

## **Part B** Statistical Methods

### 1. Respondent Universe and Sampling Methods

The respondent universe for this voluntary survey will be representatives of State government agencies that are participating in the food and agricultural defense cooperative agreements with FDA (22 State Agencies) and USDA (27 State Agencies) to enact the NAFDS. State representatives (survey respondents) will be food defense leaders responsible for conducting food defense activities during a food emergency for their jurisdictions.

#### **Sampling:**

Purposive sampling will be employed for this voluntary survey. Given the small total sample size (49 State Agencies) and the specific area of inquiry, purposive sampling is the most appropriate method. Individual state government representatives from participating states will receive an emailed invitation to complete the survey. FDA and USDA have a list of states participating in the NAFDS cooperative agreement and the contact information for the state representatives.

A survey was selected as the best method to obtain the information about implementing the strategy that is needed to include in the Report to Congress. The NAFDS consists of four broad area goals, each containing at least four objectives, each objective having about four key initiatives and each initiative having about three activities associated with it. The NAFDS goals, objectives, initiatives and activities are broadly stated to allow for variation in accomplishing them; one State's methods for implementing a component of the NAFDS might be different from another State, but both could be working toward the same goal, objective, initiative or activity.

Care was taken to develop survey instructions that respondents can easily understand, explaining that they are to apply the statements listed on each line in the grids to their own state's activities. Examples for how to answer the questions are provided and, as is mentioned below, the survey and instructions will be thoroughly cognitively tested by FDA staff.

There are other methods available to collect this information but a survey methodology was selected as being the least burdensome to the respondents.

### 2. Procedures for the Collection of Information

The survey will be programmed for administration by computer and respondents will be urged in the email invitation and in the survey instructions to take the survey on a personal computer (PC). Targeted respondents will be emailed an invitation and link to the survey. Survey responses will be uploaded to a database that is compatible with commonly used statistical analysis software as IBM SPSS or SAS.

### 3. Methods to Maximize Response Rates and Deal with Non-response

To help ensure that the response rate is as high as possible for this voluntary survey, FDA will employ methods demonstrated in the research literature on survey methodology to improve response rate, keeping this particular sampling frame in mind. These procedures include the following:

- Design a questionnaire that minimizes participant burden (relatively short in length, written in language understandable to the respondent population).
- Explain in the email invitation and in the survey instructions the important contributions their responses will make, while assuring that participation is completely voluntary.
- Test the draft questionnaire using cognitive interviews to ensure that participants can properly understand the questions and that the response options are robust.

### 4. Test of Procedures or Methods to be Undertaken

FDA plans to perform five cognitive interviews with federal employees to minimize collection burden on participants and improve quality of collected information. The primary purpose of these interviews is to understand the thinking processes that participants use to answer the survey questions and to refine the questionnaire.

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

The survey will be conducted electronically by FDA, on the FDA.gov Website portal using internal servers. Data analysis will be led by Linda Verrill, Ph.D., Consumer Science Specialist at FDA, telephone 240-402-1765.