Health Hazard Evaluation Program Customer Survey

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Part B: Collections of Information Employing Statistical Methods

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# **B.** Collections of Information Employing Statistical Methods

# 1. Respondent Universe and Sampling Methods

The participants in the customer survey will be employees over age 18. The potential respondent universe for this survey is the total number of adult employees in the U.S. After researching available resources for obtaining a credible, dependable sample of adult employees throughout the U.S., AED and CDC/NIOSH have identified the Dun & Bradstreet Zapdata directory. Dun & Bradstreet is a private company that collects and disseminates directories of business and marketing information. The Zapdata directory is updated continually to ensure the best possible accuracy in its contents, and was the only single resource identified that provided the full range of data needed for this effort.

Based on information provided by a Dun & Bradstreet representative knowledgeable about the Zapdata directory, we expect that 80% of the names and numbers on the list are accurate and up-to-date (e.g., the individual is still employed at the business and the address and email address is correct for that individual).

Based on CDC/NIOSH experience with conducting surveys, assumptions about sample response rates have been made. It is expected that approximately 20% of adult employees will be unwilling to participate in the survey for various reasons. Thus, a response rate of 80% is expected. Methods to maximize response rate to obtain completed surveys will be utilized, as described later in section B.3. For analysis purposes, data cleaning and the exclusion of surveys that are largely incomplete will result in the rejection of approximately 10% of the final number of surveys obtained.

Based on these assumptions, a random sample of 10,000 names of adult employees will be purchased, and is expected to be sufficient for CDC/NIOSH to obtain 5,760 completed interviews. A summary of the assumptions made and the approximate yield is outlined in the table below.

Sample Size	Assumption	Approximate Yield
10,000	X 80% Contact information correct and accurate	8,000
8,000	X 80% Agree to participate in survey	6,400
6,400	X 90% Data cleaning	5,760 Completed surveys

Table B-1. Approximate Yield in Number of Adult Employees

The North American Industry Classification System (NAICS) classifies 20 broad industry sectors, as well as numerous subsectors. To detect medium sized effects, utilizing a significance level of 0.05, and power of 0.80, a sample of at least 143 respondents per sector is needed.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Cohen, J. Statistical power analysis for the behavioral sciences, 2<sup>nd</sup> edition. Lawrence Erlbaum Associates, Publishers, Hillsdale, New Jersey, 1988.

Assuming that the responses are evenly distributed, sufficient power to detect some small sized effects also would be achieved with 5,760 completed surveys.

The participants in the customer focus groups will be employees ages 18 and older. All groups will be recruited to ensure a mix of income and education levels. An initial session of 4 focus groups will each be conducted in three distinct geographic locations to test concepts; 12 groups in all will be conducted. This will be followed by 12 additional focus groups, again conducted in three geographically distinct locations, to test materials. Participants for all customer focus groups will be recruited using standard focus group recruitment methods, by calling their household and administering a screening questionnaire to pre-qualify them. Most participants will be drawn from an existing database (or list) of potential participants which is owned and maintained by each focus group facility. Others will come from referrals (either from those people found in the facilities' databases or from community resources), and some may be solicited through ads or fliers in local media or community organizations to let potential participants know about the opportunity to participate in the focus groups. Regardless of recruitment method, all identifying or potentially identifying information for each respondent will be maintained by the focus group facilities and not shared with CDC/NIOSH staff or AED staff as described in Section A.10.

#### 2. Procedures for the Collection of Information

After receiving OMB approval, the contractor AED will mail an invitation letter for the customer survey to the list of 10,000 adult employees provided by Dun & Bradstreet. This letter will announce the customer survey, request that the recipient participate in a short, secure and voluntary survey about workplace health hazards, and provide survey instructions and a URL for the survey website. Five working days later, adult employees will receive an email message from Dun & Bradstreet which refers to the invitation letter, again requesting that the recipient participate in the survey, and provides a URL link to the survey website. The letter and email will also note that those who choose not to complete the survey via the web can request to fill out a traditional paper and pencil survey. These initial contacts will be followed 10 business days later by a mailed postcard from the contractor AED reminding recipients to participate. Five business days following this mailed postcard, an email message from Dun & Bradstreet will make a final request to participate.

As noted in Section A.3, web technology allows for complex skip patterns to be utilized so that the survey is more efficient for respondents. It also allows respondents to complete the survey at any time as the secure website hosting the survey is accessible 24 hours a day. Additionally it minimizes errors in data entry. After the survey data is collected, AED staff will follow standard data cleaning procedures. The data will then be analyzed and cleaned data files will be delivered to CDC/NIOSH staff.

For the customer focus groups, the contractor AED will collect the data by subcontracting with focus group facilities in three distinct geographic locations. Using conventional telephone-based focus group recruitment processes, the facilities will contact potential respondents and screen them for eligibility and interest in the study using the "screener" (see Attachment D). After

arriving at the facility and signing a consent form (see Attachment H) for study participation, the respondents in each group will be gathered in a room with a trained moderator and a one-way mirror, behind which will sit CDC/NIOSH and contractor observers. The moderator will explain the study, inform the group of taping and observation, and lead a discussion using the discussion guides (see Attachments E.1 and E.2). Responses will be collected by audiotape, and observers will take notes. After the group meeting, the tapes will be transcribed for qualitative analysis by the contractor, and then destroyed.

# 3. Methods to Maximize Response Rates and Deal with Nonresponse

The contractor AED will undertake considerable efforts to maximize response rates. Adult employees contacted for the customer survey will receive up to four announcements and reminders to increase the likelihood of participation. Customer focus group respondents will be recruited primarily from registries of potential participants that are owned and maintained by the focus group facilities. These registries include names of persons interested in participating in focus groups and yield a higher response rate than other methods such as random dialing. The focus group facility will also be selected based on ability to encourage participation. The sessions will be held in locations that promote recruitment and retention. For example, the selected facilities will be convenient and easily accessible by public transportation, and provide safe and easy parking. The facilities will be clean, safe, and comfortable environments and the group discussions conducted by professional moderators.

# 4. Tests of Procedures or Methods to be Undertaken

The customer survey instrument and methods have been thoroughly reviewed by CDC/NIOSH and AED staff, as well as members of an Evaluation Advisory Group assembled to assess the clarity and understandability of the questions. In addition, upon receipt of OMB approval, a pretest of the survey instrument (see Attachment C.2) using a sample of 32 adult employees representing various sectors and sub-sectors of U.S. industries will be conducted. Respondents will be asked to participate in a pretest of the survey and directed to the survey website. After completing the survey they will be asked to provide feedback and suggestions on clarity and appropriateness of language, clarity of survey directions, comprehension of item content, need to either delete or add items, and any other suggestions for improving the survey.

As described in Section B.2, standard focus group discussion procedures and analysis of findings will be used.<sup>2</sup> The focus group guides have been thoroughly reviewed by CDC/NIOSH and AED staff to assess the clarity and understandability of the questions. The questions are based on formats successfully implemented in prior focus groups.

<sup>&</sup>lt;sup>2</sup> Krueger, R.A., (1994). Focus groups: A practical guide for applied Research, (2<sup>nd</sup> ed.) Thousand Oaks, CA: Sage Publications.

# **5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data**

No individuals were consulted on statistical aspects.

The persons who designed the data collection and who will analyze the data are:

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# 6. Data Collection Compliance with OMB Bulletin Standards and Guidelines for Statistical Surveys

All data collection methods for the Health Hazard Evaluation Program Customer Survey are in compliance with the OMB Final Revised Bulletin for Standards and Guidelines for Statistical Surveys.