



Study of Health Professionals' Awareness and Perceptions of Environmental Health Issues (Chemicals and Health) – 2019

FINAL Report

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Study of Health Professionals' Awareness and Perceptions of Environmental Health Issues - (Chemicals and Health) – 2019

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Prepared for Health Canada

Supplier Name: Leger Marketing Inc.
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This public opinion research report presents the methodology and the results of a series of focus groups conducted by Leger Marketing Inc. on behalf of Health Canada. The research was conducted with health professionals between July 18 and August 20, 2019.

Cette publication est aussi disponible en français sous le titre : ÉTUDE SUR LA NOTORIÉTÉ ET LES PERCEPTIONS DES PROFESSIONNELS DE LA SANTÉ À L'ÉGARD DES QUESTIONS DE SANTÉ ENVIRONNEMENTALE (PRODUITS CHIMIQUES ET SANTÉ)

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EXECUTIVE SUMMARY

Leger is pleased to present Health Canada with these findings from a series of focus groups on the awareness and perceptions of environmental health issues and Health Canada Materials on the subject. This report was prepared by Leger, the research firm contracted by the Department of Health (contract number: HT372-192583/001/CY, awarded June 16, 2019).

Background

Family physicians are a front-line health resource for many Canadians, particularly among vulnerable populations. They are a reliable and credible resource, and as such, they are important partners for Health Canada in disseminating and strengthening the federal department's messages.

There is some evidence to suggest that environmental health, in particular related to chemicals and pollutants in Canadians' living environments, is not a key component of family physician visits.

As such, Health Canada wants to ensure that it is effectively engaging family physicians in Canada on this issue in the coming years.

It is in this context that this study explored physicians' awareness and perceptions of environment health, with an emphasis on chemicals of concern and pollutants in an around the home, to ultimately allow Health Canada to more effectively tailor materials for, and build relationships with physicians.

Objectives

The qualitative research objectives were to assess:

1. The perceptions and awareness of health risks of chemicals and pollutants found in and around the home, and Government of Canada's Chemicals Management Plan
2. The concerns regarding the impact of household chemicals of concern and pollutants on the health of their patients, with a focus on vulnerable populations
3. The sources of information on environmental health and barriers/challenges/ suggestions for discussing with patients
4. The preferences for tools/materials from Health Canada and information content
5. The recommendations for health professional organizations that Health Canada could partner with on environmental health and the CMP

Overview of the Methodology

A total of eight (8) “mini” groups were planned in four (4) different provinces: Nova Scotia, Quebec, Ontario and British Columbia. Two separate groups were planned in each location, for a total of eight (8) groups.

A first series of groups (4) were conducted with physicians working mainly in urban areas in their respective provinces. These physicians were located in the Census Metropolitan Area (CMAs) of the following cities: Halifax (NS), Montreal (QC), Toronto (ON) and Vancouver (BC). A second series of groups (4) were planned with physicians working mainly in rural areas : Ontario, Quebec, Nova Scotia and British Columbia. Due to recruitment problems, the group of rural physicians in Quebec was cancelled. Given the difficulty in obtaining lists of physicians who accept to participate in opinion research in rural Quebec, recruitment had to be done through direct calls to medical clinics from numbers available in the telephone directory. Since recruitment took place in the middle of the summer vacation period, it has not been feasible to meet the quota set for this group. It should be noted that "rural" recruitment has been difficult in every region, not only in Quebec. A total of 7 groups were therefore carried out under the mandate.

Groups were comprised of family physicians reflecting as much as possible, a good mix of age and gender. Groups were held online via the Itracks Video Chat platform.

Recruitment

Leger was responsible for participant recruitment. Leger recruited six (6) physicians in each group to ensure that at least four (4) or five (5) would show up for the group discussion. Recruitment was done over the phone using lists of family physicians. Recruiters work from lists of physicians who have already participated in opinion research in the past and who volunteer to participate in such research. When these lists become insufficient, cold calls were made directly to clinics. Groups were held in evenings as daytime events make recruitment more difficult with physicians. The screener guide was developed by Leger in collaboration with the project authority, so the profiles of physicians clearly matched the research objectives.

The recruitment screener informed physicians of their rights under Canada’s Privacy legislation and the Standards for the Conduct of Government of Canada Public Opinion Research. More specifically, that their confidentiality was guaranteed, and that participation was voluntary. They were also informed that the results of the research were going to be made available to the public through Library and Archives Canada.

Physicians received an honorarium of \$425 for their participation in the discussion.

Dates and Locations

The following table shows the dates and locations of physicians for all focus groups.

City	Language	Recruit	Participate	Date
Toronto (urban)	EN	6	5	July 18
Ontario (rural)	EN	6	4	August 20
Montréal (urban)	FR	6	6	July 18
Québec (rural)	FR	6	0	CANCELLED
Halifax (urban)	EN	6	3	July 22
Nova Scotia (rural)	EN	6	4	July 25
Vancouver (urban)	EN	6	6	July 22
British Columbia (rural)	EN	6	5	August 20
Total		48	33	

Moderation

Groups lasted approximately 90 minutes, and were conducted in English (except in Montreal, where the groups were conducted in French). The moderation of the groups was carried out by a senior researcher from Leger.

Overview of the Qualitative Findings

General Knowledge of Environmental Health Issues

Participating physicians were aware of health issues related to the environment. They were all able to define what it was and give examples of it. The majority of participants felt that the environment, both water and air quality as well as the living and working environment, is an important determinant of the health of Canadians.

However, the majority of them considered their level of knowledge in this regard to be quite limited beyond general awareness. They did not consider themselves to be overly well informed on the subject. Few physicians participating in the focus groups had to treat patients with environmental health problems, except for cases of allergies or other problems caused by a pre-existing health condition.

Very few participants recalled seeing or reading environmental health information published by Health Canada. In fact, very few recalled specific initiatives. At best, some vaguely recalled information on radon, carbon monoxide, Zika, Lyme disease and mould.

The Importance of Environmental Health

Although considered an important issue to physicians, environmental health does not translate to a priority in their practice. Unless a patient presents particular risks due to a specific condition where the patient directly raises the environmental aspect of a problem or if there is doubt about the cause of symptoms, environmental health is not included in the regular topics covered during routine patient visits. Physicians consider that the time spent with each patient is too short and does not necessarily allow the environmental dimension of health to be addressed each time. Only if a patient addresses the subject directly, will it be part of the discussion.

Obstacles that Keep Canadians from Being Well-Informed on Environmental Issues

According to physicians, access to health knowledge and information is more difficult for immigrant populations in some parts of the country. They felt it was important for Health Canada to disseminate information in languages other than English and French to make the information accessible to as many people as possible. In addition to the language barriers posed by immigration, the low health literacy of many Canadians is also an issue that can hinder the dissemination of vital information. Health Canada must take these factors into account in its efforts to communicate with the public.

Environmental Health, A Public Health Issue

Physicians do not feel it is their role to inform Canadians on potential risk factors, viewing environmental health rather as a public health issue, mainly important at a preventative stage. They also consider that they lack the necessary expertise to discuss environmental health issues with patients. Indeed, physicians consider that their role is less to inform the public about environmental health than to treat the potential direct impacts of environmental factors on the health of their patients. Informing and educating the public, fighting myths, beliefs, misinformation and raising public awareness is seen as falling under Health Canada's role and responsibilities. Physicians consider it is important that Health Canada provides

verified and reliable information to Canadians. As such, physicians consider that Health Canada's reputation can be reassuring to Canadians.

Health Canada, A Credible but Ineffective Resource

Most of the physicians who participated in the focus groups have a good opinion of Health Canada. Physicians interviewed in the focus groups considered Health Canada to be a credible source of information. However, most of them almost never use Health Canada resources and information in their work. They prefer sources provided by Canadian health associations (e.g., Canadian Lung Association, etc.) or peer-reviewed sources.

For now, if necessary, physicians will search the Internet (Google) for credible and useful information on environmental health issues. A few physicians reported having a hard time finding information on the Health Canada website. They considered the website difficult to navigate. There is a clear need expressed by physicians to have a site that archives and stores information on the most common environmental health issues in Canada, such as a credible searchable repository. This was reflected in the review of the Healthy Home website which was well received as a centralized resource for their patients.

Opinion About Health Canada Documents

Physicians expressed a preference for material resources that are simple, clear, direct, accurate, colourful, evidence-based and that provide up-to-date information. Documents must be short enough to be used, read and understood quickly by both physicians and patients. If the resource is seen as too big or too deep, physicians doubt that Canadians will bother to search for and read this type of material.

Note on the Interpretation of the Findings

The views and observations expressed in this document do not reflect those of Health Canada/PHAC. This report was compiled by Leger and based on the research conducted specifically for this project. The analysis presented represents what Leger believes were the most salient points during the focus group sessions. All words and sentences in quotation marks are actual verbatim comments from physicians, selected by Leger for their capacity to directly convey the views and opinions of physicians, in their own words.

Declaration of Political Neutrality and Contact Information

Findings from these the focus groups should be considered directional only, and results should not be projected as representative of all general physicians in Canada. It is intended to provide deeper insight into the underlying reasons for opinions or lack thereof.

Declaration of Political Neutrality

I hereby certify, as chief agent of Leger, that the deliverables are in full compliance with the neutrality requirements of the [Policy on Communications and Federal Identity](#) and the [Directive on the Management of Communications—Appendix C](#) (Appendix C: Mandatory Procedures for Public Opinion Research). Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, party positions, or the assessment of the performance of a political party or its leaders.

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DETAILED FINDINGS

General Level of Knowledge of Environmental Health Issues

Physicians have a strong awareness of environmental health issues in Canada. Indeed, all physicians participating in the focus groups had already heard about environmental health before the focus groups. Physicians easily provided a list of topics associated with environmental health, such as air and water quality, exposure to chemicals, mould and other potential issues in one's home and other elements in one's environment which may or could cause skin, respiratory or other types of health problems. Respiratory problems, such as asthma, COPD and seasonal allergies, are among the environmental health problems physicians see most often in their clinical work. Air pollution and climate change were also mentioned as important factors related to respiratory problems.

Beyond air and water quality, housing (namely mould) and place of work are considered as important determinants of environmental health. Indeed, many family physicians perceive the environment as a factor in several health conditions. By their own admission, this field is very broad and covers a wide range of issues, so none of the physicians really feels like an expert in the field. Some of the workplace elements mentioned include asbestos-related diseases, long-term exposure to chemicals (such as solvents) or other chemicals that affect the respiratory system. Elements related to place of residence include allergies or dermatological diseases, exposure to radon and mould, exposure to smoke from forest fires (particularly in the West during the summer). Physicians also spontaneously mentioned pregnant women, Indigenous peoples and low income Canadians as being more vulnerable to exposure to environmental health problems.

According to most physicians in the groups, family physicians in Canada are not particularly well informed on the subject. In fact, many would not know what to do, what to ask or what to recommend to patients with specific environmental health problems. This is too broad a field of medicine and does not receive the same kind of attention from physicians. The only exception were physicians who have a specialty in occupational health.

The Importance of Environmental Health

A majority of physicians believed that environmental health issues are very important. When they think of environmental health problems, they think first and foremost of people who smoke or who are exposed to second-hand smoke, people

with allergies, people with chronic obstructive pulmonary disease (COPD) and pregnant women. However, according to physicians, the theme of environmental health problems is not really "attractive" in general medical practice. The subject attracts very little interest in the profession, so there is little emphasis on related issues.

In this regard, few physicians recalled Health Canada's environmental health initiatives. Without denying the existence of environmental health issues, physicians tended to consider it a lower priority than other health issues, unless a patient has a known condition that can be caused or aggravated by their immediate environment. Radon, carbon monoxide, asbestos, Zyka, Lyme disease and mould are Health Canada initiatives that physicians were more likely to recall during the groups. However, this recall was rather "imperfect" or non-specific. Phrases like: "I think I remember something about radon", "Wasn't there a warning about Zyka a couple of years ago?". Physicians were not aware of any Health Canada initiatives on chemicals and the Healthy Home program. Some physicians mentioned at the outset that they received a lot of literature from Health Canada and other organizations that they did not read.

It should be noted that physicians in British Columbia appeared to be more concerned or showed a heightened sense of awareness of environmental health issues given the recent history of major forest fires in that province. The same could be said for some rural physicians in Ontario that deal specifically with the farming community (e.g. risks related to pesticide use).

Not all physicians appeared to have had to manage patients with environmental health problems other than allergies or health problems due to a prior health condition. However, they generally felt that patients are the most proactive when it comes to environmental health issues. It was the patients who raised the issues and asked the questions. In their view, it is normal for the public to try to protect themselves from risks or threats related to environmental health problems. Indeed, patients are increasingly exposed to information about environmental health problems, whether through the media, the Internet, at work from colleagues, friends or family. Physicians must therefore deal with patients who are more informed than in the past and who are also exposed to a myriad of myths and beliefs, which makes their work and communication with patients very difficult. Physicians tended to be divided by the extensive use of "Dr. Google" by their patients. While some believe that access to medical information on the Web as an overall positive impact on patients being generally more aware of what can effect their health, some believe that the burden of this over- if not mis-information is transferred to the time-challenged health professional needing to answer more or less relevant questions.

Obstacles that Keep Canadians from Being Well-Informed on Environmental Health Issues

Language barriers and knowledge are probably the issues that were most frequently mentioned in the focus groups as being major barriers that could effectively prevent segments of the population from being informed about these health issues. Indeed, the number of new Canadians in some urban areas of the country poses the problem of making essential health information accessible to a wide range of ethnic groups, if literature is only offered in English or French.

In addition to a language barrier, literacy rate is also an important factor that should not be overlooked. Low health literacy can interfere with a campaign to inform the Canadian public about environmental health issues and problems. Low health literacy is more than an immigration issue and affects many Canadians, so literacy levels should be considered in the communication of important public health information.

Also, as mentioned above, the abundance of myths and beliefs about environmental health is a real issue that must be addressed by Health Canada. More and more Canadians are exposed to health information, whether it comes from the media, the Internet or from those around them. Physician expertise is, therefore, put to the test in the face of this information and these beliefs, especially since family physicians consider themselves to be very ill-equipped to meet the demands of Canadians related to environmental health. They often feel unable to conclude or offer satisfactory responses to patients, so they refer them to specialists or send them for tests. In fact, many physicians complained that they were not sufficiently equipped or trained to respond to these types of requests.

Perspectives of Physicians on Patients Vulnerable to Environmental Health Hazards

In all focus groups, physicians identified people with chronic respiratory diseases (i.e., COPD) and people with allergies as those most at risk of being affected by environmental health hazards. People with respiratory or dermatological allergies are the most common cases seen by family doctors.

Pregnant women are also a population group perceived by family physicians as being at risk, but also as a group concerned about environmental health. Indeed, according to family physicians, pregnant women are likely to be concerned about environmental health hazards, particularly related to dietary issues such as heavy metals in fish and pesticides on vegetables.

As mentioned above, immigrants are also viewed as an at-risk group (mainly due to intense heat and cold), and a group that can be difficult to reach due to language barriers and health literacy.

Family physicians working in urban areas also identified homeless Canadians as a group particularly at risk for a wide range of environmentally related diseases and health problems. Family doctors in rural areas mentioned workers in industrial settings exposed to chemicals, solvents, fuels or moulds as Canadians at higher risk of developing health problems due to the work environment.

Environmental Health, A Public Health Issue

Educating the Canadian public about environmental health issues is considered important by family physicians. According to them, it is the responsibility of Health Canada and the Public Health Agency to fulfill the role of public awareness and education. Indeed, there are so many myths, beliefs and misinformation being disseminated that physicians consider it important for Health Canada to provide credible and verified information to Canadians. As a “public health issue” mainly important at a preventative medicine stage, physicians do not feel it is their role to inform Canadians on potential risk factors.

Indeed, physicians consider this aspect less relevant to their own role since they felt they were hardly or not prepared at all to respond to patients who would raise environmental health issues. In fact, they would refer them to specialists (i.e. allergist, respirologist, dermatologist) to manage patients on this subject. Many of them have had to deal with a local or provincial public health agency, poison control centres, or other specialists when patients come with specific and specialized requests.

Physicians tended to believe their role is in advising or treating patients on environmental health only when specific symptoms are present. They felt they lacked expertise in the area of environmental health per say but would generally know when to refer or how to treat these symptoms. All family physicians participating in the focus groups mentioned that they do not have time to discuss the environment with their patients. Indeed, the time spent with their patients is extremely limited. Physicians feel they cannot afford the time to discuss environmental health issues as part of a normal health check exam, unless the patient comes in with a specific concern.

Several family physicians seemed concerned that they would have to start integrating environmental health issues into the regular patient visit routine (standard health questionnaire). Feeling very time challenged when it comes to patient visits, they feel they have to stick to whatever is symptomatic at the time of the visit or a specific known chronic condition they need to monitor. Having limited time with each patient, they do not consider it essential to integrate environmental

issues into the routine questionnaire. They will discuss the environment with their patient if they have any doubts about the origin of a health problem or if the patient raises the issue directly. Some physicians said they may bring up environmental health issues if they are aware of the patient's occupation (i.e. farming, working with chemicals at a plant, exposure to dust) or if they know the patient lives in poorer living conditions (i.e. risk of mould).

Since most physicians believe they have limited knowledge in environmental health (except for those who specialize in occupational health), most family doctors would likely use Google to find information if the need arose. There is a clear need for family physicians to have access to credible, reliable, curated and documented information on the most common environmental health problems. For now, family doctors would search for information in different places according to their preferences and habits: Google, specialized websites, American public health websites, university websites, etc.

Health Canada, A Credible but Ineffective Resource

Most family physicians who participated in the focus groups have a positive opinion of Health Canada. Health Canada is seen as a credible and reliable source of information, which can reassure patients. However, very few physicians have ever used Health Canada information and resources in their work, and only in exceptional cases. In fact, the majority of physicians would consult other sources of information before consulting Health Canada (e.g., the Asthma Association of Canada, the Canadian Lung Association, etc.). They said they felt that they would find more specialized information from these associations than is currently available from Health Canada. In all focus groups, physicians expressed the need for a credible searchable repository of information on environmental health issues.

Several mentioned that they mainly search Google to find useful information when they have complex cases. They get an idea of the website's credibility and reliability before using the information they have found. The resources offered by Health Canada are not well known and do not resonate in the minds of physicians when they need to do research. Some said they did not even know what is on the Health Canada website, while others said it is difficult to navigate the website and find the information they are looking for.

General Opinion About Health Canada Documents

None of the physicians reported seeing any of the Health Canada documents before being shown them in the focus groups. Once they became aware of the content of the material, the reaction was rather neutral. In fact, the information may be seen as relevant, but only a minority of family physicians would use it in their practice.

Physicians expressed a preference for material resources that are simple, clear, direct, accurate, colourful, evidence-based and that provide up-to-date information. Documents must be short enough to be used, read and understood quickly by both physicians and patients. If the resource is seen as too big or too deep, physicians doubt that Canadians will bother to search for and read this type of material. Physicians expressed doubts about some of the materials presented that did not appear to be intended for their profession but rather for other professionals, such as contractors or pharmacists. While others pointed out that some documents seemed to be too general, too "common sense" and unnecessarily targeted at a specific population group. This was the case more specifically for the ten tips brochure, part of the Healthy Home campaign.

Reactions from physicians in the Quebec and Ontario focus groups were rather negative towards the material presented in the focus groups. They found some information too abstract and not specific enough. In a few cases, the "call to action" was missing. Some mentioned that it is not the role of family physicians to provide this information and educate Canadians on these topics, they consider it to be Health Canada's role. They did not see how they could take the time to educate and inform their patients about environmental health when they only have a few minutes with each patient. Few of them stated that they intend to pursue the subject of environmental health personally because it is too broad and complex a subject and not central to their work. They would prefer that there be a website that centralizes this type of information and that could be used as a reference if necessary. However, a few physicians mentioned that if the public is warned about a particular subject or environmental health risk, they must also be warned because they know that their patients will question them about it.

Reactions from physicians in the Vancouver and Halifax groups were much more positive towards the documentation. Among the positive comments, physicians mentioned that they like documents that present statistics and information in a simple and concise manner. This type of material is ideal to help patients learn about a new subject. Some physicians like to have documentation to offer their patients, so the brochure format would be interesting for patients. Others noted that they already have too many brochures and posters on display or to offer patients and questioned the format and relevance of adding more. Some physicians argued that Health Canada should adapt to be more modern in its communications and to reach younger people. The Internet and social media should therefore be used to communicate information and better target specific groups. The environmental aspect was also raised by a few physicians. Indeed, brochures are now perceived by many doctors as a waste of paper that should be avoided.

Material

Talc Infographic

Positive Points of the Material

It is simple, clear and appreciated by many physicians. This information could be easily absorbed by most of the Canadian public. It is not too complex, although there are a few rather technical terms. Visual content is perceived as positive because it simplifies the message. The colours used are interesting and make the product attractive. A few physicians said they would be willing to display infographics like this in their offices.

Negative Points of the Material

The content is perceived as non-factual. The use of the term "may" leads physicians to believe that nothing is really proven. Several questioned the content of the material presented. In this sense, they would be reluctant to use and even discuss the subject with their patients. In their view, the message is too vague and ambiguous to be considered credible. Some physicians even believed that it could cause anxiety in some patients. They would therefore avoid using this type of material. The fact that the Infographic contained the phrase "speak to your doctor or health care provider", was seen as a negative. They believed this was a direct transfer of burden to them in an area they know little or nothing about.

Some physicians stated that they believe this is a publication in response to legal action that took place in the United States. It gave them the impression that Health Canada was responding to this. However, participating physicians did not know what to do with this information. "What should I do next? What do I say to my patient who has been using talcum powder for 20 years?" Many criticize the fact that Health Canada encourages patients and the Canadian public to discuss this with their doctors, but that they are not prepared to answer these types of questions and are not adequately trained and informed about what needs to be done. "The government has a role to play in informing Canadians - but it is passing the problem on to physicians - and we now have to deal with it. We are not prepared for that or what should be done next."

Talc Advisory

Positive Points of the Material

For many physicians, Health Canada provides important information in this document. Health Canada fulfills its role by providing this type of information to health professionals and the general public. The document is about precautions to follow. Many seemed to believe that the information is too specialized for the public, but it was generally well received by physicians. Many physicians appreciate details and statistics.

Negative Points of the Material

It is not sufficiently clear who is the target of this information, physicians and/or the public. Many physicians said that Health Canada could do a better job of reaching them directly. Most of them did not recall receiving or reading this documentation. Some wondered if this was the best way to inform the public and doctors about the danger of exposure to talc powder.

Several physicians also stated that they do not have the ability or capacity to identify the patients who use these types of products and who are affected by Health Canada's advice. The doctor is therefore probably not the best person to convey the message to patients. There should be a better way to inform people directly about the harmful effects of talcum powder. A few physicians said that the warning should be placed directly on the product if proven that talc is harmful.

Healthy Home Website

Positive Points of the Material

The website was well received by the doctors. Physicians generally believed that the website struck a good balance between depth of information (capacity of clicking to drill down) and the necessity to keep the language simple enough for the lay public. Many physicians found this website idea interesting and they would refer their patients to the site for consultation. Knowing that this resource exists is a good thing according to physicians. However, none of the physicians were aware that this site existed prior to participating in the focus groups. Physicians stated that they did not have time to explore the subject of environmental health themselves due to lack of time, so this centralized resource was well received. The website appeared credible to physicians and the information appeared to be fact-based. According to some physicians, this type of publication could be targeted to certain population groups that are more sensitive to chemical exposures, such as patients with cancer. They may find the information useful.

Negative Points of the Material

There is a lot of information on the website. This can be overwhelming for some people and interfere with message comprehension.

Some physicians do not believe that it is their job to give and relay this kind of information to their patients. Having time to discuss and refer patients to these types of resources is not possible for many physicians who mentioned that they already have too much to do with their patients and cannot afford to take the time to do this. Physicians did not really see how they could discuss these topics with their patients.

Other physicians also questioned the popularity of this type of website, not believing that many Canadians would visit it to access information. According to them, people do not bother to look for this kind of information personally when they are at home. They therefore believe that this could be an unnecessary Health Canada expenditure that could have been put to better use. Some physicians doubted that Canadians who are going to renovate their homes will discuss this with their doctor beforehand. In their experience, this kind of situation does not happen in real life.

Top Ten Tips

Positive Points of the Material

Unlike the website, which was overwhelming in terms of information, this document is simple and effective. Prioritizing the information into ten practical tips was considered an excellent idea by focus group physicians.

Many physicians liked the brochure, which was perceived as being very clear, bold and simple. Not too much information and short enough to be readable are positive elements. The simplicity of a product like this is interesting for people to learn about something.

Physicians participating in the groups believe that it is Health Canada's responsibility to produce this type of document and make it accessible to the public. In their view, this document should be sent to all Canadian households. The fact that it is a Health Canada document makes it legitimate.

Negative Points of the Material

Although the information was considered essential by the physicians participating in the focus groups, many felt that it should not be the responsibility of family physicians to communicate this type of information. In fact, several physicians said that this is not the kind of discussion they have with their patient and others should shoulder this responsibility: pharmacists, real estate agents, etc. "It's something your real estate agent should give you when you buy your home, but should not be the subject of discussion between a doctor and his patients." They also mentioned that it would be nice to find this type of information in renovation centres.

A few physicians were critical of Health Canada for trying to give them an additional responsibility that does not fall within their area of expertise. They even stated that it would not be appropriate for this type of material to be in their offices. "It is not relevant to my work as a family doctor and what I do for the patient. None of this comes to mind when I talk to the patient. It would not be appropriate to have this in our office. Put it in the newspaper."

Seniors at Home: An Environmental Health Guide

Positive Points of the Material

This was seen by family physicians as very basic material. This is information that everyone should have. It seemed adapted to the general public, not doctors. The images, colours and overall look and feel of the documents were appreciated by a few physicians. There should be a link to a website.

Some physicians also liked the fact that the document is aimed at seniors directly. In their eyes, this makes targeting simpler and easier, and increases the chances that the document will actually be consulted by the people concerned. Deploying this document in community centres would be a good strategy to ensure that the document is consulted.

Negative Points of the Material

Several physicians mentioned the fact that, although the documents are targeted to seniors, the advice in the document applies to everyone. Many wondered why the documents were targeted when they could be useful to others, not just seniors. On the other hand, the information included in these documents is so general and so common sense that most older people are already familiar with it. Some physicians wondered if Health Canada was probably missing its target with this document.

Other physicians pointed to the length of the text on the website as potentially problematic for older people. Many physicians questioned the possibility of seniors reading the document. As a result, a few questioned the usefulness of these documents, which seems too general to be able to bring about behavioural changes among readers: "I don't think it's useful at all. Everyone knows that. I don't think there's anything that everyone doesn't already know. Those who do not yet know it will not read the pamphlet. I like campaigns that implement change - but I don't know if reading it will change people - I'm not sure about this booklet. It's too general - I don't see the point."

Conclusion

Family physicians have a general understanding of what "environmental health" is, and while they do recognize its importance, it remains a topic they rarely refer to in their practice. Physicians feel they do not have enough time with their patients to discuss preventative medicine or to broaden their standard health check questionnaire to include environmental health issues. They can only respond to the reason which prompted the patient visit. Most say they cannot perform a general health assessment for their patients, where issues such as environmental concerns could be discussed. For them it remains a "public health issue" largely associated with preventative medicine, and would only address it in

their practice if and when a patient presents themselves with symptoms which could be associated with an element in their environment or has a known condition which can be exacerbated by their immediate environment.

As such, they believe that raising awareness and reducing the health risks in Canadians' environments is not "their role". This should be the responsibility of public health authorities and public awareness campaigns. In this regard, they view Health Canada as a credible and trusted source of information both for them and their patients. In terms of their own practice, if confronted with a specific environmental issue, physicians do not use one trusted source. While the search would be initiated in Google, they would recognize trusted sources along the way, to help them form a professional opinion. For most, that search would not start with Health Canada for lack of habit.

When evaluating the different materials they were presented, physicians felt materials designed to inform the public on public health issues was a role that belonged to Health Canada and felt generally positive about the documentation and its direction. However, they had fairly strong preferences in what they felt would be most effective for patients and, ultimately, for them. While they believe brochures have become a less effective tool, e.g. too many of them, not being left in their waiting areas anymore, they tended to like their content. Making things simple for the patient, in quick bullet point form or a quick guide is something they believe in. Physicians particularly liked the Healthy Home website which, to them, is the only known repository of "all you need to know" about environmental health hazards in your home. They would gladly direct patients, especially vulnerable ones, such as the elderly, pregnant women or lower-income Canadians to the website if they knew more about it. The easy drilldown menus and the variety in the presentation of the content (infographics to text to videos) were positive. What generated more critical comments were materials that were viewed to be inconclusive (using words like "may" or "could" in the talc infographic for example) or materials that used the "talk to your physician" call-to-action. Since physicians feel it is Health Canada's role to inform Canadians, they do not agree with Health Canada transferring the burden to physicians. They do not feel equipped with the time or background to discuss such environmental health issue with their patients.

APPENDIX

SCREENER GUIDE

Study of Health Professionals' Awareness and Perceptions of Environmental Health Issues (Chemicals and Health) - 2019

Hello, my name is _____ from Leger Research. We are conducting a series of focus group discussions with family physicians 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.

Participation is completely voluntary. We are interested in your opinions. No attempt will be made to sell you anything or change your point of view. The format is a "round table" discussion led by a research professional with up to ten physicians. All opinions will remain anonymous and will be used for research purposes only in accordance with laws designed to protect your privacy.

[INTERVIEWER NOTE: IF ASKED ABOUT **PRIVACY LAWS**, SAY: "The information collected through the research is subject to the provisions of the Privacy Act, legislation of the Government of Canada, and to the provisions of relevant provincial privacy legislation. For more information about our privacy practices, please contact Health Canada's Privacy Coordinator at 613-948-1219 or privacy-vie.privee@hc-sc.gc.ca."]

A1.

May I continue?

- Yes 1
- No 2 —————▶ **Thank and terminate**

I need to ask you a few questions to see if you fit the profile of the type of people we are looking for in this research.

A2.

The group discussions we are organizing are going to be held over the Internet. They are going to be "online focus groups". Physicians will need to have a computer, a high-speed Internet connection and a WebCam in order to participate in the groupe. Would you be able to participate under these conditions?

- Yes 1
- No 2 —————▶ **Thank and terminate**

A3.

Physicians in group discussions are asked to voice their opinions and thoughts, how comfortable are you in voicing your opinions in a group discussion with others your age? Are you...?

READ OPTIONS

Very comfortable	1	MIN 5 PER GROUP
Fairly comfortable	2	
Not very comfortable	3	THANK & TERMINATE
Very uncomfortable	4	THANK & TERMINATE

Note to recruiter: When terminating a call with someone, say: *Thank you for your cooperation. We already have enough physicians who have a similar profile to yours, so we are unable to invite you to participate.*

Q1.

Do you or any member of your household or immediate family currently work for?

TICK ALL THAT APPLY

Advertising company	1	TERMINATE
Marketing/Market Research company	2	TERMINATE
A pharmaceutical company	3	TERMINATE
A biotechnology Company	4	TERMINATE
A government healthcare agency	5	TERMINATE
None of the above / Aucune de ces réponses	6	CONTINUE
I prefer not to answer	9	TERMINATE

Q2.

INDICATE GENDER, PLEASE TRACK WITHOUT ASKING DO NOT ASK

Male	1
Female	2

ENSURE A GOOD DIVERSITY OF GENDER IN EACH GROUP

Q3.

What age group do you belong to?

Under 25	1	
Between 25 and 34	2	
Between 35 and 44	3	
Between 45 and 54	4	
Between 55 and 64	5	
65 and older	6	
I prefer not to answer	9	TERMINATE

ENSURE A GOOD DIVERSITY OF AGE IN EACH GROUP

Q4.

Do you consider yourself to be a member of a visible ethno-cultural group?

- Yes 1
- No 2

Q5.

What is your ethnic background? RECORD

RECORD ETHNICITY: _____

Q6.

Could you confirm that you are a general physician?

- Yes 1 **CONTINUE**
- No 2 **TERMINATE**
- I prefer not to answer 99 **TERMINATE**

Q7.

Approximately how many years have you been practicing medicine, post fellowship in Canada?

Less than 10 years	1	
More than 10 years	2	
I prefer not to answer	9	TERMINATE

ENSURE A GOOD DIVERSITY OF EXPERIENCE IN EACH GROUP

Q8.

Is your medical practice located in an urban/suburban or in a rural area?

Urban (i.e. located within city)/Suburban (i.e. located immediately outside city)	1	
Rural area	2	
I prefer not to answer	9	TERMINATE

URBAN/SUBURBAN – invite for groups 1-3-5-7

RURAL – invite for groups 2-4-6-8

Q9.

Can you tell me approximately what percentage of your practice is ...

... Young children?	1
... Elderly?	2
... Women?	3
... New Canadians?	4
... Indigenous/Aboriginal Persons?	5
... Other?	6
... Refusal	96

Q10.

Have you ever attended a focus group discussion for which you received a sum of money?

Yes1 **CONTINUE – MAX 5 per group**

No2 GO DIRECTLY TO INVITATION SECTION

IF YES at Q10 ASK Q11

Q11.

And when was the last time you attended a discussion group?

6 months ago or less1 THANKS and TERMINATE

More than 6 months ago..2

Q12.

How many times did you attend a discussion group or an in-depth interview in the last five years?

5 times or more.....1 THANKS and TERMINATE

Less than five times.....2

Q13.

What topics have you ever discussed?

~IF THEY HAVE BEEN TO A GROUP ON ENVIRONMENTAL HEALTH IN THE PAST 5 YEARS, THANKS & TERMINATE~

INVITATION

We are thrilled to have you as one of our physicians in this study; your profile perfectly fits the target respondent we are looking for. We would like to invite you to participate in a focus group which will be facilitated by an experienced professional moderator, and will last approximately 90 minutes. The session will take place at [XX], on ____XX____ (date/time) __XX__.

For your participation, you will receive a cash gratuity of **\$425**.

Please note that the session will be video and audio recorded. Your interview may also be observed by people who are directly working on the research study.

Just a quick reminder that the groups of discussion are going to be held over the Internet. They are going to be "online focus groups". You will need a computer, a high-speed Internet connection and a WebCam in order to participate in the group.

INV1.

Are you interested in participating in this research study?

Yes

No TERMINATE

The information provided by you will be kept confidential and will only be disclosed to those who are directly working on the research that is relevant to the topic of discussion.

INV2.

Representatives of our client may be observing the discussion, but will not have access to any of your private information. You will be asked to sign a consent form in order to participate in this research. Would you be willing to do this?

Yes

No TERMINATE

PRIVACY SECTION

Now I have a few questions that relate to privacy, your personal information and the research process. We will need your consent on a few issues that enable us to conduct our research. As I run through these questions, please feel free to ask me any questions you would like clarified.

P1) First, we will provide **the online platform** and **session moderator** with a list of respondents' names and profiles (screener responses) so that they can sign you into the group. This information will not be shared with the Government of Canada department organizing this research. Do we have your permission to do this? I assure you it will be kept strictly confidential.

Yes 1 **GO TO P2**

No 2 **READ RESPONDENT INFO BELOW**

We need to provide the **online platform** and **session moderator** with the names and background of the people attending the focus group because only the individuals invited are allowed in the session and the facility and moderator must have this information for verification purposes. Please be assured that this information will be kept strictly confidential. **GO TO P1A**

P1a) Now that I've explained this, do I have your permission to provide your name and **to the online platform and moderator?**

Yes 1 **GO TO P2**

No 2 **THANK & TERMINATE**

P2) An audio and/or video tape of the group session will be produced for research purposes. The tapes will be used by **the team of researchers at Léger** to assist in preparing a report on the research findings.

Do you agree to be audio and/or video taped for research purposes only?

Yes 1 **THANK & GO TO Invitation**

No 2 **READ RESPONDENT INFO BELOW**

It is necessary for the research process for us to audio/video tape the session as the researcher needs this material to complete the report.

P2a) Now that I've explained this, do I have your permission for audio/video taping?

Yes 1 **THANK & GO TO Invitation**

No 2 **THANK AND TERMINATE**

As we are only inviting a small number of people to take part, your participation is very important to us. If for some reason you are unable to participate, please call so that we can get someone to replace you. You can reach us at ____ at our office. Please ask for ____.

To ensure that the focus groups run smoothly, we remind you:

- To make sure you are connected to Internet and logged on 15 minutes in advance of the group
- To turn off your cellular phones – to avoid disruptions during the group;
- Make sure your WebCam is ON and functional
- To bring reading glasses, if necessary, to be able to go over the test material;
- To make sure you will be located in a clear room (luminous)
- That the session will be recorded for analysis purposes only.

You will receive all the information to connect to the session before the group. We will also send you Health Canada materials by email to prepare you for participation. We kindly ask you to read it before the discussion session.

Email address : _____

Thank you very much for your collaboration!

Group specifications: General physicians

URBAN/SUBURBAN – invite for groups 1-3-5-7

RURAL – invite for groups 2-4-6-8

City	Language	Recruit	Participate	Tentative Date
Toronto (urban)	ÉN	6	4-5	July 18
Ontario (rural)	EN	6	4-5	August 20
Montréal (urban)	FR	6	4-5	July 18
Québec (rural)	FR	6	4-5	CANCELLED
Halifax (urban)	EN	6	4-5	July 22
Nova Scotia (rural)	EN	6	4-5	July 25
Vancouver (urban)	EN	6	4-5	July 22
British Columbia (rural)	EN	6	4-5	August 20
Total		48	32-40	

MODERATOR GUIDE

Introduction (10 MINS)

Introduction

Introduce moderator and welcome physicians to the focus group.

As we indicated during the recruiting process, we are conducting focus group discussions on behalf of the Government of Canada (Health Canada).

The focus of tonight's discussion is to get your perception and opinion regarding environmental health issues as well as your opinion on Health Canada's materials on this topic.

The discussion will last approximately 90 minutes.

Explanation

Other people who are also involved in this study will be listening to the focus groups. My colleague – who is an analyst at Leger – will be taking notes.

It is also important for you to know that your responses today will in no way affect your dealings with the Government of Canada.

Confidentiality – Please note that anything you say during these groups will be held in the strictest confidence. We do not attribute comments to specific people. Our report summarizes the findings from the groups but does not mention anyone by name. **The report will be available through Library and Archives Canada.**

We are going to take attendance for your incentive and to certify that you have participated.

Describe how a discussion group functions:

Discussion groups are designed to encourage an **open and honest discussion**. My role as a **moderator is to guide the discussion** and encourage everyone to participate. Another function of the moderator is to ensure that the discussion stays on topic and on time.

Your **role is to answer questions and voice your opinions**. We are looking for all opinions in a focus group, so don't hold back if you have a comment, even if you feel your opinion may be different from others in the group. There may or may not be others who share your point of view. **Everyone's opinion is important** and should be respected.

I would also like to stress that **there are no wrong answers**. We are simply looking for your opinions and attitudes. This is not a test of your knowledge. We did not expect you to do anything in preparation for this group.

It is also important that you talk loud enough for everyone to hear and that you **talk one at a time** so I can follow the discussion.

Please note that **I am not an employee of the Government of Canada** and may not be able to answer all of your questions.

Moderator introduces herself/himself.

Physicians should introduce themselves, using their first names only.

How many years have you been practicing medicine? Where is your medical practice located? What kinds of patients do you see in your practice?

As stated earlier, the **objectives of today's focus group are to better understand your opinion and perception regarding environmental health issues and your opinion regarding Health Canada materials on this issue.**

Section 1: Perceptions and Awareness of Environmental Health issues and Health Canada’s work on the Chemicals Management Plan and Healthy Home Campaign (10 MINS)

To begin, let’s talk a little bit about environmental health issues – i.e. impacts of chemicals, air, and water on health.

Environmental health can broadly be defined as risks to health that can occur through environmental factors from nature itself, products we use, the air we breathe, the food we eat, or the water we drink. Specifically, at Health Canada, they work to reduce the risks to Canadians from exposure to chemicals and pollutants in air, water, food, and consumer products, and also, climate change and noise, among others.

- Before you have read the material we sent you, what did you know about environmental health issues in Canada?
- Before e-mailing the material to you for review for the focus group discussion, were you aware of Health Canada's work on environmental health, specifically managing the health risks of toxic substances (Chemicals Management Plan)?
- What do you know about Health Canada’s activities and guidance for Canadians in keeping their home environment healthy, i.e., the Healthy Home campaign?

Section 2: Concerns about the Health of their Patients due to chemicals or pollutants (10 MINS)

- Do you consider that environmental health issues are important in Canada?

If yes, which ones in particular?

- And in your practice, how often do environmental health issues arise?

What issues in particular?

Do patients ask about any environmental health issues? Which ones?

Do you have some patients you perceive or who may self-diagnose as more vulnerable to environmental issues?

If yes, who and to what environmental contaminants or concerns?

- In your opinion, what are the main factors influencing your patients’ ability to protect their own health from contaminants/pollutants in the environment? (e.g. language barriers, lack of information, socioeconomic status, physical disabilities, geography, etc.)
- Do you think your patients follow physician advice related to environmental health?

- Are there any questions about environmental health you feel should be asked as part of regular check-up inquiries such as smoking, exercise, etc? For example, in your opinion, do you think it is important to ask patients if they've tested for radon in their homes, knowing that radon is the leading cause of lung cancer in non-smokers?

Section 3: Sources of Information and Barriers in discussing environmental health with Patients (15 MINS)

SECTION 3-A - Obtaining the information

- How do you currently obtain and/or receive information about impacts of chemicals and pollutants on health? How do you use this information in your practice?
- What are your main sources of information about environmental health? If you had to look for information about this, what would be your sources?
- Do you feel you have enough information on the subject of environmental health? Do you consider yourself well prepared for dealing with environmental health issues/patient concerns? **PROBE**

If not, PROBE: what is missing to be better prepared to deal with these kinds of issues? Are there some environmental health issues you are more knowledgeable of than others?

- Do you use any Health Canada materials in your practice?
If yes, how do you use this material? Is it for you or your patient?

How often do you refer to it?
- With respect to health issues related to the environment (e.g. contaminants, pollutants, chemicals), do you view Health Canada credible as a source of information?
PROBE: Why YES or Why NOT?

SECTION 3-B - Transferring information

- Do you give advice to your patients regarding any specific environmental health issues?
If so, PROBE: which patients?

If so, PROBE: what type of advice do you usually give your patients to minimize the impacts of their environments (the environment) on their health?

If so, PROBE: Do you have leave-behinds or brochures or any material to hand out to these patients?
- Do you encounter any difficulties when transferring information to patients related to environmental health? What kind of barriers/difficulties?

SECTION 3-C – Best practices

- In your opinion, what is the best way to transfer prevention information to patients who are vulnerable to environmental risks, and those who care for them?
- Have you developed tips for conveying this kind of information?
- What would enable you to better help your patients protect their health from environmental contaminants/pollutants/etc?

Section 4: Feedback on Health Canada’s Environmental Health Products in order to Identify Strengths, Weaknesses and Areas for Improvement (40 MINS)

FOR EACH OF THE FOLLOWING DOCUMENTS

1. TALC ADVISORY
2. TALC INFOGRAPHIC
3. HEALTHY HOME WEBSITE
4. TEN TIPS
5. SENIORS’ ENVIRONMENTAL HEALTH GUIDE

[DISPLAY DOCUMENTS ONE AT A TIME AND COMPLETE THE FIRST SECTION (4-A) FOR EACH PRODUCT BEFORE PROCEEDING TO SECTION 4-B and 4-C.]

SECTION 4A

- Had you seen this product before we sent it to you for this discussion group?
- What do you think about it? What is your general opinion?
- Would or do you use it in your practice?
If YES, PROBE: How do or would you use it?
If NOT, Why don’t or wouldn’t you use it?
- What are the strengths? What do you like about it?
- What are the weaknesses? What improvement could be made?
- Is the information contained in this product clear for you?

SECTION 4B - GENERAL QUESTIONS ABOUT THE PRODUCTS

- Do you feel that any of these documents would be useful for your patients? Are they more useful for some type of patients? Why? Which ones?
OR
- Are they less useful for some type of patients? Why? Which ones?

PROBE :

- Elderly
 - People with pre-existing health conditions (e.g. asthma, COPD, immunodeficiencies)
 - Youth/young/children
 - Athletes/physically active/individuals working outdoors
 - Certain ethnic groups / New Canadians
 - Individuals with low socioeconomic status
 - Indigenous people
 - Pregnant women
 - Parents or people without children
 - Are there other groups you can think of?
-
- Do you think these documents are effective? Why or why not? With which types of patients might they be less effective?
 - How do you think these documents could be more effective among patients whose may be more vulnerable to environmental health?
 - What changes would you make to this/these document(s) to make it/them more relevant, effective and useful for physicians? How would you improve distribution, access and use of Health Canada publications and online materials by family physicians?

SECTION 4-C SUGGESTIONS FOR ADDITIONAL INFORMATION

- In your opinion, how can Health Canada help family physicians provide appropriate health advice to their patients on environmental health risks?
- What would enable you to better help address your patients concerns and questions about chemicals and health, or environmental health more generally?
- What training format would be most helpful to you to learn about the impacts of harmful substances on health, e.g. lead, talc, endocrine-disrupting chemicals (EDCs)? Some examples of training include: online training courses, continuing education courses, online resources, in-person courses, etc.

Section 5: Conclusion (5 minutes)

- **Once all concepts have been covered, ask the concluding question below.**
- We are basically done. Do you have any further comments or suggestions for Health Canada on how they could better inform you and Canadian citizens about environmental health?

LINKS TO HEALTH CANADA MATERIAL

Talc infographic

EN: <https://www.canada.ca/content/dam/hc-sc/documents/services/publications/healthy-living/talc-infographic-2018/pub-eng.pdf>

Talc advisory for health professionals

EN: <https://www.healthycanadians.gc.ca/recall-alert-rappel-avis/hc-sc/2018/68320a-eng.php>

Healthy Home webpage

EN: www.Canada.ca/healthy-home

Ten tips

EN: <https://www.canada.ca/content/dam/themes/health/campaigns/healthy-home/ten-tips.pdf>

Is your home healthy: Seniors' environmental health guide

EN: https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/hl-vs/alt_formats/pdf/pubs/seniors-aines/senior-guide-aines-eng.pdf