TOOLS FOR INFORMED SUBSTITUTION

HOW DO YOU FIND SAFER CHEMICALS FOR THE WORKPLACE?

Illustration by Carmen Bright & John Oman
**Table Of Contents**

### Introduction

*Why this toolkit?*

### Section 1

**Toxics in our cleaning products.**

*Why do chemicals matter?*

- How do cleaning products affect people and the environment?
- What resources are out there to help people understand how cleaning products can affect our health and environments?
- What’s next? How do we find out what’s a hazardous cleaning product?

### Section 2

**From the right -to-know to the need to act.** *How can WHMIS 2015 and B.C.'s safer substitution regulation take us there?*

- What’s new with WHMIS?
- What are the new hazard symbols? What do they mean?
- What are the new labels? What are they supposed to say?
- How are data sheets different?
- Does WHMIS apply to every product used at work? At home?
- How can you use a SDS to get to safer substitutes? Moving from right-to-know to action
- Where can you get more information?
- What’s next? Prioritizing the most hazardous cleaning products for substitution.

### Section 3

**Checking on chemicals of high concern.** *What on-line tools can help?*

- What information do you need before doing an on-line search?
- What’s the Pharos database?
- How do you find a chemical’s hazards with Pharos?
- What other on-line tools could you use?
  - Chemical Hazard and Alternatives Toolbox (ChemHAT)
  - RISCTOX
- What other resources can help us know what to avoid?
- What’s next? Finding third-party ecolabel products
Section 4

Finding informed substitutes. How can you find third party certified ecolabel cleaning products?

- What are third party certified cleaning products?
- What’s Ecologo?
- What’s Green Seal?
- What’s Safer Choice?
- What is SF approved?
- What else is available to help find informed substitutes?
  - A Cleaning Solutions database
  - Microfibre mops and cloths
- What resources are out there to help choose informed substitutes?
- What’s next? Preparing a good procurement policy

Section 5

Buying safer cleaning products. How do you set good procurement policies for informed substitution?

- What are the best practices for green procurement policies?
- What about the costs?
- Where can you get more information?
- What’s next? Implementing informed substitution in your workplace

Section 6

Keeping the workplace healthy and safe. How do you implement informed substitution?

- What are the steps?
- What are the benefits of informed substitution?
- What can you do to get informed substitution of cleaning products?
  - What can health and safety reps and staff do?
  - What if you’re a worker?
  - What about supervisors, employers, and procurement staff?
- What does all this add up to?
- Some resources for screening chemicals (especially in cleaning products)
- Some resources for informed substitution for workplaces
- Some resources for informed substitution for consumers

Appendices

More resources about hazardous chemicals and informed substitution

- Appendix 1 What are informed substitutes for the toxic products we found?
- Appendix 2 A glossary of terms related to cleaning products
- Appendix 3 Recommended labelling programs

This research was supported with funds from WorkSafeBC through the Innovation at Work research programme.
Cleaning products are common in our lives, at work and home. They're used to get rid of dirt on all kinds of surfaces, disinfect germs, wash our hands and clothes, clean our dishes, make the air smell better, and remove graffiti.

Whatever the purpose, the ingredients can include chemicals that cause harm when poured down the drain or used by or around people.

In workplaces, that possibility is leading to questions about what kinds of products workers are using, or what's used around them. Joint health and safety committees are searching for “green” solutions when workers report health effects they connect to cleaning products. Employers are adapting procurement practices to include environmentally preferable purchasing (EPP) policies and products.

The Tools for informed substitution project focused on cleaning products used in British Columbia government buildings. We identified toxic ingredients using on-line tools and recommended products that could or should be replaced with ones certified to less toxic or non-toxic by independent (third-party) organizations.

We also looked at the procurement policy that is supposed to guide buying cleaning products used in BC government buildings. And we used the principles of informed substitution to recommend alternative cleaning products that are consistent with that policy.

Funded by WorksafeBC’s Innovation at Work programme, we did this work with the British Columbia Government and Service Employees Union (BCGEU) and the company that manages the province’s buildings (WSI, now part of Brookfield Global Integrated Solutions) in 2014 and 2015. We built on earlier work funded by WorksafeBC, and the growing body of materials and studies about the hazards of cleaning products and how to prevent them.
We followed a series of steps that are explained in this toolkit. It includes the results of looking at the products. (There were some quite hazardous ingredients in a few products. Only about 25 percent had the independent certification expected in the government’s procurement policy.)

The steps we took in this project can be replicated. Joint health and safety committees and procurement staff can take similar ones to identify informed substitutes for toxic cleaning products in other workplaces.

That’s why we organized the toolkit into six sections. Each section provides information and processes to help you learn how to do this chemical detective work yourselves. There are resources at the end of each section, and more at the end of the toolkit. We’ve also used links within the toolkit so you can go back and forth as you wish.

If you’re outside British Columbia, you may be inspired to check your own regulations and procurement policies for tools to get you to informed substitution of cleaning and other products.

For occupational health and safety reps, unions, procurement staff and managers, employer health and safety staff, and joint health and safety committees, the resources and databases are what you need for informed substitution of toxic cleaning products. The lessons can be used for other products too.

Read on!

______________________________

*The Tools for informed substitution*

**project team:**

Larry Stoffman  
Bev Thorpe  
Dorothy Wigmore

July, 2015

P.S. We also need to thank and credit the marvelous team of John Oman and Carmen Bright from [unaluma.com](http://unaluma.com). They did the cartoon graphics for this toolkit and designed the document itself. Please credit them if you borrow or use one of their creations.