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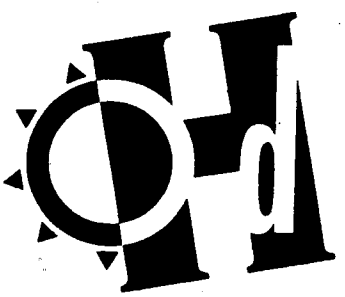
ABSTRACT

This study investigated the patterns of student use of school-based health centers (SBHCs) in Oregon. The study explored adolescents' health care needs and use of services, the reasons students use SBHCs for care, and the type of students who use SBHCs; the study also assessed the relationships between use of SBHC services and student risk behaviors, and compared health care access and behaviors of students using SBHCs with those of other students. High school students attending schools with and without SBHCs completed the Youth Risk Behavior Survey, and a summary and evaluation of SBHCs. Findings indicate that students use SBHCs for easy access, financial reasons, and privacy protection, and that students from areas of lower socioeconomic status, minority groups, and older age groups are more likely to use SBHCs. Access to SBHCs is related to increases in the health care of students. While SBHCs are providing care to some of the highest risk students--as indicated by experiences of abuse, drug use and sexual behavior--these students are not engaging in higher levels of alcohol or cigarettes than other students, and SBHC users report lower rates of sexual activity without birth control and are more concerned about HIV/AIDS than their peers. (Tables and figures of statistical data are included.) (JPB)

SCHOOL-BASED HEALTH CENTERS IN OREGON:

Adolescents Report Their Needs, Use, Behaviors, and Attitudes



A report from the Oregon Department of Human Services, Health Division in collaboration with the section of Outcomes Research and Health Informatics, Biomedical Information Communication Center, Oregon Health Sciences University

November 1996

School-Based Health Centers in Oregon: Adolescents Report Their Needs, Use, and Risk

EXECUTIVE SUMMARY

Using data from the Youth Risk Behavior Survey Completed by 13,992 high school students throughout the state of Oregon*, a summary and evaluation of school-based health centers and the status of adolescent risk behaviors were completed. Data were collected from students attending schools with School-Based Health Centers (SBHCs) and from students at other schools. Therefore, comparisons were made between users of SBHCs and nonusers in the same school, and between users of SBHCs and students attending schools with no SBHC. The four goals of this evaluation were:

1. To describe the health care needs and use of adolescents in Oregon.
2. To describe the reasons students use or do not use SBHCs for care.
3. To Describe the students who use SBHCs services and to determine relationships between use of SBHC services and student risk behaviors.
4. To compare health care access and behaviors of students using SBHCs to other students

Findings revealed the following about Oregon's high school students and 15 of the state's school-based health centers:

- Increasing numbers of students are using the SBHCs.
- High school students report they use the services of SBHCs because of the easy access, for financial reasons, and because of the protection of privacy that is available.
- Students in areas of lower socioeconomic status, minority students, and older students are more likely to use the SBHC services.

EXECUTIVE SUMMARY Continued

- Access to SBHCs is related to increases in the health care of high school students including:
  - more immunizations
  - more care for emotional or personal problems
  - more care for alcohol- and other drug-related problems
  - more care for sexually transmitted diseases
  - increased reproductive services

- School-based health centers are providing care to some of the highest risk students as indicated by experiences of abuse, drug use, and sexual behavior. However, these adolescents are not engaging in higher levels of use of alcohol or cigarettes than other students.

- Adolescents who use the school-based health centers report lower rates of sexual activity without birth control, and are more concerned about HIV/AIDS than other high school students.

**A joint project of the Oregon Department of Education; The Oregon Department of Human Resources, Health Division; and the Centers for Disease Control.*

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Adolescents Report Their Needs, Use, Behaviors, and Attitudes

A report from the Oregon Department of Human Services, Health Division
in collaboration with the section of Outcomes Research and Health Informatics,
Biomedical Information Communication Center, Oregon Health Sciences University

November 1996

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Introduction

The major sources of morbidity and mortality during adolescence are preventable. The factors most harmful to adolescents include violence, cigarette smoking, drug use, unsafe sexual practices, and risky motor vehicle use (Crockett & Peterson, 1993; Millstein, 1989; Oden, 1995). Injury and violence account for 75% of deaths during adolescence. In the United States, homicide is the second and suicide is the third leading cause of death among 15- to 24-year-olds. However, in Oregon, suicide accounts for more deaths than homicide. Infection with the human immunodeficiency virus (HIV) is now the sixth leading cause of death in this age group in the U.S. and infection with sexually transmitted diseases (STD) is at an all-time high.

STDs and pregnancy are too frequent in individuals ages 15 to 19. In Oregon in 1995, there were 2,315 cases of chlamydia, gonococcal infection, and syphilis in individuals ages 15 to 19. This is a rate of 111 per 10,000 individuals in this age group. Teens have the highest rate of STDs of all age groups in the United States. About 25% of all adolescents will be diagnosed with an STD by the age of 21, and approximately 10% of females ages 15 to 19 get pregnant each year in the U.S. (more than 1 million teens each year). During 1994, there were 3,214 Oregon females ages 10 to 17 who became pregnant and 2,022 of these young women gave birth.

A substantial minority of young people also engage in smoking and other substance use. About one-third of high school students smoke cigarettes daily and about the same proportion binge drink alcohol weekly (Crockett & Peterson, 1993; Kirby, Short, Collins, Rugg, Kolbe, Howard, Miller, Sonenstein, & Zabin, 1994). In addition, adolescents are also more likely to be abused or neglected than any other age group of children (Council on Scientific Affairs–American Medical Association, 1993; Elder & Hui, 1993). Although these statistics are high, they may still be lower than the actual numbers for this group because many adolescents do not receive regular health care and, therefore, high rates of undetected disease are suspected in this population (Millstein, 1989).

Based on current knowledge, approximately 15% of adolescents are estimated to be at high risk for continuing health risk behaviors and long-term problems (Zaslow & Takanishi, 1993). The percentage of adolescents at high risk is expected to increase and the overall health status of youth is expected to decrease over the next decades (Millstein, 1989). These dim projections are based upon the increasing number of adolescents that are expected to be raised in poverty and the expectation of decreasing opportunities for adequate education and employment.

Adolescents report a wide range of health concerns and report being less healthy than their parents or physicians rate them (Millstein, 1993). The health concerns adolescents cite include nutrition/weight control, mental health counseling, school and interpersonal problems, dental care, acne, anxiety, menstrual problems, sex education, family planning, and pregnancy (Hawkins, Spigner, & Murphy, 1990; Millstein, 1989, 1993). The most common reason for visiting a physician during adolescence is for a routine physician examination. The most frequent reason reported by older adolescents for visiting a physician is prenatal care. However, in general, young people receive care from private physicians at lower rates than any other group (Igra & Millstein, 1993).

Improving the physical and mental health of young people in the present and future is increasingly becoming a focus for health care service providers, health policymakers, and researchers of various disciplines. Emphasizing health care provision during adolescence and research surrounding this care seems to have gained importance for three reasons. First, the period of adolescence is a transitional time when the development of social and intellectual skills are of utmost importance for adult life (Crockett & Peterson, 1993). These transitions in biological, cognitive, and psychosocial domains provide many opportunities for adolescents to engage in risky health behaviors or to begin to develop a healthy lifestyle. Second, the factors which influence adolescent morbidity and mortality are primarily preventable (Igra & Millstein, 1993; Millstein, 1989). Third, past attempts to intervene to decrease rates of adolescent disorders and difficulties have had only limited and isolated success.

Intervention programs for young people have been designed to target either specific problems, such as HIV transmission, or to provide general support for health promotion (Zaslow &

Takanishi, 1993). Most of these programs have been implemented due to a sense of urgency, with little funding, and with little or no evidence of effectiveness or plans for program evaluation.

School-Based Health Centers

The establishment of School-Based Health Centers (SBHCs) is one intervention promoted as an opportunity to improve the health of adolescents and reduce rates of risk behaviors by increasing access to care tailored to the needs of adolescents (Elder & Hui, 1993). SBHCs usually provide general medical and counseling services that include primary health care, physical examinations, laboratory tests, diagnosis and treatment of minor illness, and immunizations (Dryfoos & Klerman, 1988; Kirby, Waszak, & Ziegler, 1991). Only about 20% of SBHCs dispense birth control on site, but about 30% can write prescriptions for contraceptives. Also, SBHCs differ in their emphasis on mental health care, educational programs, or other components of care (Dryfoos & Klerman, 1988; Kirby, et al., 1994). Since the 1970s, SBHCs have been on the increase in order to make both physical and mental health care more accessible and available to adolescents (Harold & Harold, 1993).

The first SBHC was established in Dallas in 1970 (Kirby, et al., 1991). By 1992 there were over 400 SBHCs throughout the United States in more than 30 states (Harold & Harold, 1993; Kirby, et al., 1994) and the numbers are increasing rapidly. In 1994, one national survey found the number of SBHCs had increased to 607 in 41 states and the District of Columbia (Schlitt, Rickett, Montgomery, & Lear, 1995). The growth of SBHCs has not been based on clear indications of their positive impact on adolescent short-term or long-term risk-behavior or health. Instead, the growth has been influenced by at least five factors: 1) the elevated level of preventable health risks to which adolescents are exposed, 2) indications that adolescents have many concerns about their health and often do not get the health care they desire (Millstein, 1989, 1993), 3) a recognition of the special requirements adolescents have when using health care services including confidentiality and privacy, 4) a desire for a staff that has knowledge of adolescent problems, and 5) the large numbers of students who use the services (Harold & Harold, 1993).

Adolescents do have concerns about their health, desire and appreciate specially targeted health programs, use the services of SBHCs, and are satisfied with these services. (Hawkins, et al.,

1990; Stout, White, & Alexander, 1996; Millstein, 1989, 1990, 1993). Approximately 50% to 80% of all adolescents within a school enroll for services in an SBHC if it is available (Dryfoos & Klerman, 1988; Kirby, et al, 1991; Skeels & Clark, 1990). Students also report that they are more likely to use SBHCs for sensitive health problems that they would not seek care for otherwise (Cheng, Savageau, Sattler, & DeWitt, 1993; Millstein, 1993). Although the number of SBHCs is on the rise and adolescents accept and use the services, more evaluations are still needed since previous evaluations have not consistently concluded that SBHCs have a positive influence on the risky attitudes and behaviors common during adolescence.

Evaluation of School Based Health Centers

It can be difficult to evaluate the general impact of SBHCs because the services provided may vary. In addition, funding for evaluation is often limited, and there may be concerns that an evaluation will not document success and threaten funding (DiBlasio, 1988; Zaslow & Takanishi, 1993). Despite these difficulties and fears, a few evaluations of SBHCs have been reported (Dryfoos & Klerman, 1988; Glick, Doyle, Ni, Gao, & Pham, 1995; Kirby, et al., 1991; Stout, et al., 1996; Zabin, Hirsh, Smith, Streett, & Hardy, 1986).

One of the largest evaluations of SBHCs published to date (Kirby, et al., 1991, 1994) assessed six programs associated with high schools in different states and six matched control schools without SBHCs. Researchers examined the influence of providing access to SBHCs on the receipt of reproductive health care services by adolescents and reported sexual behavior. Dispensing or prescribing contraceptives on site was significantly related to the percent of students seeking services for family planning. However, there were few differences in the percentage of students using contraceptives when schools with and without SBHCs were compared. There appeared to be a shift in the students' source of contraceptives from an outside site to the SBHCs after the health service became available. Additionally, after controlling for student background characteristics, the presence of a SBHC was not associated with lower pregnancy rates in any of the six schools. Most pregnancies occurred prior to receiving SBHC services. Also, students from schools with an SBHC did not appear to be more knowledgeable about contraceptive use or

pregnancy prevention. The strongest effects on student sexual behaviors appeared in schools with SBHCs that provided an educational program in addition to regular health care services.

Although Kirby and associates (1991) failed to find any consistent relationship between SBHCs, sexual behavior, and rates of pregnancy, several smaller evaluation projects have found that SBHCs are related to reductions in these rates. In a 3-year demonstration project in Baltimore, pregnancy rates dropped 30% in schools with SBHCs compared to a 58% increase in control schools (Zabin, et al., 1986). Also, in an early evaluation of a clinic in St. Paul, Minnesota, the birth rate decreased from 79 births per 1,000 in 1973 to 26 births per 1,000 in 1983-1984 (Dryfoos & Klerman, 1988).

SBHCs in Oregon

Oregon was the first state in the nation to establish an SBHC demonstration program and it is one of the states that has seen the most significant growth in the number of these clinics. This growth is attributed to legislative initiatives that have designated state monies for their development and commitments from local sites, especially in Multnomah County. In addition, expansion in 1996-1997 is possible as a result of a grant from The Robert Wood Johnson Foundation (Dryfoos & Klerman, 1988; Lovick & Freedman Stern, 1988; Personal communication with OHD, 1996; Report from Multnomah County, OR, 1988; Skeels & Clark, 1990). There are now 29 SBHCs in Oregon with an average budget per clinic of approximately $121,000 (ranging from $10,000 to over $400,000). These budgets do not count in-kind contributions (personal communication with OHD, 1995; Lovick & Freedman Stern, 1988; Report from Multnomah County, OR, 1988). SBHCs are established in both rural and urban areas of Oregon in schools of various sizes and with diverse student populations. The ability to summarize the use of and satisfaction with services in schools with various enrollment size, schools in rural versus urban areas, or schools in more established programs versus less established centers will provide additional information to aid future planning and development of health care programs within schools in Oregon and across the nation.

The 1995 Oregon Youth Risk Behavior Survey

Questions about health care needed and received, and knowledge and use of SBHCs were included as part of the 1995 Oregon Youth Risk Behavior Survey (YRBS). The YRBS is a questionnaire given to high school students across Oregon and in many other states across the United States. This survey is useful in tracking health, risky behaviors and attitudes, and positive habits of youth. The information is a tool for legislators, policy makers, school administrators, teachers, and others to make decisions about disease-prevention efforts and health promotion policies, services, programs, and education. The YRBS can also be used to compare different populations of students in order to identify and describe those who are most in need of services and to target these services appropriately. In addition, because specific information was collected on the use of and satisfaction with SBHCs in Oregon, data from the YRBS can provide some estimate of the impact of this intervention from the student's perspective.

The following study summarizes adolescents' report of their use of Oregon SBHCs, the level of student satisfaction with SBHCs, and to provide more detailed profiles of the students most and least likely to access these services using the YRBS information. There were four goals of this study.

- To describe the health care needs and use of adolescents.
- To describe the reasons students use or do not use SBHCs for care.
- To describe the students who use SBHCs services and to determine relationships between use of SBHC services and student risk behaviors.
- To compare health care access and behaviors of students using SBHCs to other students.

Methods

Data Collection

School and student participation in the YRBS was voluntary. District school superintendents for each of Oregon's 230 public schools having grades 9, 10, 11, or 12 were initially contacted in the Fall of 1994, to invite their participation and request permission to contact their school principals. A copy of the 1995 YRBS questionnaire and a description of the survey's procedure

were enclosed. If district approval was obtained, the school's principal was contacted to obtain his or her approval and the name of a survey contact.

Fliers or letters announcing the survey were prepared to provide notification of the survey two weeks before the survey date at each school. Distribution of the notification was up to each school. Most schools sent it home with students, while some schools mailed it directly to parents with grade reports, or included information in a school newsletter mailed directly to parents. If parents did NOT wish their child to participate in the survey, they were to return the letter or contact the school. Copies of the survey were available at the school office if parents wanted to read it. Oregon SafeNet provided a toll-free number to call for information about the survey. When contacted, the Oregon Health Division sent copies of the survey to parents who were unable to come to their school's office to look at the survey. Finally, students themselves could choose not to participate in the survey. Students were also given the option of skipping any question they did not wish to answer.

Survey Participation

Of the 40 schools randomly selected for participation, 17 (43%) chose to participate. Districts and schools declined to participate for various reasons including a feeling of having been surveyed extensively by other groups, competition for use of classroom time, current use of another health survey, and involvement in the statewide mathematics and reading assessment by the Oregon Department of Education. Some superintendents did not wish to take the project to their school boards because of anticipated controversies over questions concerning sexual activities, education budgeting, or other local school board issues.

Because of low school participation, the stratified cluster sampling procedure recommended by the Centers for Disease Control and Westat, their technical consultant, was not used for this year's Oregon YRBS. The 17 schools participating from the random sample were considered volunteers and combined with 33 other schools that volunteered. Therefore, a random sample of schools was not achieved. Consequently, the 1995 YRBS is comprised of 50 volunteer Oregon public high schools and may not be representative of the entire Oregon public school population.

The Oregon Health Division recommended that schools draw a random number of classes in which every student had an equal chance of being selected to participate. However, participating schools ultimately chose their own sample. In order to obtain meaningful data, some schools chose to survey their entire school enrollment. Not all schools that participated had a representative sample for doing site-specific analysis.

The YRBS was administered by classroom teachers who utilized procedures designed to assure students' privacy and anonymity while taking the survey. Students were asked to complete questions on the following topics:

- •general demographic information
- •bike safety, vehicle safety, and violence
- •suicide thoughts and behaviors
- •tobacco, alcohol, marijuana, and other drug use
- •sexual behavior history
- •HIV/AIDS knowledge and protective behaviors
- •diet and exercise behavior
- •health care history
- •knowledge and use of SBHCs

After adjustments for absences and non-participation, a total of 14,891 surveys were returned. This group contained 80% of the students in the volunteer sample of participants.

Accuracy of the Information from the Student Survey

In order to verify the validity of responses, surveys were checked visually and then by computer for consistency between questions. Of the 14,891 surveys completed, 13,992 (94%) were considered to be sufficiently accurate. Of the 14,891 survey, 437 were excluded because of an answer to a drug-verification question. Another 566 were excluded because they had ten or more inconsistencies in related questions, out of range answers, and/or multiple answers. An additional 140 students did not report their gender and/or grade level. Surveys which had fewer than ten inconsistencies, out of range answers, or multiple answers were included in the final dataset, but the answers to these questions containing inconsistent pairs, etc. were counted as

missing data. In addition, if a student reported never having used marijuana or cocaine but reported using injection drugs, the response for injection drugs was counted as missing. The percent of surveys (6%) eliminated in the YRBS is consistent with the 6.9% of surveys eliminated in another statewide survey used in alternate years by the Office of Alcohol and Drug Abuse Programs, Department of Human Resources.

The demographic characteristics of the surveyed population were found to be very similar to the statewide pubic school enrollment for gender, grade, and race. Additionally, the distribution of surveyed schools was fairly similar to that of all Oregon public schools in terms of school size and socioeconomic level (SES). However, Clackamas, Washington, and Marion county schools were underrepresented.

Final Student Participants

A total of 4,511 students attending 15 high schools in Oregon with School-Based Health Centers (SBHC schools) provided usable information on the 1995 version of the Youth Risk Behavior Survey (YRBS; see Table 1). An additional 9,481 students attending 35 schools without SBHCs (non-SBHC schools) provided usable survey information. Six percent of the surveys were excluded from the initial group of students leaving 13,992 completed surveys. However, many students neglected to answer one or more questions, so sections of the results contain varied numbers of students.

One-half of the students at SBHC schools and at non-SBHC schools were females. Younger students were more likely to complete the survey. Students who attended Portland, Salem, or Eugene-area schools were defined as urban schools students. All other students were considered rural school students. More students in rural areas participated in the survey. SBHC school participants were primarily concentrated in middle-sized schools, while non-SBHC school students were more likely to be from smaller schools.

Overall, nearly 10% of Oregon's 1995 public high school enrollment participated in the YRBS survey. Therefore, the results are useful in tracking trends and changes in health risk and protective behaviors of youth in the state. This survey may not be representative of those who dropped out of school or declined to participate in the survey.

The SBHC Survey

A short survey of each SBHC was conducted to determine differences in the operations of each clinic. Information collected included the annual budget, operating hours, staffing, health care provided, and provision of educational programs. This information was primarily used to provide some explanation of school differences that were found when comparing YRBS data.

Analysis

A socioeconomic status (SES) developed by the Department of Education was assigned to each student. SES was a rank composite index for the geographic area surrounding the school consisting of the percent of students eligible for free or reduced price lunch, student mobility rate, student attendance rate, and the level of education of the most educated parent. A rank of 1 to 59 was considered low SES , 60 to 119 was low-middle SES, 120 to 169 was upper-middle SES, and 170 or higher was high SES.

An indicator of a rural or urban school setting was also assigned to each student. An urban setting was assigned to students who attended schools in the Portland, Salem, or Eugene areas. Rural students were those attending school in other areas of the state. The remaining definitions of variables used in analyses will be described along with the results.

Comparisons between groups of students were completed using analysis of variance if the variable of interest was intervally scaled, or Pearson chi-square ($\chi 2$) if the variable of interest was nominally scaled. Correlations between variables were completed using the Pearson correlation coefficient. No causal interpretations can be made from this data. This report takes great care in emphasizing that only relationships between variables can be determined, not cause. For example, student access to SBHCs is related to a higher level of concern about HIV/AIDS, but cannot be interpreted as a cause of this increased concern.

Results and Discussion

Do Students Know About the SBHCs?

Most students knew that an SBHC was available in their school. Overall, only 7.4% (303 out of 4,091) of students did not know their school had an SBHC (see Table 2). Females, students in rural schools, and 12th grade students were more likely to know about the SBHCs. Students in schools with enrollment sizes between 800 and 1,199, Hispanic students, and students assigned an upper SES were least likely to know about SBHCs. In most schools with a SBHC, about 1% to 2% of the students did not have knowledge that their school had an SBHC. However, out of the 15 schools with SBHCs that were surveyed, there were two schools in which more than 20% of the students did not know about the centers (site A and site M; see Figure 1). It appeared that lack of knowledge of the clinic at site A was due to the small size of the clinic, particularly the small staff at this center. This site reported only 1 staff member, while all other sites with SBHCs completing the YRBS data had 2 or more staff members. Site A, as well as site M, also had reduced services compared to other sites. Site A did not do general physical examinations, and both sites did not provide the full range of reproductive services (they did not provide examinations for STDs, examinations for reproductive services, or prescriptions for birth control).

Who uses the SBHCs?

What are the Rates of Student Use?

Of those students who knew about the SBHC in their school, 61% (2,231 out of 3,690) reported receiving care there. This is up from 50% of students using the services since the last report of student use of SBHCs (Skeels & Clark, 1990). More females than males reported using the services, there was increasing usage as students got older, and Asian/Pacific Islander and Black students were more likely to use the services compared to students of other race/ethnicities (see Table 3). Students assigned a middle SES were more likely to access the services than students in the low and high SES groups. Use of the SBHCs in urban schools did not differ from use in the rural schools, and school enrollment size was also not related to rates of use.

Student usage of SBHCs also varied between schools. Rates of use ranged from lows of about 40% of students using the SBHC (site A and L; see Figure 1) to a high of 73% (site J).

Reasons why knowledge of services may have been low at site A were described earlier and reasons for low student use of these services may be similar. In addition, fewer students reported using the SBHC services at school site L. Similar to site A, this site was also a small clinic, open for only 24 hours per week, and had a reduced range of reproductive services. The site with the highest usage by students (site J) was a large clinic with many staff and a full range of services including prescriptions for birth control. However, these characteristics do not easily explain the higher use of this SBHC by adolescents. A similar large site in a comparable school had one of the lowest rates of use (site D).

Why Do Students Use the SBHCs?

The YRBS included a series of questions regarding reasons for using and not using the SBHC services in their school. Students were asked to select the most important reason they used the SBHC in their school and the most important reason why they did not use the clinic. Reasons for using the services included the ease of access to clinic services (5 items; see Table 4), financial considerations (2 items), privacy provided (2 items), positive care received (2 items), parents' request (1 item), and "other reason not listed" (1 item). Reasons for not using the SBHC services included the lack of need for services (2 items), concerns about lack of privacy (3 items), difficulties with access (2 items), lack of knowledge of the services (1 item), or "other reason not listed" (1 item). The number of items were combined to form the broader categories of reasons for use and non-use of the services.

Disregarding the "other reason not listed" categories, ease of access was the most common reason students used SBHCs (see Figure 2). The existence of the large group of students reporting "other reasons" for use of the SBHCs (23%) is probably due to the omission of an item stating that the student was ill or needed a physical examination. The most common reason students reported for not using the SBHC was that they had no need for care (either they reported having no health care needs or that they were receiving care from another location; see Figure 3).

There were some differences in reasons reported for use and lack of use of SBHCs when comparing students of different sex, grade level, or race/ethnicity (see Table 5). Male students and

older students were more likely to report that they used the services because the SBHCs were easy to access.

Females and younger students were more concerned about privacy and both groups were more likely to report they used the services because of the privacy provided to them. Females were also more likely to report they did not use the services because they were concerned about a lack of privacy. Black students also appeared to be more concerned about privacy than other racial/ethnic groups. They were more likely to report that they used the services because of the privacy provided and they were more likely to report, along with Hispanic students and students reporting 'other' race/ethnicity, that they did not use SBHCs because they were concerned with a lack of privacy.

Older students were more likely to report use because of financial reasons. Males, Hispanic students, and American Indian/Alaskan students were more likely to report they did not use the services because they did not know of their availability. Compared to other racial/ethnic groups, White and Asian/Pacific Island students were more likely to report they did not use SBHCs because they had no need.

Table 6 reports the most important reasons for using and not using SBHC services by SES group, school location (rural vs. urban), and school enrollment. SES was related to all reasons for use and non-use of the clinics except lack of knowledge of the SBHC as a reason for not accessing the services. Those students in the higher SES group were more likely to use the services because of ease of access. They were more likely to report they did not use the services because they had no need. Students assigned a lower SES indicator were more concerned with privacy. These students used the services for the privacy provided, and did not use the services when they were concerned about a lack of privacy.

There were few differences in reasons for use when comparing rural to urban schools and schools with differing enrollment sizes. Access, privacy, and positive care only slightly differentiated urban students from rural students, and students in smaller schools from students in larger schools. In general, students in urban schools were more likely to report they used the SBHCs because of ease of access. Urban students were also more likely to report they had no need for services. When compared to students in the smallest schools, students in larger schools

were more likely to report using the SBHC because of the positive care they received. Also, students in both the smallest and largest schools reported that ease of access more likely prompted their use of the services than students in middle-sized schools. In addition, privacy was more of a concern for students in the smaller schools and more likely prompted them to avoid the services.

Although, in general, the ease of accessing the SBHCs was the most important reason students reported for using them, reports of students within individual schools did differ. In some schools the privacy received at the SBHC was a more common reason for use (sites A, F, and I; see Table 7). In one school, financial reasons were more important (site N). In addition, in conflict with student reports of the privacy received at site A, the lack of privacy at the SBHC in this school was also a more frequent reason for not using the services. The difficulties in accessing the SBHCs were a bigger concern for students at site J and site K, and lack of knowledge about the services was the biggest problem at site L.

The Health Care Needs of Students

Overall, 80% of students reported having a visit with a doctor or nurse practitioner in the last 12 months and 76% of students reported visiting a dentist in the last 12 months. Only 395 (3%) students had never been to a doctor or nurse practitioner or had not been in the last 5 years (see Table 8). In addition, 707 students (5%) had never received care from a dentist or had not seen one in the last 5 years (see Table 9). American Indian/Alaskan native students and Hispanic or Latino students were the most likely to report they had not been to a doctor, nurse practitioner, or dentist in 5 or more years.

The YRBS asked students to indicate the health care they needed and received in 10 areas including 1) a check-up or sports physical, 2) care for an injury or accident, 3) care for an illness, 4) birth control or condoms, 5) care for a sexual transmitted disease (STD), 6) a pregnancy test, 7) a female examination, 8) care for a drug or alcohol problem, 9) immunizations, or 10) care for a personal or emotional problem. Thirteen percent of students (1,730 individuals) reported that they did not need and did not receive any of these forms of health care in the past 12 months (see Table 10). Males were more likely than females to report they did not need and did not receive health care in the last year (16% of males vs. 9% of females). Again, American Indian/Alaskan native

students and Hispanic or Latino students were most likely to report they needed health care, but did not get it. Low income students, and students in rural or small schools were also more likely to report needing care they did not get.

Overall, these data indicate that many adolescents report access to health care. However, Hispanic or Latino and Indian/Alaskan native adolescents report less health care than other young people. Low income students also continue to report less access to needed health care, as do students in rural areas and those attending small high schools.

Comparison Between the Health Care of Students with Access to SBHCs and Other Students

Students attending schools with SBHCs reported increased access to many forms of health care. For example, students going to schools with a SBHC had a much higher rate of reported immunizations (43%) than students at other schools (35%; see Table 11). If the students at non-SBHC schools were immunized at the same rate as those attending schools with SBHCs, 705 more individuals would have reported immunization. In addition, more students at SBHC schools reported receiving care for 6 other forms of health care including care for a sexually transmitted disease, female examinations, birth control, care for an alcohol or drug problem, and care for a personal or emotional problem. The only forms of health care that all students received at similar rates were care for an injury or accident and care for an illness. All differences between students attending schools with SBHCs and students attending non-SBHC schools were consistent for both males and females and, in most cases, at every grade level (see Table 11 and Table 12). For example, males, females, and students in every grade (9 to 12) attending schools with SBHCs reported more immunizations than students at other schools.

SBHCs do seem to have made an impact of the health care of adolescents. Compared to other students, students who had access to these clinics reported receiving more health care services. This increased care came in two forms - increased care within SBHCs and referrals from SBHCs to other sources of health care. Students reported receiving care at the SBHCs, and students at schools with clinics reported higher rates of access to other health service providers.

Student Behaviors, Student Attitudes, and Access to SBHCs

Abuse

Students were asked if they had ever been physically abused or sexually abused. Physical abuse was defined as being hit, kicked or struck by someone when not involved in a fight. Sexual abuse was defined as being touched sexually when it was not wanted, or forced to watch sexual things that made the student uncomfortable. Both forms of abuse were fairly common in this population. Overall, 3,044 (28%) of students reported physical abuse and 2,078 (17%) reported sexual abuse (see Figure 4). These percentages are similar to other reports of the rates of abuse in children in the U.S. and in Oregon (Garbarino, Schellenbach, & Sebes, 1986; Glick, et al., 1995). Females were more likely than males to report sexual abuse. Reports of physical abuse declined with age, and reports of sexual abuse increased with age.

Suicide

Rates of suicidal thoughts and suicide attempts in the last 12 months are shown in Figure 5. In this sample, about one-fourth of students thought about suicide and 9% of all students had attempted it. Considering only those students who reported suicidal thoughts, 35% had attempted suicide. More females thought about suicide and attempted it than males. Rates of both suicide thoughts and attempts declined with age.

Risk Behaviors

Considering student reports of their behaviors in the last 30 days, the overall rate of alcohol use (46%) was almost double the rate of cigarette use (24%), and was more than double the rate of marijuana use (22%; see Table 13 and Figure 6). Alcohol use was the most common risk behavior students reported. Almost one-half of adolescents (6,222 students, 46%) reported they had consumed alcohol in the last 30 days and 30% of all students reported they had engaged in heavy drinking in the last 30 days (drinking 5 or more alcoholic beverages in a row in a few hours). In addition, the vast majority of adolescents who reported alcohol use reported engaging in heavy drinking (about 70%). Physically fighting in the last 12 months and being in a car with a drunk driver were also fairly common (32% and 29% of students reporting, respectively).

Rates of most risk behaviors were higher in males. Males were more likely to drink alcohol, drive a car when drinking or be in a car with a drunk driver, use marijuana or other drugs, carry a gun or other weapon, or physically fight. Females were more likely to smoke cigarettes. However, even though these differences were significant, the actual differences were not large. For example, 47% of males reported using alcohol in the last 30 days, while 45% of females reported alcohol use. This difference was significant, but not large. Males did engage in much higher rates of carrying a gun or other weapon, and fighting (at least double the rate of females; see Figure 7).

Older students were also more likely to report many risk behaviors including alcohol use, driving a car when drinking or being in a car with a drunk driver, cigarette use, marijuana use, and use of other drugs. Younger students were much more likely to carry a gun or other weapon, or to physically fight than older students. These data indicate that alcohol and drug use increases with age, while aggressive behaviors decrease with age.

Rates of cigarette, marijuana, alcohol, and cocaine use in this sample of students appeared to be similar to rates within other groups of Oregon high school students, although different time periods were sometimes summarized (Glick, et al., 1995; Stout, et al., 1996). For example, Stout and associates (1996) reported that 15% of females smoked cigarettes daily, while Glick, et al. (1995) reported that 28% of females used cigarettes in the last 30 days, and we found that 25% of females had smoked cigarettes in the last 30 days.

Sexual Behavior, and Related Attitudes and Behaviors

Approximately 40% of female and male high school students (about 2,500 students of each sex) reported experience with sexual intercourse (see Table 14 and Figure 8). The percentage of sexually active adolescents doubled from 9th grade (27%) to 12th grade (54%).

Students were identified as 'High Risk' or 'Very High Risk.' High Risk students were those student who used cigarettes, alcohol, and marijuana in the last 30 days, and were sexually active. Very High Risk students were those student who used cigarettes, alcohol, and marijuana in the last 30 days, used other drugs in their lifetime, and were sexually active. About 11% of all student were High Risk and 7% were Very High Risk. Even though these percentages seem rather low,

11% is 1,517 students and 7% is almost 1,000 students. These are high numbers of Oregon students involved in multiple risky behaviors (primarily in the last 30 days).

Many sexually active students report safe and responsible behavior with regards to their sexual relationships. Most (86%) had less than 2 sexual partners in the last 3 months and more than one-half (58%) had used a condom during intercourse the last time (see Table 14 and Figure 9). However, there was still a substantial minority (26%) that did not use a method of birth control or used the withdrawal method of birth control the last time they had sex, and a large number (42%) that remain unprotected from STDs by their lack of condom use. About 1 out of every 8 females who were sexually active reported having been pregnant and about 1 out of 10 males reported getting a sexual partner pregnant.

Females reported higher rates of unsafe sex and no use of birth control during sexual intercourse the last time when compared to males. Almost one-half (47%) of females reported no condom was used the last time they had sex and 28% reported that no birth control method was used, while only 38% of males reported no use of a condom and 24% reported no method of birth control.

Adolescents seem to decrease their use of condoms as they age, but tend to report that other methods of birth control were being used in their place. Older adolescents were also more likely to report only 1 sexual partner in the last 3 months. It seems that as older adolescents form longer term steady sexual relationships, methods other than condoms are chosen for birth control and condom use drops substantially (from 64% in 9th grade to 51% in 12th grade). This drop in condom use as adolescents become older may indicate a population that should be targeted with programs to maintain their condom use, even with steady partners. Older adolescents may feel that other birth control is adequate to protect against pregnancy, and a steadier partner negates the need for use of a condom.

HIV/AIDS information was reported to be understood by most of the young people who completed the YRBS. Most were concerned about the virus and only a small percentage of students (8%) believed that it was safe to have unprotected sex with a person who had tested negative for HIV.

Finally, adolescents who engaged in one risk behavior had an increased chance of engaging in others. However, not many of these relationships between risk behaviors were strong (see Table 15). The most substantial associations were between 1) suicidal thoughts and suicidal attempts, 2) drug use (including use of cigarettes and alcohol), the number of sexual partners in the last three months, and the use of alcohol during sex, 3) the number of sexual partners in the last three months and pregnancy, and 4) aggressive behavior including carrying a gun, carrying other weapons, and fighting. Individuals who thought about suicide were more likely to attempt it. Young people who used cigarettes in the last month were also more likely to drink alcohol, use marijuana, use cocaine, and use other drugs. These individuals were also more likely to have more sexual partners and to use alcohol during sexual intercourse. In addition, use of other drugs (including PCP, LSD, heroin, ecstasy, etc.) was associated with injecting drugs. Individuals who had more sexual partners in the last 3 months were more likely to have been pregnant or to have gotten their partner pregnant, and those that used condoms were much less likely to report a pregnancy. Individuals who fought with others in the last 12 months were more likely to carry a gun or other weapon.

The Relationship Between Student Experiences, Behaviors and Attitudes, and Use of SBHCs

Table 16, and Figures 10, 11, and 12 show the rates of students' experiences, risky or protective health behaviors, and attitudes within 4 groups. Group 1 includes those students who reported using the SBHC in their school. Group 2 contains those students at schools with SBHCs who did not access the clinics for any reason. Group 3 includes all students at schools with SBHCs, and Group 4 contains all students at school without SBHCs. Three group comparisons were made. Users of SBHCs were compared to nonusers (Group 1 versus Group 2), users of SBHCs were compared to students at schools without SBHCs (Group 1 versus Group 4), and all students at schools with SBHCs were compared to all students at school without SBHCs (Group 3 versus Group 4). Many differences were found between these groups of students.

SBHC Users Compared to Students Who Did Not Use the Clinics (Groups 1 vs. 2)

Users of SBHCs were clearly some of the highest risk students.. Compared to students attending the same schools who did not use the SBHCs, users of the clinics reported more physical and sexual abuse, and were more likely to have suicidal thoughts and to have attempted suicide. Clinic users were also more likely to have smoked cigarettes, used alcohol, used marijuana, used other miscellaneous drugs, to have been in a car with a drunk driver or driven a car when drinking, to be sexually active, and to have engaged in aggressive behaviors (fighting and carrying weapons). Twelve percent of clinic users were 'High Risk' (used cigarettes, alcohol, marijuana, and were sexually active), and 8% were 'Very High Risk' (also did other drugs), while only 9% of students who had not used the clinics were High Risk and 6% were Very High Risk. Clinic users were not more likely to have been pregnant, to have higher numbers of sexual partners, and to use a condom or other birth control. Finally, clinic users who were abused physically or sexually were more likely to have talked to someone about the abuse when compared to abused students who did not use the clinics.

SBHC Users Compared to Students at Schools Without Clinics (Groups 1 vs. 4)

Students who received care at the SBHCs were also more likely to be engaged in risky behaviors than students attending schools without SBHCs. Students who accessed the clinics were more likely to have been abused, used more of some substances, and were more likely to be sexually active than students attending non-SBHC schools. Clinic users were also slightly more likely to be High Risk.

Students at SBHC Schools Compared to Students at Non-SBHC Schools (Groups 3 vs. 4)

In general, the student population who completed the YRBS at the 15 schools with SBHCs rarely differed from students at the other 35 schools. Students at clinic schools were more likely to never or rarely wear a seatbelt, to use marijuana, to use other miscellaneous drugs, to be sexually active, to report a pregnancy, and to be very concerned about HIV/AIDS. Students at schools with SBHCs were less likely to have suicidal thoughts, to smoke cigarettes, and to use no method of birth control.

In summary, when the entire student populations at schools with or without SBHCs were compared, few differences emerged. However, the group of students who accessed SBHC services did differ from other students. This group contained some of the highest risk adolescents. It is significant that even though these adolescents were high risk and reported higher amounts of physical and sexual abuse than other groups of students, they were not more likely than the students attending non-clinic schools to have suicidal thoughts, make suicide attempts, drink alcohol, or smoke cigarettes. In addition, the students who used SBHC services were more likely to use birth control and to be concerned about HIV/AIDS than students in schools without clinic services. A previous report (Skeels & Clark, 1990) found that SBHCs provided the majority of counseling services for adolescents, and many of the clinics reported that they emphasize mental health care and offered special programs or education on smoking cessation and reproductive information. The fact that these high risk students do not have more suicidal thoughts and have rates of cigarette use similar to other schools may reflect these services. In the future, it may be beneficial for SBHCs to increasingly target other risk behaviors that remain higher in this group of adolescents, such as marijuana use or use of other drugs such as hallucinogenics.

Conclusion

In 1990, results of a 1989 survey of Oregon youth were disseminated (Skeels & Clark, 1990). This survey was administered to 9,178 students in 13 schools in Oregon. Four schools had an established SBHC, four schools had a new SBHC, and five schools had no SBHC. On this survey, students reported that they used outside sources for general health services, but accessed the SBHCs for counseling. Reproductive health services were equally split between the SBHCs and outside sources. Higher risk students were more likely to use the services of the SBHCs. Students reported the primary reasons they went to a SBHC were the easy access and the staff that cared about their problems.

Another report released in 1996 (Stout, et al., 1996) consisted of two surveys of Oregon youth. The first survey was conducted in 1990 and a follow-up survey was completed in 1992. However, both reports were anonymous, so individual students were not followed longitudinally.

This report surveyed 6,000 students in 9 schools - 5 with SBHCs and 4 matched control schools without SBHCs. This evaluation project reported that students with the greatest need used the SBHCs and found that one SBHC did improve the health behaviors of students.

In addition, Glick and associates (1995) conducted telephone surveys of a group of 11th grade students from 6 schools in the Portland, Oregon-metropolitan area and some of their parents regarding SBHCs in Oregon (about 1,000 students and 400 parents). Parents and students both reported that those adolescents with the most need used the SBHCs. In addition, both groups reported that the primary reason students did not use the clinic was because they had no need, not because of negative views of the care provided. Students who used the SBHCs reported more financial difficulties and engaged in more behaviors that might increase their health care needs. Overall, the conclusions of all three reports (Glick, et al., 1995; Skeels & Clark, 1988; Stout, et al., 1996) highlighted some of the benefits of SBHCs including easy access for students, provision of services that students would not get otherwise, the use of services by high risk students, the high satisfaction of students with the services, and the well-liked staff. The findings of Skeels and Clark (1990) gave some early evidence that SBHCs were positively received and used by students who could benefit from the services, and the reports by Glick and associates (1995), and Stout and associates (1996) gave further evidence that SBHCs are beneficial to high school students in Oregon.

Now that SBHCs have been established in Oregon for 10 years or more, it was an appropriate time to again assess adolescents' health care needs, use of health care services including SBHCs, and to determine relationships between use of SBHC services and health or risk behaviors of adolescents. Although this analysis was based on a natural experiment in which no random assignment of students or schools was made, findings that are consistent when comparing this report to previous reports provide mounting evidence that SBHCs do improve the health and health care of adolescents, and that adolescents who need the service most will use SBHCs.

This evaluation found that even more students are using the SBHCs when compared to just a few years ago. The ease of access to the services remains one of the most important reasons adolescents continue to use the services. In addition, students who are in areas of lower SES, minority students, and higher risk students continue to access the services of SBHCs more

frequently than other students. Students who use the clinics are more likely to be abused, to use marijuana or other drugs, and to be sexually active. However, they are similar to students attending schools without SBHCs in their use of cigarettes and alcohol, and were less likely to be sexually active without birth control. Clinics may be reducing some of the dangerous behaviors of this high risk group of students to levels that remain comparable to other student populations.

Adolescents attending schools with SBHCs have improved access to health care and report receiving more care for immunization, emotional or personal problems, alcohol or drug related problems, sexually transmitted diseases, and reproductive services. Increased amounts of health care seems to be due to both access to the clinic, and referrals or access to outside sources for care.

Overall, the SBHCs in Oregon are still used by the adolescents who need the services, and are easy and convenient for the students. They are associated with increased levels of health care for adolescents and seem to be helping to maintain lower levels of some risk behaviors.

There may be some limitations of the YRBS that should be noted. Rates of suicidal thoughts and attempts reported here were lower than those reported by Stout and associates (1996) from their survey of Oregon youth. For example, the rate of suicidal thoughts by females was 29% in this study, but Stout and associates (1996) reported a rate of about 48%. Discrepancies in rates reported by males about suicidal thoughts and rates of suicide attempts were also lower in this study. Some of these differences may be due to the specific wording of questions. The YRBS asked a student to answer whether he or she had "ever seriously considered attempting suicide?," while Stout, and associates (1996) asked a student whether he or she had "ever been so down that you thought about seriously hurting or killing yourself?" The survey questions of Stout and associates (1996) are a bit broader in focus and used terminology that may be more understandable to young people and, therefore, should have resulted in higher rates than the rates reported here. Similarly, Glick and associates (1995) reported a higher rate of suicide attempts (17%) based on the question have you "ever been so down that you tried to end your life?" The comparison of these rates provides important information that could aid the future development of the YRBS survey to ensure that questions will be interpreted accurately by young people.

This report has also identified some difficulties on which clinics may wish to focus in the future to continue the positive trends reported here. For example, the decreasing rate of condom

use as adolescents age suggests that SBHCs may wish to target older adolescents in longer-term relationships with the opposite-sex for programs which attempt to maintain their use of condoms.

Finally, evaluations such as this one are beginning to establish some of the benefits that SBHCs provide to the adolescents residing in Oregon. If the current trends continue, and evaluations make further attempts to understand how the programs can increase their effectiveness, SBHCs will only be more beneficial in the future.

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Table 1. Number of students (and schools) completing the Youth Risk Behavior Survey

Group of students	Total Number of Students	Number of Students Atttending Schools WITHOUT a School-Based Health Center	Number of Students Attending Schools WITH a School-Based Health Center	Number of Schools Represented
All students	13992	9481	4511	50
Student sex				
Females	7039 (50%)	4782 (50%)	2257 (50%)	50
Males	6953 (50%)	4699 (50%)	2254 (50%)	50
Grade level				
9th grade	4269 (31%)	2918 (31%)	1351 (30%)	50
10th grade	3717 (27%)	2521 (27%)	1196 (27%)	50
11th grade	3257 (23%)	2252 (24%)	1005 (22%)	50
12th grade	2749 (20%)	1790 (19%)	959 (21%)	50
Student race/ethnicity*				
Am. Indian/Alaskan	416 (3%)	289 (3%)	127 (3%)	46
Asian/Pacific Islander	531 (4%)	292 (3%)	239 (5%)	39
Black	324 (2%)	106 (1%)	218 (5%)	39
Hispanic or Latino	669 (5%)	343 (4%)	326 (7%)	44
White	11381 (81%)	8049 (85%)	3332 (74%)	50
Other race/ethnicity	527 (4%)	303 (3%)	224 (5%)	47
SES group*†				
Low (1-59)	3196 (23%)	1170 (12%)	2026 (45%)	15
Low-middle (60-119)	2673 (19%)	2125 (22%)	548 (12%)	13
Upper-middle (120-169)	2835 (20%)	2357 (25%)	478 (11%)	9
High (170+)	5288 (38%)	3829 (40%)	1459 (32%)	13
School location				
Rural area	8851 (63%)	6076 (64%)	2775 (62%)	38
Urban area	5141 (37%)	3405 (36%)	1736 (38%)	12
School enrollment size*				
<99 students	328 (2%)	328 (3%)	0	7
100-399 students	2592 (19%)	2368 (25%)	224 (5%)	13
400-799 students	1987 (14%)	335 (4%)	1652 (37%)	9
800-1199 students	5166 (37%)	3692 (39%)	1474 (33%)	12
1200+ students	3919 (28%)	2758 (29%)	1161 (26%)	9

* $\chi 2$ analysis indicated significant differences between students attending schools without SBHCs and students attending schools with SBHCs, $p<.05$.

† SES score is a rank of a composite index created by the Department of Education consisting of: the percent of students eligible for free or reduced price lunch, student mobility rate, student attendance rate, and the level of education of the most educated parent.

Table 2. Student knowledge of the availability of School-Based Health Centers in their schools

Group of students	Percent of Students NOT Aware of the School-Based Health Center in Their School	Number of Students Answering the Question
All students	7.4%	4091
Student sex*		
Females	6.5%	2077
Males	8.2%	2014
Grade level*		
9th grade	7.7%	1198
10th grade	8.0%	1077
11th grade	8.5%	929
12th grade	5.0%	887
Student race/ethnicity*		
Am. Indian/Alaskan	7.0%	114
Asian/Pacific Islander	2.8%	212
Black	3.2%	189
Hispanic	13.8%	261
White	7.2%	3072
Other race/ethnicity	10.3%	203
SES group*†		
Low (1-59)	6.7%	1795
Low-middle (60-119)	2.1%	517
Upper-middle (120-169)	1.1%	462
High (170+)	12.5%	1317
School location*		
Rural area	3.0%	2538
Urban area	10.0%	1553
School enrollment size*		
<99 students	-	-
100-399 students	7.1%	197
400-799 students	6.4%	1526
800-1199 students	12.1%	1326
1200+ students	2.8%	1042

* $\chi 2$ analysis indicated groups of students had significantly different rates of knowledge of the SBHCs in their schools, $p<.05$.

† SES score is a rank of a composite index created by the Department of Education consisting of: the percent of students eligible for free or reduced price lunch, student mobility rate, student attendance rate, and the level of education of the most educated parent.

Table 3. Usage of School-Based Health Centers reported by students representing differing demographic groups and school settings

Student or school characteristic	Percent of students using the School-Based Health Centers	Number of Students Answering the Question
All students	61%	3690
Student sex*		
Females	70%	1894
Males	62%	1796
Grade level*		
9th grade	61%	1059
10th grade	63%	965
11th grade	70%	835
12th grade	71%	831
Race/Ethnicity		
Am. Indian/Alaskan	62%	103
Asian/Pacific Islander	71%	197
Black	72%	176
Hispanic	64%	216
White	65%	2782
Other race/ethnicity	65%	178
SES group*†		
Low (1-59)	61%	1627
Low-middle (60-119)	71%	493
Upper-middle (120-169)	72%	446
High (170+)	67%	1124
School Location		
Rural area	67%	2227
Urban area	64%	1463
School Enrollment		
<99 students	-	-
100-399 students	62%	176
400-799 students	66%	1392
800-1199 students	64%	1138
1200+ students	68%	984

* $\chi 2$ analysis indicated groups of students had significantly different rates of use of the SBHCs in their schools, $p<.0001$.

† SES score is a rank of a composite index created by the Department of Education consisting of: the percent of students eligible for free or reduced price lunch, student mobility rate, student attendance rate, and the level of education of the most educated parent.

Table 4. Student reports of their most important reason for using or not using the School-Based Health Centers (SBHCs) in their schools

MOST IMPORTANT REASON FOR USING SBHCs:	Percent of Students Reporting as the Most Important Reason
The hours are good for me	4.9%
It is easy for me to get there	22.1%
I do not have to wait a long time for an appointment	1.8%
It's easy to make an appointment	1.9%
I have no where else to go	1.1%
Ease of access	**31.1%**
I do not have to pay	15.1%
I don't have insurance	1.3%
Financial reasons	**17.3%**
My privacy will be protected (it feels safe there)	11.3%
My parents don't have to know I go there	5.7%
Privacy is protected	**16.5%**
I like the staff (they understand my needs and problems)	4.1%
I get good care there	6.0%
Positive care received there	**10.9%**
My parents want me to go there	**1.6%**
Other reason not listed	**23.1%**

MOST IMPORTANT REASON FOR NOT USING SBHCs:	Percent of Students Reporting as the Most Important Reason
I don't need to go	59.8%
I go somewhere else	10.3%
No need for care	**70.1%**
I'm afraid my parents would find out	1.2%
I worry about my privacy (it doesn't feel safe there)	2.8%
I'm afraid of what it will look like to other people if I go there	1.6%
Concern for privacy	**5.6%**
My teachers would not let me out of class	3.3%
I couldn't get an appointment	1.3%
Difficult to access	**4.6%**
I didn't know there was a School Based Health Center	**3.1%**
Other reason not listed	**16.6%**

Note. N=2147 for reasons for use. N=2786 for reasons for not using.

Combination of items listed above the shaded row.

Table 5. Student reports of the most important reason for using or not using the School-Based Health Center in their school by student sex, grade level, and race/ethnicity

Most Important Reason for Using School-Based Health Centers:	Student Gender			Grade Level					Race/Ethnicity						
	Females	Males		9th	10th	11th	12th		Am. Indian or Alaskan Native	Asian or Pacific Islander	Black	Hispanic or Latino	White	Other	
N	*1180*	*967*		*535*	*545*	*516*	*551*		*54*	*117*	*110*	*105*	*1639*	*99*	
Ease of access	28%	35%	*	26%	32%	32%	35%	*	33%	39%	29%	27%	31%	22%	
Privacy is protected	22%	10%	*	21%	15%	17%	13%	*	20%	13%	34%	22%	15%	22%	*
Positive care received there	12%	9%	*	12%	12%	11%	9%		11%	15%	12%	16%	10%	9%	
Financial reasons	17%	18%		13%	16%	18%	23%	*	9%	15%	12%	11%	18%	21%	
Parents' wishes	2%	2%		3%	2%	2%	1%		4%	1%	0%	2%	2%	0%	
Other reason not listed	19%	26%	*	25%	23%	20%	19%	*	23%	17%	13%	22%	24%	26%	*

Most Important Reason for NOT Using School-Based Health Centers:	Females	Males		9th	10th	11th	12th		Am. Indian or Alaskan Native	Asian or Pacific Islander	Black	Hispanic or Latino	White	Other	
N	*1344*	*1442*		*800*	*743*	*627*	*616*		*85*	*156*	*115*	*166*	*2097*	*135*	
Difficult to access	5%	5%		5%	5%	3%	5%		6%	6%	7%	2%	4%	7%	
Concern for privacy	7%	4%	*	6%	5%	7%	5%		7%	4%	9%	10%	5%	9%	*
Lack of knowledge of the SBHC	2%	4%	*	4%	2%	4%	2%		7%	2%	2%	6%	3%	5%	*
No need for care	68%	72%		68%	71%	71%	72%		56%	68%	64%	63%	73%	59%	*
Other reason not listed	18%	15%	*	17%	17%	15%	16%		24%	20%	18%	19%	15%	20%	*

* $\chi 2$ analysis indicated groups of students had significantly different reasons for using and not using SBHCs in their schools, $p<.05$.

Table 6. Student reports of the most important reason for using or not using the School-Based Health Center in their school by student SES group, school location, and school enrollment

Most Important Reason for Using School-Based Health Centers:	Socioeconomic Status Group					School Location			School Enrollment				
	Low	Low-middle	Upper-Middle	Upper		Urban	Rural		100-399	400-799	800-1199	1200+	
N	*850*	*314*	*291*	*692*		*839*	*1308*		*95*	*792*	*651*	*609*	
Ease of access	28%	30%	29%	36%	*	36%	28%	*	36%	26%	30%	38%	*
Privacy is protected	21%	23%	17%	8%	*	18%	16%		13%	19%	14%	16%	*
Positive care received there	10%	11%	17%	9%	*	12%	10%		5%	12%	10%	11%	
Financial reasons	15%	12%	17%	22%	*	16%	18%		18%	15%	22%	16%	*
Parents' wishes	2%	3%	4%	1%	*	1%	2%	*	6%	3%	1%	1%	*
Other reason not listed	24%	21%	16%	24%	*	17%	26%	*	22%	25%	23%	18%	*

Most Important Reason for NOT Using School-Based Health Centers:	Low	Low-middle	Upper-Middle	Upper		Urban	Rural		100-399	400-799	800-1199	1200+	
N	*1242*	*355*	*324*	*865*		*1098*	*1688*		*141*	*1054*	*875*	*716*	
Difficult to access	4%	8%	8%	3%	*	4%	5%		4%	5%	4%	4%	
Concern for privacy	7%	5%	7%	3%	*	5%	6%		8%	7%	4%	5%	*
Lack of knowledge of the SBHC	3%	2%	3%	3%		3%	3%		2%	4%	3%	2%	
No need for care	68%	66%	64%	77%	*	73%	69%	*	65%	65%	75%	72%	*
Other reason not listed	18%	19%	18%	14%	*	15%	17%		21%	19%	14%	17%	*

* $\chi 2$ analysis indicated groups of students had significantly different reasons for using and not using SBHCs in their schools, $p<.05$.

Table 7. The percentage of students who indicated the following as their most important reason for using or not using School-Based Health Centers

School Code	Most Important Reason for Using School-Based Health Centers						Most Important Reason for NOT Using School-Based Health Centers				
	Ease of access	Privacy is protected	Positive care received there	Financial reasons	Parents' wishes	Other reason not listed	Difficult to access	Concern for privacy	Lack of knowledge of the SBHC	No need for care	Other reason not listed
A	15%	25%	8%	14%	3%	35%	1%	**10%**	4%	71%	14%
B	32%	25%	14%	14%	1%	14%	3%	5%	3%	73%	16%
C	32%	30%	11%	13%	0%	14%	3%	6%	2%	69%	20%
D	30%	24%	11%	18%	1%	16%	4%	5%	3%	75%	13%
E	36%	13%	5%	18%	**6%**	22%	4%	8%	2%	65%	21%
F	24%	**27%**	13%	18%	0%	18%	6%	8%	2%	65%	19%
G	30%	11%	14%	16%	2%	27%	5%	6%	4%	61%	**24%**
H	23%	22%	4%	11%	0%	**40%**	3%	8%	3%	62%	**24%**
I	25%	**27%**	7%	11%	2%	28%	7%	5%	3%	66%	19%
J	36%	18%	15%	13%	3%	15%	**8%**	4%	1%	67%	20%
K	29%	17%	**17%**	17%	4%	16%	**8%**	7%	3%	64%	18%
L	29%	9%	11%	16%	0%	35%	2%	3%	**8%**	**80%**	7%
M	30%	7%	4%	21%	1%	37%	2%	3%	4%	76%	15%
N	30%	14%	14%	**31%**	1%	10%	7%	3%	1%	78%	11%
O	**47%**	4%	10%	19%	0%	20%	3%	5%	2%	75%	15%

Minimum value in the column.

Maximum value in the column.

Table 8. Reports of access to health care by all students completing the 1995 Youth Risk Behavior Survey

Group of students	*N*	Student reports of their last visit to a doctor or nurse practitioner: Visit during the last 12 months	Visit within the past two years	Visit within the past five years	Visit more than five years ago	Never had a visit
All students	*13030*	79.7%	13.2%	4.0%	1.6%	1.5%
Student sex*						
Females	*6624*	82.3%	12.1%	2.9%	1.5%	1.3%
Males	*6406*	77.1%	14.5%	5.1%	1.6%	1.7%
Grade level						
9th grade	*3849*	80.3%	12.8%	3.5%	1.9%	1.5%
10th grade	*3490*	79.7%	12.8%	4.4%	1.7%	1.4%
11th grade	*3060*	79.4%	13.4%	4.1%	1.5%	1.7%
12th grade	*2631*	79.2%	14.3%	4.2%	1.0%	1.3%
Student race/ethnicity*						
Asian/Pacific Islander	*472*	72.3%	15.9%	5.7%	1.3%	4.9%
Am. Indian/Alaskan	*374*	76.7%	12.3%	5.9%	1.9%	3.2%
Black	*275*	78.9%	12.0%	5.1%	2.6%	1.5%
Hispanic	*545*	69.0%	16.5%	5.1%	3.1%	6.2%
White	*10753*	80.8%	13.0%	3.8%	1.5%	1.0%
Other race/ethnicity	*484*	78.7%	14.9%	3.3%	1.9%	1.2%
SES group*†						
Low (1-59)	*2916*	78.1%	12.7%	4.5%	2.4%	2.3%
Low-middle (60-119)	*2513*	79.3%	13.4%	3.9%	1.8%	1.6%
Upper-middle (120-169)	*2573*	81.3%	12.3%	3.9%	1.4%	1.2%
High (170+)	*5028*	80.1%	14.0%	3.8%	1.1%	1.1%
School location*						
Rural area	*8306*	78.9%	13.4%	4.3%	1.8%	1.6%
Urban area	*4724*	81.2%	12.9%	3.5%	1.3%	1.1%
School enrollment size						
<99 students	*316*	82.6%	11.4%	3.8%	1.9%	0.3%
100-399 students	*2413*	78.4%	13.1%	4.6%	2.0%	1.9%
400-799 students	*1865*	78.7%	13.5%	4.6%	1.7%	1.6%
800-1199 students	*4916*	80.3%	13.5%	3.5%	1.4%	1.3%
1200+ students	*3520*	80.1%	13.1%	3.9%	1.5%	1.3%

* $\chi 2$ analysis indicated groups of students differed in their rates of access to health care, $p<.05$.

† SES score is a rank of a composite index created by the Department of Education consisting of: the percent of students eligible for free or reduced price lunch, student mobility rate, student attendance rate, and the level of education of the most educated parent.

Table 9. Reports of access to health care by all students completing the 1995 Youth Risk Behavior Survey

Group of students	*N*	Student reports of their last visit to a dentist: Visit during the last 12 months	Visit within the past two years	Visit within the past five years	Visit more than five years ago	Never had a visit
All students	*13369*	76.2%	13.3%	5.2%	3.6%	1.7%
Student sex*						
Females	*6783*	77.5%	12.7%	5.0%	3.2%	1.5%
Males	*6586*	74.8%	13.9%	5.4%	3.9%	1.9%
Grade level						
9th grade	*4017*	76.8%	13.2%	4.8%	3.4%	1.8%
10th grade	*3555*	76.7%	12.6%	5.4%	3.5%	1.8%
11th grade	*3135*	76.1%	13.2%	5.1%	4.0%	1.6%
12th grade	*2662*	74.8%	14.7%	5.7%	3.5%	1.5%
Student race/ethnicity*						
Asian/Pacific Islander	*491*	69.3%	15.9%	6.9%	5.1%	2.9%
Am. Indian/Alaskan	*385*	73.8%	13.3%	6.5%	3.9%	2.6%
Black	*295*	70.9%	17.6%	7.1%	2.7%	1.7%
Hispanic	*585*	54.9%	20.2%	9.1%	7.2%	8.7%
White	*10972*	78.0%	12.7%	4.8%	3.2%	1.3%
Other race/ethnicity	*506*	73.5%	12.7%	5.3%	6.5%	2.0%
SES group*†						
Low (1-59)	*3027*	67.9%	16.8%	6.9%	5.0%	3.5%
Low-middle (60-119)	*2560*	73.1%	14.1%	6.2%	4.7%	1.9%
Upper-middle (120-169)	*2626*	76.4%	13.3%	5.5%	3.8%	1.0%
High (170+)	*5156*	82.5%	10.9%	3.6%	2.1%	1.0%
School location*						
Rural area	*8519*	72.5%	14.8%	6.2%	4.4%	2.1%
Urban area	*4850*	82.6%	10.8%	3.6%	2.1%	1.0%
School enrollment size*						
<99 students	*323*	68.7%	17.7%	6.2%	6.5%	1.0%
100-399 students	*2461*	70.5%	15.5%	6.7%	4.8%	2.5%
400-799 students	*1907*	69.3%	15.9%	7.2%	4.9%	2.7%
800-1199 students	*5052*	79.4%	12.2%	4.4%	2.8%	1.3%
1200+ students	*3626*	79.9%	11.7%	4.2%	2.9%	1.3%

* $\chi 2$ analysis indicated groups of students differed in their rates of access to health care, $p<.05$.

† SES score is a rank of a composite index created by the Department of Education consisting of: the percent of students eligible for free or reduced price lunch, student mobility rate, student attendance rate, and the level of education of the most educated parent.

Table 10. Student reports of their health care needs and access to care

Group of students	*N*	Percent of students who reported they did not need and did not receive any of 10 forms of health care¥	Percent of students who needed, but did not get one or more of 10 forms health care¥
All students	*13304*	13.0%	18.9%
Student sex		*	
Females	*6752*	9.5%	19.4%
Males	*6552*	16.7%	18.4%
Grade level			*
9th grade	*3991*	13.2%	18.5%
10th grade	*3549*	12.4%	20.5%
11th grade	*3117*	13.0%	18.8%
12th grade	*2647*	13.7%	17.6%
Student race/ethnicity		*	*
Asian/Pacific Islander	*494*	14.8%	18.6%
Am. Indian/Alaskan	*386*	11.7%	28.0%
Black	*294*	12.6%	20.4%
Hispanic	*592*	16.1%	24.8%
White	*10905*	12.7%	18.2%
Other	*501*	16.2%	20.8%
SES group†			*
Low (1-59)	*3033*	14.1%	19.7%
Low-middle (60-119)	*2551*	12.4%	20.2%
Upper-middle (120-169)	*2597*	12.4%	19.5%
High (170+)	*5123*	13.0%	17.6%
School location			*
Rural area	*8499*	12.7%	20.0%
Urban area	*4805*	13.6%	17.1%
School enrollment size			*
<99 students	*323*	9.6%	20.4%
100-399 students	*2468*	12.9%	21.5%
400-799 students	*1906*	13.6%	19.1%
800-1199 students	*5030*	12.9%	17.8%
1200+ students	*3577*	13.3%	18.5%

¥ Includes: check-up or sports physical, care for an injury or accident, care for an illness, birth control or condoms, care for a STD, pregnancy test, female examination, care for a drug/alcohol problem, immunizations, care for a personal or emotional problem

* $\chi 2$ analysis indicated groups of students differed in their rates of need for health care or access to health care, $p<.05$.

† SES score is a rank of a composite index created by the Department of Education consisting of: the percent of students eligible for free or reduced price lunch, student mobility rate, student attendance rate, and the level of education of the most educated parent.

Table 11. Needs for health care and location of health care received by all students completing the 1995 Youth Risk Behavior Survey

Type of Health Care	Needed Care, But Did Not Get It		Received Care at a SBHC			Received Health Care at Any Location (clinic, private physician, SBHC, etc.)								
			All Students	Males	Females	All Students			Males			Females		
	SBHC students	*Non-SBHC students*	*SBHC students*	*SBHC students*	*SBHC students*	*SBHC students*	*Non-SBHC students*		*SBHC students*	*Non-SBHC students*		*SBHC students*	*Non-SBHC students*	
N	*4293*	*9011*	*4293*	*2158*	*2135*	*4293*	*9011*		*2135*	*4417*		*2158*	*4594*	
Check-up or sports physical	2%	2%	18%	11%	13%	47%	53%	*	48%	52%	*	47%	54%	*
Care for an injury or accident	4%	4%	5%	5%	4%	37%	38%		40%	41%		33%	35%	
Care for an illness	6%	7%	7%	4%	9%	42%	42%		33%	33%		50%	50%	
Birth control or condoms	3%	4%	9%	7%	11%	20%	14%	*	14%	10%	*	26%	19%	*
Care for a STD	2%	1%	3%	2%	4%	8%	5%	*	6%	4%	*	9%	5%	*
Pregnancy test¥	1%	2%	-	-	7%	-	-		-	-		15%	9%	*
Female examination¥	2%	2%	-	-	9%	-	-		-	-		30%	25%	*
Care for a drug/alcohol problem	2%	3%	2%	2%	2%	5%	4%	*	6%	5%		5%	4%	*
Immunizations	2%	2%	20%	17%	24%	43%	35%	*	39%	31%	*	47%	39%	*
Care for a personal or emotional problem	6%	6%	5%	3%	6%	11%	9%	*	8%	6%	*	15%	12%	*

* $\chi 2$ analysis indicated that students attending schools with SBHCs had significantly different rates of need for health care or access to health care than students attending schools without SBHCs, $p<.05$.

¥ Percentage of females only.

SBHC=School-Based Health Center.

ble 12. Needs for health care and location of health care received by all students completing the 1995 Youth Risk Behavior Survey by grade level

Type of Health Care	9th Grade			10th Grade			11th Grade			12th Grade		
	SBHC students	*Non-SBHC students*		*SBHC students*	*Non-SBHC students*		*SBHC students*	*Non-SBHC students*		*SBHC students*	*Non-SBHC students*	
N	*1263*	*2728*		*1144*	*2405*		*960*	*2157*		*926*	*1721*	
Check-up or sports physical	49%	58%	*	53%	56%		46%	53%	*	39%	42%	
Care for an injury or accident	37%	40%		37%	37%		37%	38%		36%	38%	
Care for an illness	41%	41%		43%	40%		41%	43%		45%	44%	
Birth control or condoms	16%	10%	*	16%	13%	*	23%	16%	*	27%	22%	*
Care for a STD	7%	4%	*	8%	4%	*	7%	5%	*	9%	6%	*
Pregnancy test ¥	11%	5%	*	11%	8%		17%	11%	*	24%	13%	*
Female examination ¥	20%	17%		25%	21%		36%	31%	*	43%	37%	*
Care for a drug/alcohol problem	6%	4%		4%	4%		6%	4%	*	5%	4%	
Immunizations	42%	38%	*	42%	36%	*	45%	35%	*	43%	30%	*
Care for a personal or emotional problem	12%	10%	*	11%	10%		12%	9%	*	11%	9%	

* $\chi 2$ analysis indicated that students attending schools with SBHCs had significantly different rates of need for health care or access to health care than students attending schools without SBHCs, $p<.05$.

¥ Percentage of females only.

SBHC=School-Based Health Center.

Table 13. Risky behaviors reported by all students completing the 1995 Youth Risk Behavior Survey

Student Behavior	Percent of Students Reporting Risky Behavior								
	All Students	Females	Males		9th Grade Students	10th Grade Students	11th Grade Students	12th Grade Students	
N	*13992*	*7039*	*6953*		*4269*	*3717*	*3257*	*2749*	
Never or rarely wears a seat belt	7%	4%	9%	*	7%	7%	5%	7%	*
Alcohol use in last 30 days	46%	45%	47%	*	41%	45%	49%	52%	*
Heavy drinking in the last 30 days †	30%	28%	33%	*	26%	28%	33%	36%	*
Driven a car when drinking	12%	10%	14%	*	7%	10%	15%	19%	*
Been in a car when the driver was drinking	29%	30%	29%		28%	30%	31%	31%	*
Cigarette use in last 30 days	24%	25%	22%	*	20%	23%	26%	28%	*
Marijuana use in last 30 days	22%	20%	25%	*	20%	22%	24%	24%	*
Used cocaine in lifetime	7%	6%	7%		6%	7%	7%	7%	
Used other drugs in lifetime (LSD, PCP, ecstasy, heroin, etc.)	16%	15%	17%	*	12%	16%	19%	19%	*
Injected drugs in lifetime	1%	1%	1%		1%	1%	1%	1%	
Carried a gun in the last 30 days	7%	2%	11%	*	8%	7%	7%	5%	*
Carried other weapon in the last 30 days	18%	8%	29%	*	21%	19%	17%	14%	*
Fighting in the last 12 months	32%	25%	41%	*	40%	34%	28%	24%	*

* $\chi 2$ analysis indicated that groups of students had significantly different rates of behaviors, $p<.05$.

† Heavy drinking = 5+ alcoholic drinks in a few hours.

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ble 14. Sexual behavior, and related attitudes and behaviors reported by all students who completed the 1995 Youth Risk Behavior Survey

Student Behavior or Attitude	Percent Reporting Behavior or Attitude								
	All Students	Females	Males		9th Grade Students	10th Grade Students	11th Grade Students	12th Grade Students	
AMONG ALL STUDENTS, *N*	*13992*	*7039*	*6953*		*4269*	*3717*	*3257*	*2749*	
Ever had sexual intercourse	39%	39%	39%		27%	34%	46%	54%	*
Believes that it is safe to have unprotected sex with a person who tested negative for HIV	8%	6%	13%	*	13%	10%	8%	8%	*
High Risk - Used cigarettes, alcohol, marijuana, and was sexually active	11%	11%	11%		9%	10%	12%	14%	*
Very High Risk - Used cigarettes, alcohol, marijuana, other drugs, and was sexually active	7%	7%	7%		5%	7%	8%	9%	*
AMONG SEXUALLY ACTIVE STUDENTS, *N*	*5097*	*2578*	*2519*		*1090*	*1198*	*1431*	*1378*	
Have been pregnant or gotten someone pregnant	11%	13%	8%	*	9%	10%	10%	14%	*
More than 1 sexual partner in the last 3 months	14%	12%	16%	*	17%	15%	12%	12%	*
Used alcohol during sex the last time	25%	23%	27%	*	27%	25%	24%	25%	
Used a condom during sex the last time	58%	53%	62%	*	64%	61%	57%	51%	*
Used no method (or withdrawal method) of birth control during sex the last time	26%	28%	24%	*	28%	26%	26%	23%	*
Not concerned about HIV/AIDS	15%	14%	17%	*	16%	14%	15%	16%	
Very or extremely concerned about HIV/AIDS	66%	66%	65%		66%	68%	64%	66%	

* $\chi 2$ analysis indicated that groups of students had significantly different rates of behaviors or attitudes, $p<.05$.

Table 15. Correlations between student experience with abuse, emotional difficulties, and involvement in risky and protective health behaviors

	Physical abuse†	Sexual abuse†	Suicide thoughts†	Suicide attempts	Cig use in last 30 days	Alcohol use in last 30 days	Marij use in last 30 days	Cocaine use in lifetime	Lifetime use of other drugs	Injection of drugs	No. of sex partners in last 3 mths	Alcohol during sex the last time†	Been pregnant or gotten someone pregnant†	Condom use during sex the last time†	No method of birth control used the last time†	Carried a gun in the last 30 days	Carried other weapon in the last 30 days	Physically fought with others in the last 12 mths
Physical abuse	1																	
Sexual abuse	0.32	1																
Suicide thoughts	0.27	0.23	1															
Suicide attempts	0.22	0.21	0.45	1														
Cig use in last 30 days	0.16	0.13	0.18	0.16	1													
Alc use in last 30 days	0.15	0.08	0.16	0.17	0.48	1												
Marij use in last 30 days	0.12	0.06	0.12	0.12	0.54	0.48	1											
Cocaine use in lifetime	0.13	0.11	0.12	0.15	0.32	0.25	0.36	1										
Lifetime use of other druga	0.15	0.10	0.14	0.14	0.45	0.37	0.58	0.53	1									
Injection of drugs	0.07	0.03	0.07	0.10	0.12	0.11	0.13	0.39	0.26	1								
No. of sex partners in last 3 mths	0.22	0.22	0.15	0.16	0.40	0.39	0.35	0.33	0.36	0.14	1							
Alcohol during sex the last time	0.08	0.01	0.07	0.08	0.35	0.35	0.35	0.18	0.27	0.08	0.19	1						
Been pregnant or gotten someone pregnant	0.12	0.15	0.08	0.11	0.13	0.13	0.11	0.18	0.16	0.11	0.34	0.03	1					
Condom use during sex the last time	-0.04	-0.10	-0.07	-0.06	-0.05	-0.01	-0.01	-0.07	-0.05	-0.03	-0.08	0.01	-0.13	1				
No method of birth control used the last time	0.04	0.07	0.07	0.07	0.03	0.01	0.02	0.04	0.02	0.03	0.04	0.03	0.10	-0.61	1			
Carried a gun in the last 30 days	0.08	-0.01	0.06	0.11	0.10	0.21	0.14	0.18	0.14	0.20	0.20	0.11	0.14	0.04	-0.01	1		
Carried other weapon in the last 30 days	0.13	-0.02	0.09	0.14	0.15	0.22	0.17	0.16	0.15	0.11	0.18	0.10	0.07	0.04	-0.01	0.42	1	
Physically fought with others in the last 12 mths	0.25	0.07	0.18	0.23	0.19	0.26	0.18	0.21	0.18	0.16	0.28	0.12	0.17	0.00	0.04	0.37	0.36	1

† Binary, coded: 1=No, 2=Yes

Note: Values between -.25 and .25 are not significant.

Values over .3

Example. Alc use in the last 30 days (row) and Cig use in the last 30 days (column) have a correlation of .48 (out of a range from 0 to 1; see shaded area). Therefore, alcohol use and cigarette use are positively related.

Individuals who engage in one behavior are likely to engage in the other behavior. A negative correlation means increasing levels of engagement in one behavior is associated with a decline in a second behavior.

Table 16. Student reports of experience with abuse, emotional difficulties, and involvement in risky and protective health behaviors by school group

Student Experience or Behavior	Percent Reporting the Behavior or Experience				Comparisons		
	GROUP 1 SBHC Users	GROUP 2 Students who did not use the SBHC in their school	GROUP 3 All students attending schools with SBHCs	GROUP 4 All students attending schools without SBHCs	Group 1 vs. 2	Group 1 vs. 4	Group 3 vs. 4
AMONG ALL STUDENTS, *N*	*2613*	*1524*	*4137*	*9481*			
Physical abuse	34%	21%	29%	28%	*	*	
Talked to someone about physical abuse	36%	26%	33%	30%	*	*	
Sexual abuse	21%	12%	18%	16%	*	*	
Talked to someone about sexual abuse	54%	47%	50%	50%			
Suicide thoughts	25%	18%	23%	25%	*		*
Suicide attempts	10%	7%	9%	9%	*		
Never or rarely wears a seat belt	8%	8%	8%	6%		*	*
Alcohol use in last 30 days	47%	41%	45%	47%	*		
Heavy drinking in last 30 days ¥	31%	26%	29%	31%	*		
Driven a car when drinking	12%	9%	11%	12%	*		
Been in a car when the driver was drinking	31%	25%	29%	30%	*		
Cigarette use in last 30 days	24%	17%	22%	24%	*		*
Marijuana use in last 30 days	27%	21%	25%	21%	*	*	*
Used cocaine in their lifetime	7%	5%	6%	7%			
Used other drugs in their lifetime (LSD, PCP, ecstasy, heroin, etc.)	18%	14%	17%	15%	*	*	*
Injected drugs in their lifetime	1%	1%	1%	1%			
Ever had sexual intercourse	47%	31%	41%	38%	*	*	*
Believes that it is safe to have unprotected sex with a person who tested negative for HIV	10%	12%	10%	10%			
Carried a gun in the last 30 days	7%	6%	6%	7%			
Carried other weapon in the last 30 days	18%	17%	17%	19%			
Fighting in the last 12 months	34%	27%	32%	33%	*		
High Risk - Used cig, alc, marij, & sexually active	12%	9%	11%	11%	*	*	
Very High Risk -All of above plus used other drugs	8%	6%	7%	7%	*		
AMONG SEXUALLY ACTIVE STUDENTS, *N*	*1146*	*455*	*1591*	*3362*			
Have been pregnant or gotten someone pregnant	13%	13%	13%	10%		*	*
More than 1 sexual partner in the last 3 months	14%	15%	15%	13%			
Used alcohol during sex the last time	27%	24%	27%	24%			
Used a condom during sex the last time	58%	60%	58%	58%			
Used no (or withdrawal) method of birth control during sex the last time	24%	24%	24%	26%		*	*
Not concerned about HIV/AIDS	13%	14%	13%	16%		*	*
Very or extremely concerned about HIV/AIDS	68%	67%	68%	65%		*	*

* $\chi 2$ analysis indicated that students in one group had significantly different rates of experiences or behaviors than students in the other group, $p<.05$.

¥ Heavy drinking = 5+ alcoholic beverages in a row in a few hours.

SBHC=School-Based Health Center.

Figure 1. Student use and knowledge of the School-Based Health Center (SBHC) in their school

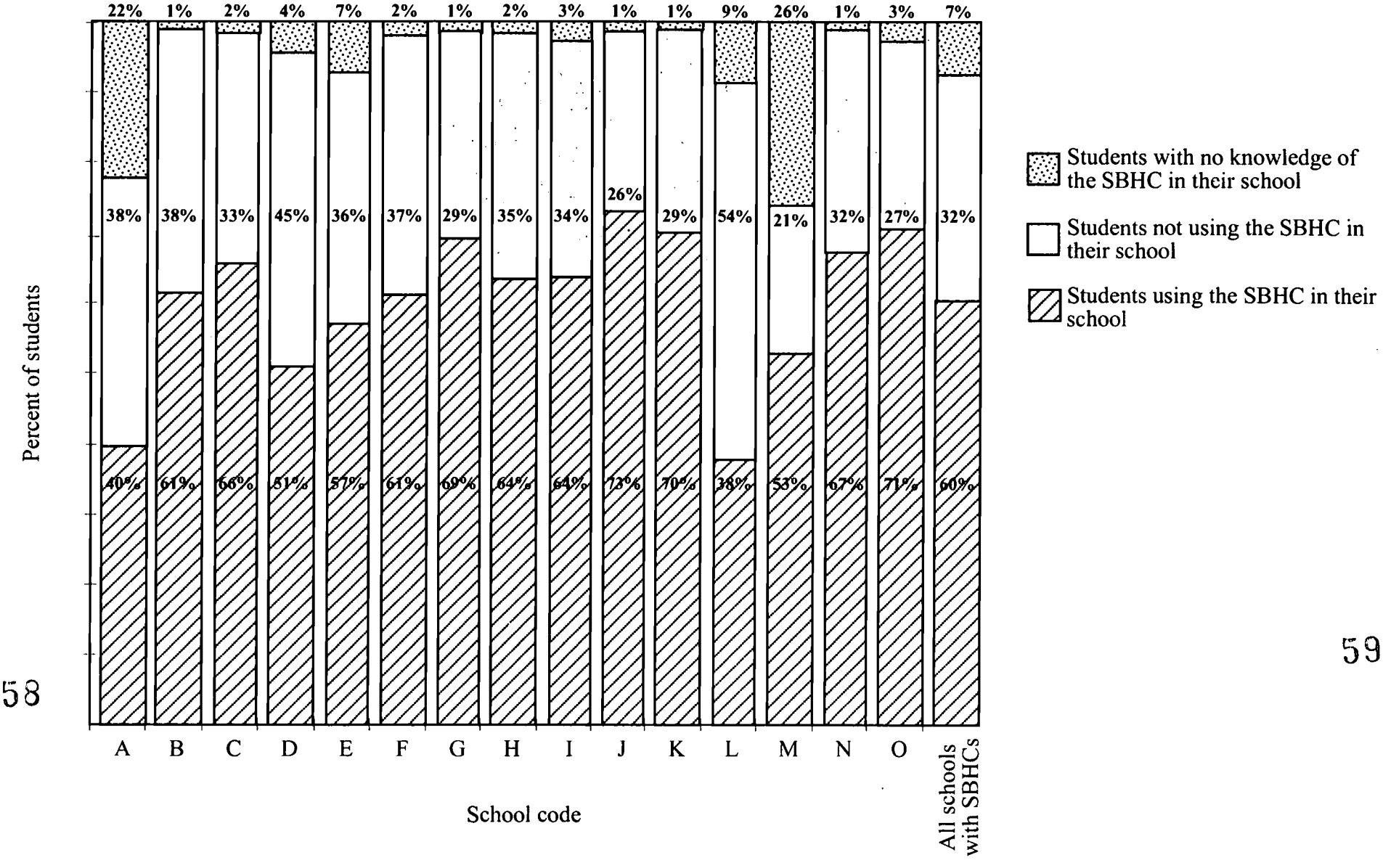


Figure 2. Students' most important reason for using the School-Based Health Centers

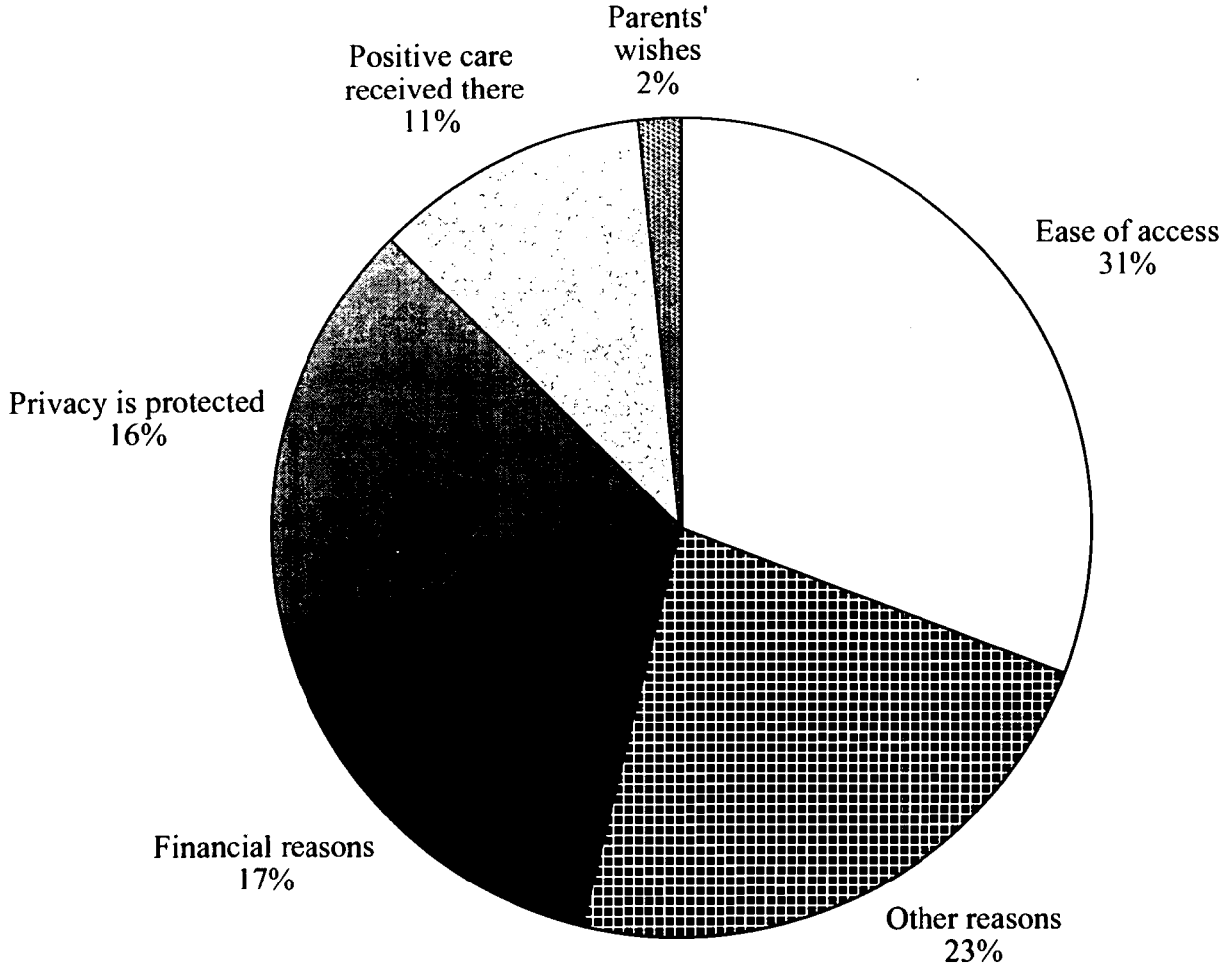


Figure 3. Students' most important reason for not using the School-Based Health Centers

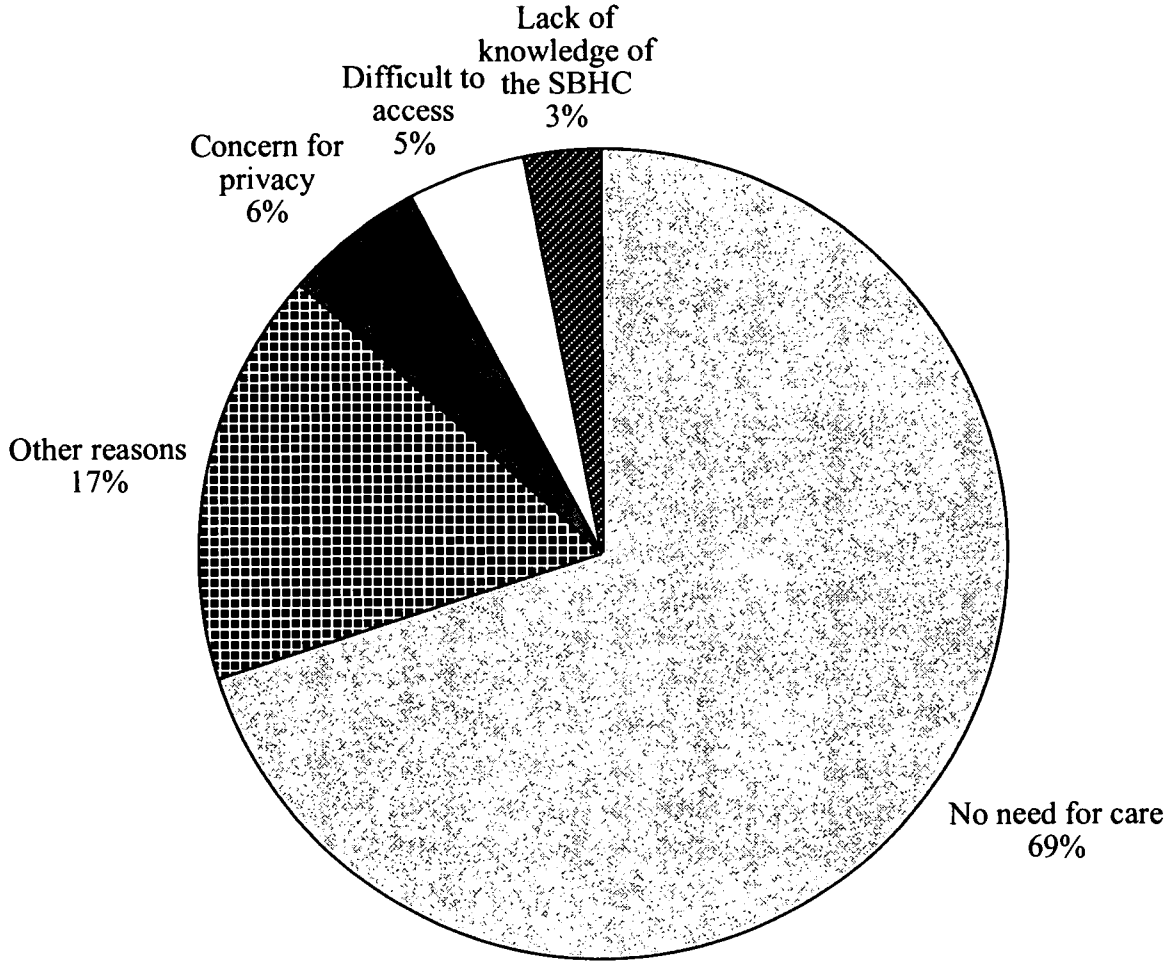


Figure 4. Experiences with abuse reported by all students completing the 1995 Youth Risk Behavior Survey

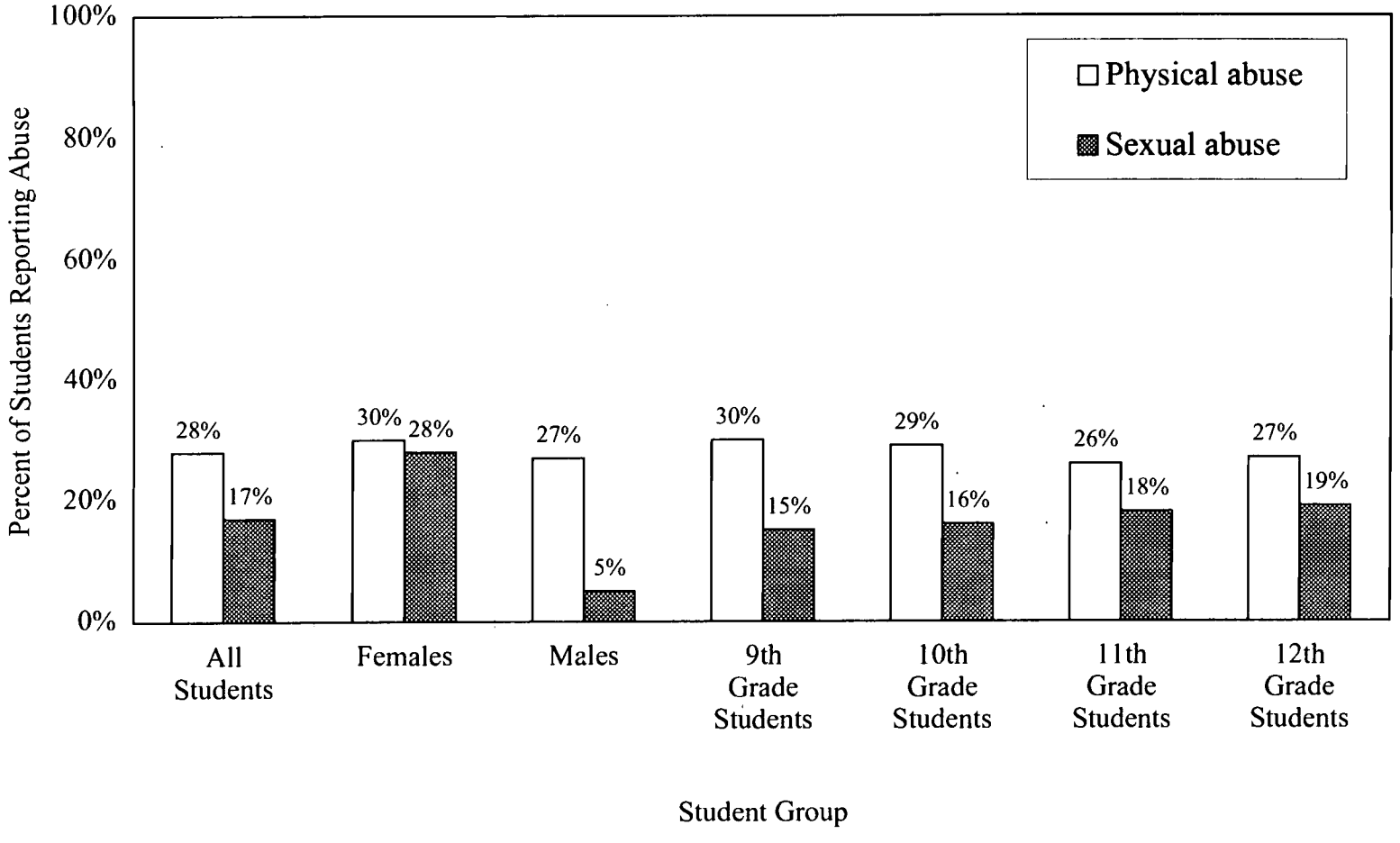


Figure 5. Reports of suicidal thoughts and suicide attempts by all students completing the 1995 Youth Risk Behavior Survey

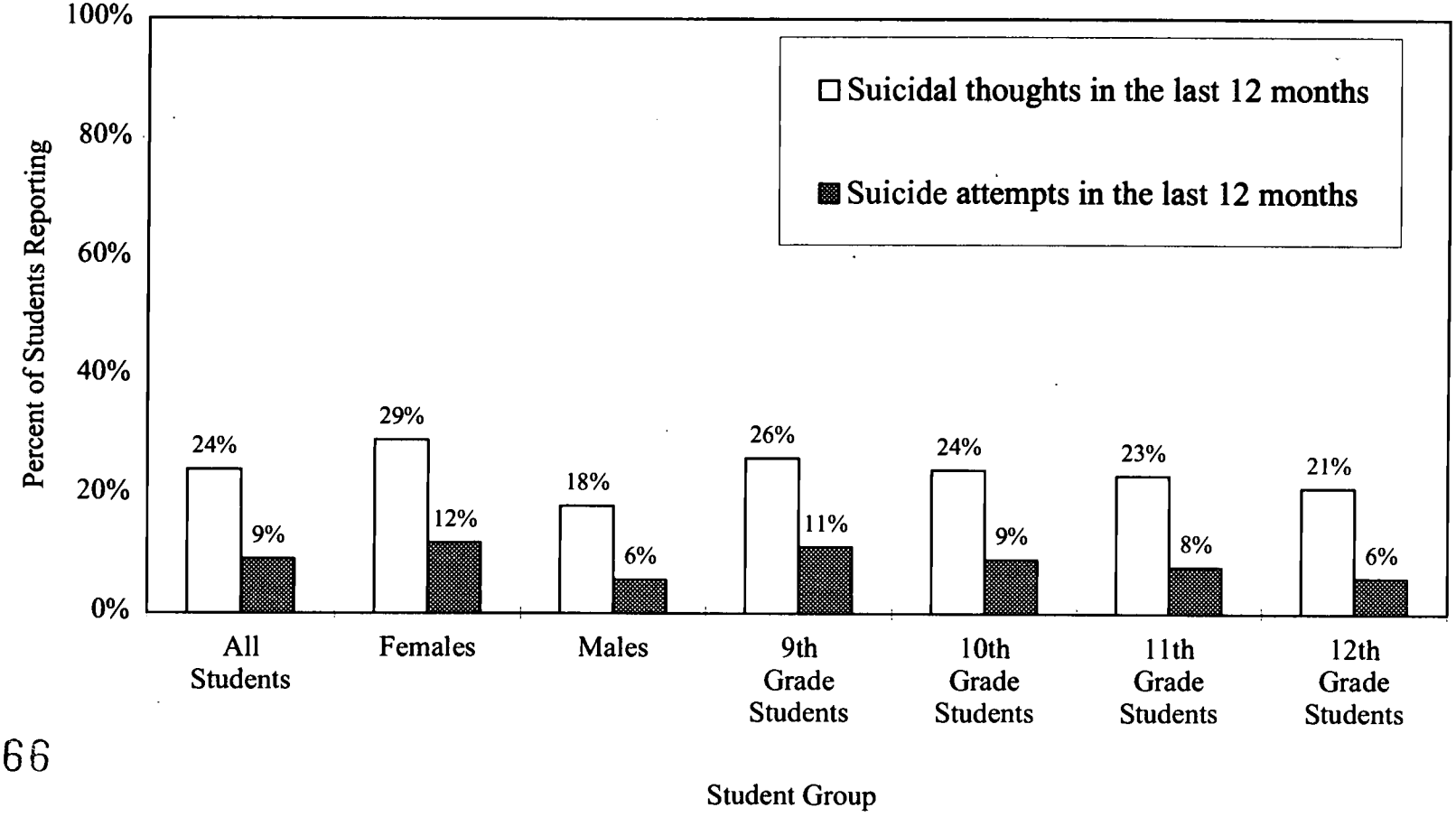
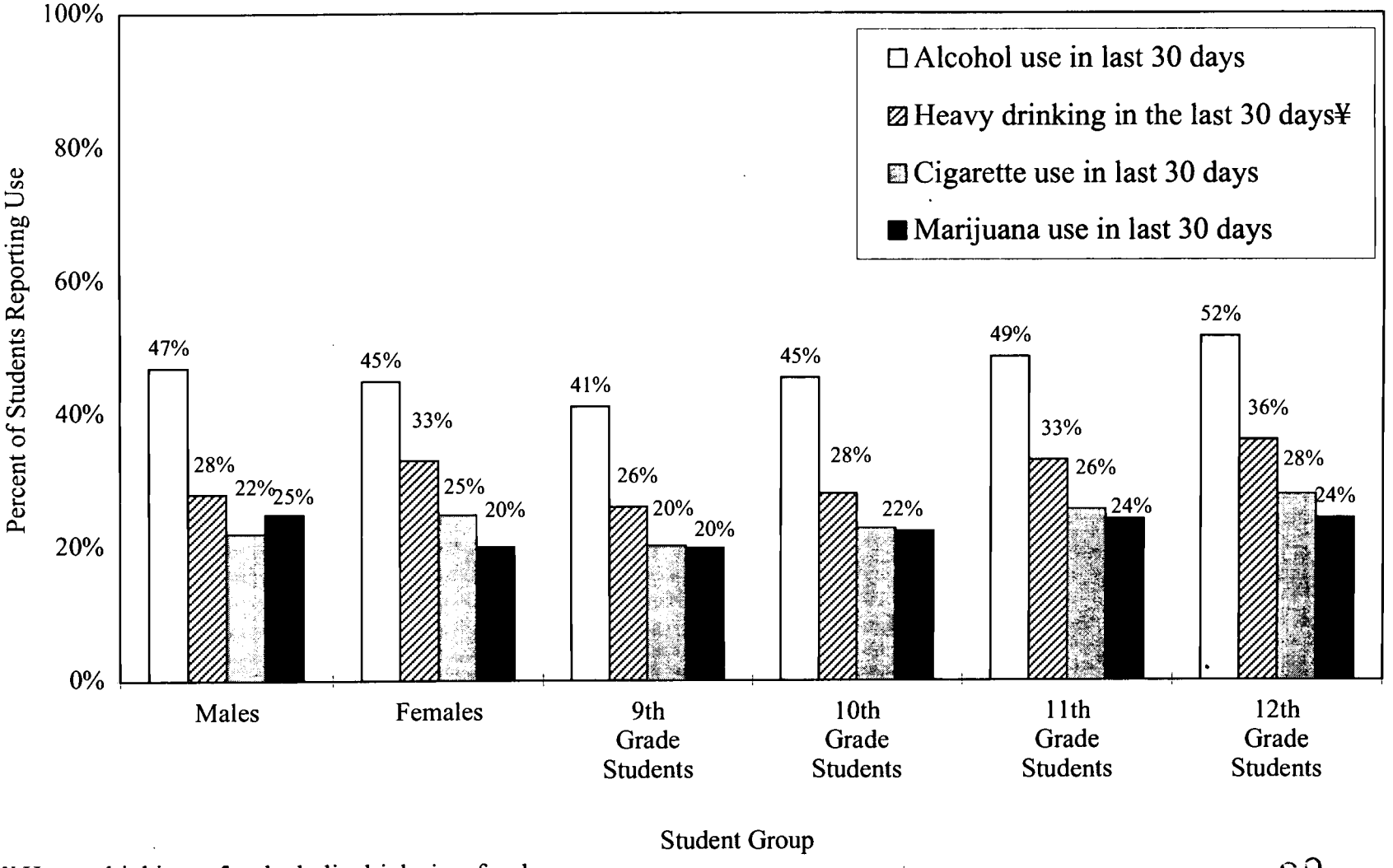


Figure 6. Alcohol, cigarette, and marijuana use reported by all students completing the 1995 Youth Risk Behavior Survey



¥ Heavy drinking = 5+ alcoholic drinks in a few hours

Figure 7. Aggressive behaviors reported by all students completing the 1995 Youth Risk Behavior Survey

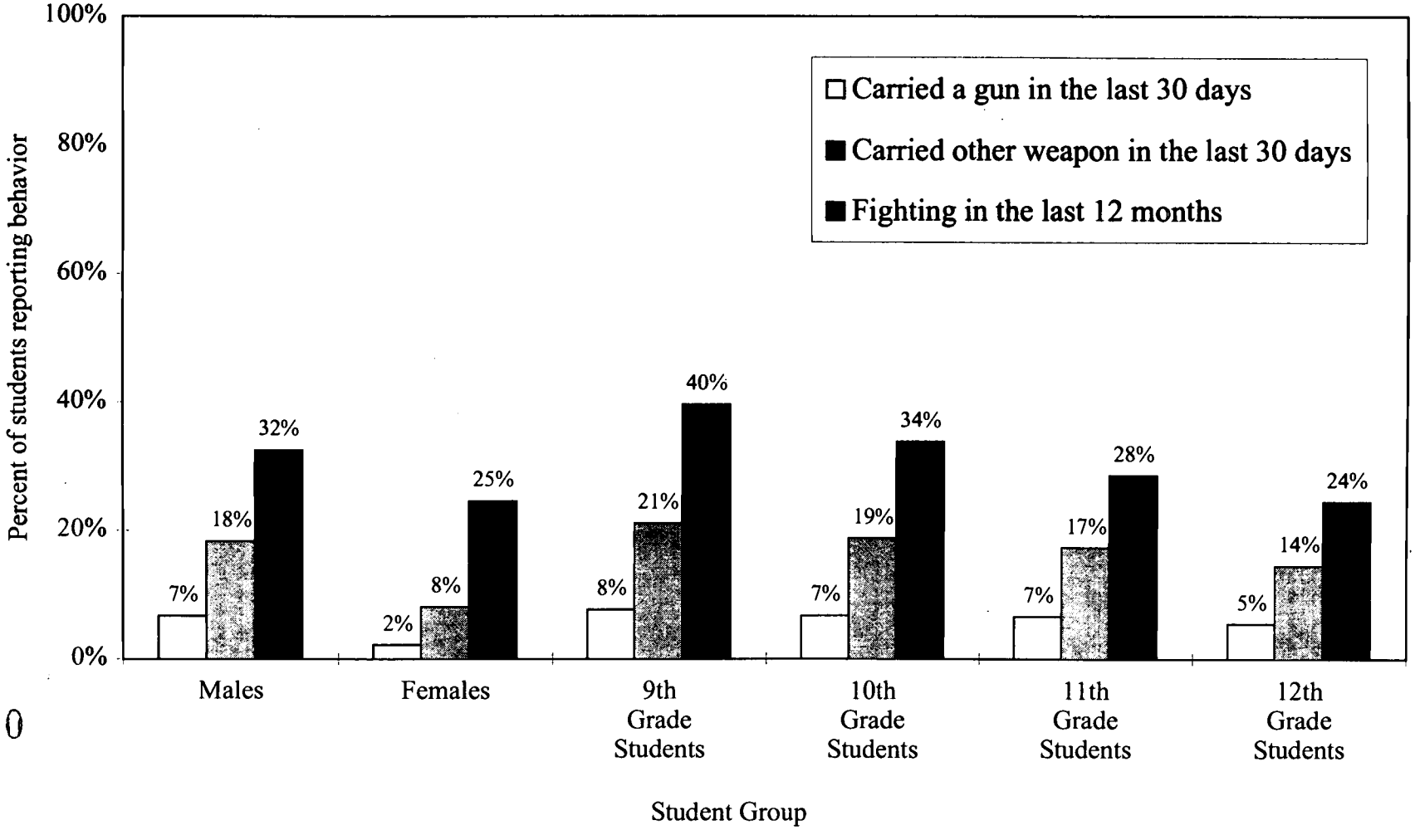


Figure 8. Sexual and high risk behavior reported by all students completing the 1995 Youth Risk Behavior Survey

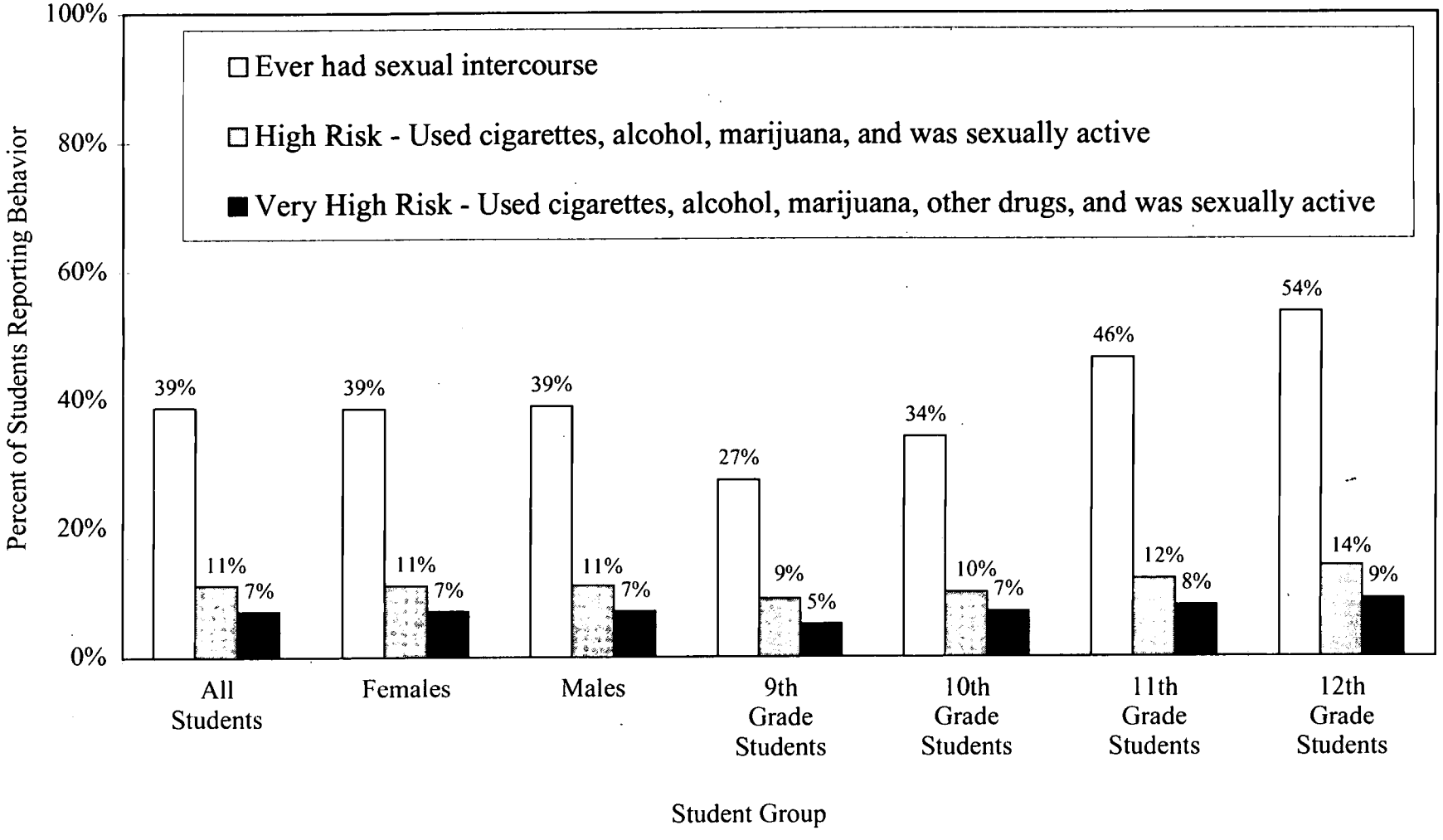


Figure 9. Sexual behaviors reported by all sexually active students who completed the 1995 Youth Risk Behavior Survey

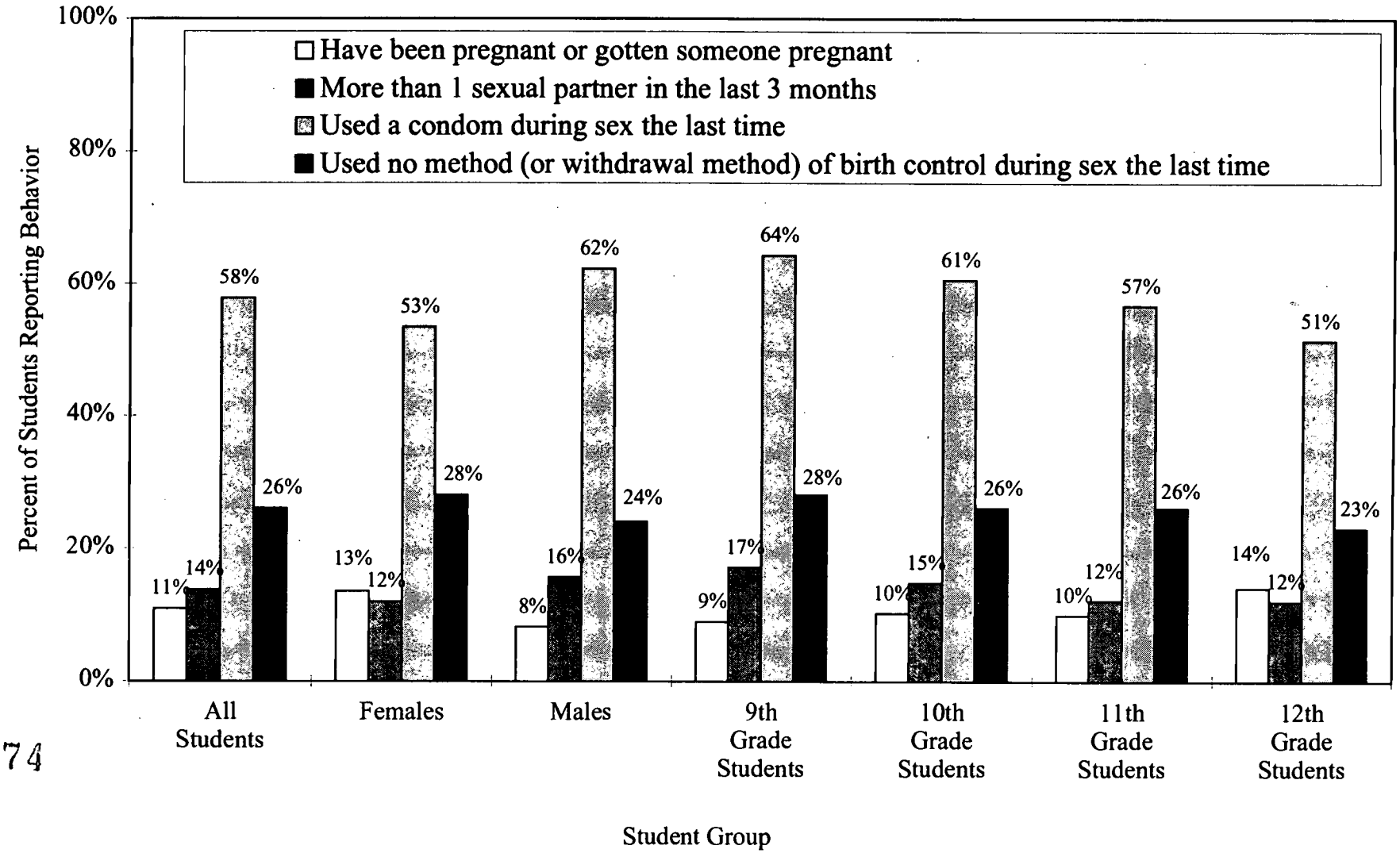


Figure 10. Differences between students who used the School-Based Health Centers (SBHCs) and 1) students at the same schools who did not use the SBHCs, and 2) students who attended schools without SBHCs

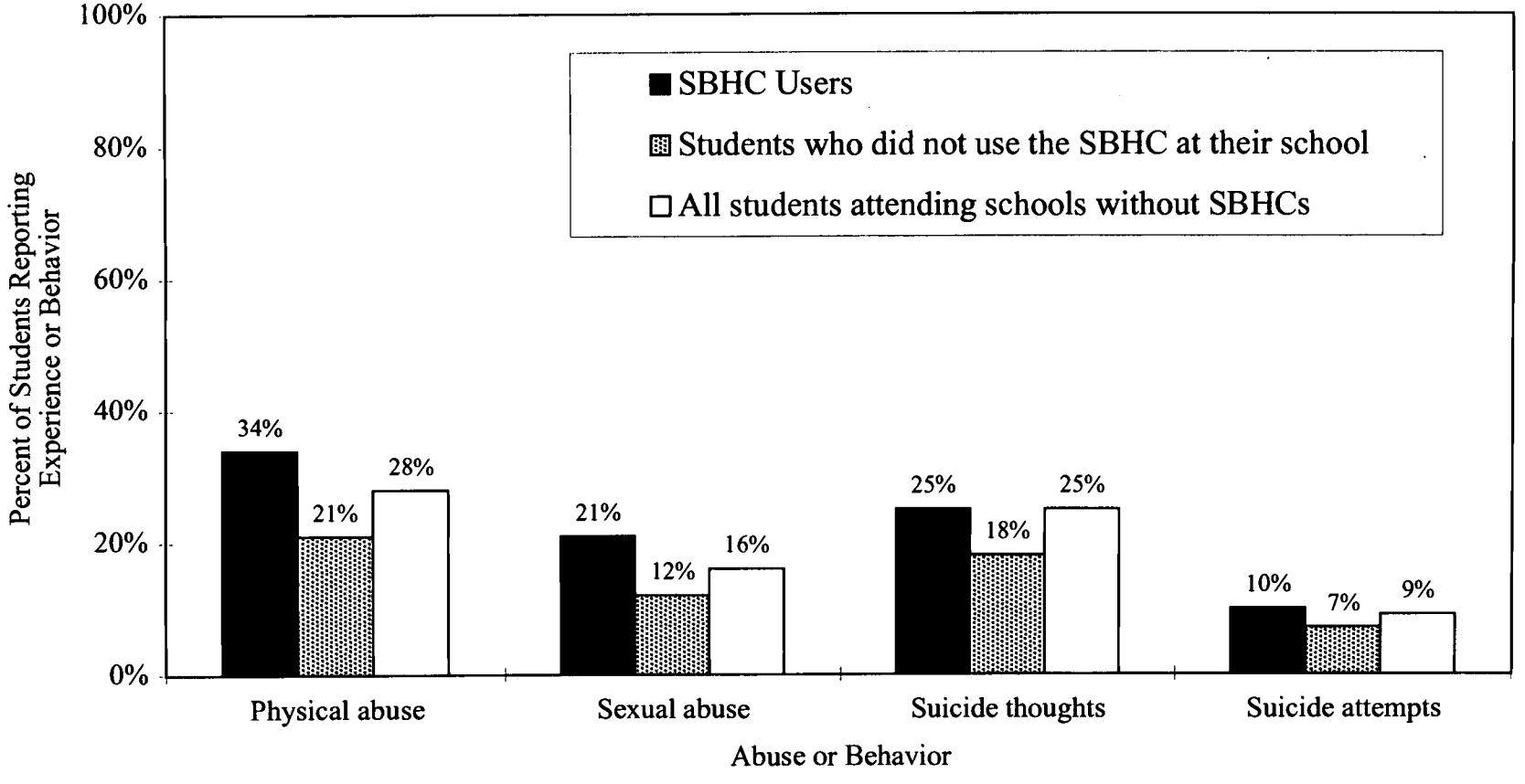
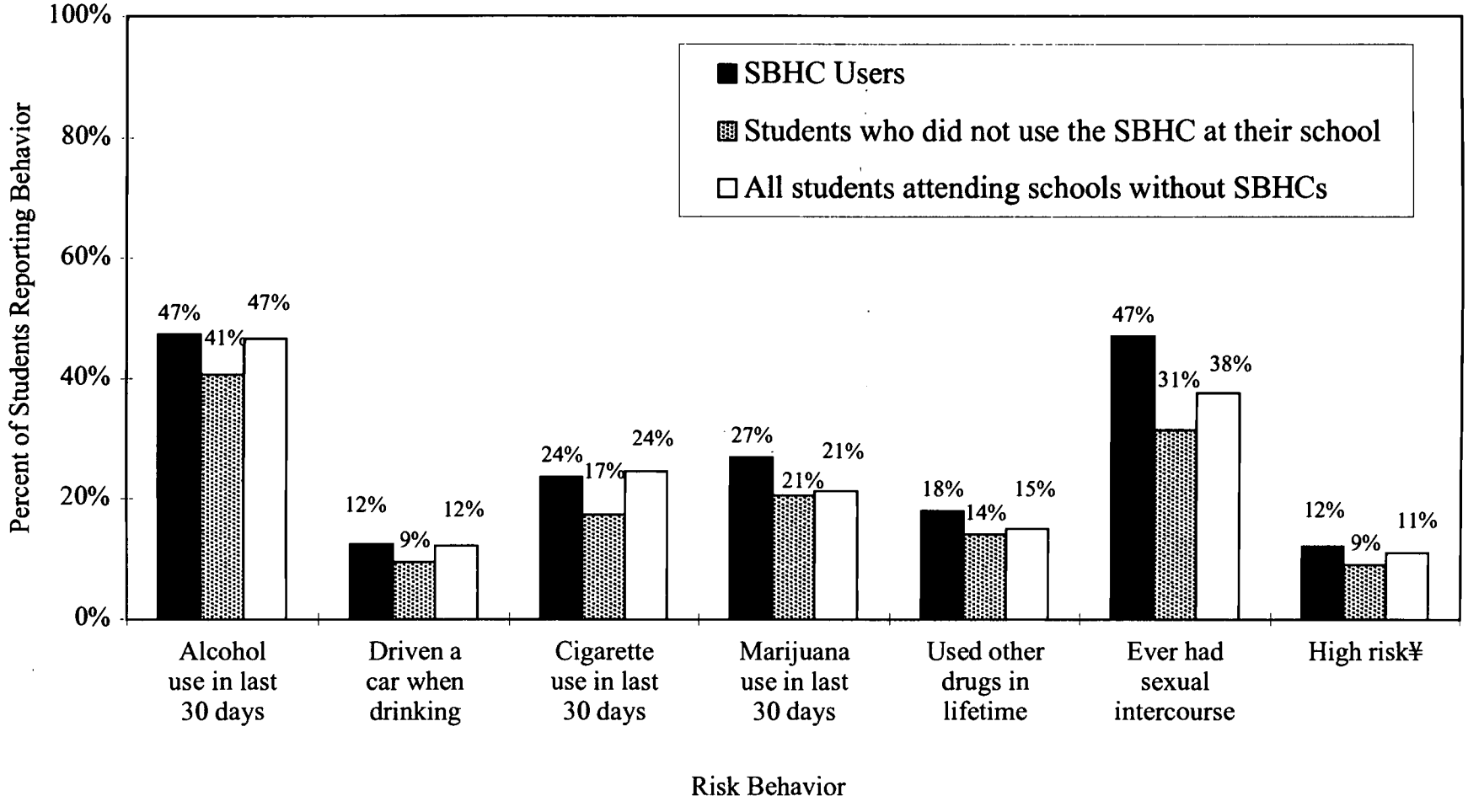
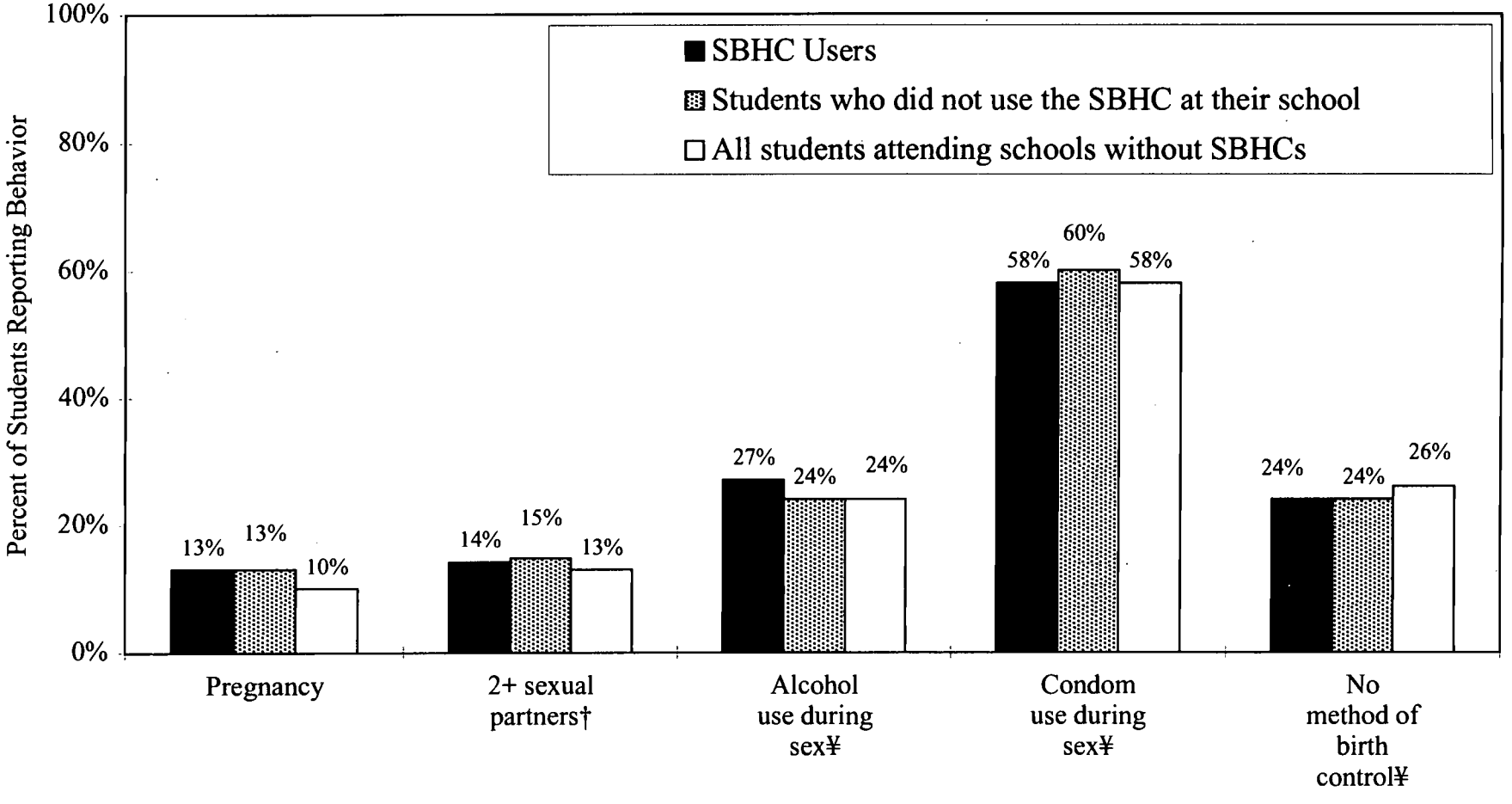


Figure 11. Differences between students who used the School-Based Health Centers (SBHCs) and 1) students at the same schools who did not use the SBHCs, and 2) students who attended schools without SBHCs, continued



¥ Used alcohol, cigarettes, marijuana, and was sexual active

Figure 12. Differences between sexually active students who used the School-Based Health Centers (SBHCs) and 1) students at the same schools who did not use the SBHCs, and 2) students who attended schools without SBHCs



† In the last 3 months.

¥ During sexual intercourse the last time.

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