

#### by Option consommateurs

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# Introduction

Most cleaning products contain chemicals.
According to Health Canada, these chemicals are present only in small quantities, and the products are harmless when used correctly. But several studies indicate that certain substances could have harmful long-term health effects.
Correlations have been found between exposure to some chemicals and higher incidences of cancer, allergies, and asthma. Furthermore, numerous studies implicate pesticides in non-negligible negative health impacts.

Which chemicals are potentially harmful, and what are their health effects? What can you do to reduce your use of household chemicals? What are the safest, greenest alternatives? The answers are right here. Read on to find out more about the risks of long-term exposure to common household cleaning products.



# Regulations

Since 2001, under the federal Consumer Chemicals and Containers Regulation, many cleaning products must be labeled with a hazard symbol. In addition, manufacturers must indicate on the packaging any ingredients present in concentrations greater than 1% that make the products hazardous. However, these warnings only relate to immediate, shortterm risks. Another deficiency of the regulations is that manufacturers are not required to provide the complete list of ingredients on the label.

Any pesticide imported, sold, or used in Canada must be registered under the Pest Control Products Regulations. Amendments to this act scheduled for 2006 and 2007 will make registration contingent upon consideration of the cumulative effect of all pesticides having the same mode of action. However, there will still be some deficiencies; for example, the imperative of "protecting trade secrets" still means that there will be no requirement to list all pesticide ingredients on the label.

In Québec, the Pesticide Act covers the sale, use, and distribution of registered pesticides. In addition, the provincial government adopted a Pesticide Code in 2003 that applies more rigorous standards aiming to limit the health risks of pesticides.

# Advice for **Healthy Homes**

The Canada Mortgage and Housing Corporation (CMHC) recommends the following in order to minimize the presence of chemicals in the home:

- Avoid air fresheners, including both plug-in and spray varieties. Instead, eliminate odours at the source, for example, by taking out the garbage
- Minimize the use of bleach, which produces gases harmful to health and the environment.
- Do not use perfumed fabric softeners, which leave chemical residues in clothing and linens and also pollute the outdoor air through the dryer exhaust.
- Use non-chemical pest control methods, such as bait, traps, and flypaper.



# A Multi-Count Indictment

The list below presents the most common potentially harmful chemicals, their possible long-term health effects, and the types of products that contain them.

Substance	Effects	Cleaning products
Ammonia	Respiratory tract irritation	Window cleaners
Benzene*	Known carcinogen	Air fresheners, incense
Cresol and phenols*	Kidney and liver damage	Disinfectants
Formaldehyde*	Probable cardnogen, allergies	Air fresheners, antibacterial dish detergents, carpet cleaners
Glycol ethers	Male infertility	Extra-strength all-purpose cleaners
Naphtalene and paradichlorobenzene*	Possible cardinogens; eye, kidney, and nervous system damage	Mothballs, stick deodorants
Nonylphenol and nonylphenol ethoxylates	At high exposures, nervous system disruption, kidney damage	Laundry detergents, all-purpose cleansers
Perchlorethylene*	Possible cardinogen	Stain removers
Pesticides	Possible cardnogens; disruption of fetal and child development; disruption of reproductive, endocrine, and neurological systems	Insecticides, fungicides
Phtalates*	Probably carcinogenic, linked to reproductive system dysfunction	Perfumes in laundry detergents and fabric softeners
Sodium hypochlorite	Produces chlorine gas when mixed with ammonia and other substances; chlorine gas can burn the respiratory tract	Powdered cleansers, disinfectants, bleaching products
Toluene*	Powerful neurotoxin, memory loss, fatigue, and dizziness.	All-purpose cleaners



#### ✓ If you use them:

Carefully read the instructions and use only the recommended amounts. NEVER mix different deaning products or pesticides. And NEVER reuse empty cleaning product containers for any other purpose. If you decide to use a pesticide, make sure that it is a household pesticide that has a registration number.

### Storing them properly:

Store cleaning products separately from food. Keep them out of the reach of young children and pets. As for pesticides, store them in a locked cabinet separate from cleaning products.

#### ✓ Disposing of them properly:

Don't dump unwanted cleaning products down the drain or in the trash. Inquire with your municipality about proper disposal practices. This is especially important for pesticides and products bearing a hazard symbol (indicating that they have been classified as hazardous household waste).

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# What are the alternatives?

Depending on the task, choose amongst these useful green cleaning products.

#### Lemon juice

· removes grease and spots from mirrors and tableware.

#### White vinegar

 disinfects, removes grease, prevents mould formation. cleans windows.

#### Citrus rind

· kills insects (boil orange, lime, and lemon peel several minutes, let sit 24 hours, filter, spray on plant).

#### Table salt

disinfects and scours.

#### Milk

· eliminates mould and mildew (mix with equal volume of water and spray on plants before disease appears).

#### Brewer's yeast and garlic

· add to pet food to combat fleas and ticks.

#### Sodium bicarbonate

 scours, cleanses, deodorizes, removes spots, softens fabric, unclogs drains.

Cornstarch

• deodorizes carpets and removes greasy stains.

#### **Green Products**

Green cleaning products available on the market are often certified with various logos, such as Eco-Logo and Ecocert. In the absence of a logo, look for the following:

- Complete list of natural or simple ingredients on label (for example, pure soap).
- The product is advertised as colourless, odourless, and biodegradable.
- The packaging is advertised as recyclable and/or reusable.

#### Caution!

Be careful with borax! Many people believe that borax is a smart choice of cleaning product. However, borax can cause nausea, skin irritation and diarrhea.



## Not everyone is affected equally

Allergic and asthmatic people are much more sensitive to chemicals than the average person. Pregnant and lactating women should severely limit their use of household chemicals and minimize their exposure to pesticides, whose safety to fetuses and infants is unproven. As for children, they are more vulnerable than adults to certain chemicals. Toxic at much lower levels, these chemicals can irreversibly harm a child's development.

#### Hypersensitivity

In hypersensitive people, exposure to chemicals systematically causes physical and/or neurological reactions, such as headaches, respiratory problems and eye irritation. Although the causes of hypersensitivity remain to be elucidated, studies show that people in direct, recurring contact with chemicals are most likely to develop hypersensitivity.

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### Resources

National Library of Medicine (United States)

Household Products Database: www.householdproducts.nlm.nih.gov/index.htm (English)

Coalition for Alternatives to Pesticides (CAP)

www.cap-quebec.com, (514) 875-5995

Allergy and Environmental Health Association of Québec www.aeha-quebec.ca, (514) 683-5701

Pest Management Regulatory Agency (PMRA)

www.pmra-aria.gc.ca, (data sheets on pest control methods other than pesticides), 1-800-267-6315

Coop La Maison verte

www.cooplamaisonverte.com, (514) 489-8000

Centre anti-poison du Québec (Québec Poison Control Center) 1-800-463-5060

Basic recipes for green deaning (Greenpeace)

http://www.greenpeace.ca/e/resource/green/recipes.php

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About Option consommateurs
Founded in 1983, Option consommateurs (formerly
ACEF-Centre) is a nonprofit association advocating
for the rights of consumers in the areas of health,
agrifood, energy, financial services, and business
practices. Its activities include some twenty
class-action lawsuits.