Deliverable D5.1

Initial Pre-Incident Public Information Materials for CBRNe terrorism

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1: PHE

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Consortium – List of partners

Partner no.	Short name	Name	Country
1	UIC	UNION INTERNATIONALE DES CHEMINS DE FER (COORDINATOR)	France
2	CBRNE	CBRNE LTD	UK
3	PPI	POPULATION PROTECTION INSTITUTE (MINISTRY OF THE INTERIOR OF THE CZECH REPUBLIC)	Czech Republic
4	DB	DEUTSCHE BAHN AG	Germany
6	UMU	UMEA UNIVERSITET	Sweden
7	DHPOL	DEUTSCHE HOCHSCHULE DER POLIZEI	Germany
8	RINISOFT	RINISOFT LTD	Bulgaria
9	WMP	WEST MIDLANDS POLICE AND CRIME COMMISSIONER	UK
10	ETICAS	ETICAS RESEARCH AND CONSULTING SL	Spain
11	SESU	STATE EMERGENCY SERVICE OF UKRAINE	Ukraine
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15	FFI	FORSVARETS FORSKNINGSINSTITUTT	Norway
16	NPH	KOMENDA GŁÓWNA POLICJI	Poland

Executive summary

The following deliverable reports on the initial work undertaken to develop pre-incident public information materials as part of WP5 - Toolkit for civil society organisations.

The aim of this WP is to develop materials that are suitable for use by all members of the civil society. This report, therefore, summarises a series of eight public focus groups and two surveys that were carried out to capture the views of a variety of individuals (36 participants in total), including particular representation from members of vulnerable groups (31 participants were classified as vulnerable), to ensure that the development of the pre-incident public information materials is driven by the needs of end users. The report makes several specific recommendations in terms of future directions for the pre-incident public information materials, including the need to ensure that the language is accessible to all, and a greater use of graphics to increase understanding of the materials. The report also considers the best ways to deliver the materials, with participants generally preferring traditional methods (such as leaflets) over a mobile phone app.

The output of D5.1 will be used to inform the further development of the pre-incident public information materials, which will be further developed, piloted, and evaluated throughout the exercises, and subsequently presented within D5.2 and D5.4.

Acronym Table

Acronym	Definition
CBRNe	Chemical, Biological, Radiological, Nuclear and explosive
D	Deliverable
NHS	National Health Service
WP	Work Package

Table of contents

1. INTRODUCTION

Task 5.1 focuses on the development of pre-incident public information materials, based on gaps, recommendations and insights identified through WP1, with a focus on ensuring these materials are suitable for members of vulnerable groups (e.g., persons with disabilities or chronic medical disorders).

This report, Deliverable 5.1, is the first of two deliverables that document the development of these pre-incident public information materials. Specifically, this report summarises the development of the initial draft pre-incident public information materials from the initial insights and recommendations derived from the review and synthesis work conducted within WP1, and the evaluation of this information using public focus groups and surveys. The aim of this Deliverable was to capture initial perceptions of the content of the pre-incident information, in terms of public understanding of the information presented, public willingness to take the actions recommended, any suggested improvements to the information, and public perceptions about this type of pre-incident information more broadly. Both the composition of the focus groups and the evaluation materials were mindful of the need to ensure that any pre-incident public information materials are suitable for all members of civil society.

The pre-incident information developed within D5.1 will be tested and refined during the exercises planned as part of WP6. This will facilitate the development of optimised pre-incident information that will be presented in D5.2 and D5.4.

2. DEVELOPMENT OF PRE-INCIDENT PUBLIC INFORMATION

Based on the insights derived from WP1 (synthesised within D1.3), discussions with the PSAB (reported in D2.2) and the CSAB (reported in D3.3), and from initial discussions regarding the Rieti exercise (reported in D6.2), preliminary pre-incident communication materials were developed.

Specifically, Table 1 details the relevant recommendations from WP1 D1.3 (which related mainly to communication, education, dissemination and vulnerable populations, and can be found in Table 1 in D1.3; Hall, Weston, Long, O'Sullivan, Amlôt & Carter, 2020) and subsequent workshops that were incorporated into this initial draft of pre-incident communication material.

Table 1: Communication recommendations underlying the development of initial pre-incident communication materials

No	Recommendation
1	Information provided by authorities should be pre-planned, where applicable, to ensure prioritisation and consistency, provide uniformity and advocate cohesion.
2	Communication should aim to reduce anxiety, by providing information to enhance self-efficacy.
3	Multiple platforms should be used to communicate with the public, with consistent information being provided across platforms.
4	Information campaigns and education to build CBRNe public knowledge should be implemented.
5	Information should be available in writing (i.e. print form), where possible, using non-complex language.
6	The public should be educated on how a CBRNe incident may play out, e.g. procedures may be delayed.

7	Risk communication cannot assume a scientifically ignorant public, and institutions should not exaggerate the superiority of their knowledge and judgment.
8	Information should be provided in multiple languages, pictographic form, and sign language.
9	The public should be educated on who to turn to for support and further information in the event of an incident.
10	Messages should be pitched at an appropriate level (in terms of language and complexity).
11	Where there is increased risk (e.g. where a town or city is located where there is a chemical facility or nuclear reactor), people should receive in advance what to do in the case of a CBRNe incident, which will reduce anxiety and worry.
12	Information should be available on how to distinguish fake news, i.e. which sources are correct, and which are not.
13	It would be beneficial to prepare pro-active social media campaigns and get people to know where to go for good information during events.

These recommendations, along with the full evidence synthesised throughout WP1 and discussed with stakeholders within WP2 and WP3, was used to design the initial draft pre-incident information. As shown above, a wide range of recommendations were developed within D1.3 and refined within D2.2 and D3.3, some of which related to specific content of the pre-incident information (1, 2, 4, 5, 6, 9, 10), some of which related to formatting and dissemination of the pre-incident information (3, 8, 13), and some of which related to information for specific target populations or within specific contexts (7, 11, 12). Given the wide range of recommendations, it was decided that it would be important to start by developing and evaluating the content of the information, before refining this in terms of format, dissemination strategy, target population and context. Furthermore, these individual recommendations will be revised and specifically tailored for each individual exercise (in order to incorporate key elements relating to individual exercise scenarios), and further improvements to visual presentation and accessibility will be made, incorporated, and revised as part of the exercise process. The pre-incident information presented in this deliverable was therefore developed based on the content specific recommendations. The bullet points below provide examples of how each of

the content specific recommendations was used to develop the pre-incident information (though these are just examples, and are not exhaustive):

- Recommendation 1 (Information provided by authorities should be pre-planned, where applicable, to ensure prioritisation and consistency, provide uniformity and advocate cohesion): the provision and development of these information materials is in-line with this recommendation.

- Recommendation 2 (Communication should aim to reduce anxiety, by providing information to enhance self-efficacy): several statements were included within the pre-incident information to explain to people what action they need to take and why, thereby enhancing self-efficacy, e.g. "Remove your outer clothing. Your outer clothing may have some of the harmful substance on it, and so removing this will help to reduce your exposure to the harmful substance".

- Recommendation 4 (Information campaigns and education to build CBRNe public knowledge should be implemented): the pre-incident information is designed to build public knowledge about CBRNe incidents, and therefore includes information about what these types of incidents might involve (in terms of emergency response), what actions people should take, and how taking certain actions will protect themselves and others.

- Recommendation 5 (Information should be available in writing (i.e. print form), where possible, using non-complex language): information was provided to participants in written form, and language was kept as simple as possible, e.g. "Do not eat, drink, smoke or touch your face".

- Recommendation 6 (The public should be educated on how a CBRNe incident may play out, e.g. procedures may be delayed): information was included on what actions emergency responders might take when they arrive at the scene, e.g. "When emergency responders arrive, they may ask you to remove your clothing to your underwear and then wash yourself all over in a shower system that they will set up at the scene".

- Recommendation 9 (The public should be educated on who to turn to for support and further information in the event of an incident): information was included on what support would likely be provided to those involved in an incident, e.g. "You should remain at the scene as emergency responders will soon arrive to help you".

- Recommendation 10 (Messages should be pitched at an appropriate level (in terms of language and complexity)): instructions were kept as simple as possible, including step by step instructions of actions that people should take, and a brief explanation about why, e.g. "Get fresh air if possible – this can help with any symptoms you may be experiencing".

The full draft information is presented in Appendix 1. The above shows how specific recommendations were used to develop this initial draft of pre-incident information. This pre-incident information will be further refined to incorporate the outstanding recommendations from WP1, any feedback collected from focus group participants, findings from the longitudinal survey (to be

presented in D5.2), and feedback from exercises (WP6). In this way, we will extend these initial baseline messages over the remaining course of the PROACTIVE project, in order to develop a range of public information material, optimised to maximise accessibility. The final versions of the pre-incident information, refined and optimised based on this further evaluation, will be presented in D5.2.

3. METHOD

The study was approved by the Public Health England Research Ethics and Governance Group (R&D 425) and the PROACTIVE Project Ethics Officer (PROACTIVE/6/26.11.2020).

3.1. Design

The study used a mixed-method design to undertake public consultation of the initial pre-incident public information materials. The study is broken into three stages (two of which are presented in this deliverable, and the third of which will be incorporated into D5.2):

- Stage 1: gaining participants initial perceptions of the communication materials using qualitative methods.

- Stage 2: quantitatively assessing the impact of the communication materials on public perceptions regarding their preparedness to deal with CBRNe terrorism immediately after taking part in a focus group.

- Stage 3 (to be presented in D5.2): using a longitudinal survey with two additional time points (3 months and 6 months post-focus group). This will be used to inform the development of the pre-incident information materials, alongside feedback collected from the three exercises (as part of Work Package 6) and will be incorporated in Deliverable 5.2.

A mixed-methods design was used in order to capture both rich and detailed information about participants perceptions of the information (Stage 1), and a quantitative measure of the impact of information materials on participants' knowledge and expected behaviour during a CBRNe incident (Stage 2). For the qualitative data, focus groups were used rather than 1:1 interviews, in order to allow for the expression of social context (Ritchie, 2006). As Carter, Symons, and Amlôt (2019) note, this facet of focus groups is particularly important when researching topics where social context is likely to shape individuals' perceptions and responses, as is likely to be the case in a mass emergency situation. Although not reported within this Deliverable, Stage 3 will involve evaluation of the public information through the longitudinal survey, following up focus group participants 3 months and 6 months post-focus group. The revised materials will then be further evaluated and refined through use and/or discussion as part of the exercises and subsequent exercise evaluation (as detailed within WP6). In this way, Task 5.1 will ensure that the public information material is regularly tested, developed, and refined throughout the remainder of the PROACTIVE project, culminating in resources available to support pre-CBRNe incident education campaigns (to be presented within D5.2).

3.1.1. Participants

Eight focus groups were conducted, with between two and six participants in each group (36 participants in total). Four additional participants signed up to take part in the study, but were unable to join the focus group due to technical issues. Participants were allocated to a focus group based on their availability. Participants were members of the public, recruited via the PHE People Panel and opportunistic recruitment. Study adverts were live for approximately one week, and were sent out via email from a representative of the PHE People's Panel and a member of the PHE disability network. To be eligible for the study, participants had to be aged over 18 years old, be fluent in English and have no prior knowledge of CBRNe response. Just over half (52.78%) of participants were female, mean age was 57 years old (ranging from 28 – 76 years), and the majority of participants (n = 31, 86%) indicated they had a vulnerability (Elderly, n = 18; Chronic health condition, n = 11; Physical impairment, n = 4; Hearing impairment, n = 3; Visual impairment, n = 2; Carer, n = 1; Autism, n = 1).

3.2. Materials

3.2.1. Scenario

Participants were asked to read the public-facing scenario designed in D6.2, the facilitator was also tasked with reading the scenario aloud to ensure those with visual impairment were able to engage with the material. This scenario (see Appendix 2) describes a hypothetical incident involving the release of a non-caustic, liquid chemical contaminant on a train platform. As detailed in D6.2, this scenario was developed on the basis of initial discussions concerning the Rieti exercise and reflects key elements from: a) our identified worst-case scenario, and; b) the outcomes of WP1. Providing participants with this scenario enabled them to imagine a novel incident context in which having read the pre-incident information may potentially have consequences for knowledge and action.

3.2.2. Pre-incident information

Participants were also provided with the pre-incident information, the development of which is described above and presented in Appendix 1, and were asked to read through this information as part of the session.

3.2.3. Self-report questionnaires

There were three questionnaires (see Appendix 3 – 5) for participants to complete: before joining the focus group (demographic survey), at the very start of the focus group (pre-focus group questionnaire) and at the very end of the focus group (post-focus group questionnaire). The questionnaires were derived from questionnaires used within a previous study conducted by PHE (Carter, Weston, Symons, & Amlôt, 2019).

The demographic survey captured some basic information about the participant, namely their gender, age, and any relevant needs that might make them more vulnerable during a CBRNe incident.

The pre-focus group questionnaire had four sections. The first section explored participants' knowledge and confidence of actions to take during a chemical incident and contained four closed

questions (e.g. "If a real incident of this type were to occur, I would know what actions to take to protect my loved ones.") (α = 0.96), and one open text response question (e.g. "Please describe any actions which you would take if an incident of this type were to occur"). The second section asked two questions on participants expectations of the response from the emergency services (e.g. "I think that the emergency services would behave in a respectful way when managing this type of incident.") (α = 0.83). The third section asked two questions on participants expectations about receiving help and support from other members of the public during such an incident (e.g. "If this was a real incident, I would expect to receive help from other members of the public who were involved") (α = 0.91). The fourth section asked one question on whether participants would help others during an incident. Questions were scored on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree).

The post-focus group questionnaire contained the same items described above, with questions scored on a seven-point Likert scale, ranging from 1 (strongly disagree) to 7 (strongly agree). As with the pre-focus group measures, these scales all had good reliability (knowledge and confidence, α = 0.94; expectations of emergency services response, α = 0.92; expectations about help and support, α = 0.93). The replication of the scales allowed for change in participants understanding following the focus group to be captured. Additionally, the post-focus group questionnaire contained four new sections. The first of these had one question exploring participants' perceived efficacy of actions in the pre-incident information (e.g. "If this were a real incident, I think that taking the actions recommended in the pre-incident communication information sheet would be an effective way to remove a contaminant from my skin"). The second had one question exploring whether participants would feel comfortable taking the recommended actions (e.g. "If this were a real incident, I would feel comfortable taking the actions recommended in the pre-incident communication information sheet"). The third had one question that explored whether participants would feel embarrassed taking the recommended actions (e.g. "If this were a real incident, I would feel embarrassed taking the actions recommended in the pre-incident communication information sheet"). The fourth had one question relating to how easy participants would find it to take the recommended actions (e.g. "If this were a real incident, I think I would find it easy to take the actions recommended in the pre-incident information sheet"). The fifth section had one question exploring participants' willingness to take actions recommended in the pre-incident information sheet (e.g. "I would be willing to take the action recommended in the pre-incident communication information sheet during a real-life incident of this kind"). The sixth section had one question exploring how anxious participants thought they would feel during this type of incident (e.g. "If a real incident of this kind occurred, I would feel anxious"). The seventh section had one question exploring whether participants would want to seek further treatment after taking the action recommended in the pre-incident information sheet (e.g. "If this were a real incident, I would feel the need to seek further treatment after taking the actions recommended in the pre-incident communication information sheet").

3.2.4. Discussion guide

The discussion guide (see Appendix 6) focused on similar themes as the two focus group questionnaires but was designed to facilitate more in-depth discussions between participants.

3.3. Procedure

Prior to joining a focus group, participants were provided with an information sheet, a consent form to sign, and a demographics survey to complete. Participants then attended one of the focus groups

which, due to the COVID-19 pandemic, was conducted via Microsoft Teams. At the start of the focus group participants were asked to read or listen to the scenario before completing the pre-focus group survey (either via an online platform or via a word document). The scenario was read aloud for those with visual impairment, and was also presented on screen, for those with a hearing impairment. Participants then took part in a recorded discussion on the scenario. Participants were able to contribute either verbally or via the written chat function in Microsoft Teams. In this way, all participants were able to take part in the discussion. Following this discussion, participants read the pre-incident communication information sheet (Appendix 1) and took part in another recorded discussion on the communication materials. Participants then completed the post-focus group survey. This procedure was based on a methodology successfully used in previously published work (e.g., Carter et al., 2019). Following the focus group, participants were sent a debrief statement and information on how to receive their incentive of £50.

4. RESULTS

4.1. Analysis plan

The questionnaire data was analysed using R version 4.0.2. T-tests[1] were used to compare changes in responses between Time 1 and Time 2. The four measurements were: participants': knowledge of CBRNe incidents; expectations of the response; expectations of receiving help from other members of the public; and willingness to help others during an incident.

The recordings from the focus groups were transcribed and analysed using the framework approach. This method is frequently used in research that has implications for policy (Pope, Ziebland & Mays, 2000), and has been successfully used in work previously published by members of the research team (e.g., Carter et al., 2019). A framework was developed based on the aims of this deliverable (see Table 2). Overall, in line with the task objectives, seven main themes of interest were identified. In addition, the first theme was divided into further sub-themes.

Table 2: Identified themes and sub-themes (based on the aims of D5.1)

Theme	Sub-theme
Initial response to scenario	Expected feeling

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[1] A paired t-test is used to compare two population means where there are two samples in which observations in one sample can be paired with observations in the other sample; in this case, participants' scores pre-focus group can be paired with their scores post-focus group.

	Expected actions
Perceptions of pre-incident communication	
Perceptions about which organisations should provide this information	
Perceptions about how to receive the information	
Perceptions regarding recommended actions	
Perceptions regarding ability to take recommended actions	
General perceptions about pre-incident communication campaigns	

4.1.1. Quantitative analysis

To understand the change in participants response on the four measurements mean difference scores were calculated. These were calculated by subtracting pre-focus group scores from post-focus group scores for each participant and then creating a mean of the difference for the whole sample. These mean differences can be seen in Figure 1, with positive numbers indicating an increase in scores from pre to post, and negative scores indicating a decrease in scores between the two surveys. As can be seen in Figure 1, there was a small increase from pre to post for all four measurements, with the Knowledge measure showing a large increase (mean scores increased by 7.75) from pre to post (i.e. a participant recorded an increase in their knowledge and confidence of CBRNe incidents), whereas the three other measures showed smaller increases.

Paired t-tests were conducted to compare participant's response at Time 1 (pre-focus group survey) to their response at Time 2 (post-focus group survey), with only the knowledge and confidence measure showing a significant increase in scores (corrected for multiple comparisons), $t(35) = 7.51$, $p = < .001$, $d = 1.25$. This suggests that participants had increased their knowledge of, and confidence in, taking actions to protect themselves and others during a CBRNe incident. Further quantitative analysis based on follow up data (3- and 6-months post focus group) will be conducted to examine whether these differences persist over time. This analysis will be presented in D5.2.

For those variables that were only measured at Time 2 (post-focus group), mean scores (max 7) and standard deviations were calculated. Findings showed that participants thought that the actions in

the pre-incident information would be effective (M = 5.31), they would feel comfortable taking the recommended actions (M = 5.64), they would not be embarrassed to take the recommended actions (M = 3.08), and they would find it easy to take the recommended actions (M = 5.19). Participants also felt they would be willing to take the recommended actions (M = 5.78). However, participants reported that they would feel anxious during this type of incident (M = 6.08) and would want to seek further treatment after taking the recommended actions (M = 6.26).

The means and standard deviations for participant scores by each question pre- and post-focus group can be found in Appendix 7 and 8.

Figure 1: Mean difference scores between pre- and post-focus group surveys.
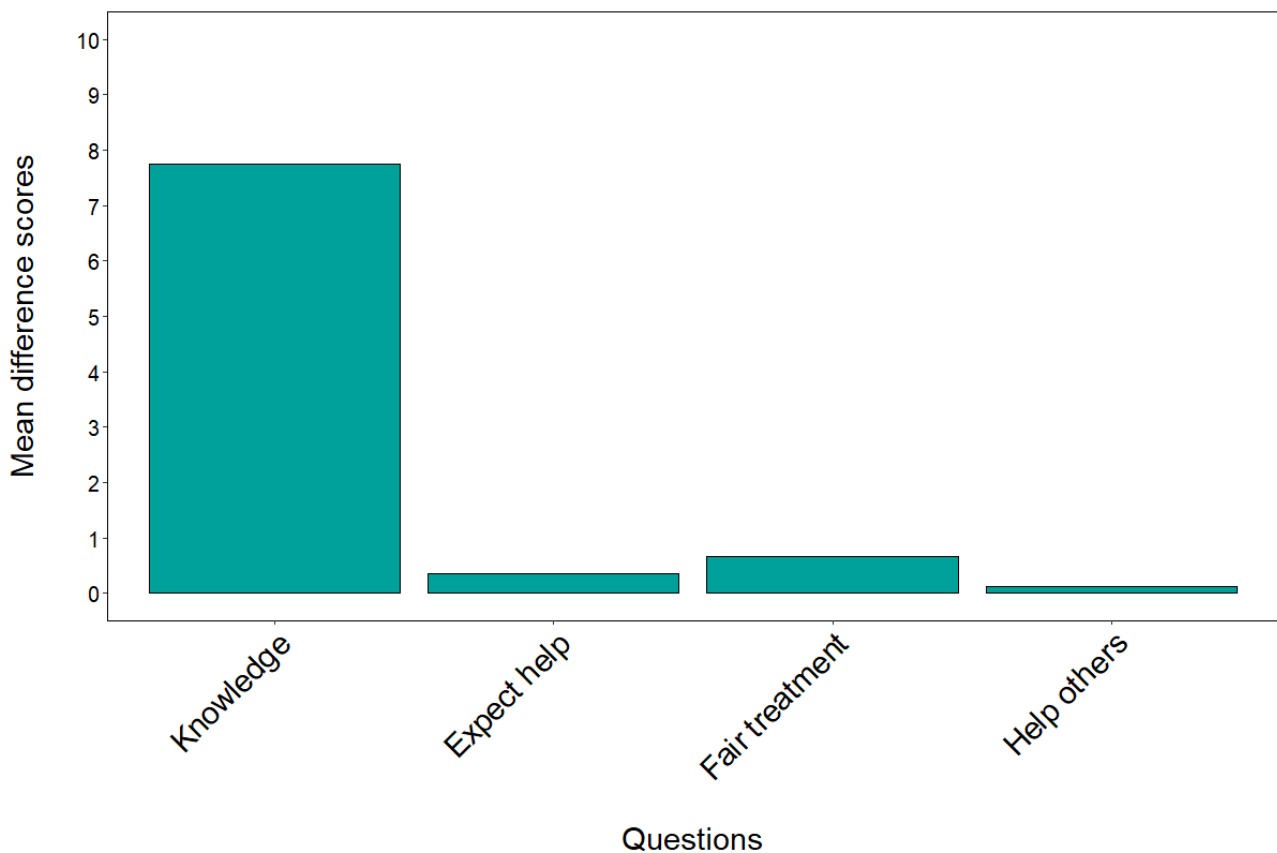
4.1.2. Qualitative analysis

The results are presented by theme. As noted above, these themes were based on the requirements for D5.1. The number proceeding each quote in parenthesis indicates the focus group number the participant was in.

4.1.2.1 Initial response to scenario – expected feelings

When asked "how do you think you would feel if an incident of this type were to occur?" many participants answered that they would be afraid, e.g. "I would feel really scared. Um, yeah, I'd feel really scared and out of my depth, and probably … very, very unsure what to do ... I think I'd maybe quite likely to just want to run" (6), "I would be scared and worried and concerned" (3). Participants also reported the wish to help other people, e.g. "I know that my general gut feeling of the situation is to want to help people" (8). Indeed, despite the prevailing fear and concern reported, many participants responded with actions they would take to help themselves or others, e.g. "And then look out for anyone else that's in trouble or distress … try and be as calm as possible" (6).

4.1.2.2 Initial response to scenario – expected actions

In response to the question "What would you do if you found yourself in this scenario?", some participants reported that they were not sure and that it would depend on the situation , e.g. "basically I don't think we know what we'd do, until we're actually in the situation and we do our best judgement on what to do at the time" (2). However, many participants reported specific actions they would take. A common action was to try and find water and then clean their clothes and/ or skin, e.g. "Try and get some fresh water or any sort of liquid to try and wash off, and then try and help others, um, around you if you can" (4) and "find water. I think I'd be reluctant to take any clothes off before I put water on it in case it ripped your skin or something, like with a burn" (7). Another common action was to seek help, either through the emergency services or by calling station personnel, e.g. "contact emergency services or the police or whatever" (7), "I'd try and raise the alarm, would be my next step" (5). Some participants reported that they would leave the area, e.g. "I think that the first response would be to, to leave the station, would be to leave the environment ... I think the initial reaction of people would be to get off the platform" (2).

Participants were mixed as to whether or not they would help others. Some reported that they would focus on themselves, e.g. "although I'm naturally a gregarious supportive person, I think I'd actually become quite selfish in these circumstances in terms of my own personal welfare, wellbeing, life" (1) and "I think it's a bit of the being on a plane, and the, um, the oxygen drops down. They always say, make sure you're in a position to help, once you've got yourself ready" (4). However, some participants said they would expect to help others, e.g. "Obviously, making sure anyone particularly… You know, if anyone needed help, needed assistance, get them people to a place of safety, that kind of thing" (7) and "the first thing I think I'd have to do is to assess how capable I was of carrying out any further actions. Was I debilitated, or was I still functional? If I was functional, then, you know, check around to see if anybody around you needs immediate assistance" (4).

4.1.2.3 Perceptions of pre-incident communications

Overall, groups were positive about the pre-incident communications materials, e.g. "I think I'd remember that. It's very succinct and to the point. Um, it was uh, it made sense, it was all logical" (2). However, there was consensus that the materials are too long, e.g. "I think it contains a lot of things that make a lot of sense. However, when you get a communication like that, I feel that it's very long and that people would lose interest" (1).

Several participants reported confusion on the instructions within the communications materials, particularly regarding the instructions to leave the area, e.g. "I did get a bit confused about some of

it, because in the initial bit it said, um, stay at the scene, and then it said if you can rinse, go and rinse … something. And I'm thinking, if I'm staying at the scene and not moving, but I have, but I have to go and rinse something, I want to move away from the scene. Um, so I think that became a bit confusing" (7). Participants also reported some confusion on the instructions to blot clothing with tissues, e.g. "the only word I found a bit of difficulty in that description was one where it talked about brushing the affected area" (2) and "I was a little bit lost on the dry tissue bit because, um, I mean, I understand what is meant to happen, but I think in principle looking for a tissue and stuff is not going to happen, whereas if you had a dry piece of other clothing, maybe that might be easier" (1).

Some participants also raised issues of whether the information is appropriate for all, e.g. "And know that reading age in the UK is quite low. And knowing that, I think that that would be quite dense text for someone with a… Well, just the average person in the population, let alone somebody with a learning difficulty or, or similar. And there's not enough visual prompts" (8). Indeed, this recommendation to visually represent the information was supported by others. For example, one suggestion to improve the materials was to include pictures with the text, e.g. "lot of information which could be very nicely backed up some little cartoon characters, because that will always reinforce information in people's minds" (7) and "Yeah, I'd like to see graphics on it so that you've got some picture to relate to. I think some people take words in better, and some people take pictures in better. So, you know, I'd like to see graphics associated with it. I'm not sure I'm going to remember all of that tomorrow" (6). Important, one participant commented that pictures could also help with the accessibility of the materials, "Because, obviously, not everybody can read and not everybody's first language is English, so, um, I, I think, cause I don't think anyone, or many people, will pick up a document and read it" (3).

As well as pictures, respondents also suggested formatting the text to make it stand out and clearer to read, e.g. "Capital letters, sort of emphasise certain bits of text and things. So, a bit more emphasis, so it's a bit more immediate and quick to sort of take on board for someone" (5), "I would rather see something that was summarised almost in the three or four bullet points" (1).

Altogether, the comments and recommendations regarding visualisation and formatting are well summarised by the following quote: "I think diagrams can also be quite helpful and … you also need to deal with the issue about someone … who may not be able to remove their clothing and may need help removing their clothing. Issues like that might occur. So diagrams and, and bullet points and other advice if you're, if you have to help people remove their clothing" (3).

4.1.2.4 Perceptions about which organisations should provide this information

In response to the question "Which organisation would you want to provide this information?" participants' broad answers focused on the need to have information provided by organisations that people trust, e.g. "I think it's someone like, someone, … organisation we trust" (1), or "know that having the NHS logo on things is, is the brand that people trust…" (8). Participants also reflected on the need for the information to come for a variety of sources, e.g. "I guess I would expect it to be, sort of, a joint thing, so, kind of, like, joint I guess with PHE, with NHS, … the emergency services and police, so I guess, … a joint messaging" (8) and "Yeah, multi-agency approach. So, so that everyone's involved and everyone's thinking and everyone's looking out, hopefully, for the populace" (5). This approach was seen to lead to greater trustworthiness, e.g. "if you had a multiagency

approach, it would hopefully be more likely to be believed than having one agency alone stand alone and be poopooed by conspiracy theories" (3).

Focusing on the specific organisations people wanted to receive the information from, participants frequently suggested the police, e.g. "I think it's, it's probably the police" (1) as this source was seen to provide gravitas to the information, e.g. "if it's got the police … people pay attention" (5). Other suggested sources were local councils, e.g. "I've been getting steady information from my council … which I have found trustworthy, accurate, and I would be… quite happy with my council" (1) and "So, our local council, which sends out a weekly email … telling us the things that they think we might need to know" (6). However, some participants suggested the councils would lack the gravitas needed for the information, e.g. " But I think for the general populace, it probably matters if it comes as a leaflet from the council … leaflet from the government, it probably does make a difference" (5) and "it needs a national organisation in my opinion" (1).

4.1.2.5 Perceptions about how to receive the information

The discussions in this section focused on how best to receive the pre-incident communications materials and noting the wider purpose of WP5 to design an app for PROACTIVE, whether an app would be supported.

Overall, participants were not supportive of an app, e.g. "An app, no I don't think so" (6). One reason for not supporting an app was around technological issues, such as memory space on phones, e.g. "Especially with having an issue with memory and space on my phone, I have to delete so many at the moment" (7) and "I have a smartphone … and it hasn't got any room for anymore apps" (2). Related to this, some participants did not use apps, or smartphones, and so felt that an app might exclude them, e.g. "As a bit of a dinosaur, where I don't actually have a phone with apps, um, I'd miss it all" (4) and "I always automatically think about my mum, and she's elderly, and anything that's purely technology-based just eliminates her completely" (7). Another reason was that participants did not feel an app was appropriate for this type of information, e.g., "And if it was left to an app, I think you might find a lot of people choosing not to have it on their phone, unless it was a mandatory thing … difficult … because I think a lot of people would choose, well, why do I want that when I can have, I don't know, Topshop or whatever on my phone" (1) and "if you put it on an app, then you're dependent on people bothering to go and find that app and then bothering to download it, and then bothering to go into it on a regular basis" (7) and "I agree with what's been said about apps and it's, it's, it's great for the Fitbits, you know, because you use it all the time, or some of us do to make what's our resting heart rate, whatever. It's a constant thing" (1) and "So it's really weird because I love apps in general. I use it for the shopping and all sorts, but not for this. Not for this particular one" (1).

In terms of other approaches to communication participants mentioned the need for a multimedia approach to capture all parts of society, e.g. "we're having to cater for quite a significant, you know, a, a diverse population when it comes to how we interact with, with media" (3) and "it's going to be, need to be a mixture across all media to reach all, all ages" (1). There was a particular concern that any communication methods are appropriate for the target age, e.g. "obviously need to appeal to the widest amount of people. I think older people are … drawn by leaflets and this information. And younger people are just not necessarily going to connect to that … in the same way" (6), and "advertise on YouTube, doing clips of things on video … target younger people. Older people seem to be a bit more receptive to getting stuff on paper" (5). Participants also mentioned that any

communication would need to be accessible to all, e.g., "I would I be concerned about is … how the leaflet gets out to, you know, people with visual impairment … I'm not sure how, quite how people with visual impairments would be able to access this information" (6) and "the only public transport service that provides any information in my language is the West Yorkshire Bus Company" (2).

When asked to suggest how they would like to receive the information many participants suggested traditional methods such as poster or billboards, especially in public places, e.g. "I like the idea of having this, you know, traditional advertisement on the bus stop or on the train" (1) or "Maybe there is a way to put this … up on the video screens in Tube stations on the video sort of advertising that you get on the escalators, on the time, on the sort of train arrival boards, that sort of thing" (5). Other participants suggested posters in workplaces, "Maybe every organisation should have a mandatory panel, that it's like a, you know, like you have at workplace, have a workplace, um, noticeboard or something like that for these types of public communications" (1). It was also suggested that posters could have QR codes on them to allow people to access further information, "I guess I had had a thought that you could have a poster that's very high level that had a QR code on it" (8). Participants also mentioned the possibility of teaching the information to school children, e.g. "it might even be taught for the children to know what to do in school" (5) and "You know, a six-year-old tells their grandparents, you shouldn't be eating that … it's because they've been told. And, and I think things like that education is a very slow process for a good end result (6).

Participants were also concerned about information overload, e.g. "I think … these days, you know, where you've got an information overload" (3), with one participant suggesting text messages to receive the information as they receive few text messages and so the information would be salient: "I think text messages or something like that, that's quick to read. I don't get that many text messages nowadays, as opposed to lots of things via social media … because I don't get that many text messages, those are the things that I actually read more than I do any other things" (7).

4.1.2.6   Perceptions regarding recommended actions

In general, participants were confident and willing to undertake the actions recommended in the pre-incident communication materials, e.g. "I'd feel confident in taking the actions" (2), "I wouldn't be abashed about stripping down to my pants in front of people if it meant that I would stay safe afterwards" (8), and "I think I would sort of try to, try to follow the actions as much as I could" (5).

However, some participants were less confident and suggested that they would wait for other people to act, e.g. "I think would be reluctant to remove her clothing in … whatever was happening … unless the crowd was doing the same thing" (2), or wait for direction from the emergency responders, e.g. "I would be inclined, particularly with chemicals, when you don't know what they are, then I would be inclined to wait and then support them in whatever way that they wanted me to do" (3). One participant noted that their actions would be based on who was around, "maybe needs something in the leaflet to say, you know, these are the things you should do if there isn't anybody in authority telling you to do something completely different" (7).

Additionally, participants commented that willingness and confidence might change depending on people's circumstances such as their gender, e.g. "And I suspect she's probably the same as many, very many ladies with similar misgivings. Um, but rugby players, the ugly and hairy, um, they probably don't care too much" (2), body confidence, "I imagine there's gonna be an element of that being a difficult message to sell for people who perhaps don't have… Maybe have a less confidence

in their own body image" (8), and past experiences, e.g. "being a disabled person, having had lots of experience of having to disrobed my underwear for the medical profession on and off throughout my life has made me a little bit more robust about it than perhaps other people would be" (8).

Participants also commented that, though they would be willing to undertake the recommended actions, they might not remember them, with revised materials helping recall. For example, "I think I would remember it if it was in short bullet points … and then if the incident occurs, I probably would remember some of it, not all of it. but I need the bullet points to remember what to do" (1) and "I would, if I could remember them, but I've forgotten them already. So that's why I'd need, I'd need to be bombarded repeatedly with the information" (3). Lastly, some participants questioned if they would take the recommended actions in the particular scenario, e.g. "I don't know whether people would take all the actions on a cold winter's night on a railway station. Um, you know, you put it to would people actually tear their clothes off? It's bitterly cold and it's dark. Maybe they won't" (2).

4.1.2.7 Perceptions regarding ability to take recommended actions

When asked specifically about any characteristics that might make it difficult to complete the recommended actions participants commented that removing clothing might be unpleasant for some people, and might put them off undertaking this step, e.g. "Just on the removal of clothing bit, because it's, it's sort of so explicit about getting down into the underwear there, I think, you know, a lot of people, that could actually scare people really, more likely to run away from the scene" (1) and "there is plenty of people that would have reasons to not be able to, because of stigma, because of self-consciousness, because of not understanding, because they've learnt different things in different places" (5). One participant commented that those with medical devices, such as colostomy bags, might be unwilling to take off their clothing, "I wonder whether that would make people nervous to do it because they have something that maybe their friends or family weren't aware that they were dealing with" (8). While another participant commented that their child might be unwilling to take the actions, "I have a child that would probably put up a bit of a fight to strip him off but he would do it" (5). One participant commented that those with a disability might be scared, "My first thing that I noted down was, is this issue about disabilities or different abilities, of people. Having had a hip operation last year … if I was in that situation … so I know what somebody who might have a more permanent disability might have to go through, etc, and the difficulties and the scare" (1).

Participants suggested that some of these concerns could be overcome with clear communication, e.g. "I think that, that kind of communication could be really… Could do with being really clear because, again, you know, people are quite happy to get into their swimming costumes to go swimming quickly. But they wouldn't walk down the High Street in it, sort of thing. And it's about putting it in a bit of a context on a bit, sort of, that kind of process, and that the only people who will see them properly will be the people involved in the incident, not… You know, they're not gonna just be suddenly pushed out into the High Street in their pants (8).

One participant noted that they would like to help others who need assistance but would struggle to know how, "speaking as an abled-bodied person, if there was an emergency and there were people in a wheelchair … I wouldn't know how to … help those people. So I think that needs to be more clearly signposted or, or explained" (3).

4.1.2.8 General perceptions about pre-incident communication campaigns

Participants were generally in favour of pre-incident communications, e.g. "I think it's a great idea" (2) and "I think it's good to have the information … it's important to have the information so we can just be prepared should it ever pass" (1).

In terms of how people would feel if they receive pre-incident communications responses were mixed. Some participants stated that they would feel reassured, e.g. "I think it would make me feel quite reassured that people were, sort of, taking this form of attack more seriously" (3) and "I don't know what else to add … sort of just, just having that reassurance I think" (1). However, some participants commented that receiving such information might make them feel scared, e.g. "It's dangerous scaring people too much, I don't know" (2) or nervous, e.g. "Well, I would agree that… the lady who said, um, it might be a little bit unnerving" (7) and "I think it might unnerve me a little bit, if I've got something like that through the post, because I think it is natural to feel concerned that maybe something's brewing, something's imminent" (7). Other participants noted that they might be suspicious if they received the information without any context, e.g. "I might feel slightly suspicious if all of a sudden all of this information was everywhere. Like, cause if the, the government had something they wanted to tell us that they weren't" (3) and "If this information suddenly came out, the… Would the cynics start thinking we're about, imminently about to have an attack?" (4).

To improve the reception of the pre-incident communications materials, participants suggested that the materials include more contextual and background information, e.g. "I think that perhaps in the context of where there are countries … on alert within, for security, um, if there's been anything that makes us think that this might happen in the local area" (5) and "just to sort of clarify what the government or what the security authorities are expecting or anticipating to occur, really" (5). It was also suggested that the materials could be emphasised that they are just for information, "if you qualify this, you know, if you give the information that this is just information in case, you know, I don't know how you'd phrase it or whatever, then I think that would reassure people" (7) or that they could be included with a pack of information, "I think if it came out as an individual document just with that as a subject, people might get suspicious. I think if it was as part of an emergency planning leaflet included it, then it would be better that way" (6).

5 CONCLUSIONS AND NEXT STEPS

The purpose of D5.1 was to develop draft pre-incident public information materials and gather the perceptions of members of the public on them, with a specific focus on the needs of members of vulnerable groups. The pre-incident information was developed with a focus on getting the content of the messaging right (based on relevant recommendations from D1.3), to enable ongoing evaluation (D5.2) and feedback from exercises (WP6) to further inform content, format, and dissemination of the pre-incident information materials. Indeed, the materials presented in this deliverable represents the first, initial draft of material that will be extended, tailored, and optimised for accessibility (including the use of multimedia methods) throughout the rest of the project, for ultimate presentation within D5.2. From the qualitative analysis presented above, several key points can be drawn out to inform the further development of these materials.

Firstly, the content of the instructions themselves could be improved. Participants reported uncertainty around some of the actions, specifically for leaving the scene and using tissue to blot their clothes. Additionally, participants reported that the instructions were too long. It was suggested that the use of colour and graphics might help to reduce information overload and increase engagement with the materials. This is in line with recommendations about format of pre-incident information derived from D1.3 and will be incorporated into the next iteration of the materials.

In terms of how to communicate the materials, participants were generally keen that the materials should be endorsed by a variety of organisations, and that this would increase the trust in the instructions. Participants were generally negative about the use of an app, with issues of phone memory space being frequently mentioned. However, it should be noted that the average age of participants in this sample (57 years) was older than the average for the UK (40 years). It is possible that a younger sample of participants may be more likely to favour an app. Planned work to assess public perceptions of pre-incident information provided via an app (as part of exercises carried out within WP6) will include younger participants (under 18) and will provide further insight into younger people's perceptions of using an app to provide this type of pre-incident information. A multipronged approach was suggested for communication and dissemination of the materials, with traditional forms (e.g. leaflets, or billboards in public spaces) being widely supported, especially in public places. Given this, it will be important to use alternative methods of disseminating and communicating the material alongside the PROACTIVE app. Based on the discussions reported herein, it is recommended that: a) adverts for the PROACTIVE app are clear on the amount of memory that the app will require, and; b) the PROACTIVE app include downloadable PDF versions of the pre-incident information that could be downloaded and disseminated using more traditional methods by relevant groups (e.g., community groups, responders, etc). Materials will be reviewed by members of the PSAB prior to finalisation, to ensure that methods of information dissemination and distribution are feasible and appropriate.

Participants were mostly confident and willing to take the actions in the materials. However, some participants suggested that they might wait for others to take the actions or wait for the emergency services. It is suggested that including phrasing in the materials which suggests others will also be taking the actions may aid in increasing compliance.

Finally, many participants reported being reassured to receive pre-incident public information materials, yet some participants commented that without any context the information may scare them. A brief introduction to the materials on why they are important might help people contextualise the information and reduce anxiety.

Throughout the discussions, several important points were raised regarding the importance of ensuring any materials are accessible by, and relevant for, all members of society, including members of the vulnerable civil society. The following recommendations are proposed to address these points and ensure that pre-incident information materials are appropriate for vulnerable groups: Firstly, the instructions need to be of a reading age which is appropriate for wider society. There may be scope to send the final materials to an expert in this field to check the reading age. Secondly, concern around how vulnerable groups (e.g., individuals with visual impairments) would access these materials could be countered by ensuring that the PROACTIVE app has the ability to read aloud any instructions or text displayed on the screen. In terms of undertaking the recommended actions, participants suggested that the materials also provide advice on how to help people with additional needs and vulnerabilities; such modifications could be developed in conjunction with representatives from the CSAB.

Overall, this Deliverable has produced several recommendations which will be incorporated into the PROACTIVE pre-incident public information materials. The information materials will be further developed and refined based on the outcomes presented here, before being tested during the exercises carried out within WP6. Based on the outcomes presented here, the outcomes from the longitudinal survey, and feedback from the three exercises, an optimised version of the pre-incident information will be developed and reported in D5.2.

6 REFERENCES

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7 APPENDICIES

7.1 Appendix 1: Public pre-incident communication information sheet

- If you think you have been exposed to a harmful substance, you should move away from the hazard as soon as possible to prevent further exposure. You should remain at the scene as emergency responders will soon arrive to help you.

- Get fresh air if possible – this can help with any symptoms you may be experiencing. Do not eat, drink, smoke or touch your face to avoid swallowing any of the harmful substance.

- Remove your outer clothing. Your outer clothing may have some of the harmful substance on it, and so removing this will help to reduce your exposure to the harmful substance. Try to remove clothing without pulling any clothes over your head, if possible. If this is not possible, try to avoid clothing coming into contact with your face whilst removing over your head.

- If any of your skin has the harmful substance on it, use a dry tissue or similar absorbent materials to either soak it up or brush it off. This will help to remove the substance from your skin. If your skin is itchy or burning, then rinse the affected area continually with as much water as possible.

- When emergency responders arrive, they may ask you to remove your clothing to your underwear and then wash yourself all over in a shower system that they will set up at the scene.

- You should not put your old clothes back on after removing the substance from yourself. Emergency responders will help to provide you with clean, uncontaminated clothing.

7.2   Appendix 2: Public facing scenario

On a cold, wet late evening, you are travelling alone to meet a family member. As you are standing on the platform of an unfamiliar train station, someone wearing dark clothing and a backpack runs through the crowd spraying people with liquid. You look down and realise that your clothing is wet. Your eyes sting and you start to cough. You look around and see that other members of the crowd are also starting to suffer.

7.3   Appendix 3: Demographics survey

Pre focus group – Demographics

This survey will ask you three demographic questions to help the researchers understand the range of views captured within the focus groups.

Please can you provide us with a unique identifying number based on: the first two letters of your mother's maiden name, the last two letters of your surname, and the last three digits of your mobile phone number.

1. What is your gender?

Male		Female		Other		Prefer not to say	

2. What is your age?

	Prefer not to say	

3. There are various needs that people might have that might make them more vulnerable during an incident involving a CBRN release. Please indicate below whether you have any of the following:

Chronic health condition(s)	
Visual impairment	
Hearing impairment	
Physical impairment	
Are pregnant	
Elderly (60+)	
Other, please state	
Prefer not to say	

7.4 Appendix 4: Pre-focus group survey

Pre focus group questionnaire – Public perceptions of pre-incident public information materials for CBRNe terrorism

Please can you provide us with a unique identifying number based on: the first two letters of your mother's maiden name, the last two letters of your surname, and the last three digits of your mobile phone number.

1. If a real incident of this type were to occur, I would know what actions to take to protect myself.

Strongly disagree	1	2	3	4	5	6	7	*Strongly agree*

2. If a real incident of this type were to occur, I would know what actions to take to protect my loved ones.

Strongly disagree	1	2	3	4	5	6	7	*Strongly agree*

3. If a real incident of this type were to occur, I would feel confident that I could successfully undertake appropriate actions in order to protect myself.

Strongly disagree	1	2	3	4	5	6	7	*Strongly agree*

4. If a real incident of this type were to occur, I would feel confident that I could successfully undertake appropriate actions in order to protect my loved ones.

Strongly disagree	1	2	3	4	5	6	7	*Strongly agree*

5. Please describe any actions which you would take if an incident of this type were to occur.

6. I think that the emergency services would behave in a respectful way when managing this type of incident.

Strongly disagree	1	2	3	4	5	6	7	*Strongly agree*

7. I think that the emergency services would behave in a fair way when managing this type of incident.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

8. I think that the emergency services would behave in a forceful way when managing this type of incident.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

9. If this was a real incident, I would expect emotional support from other members of the public who were involved.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

10. If this was a real incident, I would expect to receive help from other members of the public who were involved.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

11. If this was a real incident, I would be willing to help other members of the public.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

7.5 Appendix 5: Post-focus group survey

Post focus group questionnaire – Public perceptions of pre-incident public information materials for CBRNe terrorism

Please can you provide us with a unique identifying number based on: the first two letters of your mother's maiden name, the last two letters of your surname, and the last three digits of your mobile phone number.

1. If a real incident of this type were to occur, I would know what actions to take to protect myself.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

2. If a real incident of this type were to occur, I would know what actions to take to protect my loved ones.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

3. If a real incident of this type were to occur, I would feel confident that I could successfully undertake appropriate actions in order to protect myself.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

4. If a real incident of this type were to occur, I would feel confident that I could successfully undertake appropriate actions in order to protect my loved ones.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

5. Please describe any actions which you would take if an incident of this type were to occur.

6. If this were a real incident, I think that taking the actions recommended in the pre-incident communication information sheet would be an effective way to remove a contaminant from my skin.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

7. If this were a real incident, I would feel comfortable taking the actions recommended in the pre-incident communication information sheet.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

8. If this were a real incident, I would feel embarrassed taking the actions recommended in the pre-incident communication information sheet.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

9. If this were a real incident, I think I would find it easy to take the actions recommended in the pre-incident communication information sheet.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

10. I would be willing to taking the actions recommended in the pre-incident communication information sheet during a real life incident of this kind.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

11. If a real incident of this kind occurred, I would feel anxious.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

12. If this were a real incident, I would feel the need to seek further treatment after taking the actions recommended in the pre-incident communication information sheet.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

13. I think that the emergency services would behave in a respectful way when managing this type of incident.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

14. I think that the emergency services would behave in a fair way when managing this type of incident.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

15. If this was a real incident, I would expect emotional support from other members of the public who were involved.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

16. If this was a real incident, I would expect to receive help from other members of the public who were involved.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

17. If this was a real incident, I would be willing to help other members of the public.

Strongly disagree	1	2	3	4	5	6	7	Strongly agree

7.6 Appendix 6: Discussion guide questions

Scenario questions

a) How do you think you would feel if an incident of this type were to occur?

b) What would your main concerns be?

c) What would you do if you found yourself in this scenario?

d) What actions do you think emergency responders would take during this type of incident?

e) What information do you think you would need if an incident of this type occurred?

f) Who would you like to receive information from during this type of incident?

Pre-incident communication materials questions

a) What do you think of the information provided?
   a. Prompts: is there anything contained in this information that you don't understand? Do you think this is memorable / that you would remember this information?

b) Is there anything you don't understand, or which could be made clearer?

c) Which organisation would you want to provide this information?

d) How would you want to receive this information?
   a. Prompt: would an app be useful/ would you use an app to access this information?

e) Do you think you would remember this information in a real incident?
   a. If not, why?

f) Would you feel confident taking the actions recommended in the information sheet?
   a. If not, why?

g) Is there anything that you think might make it difficult for you to take these actions?
   a. Prompt – vulnerability/ additional requirements

h) Would you be willing to take the actions recommended in the information sheet?
   a. If not, why?

i) General questions about pre-incident information:

     a. How do you feel about information such as the information being discussed being released? (Prompt: if you saw this type of information would you be suspicious/ frightened/ reassured?)

j) In general, do you think the provision of this kind of information is a good idea?
     b. If so, why?
     c. If not, why?

7.7 Appendix 7: Pre-focus group descriptive statistics

Pre-focus group survey questions	Mean (SD)	Scale name	Scale reliability	Scale mean (SD)
Q1. If a real incident of this type were to occur, I would know what actions to take to protect myself.	3.42 (1.54)	Knowledge/ confidence	0.96	12.97 (5.87)
Q2. If a real incident of this type were to occur, I would know what actions to take to protect my loved ones.	3.31 (1.65)			
Q3. If a real incident of this type were to occur, I would feel confident that I could successfully undertake appropriate actions in order to protect myself.	3.11 (1.51)			
Q4. If a real incident of this type were to occur, I would feel confident that I could successfully undertake appropriate actions in order to protect my loved ones.	3.14 (1.51)			
Q6. I think that the emergency services would behave in a respectful way when managing this type of incident.	5.78 (1.12)	Fair treatment	0.83	11.47 (1.95)
Q7. I think that the emergency services would behave in a fair way when managing this type of incident.	5.69 (0.98)			
Q8. I think that the emergency services would behave in a forceful way when managing this type of incident.	5.14 (1.48)			
Q9. If this was a real incident, I would expect emotional support from other members of the public who were involved.	4.08 (1.59)	Expect help	0.91	8.31 (2.95)
Q10. If this was a real incident, I would expect to receive help from other members of the public who were involved.	4.34 (1.39)			

Q11. If this was a real incident, I would be willing to help other members of the public.	5.91 (1.17)			

7.8 Appendix 8: Post-focus group descriptive statistics

Post-focus group survey questions	Mean (SD)	Scale name	Scale reliability	Scale mean (SD)
Q1. If a real incident of this type were to occur, I would know what actions to take to protect myself.	5.44 (1.08)	Knowledge/ confidence	0.94	20.72 (4.30)
Q2. If a real incident of this type were to occur, I would know what actions to take to protect my loved ones.	5.25 (1.20)			
Q3. If a real incident of this type were to occur, I would feel confident that I could successfully undertake appropriate actions in order to protect myself.	5.08 (1.13)			
Q4. If a real incident of this type were to occur, I would feel confident that I could successfully undertake appropriate actions in order to protect my loved ones.	4.94 (1.26)			
Q6. If this were a real incident, I think that taking the actions recommended in the pre-incident communication information sheet would be an effective way to remove a contaminant from my skin.	5.31 (1.33)			
Q7. If this were a real incident, I would feel comfortable taking the actions recommended in the pre-incident communication information sheet.	5.64 (0.96)			
Q8. If this were a real incident, I would feel embarrassed taking the actions recommended in the pre-incident communication information sheet.	3.08 (1.75)			

Q9. If this were a real incident, I think I would find it easy to take the actions recommended in the pre-incident communication information sheet.	5.19 (0.98)			
Q10. I would be willing to taking the actions recommended in the pre-incident communication information sheet during a real life incident of this kind.	5.78 (0.99)			
Q11. If a real incident of this kind occurred, I would feel anxious.	6.08 (1.02)			
Q12. If this were a real incident, I would feel the need to seek further treatment after taking the actions recommended in the pre-incident communication information sheet.	6.26 (0.95)			
Q13. I think that the emergency services would behave in a respectful way when managing this type of incident.	6.22 (0.80)	Fair treatment	0.92	12.14 (1.82)
Q14. I think that the emergency services would behave in a fair way when managing this type of incident.	6.09 (0.89)			
Q15. If this was a real incident, I would expect emotional support from other members of the public who were involved.	4.33 (1.51)	Expect help	0.93	8.67 (2.91)
Q16. If this was a real incident, I would expect to receive help from other members of the public who were involved.	4.33 (1.49)			
Q17. If this was a real incident, I would be willing to help other members of the public.	6.03 (1.11)			