

Cleaning and Personal Care Product Labelling:

Exploring Consumer Attitudes and Behaviour

RESEARCH REPORT

ACKNOWLEDGEMENTS

Environmental Defence received funding from Innovation, Science and Economic Development Canada's Contributions Program for Non-profit Consumer and Voluntary Organizations. The views expressed in the report are not necessarily those of Innovation, Science and Economic Development Canada or the Government of Canada.

© Copyright January 2017 by ENVIRONMENTAL DEFENCE CANADA.

Permission is granted to the public to reproduce or disseminate this report, in part, or in whole, free of charge, in any format or medium without requiring specific permission. Any errors or omissions are the responsibility of ENVIRONMENTAL DEFENCE.

Download the report at:

environmentaldefence.ca/labelling



ABOUT ENVIRONMENTAL DEFENCE

ENVIRONMENTAL DEFENCE is Canada's most effective environmental action organization. We challenge, and inspire change in government, business and people to ensure a greener, healthier and prosperous life for all.



ENVIRONMENTAL DEFENCE

116 Spadina Avenue, Suite 300 Toronto, Ontario M5V 2K6

Visit environmentaldefence.ca for more information



EXECUTIVE SUMMARY

Every day, cleaning and personal care products that lack ingredient lists and warning labels expose Canadians to toxic chemicals that are linked to allergies, endocrine or hormone disruption – and even cancer. Many are also persistent pollutants in our environment.

In 2012, the World Health Organization and United Nations Environment Programme released a major review of the science of endocrine-disrupting chemicals, indicating that chemicals in consumer products may be linked to increasing rates of cancers of the breast, thyroid and prostate.¹

To enable consumers to reduce their exposure, Canada needs better labelling rules to inform consumers about harmful ingredients in cleaning and personal care products.

Health warning labels on products such as tobacco and alcohol have been used in many jurisdictions to offer consumers information about the potential harms associated with exposure to product ingredients.² This study summarizes the results of four focus groups commissioned by Environmental Defence and conducted by Environics Research in Toronto that explored Canadian consumers' opinions and attitudes on the use of health warning labels on personal care and cleaning products. The results of the focus groups are also supported by findings from a policy literature review on health warning labels and disclosure policies for various consumer products.

Consumers Want More Information

Canadian consumers are increasingly aware of the health and environmental impacts of chemicals in household goods, and have subsequently become more interested in safer alternatives. However, due to regulatory gaps it is very difficult for consumers to know for certain whether a cleaning or personal care product contains harmful ingredients.

Consumer product labelling rules in Canada often do not require complete disclosure of ingredients on product labels. For example, disclosure of ingredients in household cleaners and in fragrance mixtures used in personal care products is not required, leaving consumers unaware of the potential presence of toxic chemicals in these goods. While several major companies have recently committed to better disclosure policies, reports have shown that voluntary programs are insufficient.⁴

In 2014, a David Suzuki Foundation survey found the following results among 10,500 Canadian households:



15,000 products



Ingredient list on less than 50%

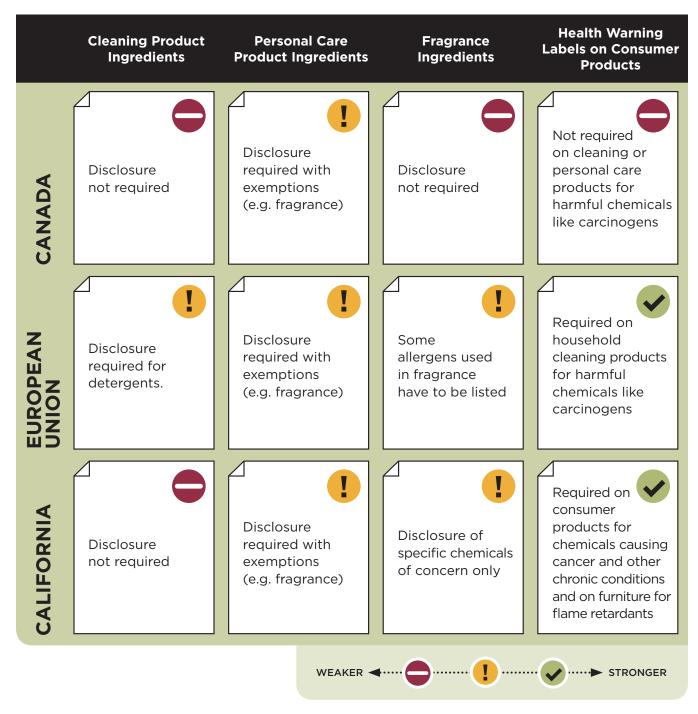


Unsubstantiated "green" claims on **25% of products**

While cleaning products have to display warnings related to acute hazards such as poisoning, warnings about chronic health risks are not required. Along with the lack of such warning statements, health and environmental claims made by companies can be very misleading. According to a 2012 Canada-wide survey of over 10,500 participants, the survey found that of over 15,000 products that participants had in their homes, nearly 25 per cent made unsubstantiated "green" claims and less than half of the products displayed an ingredient list on the packaging. That's why health warning labels in conjunction with full ingredient disclosure are necessary for informed consumer choices.

Labelling Policy: Canada Behind California, EU

As the table below shows, Canada is behind in its labelling policy. Other jurisdictions around the world such as the European Union and the state of California have modernized their labelling rules to better inform consumers and improve industry practices.



Better Labels Influence Consumer and Manufacturer Behaviour

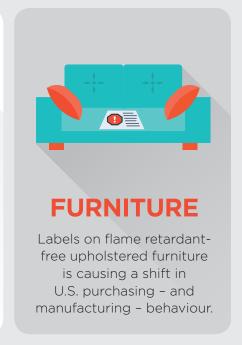
A look at other product categories and jurisdictions shows that labels inform and influence consumers' purchasing behaviour. Health warning labels offer an effective solution to inform consumers of potential health risks associated with using a certain product. For example, tobacco product warning labels have helped reduce smoking rates around the world by warning smokers about the dangers of smoking.⁶

Similarly, labels on personal care products and household cleaners can also help inform consumers of the dangers of toxic chemicals in personal care and cleaning products (such as cancer-causing formaldehyde, a key carcinogen in cigarette smoke).

Product labelling rules can also positively influence manufacturer behaviour. In 2013, California updated its furniture flammability standards to require the disclosure on the product label of the use of flame retardants – a group of chemicals linked to endocrine disruption and adverse impacts on neurological development in children. Since then, the use of some of the most common and harmful flame retardants has significantly declined across the United States.⁷







In 2013, California updated its
furniture flammability standards to require the
disclosure on the product label of the use of
flame retardants – a group of chemicals linked
to endocrine disruption and adverse impacts on
neurological development in children.

FOCUS GROUPS: KEY FINDINGS

Findings from the Environics Research-conducted focus groups support the notion that Canadian consumers do not have the necessary or accessible information to make safe and healthy choices when shopping for cleaning and personal care products.

In line with the findings in literature from other jurisdictions and other product categories, participants were supportive of health warning labels that warn consumers of the chronic health dangers of certain ingredients in products, and indicated that they would seek better alternatives if warned about the presence of a cancer-causing or harmful chemical in a product.

Current Labels do not Protect the Health of Consumers

Focus group participants indicated that long-term health impacts were not among the key considerations that many consumers think about when choosing a cleaning or personal care product. On the other hand, price and brand

recognition, and for some, environmental concerns were among the common factors that participants considered. Despite the lack of regulations to ensure the accuracy of safety messages and health claims,

"The only thing which has ever stopped us is if it's been in the media that this particular product has been cancerous or something serious."

participants generally acknowledged that consumers have a responsibility to use products in a safe manner by following instructions provided on or with products. In fact, many mentioned that product features such as scent or marketing

"Cigarettes have the label that you can die and millions of people are still smoking. If companies are still being shady about it... it's the most fair to let people know and make their own decision."

"I assume that when I'm buying a product that it's been tested."

perceptions of the healthiness of the product. This is troubling since participants

generally under-scored the lack of clarity and consistency in how ingredients or effects are listed. Only a few participants mentioned that they read full ingredient lists and often look for ingredients that stand out.

False Belief that Product Ingredients are Tested and Safe

Focus group discussions revealed that despite concerns about the clarity and/or consistency of ingredient listing, participants generally trusted that current Canadian laws mandated the rigorous testing of personal care and cleaning products,

"I have faith in the process of becoming a product that it's not bad for me."

statements influenced their

especially if bought from well-known stores.

In fact, Canadian

regulations do not

require chemicals to be proven safe before they enter the market for use in consumer products. Furthermore, a 2016 audit by Canada's Environmental Commissioner, Office of the Auditor General, criticized inadequate and lax regulatory enforcement by Health Canada with regards to safety testing of cosmetics and personal care products. The report also underscored the problem of incomplete disclosure of ingredients, by emphasizing that the "fragrance" component of a product's ingredient list may consist of a myriad of chemical ingredients that have been shown to pose health risks to humans.8

The findings of the report underline the fact that widely available products contain substances that are harmful. Yet, among

focus group participants

there was a general misunderstanding that the government ensures the safety of products before they enter the market and that big-name retailers can be trusted for supplying safe goods.

"It would cause me to pause. Maybe there's something out there that's better for you. I can find another product that will do the same job. There's such a wide variety of options out there."

"The writing on the back is so small... It is almost like they don't want you to know."

Consumers Need Full Ingredient Disclosure, Warning Labels

Focus group participants acknowledged the usefulness of on-package warning labels indicating health risks associated with a product. Many emphasized the importance of ensuring readily identifiable information on the product about the presence of harmful chemicals that may cause serious health problems such as cancer.

Several participants stated that seeing a health warning label about cancer or other serious health risks would make them reconsider buying the product and seek a safer alternative. Participants acknowledged the responsibility and ability

of manufacturers to reformulate products to avoid chemicals of concern and a drop of revenue as a result of consumer change in preferences.

Evidence from the state of California, where Proposition 65, a law that mandates warning statements on products that include specific chemicals of concern such as BPA, has been in force for three decades, shows that manufacturers reformulate products to remove toxic ingredients in order

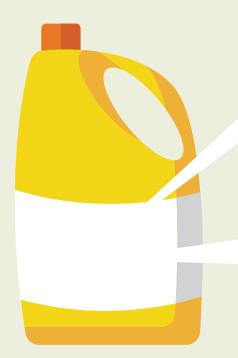
to avoid requiring warning labels on their products. For example, major manufacturers eliminated lead from plumbing supplies.9

"They're going to find their sales going down. They're going to stop putting in the things that people don't like."

"It's on you to look it up to see what you're ingesting or putting on your skin...but we're not scientists. Within reason, they should be putting warnings on stuff."

E.U. AND CALIFORNIA PRODUCT LABELS

For illustration, here are two hypothetical label examples for household products sold in California and the EU featuring the updated health warning symbol.



CALIFORNIA

WARNING: This product can expose you to chemicals such as phthalates and Chlorinated Tris which are known to the State of California to cause cancer, birth defects or other reproductive harm, or both. For more information go to: P65Warnings.ca.gov

E.U.



[TRADE NAME] CLEANING PRODUCT WARNING: MAY CAUSE VERY SERIOUS LONG-TERM HEALTH EFFECTS.

EUROPEAN UNION PRODUCT WARNING LABELS

Through regulations and industry agreements, the EU has put in place a uniform system of warning labels on cleaning products. Warning labels have to include the word 'warning' or 'danger' followed by hazard and precautionary statements, flanked by a pictogram. Key symbols include:



This new symbol indicates health hazards like skin irritation or sensitization, serious eye irritation, or that a product could be harmful if swallowed.



This new symbol indicates more severe and chronic health hazards, including cancer and reproductive health risks.



The symbol indicates that the product is toxic to aquatic organisms and/or causes long-term damage to the ecosystem.

Conclusion

The focus groups and supporting literature review found that Canadian consumers are interested in safer and environmentally-friendly cleaning and personal care products. However, consumers purchasing personal care and cleaning products currently do not have access to the information needed to make informed choices.

Current Canadian rules for product ingredient disclosure fall short to fully inform consumers of the presence of potentially harmful chemicals. There is a lack of public trust in the accuracy of product ingredient lists. Consumers want better disclosure policies and health warning labels to help them avoid toxic chemicals in cleaning and personal care products.

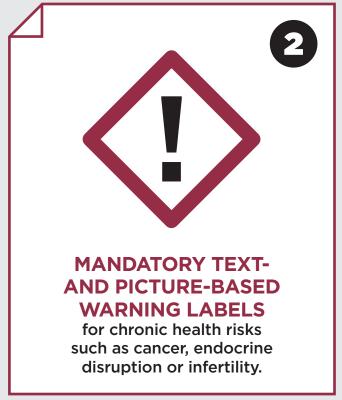
Labelling regulations in places like California enjoy public support and positively impact consumer and producer behaviour.

With full ingredient disclosure and health warning labels, there is a clear incentive for manufacturers to eliminate toxic chemicals from their products in order to avoid including warning labels.

Recommendations

Based on our findings, we recommend that the federal government updates and strengthens Canada's labelling rules for consumer products to require:





BACKGROUND

Household cleaning and personal care products, including cosmetics, often contain a myriad of chemicals linked to cancer, reproductive health issues, or endocrine (hormone) disruption. Chemicals such as formaldehyde, parabens, phthalates and flame retardants are ubiquitous in makeup, shampoos, furniture and household cleaners.

However, consumers remain largely unaware of the presence of these chemicals or the health risks associated with continuous exposure through products that they use daily. One potential solution is to require labels on cleaning and personal care products that inform and warn consumers of the presence of certain chemicals and their potential health risks. Environmental Defence conducted a research study to understand Canadian consumer perceptions of labelling toxics on household cleaning and personal care products.

Health warning labels (HWL) offer information to consumers about the possible effects of exposure to one or more ingredients contained in a product. Evidence from both academic and policy literature demonstrates that providing health warnings on packaging labels has positive impacts on consumer behaviour in terms of

reducing or preventing the use of a potentially harmful product.^{11,12} By providing information to consumers and increasing their awareness of health risks associated with using a product or exposure to its by-products such as cigarette smoke, a consumer is more likely to change their purchasing habits and behaviours.

Warning Labels Help Reduce Cigarette and Alcohol Consumption

Warning labels on tobacco products have contributed to reductions in smoking rates globally. Therefore, policies mandating warning labels have been recognized as being an effective way to reduce exposure to cancercausing chemicals from smoking and have been adopted by many countries and jurisdictions around the world. Canada took a leading role by developing the first pictorial health warning labels for cigarette packages in 2001, and recently increased the size of warning labels from 50 per cent to 75 per cent of the cigarette packaging.¹³

Public health researchers have also highlighted the benefits of HWL in liquor stores or on alcoholic beverage containers for reducing drinking among pregnant women. Many jurisdictions in Canada mandated warning statements on point-of-sale signs or packaging labels to inform consumers of the health risks associated with drinking during pregnancy. In a recent survey conducted by Public Health Ontario of over 2,000 adults who consumed alcohol in the past year, 63 per cent agreed that beverage containers should display more health related messages or information.



Canada took a leading role by developing the first pictorial health warning labels for cigarette packages in 2001.

OVERVIEW OF POLICIES IN CANADA AND OTHER JURISDICTIONS

Canadian Regulations on Cleaning and Personal Care Product Labels

HOUSEHOLD CLEANING PRODUCTS

Canadian regulations on household cleaners currently do not require the disclosure of ingredients, and as a result products on the market rarely display a list of ingredients on the package. While some companies have voluntarily committed to disclosing the chemical ingredients in their cleaning products in response to public pressure, information about the chemical makeup of cleaners remains largely inaccessible. For instance, an industry-led initiative known as the Consumer Ingredient Communication Initiative was established by the Canadian Consumer Specialty Products Association in an attempt to bridge the knowledge gap between manufacturers and consumers on what goes in household cleaning and air care products by

providing ingredient information on product labels, on company websites, or by calling a toll-free number.¹⁶ However, ingredient lists remain absent from the majority of household cleaning products on the Canadian market today.¹⁷

A report by Women's Voices for the Earth assessed major brands of household cleaners and found that while some companies like Proctor & Gamble and SC Johnson & Son have released ingredient lists on their website. many products continue to contain harmful chemicals like synthetic musks.¹⁸ Despite the progress on creating online ingredient lists, the report shows that significant gaps in chemical disclosure remain. including disclosing all chemical ingredients and providing more

information about the processes and standards used to assess chemical and ingredient safety. The report also suggested that full transparency can only be achieved by including ingredient lists on the product packaging and clearly providing links to web pages containing product information.

PERSONAL CARE PRODUCTS

In contrast to household cleaning products, personal care products, including cosmetics, in Canada are required to disclose the ingredients on the product label. However, regulations currently exempt unintentional ingredients or by-products (such as formaldehyde released by preservative agents) as well as the disclosure of "fragrance" or "perfume" ingredients. These gaps can mask the presence of several harmful chemicals, such as cancer-causing formaldehyde, endocrine-disrupting phthalates, or endocrine-disrupting artificial musks often used in the "fragrance" mixture.



INDUSTRIAL AND WORKPLACE CHEMICALS

Canada's Workplace Hazardous Materials Information System (WHMIS), as required by the Hazardous Products Act and Hazardous Products Regulations, is a national hazard communication standard for chemicals used in industrial settings or in the workplace. This system provides workers



Washington State's Children Safe Products
Reporting Rule requires
that manufacturers
disclose the use of
chemicals of high concern
such as phthalates and
bisphenol A (BPA) in
children-related products
in an online database.

with education and training to protect themselves from exposure to hazardous chemicals. Among other educational elements, WHMIS mandates warning labels on containers that hold hazardous chemical solvents and other materials. As of 2015, these labels are in line with the Globally Harmonized System of Classification and Labelling (GHS) developed by the United Nations and adopted by the European Union in 2008. However, the application of the GHS labelling system is limited only to workplace-related chemical hazards.

PESTICIDES

Canada's Pest Control Products Act requires that pesticide labels identify active ingredients and hazards and provide safety and handling instructions. However, the regulations do not mandate disclosure of potentially harmful non-active ingredients. Moreover, and unlike California's regulations, they do not require labelling products as potentially cancer-causing or toxic to reproductive systems even when risk assessments have shown such toxicological properties.²⁰

Policies in Other Jurisdictions

In the United States, several jurisdictions have developed their own consumer product ingredient disclosure or labelling policies to promote public awareness of health risks associated with using household and other products. Since 1986, California's Proposition 65, also known as the Safe Drinking Water and Toxic Enforcement Act, has mandated warning labels on all products that contain one or more of a number of chemicals known to cause cancer, birth defects or reproductive health harms.²¹ In 2014, California also reformed its upholstered furniture flammability standard TB117-2013, which now requires manufacturers to include a standardized label that specifies clearly whether the product contains toxic flame retardants. Additionally, Washington State's Children Safe Products Reporting Rule requires that manufacturers disclose the use of chemicals of high concern such as phthalates and bisphenol A (BPA) in children-related products in an online database.

RESEARCH METHODOLOGY

This study aimed to explore Canadian consumers' perceptions and attitudes towards labelling toxics in household cleaners and personal care products. Environmental Defence commissioned Environics, a national research firm, to conduct a series of focus groups with Canadians in Toronto from a variety of regions, ethnicities, education levels, income levels and occupations.

Environics conducted four focus groups in English on August 8 and 9, 2016, which were observed by Environmental Defence staff. Each of the four focus groups consisted of seven to nine participants recruited from an Environics panel:

GROUP 1	GROUP 2
with women aged 18-40	with men aged 18-40
GROUP 3	GROUP 4

A preliminary consultation with expert scientists and staff at health and environment nongovernmental organizations (NGOs) as well as literature research identified reports and articles that were used to inform the development of the focus group discussion guide. Environmental Defence staff worked with Environics to develop the discussion guide and recruitment strategy (see supplementary Environics focus groups report), both of which were reviewed and critiqued by a third party expert methodologist. Focus group participants were asked about their purchasing habits for cleaning and personal care products, and about their attitudes towards packaging ingredient labels and warnings. Participants were also shown sample warning statements and pictograms and were asked to comment on their interpretation and usefulness.

To support the findings from the focus groups, Environmental Defence staff conducted a review of media and non-academic literature to identify public opinion and policy research on issues related to warning labels and disclosure policies. Findings from the focus groups and the literature review were synthesized in this primer. The expert methodologist also provided feedback on the focus groups report completed by Environics and the interpretation of focus groups findings within this report.



RESULTS

The results of our study were analyzed according to four distinct themes identified by the literature review and focus groups. These themes are:

- CONSUMER PERCEPTIONS OF HEALTH RISK
- PRODUCT INGREDIENT LISTS AND PACKAGING LABELS
- CONSUMER TRUST IN GOVERNMENT AND CORPORATE REGULATIONS
- PERCEIVED IMPACTS OF HEALTH WARNING LABELS

Findings from the focus groups and the literature review were synthesized according to these four themes.

CONSUMER PERCEPTIONS OF HEALTH RISKS

Our focus groups revealed that health considerations are seldom among the top factors that determine purchasing preferences of participants. Often participants mentioned familiarity of brands, price, reputation, scent and eco-friendliness, but few health-related attributes were mentioned without prompting. These included allergy-friendly properties and the lack of harsh chemicals.

"I think with makeup, they say that parabens are bad."

"I don't particularly like using stuff with poison signs on it because I don't want to inhale it."

"There's some cleaning products you have to be careful you don't inhale too much."

Risks of long-term health impacts and chronic illnesses such as cancer or reproductive health problems were rarely brought up by participants. There was general agreement that media stories on toxic or harmful ingredients in products were the primary source of information about such impacts. It was clear that chemicals that have received considerable media attention over the past few years due to emerging evidence or suspicions of carcinogenicity were more known or recognizable to participants. For instance, there was strong awareness of BPA, which major media have covered repeatedly in recent years for its use in products like baby bottles (a prohibited use in Canada as of 2010), food cans, reusable water bottles and cash register receipts. Conversely, other harmful chemicals like phthalates were not very well known.

"The only thing which has ever stopped us is if it's been in the media that this particular product has been cancerous or something serious."

"[BPA] is a chemical that can be cancer-causing."

"I think [BPA] affects the hormones, particularly with children."

"When you buy plastic containers, it says [BPA] on it."

"When you get a receipt from the grocery store, it has BPA...the thermal paper has BPA."

"I think some people are sensitive to [parabens]."

"I have [heard of phthalates] but I don't know whether it's good or bad."

Women, especially in the younger group, seemed to be more aware of health concerns associated with personal care and cleaning products. This could be explained by the fact that women generally purchase more of these products or the notion that men tend to discount health-related concerns more often in focus group research.²² Interestingly, at least two male participants mentioned health-related concerns when discussing personal care products in the context of female family members.

"For women, I think there are certain products that may cause cancer so I wouldn't use those."

"I have a history of serious illness in my family, so that's something that's on the forefront. As soon as I see the WHMIS symbols, I'm not touching that whatsoever."

"There's a lot of dyes in products and that's been linked to cancer as well."

"I'm really conscious of it with the food in my body... It's weird that I don't pay as much attention to it with products."

Participants relied on information on the product or through media stories to identify products that they should avoid. There was general acceptance that the onus falls on the consumer to ensure the safe use of cleaning products (e.g. wear gloves when using bleach; use only as directed or for intended purposes; only use once every few weeks) or to make healthy decisions when shopping. Interestingly, participants mentioned that they would be more concerned about products they use every day than about products they use occasionally or for very specific purposes such as tooth whitening treatments or floor or bathroom cleaners. Some participants emphasized that sometimes they end up knowingly using products that can be harmful to their health for specific purposes.

Several comments highlighted that concerns about long-term effects over one's lifetime were not considered as part of the decision-making process.

"I definitely think about it but if my white shirt needs to get cleaned, I have to clean it."

"Depends on where you're using it as well. If it's in the washroom I'd want something pretty strong."

"I don't think as much as I should. I have really sensitive skin so I think about that with my makeup and deodorant and body wash...But for cleaning products I haven't really thought of the longevity."

"I honestly don't think about 30 years down the road."

"I will not stick to one brand for a long time...whether it's shampoo, conditioner, face cream...I will not stick to one chemical for a long time. I hope it will help."

2

PRODUCT INGREDIENT LIST AND PACKAGING LABELS

As media stories and civil society groups continue to raise public awareness of problematic product ingredients and chemicals, consumers resort to the ingredient list as an objective source of information to resolve their concerns about product safety and health risks. This is demonstrated by public opinion surveys in Canada and the U.S. One survey of 1,126 women over the age of 18 commissioned by Kari Gran, a cosmetics company, found that 55 per cent of participants read ingredient lists on the package before buying the product. Participants who examined the product ingredient list before purchasing were interested in detecting commonly used harmful chemicals such as sulfates, parabens and oxybenzones. The rate



was higher among younger participants (62 per cent of millennial women), a trend that was also observed in our focus group.²³

While many participants in our focus groups indicated that they occasionally rely on the product packaging and ingredient lists to review cautions, instructions and problematic ingredients, few said that they read the full ingredient list. There was an apparent lack of motivation to do so due to concerns about adequacy, clarity and consistency of information on the labels as well as confusing messages about safety that make it difficult to determine how safe a product may be.

According to a 2012 Canada-wide survey of over 10,500 participants by the David Suzuki Foundation, 99 per cent of Canadians wanted companies to disclose all ingredients used in

"The writing on the back is so small...
It is almost like they don't want you
to know."

household cleaning products. The survey asked participants to examine their household cleaning products for the presence of ingredient lists and environmental claims, and found that of over 15,000 products that Canadians had in their homes, fewer than half (42 per cent) displayed a complete ingredient list on the packaging and almost a quarter made "green" claims without providing any sort of eco-certification.²⁴ Participants in our focus groups agreed that any personal care or cleaning product have to include all ingredients on the label.

"They're supposed to list all the ingredients."

"They never tell you exactly what's in there...It doesn't say exactly what's inside."

These findings underscore the need for a simple and clear information tool such as health warning labels to enable consumers to make well-informed decisions about their purchasing preferences. Because consumers often do not read the full ingredient list, and due to the vague, inadequate and often inaccurate nature of safety messages displayed on personal care and cleaning product packaging, consumers may misinterpret messages or be influenced by product promotional features and unknowingly select an unsafe product. For instance, fresh, fruit-scented fragrances may give the consumer a false sense of healthiness despite the potential presence of undisclosed harmful chemicals and masking agents. As one focus group participant put it:

"I'm allergic to scent...I always have to go open the bottles...and smell it to pick the one that doesn't have the scent that's gonna give me a migraine."

CONSUMER TRUST IN GOVERNMENT REGULATIONS AND INDUSTRY STANDARD

Our focus groups revealed that Canadian consumers generally trust government product safety regulations and well-known product brands. There was strong general agreement on the assumption that products have to undergo rigorous safety testing by government departments or companies before they are made available on the market.

"Dawn dish soap - we regularly use this in my household simply because if it's gentle enough for animals and ducks, for oil spills and stuff, it's gentle enough for us to use on dishes...They advertise it".

"I have faith in the process of becoming a product - that it's not bad for me."

"I don't really have a concern whether or not it's safe for me because I figure they have standards. I'm more concerned with the environment."

"I think we kind of rely on the government to make sure things are safe."

"I assume that when I'm buying a product that it's been tested."

"I tend to buy [cleaning products] from mainstream stores. I tend to be cautious not knowing the product well enough and whether they've been passing any regulations."

Furthermore, many participants indicated that they are especially certain of the safety of products sold in trusted Canadian stores, such as large grocery retailers.

"If it's sold at a reputable store, like a chain or Loblaw's, I have faith that it's an okay product to use for your health. There are so many regulations you'd have to pass to be sold at a reputable store."

"I always assume that it's safe - If I'm buying it from Shoppers Drug Mart or some big department stores." Recent studies by government watchdog organizations and NGOs reveal that the reality is starkly different. A 2016 audit by Canada's Environmental Commissioner, Office of the Auditor General, criticized inadequate and lax regulatory enforcement by Health Canada with regards to safety testing of cosmetics and personal care products. The report also underscored the problem of incomplete disclosure of ingredients, by emphasizing that the "fragrance" component of a product's ingredient list may consist of a myriad of chemical ingredients that have been shown to pose health risks to humans. Current laws on cosmetics ingredient disclosure exempt companies from listing the chemical formula that makes up the product's scent as the composition is considered a trade secret.²⁵

For example, two harmful substances often used in fragrances are phthalates and synthetic musks. Phthalates, which are used in disposable water bottles and plastic bags as plasticizers, are frequently used in cosmetics to increase the "staying power" of a fragrance. However,

these endocrine-disrupting chemicals have been linked to reproductive health problems and obesity. Synthetic musks are toxic and persistent environmental pollutants that have been detected in Great Lakes fish and sediments. Despite public pressure and voluntary commitments by companies to disclose and eliminate chemicals of concern, many companies continue to use phthalates and synthetic musks and other potential harmful fragrance ingredients in their products.²⁶

Product testing and studies of cleaning products commissioned by NGOs have illustrated this trend. Independent laboratory testing of 14 popular fragrance brands found that only two out of 40 fragrance ingredients were disclosed in all products. Ingredients detected by the study included 12 endocrine-disrupting chemicals, and on average each product tested contained 10 substances that are known to cause allergic reactions.²⁷ Additionally, a recent report by Women's Voices for the Earth has uncovered that SC Johnson, a major maker of cleaning products, continues to use synthetic musks despite its



SELECTED HEALTH WARNING SYMBOLS



This new symbol indicates health hazards like skin irritation or sensitization, serious eye irritation, or that a product could be harmful if swallowed.



This new symbol indicates more severe and chronic health hazards, including cancer and reproductive health risks.



The symbol indicates that the product is toxic to aquatic organisms and/or cause long-term damage to the ecosystem.



This symbol indicates acute toxicity, meaning it could be fatal if swallowed, inhaled or put in contact with skin.

commitment to using safer ingredients.²⁸ Popular cleaning product brands often contain other undisclosed problematic ingredients that are known allergens and skin irritants.²⁹ A study by Environmental Defence on the impact of cleaning products on indoor air quality showed that popular household cleaning products can significantly elevate airborne levels of volatile organic compounds (VOCs). Certain types of VOCs can lead to chemical reactions that release cancer-causing chemicals such as formaldehyde in the home environment.³⁰

Focus group participants acknowledged the lack of consistency and transparency of ingredient lists. But they generally trusted that regulations on personal care and cleaning product labels currently require the listing of all ingredients contained in the product and that packaging labels indicating health risks such as cancer are adequately provided. Current regulations, however, do not require listing all ingredients on personal care or cleaning products and do not mandate warnings on long-term health effects. Participants routinely reacted surprised when confronted with the lack of regulations:



"There should be."

"I thought there was."

"Everything in Canada's pretty well gone through that."

"They're supposed to list all the ingredients."

"If it's poisonous or not."

"I don't think it's sufficient. It's nowhere near sufficient."

"Do they have one [for] carcinogenic? That would...deter people a lot."

"I would hope so, but I don't know for certain."

4

PERCEIVED IMPACT OF PRODUCT HEALTH WARNING LABELS

The positive impacts of product health warning labels on consumer behaviour are well documented in tobacco and alcohol use literature. Focus group participants acknowledged seeing warning labels on tobacco products and on alcohol beverage containers. Moreover, when prompted, they identified the presence of certain symbols such as the "skull and bones" pictogram on certain consumer goods like cleaning products. However, it was surprising to some participants that regulations on cleaning and other household products only necessitate the use of hazard symbols for acute hazards as opposed to both acute and long-term health impacts. There was general agreement that the presence of chronically harmful chemicals should be easily identifiable for the public:

"I think that's kind of crazy.

The only way it's understandable if the product hadn't been out that long...but if we know that using this habitually, it should be on every single label in Canada."

"It says it on cigarettes, why can't it be on other products?"

"Cigarettes have the label that you can die and millions of people are still smoking. If companies are still being shady about it...it's the most fair to let people know and make their own decision."

"It's on you to look it up to see what you're ingesting or putting on your skin...but we're not scientists. Within reason, they should be putting warnings on stuff."

Participants largely agreed that packaging labels should readily identify harmful or toxic chemicals, and that consumers should know about the benefits and drawbacks of a product.



"100 per cent there should be."

"If you're gonna tell people this product is great for you...you should also tell them about the negative effects. You should tell them both sides so they can make an educated decision."

"I think manufacturers need to start justifying why they put it in [the product]."

"The consumer should have a choice."

"I think they just need more consumer education...that constant use could cause these things."

These findings are in line with the results of public opinion surveys on labelling and disclosing harmful chemicals on consumer products. A British Columbia-wide poll in 2007 demonstrated that nine in ten participating voters supported labelling the presence of toxic chemicals household products.³¹

When asked about the impact of health warning labels, focus group participants emphasized that health warning labels on toxics in cleaning or personal care products would be crucial to enable consumers to make better informed decisions. Many said they would not use a product if they knew it could cause long-term health impacts like cancer, especially if there are safer alternatives. This trend was particularly pronounced among women.

"It would cause me to pause.
Maybe there's something out there
that's better for you. I can find
another product that will do the same
job. There's such a wide variety of
options out there."

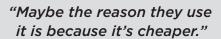
"Now that I know of BPA, I'll be looking at the labels a little closer. If I saw it on there and knew what the effects were, I wouldn't buy it."

"If the government knows these products are bad why don't they just say 'you're not using them'? If they know it's bad, then stop it."

One participant indicated that they changed products after learning about the potential health impacts of a chemical ingredient:

"I changed from antiperspirant to deodorant because of all the health warnings that there was concern with the aluminum and direct link to Alzheimer's."

While few participants expressed concerns about the lack of affordable alternatives, or an increase in prices if companies reformulated their products to remove certain chemicals in response to labelling regulations, some participants indicated that they would pay more for a healthier product. On the other hand, participants were largely indifferent about the possible impact of removing specific chemicals on the product's shelf life, highlighting the availability of safer and equally effective alternatives on the market today. Many participants expected that companies are responsible for and have the capacity to explore alternative formulations for their products in order to remove chemicals of concern, and not be subsequently required to display health warning labels and to maintain product sales.



"The money wouldn't mean anything to me."

"We have to educate the public."

"It would be a disincentive to have [the ingredient]...Maybe there are alternatives that Canadian manufacturers haven't thought of."

"They have to change their formula."

"They're going to find their sales going down. They're going to stop putting in the things that people don't like."

"Larger companies would certainly have the means to change their products."

In fact, evidence from the state of California, where Proposition 65 has been in force for three decades, shows that manufacturers reformulated their products in order to avoid warning labels on their products. For instance, major manufacturers completely eliminated lead from their plumbing supplies and faucets as a result of Proposition 65. Similarly, food production companies removed lead from food product packaging such as tomato and soup cans. School supplies, car cleaners and wax, and shoe polish are among many products that were consequently reformulated to eliminate carcinogens and other toxics. 32,33 Furthermore, a recent study by researchers from Duke University demonstrated that the use of flame retardants in upholstered furniture in the U.S. declined significantly since California adopted its new flammability standard TB117-2013, which requires furniture producers to list on the label whether the item contains any flame retardants.34

CALIFORNIA PRODUCT LABEL For illustration, here is a hypothetical label example for household products sold in California featuring the updated health warning symbol. WARNING: This product can expose you to chemicals such as phthalates and Chlorinated Tris which are known to the State of California to cause cancer, birth defects or other reproductive harm, or both. For more information go to: P65Warnings.ca.gov

IMPLICATIONS

Our focus groups revealed that Canadian consumers view health warning labels as a positive tool to provide important information about potential health risks associated with a product. Participants overwhelmingly acknowledged seeing warning labels on tobacco products, in liquor stores and on some cleaning products in the form of "skull & crossbones" pictogram. Overall, there was strong support for health warning labels indicating the presence of toxics in household cleaners and personal care products. Some participants expressed their concern over the fact that disclosure of harmful chemicals only happens in the context of positive labelling (i.e. when the product is free of a particular chemical, such as "BPA-free" or "paraben-free").

"They say that it's free of it on the front."

"So when it's there they don't tell you...
they tell you when it's not there?"

When presented with sample labels illustrating what a warning label on a cleaning product or a shampoo bottle may look like, participants generally indicated that labels providing clear textual messages indicating "warning", "caution" or "toxic", and providing information about the problematic chemical and its associated health risk would be most effective at getting their attention. Participants also emphasized the need for a symbol or sign like the "skull and crossbones", an hourglass (indicating long-term impacts) or the exclamation mark alongside the textual message.

The moderator presented sample labels informed by the labels in California and the GHS hazard symbols. There was general agreement that a label with a hazard symbol combined with a textual message indicating the chemical of concern and its potential health impacts was the most ideal solution.



However, the majority of participants were confused by the meaning of the GHS hazard symbols, questioning their effectiveness without a public education campaign on these symbols. Surveys by the European Union Commission and the European Chemicals Agency (ECHA) found that while 66 per cent of respondents read safety instructions on household products, only a few pictograms were recognized or understood. ECHA recommended the need for a campaign to increase public awareness of hazard symbols. 35,36

CONCLUSION AND RECOMMENDATIONS

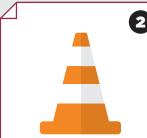
A number of key themes emerged in our research on public opinion on labelling of consumer products, all of which support the theory that better disclosure of ingredients, and adoption of warning labels on personal care products and cleaning products would be beneficial to consumers. Offering better information at the point of purchase through product labelling would allow for purchasing behaviour changes that consumers have expressed a willingness to make.

Our focus groups and supporting literature review found:



INTEREST IN SAFER PRODUCTS

and agreement that the onus is on the consumer to find the right product;



SEVERE SHORT-COMINGS

in terms of ingredient transparency and safety in products on the market;



LACK OF PUBLIC TRUST

in the currently available product ingredient labels;



STRONG PUBLIC INTEREST

in easy-tounderstand and helpful warning labels.

These findings underline the need for better disclosure policies, particularly the need for warning labels.

Prior studies have established the effectiveness of warning labels at influencing consumer choice. Consumers have reported an interest in receiving more information about cleaning and personal care product ingredients and their potential harms, and market trends further indicate a growing interest in products advertised as "green" or "eco-friendly" that will have fewer environmental impacts. As documented in the United Nations Environment Programme and World Health Organization Report, Endocrine Disrupting Chemicals, State of the Science 2012, scientific research on the impact of

endocrine disrupting chemicals indicates that chronic, low-grade exposure to chemicals in consumer products pose risks to human health and the environment. Labelling of consumer products that offer consumers information about potential risks to human health and the environment would appeal to consumer interest, and equip consumers with the information to reduce their exposure to toxic chemicals. Currently, customers purchasing personal care and cleaning products do not have access to adequate information to make informed choices.

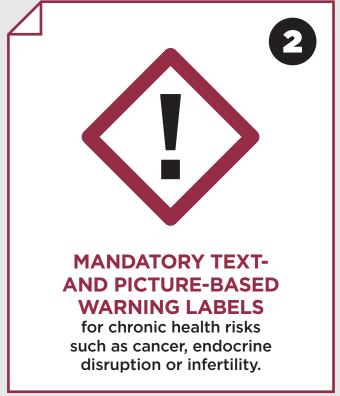
Fragrances in products offer an illustration of the problem. Many products on the market have artificial musks, some of which are endocrine disruptors, and phthalates, which have been shown to impact fetal development and are linked to asthma. Yet these ingredients are frequently used to give products a pleasant, long-lasting scent, which masks the harmful constituents that make up that smell. With the state of cosmetics regulations allowing products to list fragrance ingredients as "fragrance" or "perfume" consumers cannot find out if there are phthalates or artificial musks in the product. Even when ingredients are fully disclosed, consumers may not understand the chemical names, or their potential impacts without adequate warning texts and symbols.

The fact that ingredient lists are too often not easily understandable and incomplete justifies the need for health warning labels.

Experience in jurisdictions such as California shows that labelling regulations can have positive effects on producer behaviour and product safety. They can encourage manufacturers to phase out toxic chemicals as companies try to avoid including warning labels. Labeling programs in other jurisdictions enjoy public support. Evaluation of the proposed amendments to the California labelling policy shows that the public is supportive and that including the name of the chemical as well as a symbol is useful.³⁷

In conclusion, our recommendations are twofold. Based on our findings we recommend that the federal government takes the following steps:





Further details regarding label styles, and how to educate the public for maximum effectiveness of product labeling, would be appropriate topics for further study. Models for proper disclosure and label design should be drawn from best practices in other jurisdictions.

APPENDIX A -**HEALTH WARNING LABEL EXAMPLES**



WARNING:

This product contains chemicals known to cause cancer, hormone disruption, allergies, or infertility or other reproductive harm.



WARNING:

This product contains chemicals such as BPA or parabens known to cause cancer, hormone disruption, allergies, or infertility or other reproductive harm.



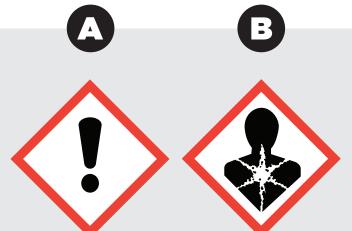
WARNING:

Using this product may expose you to chemicals known to cause cancer, hormone disruption, allergies, or infertility or other reproductive harm.

WARNING:

Using this product may expose you to chemicals such as BPA or parabens known to cause cancer, hormone disruption, allergies, or infertility or other reproductive harm.

APPENDIX B -PICTOGRAM EXAMPLES













REFERENCES

- 1. WHO & UNEP. (2012). State of the science of endocrine disrupting chemicals. An assessment of the state of the science of endocrine disruptors prepared by a group of experts for the United Nations Environment Programme (UNEP) and WHO. http://www.who.int/ceh/publications/endocrine/en/
- 2. In 2002, Canada led the way by being the first country to implement graphic health warning labels on cigarette packages. Today, over 100 countries around the world have warning labels on tobacco products, contributing to increased public awareness of smoking-related health problems and to millions of lives saved.
- 3. A 2012 survey in British Columbia demonstrated that 99 per cent of over 10,500 Canadians who participated wanted companies to disclose all ingredients in household cleaners (David Suzuki Foundation, 2012).
- 4. A recent report concluded that major brands of household cleaners like Proctor & Gamble and SC Johnson & Son that have voluntarily released ingredient lists on their websites continue to withhold important product information like the presence of harmful ingredients in small concentrations or specific product fragrance ingredients. Some products also continue to contain harmful chemicals like synthetic musks, and which remain undisclosed on product labels (Women's Voices for the Earth, 2015).
- 5. David Suzuki Foundation. (2012). http://www.davidsuzuki.org/publications/downloads/2012/CS_executive_summary.pdf
- 6. Swayampakala, K., Thrasher, J. F., Hammond, D., Yong, H. H., Bansal-Travers, M., Krugman, D., ... & Hardin, J. (2014). Pictorial health warning label content and smokers' understanding of smoking-related risks—a cross-country comparison. Health education research, cyu022.
- 7. Stapleton & Cooper (2016). Flame Retardant Applications in Residential Furniture: Results from the Duke Superfund Foam Screening Project. (Webinar Slides)
- 8. Office of the Auditor General of Canada (2016). Chemicals in Consumer Products and Cosmetics. http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201605_03_e_41382.html
- 9. Mary Graham. (200). Regulation by Shaming. In The Atlantic. http://www.theatlantic.com/magazine/archive/2000/04/regulation-by-shaming/378126/
- 10. Wogalter MS. Purposes and scope of warnings. In: Wogalter MS (Ed.). Handbook of Warnings. Mahwah, NJ: Lawrence Erbaum Associates; 2006.
- 11. http://ec.europa.eu/health/tobacco/docs/warnings_report_en.pdf
- 12. http://www.tobaccolabels.ca/wp/wp-content/uploads/2013/11/IUATLD-Toolkit-Chapter-1-Feb-2009.pdf
- 13. Tobaccolabels.ca
- 14. https://www.publichealthontario.ca/en/eRepository/Focus_On_Alcohol_warning_labels_and_FASD.pdf
- 15. Public Health Ontario. (2016). Investigating the Perceived Effectiveness of Alcohol Warning Labels in Canada An Experimental Study. http://ph2016.isilive.ca/files/413/Warning%20labels%20on%20alcohol%20 containers%20in%20Ontario.pdf
- 16. http://www.healthycleaning101.org/english/2011may16parameters.pdf
- 17. David Suzuki Foundation. (2012). http://www.davidsuzuki.org/publications/downloads/2012/CS_executive_summary.pdf
- 18. http://www.womensvoices.org/wp-content/uploads/2015/06/Deep-Clean-Report6.15.pdf
- 19. http://www.hc-sc.gc.ca/ewh-semt/occup-travail/whmis-simdut/index-eng.php
- 20. http://www.cela.ca/sites/cela.ca/files/uploads/538_rttknow.pdf
- 21. http://oehha.ca.gov/proposition-65
- 22. Statistics Canada. Women and Health. Accessed at http://www.statcan.gc.ca/pub/89-503-x/2010001/article/11543-eng.htm#n2

- 23. http://www.prnewswire.com/news-releases/survey-35-of-women-plan-to-increase-purchases-of-all-natural-beauty-products-in-next-two-years-300334992.html
- 24. http://www.davidsuzuki.org/publications/downloads/2012/CS_executive_summary.pdf
- 25. Office of the Auditor General of Canada (2016). Chemicals in Consumer Products and Cosmetics. http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201605_03_e_41382.html
- 26. ibid
- 27. http://environmentaldefence.ca/report/report-not-so-sexy-the-health-risks-of-secret-chemicals-in-fragrance-canadian-edition/
- 28. http://www.womensvoices.org/safe-cleaning-products/deep-clean/
- 29. https://www.theguardian.com/sustainable-business/2015/jun/11/sc-johnson-glade-chemicals-disclosure
- 30. http://environmentaldefence.ca/report/the-dirty-truth-how-toxic-cleaning-products-are-putting-canadians-at-risk/
- 31. BC Public Affairs Omnibus Survey Confidential Report for Labour Environmental Alliance Society. http://leas.ca/UserFiles/File/StratCom%20poll%20explain.pdf
- 32. http://digitalcommons.law.ggu.edu/cgi/viewcontent.cgi?article=1038&context=pubs
- 33. http://www.theatlantic.com/magazine/archive/2000/04/regulation-by-shaming/378126/
- 34. http://pubs.acs.org/doi/ipdf/10.1021/acs.est.6b01602
- 35. http://ec.europa.eu/public_opinion/index_en.htm
- 36. https://echa.europa.eu/documents/10162/13559/clp_study_en.pdf
- 37. UC Davis Extension Collaboration Center. (2015). Proposition 65 Clear and Reasonable Warning Regulations Study.

Full Disclosure: The case for stronger household product labelling

FULL RESEARCH REPORT



© Copyright January 2017 by ENVIRONMENTAL DEFENCE CANADA.

Permission is granted to the public to reproduce or disseminate this report, in part, or in whole, free of charge, in any format or medium without requiring specific permission. Any errors or omissions are the responsibility of ENVIRONMENTAL DEFENCE.

Download the report at: environmentaldefence.ca/labelling

Acknowledgements

Environmental Defence received funding from Innovation, Science and Economic Development Canada's Contributions Program for Non-profit Consumer and Voluntary Organizations. The views expressed in the report are not necessarily those of Innovation, Science and Economic Development Canada or the Government of Canada.