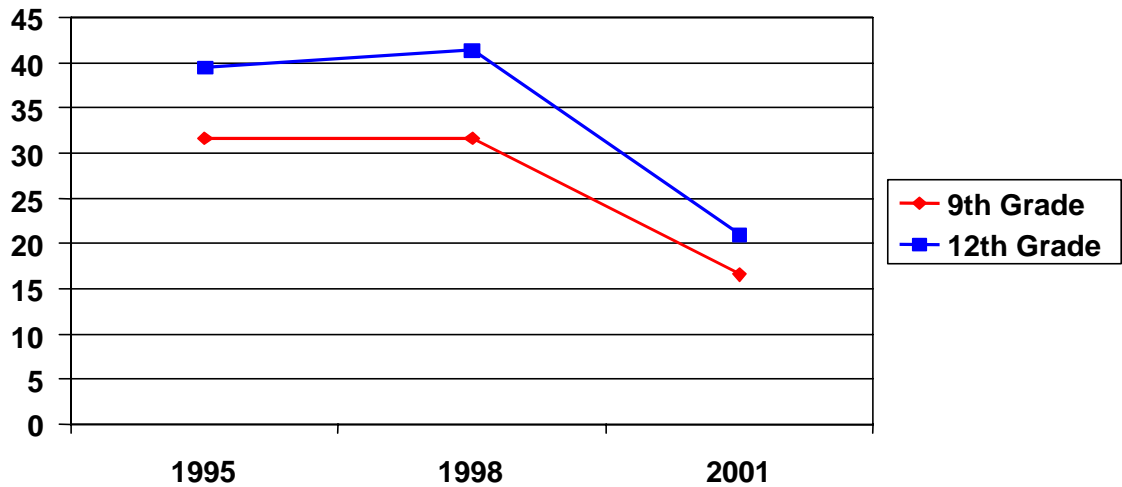
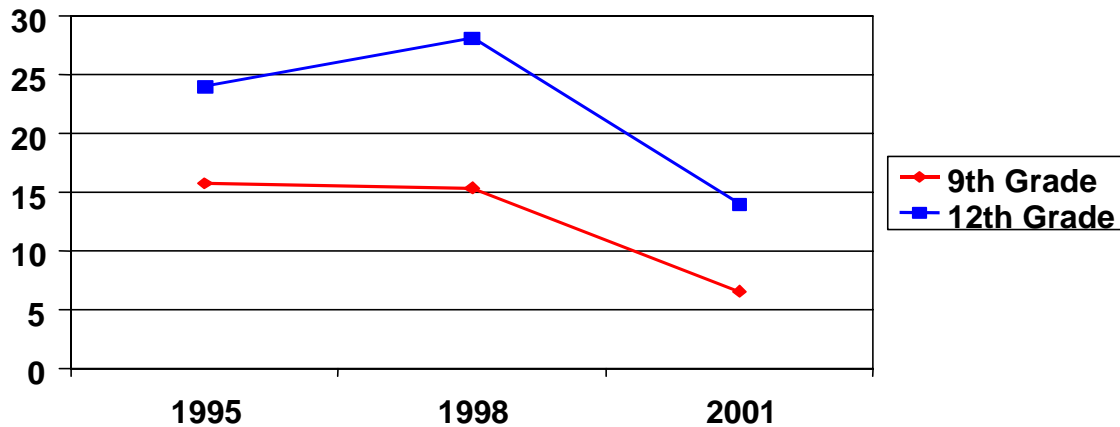


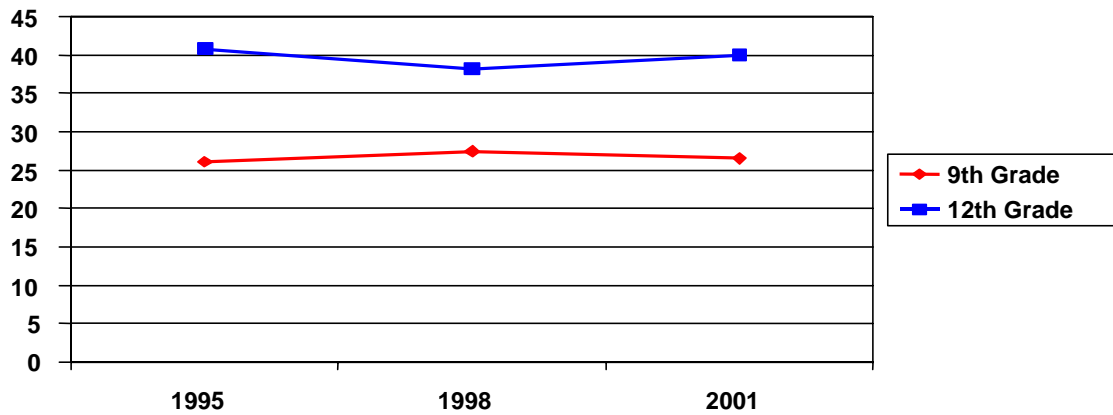
Figure 20 - Minnesota Student Survey
Percent of American Indian Students Who Smoked
a Half-pack or More Per Day During Last 30 Days



The proportion of American Indian students who smoked 1-5 cigarettes per day during the last thirty days is down from 31.6 percent in 1995 to 16.5 percent in 2001 for 9th graders and down from 39.5 percent to 21 percent for 12th graders. For American Indian students who smoked a half pack of cigarettes or more during the last thirty days, the trend for the same time period was down from 15.7 percent to 6.5 percent for 9th graders and down from 24 percent to 14 percent for 12th graders.

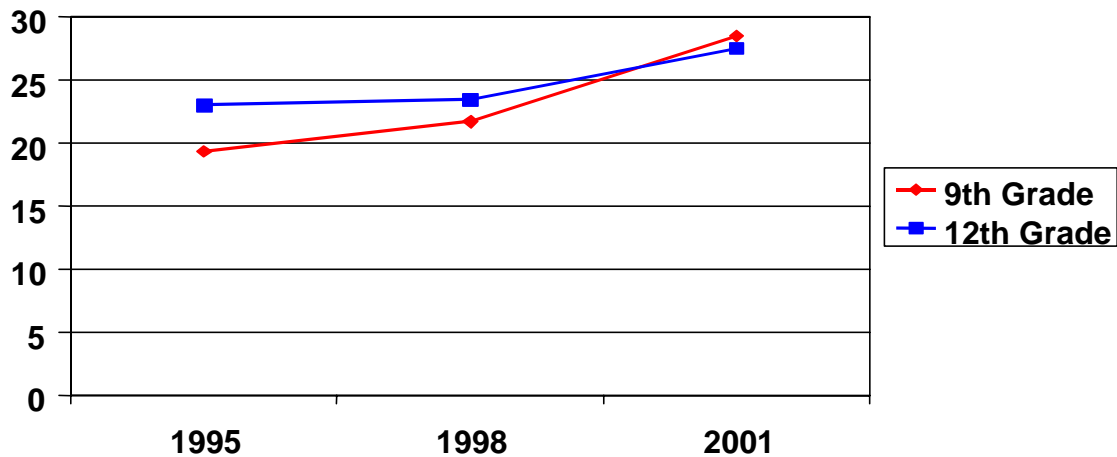
Unfortunately, the trends for alcohol and marijuana use are not as good as those for cigarette smoking. The proportion of American Indian students who drank alcohol on ten or more occasions in the last twelve months for both 9th and 12th graders had not changed very much between 1995 and 2001. On the average, between 1995 and 2001, over 26 percent of 9th graders and about 40 percent of 12th graders reported drinking alcohol on ten or more occasions over the past year. (See Figure 21)

Figure 21 - Minnesota Student Survey
 Percent of American Indian Students Who Drank Alcohol
 on 10 or More Occasions in the Last 12 Months



The overall trend in marijuana smoking was up for both 9th and 12th grade American Indian students. The percent of American Indian 9th graders who used marijuana on ten or more occasions in the last twelve months grew from 19.3 percent in 1995 to 28.5 percent in 2001. For American Indian 12th graders, the trend rose from 23 percent in 1995 to 27.5 percent in 2001. (See Figure 22.)

Figure 22 - Minnesota Student Survey
 Percent of American Indian Students Who Used
 Marijuana on 10 or More Occasions in Last 12 Months



LAW ENFORCEMENT DATA

Law enforcement data were gathered from five sites. These included Warm Springs Reservation, Salish-Kootenai Reservation, United Indian Health Services, Minneapolis, and NW New Mexico Fighting Back.

Warm Springs Reservation. For the period of interest, 1995 to 2000, law enforcement information was gathered for arrests of adults and juveniles driving under the influence (DUI), adults and juveniles in substance-abuse detoxification, adult and juvenile drug arrests, adult and juvenile liquor violations, and juveniles in possession of alcohol or drugs.

The overall trend in adult and juvenile DUI arrests has been down. Among adults, the number of arrests has gone down from 157 in 1995 to 99 in 2000. However, from 1995 to 1999 the number of arrests dropped considerably from 157 to 49, but rising in 2000 to 99 arrests. Although juvenile arrests for DUI have been five arrests or fewer between 1995 and 1999, there has been a steady decline since 1997. (See Figures 23 and 24.)

Figure 23 - Warm Springs Reservation
Driving Under the Influence Arrests, 1995-2000

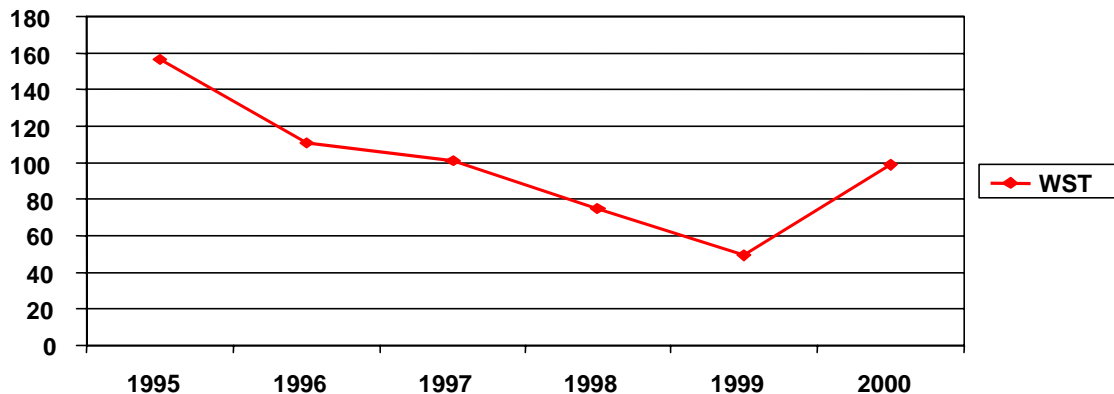
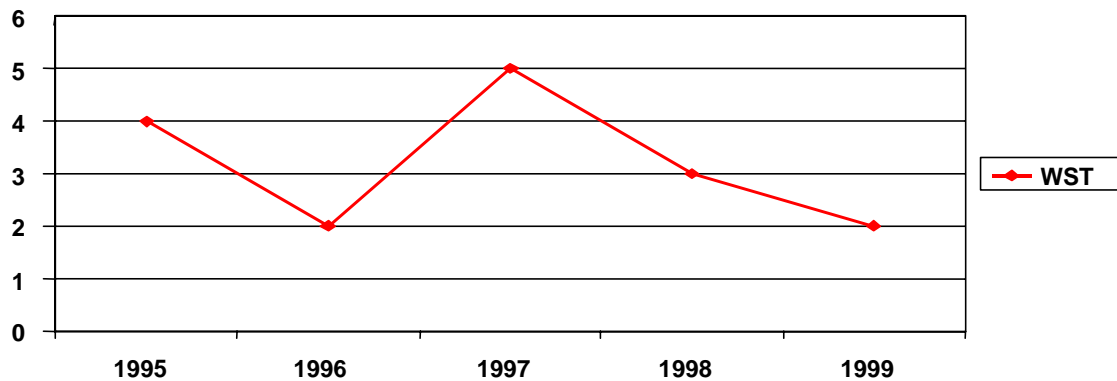


Figure 24 - Warm Springs Reservation
Juvenile Driving Under the Influence Arrests, 1995-1999



The number of adults and juveniles in substance-abuse detoxification declined between 1995 and 2000. Among adults we see a similar, if not quite so marked, trend for DUI arrests. Between 1995 and 1999, the number of adults in substance abuse detoxification fell from 1,295 to 789. However, the trend increased the following year when the number rose to 911. The number of juveniles in substance-abuse detoxification declined from 24 in 1995 to 5 in 2000, with only 3 in 1998. (See Figures 25 and 26.)

Figure 25 - Warm Springs Reservation
Adults in Substance-Abuse Detoxification, 1995-2000

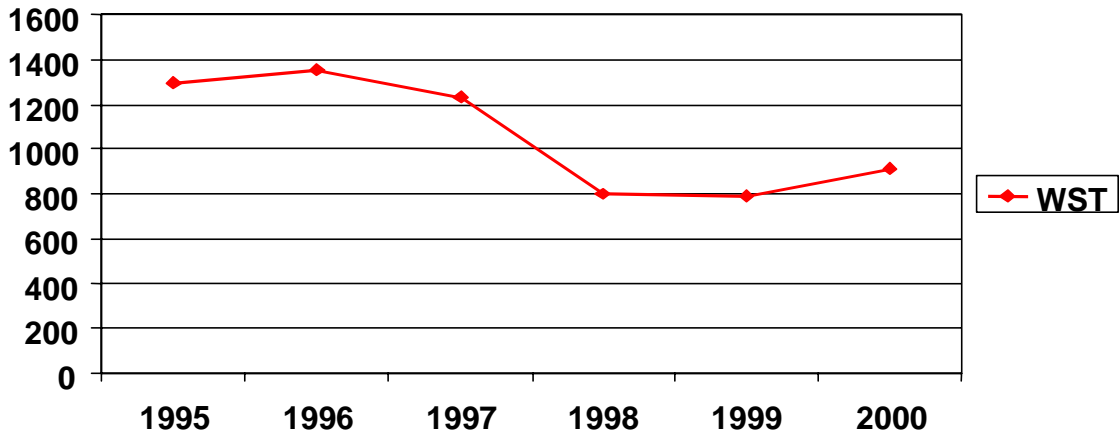
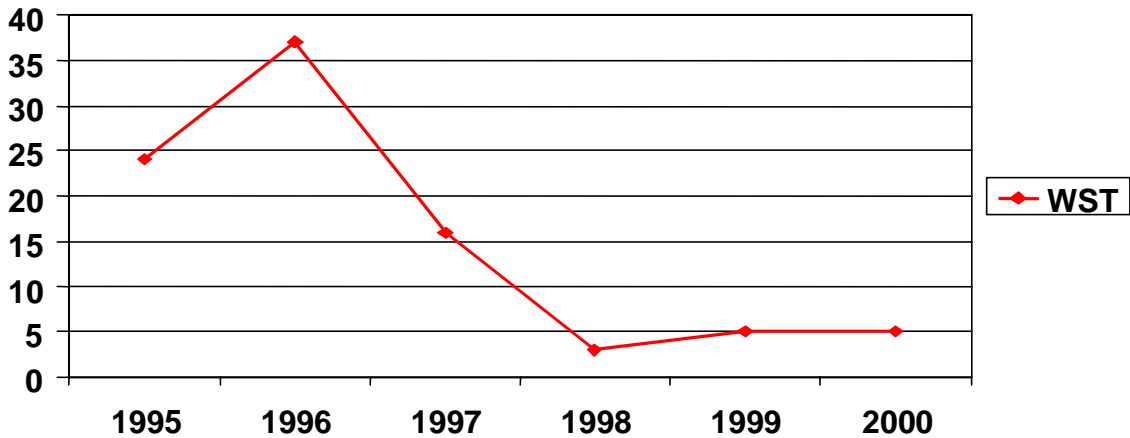


Figure 26 - Warm Springs Reservation
Juveniles in Substance-Abuse Detoxification, 1995-2000



The overall trend in adult drug arrests has been down—from 94 arrests in 1995 to 69 in 2000. However, since 1999 the trend has been up—rising from 39 to 69 arrests. The overall trend in juvenile drug arrests has been up—from 13 arrests in 1995 to 19 in 1999. (See Figures 27 and 28.)

Figure 27 - Warm Springs Reservation
Adult Drug Arrests, 1995-2000

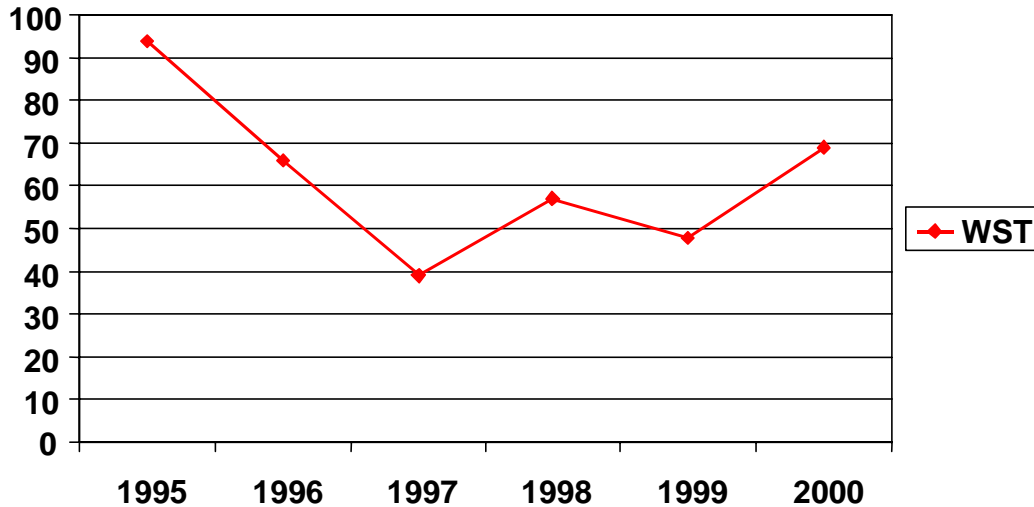
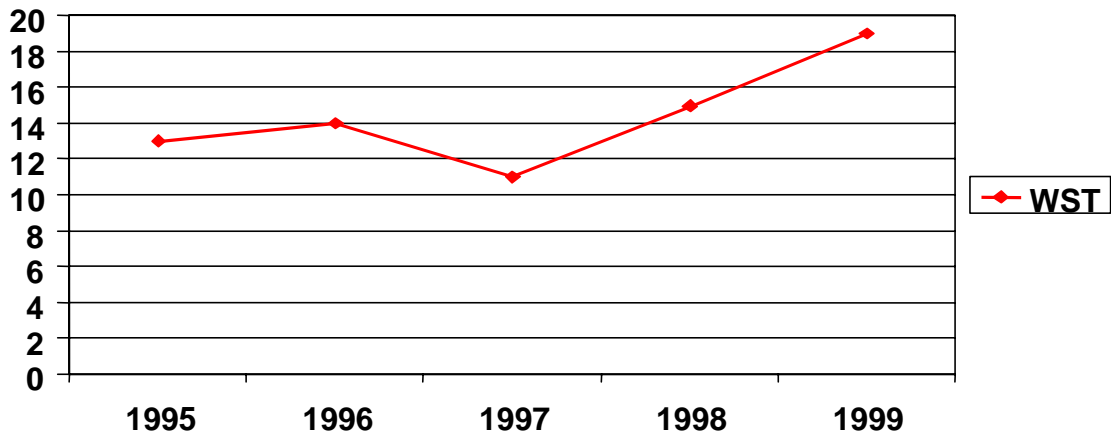


Figure 28 - Warm Springs Reservation
Juvenile Drug Arrests, 1995-1999



Overall, adult liquor violations declined from 1995 to 2000 at Warm Springs Reservation. From 1995 to 1998, the number of adult liquor violations dropped from 171 to 47. In 1999 the number rose to 115 violations, dropping again in 2000 to 77 liquor violations. Juvenile liquor violations numbered 5 or fewer between 1995 and 1999. (See Figures 29 and 30.)

Figure 29 - Warm Springs Reservation
Adult Liquor Violations, 1995-2000

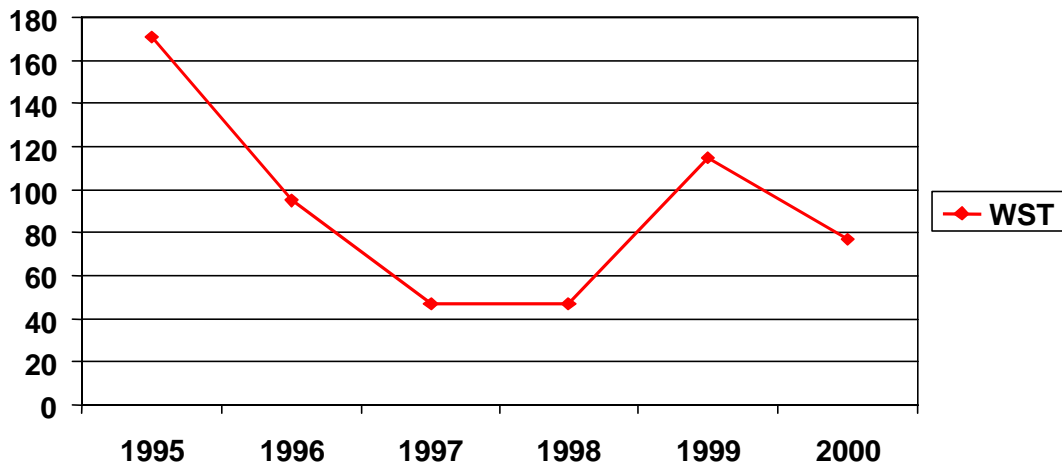
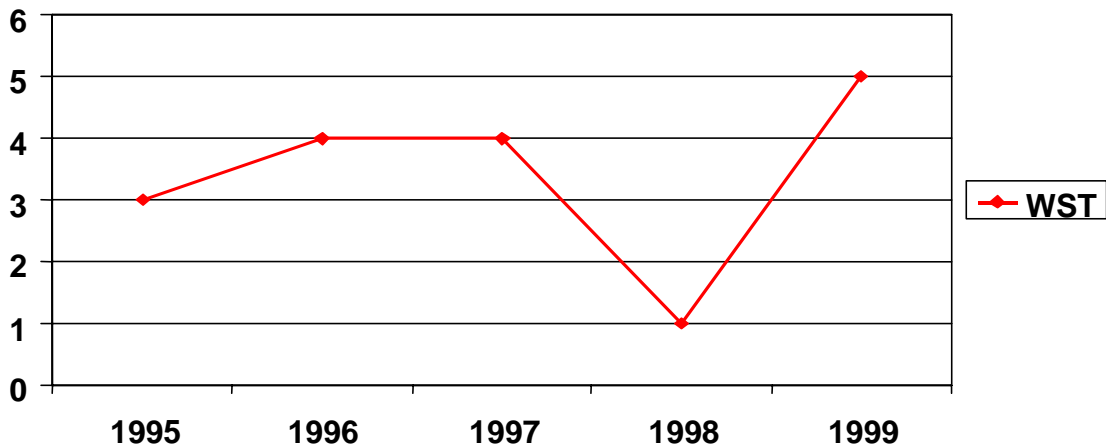
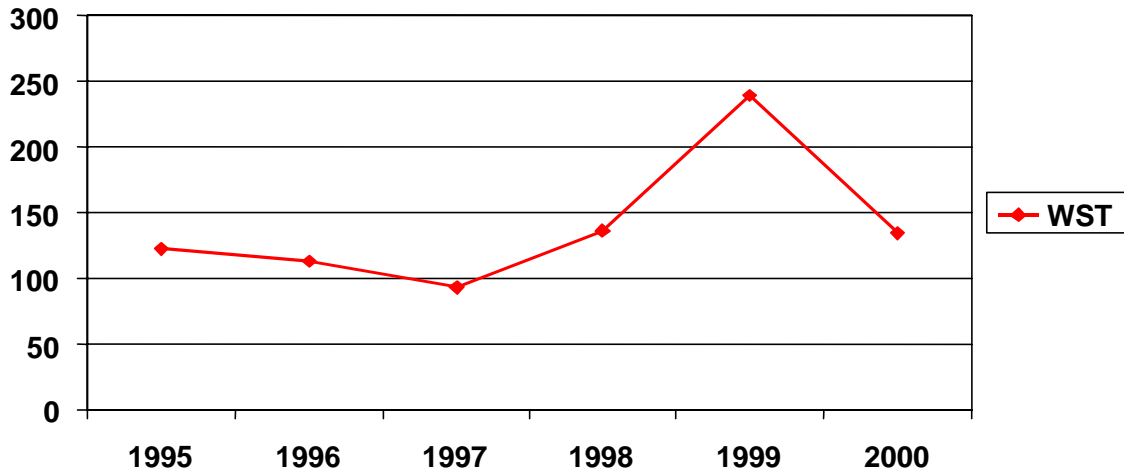


Figure 30 - Warm Springs Reservation
Juvenile Liquor Violations, 1995-1999



Between 1995 and 1997, the number of Warm Springs Tribes youth found in possession of alcohol or drugs fell from 122 to 93. The number rose the following two years to 136 and 239, respectively. The number dropped again in 2000 to 134 juveniles found in possession of alcohol or liquor. (See Figure 31.)

Figure 31 - Warm Springs Reservation
Juveniles in Possession of Alcohol or Drugs, 1995-2000



Salish-Kootenai Reservation. Law enforcement information gathered at the Salish-Kootenai Reservation for the period 1995 to 2001 included total adult and juvenile citations, adult drug- and alcohol-related citations, adult drug violations, adult liquor violations, the number of adult DUI arrests, and the number of juvenile public nuisance arrests.

The overall trend in Salish-Kootenai adult citations for all causes fell between 1995 and 2001 from 2,343 to 1,644 citations. From 1997 to 1999, the trend rose from 1,762 to 2,206 citations before falling to the 2001 level. Conversely, the trend in Salish-Kootenai juvenile citations increased dramatically from 1996 to 1998 from 169 to 682 citations. From 1998 to 2000, the trend continued to rise to 729 citations, before falling slightly in 2001 to 683 citations. (See Figures 32 and 33.)

Figure 32 - Salish-Kootenai Reservation
Total Adult Substance-Abuse-Related
Arrests, 1995-2001

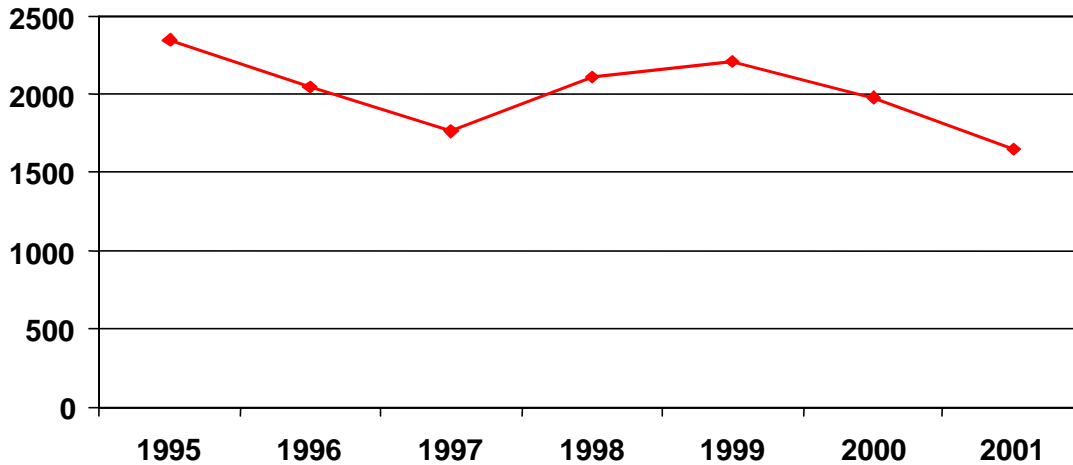
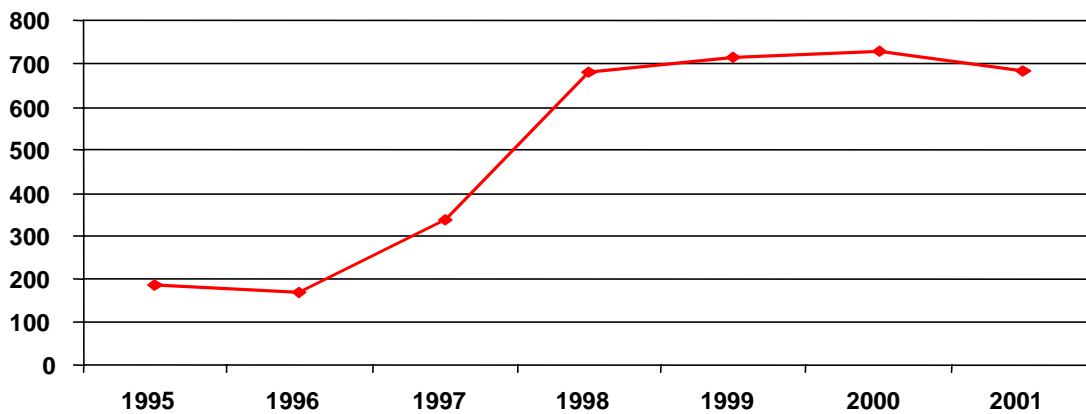
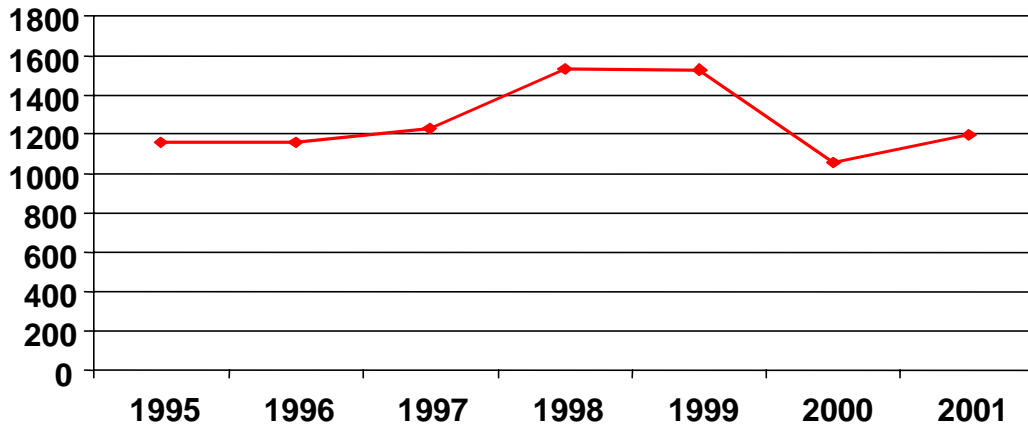


Figure 33 - Salish-Kootenai Reservation
Total Juvenile Arrests, 1995 to 2001



A large (and for some years, a very large) proportion of adult citations were drug and alcohol citations. In 1995 about half of all adult citations were drug or alcohol citations. In 2001 almost 73 percent of adult citations were drug or alcohol citations. The overall trend in adult drug and alcohol citations rose during the period 1995 to 1998 and in 1999. The trend fell in 2000 to a low of 1,055 citations for the period, rising again in 2001 to 1,194 citations. (See Figure 34.)

Figure 34 - Salish-Kootenai Reservation
Drug- and Alcohol-Related Arrests, 1995-2001



Drug violations on the Salish-Kootenai Reservation rose between 1995 and 2001 from 83 to 118. In between, in 1997 and 2000, the number of drug violations was highest at 135 and 125, respectively. Similarly, the trend in liquor violations also went up between 1995 and 2001 from 222 to 417. In 1998 and 1999, the number of liquor violations was highest for this period—432 and 453, respectively. (See Figures 35 and 36.)

Figure 35 - Salish-Kootenai Reservation
Total Drug Violations, 1995-2001

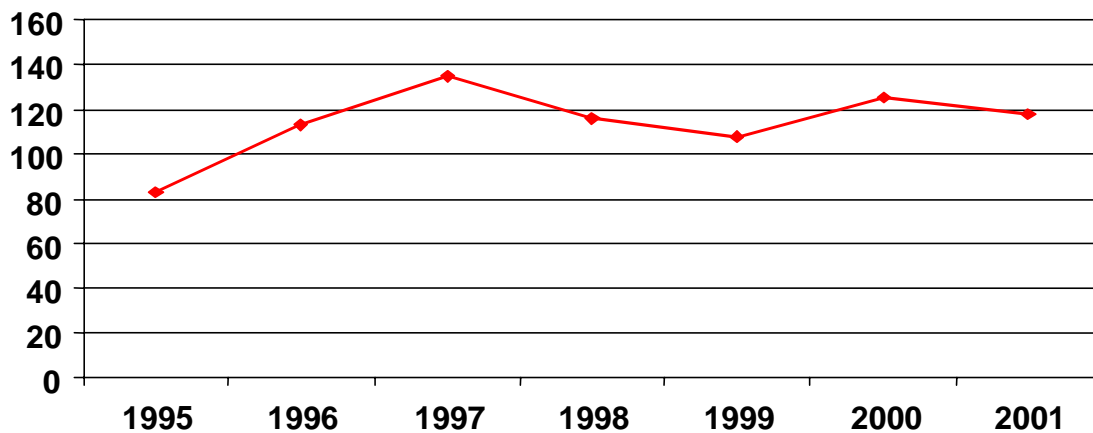
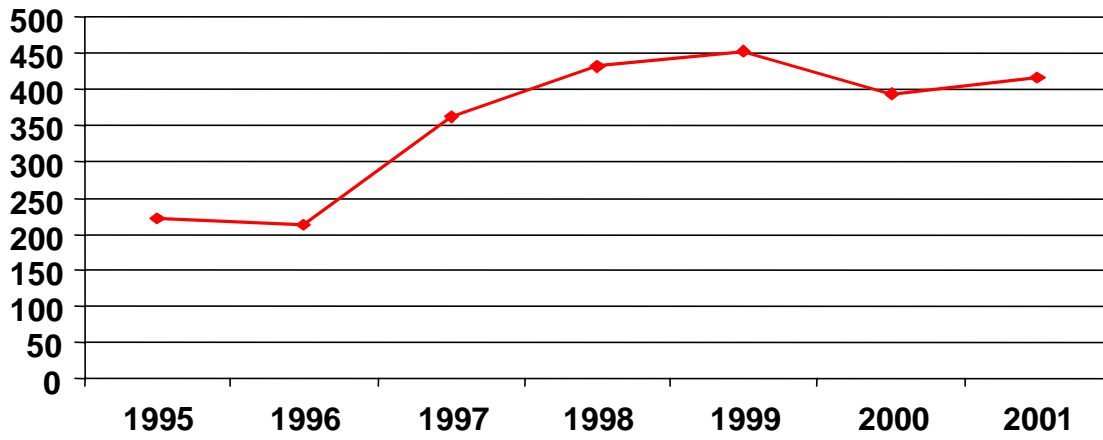
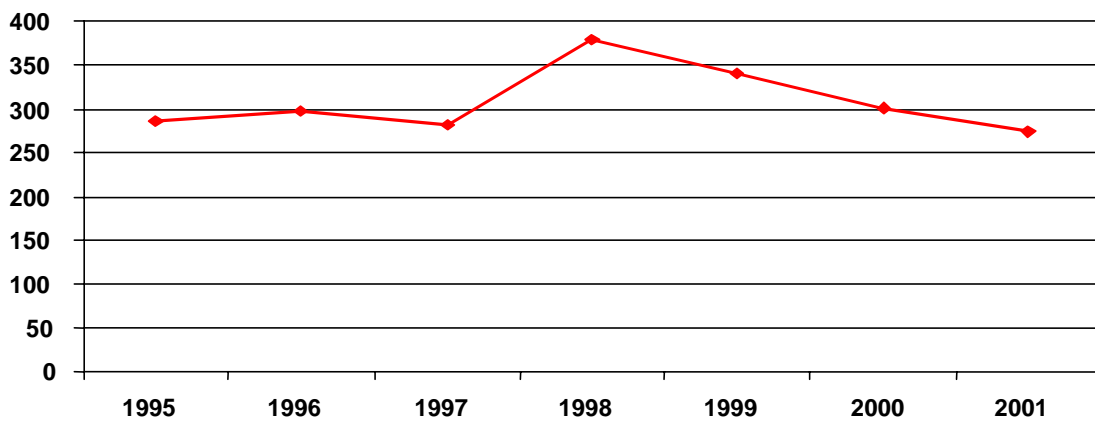


Figure 36 - Salish-Kootenai Reservation
Total Liquor Violations, 1995-2001



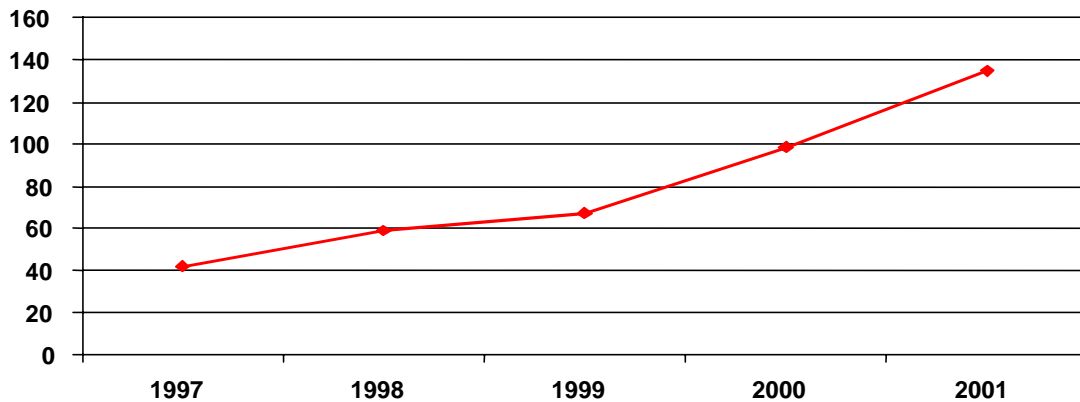
The overall trend in arrests for driving under the influence at the Salish-Kootenai Reservation did not change very much between 1995 and 2001. There were 287 DUI arrests at the beginning of this period and 274 DUI arrests at the end of the period. The trend rose to 379 DUI arrests in 1998 and has steadily declined since then. (See Figure 37.)

Figure 37 - Salish-Kootenai Reservation
Driving-Under-the-Influence Arrests, 1995-2001



Arrests for public nuisance—a category that most often included young people and alcohol or drugs—was established on the Salish-Kootenai Reservation in 1997. Since then the number of arrests has grown steadily each year from 47 arrests to 135 arrests in 2001. (See Figure 38.)

Figure 38 - Salish-Kootenai Reservation
Annual Public Nuisance Arrests, 1997-2001



United Indian Health Services, Inc. Law enforcement information gathered from the community served by the United Indian Health Services, Inc. for the period 1997 to 2002 included the following:

- information on the minority county jail population
- American Indian juvenile probation referrals
- juvenile alcohol and drug probation referrals
- juvenile alcohol and drug probation referrals by gender
- American Indian youth in custody at Juvenile Hall and at a regional facility
- American Indian new diversions and new intakes for alcohol and substance abuse treatment

From 1997 to 2002, most of the people in the Del Norte County, California, jail were white Americans—numbering between 70 and 80 people. However, the second most numerous group of people making up the jail population were American Indians—more than African-Americans and more than Latinos. The number of American Indians in the county jail from 1997 to 2002 has been consistent at about 14 people.

The overall trend in the number of American Indian juvenile probation referrals grew from 65 referrals in 1997 to 126 and 125 referrals in 2001 and 2002, respectively. Of these American Indian juvenile referrals for probation, the number of alcohol and drug probation referrals also grew steadily over the period 1997 to 2002, especially since 2002. For all but two years there were 20 or more American Indian alcohol or drug probation referrals. (See Figures 39 and 40.)

Figure 39 - American Indian Juvenile Probation Referrals, 1997-2002
United Indian Health Services, Inc., Del Norte County, CA

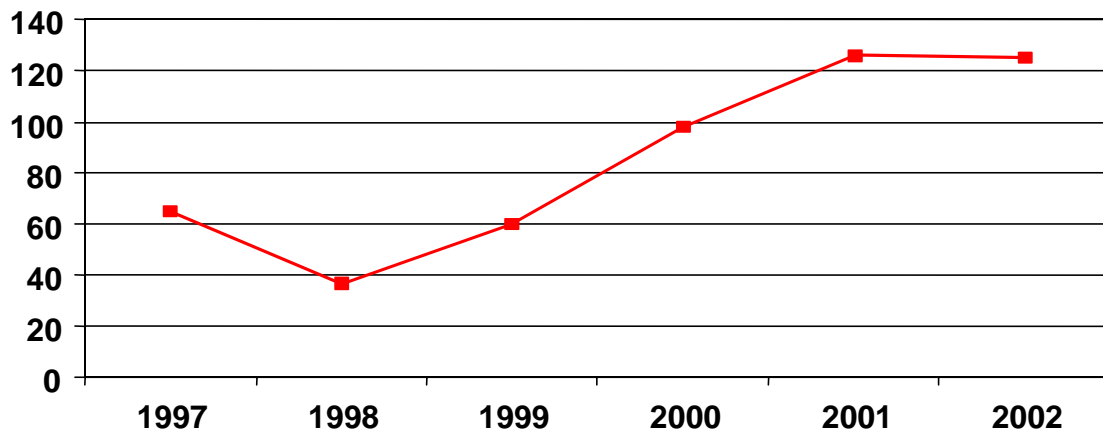
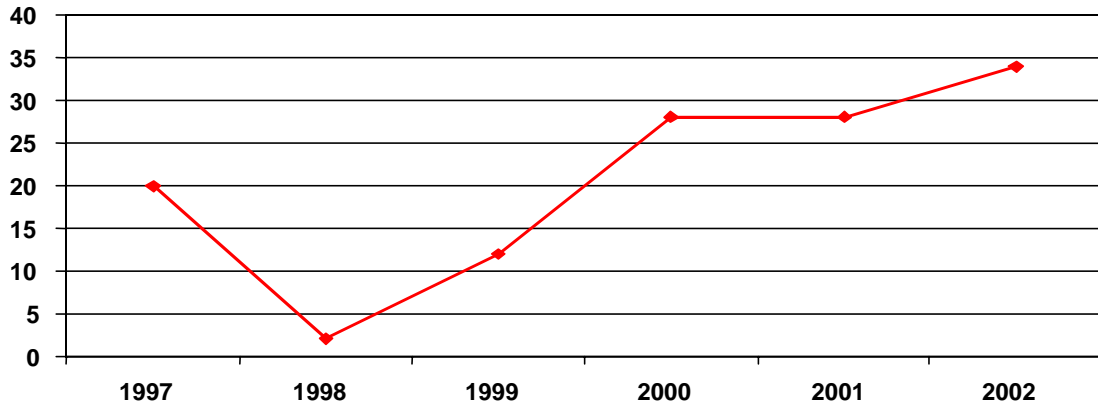
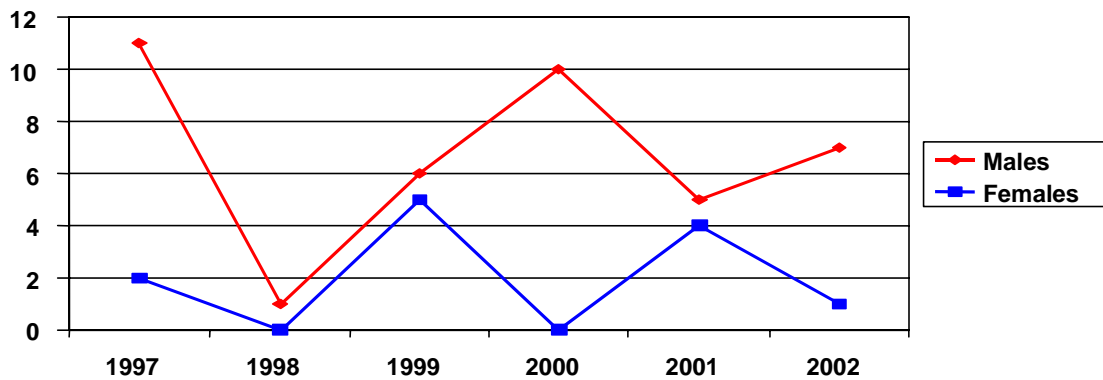


Figure 40 - American Indian Juvenile Alcohol and Drug Probation Referrals, 1997-2002
 United Indian Health Services, Inc., Del Norte County, CA



While the numbers are small—fewer than twenty for each year of interest—the trend among American Indian boys and girls in the numbers of alcohol-related probation referrals was one of annual change. (See Figure 41.)

Figure 41 - American Indian Juvenile Alcohol-Related Probation Referrals, 1997-2002
 United Indian Health Services, Inc., Del Norte County, CA



However, the trend for both American Indian boys and girls for drug-related probation referrals was clearly up, especially for boys. From 1999 to 2002 the number of referrals for drug-related probation for Indian boys grew from one

to fifteen; for girls the number of referrals for the same period grew from zero to nine. (See Figure 42.)

Figure 42 - American Indian Juvenile Drug-Related Probation Referrals, 1997-2002
United Indian Health Services, Inc., Del Norte County, CA

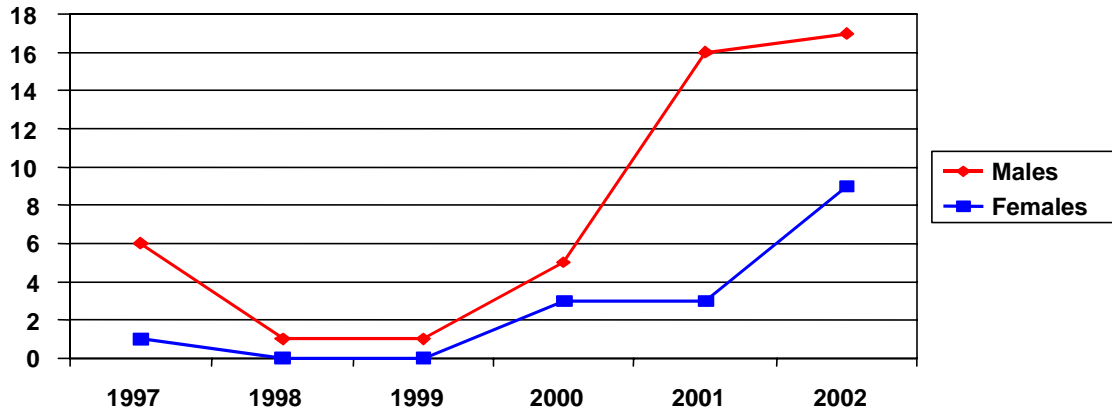


Figure 43 shows the trend in the numbers of American Indian youth in custody at Juvenile Hall and at a nearby regional facility from 1997 to 2002. American Indian youth held in custody at the regional facility since 1999 numbered fifteen or fewer. However, the number of American Indian youth held in custody at the Humboldt County, California, Juvenile Hall ranged from a high of 83 in 2001 to a low of 62 in 1999. The overall trend rose from 1997 to 2001, falling from 83 to 54 in 2002.

Figure 43 - American Indian Youth in Custody,
Juvenile Hall and Regional Facility, 1997-2002
United Indian Health Services, Inc., Humboldt County, CA

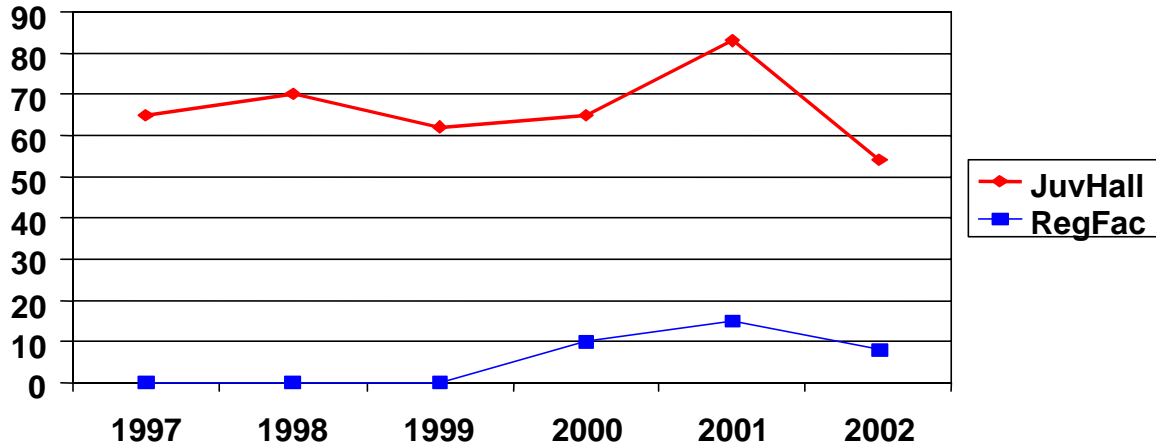
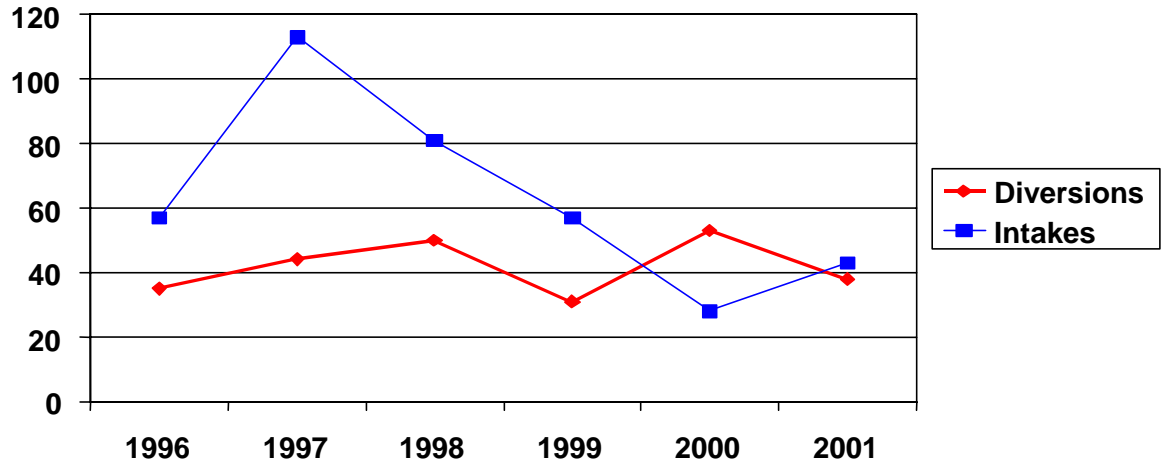


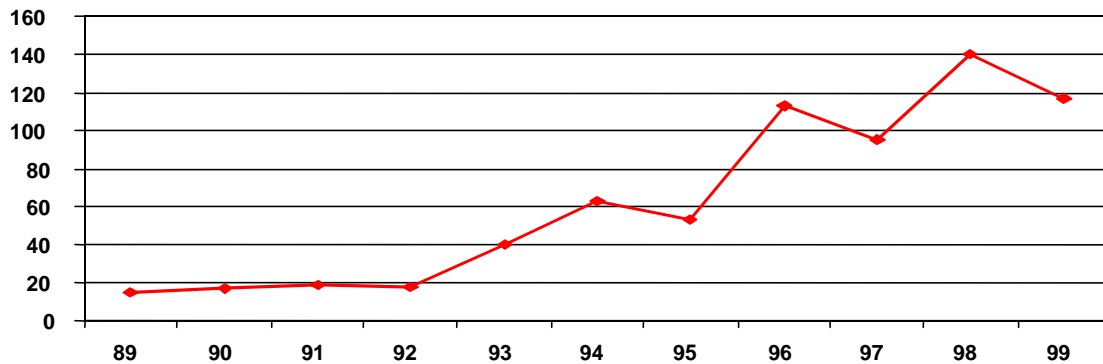
Figure 44 shows the number of American Indian youth diversions and new intakes for Alcohol/Substance Abuse (ASA) treatment from 1996 to 2001. The overall trend for youth diversions was down while the trend in new intakes has stayed about the same.

Figure 44 - American Indian Youth, New Diversions and New Intakes for ASA Treatment, 1996-2001
United Indian Health Services, Inc.



Minneapolis American Indian Center. American Indian and Alaska Native adult and juvenile law enforcement information was collected from the state of Minnesota for the state and for Hennepin County. Law enforcement information included narcotics offenses, driving under the influence, and liquor law violations. With only a few instances where the number of arrests or violations went down, most trends were up. For example, for the entire state, American Indian juvenile arrests for narcotics offenses rose from 15 arrests in 1989 to 140 in 1998, falling to 117 in 1999. (See Figure 45.)

Figure 45 - State of Minnesota, American Indian Juvenile Apprehensions for Narcotics Offenses, 1989-1999



American Indian DUI arrests in the state of Minnesota grew from 10 in 1989 to 32 in 1999. (See Figure 46.) For juvenile arrests for liquor violations the number of American Indian arrests grew from 118 in 1989 to 536 in 1998, falling to 472 in 1999. (See Figure 47.)

Figure 46 - State of Minnesota, American Indian Juvenile Apprehensions for Driving Under the Influence, 1989-1999

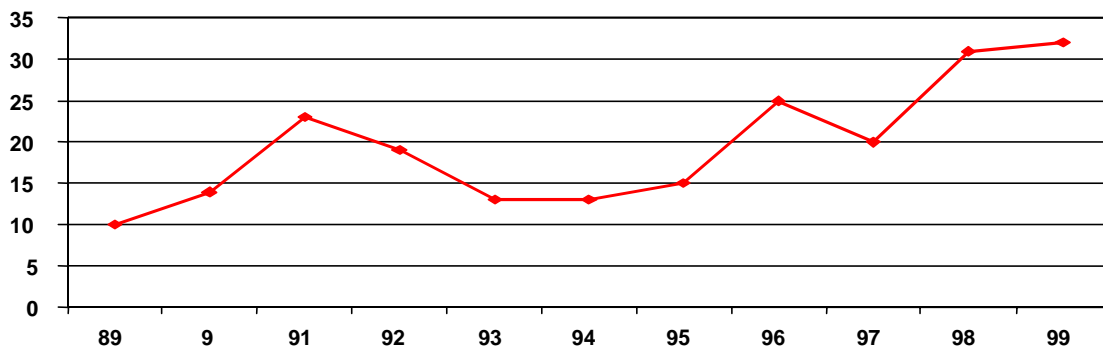
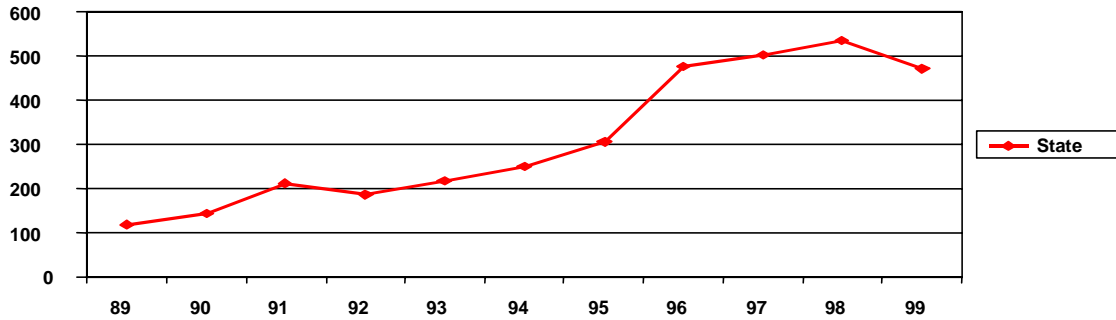


Figure 47 - State of Minnesota, American Indian Juvenile Apprehensions for Liquor Law Violations, 1989-1999



In Hennepin County, Minnesota, for the period 1989 to 1999, American Indian juvenile arrests for narcotics offenses grew from 7 in 1989 to 51 in 1999. (See Figure 48.) DUI arrests among American Indian youth never grew over five in any one year and averaged two arrests per year during the period of interest. American Indian juvenile arrests for liquor violations, however, grew from eight in 1990, 1991, and 1992 to 123 in 1998, falling to 116 in 1999. (See Figures 49 and 50.)

Figure 48 - Hennepin County, Minnesota, American Indian Juvenile Apprehensions for Narcotics Offenses, 1989-1999

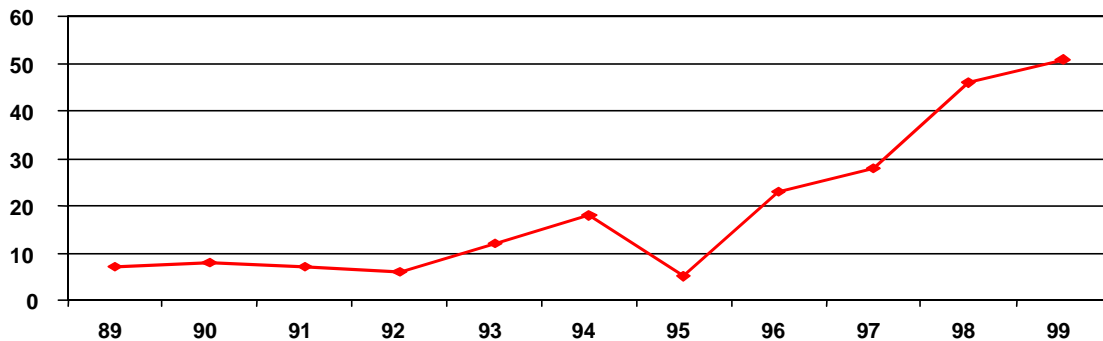


Figure 49 - Hennepin County, Minnesota, American Indian Juvenile Arrests for Driving Under the Influence, 1989-1999

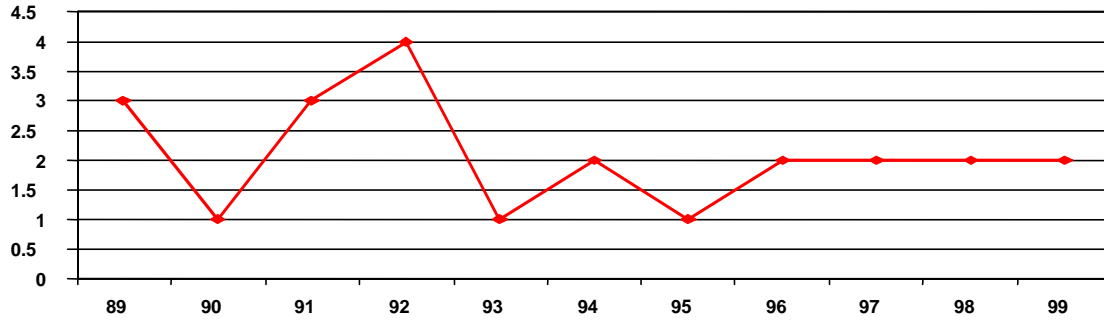
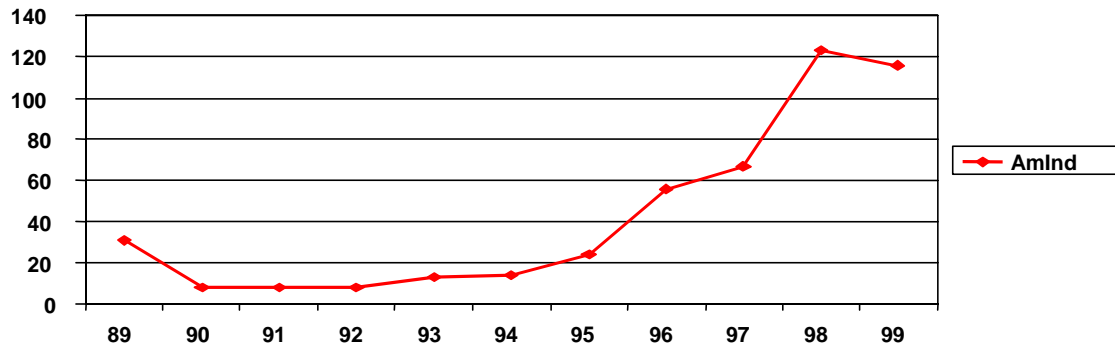


Figure 50 - Hennepin County, Minnesota, American Indian Juvenile Liquor Law Violations, 1989-1999



American Indian adult arrests in the State of Minnesota for narcotics offenses grew from 122 in 1989 to 363 in 1999. (See Figure 51.) American Indian adult arrests for the period for driving under the influence grew from 800 to a high of 1,272 in 1997, falling thereafter to 1,256 in 1998 and 1,230 in 1999. (See Figure 52.) American Indian adult arrests for liquor law violations rose from 288 in 1989 to a high, for the period, of 1,147, dropping to 1,031 arrests in 1999. (See Figure 53.)

Figure 51 - State of Minnesota, American Indian Adult Arrests for Narcotics Offenses, 1989-1999

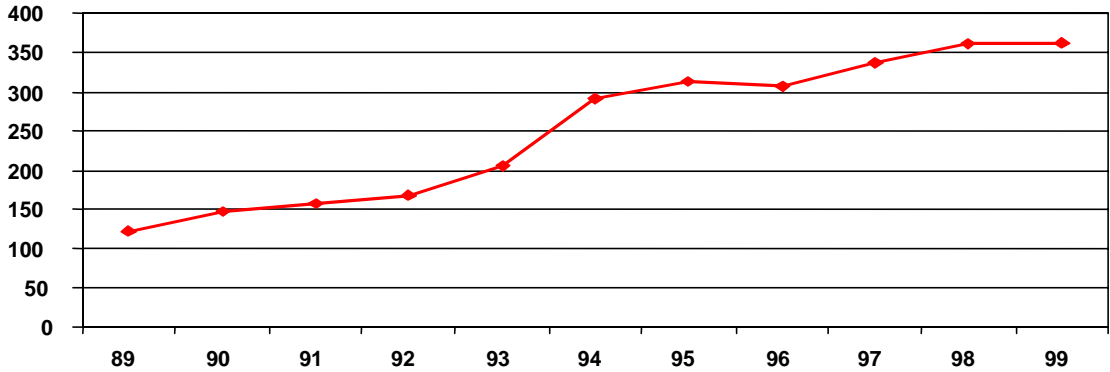


Figure 52 - State of Minnesota, American Indian Adult Arrests for Driving Under the Influence, 1989-1999

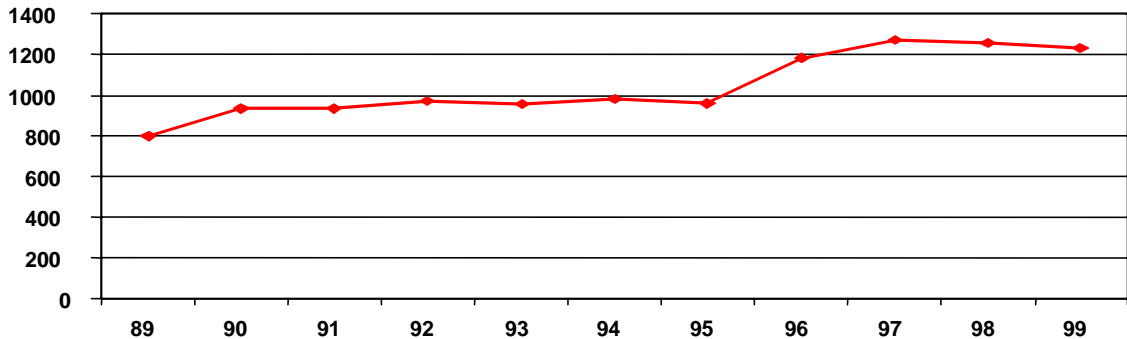
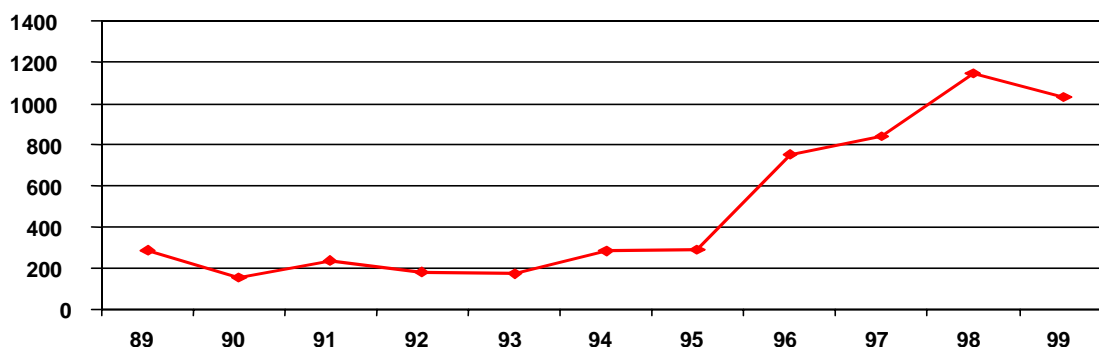


Figure 53 - State of Minnesota, American Indian Adult Arrests for Liquor Law Violations, 1989-1999



Adult American Indian arrests in Hennepin County for narcotics offenses grew from 44 in 1989 to a high, for the period, of 136 in 1998, falling to 127 arrests in 1999. (See Figure 54.) American Indian adult arrests for DUI fell from 272 arrests in 1989 to a low, for the period, of 159 in 1995. From 1995 to 1999, the number of American Indian adult DUI arrests rose to 247 in 1996 and then fell to 242 arrests in 1997 and 220 arrests in 1998, before rising in 1999 to 224 arrests. (See Figure 55.) From 1996 to 1999, the number of American Indian adult arrests for liquor law violations rose from 364 arrests to 775 arrests in 1998, falling to 671 arrests in 1999. (See Figure 56.)

Figure 54 - Hennepin County, Minnesota, American Indian Adult Arrests for Narcotics Offenses, 1989-1999

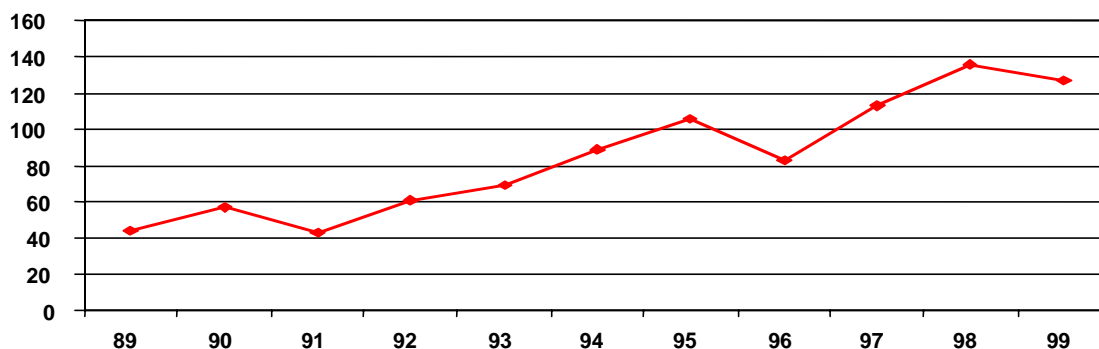


Figure 55 - Hennepin County, Minnesota, American Indian Adult Arrests for Driving Under the Influence, 1989-1999

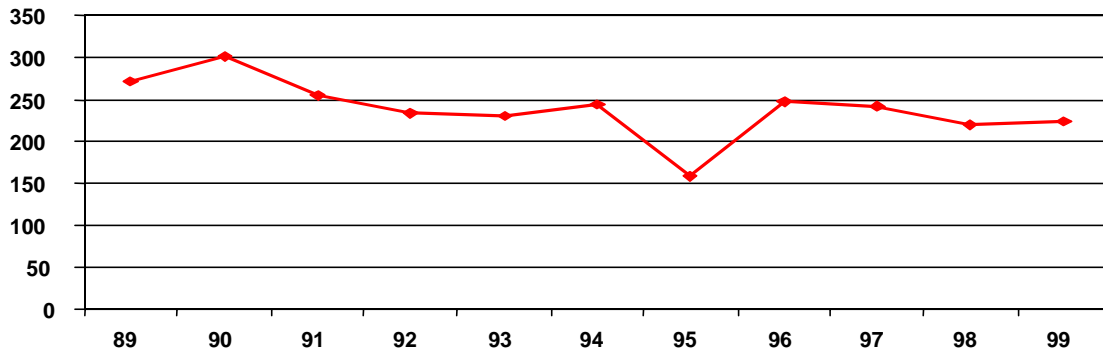
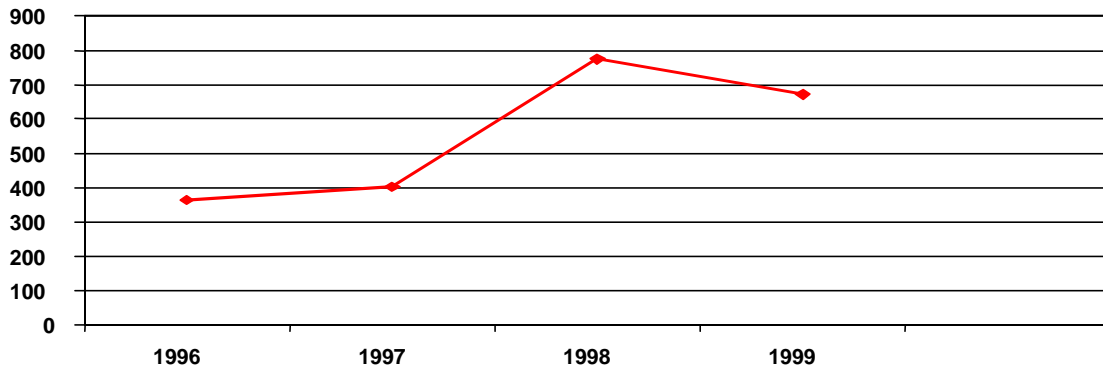


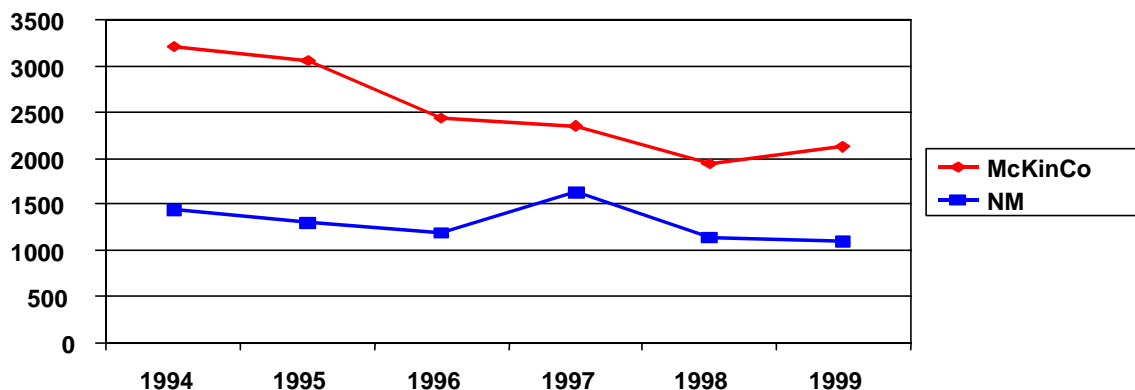
Figure 56 - Hennepin County, Minnesota, American Indian Adult Arrests for Liquor Law Violations, 1989-1999



NW New Mexico Fighting Back, Gallup, New Mexico. Law enforcement data gathered included arrests per 100,000 for Driving While Intoxicated (DWI), alcohol arrests per 100,000 population, and drug arrests per 100,000 population. Information was gathered from reports produced by the state of New Mexico, McKinley County, and Gallup, New Mexico. The available information is not specific to American Indians and Alaska Natives, although the population of McKinley County and Gallup, New Mexico, is predominately American Indian.

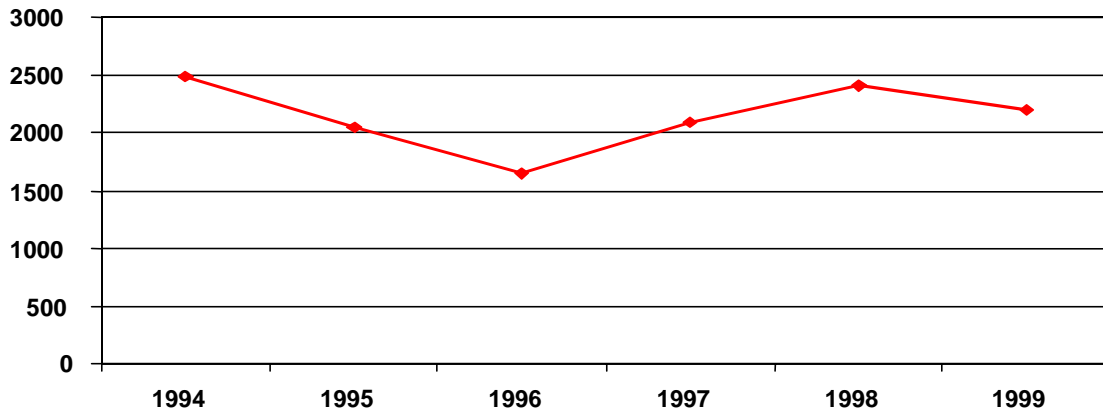
In McKinley County, New Mexico, the county in which the city of Gallup is located, the arrest rate per 100,000 population has declined from 1994 through 1999. In 1994 there were 3,210 arrests per 100,000 population. In 1999 there were 2,128 arrests per 100,000 population. Arrests per 100,000 for DWI went over 3,000 in 1994 and 1995. The overall trend has been down with spikes in the mid-1990s. From 1998 to 1999, the rate rose from 1,939 to 2,128. The arrest rate per 100,000 population for DWI in the state of New Mexico has also declined during the period 1994 to 1999. Despite a spike in 1997, the trend shows a steady decline to 1,092 arrests per 100,000 population in 1999. (See Figure 57.)

**Figure 57 - NW New Mexico Fighting Back
DWI Arrest Rate, McKinley County and New Mexico**
(Arrests/100,000 Population)



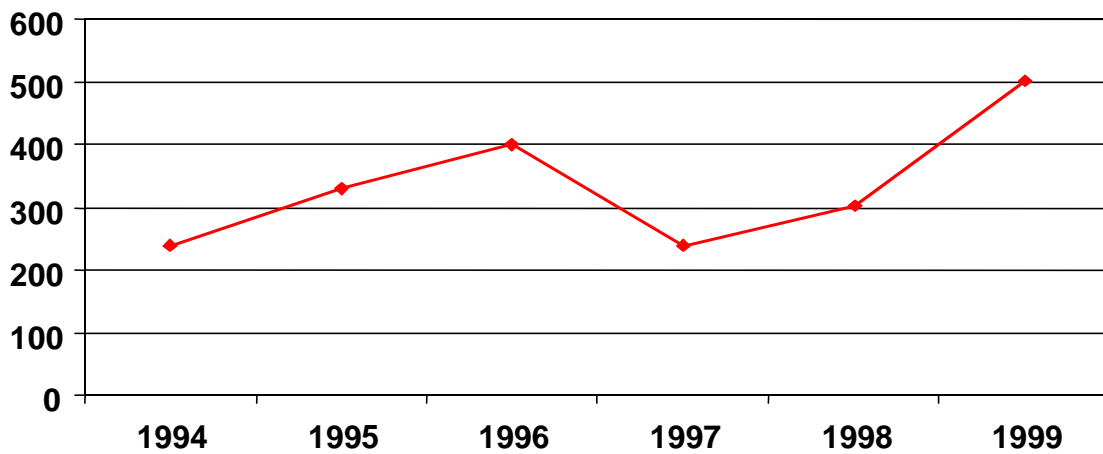
The trend in the number of alcohol-related arrests per 100,000 population in Gallup, New Mexico, shows a good decline from 1994 to 1996, falling from 2,490 to 1,650 arrests per 100,000. Since 1996, however, the number of alcohol-related arrests per 100,000 population rose to 2,090 in 1997 and 2,411 in 1998 per 100,000 population, falling to 2,206 arrests per 100,000 population in 1999. (See Figure 58.)

Figure 58 - NW New Mexico Fighting Back
Alcohol-Defined Arrest Rate, Gallup, NM
(Arrests/100,000 Population)



The overall trend in drug-related arrests in Gallup, New Mexico, from 1994 to 1999 was up. From 1994 to 1996, the number of drug-related arrests per 100,000 grew from 240 to 400. Although the number of drug-related arrests per 100,000 fell from 1996 to 1997, by 1999 there were 502 drug-related arrests per 100,000 population. (See Figure 59.)

Figure 59 - NW New Mexico Fighting Back
Drug-Defined Arrest Rate, Gallup, NM
(Arrests/100,000 Population)



SCHOOL DATA

School data were collected from four sites—Warm Springs, Salish-Kootenai, Minneapolis American Indian Center, and United Indian Health Services. Our purpose in looking at school data included the following two reasons:

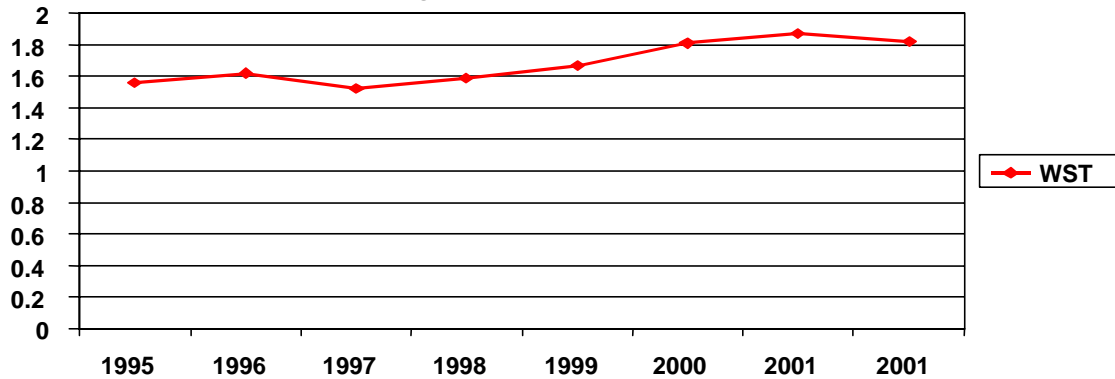
First, many of the activities developed by the Healthy Nations grantees were focused on young people. In fact, several of the grantees conducted significant portions of their overall programs with schools. Second, it was thought that one way to ascertain whether or not Healthy Nations activities had a positive impact on young people was to see if there were positive changes over time in things like grade-point averages, dropout rates, and graduation rates.

Warm Springs Reservation. Warm Springs Reservation school data were collected for the period 1995 through 2002 for grade-point averages, annual absenteeism rates, suspensions, and dropout rates. In addition, data were also collected for third grade proficiency levels for the Oregon Statewide Assessment of Reading and Math performance for the period 1996-2001.

Grade-point averages for students in grades 7 through 12 went up from 1.62 to 1.82 (4.00 scale) from 1996 to 2001. The trend line, as shown in Figure 60, shows a modest but steady increase over this eight-year period. However, during the 2000-2001 academic year, grade-point averages for Indian students in middle schools and high schools decreased to 1.82 from the previous year's 1.91. As noted in their school district report, it is hoped that the recent decline

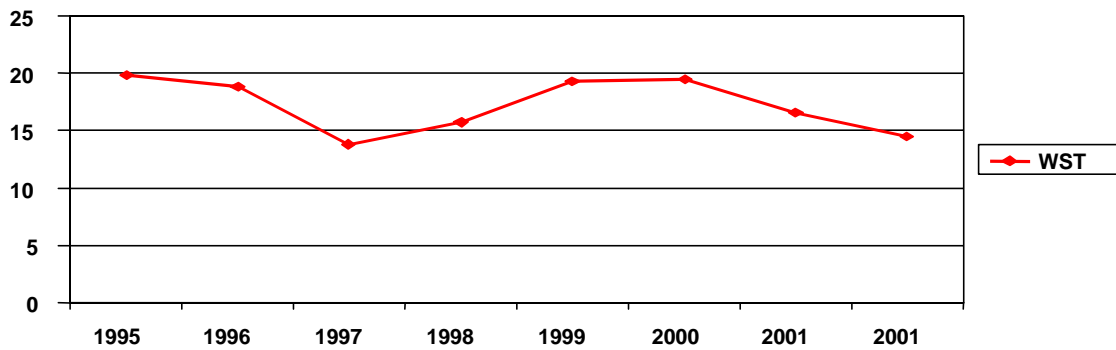
was not the beginning of a downward trend in Indian students' academic performance.

Figure 60 - Warm Springs Reservation
Annual High- and Middle-School Grade Point
Averages, 1995-2002



Data on annual absenteeism rates for Indian students at the Warm Springs Reservation indicate that the number of Indian students who were absent from school did not increase during the 2001-02 school year. Moreover, the overall absenteeism rate, measured by the percent of days absent, has decreased for students in grades 9-12. Unfortunately, this is not true for all grades, for which there has been a nominal increase in absenteeism. Nevertheless, for grades 9-12 the percent of days absent saw high rates in 1995-96 (18.9), 1998-99 (19.3) and 1999-00 (19.5). Since the 1999-00 school year, the rate has gone down to 16.6 in 2000-01 and to 14.5 in 2001-02. (See Figure 61.)

Figure 61 - Warm Springs Reservation
Annual High School Absenteeism Rates, 1995-2002



Suspension of Indian students increased sharply between 2001 and 2002 for both middle school and high school students. Since the 1995-96 school year, suspensions have ranged from between 123 middle school and high school students in the 1999-00 school year to 480 students in the 1995-96 school year. And, from 968 days suspended in the 1999-00 school year to 2,268 days suspended in the 2001-02 school year, respectively.

The number of suspensions for middle school and high school students combined increased to a high of 480 in the 2001-02 school year from the previous year's 305. The number of middle school students suspended increased from 204 (2000-01) to 338 in 2001-02. Most significantly, the number of days suspended for Indian middle school students jumped from 543 to 1691, an increase of almost 44 percent! In contrast, the increase for the high school Indian students was only 19 percent.

The total number of days suspended for grades 7-12 grew from 1,422 to 2,268—a very large increase of 37 percent between school years 2000-01 and 2001-02. Seventy-five percent of these 2,268 suspended days and seventy

percent of the 480 total suspensions were charged to middle school students. Further, of the 374 Indian students suspended during the year, 295 (79 percent) were middle school students. In terms of trends, since the mid-1990s, Indian high school student suspensions were declining until the 2001-02 school year. However, for middle school Indian students, suspensions rose sharply. While the frequency of suspension had increased, the severity remained about the same as the previous year (2000-01) as measured by the ratio of the number of days suspended to the number of students suspended.

Obviously, the school district and the education program at Warm Springs Reservation have been trying to answer a number of questions that might explain the extraordinary rise in the number of days suspended for the middle school students. There have been no changes in disciplinary procedures or policy, nor can school officials point to any specific event that has taken place in the schools or the community that might account for the rise in suspension days. (See Figures 62, 63, and 64.)

Figure 62 - Warm Springs Reservation
Suspensions of Middle School Students, 1996-2002

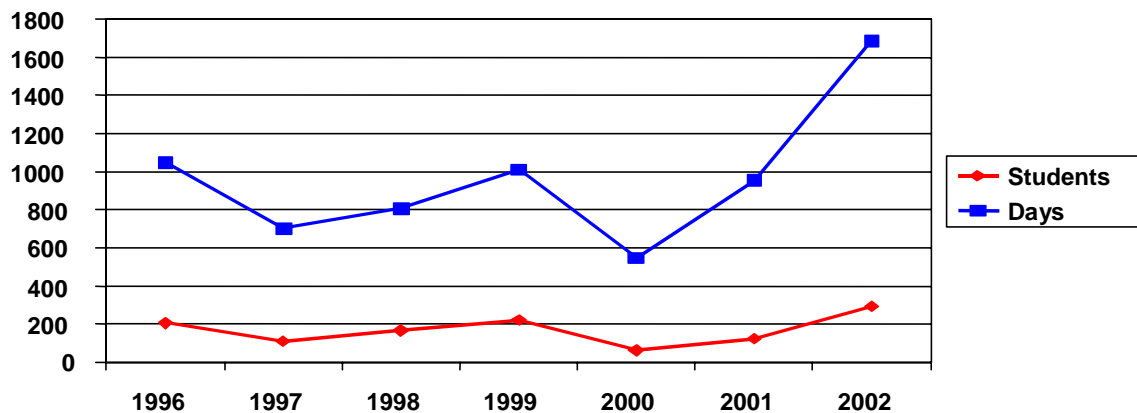


Figure 63 - Warm Springs Reservation
Suspensions of High School Students, 1996-2002

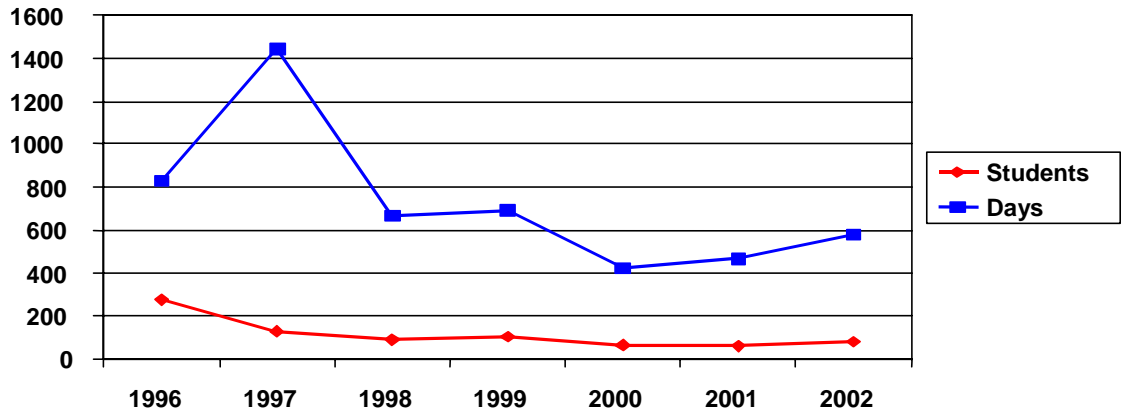
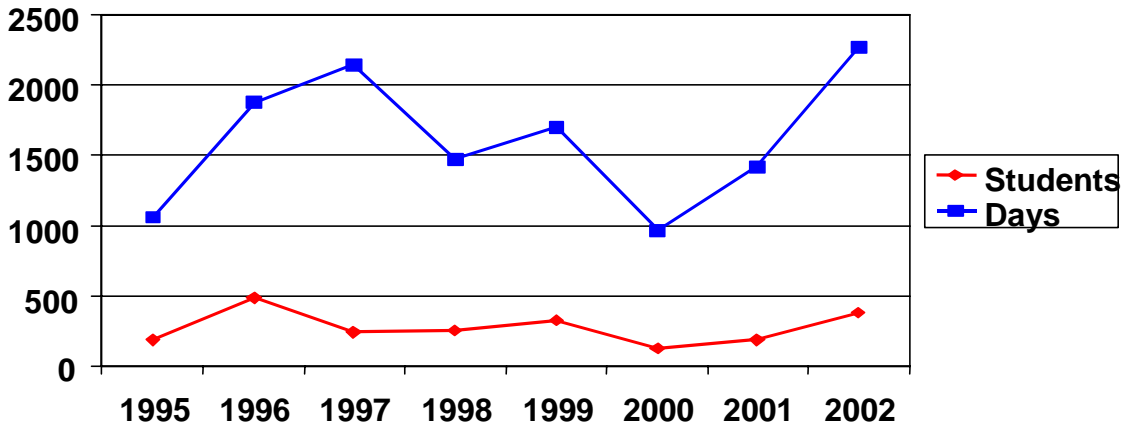


Figure 64 - Warm Springs Reservation
Suspensions of Middle- and High-School
Students, 1996-2002



The overall dropout rate has been steadily falling since the 1998-99 school year, when it was as high as 32 percent. However, between 1995-96 and 1998-99, there was a steady increase in the dropout rate—from 26 percent to 32 percent. For the school year 2001-02, the dropout rate for Indian students in grades 7 through 12 was 14 percent. This has been a great success for the school district. (See Figure 65.)

Figure 65 - Warm Springs Reservation
Student Dropout Rates, Grades 7-12, 1995-2002

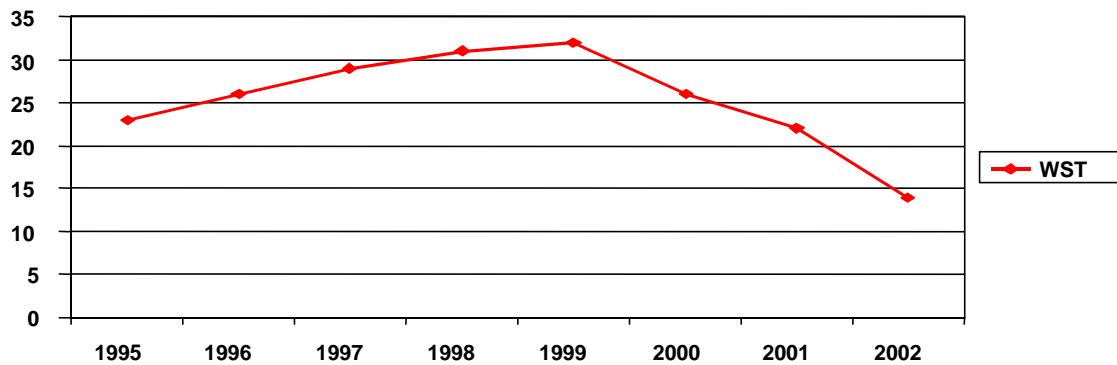


Figure 66 - Warm Springs Reservation
Third Graders Meeting or Exceeding Proficiency Level
Oregon Statewide Assessment of Reading/Math Performance, 1996-2001

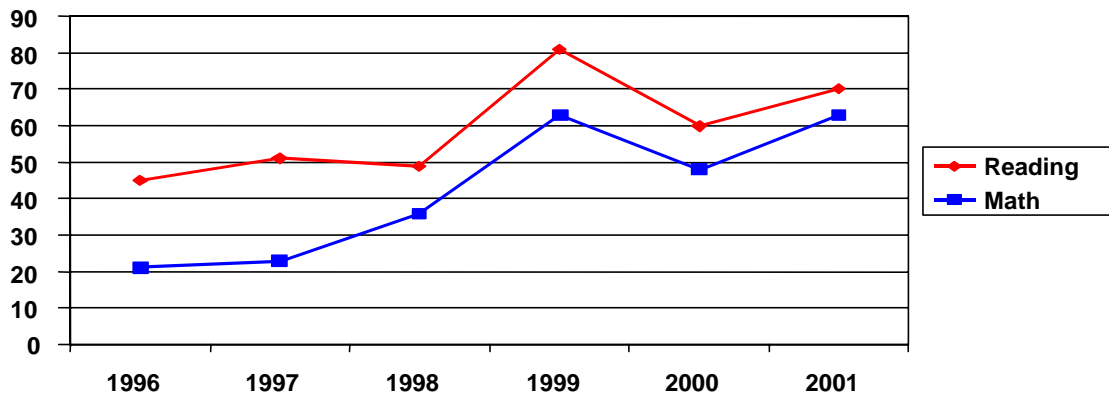


Figure 66 shows the six-year trend in the percentage of third grade students at Warm Springs Elementary School that met or exceeded the proficiency levels of the Oregon Statewide Assessment of reading and math. The overall trend since the 996-97 school year has been one of improvement, yet the most recent results have not returned to the high levels of achievement in school year 1999-00. Nevertheless, the most recent trend is up, and this has motivated teachers, staff, parents, and other stakeholders to devote greater attention to these young Indian students.

Salish-Kootenai Reservation. At the Salish-Kootenai Reservation in Montana, the only trend data available for the period of interest (1995 to present) were the number of Salish-Kootenai High School graduates for the period 1995 to 2002. (See Figure 67.) In addition, limited trend education data were available for Montana-American Indian high school graduates and high school dropouts. (See Figures 68 and 69.)

Figure 67 - Salish-Kootenai Reservation High School Graduates, 1995-2002

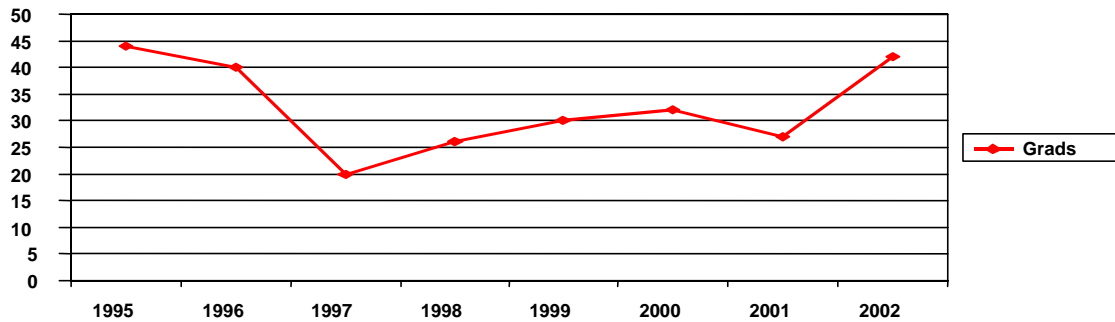


Figure 68 - Salish-Kootenai Reservation Montana-American Indian High School Graduates and GED Recipients, 1997-1999

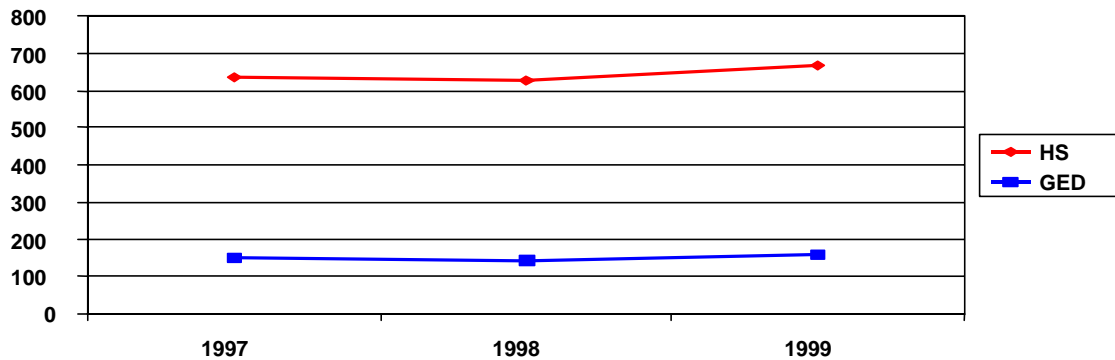
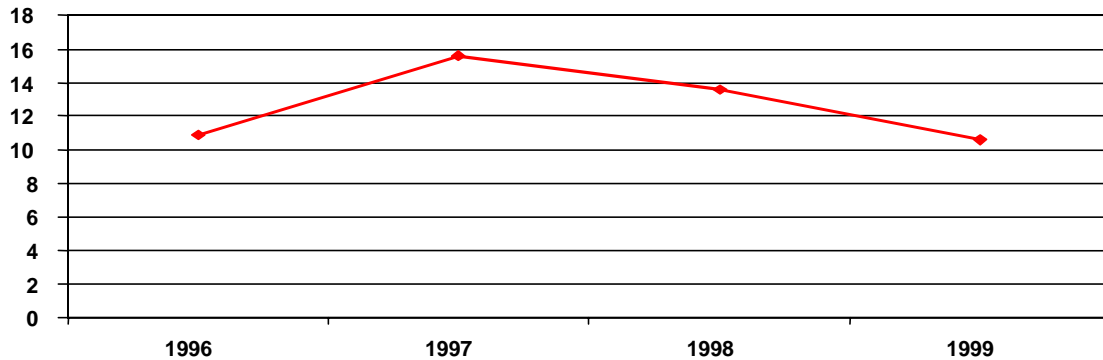


Figure 69 - Salish-Kootenai Reservation
 Montana American Indian High School Dropout Rates
 1996-1999



During the period 1995 to 2002, Salish-Kootenai high school graduates ranged from a low of 20 in 1997 to a high of 44 in 1995. Between 1995 and 1997, the number of graduates dropped by more than one-half. Since 1998 the trend has generally been up, with only one slight decline in 2001. Since 1998 and up to 2002, the trend in the number of high school graduates at the Salish-Kootenai Reservation has almost reached the 1995 level.

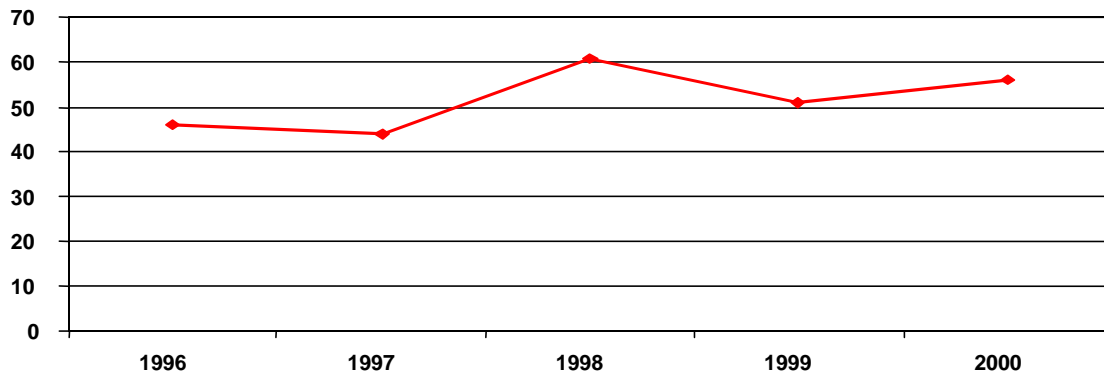
In terms of overall Montana American Indian high school graduates and GED recipients, the trend for the years 1997 through 1999 has been one of modest improvement. Between the years 1996 and 1999, the Montana American Indian high school drop-out rate has risen from 10.9 percent in 1996 to 15.6 percent in 1997 and then fallen in 1998 (13.6%) and 1999 (10.6%) to a level similar to that of 1996.

Minneapolis American Indian Center. For American Indian students in Minneapolis, school trend data were available for the number of American Indian graduates and dropouts and for the percent of American Indian students passing

the Minnesota Basic Standards Test for reading and math. Trends were favorable for each parameter.

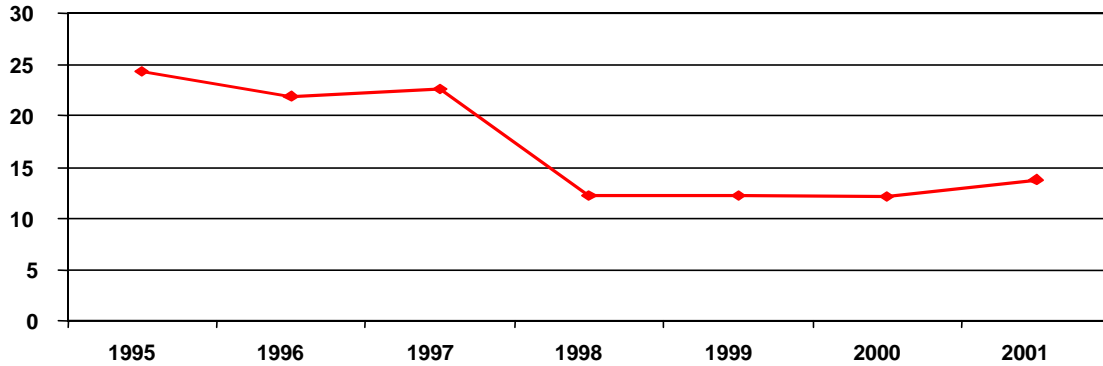
Between 1996 and 2000, the overall trend in the number of American Indian high school graduates in the Minneapolis School system was up from 46 to 56 graduates. However, in 1998 there were 61 graduates. (See Figure 70.)

Figure 70 - Minneapolis Public Schools American Indian Graduates, 1996-2000



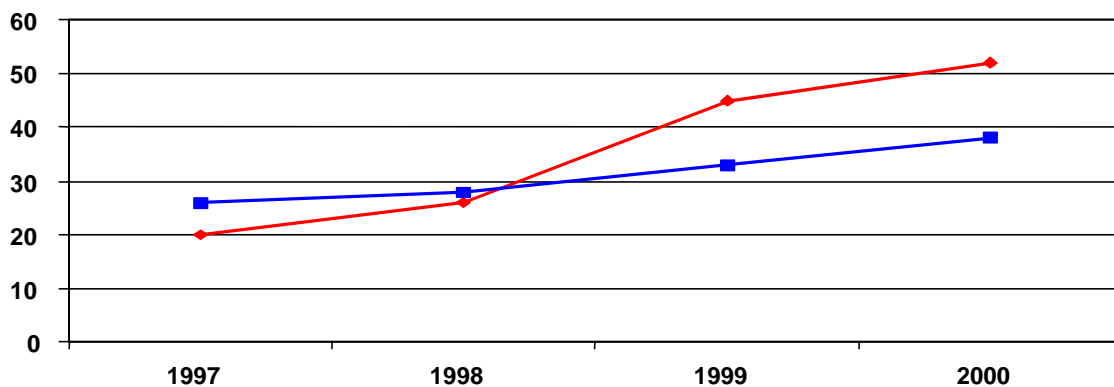
The overall trend in the percent of American Indian dropouts between 1995 and 2001 was down, from 24.4 percent in 1995 to 13.8 percent in 2001. There was an impressive reduction in dropouts between 1997 and 1998—from 22.7 percent to 12.2 percent. Since 1998 the rate of American Indian dropouts has gone up from 12.2 percent to 13.8 percent in 2001. (See Figure 71.)

Figure 71 - Minneapolis Public Schools American Indian Student Dropouts as a Percentage of Enrollment, 1995-2001



The trends in the percent of American Indian students who passed the Minnesota Basic Standards Test (MBST) for reading and math has been impressive. Between 1997 and 2000, the number of American Indian students who passed MBST for reading grew each year from 20 percent in 1997 to 52 percent in 2000. Similarly for math the percentage of American Indian students who passed increased each year from 26 percent in 1997 to 38 percent in 2000. (See Figure 72.)

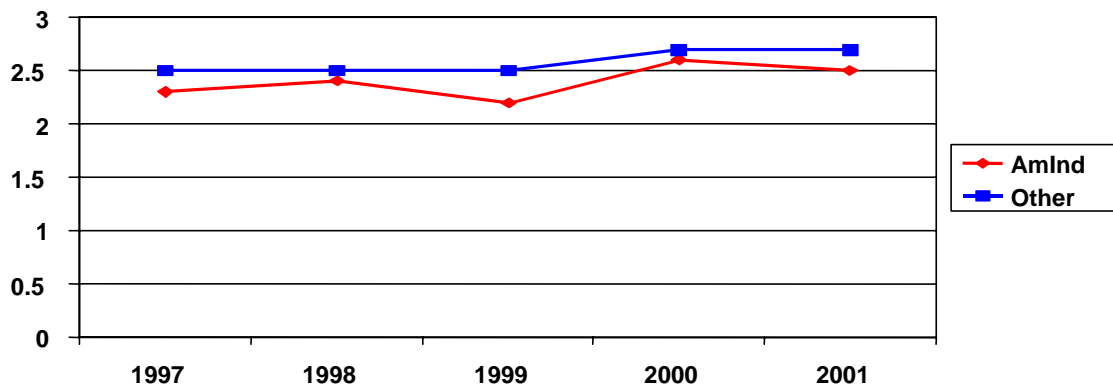
Figure 72 - Percent of American Indian Students Passing the Minnesota Basic Standards Test for Reading, 1997-2000



United Indian Health Services (UIHS). Available education data for American Indian students in the Del Norte County, California, School District who use the health services of the UIHS included annual grade-point averages; percent of American Indian high school graduates; and the rate of dropouts, participation in extracurricular activities, suspensions, and referrals for expulsions.

Between 1997 and 2001, there was modest increase in annual grade-point averages of American Indian students. In 1997 the grade-point average of Indian students was 2.3 on a 4.0 scale. It rose to a high during this period of 2.6 in 2000 and dropped slightly to 2.5 in 2001. (See Figure 73.)

Figure 73 - Annual Grade Point Averages of American Indian and Other Students, 1997-2001
United Indian Health Services, Inc.
Del Norte County, CA, School District



The overall trend in the percent of American Indian high school graduates from 1996 to 2001 was up. In 1996 the graduation rate was 57.1 percent; it reached a high during this period of 78.6 percent in 1999, dropping to 65 percent in 2000 and then rising again to 71.4 percent the following year. As shown in Figure 74, the graduation rate of American Indian students from 1996 to 2001

was about 15 to 20 percent less than that of other students, except for 1999 when the American Indian graduation rate was slightly higher than that of other students. The next year the American Indian graduation rate dropped from almost 79 percent to 65 percent, rising in 2001 to 71.4 percent.

Figure 74 - Percent of American Indian and Other Students Graduated, 1996-2001
 United Indian Health Services, Inc.
 Del Norte County, CA, School District

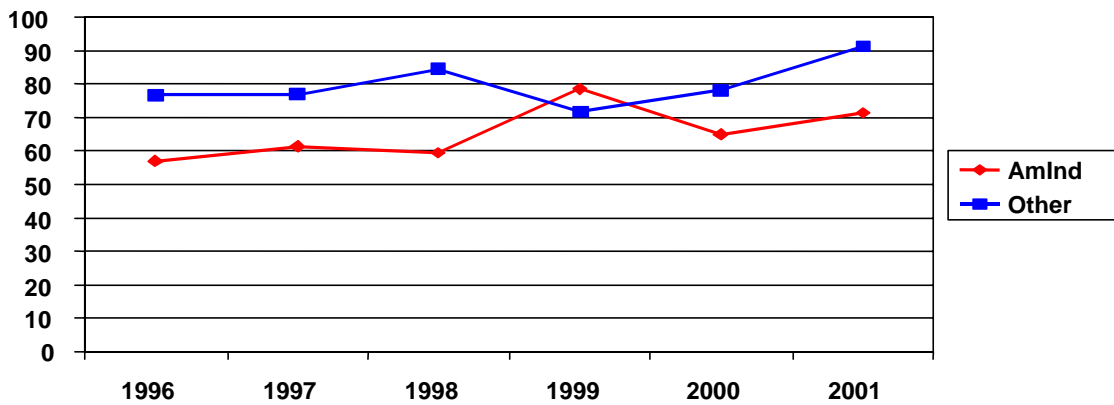
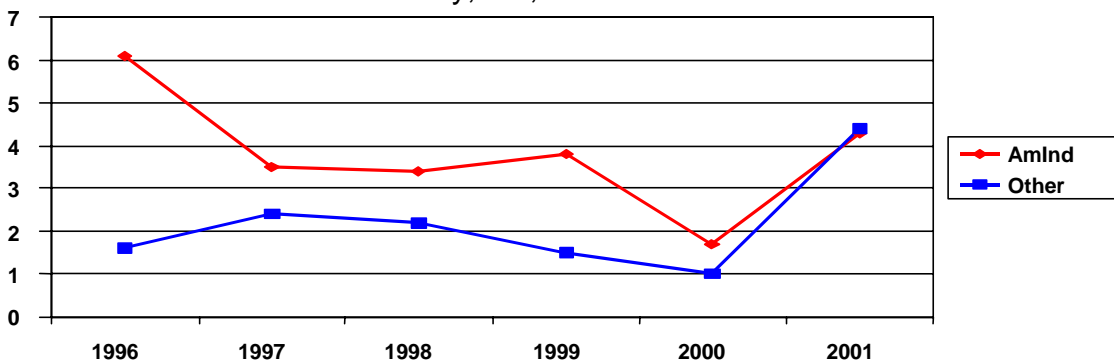


Figure 75 - Percent of American Indian and Other Student Dropouts, 1996-2001
 United Indian Health Services, Inc.
 Del Norte County, CA, School District



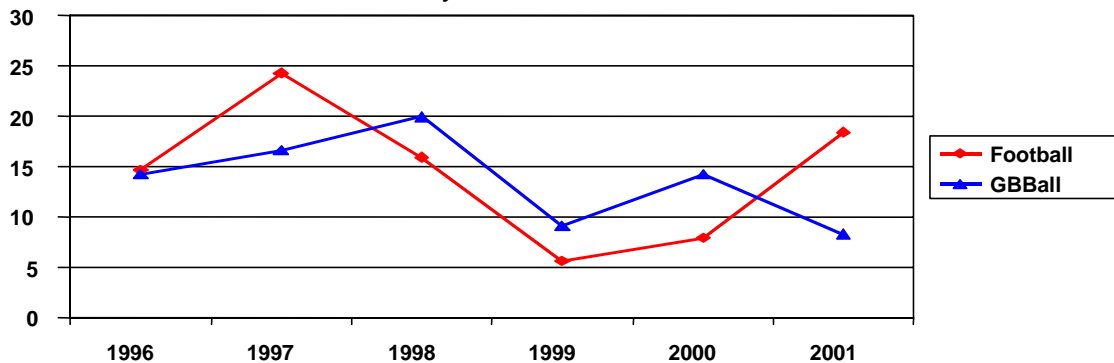
As shown in Figure 75, the overall trend in the dropout rate of American Indian students between 1996 and 2001 has been down—from a high of 6.1

percent in 1996 to a low of 1.7 percent in 2000. However, the following year the rate rose to 4.3 percent.

American Indian student participation in extracurricular sports, both football and girls basketball, has varied from year-to-year between 1996 and 2001. Overall, the trend in football participation went up in 1997 and then dropped from a high of 24.3 percent to a low of 5.6 percent in 1999. Since then the rate increased to 7.9 percent in 2000 and to 18.4 percent in 2001.

The overall trend in participation in girl's basketball has been down from 14.3 percent in 1996 to 8.3 percent in 2001. In between, the rate of participation fluctuated from a high of 20 percent in 1998, to 9.1 percent in 1999 to 14.3 percent in 2000. (See Figure 76.)

Figure 76 - American Indian Participation in Extracurricular Sports Activities, 1996-2001
United Indian Health Services, Inc.
Del Norte County, CA, School District



The rate of suspension for American Indian students between 1998 and 2001 rose to a high of 29.7 percent in 1999, dropping since then to 20.8 percent in 2000 and 19.5 percent in 2001. (See Figure 77.) The trend in the percent of American Indian students referred for expulsion was flat between 1996 and 1999, ranging between 17 and 19 percent. The rate dropped from about 19 percent in

1999 to about 8 percent in 2000. However, the rate skyrocketed to over 30 percent in 2001. (See Figure 78.)

Figure 77 - Percentage of American Indian Student Suspensions, 1998-2001
United Indian Health Services, Inc.
Del Norte County, CA, School District

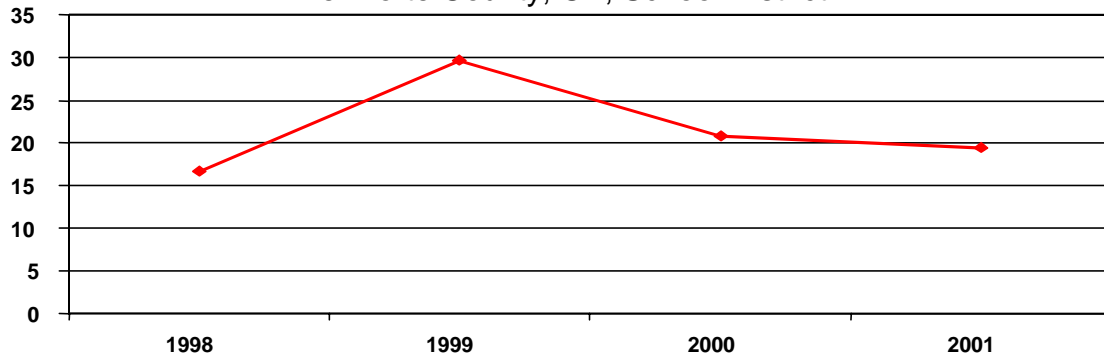
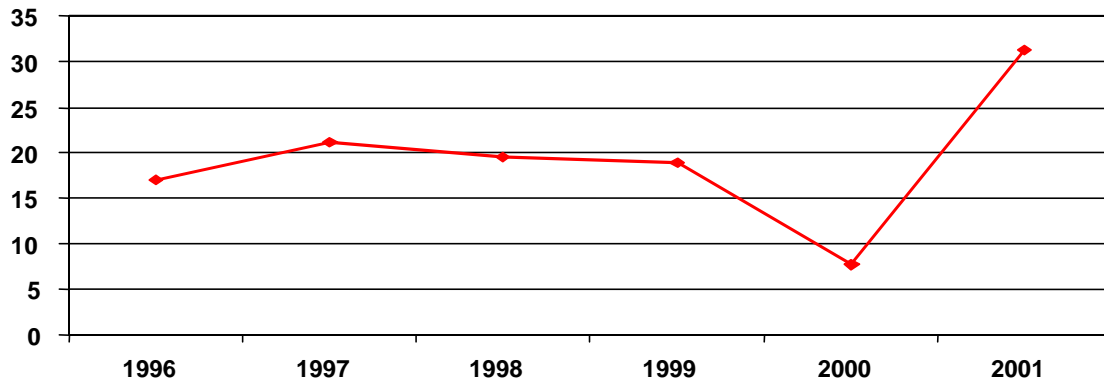


Figure 78 - Percentages of American Indian Students Referred for Expulsion, 1996
United Indian Health Services, Inc.
Del Norte County, CA, School District



HEALTH DATA

Health data were gathered from six sites. These included the Warm Springs Reservation, the Salish-Kootenai Reservation, United Indian Health Services, the Norton Sound Corporation, Northwest New Mexico Fighting Back, and the Seattle Indian Health Board.

It required an arduous series of efforts to secure permission from the first four sites listed above and from the Indian Health Service to view outpatient and hospital admissions data for the period 1995 to 2001. Once trends were calculated, it became clear that all trends were on the upswing; that is, the number of outpatient visits and hospital admissions for alcohol- and drug-related diagnoses grew, in some cases dramatically, during the period of the Healthy Nations Initiative.

In addition, health data were also gathered from the Seattle Indian Health Board and from the NW New Mexico Fighting Back program in Gallup, NM.

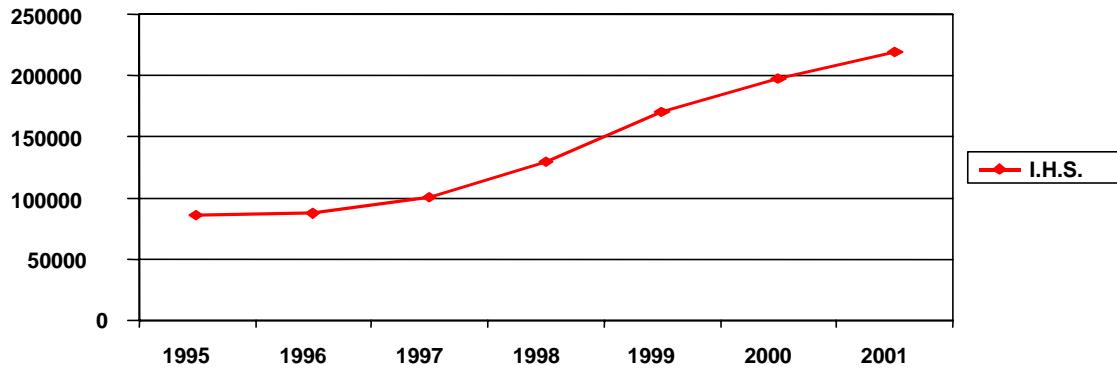
Indian Health Service patient care statistics are derived from different reporting systems. It is sufficient to say that the sources of Indian Health Service patient care information are its direct and contract care system for both inpatient and ambulatory care. All data are collected daily, with one record per hospital admission or ambulatory medical visit. The trend data viewed for this evaluation report were prepared from the National Patient Information Reporting System (NPIRS) by the Information Technology Support Center (ITSC), Albuquerque, NM. Hospitalizations and outpatient visits included inpatient visits and outpatient

visits from both the direct and contract health care delivery systems. Alcohol and drug diagnoses were comprised of the following:

- Visits with diagnoses related to alcohol present in any of nine diagnoses codes and or re-coded fields;
- Visits with the external cause of injury related to alcohol in any of nine causes of injury fields;
- Visits with the cause of diagnoses related to alcohol in any of the nine causes of diagnoses fields;
- Visits with diagnoses related to drugs present in any of nine diagnoses codes and/or re-coded field;
- Visits with the external cause of injury related to drugs.

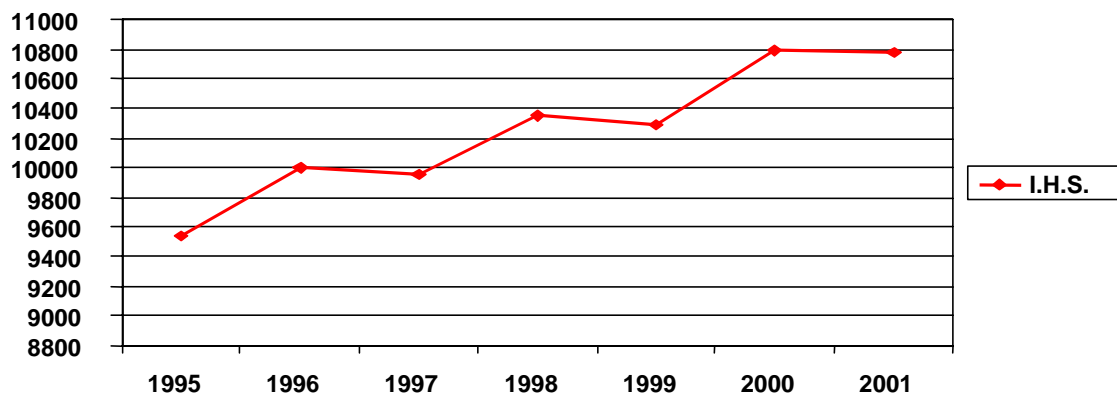
In 1995 there were 85,733 alcohol and drug outpatient visits for the entire Indian Health Service system. By 2001 there were 219,103 outpatient visits. From the 1995 level, the number of outpatient visits for alcohol and drug diagnoses grew almost two-and-one-half times. The trend shows steady growth over the period of interest. From 2000 to 2001 the number of outpatient visits grew from 197,477 visits to 219,103 visits. (See Figure 79.)

Figure 79 - Indian Health Service Alcohol and Drug Outpatient Visits, 1995-2000



Alcohol and drug hospitalizations also rose from 1995 to 2001, although at a much more modest pace. In 1996 there were 9,539 hospitalizations with alcohol and drug diagnoses. Over the period 1995 to 2001, the trend increased to 10,791 hospitalizations in 2000 before falling to 10,780 in 2001. (See Figure 80.)

Figure 80 - Indian Health Service Alcohol and Drug Hospital Admissions, 1995-2001



Warm Springs Reservation. The trend in alcohol and drug outpatient visits at the Warm Springs Reservation for the period 1995 to 2001 grew each year, although the rate of growth was much slower after 1999. (See Figure 81.) There were no alcohol or drug hospitalizations during the period of interest. In the Portland Area Indian Health Service, the organizational region in which the Warm Springs Reservation is located, the number of alcohol- and drug-related outpatient visits doubled between 1995 and 2001—from 9,573 to 20,649. The trend flattened between 1997 and 1999, but began rising again thereafter. (See Figure 82.) The number of Portland Area Indian Health Service alcohol and drug hospitalizations also grew during the period of interest. In 1995 there were 143 alcohol and drug hospitalizations. The trend was up through 1999, when there were 235 hospitalizations. The trend thereafter fell to 227 hospitalizations in 2000 and to 206 hospitalizations in 2001. (See Figure 83.)

Figure 81 - Warm Springs Reservation
Alcohol and Drug Outpatient Visits, 1995-2001

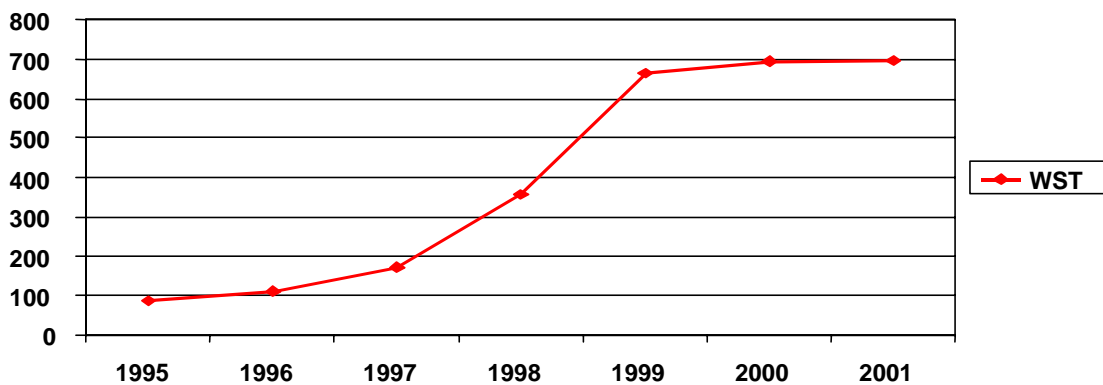


Figure 82 - Alcohol and Drug Outpatient Visits
Portland Area Indian Health Service, 1995-2001

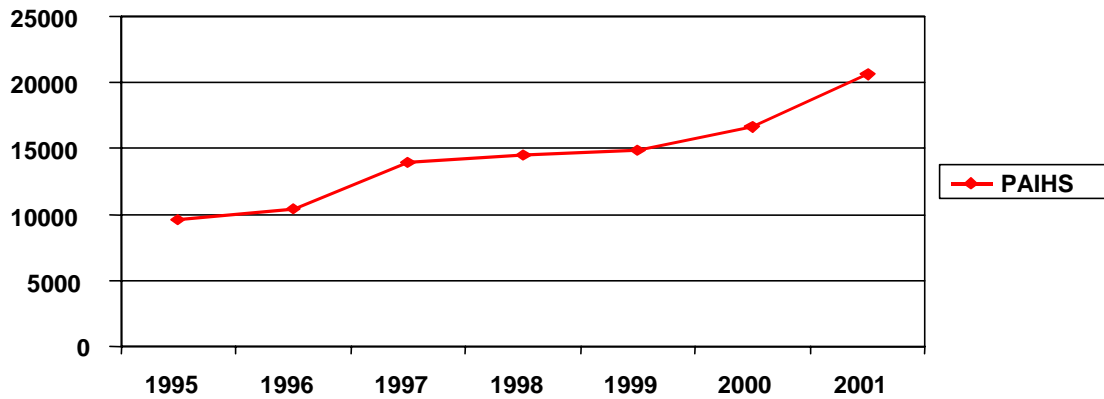
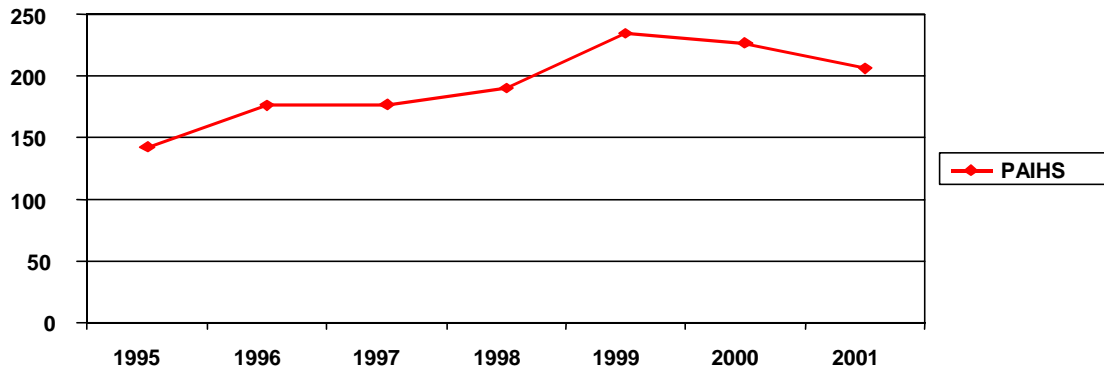
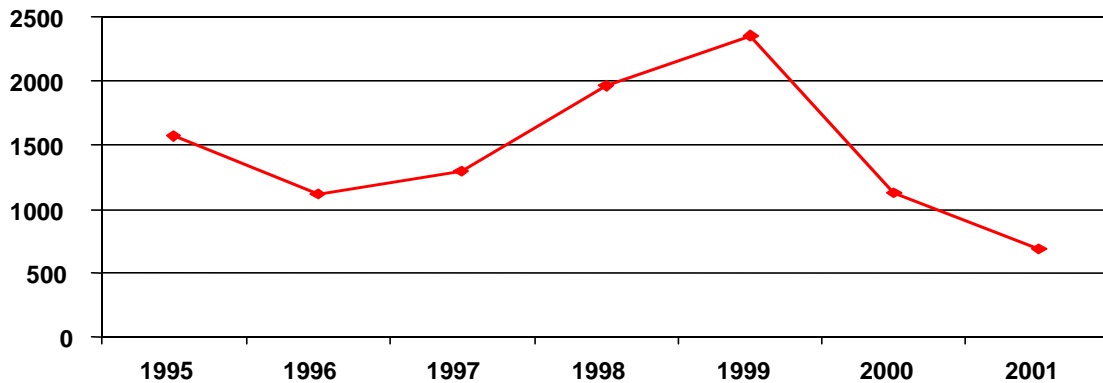


Figure 83 - Alcohol and Drug Hospital Admissions
Portland Area Indian Health Service, 1995-2001



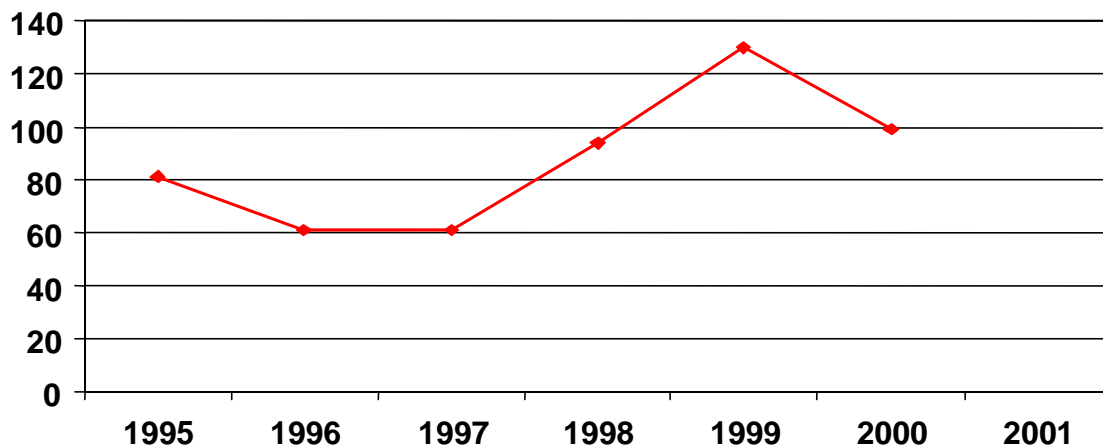
Salish-Kootenai Reservation. At the Salish-Kootenai Reservation, the trend in the number of alcohol and drug outpatient visits rose from 1,569 visits in 1995 to 2,360 outpatient visits in 1999. The trend then fell to less than one-half of what it was in 1995. By 2001 the number of alcohol- and drug-related outpatient visits had fallen to 688 visits. (See Figure 84.)

Figure 84 - Salish-Kootenai Reservation
Alcohol and Drug Outpatient Visits, 1995-2001



The overall trend in alcohol- and drug-related hospitalizations at the Salish-Kootenai Reservation was down dramatically; by 2001 there were no alcohol- or drug-related hospitalizations recorded. At the beginning of the trend period, there were 81 alcohol- and drug-related hospitalizations. The high point for the trend period was 130 alcohol and drug hospitalizations in 1999. In 2000 the number fell to 99, and then in 2001 it fell to zero. (See Figure 85.) The explanation for this decline will be discussed later.

Figure 85 -Salish-Kootenai Reservation
Alcohol and Drug Hospital Admissions, 1995-2001



In the Billings Area Indian Health Service, the Indian Health Service organizational region in which the Salish-Kootenai Reservation is located, the trend in the number of alcohol- and drug-related outpatient visits was up during the late 1990s, having more than doubled over the trend period. In 1995 there were 6,406 alcohol- and drug-related outpatient visits in the Billings area. By 2001 the number had reached 14,501. (See Figure 86.) The trend in alcohol- and drug-related hospitalizations was generally flat between 1995 and 2001, with a slight decline between 2000 and 2001. (See Figure 87.)

Figure 86 - Billings Area Indian Health Service Alcohol and Drug Outpatient Visits, 1995-2001

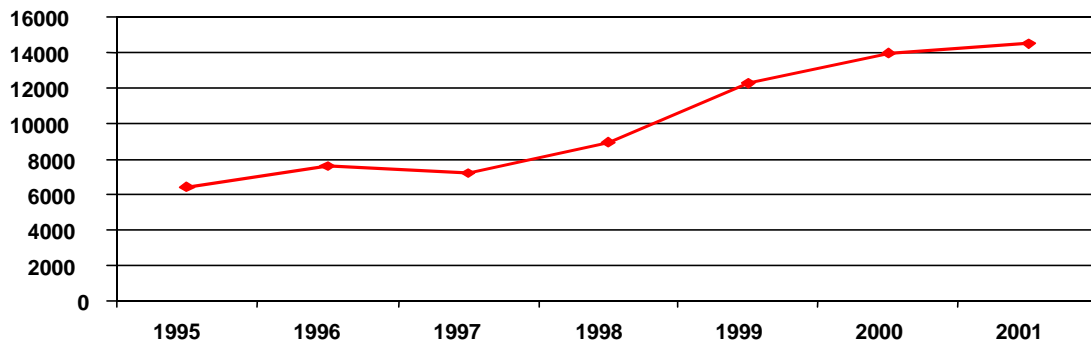
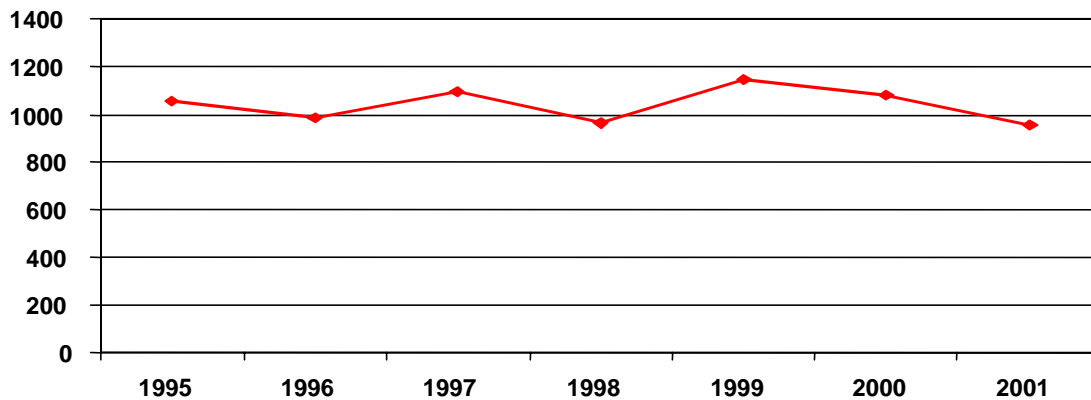


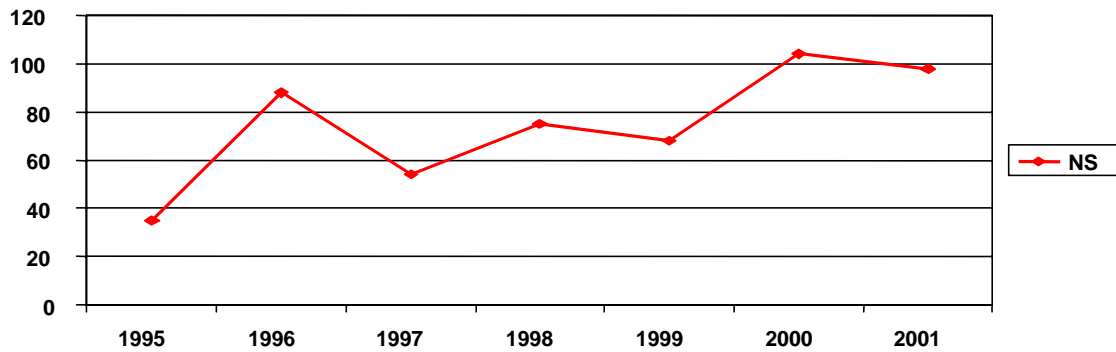
Figure 87 - Billings Area Indian Health Service Alcohol and Drug Hospital Admissions, 1995-2001



Norton Sound Health Corporation. Because of its remote location (in and around Nome, AK) and because up until about 2001 there was no available ambulatory health service for alcohol- or drug-related health conditions, all alcohol- and drug-related diagnoses were referred to direct care or contract care hospitals.

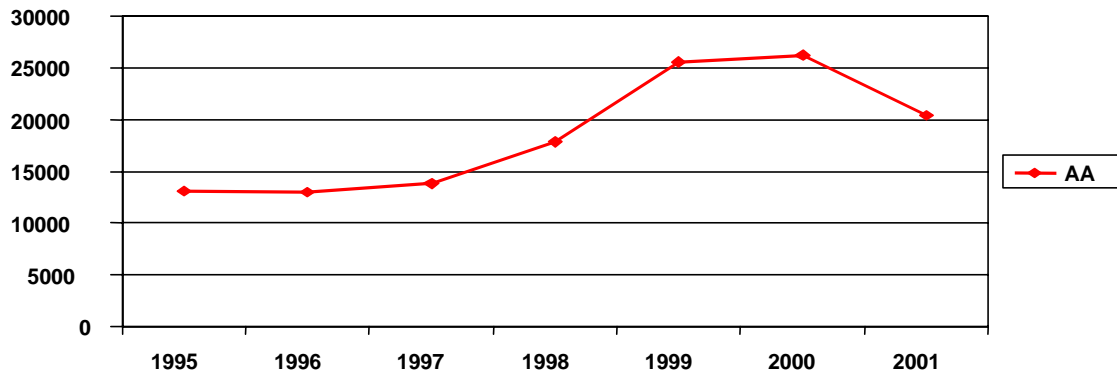
During the trend period (1995 to 2001), alcohol- and drug-related hospitalizations grew from 35 hospitalizations in 1995 to 104 in 2000, falling the year after to 98 hospitalizations. (See Figure 88.)

Figure 88 - Norton Sound Alcohol and Drug Hospital Admissions, 1995-2001



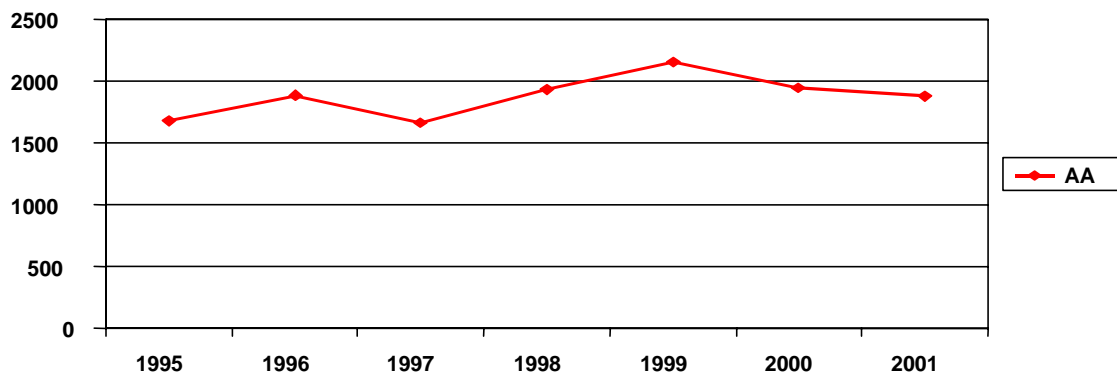
In the Alaska Area Indian Health Service, the organizational region in which the Norton Sound Health Corporation is located, alcohol- and drug-related hospitalizations grew from 1,681 hospitalizations in 1995 to a high of 2,157 in 1999. The trend fell the following two years to 1,907 hospitalizations in 2000 and 1,877 in 2001. (See Figure 89.)

Figure 89 - Alaska Area Indian Health Service Alcohol and Drug Outpatient Visits, 1995-2001



The number of alcohol- and drug-related outpatient visits in the Alaska Area Indian Health Service grew from 13,108 visits in 1995 to a high, during the trend period, of 26,187 visits in 2000. The number of alcohol- and drug-related outpatient visits fell in 2001 to 20,423 visits. (See Figure 90.)

Figure 90 - Alaska Area Indian Health Service Alcohol and Drug Hospital Admissions, 1995-2001



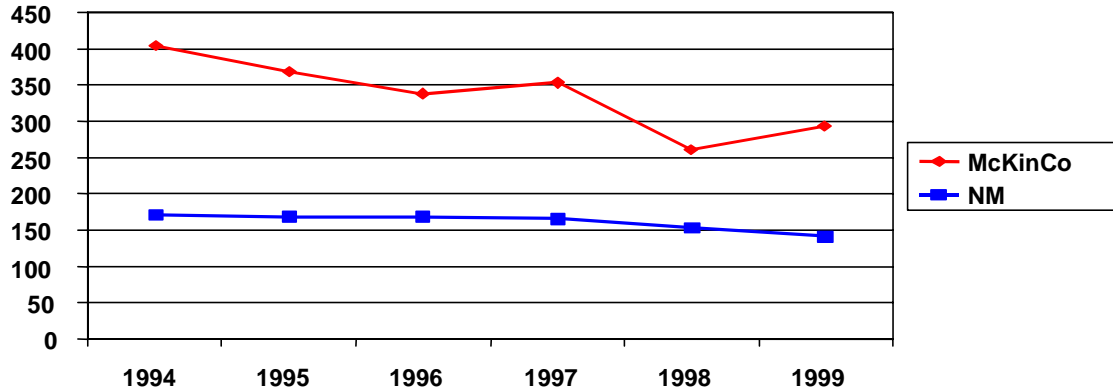
NW New Mexico Fighting Back. Health information for the NW New Mexico Fighting Back program was collected from sources other than the Indian Health Service. Those sources include the New Mexico Department of Health, Bureau of Vital Records and Health Statistics; the New Mexico Health Policy

Commission; and the Division of Government Research at the University of New Mexico. As noted earlier, information for the NW New Mexico Fighting Back program is not specific to American Indians. Available information includes alcohol-induced inpatient discharges for non-federal New Mexico hospitals for the state of New Mexico and McKinley County between 1991 and 1999; annual mortality rates for motor vehicle accidents for the state of New Mexico and McKinley County, 1974 to 1999; and alcohol-related fatal or injury traffic crash rates for the state of New Mexico and McKinley County, 1982 to 1999.

The overall trend in alcohol-induced inpatient admissions from 1994 to 1999 in McKinley County, NM, was down from 404 hospitalizations per 100,000 population at the beginning of the trend period to 294 hospitalizations per 100,000 population at the end of the trend period. In between, 1998 experienced the lowest rate. So, while the overall trend has been down, it has started to rise since 1998. For the state of New Mexico, the trend in alcohol-induced hospitalizations per 100,000 population has been down although not as markedly as that for McKinley County. The overall trend since 1994 has declined steadily each year—from 171 hospitalizations per 100,000 population to 141 in 1999.

(See Figure 91.)

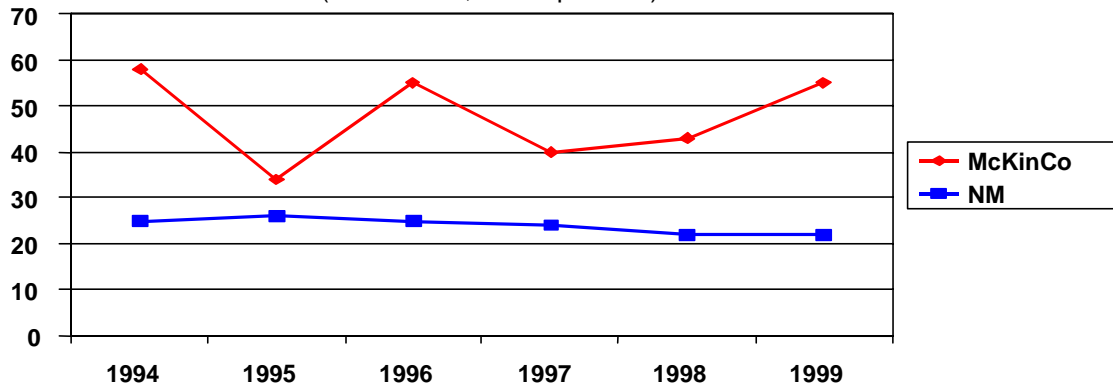
Figure 91 - Alcohol-Related Hospitalizations,
 Nonfederal New Mexico Hospitals, McKinley County
 and New Mexico, 1994-1999
 (Discharges/100,000 Population)



The overall trends in annual mortality rates for motor vehicle accidents in McKinley County, NM, and for the state of New Mexico did not change very much from 1994 to 1999. For the state of New Mexico, the trend was fairly smooth, declining slightly from 25 deaths per 100,000 population in 1994 to 22 deaths per 100,000 in 1999. For McKinley County, the overall trend was not smooth, rising and falling throughout the trend period. The lowest annual mortality rate was in 1995 when there were 34 deaths per 100,000 population due to motor vehicle accidents. The highest rate for the period was in 1994 when there were 58 deaths per 100,000 population. Although the overall trend has been down by three fatalities, the trend rose during the last five years of the trend period. (See Figure 92.)

**Figure 92 - NW New Mexico Fighting Back
Motor Vehicle Mortality Rates, McKinley County
and New Mexico, 1994-1999**

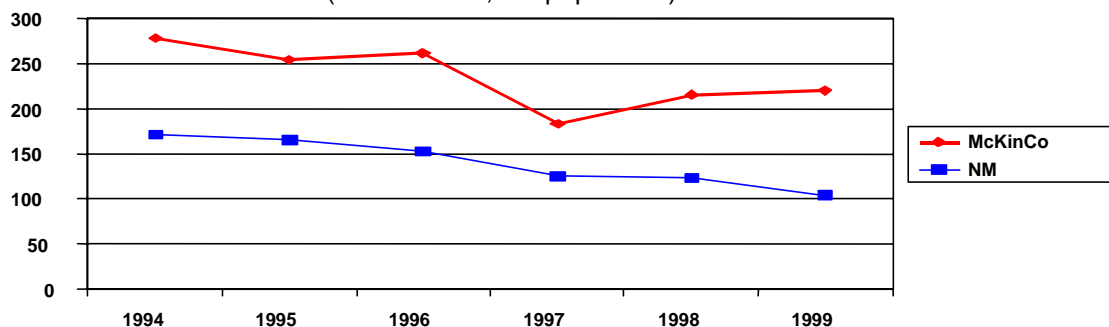
(Deaths/100,000 Population)



The overall trends in alcohol-related fatal or injury traffic crash rates for McKinley County and the state of New Mexico have been down. However, as with the trend in motor vehicle accidents in McKinley County, the County has seen an increased rate in alcohol-related fatal or injury traffic crashes in recent years.

For the state of New Mexico, the overall trend has been generally smooth, falling from an alcohol-related fatal or injury crash rate of 171 per 100,000 population to 104 per 100,000. The McKinley County trend was not so smooth but, nevertheless, fell from a high of 278 per 100,000 population to a low of 183 per 100,000 during the trend period. Unfortunately, since 1997 the trend has gone up. (See Figure 93.)

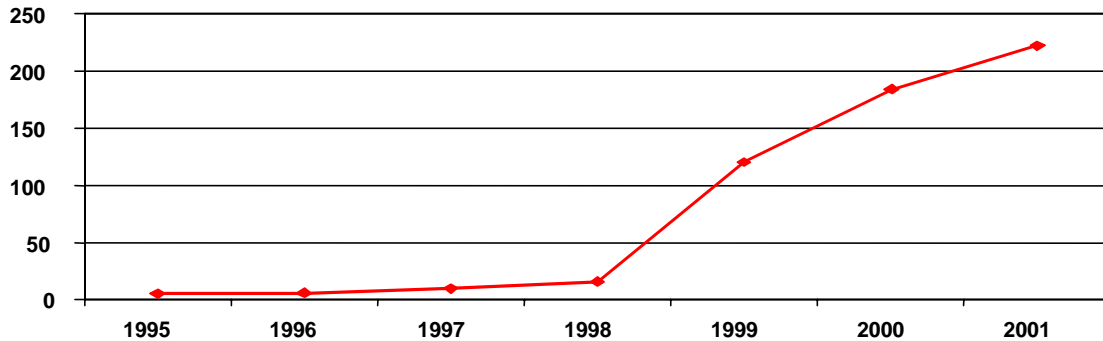
**Figure 93 - NW New Mexico Fighting Back
Alcohol-Related Fatal or Injury Traffic Crash Rate,
McKinley County and New Mexico, 1994-1999**
(Crashes/100,000 population)



Seattle Indian Health Board. Health information from the Seattle Indian Health Board included substance-abuse outpatient visits and Thunderbird Substance Abuse Treatment Center admissions for the period 1995 to 2002. In addition, health trend information was also available for the proportion of adolescent admissions to the Thunderbird Treatment Center from 1998 to 2002.

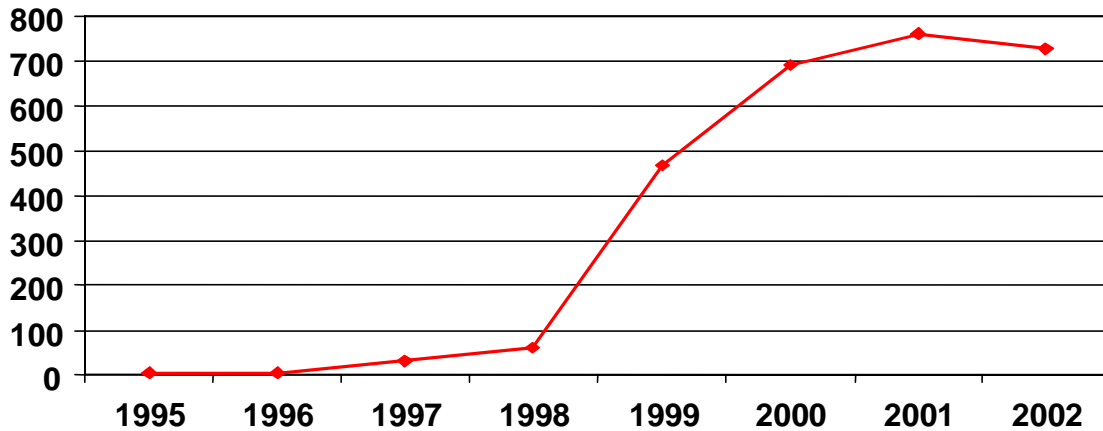
All trends were up. In fact, for substance-abuse outpatient visits and for Thunderbird Treatment Center admissions, the trends were up considerably. Between 1995 and 1998, the number of substance-abuse outpatient visits grew from 5 to 16. In the following three years, the number of substance-abuse outpatient visits grew from 120 to 184 to 222, respectively. (See Figure 94.)

Figure 94 - Seattle Indian Health Board
Substance-Abuse Outpatient Visits, 1995-2001



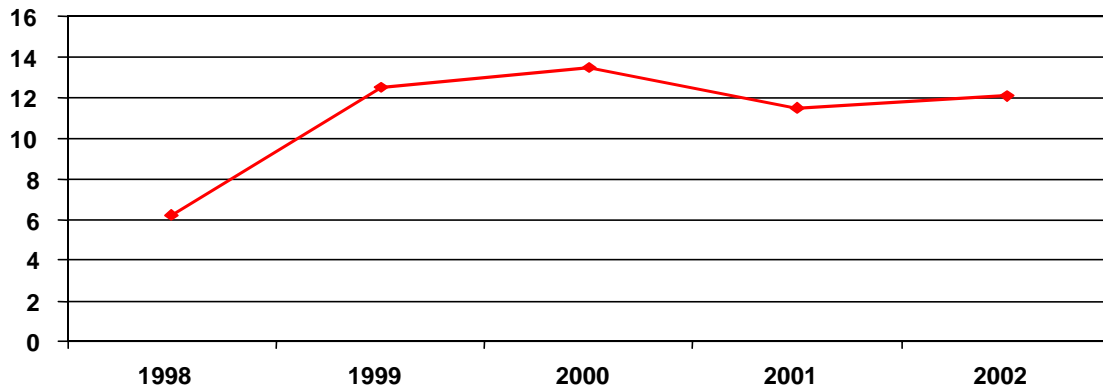
The growth in number of admissions to the Thunderbird Treatment Center was equally great. Starting in 1998 the number of admissions grew from 61 to 469 in 1999. For the rest of the trend period, the number of annual admissions to the Thunderbird Treatment Center was 691, 761, and 727, respectively. (See Figure 95.)

Figure 95 - Seattle Indian Health Board
Thunderbird Substance Abuse Treatment
Center Admissions, 1995-2002



From 1998 to 2002, the proportion of adolescent admissions to the Thunderbird Treatment Center ranged from 6.25 percent to 13.5 percent. Over the trend period, the average proportion of adolescent admissions was slightly over 11 percent and the overall trend was up. (See Figure 96.)

Figure 96 - Seattle Indian Health Board
Percent of Adolescent Admissions
Thunderbird Treatment Center, 1998-2002



United Indian Health Services, Inc. At the UIHS, located in northern California (almost in Oregon), the trends of all three health-related social indicators were up for the period 1995 to 2001. These indicators included alcohol and drug outpatient visits for UIHS and for the California Area Indian Health Service. Also available were data for alcohol and drug hospital admissions for the California Area Indian Health Service.

Alcohol and drug outpatient visits at UIHS grew dramatically from 377 visits in 1995 to almost 3,000 visits in 2001. During the same period alcohol and outpatient visits doubled in the California Area Indian Health Service, growing from 8,148 visits in 1995 to over 16,000 visits in 2001. The numbers of alcohol and drug hospital admissions for the California Area Indian Health Service were

small, ranging from a low of five admissions in 1996 to a high of nineteen in 1999. Only limited hospital and other inpatient data were available from UIHS and are not here reported. (See Figures 97, 98, and 99.)

Figure 97 - Alcohol and Drug Outpatient Visits
United Indian Health Services, Inc, 1995-2001

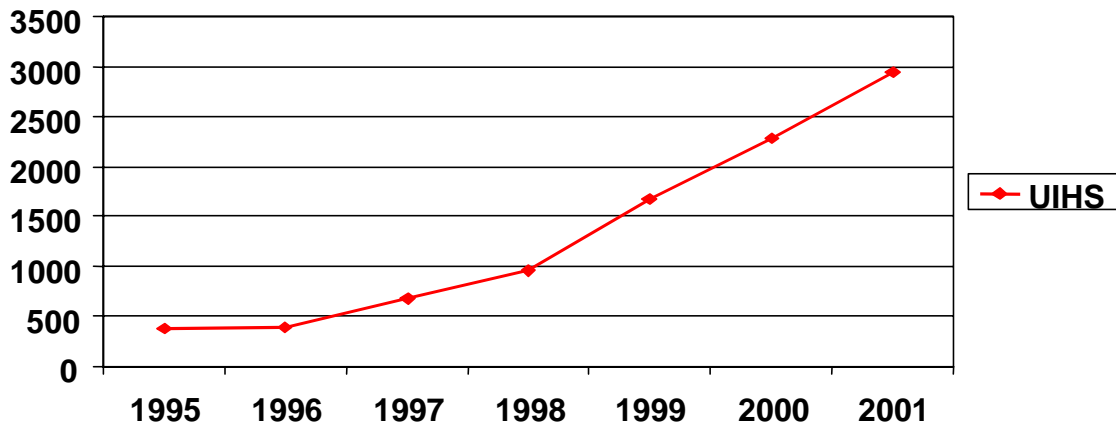


Figure 98 - Alcohol and Drug Outpatient Visits
California Area Indian Health Service, 1995-2001

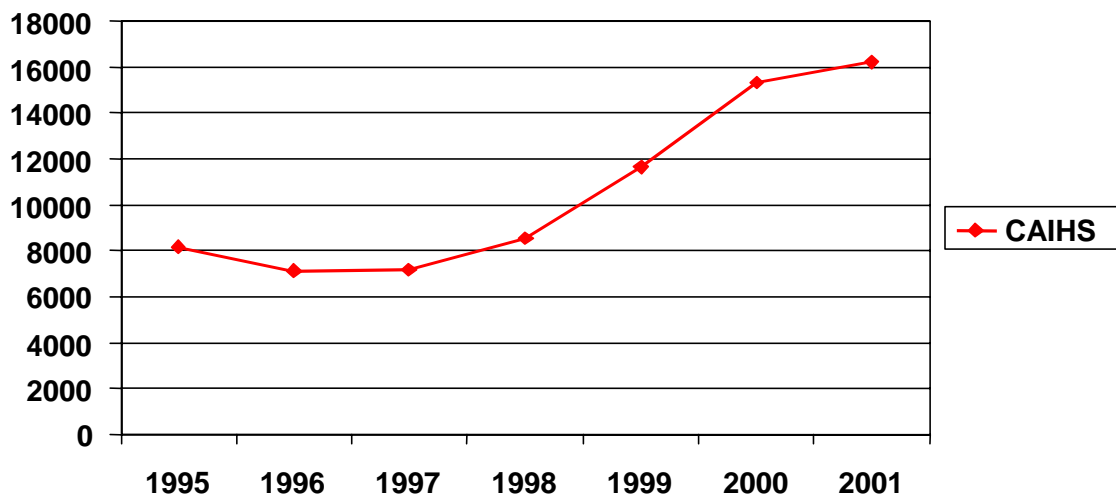
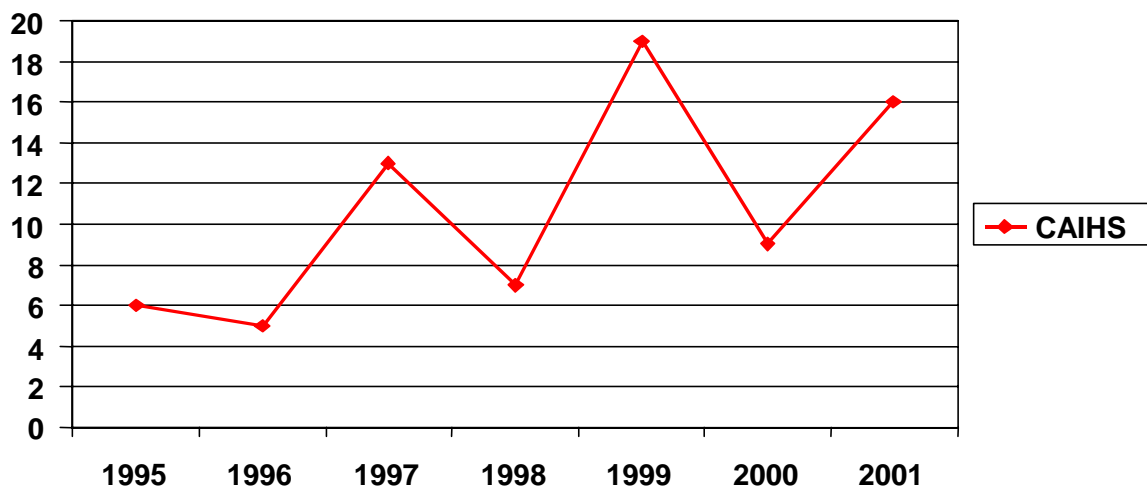


Figure 99 - Alcohol and Drug Hospital Admissions
California Area Indian Health Service, 1995-2001



Summary

On its face, assessment of social indicator trends collected and presented herein for the HNIE do not support the notion that an intervention, such as the Healthy Nations Program—or any other intervention—has had a positive influence on substance abuse among American Indians and Alaska Natives. The reason for this is that many of the trends we would like to see go down—DUI arrests, substance-abuse outpatient visits, school suspensions, and self-reported use of alcohol and illicit drugs—are, in fact, going up. Conversely, those trends we would like to see go up, such as grade-point averages and graduation rates, were either rising very modestly or were going down.

As presented, some social indicator trends seem to be going in the right direction. For example, on the Salish-Kootenai Reservation both alcohol and

drug-related outpatient visits and alcohol- and drug-related hospitalizations have been going down, especially since 1999. However, the information available is suspect because of a major disruption in the collection of health data that occurred during the late 1990s. Similarly, the YRBS-BIA health survey information collected shows clear reductions in the numbers of Indian students who report current use of alcohol, current marijuana use, and lifetime inhalant use. Yet, these data too must be critically assessed in light of the fact that a zero-tolerance policy was implemented at BIA schools during the 1990s. The net effect of this policy was that Indian youth with higher levels of substance use were less likely to be BIA school students.

Also, the seemingly good progress that took place on Warm Springs Reservation regarding law enforcement trends, such as adults and juveniles in detoxification, must take into account that there have been periods during the 1990s when there was inadequate staffing. And, it was because of inadequate staffing that lower numbers of adults and juveniles received detoxification care.

Nevertheless, there are a few bright spots. The Montana YRBS shows definite reductions in lifetime inhalant use both on reservations and in urban areas. On the Salish-Kootenai Reservation, adult substance-abuse-related arrests are down. On Warm Springs Reservation, both adult and juvenile DUI arrests have gone down since 1995.

Perhaps the most encouraging information has come from social indicator information from schools. For example, at Warm Springs Reservation, the improvement in the numbers of elementary school children meeting or exceeding

proficiency levels on the Oregon Statewide Assessment of reading and math performance has been remarkable. This achievement is directly related to the Healthy Nations resources provided to the schools and to parents for the purpose of improving their children's self-esteem and self-confidence.

As a result of the inconclusive nature of the data, I think it fairly obvious that the Healthy Nations Program required and deserved a more rigorous evaluation component. Certainly, I think, a more rigorous evaluation component, developed and implemented before the program began, would have served both the RWJ Foundation and American Indians and Alaska Native sites much better than the retrospective methods that were actually utilized.

