

Appendix 5

Non-Response Aversion and Non-Response Follow-Up

University of Michigan Dioxin Exposure Study Nonresponse Aversion and Nonresponse Follow-up

Several methods will be used to obviate and measure potential nonresponse bias. The refusal aversion process begins the first time that the household is contacted by the University of Michigan. Selected housing units will be sent an advance letter, alerting them that they will be approached by interviewers in the near future. Interviewers will contact selected units and determine whether anyone in the household meets the eligibility requirements for the study (i.e., adults over the age of 18, living in residence for at least 5 years). Eligible participants will be given a \$60 token of appreciation prior to completing the questionnaire and blood draw. The interviewer folders include full color brochures with photographs documenting the procedures for the study's dust and soil sampling. Interviewers also will be trained to answer questions about blood, dust and soil sampling procedures. Interviewers will administer the full questionnaire with all eligible, cooperating respondents, whether or not they agree to the blood draw, dust or soil sampling.

Standard ISR procedures for converting resistant households in face-to-face interviews also will be followed. These procedures include repeated callbacks to households, persuasion letters that directly address the respondent's concern (too busy, not interested, etc.), and use of more successful or experienced interviewers to contact and attempt to convert these households or respondents.

Interviewer Training. Interviewers will be trained extensively on how to avert refusals. Key to this process is tailoring a response to the respondent's main concern about participating, and maintaining interaction with the householder until they are ready to agree to the request. Practically, this process consists of five steps: preparing for the interaction with the householder or selected respondent, engaging in active listening, diagnosing the respondent's main concern about participating, selecting an appropriate response to that concern, and quickly providing the response to the respondent. This approach has been shown to be effective in increasing response rates (Groves and McGonagle, 2001).

ISR will monitor contact, cooperation, refusal, and eligibility rates on a daily basis, overall and by interviewer. Additionally, during the first five weeks of data collection in fall 2004 and again in spring 2005, project managers will meet twice a week with interviewers to review their caseloads and resolve any problems with selected sample lines. The meetings will continue throughout the remaining data collection period, but at lower frequency.

Household observations. In addition to training, information on each housing unit such as type of structure, access impediments, and possible safety concerns is gathered during listing, the process of building a list of housing units for an area probability sample. All interviewers will also complete a Record of Calls documenting the outcome of each call attempt to the household. The first time that contact is made with a household and with the respondent, all interviewers will complete a set of contact observations that document how the interaction took place – face to face or through an open or closed door, for example – and what the household informant and selected respondent said when making the decision to participate in the study. Research has

found that the strongest predictor for participating in surveys are these doorstep statements (Groves and Couper, 1998).

Nonresponse Follow-up. A sample of households that did not complete the screener, or that completed the screener and found to be eligible, but the selected respondent did not complete the questionnaire, will be visited again using modified field procedures in order to collect even a limited amount of data about them. We will not request the blood, soil, or dust samples during the nonresponse follow-up, and will administer a shorter questionnaire (approximately 10 minutes long) to collect information on key study variables. Reverse phone number directory services will be used to obtain, where possible, phone numbers for a subset of the nonresponding households to conduct telephone interviews. Units selected for the nonresponse follow-up will receive a tailored advance letter containing a prepaid \$50 incentive, with a promised additional \$50 upon completion of the short questionnaire. Interviewers with the lowest noncontact or refusal rates, and/or the highest eligibility rates will be selected for the nonresponse follow-up. These interviewers will receive additional training on the revised procedures. The nonresponse follow-up will take place after the main study data collection has ended for the season so that the best interviewers are not removed from production interviewing.

These data will be analyzed to compare nonrespondents and respondents on key study variables from the questionnaire to assess the degree of nonresponse bias. If necessary, estimates may be adjusted for non-response bias identified through these studies through weighting or imputation methods.

Nonresponse Analyses. Comparison will be made between households who provide blood, soil, and/or dust samples and those who do not. We will administer the full questionnaire to all eligible, cooperating households in the main data collection. This will provide a rich set of variables for which we can compare respondents who do and do not provide these samples. Estimates will be adjusted for non-response using data from these studies through weighting and imputation methods.

Groves, R and Couper, M. *Nonresponse in Household Interview Surveys.* John Wiley and Sons, New York, 1998.

Groves, R and McGonagle, K. A Theory-Guided Interviewer Training Protocol Regarding Survey Participation. *Journal of Official Statistics* 2001. 17: 249-265.