# ATTACHMENT B: Protocol Message Testing: Radiation Emergency Infographics (Online Survey)

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## **Background**

Radiation emergencies, whether intentional (terrorist attack) or unintentional (nuclear power plant accident) can result in concern and fear from the public, even in unaffected areas. Planning for such events is critical to the nation's overall preparedness for emergency events. Amidst the calamity ensuing from a radiation emergency, a crucial task for federal, state, and local authorities will be communicating clear and consistent messages to the public. Effective communications will be a critical factor in saving lives and minimizing injury.

Previous research by the Radiation Studies Branch on effective communications in a radiation emergency found that visual aids can assist the public in understanding technical concepts related to radiation. Radiation is a topic often feared and misunderstood by the public. To meet this need, the Radiation Studies Branch has developed a series of infographics on various topics related to radiation emergencies. Infographics are visual representations of data, information, or knowledge that tell a story through visual communication. These infographics are intended to provide information such as key life-saving protective action guidance as well as responses to questions anticipated in such an event. Although incident-specific messages and other communications will still be needed, these infographics will enable decision makers and communicators to provide consistent, well developed information in an easily understood format that can address a variety of concerns.

The Radiation Studies Branch of the Centers for Disease Control and Prevention (CDC) provides basic information on radiation and its health effects as well as emergency instructions for individuals and families. To help ensure the quality of these infographics, CDC wishes to test them with the public. The Oak Ridge Institute for Science and Education (ORISE) is to provide technical assistance.

It addresses:

- Goal
- Objectives
- Target Audience
- OMB Approval
- Methodology
  - O Audience Segmentation/Screening
  - o Recruiting
  - o Schedule
  - o IRB
  - 0 Methods of Data Collection
  - O Determining Tokens of Appreciation to Online Survey Participants
  - O Handling of Data and Records

#### Goal

Explore the effectiveness of radiation emergency infographics prepared for the CDC Radiation Emergencies website. A total of 180 burden hours is requested.

## **Objectives:**

- 1. Determine whether infographics effectively communicate radiation emergency topics.
- 2. Evaluate the extent to which infographics are relevant, comprehensible, credible, appealing, & motivate desired actions.

## **Target Audience**

The target audience for this research is the public.

## **OMB Approval**

CDC will seek OMB approval through an amendment to its existing broad-based agency approval for message testing [Health Message Testing System (HMTS)]. CDC is encouraged to use questions from a pre-approved question bank in developing data collection instruments. Questions from the pre-approved question bank will focus on the following areas:

- Comprehension
- Initial Impressions
- Believability
- Persuasiveness
- Self-protection motivation/Self efficacy
- Content & Wording
- Appearance

## **Audience Segmentation and Screening**

The survey will take place online.

All participants will:

- Be at least 18 years of age
- Be comfortable reading in English
- At least some high school education

No respondents or members of their immediate family will be employed in any of the following fields:

- Advertising
- Public relations
- Market research
- Media
- Health care
- Public health
- Emergency management
- Health physics or related fields involved with radiation

The screening instrument is included as Attachments C-1. Word and C-2. Screenshots.

#### Recruiting

Recruiting will be conducted through UserInsight, under the supervision of ORISE. Participants for this survey are part of a double opt in panel, meaning they have to agree both to be a member of the survey database as well as agreeing to participate in any survey. Variations from this protocol must be approved by OMB, CDC and ORISE.

UserInsight
50 Glenlake Pkwy NE #150
Atlanta, GA 30328
(770) 391-1099
www.userinsight.com/

Any changes must be approved by OMB, CDC and ORISE before they are made.

#### Schedule

May/June 2013

#### IRB

Prior to participating in the study, each prospective respondent will receive an information on sponsorship of the study, their rights as participants, risks and benefits in participating, and

contacts for more information (Attachment D - Participant Information Sheet). This information will be provided electronically, using the online survey platform (first page, Attachment C-2). Because this study presents no more than minimal risk and involves no procedures for which written consent is normally required outside of the research context, signatures for informed consent will not be obtained.

#### Methods of Data Collection

An online quantitative study will be conducted. This study will use a nationwide sample by census. There will be a total sample of 600 completed surveys. The infographics will be randomized across 600 users, and each infographic will be used 150 times. Each user will see 3 randomly selected concepts. Online surveys will be conducted by staff of UserInsight, through a sub-contract of the ORAU/ORISE interagency agreement. These third party staff members will be able to act on behalf of CDC and ORISE to maintain participants' confidentiality and anonymity. Participants will be screened, recruited and compensated by UserInsight.

The screening instrument (Attachment C-1 & C-2) will have demographic items and questions related to the relevance, comprehensibility, credibility, visual appeal, & motivation to perform the desired actions and preferences of channels for receiving the infographics.

Thirteen radiation emergencies infographics (Attachments F-1 through F-13) will be evaluated through the survey questions (Attachments E-1 & E-2). Survey data will be analyzed quantitatively using descriptive statistics to evaluate the performance of each infographic across a series of measures. The feedback will be used to help improve and optimize the existing infographics based on strengths and weaknesses identified in the survey data. A full summary report with recommendations will be submitted. No personal identification information will be linked to participants in the report. Neither CDC nor ORISE will have any interaction with any participants.

# **Determining Tokens of Appreciation to Online Survey Participants**

Gift cards are offered as a token of appreciation for focus group participants' willingness to engage in the project. The monetary amount offered, \$3 per participant, is impacted by a number of variables for this project, including the following:

- O Total participation time is 15 minutes; 3 minutes for the screener and 12 minutes for the survey
- O Specifications that each participant has to meet to participate in the study.

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 monetary 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 online survey.

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. They will have no monetary gain based on the recommended dollar amount of the gift card.

## Handling of Data and Records

The survey provider uses AdTran router technology to ensure infrastructure security. This device has firewall capabilities and is monitored by Stokes Technologies. Any suspicious events are investigated to check for unauthorized access. The data collection servers are located in a separate locked server room. Only authorized personnel have access to this server room and the separate alarm zone passkey associated with this room.

ORISE will maintain no identifiers connecting any data collected to any particular respondent; neither will it provide any personal identifiers to CDC or others. Neither CDC nor ORISE will have any interaction with any participants. Firms which conduct recruiting and host the survey will be required to not provide personal identifiers to ORISE or CDC.

## Additionally, ORISE will:

- Develop a report in an agreed-upon format summarizing the responses provided by participants; the report will contain no personal identifiers -- that is, information sufficient to determine the identity of any participant (e.g. first and last name, address)
- Deliver the report to CDC;
- Not deliver to CDC or others any personal identifiers of participants;
- Retain records for three years, then burn, shred, or otherwise destroy them.