## **EKOS Research Associates Inc.**

# Chemicals Management and Environmental Health Issues Campaign Focus Groups

Findings Report

Prepared for: Health Canada

Ce rapport est aussi disponible en français

For more information on this report, please email: <u>CPAB\_por-rop\_DGCAP@hc-sc.qc.ca</u>

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# SUMMARY

Under the Chemicals Management Plan (CMP), a public education campaign is intended to reach Canadians with messages about potential environmental health risks posed in and around the home, including suggested action that may be taken to reduce risk. The current research garnered initial impressions and feedback to proposed materials designed to inform and educate Canadians. Participant feedback is intended to assist in determining the direction of any changes required to communicate the most effective and appropriate message possible.

A total of ten focus groups were held across five locations. Groups were held in Ottawa and Toronto in Ontario, Montreal in Quebec, St. John's in Newfoundland and Vancouver in British Columbia. In each centre, one session included predominantly parents of children six and under, while the other session was generally open to anyone in the general public. Eight of the ten groups were held in English and two were conducted in French in Montreal.

### Highlights

#### Awareness and Concerns

Focus group participants were concerned about the health risks of various environmental factors or household products in and around their home. Cleaning products were among the items most frequently mentioned, along with mould in the home, pesticides, and carbon monoxide. The potential risks of radon, off-gassing from plastic products, allergenic or toxic particles in carpets, asbestos in older homes and spray insulation, or scented products are of concern to some participants. A plethora of other concerns were noted by a few such as drywall, cellular phones, smoke, animal feces, bristles from barbeque brushes, and window blinds with cords.

Almost all participants felt there is abundant information about the risks associated with environmental factors or household products. However, most stated that there is "too much" information, confusing and conflicting information, or a lack of trust in the source of the information.

#### Creative Concepts

The primary goal of the discussions was to garner reactions to four creative concepts. These were titled: **There's More Than**, **I'd Do Anything**, **Everyday Hero**, **and Healthy Home Toolbox**. Most participants favoured the **There's More Than** concept, appreciating the design of the material, the factual approach, and the idea that decisions at home affect the broader environment. For some, the tone of the concept was somewhat fear-based, which was motivating for some to take action, but a negative aspect for others. The **I'd Do Anything** concept likewise garnered a positive impression by most participants. For this concept, the emotional connection was deemed motivating to take action to protect themselves and their families from environmental factors and household products in and around the home. A few participants without spouses or children reacted negatively, however, as they did not relate to the images of families. Some others felt the soft font, and less specific or explanatory information, weakened the approach.

**Everyday Hero** was favourable to many, but strongly negative to others. The playful approach, and boldness of images, were cited as positive features by many participants. Conversely, some felt that using the term "hero" is unwarranted by the simple actions, making light of true heroes. Finally, the **Healthy Home Toolbox** was the least preferred approach. While some participants felt the concept was straightforward and pragmatic, others did not connect to the approach as it was lacking in emotion, confusing in the details, or easy to dismiss.

#### Information Sheets

The majority of participants thought the inclusion of 5 Healthy Home Tips in the ads gave important context for the photos and tag-lines, regardless of the approach, and made the overall message of the ads more clear for the viewing audience. Upon examination of the specific content of these tips, respondents thought overall that the tips were a good starting point, and may stimulate some to look for more information, but were too vague to illicit direct action to mitigate risks around the home. Participants felt that for the Home Tips to be most effective, they should contain detailed information to educate people on these potential risks and the simple steps to take for protection in the home, while including all relevant safety precautions to avoid misleading the public.

The handout, Your Healthy Home – How Your Environment Affects Your Health, provided respondents with a better understanding of the potential health risks associated with chemicals in the home and the importance of mitigating those risks for the health of themselves and their loved ones. Participants noted the value of the information provided, and suggested that they would want to see more detail, a stronger connection to the individual sections of the tips sheet, **9** Healthy Home Messages, and sources listed beside cited statistics and studies to increase the overall effectiveness of those messages.

#### Mobile App

The Mobile App initially intrigued some respondents; the calendar, checklists, and link to local resources being the most popular components. Following discussion of the proposed functions in the groups, most participants felt they would be better served by a website platform that individuals could access, as needed, without affecting the available storage of their mobile devices, given that use would likely not be frequent enough to warrant use as an app.

The contract value for the POR project is \$57,671.81 (including HST).

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### POLITICAL NEUTRALITY CERTIFICATION

This certification is to be submitted with the final report submitted to the Project Authority.

I hereby certify as Senior Officer of EKOS Research Associates Inc. that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the Communications Policy of the Government of Canada and Procedures for Planning and Contracting Public Opinion Research.

Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, standings with the electorate, or ratings of the performance of a political party or its leaders.

Signed by: Susan Galley (Vice President)

# 1. INTRODUCTION

## 1.1 BACKGROUND AND OBJECTIVES

The Chemicals Management Plan (CMP) is a major horizontal initiative that is jointly managed by Health Canada (HC) and Environment and Climate Change Canada, aimed at reducing the risks posed by chemicals to Canadians and their environment. The CMP builds on previous initiatives by assessing chemicals used in Canada and by taking action on chemicals found to be harmful. A key aspect of this program is to increase public awareness of potential risks and encourage Canadians to take action to protect their health from substances of concern. This has been accomplished through making environmental health guides available to Canadians, and through activities such as awareness and learning events, public distribution of information, and social media promotion. The result is a myriad of existing avenues through which Canadians can receive and access this vital health information. A need was identified, however, to develop a renewed, unified public outreach strategy to strengthen messaging and identify how to best reach Canadians including vulnerable populations with science-based program information and motivate them to take action.

The current research will garner initial impressions and feedback to proposed materials designed to inform and educate Canadians. Participant feedback will help to inform how to communicate the most effective and appropriate message possible. Specific objectives include:

- > To determine the concept variation that is most noticeable, appealing, and convincing to the target audience;
- > To ensure the target audience can identify with the creative concept chosen, and that it is credible, relevant, and perceived to be produced by a reliable information source;
- > To ensure the materials are clearly understood in the manner intended for target audiences and that they are culturally and emotionally sensitive;
- To assess whether they are likely to have the intended impact in motivating behaviour change (i.e., taking steps to mitigate risk, looking for information to help them better understand the risks, and necessary steps to take to reduce risk in and around their home);
- > To provide feedback on where and how the creative concepts can be altered to increase the effectiveness of the message; and
- > To assess reactions to different taglines and the likely impact they may have on the target audience.

# 1.2 Methodology

POR was conducted in the winter of 2017 by EKOS for HC. That research is helping HC to gauge a better understanding of Canadians' opinions, awareness and behaviours with regard to chemical substances, chemicals management and environmental health. The results have been contributing to the development of a renewed social marketing campaign, including new concepts, tools and messaging (taglines and specific actions). Ten focus groups were held in five Canadian cities to test these new campaign materials with Canadians, as follows:

City	Date	
Ottawa	Thursday October 05, 2017	
St. John's	Wednesday October 11, 2017	
Toronto	Monday October 16, 2017	
Montreal	Monday October 16, 2017	
Vancouver	Tuesday October 17, 2017	

Participants were recruited from the EKOS in-house randomly generated panel, Prob*it*, augmented with some random digit dialling in St. John's and Ottawa (recruitment screener can be found in Appendix A). Half of the discussions targeted recruitment of parents of young children (6 years old or younger), while the other included parents of older children and other Canadians. Groups were stratified to ensure a balance of men and women and representation of a variety of adult age cohorts, as well as to reflect socioeconomic and ethnic diversity. In total, 81 individuals participated in the discussions, of the 110 recruited. A focus group guide (provided in Appendix B) was developed by EKOS in consultation with the client. Discussions centred on the provision of feedback on four creative concepts, as well as on several information sheets related to the rationale for concerns about potential health risks posed by environmental factors around the home and information tips on actions to be taken to reduce risk. Feedback on a possible mobile app was also garnered in the discussions. Most discussions were held in English, with the exception of the two focus groups held in Montreal, which were conducted in French.

Each focus group was 90 minutes in duration. Groups were held in professional focus group facilities. Refreshments were provided and participants were provided \$85 for their attendance. Video or audio recordings, researchers' notes and observations from the focus groups formed the basis for analysis and reporting of results.

It should be kept in mind when reading this report that findings from the focus groups are qualitative in nature, designed to provide a richer context rather than to measure percentages of the target population. These results are not intended to be used to estimate the numeric proportion or number of individuals in the population who hold a particular opinion as they are not statistically projectable.

# 2. FINDINGS

# 2.1 GENERAL AWARENESS AND INFORMATION SOURCES

In order to situate participants in thinking about the topic, they were first asked to think of any environmental factors or household products in and around their home that they are concerned about in terms of potential health risk to themselves or their family. Most often, cleaning products (including laundry and dishwasher pods) were mentioned. Most participants were also concerned about mould in the home, pesticides, and carbon monoxide. Some were concerned about radon, off-gassing from plastic products, allergenic or toxic particles in carpets, asbestos in older homes and spray insulation generally, or scented products. A plethora of other concerns were noted such as drywall, cellular phones, smoke, animal feces, bristles from barbeque brushes, and window blinds with cords.

"One of my biggest concerns is air quality, because I'm asthmatic and if there's mould, you've got to get bleach. So for bathroom cleaning, mostly would be an environmental health risk to be using those products, but its also an environmental health risk to allow mould to build up." (St. John's)

"It depends, in general yes certainly for the more obvious sorts of things like toxic chemicals we need to use for cleaners and stuff but there's also a lot of new stuff on the market that may not be tested, or maybe its been glossed over, or maybe because of the way a particular law has been designed, it does not pertain to that particular product, like a lot of naturopathic types of things, they're marketed in such a way that they seem safe and natural." (Toronto)

Almost all participants felt there is enough information about the risks associated with environmental factors or household products. A few, particularly in Montreal, considered themselves well informed about the risks, resulting in fewer concerns about environmental factors or household products in their home. Many felt, however, that there is often "too much" information, confusing and conflicting information, or a lack of trust in the source of the information. A few said product labels are too technical and written in very small font, making them confusing. Many participants noted that some environmental factors or household products receive media attention featuring misinterpreted information, which also contributes to confusion. Likewise, the knowledge or guidelines on the effects of certain factors can change over time, further exacerbating confusion. A few said they distrust some information sources if they feel companies may not be disclosing adverse and long-term effects of their products. "There's a lot of misinformation out there too, so like you go to Google and search 'is this safe?' and you get 1000 things that don't base their information on scientific evidence. It would be nice to have a central place where you know you can trust." (Toronto)

"I think sometimes it depends on the severity of the story or the case. I mean yes we know that carbon monoxide is an issue but we've heard stories of people who have died as a result. We haven't heard anything like that about radon, and not that I'm saying we need to but its when it hits that type of severity people say 'I need to look into this more' and it gets bumped up to a higher priority level." (Ottawa)

"The information is changing all the time too. Even between my 2 kids, the way you introduce food to them one was one way the next was completely different. Same with even eggs, they're good for you one year and the next they're not." (St. John's)

# 2.2 FEEDBACK ON CREATIVE CONCEPTS

The key focus of the discussions centred around reactions to four creative concepts which were provided on paper to participants. They were first asked to review the concept and provide some overall ratings of the strength of the concept in terms of overall approach (including slogan, images and tone), as well as to rate the clarity of the message, degree to which the concept would command attention and extent to which it would motivate them to make a change or look for information. The results of these ratings are presented at the end of the discussion of the four concepts.

### a) I'd Do Anything

#### Reaction to Overall Approach and Tone

The I'd Do Anything concept was generally seen as a favourite among many participants, although a few had some reservations, and many had some suggestions for improvements. This concept was seen as making a strong emotional connection, and providing the strongest reason for paying attention and taking action. For this reason, many saw it as clear and compelling, with a "feel good" positive approach.

*"I think it's motivating because parents will do things to protect their children they wouldn't do to protect themselves. I mean look at how many people quit smoking for their kids." (Vancouver)* 

"The other one was making it about yourself; this is making it about your family. I don't care about being a hero; I care about protecting my family, protecting my kids." (Ottawa)

"More often than not you put your kids or other people ahead of you. You may not do it for yourself, but you would do it for them."(St. John's)

*"I like the fact that it's a positive messaging versus a negative messaging, I resent negative messaging."*(*Toronto*)

"It's cheesy, but I don't hate it for some reason. It works." (Toronto)

For a few, the emotional approach was seen as manipulative; something they would dismiss for this reason. A few participants noted that emotional appeal in advertising is quite common and more easily dismissed than intellectual or fact-based appeal. For some the emotion was considered to be slightly "over the top." Some described it as "cheesy" or "schmaltzy"; one said it reminded him of "a Hallmark card." For some the stylized font of "Him" or "Her" made it stand out, but for a few these needed to be toned down.

"I find this one is trying to guilt me into doing something, I find guilt doesn't work as much." (*St. John's*)

#### Reaction to Message

For many, the message was clear and spoke strongly about the motivation for why we would collectively take steps to mitigate health risks at home. "We do it for the people we love; we do it for them." Many participants commented on the affirmative nature of the message and found it refreshing to see a positive approach to health and safety messaging. For some, the approach seems overstated for the tips and suggestions that follow. For example, proposing "I'd do anything" for my family and then follow with very simple actions such as taking off shoes or putting chemicals in a high location seemed to be incongruent in importance or tone. For a few, the use of the words 'him' and 'her' was seen as limiting for those of another gender or without a family and suggest using more neutral language such as: 'them', 'my family', 'my loved ones', or even 'my health'.

"Of all the things that can kill us, do we really (...) care about shoes coming off?" (Ottawa)

"I mean you think about parents, any parent who loves their child dearly, 'I'll do anything for them,' they will jump in front of a bus for them. You can't complete it with 'I put my chemicals high up.'" (Ottawa)

"It rings with the love we have for our children." (Montreal)

#### Reaction to Icons and Images

For some, the images used were widely representative of the population, including people from various ethnic or cultural backgrounds. For others, however, the more narrow focus on parents and young children seemed to limit its appeal; a few without spouses or children were put off by the images. A few also talked about the need for images of inside the home to connect more directly to the topic.

"I thought the focus was pretty good, it doesn't play to me personally, probably because I'm not a parent, but I understand how they're trying to speak to people's emotions, love for their family. But it really would benefit from pictures that fit with what they're trying to communicate better." (Toronto)

*"I think visually it's very nice, but because they're all kids it kind of narrows the target audience. I don't have kids so I would probably just glance over this and figure it doesn't apply to me." (Vancouver)* 

"This one is the most powerful and impactful to me. But I can see the message getting lost on millennials and childless couples, they might not relate as much." (Vancouver)

"...why a CO detector linked to an image of outdoors, could be associated to a woodfire in the house." (Montreal)

The approach to the font was seen as too light and stylized for some, who preferred a bigger and bolder font, such as the one used in Everyday Hero (described next). Some participants also commented on the need for more striking and bolder font for the website, which seemed to blend into the background.

"I like the phrasing, the words I'd do anything for him/her, that works, but the font is off." (Ottawa)

*"I find the images are more attractive, the colours aren't so monotone, and I don't know why exactly, but the sub-captions seem to pop a bit more." (Ottawa)* 

[about the call to action] "I think it gets lost because there's such a sharp contrast between the images and the information, and the two not really marrying together nicely."

The icons featured in Everyday Hero were more often preferred to the I'd Do Anything concept, which were not considered to be as clear. The style of the icons was also seen as mismatched with the style of the images used and overall approach taken, according to many participants.

*"I think the icons worked better in the other one because thematically it works, it doesn't go with this." (Ottawa)* 

"Show me the dirty shoes, show me the dirt, not an icon with a clean pair, show me the problem." (Vancouver)

#### **Overall Perspective**

For some who liked the science-based approach used in There's More Than, a few suggested integrating the science into I'd Do Anything, so that the emotional connection would be fortified with stronger messages about why one should be concerned (e.g., showing VOC's in the environment where you are with your children, taking steps for them). A few also said that the Everyday Hero concept did a better job of explaining why there is a concern or what to do about it.

"I still don't think it's very clear. I get what they want me to do, but they give me no reason to do it." (*St. John's*)

"I like the third (image) the most simply because it has more of a call to action to it, it explains more about what was going on, and there's still that nice emotional connection."

### **b**) There's More Than

#### Reaction to Overall Approach and Tone

Many participants had a favourable first impression of the There's More Than concept. For some, the approach showed a "polished" look. Some appreciated that the concept seemed to take a "factual approach", highlighting that decisions at home affect the broader environment. Conversely, a few said that thinking about the impacts on the broader environment seemed "overwhelming."

"I really like them. I think they really catch and really hit hard. It's about the environment, it's about the air, its about the water and its about our homes." (St. John's)

*"It definitely plays on the curiosity factor though because first you see this beautiful peaceful image and then just these little specs and you have to zoom in." (St. John's)* 

"Really drives home in a few words that what I do matters, and that it's not just within my own immediate environment, but a part of broader community responsibility." (Toronto)

"The first two images are very eye catching from an aesthetic point of view." (Vancouver)

#### **Reaction to Message**

Some participants felt that the tone of the message was built on fear. For a few, this was seen as an effective approach to motivate them to take action. A few, however, saw this as "fear mongering" that would result in being dismissed or rejected as manipulative.

"My gut reaction is I think about protecting myself. I'm thinking 'don't drink the water.' I wasn't thinking not to put stuff in the water, other people put stuff in the water, I'm thinking 'I should be buying my water.'" (Toronto)

"The thing that enticed me about it is that it looked more like a horror movie poster. That's what attracts you, its something scary." (Vancouver)

"This one is fact based alright, but, to put it crudely, it's also more fear generating than the second one (Toolbox). The second one at least shows solutions, or at least offers the hint of a solution. Here you don't really have a solution, it just says here's the problem." (Ottawa)

#### Reaction to Icons and Images

Many participants reacted positively to the images, colours and font of the concept. While the font was considered appealing to participants, many said it should be larger, particularly for the sub-headings (the action and how, along with the naming of contaminants). Additionally, some participants emphasized the need for more precision or linkage with the sub-headings or contaminants listed and the title caption. For example, "There's more than love in the air" featured a sub-heading to test the home for radon, along with an icon indicating there is radon in the air. A few observed that VOC's, formaldehyde, and mould did not have the same explanations, weakening the ad.

For the "There's more than water going down the drain" image, a few participants understood the connection between the lake and elements that are thrown away in homes, such as

prescriptions drugs, flowing into the lake from households, but some said they would rather see images showing the drugs actually going down the drain, or possibly wording changed to more explicitly describe how the contaminants from a household arrived in the lake.

Finally, the page with the mother and two children was seen appealing to many participants, although some felt that the icon or graphics could go further to show more potential risks in the kitchen, such as cleaners in the cupboards or prescription drugs going down the drain. The "blurred" image of one child served as a distraction to some participants, along with the VOC's graphic near/on her head. A few participants noted that the label of radon near the stove was misleading as a source of radon, typically found in basements.

"I think if you're going to talk about multiple issues, I think you need to clarify your message. Instead of testing your home for radon, maybe testing your home for contaminants or something other than just that one thing." (Vancouver)

#### **Overall Perspective**

Although most participants felt that the concept would be effective at garnering attention, and instilled a concern about contaminants, few said they would go to the website for additional information. Interestingly, more often than with the other three concepts, this concept resulted in discussion about searching for additional information generally. For some, the concern created through the concept would serve as sufficient motivation to look up information, through a non-specific source (e.g., not through the Health Canada site, but through Google). The Health Canada site was noted to have a simple domain name, that is easy to remember, but some participants also said they would still Google issues to increase understanding of Radon, VOC's, or how to dispose of chemicals or medication.

"It may not send you to a website, but it gives you another moment of pause in your life to say 'what am I putting in the water? What's in the air?' and I think it has a tremendous value." (St. John's)

"I presume that they want to motivate people to do something afterwards and I think asking a question that the person sort of has to follow up with an answer can be effective." (Vancouver)

"It has me asking a question I'm for sure Googling when I get out of here." (Vancouver)

### c) Everyday Hero

#### Reaction to Overall Approach and Tone

Many participants said they liked the Everyday Hero concept; however, some expressed strong negative reactions. For those supportive of the concept, the boldness and playfulness of the approach, as well as the idea that very simple actions can make a difference were considered appealing. Some participants said they liked positive message portrayed.

"I think boosting people up and making them feel good about themselves is more effective than guilting them." (St. John's)

"... it connects it very directly to everyday, very mundane decisions, and I kind of like the irony that it plays on about what heroism is, that heroism is nothing heroic, its really very mundane." (Toronto)

Of those who did not like the Everyday Hero concept, the idea that simple actions makes someone a hero was considered absurd. These participants felt that the term "Hero", or "Superhero", is currently over-used and has become meaningless. Some felt that the concept is "silly", "corny" or "condescending", or risks offending or making light of those who are true heroes. A few others felt that the humour presented should be more obvious, acknowledging that the audience is "in on the joke" of simple actions creating a hero. Suggestions included an individual featured in a cape, with hands on their hips, in a hero stance.

"I had a viscerally negative reaction to it, I found it painfully embarrassing." (Vancouver)

"When I first look at that, it's also because I work with teenagers all the time, is that is an insult. The word hero is also, like the highway of heroes we have, it's a really powerful word, and the likability of the people... it could be very mock-able." (Toronto)

"I think it's really bad, insults actual heroes." (St. John's)

A few participants felt that the light-hearted approach may result in the perception that the actions to reduce harm may be so simple that they have little effect or are unimportant.

"They're trying to convey the idea that it doesn't take much work, you know all I did was... but to me I think maybe it risks people not taking it seriously enough, like if it's just a little step they might not bother at all because maybe it's not that important." (Vancouver) "To me this serves to belittle what is a really serious issue we're talking about: our air, our water, our health. One little thing like this is actually not heroic, it's not nearly close to what we need to be doing." (Toronto)

Conversely, one pointed out that while the actions seemed simplistic, the potential for harm is great if the actions are not followed. By pro-actively taking steps to reduce harm and make a home safe, an individual can be a hero by preventing something dangerous from occurring.

"So yes you are a hero, I concur with that 100% because if nothing happens, well, okay, we're sensationalizing this, but if that child goes in the washroom downstairs and drinks the bleach or the drain-o or whatever chemicals you have out, you know, you don't realize the magnitude of this until something happens. So preventative measures should get that same level of regard." (Toronto)

#### **Reaction to Message**

The message of "I felt like a Hero" was appealing to a few participants, however, some others indicated that they would like the message more if it were in the present tense, "I feel like a Hero", or in the third person (to not designate yourself as a hero), such as "<u>You are</u> a Hero." The idea of the actions being common or everyday was a consideration for a few participants, suggesting the slogan, "Feel like an Everyday Hero." A few others suggested that the message could be about being a hero to someone else (such as to children or others in the family) or downplay hero while still demonstrating impact of the action "I feel like I made a difference, all I did was...."

For some, the actions presented in the concept seemed too simplistic, particularly when associated with being a hero. Some participants found the action to remove shoes, "All I did was remove my shoes..." to be unexpected or require further explanation. While the action followed with "... to keep from tracking harmful contaminants through my home.", some felt that wearing shoes indoors simply dirties the floor and that the communication implied the federal government was concerned with the cleanliness of Canadian's homes, rather than contaminants that may negatively affect health. As noted by a few participants in Vancouver and Montreal, the perceived message of keeping a clean home (seemingly through the action to remove shoes) is contrary to some studies that indicate a sanitized home is associated with a higher incidence of allergies among children.

Some participants noted, however, that the first two graphic pages provided more detail on the "why" of the action than other concepts. Overall, participants felt that it is necessary to present the reason for the action within the concept. While some actions (e.g., installing a carbon monoxide detector, storing chemicals in safe areas) were seen as obvious to many; some

participants said that other actions required more information about the risk. The most common examples were radon detectors and taking off shoes, which some felt were not obvious and needed explanation. (What is radon? Where does radon come from? What is the risk if radon is in your home?).

#### Reaction to Icons and Images

The icons were clear to some participants; however, others felt that more context needed to be presented with the icons. The open window with the plant on the sill was used as an example as an icon presented without context, thereby causing confusion for some participants. Some suggested that the shoes could be dirty work boots, the bottles should have toxic symbols on them, or the sink should have something being poured down the drain in an effort to add context.

"It's colourful and lively." (Ottawa)

*"I like the logos and the explanations, but I find the visuals just silly and irritating and I think my response would be why is the government wasting money on this*?*"?."* (Vancouver)

"The faces are exuberant, and not clear what they are feeling or expressing" (Montreal)

Many participants said they did not like the images of the people in the concepts. The woman, for example, was considered to be "rolling her eyes" or "stoned." A few did not like the use of confetti in the concept. One participant "... thought the confetti in the top image was a swarm of flies", or that confetti is over the top for such simple actions. Conversely, a few felt positive about the confetti, seeing it as a light-hearted and whimsical element.

The large, bold, font of the word "HERO" was considered a positive and attractive feature among some. A few noted that the same font could be used with a different word or concept (among those who considered "Hero" an undesirable feature of the concept). The images and colours were considered clear and bold for many participants, although a few felt the colours lend a juvenile tone not seen as age appropriate for adults ("... looks like a birthday party invitation"). The white on blue writing on the Healthy Home Tips page, including "To find out more..." was seen as appealing to some participants.

#### **Overall Perspective**

Many participants, even those who did not like the concept, felt that the concept would garner attention. Some felt that the positive tone of the message would be helpful in encouraging

people to take action and look for additional actions. However, some said that the actions are so simple that there would be no apparent need to find out more information. A few felt that the connection to hero could be strengthened by the additional action of a hero finding out more that they could do to protect their family.

"You want something that catches somebody and then they go 'why a hero?' If the person only reads this once, at least you've got their attention and you've done what you wanted to do." (Ottawa)

"I think it draws your attention with all the colours and the confetti and stuff flying around. The message "hero" is a little over the top, but it does get your attention; moreso than the other ones." (St. John's)

"What more would I look for? They've told me keep my cleaning products above where my children can reach and to take my shoes off when I go in the house. What am I going to go to the website to find out, how high?" (Vancouver)

### d) Healthy Home Toolbox

#### Reaction to Overall Approach and Tone

The Healthy Home Toolbox was generally met with the least positive reactions overall. Although a few saw it as a clean, simple and straightforward concept, most saw it as overly sparse, with insufficient explanation. For those who liked it, a key appeal was that it could be taken in quickly, at a glance, telling a simple story, in a pragmatic fashion.

"The concept of the toolkit is really nice: it's fun. It actually draws your attention to it, but as everyone said, it's not really clear what the message is."\*(Vancouver)

"I find it more practical, more likely to influence my behaviour."(Ottawa)

"I like the messaging and the display. It's simple, straightforward, you get the message." (St. John's)

Generally, those who did not like it saw it as confusing and cold, lacking in emotion; something that they had trouble connecting with. As a result, it was seen as something that would be easy to dismiss.

"Not too keen about this one, it's cold."(Ottawa)

*"It's informative but it'd be easily ignored."(St. John's)* 

"I don't really find it engaging, it seems very flat." (Toronto)

#### **Reaction to Message**

For those who liked it, the message was seen as clearer than some because it showed simple steps. For many, however, the message was not clear (i.e., why this is a concern or what you need to do about it). Similarly, the tone was seen as too terse; lacking in substance and detail. A few reacted strongly to "Be Alarmed" as overly dramatic or pushy.

"Be alarmed? No, I will not be alarmed and I resent being told to be afraid and you have to act or you're going to die or something." (St. John's)

"The message is clear in my opinion, but I don't find it motivating at all."(Toronto)

#### Reaction to Icons and Images

A key issue with this concept was the use of overly simple images that were construed by many as too rudimentary; almost child-like (i.e., "cartoonish"). Many said that it was not clear what the images referred to ("Is that a hockey puck?" "Why is there a needle and a fan?"). Among those who liked the approach, its simplicity was considered eye-catching, as was the use of the strong colour red.

"Given all the creativity that is out there and different ad campaigns I have seen, I think there is opportunity to approach it from a different angle from that look and feel standpoint. (Toronto)

"I found it really confusing to be honest. The symbols are, I don't know, the second one looks like a needle and a fan and RN, is that supposed to be radon?" (Toronto) "I do really like the concept of this theme, I think toolbox is really good because to me tools suggest you need to do something, you have a task, you have work to do to make your home safe. The tools suggest that, but the execution needs refinement for sure." (Vancouver)

#### **Overall Perspective**

Even when asked to consider if the concept was presented in a more graphically "polished" way, for many, the tool box caused confusion and did not seem to be a good metaphor (i.e., a natural fit). "Why tools?" "Why are they locked up?" A few agreed that a checklist might be a better metaphor. On the other hand, at least one participant also said that the overall approach seemed like too much work (i.e., too many things to do/too much in the toolbox), particularly for those who do not see themselves as "handy."

"Why locking the detectors in the toolbox? Seems like they're mixing their messaging." (Vancouver)

"I wasn't a big fan of the toolbox. To me it seems like people look at that and see all this work I've got to do and no one wants to do work, so they just throw it off to the side and forget it, while the other ones kind of draw you like 'I need to do this.' It doesn't feel like work on the other ones."(Vancouver)

# 2.3 SUMMARY OF OVERALL RESULTS

Following are the results of the ratings for each of the four concepts. In each of eight groups<sup>1</sup> participants were asked to rate the concept on four dimensions after reviewing the concept, but prior to discussion. In each, results have been collapsed according to ratings indicating the specific concept to be weak (rating it a 1 or a 2 out of 5), strong (rating it a 4 or a 5), or in between (3 out of 5).

The first rating captured overall approach and impressions, including feedback on the images, slogan and information provided (see Appendix D for the ratings sheet). Results indicate I'd Do Anything as the leading concept, with 78 per cent rating it positively and only six per cent giving it a negative rating. There's More Than was rated a close second, seen positively by 66 per cent, and negatively by only 16 per cent. Everyday Hero garnered ratings in the middle (i.e., more evenly spread across weak and strong). Healthy Home Toolbox garnered the least positive ratings, with more giving it a negative rating (44 per cent) than giving it a positive rating (32 per cent).

Rating	Everyday Hero	I'd Do Anything	Healthy Home Toolbox	There's More Than
Weak (1-2)	25%	6%	44% 🔺	16%
Middle (3)	35%	16%	24%	21%
Strong (4-5)	38%	78% 🔺	32%	66% 🔺

#### Table 2.1: Overall Approach-Impressions

<sup>&</sup>lt;sup>1</sup> Excludes Ottawa, used as the pilot centre, after which a rating sheet was added.

In terms of clarity of the message, There's More Than and I'd Do Anything were both rated very positively, however, there was greater consistency across the ratings in each centre for I'd Do Anything and the percentage rating the concept as weak was limited (six per cent) compared with the rating for There's More There (21 per cent).

Rating	Everyday Hero	I'd Do Anything	Healthy Home Toolbox	There's More Than
Weak (1-2)	21%	6%	16%	21%
Middle (3)	32%	37%	41%	19%
Strong (4-5)	44%	57% 🔺	43%	60% 🔺

Table 2.2: Clarity of Message

Ratings for the extent to which each concept garnered attention also place I'd Do Anything in the top tier with 70 per cent rating it as strong in this regard. Half rated There's More Than and Everyday Hero as commanding of attention, placing these two concepts in the middle tier. Bringing up the rear, Healthy Home Toolbox was seen positively by 40 per cent, although 32 per cent rated it as weak.

#### Table 2.3: Focus / Draws Attention

Rating	Everyday Hero	I'd Do Anything	Healthy Home Toolbox	There's More Than
Weak (1-2)	14%	6%	32% 🔺	13%
Middle (3)	32%	24%	29%	35%
Strong (4-5)	52%	70% 🔺	40%	52%

I'd Do Anything and There's More Than were both rated the most positively in terms of motivating one to take steps or look for more information (57 and 59 per cent respectively), although again, ratings for I'd Do Anything are more consistently positive across the four centres, with Montreal participants the least positive about this concept.

#### Table 2.4: Motivating

Rating	Everyday Hero	I'd Do Anything	Healthy Home Toolbox	There's More There
Weak (1-2)	35% 🔺	18%	37% 🔺	16%
Middle (3)	40%	25%	29%	25%
Strong (4-5)	25%	57% 🔺	35%	59% 🔺

Across the four centres, overall rankings for the four concepts are presented below. Reflecting the discussions, as well as the ratings of each of the different dimensions of the concepts, I'd Do Anything and There's More Than were rated first most often, although the ratings were more consistent across the different cities for I'd Do Anything. Healthy Home Toolbox was most apt to be ranked in fourth place (48 per cent).

Ranking	Everyday Hero	I'd Do Anything	Healthy Home Toolbox	There's More Than
First	13%	35% 🔺	18%	37% 🔺
Second	29%	38% 🔺	8%	22%
Third	32%	18%	25%	25%
Fourth	27%	10%	48% 🔺	14%
Decision	3	1	4	1 (2)

#### Table 2.5: Overall Ranking

Taking into the consideration feedback and ratings, following is a summary of the concepts overall.

### Table 2.6: Summary of Reaction to 4 Creative Concepts

Concept	Rank	Strengths	Weaknesses	Areas to Address
I'd Do Anything	<ul> <li>1</li> <li>&gt; Tied but more consist agreement across centres</li> <li>&gt; Overall – 78% rated high</li> </ul>	<ul> <li>&gt; Emotional connection makes motive obvious (tells part of the "why" story)</li> <li>&gt; Positive, uplifting, heart-warming (feel good)</li> <li>&gt; Inclusive, shows diversity (e.g., elderly parents, individuals without children)</li> </ul>	<ul> <li>Maybe a bit over the top on emotion (cheesy)</li> <li>Needs more connection to rational for steps</li> <li>Shoes considered poor example</li> <li>Only kids as beneficiaries – too narrow</li> <li>Icons not clear and don't fit with approach/imagery</li> <li>Some prefer more science and less emotion</li> </ul>	<ul> <li>Tone down emotion, change cursive font - bolder and easier to read (less Hallmark)</li> <li>Clearer connection in images to home and wider targets (not just younger parents with kids)</li> <li>Clearer explanation of why specific steps</li> </ul>
There's More Than	<ol> <li>Tied, but less consistency; high in SJ, low in Montreal</li> <li>Overall – 66% rated high</li> </ol>	<ul> <li>Science approach is positive for many (tells story)</li> <li>Wide appeal (not just for parents)</li> <li>Connection to actions at home affecting environment a plus</li> </ul>	<ul> <li>For some, feel and imagery a bit ominous</li> <li>Needs images more obviously connected to "home"</li> <li>Needs better connection to rational for steps</li> <li>Needs more diversity reflected</li> </ul>	<ul> <li>Images situated in home</li> <li>More rational on why specific steps</li> <li>Images in the home could be more specific         <ul> <li>kitchen scene including drain (prescriptions), cabinets (storage of chemicals)</li> </ul> </li> </ul>
Everyday Hero	<ul> <li>3</li> <li>&gt; Only 13% ranked 1<sup>st</sup> and 27% ranked last (most positive in Toronto, most negative in St. John's)</li> <li>&gt; Overall - 38% rated high (but 25% rated low)</li> </ul>	<ul> <li>&gt; Bold and eye-catching – commands attention and brands (consistency with "Hero")</li> <li>&gt; Playfulness appealing to some</li> <li>&gt; Good follow through on steps (tells the why)</li> </ul>	<ul> <li>&gt; Risk of "Hero" causing offence</li> <li>&gt; Overused concept</li> <li>&gt; Humour is too middle of the road. If anything go stronger (e.g., cape)</li> <li>&gt; Imagery can be misunderstood (woman, confetti)</li> <li>&gt; Light-hearted approach not seen by some as good fit for topic</li> </ul>	Change level of humour to less or more?
Home Toolbox	<ul> <li>4</li> <li>&gt; 48% ranked last, although 1 Montreal group ranked clearly higher</li> <li>&gt; Overall - 32% high (but 44% low)</li> </ul>	<ul> <li>Easy to take in at a glance</li> <li>Simple images</li> </ul>	<ul> <li>&gt; Too sparse and images not clear so easily misunderstood, causes confusion (e.g., why is the radon and CO detector locked in a toolbox?)</li> <li>&gt; Too rudimentary images, easily dismissed as amateurish</li> <li>&gt; Toolbox not considered a clear metaphor. Implies need to be "handy" to implement actions.</li> </ul>	<ul> <li>Possibly useful in digital space (quick glance), but needs clearer metaphor (e.g., checklist?), and more realistic images</li> </ul>

# 2.4 FEEDBACK ON INFORMATION SHEETS

In the next section of the discussions participants were told a key objective of the communications activities we are discussing today is to make Canadians aware of how the environment affects people's health and to motivate Canadians to take action. Summary sheets were given to each of the participants to be reviewed: one with some high level messaging in the form of nine short and simple "healthy home messages", broken down by sources of exposure; and another with some broader messaging that provides some deeper context about chemicals and human health, which includes details to demonstrate why people should care.

#### a) 9 HEALTHY HOME Messages

The first information sheet included very simple, high level messaging broken down by sources of exposure. Participants were asked to read the list of key messages about elements to consider in maintaining a healthy home environment and to provide feedback on whether or not the information was clear and if it would motivate them to take action. The information contained on the Healthy Home Tips sheet (Appendix E) received mixed reviews from participants. While some thought it was a good starting place to motivate people to look up more information online, some others found the information to be basic or incomplete; either with insufficient or misleading information on a topic, or that some necessary topics were excluded. Overall, many participants found that the list of tips did not contain enough information to elicit direct action, but piqued the interest of some who said they would go to the website for further details. People commented that a web format for this would be very effective, with hyperlinks embedded in the tips to bring you to another page for more details.

"Even if you may not do everything that's there, at least it raises your awareness and you know its something you can do." (Ottawa)

"If you saw this online I'd like to think you can click on hyperlinks on it and it would take you to more information. So then it's in your hands if you want it, you could just click and not go searching." (Vancouver)

"Is there more than this? For the take back, I want to click a link to tell me where to take back." (Ottawa)

There was also varied opinion about the tone of the presentation. Many said it was straight forward and that everything on the list seemed doable; it was not overwhelming to the reader. Others found it to be too basic and would not take it seriously as a result. Overall, participants felt it to be a good mix of reminders and new information, but that more detail was required on each point.

"I don't have to be able to apply every single one to still take value from the other ones." (Vancouver)

"When I see enough things in a list that I already know, often I will skip the rest of the list." (St. John's)

"Some of them seem very basic and could offend a lot of people. Like 'lock up your household chemicals with young children around' and stuff like that. Most people who have kids, and I know common sense is not common, but to me that's a no-brainer." (Ottawa)

The information was criticized by some participants for being vague to the point of being misleading. For example in St. John's, several said the suggestion to immediately clean any mould found, may be a health risk. The participant argued that some moulds are more dangerous when disturbed and becoming airborne, and that warnings are necessary to go with any suggestion to clean it. Another participant in the same group noted there was no mention of using protective gear in any of these tips.

"None of these things have talked at all about any kind of basic safety gear like gloves or goggles or masks at all for dealing with any of the things involved in this list." (St. John's)

Some of the tips generated more criticism than others. Many participants commented on the tip about shoes, arguing they did not understand its inclusion on the list; seeing it as trivial in comparison with the others. A few commented on the tip for lead in the water, noting that running the tap for five minutes seemed counter-intuitive to other messages about conservation of water, suggesting other methods of testing instead. Several participants also noted that there were many other items that merited inclusion on the list such as fire alarms, asbestos and food safety.

Participants in most groups noted the correlation between lung cancer and radon was an important connection to make for the reader. "It speaks to why it's an issue and how it can affect people personally. Some participants had additional questions in relation to radon, however, arguing it should contain much more information related to the source of radon (i.e., what causes it), where it is found in the country and in homes, and who is at risk, as well as how to mitigate.

> "I'd like something like this, but I'd want it to be more specific. So if it was about radon, give me all the information you have about radon: how can I be exposed? Who is at greater risk? Where does it come from? What does it do? That sort of thing. This seems a bit generic." (St. John's)

### b) YOUR HEALTHY HOME – How Your Environment Affects Your Health

The second information sheet was broader in scope and included messages that aim to tell Canadians the "why" in the story - why the environment and exposure to chemicals can potentially pose health risks and why it's important for them and to learn more." (Appendix F) Participants were asked to read this information and discuss.

Participants felt this sheet (Appendix F) gave more information about why these are important issues, but many participants said it still fell short of providing a well rounded understanding of the issues. Many found it to be too vague and some points too obvious. It was not seen to be drawing connections between the various risks, consequence and preventative action that people were looking for based on the home tips. Many participants did not see the connection between the two sheets and felt there was a lack of focus, with too many issues thrown together, causing confusion. It was suggested in multiple groups that the information be split into sections, that the information may be overwhelming and unappealing in a list format. It should also be noted that for some, a few issues that fall outside of the objectives of the program and campaign were seen to be "missing." Most often cited among these were smoke detectors.

"Might have been nice to do one of these for each of the actual issues we're talking about so it does have context to it." (Toronto)

"It's trying to cover too much at one time, and you sort of lose some of the message because you keep changing your focus." (Ottawa)

A few suggestions were made about the format and presentation of the material. Some suggested that the last point about simple steps to take should actually include some of those steps to encourage follow through (i.e., combine the why and follow up with the tips, bringing the content of the two sheets together). Several suggested that sources should be listed beside information presented as fact in this way to confirm its validity.

> "I want proof that this is science-based, and not random thoughts from people there's fake science out there, there's real science out there, and there's opinion that's presented as science. If this is the Government of Canada, science backed evidence; I want that stamp of 'this is actually legit.'" (Toronto)

"I'm confused. There seems to be a lot of stuff conflated in here. When you say something like the World Health Organization estimates that environmental factors are responsible for 13% of diseases in Canada what is the definition of that? I mean environmental factors could be anything, coal, this is too broad. I'm not actually sure that all of it is valid." (Vancouver) The phrase "be your own risk manager" garnered mixed reactions across the groups, but most participants were positive about the term. Initial reactions indicated the message came across as encouraging the readers to take responsibility and initiative to protect themselves and their loved ones; that there are things they must take care of themselves. The predominant objections were that it was associated more with businesses or professionals and that it was too vague. Many participants wanted further instruction on how they can manage their risk and what steps to take.

"I think it puts the ball in your court, and, at the end of the day, you're responsible for the health and safety in your home and in your outside environment. For the most part there are things you can do to mitigate risks." (St. John's)

"With all the overflow of information, it's good to take control yourself and say 'okay, what are my risks? And how do I manage that?"" (Ottawa)

# 2.5 FEEDBACK ON MOBILE APP

The concept of a "healthy home" app was presented to participants, which would include information on EH issues in and around the home to help them stay on top of and address EH issues to protect their health. Participants were also presented with possible features of the app including a calendar, check lists and links to local resources. There were mixed reactions to the idea of a mobile app described in the one-page information sheet (Appendix G). Many participants were initially intrigued by the idea, but upon further reflection as comments and concerns were voiced throughout the discussion, most people felt that the majority of the proposed functions would be better served on a website platform. The exception to this was in Montreal, where most participants were positive about the idea.

"I think they would download it and then never use it again." (Ottawa)

"I prefer this on a website, I think I have so many apps already." (Toronto)

"To me an app has to have a very specific purpose for me to want to install it. I mean what its trying to bring across is really good but that's all information that's better suited to a web format." (Vancouver)

Some participants said they would use the app either once for an initial check around the house, or, to a lesser extent, for continued use over a longer period of time. Of the suggested functions for the app, the most popular across all groups were the calendar and checklists, and associated push notifications, with many participants interested in the local resources section. The rewards function was largely an uninteresting distraction for the majority of participants. Most participants were interested in receiving calendar notifications for things such as battery changes for carbon/radon alarms, collection dates/locations for hazardous waste, product recalls and other home safety reminders. Many saw this as the primary argument for a potential app, citing the notifications as useful reminders that would in some cases prompt direct action.

"I like it, think reminders are a great idea, cause you know, I'm always forgetting to change the air filter in my furnace, for example." (Ottawa)

"I think it's a pretty good idea. If you download it, it's on your phone when you get the notification you're going to click on it just because it's going to ding. You'll see what it is and investigate further." (St. John's)

"I would actually pay more attention to the app push notifications." (Toronto)

While many participants were open to push notifications, it was stressed in multiple groups that there is a fine balance to strike with the frequency of such notifications. Some participants noted that too many notifications would prompt users to turn off the notification functions of the app and too few would perhaps cause people to forget about it, reducing the apps regular use.

"There's only so much space you've got yes, but also if it's annoying I'll delete it too. You can't be too clingy and you can't be too distant" (St. John's)

"Putting it into your calendar I think is a great idea but you know, with my work phone I've got so much going on, the last thing I need is more stuff popping up. As good as it is, I wouldn't do it." (Vancouver)

Some participants said that they already use a calendar on their mobile device and would not want to use a separate one for this function only. A common suggestion was to have the information synched to their existing calendars to consolidate all reminders into one place; however, a few did not want their calendar populated by outside sources. Other suggestions on how to mitigate the issue included a place to sign up for email or phone reminders on the website, or sending stickers in the mail with information packets that people can use on their physical calendars.

"There is no reason for you to create an app to have a calendar." (St. John's)

"I wouldn't specifically consult this calendar. Dates would go by if I wasn't actually thinking about them, but on the other hand I wouldn't want it to intrude on me when I wasn't looking for it. But if it could somehow show up on the calendar where I have other things, then I think that would be great." (Toronto)

"I don't know about an app in terms of if your putting it on a phone because there's so much out there now it'll just get lost. But I think if you had a website where you could log into it and set up reminders to send you an email or a text message to your phone, I think that would be more beneficial." (St. John's)

Participants showed interest in the checklist and noted the potential for it to serve as an educational tool, informing people of risks they may not have known to look for previously. Some participants drew links to similar apps used by themselves or their friends for things such as household chores, noting how useful they are for those who like to stay organized. In a few of the groups, participants thought that linking the checklist with the calendar would be a good idea, providing lists of things to check at certain times of the year (i.e., spring cleaning to check for mould). The primary concern in relation to the checklist function was that it would only be used once initially and then there would be no need for it once completed. A few suggested that a printable PDF checklist on the website would be a useful alternative.

"Once I've done the checklist, I've done the checklist. Would I go back to reference it? Not sure." (Ottawa)

"I think the challenge with any app is keeping the user engaged after 6 months. After the initial review yeah you'll see me going around and noting things down. But after 6 months more than likely you'll need to get me reengaged." (Toronto)

Participants were intrigued by the idea of partnership with local resources and municipalities, primarily as an easy place to go for information. Most were interested in links to local take-back programs and services, and many commented that city websites, where this information is typically found, can be difficult to navigate. If the app were to contain direct links to pages with local services, many participants would find this valuable. There was some concern that users would be redirected to external web pages where the information would still be difficult to find or where they could be bombarded by advertisements from local service companies or professionals.

"They don't necessarily have to develop their own app, the city of St. John's has its own app, that would be a way to partner with them and provide information through that." (St. John's)

"I like the idea of it linking to municipalities." (Toronto)

"I think they should work more closely with municipalities. For example, I get from the city, a letter, where is my garbage pick up or whatever. If it contained this information in the same letter that would get my attention." (Vancouver)

Almost all participants thought the rewards element would be unnecessary and should be removed from the concept. Some had more negative reactions to the idea describing it as childish, irritating or condescending. The few participants who were interested in the program stressed the need for tangible rewards, stating that unsubstantial or symbolic points would not likely serve as an incentive for action. It was suggested in multiple groups that, should it be included, the Government should partner with existing rewards programs such as Scene Points, similar to the Carrot App for health which has received Government funding at the provincial and federal levels. In Vancouver, it was suggested that a partnership with Rona or Canadian Tire (a retailer that sells alarms or safety kits) would be effective; this way, app users could gain points or coupons towards purchases relevant to the campaign. Some participants in St. John's had concerns about that same idea, noting the added complication of the Government monetizing the app and partnering with third parties. Another participant suggested that the Government provide a tax credit similar to the home improvement credit, but for health and safety, which would be a more enticing alternative.

"The rewards thing makes really no sense." (St. John's)

"I don't like the rewards part of it either, it seems kind of silly unless you get something out of it." (Vancouver)

Participants expressed some interest in getting more in depth information about chemicals and health effects on the app, but most people felt it would make sense to have the majority of information online, with the app as more of a database for links to relevant information for quick access. A suggestion from participants in the Toronto groups was that the app be equipped with a scanning function for chemicals, allowing users to scan products in their home or at the store prior to purchasing to check for associated health risks, safety precautions to be taken, and maybe even more healthy alternatives to try. Most thought it would be useful to have trustworthy information all in one place, citing how difficult it can be to find accurate reports online with so much conflicting information and private interests to navigate.

"It would be a good place to go as a portal to get to some information. I wouldn't want to have a big loaded app on my phone chewing up space that I'm not using." (Ottawa)

"I like the idea of using to look up certain chemicals in my home." (Toronto)

"Anything that provides a credible alternative to the nonsense you'll find by Googling a topic is worthwhile." (Ottawa)

When asked about whether or not they would be interested in receiving updates on chemicals the government is assessing for potential health risks, participants expressed mixed views. Some people felt they should know right away no matter what stage the investigation happened to be in, while others felt that it would only cause anxiety among the public to publish studies in progress without firm conclusions. One participant stressed the need to accompany any such updates with clear instructions on how to protect yourself or steps to take to mitigate risk. In some cases participants also mentioned they have little trust for such studies, as information about which products or chemicals cause health problems is always evolving and typically contradictory.

"I do not trust those studies; most of the time they change directions after a while and tell you the opposite" (Montreal)

*"If there's any new information, any new studies or anything like that the quicker you can get that information the better you can protect yourself." (Ottawa)* 

Most concerns regarding the use of an app related to the limited memory space available on mobile devices, the lack of daily relevance, the costs of development and maintenance, and the inaccessibility of the information for those who do not own mobile devices. Of these, the largest objection was in reference to frequent use. To many, the proposed functions require checking as the need arises, not to be readily accessible at any moment. For that reason, this app was not judged by participants to be a priority and would likely not remain on any device that is low on storage.

> "I think I'd rather this be on a website I could go to one time or whenever I need it as opposed to having an app on my phone that I have to keep on my phone all the time, cause our phones only hold so much information, especially when you start putting photos and videos on it. So when I go through my list of apps, this would be one of the first to go because you don't need it everyday." (Toronto)

> "This is information about healthy homes so I'm only going to need that information when I have a problem I need to address which is not going to be daily, or weekly or probably even monthly. So I would rather have a website I can go to." (Ottawa)

*"I agree that everything on this list is useful, but none of it belongs in an app, a dedicated app is a bad idea. Because that's something that will end up being deleted from your phone for space." (St. John's)* 

APPENDIX A RECRUITMENT SCRIPT

### APPENDIX A: Recruitment Script

### **INTRO**

<RINTRO: [PRESTRATE = 1] Time and Date: Thursday, October 5th from 5:45 p.m. to 7:15 p.m.

Location: Nielson Inc., 123 Slater Street, 11<sup>th</sup> floor, Ottawa [ELSE]Time and Date: Thursday, October 5th from 5:45 p.m. to 7:15pm.

from EKOS Research. We are conducting a series Hello, my name is of focus group discussions with Canadians who are 18 years of age or older on behalf of the Government of Canada. The research is related to health issues of concern to all Canadians and we think that you'll find the topic interesting.

Your participation in the research is completely voluntary and your decision to participate or not will not affect any dealings that you may have with EKOS Research or the Government of Canada. The purpose of the research is to understand the opinions and experiences of Canadians not to sell any service or product.

The sessions will be audio and video recorded for research purposes. Representatives of the Government of Canada will also be observing the discussions. The information is being collected under the authority of the Privacy Act and other applicable privacy laws. The full names of participants will not be provided to the government or any other third party. Also, the results from the discussions will be grouped together in a report, which will contain non-identifying information. May I continue?

Yes No

2THNK2

### 01

The session will last between an hour and a half and two hours and an incentive is offered for participation. May we have your permission to ask you some further questions to see if you fit in our study?

Yes	1
No	2THNK2

### **OGENDR**

<ISEX: [{ \$contexte{ip} =~ /192.168.0.?/ }]Record gender of respondent (DO NOT ASK)[ELSE]Are you...>

Male	1
Female	2

### QAGEX

May I have your year of birth, please?

RECORD YEAR :	77
REFUSED	99

### QAGEY

#### Hesitant

Would you be willing to tell me in which of the following age categories you belong?

Under 18 years	1THNK2
18 – 34 years	2
35 – 55 years	3
55+ years	4
REFUSED	9

### QEDUC

What is the highest level of formal education that you have completed to date?

Grade 8 or less	1
Some high school	2
High school diploma or equivalent	3
Registered Apprenticeship or other trades certificate or diploma	4
College, CEGEP or other non-university certificate or diploma	5
University certificate or diploma below bachelors level	6
Bachelor's degree	7
Post graduate degree above bachelor's level	8
Don't know / No answer	9

### QINCOME

Which of the following categories best describes your total household income? That is, the total income of all persons in your household, before taxes?

Under \$20,000	1
\$20,000 to just under \$40,000	2
\$40,000 to just under \$60,000	3
\$60,000 to just under \$80,000	4
\$80,000 to just under \$100,000	5
\$100,000 to just under \$120,000	6
\$120,000 to just under \$150,000	7
\$150,000 and above	8
Don't know / No answer	9

### QCHILD

Are you the parent or legal guardian of any children currently living in the household? If so, how many?

Yes (please enter number of children) :	77
No	98
Don't know / No answer	99

### QCHILDB [1,5]

### Parents, QCHILD

What are the ages of children in the home?

1	
2	
3	
4	
5	
9	Х
	3 4

### Q2

Are you or is any member of your household or immediate family employed in:

### Q2A

Government of Canada Yes No	1 2
Q2B An advertising agency Yes No	1 2
Q2C A market research company Yes No	1 2
<b>Q2D</b> The media (Print, Radio, TV, Internet) Yes No	1 2
Q2e Working in the field of health care Yes No	1 2

### Q3

Participants in group discussions are asked to voice their opinions and thoughts. How comfortable are you in voicing your opinions in front of others, in English? Are you...

1
2
3
4->THNK2
5->THNK2

### Q4

Have you ever attended a focus group or one to one discussion for which you have received a sum of money?

Yes	1
No	2

#### Q5

If Q4 = 1
When did you last attend one of these discussions that was anonaered

When did you last attend one of these discussions that was sponsored by the Government of Canada?

Please specify :	77
Months	1
Years	2
Never	99

Calculate:

Within last 6 months, thank and terminate	1->THNK2
Continue	99

### Q5B

If Q4 = 1 and Q5 not = 999	

Have you attended more than 6 of these discussions that were sponsored by the Government of Canada?

Yes	1->THNK2
No	2

### QFOCUS

The focus group is about an hour and 45 minutes in length, but we are asking that all participants arrive 10 minutes prior to the start time of the session. Are you able to be at the facility 10 minutes prior to the session time?

Yes	1
No	2->THNK2

### QTELE

We are providing each participant with a \$85 cash incentive for their participation, although late arrival (i.e., more than a few minutes) may result in not being able to participate or receive the incentive. Replacements are not permitted and you will need to bring ID, which you may be asked to present on arrival for the discussion. If you usually use reading glasses you should bring those along as well because there may be a few short phrases to read throughout the discussion.

The group will be taking place:

City	Date	Facility	Telephone
Ottawa	Thursday October 05, 2017	Nielsen Inc., 123 Slater Street, 11th Floor, Ottawa, ON K1P 5H2	613.751.5064
St. John's	Wednesday October 11, 2017	MQO Research, 55 Duckworth Street, St John's, NL A1C 1E6	709.753.5172
Toronto	Monday October 16, 2017	Nielsen Inc., 2345 Yonge Street, Suite 704, Toronto, ON M4P 2E5	416.355.6814
Montreal	Monday October 16, 2017	Nielsen Inc., 1080 Cote du Beaver Hall, 4th Floor, Montreal, QC H2Z 1S8	514.877.2776
Vancouver	Tuesday October 17, 2017	CRC Research, 1398 West 7 Avenue, Vancouver, BC V6H 3W5	604.714.5900

We will be giving you a reminder telephone call a day or two prior to your group discussion. Is this the best number at which to reach you?

Yes	1
No, please provide alternate phone number :	2

### FNAME

Please provide your first and last names.

NOTE TO INTERVIEWER: Confirm proper spelling. Ensure proper capitalization (IE: not all upper or lowercase). Name : 1

#### THNK

If you have any questions or something comes up and you can no longer participate in the discussions, please let us know by calling us toll-free at 1-800-388-2873 or by sending an e-mail to rzito@ekos.com. Thank you for your cooperation and time.

End of Interview Completion

### THNK2

I am very sorry, but due to the parameters of the study we will not be able to include you in the focus groups.

### QFIL2

Thank you for your cooperation! <QFIL2: [QFIL = 1 and QEND is empty]We will contact you should space become available in the group.[ELSE]>

APPENDIX B DISCUSSION GUIDE

## APPENDIX B: Discussion Guide

## Healthy Home Focus Group Moderators GUIDE October 2017

### 1. Introduction (5 minutes)

- I represent EKOS Research and these groups are being conducted for Health Canada to explore Canadians' understanding of common environmental factors in and around the home.
- > This research will help the Government of Canada plan communications activities designed to make Canadians aware of various risk factors in the home and actions that can be taken.
- This group is part of a series of focus groups taking place across Canada. This session will last about an hour and a half and we can start by going over the format and "ground rules":
  - Discussion is being audio taped and video recorded so that I can listen closely to what you are saying and not be distracted by having to write things down.
  - We are also streaming on WebEx and there is an observer from the Government of Canada
  - ♦ All comments are confidential.
  - Please try to speak one at a time and be respectful of one another's opinions.
  - There are no right or wrong answers to the things we'll be talking about.
  - It's okay to disagree. Please speak up even if you think you're the only one who feels a certain way about an issue. Everyone may have different experiences and different points of view. And we want to hear everyone's opinions.
- Moderator's role: raise issues for discussion, watch for time and make sure everyone has a chance to participate. We do not work for the Government of Canada.
- Please make sure that your cell phones, notifications on smart watches, etc. are turned off. We ask for your full attention for this time, without distractions.

# 2. Warm-up: Awareness and Concerns – (10 minutes)

- 1. Let's start by going around the table. Tell me your first name, and who you have in your household?
- 2. Do you feel there are any environmental factors or household products in and around your home that you are concerned about in terms of health risk to you or your family? What are they?
- 3. Do you feel you are well enough informed of risks associated with environmental factors or household products?

# 3. Creative/Communications Testing (4 Concepts - 40 minutes)

Now we are going to look at some concepts from the Government of Canada and get everyone's reaction to them. Your feedback is important and will feed into developing some new communication material to help Canadians take action to protect themselves from environmental factors in and around their home.

Remember that there are no right or wrong answers here. Everybody has an equally valid opinion.

Show and go through each concept individually. Rotate order each time

- a. [present one concept] Before we start our discussion, take a few minutes to look at the creative concept and then write down a few words on your initial reaction and fill in the ratings on the separate page.
- b. What do you think of it? (first impression, what stands out? what are you drawn to?)
- c. What do you like/not like about it?
- d. Is the message clear (i.e., what the concept is trying to tell you)?
- e. What do you think of the tone of the material? Likes/dislikes and why? How does it speak to you (emotionally, rationally, pique fears/ curiosity)?
- f. What do you think of the icon portrayed with the messaging (clear, like it)?
- g. Does the concept encourage you to want to go to their website to find out more?
- h. Would it encourage you to take some suggested steps or make changes in your household?
- 4. Which one of the 4 is the best overall concept? Best at getting your attention? Clearest? (1 being the best and 4 being the least)

# 4. Messages and Action (15 minutes)

A key objective of the communications activities we are discussing today is to make Canadians aware of how the environment affects people's health and to motivate Canadians to take action. Let's look at some messages that aim to tell Canadians the "why" in the story - why the environment and exposure to chemicals can pose health risks and why it's important for them and to learn more. [Review together using heading to guide discussion]

- a. Is this information compelling? Does it make you care about the links between your environment in and around your home and your health? Does it motivate you to take action to learn more and maintain a healthy home?
- b. What do you think of the notion of "Being your own risk manager"? (see the last bullet under "How can I reduce exposure?)

On the handout, there is a set of nine tips or actions you could take to help protect your health from common environmental factors in and around the home. [read aloud]

5. What do you think of these tips or actions? Are they what you were expecting when we talked about protecting against environmental factors in and around the home?

Note for moderator: There are two variations for messaging on radon.

Healthy home tip #3 "*Reduce your lung cancer risk, measure the radon gas in your home. Pick up a do-it yourself kit or hire a professional*" links the health impact to the message whereas the radon message founds on the creative concept tip card, tip #4 reads "*Test your home for radon. Pick up a do-it yourself kit or hire a professional*" does NOT link to the health impact.

- 6. Does the message that refers explicitly to a health impact in the call to action resonate more or less with participants?
- 7. Are they clear/reasonable to do?
- 8. Do you think that seeing these helps to reassure you that you are taking positive steps to keep your home healthy?
  - a. Is there enough information to motivate you to take action?
  - b. Are they useful? Helpful/Relevant?
  - c. Are they too simplistic or obvious?

# 5. Mobile App (10 minutes)

We have looked at potential communication tools for helping maintain a healthy home, along with specific steps to take. Now, we are going to talk about another way to deliver these messages, through a mobile app. (Read app description below)

### Healthy Home App

The purpose of the mobile app would be to inform and engage Canadians to maintain a healthy home. It would be a "go to" source for information plus have additional push features to help users be 'on-top' of their home's health.

Please take a minute to review the full written description of the app before we discuss it as a group.

- 9. What do you think of using an app to communicate steps and motivate you to take action to protect your home from environmental factors and household products? Would you use it? Why/why not?
- 10. What are the elements you would use? Do you have any concerns about the app (e.g., make it less useful, friendly)?
- 11. Would you be interested in receiving information on specific, individual chemicals that the Government is assessing for health risks? These would be chemicals that you may have heard of before such as BPA, phthalates and flame retardants so that you could learn about where these chemicals are found, what are the health effects, what you can do to minimize risks?

## 6. Wrap up (2 minutes)

12. Is there anything that we haven't talked about or that you would like to add before we go?

### THANK YOU

# APPENDIX C CREATIVE CONCEPTS

APPENDIX C: Creative Concepts

APPENDIX D RATING SHEET

# APPENDIX D: Rating Sheet

# RATINGS

### Everyday Hero

	Weak		Neither Weak Nor Strong		Strong
Overall appeal (approach, slogan, tone,					
visuals, colour)	1	2	3	4	5
Clarity of the message (what it is trying to tell you)	1	2	3	4	5
Focus (draws your attention)	1	2	3	4	5
Motivating (makes you want to look for information,					
act on some suggestions)	1	2	3	4	5
	Overall appeal (approach, slogan, tone, visuals, colour) Clarity of the message (what it is trying to tell you) Focus (draws your attention) Motivating (makes you want to look for information,	WeakOverall appeal (approach, slogan, tone, visuals, colour)1Clarity of the message (what it is trying to tell you)1Focus (draws your attention)1Motivating (makes you want to look for information,1	WeakOverall appeal (approach, slogan, tone, visuals, colour)12Clarity of the message (what it is trying to tell you)12Focus (draws your attention)12Motivating (makes you want to look for information,	WeakNeither Weak Nor StrongOverall appeal (approach, slogan, tone, visuals, colour)123Clarity of the message (what it is trying to tell you)123Focus (draws your attention)123Motivating (makes you want to look for information,123	WeakNeither Weak Nor StrongOverall appeal (approach, slogan, tone, visuals, colour)1234Clarity of the message (what it is trying to tell you)1234Focus (draws your attention)1234Motivating (makes you want to look for information,1234

### I'd Do Anything

		Weak		Neither Weak Nor Strong		Strong
a.	Overall appeal (approach, slogan, tone,					
	visuals, colour)	1	2	3	4	5
b.	Clarity of the message (what it is trying to tell you)	1	2	3	4	5
C.	Focus (draws your attention)	1	2	3	4	5
d.	Motivating (makes you want to look for information,					
	act on some suggestions)	1	2	3	4	5

### Healthy Home Toolbox

1166		Weak		Neither Weak Nor Strong		Strong
а.	Overall appeal (approach, slogan, tone,					
	visuals, colour)	1	2	3	4	5
b.	Clarity of the message (what it is trying to tell you)	1	2	3	4	5
C.	Focus (draws your attention)	1	2	3	4	5
d.	Motivating (makes you want to look for information,					
	act on some suggestions)	1	2	3	4	5

### There's More Than...

		Weak	I	Neither Weak Nor Strong		Strong
а.	Overall appeal (approach, slogan, tone,					
	visuals, colour)	1	2	3	4	5
b.	Clarity of the message (what it is trying to tell you)	1	2	3	4	5
C.	Focus (draws your attention)	1	2	3	4	5
d.	Motivating (makes you want to look for information,					
	act on some suggestions)	1	2	3	4	5

### Overall, which is your favourite concept? (Ranking: 1 being your favourite and 4 being your least favourite)

а.	Everyday Hero	
b.	I'd Do Anything	
С.	Toolbox	
d.	There's More Than	

# APPENDIX E INFORMATION SHEET #1 NINE HEALTHY HOME MESSAGES

APPENDIX E: Information Sheet #1 Nine Healthy Home Messages

## **Healthy Home Tips**

### **Chemicals**

- **1.** Lock up your household chemicals. Protect young children by always keeping chemicals and pharmaceuticals out of reach.
- 2. Always read and follow the labels on household chemical products, including pesticides. Use them carefully, especially around children.

### Air Quality

- **3.** Reduce your lung cancer risk, **measure the radon gas in your home**. Pick up a do-it yourself kit or hire a professional.
- **4. Protect your home from carbon monoxide (CO).** Install at least one certified CO alarm outside bedrooms. Keep the door between your home and garage closed.
- **5. Improve ventilation in your home**. There are many ways to do this including opening windows more often or using an exhaust fan. If you have forced air heating/cooling, regularly change the air filter.
- 6. Protect your home from mould. Check your home for damp spots or visible mould and clean it right away.
- 7. Take off your shoes just inside the front door. The soil outside can contain hazardous substances that you don't want to track throughout your home.

### Water Quality

- 8. If you know or suspect you have lead in your drinking water, you can reduce your exposure by letting the tap water run until it is cold before using it for drinking, cooking, or making baby formula.
- 9. Dispose of household chemicals and pharmaceuticals through a take back or hazardous waste program. Keep them out of our water, soil and air never down the drain.

# APPENDIX F INFORMATION SHEET #2 YOUR HEALTHY HOME – HOW YOUR ENVIRONMENT AFFECTS YOUR HEALTH

# APPENDIX F: Information Sheet #2

# Your healthy home - How your environment affects your health

#### Connection between chemicals and the home

Most of us spend approximately 90% of our time indoors. We think of our homes as safe places where we raise our children, begin and end each day, and entertain friends. There are chemical health risks in every home.

#### How can I be exposed?

- > Potential health risks from harmful chemicals come in many shapes and forms. We can be exposed to them through the air, water, soil, the products we use, and the food we consume.
- Sources may include: household cleaners, pesticides, pharmaceuticals being poured down the drain, paints, carbon monoxide, and radon.

#### Who is at greater risk?

Groups that may be more vulnerable include children, pregnant women, and seniors. For example: children come into closer contact with their environment than adults. They crawl on the floor and put their fingers in their mouths. They may also be more sensitive to some harmful substances because of their stage of development.

#### Health effects

- > Health effects may include:
  - Breathing problems, skin and eye irritation, reproductive and developmental issues, and cancer
- > Facts:
  - The World Health Organization estimates that environmental factors are responsible for 13% of diseases in Canada.
  - Unintentional poisoning is one the leading causes of preventable injury and death among children under five in Canada.
  - Radon, a gas that can get into our homes, is the no.1 cause of lung cancer for non-smokers.

### How can I reduce exposure?

- > Be your own risk manager!
- > There are simple steps we can take to make our homes healthy and reduce our exposure to harmful chemicals. You may be surprised at how these simple actions are helping to protect your health.

 $\begin{array}{c} \mbox{Appendix}\ G \\ \mbox{Description}\ of the Mobile \ App \end{array}$ 

# APPENDIX G: Description of the Mobile App

The Healthy Home app will provide useful information to Canadians on how they can keep their home healthy. The purpose of the app would be to inform and engage Canadians to maintain a healthy home.

- The content of the app would include information on environmental health issues in and around the home, such as household chemicals, mould, radon, and carbon monoxide.
- The app would have additional features to help users be 'on-top' of their home's health.

Here are some ideas to help you get a sense of its content and potential use.

- <u>Calendar</u>:
  - Pre-populated with seasonal reminders such as, change your air filter every three months, or to test your carbon monoxide detector.
- <u>Check-lists</u>:
  - For each room of the house, healthy home checklists, for example: Kitchen: check for mould, turn on fans when cooking, etc.
  - Thematic checklists, such as "Renovations & DIY Projects", "Spring Cleaning", "Arts & Crafts", "Household cleaning products: storage & use"
- <u>Partners/Resources in your area</u>:
  - Linking with municipalities for information such as upcoming take back or hazardous waste programs.
- <u>Rewards</u>:
  - Users gain points, such as for completing tasks in the various check lists
  - After a set number of points gained, the user gets an encouraging message on how they have made a difference in the lives of their family by making their home healthier.
- <u>Information:</u>
  - The "Science" i.e., easy to understand science based information for Canadians
  - "Chemicals 101" what are they, how they may be harmful, and how you can reduce exposure)
  - Simple, easy to understand information on specific, individual chemicals where are they found, what are the health effects and what can you do