APPENDIX B. TECHNICAL NOTES

General Information

The information presented in this report was obtained from many data sources, including databases from the National Center for Education Statistics (NCES), the Centers for Disease Control and Prevention (CDC), and the Bureau of Justice Statistics (BJS). While some of the data were collected from universe surveys, most were gathered by sample surveys. Some questions from different surveys may appear the same, but they were actually asked of different populations of students (e.g., high school seniors or students in grades 9 through 12); in different years; about experiences that occurred within different periods of time (e.g., in the past 4 weeks or during the past 12 months); and at different locations (e.g., in school or at home). Readers of this report should take particular care when comparing data from the different data sources. Because of the variation in collection procedures, timing, phrasing of questions, and so forth, the results from the different sources may not be strictly comparable. After introducing the data sources used for this report, the next section discusses the accuracy of estimates and describes the statistical procedures used.

Sources of Data

Table B1 presents some key information for each of the data sets used in the report, including the survey year(s), target population, response rate, and sample size. The remainder of the section briefly describes each data set and provides directions for obtaining more information. The exact wording of the interview questions used to construct the indicators are presented in table B2.

Schools and Staffing Survey (SASS)

This report draws upon data on teacher victimization from the 1993–94 Schools and Staffing Survey (SASS:93–94), which provides national- and state-level data on public and private schools, principals, school districts, and teachers. The 1993–94 survey was the third in a series of cross-sectional, school-focused surveys, following ones conducted in 1990–91 and 1987–88. It consisted of four sets of linked questionnaires, including surveys of schools, the principals of each selected school, a subsample of teachers within each school, and public school districts. Data were collected by multistage sampling. Stratified by state, control, type, association membership, and grade level (for private schools), schools were sampled first. Approximately 9,900 public schools and 3,300 private schools were selected to participate in the 1993–94 SASS. Within each school, teachers were further stratified into one of five teacher types in the following hierarchy: 1) Asian or Pacific Islander; 2) American Indian, Aleut, or Eskimo; 3) bilingual/ESL; 4) new teachers (those with 1 to 3 years of experience); and

5) experienced teachers (those with more than 3 years of experience). Within each teacher stratum, teachers were selected systematically with equal probability. Approximately 56,700 public school teachers and 11,500 private school teachers were sampled.

This report focuses on teachers' responses. The overall weighted response rates were 84 percent for public school teachers and 73 percent for private school teachers. In the Public School Teacher Questionnaire, 91 percent of the items had a response rate of 90 percent or more, and in the Private School Teacher Questionnaire, 89 percent of the items had this level of response. Values were imputed for questionnaire items that should have been answered but were not. For additional information about SASS, refer to R. Abramson, C. Cole, S. Fondelier, B. Jackson, R. Parmer, and S. Kaufman, 1996, *1993–94 Schools and Staffing Survey: Sample Design and Estimation* (NCES 96–089), or contact:

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National School-Based Youth Risk Behavior Survey (YRBS)

The National School-Based Youth Risk Behavior Survey (YRBS) is one component of the Youth Risk Behavior Surveillance System (YRBSS), an epidemiological surveillance system developed by the Centers for Disease Control and Prevention (CDC) to monitor the prevalence of youth behaviors that most influence health. The YRBS focuses on priority health-risk behaviors established during youth that result in the most significant mortality, morbidity, disability, and social problems during both youth and adulthood. This report uses 1993, 1995, 1997, and 1999 YRBS data.

The YRBS used a three-stage cluster sampling design to produce a nationally representative sample of students in grades 9 through 12 in the United States. The target population consisted of all public and private school students in grades 9 through 12 in the 50 states and the District of Columbia. The first-stage sampling frame included selecting primary sampling units (PSUs) from strata formed on the basis of urbanization and the relative percentage of black and Hispanic students in the PSU. These PSUs are either large counties or groups of smaller, adjacent counties. At the second stage, schools were selected with probability proportional to school enrollment size. Schools with substantial numbers of black and Hispanic students were sampled at relatively higher rates than all other schools. The final stage of sampling consisted of randomly selecting

within each chosen school at each grade 9 through 12 one or two intact classes of a required subject, such as English or social studies. All students in selected classes were eligible to participate. Approximately 16,300, 10,900, 16,300, and 15,300 students were selected to participate in the 1993, 1995, 1997, and 1999 surveys, respectively.

The overall response rate was 70 percent for the 1993 survey, 60 percent for the 1995 survey, 69 percent for the 1997 survey, and 66 percent for the 1999 survey. NCES standards call for response rates of 70 percent or better and bias analyses are called for by NCES when that percentage is not achieved. For the YRBS data, a full nonresponse bias analysis has not been done to date. The weights were developed to adjust for nonresponse and the oversampling of black and Hispanic students in the sample. The final weights were normalized so that only weighted proportions of students (not weighted counts of students) in each grade matched national population projections.

In 1999, in accordance with changes to the Office of Management and Budget's standards for the classification of federal data on race and ethnicity, the YRBS item on race/ethnicity was modified. The version of the race and ethnicity question used in 1993, 1995, and 1997 was:

How do you describe yourself?

1 White - not Hispanic
2 Black - not Hispanic
3 Hispanic or Latino
4 Asian or Pacific Islander
5 American Indian or Alaskan Native
6 Other

The version used in 1999 was:

How do you describe yourself? (Select one or more responses.)

A. American Indian or Alaska Native
B. Asian
C. Black or African American
D. Hispanic or Latino
E. Native Hawaiian or Other Pacific Islander
F. White

This new version of the question used in 1999 results in the possibility of respondents marking more than one category. While more accurately reflecting respondents' racial and ethnic identity, the new item cannot be directly com-

pared to responses to the old item. Thus, comparisons of responses by race/ethnicity between the 1999 YRBS and prior years' YRBS are not advisable. For additional information about the YRBS, contact:

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Fast Response Survey System: Principal/School Disciplinarian Survey on School Violence

The Principal/School Disciplinarian Survey was conducted through the NCES Fast Response Survey System (FRSS) during the spring and summer of 1997. The FRSS is a survey system designed to collect small amounts of issue-oriented data with minimal burden on respondents and within a relatively short time frame. The FRSS Principal/School Disciplinarian Survey focused on incidents of specific crimes/offenses and a variety of specific discipline issues in public schools. The survey was conducted with a nationally representative sample of regular public elementary, middle, and high schools in the 50 states and the District of Columbia. Special education, alternative and vocational schools, schools in the territories, and schools that taught only prekindergarten, kindergarten, or adult education were not included in the sample.

The sample of public schools was selected from the 1993–94 NCES Common Core of Data (CCD) Public School Universe File. The sample was stratified by instructional level, locale, and school size. Within the primary strata, schools were also sorted by geographic region and by percent minority enrollment. The sample sizes were then allocated to the primary strata in rough proportion to the aggregate square root of the size of enrollment of schools in the stratum. A total of 1,415 schools were selected. Among them, 11 schools were found no longer to be in existence, and 1,234 schools completed the survey. In April 1997, questionnaires were mailed to school principals, who were asked to complete the survey or to have it completed by the person most knowledgeable about discipline issues at the school. The raw response rate was 88 percent (1,234 schools divided by the 1,404 eligible schools in the sample). The weighted overall response rate was 89 percent, and item nonresponse rates ranged from 0 percent to 0.9 percent. The weights were developed to adjust for the variable probabilities of selection and differential nonresponse and can be used to produce national estimates for regular public schools in the 1996–97 school year. For more

information about the FRSS: Principal/School Disciplinarian Survey on School Violence, contact:

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National Crime Victimization Survey (NCVS)

The National Crime Victimization Survey (NCVS), administered for the U.S. Bureau of Justice Statistics by the Census Bureau, is the nation's primary source of information on crime victimization and the victims of crime. Initiated in 1972 and redesigned in 1992, the NCVS collects detailed information on the frequency and nature of the crimes of rape, sexual assault, robbery, aggravated and simple assault, theft, household burglary, and motor vehicle theft experienced by Americans and their households each year. The survey measures crimes reported as well as those not reported to police.

The NCVS sample consists of about 50,000 households selected using a stratified, multistage cluster design. In the first stage, the primary sampling units (PSUs), consisting of counties or groups of counties, were selected. In the second stage, smaller areas, called Enumeration Districts (EDs), were selected from each sampled PSU. Finally, from selected EDs, clusters of four households, called segments, were selected for interview. At each stage, the selection was done proportionate to population size in order to create a self-weighting sample. The final sample was augmented to account for housing units constructed after the decennial Census. Within each sampled household, Census Bureau personnel interviewed all household members ages 12 and older to determine whether they had been victimized by the measured crimes during the 6 months preceding the interview. About 90,000 persons ages 12 and older are interviewed each 6 months. Households remain in the sample for 3 years and are interviewed 7 times at 6-month intervals. The initial interview at each sample unit is used only to bound future interviews to establish a time frame to avoid duplication of crimes uncovered in these subsequent interviews. After their seventh interview, households are replaced by new sample households. The NCVS has consistently obtained a response rate of about 95 percent at the household level. During the study period, the completion rates for persons within households were about 91 percent. Thus, final response rates were about 86 percent. Weights were developed to permit estimates for the total U.S. population 12 years and older. For more information about the NCVS, contact:

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***School Crime
Supplement (SCS)***

Created as a supplement to the NCVS and co-designed by the National Center for Education Statistics and Bureau of Justice Statistics, the School Crime Supplement (SCS) survey was conducted in 1989, 1995, and 1999 to collect additional information about school-related victimizations on a national level. The survey was designed to assist policymakers as well as academic researchers and practitioners at the federal, state, and local levels so that they can make informed decisions concerning crime in schools. The SCS asks students a number of key questions about their experiences with and perceptions of crime and violence that occurred inside their school, on school grounds, or on the way to or from school. Additional questions not included in the NCVS were also added to the SCS, such as those concerning preventive measures used by the school, students' participation in afterschool activities, students' perceptions of school rules, the presence of weapons and street gangs in school, the presence of hate-related words and graffiti in school, student reports of bullying at school, and the availability of drugs and alcohol in school, as well as attitudinal questions relating to fear of victimization and avoidance behavior in school.

In 1989, 1995, and 1999, the SCS was conducted for a 6-month period from January through June in all households selected for the NCVS (see discussion above for information about the sampling design). It should be noted that the initial NCVS interview is included in the SCS data analysis. Within these households, the eligible respondents for the SCS were those household members who had attended school at any time during the 6 months preceding the interview, and were enrolled in grades 6 through 12 in a school that would help them advance toward eventually receiving a high school diploma. Eligible respondents were asked the supplemental questions in the SCS only after completing their entire NCVS interview. For the 1989 and the 1995 SCS, 19-year-old household members also were considered eligible for the SCS interview. This upper age range was lowered to 18 for eligibility in the 1999 SCS because it was determined that most 19-year-olds did not meet the other eligibility requirement of being currently enrolled in a secondary school. In this report, 19-year-olds were excluded from the analysis of the 1995 data in order to meet the eligibility

requirements and to allow for comparisons to the 1999 SCS. However, the 19-year-olds were not dropped from the analysis of the 1989 data.

Comparisons between the 1989 data and the 1995 and 1999 data should be made with caution due to the redesign of the NCVS in 1992. A new victimization screening procedure, put in place in 1992, was meant to elicit a more complete tally of victimization incidents than did the one used in prior NCVS collections. Therefore, NCVS item-based cross-year changes in reported victimization rates, or lack thereof, may only be the result of changes in how the questions were asked and not of actual changes in the incidence of victimization. Because NCVS questionnaires were completed before students were given the SCS, it is likely that these changes to the NCVS victimization screening procedures differentially affected responses to the 1989 and 1995 SCS victimization items. Other items in this report, such as fear at school, avoidance of places at school, and reports of gangs at school, followed the victimization items on the SCS survey.

Unlike prior Indicators reports, the prevalence of victimization for 1995 and 1999 was calculated by using NCVS incident variables appended to the 1995 and 1999 SCS data files. The NCVS type of crime variable was used to classify victimizations of students in the SCS as serious violent, violent, or theft. The NCVS variables asking where the incident happened and what the victim was doing when it happened were used to ascertain whether the incident happened at school. For prevalence of victimization, the NCVS definition of "at school" includes in the school building, on school property, or on the way to or from school.

Total victimization is a combination of violent victimization and theft. If the student reported an incident of either, he or she is counted as having experienced "total" victimization. If the student reported having experienced both, he or she is counted once under "total" victimization. Serious violent crimes include rape, sexual assault, robbery, and aggravated assault. Violent crimes include serious violent crimes and simple assault.

A total of 10,449 students participated in the 1989 SCS, 9,728 in the 1995 SCS, and 8,398 in 1999. In the 1999 SCS, the household completion rate was 94 percent. In the 1989 and 1995 SCS, the household completion rates were 97 percent and 95 percent, respectively; and the student completion rates were 86 percent and 78 percent, respectively. For the 1999 SCS, the student completion rate was 78 percent. Thus, the overall SCS response rate (calculated by multiplying the household completion rate by the student completion rate) was 84 percent in 1989, 74 percent in 1995, and 73 percent in 1999. Response rates for most survey items were high—mostly over 95 percent of all eligible respondents. The weights were developed to compensate for differential probabilities of selection and nonresponse. The weighted data permit inferences about the eligible

student population who were enrolled in schools in 1989, 1995, and 1999. For more information about SCS, contact:

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School Associated Violent Death Study (SAVD)

The School Associated Violent Death Study (SAVD) is an epidemiological study developed by the Centers for Disease Control and Prevention in conjunction with the U.S. Department of Education and the U.S. Department of Justice. SAVD seeks to describe the epidemiology of school-associated violent deaths, identify common features of these deaths, estimate the rate of school-associated violent death in the United States, and identify potential risk factors for these deaths. The study includes descriptive data on all school-associated violent deaths in the United States, including all homicides, suicides, and firearm-related deaths where the fatal injury occurred on the campus of a functioning elementary or secondary school, while the victim was on the way to or from regular sessions at such a school, or while attending or on the way to or from an official school-sponsored event. Victims of such events include nonstudents as well as students and staff members. SAVD includes descriptive information about the school, event, victim(s), and offender(s). The first SAVD study collected data for July 1, 1992–June 30, 1994 and the follow-up study includes July 1, 1994–June 30, 1999. The follow-up study is nearing completion, and data presented in this report include preliminary findings for the 1998–1999 school year.

SAVD uses a four-step process to identify and collect data on school-associated violent deaths. Cases were initially identified through a search of the Lexis/Nexis and Dialog newspaper and media databases. Then police officials are contacted to confirm the details of the case to determine if the event meets the case definition. Once a case is confirmed, a police official and a school official are interviewed in regards to details about the school, event, victim(s), and offender(s). If police officials are unwilling or unable to complete the interview, a copy of the full police report is obtained. The information obtained about schools includes school demographics, attendance/absentee rates, suspension/expulsions and mobility, school history of weapon carrying, security measures, violence prevention activities, school response to the event, and school policies about weapon carrying. Event information includes the location of injury, the context of injury (while classes held, during break, etc.), motives for injury, method of injury, and

school and community events happening around the time period. Information obtained on victim(s) and offender(s) includes demographics, circumstances of the event (date/time, alcohol or drug use, number of persons involved), types and origins of weapons, criminal history, psychological risk factors, school-related problems, extracurricular activities, and family history including structure and stressors.

One hundred and five school-associated violent deaths were identified from July 1, 1992–June 30, 1994 (See Kachur et al. June 12, 1996. JAMA. 275:22: 1729–1733). While the current study is still ongoing, over 250 school-associated violent deaths have been identified for July 1, 1994–June 30, 1999. The first study achieved a response rate of 85 percent for police officials and 81 percent for school officials. To date, the current study has achieved 96 percent for police officials and 79 percent for school officials. For additional information about SAVD, contact:

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Accuracy of Estimates

The accuracy of any statistic is determined by the joint effects of "nonsampling" and "sampling" errors. Both types of error affect the estimates presented in this report. Several sources can contribute to nonsampling errors. For example, members of the population of interest are inadvertently excluded from the sampling frame; sampled members refuse to answer some of the survey questions (item nonresponse) or all of the survey questions (questionnaire nonresponse); mistakes are made during data editing, coding, or entry; the responses that respondents provide differ from the "true" responses; or measurement instruments such as tests or questionnaires fail to measure the characteristics they are intended to measure. Although nonsampling errors due to questionnaire and item nonresponse can be reduced somewhat by the adjustment of sample weights and imputation procedures, correcting nonsampling errors or gauging the effects of these errors is usually difficult.

Sampling errors occur because observations are made on samples rather than on entire populations. Surveys of population universes are not subject to sampling errors. Estimates based on a sample will differ somewhat from those that would have been obtained by a complete census of the relevant population

using the same survey instruments, instructions, and procedures. The standard error of a statistic is a measure of the variation due to sampling; it indicates the precision of the statistic obtained in a particular sample. In addition, the standard errors for two sample statistics can be used to estimate the precision of the difference between the two statistics and to help determine whether the difference based on the sample is large enough so that it represents the population difference.

Most of the data used in this report were obtained from complex sampling designs rather than a simple random design. In these sampling designs, data were collected through stratification, clustering, unequal selection probabilities, or multistage sampling. These features of the sampling usually result in estimated statistics that are more variable (that is, have larger standard errors) than they would have been if they had been based on data from a simple random sample of the same size. Therefore, calculation of standard errors requires procedures that are markedly different from the ones used when the data are from a simple random sample. The Taylor series approximation technique or the balanced repeated replication (BRR) method was used to estimate most of the statistics and their standard errors in this report. Table B3 lists the various methods used to compute standard errors for different data sets.

Standard error calculation for data from the National Crime Victimization Survey and the School Crime Supplement relied on a combination of procedures. For statistics based on the 1995 and 1999 SCS data, the Taylor series approximation method using PSU and strata variables available from the data set was employed. For statistics based on all years of NCVS data and the 1989 SCS data, standard errors were derived from a formula developed by the Census Bureau, which consists of three generalized variance function (gvf) constant parameters that represent the curve fitted to the individual standard errors calculated using the Jackknife Repeated Replication technique. The formulas used to compute the adjusted standard errors associated with percentages or population counts can be found in table B3.

Statistical Procedures

The comparisons in the text have been tested for statistical significance to ensure that the differences are larger than might be expected due to sampling variations. Unless otherwise noted, all statements cited in the report are statistically significant at the .05 level. Several test procedures were used, depending upon the type of data being analyzed and the nature of the statement being tested. The primary test procedure used in this report was the Student's t statistic, which tests the difference between two sample estimates, for example, between males and females. The formula used to compute the t statistic is as follows:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}} \qquad (1)$$

where E_1 and E_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors. Note that this formula is valid only for independent estimates. When the estimates are not independent (for example, when comparing a total percentage with that for a subgroup included in the total), a covariance term (i.e., $2*se_1*se_2$) must be added to the denominator of the formula:

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2 + 2* se_1* se_2}} \qquad (2)$$

Once the t value was computed, it was compared with the published tables of values at certain critical levels, called *alpha levels*. For this report, an alpha value of 0.05 was used, which has a t value of 1.96. If the t value was larger than 1.96, then the difference between the two estimates was statistically significant at the 95 percent level.

When multiple comparisons among more than two groups were made, for example, among racial/ethnic groups, a Bonferroni adjustment to the significance level was used to ensure that the significance level for the tests as a group was at the .05 level. Generally, when multiple statistical comparisons are made, it becomes increasingly likely that an indication of a population difference is erroneous. Even when there is no difference in the population, at an alpha of .05, there is still a 5 percent chance of concluding that an observed t value representing one comparison in the sample is large enough to be statistically significant. As the number of comparisons increase, the risk of making such an erroneous inference also increases. The Bonferroni procedure corrects the significance (or alpha) level for the total number of comparisons made within a particular classification variable. For each classification variable, there are (K*(K–1)/2) possible comparisons (or nonredundant pairwise combinations), where K is the number of categories. The Bonferroni procedure divides the alpha level for a single t test by the number of possible pairwise comparisons in order to produce a new alpha level that is corrected for the fact that multiple contrasts are being made. As a result, the t value for a certain alpha level (e.g., .05) increases, which makes it more difficult to claim that the difference observed is statistically significant.

Finally, a linear trend test was used when a statement describing a linear trend, rather than the differences between two discrete categories, was made. This test allows one to examine whether, for example, the percentage of students using drugs increased (or decreased) over time or whether the percentage of students who reported being physically attacked in school increased (or decreased) with their age. Based on a regression with, for example, student's age as the inde-

pendent variable and whether a student was physically attacked as the dependent variable, the test involves computing the regression coefficient (b) and its corresponding standard error (se). The ratio of these two (b/se) is the test statistic t. If t is greater than 1.96, the critical value for one comparison at the .05 alpha level, the hypothesis that there is a linear relationship between student's age and being physically attacked is not rejected.

Table B1.—Descriptions of data sources and samples used in the report

Data source	Target population	Year of survey	Response rate (%)	Sample size
Schools and Staffing Survey (Teacher Survey) (NCES)	A nationally representative sample of public and private school teachers from grades K through 12.	1993–1994	84 (public)[1] 73 (private)[1]	47,105 8,372
Youth Risk Behavior Survey (CDC)	A nationally representative sample of students enrolled in grades 9 through 12 in public and private schools at the time of the survey.	1993 1995 1997 1999	70[2] 60[2,3] 69[2,3] 66[2,3]	16,296 10,904 16,262 15,349
FRSS Principal/School Disciplinarian Survey (NCES)	A nationally representative sample of regular public elementary, middle, and secondary schools.	1996–1997	89[1]	1,234
National Crime Victimization Survey (BJS)	A nationally representative sample of individuals 12 years of age and older living in households and group quarters.	1992–1999 (Annual)	About 86[2]	About 90,000
School Crime Supplement (BJS/NCES)	A nationally representative sample of students ages 12 through 19 (for 1989) and 12 through 18 (for 1995 and 1999) enrolled in public and private schools during the 6 months prior to the interview.	1989 1995 1999	83[2] 74[2] 73[2]	10,449 9,728 8,398
School Associated Violent Death Study (SAVD)	Population of school-associated violent deaths in the U.S. between July 1, 1997–June 30, 1998. Data collected from two sources: a school official and a police official.	1997–1998	79 (schools) 96 (police)	N/A

[1]Weighted response rate.
[2]Unweighted response rate.
[3]The response rate for this survey was less than 70 percent and a full nonresponse bias analysis has not been done to date.

Table B2.—Wording of survey questions used to construct indicators

Survey	Questions	Response Categories
Nonfatal Student Victimization		
National Crime Victimization Survey[1] (Screen Questionnaire)	• I'm going to read some examples that will give you an idea of the kinds of crimes this study covers. As I go through them, tell me if any of these happened to you in the last 6 months. That is since _____, 19__. Was something belonging to you stolen, such as Things that you carry, like luggage, a wallet, purse, briefcase, book Clothing, jewelry, or calculator Bicycle or sports equipment Or did anyone attempt to steal anything belonging to you?	Yes/No; if yes, What happened? If yes, how many times?
	• (Other than any incidents already mentioned,) Since _____, 19__ were you attacked or threatened or did you have something stolen from you At work or school Or did anyone attempt to attack or attempt to steal anything belonging to you from any of these places?	Yes/No; if yes, what happened? If yes, how many times?
	• (Other than any incidents already mentioned,) has anyone attacked or threatened you in any of these ways (exclude telephone threats): With any weapon, for instance, a gun or knife With anything like a baseball bat, frying pan, scissors, or stick By something thrown, such as a rock or bottle Include any grabbing, punching, or choking Any rape, attempted rape or other type of sexual attack Any face to face threats Or any attack or threat or use of force by anyone at all? Please mention it even if you are not certain it was a crime.	Yes/No; if yes, what happened? If yes, how many times?
	• People often don't think of incidents committed by someone they know. (Other than any incidents already mentioned,) did you have something stolen from you or were you attacked or threatened by (exclude telephone threats): Someone at work or school?	Yes/No; if yes, what happened? If yes, how many times?
	• Incidents involving forced or unwanted sexual acts are often difficult to talk about. (Other than any incidents already mentioned,) Have you been forced or coerced to engage in unwanted sexual activity by: Someone you didn't know before A casual acquaintance Or someone you know well?	Yes/No; if yes, what happened? If yes, how many times?

Table B2.—Wording of survey questions used to construct indicators—Continued

Survey	Questions	Response Categories
National Crime Victimization Survey[1] (Incident Report)	• Where did this incident happen?	In own home or lodging/Near own home/At, in or near a friend's/relative's/neighbor's home/Commercial places/ Parking lots/garages/School/ Open areas, on street or public transportation/Other
	• What were you doing when this incident (happened/started)?	Working or on duty/ On the way to or from work/On the way to or from school/On the way to of from other place/Shopping, errands/ Attending school/Leisure activity away from home/ Sleeping/Other activities at home/Other
Youth Risk Behavior Survey	• During the past 12 months, how many times has someone threatened or injured you with a weapon such as a gun, knife, or club on school property?	0 times/1 time/2–3 times/4–5 times/6–7 times/8–9 times/ 10–11 times/12 or more times
	• During the last 12 months, how many times were you in a physical fight?	0 times/1 time/2–3 times/4–5 times/6–7 times/8–9 times/ 10–11 times/12 or more times
	• During the last 12 months, how many times were you in a physical fight on school property?	0 times/1 time/2–3 times/4–5 times/6–7 times/8–9 times/ 10–11 times/12 or more times

Table B2.—Wording of survey questions used to construct indicators—Continued

Survey	Questions	Response Categories
School Crime Supplement[1]	• During the last 6 months, have you been bullied at school? That is, has anyone picked on you a lot or tried to make you do things you didn't want to do like give them money? You may include incidents you reported before.	Yes/No

Violence and Crime at School

FRSS Principal/School Disciplinarian Survey	• During the 1996–97 school year, how many incidents involving each type of the following crimes or offenses have occurred at your school? Only include incidents in which police or other law enforcement representatives were contacted. Murder Rape or other type of sexual battery Suicide Physical attack or fight with a weapon Physical attack or fight without a weapon Robbery Theft/larceny Vandalism	Actual number of incidents in which police or other law enforcement representatives were contacted

Nonfatal Teacher Victimization

National Crime Victimization Survey[1] (Screen Questionnaire)	• I'm going to read some examples that will give you an idea of the kinds of crimes this study covers. As I go through them, tell me if any of these happened to you in the last 6 months. That is since _____, 19__. Was something belonging to you stolen, such as Things that you carry, like luggage, a wallet, purse, briefcase, book Clothing, jewelry, or calculator Bicycle or sports equipment Or did anyone attempt to steal anything belonging to you?	Yes/No; if yes, What happened? If yes, how many times?
	• (Other than any incidents already mentioned,) Since _____, 19__ were you attacked or threatened or did you have something stolen from you At work or school Or did anyone attempt to attack or attempt to steal anything belonging to you from any of these places?	Yes/No; if yes, What happened? If yes, how many times?

Table B2.—Wording of survey questions used to construct indicators—Continued

Survey	Questions	Response Categories
National Crime Victimization Survey[1] (continued)	• (Other than any incidents already mentioned,) has anyone attacked or threatened you in any of these ways (exclude telephone threats): With any weapon, for instance, a gun or knife With anything like a baseball bat, frying pan, scissors, or stick By something thrown, such as a rock or bottle Include any grabbing, punching, or choking Any rape, attempted rape or other type of sexual attack Any face to face threats Or any attack or threat or use of force by anyone at all? Please mention it even if you are not certain it was a crime.	Yes/No; if yes, What happened? If yes, how many times?
	• People often don't think of incidents committed by someone they know. (Other than any incidents already mentioned,) did you have something stolen from you or were you attacked or threatened by (exclude telephone threats): Someone at work or school?	Yes/No; if yes, What happened? If yes, how many times?
	• Incidents involving forced or unwanted sexual acts are often difficult to talk about. (Other than any incidents already mentioned,) Have you been forced or coerced to engage in unwanted sexual activity by: Someone you didn't know before A casual acquaintance Or someone you know well?	Yes/No; if yes, What happened? If yes, how many times?
National Crime Victimization Survey[1] (Incident Report)	• Where did this incident happen?	Inside a school building/ On school property
	• What were you doing when this incident (happened/started)?[2]	Working or on duty
	• Did this incident happen at your worksite?	Yes/No
	• Which of the following best describes your job at the time of the incident?	If Teaching Profession, were you employed in a(n) Elementary/Junior high or Middle school/High school

Table B2.—Wording of survey questions used to construct indicators—Continued

Survey	Questions	Response Categories
Schools and Staffing Survey	• Has a student (from this school) threatened to injure you in the past 12 months?	Yes/No
	• Has a student (from this school) physically attacked you in the past 12 months?	Yes/No
School Environment		
Youth Risk Behavior Survey	• During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club?	0 days/1 day/2–3 days/4–5 days/6 or more
	• During the past 30 days, on how many days did you carry a weapon such as a gun, knife, or club on school property?	0 days/1 day/2–3 days/4–5 days/6 or more
	• During the past 30 days, on how many days did you have at least one drink of alcohol?	0 days/ 1–2 days/ 3–5 days/6–9 days/ 10 to 19 days/20–29 days/all 30 days
	• During the past 30 days, on how many days did you have at least one drink of alcohol on school property?	0 days/1–2 days/ 3–5 days/6–9 days/ 10 to 19 days/20–29 days/all 30 days
	• During the past 30 days, how many times did you use marijuana?	0 times/1–2 times/3–9 times/10–19 times/20–39 times/40 or more times
	• During the past 30 days, how many times did you use marijuana on school property?	0 times/1–2 times/3–9 times/10–19 times/20–39 times/40 or more times
	• During the past 12 months, has anyone offered, sold or given you an illegal drug on school property?	Yes/No

Table B2.—Wording of survey questions used to construct indicators—Continued

Survey	Questions	Response Categories
School Crime Supplement[1]	• Are there any street gangs at your school?	Yes/No/Don't Know
	• (Besides anything that happened in the incidents you just told me about), during the last 6 months has anyone called you a derogatory or bad name at school having to do with race, religion, Hispanic origin, disability, gender, or sexual orientation? We call these hate-related words.	Yes/No
	• During the last 6 months, have you seen any hate-related words or symbols written in school classrooms, school bathrooms, school hallways, or on the outside of your school building?	Yes/No
	• During the last 6 months, that is, since _____1st, did you stay away from any of the following places because you thought someone might attack or harm you there? The entrance into the school Any hallways or stairs in school Parts of the school cafeteria Any school rest rooms Other places inside the school building	Yes/No
	• How often are you afraid that someone will attack or harm you at school?	Never/Almost never/ Sometimes/Most of time
	• How often are you afraid that someone will attack or harm you on the way to and from school?	Never/Almost never/ Sometimes/Most of time

Table B2.—Wording of survey questions used to construct indicators—Continued

Survey	Questions	Response Categories
FRSS Principal/School Disciplinarian Survey	• Circle the number indicating to what extent, if any, each of the following has been a problem in your school during the 1996–97 school year: Student tardiness Student absenteeism/class cutting Physical conflicts among students Robbery or theft of items over $10 Vandalism of school property Student alcohol use Student drug use Sale of drugs on school grounds Student tobacco use Student possession of weapons Trespassing Verbal abuse of teachers Physical abuse of teachers Teacher absenteeism Teacher alcohol or drug use Racial tensions Gangs	1) Serious/2) Moderate/ 3) Minor/4) Not a problem

[1]Readers should note that this table reflects the most recent version of the NCVS (1998) and SCS (1999) instruments. Survey items shown here may have changed from past NCVS and SCS collections.

[2]Estimates of teacher victimizations include crimes occurring to teachers at school (location), or at the worksite (location), or while working (activity). For thefts, activity was not considered, since thefts of teachers' property kept at school can occur when teachers are not present.

Table B3.—Methods used to calculate standard errors of statistics for different surveys

Survey	Year	Method of calculation
National Crime Victimization Survey	1992 to 1999	Standard errors of crime level data and aggregated crime rates per 1,000 persons were calculated using three generalized variance function (gvf) constant parameters (denoted as a, b, and c) and formulas published in the Methodology Section of *Criminal Victimization in the United States—Statistical Tables* (NCJ184938) on the Bureau of Justice Statistics web site: http://www.ojp.usdoj.gov/bjs/abstract/cvusst.htm.

The formula used to calculate standard errors (q) of crime level data (x) is:

$$\sqrt{ax^2 + bx + cx^{3/2}}$$

where x is the estimated number of crimes of interest, and a, b, and c are gvf constant parameters.

The formula used to calculate standard errors of aggregated crime rates per 1,000 persons (r) is:

$$\sqrt{br(1000 - r)/y + cr(\sqrt{1000r} - r)/\sqrt{(y)}}$$

where r is the aggregate crime rate (i.e., 1000* total crimes / total population), y is the aggregated base population, and b and c are gvf constant parameters.

The three gvf constant parameters associated with the specific years are:

Year	a	b	c
1992	-0.00013407	4,872	3.858
1993	-0.00007899	2,870	2.273
1994	-0.00006269	2,278	1.804
1995	-0.00006269	2,278	1.804
1996	-0.00006863	2,494	1.975
1997	0.00016972	2,945	2.010
1998	0.00001297	2,656	3.390
1999	-0.00026646	2,579	2.826
Aggregated data from 1995 to 99	-0.00002061	3,705	1.688

Readers should note that the annual parameters published in this year's report differ slightly from those provided in previous reports.

Survey	Year	Method of calculation
School Crime Supplement	1989, 1995, and 1999	Standard errors of percentage and population counts were calculated using the Taylor series approximation method using PSU and strata variables from the 1995 and 1999 data sets. Another way in which the standard errors can be calculated for these years is by using the generalized variance function (gvf) constant parameters (denoted as a, b & c). The gvf parameters were used to calculate the standard errors for the 1989 data in this report.

Table B3.—Methods used to calculate standard errors of statistics for different surveys—Continued

Survey	Year	Method of calculation
		The formula used to calculate standard errors for percentages (p) is: $$\sqrt{bp(1-p)/y + cp(\sqrt{p}-p)/\sqrt{y}}$$ where p is the percentage or interest expressed as a proportion, y is the size of the population to which the percent applies, and b and c are gvf constant parameters. After the standard error is estimated, it is multiplied by 100 to make it applicable to the percentage.
		The formula used to calculate standard errors of population counts (x) is: $$\sqrt{ax^2 + bx + cx^{3/2}}$$ where x is the estimated number of students who experienced a given event, and a, b, and c are gvf constant parameters.
		The three gvf constant parameters associated with the specific years are:

Year	a	b	c
1989	-0.00001559	3,108	0.000
1995	-0.00006269	2,278	1.804
1999	-0.00026646	2,579	2.826

Survey	Year	Method of calculation
Schools and Staffing Survey	1993–1994	Balanced repeated replication method using replicate weights available from the data set.
FRSS Principal/School Disciplinarian Survey	1997	Jackknife replication method using replicate weights available from the data set.
Youth Risk Behavior Survey	1993, 1995, 1997, and 1999	Taylor series approximation method using PSU and strata variables available from the data set.