



CancerSmart Backgrounder

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Cancer incidence in Canada has risen dramatically since the 1930s when approximately one in 10 Canadians could be expected to develop cancer over the course of their lifetime. Today, one in 2.4 men and one in 2.7 women can expect to develop cancer. (Results age-standardized to take into account Canadian's increased life expectancy).

The Canadian Cancer Society currently estimates that the number of cancer cases will rise 60 per cent over the next two decades.

Certain reproductive birth defects, such as hypospadias, a defect of the opening in the penis, have increased significantly over the last several years. Hypospadias has been linked to endocrine disrupting chemicals such as phthalates, which are found many in personal care products.

There is increasing concern about the burden of toxic chemicals that North Americans carry in their bodies. Testing carried out by the Centre for Disease Control in the U.S. found 150 different toxic chemicals, including lead, PCBs, benzene and other carcinogens, in the blood and tissue of the people tested. On average, each person carried 90 of those chemicals. In a feature article in the Globe and Mail March 5, 2005, reporter Mark Stevenson reported that researchers found 76 toxic chemicals in his body after a similar test at Harvard University.

The chemicals are only the most persistent of some 75,000 chemicals currently in use across North America. Of those, less than half have been fully tested for their health and environmental effects.

Toxic occupational and environmental chemicals are a significant factor in the incidence of cancer and other diseases and disorders. The World Health Organization attributes 25 per cent of cancers worldwide to occupational and environmental carcinogens, not including tobacco smoke. Reducing or eliminating exposure to toxins is an important strategy to promote cancer and disease prevention and to help ensure a healthy environment for children.

- Every year, Canadians are exposed to potentially-cancer causing chemicals in the food they eat and in the household products they use — often without any knowledge of that exposure. For example:
- At least nine different consumer pesticide products contain ingredients listed by the International Agency for Research on Cancer as possible human carcinogens (IARC Group 2B). Another four products contain ingredients listed in California as “substances known to the state of California to cause reproductive toxicity.” None of the hazards is listed on the product labels.
- Some leading brands of household laundry detergent contain trisodium nitrilotriacetate, another IARC 2B carcinogen, and also a wastewater pollutant.
- Moth balls, widely available in retail stores, contain either naphthalene or paradichlorobenzene, both of which are IARC 2B carcinogens. A recent U.S. study linked moth ball use to an increased incidence of non-Hodgkin's lymphoma.

- Spray rust paint, a very popular product, often contains toluene and xylene, two chemicals that can have adverse effects on reproduction or cause harm to the developing fetus.
- Many leading perfumes, nail polishes and other cosmetic products sold in Canada contain the endocrine-disrupting phthalates DBP and DEHP, both of which have been banned for use in cosmetic products in European Union countries.

By reducing exposure to the carcinogens that they are regularly exposed to in consumer products, Canadians can reduce their risk of cancer and reproductive harm, and lower the risk for their children. They can also help generate support for new regulations to provide for ingredient and hazard labelling and protective legislation similar to that adopted in the EU.

In the past, little attention has been paid to the exposure in everyday products because the doses were considered to be too low to have any effect. But a growing body of new research shows that harmful effects can occur at doses far lower than what were once considered a threshold. The cumulative effects of different chemicals are largely unknown.

Although ingredient labelling for cosmetic products will be mandatory in Canada by 2006, there is no labelling requirement for consumer cleaning products. And even cosmetic labels will provide little information on health hazards associated with certain ingredients.

The CancerSmart Consumer Guide provides health and environmental information about ingredients in name brand cleaning products, consumer pesticides, personal care products and home maintenance products. It also offers commercially-available alternative products that are safer and environmentally preferable, as well as tips to avoid pesticides and sources of additional information.