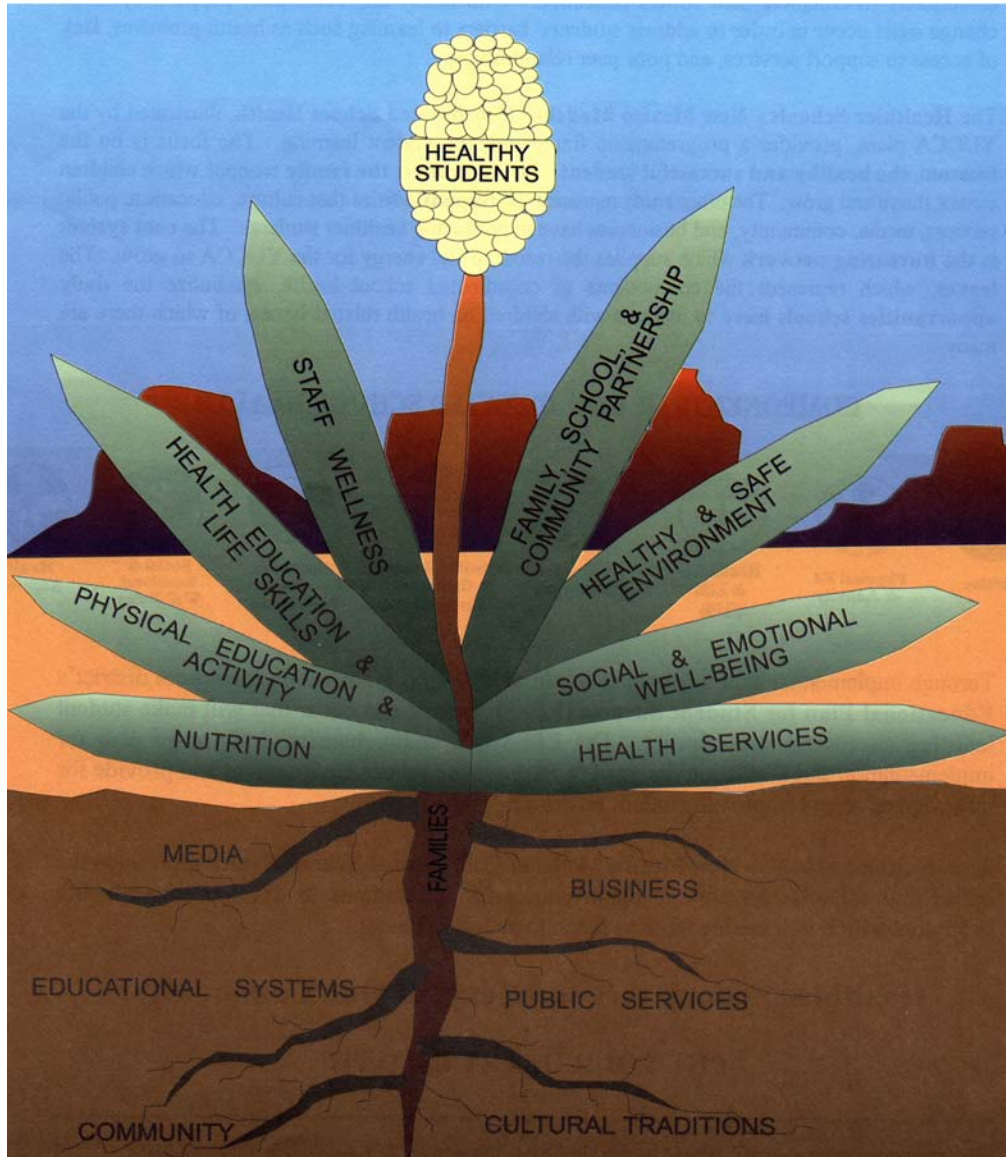


NEW MEXICO 2001 YOUTH RISK AND RESILIENCY SURVEY



REPORT OF STATE RESULTS

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A special thanks goes to New Mexico public schools and New Mexico students for their support in making the YRRS a success!

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EXECUTIVE SUMMARY

In the fall of 2001, high schools from 62 school districts participated in the first New Mexico Youth Risk and Resiliency Survey (YRRS). The YRRS contains questions that address resiliency factors chosen from established surveys as well as the six health risk-behavior categories which are known to cause premature morbidity and mortality among youth as established by the Centers for Disease Control and Prevention and used in the Youth Risk Behavior Survey (YRBS).

RISK BEHAVIORS

Intentional and unintentional injuries

- An overwhelming majority—93%—of students responding did not skip school due to feeling unsafe.
- 83% report wearing their seatbelt most of the time or always, up from 76% in 1999.
- Weapon carrying is the same (25%) as 1999, but gun carrying is down—8%, down from 12% in 1999.

Tobacco use

- 76% of those who had never had a whole cigarette said that they would definitely not smoke in the next year.
- 42% of all respondents say they have never smoked.
- 75% did not smoke in the 30 days prior to the survey. This is an improvement from 1999 when 62% reported not smoking in the previous 30 days.

Alcohol and other drug use

- 49% of all respondents said that they had had at least one drink of alcohol on at least one day out of the previous 30.
- Only 26% of all respondents said that they had never had a drink of alcohol.
- 27% of all respondents said that they had used marijuana on at least one day out of the previous 30.
- 48% of all respondents reported never trying marijuana.

Sexual behaviors that result in and contribute to STDs, including HIV, and unintended pregnancies

- 56% report never having had sex.
- 17% report not using a condom the last time they had sex.

Inadequate dietary behaviors and physical activity that result in health problems and illness

- 85% drank milk or ate cheese or yogurt the day before.
- 69% said they exercised hard for two or more days out of the seven.

RESILIENCY AREAS

Caring Relationships and Support

- 84% say they have a parent or some other adult in their home that is interested in their school work.
- $\frac{3}{4}$ say they have a parent or some other adult in their home that talks with them about their problems and listens to them when they have something to say.

Boundaries and Expectations

- Although 74% perceive that adults in their community think it would be wrong for kids their age to smoke cigarettes, and 89% perceive their parents think it would be wrong, only 62% think it would be wrong for themselves.
- 89% say there is a parent or some other adult in their home that expects them to follow the rules.

Meaningful Participation and Constructive Use of Time

- 58% say they are involved in sports, clubs, and other activities in school.
- 1/3 say they volunteer time, help other people, or engage in community service activities.

Commitment to Learning and Positive Identity

- 81% say they try hard to do their best work at school.
- 87% say they plan to go to college or some other school after high school.

Social Competencies and Life Skills

- 85% say that it is important to think before one acts.

Comments on findings: This is a simple analysis using descriptive statistics—frequencies and some crosstabs by age, gender, grade, and ethnicity. Only findings that are significant and/or relevant to an issue at the state level are reported. In general, age, grade and sometimes gender were more likely to present interesting findings in the risk behavior questions, and ethnicity (and sometimes gender) was more likely to present interesting findings in the resiliency questions.

This report is a summary of state data. County-level results will be available from the Public Health District offices in which a school district is located. School district results have been provided to participating districts and can only be obtained through direct permission from that participating district.

The survey can be reviewed on-line at www.healthierschools.org.

INTRODUCTION

In the fall of 2001, 62 New Mexico high schools participated in a new survey, the New Mexico Youth Risk and Resiliency Survey (YRRS). This survey is the product of two years of collaboration between the New Mexico State Department of Education (SDE), Department of Health (DOH), community-based organization personnel, school district personnel, and other youth advocates from across our diverse state. This survey was designed in response to desires from various school, agency, and community interests to address positive aspects of their young people that would measure resiliency (also called “assets” or “protective factors”), not just “negative” or risk behaviors. Additionally, districts expressed a need for one surveillance tool that could measure both the risk behaviors and resiliency factors of youth rather than multiple surveys which often took away valuable classroom instruction time. A committee of SDE, DOH and other statewide partners convened to choose assets-type questions from other surveys and to decide which of the core risk questions from the previous Youth Risk Behavior Survey (YRBS) would be retained. The 2001 YRRS was also translated into Spanish to offer a survey that was as inclusive as possible.

Responding to concerns by school district staff that surveys administered during the spring semester had less direct benefit to their population than surveys administered earlier in a school year, the YRRS was scheduled for administration in October of 2001. However, due to the fact that some school districts did not administer the survey until November or December, survey administration was allowed until the winter break.

The results of the YRRS provide a snapshot of the current behaviors and assets of New Mexico’s high school students. This picture will be used by state agencies, school districts, county health councils, and community partners to determine, develop, and sustain programs that best meet the needs of the youth in their communities.

The NM Department of Health uses YRRS data for several indicators in the Vision of Health. This Vision of Health is a blueprint of indicators and collaborative strategies to help make New Mexico a healthier state in which to live and grow. After reviewing New Mexico health data and potential evidence-based interventions, indicators were chosen to guide our path toward the vision. The YRRS provides data for these Vision of Health Indicators: 1) decreasing the driving under the influence prevalence among adolescents, 2) decreasing the smoking prevalence among adolescents, and 3) decreasing the illicit drug use prevalence among adolescents. A future indicator that will be further developed that uses data from YRRS is increasing the percentage of children with positive family and social supports. In addition, many Healthy People 2010 objectives rely on data from surveys such as the YRRS.

Methodology

This year Research & Polling, Inc. (R&P), was hired to do the survey administration. R&P sent letters to all district superintendents inviting their participation. Of the 89 districts in New Mexico, 69 superintendents said that they wanted to participate. With a positive response, the district was asked to provide a list of all 2nd period classrooms in grades 9-12 for all schools in the district. Using a random probability formula (see Appendix A), R&P calculated a sample size and classroom interval that would meet the criteria for district-level

generalizability. School district data were aggregated and weighted for the state-level results reported herein.

Response Rate

Of the 69 districts that said they would participate, 62 returned surveys at varying response rates within their district. The total high school enrollment in fall 2001 was 95,225. The total high school enrollment for the 62 participating districts was 83,971 or 88% of the total state high school population. The desired sample size for these 62 districts was 12,182. 9,122 usable surveys were returned from these districts for a raw response rate of 74%.

Because the school districts self-selected (i.e., the participating districts were not drawn according to a random sample formula), and not all districts in the state participated, and because of varying response rates in the districts, inferences should not be made to the state level. Results pertain to respondents from participating districts and schools only.

As the gridded format of this survey is different from previous surveys, and because in most cases, even where the question is the same, the answer categories are different, the majority of the risk questions are not comparable to previous surveys. Where the questions are similar and there is a noticeable change, comparisons will be made to the 1999 New Mexico Youth Risk Behavior Survey (1999 NM YRBS).

This is the first year that we were able to provide a survey that combined risk and resiliency questions. As with any new survey, trend results can only be established over time and thus will be possible when the same survey has been administered for a second time. (2003 YRRS is scheduled for fall of 2003-2004 school year.) Eventually a middle-school YRRS will also be available thus providing an even more in-depth picture of adolescents.

The data were weighted by district and then aggregated to make state results. The data were not weighted by age, grade, gender, or ethnicity since the basis of the sampling design was stratification by classroom within each district only. The demographic composition of the students taking the 2001 YRRS falls within similar proportions to the student population of the state. There does not appear to be any significant misrepresentation in the demographic categories as listed in the table below.

Demographic category	Proportion 2001 YRRS	Proportion state ¹	Demographic category	Proportion 2001 YRRS	Proportion state
Grade: 9 th	28.0%	30.3%	Ethnicity:		
10 th	25.4%	27.0%	Amer Ind/Nat Amer	10.2%	11.0%
11 th	21.3%	23.0%	Hispanic/Latino	42.5%	50.0%
12 th	24.3%	19.6%	White (Anglo)	31.7%	34.6%
			Black/African Amer	2.5%	2.4%
Gender: Females	53.3%	48.6%	Asian	1.6%	1.1%
Males	46.3%	51.4%	Other	.4%	.8%

¹ From SDE’s Data Collection and Reporting Unit based on fall enrollment figures. All SDE demographic data is available on-line <http://www.sde.state.nm.us/divisions/ais/datacollection/derfactsheets.html>

Healthy People 2010 Leading Health Indicator—Injury and Violence

More than 400 Americans die each day from injuries due primarily to motor vehicle crashes, firearms, poisonings, suffocation, falls, fires, and drowning. The risk of injury is so great that most persons sustain a significant injury at some time during their lives.

Motor vehicle crashes are the most common cause of serious injury. In 1998, there were 15.6 deaths from motor vehicle crashes per 100,000 persons.

Because no other crime is measured as accurately and precisely, homicide is a reliable indicator of all violent crime. In 1998, the murder rate in the United States fell to its lowest level in three decades—6.5 homicides per 100,000 persons.

Impact of Injury and Violence

In 1995, the cost of injury and violence in the United States was estimated at more than \$224 billion per year. These costs include direct medical care and rehabilitation as well as productivity losses to the Nation's workforce. The total societal cost of motor vehicle crashes alone exceeds \$150 billion annually.

Motor Vehicle Crashes

Motor vehicle crashes are often predictable and preventable. Increased use of safety belts and reductions in driving while impaired are two of the most effective means to reduce the risk of death and serious injury of occupants in motor vehicle crashes.

Death rates associated with motor vehicle-traffic injuries are highest in the age group 15 to 24 years. In 1996, teenagers accounted for only 10 percent of the U.S. population but 15 percent of the deaths from motor vehicle crashes. Those aged 75 years and older had the second highest rate of motor vehicle-related deaths.

Nearly 40 percent of traffic fatalities in 1997 were alcohol related. Each year in the United States it is estimated that more than 120 million episodes of impaired driving occur among adults. In 1996, 21 percent of traffic fatalities of children aged 14 years and under involved alcohol; 60 percent of the time the driver of the car in which the child was a passenger was impaired.

The highest intoxication rates in fatal crashes in 1995 were recorded for drivers aged 21 to 24 years. Young drivers who have been arrested for driving while impaired are more than four times as likely to die in future alcohol-related crashes.

Homicides

In 1997, 32,436 individuals died from firearm injuries; of this number, 42 percent were victims of homicide. In 1997, homicide was the third leading cause of death for children aged 5 to 14 years, an increasing trend in childhood violent deaths. In 1996, more than 80 percent of infant homicides were considered to be fatal child abuse.

Many factors that contribute to injuries also are closely associated with violent and abusive behavior, such as low income, discrimination, lack of education, and lack of employment opportunities.

Males are most often the victims and the perpetrators of homicides. African Americans are more than five times as likely as whites to be murdered. There has been a decline in the homicide of intimates, including spouses, partners, boyfriends, and girlfriends, over the past decade, but this problem remains significant.

For more information on Healthy People 2010 objectives visit

<http://www.health.gov/healthypeople/>

http://web.health.gov/healthypeople/Document/html/uih/uih_bw/uih_4.htm#injviol

Healthy People 2010 Leading Health Indicator—Mental Health

Approximately 20 percent of the U.S. population is affected by mental illness during a given year; no one is immune. Of all mental illnesses, depression is the most common disorder. More than 19 million adults in the United States suffer from depression. Major depression is the leading cause of disability and is the cause of more than two-thirds of suicides each year.

In 1997, only 23 percent of adults diagnosed with depression received treatment.

Definition of Mental Health

Mental health is sometimes thought of as simply the absence of a mental illness but is actually much broader. Mental health is a state of successful mental functioning, resulting in productive activities, fulfilling relationships, and the ability to adapt to change and cope with adversity. Mental health is indispensable to personal well-being, family and interpersonal relationships, and one's contribution to society.

Impact of Depression

A person with a depressive disorder often is unable to fulfill the daily responsibilities of being a spouse, partner, or parent. The misunderstanding of mental illness and the associated stigmatization prevent many persons with depression from seeking professional help. Many people will be incapacitated for weeks or months because their depression goes untreated.

Depression is associated with other medical conditions, such as heart disease, cancer, and diabetes as well as anxiety and eating disorders. Depression also has been associated with alcohol and illicit drug abuse. An estimated 8 million persons aged 15 to 54 years had coexisting mental and substance abuse disorders within the past year.

The total estimated direct and indirect cost of mental illness in the United States in 1996 was \$150 billion.

Treatment of Depression

Depression is treatable. Available medications and psychological treatments, alone or in combination, can help 80 percent of those with depression. With adequate treatment, future episodes of depression can be prevented or reduced in severity. Treatment for depression can enable people to return to satisfactory, functioning lives.

Populations With High Rates of Depression

Serious mental illness clearly affects mental health and can affect children, adolescents, adults, and older adults of all ethnic and racial groups, both genders, and people at all educational and income levels.

Adults and older adults have the highest rates of depression. Major depression affects approximately twice as many women as men. Women who are poor, on welfare, less educated, unemployed, and from certain racial or ethnic populations are more likely to experience depression. In addition, depression rates are higher among older adults with coexisting medical conditions. For example, 12 percent of older persons hospitalized for problems such as hip fracture or heart disease are diagnosed with depression. Rates of depression for older persons in nursing homes range from 15 to 25 percent.

For more information on Healthy People 2010 objectives visit

<http://www.health.gov/healthypeople/>

http://web.health.gov/healthypeople/Document/html/uih/uih_bw/uih_4.htm#mentalhealth

PERSONAL SAFETY AND VIOLENCE-RELATED BEHAVIORS

Intentional and unintentional injuries, including suicide

Rationales: These questions measure the frequency with which students are exposed to risks to their safety and risks of violence. Use of seatbelts is estimated to reduce the risk of a fatal motor vehicle injury by 45% and moderate to critical injuries by 50%.¹ Motor vehicle crash injuries are the leading cause of death among youth aged 15-24 in the United States.² Approximately 30% of all motor vehicle crashes that result in injury involve alcohol.³ Firearms markedly elevate the severity of the health consequences of violent behavior.⁴ Firearm-related homicide and firearm-related suicide accounted for 44% and 51%, respectively, of all firearm injury deaths in 1995. Unintentional firearm-related fatalities are a critical problem among children and young adults in the United States.⁵ Physical fighting is an antecedent for many fatal and nonfatal injuries.⁶ Homicide is the second leading cause of death among all youth aged 15-24.⁷ Suicide is third leading cause of death among youth aged 15-24.⁸ The suicide rate for persons aged 15-24 has tripled since 1950; in 1995 it was 13.3 per 100,000.⁹ Forced sex has been associated with suicidal ideation and attempts¹⁰, and alcohol and drug use.¹¹

7. **How often do you wear a seat belt when riding in a car or other vehicle driven by someone else?** 83% report wearing their seatbelt most of the time or always. The percent increases with age and grade: 84% of 12th graders wear their seatbelts regularly, 76% of 9th graders. This is up from 1999 when 76% of all respondents reported wearing a seatbelt always or most of the time; in 1991, it was 59%.

10. **If you wanted to get a firearm (gun or rifle), how quickly could you get it?** 40.5% report being able to get a firearm within 15 minutes to one day. More males (50%) than females (32%) could get a firearm quickly.

Factoid: According to the 1997 Survey of State Prison Inmates, among those possessing a gun, the source of the gun was from -

- a flea market or gun show for fewer than 2%
- a retail store or pawnshop for about 12%
- family, friends, a street buy, or an illegal source for 80%

<http://www.ojp.usdoj.gov/bjs/guns.htm>

11. **Where could you get a firearm if you wanted one?** 25% said they could get a firearm from their home, 18% from a relative or friend, 8% from someone who sells weapons, and 7% from a store or gun show.

12. **The last time you used or handled a firearm, what were you doing?** 41% said hunting or other recreation. Males were twice the percentage of females (57%, 28%) of those reporting handling a gun for hunting or other recreation. 11.5% said "other."

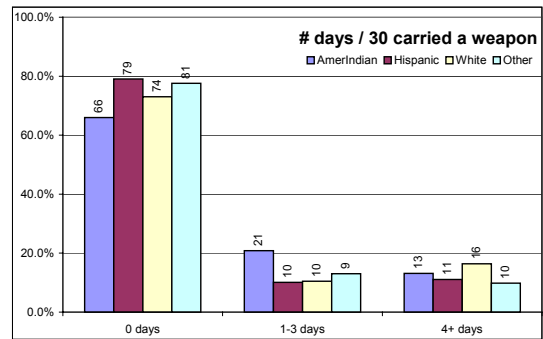
During the past 30 days,...

8. **how many times did you ride in a car or other vehicle driven by someone who had been drinking alcohol?** 33% answered one time or more. This is an improvement

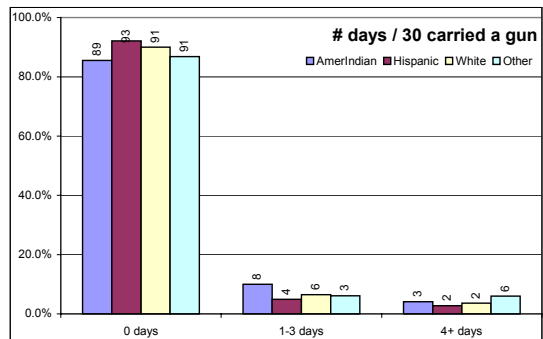
from the 1999 NM YRBS when 45% had been in a car at least once in the previous 30 days when the driver had been drinking.

9. **how many times did you drive a car or other vehicle when you had been drinking alcohol?** 13% answered one time or more. Of those respondents between 16-18 years old, 17.5% answered yes to driving after drinking at least once in previous 30 days; 8.3% of 15 year olds answered yes. This is also an improvement from the 1999 NM YRBS when 25% reported having driven after drinking at least one day out of the previous 30.

13. **on how many days did you carry any kind of weapon such as a gun, knife, or club?**² 24% answered one or more days. 19% of males and 4% of females had carried a weapon on six or more days out of the previous 30. More American Indians (20.8%) reported carrying a weapon for 1-3 days out of the previous 30. However, when looking at the percentage of youth carrying a weapon four or more days, the percentage of American Indians dropped sharply while the percentage of Anglos increased over all other ethnic categories with 16% reporting that they had carried a weapon 4 or more days than the other ethnic categories.



14. **on how many days did you carry a gun (specifically)?** 8% answered one or more days. 14% of males had carried a gun on one or more days out of the previous 30, 3% of females. Of those respondents that answered they had carried a gun on one or more days out of the past 30, American Indians were a greater percentage (11.5%) than the other ethnic categories. In the 1999 NM YRBS 12% of all respondents reported carrying a gun specifically.



15. **on how many days did you carry a weapon such as a gun, knife, or club, on school property?** 8% of all answered one or more days: 13% of males, 3% of females. This is down from the 1999 NM YRBS where 14% of all respondents reported carrying a weapon on school property.

16. **on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?** An overwhelming majority (93%) of respondents did not report skipping school due to feeling unsafe (0 days); only 7% answered they skipped one or more days because of feeling unsafe.

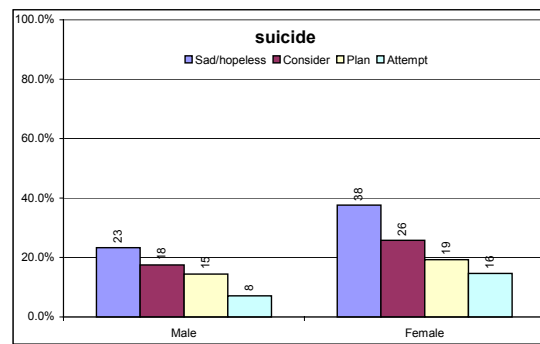
² For Qs 13-14, instructions were “do not include handing a firearm for hunting or other recreation, e.g., target shooting.”

During the past 12 months,...

17. **how many times has someone threatened or injured you with a weapon such as a gun, knife, or club on school property?** 10% answered one or more times: 14% of males and 7% of females.
18. **how many times were you in a physical fight?** 27% answered one or more times. 24% of males had been in a fight 1-3 times in previous 12 months, 16% of females. This is down from the 1999 NM YRBS where 36% had been in a physical fight in the previous 12 months.
19. **how many times were you in a physical fight on school property?** 14% answered one or more times: 19% of males and 10% of females. There is a decrease in the percentage by grade: 10th graders-15% had been in a fight more than once, 12th graders-only 11%.

20. **Has your boyfriend or girlfriend ever hit, slapped, or physically hurt you on purpose?** 7% answered yes: 7.9% of males and 6.5% of females report having been deliberately hit, slapped, or hurt on purpose by a boy/girlfriend.

21. **Did you ever feel so sad or hopeless almost every day for at least two weeks in a row that you stopped doing some usual activities?** 31% answered yes: more females (37.6%) than males (23.3%).



22. **Did you ever seriously consider attempting suicide?** 22% answered yes: more females (25.8%) than males (17.6%). In the 1999 NM YRBS, 17% of all respondents reported having seriously considered suicide.

23. **Did you make a plan about how you would commit suicide?** 17% answered yes: more females (19.4%) than males (14.5%). In the 1999 NM YRBS, 14% of all respondents said they had made a plan for suicide.

24. **How many times did you actually attempt suicide?** 13% answered one or more times. More females (16.7%) than males (8.2%) answered yes to attempting suicide at least once. In 1999 NM YRBS, 7.5% reported having actually attempted suicide 1-3 times.

Factoid: Since 1993, victimization rates for teens and young adults have declined but still remain higher than the levels of the mid-1980's
<http://www.oio.usdoj.gov/bis/homicide/teens.htm>

Healthy People 2010 Leading Health Indicator—Tobacco Use

Cigarette smoking is the single most preventable cause of disease and death in the United States. Smoking results in more deaths each year in the United States than AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle crashes, and fires—combined.

Tobacco-related deaths number more than 430,000 per year among U.S. adults, representing more than 5 million years of potential life lost. Direct medical costs attributable to smoking total at least \$50 billion per year.

In 1999, 35 percent of adolescents were current cigarette smokers. In 1998, 24 percent of adults were current cigarette smokers.

Health Impact of Cigarette Smoking

Smoking is a major risk factor for heart disease, stroke, lung cancer, and chronic lung diseases—all leading causes of death. Smoking during pregnancy can result in miscarriages, premature delivery, and sudden infant death syndrome. Other health effects of smoking result from injuries and environmental damage caused by fires.

Environmental tobacco smoke (ETS) increases the risk of heart disease and significant lung conditions, especially asthma and bronchitis in children. ETS is responsible for an estimated 3,000 lung cancer deaths each year among adult nonsmokers.

Trends in Cigarette Smoking

Adolescents. Overall, the percentage of adolescents in grades 9 through 12 who smoked in the past month increased in the 1990s. Every day, an estimated 3,000 young persons start smoking. These trends are disturbing because the vast majority of adult smokers tried their first cigarette before age 18 years; more than half of adult smokers became daily smokers before this same age. Almost half of adolescents who continue smoking regularly will die eventually from a smoking-related illness.

Adults. Following years of steady decline, rates of smoking among adults appear to have leveled off in the 1990s.

Populations With High Rates of Smoking

Adolescents. Adolescent rates of cigarette smoking have increased in the 1990s among white, African American, and Hispanic high school students after years of declining rates during the 1970s and 1980s. In 1999, 39 percent of white high school students currently smoked cigarettes compared with 33 percent for Hispanics and 20 percent for African Americans. Among African Americans in 1999, only 19 percent of high school girls, compared with 22 percent of boys, currently smoked cigarettes.

Adults. Overall, American Indians and Alaska Natives, blue-collar workers, and military personnel have the highest rates of smoking in adults. Rates of smoking in Asian and Pacific Islander men are more than four times higher than for women of the same race. Men have only somewhat higher rates of smoking than women within the total U.S. population. Low-income adults are more likely to smoke than are high-income adults. The percentage of people aged 25 years and older with less than 12 years of education who are current smokers is nearly three times that for persons with 16 or more years of education.

For more information on Healthy People 2010 objectives visit

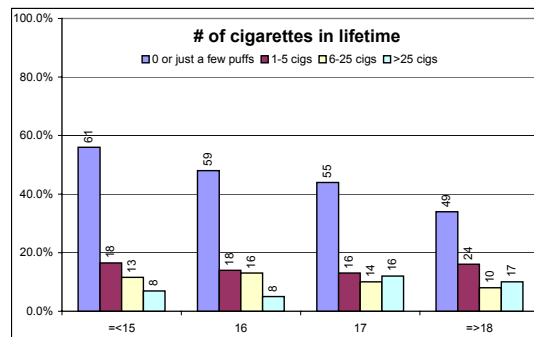
<http://www.health.gov/healthypeople/>

http://web.health.gov/healthypeople/Document/html/uih/uih_bw/uih_4.htm#tobaccouse

TOBACCO USE³ AND EXPOSURE

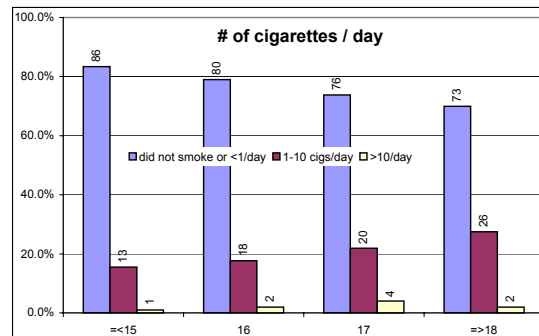
Rationales: These questions measure students' exposure to tobacco products, the frequency of smoking experimentation, current smoking habits, other tobacco use, and attempts to quit smoking. Tobacco use is considered the chief preventable cause of death in the United States¹² with over 20% of all deaths attributable to tobacco use.¹³ Cigarette smoking is responsible for heart disease; cancers of the lung, larynx, mouth, esophagus, and bladder; stroke; and chronic obstructive pulmonary disease.¹⁴ There is evidence that cigarette smokers are more likely to drink alcohol and use marijuana and cocaine as compared to non-smokers.¹⁵ If current patterns of smoking behavior persist, an estimated 5 million U.S. persons who were aged 0-17 years old in 1995 could die prematurely from smoking-related illnesses.¹⁶

26. About how many cigarettes have you tried in your lifetime? 42% said they had one cigarette or more; 42% say they have never smoked. There is a decrease by age of the percent that have not tried a whole cigarette.



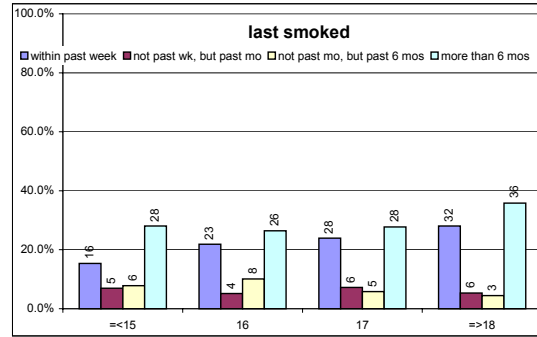
More 18 year olds have smoked 1-5 cigarettes, and more 17 and 18 year olds than younger respondents have smoked more than 26 cigarettes. There is no significant difference by gender.

27. During the past 30 days, on the days you smoked, how many cigarettes did you smoke per day? 19% had one cigarette per day or more; 75% did not smoke in the previous 30 days. There is an increase with age in the percent that say they smoked 1-10 cigarettes/day. More 16 year olds than 17 and 18 year olds reported not smoking at all or less than one cigarette/day. More males than females smoked at least one cigarette/day with 12.5% of males and 9.1% of females reporting 2-5 cigarettes/day. In 1999, 62% said they had not smoked in the previous 30 days.



³ Survey instructions were “do not count using tobacco or taking a few sips of alcohol for religious or ceremonial purposes.”

28. **When was the last time you smoked a cigarette, even one or two puffs? 21.7%** reported smoking in the previous week; 28.0% last smoked more than six months prior to survey. More females (42%) than males (36%) say they have never smoked. In all age groups, most respondents answered that they had last smoked more than six months ago, or had never smoked.



31. **During the past 30 days, have you seen or heard commercials on TV, the Internet, or on the radio about the dangers of cigarettes smoking? 28.9%** said they had seen commercials almost daily; 20.2% have seen commercials more than once/day.

32. **During the past 12 months, have you participated in any community activities to discourage people your age from using cigarette, chewing tobacco, snuff, dip or cigars? 13.6%** answered yes; 40.7% said they did not know about such activities.

35. **Do you think you will smoke a cigarette at any time during the next year? 76%** of those who had never had a whole cigarette (Q.26) said that they would definitely not smoke in the next year.

36. **If one of your best friends offered you a cigarette, would you smoke it? 51%** said definitely not; 22% said probably not. 76% of those who had never had a whole cigarette (Q.26) said that they would definitely not smoke if offered a cigarette by one of their best friends.

37. **In the past 7 days, on how many days were you exposed to tobacco smoke inside your home? 31%** were exposed on one or more days out of the previous seven.

38. **In the past 7 days, on how many days were you exposed to tobacco smoke outside your home, in a car with friends on in a room with other people? 63%** were exposed on one or more days out of the previous seven.

During the past 30 days,...

39. **on how many days did you smoke cigarettes? 10%** smoked on 20 or more days out of the previous 30, more males (12%) than females (8%). 10% smoked 1-5 days, and 5% smoked 6-19 days. 75% said they did not smoked during previous 30 days.

Factoid: Among young people, those with poorer grades and lower self-images are most likely to begin using tobacco. U.S. Department of Health and Human Services. Preventing Tobacco Use Among Young People: A Report of the Surgeon General. http://www.cdc.gov/tobacco/sgr/sgr_1994/460016.htm

40. **on how many days did you use chewing tobacco, snuff, or dip? 4.2%** answered that they had used on one or more days out of the previous 30.

41. on how many days did you use tobacco (including cigarettes or chewing tobacco) on school property? 11% answered that they had used some kind of tobacco on school property on one or more days out of the previous 30.

83. How old were you when you smoked a whole cigarette for the first time? 37% answered they had their first whole cigarette at 13 years old or younger: more males (42%) than females (32%).

Healthy People 2010 Leading Health Indicator—Substance Abuse

Alcohol and illicit drug use are associated with many of this country's most serious problems, including violence, injury, and HIV infection. The annual economic costs to the United States from alcohol abuse were estimated to be \$167 billion in 1995, and the costs from drug abuse were estimated to be \$110 billion.

In 1998, 79 percent of adolescents aged 12 to 17 years reported that they did *not* use alcohol or illicit drugs in the past month. In the same year, 6 percent of adults aged 18 years and older reported using illicit drugs in the past month; 17 percent reported binge drinking in the past month, which is defined as consuming five or more drinks on one occasion.

Health Impact of Substance Abuse

Alcohol and illicit drug use are associated with child and spousal abuse; sexually transmitted diseases, including HIV infection; teen pregnancy; school failure; motor vehicle crashes; escalation of health care costs; low worker productivity; and homelessness. Alcohol and illicit drug use also can result in substantial disruptions in family, work, and personal life.

Alcohol abuse alone is associated with motor vehicle crashes, homicides, suicides, and drowning—leading causes of death among youth. Long-term heavy drinking can lead to heart disease, cancer, alcohol-related liver disease, and pancreatitis. Alcohol use during pregnancy is known to cause fetal alcohol syndrome, a leading cause of preventable mental retardation.

Trends in Substance Abuse

Adolescents. Although the trend from 1994 to 1998 has shown some fluctuations, about 77 percent of adolescents aged 12 to 17 years report being both alcohol free and drug free in the past month.

Alcohol is the drug most frequently used by adolescents aged 12 to 17 years. In 1998, 19 percent of adolescents aged 12 to 17 years reported drinking alcohol in the past month. Alcohol use in the past month for this age group has remained at about 20 percent since 1992. Eight percent of this age group reported binge drinking, and 3 percent were heavy drinkers (five or more drinks on the same occasion on each of 5 or more days in the past 30 days).

Data from 1998 show that 10 percent of adolescents aged 12 to 17 years reported using illicit drugs in the past 30 days. This rate remains well below the all-time high of 16 percent in 1979. Current illicit drug use had nearly doubled for those aged 12 to 13 years between 1996 and 1997 but then decreased between 1997 and 1998. Youth are experimenting with a variety of illicit drugs, including marijuana, cocaine, crack, heroin, acid, inhalants, and methamphetamines, as well as misuse of prescription drugs and other "street" drugs. The younger a person becomes a habitual user of illicit drugs, the stronger the addiction becomes and the more difficult it is to stop use.

For more information on Healthy People 2010 objectives visit

<http://www.health.gov/healthypeople/>

http://web.health.gov/healthypeople/Document/html/uih/uih_bw/uih_4.htm#subsabuse

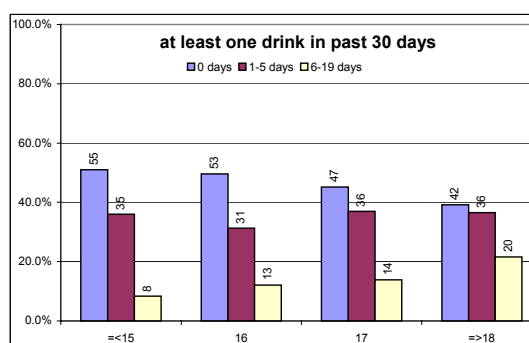
ALCOHOL AND OTHER DRUG USE

Rationales: These questions measure students' exposure to illicit substances, such as alcohol, marijuana, cocaine and other drug use and experimentation. Drug abuse is related to suicide, early unwanted pregnancy, school failure, delinquency, and transmissions of sexually transmitted diseases (STDs).¹⁷ Alcohol is a major contributing factor in approximately half of all motor vehicle crashes, homicides, and suicides, which are the leading causes of death and disability among young people.¹⁸ Heavy drinking among youth has been linked to multiple sexual partners, use of marijuana, and poor academic performance.¹⁹

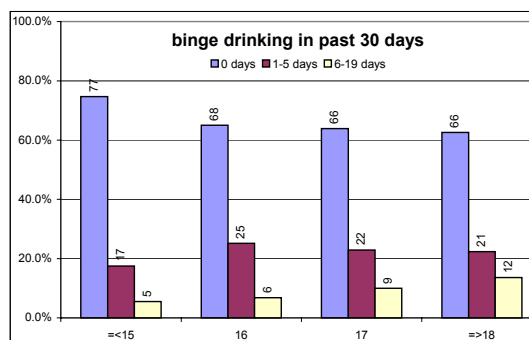
During the past 30 days,...

- 42. on how many days did you have at least one drink of alcohol? 49% had at least one drink at least one day out of the previous 30; 34% answered 1-5 days.**

The difference between males and females who drank at all in the previous month is small: 51% of males and 47% of females. There is not much difference by age of those who drank 1-5 days, but there is an increase by age of those who drank 6-19 days out of previous 30. The percent that drank in the 1-5 day range is about the same (1/3) for all ethnic groups, but Hispanics (13%) and Anglos (13%) drank more in the 6-19 day range than the American Indian (7%) or other ethnic categories. In 1999, 59% of respondents to the NM YRBS reported drinking at least one day in the 30 days prior to the survey.

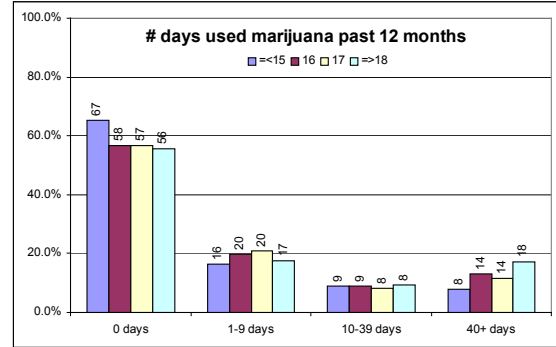


- 43. on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours? 29% said they had done this at least one day out of previous 30. More males (33%) than females (25%) had binged on at least one day, with more males (9%) doing this 6-19 days, out of previous 30. There is a noticeable upward trend by age of those that binged in the 6-19 day range. The percent that did this on 20 or more days was less than 2%.**



- 44. on how many days did you have at least one drink of alcohol on school property? 7% answered one day or more, with the largest percent (13%) being in the 18 years old or older group.**

53. how many days have you used marijuana? **38%** used marijuana at least one day out of the past 12 months. There is a pattern by extent of usage: among those that have used at all in past 12 months, fewer used in the middle range than the lower and higher ranges. 46% used 1-9 days, 31% used 40+ days and 23% used 10-39 days. There is a difference between males and females: in the 1-9 day range, the percentage of males and females are about the same (approximately 18%); more males (26%) than females (16%) drank in the 10 or more days range. More American Indians (46%) than Hispanics (37%) or Anglos (39%) used marijuana at least one day out of past 12 months.



54. how many days have you sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high? **4.7%** said they had sniffed or inhaled at least one day out of the past 12 months.

55. how many days have you used any form of cocaine, including powder, crack, or freebase? **7.9%** said they had used some form of cocaine at least one day out of the past 12 months.

57. how many days have you used heroin (also called smack, junk, or china white)? **1.1%** said they had used heroin at least one day out of the past 12 months.

58. how many days have you used methamphetamines (also called speed, crystal, crank, or ice)? **5.3%** said they had used methamphetamines at least one day out of the past 12 months.

59. how many days have you used hallucinogenic drugs, such as LSD, acid, PCP, angel dust, ecstasy, mescaline, or mushrooms? **11.4%** said they had used some hallucinogenic drug at least one day out of past 12 months: 13.5% of males and 9.6% of females.

84. How old were you when you had your first drink of alcohol other than a few sips?⁴ **43%** took their first drink of alcohol at age 13 or younger: 47% of males and 39% of females.

85. How old were you when you tried marijuana for the first time? **29%** first tried marijuana at age 13 or younger: 33% of males and 26% of females.

⁴ Survey instructions were to not count taking a few sips of wine for religious or ceremonial purposes.

Healthy People 2010 Leading Health Indicator—Responsible Sexual Behavior

Unintended pregnancies and sexually transmitted diseases (STDs), including infection with the human immunodeficiency virus that causes AIDS, can result from unprotected sexual behaviors. Abstinence is the only method of complete protection. Condoms, if used correctly and consistently, can help prevent both unintended pregnancy and STDs.

In 1999, 85 percent of adolescents abstained from sexual intercourse or used condoms if they were sexually active.

Trends in Sexual Behavior

In the past 6 years there has been both an increase in abstinence among all youth and an increase in condom use among those young people who are sexually active. Research has shown clearly that the most effective school-based programs are comprehensive ones that include a focus on abstinence *and* condom use.

Unintended Pregnancies

Half of all pregnancies in the United States are unintended; that is, at the time of conception the pregnancy was not planned or not wanted. Unintended pregnancy rates in the United States have been declining. The rates remain highest among teenagers, women aged 40 years or older, and low-income African American women. Approximately one million teenage girls each year in the United States have unintended pregnancies. Nearly half of all unintended pregnancies end in abortion.

The cost to U.S. taxpayers for adolescent pregnancy is estimated at between \$7 billion and \$15 billion a year.

Sexually Transmitted Diseases

Sexually transmitted diseases are common in the United States, with an estimated 15 million new cases of STDs reported each year. Almost 4 million of the new cases of STDs each year occur in adolescents. Women generally suffer more serious STD complications than men, including pelvic inflammatory disease, ectopic pregnancy, infertility, chronic pelvic pain, and cervical cancer from the human papilloma virus. African Americans and Hispanics have higher rates of STDs than Anglos.

The total cost of the most common STDs and their complications is conservatively estimated at \$17 billion annually.

HIV/AIDS

Nearly 700,000 cases of AIDS have been reported in the United States since the HIV/AIDS epidemic began in the 1980s. The latest estimates indicate that 800,000 to 900,000 people in the United States currently are infected with HIV. The lifetime cost of health care associated with HIV infection, in light of recent advances in HIV diagnostics and therapies, is \$155,000 or more per person.

About one-half of all new HIV infections in the United States are among people under age 25 years, and the majority is infected through sexual behavior. . . . Compelling worldwide evidence indicates that the presence of other STDs increases the likelihood of both transmitting and acquiring HIV infection.

For more information on Healthy People 2010 objectives visit

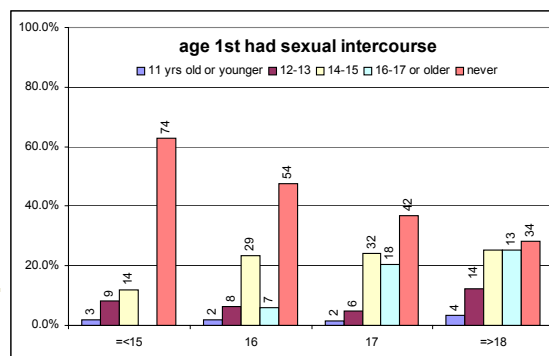
<http://www.health.gov/healthypeople/>

http://web.health.gov/healthypeople/Document/html/uih/uih_bw/uih_4.htm#sex

SEXUAL BEHAVIORS THAT RESULT IN AND CONTRIBUTE TO STDs, INCLUDING HIV, AND UNINTENDED PREGNANCIES⁵

Rationales: These questions measure prevalence of students' behaviors regarding sexual activity that could put them at health risk. Early sexual activity is associated with unwanted pregnancy and sexually transmitted diseases (STD), including HIV infection, and negative effects on social and psychological development.²⁰ Number of sexual partners and age at first intercourse are factors for initiation of sexual activity and unprotected sexual intercourse.²¹ AIDS is the 6th leading cause of death for youth aged 15-24.²² Use of latex condoms by males, when used consistently and correctly, are highly effective at reducing the risk of HIV infection and other sexually transmitted diseases (STDs).²³ Alcohol and other drug use may serve as predisposing factors for initiation of sexual activity and unprotected sexual intercourse.²⁴ In 1995, almost one million teenage girls in the United States became pregnant, just over 243,000 teenagers obtained an abortion,²⁵ and nearly 492,000 gave birth.²⁶ In 1996, the birth rate for youth aged 15-19 was 54.4 per 1,000 women.²⁷ 66% of all births among teenagers are the result of unintended pregnancy.²⁸

86. How old were you when you had sex for the first time? 11% of all respondents said they had sex at age 13 or younger: 17% of males, 7% of females. In all current age groups, age 14-15 is the most frequently reported for 1st intercourse. 56% say they've never had sex. 1



87. In the past 12 months, with how many people have you had sexual intercourse? 23% had sex with one person, 13% with 2-3 people, 8% with 4 or more people.

88. Did you drink alcohol or use drugs before you had sexual intercourse the last time? 13% answered yes, with no difference between male and female. In 1999, 1/3 of respondents reported drinking or using drugs before last having sex.



89. The last time you had sexual intercourse, did you or your partner use a condom? 27% answered yes.

90. The last time you had sexual intercourse, what one method did you or your partner use to prevent pregnancy? 22% used condoms; 6% said birth control pills; 7% said no method; and 3% were not sure.

⁵ This category of questions has the largest percent (12.4%) of missing answers. Two large districts blacked out these questions on their surveys.

91. **Have you ever been forced to have sexual intercourse when you did not want to?**
7% answered yes: 6% of males, 8% of females.
-

Factoid: In a national survey 27.7% of college women reported a sexual experience since the age of fourteen that met the legal definition of rape or attempted rape, and 7.7% of college men reported perpetrating aggressive behavior which met the legal definition of rape. <http://www.cdc.gov/ncipc/factsheets/rape.htm>

Factoid: At least 50% of all new HIV infections occur in young people under age 25.
<http://www.cdc.gov/hiv/pubs/facts/youth.htm>

Healthy People 2010 Leading Health Indicator—Physical Activity

Regular physical activity throughout life is important for maintaining a healthy body, enhancing psychological well-being, and preventing premature death.

In 1999, 65 percent of adolescents engaged in the recommended amount of physical activity. In 1997, only 15 percent of adults performed the recommended amount of physical activity, and 40 percent of adults engaged in no leisure-time physical activity.

Health Impact of Physical Activity

Regular physical activity is associated with lower death rates for adults of any age, even when only moderate levels of physical activity are performed. Regular physical activity decreases the risk of death from heart disease, lowers the risk of developing diabetes, and is associated with a decreased risk of colon cancer. Regular physical activity helps prevent high blood pressure and helps reduce blood pressure in persons with elevated levels.

Regular physical activity also:

- ✓ Increases muscle and bone strength.
- ✓ Increases lean muscle and helps decrease body fat.
- ✓ Aids in weight control and is a key part of any weight loss effort.
- ✓ Enhances psychological well-being and may even reduce the risk of developing depression.
- ✓ Appears to reduce symptoms of depression and anxiety and to improve mood.

In addition, children and adolescents need weight-bearing exercise for normal skeletal development, and young adults need such exercise to achieve and maintain peak bone mass. Older adults can improve and maintain strength and agility with regular physical activity. This can reduce the risk of falling, helping older adults maintain an independent living status. Regular physical activity also increases the ability of people with certain chronic, disabling conditions to perform activities of daily living.

Leading Health Indicator-- Overweight and Obesity

Overweight and obesity are major contributors to many preventable causes of death. On average, higher body weights are associated with higher death rates. The number of overweight children, adolescents, and adults has risen over the past four decades. Total costs (medical cost and lost productivity) attributable to obesity alone amounted to an estimated \$99 billion in 1995.

During 1988–94, 11 percent of children and adolescents aged 6 to 19 years were overweight or obese. During the same years, 23 percent of adults aged 20 years and older were considered obese.

Health Impact of Overweight and Obesity

Overweight and obesity substantially raise the risk of illness from high blood pressure, high cholesterol, type 2 diabetes, heart disease and stroke, gallbladder disease, arthritis, sleep disturbances and problems breathing, and certain types of cancers. Obese individuals also may suffer from social stigmatization, discrimination, and lowered self-esteem.

For more information on Healthy People 2010 objectives visit

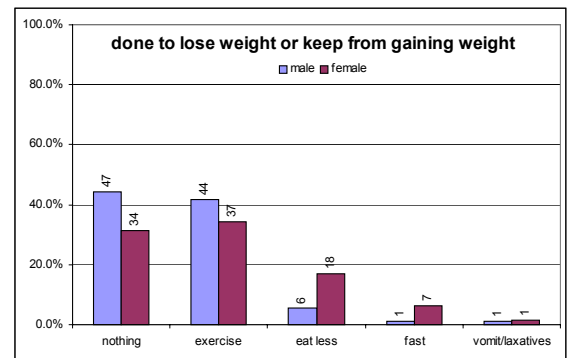
<http://www.health.gov/healthypeople/>

http://web.health.gov/healthypeople/Document/html/uih/uih_4.htm#physactiv

INADEQUATE DIETARY BEHAVIORS AND PHYSICAL ACTIVITY THAT RESULT IN HEALTH PROBLEMS

Rationales: These questions measure prevalence of students' dietary and physical activity behaviors that could put them at risk of obesity and other chronic diseases. The prevalence of overweight among adolescents more than doubled from 5% in the late 1970s to 11% between 1988 and 1994.²⁹ Overweight or obesity acquired during childhood or adolescence may persist into adulthood and increase the risk later in life for coronary heart disease, gallbladder disease, some types of cancer, and osteoarthritis of the weight-bearing joints.³⁰ In adolescence, obesity is associated with adverse psychological and social consequences.³¹ Only 44% of male adolescents and 27% of female adolescents meet the minimum average daily goal of at least five servings of vegetables and fruits set by the *Dietary Guidelines for Americans*.³² Milk is by far the largest single source of calcium for adolescents, but it is estimated that about half of adolescent males and more than 80% of adolescent females do not meet dietary recommendations for calcium intake.³³ Major decreases in vigorous physical activity occur during grades 9-12, particularly for girls: by 12th grade, more than half of female students are not participating regularly in vigorous physical activity.³⁴ School physical education classes can increase adolescent participation in moderate to vigorous physical activity and help adolescents develop the knowledge, attitudes, and skills they need to engage in lifelong physical activity.³⁵ Daily participation in physical education class has dropped from 42% in 1991 to 25% in 1995.³⁶ Television viewing is the principal sedentary leisure time behavior in the U.S. and studies have shown that television viewing in young people is related to obesity.³⁷

142. During the past 30 days, which one thing have you done most frequently to lose weight or keep from gaining weight? Of all respondents, 41% exercised and 40% did nothing. More females exercised (37%) than did nothing (34%) or ate less (18%). More males did nothing (47%) than exercised (44%). A very small percent (1.3) of both genders answered that they vomited or took laxatives.



Yesterday, how many times did you...

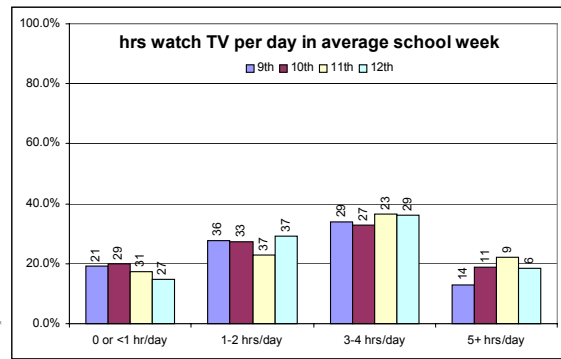
- 143. eat fruit or drink fruit juice?** 53% said they had fruit or fruit juice two or more times: More males (59%) than females (49%). There is not much difference by ethnicity in the lower frequencies (0 to 3 times) of eating fruit or juice; however, more American Indians (18%) than Hispanics (15%) or Anglos (12%) said they had fruit or fruit juice four or more times the previous day.
- 144. eat vegetables or drink vegetables juice?** 34% said they had vegetables or vegetable juice two or more times: more males (40%) than females (36%). More American Indians (45%) and Anglos (41%) than Hispanics (31%) said they had vegetables or juice two or three times the previous day.

145. drink milk or eat cheese or yogurt? 85% said they drank milk or ate cheese or yogurt: more males (89%) than females (82%).

Factoid: Initial results from the 1999 National Health and Nutrition Examination Survey (NHANES), using measured heights and weights, indicate that an estimated 13 percent of children ages 6-11 years and 14 percent of adolescents ages 12-19 years are overweight. <http://www.cdc.gov/nchs/products/pubs/pubd/hestats/overwght99.htm>

146. On how many of the past 7 days did you exercise or participate in physical activity for at least 20 minutes that made you sweat and breathe hard? 57% said they exercised hard for three or more days out of the past seven. More females (23%) than males (14%) did not exercise at all; 23% of males said they exercised all seven days.

148. On an average school day, how many hours do you watch TV? 38% said they watch TV 3 or more hours/day during an average school week; 8% do not watch at all. More females (65%) than males (59%) watch 3+ hours/day.



149. If your school has a school-based health center, how many times did you use it for services this year? 12% used it once; 10% used it two or more times. 34% say their school does not have a health center, and 44% answered “0 times.”

Factoid: Good health provides protection from the very beginning of life, in part because healthy infants tend to be much easier to take care of. <http://www.mentalhealth.org/>

The Power of Asset

On one level, the 40 developmental assets represent everyday wisdom about positive experiences and characteristics for young people. In addition, Search Institute research has found that these assets are powerful influences on adolescent behavior—both protecting young people from many different problem behaviors and promoting positive attitudes and behaviors. This power is evident across all cultural and socioeconomic groups of youth. There is also evidence from other research that assets have the same kind of power for younger children.

Yet, while the assets are powerful shapers of young people's lives and choices, too few young people experience enough of these assets. The average young person surveyed experiences only 18 of the 40 assets. Overall, 62 percent of young people surveyed experience fewer than 20 of the assets. In short, most young people in the United States do not have in their lives many of the basic building blocks of healthy development.

External Assets

The first 20 developmental assets focus on positive experiences that young people receive from the people and institutions in their lives. Four categories of external assets are included in the framework:

- **Support**-Young people need to experience support, care, and love from their families, neighbors, and many others. They need organizations and institutions that provide positive, supportive environments.
- **Empowerment**-Young people need to be valued by their community and have opportunities to contribute to others. For this to occur, they must be safe and feel secure.
- **Boundaries and expectations**-Young people need to know what is expected of them and whether activities and behaviors are "in bounds" and "out of bounds."
- **Constructive use of time**-Young people need constructive, enriching opportunities for growth through creative activities, youth programs, congregational involvement, and quality time at home.

Internal Assets

A community's responsibility for its young does not end with the provision of external assets. There needs to be a similar commitment to nurturing the internal qualities that guide choices and create a sense of centeredness, purpose, and focus. Indeed, shaping internal dispositions that encourage wise, responsible, and compassionate judgments is particularly important in a society that prizes individualism. Four categories of internal assets are included in the framework:

- **Commitment to learning**-Young people need to develop a lifelong commitment to education and learning.
- **Positive values**-Youth need to develop strong values that guide their choices.
- **Social competencies**-Young people need skills and competencies that equip them to make positive choices, to build relationships, and to succeed in life.
- **Positive identity**-Young people need a strong sense of their own power, purpose, worth, and promise.

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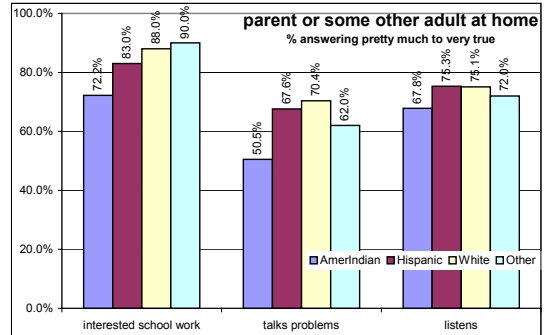
CARING RELATIONSHIPS AND SUPPORT

In my home there is a parent or some other adult...

92. who is interested in my schoolwork. 84.2% answered pretty much to very much true: 77.2% of American Indians, 83% of Hispanics, and 88% of Anglos. Gender is not significant.

93. who talks with me about my problems. 76% answered pretty much to very much true: 50.5% of American Indians, 67.6% of Hispanics, and 70.4% of Anglos.

94. who listens to me when I have something to say. 73.4% answered pretty much to very much true: 67.8% of American Indians, 75% of Hispanics and Anglos.

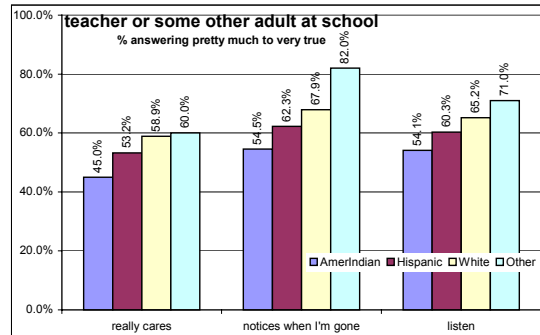


At my school, there is a teacher or some other adult...

101. who really cares about me. 54.3% answered pretty much to very much true: 45% of American Indians, 53% of Hispanics, and 59% of Anglos; 58.4% of females and 53.6% of males.

102. who notices when I'm not there. 64.2% answered pretty much to very much true: 54.5% of American Indians, 62.3% of Hispanics, and 68% of Anglos.

103. who listens to me when I have something to say. 61.4% answered pretty much to very much true: 54% of American Indians, 60.3% of Hispanics, and 65.2% of Anglos; 65.2% of females, 56.9% of males.



Outside of my home and school, there is at least one adult...

112. who really cares about me. 83.8% answered pretty much to very much true, not much difference by ethnicity or gender.

113. who notices when I am upset about something. 76.7% answered pretty much to very much true; it is less true for males, 27% of whom answered a little to not at all true compared to 19% of females. 61.6% of females answered very much true compared to 46.7% of males. No difference by ethnicity.

114. who I trust. 80% answered pretty much to very much true, with a moderate difference by ethnicity: 76.6% of American Indians, 80.1% of Hispanics, and 82.5% of Anglos.

115. who tells me when I do a good job. 78.1% answered pretty much to very much true.

118. There is at least one adult in my community I could talk to about something important. 60.7% answered pretty much to very much true: 50% of American Indians, 61.5% of Hispanics, and 67% of Anglos.

I have a friend about my own age...

127. who really cares about me. 81.5% answered pretty much to very much true: 71.1% of American Indians, 80.8% of Hispanics, and 85.8% of Anglos. Females (71%) answered very much true more than males (50.5%).

128. who talks with me about my problems. 66% answered pretty much to very much true: 66% of American Indians, 78% of Hispanics, and 79.8% of Anglos. More females (70.4%) than males (42.3%) answered very much true.

129. who helps me when I'm having a hard time. 78% answered pretty much to very much true: 71.5% of American Indians and 79% of Hispanics and Anglos. 29.4% of males, compared to 13.6% of females, answered not at all to a little true.

Factoid: The most important finding, in a NIDA-sponsored study, is that it is the *accumulation* of protective factors in school, family, and peer environments that has a positive effect on drug use over the longer term. More than 56 percent of high-risk youths with six or more protective factors remained drug free up to 3 years after the protective factors were first measured in the 8th and 9th grades. http://www.nida.nih.gov/nida_notes/NNVol11N3/Protective.html

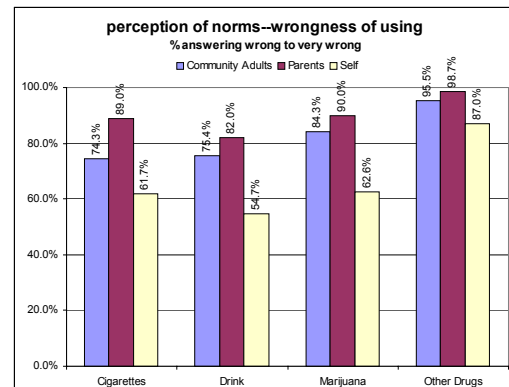
BOUNDARIES AND EXPECTATIONS including perception of norms

How wrong would most adults in your community think it was for kids your age to...

60. **smoke cigarettes?** 74.3% answered wrong to very wrong. The percentage decreases by grade: from 41.6% in 9th grade thinking adults think it is very wrong to 26.7% in 12th grade; and there is a corresponding increase by grade in the percentage that think adults think it's not wrong at all, from 2.7% in 9th to 10.2% in 12th.
61. **drink alcohol (beer, wine, or hard liquor) regularly?** 75.4% answered wrong to very wrong. There is a decrease by grade: 41.3% in 9th that think adults think it's very wrong decreases to 30.8% in 12th; 2.8% in 9th grade that think adults think it's not wrong at all compared to 6.8% of 12th graders.
62. **use marijuana?** 84.4% answered wrong to very wrong. The percentage that perceives that adults think marijuana use is wrong holds fairly steady across grades.
63. **use cocaine, LSD, or methamphetamines?** 95.5% answered wrong to very wrong. There is no difference by grade or gender. The percentage that perceives that adults think the use of methamphetamines and other illicit drugs is wrong holds steady across grades and ethnicity.

How wrong do your parents feel it would be for you to...

64. **smoke cigarettes?** 89% answered wrong to very wrong. There is some difference by gender: 75.8% of females compared to 68.1% of males think their parents think smoking for kids is very wrong. There is a decrease by grade: 78.4% of 9th graders think their parents think it is very wrong, decreasing to 61.9% of 12th graders. There is no difference by ethnicity.
65. **drink alcohol (beer, wine, or hard liquor) regularly?** 82% answered wrong to very wrong. There is some difference by gender: 67.3% of females compared to 59.9% of males think their parents think smoking for kids is very wrong. There is a decrease by grade: 67.7% of 9th graders think their parents think it is very wrong, decreasing to 59.4% of 12th graders. There is a difference by ethnicity: 78.4% of American Indians perceive their parents as thinking drinking alcohol is very wrong, 65% of Hispanics, and 58.6% of Anglos.
66. **use marijuana?** 90% answered wrong to very wrong. There is not much difference by gender, grade, or ethnicity.

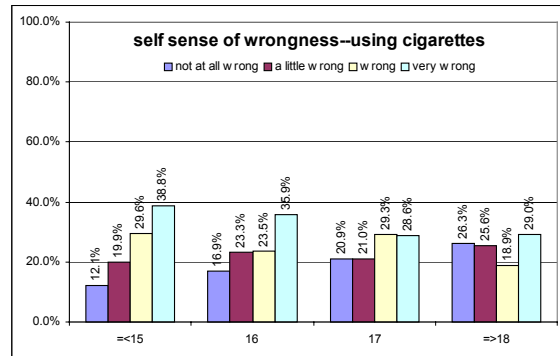


A graph comparing the respondent's perception of how adults in the community, parents, and themselves feel about the use of substances shows a significant difference: the respondents' own perception of wrongness is much lower than their perception of community adults' and parents' sense of wrongness.

67. **use cocaine, LSD, or methamphetamines?** 98.7% answered wrong to very wrong. There is no difference by gender, and very little difference by grade or ethnicity.

How wrong do you think it is for someone your age to...

68. **smoke cigarettes?** 61.7% answered wrong to very wrong. There is a change by age group: the 15 year olds and younger have a higher percentage (38.8%) thinking smoking cigarettes is very wrong declining to a small percentage (12.1%) thinking it is not wrong at all. With each age group, there is a decline in the percentage thinking smoking cigarettes is very wrong and an increase in the percent that think it is not at all wrong. There is no difference by gender or ethnicity.



69. **drink alcohol (beer, wine, or hard liquor) regularly?** 54.7% answered wrong to very wrong. More females (33.6%) than males (27.2%) think drinking alcohol is very wrong; more males (22.2%) than females (16.4%) think drinking is not at all wrong. There is also a decrease by grade of those who think drinking is very wrong: 34.2% of 9th graders compared to 26.5% of 12th graders; 51.2% of 12th graders think drinking is not at all to a little bit wrong. 67% of American Indians think drinking alcohol is wrong to very wrong, compared to 56% of Hispanics and 50% of Anglos.
70. **use marijuana?** 62.6% answered wrong to very wrong: 67% of females and 57.3% of males. There is no difference by ethnicity.
71. **use cocaine, LSD, methamphetamines, or other illegal drug?** 87% answered wrong to very wrong. There is no difference by grade, gender, or ethnicity.

If you wanted to get some () how easy would it be?

72. **cigarettes?** 78.6% answered very to sort of easy: 64.8% of 15 year olds or younger, 79% of 16 year olds, and 84.5% of 17 year olds.
73. **beer, wine, or hard liquor (for example, vodka, whiskey, or gin)?** 74.6% answered very to sort of easy: 70.7% of 15 year olds and younger, 77.3% of 16 year olds, 79.2% of 17 year olds, and 76% of 18 year olds. Fewer American Indians (58%) think it is very to sort of easy than Hispanics (75%) or Anglos (79.4%).
74. **marijuana?** 67.3% answered very to sort of easy: more males (70.7%) than females (64.4%). 72% of 11th and 12th graders answered very to sort of easy compared to 61% of 9th and 67% of 10th graders. There is no difference by ethnicity.
75. **cocaine, LSD, or methamphetamines?** 34% answered very to sort of easy. More 11th and 12th graders (approximately 42%) think it is very to sort of easy to get these drugs than 9th graders (24%) and 10th graders (31.7%). 27% of American Indians think it is very to sort of easy to get these drugs compared to 37% of Hispanics and 33.6% of Anglos.

76. **hallucinogenic drugs, such as ecstasy, mescaline, or mushrooms?** 38% answered very to sort of easy. There is not much difference by gender. 46% of 12th graders say it would be very to sort of easy compared to 29.3% of 9th graders. 28.3% of American Indians say it would be very to sort of easy compared to 37% of Hispanics and 40.4% of Anglos.
-

How much do you think people risk harming themselves (physically or in other ways) if they...

79. **smoke one or more packs of cigarettes a day?** 85% answered moderate to great risk. There is not much difference by grade: 85-90% of all grades consider smoking one or more packs a day to be moderate to great risk.
80. **have one or two drinks of beer, wine, or hard liquor nearly every day?** 68.6% answered moderate to great risk: more females (75.3%) than males (61%); more American Indians (73%) than Hispanics and Anglos (about 66.7% each).
81. **try marijuana once or twice?** 38.7% answered moderate to great risk: 45% of females and 31.6% of males. More American Indians and Hispanics (approximately 41.5% each) consider this level of marijuana use of moderate to great risk than Anglos (35%).
82. **smoke marijuana regularly?** 71.5% answered moderate to great risk: more females (78.2%) than males (63.8%). Approximately 73% of all ethnic groups consider this level of marijuana use of moderate to great risk.
-

About how many adults have you known personally who in the past year have...

77. **used marijuana, cocaine, or other drugs?** 35.2% have known personally three or more adults who have used these drugs: 42.9% of American Indians, 38.4% of Hispanics, and 35.2% of Anglos.
78. **sold or dealt drugs?** 22.3% have known personally three or more adults who have sold or dealt drugs: 27.5% and 26.2% of American Indians and Hispanics respectively, compared to 15% of Anglos.
-

In my home there is a parent or some other adult...

95. **who expects me to follow the rules.** 88.8% answered pretty much to very much true. There is a decrease with age: 20.9% of 18 year olds answered not at all to a little true compared to 10% of 17 year olds and 7.6% of 16 year olds; 80.4% of American Indians, 88.8% of Hispanics, and 92.2% of Anglos.
96. **who believes that I will be a success.** 87% answered pretty much to very much true: 82% of American Indians, 87% of Hispanics, and 89.7% of Anglos.
97. **who always wants me to do my best.** 92.3% answered pretty much to very much true: 89.7% of American Indians, 91.3% of Hispanics, and 94.8% of Anglos.
-
98. **When I am not at home, one of my parents/guardians knows where I am and who I am with.** 78% answered pretty much to very much true: 68.1% of American Indians,

78.8% of Hispanics, and 81.6% of Anglos. More females (52.9%) answered very much true compared to 40.5% of males.

99. My family has clear rules about drug and alcohol use. 78.5% answered pretty much to very much true. There were no differences by grade, gender or ethnicity.

100. My family has clear rules and standards for my behavior. 84% answered pretty much to very much true: 72.6% of American Indians, 85.4% of Hispanics, and 87.5% of Anglos.

At my school, there is a teacher or some other adult...

104. who tells me when I do a good job. 67.9% answered pretty much to very much true. There is a significant difference by gender: 72% of females compared to 63.2% of males answered pretty much to very much true; 36.6% of males answered not at all to a little true. There is no difference by ethnicity.

105. who always wants me to do my best. 72.4% answered pretty much to very much true: 75.5% of females. 31.4% of males answered not at all to a little true.

106. who believes that I will be a success. 68.8% answered pretty much to very much true: 75.4% of females. 31.8% of males answered not at all to a little true.

107. In my school, there are clear rules about what students can and cannot do. 84.7% answered pretty much to very much true; there is no significant difference by ethnicity.

Outside of my home and school, there is at least one adult...

115. who tells me when I do a good job. 78.1% answered pretty much to very much true: 60% of females answered very much true compared to 49.2% of males; 23% of males answered not at all to a little true.

116. who always wants me to do my best. 82.4% answered pretty much to very much true: 84.8% of females to 79.6% of males.

117. who believes that I will be a success. 83.2% answered pretty much to very much true with very little difference by gender.

130. My friends get into a lot of trouble. 24.6% answered very much to pretty much true: 30.2% of males and 19.7% of females. There is no difference by grade or ethnicity.

131. My friends do well in school. 75.5% answered pretty much to very much true: 80.4% of females and 69.8% of males.

Among the people you consider to be your closest friends, how many would you say...

132. drink alcohol once a week or more? 67.5% answered none to a few: 64.9% of males and 69.6% of females. There is a decrease by grade: 73.7% of 9th graders to approximately 61% of 11th and 12th graders. 22% of 11th and 12th graders answered most to all.

133. have used drugs such as marijuana or cocaine. 61% answered none to a few: 63% of females, 58.4% of males. There is an increase by grade of those answering most or all: 20.4% of 9th to 29% of 12th graders.

MEANINGFUL PARTICIPATION AND CONSTRUCTIVE USE OF TIME

- 108. At school, I help decide things like class activities or rules. 33.4%** answered pretty much to very much true: American Indians 38.5%, Hispanics 34.6%, Anglos 32%.
-
- 111. At school I am involved in sports, clubs, and other activities outside of class. 57.8%** answered pretty much to very much true. 50.4% of American Indians answered pretty much to very much true, 53.4% of Hispanics, and 65% of Anglos.
-
- 119. Away from school, I am part of clubs, sports teams or other extra activities. 51.9%** answered pretty much to very much true: 54.7% of males and 49.3% of females; 45.7% of American Indians, 47.2% of Hispanics, and 57.8% of Anglos.
-
- 120. Outside of my home and school, I take lessons in music, art, sports or a hobby. 47.3%** answered pretty much to very much true: 52.3% of males and 43% of females; 42.5% of American Indians and Hispanics, 52% of Anglos.
-
- 121. Outside of my home and school, I help other people, volunteer time, or engage in community service activities. 33.2%** answered pretty much to very much true: 26% of American Indians, 30.7% of Hispanics, 38% of Anglos.
-
- 134. How often do you attend religious or spiritual services? 50.7%** answered 1-2 times/month to 1-2 times/week; 26.4% answered never; 16.6% answered less than monthly.
-

COMMITMENT TO LEARNING AND POSITIVE IDENTITY

109. At school I try hard to do my best work. 81.2% answered pretty much to very much true: 85.3% of females, 75.4% of males.

110. I plan to go to college or some other school after high school. 86.6% answered pretty much to very much true: 90% of females, 82.7% of males; 81.2% of American Indians, 83.9% of Hispanics, and 90.6% of Anglos.

136. During the last four weeks, how many of school have you missed because you skipped or ditched? 56% answered none: 51.8% of American Indians, 53.2% of Hispanics, and 61.4% of Anglos. 38% of American Indians said they had skipped 2 or more days out of the previous four weeks; 31.1% of Hispanics, 29.3% of Anglos.

140. How often do you come to classes without bringing paper or something to write with? 56.2% answered never: 60% of females, 51.7% of males.

141. How often do you come to classes without your homework finished? 23% answered never. 19% of males answered usually, 13.5% of females; 21.7% of American Indians answered usually, 15.7% of Hispanics, 12.5% of Anglos.

SOCIAL COMPETENCIES AND LIFE SKILLS

122. I try to understand what other people feel and think. 74.1% answered pretty much to very much true: 67% of males and 80.3% of females.

123. It is important to think before you act. 85.2% answered pretty much to very much true: 81.2% of males and 88.7% of females.

124. I have to have everything right away. 60.7%% answered a little to not at all true, no difference by gender.

125. I often do things without thinking about what will happen. 56.6% answered a little to not at all true: 59% of females and 53.6% of males.

126. It's hard for me to stick with one thing even when it's fun. 65.6% answered a little to not at all true: 62% of males, 68.6% of females.

How many times have you done the following things?

137. Done what feels good no matter what. 22.4% answered never.

138. Done something dangerous because someone dared you to do it. 42.9% answered never: 34.2% of males, 50.5% of females.

139. Done crazy things even if they are a little dangerous. 30% answered never: 21.6% of males, 37.2% of females.

Factoid: The reflective-self function ... is a prerequisite to the development of other elements of resilience, including the ability to see different perspectives, the capacity to plan, creativity, and a sense of humor. Moreover, the capacity helps account for psychological plasticity, the ability to change one's inner world.
<http://www.mentalhealth.org/schoolviolence/part1chp8.asp>

CORRELATIONS

Now that the survey has two types of questions, risk behavior and resiliency factors, it seems worthwhile to investigate whether or not there is an association, or correlation, between resiliency factors and risk behavior. To that end, we started with a factor analysis of the resiliency questions to see if any strong components emerged. Three components emerged that make theoretical sense:

- Having a Caring Adult Outside the Home was the strongest and was composed of questions 112-117
- Having a Caring Adult In the Home was a good component, not as strong, but made sense in that it was composed of questions 92-97, and
- Having a Caring Adult at School, which was made up of questions 101-106.

A factor analysis of the risk behavior questions did not reveal any strong or theoretically sensible components that would lead to the making of indices.

While exploring relationships between variables, a strong association within the Perception of Norm questions regarding use of substances seemed to appear. The following indices were made:

- Perception of Risk, questions 79-82
- Perception of Wrongness from Adults in the Community, questions 60-63
- Perception of Wrongness from Parents, questions 64-67
- Self's Sense of Wrongness, questions 68-71
- Friends, questions 130-133
- Impulsivity, questions 124-126 and 137-139

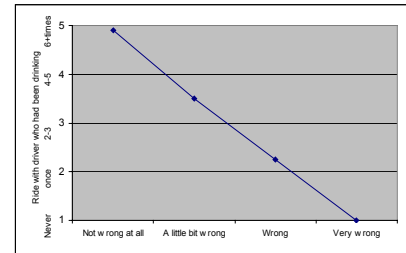
The above indices were correlated with individual risk questions (since no risk factors had emerged from which to make indices). A table follows of the correlations of the above indices with selected risk questions. Risk questions were selected by the strength of their correlation with one or more of the resiliency indices; that is, questions with no strong or statistically significant correlations are listed.

What is an index? An index is made by combining questions which one has reason to believe, either from a factor analysis or based on theory, are similar enough that together they make a composite item. So for instance, Having a Caring Adult Outside the Home was made up of six questions about the respondent's feelings about an outside adult's concern for him/her—cares about me, notices when I am upset, that I trust, tells me when I do a good job, wants me to do my best, and believes I will be a success. The index now measures the positive relationship that the respondent feels s/he has with the outside adult due to those six aspects.

A quick note on reading correlations: a correlation is a statistic that measures the degree of association (or co-relation) between two variables. If the two variables increase together, the correlation is positive; if one variable increases as the other decreases, the correlation is negative. Thus the range for a correlation is 0 to ± 1 . The closer the correlation is to 1, the more perfect the association, i.e. the units of the two variables increase or decrease in the same increments. (A perfect correlation of 1, however, would probably mean that the two

variables are actually the same.) It is very important that one not infer causality; correlation measures the strength and direction of association only—not cause.

So, for instance, the correlation between Self Wrongness Index and Q8 is $-.27$, a negative correlation. The lowest value for Q8 is 1 (never riding with a driver who'd been drinking) up to 5 (riding 6+ times). The Self Wrongness Index has 4 values, 1 being Not Wrong at All to 4, Very Wrong. Imagine the direction of the correlation looking like this graph, showing an almost perfect correlation of -1 : people who consider it not at all wrong to smoke, drink, or do pot (1) will ride with a driver who's been drinking (5). As the perception of wrongness gets closer to 4 (very wrong to smoke, drink, or do pot), those people are less likely to ride with a driver who's been drinking (1). So we can see from this example that there is a correlation between the perception of wrongness of doing drugs and another risk behavior, riding with a drinking driver.



Let's look at one question as an example, Q18, been in a fight past 12 months. The correlation with the Caring Outside Adult Index is $-.07$, negative and extremely low, as good as zero. As we go across the row we notice that the highest correlation is with the Impulsivity Index at $-.26$. From this we interpret that having a caring outside adult has no association with getting in a fight, but being in fewer fights is associated with being less impulsive (or more self control).

Indices									
All indices have been constructed, for consistency, so that all values go in the same direction, that is, the riskiest values are the lowest and the most protective values are the highest.	Caring Outside Adult	Caring Adult at Home	Caring Adult at School	Perception of Risk of Doing ATOD	Perception of Norms Adults in Community	Perception of Norms of Parents	Self's Norms	Friends' Good Influence	Lack of Impulsivity
Risk Questions									
Q7. Seatbelt	.10	.15	.10	.17	.08	.08	.14	.18	.22
Q8. Rode with driver who'd been drinking past 30 days	-.06	-.13	-.10	-.17	-.13	-.24	-.27	-.34	-.24
Q9. Drove after drinking past 12 months	-.03	-.06	-.07	-.16	-.12	-.20	-.24	-.29	-.19
Q13. Carried a weapon past 30 days	-.10	-.16	-.13	-.19	-.13	-.15	-.23	-.25	-.29
Q18. In a fight past 12 months	-.07	-.12	-.07	-.14	-.17	-.20	-.23	-.23	-.26
Q27. Cigs/day past 30 days	-.08	-.12	-.08	-.23	-.17	-.33	-.36	-.31	-.23
Q35. Will not smoke cig in next year	.09	.17	.13	.29	.17	.33	.46	.37	.30
Q36. Would smoke cig offered by a friend	.10	.16	.12	.26	.12	.25	.40	.29	.25
Q39. Days smoked cigs past 30 days	-.05	-.10	-.05	-.23	-.17	-.38	-.37	-.30	-.21
Q42. Days had alcohol past 30 days	-	-.12	-.06	-.28	-.19	-.32	-.44	-.43	-.31
Q43. Binge drink past 30 days	-.03	-.11	-.06	-.27	-.14	-.29	-.38	-.42	-.31
Q45. Days used marijuana past 30 days	-.07	-.12	-.11	-.32	-.22	-.38	-.43	-.41	-.25
Q50. Days used hallucinogens past 30 days	-.10	-.11	-.09	-.20	-.15	-.19	-.26	-.24	-.21
Q52. Days had alcohol past 12 months	-	-.09	-.07	-.30	-.24	-.37	-.50	-.43	-.30
Q53. Days used marijuana past 12 months	-.09	-.14	-.12	-.37	-.25	-.40	-.51	-.45	-.30

Indices All indices have been constructed, for consistency, so that all values go in the same direction, that is, the riskiest values are the lowest and the most protective values are the highest. Risk Questions	Caring Outside Adult	Caring Adult at Home	Caring Adult at School	Perception of Risk of Doing ATOD	Perception of Norms Adults in Community	Perception of Norms of Parents	Self's Norms	Friends' Good Influence	Lack of Impulsivity
Q55. Days used any form of cocaine past 12 months	-.07	-.11	-.08	-.17	-.15	-.22	-.25	-.25	-.15
Q83. Age 1 st smoked whole cigarette	-.07	-.11	-.07	-.24	-.19	-.24	-.33	-.28	-.19
Q85. Age 1 st had marijuana	-.03	-.05	-.06	-.21	-.09	-.18	-.34	-.25	-.17
Q86. Age 1 st had sex	.05	-.05	-.05	-.09	-.14	-.20	-.24	-.20	-.13
Q87. # of people w/whom had sex	-.04	-.10	-.03	-.20	-.13	-.20	-.25	-.27	-.24
Q88. Drink before last sex	-.04	.06	.04	.15	.14	.19	.23	.23	.20
Q89. Condom last sex	-.04	-.04	-.04	.12	.12	.17	.22	.20	.16

What is interesting about this table is that, as you go across the row of correlations for each risk question, the last three columns of resiliency indices are the strongest: self's norms, friends' good influence, and lack of impulsivity. This does not contradict or negate the resiliency literature. Protective factors are cumulative (as are risk factors); a table like this cannot capture that cumulative effect. These factors are probably the most proximate influences on risk behavior.

In planning an intervention to change risk behaviors, one would use correlations to determine a resiliency factor that has a high association (even if not cause) with the risk factor of interest. For example, 'Self Norms' and 'Friends' have a higher correlation with the number of days respondents drank alcohol in the past 12 months than 'Perceptions of Norms of Adults in the Community'. Thus, an intervention that intended to decrease the number of days teens drink alcohol (decrease underage drinking), would decide to target the teen social network instead of community norms, aiming to influence/change the attitude/perception among teens instead of trying to change community norms about underage drinking.

There is much that can be done with correlations--risk behavior to resiliency factor, individual question to question, risk behavior or resiliency factor with demographics. For information on how to get help with correlations specific to your district data, call the New Mexico State Department of Education's School Health Unit, 505/827-1806.

APPENDICES

APPENDIX A METHODOLOGY

The district samples were drawn according to the following design:

A formula was determined (see L. Kish, Survey Sampling, pp. 41-43) for the purpose of drawing an unbiased and efficient sample within each school district requesting data. To estimate the necessary sample size for each school district, using the finite population correction (per Kish et. al.), we assumed that:

- the variance of a typical variable of interest to the district is approximated by a dichotomous variable with proportion mean=.5, and
- the goal is for sample means to estimate population means within $\pm .05$ with 95% confidence.

Solving the appropriate equation for n for each district provided the minimum sample size necessary to meet these conditions.

Once the equation was solved and the final sample size was determined, the sampling interval within classes was determined using the sample size as a proportion of the total 6-8th grade enrollment (except K-6 schools) of the selected district. If there was more than one school participating from a district, the class lists from all schools were combined, sorted according to size, descending, and the interval applied.

Classes were selected from 2nd period class lists provided by the schools. 2nd period classes were used instead of English classes because, given that the necessary criterion was that EVERY student must have an EQUAL chance to be selected for the sample but only one chance, 1) some students would not necessarily be in an English class, or 2) some might be in two English classes. Every student HAD to be somewhere 2nd period, but not every student would be in an English class.

The sample size was increased by 15% to allow for absences and parental refusals. Also, in some smaller districts where the desired sample nearly equaled the total enrollment, enough surveys were provided for a census in that district. The number of surveys sent to a school was additionally increased according to the enrollment in the classrooms selected for the sample. The sampling formula provides an interval for selecting classrooms. If the total enrollment in the selected classrooms added up to more than the desired sample size, students were not excluded; excepting parental refusals, all students in a classroom participated.

The school district samples provide unbiased estimates for each school district, but because participating districts were not selected randomly, aggregating the responses for all districts does not provide good estimates at the state level.

Weighting was accomplished by a simple formula taken from the ratio of the district's high school (P_{sd}) population as a proportion of the state's total high school population (T_s). A weight was then calculated so that a district's returned usable surveys (R_{sd}) were the same proportion of the total returned surveys (T_r) as the district's population was of the state population.

$$P_{sd} : T_s :: R_{sd} : T_r$$

APPENDIX B DATA CLEANING AND EDITS

Approximately 10,500 surveys were sent out by R&P. Some classrooms returned blank or incomplete surveys. A team went over all returned surveys checking for correctness of district, county, and classroom coding, and erasing any stray marks that might interfere with the scanner reading the filled in bubbles.

After scanning, the raw data was “cleaned” further to remove surveys suspected of being insincere:

- ✓ Any survey that had answers other than 1 (never) or 0 (missing) to Questions 48 and 56, about synthetic endorphins, were deleted. This is a fabricated drug. The questions are designed to screen out those respondents who aren’t answering honestly or who are answering positively to every drug question.
- ✓ Any survey with 30 or more missing answers was deleted.
- ✓ Any survey where the BMI calculated from height and weight fell outside of normal bounds as established by the Division of Nutrition and Physical Activity (see below) was deleted.

After all edits, there was a loss of 692 surveys out of 9,814, bringing the total usable surveys to 9,122 for all participating districts.

Height, Weight and BMI

Basic Edits: Height is scanned as a three-column character variable. The first column ranges from “3” to “7” and indicates whole feet; the second and third columns range from “00” to “11” and indicate inches. If either feet or inches isn’t filled in or is unreadable, then both are set to missing and Q5 is set to missing. If it was filled in correctly, it is converted to meters by multiplying the calculated inches by .0254.

Weight is scanned as a three-column character variable. If any column is left blank or is unreadable, all columns are set to missing and Q6 is set to missing. If it was filled in correctly, it is converted to kilograms by multiplying pounds by .4536.

If Q5 and Q6 pass basic data edits, Body Mass Index (BMI) is calculated by the formula

$$BMI = \frac{kg}{m^2} = \frac{Q6}{Q5^2}$$

Logical Edits: When basic edits are complete, logical edits are applied to make sure that the results are reasonable. Q5, Q6, and BMI are set to missing when an observation lies outside the following limits. These limits were developed by the Division of Nutrition and Physical Activity.

Age	Males	Females
≤10	Weight: 13.61-90.72 kg Height: .94-1.68 m BMI: 11.5 –41	Weight: 13.61-90.72 kg Height: .94-1.73 m BMI: 11-40
11-12	Weight: 20.41-136.08 kg Height: 1.02-1.83 m BMI: 11.5-41	Weight: 15.88-136.08 kg Height: 1.02-1.83 m BMI: 11-40

Age	Males	Females
13-14	Weight: 27.22-181.44 kg Height: 1.27-1.98 m BMI: 13-55	Weight: 27.22-181.44 kg Height: 1.27-1.98 m BMI: 13-55
≥15	Weight: 31.75-181.44 kg Height: 1.27-2.11 m BMI: 13-55	Weight: 27.22-181.44 kg Height: 1.27-1.98 m BMI: 13-55

Risk of overweight (85th %ile) and Overweight (95th %ile) can be calculated according to the following table:

Reference Data for Obesity				
Age	Males		Females	
	85 th	95 th	85 th	95 th
≤9	18.85	21.47	19.19	21.78
10	19.96	22.60	20.19	23.20
11	20.35	23.73	21.18	24.59
12	21.12	24.89	22.17	25.95
13	21.93	25.93	23.08	27.07
14	22.77	26.93	23.88	27.97
15	23.63	27.76	24.29	28.51
16	24.45	28.53	24.74	29.10
17	25.28	29.32	25.23	29.72
≥18	25.92	30.02	25.56	30.22

The source for the reference data is the National Health and Nutrition Examination Survey I.

APPENDIX C REFERENCES

- ¹ National Highway Traffic Safety Administration. *Final Regulatory Impact Analysis: Amendment of FMVSS No. 208 - Passenger Car Front Seat Occupant Protection*. Washington DC: U.S. Department of Transportation, 1984.
- ² National Center for Health Statistics. Report of final mortality statistics, 1995. *Monthly Vital Statistics Report 45(11, supplement 2)*, 1997.
- ³ Centers for Disease Control and Prevention. Involvement by young drivers in fatal motor-vehicle crashes - United States, 1988-1995. *Morbidity and Mortality Weekly Report 45:1049-1053*, 1996.
- ⁴ Rosenberg, M.L., O'Carroll, P.W., and Powell, K.E. Let's be clear. Violence is a public health problem. *Journal of the American Medical Association 267:3071-3072*, 1992.
- ⁵ National Center for Health Statistics. Births and Deaths: United States, 1996. *Monthly Vital Statistics Report 46(1, supplement 2)*, 1997.
- ⁶ Cotton, N.U., Resnick, J., Browne, D.C., Martin, S.L., McCarraher, D.R., and Woods, J. Aggression and fighting behavior among African-American adolescents: Individual and family factors. *American Journal of Public Health 84:618-622*, 1994.
- ⁷ National Center for Health Statistics. Report of final mortality statistics, 1995.
- ⁸ National Center for Health Statistics. Report of final mortality statistics, 1995.
- ⁹ National Center for Health Statistics. Report of final mortality statistics, 1995. U.S. Department of Health and Human Services. *Prevention '89/'90: Federal Programs and Progress*. Washington, DC: U.S. Government Printing Office, 1990.
- ¹⁰ Hartman, C.R., and Burgess, A.W. Treatment of victims of rape trauma. In J.P. Wilson and B. Raphael (eds.), *International Handbook of Traumatic Stress Syndromes (pp.507-516)*. New York: Plenum Press, 1993.
- ¹¹ Erickson, P.I., and Rapkin, A.J. Unwanted sexual experiences among middle and high school youth. *Journal of Adolescent Health, 12:319-325*, 1991.
- ¹² U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General*. Washington, DC: U.S. Government Printing Office, 1994.
- ¹³ Centers for Disease Control and Prevention. Smoking-attributable mortality and years of potential life lost-United States, 1988. *Morbidity and Mortality Weekly Report 40:62-62, 69-71*, 1991.
- ¹⁴ USDHHS. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General*.
- ¹⁵ USDHHS. *Preventing Tobacco Use Among Young People: A Report of the Surgeon General*.
- ¹⁶ Centers for Disease Control and Prevention. Accessibility to minors of cigarettes from vending machines - Broward County, Florida, 1996 *Morbidity and Mortality Weekly Report 45:1036-1038*, 1996.
- ¹⁷ Garrison, C.Z., McKeown, R.E., Valois, R.F., and Vincent, M.L. Aggression, substance use, and suicidal behaviors in high school students. *American Journal of Public Health 83:179-184*; 1993. Hawkins, J.D., Catalano, R.F., and Miller, J.Y. Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin 112:64-105*, 1992.
- ¹⁸ Centers for Disease Control and Prevention. Alcohol-related traffic fatalities among youth and young adults - United States, 1982-1989. *Morbidity and Mortality Weekly Report 40:178-179, 185-187*, 1991.
- ¹⁹ Wechsler, H., Dowdall, G.W., Davenport, A., and Castillo, S. Correlates of college student binge drinking. *American Journal of Public Health 85:921-926*, 1995.
- ²⁰ Morris, L., Warren, C.W., and Aral, S.O. Measuring adolescent sexual behaviors and related health outcomes. *Public Health Reports 108:31-36*, 1993.
- ²¹ Hofferth, S.L., and Hayes, C.D. (eds.). *Risking the Future: Adolescent Sexuality, Pregnancy, and Childbearing*. Panel on Adolescent Pregnancy and Childbearing, Committee on Child Development Research and Public Policy, Commission on Behavioral and Social Sciences and Education, National Research Council Washington, DC: National Academy Press, 1987.
- ²² National Center for Health Statistics. Report of final mortality statistics, 1995.
- ²³ Morris et al.
- ²⁴ Hofferth and Hayes.
- ²⁵ Centers for Disease Control and Prevention. Abortion surveillance - United States, 1995. *Morbidity and Mortality Weekly Report 47(No. SS-2):31-89*.1998.

-
- ²⁶ National Center for Health Statistics. Report of final natality statistics, 1996. *Monthly Vital Statistics Report* 46(11), 1998.
- ²⁷ Report of final natality statistics, 1996.
- ²⁸ National Center for Health Statistics. Fertility, family planning, and women's health: New data from the 1995 National Survey of Family Growth. *Vital and Health Statistics Series 23: No. 19*, 1997.
- ²⁹ Troiano, R.P., and Flegal, K.M. Overweight children and adolescents: description, epidemiology, and demographics. *Pediatrics* 101:497-504, 1998.
- ³⁰ Public Health Service. *The Surgeon General's Report on Nutrition and Health*. Washington, DC: U.S. Department of Health and Human Services, Public Health Service, 1988. DHHS publication no. (PHS) 88-50210.
- ³¹ Dietz, W.H. Health consequences of obesity in youth: childhood predictors of adult disease. *Pediatrics* 101:518-525, 1998.
- ³² U.S. Department of Agriculture, Agricultural Research Service. Unpublished data from the 1994-96 Continuing Survey of Food Intakes by Individuals. February 1998.
- ³³ U.S. Department of Agriculture, Agricultural Research Service. Unpublished data from the 1989-91 Continuing Survey of Food Intakes by Individuals. February 1998. National Center for Health Statistics, Centers for Disease Control and Prevention. Unpublished data from the 1988-94 National Health and Nutrition Examination Survey. May 1998.
- ³⁴ U.S. Department of Health and Human Services. Physical Activity and Health: A Report of the Surgeon General. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.
- ³⁵ McKenzie, K.L., Nader, P.R., Strikmiller, P.K., Yang, M., Stone, E.J., Perry, C.L., Taylor, W.C., Epping, J.M., Feldman, H.A., Luepker, R.V., and Kelder, S.H. School physical education: Effect of the Child and Adolescent Trial for Cardiovascular Health. *Preventive Medicine* 25:423-431, 1996. Sallis, J.F., McKenzie, T.L., Alcaraz, J.E., Kolody, B., Faucette, N., and Hovell, M.F. The effects of a 2-year physical education program (SPARK) on physical activity and fitness in elementary school students. *American Journal of Public Health* 87:1328-1334, 1997. Centers for Disease Control and Prevention. Guidelines for school and community programs to Promote lifelong physical activity among young people. *Morbidity and Mortality Weekly Report* 46(No. RR-6):1-3 6, 1997.
- ³⁶ USDHHS. Physical Activity and Health: A Report of the Surgeon General.
- ³⁷ Andersen, R.E., Crespo, C.J., Barlett, S.J., Cheskin, L.J., and Pratt, M. Relationship of physical activity and television watching with body weight and level of fatness among children. *Journal of the American Medical Association* 279:938-942, 1998.