Surveillance of Nonfatal Injuries Among On-Duty Law Enforcement Officers (NEW Information Collection Request)

Request for Office of Management and Budget Review and Approval for Federally Sponsored Data Collection

Section B

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B. Collections of Information Employing Statistical Methods

B.1 Respondent universe and sampling methods

The respondent universe of interest for the proposed study includes all law enforcement officers treated for occupational injuries and exposures in a national probability based sample of U.S. hospital emergency departments (EDs). Potential telephone interview respondents will be identified through the occupational supplement to the National Electronic Injury Surveillance System (NEISS-Work). The telephone interviews will be a new data collection effort, enhancing the information available through NEISS-Work.

Through a collaboration between the Consumer Product Safety Commission (CPSC) and the National Institute for Occupational Safety and Health (NIOSH), NEISS-Work data are collected through a national stratified probability sample of approximately 5,400 rural and urban hospitals in the U.S. and its territories. To be included, hospitals must have a minimum of six beds and operate a 24-hour ED. General, specialty care, and military hospitals are included in the sample population. Prison, psychiatric, rehabilitation and long-term care facilities, and Veterans Administration hospitals are excluded. Selection of the current hospital sample was based on a 1995 census of U.S. hospitals. The sample is stratified by hospital size based on the number of annual ED visits. In addition, the sample is stratified geographically. Data collection of work-related cases using the current hospital sample began in 1997 at approximately 67 hospitals.

NEISS-Work includes all work-related injuries, illnesses, and exposures treated in EDs and is based on standardized information abstracted from emergency medical records. Since medical record data are limited, it is often necessary to collect additional information to better understand a population of interest. This has successfully been done through follow-back interviews using cases identified in NEISS-Work as potential respondents. For the proposed study, our goal is to conduct telephone follow-back interviews with law enforcement officers to gain a detailed understanding of their injuries and exposures. Potential law enforcement officer respondents for the telephone interviews will be identified from the NEISS-Work data. Selection of cases will be restricted to injured law enforcement officers who are 18 years of age or older, due to the added complication of obtaining parental or guardian consent, interviews from those younger than 18. this threshold. Since we do not plan to translate the questionnaire into a language other than English, non-English speaking law enforcement officers will be excluded from the study if they are reached and unable to communicate. Prescreening using the basic NEISS-Work data elements will be used to restrict potential respondents to individuals most likely to meet the respondent definition.

Based on a review of 12 years of NEISS-Work data, we estimate that an annual average of 1,000 unweighted law enforcement officers 18 years of age or older from NEISS-Work will be identified. Law enforcement officers meeting the criteria above will be eligible for inclusion. The response rate for a similar follow-back study on EMS workers was between 30 and 40%. Therefore, it is estimated that we will complete approximately 300 telephone interviews annually.

B.2 Procedures for the collection of information

As described above, NEISS-Work is based on a national stratified probability sample of U.S. EDs. For telephone interviews proposed in this study, all law enforcement officers captured in the NEISS-Work data will be considered potential participants. NEISS-Work data will be used by CPSC and DSR to identify all law enforcement officers treated in the sampled hospitals during the three-year study. Every law enforcement officer identified in NEISS-Work meeting our case criteria will be offered an opportunity to participate in a telephone interview given initial contact is made.

Once cases are identified, CPSC will contact participating hospitals and request contact information. Potential respondents will be sent a pre-interview letter notifying them of the study and giving them an opportunity to opt out by calling a toll-free number within 10 days of receiving the letter. The letter describes the study and measures that will be taken to protect confidentiality should they choose to participate. The letter also contains the elements required in an informed consent although we have requested a waiver of written informed consent. For law enforcement officers who do not opt out initially, CPSC will conduct interviews through contracts with trained interviewers. The interview script will ask each law enforcement officers to provide verbal consent prior to proceeding. Once consent is given, the interview will proceed. Data will be collected on the law enforcement officers themselves, their injury and injury outcomes. NIOSH will not receive contact information or request any personal identifiers during the interview.

B.2.1 Collection of Telephone Interview Data

Experienced telephone interviewers are contracted through CPSC to complete the follow-back interviews. These interviewers will receive additional training specific to the law enforcement officer questionnaire to be used for this study. Prior to being contacted by telephone, potential participants will receive a letter describing the study and their protections as a participant should they choose to participate (Attachment D). This letter also provides them with the opportunity to opt out of participating in the study by calling a toll-free number. While the time for the telephone interview is not initially scheduled with the participant, participants do have the option at the time of contact to state that it is not a good time and to schedule a better time to complete the interview. Also, if the potential participant initially declines to participate, the telephone interview script includes text that gently encourages them to reconsider.

B.2.2 Data Quality Control

Quality control of the data will not involve any additional contact with participants. Rather, data within the telephone interview dataset will be reviewed for logical consistency and continuity. Data from NEISS-Work and the telephone interview dataset will also be broadly compared to check for consistency and accuracy. Finally, an assessment of the non-participants versus the participants in the telephone interview portion of the study will be made to determine potential non-response bias.

B.3 Methods to maximize response rates and deal with nonresponse

We acknowledge that our projected response rate of 30% based on a recent follow-back study of EMS workers is low. However, it must be noted that this overall response rate includes hospitals that will not release contact information and respondents whose correct contact information is unavailable. These insurmountable barriers drive the response rate down prior to us beginning to contact potential participants. It should be noted that in the EMS study, the response rate increased to 74% among those who we were able to contact by telephone.

Given a potentially low response rate, we plan to take several steps to help access potential participants and facilitate their willingness to participate. These steps include:

- 1. Sending a letter describing the study to potential participants in advance of the initial phone call. This letter will alert and prepare potential participants for the phone call requesting their participation.
- Using the support of several partners and stakeholders that have interest in this area, including the National Institute of Justice, Police Foundation, and other potential stakeholders. It is expected that NIOSH staff will approach many of our stakeholders to garner support among the members of their organizations to encourage them to participate if contacted.
- 3. Making at least ten attempts to reach potential respondents. The contact attempts will be made at varying, but reasonable, hours of the day and on varying days of the week. When no personal contact is made after a number of attempts, the contact information will be set aside and contact attempts are made at a later date as time permits to maximize the response rate. Interviewers are trained to be considerate of respondents and their families, leaving a minimal number of messages or speaking with the respondent or another individual of the residence to arrange a convenient interview time. Messages include a toll-free response number so that the respondent may call at their convenience. When personal contact is not made or a message system is available, the interviewer typically spreads their call attempts over a longer time period and commonly makes more than 10 contact attempts over the initial contact attempt period and the subsequent missed interview follow-ups.
- 4. Using trained telephone interviewers who are experienced at conducting interviews. This will facilitate ease of survey participation for the respondent, increasing the likelihood that they will complete the survey in its entirety.
- 5. Emphasizing the importance of participation if the participant refuses the initial offer. The interviewer will inquire as to whether they would be willing to participate at another time of their choosing. The training and experience of the telephone interviewers will be a key factor to understanding the reactions of potential participants and appropriately encouraging their participation in cases of refusal.
- 6. Using a questionnaire that has been designed to be as easy and non-burdensome as possible. This includes ordering the questions in a logical sequence and asking only those questions that are needed for analysis purposes.

Despite a potentially low response rate, one of the benefits of this study is that we capture basic demographic and injury information on all potential participants. Ultimately, we will compare the information we have on respondents and non-respondents using the NEISS-Work dataset to provide insight on any potential response bias

B.4 Tests of procedures or methods to be undertaken

The questionnaire to be used in this study was designed based on information gathered from published literature and input from law enforcement officer stakeholder groups. It was pilot tested on nine law enforcement officers that were identified through a convenience sample. Pilot tests were performed by NIOSH project staff. In addition to these pilot tests, the questionnaire was reviewed by researchers both internal and external to NIOSH with expertise in law enforcement officer safety and health and/or survey administration. Revisions were made to the questionnaire as a result of the pilot test results and reviewer comments.

B.5 Individuals consulted on statistical aspects and individuals collecting and/or analyzing data

Contact information for those responsible for collection and analysis of the NEISS-Work data and NEISS-Work follow-back interviews:

<u>Individuals</u> who designed the data collection

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Individuals who will collect the data

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