Final Report Agent: Chemical (VX)

INTRODUCTION

The emerging global threat of terrorism has stimulated much activity and resource mobilization within the public health community over the past three years, because terrorist acts can have a direct and often serious impact on the physical and mental health of the general population. One concern has been to assure that the health care system has the capacity to respond in an emergency. Establishing drug stockpiles, emergency system improvements, and health provider and first responder training have thus proliferated at national, state and local levels. Another concern has been the preparation of communications plans and materials for the general public. The very real threat of terrorist action requires the design, development, and dissemination of technically accurate and timely information.

Recognizing this, the Centers for Disease Control and Prevention, in concert with the Association of Schools of Public Health (ASPH) Bioterrorism Council, responded by supporting the "Pre-Event Message Development Project" (PEMD). This project provided funding in the Fall of 2002 to four primary schools of public health (Saint Louis University, University of Alabama-Birmingham, University of California at Los Angeles, and the University of Oklahoma) along with several partnering schools. The four University teams working on this project were selected because each brought different skills, perspectives and experience to the overall project goals of learning how to best communicate critical information related to what audiences want as well as the information that the research team, CDC, and the ASPH Bioterrorism Council, recognize needs to be known. The basic charge the four Pre-event teams have addressed in the first two years of the project is how to develop and evaluate pre-event messages relevant for bioterrorism events for the general population, using well designed formative research to define, craft, and pre-test crisis communications messages.

What evolved through a participatory, collaborative process was the opportunity to do research on this topic that was groundbreaking, and strengthened by the degree findings can be generalized by using standardized methods across institutions and samples of persons from culturally and geographically diverse backgrounds. Initially the teams debated whether it would be more useful and efficient to focus on generic all-hazards prevention issues and messages to be used to educate the public prior to an event, or to focus the research on different types of agents that could be used for warning systems before during and after an intentional attack. We decided to do agent-specific research since our perception was that other researchers were conducting research on all-hazards prevention. This is based on literature that differentiates disaster warnings and responses from public hazard education. The latter involves general knowledge that can be

transmitted independent of the hazardous event. Disaster warnings and responses are event specific and happen either right before, during, or after an event. (Mileti and Fitzpatrick 1991; Mileti and Sorensen 1988). These messages are important in regard to saving lives, reducing unnecessary service utilization, facilitating relief efforts, and reducing anxiety among the general public.

Thus, each University team was charged with assessing public response to one of the following agents that represented a specific type of threat. These were an infectious agent (plague), a toxin (botulism), a chemical agent (VX), and a radiological agent (dirty bomb). The basic idea was that we would be able to get sufficient information from qualitative formative research to be able to construct prototypes of messages for each of these different types of agents that would be important to communicate to the general public if an event happened. The first year of the project involved open-ended formative research that sought to understand information needs, information seeking strategies, and other responses to hypothetical terrorist emergencies on the part of the public, as well as audience-testing of existing informational materials and messages. Findings from Year 1 can be found in reports, presentations and published articles (Vanderford, 2004; Becker, 2004; Wray and Jupka, 2004; Glik, Harrison, Davoudi and Riopelle, 2004; Henderson, Henderson, Raskob and Boatwright, 2004)

For Year 2, findings from Year 1 were used to craft the messages and materials that made up our initial project activities. Specifically we knew from Year 1 that most persons in the general public had little knowledge about the specific agents we were discussing. Persons had some idea of what to do in crisis and disaster situations, but were not familiar with current terminology, and often had little understanding of disaster response planning that is currently taking place at local, state and federal levels. Levels of trust of media and government were mixed. As well there was a clear "hierarchy of resort" voiced as regards information seeking, with most persons turning to the mass media for initial information and then print, internet and interpersonal sources for more in-depth coverage. However there was also a substantial minority of persons who were more likely to turn to community and interpersonal sources of information first: these were often in more isolated, disadvantaged, ethnic minority or rural communities.

Year 1 data also helped the University teams as regards the framing and organization of messages. Specifically we were reminded of the importance of prioritizing information that addresses the concerns of persons in potential crisis situations. One basic idea is that messages should address survival concerns first, then meaning, then assurance about organized responses to the event. Translated this means messages should first tell persons what to look for, what to do, or how to get help or prevent exposure (problem identification, actions, reconnaissance, symptom recognition, help seeking). The next set of messages explains why they need to do it (epidemiology, transmission, treatment, prognosis). The third type of message is to assure persons that something is being done by someone or some agency (to stop the problem, help the afflicted, find the culprit).

In the first half of Year 2 (January - June 2004) we took Year 1 findings and through an iterative process created sets of messages for each agent. We created four types of

message materials: 1) radio scripts, 2) television storyboards 3) fact sheets 4) more indepth web-based materials. The first task for all of the four University teams was to write basic message materials for video and radio scripts, a longer web page, and a two-page fact sheet. Content was reviewed CDC Subject Matter Experts (January - February). Then we all participated in a message review process using the RAIN technique to test for readability for the scripted materials. This readability system looks at many factors (words, writing style, grammar, format) that can increase reading level of materials. The goal was to bring materials to a readability level where lower literacy persons could understand them. These materials were revised (March) and then television production began and continued through April and May, with some revision of rough cuts of materials in late May and early June. As well, radio production occurred in June and concurrently fact sheets were finalized and formatted in a standardized manner. Thus we were able to produce prototypes of radio clips, short videos, and fact sheets for pretesting. Scripts for these materials can be found in the appendices of each of the reports: the challenge we found in creating materials such as these was to make them effective and credible tools for communication, balanced with concerns about scientific validity and accuracy. We did not test longer web page materials due to time and technical constraints.

In retrospect the approach we have taken has proven to be highly informative and efficient, as it has provided a rich and multilayered research data base that can be used to help craft both agent specific and all-hazards preparedness messages. That is, even though we were focused on specific agents, much of the information is also relevant to all-hazards preparedness. Information about what persons understand in regards to infectious or toxic agents, chemicals or radiological events and what to do about them not only applies to other similar agents, there was also much information gleaned about information seeking in times of a crisis or disaster, cultural differences in response to disasters, perceptions of the role of government, the media, and first responders, and insight into persons' understanding of basic concepts and terms used in warning and disaster preparedness such as sheltering in place, quarantine, isolation, prophylaxis, immunization, handling food and water, decontamination, coping and stress reduction, and information seeking.

The following sections describe in depth the methods used to test the materials as well as human protection assurances followed. Then, each of the participating Universities will present their unique findings.

METHODOLOGY

Data Collection

Two research methods were used in Year 2 to pre-test the fact sheets, radio and television clips: focus group discussions and cognitive response interviews.

The purpose of the focus groups was to elicit information about audience response and to direct revisions and improvements of the message materials (Krueger, 1994; Kreuter, et al., 2000). Focus groups are an effective means of collecting *opinion and preference* information among selected audience segments (Morgan, 1988; Stewart & Shamdasani,

1990; Krueger, 1994). The Year 2 focus groups were built on the structure of the Year 1 groups in which participants were asked to respond to a three-part hypothetical attack involving the relevant agent. In Year 2, after each scenario section was introduced, participants were then exposed to the draft message materials – radio clips after the first, the television clip after the second, and the printed fact sheet after the third. However each material was presented, the participants were asked to respond to the same set of questions, inquiring about: comprehension, appeal, credibility, emotional response, confidence in recommended actions, channel appropriateness, and recommendations for improvement. The project partners developed the interview guides collaboratively (see Appendix B).

The purpose of the cognitive interviewing was to gain knowledge on participants' understanding of messages and emotional response to messages (Forsyth & Lessler, 1991; Sudman, Bradburn & Schwartz, 1996). Cognitive testing allows us to explore general reactions to messages, problematic features of the educational messages, emotional responses, and the comprehension of different messages. Cognitive interviews focus pre-testing on specific blocks of text that are thought to contain especially difficult or ambiguous language, identified in the expert review. The cognitive interviews were designed to assess message comprehension and clarity through such strategies as thought-listing, paraphrasing, and word definition. In addition, participants were asked to comment on their feelings after reading specific passages. The project partners developed the interview guides collaboratively (see Appendix C).

Forty-three focus groups and 129 CRTs were conducted by the partner universities in the public sectors. The focus groups and CRTs were conducted in places convenient for the participants and designated by the subject recruiters. Discussions were transcribed by a professional transcriptionist, or by a stenographer. The partner universities conducted groups and interviews with the same general public audience segments as in Year 1: African American, American Indian, Asian, Caucasian, and Hispanic populations, as well as new immigrant groups studying English as a second language. For all but the Asian and new immigrant groups, groups were convened with residents of both rural and urban areas.

HUMAN SUBJECTS PROTOCOL

Protocol development and IRB submission

Over the course of several months, representatives from each member institution provided input on the content and wording of a joint human subjects protocol to be submitted to each institution's review board. Drafts were circulated among the institutions and changes were noted and incorporated until a final document was agreed upon. In addition to the protocol, each institution prepared consent forms and packets under guidelines of their review board for submission. After submission, each institution provided an IRB approval letter to the funding agency.

Study Groups

The cooperative agreement under which the work was carried out was awarded by the Association of Schools of Public Health and the Centers for Disease Control and Prevention. Four institutions served as project partners: Saint Louis University; the University of Oklahoma at Oklahoma City; the University of California at Los Angeles; and the University of Alabama at Birmingham. The University of North Texas was awarded a subcontract by the University of Oklahoma. As requested by the CDC, each of the four schools, along with subcontract institutions, conducted a series of focus groups and cognitive response interviews with various elements of the US population (Caucasian, African American, Hispanic, Asian, Native American and ESL).

Role of participants

The primary aim of the research was to test draft television, radio and printed messages that had been developed for plague, VX, botulinum toxin, and radioactive dirty bombs. Two complementary methods were employed to gather this information. The first method involved the use of focus groups with the various audience segments. Focus groups were led by moderators trained to guide discussions in non-directive, and non-judgmental ways, and to elicit responses from all participants. The second method involved the use of cognitive interviews. Here, one-on-one interviews were conducted with participants to get detailed comment on draft fact sheets. The fact sheets were read and given to participants to respond to and to use for reference in answering the interview questions, as they assessed their quality. Specifically, participants were asked to assess the materials in the areas of: (1) Clarity of the material and information conveyed; (2) Comprehensibility of the information; (3) Adequacy of the level of detail; and (4) Recommendations for improvement.

A total of 46 focus groups were conducted as part of the overall Pre-Event Message Project. Table 1 sets out the division of focus groups by population group, agent, and school.

Table 1. Radio/TV/Web Content Focus Group Testing

By Agent Type					
	Bio-Plague	Bio-Bot	Radiological	Chemical	<u>Total</u>
Urban African American	SLU (1) UAB (1)	SLU(1)	SLU (1) UAB (2)	SLU (1), UAB (1)	8
Rural African American	SLU (1)	UAB (1)	UAB (1)	SLU (1)	4
Urban Hispanic	UAB (1)	ULCA (1)	UOK (1) UAB (1)	UOK (1) UAB (1)	6
Rural Hispanic	UOK (1)	UOK (1)	UOK (1)	UOK (1)	4
Asian Urban	ULCA (1)	ULCA (1)	ULCA (1)	ULCA (1)	4
English 2 nd Language	ULCA (1)	ULCA (1)	ULCA (1)	ULCA (1)	4
Urban White	SLU (1)	ULCA (1)	UAB (3), UOK (1)	ULCA (1)	7
Rural White	SLU (1)	SLU (1)	UAB (2)	SLU (1)	5
Native American	UOK (1)	UOK (1)	UOK (1)	UOK (1)	4
Total	10	9	16	11	46

A total of 129 cognitive response interviews were conducted as part of the overall Pre-Event Message Project. Table 2 sets out the division of cognitive interviews by population group, agent, and school.

Table 2. Fact Sheet Content Cognitive Testing

By Agent Type					
	Bio-Plague	Bio-Bot	Radiological	Chemical	<u>Total</u>
Urban African American	SLU (3) UAB (3)	SLU (3)	SLU (3) UAB (3)	SLU (3), UAB (3)	21
Rural African American	SLU (3)	UAB (3)	UAB (3)	SLU (3)	12
Urban Hispanic	UAB (3)	ULCA (3)	UOK (3) UAB (3)	UOK (3) UAB (3)	18
Rural Hispanic	UOK (3)	UOK (3)	UOK (3)	UOK (3)	12
Asian Urban	ULCA (3)	ULCA (3)	ULCA (3)	ULCA (3)	12
English 2 nd Language	ULCA (3)	ULCA (3)	ULCA (3)	ULCA (3)	12
Urban White	SLU (3)	ULCA (3)	UAB (6), UOK (3)	ULCA (3)	18
Rural White	SLU (3)	SLU (3)	UAB (3)	SLU (3)	12
Native American	UOK (3)	UOK (3)	UOK (3)	UOK (3)	12
Total	30	27	39	33	129

Inclusion and exclusion criteria

As a collaborative effort, the combined study sample of all participating institutions was intended to draw on the principal population subgroups in the United States. In drawing the convenience sample for the general public audience segments, every effort was made to balance representation of both sexes and to include a wide range of adult age groups. Only adult populations were examined, so only individuals who had attained the legal age for consent under the applicable law in the state in which the focus groups were conducted were considered for participation in focus groups (45 CFR 46.402). For all institutions involved, the age of eighteen years was agreed upon as a minimum age for participants. Consequently, children were excluded from the study.

In an attempt to minimize risk to study participants, stringent efforts were made to exclude individuals with a history of trauma from the study. Exclusion criteria included, but were not limited to, combat experience, violent crime, terrorist incident, motor

vehicle accident, disaster (natural or manmade), domestic violence, or sexual abuse. Individuals with a history of psychiatric illness including, but not limited to, anxiety disorder, depressive illness, bipolar disorder, posttraumatic stress disorder, psychosis, alcoholism, or substance abuse were also excluded from focus group participation. Additionally, individuals who have had relatives or friends killed or injured in a terrorist incident were excluded.

Participant recruitment

Participants in focus group activities and participants in individual interviews were drawn from a convenience sample of members from each target population. Each university established community and professional contacts, or used existing databases to derive a sample. Although groups were already delineated by race for the general public, there was an attempt to also consider age, SES, and gender while recruiting in order to produce a study population with maximum diversity.

Focus groups and individual interviews were also stratified using an urban vs. rural distinction. Rural counties having less than 12,000 adults over the age of 16 were considered. Gender representation was to be approximately half male/half female. Different literacy levels were included as well. This difference was especially important to ensure that messages were evaluated by people with varying reading levels.

Individual participants from all research segments were paid for research sessions in which they were involved. Total focus group time was approximately 1 to 2 hours in length. The individual interviews were approximately 30 minutes in length.

Focus Group and Interview Procedures

As part of the focus group and interview introductions, the focus group moderator or the interviewer reviewed issues related to confidentiality and risk/benefit. Participants were told that their participation was voluntary and that could choose not to complete the study or any part of it without penalty or loss of benefits to which they were otherwise entitled. They were told that the materials they reviewed and discussed might be potentially distressing and that they might choose not to participate in any part of the discussion, to leave the group temporarily, or to terminate participation completely. Upon request, they would be given the name and telephone number of a mental health clinician. An informed consent document was reviewed by each participant before the group began, and in cases where the IRB protocol required it, signed by participants.

Referral information was readily available. The conducting institution contacted potential clinicians before focus groups began to secure their willingness to assist in case a participant required attention. The University of Oklahoma mental health team, a partner school, was willing to assist by telephone, in addition to a list of willing potential clinicians for referral purposes at a local level.

DATA CODING AND ANALYSIS

Coding of Data

The coding analysis process was generated from 1) literature on the theory of the Cultural Construction of Realities, 2) literature of Grounded Theory, and 3) code domains identified in collaboration with participating universities, CDC, and ASPH (Glaser & Strauss, 1967; Strauss & Corbin, 1996). As Miles and Huberman (1994) note, the coding process is simultaneously data collection, method, and analysis (Miles & Huberman, 1994). Consequently, code categories are not simply convenient labels facilitating text retrieval, they are crucial data leading to an auditable trail of findings (Strauss & Corbin, 1994; Miles & Huberman, 1994). In this study, "code categories" will be referred to as "domains."

Focus group and CRT tapes were transcribed and entered into the Ethnograph qualitative data analysis programs for coding using the designated coding protocol. For each transcript, coding proceeded from macro domains to smaller units of coded material (see Appendix H). Coding and recoding were completed when all portions of the transcripts were classified, domains were "saturated" (information began to be repetitive), and common themes emerged (Strauss & Corbin, 1994).

Analysis of Data

After coding of transcripts was completed, research relevant statements were extracted from each interview and analyzed for meanings. These meanings were clustered into themes which could be analyzed across focus groups (Morse, 1994). Thematic analysis is a process which encodes qualitative information, therefore themes are generated as the coding proceeds. It is important to note that frequency of the response is only one aspect of identification of themes. The significance of meaning as judged by the nature of the subject's discourse could mean that something less frequently mentioned could also represent a theme, provided, for example, that it is mentioned with great emphasis (Valle, 1989).

Themes elicited for each focus group were compiled into Topline Summary Reports (see Appendix E) and presented to the partner universities for utilization in the crafting of Final Topic Specific Creative Briefs for designated content areas (see Appendix A). The CRT coding process identified terms and concepts that were confusing to participants, and patterns could be discerned across participants. These were also presented to partner universities for the compilation of agent-specific reports (see Appendix F).

RESULTS

UNIVERSITY OF OKLAHOMA SOUTHWEST CENTER FOR PRE-EVENT MESSAGE DEVELOPMENT

Demographics: Focus Groups (See Table 3)

A total of 11 focus groups were conducted by partner universities on pre-event message development in regard to attack with a chemical agent, in this case, VX. Age of the participants ranged from 18 to 84 years of age, with a mean age of 46 years. There were more female than male participants, and the majority had completed high school. Regarding family income, most of the sample fell into the \$39,999 or below category. Focus groups were conducted in the following populations: 1) Caucasian, 2) Hispanic, 3) African American, 4) American Indian, 5) Asian, and 6) English as a Second Language. Most participants spoke English in the home setting, and all focus groups were conducted in the English language. "Urban" and "rural" focus groups were conducted within each population group, with the exception of the Asian population.

Table 3. Focus Group Demographics

	Category	N = 99	Mean
Age	Range	18-84	
ğ	Mean	46	
Sex	Male	30%	
	Female	70%	
Education	Less than high school	4%	
	Some high school	8%	
	High school diploma or GED	16%	
	Some college	32%	
	College degree	27%	
	Graduate degree	13%	
Ethnicity/race	African American/Black	30%	
	American Indian/Alaska Native	7%	
	Asian / Pacific Islander	20%	
	Caucasian/White	20%	
	Latino/Hispanic	22%	
Language in home	English	83%	
3 3	Spanish	4%	
	Other	12%	
Marital status	Single	33%	
	Married or living with partner	35%	
	Divorced or separated	17%	
	Widowed	14%	
Children	Yes	66 %	
	No	343%	
	Age Range	1-62	
	Mean Age	28	
Currently employed	Yes	65%	
	No	34%	
Family income	Less than \$10,000	25%	
	\$10,000 - \$19,999	19%	
	\$20,000-\$29,999	19%	
	\$30,000-\$39,999	15%	
	\$40,000-\$49,999	9%	
	\$50,000-\$59,999	1%	
	\$60,000-\$69,999	5%	
	\$70,000-\$79,999	2%	
	\$80,000-\$89,999	1%	
	\$90,000-\$99,999	0%	
	>\$100,000	4%	

Focus Group Findings: Across Populations

Information needs and information seeking are organized into three temporal conditions: 1) pre-event, 2) intra-event, and 3) post-event. Information needs also varied according to actions required for protection of self, family, and community.

Pre-Event, individuals needed preparatory conceptual information regarding chemical agents, knowledge of actions steps necessary for protection, and knowledge of where to obtain needed information and materials.

Intra-Event, individuals needed knowledge of the importance of avoiding contact with the agent and contaminated areas and knowledge of actions steps relevant to decontamination, sheltering in place, symptoms of exposure and antidote availability.

Post-Event, knowledge was needed regarding the importance of maintaining avoidance of agent, where and how to seek further information regarding emergency status and actions, knowledge relevant to the observation of self and others regarding possible exposure and knowledge of treatment avenues.

From the community perspective, pre-event community education venues regarding preparation/prevention/treatment were needed as well as information about where to get educational materials for preparation/prevention/treatment of others. Action steps relevant to the development of an effective action plan were also needed.

Radio Broadcasts. Focus group participants' responses to the radio broadcasts indicated that information presented was incomplete and difficult to commit to memory. Some of the symptoms of exposure were remembered, but hard to differentiate from those of other illnesses. The action steps recommended by the broadcast were not clearly presented, and did not engender feelings of safety among participants. There was doubt that an attack with VX could be survived. It was also stated that a unique attention grabber was needed to alert listeners to the importance of the message to follow. Participants felt that radio broadcasts would be of use if driving in the car or at work where there may be no television access.

Television Video. It was felt that the television segment had more details than the radio broadcast, and that this decreased anxiety. There remained confusion about symptoms of exposure, including time lapse between exposure and symptom recognition. Television was preferred over radio, when available. The video segments were thought to be poor in quality.

Printed Materials. The printed materials (see (Appendix D) were thought to have more detail than either the radio or television broadcasts, and this resulted in a decrease in anxiety. However, symptoms of exposure were still thought to be indicative of other illnesses, and action steps seemed poorly delineated. Suggestions for improvement of the readability of print materials included 1) increasing font size, 2) colorize critical points, 3) use of bullets, and 4) availability of materials pre-event.

Focus Group Findings: Rural Participants

Some rural participants felt that the federal government may neglect rural communities due to the relatively low population numbers, and that there would be a predilection to sacrifice a relative few to preserve the many. Rural residents placed trust in local authorities and local sources of information. However, in rural communities it was noted that access to local broadcasts may be lacking, therefore national satellite feeds are relied upon for information.

Concern was expressed about the protection of pets and livestock. Personal and commercial interests in animals were strong concerns to participants. Additionally, there was concern about exposed animals transferring contamination to humans.

Focus Group Findings: Population Specific

American Indian. Within the American Indian focus groups there was a distrust of the federal government. This is due to past interactions with the government in which the trust relationship was extensively violated. There was, however, trust in the tribal government, the chief of the tribe, and tribal employees. Information would also be sought from tribal officials and local emergency and hospital personnel. Regarding information dissemination, local broadcasting varies by rurality. Many times only national satellite broadcasts are available. There is considerable use of police scanners and ham radios. The television and radio media presented to the group were thought to be poor. Print materials were thought to be much better in quality and amount of information, but recommendations were made to change the formatting and to simplify some of the words and phrases. It was noted that the symptoms of exposure that were listed could also be symptoms of other illnesses, such as diabetes. Retreating to high, remote areas was discussed, and the use of wild or domestic outdoor animals as sentinels of active agent presence. It was thought that the elders would know how to survive an attack, as they have greater stores of preserved and canned food, and many live in remote areas that require the use of bottled water, self-standing generators, wood-burning stoves, and short wave radios.

Hispanic. Hispanic groups placed more trust in the federal government. There was also a trust of local individuals such as the parish priests. Most wanted the messages to be delivered in Spanish but some stated that they would access English-language channels due to the tendency of the Spanish-language stations to sensationalize and emotionalize events. Regarding the print materials, there was little understanding of the nature of a VX attack. Participants thought that the symptoms of exposure could apply to other illnesses and that it would be difficult to know if one were truly exposed.

African American. African American participants indicated that they would not trust the federal government in the event of an attack. This is due to past interactions in which the well-being of African American persons was extensively abused. There was trust in community and church leaders. As in the Hispanic groups, regarding the print materials, there was little understanding of the nature of a VX attack. For media dissemination, television was preferred over radio.

Asian. Asian participants trusted the government, and also place trust in community leaders. Participants preferred television dissemination.

Demographics: CRTs (See Table 4)

A total of 34 CRTs were conducted by partner universities in designated population segments, regarding the understandability and usefulness of printed materials on chemical (VX) attack. Age of the participants ranged from 21 to 58 years of age, with a mean age of 36 years. There were more female than male participants, and the majority had a high school and college education. Most spoke English in the home setting. All CRTs were conducted in English. CRTs were conducted within the same population segments as the focus groups. Regarding family income, most of the sample fell into the \$39,999 or below category.

Table 4. CRT Summary Demographics

Characteristic	Category	N = 34	Mean
Age	Range	21-58	
· ·	Mean	36	
Sex	Male	27%	
	Female	73%	
Education	Some high school	9%	
	High school diploma or GED	18%	
	Some college	39%	
	College degree	18%	
	Graduate degree	15%	
Ethnicity/race	African American/Black	29%	
	Caucasian/White	18%	
	American Indian/Alaska Native	9%	
	Asian / Pacific Islander	12%	
	Latino/Hispanic	32%	
Language in home	English	79%	
	Spanish	15%	
	Other	6%	
Marital status	Single	48%	
	Married or living with partner	36%	
	Divorced or separated	12%	
	Widowed	3%	
Children	Yes	73 %	
	No	27%	
	Age Range	1-37	
	Mean Age	14	
Currently employed	Yes	79%	
	No	21%	
Family income	Less than \$10,000	12%	
•	\$10,000 - \$19,999	24%	
	\$20,000-\$29,999	9%	
	\$30,000-\$39,999	21%	
	\$40,000-\$49,999	18%	
	\$50,000-\$59,999	9%	
	\$60,000-\$69,999	3%	
	\$70,000-\$79,999	3%	
	> \$80,000	0%	

CRT Findings: Across Population Groups

Terms. Cognitive Response Testing of VX printed materials (see (Appendix D) indicated confusion regarding the meaning of the following terms: 1) fumes, 2) gas, 3) gasoline, 4) antidote, 5) medicine, 6) vapor, 7) lukewarm, and 8) exposure. There was little ability to discriminate between "gas" and "gasoline," and between "medicine" and "antidote." The confusion over meanings of the words listed was apparent across participants and across population groups.

Concepts. Concepts that were confusing to participants across groups included the designation of signs and symptoms of exposure. These were thought to be equally representative of many other illnesses, and the questions remained about their ability to discern exposure status. Routes of exposure were also thought to be confusing. The order of the action steps designated for decontamination was thought to be unclear.

The concept of "antidote" was confusing to participants in that the printed materials stated that there was no cure, but that there was an antidote. The difference between "antidote," then, and "medicine" is unclear.

Participants maintained that there "must" be an odor to the VX gas and fumes. It was not accepted that fumes may not have an odor. Fumes were thought to be similar to gasoline vapors with an identifiable smell.

CRT Findings: Population Specific

White. Participants wanted more information before the occurrence of an event. They thought that the signs and symptoms of exposure were too vague, and wanted more information about medical treatment for exposure.

Hispanic. Understanding in general was low in this group of participants. There was confusion regarding the terms "gas" vs. "gasoline" and "antidote" vs. "treatment". The term "vapor" was also thought to be confusing. The concept of an odorless gas that you cannot see was unaccepted. Routes of exposure, the decontamination process, and the availability of an antidote were also hard to understand. Signs and symptoms of exposure as well as action steps were confusing to the participants.

African American. Understanding in general was low in this group of participants. There was confusion regarding the terms "gas" vs. "fumes", and "antidote" vs. "medicine". Symptoms of exposure were confusing to participants.

American Indian. "Exposure" was thought to be a confusing term. However, other terms were not confusing. It was not accepted that VX gas or VX fumes would be without odor. Again, symptoms of exposure were thought to be ambiguous, relating possibly to other illnesses, and action steps needed to be more clearly delineated.

ESL (**English as a Second Language**). Understanding in general was low in this group of participants. All terms relating to the concept of an invisible gas, vapor or

odorless fumes were not understood. The medical terms and designated symptoms of contamination were thought to be confusing also.

DISCUSSION

Issues of Coding Reliability

The coding of transcripts proceeded from the first coding of the manuscript to a process known as "check-coding" in which 1) two researchers code the same data set and coding difficulties or disagreements are discovered and/or 2) one researcher codes the data set and repeats the process on an identical un-coded manuscripts several days later. The processes of check-coding increase definitional clarity and validate reliability, and are also an assessment of internal consistency in individual coders (Miles and Huberman, 1994).

The coding of focus groups by the partner universities achieved acceptable levels of code-recode reliability. Verification of results was also achieved by a process of cross-group validation in which findings were compared across universities and similarities identified. It is notable that this level of reliability was achieved in this research.

Limitations of the Study

The Focus group and CRT participants in the study represent a non-random convenience sample of the population. The partner universities accessed participants from six diverse populations, and this is of considerable benefit. However, there is much discussion in the literature about the use of non-probabilistic sampling techniques. In probability samples, each member of the population has an equal chance of being included in the study. The most common uses of a probability sample are to determine distribution in a population and to test the relationships between variables. However, a primary limitation of this type of sampling is that it cannot easily be used to obtain information about the meaning of a construct (Morse, 1986).

The assumption underlying the use of non-probability sampling is that not all subjects experience the phenomenon of interest in the same ways. In qualitative research, sample size is dependent upon the purpose of the inquiry. In-depth information from a small target population is the desired outcome rather than dilute information from a large number of subjects. In a project such as this one, the researcher's main emphasis is on understanding and identifying culturally-driven constructions which will in turn facilitate the crafting and delivery of messages important to the continued health and well-being of the public. In addition to other issues, the validity of the study after its completion depends upon the richness of the information obtained, and the observational and analytic skills of the researcher (Patton, 1990).

Issues of Validity

Validity is the degree to which the research measures what it is supposed to measure. Krueger (1994) states that the use of focus groups in qualitative research is valid if the focus groups are used carefully for a problem that is amenable to focus group inquiry. The validity depends upon the context in which it is used and the procedures followed in

the conduction of the groups (Krueger, 1994). Focus groups are particularly valuable prior to initiating a social marketing campaign for the purpose of successfully communicating with designated population groups. The cognitive response testing assured that terms and phrases used in the publicly-distributed printed materials on chemical attack were fully understandable and of use to the targeted population segment.

In order to insure validity, the findings must be grounded in the data, inferences made from the data must be logical, analytic strategies applied correctly, and alternative explanations accounted for (Schwandt & Halpern, 1988). The findings of this research were consistent across four universities, and this consistency of findings constitutes the verification process necessary to assessment of validity. Ideally, the research should have the possibility of being replicated by other investigators. "Transparency" of method addresses the issue of clarity of data and procedures such that the study may indeed be replicated at a later date (Miles & Huberman, 1994). Methodology was consistent across the four universities involved in this research.

In this study external validity is limited in that the findings cannot be generalized to the entire U.S. population. They can, however, be generalized to the populations that were accessed for the focus group participants. Therefore, it is felt that the research contains important and valid information that may be of value to the CDC and ASPH in the crafting of pre-event messages addressing the issues extant in the realities of bioterrorist activity, especially in regard to targeted special populations.

CONCLUSIONS & RECOMMENDATIONS

The research presented here indicated that changes should be made to the broadcast and print materials presented to focus group and CRT participants for evaluation. In general, messages should convey the following key facts:

- 1. Protection is possible.
- 2. Survivability is possible.
- 3. Avoidance or reduction of exposure is possible.
- 4. Decontamination is possible.
- 5. Antidote medication exists.

At this time, the materials do not relay these important messages to the public audience in ways that are easily understandable and that convey a sense of safety through the perceived efficacy of recommended actions. The serious nature of contamination should be conveyed directly and fully, in language and format that can be easily understood. This will also be motivation for seeking and adopting protective information.

To counteract a pervasive perception that chemical agents will always result in death, its survivability should be emphasized and connected to the use of easily understood and implemented protective action steps. Application of sheltering information and other protective strategies can result in avoidance or reduction of exposure and timely decontamination can be an effective way to reduce the effects of exposure. Antidote medication exists that can treat the symptoms of VX exposure.

Delivery of Information

Dissemination:

- 1. TV
- 2. Radio
- 3. Print Materials: Supermarket checkout areas, schools, laundromats, libraries
- 4. Emergency Broadcast System
- 5. Local authorities and agencies: hospitals, emergency response personnel
- 6 Internet
- 7. Use of all communication means
- 8. Messages should be translated into various languages as necessary.

Radio. The tone of the radio messages should be calm, factual, authoritative, without sensationalism. The broadcast should not withhold any information. Radio was thought to be superior to television while driving a car, in rural areas, or at work. However, radio clips did not provide enough information for listeners, and this contributed to overall anxiety.

Television. The tone of the radio messages should be calm, factual, authoritative, without sensationalism. The broadcast should not withhold any information. The While TV was thought to be better than radio messaging, TV clip left viewers with confusion about action steps and symptoms of exposure.

Print Materials. Print materials presented were thought to contain much more usable information than the radio and TV clips. Improvements to print materials included use of bullets, color, larger font, and simplified language. It was thought that messages should consider reading level and provide definitions.

It is recommended that the radio and television clips be re-crafted to address the information needs of the public sector that have been revealed through the research process. Revised web content and fact sheets can be found in Appendices I and J. Revised radio content can be found in Appendix K.

Creative Considerations

Television news anchors were perceived as the sources of sensationalism about news. There was a sense that weather broadcasters were less subject to political whims of media outlets and their commercial interests. Also, information would be provided that was relevant to local concerns, rather than national concerns. Another perception was that they use objective information that is fact and science-based. Consequently, there was a sense of heightened trust due to weather broadcasters' insulation from politics and perceived scientific approach to information.

There was a strong concern about the credibility of information from the media. Independently across groups, there was an approach that was suggested in which a duo of spokespersons was used. The duo would be composed of 1) a well-recognized and respected public figure, coupled with 2) an expert in the topic area. Participants wanted

expertise, but considered the need to have confidence that the specific expert being used was "the definitive" one. The recognized and respected public figure served to convey an endorsement of the technical expert. The public figure also would serve as a connection to the human need part of the information needed to cope with an event.

There were suggestions to use tornado or other existing warning sirens as an initial alert system. Since most communities have existing alert systems, it was common to hear ideas about developing a unique audible siren blast code that would be specific to bioterrorist alerts. This code would be a signal to immediately seek more information from the media.

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Appendices

Appendix A. VX Creative Brief

Appendix B. VX Focus Group Guide

Appendix C. VX CRT Guide

Appendix D. VX Tested Materials

Appendix E. Focus Group Topline Summary Reports

Appendix F. CRT Topline Summary Report

Appendix G. Overall Project Demographics

Appendix H. Coding Guides

Appendix I. Revised Web Materials

Appendix J. Revised Fact Sheets

Appendix K. Revised Radio Content

Appendix A. Agent Specific Creative Brief: VX

UNIVERSITY OF OKLAHOMA SOUTHWEST CENTER FOR PRE-EVENT MESSAGE DEVELOPMENT

Chemical Creative Brief - 11/23/04

1. Target Audience(s)

- The population living in a threatened or affected area in which a chemical agent might be used or has been used.
- o Special attention should be given to vulnerable populations: elders, minorities, non-English speakers, and persons living in rural areas.

2. Objective(s)

In Year 2 of the research, Focus Group and Cognitive Response testing was implemented on developed radio, television, and print materials.

Information needs and information seeking are organized into three temporal conditions: pre-event, intraevent, and post-event.

Information needs also varied according to actions required for protection of self, family, and community

Individual Level

Pre-Event, individuals needed:

- o Preparatory conceptual information regarding chemical agents.
- o Knowledge of actions steps necessary for protection.
- o Knowledge of where to obtain needed information and materials.

During an event:

- o Knowledge of the importance of avoiding contact with the agent and contaminated areas.
- o Knowledge of actions steps relevant to decontamination, sheltering in place, symptoms of exposur and antidote availability.

After an event

- o Knowledge of the importance of maintaining avoidance of agent.
- o Knowledge of where and how to seek further information regarding emergency status and actions.
- o Knowledge relevant to the observation of self and others regarding possible exposure.
- o Knowledge of treatment avenues.

Family and Community

Pre-Event, people needed:

- o Community education venues regarding preparation/prevention/treatment.
- Where to get educational materials for preparation/prevention/treatment of others.

Chemical Creative Brief – 11/23/04

o How to develop a plan of effective action to implement which is inclusive of others.

During an event:

- Information regarding assisting with decontamination, treatment, and sheltering of community members.
- o Instructions on how to obtain information regarding emergency status and actions.

After an event:

- o Education regarding the observation of community members for symptom development.
- o Information regarding safety of environment post-event.

3. Obstacles

Immediate ability to effectively respond to a chemical threat or attack is impeded by several factors which are generally related to lack of adequate information, information not provided in preferred language or media, and fear of the unknown. However, other mundane but significant issues are present including language issues, distrust of government as a source of full and complete information, and a sense of futility regardless of protective action.

- o Existing knowledge of VX/Chemical agents and effective response to chemical attack/exposure ar largely absent among all public groups.
- Lack of current, available information for individuals and family creates a learning curve that
 remains to be completed. While radio, video, and print materials tested provided answers to some
 questions, others remain, and a sense of efficacy and safety is not provided by radio, television ar
 print materials tested in this past year.
- Fear, panic, and anxiety were nearly universally mentioned as initial reactions to news of an event It could be noteworthy to consider each of the above items discrete reactions, each with their own behavioral outcomes. For example, refusal to stay away from a contaminated area if family was there.
- Confusion regarding action steps such as decontamination and sheltering in place. For example, decontamination was thought to be impractical when at work and other non-residential environments since clothing removal and showering is a first step.
- o Doubt that the action steps recommended would ensure safety.
- Distrust of government regarding receipt of full information based on past experiences that seem t convey a pattern of purposeful withholding of information or the dissemination of incomplete

Chemical Creative Brief – 11/23/04

information.

- Distrust of government regarding rural areas receiving full support due to a perception of more resources in high population density areas and a predilection to sacrifice a relative few to preserve the many.
- Concern that the antidote will not be available to all.
- o Concern that language will be only English and overly difficult to understand with the result that there will not be a standard probability of survival of an event.
- Concern that detailed, technical, complex language will be used in safety communications and lim
 the ability to comply due to simple miscommunications stemming from readability factors. Print
 materials were thought to be the most informative during the present research, but were thought by
 some to be confusing.

4. Key Promise

In general, messages should convey the following key facts:

- o Protection is possible.
- o Survivability is possible.
- o Avoidance or reduction of exposure is possible.
- o Decontamination is possible.
- Antidote medication exists.

5. Support Statements / Reasons Why

VX can kill. The serious nature of contamination should be conveyed directly and fully, in language and format that can be easily understood. This will also be motivation for seeking and adopting protective information.

VX can be survived. To counteract a pervasive perception that chemical agents will always result in death, its survivability should be emphasized and connected to the use of easily understood and implemented protective action steps.

VX can be avoided. Application of sheltering information and other protective strategies can result in avoidance or reduction of exposure.

VX decontamination is effective. Timely decontamination can be an effective way to reduce the effects exposure.

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VX treatment is available. Antidote medication exists that can treat the symptoms of VX exposure.

6. Delivery of Information: Results of Media Testing

There is a strong need for information to be available **pre-event**, in addition to that provided intra- and post-event.

Dissemination:

- o TV
- o Radio
- o Print Materials: Supermarket checkout areas, schools, Laundromats, libraries
- o Emergency Broadcast System
- o Local authorities and agencies: hospitals, emergency response personnel
- o Internet
- o Use of all communication means

Radio

- o Tone: Calm, factual, authoritative, without sensationalism.
- o Complete and full without withholding any information.
- o Superior to TV while driving a car, in rural areas, or at work.
- o Radio clips did not provide enough information for listeners, and this contributed to overall anxiet
- o Messages should be translated into various languages as necessary.

Television

- o Tone: Calm, factual, authoritative, without sensationalism.
- o Complete and full without withholding any information.
- o TV clip left viewers with confusion about action steps and symptoms of exposure.
- o TV thought to be better than radio messaging.
- o Messages should be translated into various languages as necessary.

Print Materials

- Print materials presented were thought to contain much more usable information than the radio an TV clips.
- o Improvements to print materials included use of bullets, color, larger font, and simplified language
- o Messages should consider reading level and provide definitions.
- o Messages should be translated into various languages as necessary.

8. Creative Considerations

The following items offered some unique and creative information usable in message development:

Use weather broadcasters as spokespersons. Typical news anchors were perceived as the sources of

Chemical Creative Brief – 11/23/04

sensationalism about news. There was a sense that weather broadcasters were less subject to political whims of media outlets and their commercial interests. Information would be provided that was relevant local concerns, rather than national concerns. Also, they used objective information that is fact and scienc based. Consequently, a sense of heightened trust was attached to them due to their insulation from politic and their scientific approach to information.

Identify a team of spokespersons. There was a strong concern about the credibility of information from the media. Independently across groups, there was an approach that was stated in which a duo of spokespersons was used. The duo would be composed of 1) a well-recognized and respected public figure coupled with 2) an expert in the topic area. People wanted expertise, but considered the need to have confidence that the specific expert being used was "the definitive" one. The recognized and respected public figure served to convey an endorsement of the technical expert. The public figure also would serve as a connection to the human need part of the information needed to cope with an event.

Use existing venues. Use tornado or other existing warning sirens as an initial alert system. Since most communities have existing alert systems, it was common to hear ideas about developing a unique audible siren blast code that would be specific to bioterror alerts. This code would be a signal to immediately see more information from the media.

Concern with pets. Regarding pets, there was a strong desire to have information providing assurance that their safety could be maintained.

10. Population-Specific Findings

Rural Issues

- Distrust of government regarding rural areas receiving full support due to a perception of more resources in high population density areas and a predilection to sacrifice a relative few to preserve the many.
- o Trust of local authorities and local sources of information (such as that received from local emergency and hospital personnel) over federal authorities.
- o Access to national news broadcasts, but not local broadcasts, as many rural communities do not have local television or radio facilities.
- o Reliance upon ham radios and police scanners.
- Protection of pets and livestock. Personal and commercial interests in animals were strong concer to participants. Additionally, there was concern about exposed animals transferring contamination to humans.

American Indian

- Use of wild or domestic outdoor animals as sentinels of active agent presence. Some people considered their local animal populations to be potential sentinels regarding the impact and present of a chemical agent.
- o Retreating to higher, remote areas.

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- o Lack of trust in federal government.
- o Trust in tribal government and authorities.
- o TV and radio media presented were thought to be poor.
- o Print materials were preferred.
- o Symptoms delineated also apply to other illnesses, such as diabetes.

Hispanic

- o Trust in federal government.
- o Trust in local community individuals, such as the parish priests.
- o Would prefer media to be delivered in Spanish, but without the sensationalism/emotionalism.
- o Would also access English language media due to the perception that Spanish media is more emotional and sensationalist.
- o Symptoms delineated also apply to other illnesses.

African American

- o Lack of trust in federal government.
- o Trust in community leaders and church.
- o Difficulty in understanding print materials.
- o Television was preferred over radio.

Asian

- o Trust in federal government.
- o Preferred television dissemination.
- o Trust in local community leaders.

Appendix B. Focus Group Guide: VX

INTRODUCTION (3 min.)

- Hi, my name is _____ and I work for the University of Oklahoma.
- Thank you for helping us.
- Before we begin, I'd like to introduce our project team. (Introduce team members by name). They are going to take notes during our discussion today.

Pre-Screening

- Before we get started, I would like to discuss a few minimal risks or potential stressors that may occur during our discussion. During this focus group, we will be discussing potential terrorist threats, attacks, and hypothetical exposure to chemical or biological agents. Due to the sensitivity of this subject, participants who have experienced violent acts, had family or friends experience violent acts may want to reconsider participating in this focus group. Please keep in mind that the nature of this discussion may be upsetting especially if you are particularly sensitive to this subject matter.
- Also, if any of you have experienced post-traumatic stress disorder or exhibit symptoms of or have a known psychotic disorder, you should not participate in this focus group.

*This is an excerpt from ALLPSYCH.com regarding the characteristics of a psychotic disorder. Refer to this quote if any participants have questions regarding what defines a psychotic disorder. Also, to be considered a disorder, the symptoms must impede the daily actions of the individual; they must prevent the individual from living their normal life.

"The major symptom of these disorders is psychosis, or delusions and hallucinations. Delusions are false beliefs that significantly hinder a person's ability to function. For example, believing that people are trying to hurt you when there is no evidence of this, or believing that you are somebody else, such as Jesus Christ or Cleopatra. Hallucinations are false perceptions. They can be visual (seeing things that aren't there), auditory (hearing), olfactory (smelling), tactile (feeling sensations on your skin that aren't really there, such as the feeling of bugs crawling on you), or taste.

- You will be compensated for your time regardless of your participation in this group.
- Please consider what I have read and excuse yourself if you have experienced or currently experience any of the issues presented and you think that these issues

will make you particularly sensitive to discussing the following topic areas, potential terrorist attacks, bioterrorism, and diseases that may occur as a result of exposure.

Informed "Consent" (5 min.)

- Before we look at the materials, I'd like to review something with you. (Nonverbal notetaker will distribute the "informed" consent document.)
- This document explains the purpose of the discussion group and what you can expect while you're here.
- Let's go over the key points.
- First, I want you to know that your participation today is voluntary and you don't have to answer any question that makes you feel uncomfortable. You may leave at any time without penalty.
- Second, our discussion today will be audio taped. This will allow us to pay close
 attention to your comments and make our notes more accurate. Your name will
 not be identified in any of our transcripts and only our project team will have
 access to those transcripts.
- And finally, you will receive \$50 cash after our discussion, which will last no more than 2 hours.
- Possible benefits of participating in our discussion include:
 - Being better informed about the bioterrorism threat
 - Having increased confidence in your ability to make an informed decision about the bioterrorist Threats
 - Having the opportunity to discuss your fears and concerns
- Possible risks of participating in our discussion include:
 - Feeling distress or anxiety by discussing the possibility of a bioterrorism attack

Demographic Form

Please take a minute to fill out the demographic form. We're not asking for your name, answering is voluntary, can refuse to answer any questions and still participate in the discussion group.

• Does anyone have questions? We're going to start recording now. (Nonverbal notetaker will start the audiotape recording.)

Guidelines (5 min.)

- Please try to talk one at a time.
- We're very interested in your opinions. There are no right or wrong answers, only different ideas. So please be honest and share what you think.
- During our discussion, you may think of a lot of questions that you have about {VX}. We'd like you to write them down.
- We won't be able to answer your questions during the discussion, in part because the reason we're here is to see whether the **materials** answer all your questions.
- If we answer questions during the discussion this could affect your response to the materials you'll review later. At the end of our discussion, a bioterrorism expert from the University of Oklahoma Southwest Center for Pre-event Message Development will be available by phone to answer any remaining questions you have.
- Also at this time please turn off cell phones and pagers if you are able to do so.
- We will also give you some information to take with you.
- Are there any more questions before we begin?

(NOTE TO MODERATOR: If participants ask questions during the discussion, say: "We can't answer your question now as it may influence the results of the discussion. Please write down your questions and a smallpox expert will be available at the end of the discussion to answer them.")

Icebreaker/introductions (7 min.)

• Let's go around the room and please introduce yourself by saying your first name only [and title, department, etc.] and sharing one of your favorite hobbies.

SCENARIO ROLLOUT AND MATERIALS TESTING

- For the remainder of the focus group, please note that we'll be talking only about {VX}.
- Now, I am going to walk you through a made up story about what might happen if a {chemical} weapon were used right here in {Oklahoma City}.
- There are four parts to the story. After each part, we'll talk about your reactions and thoughts.
- I will read the story out loud.
- Please remember that what I'm telling you is made up. This is not happening now, and we hope it will never happen.

Part One: Non-Specific Agent & Symptoms

You wake up about 7 am on a Tuesday and turn on the local news to hear that President Bush has raised the Homeland Security Advisory System threat level to severe (red). The president and his advisors report that this change in the national threat level is based on knowledge of a credible threat that a terrorist group may be planning a chemical attack in {Oklahoma City}. Officials suspect that the attack may involve a {chemical} weapon. {A week later, early on a Saturday afternoon, you turn on the radio and hear that a plane has dropped an unknown substance on persons attending a college football game. The news reports that people are on the field dead or dying. Some people are obviously injured; they are convulsing or seizing. Other people have been injured in the panic as people tried to leave the stadium. This first report speculates that some kind of chemical might have been sprayed on the stadium. Although this has not been confirmed, these symptoms are consistent with exposure to {VX}, a dangerous agent used in {chemical} warfare.

RADIO

• Next, I'd like to ask you listen to a short radio clip providing information on the hypothetical {VX} attack and then we'll discuss it.

(After radio clip)

• Now I'd like to ask you some questions about the radio clip only.

Comprehension:

• What were the 2 or three most important points in the materials?

- What information in the clip was new to you?
- What part of the messages were clear? What parts of the clip were unclear?
- Difficult to understand? What didn't make sense the first time you saw or heard it?
- What questions do you still have? Prompts (if needed): About the nature of the threat, about symptoms of bioterrorism related illness, etc.

Emotional Response:

• How does this clip make you feel?

Prompts (if needed):

Repeat for each emotion mentioned

- What about the clip makes you feel (emotion)?
- How could we change the clip to it less/ more _(emotion)_?

Actions

- How confident are you that the actions recommended in the clip will keep you safe? (Efficacy)
 - PROBE (if needed): Why or why not?
- How confident are you that you can carry out these recommendations? (efficacy)
 - PROBE (if needed): Why or why not?
- Which of the directions do you intend to follow? What direction do you believe you won't follow? (intention)

Channel Appropriateness

- Is this the kind of information you would like to get from the radio?
- What additional information would you want to hear on the radio?
- What might be a better medium to get this information to you?
- Where else would you look for additional information?
 - Why is this the best place to look?

Response to the materials

- What was your overall impression of the clip? (overall impression.)
- What grabbed your attention? (appeal)
 - What did you like?
 - What didn't you like?
- How believable is the information in the clip? (credibility)
 - How believable are the people in the clip?
- Given the events these events what information was useful to you? (relevance)
- Do you have any recommendations to make this clip better or more useful to you?

Part Two- Specific Agent + Symptoms + Response

A short time later, you turn on your TV to find that a local government official has issued a statement. She confirms that there has been a deliberate release of a {chemical agent} in {Oklahoma City} and the agent has been confirmed to be {VX, a nerve agent used in chemical warfare}. {It was believed to have been released from a low-flying aircraft over the stadium. Responders have arrived on the scene wearing protective gear and are transporting the injured to ambulances. One hundred of the spectators at the stadium have died from the chemical and several hundred were injured trying to escape from the stadium. People are being asked to stay away from the area around the stadium. Anyone who has left the field and thinks they might have been exposed is instructed to remove their clothes, place them in two plastic bags, shower, and wash their hair}.

TV Clip

• Next, I'd like to ask you watch to a short TV clip providing information on the hypothetical chemical attack and then we'll discuss it.

(After TV clip)

• Now I'd like to ask you some questions about the TV clip only.

Comprehension:

- What were the 2 or three most important points in the materials?
- What information in the clip was new to you?

- What part of the messages were clear? What parts of the clip were unclear?
- Difficult to understand? What didn't make sense the first time you saw or heard it?
- What questions do you still have? Prompts (if needed): About the nature of the treat, about symptoms of bioterrorism related illness, etc.

Emotional Response:

- How does this clip make you feel?
 - *Prompts (if needed):*

Repeat for each emotion mentioned

- What about the clip makes you feel (emotion)?
- How could we change the clip to it less/ more _(emotion)_?

Actions

- How confident are you that the actions recommended in the clip will keep you safe? (Efficacy)
 - PROBE (if needed): Why or why not?
- How confident are you that you can carry out these recommendations? (efficacy)
 - PROBE (if needed): Why or why not?
- Which of the directions do you intend to follow? What direction do you believe you won't follow? (intention)

Channel Appropriateness

- Is this the kind of information you would like to get from the TV?
- What additional information would you want to hear on the TV?
- What might be a better medium to get this information to you?
- Where else would you look for additional information?
 - Why is this the best place to look?

Response to the materials

- What was your overall impression of the clip? (overall impression.)
- What grabbed your attention? (appeal)
 - What did you like?
 - What didn't you like?
- How believable is the information in the clip? (credibility)
 - How believable are the people in the clip?
- Given the events these events what information was useful to you? (relevance)
- Do you have any recommendations to make this clip better or more useful to you?

Part Three- Release of Print Information

Local officials release information with recommendations for steps you can take to survive a {chemical} terrorist attack. Now we're going to show you some materials of the sort that might be released for use by the public. Please give us your honest thoughts, feelings and responses to these materials, responding to questions in a number of areas. Again, please keep in mind that there are no right or wrong answers; we are just looking for your reactions.

Instruct participants to remove VX fact sheet from their folders.) Take about 10 minutes to look at the fact sheet, and feel free to write down other questions, comments, and concerns. When you're finished, please turn over the paper just to indicate that you're done reading. Do you have any questions?

Comprehension:

- What were the 2 or three most important points in the materials?
- What information in the print materials was new to you?
- What part of the messages were clear? What parts of the print materials were unclear?
- Difficult to understand? What didn't make sense the first time you saw or heard it?
- What questions do you still have? Prompts (if needed): About the nature of the threat, about symptoms of bioterrorism related illness, etc.

Emotional Response:

- How does this print materials make you feel? *Prompts (if needed):*
 - Repeat for each emotion mentioned
 - What about the print materials makes you feel (emotion)?
 - How could we change the print materials to it less/ more (emotion)?

Actions

- How confident are you that the actions recommended in the fact sheet will keep you safe? (Efficacy)
 - PROBE (if needed): Why or why not?
- How confident are you that you can carry out these recommendations? (efficacy)
 - PROBE (if needed): Why or why not?
- Which of the directions do you intend to follow? What direction do you believe you won't follow? (intention)

Channel Appropriateness

- Is this the kind of information you would like to get from the print media?
- What additional information would you want to hear on the print media?
- What might be a better medium to get this information to you?
- Where else would you look for additional information?
 - Why is this the best place to look?

Response to the materials

- What was your overall impression of the print materials? (overall impression.)
- What grabbed your attention? (appeal)
 - What did you like?
 - What didn't you like?
- How believable is the information in the print materials? (credibility)
 - How believable are the people in the print materials?
- Given the events these events what information was useful to you? (relevance)

• Do you have any recommendations to make this fact sheets better or more useful to you?

Part Four

Now thinking about all three media presented.

Preferred channels for terrorism information dissemination:

- Did you find the information from either the radio, television, or print more helpful? Why or why not?
- What channel would you have most likely turned to during the described crisis?

CONCLUSION (15 min.)

- If there are any further concerns or questions about {chemical} terrorist attacks, a University of Oklahoma bioterrorism expert, {XXXX} is available by telephone. He will answer any remaining questions: {271-XXXX}.
- Thank you for joining us today.
- We really appreciate you taking the time to meet with us.
- Please leave the pre-test materials, but you can take the rest of the folder with you
- You can leave at any time but don't forget to see (Nonverbal notetaker) to receive your \$50.

(IF ANYONE REQUESTS THE PRETEST MATERIALS, SAY: "The materials we are currently testing still need to be finalized and approved before they will be available for release.")

Appendix C. Cognitive Response Testing Guide: VX

Cognitive Response Testing Script

INTRODUCTION	
Hi, my name is	and I work for The university of Oklahoma. I'd like to
thank you for volunteering to	help us. We are developing informational materials
regarding possible terrorism e	events. We have asked you to come here today to think
about these situations and loo	k at some of our materials.

Informed "Consent"

Before we look at the informational materials, I'd like to review a few things with you. (*Present participant with informed consent document.*) This document explains the purpose of this interview and what you can expect while you're here. I'd like to call your attention to a few key points.

First, I want you to know that your participation today is voluntary and you don't have to answer any question that makes you feel uncomfortable. You may leave at any time without penalty. Second, we will be recording our interview today. This will allow us to pay close attention to your comments and make our notes more accurate. Your name will not be identified in any of our transcripts and only our project team will have access to those transcripts. And finally, you will receive a \$50 gift certificate after our interview, which will last no more than 2 hours.

Possible benefits of participating in our discussion include:

- Becoming better informed about bioterrorism and what to do in the event of an attack:
- Experiencing increased confidence in your ability to make an informed decision about a possible bioterrorism attack; and
- Having the opportunity to provide feedback on educational materials that will benefit others in case of a bioterrorism attack.

Possible risks of participating in our discussion include:

- Feeling distress or anxiety produced by discussing a bioterrorism event.
- Feeling of being tired due to participation in this 1 to 2 hour long interview.

Please take a minute to fill out the demographic form. We're not asking for your name. Answering is voluntary and you can refuse to answer any question and still participate in the interview. Please feel free to ask me any questions.

Guidelines (5 minutes)

Before we begin our interview today, we are very interested in your thoughts. So please be honest and share what you think. I am not an expert in these subjects and I am not the person who created these materials — so please do not worry about hurting my feelings!

During our discussion, you may think of a lot of questions that you have about bioterrorism. We'd like to ask you to write them down. We won't be able to answer your questions regarding the subject of bioterrorism during the discussion. I'm going to warn you right now, you're going to feel frustrated when we don't answer your questions right away. But at the end of our discussion, a bioterrorism expert from the University of Oklahoma Southwest Center for Pre-event Message Development will be available to answer any remaining questions you have. Also, at this time please turn off your cell phone and pager if you are able to do so.

Please note that at the end of this discussion, we will give you information sheets to take with you. (IF ANYONE REQUESTS THE PRETEST MATERIALS, SAY: The materials we are currently testing still need to be finalized and approved before they will be available for release.)

Are there any more questions before we begin?

I am going to begin recording now. I will be giving you seven short paragraphs to read, one at a time. After each paragraph, I will be asking you questions about it.

[Place Section A in front of participant. <u>Do not read the section titles to the participant – they are for your own information.</u>]

COGNITIVE RESPONSE TESTING

Section A: (What is VX?) (10 minutes)

Please read the following section [place Section A in front of participant]:

<u>VX can be deadly</u>. VX is an odorless and tasteless chemical. It can be in gas or liquid form, but it cannot be a powder. In gas form, VX looks like a vapor or mist. In liquid form, VX is a honey-colored liquid that looks like motor oil. It is very oily and slow to evaporate. VX feels oily on the skin. <u>Exposure to VX in any form can seriously harm or kill you</u>.

- What is this paragraph telling you?
- What does the word "gas" mean? (if participant does not know the difference explain that Content expert will go over that at the end of the session)
- In your own words, can you tell me what "exposure" means?
- Please tell me if you think there are any unclear words or sentences in this section.

Section B: (Routes of VX Exposure) (10 minutes)

Please read following section [place section B in front of participant]:

VX gas can be released into the air for you to inhale (breathe in) and be poisoned. VX can be placed into your food or water and then you would swallow it. VX can come in contact with your eyes where it may be absorbed (enter) into your body. You can be exposed by touching or being near other people's skin or clothing that have VX on it. VX fumes can continue to be released from clothing and other objects for a long time. VX fumes can seriously harm or kill you.

- What is this paragraph telling you?
- What does the word "fumes" mean?
- In your own words, can you tell me how you can be exposed to VX?
- Please tell me if you think there are any unclear words or sentences in this section.

Section C: (Symptoms of Exposure) (10 minutes)

Please read the following section [place section C in front of participant]:

If you were exposed to VX gas (vapor), symptoms may appear within seconds. If you were exposed to VX liquid, symptoms may appear within a few minutes to several hours. The more VX you are exposed to (in either liquid or gas form) the more quickly you will get sick. The longer you are exposed to VX (in either liquid or gas form) the more likely you are to get sick. Any VX liquid that touches your skin may cause death if you do not immediately wash it off. If you are exposed to VX, by any method, you may have some or all of these symptoms:

- Runny nose
- Watery eyes, pinpoint pupils (very small pupils or black dot in center of eye)
- Burning eyes, eye pain, and blurred vision
- Drooling, and excessive sweating
- Choking, coughing, chest tightness, rapid breathing
- Diarrhea and increased urination
- Sleepiness, confusion, weakness
- Headache
- Abdominal (stomach) pain, nausea and vomiting
- Skin exposed to VX may sweat and twitch
- Very slow or fast heart beat, and very low or very high blood pressure

Exposure to large amounts of VX may have these additional symptoms:

- Loss of consciousness (passing out)
- Convulsions (seizures)
- Paralysis (unable to move)
- Respiratory failure (unable to breathe) leading to death.
- What is this section telling you?
- After reading this section, do you think you could recognize the symptoms of VX exposure? What are some of those symptoms?
- Please describe which parts of this section you did not understand or were not clear to you.
- How did you feel after reading this section?

Section D: (Treatment) (10 minutes)

Please read the following section [place section D in front of participant]:

Medical workers can give you the antidote (medicine) for VX but you must take it very quickly. Medical workers can also give medical care to treat your symptoms. Treatment depends on how you were exposed to VX (inhaled, swallowed, or touched) as well as how much VX you were exposed to, and how long you were exposed to VX.

What is this paragraph telling you?

What is an "antidote"?

Please describe which parts of this section you did not understand or were not clear to you.

Section E: (Safety Excerpts) (10 minutes)

Please tell me what the following segments are telling you?

1.

If you are in the area contaminated with VX, leave immediately and dial 911.

• What is one telling you?

2.

<u>If you have swallowed food or liquid with VX</u>, do not induce vomiting and do not eat or drink anything else. Immediately dial 911.

• What is two telling you?

3

If you have breathed in (inhaled) VX gas (vapor), immediately dial 911.

• What is three telling you?

4

If VX is on your clothes or skin, cut your clothes off if possible. Try to avoid pulling your clothes over your head as this could spread VX across your body. Use the nearest available water source, like a sink, a fountain, a hose, or even bottled water. Immediately wash the exposed areas with lukewarm water (do not use hot water—it can make the VX exposure worse) and soap. If you can, use liquid soap. Wash for at least 10 to 15 minutes. If there is no soap available use plain water. After washing with soap and water dial 911. Do not put your clothing back on. Exposed clothing may give off VX fumes so you must double bag clothing in plastic bags. To do this wear rubber gloves or use sticks or tools to move your clothing into the plastic bag. Put all items that touched the clothing in the bag (any gloves or tools you used). Wash your body again to remove any trace of VX. Emergency personnel will dispose of your contaminated clothing.

- What is four telling you?
- Why should you cut clothing off and not pull clothing over your head?

5

<u>If VX is in you eyes</u>, rinse with water for 10 to 15 minutes. Use the nearest available water source, like a sink, a fountain, a hose, or even bottled water. If you are wearing contact lenses take them out immediately and rinse your eyes with water for 10 to 15 minutes. After rinsing your eyes dial 911.

• What is five telling you?

- How do you feel after reading these sections?
- Please describe which parts of these sections you did not understand or were not clear to you.

Other recommendations:

Is there anything else you would like to comment on that we haven't talked about?

CONCLUSION

Thank you for joining us today. We really appreciate you taking the time to meet with us. Please sign your first name on the sheet, and we will provide you with \$50. Have a nice day.

If there are any further concerns or questions about {chemical} terrorist attacks, a University of Oklahoma bioterrorism expert, {XXXX} is available by telephone. He will answer any remaining questions: {271-XXXX}.

Appendix D. Tested Materials: VX

VX Fact Sheet

What is VX?

<u>VX can be deadly</u>. VX is an odorless and tasteless chemical. It can be in gas or liquid form, but it cannot be a powder. In gas form, VX looks like a vapor or mist. In liquid form, VX is a honey-colored liquid that looks like motor oil. It is very oily and slow to evaporate. VX feels oily on the skin. <u>Exposure to VX in any form can seriously harm or kill you</u>.

How could I be exposed to VX?

VX gas can be released into the air for you to inhale (breathe in) and be poisoned. VX can be placed into your food or water and then you would swallow it. VX can come in contact with your eyes where it may be absorbed (enter) into your body. You can be exposed by touching or being near other people's skin or clothing that have VX on it. VX fumes can continue to be released from clothing and other objects for a long time. VX fumes can seriously harm or kill you.

What are the signs and symptoms of VX exposure?

If you were exposed to VX gas (vapor), symptoms may appear within seconds. If you were exposed to VX liquid, symptoms may appear within a few minutes to several hours. The more VX you are exposed to (in either liquid or gas form) the more quickly you will get sick. The longer you are exposed to VX (in either liquid or gas form) the more likely you are to get sick.

Any VX liquid that touches your skin may cause death if you do not immediately wash it off.

If you are exposed to VX, by any method, you may have some or all of these symptoms:

- o Runny nose
- Watery eyes, pinpoint pupils (very small pupils or black dot in center of eye)
- o Burning eyes, eye pain, and blurred vision
- o Drooling, and excessive sweating
- o Choking, coughing, chest tightness, rapid breathing
- o Diarrhea and increased urination
- o Sleepiness, confusion, weakness
- o Headache
- o Abdominal (stomach) pain, nausea and vomiting
- Skin exposed to VX may sweat and twitch
- Very slow or fast heart beat, and very low or very high blood pressure

Exposure to large amounts of VX may have these additional symptoms:

- Loss of consciousness (passing out)
- o Convulsions (seizures)
- o Paralysis (unable to move)
- o Respiratory failure (unable to breathe) leading to death.

What if I have been exposed to VX?

If you have swallowed food or liquid with VX, do not induce vomiting and do not eat or drink anything else. Immediately dial 911.

If you have breathed in (inhaled) VX gas, immediately dial 911.

If VX is on your clothes or skin, cut your clothes off if possible. Try to avoid pulling your clothes over your head as this could spread VX across your body. Use the nearest available water source, like a sink, a fountain, a hose, or even bottled water. Immediately wash the exposed areas with lukewarm water (**do not use hot water—it can make the VX exposure worse**) and soap. If you can, use liquid soap. Wash for at least 10 to 15 minutes. If there is no soap available use plain water. After washing with soap and water dial 911. Do not put your clothing back on. Exposed clothing may give off VX fumes so you must double bag clothing in plastic bags. To do this wear rubber gloves or use sticks or tools to move your clothing into the plastic bag. Put all items that touched the clothing in the bag (any gloves or tools you used). Wash your body again to remove any trace of VX. Emergency personnel will dispose of your contaminated clothing.

<u>If VX is in you eyes</u>, rinse with water for 10 to 15 minutes. Use the nearest available water source, like a sink, a fountain, a hose, or even bottled water. If you are wearing contact lenses take them out immediately and rinse your eyes with water for 10 to 15 minutes. After rinsing your eyes dial 911.

How can I protect myself?

If you are in the area contaminated with VX, leave immediately and dial 911. If you think you were exposed follow the instructions above.

If you are not in the area contaminated with VX, do not go there for any reason. Avoid any people, objects, or clothing from the contaminated area. **Do not try and go to friends or family in the contaminated area**.

If you are at home **and** your home is not contaminated with VX, shelter in place. Shut and lock all doors and windows. Cover windows with plastic and seal windows and doors with duct tape. Turn off the air conditioner, heater, and all fans (including ceiling fans). Seal vents and electrical outlets with duct tape. Listen to TV or radio news sources. Do not leave until local officials inform you the threat is over.

How is VX exposure spread?

VX is spread by touching a contaminated surface, a contaminated person or by touching contaminated clothing. Once the exposed person has taken off their clothing and washed with large amounts of soap and lukewarm water, they are no longer a threat. Clothing exposed to VX is still very dangerous.

How is VX exposure treated?

Medical workers can give you the antidote (medicine) for VX but you must take it very quickly. Medical workers can also give medical care to treat your symptoms. Treatment depends on how you were exposed to VX (inhaled, swallowed, or touched) as well as how much VX you were exposed to, and how long you were exposed to VX.

What are the long-term effects of VX exposure?

Mild or moderately exposed people usually recover completely. Most effects do not last more than a few weeks. Those people exposed to a large amount of VX may die.

For more information, visit www.bt.cdc.gov, or call the CDC public response hotline at (888) 246-2675 (English), (888) 246-2857 (español), or (866) 874-2646 (TTY).

VX

CRT

Booklet

Section A

Please read the following:

VX can be deadly. VX is an odorless and tasteless chemical. It can be in gas or liquid form, but it cannot be a powder. In gas form, VX looks like a vapor or mist. In liquid form, VX is a honey-colored liquid that looks like motor oil. It is very oily and slow to evaporate. VX feels oily on the skin. Exposure to VX in any form can seriously harm or kill you.

Section B

Please read the following:

VX gas can be released into the air for you to inhale (breathe in) and be poisoned. VX can be placed into your food or water and then you would swallow it. VX can come in contact with your eyes where it may be absorbed (enter) into your body. You can be exposed by touching or being near other people's skin or clothing that have VX on it. VX fumes can continue to be released from clothing and other objects for a long time. VX fumes can seriously harm or kill you.

Section C

Please read the following:

If you were exposed to VX gas (vapor), symptoms may appear within seconds. If you were exposed to VX liquid, symptoms may appear within a few minutes to several hours. The more VX you are exposed to (in either liquid or gas form) the more quickly you will get sick. The longer you are exposed to VX (in either liquid or gas form) the more likely you are to get sick. Any VX liquid that touches your skin may cause death if you do not immediately wash it off. If you are exposed to VX, by any method, you may have some or all of these symptoms:

- Runny nose
- Watery eyes, pinpoint pupils (very small pupils or black dot in center of eye)
- Burning eyes, eye pain, and blurred vision
- Drooling, and excessive sweating
- Choking, coughing, chest tightness, rapid breathing
- Diarrhea and increased urination
- Sleepiness, confusion, weakness
- Headache
- Abdominal (stomach) pain, nausea and vomiting
- Skin exposed to VX may sweat and twitch
- Very slow or fast heart beat, and very low or very high blood pressure

Exposure to large amounts of VX may have these additional symptoms:

- Loss of consciousness (passing out)
- Convulsions (seizures)
- Paralysis (unable to move)
- Respiratory failure (unable to breathe) leading to death.

Section D

Please read the following:

Medical workers can give you the antidote (medicine) for VX but you must take it very quickly. Medical workers can also give medical care to treat your symptoms. Treatment depends on how you were exposed to VX (inhaled, swallowed, or touched) as well as how much VX you were exposed to, and how long you were exposed to VX.

Section E

Please	read	the	foll	lowir	ıg:
			,		()

If you are in the area contaminated with VX, leave immediately and dial 911.

If you have swallowed food or liquid with VX, do not induce vomiting and do not eat or drink anything else. Immediately dial 911.

If you have breathed in (inhaled) VX gas (vapor), immediately dial 911.

If VX is on your clothes or skin, cut your clothes off if possible. Try to avoid pulling your clothes over your head as this could spread VX across your body. Use the nearest available water source, like a sink, a fountain, a hose, or even bottled water. Immediately wash the exposed areas with lukewarm water (do not use hot water—it can make the VX exposure worse) and soap. If you can, use liquid soap. Wash for at least 10 to 15 minutes. If there is no soap available use plain water. After washing with soap and water dial 911. Do not put your clothing back on. Exposed clothing may give off VX fumes so you must double bag clothing in plastic bags. To do this wear rubber gloves or use sticks or tools to move your clothing into the plastic bag. Put all items that touched the clothing in the bag (any gloves or tools you used). Wash your body again to remove any trace of VX. Emergency personnel will dispose of your contaminated clothing.

If VX is in you eyes, rinse with water for 10 to 15 minutes. Use the nearest available water source, like a sink, a fountain, a hose, or even bottled water. If you are wearing contact lenses take them out immediately and rinse your eyes with water for 10 to 15 minutes. After rinsing your eyes dial 911.

VX Radio Clips--Scripts

45 seconds

Exposure to the chemical agent "V-X" can seriously harm or kill you.

VX can be released as a mist or a liquid—both forms are odorless and tasteless.

You can become sick if VX contacts your skin or eyes, if you inhale it, or if you swallow food or water contaminated with VX.

If you think you've been exposed to VX, leave the area immediately and watch for these symptoms: twitching of exposed skin, blurred vision, confusion and weakness, paralysis, and difficulty breathing.

Direct contact with VX can be deadly. Carefully remove your soiled clothing do not put it back on. Wash exposed skin thoroughly with soap and water. If you have swallowed contaminated food or liquids, do not induce vomiting. Follow these steps at home then seek medical attention immediately. An antidote is available.

For more information, contact the CDC website at www.cdc.gov or the Outbreak Hotline at (xxx) xxx-xxxx.

30 seconds

Exposure to the chemical agent "V-X" can seriously harm or kill you.

VX can be released as a mist or a liquid—both forms are odorless and tasteless.

You can become sick if VX contacts your skin or eyes, if you inhale it, or if you swallow food or water contaminated with VX.

Leave exposed areas immediately and watch for these symptoms: twitching of skin, blurred vision, confusion and weakness, paralysis, and difficulty breathing.

Carefully remove and discard soiled clothing. Wash your body with soap and water. Don't induce vomiting. Seek medical attention immediately. An antidote is available.

For more information, contact the CDC website at www.cdc.gov or the Outbreak Hotline at (xxx) xxx-xxxx.

15 seconds

Exposure to the chemical agent "V-X" can seriously harm or kill you. VX can be released as a mist or a liquid.

Watch for these symptoms: twitching, blurred vision, and difficulty breathing.

Immediately wash exposed areas of your body with soap and water. Seek medical attention. An antidote is available.

For more information, contact the CDC website at www.cdc.gov or the Outbreak Hotline at (xxx) xxx-xxxx.

VX Television Clip--Script

VX Television ClipScript		
VIDEO	AUDIO	
	This message contains important safety information from the Centers for Disease Control and Prevention (CDC) and from your local medical and health agencies. Please pay close attention. This message contains critical information about a chemical event involving VX.	
	VO:	
	Exposure to the chemical agent VX can kill you. Even very small amounts of VX can make you sick or kill you.	
	VO:	
	VX can be a liquid or a gas. In liquid form, VX is very oily and dries up very slowly. Stay away from it and do not touch it.	
	VX causes muscles in the body to contract all the time. After enough time and with enough exposure to VX, the lungs and heart will stop working.	
	VO:	
	You and your family are at risk:	
	if VX contacts your skin or eyes,if you inhale VX gas,or if you swallow food or water with VX in it.	
	VO:	
	If you have <u>not</u> been exposed, stay where you are. Never go to an area that has been exposed to VX.	

	VO:		
	If you think you <u>have</u> been exposed, get away from the area <u>now</u> - and watch for these symptoms:		
	 Sweating and twitching of exposed skin Blurred vision or small, pinpoint pupils Drooling, sweating, confusion, and weakness Passing out Convulsions or violent shaking Paralysis or not being able to move Or severe breathing problems If you have any of these symptoms dial 911 or seek medical help right away. 		
	VO:		
	If you are exposed to VX gas, symptoms appear within seconds. If you are exposed to VX <u>liquid</u> , symptoms appear within a few minutes to 18 hours.		
	VO:		
	Any direct skin contact with VX can kill you unless washed off right away. If you have been exposed, remove soiled clothing and immediately wash the effected areas of your body with soap and water.		
	VO:		
	Do not pull clothing over your head—cut it off instead. Pulling clothing over your		

head can spread VX to more parts of your body. If you can, double bag contaminated clothing. Put the clothing in a plastic bag, seal it, and then put it in another plastic bag.		
Wash the exposed parts of your body with large amounts of soap and water now. If your eyes are exposed, immediately rinse with plain water for 10 to 15 minutes. Then dial 911 or have someone else dial 911 while you wash. If you swallowed VX, do not induce vomiting and do not drink any fluids. Dial 911 now.		
VO: Follow these guidelines and then dial 911 or seek immediate medical attention. An antidote for VX may be available but you must take it very quickly.		
 VO: Remember, follow these instructions now: Leave the area where VX was found. Take off contaminated clothing and double bag it in plastic bags if you can. Wash VX off your body with soap and water. Get immediate medical attention in order to receive the antidote. 		

If you were <u>not</u> exposed, stay where you are. Never go to an exposed area.
VO Contact these sources for more
information: • The Outbreak Hotline at XXX
 The Centers for Disease Control's website at www.bt.cdc.gov Your local health department Emergency medical staff or your primary care doctor
And continue to monitor broadcasts of the Emergency Broadcast System on television or radio.

Appendix E. Focus Group Topline Summary Reports

SOUTHWEST CENTER FOR PRE-EVENT MESSAGE DEVELOPMENT

Focus Group Pre-analysis Report

Population: American Indian Agent: VX

Region: OK

Focus Group Date: August, 2004

Prepared by the Department of Health Promotion Sciences University of Oklahoma College of Public Health Report date: September 15, 2004

GROUP CHARACTERISTICS

Rural group, held at tribal elder meal site

Part One: Radio

Comprehension

New Information

New information presented

Difficult to understand

Could relate some action points

Could relate some information from clip

Inconsistent information re: induction of vomiting and contamination of hands

Much information vague and unclear

Color codes not effective, as have not been given any action steps relevant to these codes

Remaining questions

How is contamination discerned?

Where do we go?

Where do we stay?

Where do you go to receive the antidote?

What do we stay away from?

How to keep self and family safe

How or if to help others

Emotional Response

Change to make less emotional

Yes

Apprehension, feelings of being endangered

Anxiety

Fear

Unprepared

Actions

Confidence in recommended actions

Not confident

Recommended actions not clear

Reasons for actions not clear

Confidence to carry out actions

Panic may reduce capacity to carry out actions

Need to offer training ahead of time

Intention to follow recommendations

Would seek antidote first, and then carry out other actions

Would need to hear the instructions repeatedly

Channel Appropriateness

Appropriate for radio, but then TV

Other channel recommendations

Civil defense sirens, EBS

Police sirens & loudspeakers

Computer

Use all forms of communication

Would seek information from local law enforcement, hospital personnel, neighbors, and county health departments.

Response to the Materials

Overall impression

Not enough information

Grabbed attention

Too calm. Did not grab attention

Credibility

Are not being given all information

Believable

Usefulness of materials

Need information ahead of time

Action steps unclear

Recommendations for improvement

Add "Special Report: to broadcast

Add beeping alert sound

Creek language for elders

Part Two: Television

Comprehension

New Information

How to take off contaminated clothes

How to take care of yourself if exposed

Difficult to understand

Very clear. More so than radio clip.

Remaining questions

Will antidote be available?

How far does it spread?

How long to shelter in place?

Where is it safe to be?

Emotional Response

Change to make less emotional

Yes; repeating in many times would help

Lack of information creates anxiety

Seeing reaction of people on film is scary, but helps motivate people

No feeling of panic

Actions

Confidence in recommended actions

To a point

Confidence to carry out actions

Confident

Intention to follow recommendations

Would carry out actions

Would go to loved ones. Would not stay away

Channel Appropriateness

TV very appropriate

Continual updates needed

Other channel recommendations

Internet

Local law enforcement and fire department

Tribal authorities

Field workers such as CHRs

Response to the Materials

Overall impression

Informative, good real information

Grabbed attention

Believable, competent persons

Credibility

Believable

Useful

Sense that the government doesn't tell you everything

Usefulness of materials

Recommendations for improvement

Better with tribal officials

Part Three: Release of Print Information

Comprehension

New Information

What it looks like

The effects of exposure

How to protect yourself

Difficult to understand

Important points clear

Symptoms resemble diabetes symptoms

Skin and respiratory exposure not clear

Remaining questions

Survival in a sealed building

How long until symptoms appear?

Emotional Response

Increased confidence

Change to make less emotional

No

Actions

Confidence in recommended actions

Yes. Reinforces TV clip. Can use for further referral

Confidence to carry out actions

Could carry out actions

Intention to follow recommendations

Would carry out actions

Channel Appropriateness

Reinforce the TV and Radio clips

Easy to share with family

Other channel recommendations

Field manual about this and other chemical exposures

Response to the Materials

Overall impression

Very good

Grabbed attention

Credibility

Usefulness of materials

Provides more detail than clips

Recommendations for improvement

Larger font More color

Part Four

Preferred Channels for Terrorism Information Dissemination

TV preferred

Radio most useful for car and work (time of day a factor)

UCLA Focus Group #7: Topline Report

Agent: Chemical -VX **Date:** August 27, 2004

Population: ESL Participants: 6 (6 demographic forms completed)

DEMOGRAPHIC SUMMARY

• Ethnicity: All (6) were Asian / Pacific Islander

Age: Range between 21-66; average age 41

• Sex: 4 female, 2 male

Language: Majority (4) speak English in the home; 2 speak Filipino

• Education: All college experienced; 4 some college, 3 college degree, 1 graduate degree

 Marital Status: Half (3) are single, even split (1 each) for other categories (married or living with partner, divorced or separated, widowed)

• Children: Half (3) of the participants have children; child age range 1-35; average age 15

• Employment: 4 are currently employed, none are health care professionals

• Income: Half (3) listed \$10,000-\$19,9999; others between \$30,000 and \$49,999

DETAILED CHARACTERISTICS

Characteristic	Category	N = 6	Mean
Age	Range	21-66	
	Mean	40	
Sex	Male	33%	
	Female	67%	
Education	Some college	50%	
	College degree	33%	
	Graduate degree	17%	
Ethnicity/race	Caucasian – Asian / Pacific Islander	17%	
	Asian / Pacific Islander	83%	
Language in home	English	67%	
	Filipino	33%	
Marital status	Single	50%	
_	Married or living with partner	16.7%	
_	Divorced or separated	16.7%	
	Widowed	16.7%	
Children	Yes	50%	
	No	50%	
	Age Range	1-35	
_	Mean Age	15	
Currently employed	Yes	67%	
	No	33%	
	Health Care Professional	_	
Family income	Less than \$10,000		
	\$10,000 - \$19,999	50%	
	\$20,000-\$29,999		
	\$30,000-\$39,999	33%	
	\$40,000-\$49,999	17%	

Occupations provided: administrative assistant, security officer, patient care coordinator, caregiver, student, sales

SESSION OVERVIEW

- Group was very engaged in the discussion from beginning to end.
- Participants were comfortable expressing their opinions and listening to each other.
- Group expressed concern and a somewhat somber mindset about the topic and what was being presented.
- The most reserved participant had been in the country for only 2 weeks.
- The room was slightly warm.

SEGMENT 1 (RADIO)

Half of the participants were leaning forward and very attentive as the scenario was read. Afterward, a person looked a little concerned as she asked, "So that's not true?" The moderator assured her it was not. When clip started, some participants were watching the screen as if waiting for a video to begin.

Important Points: When moderator asked about what information the group heard from the PSA, participants quickly and comfortably began to state what they remembered:

- "What website to go to, to get more information. The website and contact information."
- "Take off your clothes, your soiled clothes and not put them back on."
- "I heard that if I swallow something that is contaminated with the chemical, don't induce vomiting."
- One participant smiled and stated that, "What I wasn't hearing was what I wanted to know ... if it was contagious in any way, that I could spread it to my family. And should I stay away from people?"
- Another explained how she missed the second part because she was listening to the first part.
- An elderly man sat looking concerned with his hand over his mouth.

New Information:

- "What forms [VX] comes in" was stated.
- A participant said that she was "glad to know there's an antidote," smiling and nodding after she said so.
- The clip provided "what you need to do." "I would have hated to miss" one of its points, a participant smiled; someone nodded in agreement.
- The elderly man leaned forward and asked if the chemical is "a real one," adding, "This is the first time I heard of that." The moderator responded to his brief string of questions that it was "already in existence" and "ready to be used."

Clear/Unclear:

Clear:

- "What you needed to do in case you're exposed to it."
- "There was a lot. But I understood it."

Unclear:

- "I want to know where they found these cases."
- "[A] period of time" between the incubation period and showing symptoms.
- Asked if this was information that they wanted to know more about, a participant smiled and responded matter-of-factly, "No, because I've heard a lot about those chemical weapons but then I know that when you are speaking about that chemical, you will die immediately." Asked how that possibility made the participant feel, she kept her matter-of-fact smile and stated "dead." Another person smiled.

Emotional Response:

- "You're emotionally disturbed about those things."
- "I kind of thought about the government and all the conspiracies that you hear [about]." This participant went on to ask, "So what is the President doing about this?" Others nodded after this statement.

Acting on Recommendations:

- One person had an issue with the food recommendations and shrugged his shoulders as he explained so.
- "First I'd find my kids," someone smiled and laughed. Others smiled and laughed with her.
- "What can you do if you've already inhaled it?" someone asked, to which the elderly
 man gently joked that if you were near it you should "try to run." He scratched
 himself and smiled as he shook his head and added, "What can do you?"

Believability:

- "It's something we would listen to."
- Participants discussed the Emergency Broadcast System (EBS) alarm and its "This
 is not a test" statement that usually precedes emergency announcements to add
 credibility to clip. Such a delivery would let people know that "this was not a joke."
- "If it's a health message I really care to know about what Bush does If CDC is saying it, what are the precautions we need to take and who do we need to contact when we are in an emergency?"

Recommendations for Improvement:

- Participants would want the CDC website to apprise them of how the government was addressing the situation: "If I were to log onto the CDC's website, I would like to have that bit of information on there."
- Asked where they'd look for more information, the group nodded in agreement that the hotline phone number went by too fast.
- Someone added that people need an attention grabber like the EBS alarm explaining, "How often do you watch T.V. and not really watch it? Or how often are you driving and you're not really listening?"
- A participant listed the points that should be covered if the message is for health purposes:
 - "If you can kind of narrow it down to really the most important things, which would be symptoms, the incubation period, the distance maybe, where you should be. Otherwise you could have a panic attack, people running to the hospitals and they don't have anything."

Overall Impression:

"I don't think everybody understood the clip." "Too much too soon."

Effectiveness of Medium:

 Asked about the best channel for this type of message, when TV was mentioned, there were strong nods and agreement.

SEGMENT 2 (TV)

During the scenario reading, most participants were watching the moderator. One participant checked her cell phone when the scenario was read. Participants' eyes were glued to the screen when the video played. The elderly participant had an open mouth

(lightly gaping); he looked away at one point during the screening. Overall, he looked impacted and a little disturbed.

Important Points:

- Participants confidently stated items as if they sure about the information they gained: clothes handling, washing off, getting the antidote, rinsing your eyes, symptoms, calling 911 "if I don't know what to do or if I feel something."
- Someone smiled and explained the clarification she received from the video clip (from the confusion she was left with from the radio clip).

New Information: Provided in other sections.

Clear/Unclear: The group explored what was unclear:

- "How do you know if you're exposed," someone asked, pointing to the screen while recalling the video's example of gunk on a parking meter.
- "How can you prevent it?"
- Participants teamed up in agreement as they challenged the idea of not moving if a person hasn't been exposed:
 - "[I]f VX can get contracted by air, doesn't air travel? Can't air travel through the cracks? You can still be therefore be infected or contaminated."
- Someone scrutinized the depiction of a woman cutting her son's clothes off and then washing him, smiling as he finished with, "but she's double bagging, so that's good." Others laughed.

Emotional Response:

- Asked how the video made them feel, someone responded that "It's no joke."
 Another clicked his mouth in agreement. The latter (the elderly participant) then added "It ruins your whole day," perhaps referring to how the topic had impacted him. A third participant resolutely responded, "The whole day? You'll be dead."
- When moderator asked if the clip brought up any feeling of anxiety, one participant responded, "I mean definitely."
- Someone discussed severe treatment. Another asked about a vaccine and about how to prevent it. These participants had their hands over their mouths and looked very concerned.

Acting on Recommendations:

 Asked about the idea to carry out actions recommended in the clip, a participant began this segment of the conversation by stating that, "They're not that difficult."

Believability:

- "The clip itself, it should be a little bit more shocking in a sense that there were people on the scene. Obviously these were actors."
- A participant expressed that the video was "infomercialish," to which another added,
 "There's no urgency behind it," and that it could be part of a movie. Others nodded
 in agreement.
- Participants questioned the clip's validity. "I think it should be compelling so that the people would fear ... whatever is going to happen."
- Someone spoke about being prepared and about the importance of seeing the information:
 - "If you're in danger you have to watch this because [it is] the time versus [the] danger."

Recommendations for Improvement:

- Someone raised their hand and suggested weighing a male versus female announcer. When the moderator asked who they'd like to see as an announcer, the elderly man smiled and stated "Tom Cruise," as he made an action figure position.
- Participants strongly favored the idea of a "real doctor," who represented a position of authority. His affiliation should be clearly identified as well.
- The EBS alarm at the beginning of the message was suggested.

Overall Impression:

- People felt that the public should be oriented before an incident:
 - "I think that you should educate the people before it happens. ... [I]f you educated our people I think that we will probably prevent a lot of things that are going on."

Effectiveness of Medium:

- The group looked seriously and intently at moderator as she asked about using TV for such a message. They were all still very engaged and participatory.
 - "I think it's a good idea to put it on television. You're allowing people to visually associate what they're hearing. And they may understand it more clearly."

SEGMENT 3 (PRINT)

Eyes were on moderator during scenario reading. The material was then distributed. The group engaged in very focused, serious reading.

Important Points:

- A participant explained how the symptoms were "clearly stated and categorized," after which another person elaborated on how someone would typically use the information sheet:
 - "Less serious than serious. Those were probably the first things if I were to get this piece of paper, I would look at the symptoms first right off the back and then assess if anyway either my family, or myself has any of this. And then I will take the time to read the rest."
- "This was catchy, 'VX is deadly.' ... You're going to catch people's attention."
- Using hot water, sealing plugs and electrical outlets were also stated.
- Recalling the point to contact the "911 people," a participant smiled and laughed, "How can they help you?"

New Information: Covered in other sections.

Clear/Unclear: The group probed items that were unclear to them:

- "One of the things they mentioned in here is you can get it from touching another person then. The question that arises ... was when you're locking up yourself in the house, because it's not contaminated and you have your children in the backyard who are infected or ... contaminated. [Do] you take off their clothes out there, hose them off and then let them in?"
- Participants spent some time discussed the bags of discarded clothes. "Where do you put them?" Someone asked if burning the clothes would worsen the situation.
- Pet handling was discussed. "What about the animals?" A participant suggested putting pets in tall trash cans and covering them with the lid for protection.

Emotional Response:

- Asked how the material made participants feel, the elderly man stated "Scary. It's scary," then wiped his face with his hand.
- "What if you're in the middle" of an impacted area, the elderly man continued. He gently struck his fist to his forehead, cast his eyes down and answered to himself, "You're dead."

Acting on Recommendations:

- Someone explained that it would be difficult "not to get friends and family in contaminated areas."
- Overall, participants felt they could carry out the clip's recommendations.

Believability: Not directly addressed.

Recommendations for Improvement:

- Participants liked the information but felt "it was a lot of reading." Suggestions for easier reading included:
 - "If you could make it in a line form, and maybe people that can't read as well could just pick up the highlights."
 - Other recommendations included "a chart" and being "very precise," approaching it with an aim to "educate people."

Overall Impression:

- Asked if any of the information was helpful from any of the mediums presented, there
 were a number of nods and yeses.
- Participants discussed distributing the print material prior to an event. As someone explored:
 - "So would you be sending this out prior to or just in the midst? Hand me this and I'm already panicking, I don't know if I could read it.... I would just go over the facts and the symptoms. Do I have any of these? Do any of my friends or family have this?"

Effectiveness of Medium:

- The group felt that the material worked well when used in conjunction with other media:
 - "I think it should be combined. With print, or the T.V., or the radio."
- Participants suggested accompanying the material with a "kit that you assemble, a gas mask, or things they have in those survival kits."
- They also discussed provided the print material in accessible household friendly forms (e.g., refrigerator magnet).

PREFERRED CHANNELS

- The group felt that all three channels were important, but that television should be the primary channel. As one participant stated:
 - It's best on the T.V. because those are pictures. Everybody could see it."

CONCLUSION

After the moderator announced the conclusion of the session, a conversation ensued that covered anthrax and the rationale in pulling your car over in the event of an incident. Moderator and visiting program manager answered more of the group's questions. Participants remained engaged, alert, interested, and concerned about what the

government was doing, and what the study was achieving. The group was visibly concerned, expressing so in their own body language; all were engaged to the very end.

POST-SESSION OBSERVATIONS

Some of the participants lingered after the event, spoke with session workers afterward, and extended friendly goodbyes.

BIOTERRORISM FOCUS GROUP SUMMARY REPORT

Group Description: Group was held in the evening at a community based economic and health development organization. Those participating in the group were all employees of the organization. Because of their employment most worked with the local community, and dealt with the community's social issues. The group was well spoken, with most contributing very interesting information. The group members all knew each other well, and even teased each other at times during the group.

Prepared by: SLU Date: 8/12/04	
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Rural White VX focus group demographic characteristics (N = 7)

	eus group uemogrupme enurueteris	N (%)	Mean/SD
Characteristic	Category		
Age			45/9.716
	Missing	1 (14.3%)	
Sex	Male	1 (14.3%)	
	Female	6 (85.7%)	
Education	Less than high school		
	Some high school		
	High school diploma or GED	1 (14.3%)	
	Some college	4 (57.1%)	
	College degree	1 (14.3%)	
	Graduate degree	1 (14.3%)	
Ethnicity/race	African American/Black	7 (100%)	
Language in home	English	7 (100%)	
Marital status	Single	3 (42.9%)	
	Married or living with partner	2 (28.6%)	
	Divorced or separated	2 (28.6%)	
Children	Yes	5 (71.4%)	
	No	2 (28.6%)	
Employment	Yes	7 (100%)	
Family income	Less than \$10,000		
	\$10,000-\$19,999	2 (28.6%)	*
	\$20,000-\$29,999	4 (57.1%)	*
	Missing	1 (14.3%)	

^{* =} median

Overall, the 6 participants ranged from 32 to 57 years of age (1; 14.3% missing), with an average age of 45 (SD = 9.716). Six females participated (85.7%), and there were 1 male (14.3%). Most (4; 57.1%%) had some college, 1 (14.3%) had a high school diploma or GED, 1 (14.3%) had a college degree, and 1 (14.3%) held a graduate degree. All (7; 100%) were African American. All (7; 100%) reported that their main language spoken at home was English. Three (42.9%) were single, 2 (28.6%%) were married or living with a partner, and 2 (28.6%) were divorced or separated. Most (5, 71.4%) had children, while 2 (28.6%) did not. All (7; 100%) were employed. The median family income was in the \$10,000 to \$30,000 range (1; 14.3% did not respond).

Thoughts and comments about the focus group:

1. Overall, did the focus group proceed smoothly? Yes

Comments: All of the focus group equipment worked well. The participants provided good feedback and were very comfortable with each other.

2. Did participants appear to be comfortable participating in the discussion? Yes

Comments: With the exception of one male, the participants provided a good mix of comments, with participants took the time to give thoughtful questions

3. Were there any dominant participants in the focus group?

Comments: Most participants contributed, with some participants more then others, but no participants was dominant.

4. Were there any reserved participants in the focus group? Yes

Comments: The only male participant did not contribute at all. One of the female was very quiet most of the time, and when she did speak it was only agreeing with other's comments.

5. What occurrences, behaviors, gestures, etc. are important to note that were not mentioned above? Please list them separately and briefly describe the matter of importance in the space provided below.

Comments: The focus group took place in a large open room. The room was very hot with loud A/C made it hard to hear. Participants all worked together and knew each other well

One female brought her child and she sat over on the side – she got up a few times to check on her.

6. Was there anything about the setting that was noteworthy? I.e. did participants appear comfortable; was it hard to concentrate because it was too dark, cold, etc.?

Comments: Air conditioning was very loud, other than that the room was comfortable. For some the room may have been a little too warm.

7. Any additional information that should be included?

Comments: The food brought was a little different including: Chips, crackers, vegetables, fruit cups, and cookies. Some of the participants had participated in year one groups. The content expert was not reachable by phone so researchers took down questions and email answers content expert responses after the group.

Transcription Guide

Below are several	themes/ constru	ucts. Please indic	ate whether or n	ot this focus group
contains good quo	otations, stories,	or interesting pe	rspectives on an	y of these topics.

<u>X</u> C	Comprehension of the materials
	Usefulness of the materials -A number of important questions where left unanswered. -There needs to be a beeping wound or other noise to indicate emergency nt emergency information is to follow.
X	Readability of the materials
_ <u>X</u>	Credibility of the materials -Radio voice did not sound urgent.
	_Unintended effects
	Other (please describe)

Key Findings

What are your top three impressions of this group?

- 1. Most of the participants in this group were interested in the topic, were engaged in the conversation and provide thoughtful responses.
- 2. Participants were talkative and appeared to be educated and knowledgeable.
- 3. Participants felt like they wouldn't follow all the directions.
- 4. Participants felt the fact sheet was contradictory.
- 5. The materials generated additional questions for the participants.
- 6. Participants worried about getting treatment in their rural community.

In your opinion, what are the top three findings of this group?

- 1. Participants felt some recommended actions were unrealistic: such as not going to family and friends, and not vomiting. Participants thought they would visit family regardless.
- 2. Group recommended that the number to call for additional information be more prevalent.
- 3. Voice on radio and actors were not very convincing. Radio voice and video actors don't show urgency
- 4. There were holes in the fact sheet how could they perform actions if they are panicking.
- 5. Having the Fact sheet did not comfort participants.
- 6. For this group, the radio is not a good medium.
- 7. Participants were concerned about the availability of resources locally.

SOUTHWEST CENTER FOR PRE-EVENT MESSAGE DEVELOPMENT

Focus Group Pre-analysis Report

Population: Hispanic Agent: Chemical-Rural

Region: Texas Focus Group Date: September 18, 2004

Prepared by the Department of Social and Behavioral Sciences University of North Texas Health Science Center School of Public Health Report date: October 19, 2004

GROUP CHARACTERISTICS

What are the characteristics of the group?

Agent: Chemical VX **Date:** September 18, 2004

Population: Hispanic Rural **Participants**: 11 (11 demographic forms completed)

DEMOGRAPHIC CHARACTERISTICS

Characteristic	Category	N = 11
Age	Range	18-48
	Mean	30
Sex	Male	27%
	Female	73%
Education	Less than high-school	9%
	Some high-school	9%
	High-school diploma or GED	18%
	Some college	46%
	College degree	18%
Ethnicity/race	Hispanic	91%
	Missing	9%
Language in home	English	73%
	English / Spanish	9%
	Spanish	18%
Marital status	Single	36%
	Married or living with partner	64%
Children	Yes	64%
	No	36%
	Age Range	1-24
	Mean Age	12
Currently employed	Yes	18%
_	No	36%
	Health Care Professional (in bold below)	18%
Family income	Less than \$10,000	9%
	\$10,000 - \$19,999	18%
	\$20,000 - \$29,000	9%
	\$30,000-\$39,999	19%
	\$50,000-\$59,999	9%
	\$100,000 or more	18%

Occupations provided: Costumer service representative, student (3), housekeeper (3), salesman, **home health professional** (1), teacher aid, advisor.

Part One: Radio

Comprehension

- Recap of information given in clip
- Know what to do
- Knowledge of symptoms, some thought symptoms were unclear
- Don't have time to check the Internet
- How far can the agent spread if put in the air
- What is the time line for the infection

Emotional Response

- Fear
- It's not distressing, its informative
- Feel more comfortable knowing what the symptoms are and who to contact

Actions

- No confidence that the actions recommended will keep them safe
- Feel unprepared
- Fear there will be chaos
- Would follow directions of getting out of the area

Channel Appropriateness

- Radio is good but it should be in all forms of technology if it is that important
- Television was seen as another medium to use
- Should also use newspapers

Response to the Materials

- Material appears believable after 9/11
- Announcer was not "fantastic"
- Didn't grab your attention and if you were driving down the road and heard talking you would probably turn it off
- Needs an introduction statement

- Feels too much like a commercial
- Needs an annoying beeping alert sound

Part Two: Television

Comprehension

- Timing seems important and is limited
- Recite how to clean the areas exposed
- Visual information was helpful

Emotional Response

- Informative
- Not very confident

Actions

- They did not feel confident
- Would forget the recommendations
- Would seek medical attention

Channel Appropriateness

- All mediums should be used
- Would look to the Internet

Response to the Materials

- Acting was not believable
- Was too long and got boring
- Hard to say which is better television or radio

Part Three: Release of Print Information

Comprehension

- Now know that hot water can make it worse
- Know what to do after exposure
- Very clear to understand

Emotional Response

• Felt nervous with all the information given

Action

Confident they can carry out actions

Channel Appropriateness

Television and radio would be more useful and preferred

Response to the Materials

- Should use radio first, television second, and printed materials last
- Make printed materials available to hand out to the public

Part Four: Preferred Channels for Terrorism Information Dissemination

Prefer Radio, then television, then printed materials

BIOTERRORISM FOCUS GROUPS SUMMARY REPORT

Rural White VX focus group demographic characteristics (N = 5)

	group ucinograpine citaracterist	N (%)	Mean/SD
Characteristic	Category		
Age			60.80/19.829
Sex	Male	3 (60%)	
	Female	2 (40%)	
Education	High school diploma or GED	1 (20%)	
	Some college	2 (40%)	
	College degree	1 (20%)	
	Graduate degree	1 (20%	
Ethnicity/race	Caucasian/White	5 (100%)	
Language in home	English	5 (100%)	
Marital status	Married or living with partner	4 (80%)	
	Widowed	1 (20%)	
Children	Yes	5 (100%)	
Employment	Yes	2 (40%)	
	No	3 (60%)	
Family income	\$10,000-\$19,999	1 (20%)	
_	\$20,000-\$29,999	2 (40%)	
	\$30,000-\$39,999	, ,	*
	\$40,000-\$49,999		*
	\$50,000-\$59,999		
	\$60,000-\$69,999	1 (20%)	
	\$70,000-\$79,999	, ,	
	\$80,000-\$89,999	1 (20%)	

^{* =} median

Rural White VX bioterrorism focus group:

Overall, the 5 participants ranged from 32 to 80 years of age, with an average age of 60.80 (SD = 19.829). Two females participated (40%), there were 3 males (60%). One (20%) had a high school diploma or GED, 2 (40%) had some college, 1 (20%) had a college degree, and 1 (20%) held a graduate degree. All (5; 100%) were Caucasian. All (5; 100%) reported that their main language spoken at home was English. Four (80%) were married or living with a partner, and 1 (20%) was widowed. All (5, 100%) had children. Most (3; 60%) were not employed, and 2 (40%) were employed. The median family income was in the \$30,000 to \$50,000 range.

Pre	epared by: SLU Date: 09/8/04	
	oughts and comments about the focus group: Overall, did the focus group proceed smoothly?	Yes
	Comments: Research team forgot cassette tapes, causing the group to star	t late.
2.	Did participants appear to be comfortable participating in the discussion?	Yes
	Comments: All of the participants knew each other and all participants has any about the topic. Participants seemed comfortable talking with each of	
3.	Were there any dominant participants in the focus group?	es & No
	Comments: A couple of participants had more to say than others, but did dominate the group, as everyone contributed. Participant #4 was very talk	1 1
4.	Were there any reserved participants in the focus group?	Yes
	Comments: One of the participants was more reserved than most but still	participated.
5.	What occurrences, behaviors, gestures, etc. are important to note that wer mentioned above? Please list them separately and briefly describe the maimportance in the space provided below.	
	Comments: All participants had recently gone through CERTS training.	
6.	Was there anything about the setting that was noteworthy? I.e. did partici comfortable; was it hard to concentrate because it was too dark, cold, etc.	
	Comments: The group took place in a large meeting room that was cool a comfortable.	and

7. Any additional information that should be included?

Comments: There were only 5 participants present at this group.

Transcription Guide

Below are several themes/ constructs. Please indicate whether or not this focus group contains good quotations, stories, or interesting perspectives on any of these topics.

X_	_Comprehension of the materials
X	_Usefulness of the materials
X	Readability of the materials
X	Credibility of the materials

Key Findings

What are your top three impressions of this group?

- 1. Participants appeared to be more knowledgeable than the average person about BT threats.
- 2. Participants knew each other well and showed trust in each other.
- 3. The group went well, providing a lot of information.
- 4. The team worked well despite the delay.

In your opinion, what are the top three findings of this group?

- 1. Participants preferred the radio clip.
- 2. According to the participants, TV and print materials had too much information.
- 3. Participants wanted event specific information, not general information.
- 4. The group members said they would go to the health department for trusted information.
- 5. According to the participants, officials need to repeat radio information and include an attention-getter such as beeps.
- 6. TV ad needed to focus less on showing symptoms.

BIOTERRORISM FOCUS GROUPS SUMMARY REPORT

Prepared by:_	SLU	Date:	9/10/04

Urban African American VX focus group demographic characteristics (N = 12)

Ol ball All Icall Alli	erican v x focus group demographic) (1 1 – 1 2)
		N (%)	Mean/SD
Characteristic	Category		
Age			71.33/6.257
	Missing		
Sex	Male	2 (16.7%)	
	Female	10 (83.7%)	
Education	Less than high school	3 (25%)	
	Some high school	2 (16.7%)	
	High school diploma or GED	3 (25%)	
	Some college	1 (8.3%)	
	Graduate degree	1 (8.3%)	
	Missing	2 (16.7%)	
Ethnicity/race	African American/Black	12 (100%)	
Language in home	English	10 (83.7%)	
	Missing	2 (16.7%)	
Marital status	Single	3 (25%)	
	Married or living with partner	1 (8.3%)	
	Divorced or separated	1 (8.3%)	
	Widowed	7 (58.3%)	
Children	Yes	12 (100%)	
Employment	No	10 (83.7%)	
	Missing	2 (16.7%)	
Family income	Less than \$10,000	10 (83.7%)	
	Missing	16.7%	

^{* =} median

Overall, the 12 participants ranged from 63 to 84 years of age, with an average age of 71 (SD = 6.257). Eleven females participated (91.7%), there was 1 male (8.3%). There was a reporting error with demographics showing two males when researchers only recorded one male present. Some (3, 25%) had less than high school, 2 (16.7%) had some high school, 3 (25%) had a high school diploma or GED, 1 (8.3%) had some college, and 1 (8.3%) held a graduate degree. Two (16.7%) did not report on education. All (12; 100%) were African American. Most (10; 83.3%) reported that their main language spoken at home was English, while 2 (16.7%) did not report on language spoken at home. Three (25%) were single, 1 (8.3%) was married or living with a partner, 1 (8.3%) was divorced or separated, and 7 (58.3%) were widowed. All (12, 100%) had children. Most (10; 83.3%) were not employed, and 2 (16.7%) did not respond to the question. The median family income was less than \$10,000 (2; 16.7% did not respond).

Thoughts and comments about the focus group:

8. Overall, did the focus group proceed smoothly?

Yes

Comments: Overall the focus group went smoothly, the one exception was having to replay the first radio clip because it wasn't loud enough. At first, it was difficult to get them to talk, but once they were called on individually, they were willing to offer their opinions.

9. Did participants appear to be comfortable participating in the discussion? Yes & No

Comments: The group was very quiet, and kept looking down when questions were asked. They did begin to participate when called upon directly.

10. Were there any dominant participants in the focus group?

Yes &

No

Comments: There were some participants that talked more then others, but there was no one that cut people off or that was intimidating. It was very difficult for moderator to get group to talk.

11. Were there any reserved participants in the focus group?

Yes

Comments: Most of the group seemed reserved, but there were two to three really reserved participants, but they did talk when asked direction. One male participant was especially reserved and one of the ladies didn't participate a lot, even appearing to doze off a couple of times.

12. What occurrences, behaviors, gestures, etc. are important to note that were not mentioned above? Please list them separately and briefly describe the matter of importance in the space provided below.

Comments: Some of the people seemed very tired, and toward the end, their attention spans seemed to have waned. Some participants were less engaged with eyes lowered, or even one occasionally napping. The focus group took place in a retirement community. All of the participants knew each other and lived in the community. At times during the group some participants had side conversations regarding the material, but didn't at the time want to share their thoughts with us. Group was too long for participants.

13. Was there anything about the setting that was noteworthy? I.e. did participants appear comfortable; was it hard to concentrate because it was too dark, cold, etc.?

Comments: The air-conditioner fan was loud and made it very difficult to hear. One participant kept falling asleep during the focus group. Some group participants were easily distracted by people walking around outside of the room. A lady also walked into the room to get ice during the group. The room was hot. Also the focus group was after lunch in a common room. For most the setting was comfortable and pleasant.

14. Any additional information that should be included?

Comments: This was a group of 12 retirees in a retirement community. Some had participated in a group last year. The group was very interesting, with lots to say and good questions. Many participants were soft spoken, a number of times during the group participants were asked to repeat themselves.

Transcription Guide

Below are several themes/ constructs. Please indicate whether or not this focus group contains good quotations, stories, or interesting perspectives on any of these topics.

X_	_Comprehension of the materials
	_Usefulness of the materials
	_ Readability of the materials
_	Credibility of the materials -Participants requested a source for this information.
	_Other (please describe) -Trust – distrust of the government.

Key Findings

What are your top impressions of this group?

- 1. Although comfortable with the materials, they never got comfortable talking about the materials in a hypothetical manner based on the scenarios presented. Participants didn't like answering what they would do in a hypothetical situation; they repeated a number of times that they don't know what they would do.
- 2. Participants went off on tangents numerous times, sometimes they didn't understand the questions (that could be the fault of the moderator) (Ex: When asked where they would go to look for more information, they only answered the question using the word 'go' and "look for" in the most active form- meaning to physically leave a place for another as opposed to going and looking for more information in a book or on the television.)

- 3. Participants at times seemed comfortable sharing their opinions, particularly when called on individually.
- 4. Most everyone in the group had some knowledge of bioterrorism and chemical warfare.
- 5. The discussion was good, however, there were questions participants didn't want or need to answer.
- 6. Group felt like they were just going to die if this occurred, because they didn't believe they could help themselves.
- 7. Group felt a credible person is needed to give information out (i.e. someone they trust).
- 8. Group felt like this could happen but it would be kept quiet.

In your opinion, what are the top findings of this group?

- 1. There is concern that people will not be able to carry out protective steps if an emergency were to happen.
- 2. The usefulness of some of the action steps were questioned, for example: washing may contaminate you more because the water may be contaminated.
- 3. Participants also discussed factors that would limit ability to carry out actions, namely fear.
- 4. Group didn't get concept that this information was to help after an event occurred and it was simple tasks they could complete until help arrived.
- 5. Group had issues with trust. They felt 911 would take a while to get there and they wouldn't be prepared.
- 6. Group needed examples of how their area was preparing for an event and what an event would look like (ER dept, CDC, public health department).
- 7. A source of where the action steps came from will help increase recommendations' credibility. Participants really needed a reason to trust the information.
- 8. Mixed review of the materials. Most participants said they would follow recommendations, but all participants raised questions about credibility of messages.
- 9. There was general sense of doubt about never knowing when it will happen and never really knowing if the recommendations will actually work.

PRE-EVENT MESSAGE DEVELOPMENT PROJECT Summary Report of Qualitative Analysis of Focus Group

Population: Urban African American Agent: VX

Region: Southeast Focus Group Date: August 19, 2004 Report Date: September 15, 2004

Prepared by:
The Pre-Event Message Team
The School of Public Health
University of Alabama at Birmingham (UAB)

RESULTS OF ANALYSIS

Executive Summary of Top Concerns and Topics of Discussion

- Participants all felt the potential seriousness of an attack involving VX.
- Participants would want to protect themselves, but they have many concerns about being able to do so.
- Participants were concerned that everyone would hear or see these messages so that they could protect themselves.
- Participants had little knowledge of VX and had many questions on how it spreads.
- Participants want the information provided before the event takes place so that they will know what do in case it happens.
- The print materials provided the most information, followed by the television and radio.

RADIO MESSAGE

Comprehension

- The information provided in the radio message was not know to the participants prior to the focus group.
 - o The information "was new to me."
 - o 'I hadn't ever heard any of that."
- Participants indicated that important points from the radio message included:
 - o There is an antidote
 - o You can wash your skin off
 - You should keep your clothes on
 - You should see a doctor
- Some concern was expressed that people may not know if they have been exposed to VX.
- Participants were not clear as to how the VX chemical travels and/or dissipates.
 - o "Does it just go away?"

Emotional Response

- Most participants indicated that if they heard the radio message they would likely panic.
 - o "I would probably go into a panic. I know that I would."
- Other participants felt it did not make them nervous or apprehensive.
 - o "I would not have felt scared or nervous."

Actions

- Participants felt very confident in their ability to take measures to protect themselves.
 - "If you was one of the people at the game and you went home and you heard what you had to do was to pull off these clothes, discard them, then take you a bath and clean yourself up, and then go the doctor, and you thought you were exposed, you would do it. Truly."

Channel Appropriateness

- Television was suggested as a better channel of communication.
- Cell phone pagers, e-mail, billboards, and tornado sirens were suggested as other communication methods.
 - "We could maybe use those sirens, you know, get people sued to this is what a tornado sound sounds like and this is the terror alert sound."

Response to the Materials

- Participants were concerned that the announcer was speaking too fast and would not be understood by elderly.
- Participants suggested that the radio message include a statement connecting the message to the Homeland Security Advisory System.
- Respondents did not feel a sense of trust with the announcer.
- Participants thought the announcer's voice was calm and liked that it did not indicate a sense of panic.
- Participants suggested repeating the web site and telephone number information.

 Participants suggested having the radio message translated into Spanish and other languages.

TELEVISION MESSAGE

Comprehension

- Participants felt the television message provide much more information than the radio message.
 - "She filled in a lot of open spots or open thoughts that a lot of people had."

Emotional Response

- Participants felt that the television message would cause anxiety and make them more alert.
 - "I would be a little bit worried. I mean it's in your face, it's real."
 - "She made you sit up to know that it was an emergency that you should really take an alert to what was going on around you."
- Participants learned to call 911if they thought they had been exposed.

Actions

- Participants were concerned that they would need gloves and masks for protection and would not have them
 - o "How many folks got masks and gloves at home?"
- Participants were also concerned that in helping others they would contaminate themselves.
 - "How do you know they are not going to get exposed in the process of helping this child taking off the clothes and cleaning them up?"
- Some participants were concerned that the antidote "may" be available versus "is" available.
 - o "The biggest mistake they made when they said that the antidote may be available. See, you don't tell nobody

who's been exposed maybe; you need to let them know it's available."

Channel Appropriateness

 Respondents thought that television was a better way to reach people than the radio and provided more information.

Response to the materials

- Participants felt that the television message was more effective than the radio message.
 - "Taking into consideration that the television message reinforced it with the visual image. But on top of that, it was just more information."
- Participants were pleased with the spokesperson.
 - o "She made it look more personable."
 - o "She knew how to speak, emphasize it, and at the same time don't panic."
- Participants suggested translating the television message into Spanish or sign language.
- Participants wanted more information about the site of the attack and the area affected.

PRINT INFORMATION

Comprehension

- Participants learned new information from the print materials.
 - How VX spreads
 - Not to use hot water
 - Exposure can happen from treating others
 - Wear rubber gloves when removing clothing
- Participants suggested using bulleted points and graphics to make the reading easier.

Emotional Response

- Participants were affected by the statements about VX being deadly.
 - "I noticed that it was always underlined about dying."

Actions

 Participants were concerned that they would not have everything needed to keep them safe.

Channel Appropriateness

- Participants liked being able to read the information as it provided the most information.
 - o "It's longer than the radio broadcast and the message on the television...I'm thinking that this is more explanatory."

Response to the Materials

- Participants would like to have the print materials before an event took place.
 - "I would like it beforehand. That way, I'm aware of what's going on so I can better protect myself and my loved ones."

PREFERRED CHANNELS FOR INFORMATION DISSEMINATION

- Participants in this group felt the radio would be the best way to communicate with them after an event.
- Television was the next most effective communication channel.
- Participants suggested using all three methods of communication.
 - o "I would say use all three ways. Whatever works, do it."

UCLA Focus Group #11: Topline Report

Agent: Chemical - VX Date: August 31, 2004

Population: Urban Asian Participants: 13 (13 demographic forms completed)

DEMOGRAPHIC SUMMARY

• Ethnicity: All (13) were Asian/Pacific Islander

Age: Range 30-76; average age 58

• Sex: 11 female, 2 male

• Language: 4 spoke both Filipino and English in the home, 4 spoke Thai only, 3 spoke English only, and 2 Filipino only

• Education: Majority (12) attended some college: 7 college degrees, 2 graduate degrees

• Marital Status: Majority (4) married or living with partner; even split (3 each) between single, divorced or separated, and widowed

• Children: 8 have children, with a total of 28 children; age range 19-57; average age 41

• Employment: 7 identified themselves as currently unemployed

• **Income:** Of the 9 who answered this question, none earned over \$30,000

DETAILED CHARACTERISTICS

Characteristic	Category	N = 13	Mean
Age	Range	30-76	
	Mean	58	
Sex	Male	15%	
	Female	85%	
Education	High school diploma or GED	8%	
	Some college	23%	
	College degree	54%	
	Graduate degree	15%	
Ethnicity/race	Asian / Pacific Islander	100%	
Language in home	English	23%	
	English / Filipino	31%	
	Filipino	15%	
	Thai	31%	
Marital status	Single	23%	
_	Married or living with partner	31%	
	Divorced or separated	23%	
	Widowed	23%	
Children	Yes	61.5%	
	No	30.8%	
	Missing	7.7%	
	Age Range	19-57	
	Mean Age	41	
Currently employed	Yes	31%	
_	No	54%	
	Missing	15%	
	Health Care Professional (in bold below)	8% (1)	
Family income	Less than \$10,000	31%	
	\$10,000 - \$19,999	23%	
	\$20,000-\$29,999	15%	
	Missing	31%	

Occupations provided: Interpreter, community worker, outreach worker, nurse's aide (on disability), caregiver (2), housekeeper (3), retired employee

SESSION OVERVIEW

- The group looked interested and ready to engage. Through the ice breaker exercise, it was learned that many of the participants worked in community service. They saw the session as an opportunity to "learn something new" and take the information back to their offices. The icebreaker was very effective; there was a lot of laughter and, going into the session, there was a positive, engaged feeling from the group.
- One participant had a back injury that had her occasionally moving from one place in the room to another (to find a comfortable spot to lean). Nonetheless, she remained engaged during the entire session.
- People within the group knew each other.
- There was one elderly woman that hardly contributed. She seemed to be very limited in English and limited in her hearing.
- This group was extremely community service/outreach oriented.

SEGMENT 1 (RADIO)

The moderator read the scenario slowly and clearly. Participants seemed to have a good understanding of the scenario going into the clip review. The moderator emphasized that they should not look at the screen while the radio clip played, so they all listened intently (i.e., they were not distracted by the screen).

Important Points: The number of important points provided indicated that participants paid great attention to the clip. From the onset, they recognized that the agent being discussed was to be taken seriously:

- "It's a deadly chemical."
- "It's dangerous."
- Other points identified: "Wash clothing," "Clean out yourself thoroughly," "Be mindful so that you don't eat food or drink anything that may have been contaminated," "Leave the area," "Contact the website," "Seek medical [care]," and "Don't induce vomiting."

New Information:

 Asked about any information that they hadn't heard before, the moderator's summing up new information comments with "issues of exposure" drew nods.

Clear/Unclear: Participants explored unclear items:

- "Because it's odorless and tasteless, you cannot tell exactly if you [have been exposed] or not."
- A participant asked for clarification about seeking medical advice with the appropriate medical/health expert: "Is it just a family practice doctor or your primary care provider or who ...?
- Pursuing the medical care matter further, another participant considered:
 - "In cases of emergency, the doctor may not be able to see you in the beginning ... especially when there's a chemical attack.... So where do we go in any case that there's no doctor to go to, like a clinic or a hospital? Is there an emergency center to go to?"
- Participant figured they could visit the CDC website to get more information, but then realized that they had not understood the detailed contact information (phone or website) because it was stated very quickly.
- Someone brought up that some people don't have computer access, tossing her hands up as she explained that she's "one of them."

 A participant looked scared and concerned as she asked what she should do if she vomited.

Emotional Response:

- One participant admitted feeling "terrible" after hearing the radio clip. Another felt "scared," and another spoke of "[a] fear. I was the thinking that it might be fatal. Who shall I call? I have only [a] telephone."
- Participants were concerned about the well-being of parents and their young children, especially if a parent were at work and unable to pick up their child in case of an incident. "[H]e or she may be exposing herself further to this deadly chemical."

Acting on Recommendations:

- A participant thought she'd be able to address her clothing and "maybe get a wireless phone. Have it in case of my bathroom where it's safe."
- "Secure your house."
- Someone smiled as she stated that she'd "have a shower, maybe."

Believability:

- Interestingly, one participant stated that she thought the clip was "75% believable."
 When moderator asked about the remainder, the women explained:
 - "I will give that 25% [to] myself," crediting the source further based on "where I get that information. ... I would definitely want to investigate or find out more. If there's an incoming number by all means I call."

Recommendations for Improvement:

- Offering the information in other languages was supported. One participant addressed culture's role in how information is processed:
 - "People from other countries, "have another way of understanding things, they speak another language."
- One participant was unhesitant about the graphic imagery needed to make people realize the seriousness of an incident:
 - "Put it on T.V. Let us see the breaking news, people dying. You can see it for sure that it's happening."

Overall Impression:

- A participant felt that, despite its concerning topic, the information would serve in informing a listener and his/her family:
 - "It's good to know. You're not very happy about what it's doing or what if it is true. It's good to know because if you are not aware of things, you will not be able to warn your family members and friends, [and] you will not be able to protect yourself."
- A few minutes later, another participant furthered her point, explaining the value of educating people about such topics:
 - "I think there will be less panicking if we have more preparedness, more education, more awareness. [People] don't even know what to do or what not to do. We need to be able to protect ourselves and our families better."

Effectiveness of Medium:

• The group nodded that radio was a good channel for this information. Upon hearing it, one participant explained:

- "I would call all my friends and my family and warn them. Maybe they don't listen, they don't know about this."
- The group felt strongly that the public should be informed well before an incident. "We need to know before it happens."
- Other methods of information dissemination mentioned were television (specifically, local media), newspapers, and through the local community. "Get information for people to understand," someone stated.
- One participant pursued the idea of providing information in food items (packaging) rather than through the mail, "because anything that comes within your food you would likely read ... there's a lot of junk mail."
- There were lots of nods in agreement to provide information in church bulletins, etc.

SEGMENT 2 (TV)

The scenario was read. The elderly woman was moved to a different location to ensure that she could see the television clip. It seemed as if she had trouble hearing, even when someone was whispering in her ear. All participants watched the clip. There were audible responses in reaction to the depiction of a convulsing child.

Important Points:

- Prevention and symptoms were immediately addressed:
 - "It's about prevention [and] how to not be contaminated."
 - "It plainly describes the symptoms of when your skin is contaminated and what to do" after chemical exposure.
- Treatment recalled: "Some clothes, the bag. Wash clothing. Shampoo your hair. If exposed to your eyes clean with water at least ten to fifteen minutes." Bagging clothes.
- Phone and website contact information.

New Information:

- "I think they have an antidote," a participant stated, leaning back in silent laughter after adding "we hope."
- "It's good to know what to do before you get the treatment. Even though you can wash it, cleaning your eyes. That was new information."
- At this time, a participant brought up the idea of getting this new information to businesses so it could be disseminated into the community through their employees:
 - "This is a very good education for all of us here watching this, so I have an idea [that] in every business office ... I think it's wise for us to show this kind of video so everybody will know what's going on. So everybody will have a chance to be educated what to do."
- The above idea seemed to set off another idea to use cell phone-based information dissemination:
 - "It gives me an idea also. Because this is a focus group I can see ... how important cell phones are. Most of us have but not everybody has and now we know [that] if you are on the road or if you're outside you need to call 911 just in case. Cell Phone Company should be sponsoring."

Clear/Unclear:

• In response to the question of what they did not understand, a participant smiled and placed her fingers on her chin as she asked if the situation presented was a "made"

up story." When another person asked if the people in the video were actors, there was laugher and nods.

Emotional Response:

- Asked how the PSA made them feel, a participant smiled as she said "scared."
 Someone added:
 - "It's scared to look at it, but it's good to know if it happens what can we do."
- There were nods to someone's point that the clip takes away the feeling of "hopelessness and helplessness" in not knowing what to do in case of an incident.

Acting on Recommendations: The group was comfortable with interchanges and was interested in the discussion.

- One participant stated that she would "Go to a safe place," and her husband nodded in agreement.
- "Go and tell everyone."
- "Go the hospital," "Call 911," "If I've not been infected ... [s]tay home."
- Participants wondered how someone would know if they were exposed since "this is a clear gas."
- Asked what they'd like to know, a participant brought up the 911 call charges, which
 resulted in smiles and laughter. Others joked about the importance of making the
 call regardless of expense "because it's my life." The group took the topic seriously,
 but was good natured in their responses.
- One participant wondered if health facilities would "be looking for health insurance" if people went in for treatment.

Believability: Participants believed the announcer. They liked the clinical setting.

Recommendations for Improvement:

- A participant explained that people have to be able to endure the graphic imagery of the video: "You have to take it."
- Providing a reliable 800 number was suggested (one that wouldn't be overwhelmed by a flood of calls).

Overall Impression:

- Participants nodded that they liked the video clip:
 - "It was informative."
 - "It makes us comfortable about what to do when you are infected."
 - "It clearly shows us about the signs of being infected and how to avoid infection and then what to do when you are infected and where to go for help. So it's very, very comprehensive."

Effectiveness of Medium:

 When the moderator confirmed that participants would like such information before an incident there were lots of nods and stated affirmations.

SEGMENT 3 (PRINT)

Material was distributed and participants proceeded to read through it.

Important Points:

• There were nods regarding "first aid" and "symptoms."

New Information:

- People spoke of having a better understanding of VX itself.
- "I found out that hot water is not good. It's different."

Clear/Unclear:

- Participants strongly confirmed that the material was "very clear."
- There were laughs and nods when someone asked how VX is manufactured, which set off a question on what the government was doing (preventatively).
- Someone asked if people could have an antidote ready in their home. She explained, "We feel better if [the] government will provide us something at home" (in case of an emergency).

Emotional Response:

Asked about their feelings, there were nods in response to fear.

Acting on Recommendations: Not directly addressed, but implied.

Believability: Not directly addressed. Participants clearly valued information.

Recommendations for Improvement:

- Pictures and illustrations were suggested as ways to improve the print material.
- Participants suggested translating the text into more languages.

Overall Impression: Addressed in other subsections.

Effectiveness of Medium:

- With print material "you can read it and think about it."
- Asked if print was an appropriate medium, a participant repeated her strong belief in getting information to employers so employees can disseminate into the community. Others also spoke about community-based dissemination:
 - "It should be put in every news time or every business."
 - "If there is such a thing we can coordinate, awareness and preparedness to different community groups."
- Asked if they liked TV and print as companion pieces, there were lots of nods.
- Participants nodded as moderator mentioned a list of possible sources for this information. The group liked the idea of a "booklet" with information, which participants responded to favorably.

PREFERRED CHANNELS

TV dissemination with an education outreach arm drew lots of nods.

CONCLUSION

Group was still very engaged at the end of the session. They listened intently as moderator explained current efforts being made toward preparedness, nodding at various points she made.

POST-SESSION OBSERVATIONS

Test material was swapped with current public sheets; people were very interested in the takeaway material. Participants submitted a number of follow-up questions. As she left, one participant emphasized that, in her Filipino community, "children believe teachers more than their parents." 8 left her contact information, offering to help translate

material for the Filipino community. Group members were very pleasant and regarding as they left the session. A few stated that they learned a great deal from the event.

PRE-EVENT MESSAGE DEVELOPMENT PROJECT Summary Report of Qualitative Analysis of Focus Group

Population: Urban Hispanic Agent: VX

Region: Southeast Focus Group Date: September 15, 2004 Report Date: September 23, 2004

Prepared by:
The Pre-Event Message Team
The School of Public Health
University of Alabama at Birmingham (UAB)

CONTEXT

The focus group was held at the campus of an urban university in the Southeast. The immediate setting was a well-lit, comfortable conference room with no distracting noises. There were a total of five participants, all urban Hispanics. A female moderator and two female assistants were also present. The participants, moderator, and assistants sat around a large table. The radio and television were placed on the table for listening and viewing, while tape recorders were placed at both ends of the table.

RESULTS OF ANALYSIS

Executive Summary of Top Concerns and Topics of Discussion

- Most participants had little knowledge of VX prior to the focus group.
- Participants did learn about the symptoms and effects of exposure.
- Participants were not clear on how to take protective actions to keep themselves safe.
- Participants thought they would feel panic or helplessness upon hearing or seeing information related to a VX attack.
- Participants felt that television was the best channel of communication.
- Participants did not feel the radio or television messages were not believable because of the speaker (radio) or actors (television).

RADIO MESSAGE

Comprehension

- People were unfamiliar with VX before the radio message.
 - "I'd never heard of that chemical, first of all, and didn't know symptoms, didn't know what to do, and didn't know who to call, so all that information was pretty helpful."
- Important information gathered from the radio message about VX included:
 - How to treat it
 - How to detect it
 - o Symptoms
 - A site to find help

- Information on help seeking was presented more clearly than for symptoms.
 - "with the symptoms that was a little more bit confusing in that there were so many things given at the same time...one right after the other"
- Participants wanted more information on where to contact local government and emergency services.

Emotional Response

- Participants felt that the message would make them feel helpless.
 - "they just left you feeling kinda helpless, like there's nothing you could really do"
- Other participants would feel panic upon hearing the VX radio message.
 - o "I don't know how I can get away from this if I wanted to get away from it. I don't know what the areas that's been sprayed is, where people are coming in contact with this, how close this is to where I am, and those are the types of things I would want to know not to panic."
- Recommendations for reducing potential panic included the following.
 - Clearly stating if VX is contagious
 - Personalize the message for the community
 - o Provide accurate information
 - o Repeat vital information, such as phone numbers

Actions

- Participants were confused about the actions to take to protect themselves.
 - o "they were not really clear on what we could really do"
 - "without having really been given the tools as to how to do that, I know that you remove your clothes and you don't put them on again and you may wash your hands."
 - o "if I came in contact with somebody that was sprayed with the VX, would I get symptoms too?"

- o "if we had an idea of the timeline [exposure to symptoms to death], I think that would be helpful as well."
- Participants also felt that even if they took protective actions for VX, the actions would not have positive effects.
 - o "I know what it can be and if you get in contact with it I will be dead in about 15 to 20 minutes, so there is nothing an ad like that can do for me."

Channel Appropriateness

- Participants felt that television would be the most appropriate channel of communication.
 - "I think it would be a lot more effective if they had it on TV."
- Other suggested channels of communication included the following.
 - o Flyers with pictures
 - o Cell phones or pagers
 - o Highway signs or billboards

Response to the Materials

- Some people felt the radio message sounded like a commercial.
 - o "I just felt that he sounded more like a car dealership"
 - o "I would have like something more professional."
- Participants generally felt that the speaker was not believable or not serious and spoke too quickly.
 - o "it's not clear that it's something serious"
 - o "I speak very fast, but I felt like the person was almost flying through...slow the pace down just a little bit to where I have time to kinda let things go sink before I hear the next thing."
 - "Okay, what is this, what is he talking about? I mean, maybe I would be lost if I didn't know that kind of thing was happening."

TELEVISION MESSAGE

Comprehension

- Participants thought the television message on VX was clear and informative.
 - "They were very clean on the symptoms, they showed good examples, and they did repeat a lot what you should do, and to call 911, and I think that was really important, the repetition."
 - o "I think the routes of exposure that were explained were good. Actually showing depictions of how one form can differ from the other was helpful."
 - o "I think they were more specific on how to act, I mean, what to do, cut the clothes, put it in the bag..."
- Participants were unclear about helping others who were exposed without getting exposed themselves.
 - o "If I am helping someone who has been exposed, what do I do? Do I need gloves?"
 - "That lady, you know, washing the kid...she wasn't wearing any protection."

Emotional Response

- Participants felt the television message was frightening.
 - o "It is serious and was very scary."
 - "I think one thing that would be important for me, especially if you take into account that people are going to panic is say 'Please listen to the whole message before you react.' Because it could be that you get halfway through the message 'Oh my gosh, I need care now' and you're gonna leave before you find out that you have to wash off things and put things in bags, whatever, so that would be helpful."

Actions

- Respondents were confused about what protective actions should be taken first.
 - "I was confused whether it was more important to take off the clothes, shower, or go get a shot. They said you have to take it immediately, so if I took a shower and all this it could take like 30 minutes to get to the hospital. So, should I just go contaminated or what?"

- o "Is it necessary for me to seek medical help when I have one symptom...or do I have to have a set of symptoms?"
- Participants did not have much confidence that taking the recommended protective actions would do any good.
 - "I think with respect to being exposed to the liquid agent, I would know what I needed to do. As far as being exposed to the gas, the message I got was that basically I'm done. I need to say my goodbyes and that's it."
 - o "If I was exposed, I would follow the recommendations 100% even though it is a waste of time."
- Participants wanted more information on what to do in the days after a VX attack.
 - "One thing I prefer...more information on what to do, like to prevent stuff, more preventative measures that you could take and most stuff like in the long run, like say a couple of days later, is it still not okay to go out?"
- Participants were confused about how best to help other people exposed to VX.
 - o "I would want to know do I need to treat my kid...wash them off first and then wash myself off, or do I need to wash myself off and then make sure I take their things off"
 - "If I see someone in the street who has been exposed to this do I help them, I've been told that I need to stay away from it and not be in contact, or do I leave that person there and just call 911 and hope somebody picks them up?"
 - o "I would also want to get some information about my pets...how does it affect them and what you need to do to help them."

Channel Appropriateness

- Respondents believed that television message was better than the radio message.
- Participants suggested having the message in languages other than English.

Response to the materials

- Participants wanted more information on the following issues about the VX attack
 - Nearness of the attack to their homes
 - o If the VX is spreading
 - o How long they have to stay inside
- Participants did not feel that the presentation of symptoms was believable.
 - "A lot of these [people], like when they were having seizures, I just wanted to giggle because the people looked like it was so obvious they were acting. I know it would be hard to get like real clips of that but it would help, because it's not good if someone just starts laughing at something that's that important."

PRINT INFORMATION

Comprehension

- Participants felt that they got more information from the fact sheet than from the television or radio messages.
 - "The chemical agent is very well exposed here and you have a lot of information that you can follow and there is people you can contact and you'll be safe if you follow this."
 - "I felt that I got more information as to future things that I could do."

Emotional Response

- Participants felt more confidence in protecting themselves after reading the print information.
 - "I feel more confident after reading this than after watching the TV announcement an a lot more confident that after listening to the radio announcement."
- Participants felt less anxiety and panic when reading the print materials than upon hearing the radio message or seeing the television message.
 - o "I would feel a lot more calm after reading this because I would know a lot more precautions to take as opposed to, if I had heard the radio, given that if he sounded concerned, I would have panicked."

Actions

- Participants were confident in their ability to take protective actions.
 - o "I think that the methods they provide us in this sheet and in the video were all simple tasks: cut the clothing, wear gloves, was off, seek help. There wasn't anything extraordinary to do. You should be able to perform the actions."
- Participants noticed actions that were recommended in the fact sheet, but not contained in the television or radio messages.
 - "They do mention something about gloves and disposing the material that you used."
 - "They told you to duct tape the vents and turn off everything."
 - o "Do not use hot water."
- Participants were not clear on the amount of VX needed for exposure and how long the danger lasts.
 - "They aren't specific, like how much is too much...if I get a little dime size amount on my hand, is that going to affect me or do I like have to be completely submerged in it to die?"
 - o "I wasn't clear on how long to take, after you take the clothes off or the exposed contents, they're still exposed, they're still threatening you for a period of time, but they don't specify for about like two hours or about ten days or whatever. I would like to get a rough estimate."
 - "It's a very hot day and I have the VX liquid that is evaporating. Would that evaporating be considered a gas exposure or would the gas exposure be something completely different?"
- Participants felt the order for taking protective actions was specified better in the print materials.
 - o "They were a lot more specific...to the order in which you should do things, which is remove and wash yourself prior to seeking medical attention."

Channel Appropriateness

- Participants felt that seeing or hearing the radio, television, and print materials produced a greater impact than one medium alone.
 - "I think if I had just been handed this without any of the other information, it might not have been as effective as now"
 - "If we had just gotten one of these things, we would have been like 'oh, okay' and probably brushed to the side, but seeing all three, no matter what order...would make more of an impact."
- Participants were concerned about how the print materials would be distributed in an emergency.

Response to the Materials

- Participants thought that using a bulleted format, instead of paragraph format would be easier to read.
- Participants also suggested adding pictures and colored text for highlights.
- Participants were concerned that the language level was too advanced for some readers.
- Participants wanted the television and radio messages to give more information that was contained in the fact sheet.

PREFERRED CHANNELS FOR INFORMATION DISSEMINATION

- Participants said television would be the best channel for getting information to them.
 - "In a crisis, I would stick to TV because I would think they would have the most updated information."
 - "TV needs to make sure they have all the information and give more information."

SOUTHWEST CENTER FOR PRE-EVENT MESSAGE DEVELOPMENT

Focus Group Pre-analysis Report

Population: Hispanic Agent: Chemical-Urban

Region: Texas Focus Group Date: September 8, 2004

Prepared by the Department of Social and Behavioral Sciences University of North Texas Health Science Center School of Public Health Report date: October 19, 2004

GROUP CHARACTERISTICS

What are the characteristics of the group?

Agent: Chemical VX **Date:** September 8, 2004

Population: Hispanic Urban Participants: 7 (7 demographic forms completed)

DEMOGRAPHIC CHARACTERISTICS

Characteristic	Category	N = 7
Age	Range	19-44
	Mean	25.57
Sex	Male	57%
	Female	43%
Education	High school diploma or GED	28.6%
	Some high-school	28.6%
	Some college	28.6%
	College degree	14.3%
	Graduate degree	0%
Ethnicity/race	Hispanic	100%
Language in home	English	71%
	English / Spanish	29%
	Spanish	0%
Marital status	Single	43%
	Married or living with partner	43%
	Divorced or separated	14%
	Widowed	0%
Children	Yes	43%
	No	57%
	Age Range	1-25
	Mean Age	14
Currently employed	Yes	57%
	No	43%
	Health Care Professional	0%
Family income	Less than \$10,000	29%
	\$10,000 - \$19,999	14%
	\$40,000-\$49,999	29%
	Missing	28%

Occupations provided: case-worker (1), case-worker and student (1), student (2), housekeeper (1), front desk attendant (1).

Part One: Radio

Comprehension

- Recap of information given in clip
- Know what to do and who to call
- Good to know you can turn to the website to get information if radio clip was too fast
- Speaking was a little fast
- Hard to get name of the chemical and what it was
- Wanted more information on the nature of the threat
- Would like it to be in Spanish also
- Did not understand if VX was a real chemical, if it is, is there another name for it

Emotional Response

Without a visual cue it is hard to be emotional

Actions

- No confidence that the actions recommended will keep them safe
- Feel unprepared
- Think that the information went to quick to catch how it was you could keep safe
- Would go to the internet to get more information to know what to do
- Would not stay at home

Channel Appropriateness

- Radio is good but it should be in all forms of technology if it is that important
- Television was seen as another medium to use
- Internet seen as a good medium because it is updated regularly

Response to the Materials

- Limited information
- Was too fast in presentation of the materials
- Was too brief and too fast
- Needs an introduction statement
- Feels too much like a commercial
- Needs an annoying beeping alert sound
- Needs to be replayed many times
- Not believable because radio stations have pranks

Part Two: Television

Comprehension

- Repeated symptoms and recommendations
- Recite how to clean the areas exposed
- In the clip people used their hands to take off clothing, but that would get you contaminated
- Questions about what does it look like
- How long is an area harmful after the chemical is released

Emotional Response

- What if your doctor didn't know what to do
- Not very confident

Actions

- Would just stay away
- Would stay at home
- Would seek medical attention

Channel Appropriateness

- Was better than the radio
- Would look to the Internet

Wonders if there could be emergency Internet pop-ups

Response to the Materials

- Well done
- Very basic
- Visual helped
- Would be believable if it was on nation wide or came up in the middle of a program
- Need to add an emergency sound prior to the clips

Part Three: Release of Print Information

Comprehension

- Better understanding of exposure, prevention and treatment
- Good that it added using gloves and how to dispose of contaminated materials
- Very clear to understand
- Unclear on how to identify if something is contaminated and dead (person, animal, plant)

Emotional Response

- Aware so we will not panic
- Confidence in the information
- Scared about how fast exposure could spread

Action

- Confident they can carry out actions
- Wonder how medical professionals will react to this, how they will protect themselves
- Would stay clear of the area

Channel Appropriateness

- Television would be more useful and preferred
- Would prefer materials in the newspaper also

Response to the Materials

- The fact sheet offered more information
- Easy to see main points underlined or in bold
- Had more details
- Should be offered in different languages
- Add pictures or color, maybe a poison symbol

Part Four: Preferred Channels for Terrorism Information Dissemination

Prefer television because offers visual information

UCLA Focus Group # 9: Topline Report

Agent: Chemical-VX Date: August 30, 2004

Population: White Urban **Participants**: 11 (11 demographic forms completed)

DEMOGRAPHIC SUMMARY

• Ethnicity: Majority (9) Caucasian, 2 African-American

Age: Range from 22-76; average age 37

• Sex: 7 female, 4 male

Language: Majority (10) speak English at home; one Amharic

- Education: Varied from high school diploma to graduate degree
- Marital Status: Varied: 6 single, 4 married or living with partner, 2 divorced or separated
- Children: Only two participants have children; child age range 11-44; average age 26
- Employment: Majority (9) are currently employed

• Income: Ranged from \$20,000 to more than \$100,000; most frequent (5) income \$40,000-\$49,000

DETAILED CHARACTERISTICS

Characteristic	Category	N = 11	Mean
Age	Range	22-76	
	Mean	37	
Sex	Male	36%	
	Female	64%	
Education	High school diploma or GED	9.1%	
	Some college	27.3%	
	College degree	36.4%	
	Graduate degree	27.3%	
Ethnicity/race	Caucasian	82%	
	African American-Black	18%	
Language in home	English	91%	
	Other (Amharic)	9%	
Marital status	Single	55%	
	Married or living with partner	36%	
	Divorced or separated	9%	
Children	Yes	18%	
	No	82%	
	Age Range	11-44	
	Mean Age	26	
Currently employed	Yes	82%	
	No	18%	
Family income	\$20,000-\$29,999	18%	
	\$30,000-\$39,999	18%	
	\$40,000-\$49,999	46%	
	\$50,000-\$59,999		
	\$60,000-\$69,999	9%	
	\$70,000-\$79,999	_	
	\$80,000-\$89,999	_	
	\$90,000-\$99,999	_	
	\$100,000 or more	9%	

Occupations provided: Research assistant, massage therapist, TV participations processor, receptionist, career counselor, administrative care partner/freelance writer, freelance writer, counselor (2), student (2)

SESSION OVERVIEW

The group was friendly. There were two dominants, but everyone did a good of letting others talk and respecting each others' opinions, even when they were different from their own. No participants tried to control the discussions. Even the quieter or bored-looking participants spoke up when they had something to say, or they contributed as the discussion went on. There was no feeling of self-consciousness among the group. The session took place in a salon so there was no table. Instead, chairs were organized in a circle.

SEGMENT 1 (RADIO)

People were attentive during the radio clip; they were smiling at the end of it. Most of the time when participants were talking, others were nodding in agreement.

- ◆ Important Points: "Symptoms ... how to take care of them at home, and then seek professional help" was initially stated. Everyone recalled removing and bagging clothing, despite other distractions and issues they had with the clip. Also recalled was to not induce vomiting. The group was skeptical about the usefulness of the website and hotline number listing ("If I had been exposed, I wouldn't be thinking about calling any toll free number or logging into anybody's web site.") They raised questions that would likely arise in a real situation as they got caught up in scenarios for various key points, rather than just identifying key points:
 - "I think he said it was odorless and tasteless and it kinda scared me in a sense that even if I wash myself...I mean how would I know to wash my self unless I had some of the symptoms they are talking about. But even then, after I wash myself, I wouldn't know where to go because I would be terrified. As far as I know everywhere has it because I can't smell or taste it."
 - "I remember blurred vision and twitching skin and I also thought blurred vision
 would something that would prevent you from being able to get out of where
 you are...I mean do you know really...Now you are trying to remove all your
 clothes and wash the red areas and you can't see anything."
 - "I looked at it through the context of people actually suffered through it. So as he was going through it, I was more thinking of what they were going through, rather than thinking that it could happen to me."
 - "You said that it was going to be able to get into the water. So I'm like okay so if I wash myself ... I'm just thinking is the water clean or am I getting some more stuff on my skin? I don't know. I guess I just have to take it one step at a time."
- ♦ New Information: "Twitching of the skin," the fact that VX was odorless and tasteless "absolutely invisible" was new and also "about the most disturbing thing."
- ◆ Clear/Unclear: A participant spoke about "the frightening nature of the way the information delivered. The slightly hyper-intense [tone]. Seriously, it almost blurs what you're hearing." They didn't know the order they should follow in executing preventive/treatment procedures, and how long the outbreak and symptoms might last. Participants were unclear about where the agent would come from and how it spread:
 - "Is someone going to come home with [me]? Also, if I go to a hospital and there are people with it and symptoms, I am going to be exposed to it" I'm touching doorknobs and stuff that they have touched."

The participant who made this point also added that she had skimmed through a book on terrorism preparedness, and recalled being "filled with despair" after learning that a lot of agents don't have antidotes – "[I]f you were exposed, you were gone."

- ◆ **Emotional Response:** Participants' responses reflected varying levels of emotional interpretation and impact:
 - "It just makes you realize like they really don't know how to respond to something like that and if everyone is breaking out with that, you're on your own. I got the sense that everyone would be on your own."
 - "It just left me feeling that they don't know that chemical from any other chemical, they are just giving me very basic guidelines that any poison control center would give you."
 - "[S]ince it specified the crowd at the football game was affected by this, I got the feeling that, oh well, it's them and not us, not me. I'm way over in West Hollywood so I'm okay. It's just somehow something that has happened to them. Nothing was said about this [being] liable to affect everybody."
 - "[A]s soon as I heard, 'remove your clothes and use soap and water,' it seemed to simplistic that I don't remember hearing anything else after that. ... I thought I was going to be okay."

A UCLA staffer felt "horrible" about jeopardizing her safety knowing that if there were an incident, she would be called in to work to help treat people. "I would like to know how to shelter myself and my car and how to protect myself going from home to UCLA." She felt that nothing about the message could be changed to appease her feeling, but suggested a "female, reassuring motherly" voice to help her through. Having the announcer identify his/her association would have also made participants feel "more comfortable."

- Acting on Recommendations: The group initially provided recommendations for the clip rather than providing examples of acting on the recommendations. The moderator needed to restate the question and then prompt participants to consider various recommendations they could follow. Participants would be able to wash themselves, take off their clothes, use the hotline number, and refer to the CDC website.
- ♦ **Believability:** The majority of the group thought the announcement sounded like a radio deejay who was "selling a product" or "doing the countdown of the Top 40," preventing participants from following along and taking the clip seriously. Someone felt that the clip would "terrify people with the tone of the announcer's voice." It is worth nothing that one participant took a step back from the detailed criticism to put the clip in proper context:
 - "What occurs to me is that we are almost asking too much of that announcement because it sounded ... like that was an instantaneous thing like it just happened I didn't really think of [the announcer] as an official person so much as like a news broadcaster who is giving just very simplistic stuff about it because it's just, 'Hey, this just happened at the Rose Bowl and get on the air,' and he does it. In other words, they are standing by. There are people always in broadcasting stations waiting with the information It didn't happen today so we didn't do anything, but we're ready." [NOTE: quote cleaned up from transcript version.]
- Recommendations for Improvement: Participants repeatedly brought up wanting more specific information about the situation as to how it related to their safety:
 - "We would like very clear instructions as to how to best serve ourselves and to take care of ourselves. Just to go through the whole gamut of what to expect, how to deal with it, and then what to do after you've done everything you can do."

A "three-step process of what you need to do" was suggested. As earlier stated, they recommended changing the announcer's delivery and having his association

identified to help make the clip more "realistic" and "reassuring." They also suggested a tone reminiscent of the Emergency Broadcast System and/or a "ticker" across the bottom of the screen to help get and keep people's attention.

- ♦ Overall Impression: Most people did not like the spot. "It was too generalized" in terms of information and had "that manic edge like a commercial" in terms of delivery." Neither would be calming or reassuring, two things the group would want from the clip. They wanted information that would provide "something concrete" that "would feel good to know you are doing" something helpful.
- ♦ Effectiveness of Medium: Participants felt that radio should be one of the channels for such information. They felt it should be repeated and updated as news of the outbreak would unfold, and suggested "blasting [it] from intercoms, public service announcements, the television" as well as "loud speaker trucks driving up and down the streets."

SEGMENT 2 (TV)

Everyone paid attention as the video clip played. They laughed at some depictions, including convulsions. Overall, everyone appreciate the video's detail. One participant who came in after the radio clip was played began participating during this segment.

- ♦ Important Points: Participants appreciated the clip's delivery. They felt its seriousness was undisputable:
 - "That really stood out when she said, 'Do this now,' and how they had this in capital letters. That made it stand out a lot more this time. It was a lot easier to pay attention to her. It didn't sound like an infomercial and just seeing the action as she is describing it, you can actually see what is going on."

They felt it was comprehensive and offered more specifics about what to do and how different symptoms manifest, leaving them feeling "more informed and more ready." They appreciated learning the varying lengths of time it takes symptoms to manifest, and how it advised them how to treat themselves so they wouldn't "just panic" upon hearing the information.

- New Information: Covered in other subsections.
- ♦ Clear/Unclear: Overall, the visual depictions made the information "much easier to process," but questions regarding order of treatment and next steps again arose:
 - "[W]ould it be better to wash someone or yourself *outside* [rather] than go inside and contaminate your environment?"
 - "When the woman was having problems breathing because she must have inhaled it, that to me seemed like she needs medical attention now, not a shower first."
 - "Once you've bathed once ... [d]o you do it again?"

There is also the confusing image of the woman about to throw up while the announcer stated to not induce vomiting:

• "It's like making you nauseated. Should you eat bread or drink milk? I mean is there something...it was a little unclear."

Eye treatment – something that had not been included in the radio spot – was very clear, as was the handling of clothing (though participants agreed that the depiction likely should have included the use of protective gloves). They liked learning and seeing the agent in its different forms, "the difference between if it touches your skin or it you drink it," and timeline issues around it, but wanted a timeline in relation to the instruction to stay in a car ("[A]re you going to update us or are [we] stuck ...?")

♦ **Emotional Response:** One participant stated that the clip made her feel "despondent ... because that really is what probably is going to happen." Another

was left with a "weird mixed feeling. ... It's ... weird to know that it's there and then just be sitting there waiting for it to come." Another noted that "The public is going to hate [the clip] ... really hate it and what it underlines," but they thought that it was important information to receive and be clear about in case of an incident:

 "You have to have it imprinted on you that these are the steps you take when this stuff emerges in our city."

A suggestion was made to show someone recovering, "[s]omething that shows you can make it through." The participant admitted that wanting to hear such a story overrode whether or not it was fact-based. "I'd like to be lied to about it," she stated. Alternatively, another participant represented those in the group who felt that the video left them feeling calm and informed:

- "It didn't make me feel worried. It made me feel that there were things that you could do to take care of it. Like if this happens to you, this is what you need to do. It didn't make me feel stressed."
- ♦ Acting on Recommendations: All participants responded that they could execute the actions recommended in the video clip, although some anticipated that they would not be "real calm" while doing so. Overall, they wanted to have all the information they could "as soon as [media/health officials] know it" to begin taking preventative measures:
 - "Even if it doesn't make a difference, I would feel better having gone through all the steps."

While they'd perform the actions, they admitted they would do them in the order they determined would be "best for [their] survival." Sitting in the car was more than they could imagine. "I couldn't sit in my car on the side of the road waiting for something to happen"

- ♦ Believability: The clip's "attention to detail and [the announcer's] approach ... her tone ... the way ... she watches you," all came across convincingly. They felt differently about the actors in the clip ("You could just tell it was ... overdone in certain situations ...") while admitting that "the visuals need to be fake a little bit" to make their points.
- ♦ Recommendations for Improvement: A "ticker" running across the bottom of the screen and saying "An outbreak has occurred. Stay tuned," was suggested to draw in people's attention. Also discussed were acronyms or "1,2,3" learning tips to help people remember "routine" steps they could follow in case of an event. Participants thought the clip should let people know that children were being taken care of at school so people wouldn't leave work to get their child.
- Overall Impression: Participants felt that the announcer contributed to their overall favorable impression of the piece:
 - "It just gave a sort of feeling of staying calm and don't panic even though they didn't actually have to say that."

The group discussed the helpfulness in seeing symptom depictions ("I was worried enough. I don't see the need for actors to portray this"), even despite the comical effect they had on some participants ("I wanted to stay serious and than I'd see something else [comical]"). Ultimately, they felt that the depictions would be helpful to visual learners, children and ESL populations. They admitted that seeing a real-life image of the symptoms would "freak [them] out," and felt the depictions gave a person "a sense that you could be doing things right."

♦ Effectiveness of Medium: All participants wanted to get this type of information from television. They also wanted updates with no commercials. In essence, they

wanted, "tons of information." Pamphlets, popups on the Internet, and the telephone book was listed as other places to disseminate the material.

SEGMENT 3 (PRINT)

- ◆ Important Points: Participants seemed struck by the very serious and somber tone of the material and the points it covered: "[Y]ou could get it quickly," "You could die." "Now I'm scared," said one of the participants. They liked the long-term effects section ("[I]t did give you a sense of hope"), and additional information regarding symptoms "and even more specifics" about how to deal with them ("[I]t's a little easier to understand that you're looking at different severity levels ..."). Overall, they felt it "addresses some points that were kind of vague before"
- **New Information:** The material addressed questions that the group had brought up earlier. Using gloves when handling clothing, plastic bag pickup, not eating or drinking anything else to curb vomiting, and washing with lukewarm water were all new information. They learned that hospital workers could administer antidotes. "[I]f you get it off of you, you're okay," one participant was glad to learn.
- ◆ Clear/Unclear: The group thought the material was very clear. "These should be mailed out to everyone that was in the city [of the incident] and everywhere else too," a participant stated.
- ♦ Emotional Response: There was a range of emotional responses: "scary," "a little better prepared," "more informed."
- Acting on Recommendations: The group felt they could act on the material's recommendations, and thought they would help. Any uncertainty probed procedure in even more detail:
 - "Should you wait for an ambulance to come ... if you are seizing and convulsing ...?"
 - "If you encounter someone who is convulsing ... what do you do ...?"
 The only recommendations they questioned their ability to follow were flushing your eyes for 15 minutes and staying away from people who are or could be affected.
 They understood the need to advise people to stay away from dangerous areas, but felt that health care professionals would understand people doing otherwise:
 - I think with the whole 'don't go to your friends and family' ... I think they consider that you're probably not [going to follow the instruction]. If it's you child in school ... I think they understand that part, but they have to say it at least. I think it's okay because if you are going to break the rule, you're going to break the rule.
- Believability: Not directly addressed.
- ♦ Recommendations for Improvement: Diagrams on executing procedures properly was suggested. A format that included bullets and short paragraphs for easy scanning was recommended. A headline that was more of an attention grabber was suggested (rather than "fact sheet"). The group also discussed preparation kits and a "terrorism preparedness manual" that could be distributed to every household.
- Overall Impression: All participants responded very favorably to the material.
- ♦ Effectiveness of Medium: The group felt that this information was appropriate to print media. "I find it much more helpful and you can go over it again," a participant explained. They suggested having the material available at community centers, the library, or the Internet, "like a mandatory email." The group felt that information should be available before an incident, and that government institutions, "or just the whole public school system should have a plan" in case of an event along the lines of earthquake preparedness.

<u>PREFERRED CHANNEL</u>
The group favored the print material for its content, but stated that they would turn to television and/radio in the event of an incident. As one participant imagined, "I'd have [print material] in front of me and watching TV."

<u>CONCLUSION/POST-SESSION</u>
It was a smooth and pleasant closing.

Appendix F. CRT Report: VX

Difficult to Understand Terminology

	VX CRT TestingTerms									
Group	fumes	odor	VX	gas/gasoline	twitch	antidote/medicine	vapor	lukewarm	twitch	exposure
Urban White	х	Х	Х							
ESL	х			х		X	х	Х		
Urban Hispanic	х		х	Х	Х	X		Х		Х
Rural Hispanic							х			
Al Rural										Х
Al Urban										
Af Am Rural	х			х		X				Х
Af Am Urban	х			X		X				X
An "x indicates of	difficulty	with t	he te	erm						

VX CRT TestingTerms							
Group	poisoned	odorless	tasteless	contamination	pinpoint pupils	symptoms/medical terms	
Urban White							
ESL						x	
Urban Hispanic	х						
Rural Hispanic		х	х				
Al Rural							
Al Urban							
Af Am Rural							
Af Am Urban				X	х		
An "x indicates d	lifficulty with	the term					

Difficult to Understand Concepts

		VX CRT Testi	ingConcepts		
Group	Difficulty with Overall Signs and Symptoms	Difficulty Comprehending Signs and Symptoms	Wanted more details on Medical Care	Wanted more information about symptom onset time	Wanted I Pre-
Urban White	x		x		
ESL	X		*		
Urban Hispanic	'	Х			
Rural Hispanic	'	Х			
Al Rural	1	X			
Al Urban	X			Х	
Af Am Rural	X				
Af Am Urban	х				
An " x indicates c	difficulty with the term				

		VX CF	RT TestingConcept	<u>s</u>	
Group	Wanted more info detailing how identify if person/object was contaminated	Lack of general understanding	Location/availability of antidote	Order of decontamination	Thought VX would have a smell
Urban White					
ESL	x	X			
Urban Hispanic		X	X	X	
Rural Hispanic			х	х	Х
Al Rural					
Al Urban	x				Х
Af Am Rural		X			
Af Am Urban					Х
An "x indicates of	difficulty with the term				

	VX CRT TestingConcepts							
Group	Little Understanding of how VX is spread	Believed that VX Gas is visible	Displayed Sense of Fatalism	Did Not Know Whether to Induce Vomiting or Not	Wondered h contacts contam			
Urban White								
ESL								
Urban Hispanic								
Rural Hispanic	X	X	х					
Al Rural								
Al Urban				X				
Af Am Rural								
Af Am Urban								
An "x indicates d	lifficulty with the term							

	VX CRT	Testing-	-Concept	<u>:s</u>
Group	VX Could be Used	VX as a		Confusion of Signs and
Group	as a Weapon	poison	liquid	Symptoms in Gas vs. Liquid
Urban White				
ESL				
Urban Hispanic				
Rural Hispanic				
Al Rural				
Al Urban				
Af Am Rural	X			
Af Am Urban		X	X	X
An "x indicates d	ifficulty with the term			

Appendix G. Overall Project Demographics

Characteristic	Category	N = 134	Mean
Age	Range	18-84	
_	Mean	43	
Sex	Male	29%	
	Female	71%	
Education	Some high school or less	11%	
	High school diploma or GED	16%	
	Some college	34%	
	College degree	25%	
	Graduate degree	14%	
Ethnicity/race	African American/Black	29%	
	Caucasian/White	20%	
	American Indian/Alaska Native	8%	
	Asian / Pacific Islander	18%	
	Latino/Hispanic	25%	
Language in home	English	82%	
	Spanish	7%	
	Other	11%	
Marital status	Single	37%	
	Married or living with partner	36%	
	Divorced or separated	16%	
	Widowed	11%	
Children	Yes	67 %	
	No	33%	
	Age Range	1-62	
_	Mean Age	25	
Currently employed	Yes	69%	
	No	31%	
Family income	Less than \$10,000	21%	
	\$10,000 - \$19,999	20%	
	\$20,000-\$29,999	16%	
	\$30,000-\$39,999	17%	
	\$40,000-\$49,999	12%	
	\$50,000-\$59,999	3%	
	\$60,000-\$69,999	4%	
	\$70,000-\$79,999	3%	
	> \$80,000	4%	

Appendix H. Focus Group Coding Guide and CRT Coding Guide: VX

Pre-Event Messaging Year 2 Focus Group Coding Guide

DOMAIN: Radio Message

PA	RF	ENT	C	O	D	ES
1 1	\mathbf{L}	/I / I	\sim	v.	◡.	\mathbf{L}

Comprehension: RACOMP

Child Codes:

New InformationRACOMP.NDifficult to understandRACOMP.DRemaining QuestionsRACOMP.QClear informationRACOMP.C

PARENT CODES

Emotional Response: RER

Child Codes:

Change code to make it less emotional RER.C Reasons for response RER.R

PARENT CODES

Action: RACT

Child Codes:

Confidence in recommended actions
Confidence to carry out actions
Intention to follow recommendations
RACT.E
RACT.I

PARENT CODES

Channel Appropriateness: RAPP

Child Codes:

Additional information from channel RAPP.A
Other Channel Recommendations RAPP.R

PARENT CODES

Response to Materials: RREP

Child Codes:

Overall Impression RREP.I
Grabbed attention RREP.A
Credibility RREP.C
Usefulness of materials RREP.U
Recommendations for Improvement RREP.R

DOMAIN: Television Message

PARENT CODES

Comprehension: TACOMP

Child Codes:

New InformationTACOMP.NDifficult to understandTACOMP.DRemaining QuestionsTACOMP.QClear informationTACOMP.C

PARENT CODES

Emotional Response: TER

Child Codes:

Change code to make it less emotional TER.C Reasons for response TER.R

PARENT CODES

Action: TACT

Child Codes:

Confidence in recommended actions TACT.C
Confidence to carry out actions TACT.E

Intention to follow recommendations	TACT.I
PARENT CODES	
Channel Appropriateness:	TAPP
Child Codes:	
Additional information from channel	TAPP.A
Other Channel Recommendations	TAPP.R
PARENT CODES	
Response to Materials:	TREP
Child Codes:	
Overall Impression	TREP.I
Grabbed attention	TREP.A
Credibility	TREP.C
Usefulness of materials	TREP.U
Recommendations for Improvement	TREP.R
DOMAIN: Newspaper Message	
PARENT CODES	NACOMD
Comprehension:	NACOMP
Child Codes:	
New Information	NACOMP.N
Difficult to understand	NACOMP.D
Remaining Questions	NACOMP.Q
Clear information	NACOMP.C
PARENT CODES	
Emotional Response:	NER
Child Codes:	
Change code to make it less emotional	NER.C
Reasons for response	NER.R
DADENT GODEG	
PARENT CODES	NI A COTT
Action:	NACT

Child Codes:

Confidence in recommended actions
Confidence to carry out actions
Intention to follow recommendations
NACT.E
NACT.I

PARENT CODES

Channel Appropriateness: NAPP

Child Codes:

Additional information from channel NAPP.A
Other Channel Recommendations NAPP.R

PARENT CODES

Response to Materials: NREP

Child Codes:

Overall Impression NREP.I
Grabbed attention NREP.A
Credibility NREP.C
Usefullness of materials NREP.U

Recommendations for Improvement NREP.R

OTHER

DOMAIN: Overall

PARENT CODES

Overall Channel Appropriateness: OVER

Child Codes:

Most helpful channel **OVER.H**

Most likely channel to turn to **OVER.L**

Pre-Event Messaging Year 2 Cognitive Response Testing Coding Guide

PARENT CODE

TARLETT CODE	
Comprehension:	C
Child codes:	
<u>Main Idea</u>	MA
Main Idea—Incorrect	MA.I
<u>Paraphrase</u>	PR
Vocabulary	${f V}$
Participant Questions	PQ
Unclear Word or Phrase	\mathbf{U}
Emotional Responses:	ER
Overall section Impression, Positive Affect	ERP
Overall Section Impression, Negative Affect	ERN
Overall Section Impression, Neutral Affect	ERNT

SECTION A

COMPREHENSION Main Ideas: What is VX

C.MA.# (0,1,2,3,4)

Main Idea for section is scored 0-4 based on how many of the following participant answers are heard in response to the first question in the interview for Section A, "What is this paragraph telling you?"

VX can be deadly. VX is an odorless and tasteless chemical. It can be in gas or liquid form, but it cannot be a powder. In gas form, VX looks like a vapor or mist. In liquid form, VX is a honey-colored liquid that looks like motor oil. It is very oily and slow to evaporate. VX feels oily on the skin. Exposure to VX in any form can seriously harm or kill you.

1. VX is deadly	C.MA1
Incorrect	C.MA1.I
2. VX is odorless/tasteless chemical	C.MA2
Incorrect	C.MA2.I
3. VX can be liquid	C.MA3
(incl. use of phrase "honey-colored" or "motor oil")	
Incorrect	C.MA3.I
4. VX can be gas	C.MA4
Incorrect	C.MA4.I
Paraphrase	C.PRA.# (0,1,2)

1. VX is dangerous C.PRA1

2. Paragraph is about a chemical C.PRA2

<u>Vocabulary</u> C.VA.# (0,1,2)

Vocabulary section is scored 0-2 based on participant's answers in regards to specific vocabulary words.

(Correct Use, Incorrect Use)

1. Gas (incl. "mist" or "vapor")

C.VA1.C

C.VA1.I

2. Exposure C.VA2.C

C.VA2.I

<u>Participant Questions</u> (non-vocabulary questions) C.PQA Code any questions the participant asks not addressed in other sections.

<u>Unclear Word or Phrase</u> C.UA

PARTICIPANT EMOTIONAL RESPONSE ER.A

Overall section Impression, Positive Affect	ER.A.P
Overall section Impression, Negative Affect	ER.A.N
Overall section Impression, Neutral Affect	ER.A.NT

SECTION B

COMPREHENSION Main Ideas: Routes of Exposure

C.MB.# (0,1,2 3,4)

Main Idea for section is scored 0-4 based on how many of the following participant answers are heard in response to the first question in the interview for Section B, "What is this paragraph telling you?"

VX gas can be released into the air for you to inhale (breathe in) and be poisoned. VX can be placed into your food or water and then you would swallow it. VX can come in contact with your eyes where it may be absorbed (enter) into your body. You can be exposed by touching or being near other people's skin or clothing that have VX on it. VX fumes can continue to be released from clothing and other objects for a long time. VX fumes can seriously harm or kill you.

1. VX can be inhaled (airborne) C.MB1
Incorrect C.MB1.I

2. VX can be swallowed (food/water) C.MB2

Incorrect	C.MB2.I
3. VX can be bodily absorbed (incl. use of "touching" or "other people's skin/clothing Incorrect	C.MB3 ") C.MB3.I
4. VX fumes harm/lethality Incorrect	C.MB4.I
<u>Paraphrase</u>	C.PRB.# (0,1,2)
1. Paraphrase of fumes	C.PRB1
2. Can be infected/exposed and not know it	C.PRB2
<u>Vocabulary</u> Vocabulary section is scored 0-3 based on participant's ans specific vocabulary words.	C.VB. # (0,1,2,3) wers in regards to
(Correct Use, Incorrect Use) 1. Absorbed	C.VB1.C C.VB1.I
2. Released	C.VB2.C C.VB2.I
3. Fumes	C.VB3.C C.VB3.I
Participant Questions (non-vocabulary questions) Code any questions the participant asks not addressed in of	C.PQB her sections.
<u>Unclear Word or Phrase</u>	C.UB
PARTICIPANT EMOTIONAL RESPONSE	ER.B
Overall section Impression, Positive Affect Overall section Impression, Negative Affect Overall section Impression, Neutral Affect	ER.B.P ER.B.N ER.B.NT
SECTION C COMPREHENSION Main Ideas: Symptoms of Exposure	C.MC.# (0,1,2,3)

Main Idea for section is scored 0-3 based on how many of the following participant answers are heard in response to the first question in the interview for Section C, "What is this paragraph telling you?"

If you were exposed to VX gas (vapor), symptoms may appear within seconds. If you were exposed to VX liquid, symptoms may appear within a few minutes to several hours. The more VX you are exposed to (in either liquid or gas form) the more quickly you will get sick. The longer you are exposed to VX (in either liquid or gas form) the more likely you are to get sick. Any VX liquid that touches your skin may cause death if you do not immediately wash it off. If you are exposed to VX, by any method, you may have some or all of these symptoms:

- Runny nose
- Watery eyes, pinpoint pupils (very small pupils or black dot in center of eye)
- Burning eyes, eye pain, and blurred vision
- Drooling, and excessive sweating
- Choking, coughing, chest tightness, rapid breathing
- Diarrhea and increased urination
- Sleepiness, confusion, weakness
- Headache
- Abdominal (stomach) pain, nausea and vomiting
- Skin exposed to VX may sweat and twitch
- Very slow or fast heart beat, and very low or very high blood pressure

Exposure to large amounts of VX may have these additional symptoms:

- Loss of consciousness (passing out)
- Convulsions (seizures)
- Paralysis (unable to move)
- Respiratory failure (unable to breathe) leading to death.

(Yes, No) 1. Symptom onset time C.MC1 (gas=seconds; liquid=mins. or hours) **Incorrect** C.MC1.I *** 2. Skin contact may lead to death if C.MC2 not washed off (this is worth 2 points) Incorrect C.MC2.I 3. Increased length/amount of exposure C.MC3 leads to an increase in morbidity/lethality Incorrect C.MC3.I

Paraphrase C.PRC.# (0,1,2)

1. VX can be harmful C.PRC1

2. VX similar to CO. C.PRC2

3. Recognize VX exposure/Symptoms C.PRC3

4. Did not recognize VX exposure/Symptoms	C.PRC4
5. Some symptoms not specific to VX,	C.PRC5

could be something else, something common

<u>Vocabulary:</u> C.VC.# (0-30)

There are 30 symptoms on excerpt, 1 point for each symptom participant names when asked "What are some of those symptoms?"

<u>Participant Questions:</u> (non-vocabulary questions) **C.PQC** Code any questions the participant asks not addressed in other sections.

Unclear Word or Phrase C.UC

PARTICIPANT EMOTIONAL RESPONSE ER.C

Overall section Impression, Positive Affect

Overall section Impression, Negative Affect

Overall section Impression, Neutral Affect

ER.C.N

ER.C.NT

SECTION D

COMPREHENSION C.MD.# (0,1,2,3)

Main Ideas: Treatment

Main Idea for section is scored 0-3 based on how many of the following participant answers are heard in response to the first question in the interview for Section D, "What is this paragraph telling you?"

Medical workers can give you the antidote (medicine) for VX but you must take it very quickly. Medical workers can also give medical care to treat your symptoms. Treatment depends on how you were exposed to VX (inhaled, swallowed, or touched) as well as how much VX you were exposed to, and how long you were exposed to VX.

(Correct Use, Incorrect Use)

1. Antidote is available	C.MD1
Incorrect	C.MD1.I
2. Must take antidote very quickly	C.MD.2
Incorrect	C.MD2.I

3. Medical treatment variation C.MD.3

(dependent on route of exposure)

Incorrect C.MD3.I

<u>Paraphrase</u> C.PRD.# (0,1,2)

1. Medical treatment is available C.PRD1

Vocabulary: C.VD.# (0,1)

Vocabulary section is scored 0-1 based on participant's answers in regards to specific vocabulary words.

1. Antidote C.VD1.C

C.VD1.I

<u>Participant Questions:</u> (non-vocabulary questions) **C.PQD** Code any questions the participant asks not addressed in other sections.

Unclear Word or Phrase C.UD

PARTICIPANT EMOTIONAL RESPONSE ER.D

Overall section Impression, Positive Affect

Overall section Impression, Negative Affect

Overall section Impression, Neutral Affect

ER.D.N

ER.D.NT

SECTION E

COMPREHENSION C.ME.# (0...12)

Main Ideas: Preventing Transmission

Main Idea for section is scored 0-12 based on how many of the main ideas participant identifies.

Main Ideas E1: Contaminated area

If you are in the area contaminated with VX, leave immediately and dial 911.

1. Leave area/Dial 911 C.ME1
Incorrect C.ME1.I

Main Idea E2: If VX is swallowed

If you have swallowed food or liquid with VX, do not induce vomiting and do not eat or drink anything else. Immediately dial 911.

1. Do not induce vomiting, do not eat/drink **C.ME2**

Incorrect C.ME2.I

Main Idea E3: If VX is inhaled

If you have breathed in (inhaled) VX gas (vapor), immediately dial 911.

1. If VX gas inhaled, dial 911 C.ME3
Incorrect C.ME3.I

Main Idea E4: If VX is on Clothes or Skin

If VX is on your clothes or skin, cut your clothes off if possible. Try to avoid pulling your clothes over your head as this could spread VX across your body. Use the nearest available water source, like a sink, a fountain, a hose, or even bottled water. Immediately wash the exposed areas with lukewarm water (do not use hot water—it can make the VX exposure worse) and soap. If you can, use liquid soap. Wash for at least 10 to 15 minutes. If there is no soap available use plain water. After washing with soap and water dial 911. Do not put your clothing back on. Exposed clothing may give off VX fumes so you must double bag clothing in plastic bags. To do this wear rubber gloves or use sticks or tools to move your clothing into the plastic bag. Put all items that touched the clothing in the bag (any gloves or tools you used). Wash your body again to remove any trace of VX. Emergency personnel will dispose of your contaminated clothing.

1.	Cut clothes off Incorrect	C.ME41 C.ME41.I
2.	Avoid pulling clothes over head/body Incorrect	C.ME42 C.ME42.I
3.	Use nearest water source Incorrect	C.ME43 C.ME43.I
4.	Wash with soap and water or plain water if no soap Incorrect	C.ME44 C.ME44.I
5.	Use lukewarm water/do not use hot water Incorrect	C.ME45 C.ME45.I
6.	Double bagging/exposed clothing has fumes (Incl. wearing gloves/using sticks or tools)	C.ME46
	Incorrect	C.ME46.I
7.	Emergency personnel will dispose of contaminated items	C.ME47
	Incorrect	C.ME48.I

Main Idea E5: VX in eyes

If VX is in you eyes, rinse with water for 10 to 15 minutes. Use the nearest available water source, like a sink, a fountain, a hose, or even bottled water. If you are wearing contact lenses take them out immediately and rinse your eyes with water for 10 to 15 minutes. After rinsing your eyes dial 911.

1. Rinse eyes 10-15 minutes

C.ME51

Incorrect	C.ME51.I
2. If wearing, remove contacts Incorrect	C.ME52 C.ME52.I
<u>Paraphrase</u>	C.PRE.# (0,1,2)
1. Inhaled VX is bad	C.PRE1
2. Get VX off of you ASAP	C.PRE2
3. Get VX out of your eyes	C.PRE3
4. VX (any form) is dangerous	C.PRE4
5. Dial 911 quickly/Get help quickly	C.PRE5
Vocabulary: Vocabulary section is scored 0-2 based on participant's answers in regards to specific vocabulary words.	C.VE.# (0,1,2)
Vocabulary E1: (Correct Use, Incorrect Use) 1. Contaminated Vocabulary E4: (Correct Use, Incorrect Use) 1. Double bag	C.VE11.C C.VE11.I C.VE41.C C.VE41.I
<u>Participant Questions:</u> (non-vocabulary questions) Code any questions the participant asks not addressed in o	C.PQE ther sections.
<u>Unclear Word or Phrase</u>	C.UE
PARTICIPANT EMOTIONAL RESPONSE	ER.E
Overall section Impression, Positive Affect Overall section Impression, Negative Affect Overall section Impression, Neutral Affect	ER.E.P ER.E.N ER.E.NT

Overall Codes for use in all sections

PARENT CODES <u>Credibility</u> :	CR
Child Codes: Source concerns (Concerns about material validity)	CR.S
Message access concerns (Concerns about ability to access the information)	CR.A

REP.R

Recommendations for Improvement

Appendix I. Revised Web Content: VX

Appendix J. Revised Fact Sheets: VX

Appendix K. Revised Radio Content: VX