**Protocol:**

**Radiation Dose Tool**

**Background**

People want to be reassured that radiation or radioactive materials are safe. Radiation experts struggle to address this need. CDC’s Radiation Studies Branch (RSB) created the radiation dose tool to assist with communicating complex topics of risk. The radiation dose tool can help health departments and the public assess their risk and understand how following protective actions can lower their risk of health effects.

Oak Ridge Associated Universities (ORAU) is to provide assistance to RSB to test the Radiation Dose Tool.

It describes:

1. Goal and Objectives
2. Target Audience
3. Audience Segmentation/Screening
4. Methods of Data Collection
5. Schedule
6. Participant Information/Informed Consent
7. Handling of Data Records
8. Screening Instruments
9. Interviewer’s Guide
10. Information Sheet for Participants

**Goal**

To explore the effectiveness of the radiation dose tool as a communication instrument among the public, public information officers, and public health planners.

**Objectives**

* Evaluate the extent to which the radiation dose tool effectively communicates risk.
* Evaluate the extent to which the radiation dose tool is relevant, comprehensible, credible, appealing, and motivational toward achieving desired action.

***Proposed Research Plan for Interviews***

*Methodology and Research Design*

ORAU proposes to visit 1 community in Atlanta, Georgia and conduct remote interviews in various locations using AdobeConnects or Go-To-Meeting. Data are to be collected by means of interviews where 36 prospective respondents are to be recruited. ORAU personnel will address any questions the participants have regarding the study before the interviews begin. Interviews are expected to last 60 minutes.

During the beginning of the interview, the interviewer will provide an overview of the study and ask the participant to introduce themselves. Next, the interviewer will show the radiation dose tool on the computer.After the tool is shown, the interviewer will ask questions about the radiation dose tool. The participant will be presented a hypothetical low-risk radiation emergency situation. After the low-risk scenario, participants will be asked questions regarding the message and the radiation dose tool. Once they have completed their discussion about the low-risk scenario, participants will also be presented with a hypothetical high-risk radiation emergency scenario. After the high-risk scenario, participants will be asked questions regarding the message and the radiation dose tool. The interview will conclude with questions about information sources, such as spokespersons and communication channels.

The interviewer’s guide is included as Attachment F and Attachment G.

All interviews are to be conducted at commercial market research facilities or in remote locations (like the participants’ homes), using a professional interviewer. All sessions will be conducted in English. Participants will be screened for those comfortable conversing in English.

The possibility exists that some participants will find contemplation of such subject matter upsetting. Therefore, participants will receive contact information for CDC INFO and the Radiation Studies Branch website.

Table 1 illustrates the proposed 2015 interviews.

**Table 1: 2015 Interviews**

|  |  |
| --- | --- |
|  | **2015 Interviews** |
| Audience Segment  | * Public (18 years and older)
* Public Information Officers & Public Health Planners
 |
| Site Selection | * Atlanta, Georgia
* Remote locations
 |
| Concept | * Radiation Dose Tool
 |

A total of 36 participants from Atlanta, Georgia and other remote locations will provide feedback about the radiation dose tool.

Table 2 illustrates the interview design.

**Table 2: 2015 Interview Design**

|  |  |  |
| --- | --- | --- |
| **Audience Segment** | **Atlanta, Georgia** | **Remote Locations** |
| Public | 9 | 9 |
| Public Information Officers and Public Health Planners | 9 | 9 |

**Table 3: Facility Locations**

|  |  |
| --- | --- |
| **City** | **Facility Locations** |
| **Atlanta, Georgia** | UserInsight50 Glenlake Pkwy NE #150, Atlanta, GA 30328(770) 391-1099<http://www.userinsight.com/>  |
| **Remote Locations** | Locations across the United States like participants’ homes |

Interviews

The eligibility screener was designed in conjunction with CDC to ensure that participants represent a mix of age ranges and races/ethnicities.

All participants must have access to the internet and the ability to stream videos and images. Also, they must view the tools using a laptop or PC. No smart phones or tablets will be allowed. Participants will be viewing and interacting with Attachment H.

The following criteria will be used to select all participants

* Participants must be 18 years or older
* Able to speak and understand English

*Public*

The following criteria will be used to select public participants:

* + Have at least some high school education
	+ Have not participated in a focus group/interview in the last 6 months
	+ Does not work in any of the following fields:
		- For a market research company
		- For an advertising agency or public relations firm
		- In the media (TV/radio/newspapers/magazines)
		- As a healthcare professional (doctor, nurse, pharmacist, dietician, etc.)
	+ Is not an employee for any of the following:
		- U.S. Department of Health and Human Services
		- State or local health department
		- Department of Homeland Security
		- State or local emergency management agency
		- Nuclear power plant, radiation safety officer, health physicist or other radiation-related occupation

*Public Information Officers and Public Health Planners*

Public health information officers and public health planners will be responding in their official capacity.

The following criteria will be used to select public health participants:

* Position
* Years of experience (a range of experience will be represented)
* Geography

**Recruitment:**UserInsight (the market research firm) maintains a pool of members of the public who are interested in participating in market research, and will invite individuals from this pool to participate in the project. UserInsight will also conduct brief telephone interviews with individuals that volunteer to participate to ensure that they are eligible (Attachment C). The information collection will be conducted using a convenience sample of 18 members of the public.

Similarly, Oak Ridge Associated Universities (ORAU) will provide UserInsight with a pool of public health professionals who attended NREP (National Radiological Emergency Preparedness) conference to recruit public information officers and planners. UserInsight will screen the public health professionals using the screening questionnaire (Attachment D) through telephone interviews to ensure they meet the screening criteria. Participation will be strictly voluntary. The information collection will be conducted with a convenience sample of 18 public health professionals.

All participants who agree to participate in the interview will be given a copy of the participant sheet to retain for their records. ORAU will document the number of participant sheets given to ensure every participant receives one.

**Determining Tokens of Appreciation to Participants:** Gift cards are offered as a token of appreciation for participants’ willingness to engage in the project. The token of appreciation offered, $40 per in-person participants and $30 for remote participants, is impacted by a number of variables for this project, including the following:

* Total participation time of 60 minutes: length of the interview
* Specifications that each participant has to meet to participate in the study
* Recommendations from the market research facilities
* In-person or remote participation

Gift cards are neutral (not connected with a company, service or product) and have universal utility. It is usually more cost-effective and efficient to offer a token of appreciation, attractive by the participant, to mitigate the cost of the recruitment. The amount needs to be high enough that participants feel like it is worth their time to participate and cannot be so low that participants perceive their time and candid responses are under-valued. Likewise, tokens of appreciation cannot be so high that participants become skeptical as to the intention of the interview.

In our experience, it is most cost effective to offer the recruiter-recommended amount, which results in a better show rate and lower recruiting fees. Recruiters from the market research facilities know from experience what various market segments expect to receive. Recruiters will be paid solely for the length of time required to recruit participants.

**Interviews:** We anticipate the interviews will last no longer than 60 minutes. A professional moderator will facilitate the interviews. The interviews will be audio recorded and transcribed by the research facility. No individually identifiable information is being collected in this interview session. The proposed data collection will have little or no effect on the participants’ privacy. Only comments, quotes, and responses from participants will be noted and used as feedback to inform revisions to the radiation dose tool. ORAU and CDC staff may observe the interview on site in an observation room and/or by live-video streaming. Facilities will provide two copies of audio recordings of each session to ORAU. No videotaping is to be conducted. Audio recordings will not be shared with NCEH/ATSDR. CDC will not receive audio recordings or transcripts, but will receive a final report generated by ORAU.

**Interview Guides:** Interview questions will elicit perspectives on the extent to which the radiation dose tool effectively communicates radiation risk. Specific domains include:

* The relevancy of the radiation dose tool
* The comprehensibility of the radiation dose tool
* The credibility of the radiation dose tool
* The attractiveness of the radiation dose tool
* The motivational aspects of the radiation dose tool

**Handling of Data and Records:** UserInsight, the research firm, will provide the qualifications for screening criteria only to ORAU personnel. The interviewer, Mark Herring, Ed.D. of Mark Herring Associates, Inc., will keep the first name only during the interview, and will not deliver names - first or last – to ORAU or CDC. First name and last name will be stripped from records sent to ORAU. No personal identifiers (e.g., last name, last initial, address, completed screening instruments) are to be provided to ORAU or CDC.

ORAU will maintain no identifiers connecting any data collected to any particular respondent; neither will it provide any personal identifiers to CDC or others. UserInsight, who will recruit and host the sessions, will be required to not provide personal identifiers to ORAU or CDC.

Additionally, ORAU will:

* Retain the audio recordings, and at least one copy of any report it produces;
* Develop a report in an agreed-upon format summarizing the responses provided by participants, the report will contain no personal identifiers;
* Not deliver to CDC or others any personal identifiers of participants;
* Retain records and audio recordings for three years, then burn, shred, or otherwise destroy them.

**Analysis and Report Writing:** After receiving the transcripts of the interviews, the data will be analyzed for the purpose of categorizing responses and of measuring the relative importance of respondent characteristics, attitudes, behaviors, and future plans. Upon completion of the analysis, a report will be produced, which will include the following components:

* Overview of the project design
* Summary of key findings and recommendations
* Interview guide
* Eligibility Screener

The primary goal of this data collection is only to improve the RSB radiation dose tool. RSB will not publish the results of the data collection and that the knowledge generated is not generalizable from the selected “sample” out to the universe of public health planner personnel.

**Attachment 1b : Burden Hours and Distribution of Respondents**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Type of Respondents | Form Name | Number of Respondents | Number of Responses per Respondent | Burden per Response (in hr) | Total Burden (in hr) |
| Public | Eligibility Screener | 36 | 1 | 10/60 | 6 |
| Interview Guide | 18 | 1 | 60/60 | 18 |
| Public Information Officers & Public Health planners | Eligibility Screener | 36 | 1 | 10/60 | 6 |
| Interview Guide | 18 | 1 | 60/60 | 18 |
| **TOTAL** |  | **48** |

**Distribution of Respondents**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Audience Segment** | **Type of Respondent** | **Atlanta, Georgia** | **Remote Location** | **Total Number of Interviews** | **Total Participants** |
| Public | Eligibility Screener Only Participant | 18 | 18 | 18 | 36 |
| Interview Participant | 9 | 9 | 18 |
| Public Information Officers & Public Health planners | Eligibility Screener Only Participant | 18 | 18 | 18 | 36 |
| Interview Participant | 9 | 9 | 18 |
| **TOTAL** |  | 18 participants | 18 participants | 36 interviews | 72 participants will be screened, of the 72, 36 will meet the criteria to participate in the interview |