**SUPPORTING STATEMENT FOR THE**

**2021 and 2023 NATIONAL YOUTH RISK BEHAVIOR SURVEY and 2021 ADOLESCENT BEHAVIORS AND EXPERIENCES SURVEY**

**PART A**

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1. Privacy Impact Assessment (PIA)

This statement supports a request to obtain approval for a reinstatement with change of a previously approved information collection to conduct the National Youth Risk Behavior Survey (YRBS) (OMB No. 0920-0493, expiration, 11/30/2019) in 2021 and 2023. The YRBS is a biennial school-based survey of high school students, conducted by the Centers for Disease Control and Prevention (CDC), 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: an updated title for the information collection to accurately reflect the years in which the survey will be conducted, a slightly modified questionnaire, and the addition of electronic survey administration modes. This reinstatement with change also adds the Adolescent Behaviors and Experiences Survey (ABES), which will use a slightly modified Youth Risk Behavior Survey questionnaire to collect data from high school students during the COVID-19 pandemic.

* The goal of both studies is to assess priority health-risk behaviors in adolescents related to the major preventable causes of mortality, morbidity, and social problems among both youth and adults in the United States.
* Results of the Youth Risk Behavior Survey will be used to (1) monitor whether priority health-risk behaviors among high school students increase, decrease, or remain the same over time; (2) evaluate the impact of broad national, state, and local efforts to prevent risk behaviors; and (3) improve school health policies and practices. Results of the Adolescent Behaviors and Experience Survey will be used to assess health-risk behaviors and experiences among high school students during the COVID-19 pandemic.
* The method is cross-sectional surveys of nationally representative samples obtained using a three-stage cluster sample design.
* The subpopulation is 9th-12th grade students attending public and private schools in the United States.
* Data will be analyzed to obtain prevalence estimates, t-tests will be used to compare demographic subgroups, and logistic regression will be used to analyze trends over time.

Since its inception in 1990, the YRBS has been conducted using in-school, paper-and-pencil methodology. Due to the COVID-19 pandemic, many students across the U.S. are expected to participate in virtual/distance learning throughout the 2020-2021 academic year. Therefore, ABES will utilize web-based data collection in the spring semester of 2021 to ensure participation from a representative sample of high school students. YRBS will be administered in a separate sample of schools in fall 2021, utilizing in-school paper-and-pencil methodology. If the response rate for the 2021 YRBS cycle is lower than expected, CDC may need to draw a supplemental sample to meet the precision goals of the survey. Similarly, CDC may submit a nonsubstantive change should additional questions regarding the impact of COVID-19 need to be added for this or future administrations of the ABES or YRBS.

The 2021 YRBS will also pilot tablet data collection in additional classes, as the system prepares to transition from paper-and-pencil in 2023. Therefore, the recruitment and data collection materials have been updated to reflect the web-based ABES and the tablet-based YRBS. The proposed research will use the previously OMB-approved sampling strategy, recruitment methods, and data collection procedures to conduct the YRBS among nationally representative samples of 9th-12th grade students in public and private schools in the U.S. Similar methods will be used for the ABES, except that data collection will be web-based and occur outside of school. A three-year approval of this study is being requested to collect data during January through May of 2021 (ABES), August through December of 2021 (YRBS) and January through May of 2023 (YRBS).

# A. JUSTIFICATION

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

**Background**

The YRBS and ABES, together with several other related OMB-approved information collections, is part of the Youth Risk Behavior Surveillance System (YRBSS). The YRBS 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; OMB No. 0920-0493, expiration 11/11; OMB No. 0920-0493, expiration 09/15; OMB No. 0920-0493, expiration 11/19). The YRBS was originally cleared by OMB as an annual survey; however, after two surveys in 1990 and 1991, CDC concluded that collection of data every other year was sufficient to meet the agency’s needs and those of other Federal agencies. Since 1991, the YRBS has been conducted biennially during odd-number years (1991-2019).

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 was conducted to assess the feasibility of a web-based mode of administration for the YRBS (OMB No. 0920-0763, expiration 1/31/2009).

The legal justification for the YRBS may be found in Section 301 of the Public Health Service Act (42 USC 241) (Authorizing Legislation, **Attachment** **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.

Regarding public health implications, a limited number of health-risk behaviors, which are often established during adolescence, account for the overwhelming majority of immediate and long-term causes of mortality, morbidity, and social problems among adolescents and adults. In the United States, 74% of all deaths among youth and young adults aged 10-24 years result from three causes: unintentional injuries (41%), suicide (19%), and homicide (14%) (CDC, 2019).

Among youth aged 15-19 years, substantial morbidity and social problems also result from the estimated 194,377 births (Martin et al., 2018); 538,999 cases of chlamydia, gonorrhea, and syphilis (CDC, 2019); and 1,703 cases of human immunodeficiency virus (HIV) (CDC 2018) reported annually. In the United States, 44% of all deaths result from cardiovascular disease (23%) and cancer (21%) (CDC 2019).

These leading causes of morbidity and mortality among youth and adults in the United States are related to six categories of priority health-risk behaviors: 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 human immunodeficiency virus (HIV) infection; 5) unhealthy dietary behaviors; and 6) physical inactivity. These behaviors frequently are interrelated and are established during childhood and adolescence and extend into adulthood. To monitor priority health-risk behaviors in each of these six categories among high school students nationally, CDC developed the National YRBS, which has been conducted biennially since 1991. Additional questions assessing other critical public health issues, such as obesity, have been added over time. The ABES includes additional questions to assess students’ behaviors and experiences during the COVID-19 pandemic.

Priority health-risk behaviors result in tremendous economic cost. For example, in the area of unintentional injuries and violence, using data from the Medical Expenditure Panel Survey and the National Health Accounts, injury-related medical expenditures in 2002 were as high as $73.4 billion, accounting for 10.1% of total medical expenditures that year (Machlin, 2005).

Regarding tobacco use, the economic impact of smoking and exposure to secondhand smoke is enormous in terms of increased medical costs, lost productivity, and other factors. Average annual smoking-related productivity losses from 2005-2009 are estimated at $107.6 billion ($69.6 billion for males and $38 billion for females) (USDHHS, 2014). This figure does not include costs associated with smoking-attributable health-care expenditures, smoking-related disability, employee absenteeism, or secondhand smoke-attributable morbidity and mortality. In 2006 alone, deaths from coronary heart disease and lung cancer in nonsmokers due to exposure to secondhand smoke resulted in 532,580 years of productive life lost, and $5.68 billion lost in productivity (USDHHS, 2014). In 2009, an estimated $132.5 billion of health care expenditures in adults 19 years of age and older were attributable to smoking, an approximate 38% increase from 2004 (USDHHS, 2014). In total, smoking-attributable health care expenditures and productivity losses exceeded $240 billion in 2009.

In terms of alcohol and other drug use, in the United States in 2010, the estimated economic cost of excessive drinking was $249 billion. The government paid for $100.7 billion (40.4%) of these costs. Binge drinking accounted for $191.1 billion (76.7%) of costs; underage drinking $24.3 billion (9.7%) of costs; and drinking while pregnant $5.5 billion (2.2%) of costs. (Sacks et al, 2015). In addition, the cost of alcohol-attributable crime was $73.3 billion and the cost to government was $94.2 billion (Bouchery et al, 2011). In 2007, the cost of illicit drug use totaled more than $193 billion in the United States (National Drug Intelligence Center, 2011).

Related to sexual behavior, the lifetime direct medical costs for youth aged 15-24 who acquired one or more of the eight most common sexually transmitted infections (STIs) is currently estimated at $15.6 billion a year. Even curable STIs have a high annual cost of $742 million (CDC, 2013b). These figures represent conservative estimates because they do not account for non-medical indirect costs, such as lost wages and productivity due to STI-related illnesses, out-of-pocket costs, costs associated with mother-to-infant transmission, or costs related to prevention and screening. In addition, teen pregnancy costs taxpayers $9.2 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, 2008).

In terms of nutrition, physical activity, and obesity, a 2015 report concluded that average total annual health care expenditures per year from 2006-2011 was $1.05 trillion. Approximately 12.5% of these expenditures, or $131 billion, was associated with inadequate levels of physical activity (Carson, 2014). According to Biener et al. (2017), the percentage of medical expenditure for the treatment of obesity-related illness has risen from 20.6% in 2005 to 27.5% in 2010 to 28.2% in 2013.

The broadest justification for the YRBS may be found in the national proposed objectives for Healthy People 2030, which chart the direction for public health activities for the current decade (Rationale for Survey Questions, **Attachment D**). The YRBS is the primary data source for 13 objectives in seven focus areas: cancer; educational and community-based programs; injury and violence prevention; lesbian, gay bisexual and transgender health; mental health and mental disorders; physical activity; and sleep health. The behaviors addressed by these objectives include: sun protection to reduce the risk of skin cancer; daily physical activity; physical fighting; weapon carrying; sexual and dating violence; bullying, suicidal ideation and attempts and illicit drug use among sexual minority youth; suicide attempts among all youth; meeting federal recommendations for aerobic and muscle-strengthening physical activity; and sleep duration.

## **A.2. PURPOSE AND USE OF INFORMATION COLLECTION**

The information generated by the ABES and 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.

The purpose of the ABES is to assess students’ behaviors and experiences during the COVID-19 pandemic. The purposes of the YRBS, to be conducted biennially among nationally representative samples of students enrolled in grades 9-12, 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 sex, age, grade in school, and race/ethnicity.

3. Determine the interrelationships among health-risk behaviors and whether these interrelationships vary as a function of sex, 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 sex, age, grade in school, and race/ethnicity.

YRBS data are used by multiple centers within CDC, including the National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP); the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP); the National Center for Environmental Health; the National Center for Health Statistics (NCHS); and the National Center for Injury Prevention and Control (NCIPC). Anticipated uses of YRBS data by CDC include the following:

Evaluation

* Establish baseline and progress data for 13 Healthy People 2030 objectives and 1 Leading Health Indicator
* 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, 2014)

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:
  + *National Physical Activity Plan* ([www.physicalactivityplan.org](http://www.physicalactivityplan.org))
  + *School Health Guidelines to Promote Healthy Eating and Physical Activity* (CDC, 2011b)
  + *Physical Activity Guidelines for Americans* (HHS, 2018)
  + *Health Education Curriculum Analysis Tool* (CDC, 2012)
  + *Physical Education Curriculum Analysis Tool* (CDC, 2019)
  + *2015-2020 Dietary Guidelines for Americans* (HHS, 2015)
  + *School Health Index: A Self-Assessment and Planning Guide* (CDC, 2017)
  + *Food-Safe Schools Action Guide* (USDA, 2014)
* Provide data on the prevalence of priority health-risk behaviors of high school students for inclusion in the NCHS report, *Health, United States 2018* (NCHS, 2018)
* Provide data for *Indicators of Chronic Disease Surveillance* (CDC, 2015)
* 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

The YRBS results are of interest not only to CDC, but also to other Federal agencies and departments that participate in the delineation of the survey content and selection/construction of questionnaire items. Widely shared potential applications include monitoring progress toward Healthy People 2030 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.

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

Department of Education uses YRBS data as one of the recurring indicators in the annual Indicators of School Crime and Safety report issued by the National Center for Education Statistics (Musu, 2019).  For example, the measure on physical fighting in schools uses YRBS data. The link to the full report is: <https://nces.ed.gov/pubs2019/2019047.pdf>

DHHS, Office of the Assistant Secretary for Planning and Evaluation (ASPE) uses YRBS data to report on adolescent tobacco behaviors in the Health System Measurement Project. The link to those data is: <https://aspe.hhs.gov/system/files/pdf/72851/TeenRiskTaking.pdf>

DHHS, Office of Disease Prevention and Health Promotion is responsible for tracking the Healthy People 2030 objectives through cooperation with other agencies that serve as a lead in particular areas. YRBS data are used to track 13 Healthy People 2030 objectives and 1 Leading Health Indicator. The Department also has used YRBS data in their report on *Trends in the Well-being of America’s Children and Youth* (Office of the Assistant Secretary for Planning and Evaluation, 2004).

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* report available at <https://mchb.hrsa.gov/chusa14/>

Federal Interagency Forum on Child and Family Statistics uses YRBS data in their *America's Children: Key National Indicators of Well-Being, 2017* report available at <https://www.childstats.gov/pdf/ac2018/ac_18.pdf>

National Center for Education Statistics and Bureau of Justice Statistics use YRBS data in their annual *Indicators of School Crime and Safety* report available at <https://nces.ed.gov/pubs2019/2019047.pdf>

National Center for Health Statistics used YRBS data in *Health, United States, 2018* available at <https://www.cdc.gov/nchs/data/hus/hus18.pdf>

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: *The Health Consequence of Smoking – 50 Years of Progress* (2014), *E-Cigarette Use Among Youth and Young Adults: A Report of the Surgeon General (*2016*); Facing Addiction in America: The Surgeon General’s Report on Alcohol, Drugs, and Health (*2016*); Step it up! The Surgeon General’s Call to Action to Promote Walking and Walkable Communities (*2015); *National Strategy for Suicide Prevention: Goals and Objectives for Action (*2012*); 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.

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 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 provides a national index against which they can compare their survey results.
* The American Cancer Society uses 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) uses YRBS data in Fact Sheets on specific behaviors of interest (<https://www.childtrends.org/indicators?a-z>)
* The National Association of State Boards of Education uses 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 Leaders of Health and Physical Education uses YRBS data to inform state directors and in resolutions and policy statements.
* Family physicians, pediatricians, psychologists, and counselors use YRBS data to provide up-to-date information on behavioral risks among the adolescents they treat.
* Institutes of higher education 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 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 use YRBS data to provide information that will bolster and provide a focus for their lesson plans and educational materials.
* Parents use YRBS data to better understand the behavioral risks facing their children.

State education agencies (SEA) and local education agencies (LEA) 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 (Foti, Balaji, Shanklin, 2011). For example, the San Diego Unified School District used YRBS data to identify symptoms of an unhealthy school environment, including feeling unsafe at school or on the way to or from school, feeling sad or hopeless, considering or planning suicide, or having attempted suicide among all students, including sexual minority students. This spurred development of a district-wide Bullying, Harassment, and Intimidation Prohibition Policy that complies with federal and state laws and extensively delineates the types of protections addressed. In Kentucky, after reviewing YRBS data on fruit and vegetable consumption, physical activity, and obesity, the Coordinated School Health Program and Kentucky Action for Healthy Kids collaborated to create Students Taking Charge projects in high schools around the state. This initiative trains high school students to assess their school’s nutritional and physical activity environment, develop an action plan to improve it, implement their plan using mini-grants, and learn how to advocate for healthier school environments and policies. In Philadelphia, YRBS data on sexual behaviors were cited along with data on the prevalence of chlamydia and gonorrhea to help persuade the Philadelphia Department of Health and the School District of Philadelphia to set up an in-school STI screening program to educate students about STIs and identify and treat chlamydia and gonorrhea among high school students.

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

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

Because not all students are attending school in-person during the COVID-19 pandemic, the ABES will use a fully web-based method of data collection during the spring of 2021 in which students complete questionnaires outside of the school setting using any internet-connected device. In the fall of 2021, YRBS data will be collected on optically scannable questionnaire booklets as in all previous YRBS cycles, but to prepare for the use of a tablet-based methodology for the 2023 YRBS administration, additional classes will be surveyed using tablets. 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. The use of booklets for data collection is not compliant with the Government Paperwork Elimination Act. However, scannable questionnaire booklets are generally regarded as a minimally burdensome method for a school-based data collection. In 2008, CDC conducted a methodological study 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 indicated that online and paper-and-pencil surveys generally yield similar risk behavior prevalence estimates (Eaton et al, 2010a), but that privacy concerns existed for the web-based administration. To avail itself of more modern data collection methodologies balanced against privacy concerns, the 2021 YRBS will test the use of a tablet-based administration and the 2023 YRBS will transition to a tablet-based administration to capitalize on the efficiency of an electronic data collection while also mitigating privacy concerns of students and teachers seeing others’ screens.

## **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. In 2019, only 35 states implemented their own YRBS and obtained data representative of students in their state. In addition, 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 OF COLLECTING THE INFORMATION LESS FREQUENTLY**

Data are 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 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. Because the 2021 YRBS must be postponed to the fall of 2021 due to the COVID-19 pandemic, it is necessary to conduct the ABES in the spring of 2021 to obtain data on the health-related behaviors and experiences of high school students during the pandemic.

## **A.7. SPECIAL CIRCUMSTANCES RELATING TO THE GUIDELINE OF 5 CFR 1320.5**

The request fully complies with the regulation 5 CFR 1320.5. 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**

CDC published a *Federal Register* notice of the proposed data collection on February 28, 2020, Vol. 85, No. 40, pg. 11993 (60-Day Federal Register Notice, **Attachment** **B**). CDC received five comments. One commenter was opposed to doing the survey because it has been done since 1991, but because no contact information was submitted, no CDC response was sent. The second commenter was concerned that data from the survey is not always disaggregated by race in reporting. CDC sent a response. The third, fourth, and fifth comments were in support of continuing the survey. No changes were made to the supporting statement or data collection instruments (**Attachment** **C**).

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.

Six 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. Phase six involved an external peer review prompted by the Notice of Action for the previous OMB approval for the national YRBS (OMB No. 0920-0493, expiration, 11/30/2019). OMB requested that the YRBS undergo an external peer review prior to submitting the next package for approval. To ensure continuous scientific rigor of the sample design, best practices for recruitment, and efficient strategies to maximize participation rates, a panel of four experts was convened in April 2018.

Phase One: 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:

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| --- | --- | --- |
| Robert Burton, Ph.D. (retired)  National Center for Education Statistics  Jerry Coffey, Ph.D. (retired)  Office of Management and Budget  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)  Morris Hansen, Ph.D. (deceased)  Westat, Inc. |  | Leslie Kish, Ph.D. (deceased)  Institute for Social Research  University of Michigan  Jim Scanlon  ASPE  200 Independence Avenue, SW  Washington, DC 20201  Phone: (202) 690-7100  Email: [jim.scanlon@hhs.gov](mailto:jim.scanlon@hhs.gov)  Ron Wilson, M.S. (retired)  National Center for Health Statistics  Seymour Sudman, Ph.D. (deceased)  Department of Statistics  University of Illinois at Champaign-Urbana |

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.

Phase Two: 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 **Attachment E** for a list of Expert Reviewers for the 1989 Consultations.

The representative from each of these six Public Health Service 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.

Phase Three: 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.

Phase Four: 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, 2006, 2008, 2010, 2012, 2014, 2016, and 2018, a similar consultation process was conducted to create the 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, and 2019 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.

Phase Five: 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:

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| 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)  e-mail: Deanna.M.Hoelscher@uth.tmc.edu  Philip Huang, MD, MPH  Medical Director  Chronic Disease Prevention  Texas Department of State Health Services  1100 W. 49th Street  Austin, TX 78756  e-mail: Philip.Huang@dshs.state.tx.us |  | Donna Mazyck, RN, MS, NCSN  Maryland State Department of Education  Division of Student, Family and School Support  200 West Baltimore Street  Baltimore, MD 21201  e-mail: dmazyck@msde.state.md.us  Beth Pateman, Professor  Elementary Co-Director  Institute for Teacher Education  1776 University Ave.  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  e-mail: drphyllissimpson@yahoo.com  Bonita F. Stanton, MD  Professor and Chair, Dept. of Pediatrics  Wayne State University  Address: Children's Hospital of Michigan  3901 Beaubien Detroit MI 48201  e-mail: [BStanton@dmc.org](mailto:BStanton@dmc.org)  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? In the final report, the panel concluded the YRBS is an outstanding example of CDC’s surveillance efforts and an excellent fit for the agency. The collection of quality data across youth health-risk behaviors sets the YRBS apart from other categorical surveys. These data sets and the reports generated from them are widely regarded as among the richest sources of data available on adolescents, nationally and worldwide.

Phase Six: External Peer Review Panel

At the request of OMB, an additional External Review Panel was convened in April 2018. Four experts in survey methodology, school-based data collection, and health surveys commented on the YRBS methodology and offered recommendations for improvement. Specifically, the topics of discussion were frame development and sampling design, maximizing participation, transition to a mixed mode methodology and YRBS strategy to address emerging topics. The Panel report is provided in **Attachment F.** The Panel was composed of the following individuals:

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| Laura Clary, PhD  Faculty Research Associate,  Bloomberg School of Public Health  Johns Hopkins University  615 N Wolfe St  Baltimore, MD 21205  e-mail: lclary3@jhu.edu  Jennifer Parker, PhD  Director, Division of Research and Methodology  National Center for Health Statistics  3311 Toledo Road  Hyattsville, MD 20872  e-mail: jdp3@cdc.gov |  | Susan Queen, PhD  Director, Office of Planning, Budget, and Legislation  National Center for Health Statistics  3311 Toledo Road  Hyattsville, MD 20872  e-mail: sgq1@cdc.gov  Andy Zukerberg, MS  Chief, Cross Sectional Surveys Branch, Sample Surveys Division  National Center for Education Statistics  550 12th Street, SW Rm 4001  Washington, D.C. 20202  e-mail: Andrew.Zukerberg@ed.gov |

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

Schools will be given $250 in appreciation for their participation in the ABES and $500 for their participation in the YRBS. No payments will be offered or made to student respondents. OMB first suggested in 1999 that CDC offer tokens of appreciation to schools participating in the YRBS as a means of improving school response rates and, thereby, improving the generalizability of results. CDC adopted this procedure 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 tokens of appreciation to increase or at least maintain school participation rates. For the 2017 and 2019 YRBS, (OMB Number 0920-0493, expiration date 11/19), these tokens of appreciation helped maintain school participation rates despite the growing number of competing demands placed on schools, including standardized testing and changes to curriculum based on adoption of Common Core Standards.

## **A.10. PROTECTION OF THE PRIVACY AND CONFIDENTIALITY OF INFORMATION PROVIDED BY RESPONDENTS**

Activities do not involve the collection of individually identifiable information (IIF); therefore, the Privacy Act does not apply. Data collected from school administrators during recruitment is information available in the public domain and school administrators will not be providing personal information. For both the YRBS and ABES, teachers will be required to enter student names on a Data Collection Checklist (**Attachment G**) 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 securely stored in accordance with human subject protection best practices and later destroyed at the conclusion of the YRBS administration. The Data Collection Checklist is not forwarded to the CDC. For the ABES, the Data Collection Checklist remains at the school and is stored in accordance with school policy. At the start of the YRBS survey administration session, students will be reminded by the survey administrator (**Attachment H1**) that their responses are anonymous and that they are not to write their names on the survey booklets and that no identifiable information is collected in the tablet survey (**Attachment H2**). This information also is provided to students in a short video that they must watch before participating in the ABES (**Attachment H3**). At no point in time is there any way to connect students’ names to their 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 also will be promised to students and their parents on parental permission forms (**Attachments I1 and I2 for YRBS and Attachments I6 and I8 for ABES**).

Several actions will be taken to help ensure anonymity for both the ABES and YRBS. For the ABES, students will receive a randomly generated, randomly distributed 5-digit alphanumeric access ID in one of two ways. For students attending schools in-person at least part-time, teachers will distribute sign-in cards with student access IDs. For students attending school in an exclusively distance learning (EDL) environment, teachers will provide a classroom-level sign-in to all students in a selected class via the school’s established teacher-student communication channels. Upon sign in, all records are associated with a unique student-level ID in the backend database, but none of these student access IDs can be traced to any individual student.

For the YRBS, the survey will be administered in a classroom setting, with adequate space between respondents. No personal identifiers will appear on survey questionnaires. For the paper-and-pencil administration in 2021, each student will place the completed survey booklet in an envelope, seal the envelope, and submit it directly to the trained survey administrator. All sealed envelopes from a given class are then placed in a larger envelope that is labeled with a school identification number (for weighting purposes only). For the tablet-based administration, students will log into the survey application using a randomly-generated, randomly-distributed, 5-digit alphanumeric access ID.

For both the YRBS and ABES, the access IDs are connected in the backend database to a school identification number, for weighting purposes only. For all modes (paper-and-pencil, tablet, and web-based), 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, never transmitted to CDC.

## **A.11. INSTITUTIONAL REVIEW BOARD (IRB) AND JUSTIFICATION FOR SENSITIVE QUESTIONS**

YRBS data collection has received IRB approval from the CDC Human Research Protection Office (protocol #1969, expiration: 11/10/2020). The current YRBS IRB Approval Letter is in **Attachment** **J**. ABES data collection has been submitted for IRB approval.

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 30 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. 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 and ABES will be obtained. **Attachment** **I** contains the parental permission forms in English (**Attachment** **I1 for YRBS and I6 for ABES**) and Spanish (**Attachment** **I2 for YRBS and I7 for ABES**), the distribution script (**Attachment I3 for YRBS, I8 for ABES EDL schools, and I9 for ABES in-person schools**) to be read by the teacher when passing out the permission form, and the parental permission form reminder notice in English (**Attachment** **I4 for YRBS, I10 for ABES EDL schools, and I11 for ABES in-person schools**) and Spanish (**Attachment** **I5 for YRBS, I12 for ABES EDL schools, and I13 for ABES in-person schools**), 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 10 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**

The estimated burden for this information collection is based on nearly 30 years of experience conducting the YRBS. The planned information collection involves administration of the YRBS questionnaire (**Attachment K1**) or the ABES questionnaire (**Attachment K2**) to independent samples of students in spring 2021 (ABES), fall 2021 (YRBS) and spring 2023 (YRBS). To ensure that burden on schools and students is kept to a minimum, schools that participate in ABES in spring 2021 that also appear in the national YRBS sample for fall 2021 will not be approached to participate in YRBS. They will be considered as refusals.

Respondents for both the YRBS and ABES include state-level, district-level, and school-level administrators who provide information requested in the Recruitment Script for the YRBS (**Attachments L1-L3**) and ABES (**Attachments L4-L6**), teachers who complete the Data Collection Checklist (**Attachment G**), and students who receive instructions for and complete the YRBS or ABES questionnaire (**Attachments K1-K2**). More information about the Data Collection Checklist is detailed in section B.2.

For the YRBS and ABES, both of which will be conducted among nationally representative samples of students attending public and private schools in grades 9-12, the cooperation of educational administrators at the state, school district, and school levels will be sought in recruitment of sampled schools. For the ABES, the number of states, school districts, and schools whose administrators will be contacted is estimated at 30, 230, and 340, respectively. For the YRBS cycle, these numbers are estimated at 25, 120, and 200, respectively. The combined total number of respondents for the 2021 YRBS and the 2023 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=1,920) who complete the Data Collection Checklist for the YRBS, and students (n=35,037) who receive instructions for and complete the YRBS questionnaire. For the ABES, in addition to the state, district, and school administrators who provide information in the Recruitment Scripts, respondents include teachers (n = 600) who complete the Data Collection Checklist for the ABES and students (n = 15,460) who receive instructions for and complete the ABES questionnaires. These totals for the one-year ABES and for the YRBS annualized over the three-year YRBS study period are provided in Table A-12.a.

There are no costs to respondents except their time. The combined total burden hours estimated for the ABES and the 2021 and 2023 YRBS and associated support activities are 21,097. The total estimated annual burden hours for the ABES is 12,045. The total estimated burden hours for the YRBS annualized over the three-year study period is 9,052 (Table A-12.a). It is important to note that this is the maximum number of burden hours. With the inclusion of the web-based administration for ABES and the tablet- based administrations for YRBS in 2021 and 2023, it is likely that the amount of time needed for students to complete the questionnaire will decrease. It is not known at this time, however, the extent to which this might decrease.

**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 Adolescent Behaviors and Experiences Survey (Att L4) | 30 | 1 | 30/60 | 15 |
| District Administrators | District-level Recruitment Script for the Adolescent Behaviors and Experiences Survey (Att L5) | 230 | 1 | 30/60 | 115 |
| School Administrators | School-level Recruitment Script for the Adolescent Behaviors and Experiences Survey (Att L6) | 340 | 1 | 30/60 | 170 |
| Teachers | Data Collection Checklist for the Adolescent Behaviors and Experiences Survey (Att G) | 600 | 1 | 15/60 | 150 |
| Students | Adolescent Behaviors and Experiences Survey (Att K2) | 15,460 | 1 | 45/60 | 11,595 |
| **Total Burden for ABES** |  |  |  |  | 12,045 |
| State Administrators | State-level Recruitment Script for the Youth Risk Behavior Survey  (Att L1) | 17 | 1 | 30/60 | 9 |
| District Administrators | District-level Recruitment Script for the Youth Risk Behavior Survey  (Att L2) | 80 | 1 | 30/60 | 40 |
| School Administrators | School-level Recruitment Script for the Youth Risk Behavior Survey  (Att\_L3) | 133 | 1 | 30/60 | 67 |
| Teachers | Data Collection Checklist for the Youth Risk Behavior Survey  (Att\_G) | 640 | 1 | 15/60 | 160 |
| Students | Youth Risk Behavior Survey  (Att K1) | 11,701 | 1 | 45/60 | 8,776 |
| **Total Burden for YRBS** |  |  |  |  | 9,052 |

**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 ABES and 2021 and 2023 YRBS as seen in Table A-12.a. Table A-12.b illustrates the total calculation of burden costs for the ABES and 2021 and 2023 YRBS. In each category, the estimated respondent burden hours have been multiplied by an estimated average hourly salary for persons in that category. The Bureau of Labor Statistics is the source for hourly wages (<http://www.bls.gov/bls/blswage.htm>). The estimated burden cost 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 $4.25/hour (<http://www.dol.gov/dol/topic/wages/minimumwage.htm>). The total estimated respondent burden cost for conducting the ABES is $67,988 and the combined cost for the 2021 and 2023 YRBS annualized over the three-year study period is $47,654.

**Table A-12.b. Annualized Estimated Burden Costs**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Type of Respondent | Form Name | No. of Respondents | No. of Responses per Respondent | Average Burden Per Response (In Hours) | Total Burden Hours | Hourly Wage Rate | Total Respondent Costs |
| State Administrators | State-level Recruitment Script for the Adolescent Behaviors and Experiences Survey | 30 | 1 | 30/60 | 15 | $43.06 | $646 |
| District Administrators | District-level Recruitment Script for the Adolescent Behaviors and Experiences Survey | 230 | 1 | 30/60 | 115 | $47.94 | $5,513 |
| School Administrators | School-level Recruitment Script for the Adolescent Behaviors and Experiences Survey | 340 | 1 | 30/60 | 170 | $46.27 | $7,865 |
| Teachers | Data Collection Checklist for the Adolescent Behaviors and Experiences Survey | 600 | 1 | 15/60 | 150 | $31.23 | $4,685 |
| Students | Adolescent Behaviors and Experiences Survey | 15,460 | 1 | 45/60 | 11,595 | $4.25 | $49,279 |
| **Total** |  |  |  |  |  |  | $67,988 |
| Type of Respondent | Form Name | No. of Respondents | No. of Responses per Respondent | Average Burden Per Response (In Hours) | Total Burden Hours | Hourly Wage Rate | Total Respondent Costs |
| State Administrators | State-level Recruitment Script for the Youth Risk Behavior Survey | 17 | 1 | 30/60 | 9 | $43.06 | $366 |
| District Administrators | District-level Recruitment Script for the Youth Risk Behavior Survey | 80 | 1 | 30/60 | 40 | $47.94 | $1,918 |
| School Administrators | School-level Recruitment Script for the Youth Risk Behavior Survey | 133 | 1 | 30/60 | 67 | $46.27 | $3,077 |
| Teachers | Data Collection Checklist for the Youth Risk Behavior Survey | 640 | 1 | 15/60 | 160 | $31.23 | $4,997 |
| Students | Youth Risk Behavior Survey | 11,701 | 1 | 45/60 | 8,776 | $4.25 | $37,297 |
| **Total** |  |  |  |  |  |  | **$47,654** |

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

There will be no respondent capital or maintenance costs.

## **A.14. ANNUALIZED COST TO THE GOVERNMENT**

The study is funded under Contract No. **200-2018-F-00039**. The total contract cost for conducting the ABES and 2021 and 2023 YRBS is $5,281,395 over a 44-month period. Thus, the annualized contract cost is approximately $1,440,380. 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 one CDC employee will be involved for approximately 10% of her time (for federal personnel 100% time=2080 hours annually) at a salary of $68.67 per hour. The direct annual costs in CDC staff time will be approximately $14,283 annually.

The total cost for the study over a 44-month period, including the contract cost and federal government personnel cost is $5,333,766. The annualized cost to the government for the study will be $1,440,380 + $14,283 = $1,454,663.

**Table A-14. Estimated Annualized Study Hours and Cost**

|  |  |
| --- | --- |
| **Activity** | **Total Respondent Costs** |
| *Contract Costs* |  |
| Design and plan | $ 147,735 |
| Programming and developing | $ 129,447 |
| Recruitment and preparation | $ 165,791 |
| Printing and distribution | $ 39,538 |
| Recruiting and training | $ 110,737 |
| Collection of data | $ 644,325 |
| Processing, cleaning, weighting and developing data files | $ 139,083 |
| Dissemination and reporting of results | $ 63,724 |
| **Subtotal** | $ 1,440,380 |
| *Federal Employee Time Cost* |  |
| 10% time for contract officer technical representative | $ 14,283 |
| **Average Annualized Cost** | $ 1,454,663 |

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

The proposed study is a reinstatement of the YRBS 2019 study, with changes. CDC seeks to reinstate the information collection for a period of three years in order to conduct the ABES in spring 2021 and the YRBS in fall 2021 and spring 2023. Minor changes incorporated into this reinstatement request include: an updated title for the information collection to accurately reflect the years in which the YRBS will be conducted, a slightly modified YRBS questionnaire (**Attachment K1**), and a transition to a tablet-based methodology in 2023 that includes a test of this methodology in 2021. The 2021 YRBS questionnaire (**Attachment K1**) was created by modifying the 2019 YRBS questionnaire. This reinstatement with change also adds the Adolescent Behaviors and Experiences Survey (ABES), which will use a slightly modified Youth Risk Behavior Survey questionnaire (**Attachment K2**) to collect data from high school students during the COVID-19 pandemic using web-based data collection.

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

**Tabulation Plans**

Data from both the ABES and YRBS will be tabulated in ways that will address the principal research purposes outlined in Sections A.1 and 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 and describe their experiences during the COVID-19 pandemic*--Descriptive statistics (percentages and confidence intervals) will be calculated to address this objective.

2. *Assess the degree to which health-risk behaviors and experiences vary 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 experiences 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 **Attachment M**.

**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. Similar publications and presentations are planned for the ABES results.

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 its flagship publication, the Morbidity and Mortality Weekly Report (MMWR).

Awareness of the most common risk behaviors among high school students was promoted among the thousands of individuals who read articles based on the 2017 YRBS data press release in June 2018. The press release yielded impressive coverage including 197 unique stories and an additional 93 stories via syndication. The potential audience reach for this media coverage totaled 952,330,809 including 358 million from syndication of via the Associated Press, CNN, National Public Radio, Washington Post, ABC News and others. The overall reach of the 2017 YRBS release measured by #CDCYRBS and #YRBS resulted in 10.5 million impressions, 211 unique users and 390 mentions.

YRBS results are also made available via the Internet on a public-facing website ([www.cdc.gov/yrbs](http://www.cdc.gov/yrbs)). The website includes the following materials: an overview of the YRBS, 14 fact sheets, tables that compare state and national results and district and national results, and selected YRBS publications.  The YRBS web page received 809,203 views during the year following the data release.  The website also houses Youth Online, an interactive web database that provides YRBS results.  During the year following the release of the 2017 YRBS data, there were 875,300 views of Youth Online at <https://nccd.cdc.gov/youthonline/App/Default.aspx>

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; the National School Boards Association, and the Society for Adolescent Health and Medicine.

**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. Ideally, data collection must begin in the first month of the relevant semester of school (i.e., January 2021 for ABES and 2023 YRBS, August for 2021 YRBS). The end date for data collection is constrained by the dates on which schools close for the relevant semester. In addition, given that the final months of school are often extremely busy (e.g., finals, field trips, graduation, early release for 12th graders) , it is highly desirable to complete spring data collection one to two months before schools close for the summer; i.e., by the end of April. Similarly, given that the end of the fall semester is busy with finals and holiday breaks, it is desirable to complete fall data collection by mid-November.

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

|  |  |
| --- | --- |
| **Activity** | **Time Period** |
| Recruit and schedule schools | 1 to 3 months after OMB clearance |
| Program web-based questionnaire | 1 to 2 months after OMB clearance |
| Collect data | 2 to 5 months after OMB clearance |
| Process data | 6 to 7 months after OMB clearance |
| Weight/clean data | 7 to 9 months after OMB clearance |
| Produce data file with documentation | 10 months after OMB clearance |
| Analyze data | 11 to 12 months after OMB clearance |
| Publish results | 16 to 18 months after OMB clearance |

ABES data collection is currently scheduled to occur during January through April 2021. The time schedule for the fall 2021 YRBS and 2023 YRBS data collection will be analogous to that of the ABES data collection. Results from the 2021 and 2023 YRBS will be published in late 2022 and summer 2024, respectively, initially in the *MMWR*, and subsequently in other publications.

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

The display of the OMB expiration date is not inappropriate.

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

There are no exceptions to the certification.

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