# Youth Risk Behavior Supplement Notes

#### 1. The Youth Risk Behavior Survey

The Youth Risk Behavior Survey (YRBS), was conducted as a followback to the National Center for Health Statistics' 1992 National Health Interview Survey. The YRBS was sponsored by the Division of Adolescent and School Health, National Center for Chronic Disease Prevention and Health Promotion. This survey is one piece of a larger system of research, the Youth Risk Surveillance System, that was developed to monitor the major risk behaviors of American youth. Data collection began in April of 1992 and continued through March 1993. All YRBS sample youth were contacted in person and responded for themselves. Information was obtained by the use of a cassette tape recorder and tape containing the previously recorded YRBS questions. Sample youth listened to the taped interview and recorded their responses on answer sheets, which upon completion they returned to the interviewers in sealed envelopes. This methodology was developed through a collaborative effort between the National Center for Health Statistics and the University of Michigan's Survey Research Center. In addition to providing youth with the maximum amount of privacy and confidentiality for their responses, this methodology also benefitted youth with poor reading and/or writing skills.

#### 2. The YRBS Sample

The sample of children 12 to 21 years of age was drawn from families who were interviewed for the 1992 National Health Interview Survey. Within each family, one child who was attending school and up to two children not in school or whose in-school status was unknown were selected for the YRBS sample. Of the 13,789 sample youth identified in this manner, YRBS interviews were completed for 10,645 of them, for a final response rate of 77.2 percent.

## 3. The YRBS Data File

A YRBS record exists for every sample youth who completed the YRBS interview. Initially, dummy records were created for all YRBS non-respondents. Comparison of sociodemographic characteristics of respondents and non-respondents indicated that the two groups were not sufficiently different to warrant retaining dummy records in the YRBS file.

The YRBS survey was conducted approximately two months after the original NHIS interview. Consequently, the age of some sample youth who were 12 to 21 years old at the time of the original NHIS interview changed for the YRBS. In fact, the YRBS includes 232 youth 22 years of age. Since these

'older' youth were part of the original YRBS sample frame, their records were retained on the YRBS data file. These records should not be deleted when using this data file to produce national estimates since the weights for deriving these estimates were constructed using the entire YRBS data file. Furthermore, it is also recommended that when analyzing these data by age, the sample youth's age at the time of the original NHIS is used (loc. 27-28, or age recodes in loc. 29-32) rather than the sample youth's age at the time of the YRBS (loc. 423-424).

The YRBS questionnaire focused on selected types of health behaviors among youth that could lead to a greater risk for disease and accidents. The specific YRBS questionnaire topics and file locations are listed below:

Topic File location

1.	Injury risks, including physical fights	
	and weapons use	336-346
2.	Cigarette smoking and chewing tobacco/snuff	347-356
3.	Alcohol and illegal drug use	357-372
4.	AIDS/HIV education; drug use risks	373-376
5.	Diet and nutrition	377-391
6.	Physical activities	392-402
7.	Away from home stays	403-411
8.	Sexual intercourse (sample youth 14 years or older)	412-420

The YRBS file is structured in the following way:

a.	The NHIS person record from the core questionnaire	1-200
b.	Weight fields	201-212
c.	YRBS health behaviors and variables	336-424

'Not ascertained' codes (code 8) have been assigned to those YRBS file locations where information is either missing or responses given to related questions were inconsistent: i.e., the sample youth left an answer category blank or the sample youth gave answers to two or more questions which contradicted one another. (For example, Q. 22 "How old were you when you had your first drink of alcohol other than a few sips?" answer box marked- 17 years or older; and Q. 23 "During your life, on how many days have you had at least one drink of alcohol?" answer box marked this question does not apply to me because I have not done this during my life.) For a few items, responses of "don't know" were also coded 8.

## 4. Weights and variances

Since the NHIS uses a multistage sample design to represent the civilian, non-institutional population of the United States, weights must be used to

make accurate national estimates based on data from the National Health Interview Survey. Two weights are included on the Youth Risk Behavior Survey file:

a. The Final Annual Basic Weight (location 207-212), calculated for each interviewed YRBS sample youth, is the weight that will be used in most analyses of the Youth Risk Behavior Survey data. This weight is the functional equivalent of the Annual Final Basic Weight found on the NHIS Person Record of the Basic Health and Demographic component of the survey (i.e., the Core questionnaire).

The YRBS Final Annual Basic Weight differs from that calculated for the Core data file in that the YRBS sample was re-weighted to account for nonresponse and the selection of only one in-school youth per family and up to two out-of-school youth per family.

b. The Interim Annual Basic Weight (before age-sex-race adjustment), required by some software packages for variance estimation for surveys with complex sample designs, is also included on the data file (loc. 201-206).

There are a number of computer programs that yield variance estimates for data based on complex sample surveys. Some are based on replication approaches and others are based on Taylor linearization approaches. In addition to the Interim Basic Weight (which is the weight prior to poststratification), included on the Youth Risk Behavior Survey file is the full sample stratum identifier (loc. 179-181), the pseudo primary sampling unit (PSU) codes (loc. 187-189), and the type of PSU (loc. 185) to permit the analyst the capability of using such variance estimation procedures. These variables and weights are necessary for directly calculating sampling variances.

- 5. Estimating numbers of events or conditions
  - a. To reduce respondent error, the recall period for questions about some events is limited to two weeks. These events are: bed days and other restricted activity days, work loss and school loss days, and doctor visits. The two-week variables are found in locations 98-107 and 120-121. Estimates of the total number of occurrences of these events in the population can be derived as follows:

Number of events x 26 (number of two-week periods in a year) x Final Annual Basic Weight

= Total number of events occurring in the population during the data year, i.e., 1992.

Example: Number of bed days (loc. 100-101) x 26 x Final Annual Basic Weight (loc. 207-212) = total number of bed days reported for the population in 1992.

b. The recall period for acute incidence conditions is also two weeks and an annual estimate of the total number of acute incidence conditions is calculated using the same procedures as for two-week events:

Number of acute incidence conditions  $x\ 26\ x$  Final Annual Basic Weight

= Total number of acute incidence conditions occurring in the population during 1992.

Note: An acute incidence condition is an acute condition with onset during the two weeks preceding the date of interview.

- c. The recall period for information on hospitalizations is 12 months. However, in calculating number of discharges and number of days in hospital (locations 132-141), only discharges occurring in the past 6 months are counted. Therefore, the weighted estimates for these events must be calculated as follows:
  - (1) Number of discharges x 2 (number of 6-month periods in a year) x Final Annual Basic Weight
    - = Total number of discharges occurring in the population in one year.
  - (2) Number of days in hospital associated with discharges occurring in the past 6 months x 2 (number of 6-month periods in a year) x Final Annual Basic Weight
    - = Total number of days of hospitalization occurring in the population in one year.

Note: On this file, "population" refers to all youth 12-21 years of age at the time of the 1992 National Health Interview Survey.

6. Calculation of rates for events and conditions

The number of events or conditions estimated for the population, as described in item 8 above, can be used as the basis for calculating rates of occurrence of these events (or conditions) per person and per 100 persons for the total U.S. population and for various population subgroups.

Note: Only rates can be estimated from these data. The percent of the population experiencing a particular type of event during the data year cannot be estimated. (The percent of the population experiencing the event in the reporting period (i.e., two weeks or 6 months) can be estimated but is generally not meaningful.)

Data on hospital episodes and days, based on a 12-month recall are in locations 122-131. The Final Annual Basic Weight is used for calculating estimates of these events in the same way it is used for all other personbased variables. These variables do permit estimating the percent of the population experiencing a hospital episode in the past year and the percent of the population having a specified number of hospital days.

### 7. Guidelines for citation of data

With the goal of mutual benefit, the National Center for Health Statistics (NCHS) requests that recipients of data files cooperate in certain actions related to their use.

Any published material derived from the data should acknowledge NCHS as the original source. The suggested citation to appear at the bottom of all tables is as follows:

Source: National Center for Health Statistics (1992)

When cited in a bibliography, the suggested citation should read:

National Center for Health Statistics (1993). Data File Documentation, National Health Interview Youth Risk Behavior Survey, 1992 (machine readable data file and documentation), National Center for Health Statistics, Hyattsville, Maryland

The published material should also include a disclaimer that credits any analyses, interpretations, or conclusions reached to the author (recipients of the data file) and not to NCHS, which is responsible only for the initial data. Consumers who wish to publish a technical description of the data should make a reasonable effort to insure that the description is not inconsistent with that published by NCHS.