What is the Youth Risk Behavior Survey?

The Youth Risk Behavior Survey (YRBS) was developed in 1990 by the Centers for Disease Control and Prevention (CDC) to measure the prevalence of behaviors that contribute to the leading causes of death, disease and injury.

The YRBS is a multiple-choice survey conducted every two years and is designed to produce data representative of students in grades nine through 12. This information enables us to:

- monitor trends in health and risk behavior
- compare Ohio students with a national sample of students
- plan, evaluate and improve community and school programs that prevent health problems and promote healthy behaviors

In 2003, state or local Youth Risk Behavior Surveys were conducted by a total of 42 states, four territories and 12 large city school districts under the direction of the CDC.

Ohio first conducted the YRBS survey in 1993 with subsequent surveys in 1995 (unweighted data), 1997, 1999 and 2003. Through 1999, the survey was administered by the Ohio Department of Education. In 2001 Ohio did not participate in the YRBS and at that time a decision was made to move the administration of the survey to the Ohio Department of Health (ODH). Staff in the bureaus of Community Health Services and Systems Development (BCHSSD) and Health Services Information and Operational Support (BHSIOS) in the Division of Family and Community Health Services at ODH collaborated to conduct the YRBS in Ohio in 2003.

Why Ohio Conducted the YRBS

The YRBS helps Ohioans identify high school students' current health and safety habits so improvements can be made where needed. Establishing healthy lifestyles for Ohio youth can lead to improved learning in the classroom and longer, more productive lives for Ohio's population.

People develop behavior patterns in their childhood and teen years which can eventually strengthen or threaten their quality and length of life. Currently, many adolescents in the United States use tobacco, eat too much fat, consume too few fruits and vegetables and fail to exercise regularly. Students often can improve their health by making simple changes to what they do each day. Parents, school staff members and community groups can help students make the behavior changes necessary to improve their health by developing and supporting activities and environments that encourage healthy behaviors.

The 2003 YRBS provides Ohio with a reference point for evaluating future trends in health habits of youth. Survey results serve as a valuable tool, particularly for legislators, policy makers, school administrators and teachers as they make decisions about new disease prevention and health promotion policies, services, programs and educational

activities. Specifically, YRBS findings form a valuable base upon which Ohio can strengthen its ability to:

- Establish disease prevention and health promotion policies
- Plan and implement health-related programs and services
- Secure funding for health-related programs
- Allocate limited resources toward targeted needs and priorities
- Conduct future research and note progress or deficiencies, and
- Enact laws to prevent injuries and unnecessary deaths.

How the Survey was Conducted

During March-May 2003, students enrolled in high schools that had been selected by a scientific sampling process completed the Ohio YRBS. Their classes were randomly picked from master schedules submitted by school administrators. Research and sampling guidelines from the CDC were followed to make all selections scientifically. Following strict research procedures also ensured that:

- selected schools, their administrators, parents and students were informed and voluntarily agreed to participate, and
- student identity remained anonymous in all reports.

Who Participated in the Survey?

The 99-item, multiple-choice YRBS was administered to 1,215 students in 35 Ohio public and non-public high schools in March-May of 2003. This represented a school response rate of 75 percent, and a student response rate of 84 percent. This was a response rate high enough to produce results which are representative of Ohio high school students as a group.

How Results Can Be Interpreted

Background

Overall, Ohio's 2003 YRBS results are representative of what Ohio's ninth through twelfth grade students as a group would have reported. This is because survey results were "weighted," which simply means each participant's answers represented that individual plus some others who were similar to that individual.

Ohio's 2003 YRBS is a "snapshot in time." It highlights the prevalence of risk behaviors reported by Ohio high school students during March-May 2003. These risk behaviors address six priority areas identified by the CDC as the leading causes of morbidity and mortality among youth in the United States. These priority areas include intentional and unintentional injuries; tobacco use; alcohol and other drug use; sexual activity that leads to pregnancy and sexually transmitted infections including HIV; nutrition; and physical activity.

Answers in this survey were only as accurate as students' reporting. Each student interpreted the terms in each question according to his or her own definitions. For instance, is a pocket knife a "weapon"? What territory does "on school property" include?

In some cases, the findings could under- or over-report. Some students chose not to answer certain questions, meaning that all students surveyed were not represented in every response.

Understanding 2003 Findings

The "2003 Findings" sections report the overall percentage of Ohio high school students engaging in a particular behavior. Information is reported by categories (total, gender and grade level) for each question. The 2003 findings are compared with 1999 survey results. The survey was not conducted in 2001, so 1999 is the most recent comparable data set.

A graphical representation of the data (bar graphs) is provided for each question. Survey findings are also presented in words, using a bullet point format.

In order to allow for statistically meaningful comparisons, only the questions for which 100 or more responses were received are reported. If data are not provided for a given subgroup (e.g., ninth graders), that means the number of students responding was less than 100 for that question. Less than 100 students in the Ohio survey described themselves as African-American, American Indian or Alaska Native, Asian, Hispanic or Latino, Native Hawaiian or Other Pacific Islander. Due to this small sample size, statistical comparisons cannot be made for these groups and; therefore, no data are reported. However, the racial breakdown of survey participants (13 percent African American, 84 percent white) closely mirrors the general Ohio population. So, although the numbers were not sufficient to provide a comparison by race, the overall results represent a racial proportion similar to the state as a whole.

Data supplied from the YRBS provides Ohio with a means to compare the health of our youth with the rest of the nation. The national movement to improve the health of adolescents is based upon 21 critical objectives that focus on youth ages 10-24 years. These objectives have been selected from the more than 460 national objectives listed in Healthy People 2010 as critical health outcomes or contributing risk behaviors that can impact healthy youth development. The 21 critical objectives are listed as HP 2010 objectives in the introduction to each survey topic area.

The answers reported on the YRBS are considered accurate and reliable because research protocols and scientific guidelines were followed. Survey findings could be identified as accurate, correct or "valid at the 95 percent confidence level" because the percentage of participating students was sufficiently high. That is, if the survey were to be repeated 100 times, 95 times out of 100, similar results would be found. For each of the behavior-

related questions (Q8-Q99), ranges for possible margins of error (confidence intervals) were calculated. For example, when comparing groups (e.g., males and females), if the confidence intervals for the groups do not overlap, then the results or the percentage differences are considered "significant." This means that there is a statistical difference between the two groups being compared 95 percent of the time. If the word "significant" is not used in comparing the results of two groups, the difference between the percentages of the two groups may be due to chance rather than to a true difference.

Percentages are reported in this survey for behavior-related questions 8 to 99 (i.e., Q8 to Q99) and are rounded according to CDC guidelines. Odd half numbers (e.g., 7.5 percent or 75.5 percent) were rounded up (e.g., to 8 percent or 76 percent), and even half numbers (e.g., 8.5 percent or 22.5 percent) were rounded down (e.g., to 8 percent or 22 percent).

For the 2003 YRBS, CDC conducted additional analysis of the data. Eight findings were computed by analyzing two or three related questions to enhance the understanding of the issue. These are presented in a summary format, and are not associated with a particular question.

Comparison between 1999 and 2003

For each question, the statements report all statistically significant changes in students' responses between the 1999 and 2003 surveys.

Between 1999 and 2003, some questions were added, dropped or modified. If the question is not included in both surveys, only the 2003 data are presented.

Trends (1993 - 2003)

The section entitled "Trends" reports changes in students' responses that took place between the 1993, 1997, 1999 and 2003 surveys. The YRBS was conducted in Ohio in 1995, but did not achieve a sufficient response threshold to receive weighted data. The survey was not conducted in 2001.

The statistically significant changes reported are for those differences between 1993 and 2003 only. Any significant changes that may have occurred between the other years are not reported in this report.

Interested individuals may request additional information. Researchers and professionals wanting to build upon Ohio's 2003 YRBS data may request detailed frequency tables from:

Ohio's Youth Risk Behavior Survey
Ohio Department of Health
246 N. High Street, 6th Floor
Columbus, Ohio 43216

How to Make Use of this Report

In this report, the questions are grouped into 11 sections: injury, violence, mental health, tobacco, alcohol, drugs, sexual behaviors and HIV/AIDS prevention education, nutrition, physical activity, preventive health care and positive youth development. Each section has several questions included; each is represented by a bar graph. The bar graphs contain data from 1999 and 2003, in some instances there is trend data which will include data from 1993 to 2003 and significant differences between males and females or grade levels are described in the summary statements.

These data can be used in a variety of ways. Some of these include:

- Increasing awareness about the behaviors and risks experienced by high-school students. This may help dispel myths and promote a more accurate view of the "average teenager."
- Starting a discussion with teens about the health choices they are making and/or what is happening in their communities.
- Planning and evaluating programs to make sure they are truly meeting the needs of the community.