

**A Pilot Project to Evaluate the Use of Bloodborne Pathogens
Exposure Control Plans in Private Dental Practices**

Request for Office of Management and Budget (OMB) Review and Approval
for a Federally Sponsored Data Collection

Section B

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B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS

To evaluate the extent of use of exposure control plans mandated by OSHA's Bloodborne Pathogens (BBP) Standard, a web survey of private dental practices in the United States is planned. Information collected will include evaluating the extent of use of existing exposure control plans; whether the plan or other resources are actively used to prevent occupational exposures; available resources and barriers to use such as relevant education materials, knowledge, costs and availability; and descriptive information on the type, size and geographic location of the dental practice. Information collected will be used to develop strategies to overcome key barriers to compliance, to guide health and safety promotion, interventions, and future research.

B1. Respondent Universe and Sampling Methods

According to the American Dental Association (ADA), in 2009 there were 186,084 dentists in the United States including 170,694 (92%) in private practice.¹⁰ Nearly one-third of dentists were self-employed and not incorporated. According to the ADA, about three out of four dentists in private practice are sole proprietors with 15% belonging to a partnership. Very few salaried dentists worked in hospitals and physician offices.

OSAP is working with a publishing partner, Aegis Communications, who maintains a double-opt-in email distribution list of 49,172 general dentists and dental specialists in the U.S. The list represents nearly 30% of the total population of private practice dentists and will serve as the sampling frame. Dentists on the list represent general dental practices (78%) and specialty practices (22%). Specialty practices include: oral and maxillofacial surgeons, pediatric dentists and periodontists. Other dentist specialists including endodontists, oral pathologists, orthodontists, prosthodontists and public health dentists will not be included in the sample because they either do not work in private practice and/or were at relatively low risk of exposure to BBPs.

The email invitation with a link to the survey will be sent by Aegis Communications to 40,575 dentists and dentist specialists in the survey sample. We estimate that 20,287 dentists receiving the email will complete the survey, assuming a 50% participation rate which is based on a 2008 survey of dentists where researchers reported a 49% response rate using a paper survey.¹¹

B2. Procedures for the Collection of Information

Following OMB approval, the OMB approval number and expiration date will be displayed on the introductory page of the survey. OSAP will work closely with Aegis Communications to ensure timely delivery of a series of survey communications to the sampled dentists. The emails will provide information on the survey sponsor; purpose of the survey; importance to the dental profession of the information to be collected;

estimated completion time; voluntary and anonymous participation; secure nature of responses; and contacts for questions. The types of communications and timelines are as follows:

- 10 days before survey launch date – pre-survey notification (Attachment E)
- Survey launch date – survey invitation (Attachment F)
- 10 days post survey launch date - first reminder (Attachment G)
- 20 days post survey launch date - second reminder (Attachment H)
- 25 days post survey launch date - final reminder (Attachment I)

The data collection period of the survey will be four weeks. The invitation and reminder emails to be sent during this 4 week period will contain a link to the survey where respondents will be directed upon clicking the link. The dentist or a key alternate respondent in each of the dental practices are expected to complete the survey.

B3. Methods to Maximize Response Rates and Deal with NonResponse

Healthcare workers are well educated and familiar with computer technology and the Internet. The dentists in the distribution list are periodically contacted to gather information using web surveys, and the survey population is expected to be very comfortable with this mode of data collection. To maximize participation, a series of emails (i.e., pre-survey notification, invitation email, and three reminder emails) will be sent to invitees. The emails will emphasize the importance of the survey: for improving utility of exposure control plans for reducing the risk of exposure to blood in private dental practices. Similar information will also be included on the introductory page of the web survey.

B4. Tests of Procedures or Methods to be Undertaken

The content of the survey questionnaire was developed over several iterations following discussions with stakeholders, subject matter experts, and dental practitioners.

A total of 9 cognitive interviews with active dental office team members (dentists, dental assistants and dental hygienists) were conducted. Participants were recruited by the project's advisory committee members from dental practices in three states in different regions; from rural, suburban and large cities; from a solo general dentist or specialist-owned practice to large multi-specialty group practices. Participants completed the questionnaire and then answered field test questions about their process in answering the survey questions, including the time involved. The field test questions gathered detailed information about how well respondents were able to understand and answer individual survey questions, with the goal of identifying and removing potential sources of response error. Comments from the field tests resulted in: 1) rewording of a few questions to improve clarity; 2) including one or two more response options for some questions, and 3) making sure instructions are clear about what an exposure plan is. Participants indicated the survey was comprehensive and a good learning experience. Survey completion time was about 15 minutes.

A pre-test of the web survey will be conducted in (May/June 2013). The primary purpose of the pre-test will be to evaluate the usability of the web-based survey, ensure that the programmed functions (i.e., skip patterns) are accurate and complete. We do not anticipate any changes to the content of the questions as a result of the pre-test of the web survey.

B5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data

NIOSH has contracted with OSAP for technical assistance with this study. OSAP has developed the survey questionnaire, conducted cognitive testing of the paper instrument, and following OMB approval, will program and conduct usability testing of the web survey, prior to conducting the survey.

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This collection of information does not employ statistical methods.

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