Appendix C: Focus group protocol

Focus Group Data Collection Method and Screening Procedures

Participant Universe and Sampling Methods

Focus group studies are directed group discussions that enable observers to infer the underlying views and assumptions of the group's participants. Focus group research relies on qualitative methods and is not intended to produce results that can be generalized to the overall population. Results of this research will not be used to generalize the information beyond the scope of the study sample (*e.g.*, to the U.S. population, generally).

For these focus groups, we may use quota sampling to select a convenience sample of individuals who meet certain qualifications that reflect characteristics typical of the target audience (average consumers in the U.S. over the age of 18 years of age, relatively balanced in terms of sex and age groupings). We may also use cluster sampling to form one or more focus groups (*e.g.*, contacting local school systems and related organizations, such as local gyms or community centers). Social media posts and online forums may also be used to find suitable participants. Piggybacking upon an initial gathering via a snowballing approach may bring together additional participants we are seeking. We will request basic demographic information from potential participants as a screening mechanism to ensure that we have a relatively balanced sample in terms of sex, age, education and ethnicity.

To reduce the number of no-shows, scheduled focus group participants will be sent a reminder letter or email and/or telephone call giving the time of the interview and instructions on how to access the video conference web link.

The focus group sessions will be held virtually using a video conferencing tool. The project team will perform all data collection and analysis in compliance with OMB standards and guidance, and with the Privacy Act.

Procedures for the Collection of Information

Focus groups are a form of group interview used to obtain insights into target audience perceptions, beliefs, and attitudes in the early stages of the communication process. Here, we will use the focus groups to aid in revising the project graphical symbols. The goal is to optimize the ability of the set of symbols to accurately communicate their intended message. A focus group typically is composed of approximately 10 people who have characteristics similar to the target audience or subgroups of the target audience. These sessions are conducted by a moderator who uses a loosely structured discussion outline to keep the sessions on track while allowing participants to talk openly and spontaneously and to change direction as the discussion unfolds and new topics emerge.

In general, the moderator will avoid asking yes/no questions or leading questions and will refrain from giving examples that might cue the right answer. Additionally, the moderator will ask

questions about positive aspects of a symbol before turning to (potentially) negative aspects of a symbol. The moderator may proceed with probes (*e.g.*, "What else?" "Does anyone have a different thought?") and follow-up questions depending on the flow of the discussion.

Test of Procedures or Methods to be Undertaken

Prior to the initial focus group session, we will pilot test the proposed procedures and materials, including the facilitator guide, facilitator script and sample questions (see sections below).

Sample Materials

Focus Group Facilitator Script

Hello, my name is <name>, and I am working on this project with staff of the U.S. Consumer Product Safety Commission. I would like to thank you very much for your participation today. Your input is very valuable to us.

Before we begin, I will give you some background on what we are doing . . .

I am here to ask questions to keep the conversation moving and to get information about how we might redesign graphical safety symbols so they are more effective in communicating the hazards associated with some consumer products. There are no right or wrong answers. All of your feedback is valuable.

The online focus group session will be recorded for the purposes of notetaking and referencing, but the recording will remain confidential and available only to members of the research team. Once the project ends, we will destroy the recordings.

Do you have any questions? Okay, let's begin.

Note: The interviewer should not read the script word-for-word, but should be familiar enough with its contents to conduct the focus group in a natural and conversational manner, paraphrasing or giving additional explanation, as appropriate. The protocol provides a list of suggested questions to ask, but the facilitator will be allowed the flexibility to reorganize or modify questions, depending on the flow of the discussion.

Sample Focus Group Questions

"We'll be discussing the set of symbols you evaluated in the previous session. Take a moment to look them over. Were any of the symbols particularly easy or difficult to understand? Let's start with the ones that seemed easy to understand."

[Allow time for each speaker to state their views.]

"Let's start with this symbol [select one to focus on].

For symbols that you feel are well understood:

"Did you understand the meaning of the symbol right away, or did you have to think about what it means?"

Did the colors in the symbol help with understanding? [if relevant]

"Can you tell me specific characteristics of the symbol that made it particularly easy for you to understand? Do you have any suggestions for how the symbol could be improved?"

"Whenever possible, simpler is better when it comes to symbol design. The concreteness of the potential hazard is obviously a consideration. For example, physical hazards, as depicted in the hands in gears symbol, are often easier to understand, in comparison to less concrete hazards, such as radiation. Can you think of ways this symbol could be simplified to eliminate any unnecessary detail?"

"Do you think the symbol will be well understood on its own? Or, is additional supporting text necessary to facilitate correct understanding of the symbol's meaning? If yes, do you have any suggestions for the supporting text?"

For symbols that you feel were not adequately understood:

"Can anyone tell me what this symbol is intended to communicate?"

[If no participant can correctly state the intended meaning, say: "This symbol was intended to communicate [state the hazard to be communicated]."

"Can you describe the characteristics of the symbol, or the hazard, that made it particularly difficult to understand? Do you have any suggestions for how the symbol could be improved? If needed, do you have any suggestions for text that could accompany the symbol to make it more understandable?"