

**Supporting Statement
Request for OMB Review and Approval**

**Focus Group Testing and Survey of
Radiological Event Messages for Public Health Workers**

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B. Collections of Information Employing Statistical Methods.

1. Respondent Universe and Sampling Methods

Universe

The universe of potential respondents consists of all public health workers from the states of California, Iowa, Kansas, Michigan, North Carolina, and South Carolina. The following numerical estimates of the individual state public health worker universe were provided by each state:

California	12,000
Iowa	2,700
Kansas	1,050
Michigan	4,000
North Carolina	2,500
South Carolina	4,150

Target sample sizes – Written survey

The sample size for each state is based on achieving a representative sample at a 95% confidence level and a 5% confidence interval. These sample sizes were calculated based on counts provided by each state of their total estimated] number of public health workers:

California	372
Iowa	336
Kansas	278
Michigan	351
North Carolina	333
South Carolina	352

The expected response rate for each of the states and thus the project overall is 80%.

2. Procedures for the Collection of Information

Data will be collected from a random sample of all public health workers employed in California, Iowa, Kansas, Michigan, North Carolina, and South Carolina. Every employee is eligible to answer the survey because all those on the lists received from the states will be current employees of state health departments. There is no screening process for this project.

The sample size for each state is calculated based on achieving a representative sample at a 95% confidence level and a 5% confidence interval using a standard formula. The sample sizes were calculated based on total counts of public health workers provided by

each state. The sample sizes selected for each of the targeted six states are as follows:

California	372
Iowa	336
Kansas	278
Michigan	351
North Carolina	333
South Carolina	352

The formula used to make the calculation of sample size is $ss = \frac{Z^2 * (p) * (1-p)}{c^2}$

where:

Z = Z value (e.g., 1.96 for 95% confidence level)

p = percentage picking a choice, expressed as decimal (.5 used for sample size needed)

c = confidence interval, expressed as decimal (e.g. .04 = ± 4%)

The target response rate for each of the states and thus the project overall is 80%.

A multi-modal approach is planned involving two waves of online data collection and, if needed to boost response rates to achieve the target of 80%, a mail survey. The rationale for the multi- approach includes a desire to make the survey accessible and convenient for potential respondents who prefer one type of survey over the other (online or by mail). The multi- modal approach was selected partly in response to concerns shared by communications personnel in Iowa that public health workers there may be more likely to complete written surveys than online surveys.

Data will be collected by the SRC from the online survey and mail questionnaire.

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

The sample size for each state is based upon achieving a representative sample at a 95% confidence level and a 5% confidence interval.

The SRC will conduct up to three waves of data collection to maximize response rates and minimize non-response.

Definitions of Waves

Wave 1 will consist of sending e-mail invitations to 2,530 members of a sample randomly selected from the population of all health care workers meeting criteria for inclusion in the study in each of the six targeted states. Sample sizes are based upon a projected 80% response rate.

California	465
Iowa	420

Kansas	348
Michigan	439
North Carolina	417
South Carolina	440

The first wave of e-mail communications will invite potential respondents to participate in the study via an online survey. If potential Wave 1 respondents have not returned the completed survey questionnaire within 7 days, the SRC will send e-mail reminders one week after the original e-mail invitation was sent.

If any of the six target states have response rates below 80% after Wave 1, the following further efforts at data collection will be made:

Wave 2: Additional participants will be randomly selected from the state’s databases of public health workers with e-mail addresses. The sample size calculations for Wave 2 will factor in the response rate achieved from Wave 1 and, using a standard formula, estimate the sample size necessary for Wave 2 to boost results to the overall response rate of 80%. This response rate is required to achieve the target thresholds necessary for each state to have a representative sample.

After calculations are completed, the appropriate number of additional participants will be selected and e-mailed an invitation to participate in the study. The wording to be used in the e-mail invitation is included as **attachment F**. Wave 2 will also include sending e-mail reminders to potential respondents who have not completed the survey 3 days after the original invitation e-mail was sent. The wording to be used in the reminder e-mail is included as **attachment G**.

If a cumulative 80% response rate is not achieved in each state after Wave 2, the following further attempts will be made:

Wave 3: All non-respondents from Wave 1 and Wave 2 will be invited to participate in a mailed version of the survey.

Another factor expected to increase response rates is the that NPHIC members in the survey states have received assurances from supervisors that they will encourage members of the survey sample to complete the survey at their work site during regular work hours.

The estimated response rate for the study is 80%.

4. Tests of Procedures or Methods to be Undertaken

All modals are tested methods for collecting qualitative and quantitative information and is the accepted manner to used in message testing.

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

Jessica Szenher, APR, a 30-year communications veteran, will conduct the focus groups and write the final research report for the project, including communications recommendations. Her first research position was with Southwestern Bell in St. Louis in 1980 where she was responsible for the Patient Attitude Trends and employee surveys for the five states of Arkansas, Oklahoma, Kansas, Missouri, and Texas. More recently, she has written survey questionnaires, focus group discussion guides, and research analyses for clients such as Terminix and Wendy's. She has conducted focus groups and provided written analyses for clients including Baptist Health, Central Arkansas Radiation Therapy Institute, Entergy, and Deltic Timber Corp.

Statistical consultation, research design expertise, data collection, and data analysis will be provided by Research Associates Cindy Boland-Perez and Heather Best of the Survey Research Center at the Institute of Government at the University of Arkansas at Little Rock. Following are contact information and brief professional biographies for each.

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Cindy Boland-Perez (M.B.A, University of Oklahoma) has 18 years of data management and research experience, more than 5 years of survey research management experience, and a strong understanding of statistics and quality data management.

Heather Best (M.A. in Sociology, Kent State University) has more than 7 years of professional research experience, including extensive experience in statistics and data management.

Both of these research professionals will be involved in designing data collection methods, collecting the data, and the data analyses.

List of Attachments

- Attachment A. List of Messages
- Attachment B Survey Document
- Attachment C Authorizing Legislation
- Attachment D 60 Day Federal Register Notice
- Attachment E Focus Group Discussion Guide
- Attachment F E-mail Invitation
- Attachment G E-mail Reminder
- Attachment H Focus Group Invitation letter