

# Focus Testing Healthy Home Environmental Health Guide Final Report

Prepared for Health Canada

Prepared by Narrative Research  
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# Focus Testing Healthy Home Environmental Health Guide

Final Report

## Prepared for Health Canada

Supplier Name: Narrative Research

March 2021

This public opinion research report presents the results of focus groups conducted by Narrative Research on behalf of Health Canada. The research entailed a total of 22 online focus groups, namely four groups with residents of each of Halifax (NS), Toronto (ON), Regina (SK), Vancouver (BC) and Montreal (QC). In each location one group was conducted with each audience: parents of children 0-6 years old; seniors 65 years and older; newcomers who have lived in Canada less than five years; and pregnant women or those intended to become pregnant in the next year. In addition, two groups were conducted with Indigenous peoples, one with Ontario residents and one with residents of Prairies or Western provinces. Each group included a mix of gender (where appropriate), age (within range), household type, education level and cultural background (where relevant). Groups in Montreal were conducted in French while all other groups were conducted in English. The research was conducted between February 16 and 19, 2021.

Cette publication est aussi disponible en français sous le titre :

Test en groupes de discussion du Guide de santé environnementale (maison saine)

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## Executive Summary

Narrative Research Inc.

Contract Number: HT372-204042/001/CY

POR Registration Number: 092-20

Contract Award Date: January 5, 2021

Contracted Cost: \$109,434.85

## Background and Research Methodology

In support of the Chemical Management Plan, Health Canada works to increase the public's awareness of the risks associated with chemicals and pollutants, as well as proposing actions that could be taken by Canadians to reduce their exposure. Launched in 2019, the Healthy Home campaign provides information to Canadians that motivates them to take action to protect themselves and their families from chemicals and pollutants in and around the home. To broaden the target audience, new materials are currently being developed to better reach vulnerable populations, such as pregnant women, seniors, Indigenous Peoples, newcomers, and individuals with pre-existing medical conditions, among others. Research was needed at this time to assess the content of a new Healthy Home Environmental Health Guide and tip sheets that are in the process of being developed to reach these vulnerable audiences.

Testing focused on messaging and ideas around the content, organization and formatting of these products that will be available online and in print format once finalized. More specifically, the research goal was to evaluate the new guide and tip sheets to determine if the content is:

- clearly understood by the audience(s);
- credible, relevant and of value to the audience(s);
- appealing and appropriate to the audience(s);
- memorable in the minds of the audience(s); and
- able to motivate the audience(s) to take intended action(s).

To achieve these objectives, a qualitative research approach was undertaken. This entailed a total of 22 online focus groups conducted on February 16-19, 2021 across five locations (Halifax, Toronto, Montreal, Regina and Vancouver) as well as two regional groups conducted with Indigenous peoples, as outlined below. In each of five urban locations, one focus group was conducted with each of the following four audiences: parents of children 0-6 years old; seniors 65 years or older; newcomers that have lived in Canada less than five years; and pregnant women or those who intend to become pregnant in the next year. In addition, two groups were conducted with Indigenous peoples, one with residents of Ontario and one with residents from Prairies and Western provinces. Each group included a mix of gender (with the exception of pregnant women/expecting to be), age (within range), household type, education level and cultural background (where relevant).

Group discussions were held in English with the exception of those in Montreal which were conducted in French. Participants were provided an incentive of \$100. Across all groups, a total of 219 individuals were



recruited and 187 participated. Two additional participants were incentivized given technology issues during the sessions.

All participants were recruited per the recruitment specifications for the Government of Canada. Recruitment was conducted through qualitative panels stored on Canadian servers, with follow up calls to confirm the details provided and to ensure quotas were met. This report presents the findings from the study. Caution must be exercised when interpreting the results from this study, as qualitative research is intended to be directional only. Results cannot be attributed to the overall population under study, with any degree of confidence.

### Political Neutrality Certification

I hereby certify as a Representative of Narrative Research that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the Directive on the Management of Communications. 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

Margaret Brigley, CEO & Partner | Narrative Research

Date: March 8, 2021

### Key Findings and Conclusions

The following summarizes the key findings and conclusions from the *Focus Testing Healthy Home Environmental Health Guide* research study.

#### Overall Reactions

The Healthy Home Environmental Health Guide and the four tip sheets were well received and deemed as providing useful information for all living in Canada, but notably for homebuyers and newcomers. Although most information and advice appeared as common sense, the material was also felt to include a sufficient amount of new or surprising facts to be considered useful. The material was engaging and the information was found to be pertinent and actionable.

As the topic of environmental health appears to be top-of-mind for many people, there was a desire to clearly understand the rationale behind some of the advice provided, especially if the tips or suggestions addressed common behaviours or perceptions. For example, the material should explain why bleach should not be used to clean mould, or why single-use food plastic containers should not be reused, both of which appear to be common current practices. At the same time, alternatives to products commonly used but which Health Canada has found to be harmful to health (e.g., boric acid to make slime) should be mentioned where available, and instructions on how to use these alternatives should be provided (e.g., including a recipe for slime that does not include boric acid). Although there is trust in the



information provided, explaining what consequences there might be for inaction (either not testing or not addressing an issue) should be considered to make the advice even more compelling.

While the depth of information was liked, there is uncertainty regarding the level of urgency required to act upon the various pieces of advice provided. So as not to cause alarm, but at the same time motivate action, it was suggested to indicate the relative importance of testing for the various chemicals and pollutants in the home, based on their level of danger or potential harm.

Despite the guide and tip sheets providing information of interest, the documents' effectiveness may be affected by the perception that they contain a lot of common-sense information that is already known. As such, the material should more strongly explain its relevance for people who believe they are already aware of safe practices. One way to do that would be to include statistics illustrating the prevalence of an unsafe behaviour or showing the negative impact of improper use of chemical products. Demonstrating how current practices can be harmful would also help establish the guide's relevance.

The following sections provide an overview of reactions to the guide and the tip sheets. During the focus groups, a more in-depth review uncovered specific areas that need to be addressed in each document. Those comments are included in the detailed analysis section of the report.

### **Healthy Home Environmental Health Guide**

The guide was considered an appropriate length for a more in-depth resource. The diversity and choice of topics was appreciated, though some areas were felt to be missing. These included fire safety, chemicals and children or pets, attic maintenance, ventilation/heating ducts, air purifying, gardening and outdoor living, battery storage and disposal, BBQ safety, water testing for other reasons than lead, and pesticides allowed in Canada. In addition, addressing storage of chemicals for those who do not have access to a garage or a shed was often suggested. Those renting their home expressed an interest for more information on landlords' responsibilities when it comes to testing for chemicals and addressing any problems, as well as what recourse tenants have if landlords are not complying.

Although the information generally appeared well organized in the guide, some of the topics appeared as unrelated to one another, or irrelevant to a guide focused on addressing chemicals in and around the home. A more logical structure would entail grouping daily activities in a section (both indoors and outdoors) and grouping activities that related to renovations or special projects together. Organizing the information by end-user was also a key suggestion, though far less commonly. Overall, the use of the cosmetics section was seen as more appropriate in the everyday section, while the sections on air quality and staying safe on hot days were not readily associated with chemicals around the home.

While the level of language used throughout the guide was generally found to be simple and easy to understand, differences in tone (e.g., conversational vs. matter of fact) and the inconsistent use of key terms (e.g., how protective equipment is referred to or described) throughout the guide were noted.

A few other elements were noted as being of importance. The inclusion of emergency contact information was found to be useful and should be repeated in key areas of the guide. In addition, there is



a strong interest for key terms – both chemicals and various concepts – to be included in the glossary, with hyperlinks to facilitate with reviewing the material. At the same time, the infographic section would be considered a useful summary that could be used as a reference tool.

### **Tip Sheets**

The four tip sheets – tips for renters; tips for pregnancy and preparing for baby; tips to help keep your kitchen safe and healthy; and tips for do-it-yourself (DIY) projects and renovation, were well received and perceived as complementing the guide nicely. The brevity of information and actionable tone of the tip sheets were liked and provided a great reference tool for addressing specific situations or audiences' needs, as well as complementing the guide. To be even more engaging, the tip sheets should be designed as checklists that can be posted in key areas in and around the home to assist residents with assessing the safety of their home.

### **Format and Accessibility**

In terms of making the information accessible, newcomers were interested in further guidance on where to find information on municipal and provincial regulations, what type of professional assistance is available, and who to call in emergencies.

Indigenous peoples, for their part, noted the importance of acknowledging cultural practices in the guide (e.g., smudging), and providing advice on how they can be carried out safely. More attention on water safety was also mentioned, given limited on-reserve access to clean water. The use of short text using simple language and graphics was also considered essential to ensure the material remains accessible.

Across groups, both an online and a paper format were considered useful. While online access was considered easier and more environmentally friendly to some, there was still an expressed need for printed material to jot down notes, post as reminders in key areas of the home, and to provide access to those who have limited internet access or proficiency.

The tip sheets and the guide's infographic should be provided as stand-alone documents that can be printed and posted in key areas of the home. Additional checklists by task (e.g., fall cleaning) should be considered.

In terms of the visual layout for the guide and tip sheet, the example provided appeared appropriate in the use of soft colours, bolded and underlined headers, and use of white space. While visuals are considered important to engage the reader, participants believe that images should be aligned with the topics in each section, provide clarification where needed, and illustrate the varying audiences targeted. In addition, the images should reflect the seriousness of the topic presented, without causing alarm or being too dreary.



## Introduction

### Context

In support of the Chemical Management Plan, Health Canada works to increase the public's awareness of the risks associated with chemicals and pollutants, as well as proposing actions that could be taken by Canadians to reduce their exposure. Ongoing marketing and public outreach efforts led to the development of the Hazardcheck campaign in 2010 that included environmental health guides, for the general population, seniors, as well as for Inuit and First Nations.

To ensure that the Hazardcheck materials and outreach approach remain current both in terms of content and method, a modernization initiative was undertaken. Moving beyond Hazardcheck, a new suite of communication tools and resources were developed, informed by research conducted in recent years.

Launched in 2019, the Healthy Home campaign provides information to Canadians that motivates them to take action to protect themselves and their families from chemicals and pollutants in and around the home.

To broaden the target audience, new materials are currently being developed to better reach vulnerable populations, such as pregnant women, seniors, Indigenous peoples, new Canadians, and individuals with pre-existing medical conditions, among others. Research was needed at this time to assess the content of a new Healthy Home Environmental Health Guide and tip sheets that are in the process of being developed to reach these vulnerable audiences.

### Objectives

Testing focused on messaging and ideas around the content, organization and formatting of these products that will be available online and in print format once finalized. More specifically, the research goal was to evaluate the new guide and tip sheets to determine if the content is:

- clearly understood by the audiences;
- credible, relevant and of value to the audiences;
- appealing and appropriate to the audiences;
- memorable in the minds of the audiences; and
- able to motivate the audiences to take intended actions.

This report presents the findings of the research. It includes a high-level executive summary, the description of the detailed methodology used and the detailed findings of the online focus group discussions, including recommendations made. The working documents are appended to the report, including the recruitment screener (Appendix A), the moderator's guide and homework assignment in preparation for the focus groups (Appendix B), and the material reviewed (Appendix C).





## Research Methodology

### Target Audience

For the purpose of the study, there were five target audiences, namely:

- Parents of children 0 to 6 years old;
- Seniors aged 65 and older;
- Newcomers who have lived in Canada less than five years;
- Pregnant women and those who intend to become pregnant in the next year; and
- Indigenous peoples.

### Research Approach

The study included a total of 22 online focus groups conducted from February 16-19, 2021. The following provides a breakdown of groups based on location, language and audience:

Number of Online Focus Groups						
Audience	English				French	Total
	Halifax NS	Toronto ON	Regina SK	Vancouver BC	Montreal QC	
Parents of children 0-6	1	1	1	1	1	5
Seniors	1	1	1	1	1	5
Newcomers	1	1	1	1	1	5
Women (Pregnant or to be)	1	1	1	1	1	5
	Ontario		Prairies or West			
Indigenous peoples	1		1		N/A	2
<b>TOTAL</b>						<b>22</b>

Each group included a mix of gender (with the exception of pregnant women/expecting to be), age (within range), household type, education level and cultural background (where relevant).

All participants were recruited per the recruitment specifications for the Government of Canada. Recruitment was conducted through qualitative panels stored on Canadian servers, with follow up calls to confirm the details provided and to ensure quotas were met. Those with current or past employment in sensitive occupations were excluded from the research, in addition to those who have others in the household in this situation. These sectors included marketing, marketing research, advertising, media, public relations, graphic design and provincial or federal government housing agency or department. In addition, individuals who have been to at least five qualitative sessions in the past five years, those who have attended a session in the past six months, and those who have participated in group discussions related to evaluating forms, brochures or documentations were excluded from the research.

Group discussions were held in English with the exception of those in Montreal which were conducted in French. Participants were asked to complete a homework assignment in preparation for the focus group discussion, which took between 45 and 60 minutes to complete. In addition, each focus groups session



lasted about 90 minutes. Participants received \$100 in appreciation for their time. Across all groups, a total of 219 individuals were recruited and 187 participated. Two additional participants were incentivized given technology issues during the sessions.

### Context of Qualitative Research

Qualitative discussions are intended as moderator-directed, informal, non-threatening discussions with participants whose characteristics, habits and attitudes are considered relevant to the topic of discussion. The primary benefits of individual or group qualitative discussions are that they allow for in-depth probing with qualifying participants on behavioural habits, usage patterns, perceptions and attitudes related to the subject matter. This type of discussion allows for flexibility in exploring other areas that may be pertinent to the investigation. Qualitative research allows for more complete understanding of the segment in that the thoughts or feelings are expressed in the participants' "own language" and at their "own levels of passion." Qualitative techniques are used in marketing research as a means of developing insight and direction, rather than collecting quantitatively precise data or absolute measures. As such, results are directional only and cannot be projected to the overall population under study.



## Research Findings

### Prior Knowledge of Chemicals and Pollutants in the Home

Many participants had previously thought of the extent to which their health could be impacted by chemicals and pollutants, particularly if they had experienced a life event such as being pregnant or having children. For example, parents were more likely to consider the cleaning products used in their home after having children, or pregnant people are more likely to think about what they are consuming and how it might impact their baby. Additionally, some participants investigated topics such as radon or lead when doing home renovations, or had a particular issue such as mould that required addressing. Some participants regularly work with chemicals as part of their job and therefore are more aware generally as a result.

*“I came across a video on YouTube about asbestos when I wanted to do a renovation.”  
Newcomer Group*

*“After having a baby, I researched floor cleaners, whether I could use bleach anymore.  
It’s something I thought about with a baby for sure.” Parent Group*

*“With COVID I have been thinking about chemicals a lot. Can I use Lysol when I’ve used  
hand sanitizer?” Newcomer Group*

*“After we had our baby, we were really cautious about what we were cleaning our floors  
with, more cautious now than we were before.” Parent Group*

In some cases, participants noted that it was not a topic they had considered, and reading through the Healthy Home Guide opened their eyes to the range of topics they should consider.

*“I hadn’t really thought of it. This was a real eye opener.” Newcomer Group*

### Overall Reactions to the Guide and Tip Sheets

The guide and the tip sheets were well received by participants. After reading through, many indicated the guide provided new learnings, as well as key pieces of advice that would be implemented immediately. Some information was surprising or questioned, emphasizing the importance of providing the rationale for recommendations in order that the information is deemed as trustworthy.

Some participants, being surprised with various aspects of the information, had become concerned about the safety of being in their home, and were unsure, based on the information in the guide, as to how urgently they should be testing for various chemicals, such as radon or lead. The guide should therefore offer some advice about the relative importance of testing for chemicals in the home.



*“After reading this, I have a fear of water from my tap. How do I know if it’s safe? Should I stop using it? Where do I get it tested?” Newcomer Group*

While considered to be lengthy, the guide was interesting and engaging for participants, who found that the information was pertinent and immediately useful to them. In some instances, the information was felt to be common-sense and not personally relevant, but participants could see how it would be important for others, primarily for new homeowners or newcomers.

Consistency is key, as participants identified instances where information was different for the same topic area. Suggestions that were repeated throughout the guide (washing hands, personal protective equipment use) needed to be consistent.

The use and level of language was deemed to be clear, however consistency was again mentioned, in terms of using a constant tone or voice throughout the documents.

## Overall Reactions on the Healthy Home Environmental Health Guide

Participants were each asked to review a portion of the guide and two of the four tip sheets prior to taking part in the focus group discussion. All of the material was reviewed by participants through a rotation schedule. During this review exercise, participants were asked to take note of information they found useful, things they learned or were interested in, words, expressions, sections or topics that were unclear or needed better explanation, and missing information. Participants were asked to share those comments during the focus group.

### Amount of Information

In general, participants said that they initially felt that the guide included a lot of information and was lengthy, although after reading it, participants said that the level of detail is adequate. The format of the tip sheets – acting as reminders – was well liked and considered useful.

*“J’ai trouvé que c’était adéquat (le montant d’information dans le guide). Pas trop court et pas trop long que le monde va s’ennuyer.” (I thought the amount of information in the guide was just right. Not too short and not too long that everyone will be bored.)*  
Parent Group

*“This was a very clear and detailed guide. It was all very useful. They should add what substitutions could be used instead of chemicals though.” Newcomer Group*

Some participants felt that concepts were often repeated across sections and that someone reading the entire guide would find it repetitive. That said, others commented that the repetition was useful in that they would be more likely to only read sections that were relevant to them, and therefore it was helpful to ensure each section was comprehensive in its advice.



In a few instances, participants mentioned a lack of clear distinction on the risks of chemical exposure based on the level of danger incurred or the severity of consequences. Again, better understanding the varying degree of danger or urgency in testing for chemicals would help with prioritizing decisions related to testing for chemicals.

*“Il y a beaucoup d’information et dans le fond la lacune principale c’est qu’on traite les éléments de la même façon même s’il y a différents degrés de dangerosité.” (There is a lot of information and basically the main shortcoming is that we treat the elements in the same way even if there are different degrees of dangerousness.) Senior Group*

### Choice of Topics

The topics included in the guide were felt to be comprehensive by many, and covered a wide range of subjects. There were suggestions to include information on other topics and in some cases these topics were similar to those covered, but perhaps not directly related to chemicals and pollutants.

*“The Swiffer floor cleaner is very harmful to pets so there should be a separate thing for pets.” Senior Group*

*“Le choix des thèmes était cohérent et diversifié. Ce sont des éléments de la vie de tous les jours. De manière générale j’ai trouvé ça intéressant.” (The choice of themes was consistent and diverse. They are elements of everyday life. Overall I found it interesting.) Pregnancy Group*

*“There were some topics we hadn’t really thought of before, such as low emission options in wood products and furniture.” Parent Group*

*“They need to add information on what pesticides are allowed in the country.” Newcomer Group*

*“It’s so useful, I’m thinking of buying a home, and there are now so many things to consider before I buy to know if it’s safe.” Newcomer Group*

*“When you are a new immigrant you are trying to survive. You don’t think about these things. But it’s so important. Everyone should have access to this information to stay safe. There are so many things that are different in a house in Canada.” Newcomer Group*

The following summarizes the topics participants mentioned as missing from the current guide:

- Fire safety including fire extinguishers and mention of addressing grease fires.
- Chemicals and children/pets.
- Rodent/Mice/Bed bug control including use of chemicals and other considerations.
- Attic maintenance and cleaning ventilation/heating ducts.



- Information regarding air purifiers – a topic many participants identified as important during the pandemic.
- Gardening and outdoor living (including how to store chlorine used for pool maintenance), use of lawnmowers or snowblowers and storage in terms of fuel.
- BBQ safety in terms of proximity to the house/apartment, proper lighting techniques, use of accelerants, awareness of fumes, and proper storage of propane tanks.
- Battery storage and disposal, and it was noted that if a battery is old and develops white residue, understanding of proper handling techniques.
- Water testing may be relevant not only to lead in plumbing, but for other reasons, and the guide could mention that water testing is generally available within municipalities.
- Information on which pesticides are allowable in Canada.

Additionally, where a garage or shed is referenced in the guide as the best place to keep some of the chemicals, it was suggested to address alternatives for those who do not have access to those types of outbuildings, particularly those living in smaller homes or apartments/condos.

### Organization of Information

The organization of the information in the guide was generally well liked, although there were some who critiqued the guide for an apparent inconsistency or lack of clear relationship between some of the topics. Some suggested having the division of information by ‘ordinary’ activities at home compared to ‘renovations’ or ad-hoc types circumstances. Others suggested that having information organized by user would be helpful (e.g., parents / DIY enthusiasts / crafters). Some noted that using cosmetics felt like an everyday activity and would be better moved to the everyday activities section.

*“The organization seems to have no logic. I would group the content by stuff around the home and then stuff in the environment and air, and then activities. It’s confusing now when they talk about chemicals and then move on to the weather.” Newcomer Group*

*“Activités quotidiennes et rénovation de la maison ça ne fait pas de sens. Bricolage et rénovation ne vont pas dans les activités quotidiennes.” (Daily activities and home renovation it does not make sense. Projects and renovations are not part of daily activities.) Parent Group*

It was also believed that the ordering of topics should consider how each topic is related to others, when someone reads the guide in sequential order. For example, some questioned the logic for providing crafting advice immediately following kitchen advice, within the same general section of the guide.

When identifying areas that were missing, it was not clear to some participants what should or should not be included in the guide. It was felt that while most topics related to chemicals and pollutants, there were some sections not obviously linked to the home (e.g., staying safe on hot days; outdoor air quality), and thus should be presented in a separate section, or be reworked/positioned to have better linkage to the overall topic of the guide. This led some to question who was the target audience for the guide, and whether it was meant for them personally.



*“Le choix des thèmes est bien mais je trouvais que le lien n’était pas évident d’un sujet à l’autre. Rester en sécurité les jours de grande chaleur? Rien à voir avec les produits chimiques.” (The choice of themes is good but I found that the link was not obvious from one subject to another. Staying safe on hot days? Nothing to do with chemicals.) Senior Group*

## Most Relevant Topics

When asked to identify the topics that were most interesting and relatable to them, participants commonly identified cleaning the home and cooking, preparing and storing food. While only asked to review a portion of the guide, many participants read through all sections because they were interested in the different topic areas. Most felt that the topics were relevant to them personally, and in instances where a topic was not relevant (mentions of cosmetics, DIY or garages and workspaces), it was still felt important to be included.

Participants in the parent and pregnancy groups also found the arts and crafts materials with children section to be particularly relevant, noting that it was an important topic that included useful tips that they maybe hadn’t previously considered.

*“It was all relevant, it touches on every day activities. Even craft materials, those might be things I don’t think of.” Parent Group*

## Amount of Information

Most participants found the amount of information to be adequate, and while many noted that the guide was long, they found it interesting and helpful and therefore did not mind the length. That said, a few participants noted that the information was too long and they would be unlikely to read a guide of that length. In these cases, the tip sheets or the checklist would be preferred.

*“I found it really long – infographic would be really important.” Parent Group*

*“As little copy as possible and something that could be taped up and divided by homeownership versus apartment living because they are a different beast.” Indigenous Peoples Group*

*“There was some repetition, but I really liked the checklist and the hazard symbol sections.” Senior Group*

*“I do feel that it’s relevant, but there was a lot of information and some of it felt very repetitive. I find it hard to believe that someone will read 25 pages of information.” Parent Group*



## Use of Language

The language was generally found to be easy to understand, but many participants noted the need for consistency throughout the document in terms of the tone and voice, either more conversational, or more matter of fact. For example, the use of exclamation marks was found to be alarming or unnecessary given that the document was viewed as fact-based. Consistency was also sought in the use of terms (for example, personal protective equipment was mentioned in a variety of ways, goggles vs. glasses, proper mask, face mask, rubber gloves, rubberized gloves, etc.).

*“It did feel disconnected, felt like copying and pasting from different sources.” Parent Group*

## Provision of Explanations / Rationale

Participants generally liked to have an explanation or rationale for the advice provided. It was believed that if an activity is currently widely-undertaken (e.g., re-using plastic food containers, cleaning mould with bleach, using hot water from the tap to speed up cooking, using boric acid to make slime, etc.), participants were highly interested in having an explanation of the reason for the tip that advised a change in behaviour, to enhance its credibility. Understanding the ‘why’ was very important to them. In many instances, however, the rationale for the advice provided was insufficient to instil confidence and engage the reader.

## Alternatives / Additional Advice

The provision of tips or advice was well liked. That said, there was a desire for alternatives to be provided in some instances to address situations where the advice is not possible or recommended. For example, someone living in an apartment might not be able to open a window for ventilation, or someone may not want to open a window if it is extremely cold outside.

Additionally, the advice regarding what can be used as a safer and less expensive cleaning alternative (baking soda, vinegar) was found to be highly useful, and participants were eager for more of these types of tips, or direction to where they could go to find credible sources about healthier or environmentally-friendly alternatives. Many also wanted more specific information or ‘recipes’ for homemade cleaning products.

## Emergency Contacts

Reminders in the guide about who to call in the event of poisoning or exposure to chemicals were found to be very useful, and should be repeated throughout the guide, along with provincial contact information for poison control.

## Landlord Responsibilities

Those living in apartments expressed an interest for additional information on the responsibilities of landlords, and advice on what recourse tenants have if the landlord is not complying. There was also great interest in more clearly defining landlords’ responsibilities as compared to tenants’ responsibilities.





## Review of Healthy Home Environmental Guide Content

The following sections provide a detailed account of specific comments related to each section of the Healthy Home Environmental Health Guide.

### Introduction

#### Overall Reactions

This section was generally thought to be clear, concise, and adequate in presenting the purpose for the guide. That said, the intended audience for the guide was not always clear and the information and advice provided in the guide were felt to be too simplistic and common sense at times, thus highlighting the need to establish greater relevance in the introduction. The voice in the introduction was felt by some to move from positive to alarming, and a few questioned how concerned they should be about the overall topic.

The introduction mentions spending more time indoors, and it was confusing to some as to why COVID-19 was not mentioned. It was questioned whether Canadians were spending more time indoors because of the current situation, or in general. It was also felt that some were trying to spend more time outdoors because of COVID-19 and therefore this was contradicting what was expected.

#### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Begin the section with a sentence that provides rationale for the guide (“With Canadians spending more and more of our time indoors, it is important to keep our homes healthy and safe from the potential risks of chemicals”). It was felt that the first three paragraphs could be moved after the bulleted points.
2. Consider changing the sentence referring to spending more and more time outdoors, to add “spending more and more of our time indoors and around our homes”.
3. Identify who the guide is intended to help (All Canadians, new homeowners, etc.) or how it should be used.
4. Clarify meaning of the concept of “reproductive impacts”.
5. Add a comma between the words “accidental poisoning” and “chronic health conditions”.
6. Add a reference to COVID-19 or clarify that Canadians are generally spending more time indoors.
7. The term, “chemicals” was considered a negative to some, and stating the chemicals can be beneficial was confusing as a result. Provide examples of beneficial chemicals, or indicate that this will be clarified later in the guide.
8. The English sentence that begins with “Health risks from chemicals...” was considered too long and awkward. List the health risks in bullet-point format to make it easier to read.
9. Include hyperlinks to the websites in the final document.



10. Typo in the French version of the guide – “sûr” change to “sûre”.
11. Rephrase the first sentence of the fourth paragraph in the French version of the guide to:  
“Les Canadiens passent de plus en plus de temps à l’intérieur alors il est important d’avoir une maison saine, sûre et exempte des risques que peuvent représenter les produits chimiques.”

### Notable Quotes from Participants

*“It just needs to be ordered different, sounds like a positive beginning then a turn into doom and gloom. If it’s meant to be a doc to give a heads up, the voice needs to stay consistent throughout.” Parent Group*

*“I wasn’t clear who this was intended for. Some of it was general knowledge, and it felt all encompassing and common-sense topics. I wasn’t sure if it was intended for a new homeowner, or someone else?” Parent Group*

*“I felt like this wasn’t geared toward me. It was all relevant, but it would be more for new families.” Senior Group*



## Risk and Exposure to Chemicals and Pollutants

### Overall Reactions

Reactions to this section were positive, although some felt they were reading a text book or that the tone was directed to a younger audience (“Yes, we’re made of chemicals too.”). Some information was surprising or new. For example, many participants were not aware that they take 20,000 breaths a day, and this statement caught their attention, particularly for those who have children. At the same time, many participants indicated that it should be specified in this section, and elsewhere in the guide, that there may be health risks for pets as well as humans.

The concept of radon is first mentioned in this section of the guide, and as such, a number of participants – particularly in some of the French-speaking groups - suggested to explain what it is, either directly in the section, or by hyperlink to the glossary section.

The section regarding hazard and risk was interesting to many, especially in showing the formula that showed the relationship between risk, hazard and exposure. It was suggested to illustrate the formulas with icons or images in the final guide. Many were interested to understand the concepts of risk and hazard, and felt that the topics were simply presented and explained. That said, at least one or two participants in most groups found the information superfluous and confusing, with some of them feeling as though they were being tested. It was suggested to include a few examples of risks and hazards to provide a more tangible explanation of both concepts.

Mentioning what to do in the case of exposure to a chemical (such as rinsing with water, or contacting poison control) was considered important. At the same time, it was believed by a few that the two factors that can increase or decrease risk should speak of the number of times / occurrences of exposure, in addition to the length or duration of exposure).

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Consider changing “Yes, we’re made of chemicals too”, or removing first paragraph entirely. This statement was considered unessential and puzzled some participants who were not sure of its significance in the context of the guide.
2. Indicate Government of Canada rather than government.
3. Indicate in the last paragraph where to find additional information about the government’s risk assessments, or to understand what that means (i.e., is this why some chemicals are banned?).
4. Remove the comma between “exposure refers to how any chemicals” and “enters the body”.
5. Typo in the English version of the guide – “bodies” change to “body” (under the section *Skin and eye contact*).



6. Consider replacing “top-of-mind chemicals” with “common chemicals” in the English version of the guide.
7. Specify in the introduction paragraphs that chemicals can “...harm our health and that of our pets”.
8. In the French version of the guide, replace the word “insipidus” or provide an explanation.
9. In the French version of the guide, the recommended use of a “respirateur” was questioned. A few were unsure of the type of equipment it referred to, while some questioned how long such equipment would need to be worn to significantly reduce exposure (i.e., all of the time while in the room or basement?).

### Notable Quotes from Participants

*“I don’t need to know the theory, tell me what could be a danger and how to avoid that danger.” Pregnancy Group*



## Everyday Activities: Buying, Using, Storing, and Disposing of Chemical Products

### Overall Reactions

Reactions to this section were positive and the use of headers for Buying, Using, Storing and Disposing helped to clarify the topics. In a number of cases participants wanted greater clarification about particular statements, which are detailed below.

The bullet-point format was well liked and participants generally appreciated the provision of tips. The tip about unused or expired drugs was unknown to many and found to be surprising and useful information. It was noted that it might be important to provide information about not disposing of items down the drain or toilet, particularly chemicals or medication. Specifying the consequences of improperly disposing of medication was considered an important motivator to take the extra steps to bring these items to a pharmacy for disposal. It was also suggested to provide additional resources or information about disposing of medications or other like-chemicals if a pharmacy refuses to take them.

It was suggested to address natural products in this section, notably in terms of defining their chemical contents and their health risks, as well as providing advice on how to buy, use, store and dispose of them.

Quite a few participants, notably renters, mentioned that they do not have access to a shed, an outdoor storing facility, or a garage. As such, alternative storing solutions should be provided, especially for how to store dangerous household chemicals (e.g., solvents).

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Mentioned in multiple places, reading product labels was considered problematic for seniors, as the size of the font was often small or difficult to read as it wrapped around a container. A few noted that MSDS documents could be referenced, or how to find out more information about a product.
2. Provide options for safer or less harmful alternatives to chemicals.
3. When mentioning hazard symbols, reference the section of the guide that outlines hazard symbol information or hyperlink to these sections.
4. Clarify what qualifies as low-emission paints and materials, or how to identify these products. For example, it was felt that furniture did not include this information, and therefore stating that the information is available on the product was not necessarily true.

#### **Buying Section:**

5. The first bullet that starts with “to begin, consider your needs, do you really need this product?”, and the last bullet “Reduce waste by only buying the products you need” were considered repetitive, and to some came across as patronizing, therefore consider rewording or removing one of the two statements.



6. Inform readers they should seek professional advice on choosing the best product, when in doubt.
7. In the French version of the guide, the concept of “faible taux d’émission” should be clarified.

#### **Using Section:**

8. Provide a tip on how to safely spray chemical cleaner, if there are known safe using techniques.
9. Explain why household chemicals should not be mixed together (i.e. what the potential consequence could be), and/or provide an example of two products that should be not be mixed.
10. Specify why warm water is recommended to wash hands.

#### **Storing Section:**

11. Provide alternatives to storing in a garage or shed for those who don’t have access to these types of facilities.
12. Specifying rubber mallet may not be necessary, or an alternative as not everyone may have a rubber mallet.
13. Include a tip to advise people to re-label chemical products if the original product label was removed or fell off, or even if the information has become illegible.
14. Specify if paint can be stored in a shed or other location, instead of a locked cabinet.

#### **Disposing Section:**

15. Clarify what types of hazardous waste might be collected at a hazardous waste day.
16. Include a tip on how to dispose of pet waste.
17. Provide instructions on how to safely dispose of used batteries.
18. It was felt that most chemicals/pollutants should not be poured down the drain or flushed, therefore the statement on this topic was questioned. As stated, the mention to use this disposal method “when directed” was often missed or misunderstood.
19. Provide alternative storage solutions for people who do not have a shed or a garage to store dangerous chemicals.
20. In the French version of the guide, for the last bullet, the concept of “... seulement lorsque dirigé” was not understood and it was suggested that the word “dirigé” is misused in this context. Consider replacing with “... seulement lorsqu’indiqué sur l’emballage”.

### **Notable Quotes from Participants**

*“The sentence about flushing products down the toilet? I’m not going to do that. I’d rather hang onto the product than look into whether or not it can be flushed.” Parent Group*

*“Il faudrait diriger les gens pour savoir quels genres de produits on devrait acheter; des produits naturels? Bios?” (It should provide direction on what products people should purchase: natural products? Organic products?) Parent Group*



## Everyday Activities: Hazard Symbols and Warnings

### Overall Reactions

This information was well received, and the layout and wording of this section was found to be clear and relevant. Some felt the importance of this section meant it should be placed either earlier in the guide, or at the end as a reference to be more easily accessed. It was also suggested to provide it in a stand-alone version, so it can be posted in areas around the house where chemicals are stored.

While many participants thought they understood the use of hazard symbols, the information regarding the shape of the frame (triangle vs. octagon) was new and surprising to many. They generally liked the way the distinction was made and appreciated learning this information.

Although it was generally understood that the guide is addressing the health risks of chemicals, a few participants expressed an interest for the information to go beyond the immediate consequences of chemicals on someone's health, and address the indirect risks as well. For example, how chemicals are disposed of may impact the health of someone's environment. As such, it was suggested to include symbols identifying products that are more environmentally-friendly to help consumers make better choices overall.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Including "call your health care provider right away" as an alternative to calling poison control was confusing to some. Other instances in the guide mention contacting poison control immediately, such that clarification is needed to indicate in what instance a health care provider should be contacted.
2. The statement "if you are in distress, please call 911" seemed to contradict the previous statement regarding calling poison control if someone else is in distress. Consider amending to be consistent.
3. It was felt it would be more helpful to have provincial poison control numbers directly in the document, including hyperlinks to the relevant websites and key information numbers to call if someone does not have access to internet.
4. Highlighting (such as the use of a box around the text) the poison control aspect was considered helpful.
5. This section should appear after the hazard and risk section, or at the end as a reference.

### Notable Quotes from Participants

*"Qu'est-ce qu'il faut faire si on n'a pas accès à Internet? Est-ce que je dois appeler le 911?" (What should we do if we don't have Internet access? Should I call 911?)*

*Pregnancy Group*



## Everyday Activities: Cleaning Your Home

### Overall Reactions

This section was considered very useful for participants, despite there being little that was surprising or new to many. However, a few participants had not previously heard of HDM-impermeable covers and intended to look into that more.

The information about not mixing chemicals was considered important and should be highlighted in the final version of the guide, along with more information about what the consequences of mixing could be.

A few participants reported washing their produce with soap since the beginning of the COVID-19 pandemic, and as such were please to see the advice of using only water, as well as the rationale behind it.

A few were surprised to learn that household dust may contain lead and other harmful chemicals, which made them reconsider the manner in which they clean their home and the frequency of it.

While the section was considered useful and of interest overall, one or two participants felt that the section focused too much on cleanliness and disinfection, while not properly addressing how some bacteria, germs and microbes can help build or strengthen someone's immune system.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Clarify why removing dust can reduce exposure to lead, this connection was not clear to some.
2. Consider adding a trusted information source for the quantities or ratios to use when cleaning with vinegar, baking soda, and water.
3. This section stated that washing hands with soap and warm running water should be for 20 seconds, though in the section for buying and storing chemicals it does not mention the time frame. Use consistent instructions throughout.
4. Typo in the English version of the guide – “chose” to use chemicals – change to “choose”.
5. Include additional examples of products that should not be mixed, if any others are relevant. The explanation regarding toxic gases confirmed the importance not mixing products together, and using bold/highlighting for this explanation should be included in the final guide.
6. Mention relevant information in the healthy home checklist in this section as well, such as removing outdoor footwear.
7. Clarify why bed sheets should be washed weekly, especially providing a rationale for participants who currently wash their bedding biweekly.





### Notable Quotes from Participants

*“It’s very interesting to read about not washing produce. It’s particularly relevant during the pandemic!” Senior Group*

*“Je ne savais pas qu’il pouvait y avoir du plomb dans la poussière. Ça m’a fait un peu peur et ça me pousse à faire plus de recherche à ce sujet-là.” (I did not know there could be lead in dust. It scared be a bit and makes me want to look into it more.) Parent Group*



## Everyday Activities: Cooking, Preparing and Storing Foods

### Overall Reactions

This section was highly useful to participants, and there was interest in receiving more information to clarify some of the recommendations. Tips that are easy to implement such as using the back burner on the stove, or running the vent, were well received with many believing they would start doing these activities immediately. Being aware of particulate matter while cooking was surprising to many, and using vents or opening windows was not something that had been consistently or purposefully considered.

The recommendations around the use of plastic containers elicited a lot of interest and discussion, especially when referencing single use containers. Many are currently re-using food plastic containers to store other food in the fridge or freezer and while they appreciated the advice, it was felt that including a better rationale or an explanation of consequences would make them rethink their behaviour.

Some participants were surprised by the recommendation to use the microwave, as there was a negative association when cooking with a microwave (either stemming from the heating of plastics, or just a general sense that other forms of cooking are healthier or safer), or there are some foods that shouldn't be cooked in the microwave for safe consumption, such as meat.

Participants had generally not considered the type of cooking (frying vs. steaming, for example) in terms of particulate matter, and some questioned how serious or problematic this could be. In addition, some renters noted that they do not have windows that can open, or others noted that opening windows was not possible or advisable in very cold winter climate or on hot summer days, either resulting from the building design, or a need to conserve energy.

In this section and elsewhere in the guide, there was some confusion regarding the possible presence of lead in pipes whether a home is built prior to 1975, 1990 or 1991. The dates referenced throughout the document should be consistent, or alternatively, the use of different timeframe should be clarified.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Providing the explanation for why soap or bleach should not be used when washing vegetables was helpful. A few participants noted that there are products available that promote safe washing of fruits and vegetables, and they questioned if these were safe to use or should also be avoided.
2. Indicate if it is recommended to use a brush when washing produce.
3. Specify the importance of being safe around poultry or cross contamination when mentioning food-related illness.
4. Explain why it is recommended to use cold water for drinking, cooking and making baby food. Clarify if this is only if you suspect you have lead pipes, or for everyone.



5. Clarify that if you have PEX pipes within your home you do not need to worry about lead.
6. Particulate Matter (PM) is not a well-known term, consider stating the full term instead of the abbreviation throughout this section.
7. Some apartments do not have access to opening windows, detail other possible options for these situations in addition the running the exhaust fan.
8. Explain why using stained or chipped containers is not recommended.
9. Explain why not to reuse single use plastics, and in addition to margarine containers mention single-use take-out containers as it as felt this was common practice.
10. Explain why storing hot foods in plastic containers is not recommended.
11. Explain where the recycling codes are found on plastic products and include a visual reference in the final guide.
12. In the French version of the guide, consider replacing the term “ventilateur d’extraction” caused confusion and participants appreciated having the more common term specified as well (“la hotte”).
13. In the French version of the guide, using the word “évitez” implied that it is recommended not to use plastic wrap or damaged containers, rather than avoiding it altogether. Consider rephrasing to “n’utilisez pas” if the intent is to recommend not to use the items listed. The same can be said for the last bullet point about hot beverages.
14. In the French version of the guide, clarify what type of beverages (“boissons”) should not be stored or served in plastic containers. The way the statement is presented, some people felt that it could refer to both cold and warm beverages.

### Notable Quotes from Participants

*“I found that odd. Microwaving was my last resort; I would use my oven or stove to cook something. When I was growing up, we would hear about microwaves being harmful.”*  
Parent Group

*“Using plastic containers like margarine containers, I don’t know what the problem is with storing in a clean margarine container, using yogurt containers, and not be forcing people to buy plastics.”* Senior Group

*“Doit-on frotter les fruits et les légumes avec une brosse? Si ce n’est pas nécessaire, il faudrait le préciser.” (Should we wash fruits and vegetables with a brush? If this is not necessary, it should be mentioned.)* Pregnancy Group

*“Why can’t you reuse a margarine container? I’ve been doing that forever. So is glass okay to reuse?”* Pregnancy Group



## Everyday Activities: Using Hobby and Crafting Materials

### Overall Reactions

This section was well received as it was previously felt that using crafting materials is not considered a dangerous activity and perhaps not something participants had considered before. This section was more relevant to those with children or who regularly use these products. Generally, the level of caution being recommended in this section was more than many had thought of for this topic area.

In terms of new information, removing contact lenses was surprising/not thought of to some, and many noted that they had not considered the implications when buying something online and sought greater clarity in this regard.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. For the statement regarding looking for safer materials, examples could be provided.
2. Typo in the English version of the guide – “untended” change to “unintended”.
3. Provide more information about what to look for when buying products online, or how to confirm if an online source is safe.
4. Under Cleaning Up, clarify washing hands with soap and water for 20 seconds to be consistent with elsewhere in the document.
5. Consider cautioning on the purchase, use and storing of flammable products.

### Notable Quotes from Participants

*“Il y a un manque de clarté dans la disposition des éléments. Les sections ne sont pas assez identifiées. Dans le bricolage on parle de moisissures tandis que ça devrait être dans la ventilation.” (The way the information is organized is unclear. The sections are not sufficiently identified. In crafting, we talk about mould while that should be under ventilation.) Parent Group*

*“I thought this was important, remind people that these can be harmful, you might not think of it as a hazardous material, like Mod Podge. You don’t think of crafting as dangerous.” Pregnancy Group*

*“It should mention what products can ignite or even self-ignite, like some glue and also acid products we use for stained glass.” Senior Group*

*“This is a lot of new information, but if you are putting in a warning, you have to tell people why.” Indigenous Peoples Group*



## Everyday Activities: Using Arts and Crafts Materials with Children

### Overall Reactions

Similar to the previous section, many participants had previously considered this topic fairly benign and had not considered the safety implications of using arts and crafts materials with children. This section was particularly helpful to parents, and several pregnant/expect to be pregnant in next year participants indicated they had not considered the risks posed by arts and crafts material while pregnant.

Many participants noted that the advice to never mix crafting and snacking was important, and not one they had considered before.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Explain the reasons boric acid should not be used in slime, as this is an ingredient found in many slime recipes found online. This was felt to be most important as boric acid seems to be an important contributor in a slime's appealing consistency. It was also mentioned that slime is being made in school, thus perhaps needing to advise schools of the potential danger of using boric acid.
2. Provide suggested alternatives to using boric acid in slime.
3. Clarify the term "kid friendly".
4. Include a reminder/warning that colourful materials (e.g., slime or plasticine) can be attractive to eat for young children.
5. Mention to always supervise children when doing crafts.

### Notable Quotes from Participants

*"Kid friendly is a term that means many different things to different people. I think it needs to be clarified if you mean non-toxic etc." Pregnancy Group*

*"Il manque d'explications sur l'acide borique. Je ne sais pas c'est quoi et pourquoi on ne peut pas l'utiliser." (There isn't enough information on boric acid; what is it and why can't we use it?) Parent Group*

*"At the end they should say that for protecting people at greater risk also includes those who are breast feeding." Pregnancy Group*

*"Why is there no mention of choking hazards, or about sharing materials because of COVID?" Indigenous Peoples Group*



## DIY and Home Renovations

### Overall Reactions

Some felt this section was not necessarily an everyday activity and could be placed as its own section of the guide. While providing detailed information, there were many areas identified as needing clarification or more information for their particular needs. Some newcomers had not heard of the term 'DIY' before, and suggested that the term be defined on first use.

More specifically, the information regarding asbestos, lead, and radon was considered highly important and not necessarily related to home renovations. It was felt that this information might be skipped by someone who did not feel the section was relevant to them personally, and therefore this information should appear in its own section or elsewhere in the guide.

Radon exposure was new information for many, and there were many participants who would like to have additional practical information on how to test for radon in their home. Similarly, there were many questions about how to test for lead in paint or pipes, as well as questions about what the consequences of drinking water or breathing in dust containing lead. Many wondered how they would be able to test their water for lead.

There was also interest in understanding the severity of the risk, understanding that it may not be possible for some people to assess or address the presence of radon or lead in their home. Some people who had never heard of radon questioned how important it would be to address it, although having it placed ahead of CO or lead poisoning in the guide led them to believe it was highly important. Likewise, renters questioned if dealing with mould was their responsibility or that of their landlord. Further, they would like to have advice included in the guide on how to address landlords who are not complying with their obligations to ensure their home is safe and free of dangerous chemicals and substances, such as radon and mould.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. In the first paragraph, the statement "...that you can do to help turn where you live into your home" was confusing.
2. Define 'DIY' the first time it is used for those unfamiliar with the acronym.
3. Renovations can often happen once someone is pregnant (preparing the baby's room), and therefore it is not necessarily feasible to postpone the project. Mention that the pregnant person should not participate in the project (similar to the statement in the pregnancy tip sheet about not being present during renovations).
4. Reference the hazard symbols section of the guide when stating "If you don't already know what these symbols mean, learn about them." Also advise on where to find additional information (e.g., where in the guide but also other references online).



5. Clarify the reference to a proper mask and safety glasses (in what case would someone need both?), perhaps state “or” or “and/or” safety glasses.
6. Clarify the severity of exposure to VOCs and off-gassing. The concept of VOCs and off-gassing was new information to many, and it was not clear how severe an issue this could be.
7. Clarify certain terms in the asbestos section, such as ‘tightly bound’ and what ‘disturbed’ and ‘undisturbed’ refer to.
8. Clarify how someone can find out if the paint in their home contains lead (simply because the home is before 1991, or other reasons?)
9. Letting tap water run until cold was considered highly important and should be highlighted, along with an explanation about the rationale for doing so.
10. Include information about how to test for lead in paint.
11. Clarify why it is not recommended to use bleach when cleaning mould, as this advice contradicts common perceptions and current practices.
12. The size of the mould patch required before hiring a professional was surprising, some felt that smaller patches should also not be addressed by the homeowner/tenant.
13. Illustrate the sizes of mould patches with examples for added clarity.
14. Mention that those with compromised immune systems may also be more susceptible to exposure to chemicals.

### Notable Quotes from Participants

*“Il y a beaucoup d’information et dans le fond la lacune principale c’est qu’on traite les éléments de la même façon même s’il y a différents degrés de dangerosité.” (There is a lot of information and basically the main shortcoming is that we treat the elements in the same way even if there are different degrees of dangerousness.) Senior Group*

*“Mould is way more serious than the information makes it out to be, try to clean mould yourself, centers would need to close down if there was a little bit of mould, not to try to clean it up on your own.” Pregnancy Group*

*“It would be nice to know how common Asbestos and lead is in paint. I have no idea. And also how to recognize it and how to avoid it.” Indigenous Peoples Group*

*“Il y a plein de dates quand on parle du plomb à travers le guide : 1975, 1990 et 1991. Est-ce qu’on parle de la même chose?” (There are different dates mentioned throughout the guide when speaking of lead: 1975, 1990 and 1991. Are we talking about the same thing?) Newcomer Group*

*“J’aimerais savoir quelle est la conséquence d’avoir été exposé à ces produits par le passé (radon, plomb et moisissures)?” (I would like to know what are the consequences for previous exposure to these products (radon, lead and mould)?) Senior Group*



*“Asbestos is very serious as a subject, and here it’s unclear. What does ‘tightly bound’ mean? What is ‘undisturbed’? It’s not taken seriously enough because it’s vague.” Senior Group*

*“If you’re buying something made of composite wood... When it says look for products with lower levels of formaldehyde, what are considered low levels? What is the threshold?” Newcomer Group*

*“Where it says follow all safety, usage, and disposal instructions... then... Look for hazard symbols... if you don’t know what these symbols mean, learn about them. Instead of saying this, provide link to page that lists hazards symbols. Make it easier for the reader to find the information required.” Newcomer Group*

*“How do I know if you have lead in your pipes or paint? How would I have it tested? Where are the labs? Who do I contact?” Senior Group*

*“Why shouldn’t I use bleach for mould? I’ve always done it. Is it dangerous? Give me a reason.” Senior Group*





## Working in the Garage or Workshop

### Overall Reactions

This section was felt to be repetitive from other sections, but also included useful information. It was felt that if someone didn't own a garage or a workshop, this section might be overlooked, so therefore tips not mentioned elsewhere (sniffing a container, for example) should be repeated in other sections.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Typo in the English version of the guide, first paragraph – “keep healthy and safety” change to “health”.
2. Consider advising to have access to a fire extinguisher, smoke detector and carbon monoxide detector.
3. Include an explanation of what happens if an individual is exposed to carbon monoxide.
4. Consider more specific advice on storing pool chemicals if a garage or shed is not available.

### Notable Quotes from Participants

*“How would I know if I was exposed to carbon monoxide? What are the symptoms?”*  
Newcomer Group

*“The word sniff is odd. It should really say ‘smell’ instead.”* Indigenous Peoples Group



## Controlling Pests Safely

### Overall Reactions

This section was useful to some but also raised a number of questions for participants, and a few areas noted as missing.

Some participants commented on the section being too broad, covering both pests in the garden and the home, and including both chemicals that one would use on one's skin (e.g., bug repellent) and pesticide that would be used in the home or garden. Many newcomers were curious to better understand which types of pesticides could be used legally in Canada.

The availability of the pesticide label app was of interest to many, but there was no previous awareness of such an app. Participants were interested in having more information as to what type of information is available on the app.

As there may be a stigma associated with the presence of pests in a home, notably bugs, it was suggested to establish in the section introduction that it has no relationship to the cleanliness of a home, as well as clarifying how common this situation might be. This approach was felt to be essential in reassuring some people who may avoid dealing with the issue for fear of stigmatization.

It was mentioned that capturing bugs for identification is not always possible and as such, a visual guide should be provided (or a link to this kind of online tool) to assist with the identification.

Once again, renters believed that the section should mention how they can address situations where landlords do not want to deal with the presence of pests in their rental units.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Revise the first bullet, as pests were assumed to be an insect/rodent, so a reference to hand weeding seemed out of place. Mention either herbicides/weeds/garden pests in the introduction, or move hand weeding to a separate sentence. The relevance or purpose of hand weeding was not well understood.
2. Provide information on how to check if pesticides are authorized for use in Canada.
3. Provide information on how to check if a pesticide is a registered product from a Canadian retailer.
4. Clarify the term cosmetic in relation to pesticides.
5. Consider specifically mentioning DEET in sprays and to be aware, or reduce exposure to DEET. Include a link to poison control centres to have easy access in an emergency.
6. Some pesticide products have best before dates, mention checking best before dates.



7. The link between using pesticides and covering up was not clear, consider adding ‘to reduce the amount of bug repellent or pesticides needed’ or similar statement in the Cover up section.
8. Identify safer alternatives to chemicals to address pests, if those exist.
9. Advise against picking up second-hand items left at the road side; and how to handle objects purchased from second-hand stores.
10. Mention if the retailer is required to refund returned pesticides that is unopened.
11. In the French version of the guide, consider rewording the statement on storing of pesticides to read: “Entreposez les pesticides dans leur contenant d’origine, hors de la vue et de la portée des enfants et des animaux domestiques, et à l’écart des aliments et des boissons”.
12. Correct the misspelling of “tucked-in-ling sleeve shirt” to “tucked-in-long-sleeve shirt”.

### Notable Quotes from Participants

*“There is a stigma with bedbugs. So, they need to say that you don’t have to be ashamed to have bedbugs and you have to deal with it.” Indigenous Peoples Group*

*“This section is mixed up between things that you use on your skin and things that are in the home.” Newcomer Group*

*“They need a list of pesticides that are allowed in Canada.” Newcomer Group*

*“What is hand weeding? And what does it have to do with pests?” Senior Group*

*“Is there a specific ‘mark of safety’ that we can look for while purchasing pesticides?”  
Newcomer Group*

*“It’s really informative on how to deal with pesticides. Often we just remove the cap and start spraying, never thinking of its harm to ourselves.” Newcomer Group*



## Staying Safe on Hot Days (including Outdoor Air Quality)

### Overall Reactions

While this section was considered helpful, participants questioned its relevance to the overall topic of chemicals and pollutants as well as its placement within the guide. Referencing air quality and use of sunscreen made sense in the context of chemicals and pollutants, but it may be necessary to provide a greater link between the safety tips and the overall goal of the guide.

While some appreciated the explanation provided for the Air Quality Health Index (AQHI), some felt that it should be mentioned that air quality varies by location and time of year, for added clarity and to make people realise that this is something that needs to be checked regularly. It was also deemed relevant to mention that air quality can be affected by certain events, such as increased air pollution or forest fires. Some suggested that it would be important to include a safe range of numbers within the index.

It was also believed that to make the information in this section more relevant and enhance its perceived importance, information or data should be provided on the types and severity of consequences resulting from poor air quality (e.g., number of deaths; effect on people's health).

Questions were raised as to the reasons for identifying homeless people as being among the higher risk population, given that the guide appears to be intended for homeowners or renters.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Consider removing the first sentence regarding climate change, as some questioned its accuracy and felt the government was taking a stance that was not necessary.
2. Mention that sunscreen needs to be reapplied regularly.
3. Mention that dehumidifiers are an option for dealing with humidity.
4. Similar to the cooling section, mention checking air filters for cooling (air conditioning, heat pumps, etc.).
5. Clarify the consequences of poor air quality.
6. Consider advising on limiting alcohol consumption on hot days, if alcohol is considered to be a chemical substance.
7. In the safety tips section, clarify why the use of cordless window coverings is recommended (in contrast to blinds with cords).
8. Mention the health risks of aerosol sunscreen, given that the product is airborne.

### Notable Quotes from Participants

*"Is this guide supposed to cover all aspects of health? This section seems to suggest that is the case." Indigenous Peoples Group*



*“Pourquoi c’est pertinent cette information-là? Il n’y a rien de chimique là-dedans!”  
(Why is this relevant information? There is nothing chemical about this.) Senior Group*

*“They need to give more information. What to do if you have sun exposure? What can you cook without the oven? Clarify what the alternatives are.” Newcomer Group*



## Staying Safe at Home During Cooler Months

### Overall Reactions

This section was considered more relevant than staying safe during hot days, which may be in relation to the sessions being held in winter and this was top of mind for participants. In addition, the topics covered were felt to be more relevant to indoor chemicals and pollutants. This section included a number of topics that were of interest and new for participants, and there were a number of areas where concern was raised or clarity was sought.

In particular, radon was not well known for many, and there was confusion and alarm for a topic that they had never heard of. The placement of radon in this section (before carbon monoxide) led participants to believe this issue was more critical, and of high importance. More information regarding radon was sought (such as what is considered high concentration; which regions are most at risk; where can testing materials be obtained), but also caution was noted. Specifically, several participants mentioned that while testing for radon was a simple and fairly inexpensive process, should radon levels be elevated, fixing the problem was potentially too expensive for some home owners or landlords. It was noted that the government should have programs to help home owners deal with elevated radon levels, particularly if this is considered a large problem in Canada.

The reminder to service appliances was considered important and helpful. In addition, many were not aware that CMHC had information regarding the rights and responsibilities of a renter.

While information specific to renters was found in this section, it was felt that it would be missed if someone did not have any worries about staying safe during cold months. As such, it was suggested to move the information upfront in the guide, either in the introduction or in its own section.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Clarify to the extent to which radon is a concern or issue in Canada. For those who were unfamiliar, this section was alarming, and they were left with many questions about how to gather more information. Noting if radon is present in all areas of Canada, or more common in specific areas was also deemed helpful.
2. Indicate where to go to find more information (and who to contact regarding) radon testing.
3. Specify why testing is better done in fall/winter.
4. Specify if there are multiple test options for radon, if there is a way to check the legitimacy of a test or company that offers tests, or if there's a website that would provide more information.
5. Mentioning radon testing and not detailing the possible expense or issues associated with reducing radon levels was considered problematic. For example, several participants were



- also landlords, and it was mentioned that if they did not have the funds to fix a radon issue in their properties, they would not want to proceed with the testing to start with.
6. The guide indicates that the landlord is responsible for ensuring a working CO alarm, and the “Do you rent” section states that landlords may be obligated. It was felt that landlord responsibility varies from province to province or municipality to municipality, and the local authority may not require the installation of a carbon monoxide alarm, therefore the guide should not reference that this is the responsibility of the landlord and be consistent in this wording throughout.
  7. Include checking outdoor vents during winter to ensure they aren’t covered by snow/ice.
  8. Typo in the English version of the guide – under Detect Carbon Monoxide, “or” change to “of”.

### Notable Quotes from Participants

*“The guide doesn’t seem to explain radon as well as carbon monoxide. Why it is more prevalent in winter?” Parent Group*

*“What are permitted levels of radon? What happens if you are exposed?” Newcomer Group*

*“How does radon exposure correlate to cold weather?” Newcomer Group*

*“Are radon checks a landlord’s responsibility?” Newcomer Group*

*“For Carbon Monoxide, is there a law that obligates landlords to install CO alarms? What if the landlords won’t install the CO alarm? What should the tenant do?” Newcomer Group*

*“Reminders about changing filters are really important. That’s something I forget about and this reminded me to do it!” Senior Group*



## Using Cosmetics and Personal Care Products Safely

### Overall Reactions

This was considered useful information and there was a strong desire for additional details on specific chemicals found in those kinds of products, as well as what health consequences they may have. It was felt that this section could be considered an every day activity and therefore it should be moved earlier in the guide.

This section was surprising for some, particularly noting that natural products may not necessarily be healthier. For some, this section did not seem as important as the other topics covered in the guide (if they did not use cosmetics). Many men indicated this section was not relevant to them, as they didn't use cosmetics, indicating that the section heading should be renamed to encourage those who don't use cosmetics to read it.

It was also noted that cosmetics are often not treated in the same manner as other chemicals, and are not locked up or necessarily kept away from children, and for that reason, it was important to focus on it.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Provide information specific to natural products.
2. Discuss best before dates on those products and how they should be used.
3. List the chemicals that should be avoided.
4. Consider renaming the section to highlight 'Personal Care Products' rather than 'Cosmetics' to encourage wider readership.
5. In the French version of the guide, clarify what is implied by "produits parfumés" – more specifically if it only includes perfumes or other products.
6. Specify where to find the consumer Product Incident Report for people who do not have access to internet.

### Notable Quotes from Participants

*"This is great! I did not realize that make up went bad. I have stuff that dates back fifteen years. I am going to throw it out after this!" Indigenous Peoples Group*

*"Apart from natural vs. synthetic there is very little mentioned about Personal Care Products. Focussed a lot more on cosmetics." Newcomer Group*

*"The 'natural is not always better' information was very interesting to know." Newcomer Group*





## Glossary of Common Chemicals and Pollutants

### Overall Reactions

Although it did not include any content at this time, the glossary section was well received, with many feeling they would reference this portion of the guide given the complexity of some of the topics/terms used throughout the guide. It was felt that given the complexity of the terms or concepts that would likely be included in the glossary, attention should be paid to using simple language and explanations.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Provide a detailed glossary, including the definition of chemicals, but also of other concepts referenced in the guide (e.g., reproductive impacts).
2. Incorporate links into the relevant sections throughout the electronic guide, for ease of reference.
3. Typo in the English version of the guide – “You many” should be “You may”.

### Notable Quotes from Participants

*“They need to keep the level of language accessible. Use simple language.” Senior Group*

*“I think the glossary is a good idea we have different names for things in different countries.” Newcomer Group*



## Infographic: A Healthy Home Checklist

### Overall Reactions

The infographic information included at the end of the guide was considered highly useful, and some felt it would be better at the beginning of the guide, or even as a stand-alone document. It was also believed that incorporating imagery/visuals in this section is highly important to make it an easy-to-reference and accessible tool. For some it was viewed as a checklist and they envisioned that it could be put on their fridge, or referenced in a case where they or their children were moving into a new house.

The organization of the checklist in terms of moving from room to room made sense to participants, and some felt this organization more appealing than the organization of the other sections in the guide. In a few cases it was noted that information found in the checklist was more detailed or provided different information than the guide itself (for example, the radon section), and it was suggested that they should be consistent.

It was suggested that if this section is included as part of the overall guide, page references or hyperlinks to areas of the document should be included.

It was mentioned that the introductory paragraph presents the section as being a “checklist” and yet the information is not formatted as a checklist (i.e., there are not boxes to be checked). As such, it was suggested to either reconsider the use of the term “checklist” or to format the section as a checklist. Nonetheless, the table format was appreciated for ease of reference.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. The **Check for lead paint** section should state the same information as earlier in the guide in relation to consideration to hiring a professional.
2. **Fireplace safety** should also mention cleaning of the flue, including the frequency of inspection and cleaning.
3. Keeping dust and dirt to a minimum should include the reason (to reduce dust mites, etc.)
4. The sections on using and storing household chemicals, as well as choosing and using household chemical products felt repetitive; consider consolidating.
5. In the **Laundry room** section, mention cleaning lint from the dryer.
6. In the **Basement section**, mention keeping paint and solvents away from furnace, water heater, etc.
7. The **Test for radon** section provided different information than earlier in the guide, and should be consistent. This information was found useful (follow test instructions, place at lowest level where you spend at least four hours a day).
8. In the **Attic section**, some wondered why asbestos was mentioned, as there could be asbestos in the whole house, and if a home didn't have an attic, this information could be missed.



9. In the **Basement section**, clarify why boxes should not be stored on the basement floor
10. Mention not using bleach on mould and what the rationale is for this advice (and what the consequence of doing so could be).
11. In the **Test for lead in plumbing** section, clarify if cold water should be used by all, or only those who suspect lead in their plumbing.
12. In the **Go scent-free** section, explain why dryer sheets should be avoided entirely, not just those that are scented.
13. In the **Reduce clutter** section, consider providing a more environmentally-friendly recommendation to using plastic bins.
14. The **Prevent mould** section did not clearly align with the kitchen area where this information is found. Consider moving to another section or clarifying the relevance to the kitchen area.
15. In the **Check for asbestos** section, consider mentioning if this should be done for all home renovations or only for certain homes based on when they were built.
16. In the **Ventilate your space section**, mention what type of furniture, mattresses and bedding materials or components most commonly emit VOCs. Indicate if this is common in both new and used furniture.

### Notable Quotes from Participants

*“I thought this section would have been better after Risk and Exposure, and could be used as a table of contents for the rest of the document.” Parent Group*

*“La liste de contrôle pour moi c’est la seule chose qui s’avérait très utile. Cette liste devrait être disponible sur plusieurs supports et facile à utiliser.” (The checklist for me was the only thing that was really helpful. This list should be available in multiple formats and easy to use.) Senior Group*

*“I found the checklist really useful. I found it a bit wordy, but for people who aren’t familiar, maybe it’s what’s needed.” Senior Group*

*“It feels a little redundant, but knowing people wouldn’t reach the whole document. I think that it would help, as well as adding page references in the checklist.” Pregnancy Group*

*“This is the kind of thing I would put on my fridge, or give to kids that are moving into a new house.” Senior Group*

*“Is this really a checklist? There is nowhere to check anything.” Indigenous Peoples Group*

*“A checklist would be really helpful – tell me what to ask a landlord before I move in. Should also highlight what to ask a professional if you are hiring someone to look after some problem.” Newcomer*





## Overall Reactions on the Tip Sheets

Across all groups, four tip sheets were reviewed, including:

- Tips for Pregnancy and Preparing for Baby
- Tips to Help Keep your Kitchen Safe and Healthy
- Tips for Renters
- Tips for Do-It-Yourself (DIY) Projects and Renovations

In the interest of time, and to ensure a more thorough review, only two tip sheets were reviewed in each group, with the schedule ensuring equal review for each tip sheet, across all audiences.

The tip sheets were felt to be great resources for being short, to-the-point guides on what to do in specific situations. The tips were seen as useful and immediately applicable, and many felt they would place the tip sheets in an easily accessible location as a reference. It was noted that in some cases the tip sheets included information that was not in the guide, and in these cases this information should appear in both documents, that is, the tip sheets are a shorter reference for a topic, and the full information could be found within the guide.

Some suggested that a helpful addition to the set of tip sheets would be a set of checklists for those considering buying or renting a new home – including a list of things to ask / test for, as well as clear information about what to do if a landlord doesn't fulfill their responsibilities.

*“These are easier to go through – short and useful.” Newcomer Group*

*“Some landlords are not very nice. So, what do you do next if they say no?” Newcomer Group*

## Review of the Tip Sheets Content

The following sections provides a more detailed account of the reactions to the contents of each of the four tip sheets.

### Tips for Pregnancy and Preparing for Baby

#### Overall Reactions

This checklist was found useful and some learned new information. Among those pregnant or likely to be pregnant, there were mixed reactions to this guide. Some felt that this was information they already knew and it was repetitive, and others were surprised at some of the information. In a number of cases participants wanted more information as to the reasoning behind a recommendation.

In a few instances, the advice was felt to be unrealistic for renters, notably in terms of addressing lead in pipes.



## Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Clarify if lead should be a concern for everyone (i.e., even those in a newer house), and therefore whether the suggestion to use cold water is relevant to all.
2. Identify fish that are high in mercury (i.e., which ones to avoid).
3. Clarify what BPA is and how to determine if your plastics have it.
4. Clarify why it's important to not use single-use containers.
5. Clarify why it's important to not pour hot liquids into plastic containers.
6. Explain why it's important to avoid talc.
7. Clarify how to determine low-emission options for wood products. This statement was surprising and confusing to some, as they had not heard of emissions from wood products.
8. Clarify that information on whether a product is low-emission is included on product labels.
9. Include information about not pouring hot water into baby bottles, as it was felt this was common practice.
10. Mention hair coloring or perm products and if wearing a mask during hair coloring is necessary.
11. Mention second-hand smoke and its implications.
12. Inform of the risk of using perfumed products, if relevant.
13. Specify if chemicals or specific products are to be avoided in the choice of diapers and other products for babies.
14. Advice on the use of a water filtration system for water that is given to babies and young children.
15. Rephrase the statement regarding crafting products, as some people were unaware of any risks and thus would not know what to discuss with their family doctor.
16. Provide the directions for using vinegar and baking soda cleaning solutions.
17. On the French version of the tip sheet, clarify what "BPA" stands for or explain what it consists of.
18. Mention that pregnant women should not handle the cat litter box.

## Notable Quotes from Participants

*"Using the word porous for produce and explaining the reason for not washing with soap or bleach, it gave me a good visual." Parent Group*

*"Les conseils ne sont pas pratiques. Je suis en apart et il peut y avoir du plomb dans mes tuyaux, mais je ne peux pas déménager." (The tips are not practical. I live in an apartment and if there is lead in my pipes, I can't move.) Parent Group*

*"Is salmon low in mercury? I'd like some examples." Newcomer Group*



## Tips to Help Keep your Kitchen Safe and Healthy

### Overall Reactions

This tip sheet was positively viewed, but also found to be the most repetitive of other information presented in the guide. Participants' comments relevant to this section of the guide often applied in the tip sheet as well. Presenting the information and the advice by type of activity (i.e., cleaning, preparing, etc.) was appreciated and helped with locating information quickly.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Identify in what cases soap and hot water may not do the job.
2. It was questioned if washing produce with vinegar or lemon juice was a good alternative to soap, or if only water should be used.
3. Clarify the ratio of baking soda, vinegar and water to use, or include a link to a credible source.
4. It was questioned if steam cleaners are a good option for cleanliness or should these be avoided because of distributing particulate matters.
5. Clarify the recommended frequency of cleaning various kitchen areas (e.g., oven, under the sink).
6. Clarify if scratched Teflon pans should be used or discarded.
7. Specify why badly scratched or damaged cookware should not be used.
8. In the French version of the tip sheet, consider changing the word "étapes" for "conseils" since the tips are not listed in order as would be expected of "steps".
9. Consider separating the advice about keeping household chemical products away from food, water sources and open flames from the advice of keeping those products out of reach from children, to stress the importance of each of those safety practices.
10. Indicate where to find the recycling code on containers.
11. Explain why plastic wrap/film should not be used to store foods (in the French version of the tip sheet).
12. Specify how often kitchen surfaces should be washed, namely what is considered "often".
13. Indicate how long to run the cold water before using it, especially if the presence of lead is suspected, and whether this advice is applicable for all, or just those living in homes built before 1990.
14. Indicate why the stove exhaust fan should be run on the fastest speed available.
15. Provide example of microwave-safe containers and how to determine if a container fits this description.
16. Mention that stained or damaged plastics and containers should be discarded or recycled.



### Notable Quotes from Participants

*“They should elaborate a bit about container use. There is a lot of information in the guide that is not here.” Indigenous Peoples Group*

*“Comme est-ce qu’on fait pour identifier le code de recyclage sur les plats de plastiques qui sont achetés? Pas sur ceux des aliments, mais sur les autres.” (How do we identify the recycling code on the purchased plastic containers? Not the food containers but the other ones.) Senior Group*





## Tips for Renters

### Overall Reactions

This tip sheet garnered a lot of discussion, and questions were raised about who has responsibility for specific tasks (tenant or landlord), and whether requirements vary from province to province. Some participants were also landlords, and felt that the information was misleading or indicating that a task was the landlord's responsibility when it wasn't the case in their area. Mentioning the CMHC was important as many were unaware that renter information was available.

In a few instances, it was felt that the information about asbestos was not relevant to renters, as they are generally not responsible for renovations or upgrades to their home. Perhaps this information can be contextualized by warning renters to be aware of the possible presence of asbestos and the risk they could incur if they continue living in their apartment while renovations to the building are underway.

While some information was felt to be repetitive, it was found that having the information in both the guide and the tip sheet was preferred, and the information should be consistent.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. Stating “and may be the duty of your landlord” was not clear and was concerning to some landlords if they felt that this was not a requirement for them in their jurisdiction.
2. Stating “there is no need to use bleach” was not found to be as strong as the statement in the guide on page 16 “do not use bleach”, and again there was interest in understanding why bleach should not be used to clean mould. Clarify the difference between small and large amounts, rather than leaving it for interpretation.
3. Clarify whose responsibility it is to install smoke and CO alarms.
4. Briefly mentioning radon without further information was considered confusing. Either include more information about radon in the tip sheet, or provide a link to more information. There was concern that while testing for radon was an easy task, the expense to fix the issue may not be accessible.
5. Explain why outdoor shoes should be removed at the door.
6. The advice to have a smoke-free home puzzled some and lacked proper explanation.
7. Explain the reason for washing hands after touching pets, as this seemed unnecessary or unrealistic to many.

### Notable Quotes from Participants

*“I’m a landlord, something that I’d want to give to my tenants when they move in, great information. I would be happy to include in my information to renters.” Parent Group*



*“If my landlord refuses, should I as a tenant file a complaint? Who is responsible?”  
Parent Group*

*“Les gens n’ont pas connaissance de leurs droits. Ça devrait être mentionné ici.” (People  
are not aware of their rights and it should be mentioned here.) Newcomer Group*

*“They should include a section that has a list of questions you can ask if you are renting,  
so you don’t have to worry.” Newcomer Group*



## Tips for Do-It-Yourself (DIY) Projects and Renovations

### Overall Reactions

Similar to the other tip sheets, this was found to be useful and summarized information available in the guide. There was an interest in the information to be consistent with the guide, without being too lengthy. Some of the newcomers who were also renters felt that the information was too vague and lacked relevance to their situation.

### Recommended Edits

Participants highlighted a number of areas that require clarification or improvement, and recommended edits in some instances.

1. The title was confusing to some; it wasn't clear if the tip sheet was going to explain how to do DIY projects, or speak of chemicals and pollutants when undertaking a DIY project.
2. Zero-VOC is mentioned before volatile organic compounds are listed. Include the full term with a description the first time it is mentioned.
3. Include a link to the hazard symbols page from the guide.
4. Introduce the concept of reusing, recycling, refurbishing, and repurposing in the process of renovating a home.
5. Mention that renovation can take time – days, weeks or even months – to help renters consider the potential level of exposure to some of the chemical used during the process.
6. In the French tip sheet, clarify the term “dirigé” (last bullet on the page) or consider using a different term.
7. Mention that asbestos can be found on equipment that needs replacement (e.g., old furnaces) in addition to being a consideration for renovation projects.

### Notable Quotes from Participants

*“In terms of safety aspects, it would be a good reminder for people to get a timeline of the project. People may be living on the work job for a bit so this is important.”*

*Indigenous Peoples Group*



## Guide and Tip Sheets Accessibility

Indigenous peoples and newcomers were asked what needs to be done to ensure that the guide and tip sheets are accessible.

### Acknowledgement of Cultural Practices

Indigenous peoples highlighted the need to ensure that the guide acknowledge their cultural practices (e.g., smudging) and provide advice on how to ensure they can be carried out safely. It was also believed that advice on water safety should be provided within the context of the limited accessibility to clean water on-reserve and in some remote communities.

*“There needs to be something for First Nations but also in Inuit community where we light a light. Smudging produces a lot of soot and the government has made a lot of talk about reconciliation and I would think that having a small section to address the indoor air quality of traditional practices would be important.” Indigenous Peoples Group*

### Assistance for Newcomers

Newcomers were less familiar with how to access information relevant to where they live, and would like some further guidance on how to look up information about their municipal regulations, what type of ‘professional’ assistance could be called for various types of services, and who to call in emergencies.

In general, the information was very useful for newcomers, who indicated that it would be particularly helpful when they were looking for housing.

*“It should be available when you are looking to rent somewhere. I would read a checklist on my phone.” Newcomer Group*

*“As a newcomer I find it difficult to find municipal guidelines on how to dispose of household hazardous waste for example. Ideally, there would be links to websites depending on the area you live in.” Newcomer Group*

Others indicated that the information would be helpful to have in print to be able to have it posted in their home or community centres.

*“I’d put it like a cheat sheet on my fridge.” Newcomer Group*

*“It should be in print and online. Sometimes you can’t print, and sometimes you can’t access a computer, so printed is good. Some community members don’t have internet too.” Newcomer Group*



## Visual Format

It was also mentioned across both audiences that short text using simple language was important to grab attention and sustain interest, especially for those for whom English or French is not their primary language. The use of images and bullet-point format were felt to be very effective, as was the case in the tip sheets.

## Formats for the Guide and Tip Sheets

Participants were informed that the guide and tip sheets they reviewed were still under development, and as such, formatting was not completed. A portion of the discussion pertained to the desired format and layout for the final materials.

Older participants, as well as Indigenous peoples and newcomers, were interested in having both a physical copy and an online version available. Many indicated that tip sheets would be useful to have on hand to post on key locations where chemicals are kept (e.g., storage cupboard doors; near the furnace), in the garage around DIY tools, or on the fridge for cooking and cleaning. In addition, some felt that internet access was not always guaranteed, and the depth of information available in the guide lends itself to be read at leisure, rather than on a phone or other small electronic device. A printed copy of the guide would also be useful as a reference, or to tear off sections that are of greater interest.

*“Pour moi j’aime avoir une copie papier parce que c’est pratique pour le garder chez moi et le montrer à mes enfants par rapport à quoi ne pas toucher.” Parent Group*

By contrast, having online access to quick tips, or to research specific questions, was felt to be important. Having the guide in an online format was felt to be helpful for searching for information or linking to external websites.

A few participants suggested to develop complementary products to improve accessibility and appeal for different types of learners, such as short podcasts and videos.

A number of participants suggested complementing the guide and tip sheets with ‘checklists’ that would help homeowners conduct regular verifications around the house. For example, a renovation checklist could be used to ensure that the worksite is safe; a checklist could be available for spring or fall cleaning, thus assisting residents in selecting, buying, using and storing chemical products adequately to conduct those tasks. Likewise, other checklists were suggested for gardening/caring for the yard and preparing for the colder months (e.g., check for radon, etc.).

*“I don’t want to read stuff about homeownership, things that don’t apply to me. But if there were separate sections online that you could click on and that are helpful that would be nice to read. Have a checklist for each section that you can print or download on your phone.” Indigenous Peoples Group*



## Look & Feel for the Guide and Tip Sheets

Participants were presented with an example of an existing brochure and asked to comment on the appropriateness of the type of design/layout for the guide and tip sheets under review. For the most part, the blue/teal colour-scheme was considered appropriate, while the choice of font, use of bold, and underlining of titles were also liked for visual appeal and clarity. That said, many were critical of the images shown, as they are not reflective of a diversity of household types and composition (i.e., they mostly show families with children).

It was also felt that the images should reflect the seriousness of the topics presented in the guide and tip sheets, as well as provide additional information/visual cues/clarifications where possible (e.g., show product labels or where to find information on product labels; show what borax and mould look like, show an example of a CO alarm). Many participants suggested that the photos used in the guide should reflect the topics closely (e.g. showing images of a radon detector, showing images of the types of containers that are safe to use) rather than showing only images of people.

**DO IT FOR...**

**A HEALTHY HOME.**

**Ten Tips to Protect Your Family from Chemicals and Pollutants**

Canada.ca/healthy-home

**Every day, we are exposed to chemicals and pollutants in the air, food, water and products we use in our home.**

Here are ten simple steps you can take today to help protect yourself and your family.

**1 Read the Label.**  
Always read and follow instructions on the labels of household chemical products and pesticides. Use them carefully—especially around children!

**2 Lock Up Your Chemicals.**  
Keep household chemical products locked in cupboards or drawers—out of reach and sight of young children.

**3 Dispose of Chemical Products Properly.**  
Prevent the contamination of our soil, air, and water—never dispose of chemical products or pharmaceuticals by flushing them down toilets and drains. Follow directions on product labels and municipal guidelines on how to dispose of chemicals and other hazardous waste.

**4 Install Smoke and Carbon Monoxide Alarms.**  
Install a certified smoke detector and ensure you have at least one functioning carbon monoxide (CO) alarm outside of your bedrooms. Always keep the door between your home and garage closed.

**5 Test for Radon Gas.**  
Radon is an invisible and odourless radioactive gas. It is the number one cause of lung cancer in non-smokers. Buy a radon test kit or hire a professional to do it for you, most importantly reduce the level if it is high.

**6 Ventilate Your Home.**  
Turn on exhaust fans that vent to the outdoors while showering and cooking, especially when frying food or using a gas stove. Open windows when renovating or using products that may release chemicals into the air, such as when painting, varnishing, working with composite wood, or installing carpets.

**7 Prevent Mould.**  
Eliminate mould by keeping indoor moisture and humidity levels low. Clean up spills immediately and small amounts of mould with water and dish soap.

**8 Let Tap Water Run Until It's Cold.**  
If you know or suspect you have lead in your drinking water, reduce your exposure by letting your taps run until the water is cold. Use this cold water for drinking, cooking, or making baby formula.

**9 Wash Your Hands Often.**  
Frequent hand washing often helps to prevent infection and reduce exposure to harmful substances. This is especially important before preparing and eating meals and if your hands come into contact with a household chemical product.

**10 Keep Your Home Clean.**  
Clean your floors and household surfaces with a wet cloth or mop to remove dust and dirt. Vacuum carpets, curtains, and all soft furnishings frequently. Don't track in harmful substances from outside; keep a strict barrier between outside contaminants and your home by removing your shoes at the door.

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For the most part, participants believed that the images should be more reflective of the topics presented, although care should be taken in ensuring that they are still attractive enough to grab attention.

*“On parle de moisissures et on voit des gens heureux. On devrait voir des gens se laver les mains et des images de moisissures.” (We talk about mould and we see happy people. You should see people washing their hands and pictures of mould.) Parent Group*

*“I liked boxing off the definitions [throughout the guide] – it makes them stand out.” Senior Group*



*“The design isn’t in line with the seriousness of what we’re talking about. It needs to be hard-hitting, maybe including hazardous symbols.” Pregnancy Group*

## Usage / Appeal of the Guide and Tip Sheets

In general, participants found the guide and tip sheets a useful reminder of what to look for and how to address common household situations in a safe and healthy way. The inclusion of advice was appreciated, and in fact, many of the tips provided would be followed right away, especially those related to cooking, crafts, DIY and cleaning.

*“I could see myself using that information. I could see myself if I received a checklist that is something that I could make copies of and once a year or once a month do things like check the vents in my apartment and make sure that they are vacuumed out and things like that.” Indigenous Peoples Group*

*“I’d stick it on my fridge because it is top of mind and visible to everyone who opens the fridge or enters the kitchen.” Newcomer Group*

It should be noted that in a few instances, participants did not see a purpose for the material, and in fact felt that the information and advice were common knowledge and thus unnecessary. As such, suggestions were made to establish greater relevance in the guide’s introduction section, and in the opening paragraph on the tip sheets, perhaps by providing statistics showing the negative impacts of improper consideration of chemical products or by demonstrating that some common practices can in fact be harmful. In essence, explain why it is necessary to inform the public about the purchase, handling and storing of chemicals in and around the home.

It was believed that the guide and tip sheets would only be useful in specific situations, primarily a home renovation or the purchase of a home. Tenants felt that these documents would be useful upon contracting a new lease, thus informing them of their rights and their landlord’s responsibilities.

In terms of where the printed material should be available, many participants felt that high-traffic locations would be best (e.g., retail stores), most notably those with some relation to home improvements (e.g., home hardware stores) and where tenants are most likely to see it (e.g., apartment or condo building lobby). At the same time, it was believed that doctors’ offices or libraries would be good distribution sites, where people have time to read materials onsite. Home or renovation shows were also considered appropriate distribution method for printed materials. Through direct mail was also mentioned, for example by including with a power or water bill, or other communication of this nature. Finally, pregnant women, or those intending to become pregnant in the next year, also suggested to make the pregnancy tip sheet and guide available through physicians’ offices.

*“If I saw this in my building lobby, I would pick it up but not otherwise.” Indigenous Peoples Group*



*“They should give this to you at an immigrant settlement meeting. It’s really useful when you arrive. Also at Service Canada centres.” Newcomer Group*

It was believed that raising awareness of the guide and tip sheets would be beneficial, notably through social media and posters in high-traffic locations.





## Conclusions and Direction

As Health Canada finalizes the development of the Healthy Home Environmental Health Guide and tip sheets, the following provides conclusions derived from the detailed analysis of findings and the resulting recommendations to address study objectives.

- ***The guide and tip sheets were useful and generally relevant. Updating the content to more clearly articulate the objectives and delineate the intended audience will be important to make the materials even more compelling.***

Most participants found at least a portion of the guide to be interesting, relevant, and in many cases, participants felt that their behaviour would change as a result of reading the material. Indeed, while only asked to review a portion of the guide, many participants reviewed the entire guide as it contained information they felt was important and relevant to them personally. That said, it was not always clear if the guide was directed toward them, or other audiences, and how the information should be used.

Based on this conclusion, the following should be considered:

- **Topics included in the guide.** Consideration should be given to the choice of topics covered (relevance to having a healthy home vs. focusing on chemicals and pollutants more broadly) and provide rationale for including specific topics (e.g., outdoor air quality; staying cool on warm days).
  - **Clarify the intended audience.** Ensure that readers understand who the guide is designed for (all Canadians, new home owners, new Canadians etc.). The introduction could provide this information while outlining the purpose of the guide and how it will help the intended audiences.
  - **Establish greater relevance for the guide and tip sheets.** As the information and advice provided may appear to be common sense to many, the personal relevance of the guide and tip sheets should be further established in the introduction for those who believe they already know this information. This could be done through the provision of factual information or statistics on the current level of awareness and on the prevalence of behaviours addressed in the material; or more clearly identifying the severity of consequences if situations are not considered or problems addressed.
- ***The guide and tip sheets appear to cover a variety of topics of interest despite lacking in some areas. Consideration should be given in how the information is organized in the guide.***

Although the choice of topics appeared comprehensive and was of interest, it was felt that selected information was still missing from the guide. The structure of the guide was also considered as lacking flow in some areas, and some of the topics were considered out of place (e.g., outdoor air quality not related to everyday activities).



Based on this conclusion, the following should be considered:

- **Provide information on additional topics.** Consideration should be given to adding information on the following topics: fire safety, chemicals and children or pets, attic maintenance, ventilation/heating ducts, air purifying, gardening and outdoor living, battery storage and disposal, BBQ safety, water testing for other reasons than lead, pesticides allowed in Canada, landlords' responsibilities, and alternative outdoor storage to a shed or garage.
- **Restructure the guide to ensure topic-groupings make sense.** Some of the section groupings should be reconsidered so the topics are related to one another. Topics could be grouped by everyday activities versus renovation or special occasions, and then within each of those sections, the topics would be ordered in such a way to make sense (e.g., by audience; by room/area; by season; by activity).
- *In some instances, the guide included contradictory information, or different information for the same topic area. Ensure consistency throughout both the guide and tip sheets.*

Participants identified a number of areas that were inconsistent, used different terms that could be interpreted as meaning the same thing, or information in one section was very clear how to handle an issue, and less clear in another section.

Based on this conclusion, the following should be considered:

- **Consistency in information/use of terms.** Ensure any topic that is included in different sections provides the same information, or directs the reader to other sections of the guide to learn more (particularly in the case of the tip sheets).
- **Limit or choose carefully when abbreviations are used.** Abbreviations should not be used until the term has been defined, and this should be repeated for each section where the term is relevant.
- **Provide an in-depth explanation of topics when presented in the guide.** Given the understanding that the guide may not be read from cover to cover, but rather based on the sections of interest, consider providing an explanation of some of the key terms/concepts/chemicals (e.g., radon) when they appear in the guide, or alternatively provide a hyperlink or reference to the glossary section.
- *Participants sought rationale and a greater level of detail for many recommendations, particularly those that are performed on a regular basis.*

There was interest in learning the 'why' for many recommendations, which was universal across audiences. This was particularly important for common everyday activities such as cooking and cleaning, or topics that were unfamiliar.



Based on this conclusion, the following should be considered:

- **Include a rationale for the advice provided.** Recommendations in the guide and tip sheets should include the rationale to further enhance the credibility. This is most important to address common behaviours or preconceptions.
- **Establish credibility and urgency to act.** Topics that may be lesser well known (radon for example), should include statistics or facts to help readers understand the prevalence and implications, to provide them with information to better assess their personal risk.
- *The tone, layout and images should reflect the seriousness of the topic. While the tone should stress some urgency, the relative importance of addressing chemicals should be mentioned.*

It was felt that the voice or tone used throughout the documents was not consistent, and varied from positive to negative, as well as from light to serious. This led to confusion as to how to interpret the seriousness of the guide. With a large number of topics being covered, to which there are varying degrees of risk, it was not always clear to participants how concerned they should be about a particular topic.

Based on this conclusion, the following should be considered:

- **Ensure a consistent voice and tone throughout the documents.** Ensure that the level of language used, the use of punctuations, and the manner in which information is presented is consistent throughout the documents.
- **Inform on the varying degrees of urgency/seriousness/severity.** Consider providing a method for readers to easily understand which topics are more serious than others (i.e., radon, lead in plumbing, carbon monoxide and asbestos). This could be done through warning icons used throughout the guide and tip sheet, or through the provision of statistics or factual information to establish a portrait of the situation that helps readers assess the level of risks.
- **The visuals used in the guide and tip sheets should reflect the seriousness of the topic in addition to providing additional information.** When considering the overall look and feel of the document, it was felt that it should be done in a way that reflects the seriousness of the topic, and include a range of imagery that does not make light of the topic (not only showing smiling faces, for example). The use of hazard symbols or other icons was felt appropriate in this instance. Images should also be used to show the materials' diverse audiences, as well as provide a visual explanation of concepts, where relevant. Participants also suggested that photos should exemplify materials and issues being explained (e.g., showing images of a radon testing device, what mould looks like etc.)

Appendix A:  
Recruitment Screener

## Health Canada: Testing Healthy Home Environmental Health Guide Recruitment Screener – Final

Name: \_\_\_\_\_

Home phone: \_\_\_\_\_ Work phone: \_\_\_\_\_ Cell: \_\_\_\_\_

Email: \_\_\_\_\_

Community: \_\_\_\_\_ Province: \_\_\_\_\_

### SECTION 1: Schedule & Specifications

#### NETFOCUS GROUP SCHEDULE

Date	Group	AST	EST	Participant Time	Audience	Language	Moderator
Tuesday, Feb 16	1	3:00pm	2:00pm	3:00pm	Seniors – Halifax	EN	MC
	2	5:30pm	4:30pm	5:30pm	Parents – Halifax	EN	CW
	3	7:30pm	6:30pm	5:30pm	Indigenous People – Prairies (MB/SK)	EN	MC
	4	8:00pm	7:00pm	7:00pm	Parents – Toronto	EN	CW
	5	9:30pm	8:30pm	5:30pm	Pregnant Women or to be – Vancouver	EN	MC
Wednesday, Feb 17	6	3:00pm	2:00pm	2:00pm	Seniors - Toronto	EN	CW
	7	6:30pm	5:30pm	5:30pm	Pregnant Women or to be - Toronto	EN	CW
	8	6:30pm	5:30pm	5:30pm	Parents - Montreal	FR	CP
	9	7:30pm	6:30pm	6:30pm	Newcomers - Toronto	EN	MC
	10	8:30pm	7:30pm	7:30pm	Indigenous People - Ontario	EN	CP
	11	9:00pm	8:00pm	7:00pm	Pregnant Women or to be - Regina	EN	CW
Thursday, Feb 18	12	9:30pm	8:30pm	5:30pm	Newcomers - Vancouver	EN	MC
	13	3:00pm	2:00pm	2:00pm	Seniors - Montreal	FR	CP
	14	5:00pm	4:00pm	5:00pm	Newcomers - Halifax	EN	CW
	15	5:30pm	4:30pm	5:30pm	Pregnant Women or to be - Halifax	EN	MC
	16	6:30pm	5:30pm	5:30pm	Pregnant Women or to be - Montreal	FR	CP
	17	7:30pm	6:30pm	5:30pm	Parents – Regina	EN	CW
	18	7:30pm	6:30pm	5:30pm	Newcomers - Regina	EN	MC
	19	8:30pm	7:30pm	7:30pm	Newcomers - Montreal	FR	CP
Friday, Feb. 19	20	9:30pm	8:30pm	5:30pm	Parents - Vancouver	EN	CW
	21	12:00pm	11:00am	10:00am	Seniors - Regina	EN	CW
	22	2:00pm	1:00pm	10:00am	Seniors - Vancouver	EN	MC

Audience	Group Number
Parents	2, 4, 8, 17, 20
Newcomers	9, 12, 14, 18, 19
Pregnant Women	5, 7, 11, 15, 16
Seniors	1, 6, 13, 21, 22
Indigenous people	3, 10

Language	Group Number
English	1-7, 9-12, 14-15, 17-18
French	8, 13, 16, 19

## Specification Summary

- |  |   |
|--|---|
| <ul style="list-style-type: none"> <li>• <b>Twenty-two (22)</b> focus groups in total:             <ul style="list-style-type: none"> <li>○ <b>Parents</b> (of children between ages 0 &amp; 6) – <b>4 English groups</b> with residents of <b>Halifax; Toronto; Regina &amp; Vancouver</b>; <b>1 French group</b> with residents of <b>Montreal</b></li> <li>○ <b>New comers to Canada</b> (less than 5 years) – <b>4 English groups</b> with residents of <b>Halifax; Toronto; Regina &amp; Vancouver</b>; <b>1 French group</b> with residents of <b>Montreal</b></li> <li>○ <b>Women</b> (either pregnant or planning to be within one year) – <b>4 English groups</b> with residents of <b>Halifax; Toronto; Regina &amp; Vancouver</b>; <b>1 French group</b> with residents of <b>Montreal</b></li> <li>○ <b>Seniors</b> (aged 65 and older) – <b>4 English groups</b> with residents of <b>Halifax; Toronto; Regina &amp; Vancouver</b>; <b>1 French group</b> with residents of <b>Montreal</b></li> <li>○ <b>Indigenous People</b> – 2 English groups; one with Indigenous persons residing in the <b>Ontario</b> and one with Indigenous persons residing in the <b>Prairies</b> (SK/MB)</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>• Mix of <b>ages, gender, household type, education level and cultural background</b></li> <li>• Mix of homeowners &amp; renters</li> <li>• Incentive: <b>\$100</b> per participant</li> <li>• <b>10 participants</b> recruited per group</li> <li>• Group discussion lasts up to <b>90 minutes</b></li> </ul> |
|--|---|

**RECRUITER NOTE - WHEN TERMINATING AN INTERVIEW, SAY:** "Thank you very much for your cooperation. We are unable to invite you to participate because we have enough participants who have a similar profile to yours."

**RECRUITER NOTE:** If a respondent wishes to verify the validity of the study, please contact:  
 Government of Canada: 1-800-926-9105; [questions@tpsgc-pwgsc.gc.ca](mailto:questions@tpsgc-pwgsc.gc.ca)  
 Narrative Research: 888-272-6777; [focusgroups@narrativeresearch.ca](mailto:focusgroups@narrativeresearch.ca)

### SECTION G: General Introduction

Hello, my name is \_\_\_\_\_ and I am calling on behalf of **Narrative Research**, a national market research company. **Let me assure you that we are not trying to sell you anything.** As part of a public opinion research project we are conducting on behalf of the Government of Canada, we are looking for people to take part in a 90-minute small online focus group discussion that will be scheduled from **<INSERT DATE>** to **<INSERT DATE>**. To prepare for the focus group, you will also need to spend about 45 minutes to an hour reviewing materials before the session. Altogether, your overall time commitment for taking part will be about two and half hours. Those who qualify and take part in the group discussion will receive a **\$100** financial incentive. Is this something you might be interested in?

- Yes.....1  
 No.....2 **THANK & TERMINATE**

Would you prefer that I continue in English or French? / Préférez-vous continuer en français ou anglais?

**RECRUITER NOTE - FOR ENGLISH GROUPS, IF PARTICIPANT WOULD PREFER TO CONTINUE IN FRENCH, PLEASE RESPOND WITH:** "Malheureusement, nous recherchons des gens qui parlent anglais pour participer à ces groupes de discussion. Nous vous remercions de votre intérêt."

The purpose of this group discussion is to hear people’s opinions on documents and materials being developed by the Government of Canada. The materials will provide practical information and advice to help contribute to a healthy living environment.

Participation in this research is voluntary and completely anonymous and confidential. No attempt will be made to sell you anything or change your point of view. The format of the focus group is an informal small online group discussion led by a professional moderator. May I ask you a few quick questions to see if you are the type of participant we are looking for? This should take about 5 or 6 minutes.

Yes.....1  
No.....2 **THANK & TERMINATE**

**SECTION P: Profiling Questions**

P1. To begin, do you or any member of your household work in or has retired from...? [READ LIST – ROTATE ORDER]

- Marketing/Market Research..... 1
- Public relations.....2
- Advertising .....3
- Media (TV, Radio, Newspaper) .....4
- Graphic Design .....5
- Provincial or federal government housing agency or department.....6

**INSTRUCTIONS: If yes to any of the above, thank & terminate**

P2. In which community and province or territory do you currently live?

- 1. Record name of city/village/community: \_\_\_\_\_
- 2. Record name of province/territory: \_\_\_\_\_

**INSTRUCTIONS: Note geographic location for each group**

P3. How long have you lived in [INSERT COMMUNITY NAME FROM QP2]?

- 3. RECORD # of Years: \_\_\_\_\_

**INSTRUCTIONS: Thank & Terminate if less than 2 years**

P4. Into which age group are you? [READ RESPONSES IN ORDER]

- Less than 18 .....1
- 18-29.....2
- 30-39.....3
- 40-49.....4
- 50-59.....5

- 60-64.....6
- 65-69.....7
- 70-79.....8
- 80 and older .....9

**INSTRUCTIONS: If 65 and older (Code 7, 8 or 9) consider for SENIORS groups. Recruit mix across all three age categories. For all other groups, recruit a good mix of ages across all 18-64 age categories.**

- P5. What is your gender?
- Male.....1
  - Female; or.....2
  - Gender diverse .....3

**INSTRUCTIONS: Recruit female or gender diverse for PREGNANT WOMEN group. Recruit an equal mix for all other groups.**

- P6. Are you a parent or guardian of a child age 6 years old or under?
- Yes.....1
  - No.....2

**INSTRUCTIONS: If “Yes” (Code 1) consider for PARENTS groups. Otherwise, consider for one of the other groups.**

- P7. [IF FEMALE AND GENDER DIVERSE IN QP6, ASK] Are you currently pregnant?
- Yes.....1
  - No.....2

**INSTRUCTIONS: If “Yes” (Code 1) consider for PREGNANT WOMEN groups. Recruit min 5 per PREGNANT WOMEN group. If “No” (Code 2) ask QP8**

- P8. [IF FEMALE AND GENDER DIVERSE IN QP6 AND “NO” AT QP7, ASK] Are you expecting to become pregnant within the next year?
- Yes.....1
  - No.....2

**INSTRUCTIONS: If “Yes” (Code 1) consider for PREGNANT WOMEN groups. Recruit max 5 per PREGNANT WOMEN group. Otherwise, consider for one of the other groups.**

- P9. Were you born in Canada?
- Yes.....1
  - No.....2



**INSTRUCTIONS: If "No" (Code 2) ask QP10. If "Yes" (Code 1) skip to QP11**

P10. How many years have you lived in Canada?

- Less than one (1) year..... 1
- At least one (1) year but less than five (5) years..... 2
- At least five (5) years but less than ten (10) years..... 3
- At least ten (10) years or more ..... 4

**INSTRUCTIONS: If less than 5 years (Codes 1 & 2) consider for NEWCOMERS groups. Otherwise, consider for one of the other groups.**

P11. To make sure that we speak to a diversity of people, could you tell me what is your ethnic background? **DO NOT READ – CODE ALL THAT APPLY**

- White/European (for example, German, Irish, English, Italian, French, Polish, etc.) ..... 1
- Hispanic, Latino, Spanish (for example, Mexican, Cuban, Salvadoran, Columbian, etc.) ..... 2
- Black or African Canadian (for example, African Canadian, Jamaican, Haitian, Nigerian, Ethiopian, etc.) ..... 3
- East Asian (for example, Chinese, Filipino, Vietnamese, Korean, etc.) ..... 4
- South Asian (for example, East Indian, Pakistani, etc.) ..... 5
- Middle Eastern or North African (for example, Lebanese, Iranian, Syrian, Moroccan, Algerian, etc.)..... 6
- Indigenous (e.g. First Nations, Métis, Inuit) ..... 7
- Other (Specify: \_\_\_\_ )..... 8
- Don't know / No response ..... 9

**INSTRUCTIONS: If Indigenous, recruit for INDIGENOUS groups. If other ethnic backgrounds, recruit mix in each of the other groups to represent the general composition of each market.**

P12. Which of the following best describes your current household situation? Are you living...?

- Alone..... 1
- With other adults as roommates ..... 3
- With a partner or spouse ..... 2
- With a partner or spouse and your children and/or their children at least part of the time..... 4
- As a single parent with your children at least part of the time ..... 4
- Other (Specify: \_\_\_\_\_)..... 5

**INSTRUCTIONS: Recruit mix in each group**

P13. Do you currently own or rent your home?

- Own..... 1
- Rent..... 2

**INSTRUCTIONS: Recruit mix in each group**

P14. What is the highest level of education that you have completed?

- Some high school or less .....1
- Completed high school .....2
- Some college/university .....3
- Completed college/university .....4
- Post-graduate studies .....5
- DK/NR .....8

**INSTRUCTIONS: Recruit mix in each group**

P15. What is your current employment status?

- Working full-time (at least 30 hours per week) ..... 1
- Working part-time (less than 30 hours per week).....2
- Self-employed ..... 3
- Retired.....4
- Unemployed.....5
- Student.....6
- Other (Specify: \_\_\_\_\_) ..... 7
- DK/NR.....8

**INSTRUCTIONS: Thank & Terminate if DK/NA**

P16. **IF EMPLOYED, ASK:** In what sector do you work and what is your current occupation?

Sector: \_\_\_\_\_  
Occupation: \_\_\_\_\_

**INSTRUCTIONS: Thank & Terminate if similar occupations as in QP1**

P17. **IF RETIRED, ASK:** In what sector were you last employed before retirement and what was your occupation?

Sector: \_\_\_\_\_  
Occupation: \_\_\_\_\_

**INSTRUCTIONS: Thank & Terminate if similar occupations as in QP1**

P18. What was your household's total income last year? That is, the total income of all persons in your household combined, before taxes? **[READ LIST IN ORDER]**

- Under \$20,000.....1
- \$20,000 to under \$40,000 .....2
- \$40,000 to under \$60,000 .....3

\$60,000 to under \$80,000 .....	4
\$80,000 to under \$100,000 .....	5
\$100,000 to under \$150,000.....	6
\$150,000 or more .....	7
DK/NR.....	9

**SECTION N: Netfocus Questions**

The discussion groups for this project will be conducted over the phone and online simultaneously and will require the use of a laptop or a desktop computer and a telephone line (landline or cell phone) for the duration of the focus group session. Note that because of the complexity of the material we are showing during the focus group, you cannot use a computer tablet or a smartphone to access the online session. The screen of a computer tablet or smartphone is simply too small for the purpose of this research project.

11. Do you have access to a laptop or desktop computer with high-speed Internet to take part in this focus group?
- Yes..... 1  
 No..... 2

**INSTRUCTIONS: If no, thank & terminate**

12. The session will be held online using Adobe Connect which requires the installation of a free and secure plug in. Will you, or your system’s administrator, be able to install this application before the focus group discussion? That is, do you have the proper authorization to install software and application on the computer you will be using for the session? We will send you the installation instructions at least one day prior to the session.
- Yes..... 1  
 No..... 2

**INSTRUCTIONS: If no, thank & terminate**

13. Once you are online for the session you will also be required to join a separate telephone conference call to be connected to the discussion with the rest of the group. You will need to use a telephone line and **NOT** your computer audio. This means that for the entire session, you will be both on the telephone and in front of your computer. Will you have access to a dedicated telephone (either landline or cellular) located near your computer? Note that you will not incur long-distance charges.
- Yes ..... 1  
 No..... 2

**INSTRUCTIONS: If no, thank & terminate**

14. You will need to be in a place that is quiet and free of distractions for the duration of the session. This includes ensuring to the extent possible, you are able to be on your own, without pets or other people nearby, and in a room in your home or office that is as quiet as possible. Are you able to secure a quiet environment without distractions or noises for the duration of the focus group session?

Yes .....1

No.....2

**INSTRUCTIONS: If no, thank & terminate**

**INSTRUCTIONS FOR NF1-NF4 THANK & TERMINATE: Based on your responses, we are unable to invite you to take part in this online focus group, as you do not meet the technical or logistic requirements. We thank you for your interest in this research.**

**SECTION R: Previous Focus Group Experience Questions**

I just have a few more questions...

- R1. Have you ever attended a group discussion or interview for which you received a sum of money?

Yes.....1

No .....2

**INSTRUCTIONS: Max 5 recruits per group who answered “yes”. If “yes” continue. If “non”, go to SECTION I: Invitation**

- R2. When was the last time you attended a group discussion or interview? \_\_\_\_\_
- R3. How many groups or interviews have you attended in the past 5 years? \_\_\_\_\_ **MAX 4**
- R4. What was the subject(s) of the focus group(s) or interview? \_\_\_\_\_

**THANK AND TERMINATE IF THEY HAVE...**

- been to 5 or more groups in the past 5 years (max 4 groups/interviews attended)
- attended a focus group in the past six months.
- ever attended a group discussion on evaluating forms, brochures or documentation

**SECTION I: Invitation**

Based on your responses so far, we would like to invite you to participate in a small group discussion that will be conducted simultaneously over the telephone and online at **<INSERT TIME>** on **<INSERT DATE>**. The session will bring together 7 to 9 people and it will last about **90 minutes**. To take part in the focus group, you would simply log on to a secure website from your computer and at the same time join in a

group discussion on the phone via conference call. During the session, you will provide feedback on a guide and information sheets currently being developed by the Government of Canada to provide residents with information and advice on ensuring that their home offers a healthy living environment. To prepare for the focus group session, you will need to read the documentation ahead of time which should take you approximately 45 minutes to an hour. In total, your time commitment to take part in this research will be about two hours and a half, including the time to login to the session. In appreciation for your time to attend the focus group and complete the preparation work, you will receive **\$100** after the session.

11. Are you available and interested in taking part in this focus group?

Yes.....1

No .....2

**INSTRUCTIONS: If no, thank & terminate**

12. The discussion in which you will be participating will be audio recorded for research purposes only. Be assured that your comments and responses are strictly confidential and that your name will not be included in the research report. Are you comfortable with the discussion being audio recorded?

Yes.....1

No .....2

**INSTRUCTIONS: If no, thank & terminate**

13. There may be employees from the Government of Canada, who will be listening in on the discussion. They will not be given the last names of participants. Are you comfortable with having observers?

Yes.....1

No .....2 **THANK AND TERMINATE**

**INSTRUCTIONS: If no, thank & terminate**

14. Which of the two official languages, English or French, do you speak most often on a regular basis?  
**[SINGLE RESPONSE – DO NOT READ]**

English .....1

French.....2

Both equally .....3

**INSTRUCTIONS: Single response. Must answer French (code 2) for Montreal groups**

15. The group discussion will be held **[GROUPS 8, 13, 16, 19: in French] [ALL OTHER GROUPS: in English]**. Participants may also be asked to read text, write responses and/or review images prior to and during the session. Are you able to take part in these activities **[GROUPS 8, 13, 16, 19: in French] [ALL OTHER GROUPS: in English]** on your own, without assistance?

- Yes.....1
- No.....2
- DK/NR.....8

**INSTRUCTIONS: If “no” or DK/NR, thank & terminate**

Could we please confirm the email address where we can send you the homework assignment in preparation for the focus group and the instructions to log in to the focus group session? We would like to remind you that the homework assignment to be completed before the focus group should take you 45 minutes to an hour to complete.

**Record email address (and verify):** \_\_\_\_\_.

We will send you by email the homework assignment at least five days prior to the focus group session and the instructions at least 1 day in advance of the group. The group discussion will begin promptly at <TIME> and will end at <TIME>, lasting about 90 minutes. Please log in on time to ensure that the session is not delayed. If you arrive late, we will not be able to include you in the discussion, and will not provide you with the incentive.

As mentioned, we will be pleased to provide everyone who participates with \$100, provided by e-Transfer or cheque, as you’d prefer. It takes approximately 3 business days to receive an incentive by e-Transfer or approximately 2-3 weeks following your participation to receive an incentive by cheque.

16. Would you prefer to receive your incentive by e-Transfer or cheque?

- e-Transfer .....1
- Cheque .....2

17. **[IF PREFER TO RECEIVE INCENTIVE BY E-TRANSFER – CODE 1 IN Q16]** Could you please confirm the e-mail address where you would like the e-transfer sent after the focus groups?

Email address: \_\_\_\_\_  
 And please confirm the spelling of your name: \_\_\_\_\_  
 The e-transfer password will be provided to you via email following the group.

18. **[IF PREFER TO RECEIVE INCENTIVE BY CHEQUE – CODE 2 IN Q16]** Could I have the mailing address where you would like the cheque mailed after the focus groups?

Mailing address: \_\_\_\_\_  
 City: \_\_\_\_\_  
 Province: \_\_\_\_\_ Postal Code: \_\_\_\_\_  
 And please confirm the spelling of your name: \_\_\_\_\_

19. As these are very small groups and with even one person missing, the overall success of the group may be affected, I would ask that once you have decided to attend that you make every effort to do so. If you are unable to take part in the study, please call \_\_\_\_\_ (collect) at \_\_\_\_\_ as soon as possible so a replacement may be found. **Please do not arrange for your own replacement.**

So that we can call you to remind you about the focus group or contact you should there be any changes, can you please confirm your name and contact information for me? **[CONFIRM INFORMATION ALREADY COLLECTED AND CHANGE/COMPLETE AS NECESSARY]**

First Name: \_\_\_\_\_

Last Name: \_\_\_\_\_

Email: \_\_\_\_\_

Cell Phone: \_\_\_\_\_

Home Phone: \_\_\_\_\_

Work Phone: \_\_\_\_\_

**INSTRUCTIONS: If the respondent refuses to give his/her first or last name or phone number please assure them that this information will be kept strictly confidential in accordance with the privacy law and that it is used strictly to contact them to confirm their attendance and to inform them of any changes to the focus group. If they still refuse THANK & TERMINATE.**

Thank you for your interest in our study. We look forward to hearing your thoughts and opinions!

#### **Attention Recruiters**

1. Recruit **10 respondents per group**
2. CHECK QUOTAS
3. Ensure participant has a good speaking (overall responses) ability-If in doubt, DO NOT INVITE
4. Do not put names on profile sheet unless you have a firm commitment.
5. Repeat the date, time and verify email before hanging up.

#### **Confirming – DAY BEFORE GROUP**

1. Confirm in person with the participant the day prior to the group–do not leave a message unless necessary
2. Confirm all key qualifying questions
3. Confirm date and time
4. Confirm they have received the login instructions and completed the diagnostic test

Appendix B:  
Moderator's Guide and  
Homework Assignment



# Moderator's Guide – FINAL

Focus Testing Healthy Home Environmental Health Guide (HCPOR-20-20)

## *Study Objectives (do not share with participants)*

- *Evaluate if the content of the new Healthy Home Environmental Health Guide and tip sheets is:*
  - clearly understood by the audiences;
  - credible, relevant and of value to the audiences;
  - appealing and appropriate to the audiences;
  - memorable in the minds of the audiences; and
  - able to motivate the audiences to take intended actions.

## *Introduction*

*10 minutes*

- **Welcome:** Introduce self & research firm & role as moderator (keep on time/on topic)
- **Sponsor & Topic:** Groups on behalf of the Government of Canada. The government is currently developing a new guide and related tip sheets to provide information and advice to promote a healthy home environment. You should have received and reviewed the material in preparation for today's session, including a 25-page guide and a number of individual tip sheets. Make sure you have the copy you reviewed handy during our session, along with the notes you made during your review.
- **Length:** Our discussion should last about 90 minutes, with no break.
- **Your Role:** Share your opinions freely and honestly; not testing your knowledge; participation is voluntary.
- **Process:** All opinions are important; looking to understand minority/majority of opinions; talk one at a time; interested in hearing from everyone; raise hand before speaking.
- **Logistics:** Recording discussion for reporting; observation from government (listening in but not part of discussion).
- **Confidentiality:** Your comments are anonymous; no names in reports; answers will not affect dealings with Government of Canada; Once finalized, the report can be accessed through the Library and Archives Canada.
- **Participant Introduction:** Who lives with you and what type of home you live in – PROBE: how long they have lived at their current address

## *General Discussion*

*5 minutes*

Before we look at the material...

- Before you saw the materials we sent you, to what extent had you thought about how your health could be impacted by chemicals and pollutants in and around your home?
- Can you give me an example of the type of topic you had thought about / researched before?

## *Guide Content / Topics, Relevance and Appeal*

*15 minutes*

Let's have a look at the material you reviewed before today, starting with the Guide. I'd like to remind you that since the Guide and tip sheets are currently in development, the layout is not yet finished. In the final version, there will be colours, visuals, images and other graphic elements (like text boxes for example). The

font might also be different and vary based on the type of information presented. Once completed, the Guide would be about 25 pages and the tip sheet a page or two each. So, keep in mind that our discussion today will focus on the topics included in the Guide and tip sheets and how the information is conveyed – not the design.

I'd like to begin by looking at the **themes** found in the Guide. Even though you reviewed only a portion of its content, I would like to have your opinion on the themes that have been selected to be included in the Guide.

**Show Guide table of contents on the screen**

Looking at the table of contents on the screen...

- What do you think of the choice of themes covered in the Guide?
- How relevant are they to you?
  - Which ones are of greatest interest to you? What information would be most useful?
  - What information isn't useful or necessary?
- What themes, or categories of information, if any, are missing?
- Do the section titles give you a good idea of what information will be available in each section?
  - If no, which are unclear? How can they be improved?
- What do you think about the way the information is ordered or organized in the Guide?

**Clarity, Comprehension, Ability to Motivate** **30 minutes**

Let's dig a little more into the Guide. We will talk more specifically about the sections you reviewed, but feel free to provide comments about the rest of the content if you have had a chance to look at it.

Review Schedule by Audience and Group – Guide				
Audience	Introduction Risks and Exposure (about 3 pages)	“Buying, Storing...” to “Using Arts and Crafts with Kids” sections (about 7 pages)	“DIY...” to “Using Cosmetics...” sections (about 9 pages)	Glossary Infographic (about 4 pages)
Newcomers	All groups	Group 14, 18	Group 9, 12, 19 (FR)	All groups
Indigenous	All groups	Group 3	Group 10	All groups
Pregnant	All groups	Group 5, 7, 16 (FR)	Group 11, 15	All groups
Seniors	All groups	Group 21, 22	Group 1, 6, 13 (FR)	All groups
Parents	All groups	Group 2, 4, 8 (FR)	Group 17, 20	All groups
<b>Total# Gr.</b>	<b>22 groups</b>	<b>11 groups</b>	<b>12 groups</b>	<b>22 groups</b>

If you think of all of the sections of the Guide you reviewed, combined...

- What do you think of the **amount** of information provided?
  - If not enough: What else should be included?
  - If too much: What could be removed? Why that?

Now let's have a look at each section you reviewed, one at a time... For each section, I will be interested in your feedback regarding a number of items: what new things you learned, anything unclear or confusing, anything you question or claims that don't seem right, if the level of language is appropriate, and any other comments you think are relevant. Let's start with the first section...

**Show Guide sections on the screen, as relevant to the discussion**

- What, if anything, did you **learn**?
- Is there anything **unclear**? If so, what is unclear? Why is this unclear? Do you have any suggestions on how this could be clarified?
- Do you **believe** all of the information provided or are there elements or claims you question?
- Is the **level of language** appropriate for everyone? Is it accessible and easy to understand? If no, what parts or words could be improved?
- What **tip or advice are you likely to follow** and which ones are you **unlikely to follow**? What makes those compelling or not to you? If relevant: What would make them more compelling?

**Specific Questions by Section – Ask where relevant only:**

- In the Risk and Exposure to Chemicals and Pollutants section on page 6, the terms “hazard” and “risk” are defined. Can you give me an example of each?
- Is having a glossary of terms useful in this type of guide? Why/why not?

I’d like to spend a few minutes on the other sections of the Guide that were not part of your review. Has anyone had a chance to read those sections?

- If so, is there anything that needs to be addressed to improve those sections? Any other comments you might have?

**Tip Sheets - Clarity, Comprehension, Ability to Motivate 15 minutes**

Let’s look a little closer at the two tip sheets you reviewed before today...

Review Schedule by Audience and Group – Tip Sheets				
Audience	Tips for Renters	Tips for Kitchen Safety	Tips for Pregnancy	Tips for DIY
Newcomers	Group 9, 19 (FR)	Group 12, 14, 18	Group 9, 14	Group 18, 12, 19 (FR)
Indigenous	Group 3	Group 10	Group 3	Group 10
Pregnant	Group 15, 11	Group 7, 16 (FR)	Group 5, 7, 11, 15, 16 (FR)	Group 5
Seniors	Group 1, 21, 22	Group 1, 6, 13 (FR), 21	-	Group 6, 13 (FR), 22
Parents	Group 4, 17, 8 (FR)	Group 2, 4	Group 2, 8 (FR), 20	Group 17, 20
<b>Total#Gr.</b>	<b>11 groups</b>	<b>12 groups</b>	<b>11 groups</b>	<b>10 groups</b>

**Show tip sheets on the screen, as relevant during the discussion**

- Are you **interested** in this information? Why/why not?
- What, if anything, did you **learn**?
- Is there anything **unclear**? If so, what is unclear? Why is this unclear? Do you have any suggestions on how this could be clarified?
- Do you **believe** all of the information provided or are there elements or claims you question?
- Is the **level of language** appropriate for everyone? Accessible and easy to understand? If no, what topics, sections or words could be improved?
- What **tip or advice are you likely to follow** and which ones are you **unlikely to follow**? What makes those compelling or not to you? If relevant: What would make them more compelling?

I'd like to get your thoughts on what the final materials should look like to be visually appealing. Let's have a look at a brochure that is available right now – the topic is similar to what we have looked at, but we will only be focusing on the overall “look and feel” not on the information it includes. So focus on the layout, the design, the formatting; look at the images, the colours, the graphic elements, and everything else that is part of how the information is presented.

### Show the following on the screen



- What do you think about the **layout** of information in this brochure? What do you like about **how the information is visually presented**? Anything you don't like?
- Would this be a good layout for the Guide and Tip Sheet we looked at earlier? Why/why not?

Before we finish up...

- **Ask Newcomers & Indigenous:** How can this information be made more accessible to you?
- In what circumstances would you be interested in this Guide or the tip sheets we looked at earlier? That is, when would you pay attention if you came across this information; or when would you actively look for it?
- How do you want to access the Guide and tip sheets? Where? In what format?
  - **If online:** In what format would you like to have it accessible online? **Probe for format, downloadable etc.** What device would you use to access it?
  - **If not mentioned:** Would you be interested in a hard copy of the guide and tip sheets? If so, why? Where would you like to access the print material?
  - Would you rely on only one format or are there reasons you would use multiple formats (e.g., print copy and online)? If so, how would you use the online information? And how would you use the print guide/tip sheets?
- How, if at all, would you use the Guide and tip sheets? **Probe:** keep as reference; cut out sections and post at home; discuss or share with others; read and discard
- Any final suggestions?

### Thanks & Closure

That concludes our discussion. On behalf of the Government of Canada, thank you for your time and input.

# Homework Assignment

Thank you again for agreeing to take part in our research. Your feedback is important to assist the Government of Canada in developing a guide and tip sheets that provide information and advice to promote a healthy living environment for all Canadian residents. The purpose of the research you are participating in is to determine if the information provided is clearly communicated, complete, believable, and of interest and value to people like you.

In preparation of the upcoming focus group, we would like you to carefully review the attached material that includes the content for **two tip sheets** and **one guide**.

## Tip sheets

You will find attached the content for the following tip sheets that you will need to read:

- Tips for Pregnancy and Preparing For Baby
- Tips for Renters
- Tips to Help Keep your Kitchen Safe and Healthy
- Tips for Do-It-Yourself (DIY) Projects and Renovations

## Guide

You will find attached the content for a draft guide titled, **Healthy Home: A guide to chemicals, pollutants and your health**, that you will need to read. The draft guide is 27 pages. We understand that this is a lot to review, so please focus on the following sections of the guide first, and review the rest of the guide afterwards, if you have time:

### Sections in the Guide for you to review (totalling about 15 pages):

- Introduction (page 5)
- Risk and Exposure to Chemicals and Pollutants (pages 6-7)
- Everyday Activities (page 7)
- Buying, Using, Storing, and Disposing of Chemical Products (pages 7-8)
- Hazard Symbols and Warnings (pages 9-10)
- Cleaning Your Home (pages 10-11)
- Cooking, Preparing and Storing Foods (pages 11-12)
- Using Hobby and Crafting Supplies (pages 12-13)
- Using Arts and Crafts Materials with Children (page 14)
- Glossary of Common Chemicals and Pollutants (page 23)
- Infographic: A Healthy Home Checklist (pages 24-27)

### Sections in the Guide for you to review (totalling about 18 pages):

- Introduction (page 5)
- Risk and Exposure to Chemicals and Pollutants (pages 6-7)

- DIY and Home Renovations (pages 14-17)
- Working in the Garage or Workspace (pages 17-18)
- Controlling Pests Safely (pages 18-19)
- Staying Safe on Hot Days (pages 19-20)
- Outdoor Air Quality (page 20)
- Staying Safe at Home During Cooler Months (pages 21-22)
- Using Cosmetics and Personal Care Products Safely (pages 22-23)
- Glossary of Common Chemicals and Pollutants (page 23)
- Infographic: A Healthy Home Checklist (pages 24-27)

Once you have carefully reviewed the content in those sections, feel free to read the rest of the guide. Although we will focus on the sections listed above, we will welcome feedback on the other sections as well during the focus group. Remember that your feedback is very important to ensure that the final guide and tip sheets provide useful information that is easy to understand.

## What You Need to Do

Your homework assignment is quite simple and it should take you less than one hour to complete, including reviewing the material. Don't worry if the information does not apply to you personally; we are still interested in your feedback. Please carefully read through all of the information to review and take note of the following:

### Take note of:

- What information is **useful to you**
- **Things you learned and are interested in**
- Words, expressions, sections or topics that are **unclear or need better explanation**
- Any **missing information or explanations**; anything else you would like to know (a good way to identify that is to jot down the questions you might have after reading the information)
- **Anything else** you feel is important for the government to know, as it is finalizing the development of this information

During the upcoming focus group, we will discuss all of these points and it will be important for you to point out things you like, but also specific areas that are problematic (unclear, not believable, or incomplete) and suggestions for improvements. As such, it may be helpful for you to **jot down notes** on a piece of paper while reading the material, so you can speak to those points during the focus group discussion. We have included a 'notes page' with this package that you can use to record your thoughts as you review the material.

Make sure you jot down the **page number** as well, to be able to quickly locate the information when sharing your opinions during the focus group.

One more thing – **make sure to have the guide, tip sheets, and your notes handy during the upcoming focus group**, as you will be asked to reference those during the discussion.

**NOTE!**

***The guide and tip sheets are in draft form right now and currently only include text.***

For the discussion, we'd like you to focus on the **content** and **not the design or layout**, as the material is still in the content development stage. Be assured that once completed, the guide and tip sheets will include graphics, visuals, illustrations, colours, and overall, they will look professionally done. But for now, we need your help to finalize the information it includes and how this information is communicated.

**Happy reading! We look forward to hearing your thoughts and suggestions during the focus group!**

## Notes Page

You can use this page to write down your thoughts as you review the Guide and the tip sheets, in preparation for the focus group discussion. *Remember to take note of the page where this information is located in the guide or on the tip sheets so you can easily reference it during the focus group discussion*

---

Information I found useful and interesting:

---

What I have learned (what I did not know before):

---

What is unclear or need better explanation:

---

Information or explanation that is missing / Other things I would like to know:



Appendix C:  
Materials Tested  
(Guide and Tip Sheets)

**[FRONT COVER]**

**Healthy Home: A guide to chemicals, pollutants and your health**

**[INSIDE FRONT COVER—CREDITS AND CONTACT INFORMATION]**

To learn more about these and other environmental health risks, please visit [Canada.ca/Healthy-Home](http://Canada.ca/Healthy-Home).

To order Health Canada publications, please visit [Canada.ca/Health-Canada](http://Canada.ca/Health-Canada) or call 1 800 O-Canada (1-800-622-6232), TTY 1-800-926-9105.

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disponible en français sous le titre\_\_\_\_\_.

[TITLE PAGE]

**Healthy Home:  
A guide to chemicals, pollutants and your health**

## Contents

<b>Introduction .....</b>	<b>5</b>
<b>Risk and Exposure to Chemicals and Pollutants .....</b>	<b>6</b>
<b>Everyday Activities .....</b>	<b>7</b>
<b>Buying, Using, Storing, and Disposing of Chemical Products.....</b>	<b>7</b>
<b>Hazard Symbols and Warnings .....</b>	<b>9</b>
<b>Cleaning Your Home .....</b>	<b>10</b>
<b>Cooking, Preparing and Storing Foods.....</b>	<b>11</b>
<b>Using Hobby and Crafting Materials.....</b>	<b>12</b>
<b>Using Arts and Crafts Materials with Children .....</b>	<b>14</b>
<b>DIY and Home Renovations.....</b>	<b>14</b>
<b>Working in the Garage or Workspace.....</b>	<b>17</b>
<b>Controlling Pests Safely .....</b>	<b>18</b>
<b>Staying Safe on Hot Days.....</b>	<b>19</b>
<b>Outdoor Air Quality .....</b>	<b>20</b>
<b>Staying Safe at Home During Cooler Months.....</b>	<b>21</b>
<b>Using Cosmetics and Personal Care Products Safely .....</b>	<b>22</b>
<b>Glossary of Common Chemicals and Pollutants .....</b>	<b>23</b>
<b>Infographic: A Healthy Home Checklist.....</b>	<b>24</b>

## Introduction

We do many things to take care of ourselves and those around us, like staying active, eating healthy foods, and keeping our homes safe.

Every day, we are exposed to chemicals and pollutants in air, food, water and in the products we use. Most of these chemicals play an important and essential role in our lives. In fact, many are even beneficial to our health, but others can pose a health risk when not used properly.

Health risks from chemicals can be both immediate and long term and include a range of effects such as skin irritations, respiratory issues, accidental poisonings chronic health conditions, developmental and reproductive impacts, and even cancer, among many others.

With Canadians spending more and more of our time indoors, it is important to keep our homes healthy and safe from the potential risks of chemicals. This guide will provide you with:

- practical information on reducing your family's exposure to harmful chemicals from everyday activities such as cooking, cleaning, and maintaining your home;
- a glossary of common chemicals and pollutants; and
- a Healthy Home Checklist.

For more information on what you can do to protect yourself and those around you, visit [Canada.ca/Healthy-Home](https://Canada.ca/Healthy-Home).

## Risk and Exposure to Chemicals and Pollutants

Everything around us is made of chemicals. There are the top-of-mind chemicals – the household cleaners, hand sanitizers, personal care products, etc., but then there are the chemicals we think about less often such as the chemicals that make up our clothes, our furniture and even us! Yes, we're made of chemicals too.

The focus of this guide is on the former, those household chemicals – the ones that we use and or have in our homes with known health risks if they're not handled, used, or stored properly. These chemicals that can harm our health and pollute our environment are often referred to as pollutants. Throughout this guide, we will be referring to both *chemicals and pollutants*.

### **Exposure to Chemicals and Pollutants**

Exposure refers to how any chemical, enters the body. Knowing how we can be exposed is key to understanding how to reduce our risk.

#### **Air and inhalation**

We take over 20,000 breaths a day. This number is much higher for infants and children. The chemicals and pollutants we inhale end up in our lungs and blood stream. Sometimes, we can smell or taste chemicals and pollutants. However, some pollutants, like radon or carbon monoxide, are odourless, tasteless, and invisible. By opening a window, installing a carbon monoxide alarm, testing for radon or wearing proper personal protective equipment, such as a respirator, when appropriate, we can help to reduce exposure.

#### **Skin and eye contact**

Chemicals and pollutants can also be absorbed through your skin and eyes. These organs can be more sensitive to pollutants and may react more quickly than the rest of our bodies. Wearing personal protective equipment, such as gloves, safety goggles, and masks can help protect you from exposure.

#### **Food and water**

Pollutants can also contaminate our food and water sources. As we eat and drink, we could swallow unwanted pollutants. Government measures to protect source waters from pollution and restrict the use of dangerous pesticides are essential to keeping our food and water supplies safe. We, too, can help minimize our exposures with simple actions like washing our fruits and vegetables, and proper handwashing before eating.

#### **Hazard and Risk**

"Risk" and "hazard" are two words that you may hear used interchangeably, but in fact they have quite different meanings. "Hazard" is the harm that something can cause. The harm may be physical injury, damage to health, property, or the environment. "Risk" is the likelihood that a hazardous material will cause harm to people, property or the environment.

There are two factors that can increase or decrease risk:

- The seriousness of the hazard. For example, one material may cause skin cancer, while another may cause skin irritation. Cancer is a much more serious effect than irritation.
- How much exposure there is to the hazard. Exposure refers to how much people or objects are subjected to the hazard. Exposure can be influenced by factors such as the length or duration of exposure (short versus long), how much exposure (high concentration versus low) and/or the route of exposure (inhalation versus skin contact versus ingestion).

It is commonly accepted that: **Risk = hazard × exposure**

This is a simple way of saying that the degree of risk depends on both the nature of the hazard and the nature of the exposure. A material with a low hazard can pose a high risk if exposure is high. A material with a high hazard can pose less risk if exposure is low.

Many chemicals have hazardous properties. But the risk to your health generally depends on the amount or how you are exposed to the chemicals.

In Canada, there are laws and regulations on chemicals and products that help to protect us from harm. Through systematically considering both the hazards and the potential uses and exposures of chemicals, the Government conducts risk assessments to determine if the chemicals pose us harm. From pest control products to cosmetics and consumer products, the Government works to assess and manage risks posed by chemicals in our daily lives.

## Everyday Activities

Whether you live in an apartment or house, whether you rent or own, everyday activities like cleaning, cooking, gardening, and repairing or renovating your home can increase your exposure to potentially harmful chemicals and pollutants. Whatever you're doing, it's important to understand the potential risks and the steps you can take to help protect yourself and your loved ones.

### Buying, Using, Storing, and Disposing of Chemical Products

You probably use many different household chemical products in and around your home. These may include cleaning liquids and powders, polishes, drain cleaners, paint and paint thinners, laundry detergent, pesticides, and windshield washer fluids, among others. While these products may help with household chores, they can also be potentially dangerous if not used or stored safely. To reduce your chance of harm, follow these tips when you buy, use, store, and dispose of household chemical products:

#### Buying

- To begin, consider your needs, do you really need to buy this product? Is there a safer, less harmful, alternative?



- If you determine the product is essential for your needs, first read the label to confirm its intended use and note if there are any special handling instructions.
- Look for hazard symbols to be aware of precautions you should take for the product if you choose to purchase it.
- Choose low-emission paints, varnishes, glues, wood furniture, and building products. You will be able to find this information on the product themselves.
- Reduce waste by only buying the products you need.

### **Using**

- Follow the instructions on the label every time you use a household chemical.
- Never mix household chemical products together.
- Ensure proper ventilation by opening windows or doors or running exhaust fans.
- Use protective clothing such as goggles and rubber gloves as per instructions.
- Wash your hands with soap and warm running water after using the product.

### **Storing**

- Store all chemical products in original containers and according to instructions.
- Keep all product safety information and instructions for use.
- Keep products out of sight and out of reach of children and pets.
- Solvents, gasoline, fuels, varnishes, and other products that are flammable or release toxic gases should be stored safely in a garage or shed. Do not store them near the living space in your home.
- Reclose paint cans with a rubber mallet and store them in a secure storage cabinet.
- Avoid storing household chemical products near heat sources, open flames, or sparks.
- Regularly check containers for leaks or damage.

### **Disposing**





- Follow municipal guidelines on how to dispose of household hazardous waste. Watch for hazardous waste days in your community.
- Never burn household chemicals and containers.
- Avoid re-using containers for another purpose.
- Only pour the contents down the drain or flush them down the toilet, when directed.

Bring unused and expired prescription drugs, over-the-counter medications, and other health products to your local pharmacist for proper disposal.

## Hazard Symbols and Warnings

You will see hazard symbols on the labels of many household chemical products used in and around your home.

The hazard symbol inside the shape tells you the type of danger:

	<b>EXPLOSIVE</b> The container can explode if heated or punctured. Flying pieces of metal or plastic from the container can cause serious injury, especially to your eyes.
	<b>POISON</b> If you swallow, lick, or in some cases, breathe in the chemical, you could become very sick or die.
	<b>CORROSIVE</b> The product can burn your skin or eyes. If swallowed, it can damage your throat and stomach.
	<b>FLAMMABLE</b> The product or its fumes will catch fire easily if it is near heat, flames, or sparks. Rags used with this product may begin to burn on their own.

The shape of the frame around the hazard symbol tells you which part of the product is dangerous:

	If it's a triangle, it means the container is dangerous.		If it's an octagon, it means the contents are dangerous.
---	--	--	--

The signal word(s) underneath the hazard symbol explain the degree of risk:

**CAUTION** means temporary injury may result. Death may occur with extreme exposure.

**DANGER** means may cause temporary or permanent injury, or death.

**EXTREME DANGER** means exposure to very low amounts may cause death or serious injury.

If someone has been in contact with a household chemical product and you think they may have been harmed:

- Call a Poison Control Centre or your health care provider right away. You can find phone numbers for the Poison Control Centre by searching Poison Control Centre + (your province or territory) on the Internet.
- If you are in distress, please call 911.

## Cleaning Your Home

Dust and dust mites are found everywhere, both indoors and outdoors. Dust mites are microscopic organisms that live in beds, carpets, furniture, plush children's toys, and anywhere that dust accumulates. Both dust and mites can cause allergic reactions and aggravate pre-existing health conditions, such as asthma.

House dust may also contain lead and other harmful chemicals. Children and toddlers are more vulnerable to the health risks of dust, through their tendency to put things in their mouths and by virtue of their early life stage, meaning that some of the chemicals in dust can have long-term impacts on their development and health. Exposure to dust mites has also been shown to cause the development of asthma in genetically susceptible children.

### **Keep Dust and Dust Mites Away**

- Removing dust can reduce exposure to lead and other chemicals in house dust.
- Clean floors and household surfaces with a wet cloth or mop regularly to remove dust and dirt.
- Consider installing a central vacuum that is vented outdoors or using a vacuum with a high-efficiency particle air (HEPA) filter that traps small particles.
- If your heater uses air filters replace them regularly, according to manufacturer's instructions.
- Encase pillows and mattresses in house dust mite (HDM)-impermeable covers.
- Wash linens in hot water weekly.

### **Follow Instructions for Household Chemical Cleaning Products**

You may choose to clean with vinegar, baking soda and water. They are often cheaper, healthier and better for the environment.

When you chose to use chemical cleaning products, be sure to do the following to ensure safe use:

- Follow cleaning product label instructions on how to use and store a product safely. The label will show hazard symbols and caution statements of potential hazards.
- Use protective equipment, such as goggles, rubber gloves or face masks, as required to protect your eyes, skin and lungs when using the product.
- After using the product, wash your hands with soap and warm running water for at least 20 seconds.

- Never mix household chemical products together. Some mixtures can produce harmful gases.
  - **Never mix bleach with other chemicals especially with glass cleaners, other products containing ammonia or acids such as vinegar. Mixing bleach and ammonia or other chemicals can produce toxic gases.**

### **Ventilate Your Space**

- Keep the area well ventilated by opening windows or doors and running exhaust fans, during and after using a household chemical product.

If there are young children living in the home, use child safety locks and latches to lock up your household chemical products.

### Cooking, Preparing and Storing Foods

Cooking at home is great way to stay healthy and connect with family and friends. Help keep your home safe by following these tips.

#### **Keep It Clean**

- Clean anything that comes into contact with food to help eliminate bacteria and reduce the risk of food-related illness. This includes your hands, kitchen surfaces, utensils, fruit and vegetables and reusable grocery bags.
- Wash your fruits and vegetables under running water. Washing fresh produce with soap, chlorine (bleach) or other chemicals is not recommended. Fresh produce is porous and can absorb chemicals that are not intended for you to eat.

#### **Reduce Your Exposure to Lead while Eating and Drinking**

If your home was built before 1975, you may have lead pipes. Lead poisoning can harm the brain, nervous system, blood circulatory system and kidneys.

- If you are concerned that you may have lead in your pipes, check with your municipality or water utility (or your landlord if you rent) to see if there are lead service lines in your area.
- Let your taps run until the water is cold if you know or suspect you have lead in your plumbing.
- Use only cold tap water for drinking, cooking, and making baby food.

#### **Be Aware of Your Indoor Air Quality**

When we fry, roast, broil, sauté, toast, bake or burn food, tiny particles of cooked food, fat and oil get into the air. These particles create what is known as particulate matter (PM). Seniors and

older adults, young children with asthma, and individuals with heart and respiratory issues are all particularly sensitive to PM as they can negatively impact breathing, heart and blood functions. When possible, try steaming, boiling, or using a microwave. These cooking methods all produce fewer particles.

Other cooking activities can impact your indoor air quality if done in the absence of proper ventilation. This includes using a gas stove which generates combustion by-products such as nitrogen dioxide (NO<sub>2</sub>) and carbon monoxide (CO), and stovetop cooking which can also produce excessive water vapour, increasing the amount of moisture in the air, which can lead to the growth of mould.

Cooking activities can affect indoor air quality, which may have an impact on your health. Follow these simple steps to reduce pollutant levels in your indoor air when cooking food in your home.

- Use a range hood exhaust fan when cooking to reduce the levels of cooking-related pollutants such as PM, NO<sub>2</sub>, CO, and water vapour. Run your exhaust fan on the fastest setting available. If you don't have a working range hood exhaust fan, open a window.
- Use back burners instead of front burners so that all vapour, PM, and gases are captured by the exhaust hood.
- Open windows while cooking.
- Run the fan in your furnace or ventilation system, if available.

### **Store Food Safely**

- Store food safely in glass or stainless steel containers. If using plastic containers, make sure they are made of food-grade (recycling codes 1, 2, 4, 5) plastic.
- Do not use stained, chipped or cracked plastics and containers.
- Avoid visibly damaged, stained or unpleasant smelling plastics and containers.
- Never store food in plastic containers that were not intended for food or were used for another single-use specific purpose (for example, margarine containers).
- Avoid serving or storing hot foods or beverages in plastic containers.

### [Using Hobby and Crafting Materials](#)

Hobbies and crafts are a fun activity for people of all ages. Be sure to follow the safety instructions on product labels to know which products may pose health risks and to help keep these activities safe for everyone.

Exposure to some specialized hobby and crafting materials can cause burns or irritation to skin or eyes, cause breathing issues, and even poisoning.

Here are some simple tips to help keep your hobby and crafting time fun and safe:

### **Preparing and Planning**

- **Read the label.** Follow all instructions.

- **Learn the right techniques.** Learn all you can about the materials and techniques you're using. Take classes, find an instructional video, read information written by professionals, or ask a professional.
- **Be cautious of what you find online.** While the internet can be a great way to learn a new skill, some sources can give bad advice. For example, off-label use of household chemical products in crafts can result in untended harm.
- **Look for safer alternatives.** Look into the potential hazards before you try (or buy) new hobby or crafting supplies. Consider re-using some materials you have around the home such as, paper, cardboard and fabric.
- **Keep materials in their original containers.** You'll be able to read label instructions and emergency advice.
- **Ventilate your work area.** Work in an area where the air circulates well. Work outside when possible, open a window, or use a fan.
- **Wear protective equipment.** Many materials may require the use of goggles or safety glasses, earplugs, rubberized gloves, and dust masks or respirators.
- **Remove your contact lenses.** They can trap dust or splashed liquids, which could damage your eyes. Use safety glasses or your prescription glasses instead.
- **Protect against smoke and fires.** Install a smoke detector in your work area. Keep a fire extinguisher close by. Be sure to keep flammable materials, such as paper or cloth, away from any flame.
- **Keep hobby and crafting supplies away from food and drink.** You will reduce the risk of swallowing dangerous materials by mistake.
- **Know emergency phone numbers.** Keep the phone number of your nearest Poison Control Centre handy or add it as a contact in your phone. Call right away if you suspect a poisoning.

### Cleaning Up

- **Wash up.** Wash your hands and workspace (and clothing, if needed) after you finish working.
- **Dispose of materials carefully.** Contact your municipal waste facility for information on safe disposal of any hazardous materials.
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**TIP** If you suffer headaches, dizzy spells, severe mood swings or feel ill when working on your crafts or hobbies, leave the project for a while and get fresh air to see if you feel better. These symptoms could be warning signs that you need to take more steps to protect your health. If symptoms continue or return, get medical advice.

## Using Arts and Crafts Materials with Children

When preparing and planning arts and crafts for children, follow these tips:

- **Buy kid-friendly products.** Choose age appropriate products labelled for children's use.
- **Pay attention.** Stay in the room and be attentive when children use arts and crafts materials. Keep children away from some of the more specialized materials, such as powdered clays and paints, ceramic glazes, shellac, glue guns and paint strippers.
- **Never** mix crafting and snacking.
- **Store carefully.** Keep hazardous materials out of the sight and reach of children (and pets).

**WARNING! Do not use boric acid (borax, borate, boron) to make slime, dough, putty or modeling clay.**

### **Protecting People at Greater Risk: Pregnant People, Children**

- There may be additional risks posed to pregnant people by certain arts and crafts materials (such as lead solders used in stained glass). If you're pregnant or planning to get pregnant, talk to your doctor about the risks of these products.
- Young children, who are naturally curious and have a habit of putting things in their mouths, are also at greater risk. Keep materials not intended for children out of their sight and reach.

## DIY and Home Renovations

Whether you own or rent, there are a range of renovations and do-it-yourself (DIY) projects that you can do to help turn where you live into your home. However, it is important to be aware that some projects can expose you or the people around you to harmful chemicals and pollutants.

Here are some helpful tips to follow to help keep you and your family safe before starting any DIY or renovation project:

- Think about the best time to do the renovation. If someone is pregnant and/or there is an infant in the home, now is probably not the best time to do a reno project. When possible, plan renovations and DIY projects for the warmer months when windows can be left open.

- Follow all safety, usage, and disposal instructions every time you use a household chemical product. Look for hazard symbols on the front of the product. If you don't already know what these symbols mean, learn about them.
- Wear personal protective equipment to reduce your exposure to chemicals. This may include gloves, a proper mask, and safety glasses. Product labels and instructions will provide more detailed information on any additional personal protective equipment (e.g., hard hats) you should wear.
- Keep your work areas well ventilated. This is especially important when doing projects that use paints, varnishes, glues, or other adhesives. All of these can create dust or release chemical fumes. Open windows and doors, run your exhaust fans, and work outdoors, if possible.
- Paint and varnish products often have a smell. The odour may come from the gases known as volatile organic compounds (VOCs) that are released from the product. Some household chemical products that are labelled as "low emission" give off fewer VOCs. Read the label and use products that are low in VOCs. Do not occupy the space until the smell is gone.
- If you're buying something made of composite wood, such as furniture, cabinets, countertops or flooring, check the label and look for products with lower levels of formaldehyde which is used as a binding agent. When possible, allow such materials to off-gas for several days or longer before occupying the newly renovated space.

While older homes can have a lot of character and charm, they can also contain hidden risks that you may uncover as you begin renovations. If you live in or are renovating an older home, consider the following:

**Asbestos.** Before 1990, asbestos was commonly used for insulating homes and was found in other building materials such as, ceiling and floor tiles, cement and plaster. Hire a certified professional to test for (and remove, if required) asbestos before doing any renovations or remodelling. Never disturb asbestos materials yourself. There are no significant health risks if materials containing asbestos are tightly bound in products and in good condition; sealed behind walls and floorboards; isolated in an attic; and left undisturbed. When disturbed and released into the air, breathing in asbestos fibres can be extremely harmful to your health, potentially leading to a serious type of lung cancer.

**Lead in paint.** If your home was built before 1991, it may contain lead-based paint. If you think the paint in your home may contain lead, have it tested. A certified inspector can measure paint lead levels in your home, or you can mail paint chip samples to a testing laboratory. If you have lead-based paint (e.g., on walls, windowsills, baseboards or other woodwork, radiators, or floors), consider hiring a professional to remove it. Painting it over can be an acceptable option, provided that the underlying leaded paint is not disturbed. Do not sand, scrape or burn off leaded paint.



**Lead in plumbing.** Plumbing systems in some homes may be connected to the watermain with lead pipes (also called lead service lines). The National Plumbing Code allowed lead as a material in pipes until 1975 and allowed the use of lead-based solder in plumbing until 1986. Some other brass plumbing parts or faucets may also contain lead. This lead can leach into drinking water if it has been sitting in the pipes for several hours. You can check with your municipality or water utility to see if there are lead service lines in your area. If there are lead service lines or other lead-based materials in your plumbing system, you can have your water tested for lead content. If you have (or think you may have) lead in your plumbing, you can do the following:

- Always let tap water run until it is cold before using it for drinking, cooking and especially making baby food or formula.
- Don't use water from the hot water tap for cooking or drinking. Use cold water instead.

If you do have a lead service line, the best solution is to have it replaced. Ask your municipality about programs or incentives for replacing lead service lines.

**Mould.** Mould can grow in damp or wet areas in your home, contributing to poor indoor air quality and health problems, such as asthma. Find and remove all sources of excess moisture and existing mould throughout your home. Depending on where you're renovating, check basements, closets, windowsills, roofs, and around sinks, tubs and pipes. To reduce exposure to mould in your home:

- Keep humidity low, about 50% in summer and 30% in colder weather. You can use a hygrometer (a tool available at most hardware stores) to measure humidity.
- Install and use exhaust fans in the kitchen and bathroom to remove excess moisture.
- Install a dehumidifier in damp or humid areas of your home such as in your basement.
- If mould is found, discard items that cannot be dried or cleaned.
- When placing large furniture in a room (e.g. a couch, a large free-standing cupboard) leave a small amount of space for air circulation between the furniture and the wall.

If a small (1 - 3 patches, each less than 1 m<sup>2</sup> (10 square feet) in size) to moderate (more than 3 patches or if the patches are greater than 1 m<sup>2</sup> but less than 3 m<sup>2</sup> (32 square feet)) area of mould is found:

- Wear safety glasses or goggles, a disposable N95 mask, and household disposable gloves.
- Vacuum the area with a HEPA vacuum cleaner before and after cleaning.
- Clean the mould by using water and dish detergent. Do not use bleach.

If a large (patch is larger than 3 m<sup>2</sup>) area of mould is found:

- Hire a professional (or ask your landlord to hire a professional) to clean it up, especially if there is a large amount of mould or if the mould keeps coming back after you clean it.
- A large amount of mould is often the result of a bigger problem (like a leak in the foundation or a major flood), which you may need a professional help to fix.

If you find mould, first try to figure out where the moisture is coming from and correct the underlying problem. Otherwise, the mould will continue to come back.

**TIP** Consider moving dusty work such as cutting and sanding outdoors, or using a local exhaust system vented to the outside.

### **Protecting People at Greater Risk: Children, Pregnant People, and Older Adults**

- Children are naturally curious, so always keep paints, adhesives, and chemical substances locked away and out of sight. Be careful of children around tools, supplies, and work sites.
- Children, pregnant people, and older adults may be at greater risk to the health effects of exposure to chemicals. When renovating, it is recommended that children, pregnant people, and older adults are away from work areas and do not return to the renovated space until all dust has been thoroughly cleaned up and the smell of fumes is completely gone.

## Working in the Garage or Workspace

When spending time in your garage or workspace, remember to keep healthy and safety your number-one priority. Cleaners, solvents, kerosene, gasoline, ammonia, antifreeze, and other common chemicals require careful handling and storage. Follow these steps to help keep you and your family safe.

### **Store Chemicals Safely**

- Keep products in their original containers. Never 'sniff' a container to figure out what it contains.
- Store pesticides, fertilizers, engines, fuels, and fuel-burning equipment in a storage cabinet or, if possible, a locked shed, separated from your home's ventilation system. This will help to prevent chemical fumes from these products from entering your home.
- If you live in an apartment or condo, please consult with your landlord.
  - Reclose all product cans and bags firmly.
  - If you have a pool or spa, remember to store pool chemicals:
    - in their original containers
    - in a cool, dry, well ventilated place, away from sunlight
    - away from food and beverages
    - away from gasoline, fertilizers, pesticides, grease, paints, tile cleaners, turpentine, or other flammable materials, especially when pool chemicals are stored in sheds or small storage rooms

## **Keep Hazardous Fumes Out of the Garage or Workspace**

- Wash brushes, work clothes, and shoes immediately after working – don't leave these sitting and off-gassing in the garage or workspace.
- Keep carbon monoxide out of the garage or workspace. Never smoke, operate a barbecue (BBQ), run fuel-burning equipment (like a lawnmower or generator) or leave your car idling in your garage or indoor workspace. These rules apply even if you keep the garage or workspace door open. Exposure to the gas can cause carbon monoxide poisoning leading to harm and even death.
- Ensure garage or workspace doors and windows are open when you are working in there. When in doubt, move your work outdoors and always wear appropriate safety equipment.

## Controlling Pests Safely

There are many actions we can take to avoid and address problems with insects, rodents and other pests in our homes that do not involve using toxic chemicals. However, if you have a problem that requires the use of pesticides, follow these safety tips.

### **Buying and Using a Pesticide:**

- Identify the pest correctly. Use physical control methods first, such as hand weeding or traps.
- Only use a pesticide that is authorized for use in Canada and is permitted in your municipality.
- Do not purchase a pesticide online unless it is a registered product from a Canadian retailer, and you are authorized to use it.
- Check provincial/territorial rules on the use of pesticides and herbicides around the home. Some jurisdictions have banned the use of 'cosmetic' uses of such chemicals.
- Read the label carefully and follow the instructions. You can also download Health Canada's pesticide label app from the App store, Google Play or Amazon.
- Store pesticides out of sight and reach of children and pets, away from food and drinks, and in their original containers.
- If you're not comfortable using a pesticide yourself, consider hiring a licensed pest control expert.
- If you want to report adverse health effects, you can do this by submitting a voluntary incident report, which is accessible through Health Canada's Public Engagement Portal for pesticides (<http://pest-control.canada.ca/en/public-engagement-portal/>).

### **Always avoid:**

- Making homemade pesticides. This can lead to health and safety risks for you and your environment.

- Drinking, eating, or smoking while using pesticides.
- Touching your eyes and mouth while or after using pesticides.
- Applying a pesticide directly on a person, an animal, or to bedding unless the label permits it, such as with personal insect repellents, and flea or tick pet protection products.
- Involving children or pregnant people in pesticide use or clean-up.

#### **After using a pesticide:**

- Wash your hands with soap and warm running water for at least 20 seconds.
- Wash the clothes you wore while applying pesticides in a separate load from regular laundry.
- Thoroughly clean any cooking or eating surfaces that may have been contaminated.

#### **Disposing of pesticides:**

- Follow the product label instructions for how to safely dispose of pesticides.
- Never burn pesticides or pour them down the drain.
- Return unopened containers to the supplier.
- For partially used pesticides, contact your municipality for information on how to dispose of household hazardous waste.

#### **Keep bugs away:**

- **Cover up.** Wear light-covered clothes made of tightly woven materials such as nylon or polyester. Wear long pants and tucked-in long sleeved shirts with closed toe shoes.
- **Use insect repellent safely.** It is important to always read the entire product label carefully before use and follow all directions. Note that a product that repels mosquitoes might not work for ticks or blackflies. The label specifies what pests the product protects you from. Depending on the ingredients, some products repel insects for a longer time than others do. The label also states how old you must be to use the product, how to apply it, how much to apply, and how often.

## Staying Safe on Hot Days

As a result of climate change, Canadians can expect more extreme heat events. Extreme heat events involve high temperatures and sometimes high humidity; this can vary region to region. Extreme heat events can harm you and can lead to heat stroke and even death. It is important to take steps to protect yourself and your family.

## Safety tips

Heat illnesses are preventable. During extreme heat, the most important thing is to keep cool and hydrated. Follow these tips to protect yourself and your family in very hot weather:

- Check local weather forecasts for heat alerts.
- If you have an air conditioner, make sure it works properly before the hot weather starts.
- Block the sun with awnings, curtains or other cordless window coverings.
- If safe, open windows at night to let cooler air in.
- Prepare for the heat – dress in loose, light clothes.
- Avoid strenuous exercise, especially during mid-day. If you jog, do so early in the morning before the temperatures rise.
- Stay hydrated, drink plenty of cool liquids before you feel thirsty – water is best.
- Pay close attention to how you, and those around you, feel. Check with family and friends during very hot days to see if they need help.
- Make meals that don't need to be cooked in an oven.
- Take cool baths or showers to get some temporary relief.

## Outdoor Air Quality

The hottest days of the year are often those with the worst air quality. The Air Quality Health Index (AQHI) is a simple scale from 1 – 10 that measures outdoor air quality and provides health recommendations depending on the daily reading. Listen to the news or check the daily AQHI using online sources or with the AQHI Canada App. [Insert image of AQHI scale]

**Check sunscreen labels.** If you are sensitive or allergic to certain ingredients, check with a health care provider before using the sunscreen. Protect infants and children with sun hats, long-sleeved light-coloured and loose-fitting clothing and by staying in the shade.

### Protecting People at Greater Risk:

While extreme heat and poor outdoor air quality can put everyone at risk, health risks are greatest for:

- older adults
- infants and young children
- people with chronic illnesses (like breathing problems, mental illness, and heart problems)
- people who work outdoors
- people who are active or exercise outside
- homeless people
- people with compromised immune systems

## Staying Safe at Home During Cooler Months

As the weather gets cooler, we spend more time indoors and take efforts to keep the cold air out. Sealing off our homes from the elements can make us feel cozy and warm, but it can also increase health risks from some indoor air pollutants.

**Test for Radon.** Radon, a radioactive gas that comes from the breakdown of uranium in the ground, it is the leading cause of lung cancer in non-smokers. It is invisible, odourless and tasteless. The higher the radon level and the longer you are exposed, the more significant the health risk.

- Radon can enter a home any place it finds an opening where the house contacts the ground: cracks in foundation floor and walls, construction joints, gaps around service pipes, support posts, window casements, floor drains, sumps or cavities inside walls.
- Radon concentration levels will vary from one house to another, even if they are similar designs and next door to each other. The only way to be sure of the radon level in your home is to test.
- Buy a long-term radon test kit or hire a professional to test your home for you. Test for 3 months, ideally in the fall/winter time.
- If the radon level is high, hire a certified radon professional to determine the best and most cost effective way to reduce the radon level in your home.

**Detect Carbon Monoxide (CO).** CO has no smell, taste or colour. If high levels of CO are found they can cause harm, even death. CO comes from burning fuels such as natural gas, propane, oil, coal and wood. It can be in your home any time of year, but the risk is greater in the winter months because homes in Canada are usually heated by appliances that burn fuel.

- Install at least one functioning carbon monoxide alarm outside of your bedrooms. In a rental unit, this is the responsibility of the landlord.
- If your alarm sounds, do not try to locate the source of CO. Leave your home immediately and move to fresh air. Once outside, call 9-1-1, your fire department, or emergency services. Return to your home only after the problem has been fixed by a professional.
- REMINDER! Be sure to test your existing CO alarms and either replace the batteries or the alarm itself, if necessary, according to manufacturer's instructions. Again, in a rental unit, this is the responsibility of the landlord.

**Service Appliances.** Appliances such as furnaces, fireplaces, gas stoves, and water heaters need to be maintained to keep them working properly. Appliances not running in top condition may be sources of health risks such as carbon monoxide or particulate matter. Take action, or have your landlord take action, by:

- Having furnaces, fireplaces, gas stoves, and water heaters serviced every year by a trained professional.

- If your heater or air conditioner uses air filters, replace them regularly according to manufacturer's instructions.

**Do you rent?** If you rent your house or other dwelling, make sure to talk to your landlord if you have any concerns about potential health risks, including mould or asbestos.

Landlord and tenant issues fall under provincial or territorial jurisdiction. Visit the Canadian Mortgage and Housing Corporation website (<http://www.cmhc-schl.gc.ca>) or call 1-800-668-2642 to help you understand your rights and responsibilities as a renter.

Depending on where you live, landlords may be obligated to install and maintain proper certified CO and smoke alarms.

## Using Cosmetics and Personal Care Products Safely

Every day, most of us use products like soap, moisturizing creams, shampoo or makeup. Most cosmetics and personal care products are safe, but they can sometimes cause health problems, like allergic reactions and skin irritation, especially when not used as intended.

### Natural vs Synthetic

We might assume that "natural" products are better or healthier than similar ones using synthetic ingredients. Often, however, these "natural" ingredients are no different in chemical composition than synthetic ones. In fact, a synthetic substance that mimics a natural one can sometimes provide a purer, more stable ingredient that gives the product a longer usable time. Both natural and synthetic ingredients are equally suitable for use in cosmetics.

### When using cosmetics, follow these tips to help ensure safe use:

- Always read and follow directions carefully. Misuse of a product can lead to problems like rashes, burns or eye damage.
- Keep cosmetic products out of the sight and reach of children! If a child swallows a cosmetic, contact the nearest Poison Control Centre. Call 911 if it's an emergency (the victim is not breathing, unconscious, or having a seizure).
- Most cosmetics contain preservatives. These important ingredients help keep bacteria from growing in the product. To make sure your cosmetics stay clean, follow these simple rules:
  - **Wash your hands** before putting on makeup
  - **Do not** share makeup
  - **Do not** add water or saliva to dilute makeup
  - **Keep** cosmetics in a dry area, away from direct heat and sunlight
  - **Do not** use a cosmetic if it changes its smell, colour, or feel

- Be careful of unrealistic/exaggerated manufacturers' claims on any product, especially if they suggest major or permanent changes to your body or skin structure. If the product has a therapeutic effect on your body (like treating a disorder or skin condition), it is considered a drug (or natural health product) and should have a Drug Identification Number (DIN) or a Natural Health Product Number (NPN) on the label.
- If product directions say to do a patch test, do one to check if you are sensitive or allergic to something in the cosmetic. If you think you've had an adverse reaction to a cosmetic, stop using the product. See a doctor for advice if the reaction looks irritated and lasts long.
- Report problems with cosmetic products by submitting a [Consumer Product Incident Report](#).

**Go scent-free.** The chemicals used in scented products can make some people sick, especially those with fragrance sensitivities, asthma, allergies and other medical conditions. To help keep the air healthy for everyone, some workplaces are introducing a scent-free policy.

## Glossary of Common Chemicals and Pollutants

The Government of Canada conducts chemical risk assessments to determine whether a substance poses a risk to humans or to the environment. You may find the latest information on assessments at Canada.ca. The glossary below provides information on some of the chemicals and pollutants found in the guide.

### **NOTE:**

**This section will be populated at a later stage to line up with the chemicals/pollutants referred to in the guide. It will be presented as a reference table with the following information:**

- **name of chemical/pollutant;**
- **sources (where I can find it); and**
- **health effects.**



## Infographic: A Healthy Home Checklist

[This is meant to be a two-page spread with graphics to help illustrate the messaging - As demonstrated below, even with short actions and descriptions, this checklist will be long. Each tip on the checklist could be shortened further, or the list should keep just the **bold** text and reference the page/section of this guide for more information]

Room	Message
<b>Front entrance</b>	<p><b>Remove outdoor footwear</b></p> <p>Always leave your outdoor footwear by the door. They can track dirt and contaminants from outside the home into your living space.</p>
<b>Living room</b>	<p><b>Make your home smoke-free</b></p> <p>Second-hand smoke spreads from one room to another even if the door of the smoking area is closed.</p> <p><b>Check for lead paint</b></p> <p>Homes built before 1991 may have base coats of lead paint beneath the newer ones. Do not use sanders, heat guns or blowlamps to remove paint. This can create dust and fumes that contain lead. If it is necessary to remove old paint, use a chemical paint stripper, ideally one with a paste that can be applied with a brush.</p> <p><b>Use your fireplace safely</b></p> <p>Make sure your fireplace is properly installed, inspected and cleaned, and only burn dry, untreated wood.</p> <p><b>Keep dust to a minimum</b></p> <p>Clean floors and household surfaces with a wet cloth or mop regularly to remove dust and dirt.</p>
<b>Kitchen</b>	<p><b>Test for lead in plumbing</b></p> <p>If your home was built before 1986 and you think you may have lead in the plumbing, get your water tested. Always let tap water run until it is cold before using it for drinking, cooking and for preparing baby food.</p> <p><b>Use and store household chemical products safely</b></p> <p>Read the label and follow all instructions for use. Store household chemical products in original containers, keep them safely locked away and out of sight of pets and children.</p>

	<p><b>Prevent mould</b></p> <p>Address any leaks or damp areas to prevent mould growth. This may entail fixing roof leaks, improving drainage around the foundation, or dealing with plumbing leaks.</p> <p><b>Vent stovetop</b></p> <p>When using a stove, it is important to have a range hood and fan for venting water vapour and air pollutants, such as Particulate Matter (PM) to the outside.</p>
<b>Bathroom</b>	<p><b>Vent bathroom water vapour</b></p> <p>Use an exhaust fan or open windows when running a bath or showering to prevent excessive humidity.</p> <p><b>Choose and use household chemical products wisely</b></p> <p>Carefully read the labels of and follow the instructions for all household chemical products, including directions for use, harmful interactions with other chemicals, storage, disposal and first aid.</p> <p><b>Prevent mould</b></p> <p>Seal your tubs and sinks tightly. Leaks can allow water to collect behind walls or under cupboards or floors, providing a damp place for mould to grow.</p> <p><b>Repair leaks</b></p> <p>Make sure there are no leaks around the bathtub or the sinks and that the seals are not cracked or missing. When there is a leak or water damage, it is important to repair the source of the leak promptly and to dry the affected area thoroughly to prevent mould growth.</p> <p><b>Consider scent-free personal care products</b></p> <p>The chemicals used in scented products can make some people sick, especially those with fragrance sensitivities, asthma, allergies and other medical conditions.</p>
<b>Bedroom</b>	<p><b>Ventilate your space</b></p> <p>Keep the bedroom well ventilated by opening the window to prevent buildup of volatile organic compounds (VOCs) from off gassing from furniture, mattresses and bedding.</p> <p><b>Install a CO alarm</b></p> <p>Install at least one functioning certified CO alarm outside of the bedrooms.</p>

	<p><b>Reduce dust and particulate matter</b></p> <p>Vacuum carpets, use mattress and pillow covers, and wash bedding weekly to reduce asthma triggers.</p>
	<p><b>Replace or repair damaged covers</b></p> <p>Ensure products that contain foam, such as stuffed toys, upholstered furniture and mattresses, are in good condition to reduce your exposure to flame retardants.</p>
<b>Laundry room</b>	<p><b>Vent the clothes dryer</b></p> <p>Vent the clothes dryer to the outside through the roof or wall, not into the attic, to prevent excess moisture and mould growth.</p>
	<p><b>Go scent-free</b></p> <p>Choose fragrance-free laundry detergent and avoid the use of dryer sheets, especially those that are scented.</p>
<b>Attic</b>	<p><b>Check for asbestos</b></p> <p>If you are renovating, hire a professional to test and remove asbestos. Asbestos may also be found in other older building materials, and other areas such as, ceiling and floor tiles, plaster, and cement.</p>
<b>Basement</b>	<p><b>Maintain furnace and other equipment</b></p> <p>Make sure appliances such as furnaces, fireplaces, gas stoves, and water heaters are well maintained and inspected by a professional at least once a year.</p>
	<p><b>Reduce clutter</b></p> <p>If you use the basement for storing items, use plastic bins with lids instead of cardboard. Never place cardboard boxes directly on the basement floor.</p>
	<p><b>Reduce the potential for mould</b></p> <p>Install a dehumidifier in damp or humid areas of your home such as in your basement.</p>
	<p><b>Test for radon</b></p> <p>Do a long-term radon test for 3 months to measure the level of radon in your home to determine if you need to reduce it. Follow test kit instructions to place the detector in the lowest level of the home (basement or first floor) where you spend at least four hours a day.</p>
	<p><b>Keep household chemical products closed</b></p>

<b>Garage</b>	Make sure all containers are tightly closed and stored with other chemical products in an area that is not occupied, such as the garage, to keep you safe from exposure to volatile organic compounds (VOCs).
	<b>Store household chemical products out of reach</b> Store products in their original containers and keep them locked and out of reach of children and pets.
	<b>Close and seal doors</b> Keep adjoining doors from the garage to your home closed to prevent car exhaust or other pollutants from entering your home.
	<b>Dispose of household chemical products safely</b> Take left-over chemical products to a hazardous waste disposal depot. Be sure to check with your municipality.

**[BACK COVER]**

For more information, visit [Canada.ca/Healthy-Home](http://Canada.ca/Healthy-Home)

## **Chemicals and Pollutants in the Home: Tips for Do-It-Yourself (DIY) Projects and Renovations**

DIY projects and renovations are a great way to be creative and/or save money. While taking on a new project, follow these steps to help keep you and your family stay safe.

### *Planning*

- ✓ Gather materials and personal protective equipment needed for your project.
- ✓ Hire a professional to test for asbestos before doing any major renovations, remodelling, or demolitions if you think you have asbestos in your home.
  - Before 1990, asbestos was commonly used for insulating homes and was found in other building materials such as, ceiling and floor tiles, cement and plaster.
  - Do not to remove asbestos-containing products yourself.
- ✓ Hire a professional to check for lead-based paint in homes built before 1991 as it can release harmful dust if disturbed or removed during renovations.
- ✓ Find all mould and sources of excess moisture throughout your home. Depending on where you're renovating, check basements, closets, windowsills, roofs, and around sinks, tubs and pipes. Consider hiring a professional to clean it up if the affected area is large, or if the mould keeps coming back after you clean it. Be sure to address the source of the excess moisture to prevent the mould from coming back.

### *Buying*

- ✓ Buy low and zero-VOC emission products wherever possible. Some building materials (like cleaning products, glues, particle board, composite flooring products, wallpaper, paints and sealants) can emit harmful gases, called volatile organic compounds (VOCs), into your indoor air.

### *Working*

- ✓ Follow safety, usage, and disposal instructions carefully when using household chemical products.
- ✓ Wear recommended protective gear such as gloves, a breathing or dust mask, safety glasses and protective clothing.
- ✓ Seal off the work area to reduce the movement of dust, fumes from the project into other parts of the house.
- ✓ Look for and understand hazard symbols on household chemical products.
- ✓ Never mix household chemical products together. Some mixtures can produce harmful gases.
- ✓ Open windows and/or use exhaust fans to keep your home well ventilated during and after projects and renovations.
  - Take fresh air breaks as needed.
- ✓ Keep children, pregnant people, and seniors away from work areas.

### *Cleaning, Storing and Disposing*

- ✓ Clean your home thoroughly after projects and renovations to remove and limit dust and other particulate matter.
- ✓ Clean brushes, work clothes, and shoes immediately after working.

- ✓ Keep household chemical products in their original containers and make sure all containers are tightly sealed.
- ✓ If possible, store products in a shed or garage not connected to the home.
- ✓ Follow municipal guidelines on how to dispose of household hazardous waste.
  - Never burn household chemicals products and containers.
  - Only pour the contents down the drain or flush them down the toilet, when directed.

**For more information on keeping a healthy home, please visit**  
[www.Canada.ca/Healthy-Home](http://www.Canada.ca/Healthy-Home)

## Chemicals and Pollutants in the Home: Tips for Renters

If you rent your home, whether a house, an individual apartment, or a condominium, follow these tips to help make your home a healthy one.

### *Knowing your rights*

Your landlord has responsibilities for maintaining your home; you should speak to them if you have any concerns about possible health risks such as mould, lead or asbestos. Landlord and tenant issues fall under provincial or territorial jurisdiction. Visit the [Canadian Mortgage and Housing Corporation](#) to help you understand your rights and responsibilities as a renter. The following tips will help make your dwelling a healthy one, and may be the duty of your landlord:

- ✓ Check for mould. If small amounts of mould are found, clean them up with dish soap and water. There is no need to use bleach.
  - Be sure to fix the underlying cause (water damage, too much humidity or not enough ventilation) to prevent more mould from coming back.
  - If larger amounts are found, speak to your landlord.
- ✓ Install new certified smoke and carbon monoxide (CO) alarms. Replace batteries and the alarm itself as recommended by the manufacturer.
- ✓ Have furnaces, fireplaces, gas stoves and water heaters serviced every year by a trained professional.
- ✓ Replace air filters in furnaces on a regular basis.
- ✓ Test for radon using a long-term (three months minimum) radon test kit.
- ✓ Check for lead.
  - If your home was built before 1991, it may contain lead-based paint.
  - Plumbing systems may have lead pipes if built before 1975 and lead-based solder if built before 1986. This is information your landlord or superintendent should be able to help you find out.
    - Let the tap water run until cold before using it for drinking or cooking. This will help reduce your exposure to lead that may be present in the plumbing.
- ✓ Talk to your landlord if you have any concerns about asbestos.
  - Before 1990, asbestos was commonly used for insulating homes and was found in other building materials such as ceiling and floor tiles, cement, and plaster.
  - There are no significant health risks if materials containing asbestos are tightly bound in products and in good condition; are sealed behind walls and floorboards; are isolated in an attic; and left undisturbed.

### *Keeping a Clean Home*

- ✓ Have a smoke-free home.
- ✓ Wash your hands with soap and warm, running water for at least 20 seconds before and after touching food, and after using the washroom, changing diapers or touching pets.
- ✓ Take your outdoor shoes off at the door.
- ✓ Vacuum regularly, and clean hard floors and surfaces with a wet cloth or mop. If possible, choose a vacuum that incorporates a high efficiency particulate air (HEPA) filter to trap small particles, including dust.



- ✓ Consider using vinegar, baking soda and water instead of traditional household cleaning products. They're often cheaper, healthier and better for the environment.
- ✓ Read household chemical product labels, and understand hazard symbols.
  - Keep these products sealed and out of reach and sight of children and pets.
- ✓ Never mix household chemical products together. Some mixtures can produce harmful gases.
- ✓ Open windows and/or run exhaust fans when cooking, showering, or using household chemical products, when possible.
- ✓ Consider scent-free personal care products. The chemicals used in scented products can make some people sick, especially those with fragrance sensitivities, asthma, allergies and other medical conditions.

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## **Chemicals and Pollutants in the Home: Tips to Help Keep your Kitchen Safe and Healthy**

The kitchen isn't only a room where meals are prepared; it can be a gathering space for family occasions or entertaining guests. Help keep your kitchen safe and healthy by following these steps.

### *Cleaning*

- ✓ Wash your hands with soap and warm, running water for at least 20 seconds before and after touching food, and after using the washroom, changing diapers or touching pets.
- ✓ Wash surfaces (like kitchen counters and cutting boards) and utensils often.
  - In most cases soap and hot water can do the job.
- ✓ Wash fresh fruits and vegetables with clean, running water that is safe to drink.
  - Washing fresh produce with soap, chlorine (bleach) or other chemicals is not recommended. Fresh produce is porous and can absorb chemicals that are not intended for you to eat.
- ✓ Always read and follow instructions on the labels of household chemical products.
  - Keep them away from food, water sources, and open flames, and out of reach and sight of children and pets.
  - Never mix household chemical products together. Some mixtures can produce harmful gases.
  - Consider using baking soda, vinegar and water instead of traditional household cleaning products. They're cheaper, healthier and better for the environment.

### *Preparing*

- ✓ Run tap water until cold for drinking, cooking, or mixing baby food as this can reduce the risk of exposure to lead.
- ✓ Avoid pouring hot liquids into plastic containers not intended for food.

### *Cooking*

- ✓ Use the stove exhaust fan when cooking. When possible, use the back burners of your stove and run the exhaust fan on the fastest speed available.
- ✓ Open windows when cooking if your exhaust fan does not vent to the outdoors or if you don't have an exhaust fan.
- ✓ Do not use badly scratched or damaged cookware.

### *Microwaving*

- ✓ Remove food from any packaging that isn't microwave safe.
- ✓ Use microwave-safe containers.

### *Storing*

- ✓ Store food safely using glass, stainless steel or food-grade (recycling codes 1, 2, 4, 5) plastic containers.
- ✓ Never store food in plastic containers that were not intended for food or were used for another single-use specific purpose (for example, margarine containers)
- ✓ Discard stained, chipped or cracked plastics and containers.

- ✓ Avoid visibly damaged, stained or unpleasant smelling plastics and containers.

**For more information on keeping a healthy home, please visit**  
**[www.Canada.ca/Healthy-Home](http://www.Canada.ca/Healthy-Home)**

# Chemicals and Pollutants in the Home: Tips for Pregnancy and Preparing For Baby

When you're pregnant, there are a number of things you can do to help [stay healthy and give your child the best start](#). One example is avoiding exposure to harmful chemicals and pollutants wherever possible. This might seem difficult, but there are many simple tips you can follow to help stay healthy before, during and after pregnancy.

## *Taking Care of Yourself and Baby*

- ✓ Follow [Canada's Food Guide](#) and eat plenty of fruits and vegetables; wash them all thoroughly with clean, running water that is safe to drink.
  - Washing fresh produce with soap, chlorine (bleach) or other chemicals is not recommended. Fresh produce is porous and can absorb chemicals that are not intended for you to eat.
- ✓ Let the tap water run until cold before using it for drinking, cooking, or making baby food. This can reduce the risk of exposure to lead, which, even at low levels, can cause harmful effects on children's development.
  - Pregnant people must also be careful, as lead can pass through the placenta.
- ✓ Choose [fish that are low in mercury \(for example, like salmon, rainbow trout or char\), so that you can take advantage of the benefits of eating fish while minimizing the risks from mercury](#).
- ✓ Avoid drinking alcohol, smoking or, vaping and taking recreational drugs.
- ✓ Avoid using plastics containing BPA.
- ✓ Never store food in plastic containers that were not intended for food or were used for another single-use specific purpose (for example, margarine containers).
- ✓ Use microwave-safe containers.
- ✓ Avoid pouring hot liquids into plastic containers.
- ✓ Avoid baby powders and diaper rash creams containing talc.
- ✓ Talk to your doctor about the risks that may be associated with certain arts and crafts materials.

## *Maintaining a healthy home*

- ✓ Wash your hands with soap and warm, running water for at least 20 seconds before and after touching food, and after using the washroom, changing diapers or touching pets.
- ✓ Remove your outdoor shoes at the door to keep contaminants outside.
- ✓ Vacuum regularly and clean hard floors and surfaces with a wet cloth or mop. If possible, choose a vacuum with a high efficiency particulate air (HEPA) filter.
- ✓ Read household chemical product labels, [understand hazard symbols](#), and keep these products sealed and out of reach and sight of children and pets.
- ✓ Never mix household chemical products together. Some mixtures can produce harmful gases.
- ✓ Consider using baking soda, vinegar and water instead of traditional household cleaning products. They're often cheaper, healthier and better for the environment.
- ✓ Open windows and/or run an exhaust fan when using household chemical products.
- ✓ Have a smoke-free home.

### *Preparing a Space for your Baby*

- ✓ Choose low-emission options if using composite wood products (for example, furniture, cabinets, countertops, flooring).
- ✓ Ensure stuffed toys, mattresses or pillows are in good condition.
  - Follow the tips in [Information for Shoppers of Second-hand Products](#) when buying and using second-hand children's products.
- ✓ Renovations can be big or small and may range from painting or wallpapering to full-room demolitions.
  - It is recommended that pregnant people and children are not present during renovations as they may be at greater risk to the health effects of exposure to chemicals. If this is not possible, avoid the area where work is happening. Pregnant people and children should not return until the area is completely cleaned up and all fumes are gone. If you choose to take on a project, be sure to wear appropriate protective clothing, gloves, goggles, and masks if you are near chemicals needed for renovations and/or are near a renovation site.
  - Choose low-emission paints, varnishes and glues.
  - Open windows and/or use exhaust fans to keep your home well ventilated during and after projects and renovations.

**For more information on keeping a healthy home, please visit [www.Canada.ca/Healthy-Home](http://www.Canada.ca/Healthy-Home)**