**Protocol: Web Usability Study for CDC’s Radiation Emergencies Website**

**Background:**

One of the main methods CDC’s Emergency Management, Radiation, and Chemical Branch (EMRCB) utilizes to communicate radiation emergency-related content to the general population and public health professionals is their radiation emergencies website (<https://emergency.cdc.gov/radiation/>). To ensure users have a quality experience with the radiation emergencies website, EMRCB staff would like to conduct a website usability assessment with the general population and public health professionals. CDC’s EMRCB is tasking Oak Ridge Associated Universities with the usability testing of CDC’s radiation emergencies website.

This protocol describes:

1. Goal
2. Target Audience
3. Audience Segmentation/Screening
4. Methods of Data Collection
5. Recruiting
6. Schedule
7. Participant Information Sheet/Informed Consent
8. Handling of Data Records

**Goal:**

The goal of this study is to gather feedback on information architecture, navigation elements, primary task flows, content presentation, page layout, key calls to action and overall usability of CDC’s radiation emergencies website.

**Target Audiences:**

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| --- | --- |
| **Audience** | **Participation Method** |
| **General Population (n=18)** | * In-person interview   + 9 participants using PCs   + 9 participants using smart phones or tablets |
| **State and Local Public Health Professionals (n=18)** | * Remote interview |

**Audience Segmentation and Screening:**

For remote participants, all participants must have access to the internet.

The following criteria will be used to select all participants:

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

The following criteria will be used to select general population:

* 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

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

* Employment at a state, local, or county health department or emergency management agency
* Job duties include planning for radiological and nuclear incidents
* Years of experience (a range of experience will be represented)

In-person participants will be from Atlanta, GA and the remote participants will be from different states across the United States of America. The screening instruments are included as Attachments A & B.

**Methods of Data Collection:**

A total of 36 prospective respondents will be recruited to participate in a 60-minute remote or in-person interview.

The interview guides are included in Attachments C & D.

All interviews will be conducted as follows:

* Individual interviews will be conducted remotely or in-person at a commercial market research facility.
* Each interview will last up to 60 minutes.
* All sessions will be conducted in English. Participants will be screened for those comfortable conversing in English.
* The remote individual interviews will use an online meeting platform with video and audio capabilities such as Zoom, Adobe Connect or Go-To-Meeting.

**Recruiting:**

The commercial market research facility in Atlanta, GA will utilize their existing database to retrieve names of potential participants. In-person participants will be from Atlanta, GA and the remote participants will be from different states across the United States of America. Participants will be screened via email or telephone using the screening questionnaire to ensure they meet the screening criteria (see Attachments A and B). Participation will be strictly voluntary. A total of 36 participants will be provided with a token of appreciation for their participation. Remote participants will receive $20.00 and in-person participants will receive $30.00.

**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 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

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, incentives 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.

**Schedule:**

Once the ORAU and CDC Institutional Review Boards and OMB approve the study, recruiting will begin and interviews will be scheduled for late winter or early spring of 2019.

**Participant Information Sheet/Informed Consent:**

All participants who agree to participate in the focus group will be given a copy of the participant sheet (Attachment E) to retain for their records. The general population participants will receive their participant sheet at the facility when they check-in for the interview. The public health employees will receive their participant sheet via email one week before the interview begins. The participant sheet will include the following information about the study: sponsorship, their rights as participants, risks and benefits in participating, and who to contact for more information. Because this study presents no more than minimal risk, signatures for informed consent will not be required.

**Data Analysis:**

MindMapping is a process of gathering information and categorizing it by design heuristics in order to see patterns of behavior. During each session, a researcher uses the MindMapping process to analyze the feedback from the session. In this way, the commercial research facility staff analyzes the feedback near real time, saving time and money in the analysis phase as well as providing a means to ensure all feedback is weighted the same.

**Handling of Data and Records:**

*Collection and management of personal identifiers:*

The commercial market research facility will recruit the participants and will provide ORAU information with respect to screening qualification criteria (first name, gender, race/ethnicity, etc.). However, the facility will NOT provide personal identifiers (e.g., last name, last initial, address, completed screening instruments) to ORAU or to CDC.

*Plans for protection of privacy and data security:*

ORAU and CDC staff may observe the interviews onsite in an observation room and/or by live-video streaming. The proposed data collection will have little or no effect on the participants’ privacy. Participant responses will be used only as feedback to inform revisions to the messages. In addition, ORAU will:

* retain at least one copy of any report it produces;
* deliver a final PowerPoint report to CDC that will include study purpose, methodology, participant selection criteria, key findings, study limitations, recommendations, and conclusions, including graphic presentation of data where appropriate.
* retain records for up to three years, then burn, shred, or otherwise destroy them.

**Attachments:**

Attachment A: Public Health Officials Screening Instrument

Attachment B: Public Screening Instrument

Attachment C: Public Interview Guide

Attachment D: Public Health Official Interview Guide

Attachment E: Participant Information Sheet