

**SUPPORTING STATEMENT FOR THE**

**2009 AND 2011 NATIONAL YOUTH RISK BEHAVIOR SURVEYS**

**PART A**

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## **ABSTRACT**

This statement supports a request to obtain approval for a reinstatement of a previously approved information collection to conduct the school-based National Youth Risk Behavior Survey (YRBS) (OMB No. 0920-0493, expiration, 11/07) in 2009 and 2011. The YRBS is a biennial survey of high school students that assesses priority health risk behaviors related to the major preventable causes of mortality, morbidity, and social problems among both youth and adults in the United States. Minor changes incorporated into this reinstatement request include: a slightly modified questionnaire (Appendix E); the stratification of administrator burden associated with the Recruitment Scripts for the YRBS for state-level (Appendix G1), district-level (Appendix G2), and school-level (Appendix G3) administrators; the inclusion of teacher burden hours associated with completing the Data Collection Checklist (Appendix I); and an updated title for the information collection, to accurately reflect the years in which the survey will be conducted. The proposed information collection will use the previously OMB-approved sampling strategy, recruitment methods, and data collection procedures to conduct the YRBS among nationally representative samples of students in public and private schools, enrolled in grades 9-12, during January through March of 2009 and 2011.

## **A. JUSTIFICATION**

The YRBS, together with several other related OMB-approved information collections, are part of the Youth Risk Behavior Surveillance System (YRBSS). The YRBS questionnaire was cleared by OMB first in 1990 and has been ongoing since then (OMB No. 0920-0258, expiration 3/93; OMB No. 0920-0258, expiration 10/97; OMB No. 0920-0258, expiration 1/00; OMB No. 0920-0493, expiration 11/03; OMB No. 0920-0493, expiration 11/07). The YRBS was originally cleared by OMB as an annual survey; however, after two surveys in 1990 and 1991, the Centers for Disease Control and Prevention (CDC) concluded that collection of data every other year was sufficient to meet the needs of CDC and other Federal agencies. Since 1991, the YRBS has been conducted biennially during odd-number years (1991, 1993, 1995, 1997, 1999, 2001, 2003, 2005, and 2007).

Several additional one-time surveys have been conducted as part of the YRBSS. A National Household Youth Risk Behavior Survey (OMB No. 0920-0214, expiration 3/93) was conducted in 1992 among 12 to 21 year-olds reached through households rather than through schools. In 1995, a National College Health Risk Behavior Survey was conducted among a nationally representative sample of college students (OMB No. 0920-0354, expiration 8/95). In 1998, a National Alternative School Youth Risk Behavior Survey was conducted among a nationally representative sample of students attending alternative high schools (OMB No. 0920-0416, expiration 12/98). In 2000, a methodological study to assess reliability and validity of the YRBS questionnaire was conducted (OMB No. 0920-0464, expiration 12/00). In 2002, a second methodological study was conducted to assess the effects of YRBS question wording on prevalence estimates (OMB No. 0920-0534, expiration 12/02). In 2004, a third methodological study of the YRBS was conducted to assess the effects of setting (school vs. home) and mode of administration (paper-and pencil questionnaire vs. computer-assisted self interview or CASI) on prevalence estimates (OMB No. 0920-0611, expiration 12/04). In 2008, a fourth methodological study is being conducted to assess the feasibility of conducting the YRBS using a web-based

mode of administration (OMB No. 0920-0763, expiration 1/31/2009). The results of the 2008 study will be available in the summer of 2009 and will be instrumental in informing the mode of data collection used in future surveys.

## **A.1 CIRCUMSTANCES MAKING THE COLLECTION OF INFORMATION NECESSARY**

The legal justification for the YRBS may be found in Section 301 of the Public Health Service Act (42 USC 241) (Authorizing Legislation, Appendix A). Further justification for a national survey of health risk behaviors among students in grades 9-12 is based on three factors: (1) public health implications of health risk behaviors among adolescents; (2) costs of health risk behaviors among adolescents; and (3) specific mandates to monitor and/or reduce health risk behaviors and/or associated health outcomes.

### **A.1.a Public Health Implications of Health Risk Behavior Among Adolescents**

A limited number of health risk behaviors established during adolescence account for the overwhelming majority of immediate and long-term sources of mortality, morbidity, and social problems among adolescents.

In the United States, 71% of all deaths among youth and young adults aged 10--24 years result from four causes: motor-vehicle crashes (31%), other unintentional injuries (14%), homicide (14%), and suicide (12%) (CDC, NCHS, 2007). Substantial morbidity and social problems also result from the approximately 757,000 pregnancies among women aged 15--19 years (Ventura, et al., 2006), the estimated 9.1 million cases of sexually transmitted diseases (STDs) among persons aged 15--24 years (Weinstock, Berman, & Cates, 2004), and the estimated 5,089 cases of HIV/AIDS among persons aged 15--24 years (CDC, 2007a) that occur annually. These morbidity data, however, do not adequately reflect the health, education, and social consequences of sexual behaviors among youth.

A limited number of preventable behaviors usually established during youth and often extended into adulthood contribute substantially to the leading causes of mortality and morbidity during youth and adulthood. These behaviors include carrying a weapon; physical fighting; attempted suicide; drinking alcohol while operating a motor vehicle; lack of seatbelt use while driving or riding in a motor vehicle; lack of helmet use while riding a bicycle or motorcycle; and unprotected sexual intercourse that results in unintended pregnancies and STDs, including HIV infection.

From this analysis of the leading causes of mortality and morbidity, the following six categories of health risk behaviors were identified: (1) behaviors that contribute to unintentional injuries and violence; (2) tobacco use; (3) alcohol and other drug use; (4) sexual behaviors that contribute to unintended pregnancy and STDs, including HIV infection; (5) unhealthy dietary behaviors; and (6) physical inactivity. Each is measured by the YRBS. These behaviors frequently are interrelated and often are established during childhood and adolescence and extend into adulthood.

Illustratively, the 2005 YRBS demonstrated that during the 30 days preceding the survey numerous high school students engaged in behaviors that increased their likelihood of death: 28.5% had ridden with a driver who had been drinking alcohol; 18.5% had carried a weapon; 43.3% had consumed alcohol; and 20.2% had used marijuana. In addition, during the 12 months preceding the survey, 35.9% of high school students had been in a physical fight and 8.4% had attempted suicide. Substantial morbidity and social problems among young persons also result from unintended pregnancies and STDs, including HIV infection. In 2005, 46.8% of high school students had ever had sexual intercourse; 37.2% of sexually active students had not used a condom at last sexual intercourse; and 2.1% of students had ever injected an illegal drug. In terms of behaviors that increase mortality and morbidity later in life, 23% of high school students had smoked cigarettes during the 30 days preceding the survey; 79.9% had not eaten  $\geq 5$  servings per day of fruits and vegetables during the 7 days preceding the survey, 67.0% did not attend physical education classes daily; and 13.1% were overweight (Eaton et al., 2006).

#### A.1.b Costs of Health Risk Behaviors Among Adolescents

The costs of the various health problems associated with the health risk behaviors listed above cannot be computed easily. However, by any system of accounts, the economic impact of what may be viewed as largely preventable health problems is staggering, in terms of increased medical costs, lowered educational achievement, lost productivity, and other factors.

Unintentional Injuries and Violence. Using data from the Medical Expenditure Panel Survey and the National Health Accounts, CDC estimated that injury-related medical expenditures in 2000 were as high as \$117.2 billion, accounting for 10.3% of total medical expenditures that year (CDC, 2004).

Tobacco Use. During 1997-2001, cigarette smoking and exposure to tobacco smoke resulted in approximately 438,000 premature deaths in the United States, 5.5 million years of potential life lost, and \$92 billion in productivity losses annually (CDC, 2005a). Productivity losses did not include costs associated with smoking-attributable health-care expenditures, smoking-related disability, employee absenteeism, and secondhand smoke-attributable disease morbidity and mortality. Based on analysis of personal health-care expenditures data from the Centers for Medicare and Medicaid Services, CDC concluded that the smoking-attributable personal health-care medical expenditures for 1998 were \$75.5 billion, for a combined total of approximately \$157.5 billion in annual health-related economic losses from lost productivity and personal health care expenditures. Among adults, the medical costs of smoking represented approximately 8% of personal health-care expenditures in 1998 (Max, 2001).

Alcohol and Other Drug Use. In 1998, the economic costs associated with alcohol abuse totaled \$26.3 billion for health care costs; \$134.2 billion for lost productivity and crime; and \$24.1 billion for motor vehicle crashes, criminal justice administration, and fires (Harwood, 2000). The economic costs associated with drug abuse in 2002 totaled \$180.8 billion: \$16.0 billion for health care costs, \$128.6 billion for productivity loss, and \$36.4 billion for other drug abuse-related costs, including the burden on the criminal justice and social welfare systems (Office of National Drug Control Policy, 2004).

Sexually Transmitted Diseases. A 1998 Kaiser Family Foundation panel estimated

annual direct medical costs of STD treatment to be \$7.8 billion (Kaiser Family Foundation, 1998). More recently, Chesson et al. (2004) estimated the lifetime direct medical costs for youth aged 15-24 who acquired an STD in 2000 to be \$6.5 billion, with HIV and HPV representing 90% of the total direct medical expenditures for STDs. These figures represent conservative estimates because they do not account for non-medical indirect costs, such as lost wages and productivity due to STD-related illnesses, out-of-pocket costs, costs associated with mother-to-infant transmission, or costs related to prevention and screening.

Teen Pregnancy. Teen pregnancy costs taxpayers \$9.1 billion annually in lost tax revenues, increased public assistance expenditures, health care costs for the children of teen mothers, foster care costs, and criminal justice costs (Hoffman, 2006).

Nutrition, Physical Activity, and Obesity. A 1999 report concluded that medical costs for certain chronic health conditions (e.g., cardiovascular disease, cancer, stroke, and diabetes) totaled \$132.7 billion. From this total, an estimated \$33.6 billion may be attributable to diet-related medical costs (Frazao, 1999). Further, Colditz (1999) concluded that physical inactivity costs \$24 billion in direct health care expenditures. Finkelstein et al. (2003) estimated that 9.1% of medical expenditures in 1998 were attributable to overweight and obesity, representing total annual expenditures as high as \$78.5 billion (\$92.6 billion in 2002 dollars). Moreover, the authors examined costs by insurance category and found that Medicare and Medicaid financed approximately half of all medical expenditures attributable to overweight and obesity.

#### A.1.c Mandates to Monitor and/or Reduce Health Risk Behaviors and/or Associated Health Outcomes

The justification for surveillance of health risk behaviors among high school students has strong Federal support. Sources of support include the Healthy People 2010 objectives (U.S. Department of Health and Human Services, 2000), CDC's performance on selected GPRA measures, evaluation of CDC's HIV Prevention Strategic Plan Through 2010, and Under Title IV of Elementary and Secondary Education Act (ESEA) as reauthorized by the No Child Left Behind Act (NCLB).

The broadest justification for the YRBS may be found in the Healthy People 2010 objectives for the Nation and the 10 Leading Health Indicators, which chart the direction for public health activities for the current decade (Rationale for Survey Questions, Appendix E). The YRBS is the primary data source for 15 objectives in six focus areas: injury and violence prevention, mental health and mental disorders, physical activity and fitness, sexually transmitted diseases, substance use, and tobacco use. The behaviors addressed by these objectives include: sun protection to reduce the risk of skin cancer, seat belt use, use of motorcycle helmets, physical fighting, weapon carrying on school property, suicide attempts, moderate and vigorous physical activity, participation in daily school physical education, time physically active during physical education class, television watching, abstinence or use of condoms if currently sexually active, riding with a driver who has been drinking alcohol, tobacco use, and tobacco cessation by smokers. In addition, YRBS data are being used to monitor three of the ten Leading Health Indicators: Physical Activity, Sexual Behaviors, and Tobacco Use.

In compliance with the Government Performance and Results Act (GPRA), CDC's Performance Plan focuses the agency's priorities and directions for the future and assesses

constituents' requirements. The YRBS has been selected as the source of data for measuring three performance goals within the Performance Plan. Those goals address HIV-prevention education, HIV-related risk behaviors, and physical activity among youth. The specific performance measures are:

- Maintain the percentage of high school students who are taught about HIV/AIDS prevention in school at 90% or greater.
- Increase the proportion of adolescents (grades 9-12) who abstain from sexual intercourse *or* use condoms if currently sexually active.
- Increase the percentage of youth (grades 9-12) who were active for at least 60 minutes per day for at least five of the preceding seven days.

CDC's HIV Prevention Strategic Plan Through 2010 was developed by CDC to improve prevention efforts to avert HIV infection. The Strategic Plan will use YRBS data to determine if the HIV prevention efforts in schools have enabled the nation to reach HIV prevention objectives for youth. This plan guides resource allocation and project prioritization for all HIV prevention activities sponsored by CDC through 2010. HIV prevention among youth is considered critical for obtaining the overall goal of reducing new cases of HIV infection in the United States by 5% per year, or at least by 10% through 2010.

Under Title IV of ESEA as reauthorized by the No Child Left Behind Act, states are required to establish a uniform management and reporting system to collect information on school safety and drug use among young people. States are required to include incident reports gathered from school officials and anonymous student and teacher surveys among their data sources. Such information is to be publicly reported so that parents, school officials, and other interested parties have access to information about school-related violence and drug use. Such data are viewed as enabling stakeholders to assess the problems at their schools and work toward finding solutions. Periodic monitoring and reporting is intended to track progress over time. The YRBS includes a series of questions on risk behaviors occurring on school property, including drug use and violence, that meets the requirement for anonymous student surveys.

## **A.2 PURPOSES AND USE OF INFORMATION COLLECTED**

The information generated by the YRBS will be used by several Federal agencies, including CDC. The information will have a broader use by state and local governments, nongovernmental organizations, and others in the private sector.

### **A.2.a Survey Purposes**

The purposes of the YRBS, to be conducted among nationally representative samples of students enrolled in grades 9 – 12 in 2009 and 2011, are to:

1. Estimate the extent to which high school students engage in behaviors placing them at risk for the major short- and long-term causes of mortality and morbidity.
2. Assess whether engaging in health risk behaviors varies as a function of gender, age, grade in school, and race/ethnicity.
3. Determine the interrelationships among health risk behaviors and whether these interrelationships vary as a function of gender, age, grade in school, and race/ethnicity.

4. Estimate the extent to which high school students engage *at school* in health risk behaviors involving tobacco, alcohol, and other drug use or contributing to violence, and determine whether this pattern changes over time.
5. Describe the trends in health risk behaviors and assess the degree to which these trends vary as a function of gender, age, grade in school, and race/ethnicity.

#### A.2.b Anticipated Uses of Results

Within the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), data from school-based risk behavior surveillance systems are used by the Division of Adolescent and School Health; the Division of Cancer Prevention and Control; the Division of Nutrition, Physical Activity, and Obesity; the Division of Adult and Community Health; the Division of Reproductive Health; the Office of the Director; and the Office on Smoking and Health. Data from such surveillance systems also are used by other centers within CDC, including the National Center for Environmental Health, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP); the National Center for Health Statistics (NCHS); and the National Center for Injury Prevention and Control (NCIPC). The anticipated uses of YRBS data by CDC include the following:

#### Evaluation

- Establish baseline and progress data for 15 Healthy People 2010 objectives and 3 Leading Health Indicators.
- Evaluate CDC's Performance Plan in compliance with the GPRA.
- Evaluate if the HIV prevention efforts in schools have enabled the nation to reach HIV prevention objectives for youth as outlined in CDC's HIV Prevention Strategic Plan Through 2010.
- Assess trends in priority health risk behaviors among high school students to determine the impact of CDC-funded interventions.
- Evaluate and monitor progress of national efforts in tobacco control (CDC, 2007b).

#### Research Synthesis

- Provide data for development of new guidelines and tools for school health programs. Results from previous YRBS have been used in the development of the following CDC or CDC-sponsored tools and publications: *Guidelines for School and Community Programs to Promote Lifelong Physical Activity Among Young People* (CDC, 1997); *Guidelines for School Health Programs to Promote Lifelong Healthy Eating* (CDC, 1996); *Guidelines for School Health Programs to Prevent Tobacco Use and Addiction* (CDC, 1994); *School Health Guidelines to Prevent Unintentional Injuries and Violence* (CDC, 2001); *Food-Safe Schools Action Guide* (National Coalition for Food-Safe Schools, 2004); *Improving the Health of Adolescents & Young Adults: A Guide for States and Communities* (CDC et al, 2004); *School Health Index: A Self-Assessment and Planning Guide* (CDC, 2005b); *Making*

*It Happen! School Nutrition Success Stories* (U.S. Department of Agriculture et al, 2005); *Physical Education Curriculum Analysis Tool* (CDC, 2006); and *Health Education Curriculum Analysis Tool* (CDC, 2007c).

- Provide data on the prevalence of priority health risk behaviors of high school students for inclusion in the NCHS report, *Health, United States 2007* (NCHS, 2007).
- Provide data for *Indicators of Chronic Disease Surveillance* (CDC, Council of State and Territorial Epidemiologists, and Association of State and Territorial Chronic Disease Program Directors, 2004).
- Present data in peer-reviewed publications and at scientific meetings.
- Identify the need for additional research on behavioral risk factors among students.
- Provide public health and education officials, youth, parents, and the general public with accurate information about health risk behaviors among high school students.
- Provide states and cities that may conduct similar surveys with a national index against which to compare their survey results.
- Provide other countries that may conduct similar surveys with a national index against which to compare their survey results.

#### Policy and Program Development

- Provide policy makers with information about the health risk behaviors among high school students so they can identify areas on which to focus resources.
- Provide state legislatures with information about the health risk behaviors of high school students to support new funding initiatives to increase resources.
- Determine how public information campaigns should be targeted to specifically address the most critical health risk behaviors.
- Set priorities for and support school health programs for students nationwide.

#### Technical Assistance

- Focus school health programs, curricula, and teacher training programs nationwide on priority health risk behaviors among students.
- Assist states and cities in interpreting health outcome data, especially related to STDs, HIV infection, unintended teenage pregnancy, and the leading causes of mortality and morbidity.
- Focus technical assistance provided to state and local departments of health and education on priority health risk behaviors among students.

- Assess the need for new interventions or to modify existing interventions that focus on reducing health risk behaviors among students.
- Assess the cumulative effects of multiple interventions and sources of information (school, family, community, and the media) on priority health risk behaviors of students.

#### A.2.c Anticipated Uses of Results by Other Federal Agencies and Departments

The YRBS results are of interest not only to CDC, but also to other Federal agencies and departments that participated in the delineation of the survey content and selection/construction of questionnaire items. Widely shared potential applications include monitoring progress toward Healthy People 2010 objectives and providing a generalized measure of the overall degree to which schools and society are having an effect on specific health risk behaviors within the mission of a given Federal agency.

Bureau of Indian Education uses YRBS data in presentations (Shaughnessy, Doshi, & Jones, 2003) and publications/reports (CDC, 2003) when comparing risk behaviors among Native American students to high school students nationally.

Department of Agriculture uses YRBS data on dietary behaviors in conjunction with its school nutrition programs.

Department of Education's Office of Safe and Drug-Free Schools uses YRBS data as one of the two data sources for annual performance measures for the Safe and Drug-Free Schools and Community Act State Grants program that is associated with National Education Goal 7. These measures relate to program quality and help the Department monitor progress towards achieving the program's long-term goal for five of the annual performance measures. The YRBS data allows the Department to provide discrete, quantifiable, and measurable data for performance measures.

YRBS data are also used to provide justification and background for discretionary grant programs, including the Grants for the Integration of Schools and Mental Health Systems and the Carol M. White Physical Education Program (PEP) Grants. The Grants for the Integration of Schools and Mental Health Systems application uses data regarding student mental health, including student reports of depression, feeling sad and hopeless, as well as measures related to suicidal ideation and attempts. The application package for this grant program can be found at <http://www.ed.gov/programs/mentalhealth/applicant.html>. The PEP grant applications have historically used YRBS data to examine students' reported rates of physical activity and other reported activities. The application package for FY 2008 will again rely on these data and is forthcoming. Past applications can be found at: <http://www.ed.gov/programs/whitephysed/applicant.html>.

YRBS data also is used as one of the recurring indicators in the annual *Indicators of School Crime and Safety* (Dinkes, Cataldi, Lin-Kelly, 2007) report issued by the National Center for Education Statistics (NCES). For example, the measures on physical fighting in schools uses YRBS data. That link to the full report is: <http://nces.ed.gov/programs/crimeindicators/crimeindicators2007/index.asp>.

The School Survey on Crime and Safety (SSOCS) is a nationally representative cross-sectional survey of about 3,000 public elementary and secondary schools. The School Survey on Crime and Safety (SSOCS) is the NCES's sample survey of the nation's public schools designed to provide estimates of school crime, discipline, disorder, programs and policies. SSOCS is administered to public elementary, middle, secondary, and combined school principals during the Spring of a school year. The SSOCS (<http://nces.ed.gov/surveys/ssocs/>) does not include YRBS data; however, some of the questions that principals are asked may relate to the types of behaviors that students would report in YRBS.

DHHS Data Council charged a subcommittee with the task of better coordination of surveys gathering data on similar topics from similar populations, notably YRBS, Monitoring the Future (MTF), and National Survey on Drug Use and Health (NSDUH).

DHHS, Office of Disease Prevention and Health Promotion is responsible for tracking the Healthy People 2010 objectives through cooperation with other agencies that serve as a lead in particular areas. YRBS data are used to track 15 Healthy People 2010 objectives and 3 of the 10 Leading Health Indicators. The Department also used YRBS data in their annual report on *Trends in the Well-being of America's Children and Youth* (Office of the Assistant Secretary for Planning and Evaluation, 2003).

DHHS, Substance Abuse and Mental Health Services Administration (SAMHSA) has used YRBS data in a report to Congress on the prevention and reduction of underage drinking. SAMHSA also uses YRBS data to target public information efforts, plan research/demonstration programs for minority and other high-risk youth, and train professional groups in risk factors for substance use. In addition, SAMHSA has used YRBS data in on-line fact sheets on topics such as drinking and driving and drinking trends among high school students.

DHHS, Health Resources and Services Administration uses YRBS data in various reports and publications including their annual *Child Health USA* (U.S. Department of Health and Human Services, Health Resources and Services Administration, & Maternal and Child Health Bureau, 2006) report.

Executive Office of the President, Office of National Drug Control Policy uses YRBS data in a series of Drug Use Fact Sheets available at [http://www.whitehousedrugpolicy.gov/drugfact/facts\\_figures.html](http://www.whitehousedrugpolicy.gov/drugfact/facts_figures.html).

Federal Interagency Forum on Child and Family Statistics uses YRBS data in their *America's Children: Key National Indicators of Well-Being, 2007* report (Federal Interagency Forum on Child and Family Statistics, 2007).

National Center for Education Statistics (NCES) and the Bureau of Justice Statistics will continue to use the YRBS as a source of indicator data for their annual report *Indicators of School Crime and Safety* (Dinkes, Cataldi, & Lin-Kelly, 2007). In addition, NCES will continue to use the data in its annual report *Youth Indicators: Trends in the Well-Being of American Youth*. (Fox, Connolly, & Snyder, 2005).

National Center for Health Statistics used YRBS data in *Health, United States, 2007* (National Center for Health Statistics, 2007).

National Center for Juvenile Justice, Office of Juvenile Justice and Delinquency Prevention has used YRBS data in their publication in juvenile offenders (Snyder & Sickmund, 2006).

NIH, National Institute on Drug Abuse use YRBS data to examine problem behaviors that cluster with drug use and as a frame of reference when assessing the annual MTF survey of drug use (for example, see National Institute on Drug Abuse, 2003).

NIH, National Institute on Mental Health (NIMH) use YRBS data as a marker for prevalence of suicide ideation and attempts in youth by gender, age, and race/ethnicity.

Office of the Surgeon General uses YRBS data to assess the need for and support expansion of health education and health services in schools and to provide data on the prevalence of priority health risk behaviors of high school students. Results were used in the Surgeon General's Conference on Children's Mental Health and in several U.S. Department of Health and Human Services Surgeon General reports including: *Preventing Tobacco Use Among Young People: A Report of the Surgeon General* (1994), *Physical Activity and Health: A Report of the Surgeon General* (1996), *Tobacco Use Among U.S. Racial/Ethnic Minority Groups: A Report of the Surgeon General* (1998), *Mental Health: A Report of the Surgeon General* (1999), *The Surgeon General's Call to Action to Prevent Suicide* (1999), *Youth Violence: A Report of the Surgeon General* (2001), *Women and Smoking: A Report of the Surgeon General* (2001), and *The Health Consequences of Smoking: A Report of the Surgeon General* (2004).

Federal Trade Commission used YRBS data to investigate possible links between advertising and overweight.

#### A.2.d Use of Results by Those Outside Federal Agencies

The results of the YRBS also will be used in a variety of ways by state and local governments, voluntary health organizations, physicians, teacher training institutions, educational administrators, health educators, teachers, and parents:

- Policy makers in the legislative and executive branches at all government levels will use YRBS data to provide evidence of health risk behaviors placing adolescents at risk. The policy makers can compare the situation in their states to the national profile.
- Many state and local education and health agencies conduct similar surveys. The YRBS will provide a national index against which they can compare their survey results.
- The American Cancer Society will use YRBS data to measure progress in obtaining four primary goals for its comprehensive school health initiative.

- Child Trends (a nonprofit, non-partisan children’s research organization supported by foundations and multiple Federal agencies) will use YRBS data in Fact Sheets on specific behaviors of interest.
- The Council of Chief State School Officers will use YRBS data to develop interventions to effectively address the health risk behaviors of youth who are at high risk for HIV infection. The YRBS data are used by the Council’s Resource Center in Educational Equity in reports and other materials.
- The National Association of State Boards of Education will use YRBS data to develop documents created for members, develop policy guides, provide updates to state boards of education, train state boards of education on technical issues, and develop action guides in marketing and communication.
- The Society of State Directors of Health, Physical Education, and Recreation will use YRBS data to inform state directors and in resolutions and policy statements.
- The Urban Institute will use YRBS data in documents related to risk-taking behaviors of youth. Results from previous YRBS have been used by the Urban Institute (2000) in *Teen Risk-Taking: A Statistical Portrait*.
- State and local health departments will use YRBS data to develop health objectives for 2010.
- Family physicians, pediatricians, psychologists, and counselors will use YRBS data to provide up-to-date information on behavioral risks among the adolescents they treat.
- Institutes of higher education will use YRBS data in their teacher training programs to provide information on the health risk behaviors that should be the target of educational programs.
- High school administrators will use YRBS data to provide information to assist them in justifying and planning educational programs to prevent health risk behaviors.
- Health educators and other teachers in high schools will use YRBS data to provide information that will bolster and provide a focus for their lesson plans and educational materials.
- Parents will use YRBS data to better understand the behavioral risks facing their children.

State education agencies (SEA) and local education agencies (LEA) already have used YRBS results in creating awareness of risk behaviors, setting program goals, planning or modifying programs, developing staff development programs for teachers, and seeking funding (Sussman, et al., 2002). For example, Milwaukee Public Schools (MPS) used YRBS data to support adoption of evidence-based curricula in MPS schools, community schools, after-school programs, and alternative settings for school-aged youth. In Montana, YRBS data are used by the Montana Office of Public Instruction and its partners, including the Montana Department of Public Health and Human Services, the Montana Board of Crime Control, Indian Health Service,

Healthy Mothers/Healthy Babies, Montana Department of Transportation, and Blue Cross and Blue Shield of Montana, for program planning and improvement. In Vermont, YRBS data are used to examine the success of statewide tobacco control programs and promote tobacco prevention programs for youth. In Wisconsin, classroom activities designed to teach social norms are developed based on YRBS data.

Publications and presentations have been targeted to reach the audiences listed above. Further details are provided in Section A.16.b, below.

### **A.3 USE OF IMPROVED INFORMATION TECHNOLOGY AND BURDEN REDUCTION**

To reduce burden, data are to be collected on optically scannable questionnaire booklets. Although paper-and-pencil administration is planned since it is historically the least burdensome and most economical mode of data collection for school-based surveys, the feasibility of automated modes of data collection are currently being explored and, if found to be feasible, may be applied to future surveys. The data to be obtained from the data collection cannot be accessed from currently existing automated databases. During questionnaire design, every effort has been made to limit respondent burden. This proposed data collection is not compliant with the Government Paperwork Elimination Act. However, scannable questionnaire booklets are generally regarded currently as the least burdensome for a school-based data collection.

### **A.4 EFFORTS TO IDENTIFY DUPLICATION AND USE OF SIMILAR INFORMATION**

CDC conducts ongoing searches of all major educational and health-related electronic databases, reviews related literature, consults with experts in behavioral epidemiology and survey research, and maintains continuing communications with Federal agencies with related missions. These efforts have identified no previous, current, or planned comprehensive efforts to conduct a survey of the health risk behaviors of a nationally representative sample of students in grades 9-12.

CDC monitors the implementation of Youth Risk Behavior Surveys by states and cities. The number of SEAs implementing their own Youth Risk Behavior Survey representative of students in their state has increased over time. However, substantial variation across jurisdictions in sampling techniques, questions, and survey administration procedures prohibit the calculation of national estimates from state-level results.

### **A.5 IMPACT ON SMALL BUSINESSES OR OTHER SMALL ENTITIES**

The planned data collection does not involve small businesses or other small entities.

### **A.6 CONSEQUENCES IF COLLECTING THE INFORMATION LESS FREQUENTLY**

Data will be gathered *biennially* from a nationally representative sample of high school students, using a cross-sectional design. Data must be collected biennially to detect any changes

in priority health risk behaviors in this population that need to be addressed in school health programs, public education campaigns, demonstration efforts, technical assistance, or professional education/training, especially those sponsored by CDC. Due to the speed with which many of these problems, including the AIDS epidemic and overweight, will take an increasing toll in human suffering and financial burden, which will be heavily borne by the Federal government, it is imperative to conduct the survey biennially. School systems have the capacity to change their school health programs to help prevent health risk behaviors that contribute to the leading causes of mortality and morbidity on an annual basis, if circumstances require. Originally, the YRBS was proposed and approved as an *annual* survey. Based on experience, it was determined that biennial administration of YRBS is sufficient to meet the programmatic needs of CDC and other Federal agencies.

**A.7 SPECIAL CIRCUMSTANCES RELATING TO THE GUIDELINE OF 5 CFR 1320.6**

The data collection will be implemented in a manner consistent with 5 CFR 1320.6. No special circumstances are applicable to this proposed survey.

**A.8 COMMENTS IN RESPONSE TO THE FEDERAL REGISTER NOTICE AND EFFORTS TO CONSULT OUTSIDE THE AGENCY**

**A.8.a Federal Register Announcement**

CDC published a *Federal Register* notice of the proposed data collection on February 15, 2008 (Vol. 73, Number 32, pages 8875-8876) (Appendix B). Two comments were received: one comment requesting a copy of the study protocol and data collection instruments; one general comment about the information collection. The public comments and CDC's responses to can be found in Appendix C.

**A.8.b Consultations**

Consultations on the design, instrumentation, products, and statistical aspects of the YRBS have occurred at critical junctures during its original design and have continued since it originally received OMB clearance. The purposes of such consultations were to ensure the technical soundness and user relevance of survey results; to verify the importance, relevance, and accessibility of the information sought in the survey; to assess the clarity of instructions; and to minimize respondent burden.

Five major phases of consultation have occurred. Phase one involved several noted sampling experts and others who discussed sampling strategies for the YRBS. Phase two helped delineate the questionnaire content and develop/identify survey questions through a series of panel meetings involving Federal agencies, representatives of SEAs and LEAs, and members of the scientific community. Phase three involved consultations with users of the YRBS data, including representatives from all CDC-funded SEAs and LEAs. Phase four involved a systematic solicitation by CDC of all identified Federal and non-Federal users of the YRBS. Phase five involved a review of the YRBS by an External Review Panel composed of survey and programmatic experts in the field of adolescent and school health from academia and state agencies.

#### A.8.b.1 Consultations with Sampling Experts

On August 9, 1989, CDC and contractor staff met in Washington, D.C. with OMB and several sampling experts and Federal agency representatives to discuss the sampling plan for the YRBS. The results of these consultations are reflected in the sampling plan in Part B of the clearance package. Specifically, school districts and schools deciding *not* to participate in the survey would not be replaced on the assumption that refusing schools would be systematically different from cooperative schools so that replacement of refusing schools would introduce bias into the results. In addition, Common Core Data (CCD) provided by the National Center for Educational Statistics would be used to ensure adequate oversampling of African-American and Hispanic students.

The following people were among the key participants at this meeting:

Robert Burton, Ph.D. (retired)  
National Center for Education Statistics

Leslie Kish, Ph.D. (deceased)  
Institute for Social Research  
University of Michigan

Jerry Coffey, Ph.D. (retired)  
Office of Management and Budget

Jim Scanlon  
ASPE  
200 Independence Avenue, SW  
Washington, DC 20201  
Phone: (202) 690-7100  
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Joe Fred Gonzales, Jr.  
Mathematical Statistician  
National Center for Health Statistics  
Office of Research and Methodology  
3311 Toledo Road, Room 3121  
Hyattsville, MD 20782  
301-458-4239  
[jfg2@cdc.gov](mailto:jfg2@cdc.gov)

Seymour Sudman, Ph.D. (deceased)  
Department of Statistics  
University of Illinois at Champaign-Urbana

Morris Hansen, Ph.D. (deceased)  
Westat, Inc.

Ron Wilson, M.S. (retired)  
National Center for Health Statistics

Continuing consultations with sampling experts have been held to ensure the continuing appropriateness of the YRBS sampling plan. The original YRBS sampling plan was reviewed by NCHS.

#### A.8.b.2 Consultations in Survey Delineation and Instrument Design

Extensive consultations were held over approximately 8 months to delineate the original YRBS questionnaire content. This process began in March 1989 with the formation of a steering committee which included representatives of the U.S. Department of Education; the National Center for Chronic Disease Prevention and Health Promotion/CDC; the National Center for Health Statistics/CDC; the Office of Disease Prevention and Health Promotion; the Office of the Assistant Secretary for Planning and Evaluation; the Maternal and Child Health Bureau/Health Research Services Administration; and the Society of State Directors of Health, Physical Education, and Recreation. In addition, a representative from each of the six PHS agencies with

significant responsibility for one of the categories of health risk behaviors to be measured by the YRBS served on the steering committee. The six agencies were: the Division of Epidemiology and Prevention Research/National Institute on Drug Abuse; the National Center for Injury Prevention and Control/CDC; the Office on Smoking and Health/NCCDPHP/CDC; the Division of Reproductive Health/NCCDPHP/CDC; the Division of Nutrition/NCCDPHP/CDC; and the Division of Chronic Disease Control and Community Intervention/NCCDPHP/CDC. See Appendix K for a list of Expert Reviewers for the 1989 Consultations.

The representative from each of these six PHS agencies was asked to chair a panel to delineate the most important behaviors to be addressed and items to measure each behavior. Each panel chair identified a group of Federal agency experts to provide consultation and advice. On August 10-11, 1989 the six chairs, the expert Federal consultants, and one or two representatives from state departments of education convened to identify specific priority behaviors within each major category of risk behavior, and to recommend the best items to measure each behavior for a draft questionnaire. Each panel was asked to address the following questions:

- What are the most important health outcomes that result from risk behaviors in your categorical area?
- What national health objectives for the year 2000, presented in *Healthy People 2000*, are relevant to your categorical area?
- What are the highest priority health behaviors established during youth that should be addressed to help reduce the most important health outcomes?
- What questions should be used to measure each priority behavior most effectively?

After the questionnaire design meeting, the chairs summarized the recommendations and survey items proposed by each panel. These summaries were sent for review to persons responsible for health education and/or HIV education in every SEA and LEA funded by CDC and to topic area experts in the scientific community. Based on their comments, a draft questionnaire was developed and, on October 11, 1989, presented to representatives of the SEAs and LEAs holding cooperative agreements in HIV education with CDC. Based on their feedback, the draft questionnaire was refined.

#### A.8.b.3 Continuing Consultations with Users of YRBS Data

Continuing consultations have been held with other Federal agencies, members of the scientific community, and other various non-Federal users of YRBS data. In addition, consultations have been held with state and local agencies that conduct similar surveys. The vehicles for these continuing consultations have included annual meetings of all of the cooperative agreement holders funded by the Division of Adolescent and School Health; a series of training programs for state and local agencies on the YRBS; site visits to funded state and local agencies; and presentations at a variety of national conferences. On the basis of these consultations over time, the clarity of several questions has been improved and a limited number of questions have been deleted entirely. In addition, the need for adding questions related to

National Education Goal 7 (Safe and Drug Free Schools) emerged from continuing discussions with the National Education Goals Panel. While the overall structure and content of the YRBS questionnaire has remained the same since it originally was designed, these improvements have eliminated some flaws in the questionnaire and increased the usefulness of the data to Federal agencies other than CDC and non-Federal users.

#### A.8.b.4 Systematic Solicitation of Comments From Federal and non-Federal YRBS Users

In 1998, CDC undertook an in-depth, systematic review of the YRBS questionnaire. The review was motivated by multiple factors, including a goal for the YRBS to measure national health objectives for 2010 that were being developed at the time. The purpose of the review and subsequent revision process was to ensure that the questionnaire would provide the most effective assessment of the most critical priority health risk behaviors among young persons. To guide the decision-making process, CDC solicited input from content experts from CDC and academia as well as from representatives from other federal agencies; state and local education agencies; state health departments; and national organizations, foundations, and institutes. The Federal agencies consulted included: the Bureau of Indian Affairs (BIA); the Department of Agriculture; the Department of Education; the Food and Drug Administration (FDA); the Indian Health Service (IHS); the National Cancer Institute (NCI); the National Center for Health Statistics (NCHS); the National Institute of Child Health and Human Development (NICHD); the National Heart, Lung, and Blood Institute (NHLBI); and the Substance Abuse and Mental Health Services Administration (SAMHSA).

On the basis of input received from approximately 800 persons, CDC developed a proposed set of questionnaire revisions, which were sent to all state and local education agencies for further input. In addition to considering the amount of support from state and local education agencies for the proposed revisions, CDC considered multiple factors in making final decisions regarding the questionnaire, including 1) input from the original reviewers, 2) whether the question measured a health risk behavior practiced by youth, 3) whether data on the topic were available from other sources, 4) the relationship of the behavior to the leading causes of morbidity and mortality among youth and adults, and 5) whether effective interventions existed that could be used to modify the behavior. As a result of this process, CDC created the 1999 YRBS questionnaire. This questionnaire included several new questions, including height and weight (so that body mass index can be calculated), dating violence, use of heroin and methamphetamines, milk consumption, time spent watching television, being injured while exercising, use of sunscreen, and medical and dental examinations.

In 2000, CDC, in consultation with 75 representatives from state and local education agencies, representatives from CDC divisions that use health behavior data, and representatives from other federal agencies, made minor modifications to the 1999 version of the questionnaire to create the 2001 questionnaire. In 2002, 2004, and 2006 a similar consultation process was conducted to create the 2003, 2005, and 2007 questionnaires, respectively. Because the YRBS is a school-based survey and student respondents have a single class period of approximately 45 minutes to complete the questionnaire, the length of the questionnaire is limited. Therefore, when revising the questionnaire, adding new questions typically requires the deletion of an equal number of existing questions. Input from users of YRBS data is critical in ensuring these additions and deletions result in a questionnaire that assesses the current priority risk behaviors, while keeping in mind the need to monitor trends in behaviors over time. As an example, the

most recent review of the questionnaire conducted in 2006, resulted in the deletion of three questions and the addition of three questions for the 2007 questionnaire. The three deleted questions addressed: frequency of missing classes or school without permission; having physical disabilities or long-term health problems; and being asked to show proof of age when buying cigarettes. The three questions added addressed: source of alcohol consumed, frequency of soda or pop consumption; and number of hours of sleep per night.

#### A.8.b.5 Consultations with Division-wide External Review Panel

In 2007, all surveillance activities conducted by the Division of Adolescent and School Health at CDC, including the YRBS, were closely examined by an External Review Panel. The Panel was composed of the following individuals:

Joyce L. Epstein, Ph.D.  
Director, Center on School, Family, and  
Community Partnerships and the National  
Network of Partnership Schools  
Johns Hopkins University  
3003 North Charles Street, Suite 200  
Baltimore, MD 21218  
e-mail: jepstein@CSOS.jhu.edu

Glenn Flores, MD, FAAP  
Professor and Chief  
Division of General Pediatrics  
UT Southwestern Medical Center  
5323 Harry Hines Blvd  
Dallas, TX 75390  
Glenn Flores, MD  
e-mail: Glenn.Flores@UTSouthwestern.edu

Deanna M. Hoelscher, PhD, RD, LD, CNS  
Director, Michael & Susan Dell Center for  
Advancement of Healthy Living  
Associate Professor  
UTSPH Austin Regional Campus  
313 E. 12th Street, Suite 220  
Austin, TX 78701  
512-482-6168  
512-482-6185 (fax)  
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Philip Huang, MD, MPH  
Medical Director  
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1100 W. 49th Street  
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Donna Mazyck, RN, MS, NCSN  
Maryland State Department of Education  
Division of Student, Family and School Support  
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Baltimore, MD 21201  
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Beth Pateman, Professor  
Elementary Co-Director  
Institute for Teacher Education  
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Everly Hall 223  
University of Hawaii at Manoa  
Honolulu, HI 96822  
e-mail: mpateman@Hawaii.Edu

Phyllis E. Simpson, Ph.D.  
Retired  
1020 Springbrook Drive  
DeSoto, Texas 75115  
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Bonita F. Stanton, MD  
Professor and Chair, Dept. of Pediatrics  
Wayne State University  
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Carlos A. Vega-Matos  
Provider Support Services  
Office of AIDS Policy and Programs  
600 South Commonwealth Avenue, 6th Floor  
Los Angeles, CA 90012  
213-351-8108 (v)  
213-738-6571 (f)  
e-mail: [cvega-matos@ph.lacounty.gov](mailto:cvega-matos@ph.lacounty.gov)

The YRBS-specific purposes of the External Review Panel were to: 1) evaluate the scientific quality of the YRBS; 2) evaluate the public health impact of YRBS data; and 3) judge the relevance of the YRBS to public health, stakeholder, Administration, and Congressional priorities. The questions posed to the research panel included: 1) is the YRBS relevant to

programmatic activities of the division and an appropriate fit for CDC; 2) is the YRBS methodology consistent with current scientific knowledge; 3) how can CDC help its partners to do a better job of interpreting and using YRBS data to improve school health policies and programs; and 4) what are the panel's recommendations on changes that should be made in the focus or quality of the YRBS? The panel currently is preparing their final report.

#### **A.9 EXPLANATION OF ANY PAYMENT OR GIFT TO RESPONDENTS**

Schools will be given educational materials and \$500 in appreciation for their participation. No payments will be offered or made to student respondents. OMB first suggested that CDC offer school incentives on the YRBS in 1999 as a means of improving school response rates and, thereby, improving the generalizability of results. CDC adopted a financial incentive in the 2001 YRBS to allow the YRBS to continue to compete effectively with other school-based data collections. Increasingly in recent years, school-based data collections, most of which do not fall under OMB review, have offered financial incentives to increase or at least maintain school participation rates. On the 2005 and 2007 YRBS, (OMB Number 0920-0493, expiration date 11/07), these school incentives helped maintain or slightly increase school participation rates despite the growing number of competing, non-instructional demands placed on schools, including the increased testing associated with NCLB.

#### **A.10 ASSURANCE OF CONFIDENTIALITY PROVIDED TO RESPONDENTS**

This data collection has received IRB approval from the CDC Human Research Protection Office (protocol #1969, expiration: 5/2008). The current YRBS IRB Approval Letter is in Appendix L.

Staff in the CDC Information Collection Review Office have reviewed this proposal and have determined that the Privacy Act is not applicable. Data collected from school administrators during recruitment is information available in the public domain and school administrators will not be providing personal information. The data collected on the YRBS are not identifiable. Even though teachers will be required to enter student names on a Data Collection Checklist (Appendix I) to monitor parent permission form returns and make sure that questionnaires are completed only by students for whom permission has been obtained, the Data Collection Checklist is destroyed after the questionnaire has been administered. The Data Collection Checklist is not forwarded to the data collection contractor, Macro International Inc., or to CDC. At no point in time is there any way to connect student's names to their response data.

All selected schools, students, and their parents will be informed that anonymity will be maintained throughout data collection, that all data will be safeguarded closely, and that no institutional or individual identifiers will be used in study reports. Anonymity will be promised to students and their parents on parental permission forms. Students will be reminded that their responses are anonymous at the start of the survey administration session by the survey administrator, who will be a professional data collector trained to conduct this survey.

Several actions will be taken to help ensure anonymity. The survey will be administered in a classroom setting, with adequate space between respondents. No personal identifiers will

appear on survey questionnaires. Each student will submit the completed questionnaire in a sealed envelope, which will be deposited directly into a "ballot box." After administration of the survey to a class section, all questionnaires for that class will be removed from the box, deposited in an envelope, and labeled with a school identification number (for weighting purposes only). The connection between the school identification number and the school name will be retained only long enough to complete data collection in each class. Once data collection is complete, this connection will be destroyed and this connection will never be transmitted to CDC.

Throughout data collection, all completed questionnaires will be stored in locked files at the contractor's offices and will be accessible only to staff directly involved in the project. Questionnaires will be retained by the contractor for a period of three years and then destroyed. The connection between the school identification number and the school name will be retained only long enough to complete data collection. Once data collection is complete, this connection will be destroyed. All contractor staff involved with the project will be required to sign Data Collector Confidentiality Agreement (Appendix F7), which is a statement of personal commitment to guard the data.

#### **A.11 JUSTIFICATION FOR SENSITIVE QUESTIONS**

Sexual intercourse, alcohol and other drug use, weapon carrying, suicidal ideation and attempts, and weight loss practices all may be considered sensitive topics. In fact, depending on the student and the setting in which questions are asked, nearly any health-risk behavior, including tobacco use and physical activity, could be considered sensitive. However, the sensitive questions are necessary to the purpose of risk behavior surveillance. The behaviors covered in the questionnaire are the major behaviors known to cause mortality and morbidity. During the past 20 years, one of the primary responsibilities of CDC has been to monitor for the nation priority health risk behaviors among youth. To monitor such behaviors, CDC must ask youth about their participation in them. Students are told prior to the start of the survey that "This survey is about health behavior. It has been developed so you can tell us what you do that may affect your health. It will also ask you questions about your experience taking this survey. The information you give will be used to develop better health education for young people like yourself."

The questions were developed in close cooperation with representatives from school systems across the nation and are presented in a straightforward and sensitive manner.

Parental permission to participate in the YRBS will be obtained. Appendix F contains the parental permission form in English (Appendix F2) and Spanish (Appendix F3) and parental permission form reminder notice in English (Appendix F4) and Spanish (Appendix F5). At each school, local procedures for sending home parental permission forms will be followed. Schools will be asked to ensure permission forms are distributed at least 7 days before the survey administration. Teachers track the return of parental permission forms on the Data Collection Checklist to ensure that only students with parental permission participate. A waiver of written student assent was obtained for the participation of children because this research presents no more than minimal risk to subjects, parental permission is required for participation, the waiver will not adversely affect the rights and welfare of the students because they are free to decline to

take part, and it is thought that some students may perceive they are not anonymous if they are required to provide stated assent and sign a consent/assent document. Students are told “Participating in this survey is voluntary and your grade in this class will not be affected, whether or not you answer the questions.” Completion of the survey implies student assent.

## **A.12 ESTIMATES OF ANNUALIZED BURDEN HOURS AND COSTS**

### **A.12.a Estimated Burden Hours**

The estimated burden for this information collection is based on more than 20 years of experience conducting the YRBS. The planned information collection involves administration of the YRBS questionnaire (Appendix E) to independent samples of students in 2009 and 2011. Respondents include state-level, district-level, and school-level administrators who provide information in the Recruitment Script for the YRBS (Appendices G1-G3), teachers who complete the Data Collection Checklist for the YRBS (Appendix I), and students who receive instructions for and complete the YRBS questionnaire (Appendix E). More information about the Data Collection Checklist is detailed in section B.2.f.

The YRBS will be conducted in 2009 and 2011 among nationally representative samples of students attending public and private schools in grades 9-12. At state, school district, and school levels, the cooperation of educational administrators will be sought in recruitment of sampled schools. For each cycle of data collection, the number of state, school districts, and schools whose administrators will be contacted is estimated at 25, 120, and 200, respectively. The combined total number of respondents for the 2009 YRBS and the 2011 YRBS, by type, will include: state-level administrators (n=50), district-level administrators (n=240), and school-level administrators (n=400) who provide information in the Recruitment Script for the YRBS, teachers (n=1,200) who complete the Data Collection Checklist for the YRBS, and students (n=24,000) who receive instructions for and complete the YRBS questionnaire. These totals annualized over the 3-year study period are provided in Table A-12.a.

There are no costs to respondents except their time. The total burden hours estimated for the 2009 and 2011 YRBS and associated support activities are 18,645. The total estimated burden hours annualized over three year study period is 6,215 (Table A-12.a).

**Table A-12.a. Estimated Annualized Burden Hours**

Type of Respondent	Form Name	No. of Respondents	No. of Responses per Respondent	Average Burden Per Response (in hours)	Total Burden (in hours)
State Administrators	State-level Recruitment Script for the Youth Risk Behavior Survey	17	1	30/60	9
District Administrators	District-level Recruitment Script for the Youth Risk Behavior Survey	80	1	30/60	40
School Administrators	School-level Recruitment Script for the Youth Risk Behavior Survey	133	1	30/60	66
Teachers	Data Collection Checklist for the Youth Risk Behavior Survey	400	1	15/60	100
Students	Youth Risk Behavior Survey	8,000	1	45/60	6,000
<b>Total</b>					<b>6,215</b>

**A.12.b Estimated Annualized Cost to Respondents**

For this information collection, there are no direct costs to the respondents themselves or to participating schools. However, the cost for administrators, teachers, and students can be calculated in terms of their time in responding to the 2009 and 2011 YRBS as seen in Table A-12.a. Table A-12.b illustrates the total calculation of burden costs for the 2009 and 2011 YRBS. In each category, the estimated respondent burden hours have been multiplied by an estimated average hourly salary for persons in that category. Administrator and teacher hourly wages were estimated using Education Research Service data *Salaries and Wages Paid Professional and Support Personnel in Public Schools 2005-06* published in Education Week. The estimated burden costs in terms of the value of time students spend in responding are based on a minimum wage for students aged less than 20 years of \$5.85/hour (<http://www.dol.gov/dol/topic/wages/minimumwage.htm>). The combined total estimated respondent burden cost for conducting the YRBS in 2009 and 2011 annualized over the three year study period is \$42,782.

**Table A-12.b. Annualized Estimated Cost to Respondents**

Type of Respondent	Form Name	No. of Respondents	No. of Responses per Respondent	Average Burden Per Response (in hours)	Hourly Wage Rate	Total Respondent Costs
State Administrators	State-level Recruitment Script for the Youth Risk Behavior Survey	17	1	30/60	\$40.63	\$345
District Administrators	District-level Recruitment Script for the Youth Risk Behavior Survey	80	1	30/60	\$40.63	\$1,625
School Administrators	School-level Recruitment Script for the Youth Risk Behavior Survey	133	1	30/60	\$40.63	\$2,702
Teachers	Data Collection Checklist for the Youth Risk Behavior Survey	400	1	15/60	\$30.10	\$3,010
Students	Youth Risk Behavior Survey	8,000	1	45/60	\$5.85	\$35,100
					<b>Total</b>	<b>\$42,782</b>

**A.13 ESTIMATES OF OTHER TOTAL ANNUAL COST BURDEN TO RESPONDENTS OR RECORD KEEPERS**

There will be no respondent capital and maintenance costs.

**A.14 ANNUALIZED COSTS TO THE GOVERNMENT**

The study is funded under Contract No. 200-2006-15929. The total contract award to Macro International Inc. is \$1,798,082 over a 36-month period. Thus the annualized contract cost is \$599,361. These costs cover the activities in Table A-14 below.

Additional costs will be incurred indirectly by the government in personnel costs of staff involved in oversight of the study and in conducting data analysis. It is estimated that two CDC employees will be involved for approximately 20% and 5% of their time (for federal personnel 100% time=2080 hours annually) at salaries of \$36.46 and \$47.00 per hour, respectively. The direct annual costs in CDC staff time will be approximately \$15,167 + \$4,888 = \$20,055 annually.

The total cost for the study over a 36-month period, including the contract cost and federal government personnel cost is \$1,858,247. The annualized cost to the government for the study will be \$599,361 + \$20,055 = \$619,416.

**Table A-14. Average Annualized Study Cost**

<b>Activity</b>	<b>Cost</b>
<i>Contract Costs</i>	
Design and plan	\$61,417.09
Programming and developing	\$53,942.79
Recruitment and preparation	\$68,926.06
Printing and distribution	\$16,550.70
Recruiting and training	\$46,151.10
Collection of data	\$267,914.72
Processing, cleaning, weighing and developing data files	\$57,964.83
Dissemination and reporting of results	\$26,493.69
<b>Subtotal</b>	<b>\$599,361</b>
<i>Federal Employee Time Cost</i>	
20% time for project officer	\$15,167
5% time for senior scientist	\$4,888
<b>Subtotal</b>	<b>\$20,055</b>
<b>Average Annualized Cost</b>	<b>\$619,416</b>

#### **A.15 EXPLANATION OF PROGRAM CHANGES OR ADJUSTMENTS**

YRBS is a school-based survey that has been conducted biennially since 1991 (OMB no. 0920-0493, expiration 11/30/2007). CDC seeks to reinstate the information collection for a period of three years in order to conduct the YRBS in 2009 and 2011. Minor changes incorporated into this reinstatement request include: a slightly modified questionnaire (Appendix E); the stratification of administrator burden associated with the Recruitment Scripts for the YRBS (Appendices G1-G3) by education agency level (state, district, or school); the inclusion of teacher burden hours associated with completing the Data Collection Checklist (Appendix I); and an updated title for the information collection, to accurately reflect the years in which the survey will be conducted..

#### **A.16 PLANS FOR TABULATION AND PUBLICATION AND PROJECT TIME SCHEDULE**

##### A.16.a Tabulation Plans

Data will be tabulated in ways that will address the principle research purposes outlined in A.2. The planned analyses to be conducted by CDC are described briefly below:

1. *Estimate the extent to which high school students engage in behaviors placing them at*

*risk for the major short- and long-term causes of mortality and morbidity*--Descriptive statistics (percentages and confidence intervals) will be calculated to address this objective.

2. *Assess the degree to which engaging in health risk behaviors varies by student as a function of gender, age, grade in school, and race/ethnicity*--Cross tabulations, Chi-square analyses, and regression analysis initially will be conducted to address this objective. Subsequently, student demographic characteristics will be regressed against behaviors.
3. *Determine the interrelationships among health risk behaviors and whether these interrelationships vary as a function of gender, age, grade in school, and race/ethnicity*--Correlation matrices and a variety of multiple regression techniques will be used to determine the relationships among health risk behaviors. Discriminant analyses will be used to predict risk of certain events (e.g., suicide attempts; adolescent pregnancy). Correlation matrices and a variety of multiple regression techniques also will be used to assess the contributions of demographic factors to interrelationships among health risk behaviors.
4. *Estimate the extent to which high school students engage at school in health risk behaviors involving tobacco, alcohol, and other drug use or contributing to violence, and determine whether this pattern changes over time*--Descriptive statistics (percentages and confidence intervals) will be calculated to quantify the extent of such behaviors. Trend analyses will be conducted to assess changes over time.
5. *Describe the trends in health risk behaviors and assess the degree to which these trends vary as a function of gender, age, grade in school, and race/ethnicity*--Multiple regression analyses that control for sex, grade, and race/ethnicity and that simultaneously assess linear and higher order time effects will be used.

Examples of the table shells that will be completed through analysis of the data are in Appendix N.

#### A.16.b Publication Plans

The YRBS results are regularly made available to the public through a variety of publications and through the annual conferences of several national organizations. The publications include analyses of the results and assessment of the implications of results for school health education and related efforts to reduce health risk behaviors and associated health problems among youth.

The following journals have carried articles on the YRBS design and results and are expected to serve as continuing vehicles for distribution of YRBS results: *Accident Analysis and Prevention*; *Adolescence*; *Adolescent Medicine*; *AIDS Education and Prevention*; *Alaska Medicine*; *Alcohol Health and Research World*; the *American Journal of Clinical Nutrition*; the *American Journal of College Health*; the *American Journal of Epidemiology*; the *American Journal of Health Behavior*; the *American Journal of Preventive Medicine*; the *American*

*Journal of Public Health; Annals of Emergency Medicine; Annals of Internal Medicine; the Archives of Pediatric and Adolescent Medicine; Clinical Journal of Sports Medicine; Contraception Report; Drug and Alcohol Dependence; Ethnicity and Disease; Evaluation Review; Family and Community Health; Family Planning Perspectives; Health Education and Behavior; Health Education Research; Health Services Research; Health Values; International Journal of Circumpolar Health; International Journal of Eating Disorders; Journal of Addictions and Offender Counseling; the Journal of Adolescent Health; the Journal of the American Medical Association; the Journal of Child and Family Studies; the Journal of Consulting and Clinical Psychology; the Journal of Drug Education; the Journal of Drug Issues; the Journal of Health Education; the Journal of Interpersonal Violence; the Journal of Pediatrics; the Journal of School Health; the Journal of Sex Education and Therapy; the Journal of Studies on Alcohol; the Journal of the American Dietetic Association; the Journal of Youth and Adolescence; Maternal and Child Health Journal; Medicine and Science in Sports and Exercise; the Morbidity and Mortality Weekly Report; Obesity Research; Pediatric Nursing; Pediatrics; Preventive Medicine; Psychological Reports; Psychology in Schools; Public Health Reports; School Psychology International; Sexually Transmitted Diseases; Social Indicators Research; Sociology of Sport Journal; Substance Use and Misuse, Suicide and Life-threatening Behavior; Tobacco Control; and Vital and Health Statistics.* An entire special issue of *Public Health Reports* documented the development and rationale of the Youth Risk Behavior Surveillance System. The YRBS results have been cited in literally thousands of articles and stories by print and broadcast media.

CDC has distributed the YRBS results primarily through reprints of the MMWRs and the Internet. More than 5,000 paper copies of the MMWR Surveillance Summary reporting 2005 YRBS data have been requested since the report's release in June, 2006. Awareness of the most common risk behaviors among high school students, including unintentional injury and violence; tobacco use; alcohol and other drug use; sexual behaviors that contribute to unintended pregnancy and sexually transmitted diseases, including HIV infections; unhealthy dietary behaviors; and physical inactivity was promoted among the thousands of individuals who read articles based on the 2005 YRBS data press release in over 40 national and state newspapers, including the Washington Post, Washington Times, LA Times, Chicago Sun Times, Atlanta Journal Constitution, New York Post, and Web MD.

The YRBS results also are available through Youth Online, an interactive web database. During the 12 months following the release of the 2005 YRBS data, there were nearly 40,000 visits to Youth Online at <http://apps.nccd.cdc.gov/yrbss>. In addition, the following materials are available via the Internet at [www.cdc.gov/yrbss](http://www.cdc.gov/yrbss): an overview of the YRBS, the most recent YRBS questionnaire and item rationale, data files and documentation, and selected YRBS publications. The YRBS data and documentation web page received 38,000 visits during the 30 days following the release of the 2005 YRBS data, and it received over 300,000 visits during 2006.

In addition, YRBS results have been and will be distributed through the publications and annual conferences of many national health and education organizations including the following: the American Alliance for Health, Physical Education, Recreation and Dance; the American Association of School Administrators; the American College Health Association; the American Medical Association; the American Public Health Association; the American School Health Association; the Council of Chief State School Officers; the National Association of Secondary School Principals; the National Association of School Nurses; the National Association of State Boards of Education; the National Education Association; the National Parent Teacher

Association; and the National School Boards Association.

**A.16.c Time Schedule for the Project**

The following represents our proposed schedule of activities for the YRBS, in terms of months after receipt of OMB clearance. The end date for data collection is constrained by the dates on which schools close for the summer. In addition, given that some twelfth grade students may be absent during the final weeks of the school year, it is highly desirable to complete data collection two months before schools close for the summer; i.e., by the end of March.

Key project dates will occur during the following time periods for the 2009 data collection:

<b><u>Activity</u></b>	<b><u>Time Period</u></b>
Recruit and schedule schools	1 to 3 months after OMB clearance
Print scannable questionnaires	1 to 2 months after OMB clearance
Train field data collectors	2 months after OMB clearance
Collect data	2 to 5 months after OMB clearance
Process data	3 to 6 months after OMB clearance
Weight/clean data	7 to 8 months after OMB clearance
Produce data file with documentation	9 months after OMB clearance
Analyze data	10 to 11 months after OMB clearance
Publish results	15 to 17 months after OMB clearance

Data collection is currently scheduled to occur during January through March, 2009 and 2011. The time schedule for the 2011 data collection will be analogous to that of the 2009 data collection. Results will be published in early 2010 and 2012, initially in the *MMWR*, and subsequently in other publications.

**A.17 REASON(S) DISPLAY OF OMB EXPIRATION DATE IS INAPPROPRIATE**

The expiration date of OMB approval of the data collection will be displayed.

**A.18 EXCEPTIONS TO CERTIFICATION FOR PAPERWORK REDUCTION ACT SUBMISSIONS**

No exemptions from the certification statement are being sought.

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