SUPPORTING STATEMENT

ICARIS-2 Phase-2
(SECOND INJURY CONTROL and RISK SURVEY, Phase-2)

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Supporting Statement
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A.   JUSTIFICATION

A1.   Circumstances Making the Collection of Information Necessary

Injuries are a major cause of premature death and disability with associated lifetime economic costs, including medical costs and productivity losses for all injuries occurring in 2000 at an estimated $406 billion.[1]   Although health objectives for the year 2010 call for reducing this toll, many injury objectives lack surveillance systems to monitor progress. Methods for collecting information on injury risk factors are also needed to measure program effectiveness at the state and local levels where the availability of injury data is limited.

One way to measure an injury control program's effectiveness is to monitor reductions in fatal and nonfatal injuries and risk factors. Unfortunately, national, state, and local data systems to monitor nonfatal injuries are almost nonexistent. In addition, although death certificates provide data on fatal injuries, they do not include risk factor information (e.g., was a helmet worn in a fatal bike crash, was a smoke detector present at a fatal fire?). These risk factors, which are early links in the causal chain for injuries, are what injury control programs often target for change. If successfully modified, subsequent links in the chain can be altered or eliminated and injuries prevented. Finally, there is typically a 2 to 3 year lag in the availability of national death data.

Evaluation of chronic disease (e.g., cancer) control efforts presents a similar problem. A successful lung cancer prevention program may have to wait many years before a statistically significant decrease in cancer deaths or incidence could be recorded. Thus, if a short term view were adopted, even a highly successful program might appear ineffective. However, since it is known that smoking is a risk factor for lung cancer, one intermediate measure of program success could be the prevalence of the risk factor, i.e., cigarette smoking. Indeed, CDC uses a state-based telephone survey (the Behavioral Risk Factor Surveillance System - BRFSS[2]) to gather data on risk factors for a broad range of diseases and conditions in the population. This paradigm can be useful for injury control programs -- measuring prevalence of risk factors as an indicator of program effectiveness. (Note: BRFSS is a long-standing data collection system sponsored and conducted by the states, with CDC technical assistance. The system is state-owned, differs from state to state, and thus has no OMB clearance number.)

Existing national surveillance systems (e.g., National Crime Victimization Survey[3]) currently collect only limited injury risk factor data. (The OMB clearance number for the National Crime Victimization Survey is 1121-0111, and the expiration date is 10/31/2003.) These systems are primarily focused on and intended for purposes other than injury prevention. Because these systems must cover large numbers of mandated topics, time constraints preclude adequate coverage of the gamut of injury risk factors. Moreover, these

systems have varying methods, definitions, and timeliness of data availability, and gaps exist in addressing data needs for tracking the year 2010 injury objectives. Thus, some alternative is needed to monitor injury risk factors in the population to help evaluate programs and to focus policy.

The magnitude of the injury problem is such that a dedicated means is needed for rapidly collecting national data about the prevalence of risk factors for injury and defining which population groups are most affected. Toward this end, CDC's National Center for Injury Prevention and Control (NCIPC) has initiated a number of activities which are described below.

The first Injury Control and Risk Survey (ICARIS, OMB No. 0920-0342, Exp. Date 01/31/1995), conducted in 1994, was a random digit dial telephone survey that collected injury risk factor and demographic data on 5,238 English- and Spanish-speaking adults ($\geq$18 yrs-old) in the United States. Proxy data were collected on 3,541 children <15 years old. Topics included dog bites, bicycle helmet use, intruder-related firearm retrievals, pool fencing, injury rates from selected types of exercise, residential smoke detector usage and fire escape practices, attitudes towards violence, suicidal ideation and behavior, and compliance with pediatric injury prevention counseling.

The second Injury Control and Risk Survey (ICARIS-2 Phase-1, OMB No. 0920-0513, exp. date 03/31/2003) was initiated in July of 2001 and data collection was completed in February 2003. Over five years had elapsed since the first ICARIS survey, and a repeat survey was needed to monitor the injury risk factor status of the nation at the start of the millennium. Further, by using data collected in ICARIS as a baseline, ICARIS-2 could be used to measure changes and gauge the impact of injury prevention policies, while also serving as a readily available data source for measuring several of the *Healthy People 2010* injury prevention objectives. Using methodology similar to that used in the original 1994 survey, ICARIS-2 Phase-1 collected injury risk factor and demographic data on 9,684 English- and Spanish-speaking adults ($\geq$ 18 years of age) in the United States. Proxy data were collected on 3,091 children < 15 years of age. Many of the same topics from the 1994 survey were coved in this newer survey (see above). In addition, data regarding sexual-, interpersonal- and family- violence were collected as well as respondent views regarding the appropriateness and impact of being asked sensitive (violence-related) questions on a survey of this kind. In response to the September 11, 2001, terrorist attacks on the World Trade Center and the Pentagon, a module on post-traumatic stress disorder was added to the survey in January 2002. Analyses of the data collected under ICARIS-2 Phase-1 are currently underway.

The scope of the ICARIS-2 Phase-1 survey was limited by the reporting burden (21.5 minutes on average to complete an interview) and available funding. The proposed ICARIS-2 Phase-2 data collection, which will also be conducted as a national telephone survey, will supplement ICARIS-2 Phase-1 and will employ methodology similar to that used in ICARIS and ICARIS-2 Phase-1. Data will be collected on new aspects of topics

previously covered (such as firearm ownership and access, and suicide) and new questions will be introduced in additional areas of interest that were not previously addressed, such as older adult mobility, the supervision of children under the age of 11 years, injury and disability, the incidence of traumatic brain injury, willingness to pay to prevent child maltreatment, and perpetration of violence.

The proposed survey will be administered to adult respondents in 4,000 randomly selected households. The total estimated reporting burden for ICARIS-2 Phase-2 is 1,240 hours for two years. The only cost to the respondents will be their time.

The following authorizing legislation permits this data collection:

1. **Section 301 of the Public Health Service Act (42 USC 241)** (Attachment 1) authorizes CDC to conduct research relating to the prevention and control of disease.

2. **Section 391 of the Public Health Service Act (42 USC 280b)** (Attachment 1) authorizes CDC to conduct research relating to the causes and prevention of injuries and assist the States in activities for the prevention of injuries. This survey is intended to define the prevalence of risk factors for injury in the U.S. as a whole and in specific subgroups. These data will help to identify populations with the greatest need for interventions to reduce risk factors and specific behaviors to be targeted by intervention programs.

A2. Purpose and Use of the Information Collected

Results from the original 1994 ICARIS survey were published in 17 reports[4-20] in 9 scientific journals from 1994-2000 and have been used by public health professionals both within and outside of government to identify injury prevention priorities and to focus the development of injury prevention programs.

We anticipate similar uses of data collected under ICARIS-2 Phase-2. The proposed data collection will allow NCIPC to more fully monitor injury risk factors and selected year *Healthy People 2010* injury objectives and to evaluate the effectiveness of ongoing injury prevention programs. The new questions concerning older adult mobility, child supervision, traumatic brain injury, and willingness to pay to prevent child maltreatment will provide important baseline information that will help NCIPC set priorities for and allocate resources to its future research and outreach activities.

The proposed data collection will cover demographics, knowledge and behavior related to injuries and injury risk factors. Specifically, NCIPC will use the resulting data to:

- Measure the prevalence of risk factors for injury;
- Define which population groups are most affected;

- Provide a point-in-time measure of several *Healthy People 2010* injury objectives;

- Track progress toward achieving the *Healthy People 2010* injury objectives by comparing with data from the original ICARIS survey;

- Monitor the impact of interventions and help direct interventions and resources toward the highest risk subgroups of the population.

The proposed analysis plan is described in Section A16.

A3. Use of Information Technology and Burden Reduction
The telephone survey (Attachment 2) will employ Computer Assisted Telephone Interviewing (CATI) to improve the ease and efficiency of administration. Responses are recorded directly onto electronic media obviating the need for keying responses from paper forms and reducing data entry errors. The questionnaire contains many skip patterns to avoid asking the respondent irrelevant questions, thus shortening interview time. CATI also reduces data entry errors by preventing "out of range" or miscoded responses from being entered. Electronic respondent reporting is not a relevant issue in this telephone survey.

A4. Efforts to Identify Duplication and Use of Similar Information
No similar national telephone survey of this scope existed before the original ICARIS survey was done in 1994. Subsequently, as the results from that survey have been published[4-20], there have been no reports of any other survey of comparable scope. In addition, our ongoing discussions with injury prevention researchers and practitioners throughout the country--including representatives of the CDC-funded Injury Control and Research Centers, the State and Territorial Injury Prevention Directors' Association, states with injury capacity building grants, the U.S. Consumer Product Safety Commission, and the National Highway Traffic Safety Administration-- have identified no plans for a national survey of comparable scope.

We have identified a few national surveys that have limited coverage of injury issues, e.g., the National Health Interview Survey (NHIS, OMB no.0920-0214, expiration date 12/2007). In addition, we have identified some surveys on specific injury issues in small geographic areas, e.g., a few states have added injury modules to their BRFSS core questionnaire. We have intentionally included some questions in this survey from the original ICARIS survey and from these other surveys (Attachment 2) to provide points of calibration for this survey and to obtain national estimates from questions that have only been previously used in a limited geographic area.

Questions from other surveys are put in a new context by asking them with other questions with which they have not been previously linked. By covering a wide range of injury risk factors simultaneously the survey will better characterize the populations in need of interventions and which risk factors to focus on for which groups.

For questions that have been used in small geographic areas, national data on the prevalence of the risk factors are needed particularly for monitoring the year 2010 objectives. Comparison of the estimated prevalence of a risk factor from this survey with estimates from other national surveys (e.g., NHIS) will allow us to gauge if this survey is reasonably representative and producing numbers that one might expect.

No survey like the ICARIS surveys currently exists. NHIS is national in coverage but includes only a small number of the questions. Thus, it is not possible to use a preexisting data source to learn about the interrelationships of injury risk factors or to cover the gamut of risk factors being addressed. No similar information is available that can be used or modified for this purpose.

A5. Impact on Small Businesses or Other Small Entities
No small businesses will be involved in this study.

A6. Consequences of Collecting the Information Less Frequently
This survey will be conducted only one time. There are no legal obstacles to reduce the burden.

A potential consequence of not conducting the ICARIS-2 Phase 2 survey would be to expend scarce resources on ineffective prevention programs because of inadequate data for program evaluation. Another important negative consequence would be continued high morbidity and mortality from injury because of inaction resulting from inadequate knowledge about preventable risk factors.

A7. Special Circumstances Relating to the Guidelines of 5 CFR 1320.5.
This data collection complies fully with the guidelines in 5 CFR 1320.5.

A8. Comments in response to the Federal Register Notice and Efforts to Consult Outside Agency
A. A 60-Day Federal Register Notice (FRN) was published in the *Federal Register* on November 25, 2005, Vol. 70, No. 226, pp. 71162-71163. The 60-day FRN was published to allow for public comments and/or recommendations. A copy of the announcement is included as Attachment 3. There were no public comments.

B. From January-March 2003, the survey instrument was reviewed by the following individuals:

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A9.   Explanation of any Payment or Gift to Respondents

For this survey, we will use the same incentive approach for Phase-2 as was used for Phase-1 of the ICARIS-2 survey. Each respondent will be offered a $5 phone card for their time spent participating in the survey. The phone card is more protective of the respondent's privacy than sending $5.00, which would come in the form of a check or money order and require the respondent's name. Because some respondents may prefer to consider their participation as an in-kind contribution to public health promotion and injury prevention, each respondent will be offered the option of either (a) receiving the $5 phone card or (b) approving donation of the $5 as a contribution to the United Way. A contribution to the United Way was also offered in Phase-1 of the survey.

If a respondent selects the phone card option, the interviewer will transfer the respondent to an operator who will take the mailing address to arrange for mailing of the phone card. Respondents will be told that they can use a pseudonym, initials, or that the card can be mailed to "Survey Respondent" or an individual of their choosing at any address they

provide. Based on data from ICARIS-2 Phase-1, we expect less than 30% of respondents to select the phone card option. Once the phone card is mailed (within one business day of choosing the option), all address and identifying information will be deleted from the database.

If a respondent who initially selects the phone card option changes his/her mind and does not wish to give us an address to which to mail the phone card, we will offer to contribute five dollars to the United Way.

A10. Assurance of Confidentiality Provided to Respondents
The CDC Privacy Act Officer has reviewed this OMB application and has determined that the Privacy Act is not applicable. Four thousand adult respondents will be randomly selected and asked to answer questions in a Computer Assisted Telephone Interview (CATI). The CATI telephone survey samples will be drawn using random digit dialing (RDD). While sensitive information and limited demographics are being collected, the respondent will provide only the age and gender of children living in the household. Consent is obtained over the telephone and the respondent can discontinue the interview at any point in the survey. No complete respondent names, telephone numbers, or other identifying information on respondents will appear on data forms or on the final computerized database. No assurance of confidentiality is given to the respondent.

Because it is not unusual for parents of children to be interrupted, we anticipate that in some instances we will need to reschedule a time to call back to complete the interview. In these instances, the CATI system will retain, under password protection, the first name, initial, or nickname of the family member about whom questions are being asked, until the interview is finally completed. Similarly, the first name, initials or a nickname for the respondent will be retained if the primary respondent is not home at the time of the initial contact with the household. However, once the individual interview is completed the partially identifying information on the primary respondent and other household members will be deleted.

The contractor's (Battelle's) internal procedures require that all identifiers be removed once an interview complete. Therefore, the final data file created at the conclusion of data collection will contain neither telephone numbers nor names. Telephone numbers will be deleted from all databases once a final disposition (interviewed/refused) of an eligible respondent is obtained. No data that could be used to identify respondents will be entered into the SAS database used for analysis nor in any ancillary database or file. Linking responses to individuals will not be possible; therefore, the project does not meet the definition of a Privacy Act system of records. The finished survey file will retain broad geographic information associated with the area code/telephone exchange on the sampling database. These data will provide information on region which could be utilized to develop regional or state estimates. This geographic information will be at such a general level (state or Census region) as to make it impossible to identify an individual respondent.

No paper copies of individual survey responses are planned. The Battelle telephone interviewing center computer system is an autonomous network that is protected by a second firewall, inside Battelle's wide area network. The CATI server cannot be accessed from the local network in the Baltimore office, nor can it be accessed by dial-up connection. Data files are password protected and are accessible only to study personnel. Battelle staff receive annual training in the protection of human research subjects and the need to safeguard respondent privacy, as well as procedures for maintaining data in a secure manner.

The CDC IRB approval memo is in Attachment 4.

A11. Justification for Sensitive Questions

The questionnaire contains some new questions that are sensitive (e.g., suicide, perpetration of violence, willingness to pay to prevent child maltreatment, and potentially sensitive demographic data on income and race/ethnicity). No social security numbers or other individual identifier data will be collected. Respondents will be told that they can refuse to answer any question(s) they do not wish to answer, and that they can withdraw or terminate the interview at any time.

Demographic data   Information on education (DH3-4), race and ethnicity (DH6-7), and income (INC1-4) is needed because there may be important differences in the prevalence of injury risks and/or injury prevention measures in populations that have different educational levels or income levels, or in populations of different racial or ethnic composition.

Suicide (SX1-SX8) A history of attempted suicide is a significant risk factor for subsequent completed suicide, and the number of previous suicide attempts is related to subsequent suicide outcomes and other health problems. Social support has been shown to be a protective factor while its absence (social isolation) is an established risk factor for suicidal behavior.

Perpetration (PR1-PR12): To increase efforts in primary prevention, the Division of Violence Prevention's (DVP) research agenda calls for more research on perpetrators. A first step is to establish the prevalence and distribution of different types of perpetration. Establishing perpetration of different types of violence in the same population can show us how and among whom they overlap. A better understanding of perpetration can help in the development of programs to prevent violence. Participants are told at the start of the module that there are several reasons why somebody would hit someone and these include self-defense. They are then assured that we are not going to ask them why they did it, only whether it happened. We also remind participants that their answers will be kept in a secure manner. The questions about striking a child do not assess the severity of the strike and may include corporal punishment. This question, as well as the follow-up question about contact with child protective service workers, will allow us to assess the

association between striking children and use of violence in other relationship types (i.e., strangers, intimates, acquaintances).

Child maltreatment victimization questions at the end of the Willingness to Pay Module (WP5a, b and c): Those who have experienced child maltreatment (CM) may respond differently to questions about willingness to pay (WTP) to prevent CM. These questions will allow us to assess lifetime prevalence of child maltreatment victimization and the duration of victimization. Statistical power permitting, we can use this information to stratify the WTP responses by CM experience. Also, some studies show that being the victim of child abuse may be a risk factor for numerous behavioral outcomes, including suicidal behavior and perpetration of violence. We can then use this information to describe or stratify the suicide and perpetration estimates by prior CM experience. The question is worded so that it includes CM at the hands of either parent or "someone who took care of you" so respondents will not feel that they are identifying a particular individual. All of the respondents are aged 18 years or older.

A12. Estimates of Annualized Burden Hours and Costs

The estimated number of respondents is 4,125 and the estimated total annual burden is 620 hours (Table A12-1). Each respondent who completes the survey will be interviewed only once. The burden estimate for a completed response is based on trials with 9 volunteer respondents. The hour burden is expected to vary somewhat for individual respondents because use of skip patterns will vary depending on respondents' history of exposure to different risk factors. The volunteer trials assumed different patterns of risk exposure including plausible scenarios in which volunteers were eligible to be asked minimal, typical, and maximum numbers of questions in the survey. The times for these trials ranged from 13 to 28 minutes (including the telephone screener), with an average time of 17 minutes. For respondents who complete both the screener and the full CATI, we assume an average burden time of 15 minutes because 1) the computer-assisted interviewing in the actual survey will be more efficient than the paper-and-pencil technique used in the trials, and 2) the scenarios that resulted in the longest interview times (e.g., multiple persons who have experienced traumatic brain injury in a household with several children under the age of 5 years) will be rare.

Table A12-1: Estimates of Annualized Burden Hours

Type of Respondents	Form Name	Number of Respondents [a]	Number of Responses per Respondent	Average Burden per Response (in hours)	Total Burden (in hours)
Ineligible households plus non-households [b]	Screening	500	1	1/60	8
Unknown or unverified eligibility [c]	Screening	900	1	0.5/60	8
Unable to reach respondent [d]	Screening	200	4	6/60	80
Eligible non-respondents [e]	Screening	450	1	1.5/60	11
Partial interviews	Screening and CATI	75	1	10/60	13
Completed interviews	Screening and CATI	2,000	1	15/60	500
Total		**4,125**			**620**

[a] Estimates based on contractor experience with the CDC national RDD telephone survey ACHES (Arthritis Conditions Health Effects Survey, OMB clearance number 0920-0673). Of the 23,570 telephone numbers initially purchased to obtain 4,000 completed interviews (2,000 interviews annually), we anticipate that approximately 49% of 23,570 or 11,550 of purchased numbers (5,775 numbers annually) will be screened out as ineligible (i.e., non-working, business numbers, or cell phones) using a pre-dialer (there is no burden to respondents associated with this screening technique). This leaves an estimated 23,570-11,550 or 12,020 numbers available for dialing (6,010 annually). Contact is expected to be made with an individual for 8,250 numbers over the course of the study (4,125 numbers annually). Note that should we fall short of our goal of 4,000 completed interviews over the 24 month study period, an additional pool of 12,021-8,250 or 3,771 numbers remain which can be dialed to obtain the desired number of respondents.

[b] Households with no English or Spanish speaking adult plus active but ineligible numbers where contact is made with a human being (i.e., businesses and other non-residential numbers, institutional quarters). Excludes fax, modem, blocked, pager, and nonworking numbers. Assumes contact burden of 1 minute or less.

[c] Household or number of unknown eligibility. Assumes contact time of 30 seconds or less.

[d] Households in which an eligible respondent is identified, but cannot be interviewed after multiple attempts (up to 8 attempts, assumes an average of 4 for computation of response burden on other household members).

[e] Individuals who were determined to be eligible, but declined to participate in the CATI survey.

The only cost to respondents is the value of their time. The estimated annual cost to respondents is approximately $6,900.00 (Table A12-2).

Table A12-2: Estimates of Annualized Cost to Respondents

Type of Respondents	Form Name	Number of Respondents	Number of Responses per Respondent	Average Burden per Response (in hours)	2005 Median Hourly Wage [1]	Total Burden (in hours)
Ineligible households plus non-households	Screening	500	1	1/60	$11.19	$93
Unknown or unverified eligibility	Screening	900	1	0.5/60	$11.19	$84
Unable to reach respondent	Screening	200	4	6/60	$11.19	$895
Eligible non-respondents	Screening	450	1	1.5/60	$11.19	$126
Partial interviews	Screening and CATI	75	1	10/60	$11.19	$140
Completed interviews	Screening and CATI	2,000	1	15/60	$11.19	$5,595
Total		**4,125**				**$6,933**

[1] Personal communication with Howard V. Hayghe, Supervisory Economist, Division of Labor Force Statistics, Bureau of Labor Statistics, 202-691-6830. Data are from the Current Population Survey. Estimated median hourly wage is for production workers and excludes salaried workers, those who are self employed and other workers.

A13. Estimate of Other Total Annual Cost Burden to Respondents or Recordkeepers
Respondents will incur no capital or maintenance costs.

A14. Annualized Cost to the Federal Government
The ICARIS-2 Phase-2 project will require approximately 24 months for survey preparation and design, data collection, data cleaning, and preliminary analysis of survey results. It is anticipated that additional analysis activities will extend beyond the requested approval period for data collection. The government costs are estimated by adding the contract costs for Battelle plus the personnel costs of federal staff involved in oversight, design, and analysis.

Table A14. Annualized Cost to the Federal Government

Contractor Tasks, Description and Estimated Costs		
Phase	**Tasks**	**Cost/Yr**
Preparation for the survey	Review, pilot test, and assist in development and revision of draft questionnaire; translate materials into Spanish; prepare draft materials and supporting documents for OMB clearance; propose national telephone sampling frame; determine call patterns, train interviewers, cognitive test, program, beta-test, and debug CATI instrument and tracking system for national survey.	$61,500
Conduct of the survey	Purchase an appropriately designed sample of telephone numbers; replicate sub-samples; conduct and supervise interviews; coordinate distribution of phone cards to respondents or contributions to designated organizations; perform data quality assurance and quality control – including provision of progress reports to CDC on a pre-determined schedule, and provide for data management and storage.	$153,000
Preparation/delivery of survey results	Data editing, cleaning, preparation of final data set for delivery to CDC and writing of final report.	$14,500
Subtotal - Contractor		*$229,000*

Government Personnel, Tasks, and Estimated Costs			
Position	**Tasks**	**Time**	**Cost/Yr**
Technical Monitor	oversight and supervision	20%	$26,880
Technical Monitor	oversight and supervision	20%	$15,320
Lead Statistician	survey design, sample selection, data analysis and consultation	25%	$21,840
Lead Computer Programmer	quality assurance, data structure issues, data analysis and consultation	15%	$13,105
Injury Prevention Research Scientist	develop, test, revise unintentional injury modules; analyze survey results	10%	$12,770
Injury Prevention Research Scientist	develop, test, revise violence prevention modules; analyze survey results	10%	$12,770
Injury Prevention Research Scientist	develop, test, revise disability prevention modules; analyze survey results	10%	$12,770
Subtotal – Government			*$115,455*
Total			*$344,455*

A15. Explanation of Program Changes or Adjustments

     The total burden hour has been reduced from 5897 hours for ICARIS-2 to 1240 hours over two years for ICARIS-2 Phase-2.

A16. Plans for Tabulation and Publication and Project Time Schedule

Table A16 -1. Project Time Schedule

Activity	Time Schedule
Initiate survey	1 month after OMB approval
Complete data collection	18-22 months after OMB approval
Complete cleaning and weighting of final data set	22-24 months after OMB approval
Analysis and preparation of draft reports	22-26 months after OMB approval
Submit first results for publication	28 months after OMB approval

Multiple publications from the survey are anticipated, as there were from the original ICARIS survey[4-20]. All data will be received, reviewed, analyzed, published, and disseminated by CDC. Data may also be used or analyzed by collaborators in public health and academia.

The analysis plan follows the three purposes of ICARIS-2 Phase-2 which are to: (1) obtain national data on the prevalence of risk factors for injury; (2) define the population groups most affected by injuries; and (3) make comparisons to data from the first ICARIS survey as a means of tracking progress toward achieving the year 2010 injury prevention objectives. The analysis plan has five parts:

1. describing the sample;

2. estimating the prevalence of injury risk factors by demographic characteristic;

3. comparing prevalence estimates to the 1994 ICARIS estimates;

4. estimating crude odds ratios for injury outcomes by risk factor (where outcome questions are available); and

5. building logistic regression models to characterize the association between risk factors, demographic characteristics, and outcome.

All analyses will be conducted using complex survey software that takes into account the complex nature of the survey design when computing variance estimates. In bivariable analyses (parts 2 and 4, above), the relative standard error (RSE) of the point estimate will be assessed. Estimates with RSEs ranging from 23-30% will be flagged as potentially unreliable while those with RSEs > 30% will be suppressed, or if presented, flagged as unstable. Where reasonable, categories will be collapsed to improve the stability of estimates. Estimates that

are unstable in bivariable analyses will not be further analyzed in multivariable analyses (part 5 above).

1. Describing the sample

This step in the analysis includes a comparison of the sample distribution to the distribution of the US population as a means of evaluating the representativeness of the sample. We will also calculate response rates for the overall sample and separately for the high and low minority strata. Response rates will be calculated via the RR4 formula of the American Association for Public Opinion Research.[21] Post-stratification adjustment will help us assess sample representativeness and potential bias.

2. Prevalence analysis of injury risk factors

This descriptive analysis will update the prevalence estimates obtained from the first ICARIS, which was completed in 1994. For each module, we will tabulate the prevalence of injury risk factors by demographic characteristic. NCIPC will use these data to identify potential interventions and target populations. For example, the prevalence of suicidal ideation and behavior will be examined by age, gender, and other socio-demographic characteristics to identify the groups at greatest risk. Temporal trends can be identified by comparing these patterns of associations with those from the first ICARIS survey. The new ICARIS data will also extend earlier reports by providing data on self-injurious behaviors by respondents who may not have intended to die, and by indicating which subgroups of the population are most at risk for these behaviors. The associations between injury risk and demographic characteristics will be tested using a χ^2 test statistic (Table A16-2).

Table A16-2: Prevalence of Injury Risk Factor X, by Level of Demographic Characteristic

Demographic Characteristic	Unweighted Sample Size	Weighted Prevalence (95% CI)
Gender		
Male		
Female		
Age group (in years)		
18-19		
20-29		
30-39		
Etc		
Educational level		
Eighth grade or less		
Some high school		
High school grad		
Etc.		
Region of country		
Northeast		
South		
Midwest		
West		
Below Poverty Threshold		
Yes		
No		
etc.		
Total		

Note: Statistically significant associations between injury risk and demographic variables will be flagged and footnoted (e.g., "P-value < 0.05, χ^2 test.").

3. Comparisons to the first ICARIS

These statistical comparisons will help identify changes in risk behaviors associated with injury and risk factor prevalence since 1994. We will compare prevalence estimates of injury risk factors using standard formulas[22]. In addition, rate ratios will be compared using methods described by Kish.[23]

4. Estimation of crude odds ratios

We will estimate crude odds ratios for injury risk behaviors and injury risk outcomes. Examples of the associations to be examined are shown in Tables A16-3 through A16-6:

Table A16-3: Fear of falling (MOBL6) and Walk for exercise (MOBL5), Age 65+

Risk/Protective Factor	Sample Size[1]	Walk for Exercise N[1]	(%)	Crude OR (95% CI)
Afraid of falling	xxx	xx	(yy.y)	z.z (a.a-b.b)
Not afraid of falling	xxx	xx	(yy.y)	1.0

[1] Unweighted.

Table A16-4: Age at time of injury and Return to work (I7)

Risk/Protective Factor	Sample Size[1]	Never Return to Work N[1]	(%)	Crude OR (95% CI)
40+ yrs	xxx	xx	(yy.y)	z.z (a.a-b.b)
Age <40 yrs	xxx	xx	(yy.y)	1.0

[1] Unweighted.

Table A16-5: Firearm in/around the home, past 12 months (FX1) and Get and be ready to fire a loaded firearm in less than 10 minutes (FX3)

Risk/Protective Factor	Sample Size[1]	Ready to Fire, <10 mins N[1]	(%)	Crude OR (95% CI)
Firearm In the home	xxx	xx	(yy.y)	z.z (a.a-b.b)
No Firearm in home	xxx	xx	(yy.y)	1.0

[1] Unweighted.

Table A16-6: Stranger assault (PR1) and Intimate partner violence (PR4)

Risk/Protective Factor	Sample Size[1]	Struck an intimate N[1]	(%)	Crude OR (95% CI)
Struck a stranger	xxx	xx	(yy.y)	z.z (a.a-b.b)
Not	xxx	xx	(yy.y)	1.0

[1] Unweighted.

Multivariable analysis*:* The purpose of the multivariable analysis is to clarify the relationships among preventable injury risk factors and outcomes after adjusting for potential confounders that may modify associations between these risk factors and outcomes.

Multivariable analyses will be presented in terms of adjusted odds ratios. Adjusted odds ratios and 95% confidence intervals will be calculated by using logistic regression to adjust for potential confounders identified in bivariable analyses. Possible effect modification of risk by selected demographic variables and other potential confounders will be identified based on evidence in the literature, and assessed using both backward stepwise regression and likelihood ratio tests.

A17. Reason(s) Display of OMB Expiration Date is Inappropriate
Not applicable; no exemption from display of expiration date is requested.

A18. Exceptions to Certification for Paperwork Reduction Act Submission
Not applicable; no exceptions requested.