

CHEMICALS AND OUR ENVIRONMENT

What are chemicals

Chemicals are the basic building blocks that make up all living and non-living things on Earth. Many chemicals occur naturally in the environment, and may be found in our air, water, food, and homes. Some chemicals are synthetic, and are used in every day products from medicines to computers to fabrics and fuels. Other chemicals are not made deliberately but are by-products of chemical processes.

Many chemicals are used to improve the quality of our lives and most are not harmful to the environment or human health. However, some chemicals have the potential to cause harm, in certain amounts, and should only be used when the potential risks are appropriately managed.

How do chemicals affect the environment

Chemicals can enter the air, water, and soil when they are produced, used or disposed. Their impact on the environment is determined by the amount of the chemical that is released, the type and concentration of the chemical, and where it is found. Some chemicals can be harmful if released to the environment even when there is not an immediate, visible impact. Some chemicals are of concern as they can work their way into the food chain and accumulate and/or persist in the environment for many years.

What is the Government doing to protect our environment

The Government of Canada plays a key role in protecting the environment from harmful chemicals. In Canada, the manufacture, import and use of chemicals are regulated by a number of laws, including the *Canadian Environmental Protection Act, 1999*, the *Hazardous Products Act*, the *Food and Drugs Act*, and the *Pest Control Products Act*.

The *Canadian Environmental Protection Act, 1999*, is the primary piece of legislation used to protect the environment from harmful chemicals. At the federal level, the environment is also protected through other legislation such as the *Fisheries Act*, which can also be used to protect water and aquatic life. In total, the Government of Canada is responsible for over 25 different Acts covering environment and environmental health issues.

Under the *Canadian Environmental Protection Act, 1999*, Government of Canada scientists assess chemicals to determine potential risks posed to human health and the environment, and the ways in which humans or the environment can be exposed to them. Based on these findings, appropriate regulations and other risk management tools may be put in place to reduce or prevent risks.

In 2006, the Government of Canada launched the Chemicals Management Plan (CMP) to further enhance its role in protecting Canadians and their environment from exposure to harmful chemicals. The Chemicals Management Plan uses a number of Acts (such as the *Canadian Environmental Protection Act, 1999*, the *Hazardous Products Act*, the *Pest Control Products Act*, etc.) to identify harmful chemicals and enable the Government to take early action on substances so that they are managed before they enter the environment and become a problem for future generations. The Chemicals Management Plan includes observations of sensitive species through an ecological monitoring program which will also serve as an “early warning” system for harmful substances in the ecosystem.

The Government of Canada works closely with provinces and municipalities to help reduce the risks of harmful chemicals. In addition, because pollution does not stop at borders, the Government of Canada works with other countries to build a consistent international and regional approach to the safe management of chemicals.

What can I do to help the environment

There are many things you can do to help protect the environment. Carefully read all of the information on product labels and use chemicals only as directed. Informed consumers can often find safe alternatives for many harmful chemicals that are found in products they use, which are better for the environment. It is also important to be familiar with municipal waste and recycling programs so that you can properly dispose of products such as batteries and plastics. Other actions to protect the environment can include walking short distances instead of driving and ensuring your car is running at peak efficiency to reduce gasoline consumption.

Where can I get more information

Information on recycling and other tips that will help you reduce your impact on the environment can be found at:

www.ec.gc.ca/education/default.asp?lang=En&n=129C994E-1

For information on the Chemicals Management Plan, including lists of chemicals being addressed, and how the government is taking action to protect health and the environment, visit the Chemical Substances website at:

www.chemicalsubstanceschimiques.gc.ca