High School
2001 Survey Results

Public Schools of North Carolina
Department of Public Instruction
State Board of Education
Visit our World Wide Web site
http://www.ncpublicschools.org
Acknowledgements

First and foremost, the North Carolina Department of Public Instruction (NCDPI) extends its sincere appreciation to all of the students who participated in the 2001 North Carolina Youth Risk Behavior Survey (YRBS). Without their responses, statewide monitoring of health risk behaviors among North Carolina youth would not be possible. NCDPI also acknowledges the vital contributions of the dozens of school, school district, and local health department personnel from across the state who allowed their schools to participate in the YRBS, attended YRBS trainings, administered the surveys, and delivered the resulting data and documentation to NCDPI. The surveys had to be administered during the instructional day, and were often completed under tight timelines. The care and effort put forth by those individuals in going above and beyond their official duties to provide quality data for the North Carolina YRBS are appreciated.

The 2001 North Carolina YRBS was conducted by NCDPI, Division of Accountability Services, in conjunction with the North Carolina Department of Health and Human Services (NCDHHS). Numerous staff members from both agencies contributed to the success of this project in one way or another.

Bradley McMillen, Senior Research and Evaluation Consultant at NCDPI and Sherry Lehman, AIDS/HIV Consultant at NCDPI, oversaw the survey development and sampling processes, conducted training of survey administrators, and coordinated all data collection and verification efforts.

The survey instrument used in 2001 was developed by a group charged with modifying the National YRBS Questionnaire to reflect priorities specific to education and health constituencies in North Carolina and with outreach efforts designed to encourage and facilitate schools’ participation in the survey. The members of the group included Phil Bors, Madge Cohen, Carol Council, Sarah McCracken, Judy Owen-O’Dowd, Becky Procter, and Michael Sanderson, of NCDHHS; Janey McMillen and Rune Simeonsson of the Frank Porter Graham Child Development Center at the University of North Carolina-Chapel Hill; Dave Currey of the Pacific Institute for Research and Evaluation; and Dorothea Brock, Alan Collins, Paula Collins, Fred Haynie, Sherry Lehman, Bradley McMillen, and Rhonda Turner of NCDPI.

Bradley McMillen was the primary author of this report. Melanie W. Greene, Associate Professor of Education at Appalachian State University and Jennifer L. Brown, Assistant to the North Carolina Comprehensive School Health Training Center at Appalachian State University, assisted with the creation of the graphics and interpretation of results. Laura Weakland, NCDPI Lead Graphic Artist, illustrated the cover of this report.
Table of Contents

Executive Summary ......................................................................................................................... i

Introduction ................................................................................................................................. 1

Procedures ................................................................................................................................. 1

Results

Personal Safety .......................................................................................................................... 5
Violence-Related Behavior ........................................................................................................ 10
Tobacco Use ............................................................................................................................... 18
Alcohol Use ............................................................................................................................... 23
Other Drug Use ......................................................................................................................... 27
Health Education ....................................................................................................................... 40
Weight Management ................................................................................................................ 42
Physical Health ......................................................................................................................... 50
Nutrition ................................................................................................................................... 53
Physical Activity ....................................................................................................................... 61
Psychological Health ................................................................................................................ 69
School Environment ................................................................................................................. 75
Selected Prevention-Related Indicators .................................................................................... 79

References .................................................................................................................................. 85

Appendices

A. 1993 North Carolina Youth Risk Behavior Survey – High School Questionnaire

B. 1995 North Carolina Youth Risk Behavior Survey – High School Questionnaire

C. 1997 North Carolina Youth Risk Behavior Survey – High School Questionnaire

D. 2001 North Carolina Youth Risk Behavior Survey – High School Questionnaire
List of Tables

Table 1. Sample sizes and response rates for the North Carolina High School YRBS, 1993-2001 ......................................................................................................................2
List of Figures

Figure 1. Characteristics of students participating in the North Carolina High School YRBS, 1993 through 2001.................................................................3

Figure 2. Percentage of North Carolina high school students who never or rarely wore a helmet while riding a bicycle during the past 12 months. ...........................................5

Figure 3. Percentage of North Carolina high school students who never or rarely wore a helmet while riding a motorcycle during the past 12 months..................................6

Figure 4. Percentage of North Carolina high school students who never or rarely wear a seatbelt when riding in a car driven by someone else................................................7

Figure 5. Percentage of North Carolina high school students who rode in a car driven by someone who had been drinking alcohol in the past 30 days..............................8

Figure 6. Percentage of North Carolina high school students who drove a car or other vehicle when they had been drinking alcohol during the past 30 days.........................9

Figure 7. Percentage of North Carolina high school students who carried a weapon such as a gun, knife, or club during the past 30 days.............................................10

Figure 8. Percentage of North Carolina high school students who carried a weapon such as a gun, knife, or club on school property during the past 30 days.........................11

Figure 9. Percentage of North Carolina high school students who did not go to school on one or more of the past 30 days because they felt unsafe at school or on their way to or from school.................................................................12

Figure 10. Percentage of North Carolina high school students who were threatened or injured with a weapon on school property during the past 12 months................13

Figure 11. Percentage of North Carolina high school students whose possessions had been stolen or deliberately damaged on school property during the past 12 months.................................................................14

Figure 12. Percentage of North Carolina high school students who had been in a physical fight during the past 12 months.................................................................15

Figure 13. Percentage of North Carolina high school students who were in a physical fight during the past 12 months and had to be treated by a doctor or nurse..................16

Figure 14. Percentage of North Carolina high school students who were in a physical fight on school property during the past 12 months................................................17

Figure 15. Percentage of North Carolina high school students reporting who first smoked a cigarette prior to age 13...............................................................18

Figure 16. Percentage of North Carolina high school students who smoked cigarettes on one or more of the past 30 days...............................................................19

Figure 17. Percentage of North Carolina high school students who smoked two or more cigarettes on the days they did smoke during the past 30 days...........................20

Figure 18. Percentage of North Carolina high school students who smoked cigarettes on school property during the past 30 days.....................................................21
Figure 19. Percentage of North Carolina high school students who were current smokers and who tried to quit smoking during the past 12 months.................................22

Figure 20. Percentage of North Carolina high school students who consumed alcohol for the first time prior to age 13.................................................................23

Figure 21. Percentage of North Carolina high school students who consumed at least one drink of alcohol during the past 30 days..................................................24

Figure 22. Percentage of North Carolina high school students who had five or more drinks of alcohol in a row within a couple of hours on one or more of the past 30 days. .................................................................................25

Figure 23. Percentage of North Carolina high school students who had at least one drink of alcohol on school property during one or more of the past 30 days..............26

Figure 24. Percentage of North Carolina high school students who used marijuana one or more times during their life.................................................................27

Figure 25. Percentage of North Carolina high school students who tried marijuana for the first time before age 13. ..................................................................................28

Figure 26. Percentage of North Carolina high school students who used marijuana one or more times during the past 30 days.................................................................29

Figure 27. Percentage of North Carolina high school students who used marijuana on school property one or more times during the past 30 days. ........................................29

Figure 28. Percentage of North Carolina high school students who used any form of cocaine including powder, crack, or freebase one or more times during their life. .................................................................31

Figure 29. Percentage of North Carolina high school students who used any form of cocaine including powder, crack, or freebase one or more times during the past 30 days........................................................................................................32

Figure 30. Percentage of North Carolina high school students who had used LSD, PCP, mushrooms, ecstasy, or other hallucinogens during their life........................................33

Figure 31. Percentage of North Carolina high school students who used heroin one or more times during their life.................................................................34

Figure 32. Percentage of North Carolina high school students who sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high one or more times during their life.................................................................35

Figure 33. Percentage of North Carolina high school students who used steroid pills or shots without a doctor’s prescription one or more times during their life. ...............36

Figure 34. Percentage of North Carolina high school students who had used methamphetamines one or more times during their life.................................................................37

Figure 35. Percentage of North Carolina high school students who used a needle to inject any illegal drug into their body during their life.................................................................38

Figure 36. Percentage of North Carolina high school students who had been offered, sold or given an illegal drug on school property during the past 12 months....................39
Figure 37. Percentage of North Carolina high school students who reported that they had ever been taught about AIDS or HIV infection in school............................................40

Figure 38. Percentage of North Carolina high school students who had ever been taught about chlamydia, gonorrhea, syphilis, or human papilloma virus (HPV) in school. ..........................................................................................................................41

Figure 39. Percentage of North Carolina high school students who are at risk for becoming overweight based on Body Mass Index (BMI). ..........................................................42

Figure 40. Percentage of North Carolina high school students who are overweight based on Body Mass Index (BMI). ........................................................................................43

Figure 41. Percentage of North Carolina high school students who describe themselves as slightly or very overweight......................................................................................44

Figure 42. Percentage of North Carolina high school students who were trying to lose weight...........................................................................................................................45

Figure 43. Percentage of North Carolina high school students who exercised to lose weight or to keep from gaining weight during the past 30 days. ........................................46

Figure 44. Percentage of North Carolina high school students who vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days. .............................................................................................................................47

Figure 45. Percentage of North Carolina high school students who went without eating for 24 hours or more to lose weight during the past 30 days........................................48

Figure 46. Percentage of North Carolina high school students who took diet pills, powders, or liquids without a doctor’s advice to lose weight or to keep from gaining weight during the past 30 days........................................................................49

Figure 47. Percentage of North Carolina high school students who saw a doctor or health care provider for a check-up or physical exam when they were not sick or injured during the past 12 months.................................................................50

Figure 48. Percentage of North Carolina high school students who saw a dentist for a check-up, exam, teeth cleaning, or other dental work during the past 12 months..........................................................51

Figure 49. Percentage of North Carolina high school students who rate the quality of their health as good or better........................................................................................52

Figure 50. Percentage of North Carolina high school students who drank 100% fruit juice one or more times during the past seven days.....................................................53

Figure 51. Percentage of North Carolina high school students who ate fruit one or more times during the past seven days..................................................................................54

Figure 52. Percentage of North Carolina high school students who ate green salad one or more times during the past seven days. .......................................................................55

Figure 53. Percentage of North Carolina high school students who ate potatoes one or more times during the past seven days.................................................................56

Figure 54. Percentage of North Carolina high school students who ate carrots one or more times during the past seven days. .................................................................57
Figure 55. Percentage of North Carolina high school students who ate other vegetables (other than salad, potatoes, and carrots) one or more times during the past seven days. .................................................................58

Figure 56. Percentage of North Carolina high school students who ate five or more servings of fruits and vegetables per day during the past seven days. ............................................59

Figure 57. Percentage of North Carolina high school students who drank three or more glasses of milk daily during the past seven days. .................................................................60

Figure 58. Percentage of North Carolina high school students who participated in strenuous physical activity for at least 20 minutes on three or more of the past seven days. .......................................................61

Figure 59. Percentage of North Carolina high school students who participated in moderate physical activity for at least 30 minutes on five or more of the past seven days. .................................................................62

Figure 60. Percentage of North Carolina high school students who did not participate in at least 20 minutes of strenuous physical activity on three or more of the past seven days and did not do at least 20 minutes of moderate physical activity on five or more of the past seven days. .................................................................63

Figure 61. Percentage of North Carolina high school students who participated in no strenuous or moderate physical activity during the past seven days. ..............................64

Figure 62. Percentage of North Carolina high school students who attended physical education classes one or more days during an average school week. .........................65

Figure 63. Percentage of North Carolina high school students who exercised or played sports for more than 20 minutes during an average physical education class. .........................66

Figure 64. Percentage of North Carolina high school students who walk to school three or more days per week. .........................................................................................67

Figure 65. Percentage of North Carolina high school students who ride a bicycle to school three or more days per week. .........................................................................................68

Figure 66. Percentage of North Carolina high school students who feel stress in their life most or all of the time. .........................................................................................69

Figure 67. Percentage of North Carolina high school students who had seriously thought about attempting suicide during the past 12 months. .................................................70

Figure 68. Percentage of North Carolina high school students who felt so sad or hopeless almost every day for two weeks or more in a row during the past 12 months that they stopped doing some usual activities. .................................................................71

Figure 69. Percentage of North Carolina high school students who rate the quality of their life as good or better. .........................................................................................72

Figure 70. Percentage of North Carolina high school students who agree that they feel good about themselves. .........................................................................................73

Figure 71. Percentage of North Carolina high school students who feel alone in their life. ..............................74

Figure 72. Percentage of North Carolina high school students who agree that harassment and bullying by other students is a problem at their school. .................................................75
Figure 73. Percentage of North Carolina high school students who agree that their teachers care about them. 

Figure 74. Percentage of North Carolina high school students who agree that drugs are a problem at their school.

Figure 75. Percentage of North Carolina high school students who agree that violence is a problem at their school.

Figure 76. Percentage of North Carolina high school students who plan to pursue post-secondary education.

Figure 77. Percentage of North Carolina high school students reporting that there is never an adult home in the afternoon when they return from school.

Figure 78. Percentage of North Carolina high school students who participate in extracurricular activities at school.

Figure 79. Percentage of North Carolina high school students who performed any organized community service as a non-paid volunteer one or more times during the past 30 days.

Figure 80. Percentage of North Carolina high school students whose parent(s) do not have at least a high school diploma.

Figure 81. Percentage of North Carolina high school students who described their grades in school during the past 12 months as mostly Ds or below.
Executive Summary

The 2001 Youth Risk Behavior Survey (YRBS) was produced by the Centers for Disease Control and Prevention (CDC) and is intended to assess health risk behaviors that contribute to some of the leading causes of death and injury among children and adolescents. This survey is typically administered at the middle and/or high school level by individual states in odd-numbered years to coincide with the national high school administration of the YRBS conducted by CDC. The primary purposes of the survey are to monitor trends in health risk behaviors over time, to evaluate the impact of broad efforts to prevent high-risk behaviors, and to provide targets for improving school health education policies and programs (CDC, 2001).

The 2001 North Carolina High School YRBS consisted of 85 items addressing topics such as personal safety, violence-related behavior, tobacco use, alcohol use, other drug use, health education experiences, physical health, nutrition, physical activity, psychological health, and the perceived safety of the school environment. A sample of 2,548 high school students drawn from 62 schools across the state participated in the 2001 YRBS. Their responses to the survey items are used to examine the current prevalence of health risk behaviors among North Carolina high school students. In addition, since some of the survey items have remained unchanged since the survey was first administered in 1993, the YRBS also provides information on trends of some behaviors over time.

Overall, results from the 2001 North Carolina High School YRBS indicate that the majority of the changes in health risk behaviors between 1993 and 2001 were positive in nature, particularly with respect to motor vehicle safety, carrying weapons, fighting, alcohol use, inhalant use, and suicidal ideation. The prevalence of some health risk behaviors measured by the YRBS remain high, however. In particular, a large percentage of North Carolina high school students appear to be overweight compared to national norms. Use of cocaine and steroids among North Carolina high school students has increased, and the percentage of students who report avoiding school because of safety concerns also increased.

Compared to national benchmarks, results for North Carolina high school students were mixed. North Carolina students were less likely that students nationally to engage in various risk behaviors related to motor vehicle safety, alcohol and cocaine use, and fighting. However, they were more likely than students nationwide to try cigarettes at an early age and to be overweight, and were less likely to consume fruits, vegetables and milk on a regular basis. On other measures of health risk behaviors, North Carolina high school students did not differ from students nationally.

There were also gender, grade level, and ethnic disparities in North Carolina on several indicators. For example, males were more likely than females to report engaging in violent behavior, engaging in unsafe motor vehicle behaviors, and abusing alcohol and other drugs. Females were more likely than males to report undesirable weight control behaviors and psychological distress. Males were more likely to be overweight, but females were more likely to see themselves as being overweight. Males were also more likely than females to report engaging in physical activity.
In general, students in higher grade levels were more likely to report drinking alcohol, smoking marijuana, and drinking and driving. Students in lower grade levels were more likely to report being involved in violence, but were also more likely to report engaging in physical activity. Several differences between ethnic groups were also evident. For example, Black students were generally less likely than students of other ethnicities to report abusing tobacco, alcohol and other drugs; however, they were also less likely to eat healthier foods and engage in physical activity.

The results of the 2001 North Carolina High School YRBS, as well as the results of future YRBS administrations, should help North Carolina health professionals, educators, and policymakers to focus and intensify their efforts to reduce health risk behaviors among North Carolina high school students.

**Positive Trends**

Between 1993 and 2001, there was a statistically significant decrease among North Carolina high school students on each of the following indicators:

- Not wearing a bicycle helmet (Figure 2);
- Riding in a car with a drinking driver (Figure 5);
- Carrying a weapon (Figure 7);
- Carrying a weapon on school property (Figure 8);
- Having their possessions damaged or stolen at school (Figure 11);
- Being in a physical fight at school (Figure 14);
- Drinking alcohol for the first time prior to age 13 (Figure 20);
- Using glues or other inhalants to get high (Figure 32);
- Seriously considering suicide (Figure 67).

**Negative Trends**

Between 1993 and 2001, there was a statistically significant increase among North Carolina high school students on each of the following indicators:

- Not going to school because of safety concerns (Figure 9);
- Ever using cocaine (Figure 28);
- Ever using steroids (Figure 33);
- Exercising to lose weight or keep from gaining weight (Figure 43).

**National Comparisons**

Compared to percentages from the National YRBS, North Carolina high school students in 2001 were significantly more likely to:

- Wear a seatbelt when riding in a car driven by someone else (Figure 4);
- Smoke cigarettes for the first time prior to age 13 (Figure 15);
- Be overweight (Figure 40).
Compared to percentages from the National YRBS, North Carolina high school students in 2001 were significantly less likely to:

- Ride in a car driven by a drinking driver (Figure 5);
- Drive under the influence of alcohol (Figure 6);
- Be in a fight (Figure 12);
- Drink alcohol for the first time prior to age 13 (Figure 20);
- Drink alcohol in the past 30 days (Figure 21);
- Engage in binge drinking (Figure 22);
- Ever use cocaine (Figure 28);
- Eat fruit (Figure 51);
- Eat green salad (Figure 52);
- Eat carrots (Figure 54);
- Eat five or more servings of fruit or vegetables in the past week (Figure 56);
- Drink three or more glasses of milk per day (Figure 57).

**Gender Disparities**

In 2001, males in North Carolina high schools were more likely than females to report:

- Not wearing a helmet while riding a bicycle or motorcycle (Figures 2 & 3);
- Not wearing a seatbelt when riding in a car driven by someone else (Figure 4);
- Driving under the influence of alcohol (Figure 6);
- Carrying a weapon (Figure 7);
- Carrying a weapon at school (Figure 8);
- Being threatened or injured with a weapon at school (Figure 10);
- Being in a fight (Figure 12);
- Being in a fight at school (Figure 14);
- Drinking and smoking marijuana for the first time prior to age 13 (Figures 20 & 25);
- Drinking at school (Figure 23);
- Smoking marijuana at school (Figure 27);
- Using steroids (Figure 33);
- Being offered, sold or given an illegal drug at school (Figure 36);
- Being overweight based on Body Mass Index (Figure 40);
- Drink three or more glasses of milk per day (Figure 57);
- Participating in strenuous and moderate physical activity (Figures 58-61);
- Attending physical education classes (Figure 62);
- Exercising or playing sports during physical education classes (Figure 63);
- Receiving grades of D or below in school (Figure 81).

In 2001, females in North Carolina high schools were more likely than males to report:

- Feeling overweight (Figure 41);
- Trying to lose weight (Figure 42);
- Exercising to lose weight or keep from gaining weight (Figure 43);
- Fasting to lose weight (Figure 45);
- Taking diet pills or products to lose weight or keep from gaining weight (Figure 46);
- Eating green salad (Figure 52);
- Feeling stress (Figure 66);
- Considering suicide (Figure 67);
- Feeling sad or hopeless (Figure 68);
- Feeling alone (Figure 71);
- That harassment, bullying and violence are problems at school (Figures 72 & 75);
- Planning to go to college (Figure 76).

**Grade Level Disparities**

In 2001, North Carolina high school students in higher grades were more likely than students in lower grades to report:
- Not wearing a helmet when riding a bicycle (Figure 2);
- Driving under the influence of alcohol (Figure 6);
- Drinking alcohol (Figure 21);
- Using marijuana (Figure 24);
- Being taught about sexually transmitted diseases other than HIV/AIDS in school (Figure 38);
- Eating green salad (Figure 52);
- Feeling stress (Figure 66);
- That an adult is never present when they get home from school (Figure 77).

In 2001, North Carolina high school students in lower grades were more likely than students in higher grades to report:
- Being threatened or injured with a weapon at school (Figure 10);
- Having their property stolen or damaged at school (Figure 11);
- Being in a fight (Figure 12);
- Being in a fight at school (Figure 14);
- Drinking for the first time prior to age 13 (Figure 20);
- Participating in strenuous physical activity (Figures 58 & 60);
- Attending physical education classes (Figure 62);
- Exercising during physical education classes (Figure 63);
- That their parent(s) had not graduated from high school (Figure 80).

**Ethnic Disparities**

In 2001, White students were more likely than Black students to report:
- Driving under the influence of alcohol (Figure 6);
- Carrying a weapon (Figure 7);
- First smoking a cigarette prior to age 13 (Figure 15);
- Smoking cigarettes (Figure 16);
- Smoking two or more cigarettes on the days they did smoke (Figure 17);
- Smoking cigarettes at school (Figure 18);
- Drinking alcohol (Figure 21);
- Binge drinking (Figure 22);
- Ever using cocaine (Figure 28);
- Using cocaine in the past month (Figure 29);
- Using hallucinogens (Figure 30);
Using inhalants (Figure 32);
Using methamphetamines (Figure 34);
Feeling overweight (Figure 41);
Trying to lose weight (Figure 42);
Exercising to lose weight or keep from gaining weight (Figure 43);
Eating fruit (Figure 51);
Eating green salad (Figure 52);
Eating potatoes (Figure 53);
Eating carrots (Figure 54);
Eating other vegetables (Figure 55);
Drinking three or more glasses of milk per day (Figure 57);
Participating in moderate and/or strenuous physical activity (Figures 59, 60, & 61);
Feeling stress (Figure 66);
Seriously considering suicide (Figure 67);
That harassment and bullying is a problem at school (Figure 72);
Participating in volunteer service activities (Figure 79).

In 2001, Black students were more likely than White students to report:
- Not going to school because of safety concerns (Figure 9).

In 2001, White students were more likely than Hispanic students to report:
- Being taught about HIV/AIDS in school (Figure 37);
- Trying to lose weight (Figure 42);
- Exercising to lose weight or keep from gaining weight (Figure 43);
- Feeling stress (Figure 66).

In 2001, Hispanic students were more likely than White students to report:
- Riding with a drinking driver (Figure 5);
- Not going to school because of safety concerns (Figure 9);
- That their parent(s) had not graduated from high school (Figure 80).

In 2001, White students were more likely than Multi-racial students to report:
- Feeling stress (Figure 66).

In 2001, Multi-racial students were more likely than White students to report:
- Being injured in a fight (Figure 13);
- Being in a fight at school (Figure 14);
- Participating in moderate physical activity (Figures 59).

In 2001, Hispanic students were more likely than Black students to report:
- Riding with a drinking driver (Figure 5);
- Using hallucinogens (Figure 30);
- Using steroids (Figure 33);
- Using methamphetamines (Figure 34);
- Eating carrots (Figure 54);
- Drinking three or more glasses of milk per day (Figure 57).

In 2001, Black students were more likely than Multi-racial students to report:
- Being overweight based on Body Mass Index (Figure 40);
That violence is a problem at school (Figure 75).

In 2001, Multi-racial students were more likely than Black students to report:
- Being injured in a fight (Figure 13);
- Ever using cocaine (Figure 28);
- Using hallucinogens (Figure 30);
- Using methamphetamines (Figure 34);
- Visiting a dentist (Figure 48);
- Eating green salad (Figure 52);
- Eating potatoes (Figure 53);
- Eating carrots (Figure 54);
- Participating in moderate physical activity (Figure 59).

In 2001, Hispanic students were more likely than Multi-racial students to report:
- That their parent(s) had not graduated from high school (Figure 80).

**Other Findings**

North Carolina high school students are disproportionately overweight compared to national normative standards. Twenty-seven percent of North Carolina high school students are overweight or at risk for becoming overweight (i.e., have Body Mass Index measurements above the 85th percentile; Figures 39 & 40).
Introduction

The 2001 Youth Risk Behavior Survey (YRBS) was produced by the Centers for Disease Control and Prevention (CDC) and is intended to assess health risk behaviors that contribute to some of the leading causes of death and injury among children and adolescents. This survey is typically administered at the middle and/or high school level by individual states in odd-numbered years to coincide with the national high school administration of the YRBS conducted by CDC. The primary purposes of the survey are to monitor trends in health risk behaviors over time, to evaluate the impact of broad efforts to prevent high-risk behaviors, and to provide targets for improving school health education policies and programs (CDC, 2001a).

The 2001 North Carolina High School YRBS consisted of 85 items addressing topics such as personal safety, violence-related behavior, tobacco use, alcohol use, other drug use, health education experiences, physical health, nutrition, physical activity, psychological health, and the perceived safety of the school environment. The items were mainly presented in a multiple-choice format, and the entire survey could be completed in 40-45 minutes. Copies of the questionnaires used for the North Carolina High School YRBS in 1993, 1995, 1997 and 2001 are located in Appendices A through D, respectively.

Procedures

Sampling. In 2001, the North Carolina High School YRBS was administered for the fourth time since 1993. The sample of students chosen to participate in the survey was drawn through a two-stage process. First, a probability sample of high schools was drawn from all of the high schools in the state. Then, individual classes (e.g., Mrs. Johnson’s 2nd period Algebra class, etc.) were sampled from within those schools. All of the students in those selected classes then comprised the sample.

The YRBS sample is usually drawn in such a manner that, if the overall response rate is above 60%, the results of the survey can be generalized to the entire population of high school students in the state with a relatively high level of precision. The overall response rate is a function of the percentage of sampled schools who decide to participate as well as the percentages of students enrolled in the sampled classes that actually complete the survey on the day it is administered. In every year except 1997, an overall response rate of 60% or higher was achieved for the North Carolina High School YRBS, meaning that those results can be considered to be representative of the statewide population of high school students in each of those years. In 1997, however, the overall response rate for the sample was too low, meaning that the data from that year cannot be considered to be representative of the state’s entire high school population (Table 1). Therefore, the interpretation of results in this report focuses primarily on changes between 1993, 1995 and 2001 as well as differences between subgroups in each of those years.

---

1 The YRBS was not conducted in North Carolina in 1999 because the participation rate for the sampled schools would have been too low to generate valid statewide estimates.
### Table 1. Sample sizes and response rates for the North Carolina High School YRBS, 1993-2001

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Schools Participating</th>
<th>Number of Students Participating</th>
<th>School Response Rate</th>
<th>Student Response Rate</th>
<th>Overall Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>59</td>
<td>2,439</td>
<td>83%</td>
<td>82%</td>
<td>68%</td>
</tr>
<tr>
<td>1995</td>
<td>51</td>
<td>1,779</td>
<td>71%</td>
<td>84%</td>
<td>60%</td>
</tr>
<tr>
<td>1997</td>
<td>39</td>
<td>2,340</td>
<td>72%</td>
<td>81%</td>
<td>58%</td>
</tr>
<tr>
<td>2001</td>
<td>62</td>
<td>2,548</td>
<td>86%</td>
<td>84%</td>
<td>73%</td>
</tr>
</tbody>
</table>

**Note:** The overall response rate is calculated by multiplying the percentage of sampled schools participating in the survey by the overall percentage of enrolled students across each classroom who completed the survey.

---

**Data Collection.** In the Fall of 2000, 72 schools were sampled from among all of the public schools statewide that served grades 9 through 12 to participate in the 2001 YRBS High School Survey\(^2\). Of those, 62 agreed to participate. YRBS administrators were recruited from education and health agencies at the state and local levels to administer the survey in these 62 schools. Information on standardized survey administration procedures as well as sets of materials for administering the survey were disseminated at regional training sessions held by staff from the North Carolina Department of Public Instruction (NCDPI). Administrators then made arrangements with each school to conduct the surveys between February and April 2001 on a date that was convenient for the school. The surveys were administered during a single class period to the students in the sampled classes who were present on the day of administration. Observations of survey administrators as well as analyses of missing data patterns confirmed that students were easily able to complete the survey during the allotted time.

**Data Processing.** Survey administrators returned all student response sheets and other related information to NCDPI, where they were cataloged and checked for anomalies before being sent to CDC for scanning and processing in the Spring of 2001. CDC staff then generated statistical weights to be applied to the data that allowed for the generation of statewide estimates based on the responses of the sampled students. CDC then provided disaggregated analyses for each YRBS survey item to NCDPI in the Fall of 2001.

**Sample Characteristics.** In addition to providing responses to survey items focused on various health risk behaviors, students completing the YRBS also responded to questions about basic demographic information. Because of the sampling procedures employed for the YRBS, the sample of students participating in the North Carolina High School YRBS each year has been basically proportional to the overall statewide high school student population in terms of demographics (Figure 1).

---

\(^2\) Juvenile justice schools, hospital schools, and schools for students with severe disabilities were not included in the sampling frame.
Figure 1. Characteristics of students participating in the North Carolina High School YRBS, 1993 through 2001.

Note. Percentages in this figure are unweighted. Prior to 2001, the number of students in the sample identifying themselves as Hispanic was too small to provide accurate subgroup estimates. The survey did not give students the option of identifying themselves as Multi-racial until 2001.

Interpretation of Results. The YRBS sampling design allows for estimates of health risk behaviors to be generated at an overall level as well as disaggregated by major demographic subgroups (e.g., by gender, by ethnicity, by grade level, etc.). Overall and disaggregated results are reported in this document under the following topical headings:

- Personal Safety
- Violence-Related Behavior
- Tobacco Use
- Alcohol Use
- Other Drug Use
- Health Education
- Weight Management
- Physical Health
- Nutrition
- Physical Activity
- Psychological Health
- School Environment
- Selected Prevention-Related Indicators

As mentioned previously, the results from 1997 were not based on a sufficiently high response rate to generalize those results to the state as a whole. Therefore, the interpretation of results focuses primarily on changes between 1993, 1995 and 2001 as well as differences between subgroups within those years.

Also, all of the differences highlighted in this document, in terms of trends over time or differences among subgroups of students, represent statistically significant differences.
Although many of the estimates in the figures may differ slightly from one another, the fact that they are based on a sample (rather than the responses of all high school students in the state) means that any discussion of differences between estimates must take into account error due to sampling. Statistical significance tests have been applied to the estimates in this report that take this sampling error into account. The results of those tests provided information as to whether the observed differences likely reflected true differences in the student population from which the sample was drawn, rather than just idiosyncrasies due to sampling.

Because not all of the myriad subgroup comparisons are addressed in this document, readers interested in more information are referred to the supplementary documentation at http://www.ncpublicschools.org/accountability/evaluation/youth_risk_behavior/yrbsindex.html. These documents include measures of sampling error (design effects, confidence intervals, etc.) and estimates for other student subgroups that can be used for further analysis.
Personal Safety

Bicycle Helmet Use. Approximately 140,000 youth are treated in U. S. hospital emergency rooms each year for bicycle-related head injuries (Sosin, Sacks, & Webb, 1996). Wearing a helmet while riding a bicycle reduces the risk of serious head injury by as much as 85% and the risk for brain injury by as much as 88% (Thompson, Rivara, & Thompson, 1989). In response to figures such as these, 20 states including North Carolina have adopted laws requiring children of certain ages to wear helmets while riding bicycles (Bicycle Helmet Safety Institute, 2002). North Carolina’s law, passed in 2001, requires all children under 16 to wear a helmet when riding a bicycle (NC Session Law 2001-268, House Bill 63, Section 1). Figure 2 presents data on the frequency of bicycle helmet use by North Carolina high school students.

Figure 2. Percentage of North Carolina high school students who never or rarely wore a helmet while riding a bicycle during the past 12 months.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>63.1%</td>
<td>71.1%</td>
<td>55.1%</td>
<td>75.8%</td>
<td>67.5%</td>
<td>53.9%</td>
<td>48.4%</td>
<td>62.0%</td>
<td>65.5%</td>
<td>67.9%</td>
<td>67.9%</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>58.9%</td>
<td>68.5%</td>
<td>49.3%</td>
<td>69.2%</td>
<td>62.8%</td>
<td>50.8%</td>
<td>46.7%</td>
<td>59.5%</td>
<td>58.3%</td>
<td>64.1%</td>
<td>62.3%</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>62.3%</td>
<td>71.2%</td>
<td>54.9%</td>
<td>70.7%</td>
<td>65.2%</td>
<td>53.7%</td>
<td>50.1%</td>
<td>61.5%</td>
<td>64.1%</td>
<td>62.3%</td>
<td>62.3%</td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>53.6%</td>
<td>62.3%</td>
<td>44.8%</td>
<td>63.9%</td>
<td>56.3%</td>
<td>44.4%</td>
<td>42.6%</td>
<td>54.2%</td>
<td>53.1%</td>
<td>56.2%</td>
<td>51.1%</td>
<td></td>
</tr>
</tbody>
</table>

Note. Some students each year reported that they did not ride a bicycle; therefore, these figures would be even higher if the analysis was limited only to those students who reported riding bicycles.

- The overall percentage of North Carolina high school students reporting that they never or rarely wore a helmet while riding a bicycle during the past 12 months declined between 1993 and 2001. This decline was also evident among males, females, 9th graders, 10th graders, and Black students.
- In 1993, 1995, and 2001, male students were more likely than females to report never or rarely wearing a helmet while riding a bicycle.
- In 1993, 1995, and 2001, 9th and 10th graders were more likely than 11th and 12th graders to report never or rarely wearing a helmet while riding a bicycle.

3 It should be noted that North Carolina’s helmet use law was not in effect when these data were collected. Data in future YRBS surveys will provide some evidence as to whether the passage of this law is having an impact on bicycle helmet use.
Motor Vehicle Safety. Standard precautions to avoid injury while riding in a car are critical health behaviors for everyone, especially teens. Motor vehicle accidents were the leading cause of death among youth ages 15 to 24 in North Carolina in 2000 (North Carolina State Center for Health Statistics, 2001). The deaths in this category accounted for 29% of all deaths in this age group. Many motor vehicle-related deaths could be prevented through better utilization of legally-mandated safety precautions including motorcycle helmet use, reducing the incidence of drinking and driving, and increasing the use of seatbelts. Figures 3 through 6 provide data on behaviors related to motor vehicle safety among North Carolina high school students.

Figure 3. Percentage of North Carolina high school students who never or rarely wore a helmet while riding a motorcycle during the past 12 months.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>12.9%</td>
<td>19.6%</td>
<td>6.4%</td>
<td>12.3%</td>
<td>13.4%</td>
<td>12.2%</td>
<td>13.9%</td>
<td>15.0%</td>
<td>8.1%</td>
<td>17.7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>8.6%</td>
<td>13.5%</td>
<td>3.7%</td>
<td>9.8%</td>
<td>7.7%</td>
<td>8.4%</td>
<td>7.1%</td>
<td>9.5%</td>
<td>6.6%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>7.8%</td>
<td>11.5%</td>
<td>4.3%</td>
<td>8.8%</td>
<td>8.1%</td>
<td>6.9%</td>
<td>5.5%</td>
<td>9.6%</td>
<td>4.2%</td>
<td>10.9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>9.2%</td>
<td>13.2%</td>
<td>5.1%</td>
<td>10.2%</td>
<td>8.0%</td>
<td>10.0%</td>
<td>8.1%</td>
<td>10.7%</td>
<td>5.9%</td>
<td>11.3%</td>
<td>6.6%</td>
<td></td>
</tr>
</tbody>
</table>

Note. Some students each year reported that they did not ride a motorcycle; therefore, these figures would be even higher if the analysis was limited only to those students who reported riding motorcycles.

- The overall percentage of North Carolina high school students reporting that they never or rarely wore a helmet while riding a motorcycle during the past 12 months declined between 1993 and 1995. The percentage then rose slightly in 2001 such that it was not significantly different from the percentages in either 1993 or 1995. This same pattern is evident among female students, 12th graders, and White students.
- Among males, the percentage reporting that they never or rarely wore a helmet while riding a motorcycle during the past 12 months declined between 1993 and 1995.
- In 1993, 1995, and 2001, males were more likely than females to report that they never or rarely wore a helmet while riding a motorcycle during the past 12 months.
- In both 1993 and 2001, White students were more likely than Black students to report never or rarely wearing a helmet while riding a motorcycle.
- In 1993, students whose ethnicity was coded as “Other” were more likely than Black students to report never or rarely wearing a helmet while riding a motorcycle.
In 2001, the percentage of North Carolina high school students reporting that they never or rarely wear a seatbelt when riding in a car driven by someone else was lower than the corresponding national percentage (14.1%; Grunbaum et al., 2002). This was also true in 1995.

The overall percentage of North Carolina high school students reporting that they never or rarely wear a seatbelt when riding in a car driven by someone else declined between 1993 and 1995. This decline was also evident among male and female students, 9th graders, and Black and White students.

The percentage of 10th graders reporting that they never or rarely wear a seatbelt when riding in a car driven by someone else was lower in 2001 than in 1993.

In 1993, 1995, and 2001, males were significantly more likely than females to report never or rarely wearing a seatbelt when riding in a car driven by someone else.
In 2001, the percentage of North Carolina high school students reporting that they had ridden in a car driven by someone who had been drinking alcohol in the past 30 days was lower than the national percentage (30.7%; Grunbaum et al., 2002). This was also true in 1995.

The percentage of North Carolina high school students reporting that they had ridden in a car driven by someone who had been drinking alcohol in the past 30 days was lower in 2001 than in 1993 and 1995. This pattern is also evident among 10th grade students.

The percentage of males, females, 9th graders, White students and Black students reporting that they had ridden in a car driven by someone who had been drinking alcohol in the past 30 days also declined between 1993 and 2001.

The percentage of 12th graders reporting that they had ridden in a car driven by someone who had been drinking alcohol in the past 30 days declined between 1993 and 1995. The corresponding figure in 2001, however, was not significantly different from either the 1993 or 1995 estimates.

In 2001, Hispanic students were more likely than either Black or White students to report having ridden in a car driven by someone who had been drinking alcohol in the past 30 days.
In 2001, the percentage of North Carolina high school students reporting that they had driven a car or other vehicle when they had been drinking alcohol in the past 30 days was lower than the corresponding national percentage (13.3%; Grunbaum et al., 2002).

Between 1993 and 2001, the percentage of males and Black students reporting that they had driven when they had been drinking alcohol in the past 30 days declined.

In both 1993 and 2001, males were more likely than females to report that they had driven when they had been drinking alcohol in the past 30 days.

In 2001, White students were more likely than Black students to report that they had driven when they had been drinking alcohol in the past 30 days.

In 1993, 1995, and 2001, 11th and 12th graders were more likely than 9th graders to report that they had driven when they had been drinking alcohol in the past 30 days.

In 1993, and 2001, 11th and 12th graders were more likely than 10th graders to report that they had driven when they had been drinking alcohol in the past 30 days.
Violence-Related Behavior

Recent incidents such as the highly-publicized school shootings in both the United States and Germany have focused public attention on the need to prevent youth violence. Data from the National Crime Victimization Survey demonstrates that youth under the age of 18 are twice as likely as adults to be victims of serious violent crime, and are three times as likely to be victims of assault (Office of Juvenile Justice and Delinquency Prevention, 2000). Trend data on school-based violence, however, indicate that crimes, fights, and weapon-carrying at school have either remained steady or declined in recent years, and that students are much more likely to be victims of violent crimes outside of school than in school (U. S. Department of Education, 2001). The North Carolina YRBS asks students several questions regarding fighting, carrying weapons, and being victimized at school (Figures 7-14).

Figure 7. Percentage of North Carolina high school students who carried a weapon such as a gun, knife, or club during the past 30 days.

- In 2001, the percentage of North Carolina high school students reporting that they had carried a weapon during the past 30 days was not significantly different from the national percentage (17.4%; Grunbaum et al., 2002). This was also true in 1993 and 1995.
- Between 1993 and 2001, there was an decrease in the overall percentage of North Carolina high school students that reported carrying a weapon during the past 30 days. This trend is also found among males, 9th and 10th graders, and Black students.
- In 1993, 1995, and 2001, males were more likely than females to report carrying a weapon on one or more of the past 30 days.
- In 2001, White students were more likely than Black students to report carrying a weapon during the past 30 days.
Figure 8. Percentage of North Carolina high school students who carried a weapon such as a gun, knife, or club on school property during the past 30 days.

- In 2001, the percentage of North Carolina high school students reporting that they had carried a weapon on school property during the past 30 days was not significantly different from the national percentage (6.4%; Grunbaum et al., 2002). This was also true in 1993 and 1995.
- The overall percentage of North Carolina high school students reporting that they had carried a weapon on school property during the past 30 days declined between 1993 and 1995, then declined again between 1995 and 2001. This pattern is also evident among male students.
- In 2001, the percentage of 10th graders reporting that they had carried a weapon on school property during the past 30 days was lower than both the 1993 and 1995 figures. This was also true for White students.
- The percentage of female students reporting that they had carried a weapon on school property during the past 30 days was lower in 2001 than in 1993. This was also true for 9th graders.
- The percentage of 12th graders reporting that they had carried a weapon on school property during the past 30 days declined between 1993 and 1995. This trend was also seen among Black students.
- In 1993, 1995, and 2001, males were more likely than females to report carrying a weapon on school property during the past 30 days.
In 2001, the percentage of North Carolina high school students who reported not going to school on one or more of the past 30 days because they felt unsafe at school or on their way to or from school was not significantly different from the national percentage (6.6%, Grunbaum et al., 2002). This was also true in 1993 and 1995.

In 2001, the overall percentage of students who reported not going to school on one or more of the past 30 days because they felt unsafe at school or on their way to or from school was higher than both the 1993 and 1995 figures. This was also true for males and Black students.

Between 1995 and 2001, the percentage of females who reported not going to school on one or more of the past 30 days because they felt unsafe at school or on their way to or from school increased. This increase was also evident among 9th graders and White students.

In 2001, both Black and Hispanic students were more likely than White students to report not going to school on one or more of the past 30 days because they felt unsafe at school or on their way to or from school.
In 2001, the percentage of North Carolina high school students who reported being threatened or injured with a weapon on school property during the past 12 months was not significantly different from the national percentage (8.9%, Grunbaum et al., 2002). This was also true in 1993 and 1995.

Between 1993 and 2001, the percentage of Black students who reported being threatened or injured with a weapon on school property during the past 12 months declined.

In 2001, 9th graders were more likely than either 11th or 12th graders to report being threatened or injured with a weapon on school property during the past 12 months.

In 1993 and 2001, males were more likely than females to report being threatened or injured with a weapon on school property during the past 12 months.
Between 1995 and 2001, the overall percentage of North Carolina high school students reporting that someone had stolen or deliberately damaged their possessions on school property during the past 12 months declined. This decline was also evident among males, 9th graders, 12th graders, White students, and Black students.

Between 1993 and 2001, the percentage of female students reporting that someone had stolen or deliberately damaged their possessions on school property during the past 12 months declined. This was also true for 10th graders.

In 1995, 9th graders were more likely than 11th graders to report that someone had stolen or deliberately damaged their possessions on school property during the past 12 months.

In 2001, 9th graders were more likely than 12th graders to report that someone had stolen or deliberately damaged their possessions on school property during the past 12 months.
The percentage of North Carolina high school students reporting that they had been in a physical fight during the past 12 months was lower than the national percentage (33.2%; Grunbaum et al., 2002). This was also true in 1995.

The overall percentage of North Carolina high school students reporting that they had been in a physical fight during the past 12 months declined between 1993 and 1995, then leveled off in 2001. This pattern is also evident among male and female students, White students, and Black students.

Between 1993 and 1995, the percentage of 9th and 12th graders reporting that they had been in a physical fight during the past 12 months declined. However, the corresponding figures for these two groups in 2001 were not significantly different from either the 1993 or 1995 estimates.

Between 1993 and 2001, the percentage of 10th graders reporting that they had been in a physical fight during the past 12 months declined.

In 1993, 1995, and 2001, males were more likely than females to report being in a physical fight during the past 12 months.

In 1993, 1995, and 2001, 9th graders were more likely than either 11th or 12th graders to report being in a physical fight during the past 12 months.

In 1995, 10th graders were more likely than either 11th or 12th graders to report being in a physical fight during the past 12 months.
In 2001, the overall percentage of North Carolina high school students reporting that they had been in a physical fight in which they were hurt and had to be treated by a doctor or nurse during the past 12 months was not significantly different from the national percentage (4.0%; Grunbaum et al., 2002). This was also true in 1993. In 1995, however, the percentage for North Carolina was lower than the national percentage.

Between 1993 and 1995, the percentage of North Carolina 9<sup>th</sup> graders who reported being injured in a physical fight and having to be treated by a doctor or a nurse during the past 12 months declined.

Between 1993 and 2001, the percentage of Black students who reported being injured in a physical fight and having to be treated by a doctor or a nurse during the past 12 months declined.

In 1993, males were more likely than females to report being injured in a physical fight and having to be treated by a doctor or a nurse during the past 12 months.

In 1993, 9<sup>th</sup> graders were more likely than 12<sup>th</sup> graders to report being injured in a physical fight and having to be treated by a doctor or a nurse during the past 12 months.

In 2001, Multi-racial students were more likely than White or Black students to report being injured in a physical fight and having to be treated by a doctor or a nurse during the past 12 months.
In 2001, the percentage of North Carolina high school students reporting that they had been in a physical fight on school property during the past 12 months was not significantly different from the national percentage (12.5%; Grunbaum et al., 2002). This was also true in 1993 and 1995.

Between 1993 and 2001, the percentage of North Carolina high school students reporting that they had been in a physical fight on school property during the past 12 months declined. This decline was also seen among male students and 10th graders.

In 1993, 1995, and 2001, males were more likely than females to report being in a physical fight on school property in the past 12 months.

In 1993 and 1995, 10th graders were more likely than 12th graders to report being in a physical fight on school property in the past 12 months.

In 1993 and 2001, 9th graders were more likely than 12th graders to report being in a physical fight on school property in the past 12 months.

In 1993, 9th graders were more likely than 11th graders to report being in a physical fight on school property in the past 12 months.

In 2001, Multi-racial students were more likely than White students to report being in a physical fight on school property in the past 12 months.
Tobacco Use

Tobacco addiction remains one of the most significant public health concerns today in the U. S. and elsewhere. Cigarette smoking has been described as the “single most preventable cause of premature death in the United States” (CDC, 2002). Smoking has been identified as a primary catalyst behind several of the leading causes of death, and is responsible for approximately 20% of all deaths in the U. S. (CDC, 1993). Among youth, smoking is also associated with short-term adverse health consequences as well as mental health problems (Arday et al., 1995). Figures 15 through 19 present trend data on the frequency and onset of smoking among North Carolina high school students.

Figure 15. Percentage of North Carolina high school students reporting who first smoked a cigarette prior to age 13.

- In 2001, the percentage of North Carolina high school students who reported having smoked a whole cigarette prior to age 13 was higher than the national percentage (22.1%; Grunbaum et al., 2002). There was no difference, however, between the North Carolina and national percentages in 1993 and 1995.
- Between 1993 and 2001, the percentage of male students reporting that they first smoked a whole cigarette prior to age 13 declined.
- Between 1993 and 1995, the percentage of 12th graders and Black students reporting that they first smoked a whole cigarette prior to age 13 declined.
- In both 1993 and 1995, males were more likely than females to report having first smoked a whole cigarette prior to age 13.
- In 1995, 9th graders were more likely than 12th graders to report having first smoked a whole cigarette prior to age 13.
- In 1993, 1995, and 2001, White students were more likely than Black students to report having first smoked a whole cigarette prior to age 13.
In 2001, the percentage of North Carolina high school students reporting that they smoked cigarettes on one or more of the past 30 days was not significantly different from the national percentage (28.5%; Grunbaum et al., 2002). This was also true in 1993 and 1995.

In 1993, 1995, and 2001, White students were more likely than Black students to report smoking cigarettes on one or more of the past 30 days.
In 2001, the percentage of North Carolina high school students reported having smoked two or more cigarettes per day on the days they did smoke during the past 30 days was not significantly different from the national percentage (19.4%; Grunbaum et al., 2002). This was also true in 1993 and 1995.

In 1993, 1995, and 2001, White students were more likely than Black students to report smoking two or more cigarettes on the days they did smoke during the past 30 days.
In 2001, the percentage of North Carolina high school students who reported smoking cigarettes on school property during the past 30 days was not significantly different from the national percentage (9.9%; Grunbaum et al., 2002). This was also true in 1993 and 1995.

Between 1995 and 2001, the percentage of 10th graders who reported smoking on school property during the past 30 days declined.

In 1993, 1995, and 2001, White students were more likely than Black students to report smoking on school property during the past 30 days.

In 1993, students whose ethnicity was coded as “Other” were more likely than Black students to report smoking on school property during the past 30 days.
Figure 19. Percentage of North Carolina high school students who were current smokers and who tried to quit smoking during the past 12 months.

Note. The wording of the YRBS smoking cessation item changed in 2001, rendering 2001 data incompatible with data from previous years. Percentages are based only on data from students who are current smokers, which is defined as students who reported smoking during the past 12 months. Percentages are not available for Hispanic and Multi-racial student groups because of the low number of smokers in these groups in the sample.

- In 2001, the percentage of North Carolina high school students who were current smokers and who reported that they had tried to quit smoking in the past 12 months was not significantly different from the national percentage (57.4%; Grunbaum et al., 2002).
Alcohol Use

Alcohol is a major contributing factor in approximately half of all homicides, suicides, and motor vehicle crashes (CDC, 1991), events which are all among the leading causes of death of youth ages 5-24 in North Carolina (North Carolina State Center for Health Statistics, 2001). Heavy drinking among youth has also been linked to other negative behaviors, such as having multiple sexual partners, using marijuana, and poor academic performance (Wechsler et al., 1995). Figures 20 through 23 provide information on trends in alcohol consumption among North Carolina high school students between 1993 and 2001.

Figure 20. Percentage of North Carolina high school students who consumed alcohol for the first time prior to age 13.

Note. Consumption of alcohol in this case does not include consumption for religious purposes.

- In 2001, the percentage of North Carolina high school students who reported consuming alcohol for the first time prior to age 13 was lower than the national percentage (29.1%; Grunbaum et al., 2002). This was also true in 1995.
- Between 1993 and 2001, the overall percentage of North Carolina high school students who reported consuming alcohol for the first time prior to age 13 declined. This decline was also seen among male students.
- Between 1993 and 1995, the percentage of 9th graders who reported consuming alcohol for the first time prior to age 13 declined. This same decline was evident among Black students.
- In 1993, 1995, and 2001, males were more likely than females to report consuming alcohol for the first time prior to age 13.
- In 1993, 1995, and 2001, 9th graders were more likely than either 11th or 12th graders to report consuming alcohol for the first time prior to age 13.
- In 1993, 1995, and 2001, 10th graders were more likely than 12th graders to report consuming alcohol for the first time prior to age 13.
- In 1993, 9th graders were more likely than 10th graders to report consuming alcohol for the first time prior to age 13, and
- In 1995, 10th graders were more likely than 11th graders to report consuming alcohol for the first time prior to age 13.
Figure 21. Percentage of North Carolina high school students who consumed at least one drink of alcohol during the past 30 days.

Note. Consumption of alcohol in this case does not include consumption for religious purposes.

- In 2001, the percentage of North Carolina high school students who reported drinking alcohol in the past 30 days was lower than the national percentage (47.1%; Grunbaum et al., 2002). This was also true in 1995.
- Between 1993 and 1995, the percentage of Black students who reported drinking alcohol in the past 30 days declined.
- In 1995 and 2001, 11th and 12th graders were more likely than 9th graders to report drinking alcohol in the past 30 days.
- In 1995, 10th graders were more likely than 9th graders to report drinking alcohol in the past 30 days.
- In 1995 and 2001, White students were more likely than Black students to report drinking alcohol in the past 30 days.
Figure 22. Percentage of North Carolina high school students who had five or more drinks of alcohol in a row within a couple of hours on one or more of the past 30 days.

Note. Consumption of alcohol in this case does not include consumption for religious purposes.

- In 2001, the percentage of North Carolina high school students who reported having five or more drinks in a row within a couple of hours during the past 30 days was lower than the national percentage (29.9%; Grunbaum et al., 2002). This was also true in 1993 and 1995.
- In 1993 and 1995, males were more likely than females to report having five or more drinks in a row within a couple of hours during the past 30 days.
- In 1993, 1995, and 2001, White students were more likely than Black students to report having five or more drinks in a row within a couple of hours during the past 30 days.
- In 1993, students whose ethnicity was coded as “Other” were more likely than Black students to report having five or more drinks in a row within a couple of hours during the past 30 days.
In 2001, the percentage of North Carolina high school students who reported consuming at least one drink of alcohol on school property during the past 30 days was not significantly different from the national percentage (4.9%; Grunbaum et al., 2002). This was also true in 1993 and 1995.

In 1993 and 2001, males were more likely than females to report consuming at least one drink of alcohol on school property during one or more of the past 30 days.
Other Drug Use

The use of illicit drugs such as marijuana, cocaine, and other substances is associated with a rash of negative health and behavioral outcomes among children and youth. Some of these outcomes include increased propensity to engage in violence (U. S. Department of Health and Human Services, 2001a), lower academic achievement (Beauvais et al., 1996; North Carolina Department of Public Instruction, 1999), and emotional and behavioral difficulties (U. S. Department of Health and Human Services, 1999). Some of the factors most commonly associated with drug use among youth include individual beliefs about the risks associated with drug use, parental attitudes toward drug use, and the perceived availability of drugs (Substance Abuse and Mental Health Services Administration, 2001a). The North Carolina YRBS includes several items addressing drug use and perceived availability of drugs, the results of which are summarized in Figures 24 through 36.

Figure 24. Percentage of North Carolina high school students who used marijuana one or more times during their life.

- In 2001, the percentage of North Carolina high school students who reported that they had used marijuana at least once was not significantly different from the national percentage (42.4%; Grunbaum et al., 2002). This was also true in 1993 and 1995.
- The overall percentage of North Carolina high school students who reported that they had used marijuana at least once increased between 1993 and 1995, then leveled off in 2001. This pattern was also evident among 10th graders.
- Between 1993 and 2001, the percentage of females who reported that they had used marijuana at least once increased. This increase was also seen among 11th and 12th graders, White students, and Black students.
- In 1993 and 1995, males were more likely than females to report that they had used marijuana at least once.
- In 2001, 11th and 12th graders were more likely than 9th or 10th graders to report that they had used marijuana at least once.
In 2001, the percentage of North Carolina high school students reporting that they had first used marijuana prior to age 13 was not significantly different from the national percentage (10.2%; Grunbaum et al., 2002). This was also true in 1993 and 1995.

The percentage of females reporting that they had first used marijuana prior to age 13 in 2001 was higher than the percentage in either 1993 or 1995.

Between 1995 and 2001, the percentage of 9th graders reporting that they had first used marijuana prior to age 13 increased. This was also true for Black students.

Between 1993 and 2001, the percentage of White students reporting that they had first used marijuana prior to age 13 increased.

In 1993, 1995, and 2001, males were more likely than females to report that they had first used marijuana prior to age 13.

In 1993, students whose ethnicity was coded as “Other” were more likely than either White or Black students to report that they had first used marijuana prior to age 13.
In 2001, the percentage of North Carolina high school students who reported using marijuana in the past 30 days was not significantly different from the national percentage (23.9%; Grunbaum et al., 2002). This was also true in 1993 and 1995.

Between 1993 and 1995, the overall percentage of North Carolina high school students who reported using marijuana in the past 30 days increased and then leveled off in 2001. This pattern was also evident among female students.

Between 1993 and 1995, the percentage 10th graders who reported using marijuana in the past 30 days increased. However, the percentage in 2001 was not significantly different from either the 1993 or 1995 percentage. This pattern was also seen among White students.

In both 1993 and 1995, males were more likely than females to report having used marijuana in the past 30 days.
In 2001, the percentage of North Carolina high school students who reported using marijuana on school property during the past 30 days was not significantly different from the national percentage (5.4%; Grunbaum et al., 2002). This was also true in 1993 and 1995.

In 1993, 1995, and 2001, males were more likely than females to report using marijuana on school property during the past 30 days.
In 2001, the percentage of North Carolina high school students who reported using any form of cocaine one or more times during their life was lower than the national percentage (9.4%; Grunbaum et al., 2002).

Between 1993 and 2001, the overall percentage of North Carolina high school students who reported using any form of cocaine one or more times during their life increased. This increase was also evident among females, 9th graders, and White students.

In 1993, 1995, and 2001, White students were more likely than Black students to report using any form of cocaine one or more times during their life.

In 2001, Multi-racial students were more likely than Black students to report using any form of cocaine one or more times during their life.
In 2001, the percentage of North Carolina high school students who reported using any form of cocaine one or more times during the past 30 days was not significantly different from the national percentage (4.2%; Grunbaum et al., 2002). This was also true in 1993 and 1995.

In 1993 and 2001, White students were more likely than Black students to report using any form of cocaine during the past 30 days.

In 1993, students whose ethnicity was coded as “Other” were more likely than Black students to report using any form of cocaine during the past 30 days.
In 2001, approximately one out of every eight North Carolina high school students reported using hallucinogens during their life.

In 2001, Black students were less likely than students from all other ethnic groups to report using hallucinogens during their life.
Figure 31. Percentage of North Carolina high school students who used heroin one or more times during their life.

Note. Question was not asked prior to 2001.

- In 2001, the percentage of North Carolina high school students who reported using heroin one or more times during their life was not significantly different from the national percentage (3.1%; Grunbaum et al., 2002).
In 2001, the percentage of North Carolina high school students who reported having ever sniffed glue or breathed the contents of sprays or paints to get high during their life was not significantly different from the national percentage (14.7%; Grunbaum et al., 2002). This was also true in 1995.

Between 1995 and 2001, the overall percentage of North Carolina high school students who reported ever having sniffed glue or breathed the contents of sprays or paints to get high during their life declined. This decline was also evident among males and 9th graders.

In both 1995 and 2001, White students were more likely than Black students to report ever having sniffed glue or breathed the contents of sprays or paints to get high during their life.
In 2001, the percentage of North Carolina high school students who reported having ever used steroids without a prescription during their life was not significantly different from the national percentage (5.0%; Grunbaum et al., 2002). The North Carolina percentage was higher than the corresponding national percentage in 1993, but was lower in 1995.

Between 1993 and 1995, the overall percentage of North Carolina high school students who reported using steroid pills or shots without a prescription during their life decreased. However, it then increased between 1995 and 2001. This same pattern is seen among males and White students.

The percentage of female students who reported using steroid pills or shots without a prescription during their life in 2001 was higher than in 1993 or 1995. This was also true for 9th graders.

In 1993 and 2001, males were more likely than females to report using steroid pills or shots without a prescription during their life.

In 2001, Hispanic students were more likely than Black students to report using steroid pills or shots without a prescription during their life.
Figure 34. Percentage of North Carolina high school students who had used methamphetamines one or more times during their life.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multiracial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>7.8%</td>
<td>8.3%</td>
<td>7.3%</td>
<td>7.8%</td>
<td>7.5%</td>
<td>7.1%</td>
<td>8.1%</td>
<td>10.0%</td>
<td>2.1%</td>
<td>13.5%</td>
<td>11.2%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, the percentage of North Carolina high school students who reported using methamphetamines one or more times during their life was not significantly different from the national percentage (9.8%; Grunbaum et al., 2002).
- In 2001, Black students were less likely than students from all other ethnic groups to report using methamphetamines one or more times during their life.
In 2001, the percentage of North Carolina high school students who reported using a needle to inject any illegal drug into their body during their life was not significantly different from the national percentage (2.3%; Grunbaum et al., 2002). This was also true in 1995.

In 1993, males were more likely than females to report using a needle to inject any illegal drug into their body during their life.
In 2001, the percentage of North Carolina high school students who reported that they were offered, sold, or given an illegal drug on school property during the past 12 months was not significantly different from the national percentage (28.5%; Grunbaum et al., 2002). This was also true in 1993 and 1995.

Between 1995 and 2001, the percentage of Black students who reported that they were offered, sold, or given an illegal drug on school property during the past 12 months increased.

In 1993, 1995, and 2001, males were more likely than females to report that someone had offered, sold, or given them an illegal drug on school property during the past 12 months.

In 1995, 10th graders were more likely than 11th graders to report that someone had offered, sold, or given them an illegal drug on school property during the past 12 months.

In 1995, White students were more likely than Black students to report that someone had offered, sold, or given them an illegal drug on school property during the past 12 months.
Health Education

The majority of schools and districts across the U. S. require some form of health education at the high school level. Topics related to the prevention of sexually-transmitted disease and HIV infection in particular are most likely to be taught at the middle or high school level (CDC, 2001b). Studies of health education programs have indicated that they can be useful for discouraging students from engaging in risky sexual behaviors (Jemmott, Jemmott, & Fong, 1992; Kirby et al., 1991; Main et al., 1994). Figures 37 and 38 provide information on the extent to which North Carolina high school students receive information about HIV/AIDS and sexually transmitted diseases in school.

Figure 37. Percentage of North Carolina high school students who reported that they had ever been taught about AIDS or HIV infection in school.

![Bar chart showing percentage of students taught about AIDS or HIV infection by year and gender.](chart)

Note. Data not available from 1995.

- In 2001, the percentage of North Carolina high school students who reported that they had been taught about AIDS or HIV infection in school was not significantly different from the national percentage (89.0%; Grunbaum et al., 2002). In 1993, the North Carolina percentage was higher than the national percentage.
- In 2001, White students were more likely than Hispanic students to report that they had been taught about AIDS or HIV infection in school.
Figure 38. Percentage of North Carolina high school students who had ever been taught about chlamydia, gonorrhea, syphilis, or human papilloma virus (HPV) in school.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>78.0%</td>
<td>77.6%</td>
<td>78.4%</td>
<td>72.4%</td>
<td>78.8%</td>
<td>81.4%</td>
<td>83.0%</td>
<td>78.4%</td>
<td>78.9%</td>
<td>65.0%</td>
<td>78.7%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, over three-fourths of North Carolina high school students reported having been taught about chlamydia, gonorrhea, syphilis, or HPV in school.
- In 2001, 12th graders were more likely than 9th graders to report having been taught about chlamydia, gonorrhea, syphilis, or HPV in school.
Weight Management

The percentage of children and adolescents who are defined as overweight has more than doubled since the early 1970s (Troiano & Flegal, 1998). Over 13 percent of youth between the ages of 6 and 19 in the U. S. are now overweight (CDC, 2001c). Overweight and obese individuals are at increased risk for a wide variety of physical and psychological disorders, including heart disease, stroke, diabetes, high blood pressure, high cholesterol, and depression (Stunkard & Wadden, 1993). Figures 39 through 46 illustrate North Carolina high school students’ responses to a variety of questions regarding their weight and weight control activities.

**Figure 39.** Percentage of North Carolina high school students who are at risk for becoming overweight based on Body Mass Index (BMI).

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>14.3%</td>
<td>15.5%</td>
<td>13.1%</td>
<td>15.4%</td>
<td>15.7%</td>
<td>13.3%</td>
<td>11.8%</td>
<td>12.6%</td>
<td>17.8%</td>
<td>14.4%</td>
<td>20.6%</td>
</tr>
</tbody>
</table>

**Note.** BMI was calculated by dividing a student’s self-reported weight (in pounds) by the square of their self-reported height (in inches), and then multiplying that total by 703. Each student’s BMI was then compared to reference data from the National Health and Nutrition Examination Survey I for children of the same age and gender. Any student whose BMI falls between the 85th and 95th percentile of the normative distribution based on those reference data is considered to be “at risk for becoming overweight”. Data on students’ height and weight were not collected prior to 2001.

- In 2001, the percentage of North Carolina high school students at risk for becoming overweight based on BMI was not significantly different from the national percentage (13.6%; Grunbaum et al., 2002).
Figure 40. Percentage of North Carolina high school students who are overweight based on Body Mass Index (BMI).

Note. BMI was calculated by dividing a student’s self-reported weight (in pounds) by the square of their self-reported height (in inches), and then multiplying that total by 703. Each student’s BMI was then compared to reference data from the National Health and Nutrition Examination Survey I for children of the same age and gender. Any student whose BMI falls above 95th percentile of the normative distribution based on those reference data is considered to be “overweight”. Data on students’ height and weight were not collected prior to 2001.

- In 2001, the percentage of North Carolina high school students who were overweight based on BMI was higher than the national percentage (10.5%; Grunbaum et al., 2002).
- In 2001, males were more likely than females to be overweight based on BMI.
- In 2001, Black students were more likely than Multi-racial students to be overweight based on BMI.
In 2001, the percentage of North Carolina high school students who described themselves as slightly or very overweight was not significantly different from the national percentage (29.2%; Grunbaum et al., 2002). This was also true in 1995.

In 1995 and 2001, females were more likely than males to describe themselves as slightly or very overweight.

In 1995 and 2001, White students were more likely than Black students to describe themselves as slightly or very overweight.
In 2001, the percentage of North Carolina high school students who reported that they were trying to lose weight was not significantly different from the national percentage (46.0%; Grunbaum et al., 2002). This was also true in 1993 and 1995.

Between 1993 and 2001, the percentage of White students who reported that they were trying to lose weight increased.

In 1993, 1995, and 2001, female students were more likely than males to report trying to lose weight.

In 1993, 1995, and 2001, White students were more likely than Black students to report trying to lose weight.

In 2001, White students were more likely than Hispanic students to report trying to lose weight.
### Figure 43. Percentage of North Carolina high school students who exercised to lose weight or to keep from gaining weight during the past 30 days.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>46.6%</td>
<td>33.1%</td>
<td>60.0%</td>
<td>49.2%</td>
<td>44.5%</td>
<td>45.5%</td>
<td>46.7%</td>
<td>52.2%</td>
<td>34.7%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>30.4%</td>
<td>16.5%</td>
<td>42.0%</td>
<td>31.9%</td>
<td>24.7%</td>
<td>32.2%</td>
<td>31.6%</td>
<td>33.8%</td>
<td>25.7%</td>
<td></td>
<td></td>
<td>30.8%</td>
</tr>
<tr>
<td>2001</td>
<td>58.1%</td>
<td>48.7%</td>
<td>67.7%</td>
<td>60.7%</td>
<td>57.1%</td>
<td>57.6%</td>
<td>55.6%</td>
<td>62.0%</td>
<td>50.0%</td>
<td>47.3%</td>
<td>55.4%</td>
<td></td>
</tr>
</tbody>
</table>

**Note.** The wording of this question changed between 1993 and 1995, rendering the 1993 estimates incompatible with those in subsequent years.

- In 2001, the percentage of North Carolina high school students who reported that they had exercised to lose weight or to keep from gaining weight during the past 30 days was not significantly different from the national percentage (59.9%; Grunbaum et al., 2002).
- Between 1995 and 2001, the overall percentage of North Carolina high school students who reported that they had exercised to lose weight or to keep from gaining weight increased. This increase was also seen among all subgroups surveyed in both years except 12th graders.
- In 1995, and 2001, female students were more likely than males to report that they had exercised to lose weight or to keep from gaining weight.
- In 1995, and 2001, White students were more likely than Black students to report that they had exercised to lose weight or to keep from gaining weight.
- In 2001, White students were more likely than Hispanic students to report that they had exercised to lose weight or to keep from gaining weight.
Figure 44. Percentage of North Carolina high school students who vomited or took laxatives to lose weight or to keep from gaining weight during the past 30 days.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>4.7%</td>
<td>2.7%</td>
<td>6.7%</td>
<td>3.3%</td>
<td>6.9%</td>
<td>4.1%</td>
<td>4.3%</td>
<td>5.2%</td>
<td>3.8%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>6.2%</td>
<td>4.2%</td>
<td>7.9%</td>
<td>7.6%</td>
<td>5.8%</td>
<td>5.5%</td>
<td>4.2%</td>
<td>7.0%</td>
<td>4.9%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>5.6%</td>
<td>4.8%</td>
<td>6.4%</td>
<td>5.8%</td>
<td>5.6%</td>
<td>5.1%</td>
<td>5.4%</td>
<td>5.0%</td>
<td>6.4%</td>
<td>9.9%</td>
<td>8.4%</td>
<td>6.3%</td>
</tr>
</tbody>
</table>

Note. The wording of this question changed between 1993 and 1995, rendering the 1993 estimates incompatible with those in subsequent years.

- In 2001, the percentage of North Carolina high school students who reported vomiting or taking laxatives to lose weight or to keep from gaining weight during the past 30 days was not significantly different from the national percentage (5.4%; Grunbaum et al., 2002).
- In 2001, females were more likely than males to report that they had vomited or taken laxatives to lose weight or to keep from gaining weight.
In 2001, approximately one out of seven North Carolina high school students reported that they had gone without eating for 24 hours or more to lose weight during the past 30 days.

In 2001, females were more likely than males to report going without eating for 24 hours or more to lose weight during the past 30 days.
Figure 46. Percentage of North Carolina high school students who took diet pills, powders, or liquids without a doctor’s advice to lose weight or to keep from gaining weight during the past 30 days.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>8.2%</td>
<td>5.4%</td>
<td>10.9%</td>
<td>6.7%</td>
<td>7.3%</td>
<td>8.6%</td>
<td>10.6%</td>
<td>8.4%</td>
<td>7.0%</td>
<td>13.3%</td>
<td>11.2%</td>
</tr>
</tbody>
</table>

Note. Prior to 2001, this question asked only about diet pills (not powders or liquids) and did not include the qualifier about not having a doctor’s advice, rendering those data incompatible with the 2001 data.

- In 2001, the percentage of North Carolina high school students who reported that they had taken diet pills, powders, or liquids without a doctor’s advice to lose weight or to keep from gaining weight during the past 30 days was not significantly different from the national percentage (9.2%; Grunbaum et al, 2002).
- In 2001, females were more likely than males to report taking diet pills, powders, or liquids without a doctor’s advice to lose weight or to keep from gaining weight during the past 30 days.
Physical Health

Most children in the U. S. under the age of 17 have a usual source for health care. However, access to health care tends to decline as children get older (Weigers, Welnick, & Cohen, 1998). Among children under 18, only 70 percent visit a health care provider each year for a routine appointment, and fewer than half see a dentist each year (Agency for Healthcare Research and Quality, 2002; Krauss, Machlin, & Kass, 1999). In addition, certain subgroups of children (e.g., Black, Hispanic, uninsured, or poor children) tend to have less access to regular sources of health care and are less likely to use health or dental services for preventive or emergency reasons (Agency for Healthcare Research and Quality, 2002; Krauss et al., 1999; Watson, Manski, & Mancek, 2001; Weigers et al., 1998). Black and Hispanic youth are also less likely to be rated as being in good health overall by their parents (Weigers et al., 1998). Figures 47 through 49 present data on health care utilization and health status for North Carolina high school students.

Figure 47. Percentage of North Carolina high school students who saw a doctor or health care provider for a check-up or physical exam when they were not sick or injured during the past 12 months.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multiracial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>60.8%</td>
<td>60.4%</td>
<td>61.3%</td>
<td>61.1%</td>
<td>57.8%</td>
<td>63.3%</td>
<td>61.9%</td>
<td>60.2%</td>
<td>62.4%</td>
<td>53.8%</td>
<td>68.2%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, approximately six out of every ten North Carolina high school students reported that they had seen a doctor or health care provider for a check-up or physical exam when they were no sick or injured during the past 12 months.
Figure 48. Percentage of North Carolina high school students who saw a dentist for a check-up, exam, teeth cleaning, or other dental work during the past 12 months.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>66.1%</td>
<td>65.5%</td>
<td>66.8%</td>
<td>66.4%</td>
<td>66.0%</td>
<td>63.6%</td>
<td>69.6%</td>
<td>74.3%</td>
<td>51.2%</td>
<td>51.9%</td>
<td>66.6%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, almost two-thirds of North Carolina high school students reported that they had seen a dentist for a check-up, exam, teeth cleaning, or other dental work during the past 12 months.
- In 2001, White students were more likely than Black or Hispanic students to report having seen a dentist for a check-up, exam, teeth cleaning, or other dental work during the past 12 months.
- In 2001, Multi-racial students were more likely than Black students to report having seen a dentist for a check-up, exam, teeth cleaning, or other dental work during the past 12 months.
Figure 49. Percentage of North Carolina high school students who rate the quality of their health as good or better.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>80.4%</td>
<td>82.4%</td>
<td>78.4%</td>
<td>81.8%</td>
<td>81.0%</td>
<td>79.0%</td>
<td>79.7%</td>
<td>81.5%</td>
<td>78.8%</td>
<td>74.1%</td>
<td>80.7%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, approximately four out of five North Carolina high school students reported that the quality of their health was good or better.
Along with inactivity, improper nutrition is the other major factor behind the obesity epidemic that has emerged in the U.S. in recent years. The U.S. Department of Agriculture (2000) recommends a diet high in grains, vegetables, fruits, and lean meats, and low in saturated fats. Currently, however, the dietary patterns of Americans of all ages falls far short of this ideal, and far short of the targets established under the Healthy People 2010 initiative (U.S. Department of Health and Human Services, 2000). Figures 50 through 57 detail the reported dietary patterns of North Carolina high school students.

**Figure 50.** Percentage of North Carolina high school students who drank 100% fruit juice one or more times during the past seven days.

In 2001, the percentage of North Carolina high school students who reported drinking 100% fruit juice during the past seven days was not significantly different from the national percentage (83.0%; Grunbaum et al., 2002).
Figure 51. Percentage of North Carolina high school students who ate fruit one or more times during the past seven days.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>80.5%</td>
<td>81.5%</td>
<td>79.6%</td>
<td>81.3%</td>
<td>78.2%</td>
<td>80.4%</td>
<td>83.4%</td>
<td>83.6%</td>
<td>73.6%</td>
<td>81.8%</td>
<td>81.0%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, the percentage of North Carolina high school students who reported eating fruit during the past seven days was lower than the national percentage (84.4%; Grunbaum et al., 2002).
- In 2001, White students were more likely than Black students to report eating fruit one or more times during the past seven days.
Figure 52. Percentage of North Carolina high school students who ate green salad one or more times during the past seven days.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>61.2%</td>
<td>57.8%</td>
<td>64.6%</td>
<td>55.8%</td>
<td>60.4%</td>
<td>67.7%</td>
<td>64.5%</td>
<td>65.8%</td>
<td>50.9%</td>
<td>60.5%</td>
<td>63.0%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, the percentage of North Carolina high school students who reported eating green salad during the past seven days was lower than the national percentage (67.1%; Grunbaum et al., 2002).
- In 2001, females were more likely than males to report eating green salad on one or more of the past seven days.
- In 2001, 11\textsuperscript{th} graders were more likely than 9\textsuperscript{th} graders to report eating green salad on one or more of the past seven days.
- In 2001, White and Multi-racial students were more likely than Black students to report eating green salad on one or more of the past seven days.
Figure 53. Percentage of North Carolina high school students who ate potatoes one or more times during the past seven days.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>71.1%</td>
<td>71.8%</td>
<td>70.4%</td>
<td>70.3%</td>
<td>71.4%</td>
<td>71.6%</td>
<td>72.9%</td>
<td>76.5%</td>
<td>59.6%</td>
<td>68.7%</td>
<td>72.5%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001. “Potatoes” did not include French fries, fried potatoes, or potato chips.

- In 2001, the percentage of North Carolina high school students who reported eating potatoes during the past seven days was not significantly different from the national percentage (72.6%; Grunbaum et al., 2002).
- In 2001, White and Multi-racial students were more likely than Black students to report eating potatoes one or more times during the past seven days.
Figure 54. Percentage of North Carolina high school students who ate carrots one or more times during the past seven days.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>40.4%</td>
<td>42.0%</td>
<td>38.9%</td>
<td>42.0%</td>
<td>39.5%</td>
<td>41.3%</td>
<td>38.7%</td>
<td>46.9%</td>
<td>25.0%</td>
<td>51.2%</td>
<td>41.7%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, the percentage of North Carolina high school students who reported that they ate carrots during the past seven days was lower than the national percentage (47.2%; Grunbaum et al., 2002).
- In 2001, Black students were less likely than students from all other ethnic groups to report eating carrots during the past seven days.
Figure 55. Percentage of North Carolina high school students who ate other vegetables (other than salad, potatoes, and carrots) one or more times during the past seven days.

Note. Question was not asked prior to 2001.

- In 2001, the percentage of North Carolina high school students who reported eating vegetables other than salad, potatoes, or carrots during the past seven days was not significantly different from the national percentage (85.2%; Grunbaum et al., 2002).
- In 2001, White students were more likely than Black students to report eating vegetables other than salad, potatoes, or carrots during the past seven days.
Figure 56. Percentage of North Carolina high school students who ate five or more servings of fruits and vegetables per day during the past seven days.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>17.8%</td>
<td>19.2%</td>
<td>16.3%</td>
<td>19.4%</td>
<td>16.8%</td>
<td>17.1%</td>
<td>17.6%</td>
<td>17.2%</td>
<td>18.9%</td>
<td>20.5%</td>
<td>18.4%</td>
</tr>
</tbody>
</table>

**Note.** Questions that were used to generate these data were not asked prior to 2001.

- In 2001, the percentage of North Carolina high school students who reported eating five or more servings of fruits and vegetables per day during the past seven days was lower than the national percentage (21.4%; Grunbaum et al., 2002).
In 2001, the percentage of North Carolina high school students who reported that they drank three or more glasses of milk daily during the past seven days was lower than the national percentage (16.4%; Grunbaum et al., 2002).

In 2001, males were more likely than females to report drinking three or more glasses of milk per day during the past seven days.

In 2001, White and Hispanic students were more likely than Black students to report drinking three or more glasses of milk per day during the past seven days.

Note. Question was not asked prior to 2001.
Physical Activity

In addition to preventing obesity, regular physical activity can also help prevent many health problems including heart disease, hypertension, diabetes, and colon cancer. Unfortunately, only half of youth ages 12 to 21 in the U. S. engage in regular physical activity, and the percentage of children attending daily physical education classes in school has declined dramatically (U. S. Department of Health and Human Services, 1996). Figures 58 through 65 present data on the physical activity levels of North Carolina high school students.

Figure 58. Percentage of North Carolina high school students who participated in strenuous physical activity for at least 20 minutes on three or more of the past seven days.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>59.1%</td>
<td>71.0%</td>
<td>47.6%</td>
<td>68.2%</td>
<td>60.3%</td>
<td>52.2%</td>
<td>51.4%</td>
<td>63.9%</td>
<td>49.3%</td>
<td>58.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>61.3%</td>
<td>73.2%</td>
<td>49.4%</td>
<td>74.5%</td>
<td>62.1%</td>
<td>51.2%</td>
<td>50.6%</td>
<td>64.5%</td>
<td>54.4%</td>
<td>46.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>55.2%</td>
<td>65.6%</td>
<td>46.9%</td>
<td>62.6%</td>
<td>53.6%</td>
<td>49.7%</td>
<td>47.7%</td>
<td>60.1%</td>
<td>49.2%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001</td>
<td>64.0%</td>
<td>73.1%</td>
<td>54.9%</td>
<td>74.0%</td>
<td>64.0%</td>
<td>58.3%</td>
<td>54.2%</td>
<td>66.2%</td>
<td>60.0%</td>
<td>63.1%</td>
<td>63.1%</td>
<td></td>
</tr>
</tbody>
</table>

Note. “Strenuous” physical activity is defined as activity that results in sweating or hard breathing, such as basketball, soccer, running, swimming laps, fast bicycling, fast dancing, or similar aerobic activities.

- In 2001, the percentage of North Carolina high school students who reported participating in strenuous physical activity for at least 20 minutes on three or more of the past seven days was not significantly different from the national percentage (64.6%; Grunbaum et al., 2002). This was also true in 1995; however, the North Carolina percentage was lower than the national figure in 1993.
- Between 1993 and 2001, the percentage of Black students participating in strenuous physical activity for at least 20 minutes on three or more of the past seven days increased.
- In 1993, 1995, and 2001, males were more likely than females to report participating in strenuous physical activity for at least 20 minutes on three or more of the past seven days.
- In 1993, 1995, and 2001, 9<sup>th</sup> graders were more likely than 11<sup>th</sup> and 12<sup>th</sup> graders to participate in strenuous physical activity for at least 20 minutes on three or more of the past seven days.
- In 1995 and 2001, 9<sup>th</sup> graders were more likely than 10<sup>th</sup> graders to report participating in strenuous physical activity for at least 20 minutes on three or more of the past seven days.
- In 1995, 10<sup>th</sup> graders were more likely than 11<sup>th</sup> graders to report participating in strenuous physical activity for at least 20 minutes on three or more of the past seven days.
- In 2001, 10<sup>th</sup> graders were more likely than 12<sup>th</sup> graders to report participating in strenuous physical activity for at least 20 minutes on three or more of the past seven days.
- In 1993 and 1995, White students were more likely than Black students to participate in strenuous physical activity for at least 20 minutes on three or more of the past seven days.
Figure 59. Percentage of North Carolina high school students who participated in moderate physical activity for at least 30 minutes on five or more of the past seven days.

% 0% 25% 50% 75% 100%

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>23.5%</td>
<td>26.6%</td>
<td>20.3%</td>
<td>24.4%</td>
<td>25.5%</td>
<td>22.4%</td>
<td>20.4%</td>
<td>25.4%</td>
<td>18.4%</td>
<td>20.7%</td>
<td>36.2%</td>
</tr>
</tbody>
</table>

Note. "Moderate" physical activity is defined as activity that does not result in sweating or hard breathing, such as fast walking, slow bicycling, skating, pushing a lawn mower, or mopping floors. Question was not asked prior to 2001.

- In 2001, the percentage of North Carolina high school students who reported participating in moderate physical activity for at least 30 minutes on five or more of the seven days was not significantly different from the national percentage (25.5%; Grunbaum et al., 2002).
- In 2001, males were more likely than females to report participating in moderate physical activity for at least 30 minutes on five or more of the seven days.
- In 2001, White students were more likely than Black students to report participating in moderate physical activity for at least 30 minutes on five or more of the seven days.
- In 2001, Multi-racial students were more likely than White or Black students to report participating in moderate physical activity for at least 30 minutes on five or more of the seven days.
Figure 60. Percentage of North Carolina high school students who did not participate in at least 20 minutes of strenuous physical activity on three or more of the past seven days and did not do at least 20 minutes of moderate physical activity on five or more of the past seven days.

Note. Questions that were used to generate these data not asked prior to 2001.

- In 2001, the percentage of North Carolina high school students who reported that they did not participate in at least 20 minutes of strenuous physical activity on three or more of the past seven days and did not do at least 20 minutes of moderate physical activity on five or more of the past seven days was not significantly different from the national percentage (31.2%; Grunbaum et al., 2002).
- In 2001, females were more likely than males to report that they did not participate in at least 20 minutes of vigorous physical activity on three or more of the past seven days and did not do at least 20 minutes of moderate physical activity on five or more of the past seven days.
- In 2001, 9th graders were less likely than students in higher grade levels to report that they did not participate in at least 20 minutes of vigorous physical activity on three or more of the past seven days and did not do at least 20 minutes of moderate physical activity on five or more of the past seven days.
- In 2001, 10th graders were less likely than 12th graders to report that they did not participate in at least 20 minutes of vigorous physical activity on three or more of the past seven days and did not do at least 20 minutes of moderate physical activity on five or more of the past seven days.
- In 2001, White students were less likely than Black students to report that they did not participate in at least 20 minutes of vigorous physical activity on three or more of the past seven days and did not do at least 20 minutes of moderate physical activity on five or more of the past seven days.
In 2001, the percentage of North Carolina high school students who reported that they participated in no physical activity during the past seven days was not significantly different from the national percentage (9.5%; Grunbaum et al., 2002).

In 2001, females were more likely than males to report participating in no physical activity during the past seven days.

In 2001, Blacks were more likely than Whites to report participating in no physical activity during the past seven days.
In 2001, the percentage of North Carolina high school students who reported that they attended physical education classes at least one day per week was not significantly different from the national percentage (51.7%; Grunbaum et al., 2002). This was also true in 1993; however, the North Carolina percentage was lower in 1995.

In 1993, 1995, and 2001, males were more likely than females to report attending physical education classes at least once per week.

In 1993, 1995, and 2001, 9th graders were more likely than students in higher grade levels to report attending physical education classes at least once per week.

In 1993 and 1995, 10th graders were more likely than 11th graders to report attending physical education classes at least once per week.

In 1993, 10th graders were more likely than 12th graders to report attending physical education classes at least once per week.
In 2001, approximately four out of ten North Carolina high school students reported exercising or playing sports for more than 20 minutes during an average physical education class.

- In 1993, 1995, and 2001, males were more likely than females to report exercising or playing sports for more than 20 minutes during an average physical education class.
- In 1993, 1995, and 2001, 9th graders were more likely than students in higher grade levels to report exercising or playing sports for more than 20 minutes during an average physical education class.
- In 1993, 1995, and 2001, 10th graders were more likely than 11th or 12th graders to report exercising or playing sports for more than 20 minutes during an average physical education class.

Note. Not enough Hispanic or Multi-racial students responded to this item in 2001 to generate statewide estimates. Percentages are based on all students regardless of whether they were enrolled in physical education classes. Some students each year reported that they did not attend physical education classes; therefore, these figures would be even higher if the analysis was limited only to those students who reported attending physical education classes.
Figure 64. Percentage of North Carolina high school students who walk to school three or more days per week.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>2.2%</td>
<td>2.9%</td>
<td>1.6%</td>
<td>3.1%</td>
<td>1.7%</td>
<td>1.3%</td>
<td>2.6%</td>
<td>1.5%</td>
<td>3.3%</td>
<td>4.7%</td>
<td>3.2%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, only one out of every 50 North Carolina high school students reported that they walked to school at least three days per week.
Figure 65. Percentage of North Carolina high school students who ride a bicycle to school three or more days per week.

- In 2001, only one percent of North Carolina high school students reported that they biked to school at least three days per week.

Note. Question was not asked prior to 2001.
Psychological Health

It is estimated that approximately one out of every ten children in the United States suffers from a mental or emotional illness severe enough to compromise their daily functioning (Colpe, 2000; National Institute of Mental Health, 2001). Children with mental health conditions are at higher risk for a variety of negative outcomes, including suicide, school dropout, violence, and drug use (e.g., Brandenberg, Friedman, & Silver, 1990). Figures 66 through 71 present data on selected indicators of the psychological health of North Carolina high school students.

Figure 66. Percentage of North Carolina high school students who feel stress in their life most or all of the time.

Table: Percentage of North Carolina high school students who feel stress in their life most or all of the time.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multiracial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>37.8%</td>
<td>28.5%</td>
<td>47.2%</td>
<td>33.9%</td>
<td>34.3%</td>
<td>39.2%</td>
<td>47.7%</td>
<td>41.9%</td>
<td>30.6%</td>
<td>28.1%</td>
<td>30.1%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, more than one-third of all North Carolina high school students reported feeling stress in their life most or all of the time.
- In 2001, females were more likely than males to report feeling stress in their life most or all of the time.
- In 2001, 12th graders were more likely than 9th or 10th graders to report feeling stress in their life most or all of the time.
- In 2001, White students were more likely than students of other ethnicities to report feeling stress in their life most or all of the time.
In 2001, the percentage of North Carolina high school students who reported that they had seriously thought about attempting suicide during the past 12 months was not significantly different from the national percentage (19.0%; Grunbaum et al., 2002). This was also true in 1993; however, the North Carolina percentage was lower than the national percentage in 1995.

Between 1993 and 2001, the overall percentage of North Carolina high school students who reported seriously considering attempting suicide decreased. This decline was also evident among females, 10th graders, and White students.

Between 1993 and 1995, the percentage of 9th graders who reported that they seriously considering attempting suicide declined, then leveled off in 2001. This pattern is also found among Black students.

In 1993, 1995, and 2001, females were more likely than males to report that that they had seriously thought about attempting suicide.

In 1993, 1995, and 2001, White students were more likely than Black students to report that that they had seriously thought about attempting suicide.

In 1993, students whose ethnicity was coded as “Other” were more likely than Black students to report that that they had seriously thought about attempting suicide.
Figure 68. Percentage of North Carolina high school students who felt so sad or hopeless almost every day for two weeks or more in a row during the past 12 months that they stopped doing some usual activities.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>29.3%</td>
<td>20.8%</td>
<td>38.0%</td>
<td>30.1%</td>
<td>28.7%</td>
<td>27.5%</td>
<td>30.3%</td>
<td>28.8%</td>
<td>30.3%</td>
<td>27.5%</td>
<td>30.4%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, the percentage of North Carolina high school students who reported feeling so sad or hopeless almost every day for two consecutive weeks during the past 12 months that they stopped doing some usual activities was not significantly different from the national percentage (28.3%; Grunbaum et al., 2002).
- In 2001, females were more likely than males to report feeling so sad or hopeless almost every day for two consecutive weeks during the past 12 months that they stopped doing some usual activities.
In 2001, approximately four out of five North Carolina high school students reported that they would rate the quality of their life as good or better.
Figure 70. Percentage of North Carolina high school students who agree that they feel good about themselves.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>76.4%</td>
<td>79.1%</td>
<td>73.8%</td>
<td>75.5%</td>
<td>78.6%</td>
<td>75.3%</td>
<td>76.9%</td>
<td>76.8%</td>
<td>76.9%</td>
<td>75.6%</td>
<td>70.5%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, approximately three-fourths of North Carolina high school students agreed or strongly agreed that they felt good about themselves.
Figure 71. Percentage of North Carolina high school students who feel alone in their life.

- In 2001, approximately one out of seven of North Carolina high school students reported that they felt alone in their life.
- In 2001, females were more likely than males to report feeling alone in their life.

Note. Question was not asked prior to 2001.
School Environment

The presence of drugs and violence in school often has deleterious effects on the learning environment and on students’ perceptions of safety. During the 1990’s, there was a decline nationally in the percentage of students victimized by crime in school and in the percentage of students who fear for their safety either in school or while traveling to or from school. Despite these declines, students ages 12 to 18 were still the victims of 2.5 million crimes at school in 1999, including 186,000 rapes, sexual assaults, robberies, and aggravated assaults, and drug use and availability at school has generally remained steady since 1995 (U. S Department of Education, 2001). Figures 72 through 75 detail North Carolina high school students’ perceptions of their school environments.

Figure 72. Percentage of North Carolina high school students who agree that harassment and bullying by other students is a problem at their school.

In 2001, almost one out of every three North Carolina high school students reported that harassment and bullying by other students is a problem at their school.

- In 2001, females were more likely than males to report that harassment and bullying by other students is a problem at their school.
- In 2001, White students were more likely than Black students to report that harassment and bullying by other students is a problem at their school.
Figure 73. Percentage of North Carolina high school students who agree that their teachers care about them.

Note. Question was not asked prior to 2001.

- In 2001, approximately four out of every ten North Carolina high school students reported that their teachers cared about them.
Figure 74. Percentage of North Carolina high school students who agree that drugs are a problem at their school.

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>44.2%</td>
<td>40.6%</td>
<td>47.7%</td>
<td>40.8%</td>
<td>43.8%</td>
<td>43.6%</td>
<td>50.8%</td>
<td>46.8%</td>
<td>39.6%</td>
<td>53.3%</td>
<td>37.7%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, approximately four out of every ten North Carolina high school students reported that drugs are a problem at their school.
Figure 75. Percentage of North Carolina high school students who agree that violence is a problem at their school.

Note. Question was not asked prior to 2001.

- In 2001, approximately one-fourth of North Carolina high school students reported that violence is a problem at their school.
- In 2001, females were more likely than males to report that violence is a problem at their school.
- In 2001, Black students were more likely than Multi-racial students to report that violence is a problem at their school.
Selected Prevention-Related Indicators

In addition to questions about health risk behaviors and related perceptions, the North Carolina YRBS also measures selected factors associated with lower risk for engaging in negative health behaviors. These include characteristics of the home environment, academic performance indicators, and measures of how students use their free time (Hawkins et al., 1998; McMillen, McMillen, Simeonsson, & Lollar, 2002; Substance Abuse and Mental Health Services Administration, 2001a, 2001b). Figures 76 through 81 display data from North Carolina high school students on these and other indicators.

**Figure 76.** Percentage of North Carolina high school students who plan to pursue post-secondary education.

![Bar chart showing percentages](chart.png)

Note. Question was not asked prior to 2001.

- In 2001, approximately three-fourths of North Carolina high school students reported that they planned to pursue post-secondary education of some kind.
- In 2001, females were more likely than males to report that they planned to pursue post-secondary education of some kind.
Figure 77. Percentage of North Carolina high school students reporting that there is never an adult home in the afternoon when they return from school.

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>16.2%</td>
<td>14.0%</td>
<td>12.2%</td>
<td>12.6%</td>
<td>17.0%</td>
<td>20.8%</td>
<td>15.6%</td>
<td>13.3%</td>
<td>17.4%</td>
<td>15.6%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, approximately one out of seven North Carolina high school students reported that an adult is never home in the afternoon when they return from school.
- In 2001, 12th graders were more likely than either 9th or 10th graders to report that an adult is never home in the afternoon when they return from school.
Figure 78. Percentage of North Carolina high school students who participate in extracurricular activities at school.

<table>
<thead>
<tr>
<th>Year</th>
<th>Total</th>
<th>Male</th>
<th>Female</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>White</th>
<th>Black</th>
<th>Hispanic</th>
<th>Multi-racial</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>65.4%</td>
<td>63.9%</td>
<td>67.0%</td>
<td>61.3%</td>
<td>66.2%</td>
<td>67.8%</td>
<td>69.9%</td>
<td>66.0%</td>
<td>65.4%</td>
<td>56.4%</td>
<td>67.0%</td>
</tr>
</tbody>
</table>

Note. Question was not asked prior to 2001.

- In 2001, nearly two-thirds of North Carolina high school students reported that they participated in extracurricular activities at school.
Figure 79. Percentage of North Carolina high school students who performed any organized community service as a non-paid volunteer one or more times during the past 30 days.

Note. Question was not asked prior to 2001.

- In 2001, approximately one-third of North Carolina high school students reported that they performed organized community service as a non-paid volunteer one or more times during the past 30 days.
- In 2001, White students were more likely than Black students to report that they performed organized community service as a non-paid volunteer one or more times during the past 30 days.
Figure 80. Percentage of North Carolina high school students whose parent(s) do not have at least a high school diploma.

Note. Question was not asked prior to 2001. Question references the highest level of education attained by any parent or other adult with whom the student lives.

- In 2001, approximately six percent of North Carolina high school students reported that their parent(s) had not graduated from high school.
- In 2001, 9th graders were more likely than 12th graders to report that their parent(s) had not graduated from high school.
- In 2001, Hispanic students were more likely that White or Multi-racial students to report that their parent(s) had not graduated from high school.
Figure 81. Percentage of North Carolina high school students who described their grades in school during the past 12 months as mostly Ds or below.

Note. Question was not asked prior to 2001.

- In 2001, the percentage of North Carolina high school students who reported that they had received grades of D or below in school during the past 12 months was not significantly different from the national percentage (6.3%; Grunbaum et al., 2002).
- In 2001, males were more likely than females to report that they had received grades of D or below in school during the past 12 months.
References


Appendix A

1993 North Carolina Youth Risk Behavior Survey
High School Questionnaire
Appendix B

1995 North Carolina Youth Risk Behavior Survey
High School Questionnaire
Appendix C

1997 North Carolina Youth Risk Behavior Survey
High School Questionnaire
Appendix D

2001 North Carolina Youth Risk Behavior Survey
High School Questionnaire