



## PROPER USE AND DISPOSAL OF MEDICATION

### The Issue

There is growing evidence that throwing out or flushing into the water system prescription drugs, non-prescription drugs and other health products may have a harmful effect on the environment.

### Background

Over the past few decades, there has been a dramatic increase in the number of new human and veterinary drugs, and personal care products introduced to the Canadian marketplace. These drugs and products are adding to the array of chemicals and other substances present in the environment.

For the past 20 years, scientists and environmentalists have been aware of pharmaceutical traces in the environment.

### The Risks of Improper Disposal of Drugs

When prescription or over-the-counter drugs are thrown into the garbage, or flushed down the sink or toilet, their chemical components may be added to the water supply or soil. The presence of these substances in the environment is emerging as an important national and international issue. Although the concentration levels of these products in the environment is very low, they may be enough to cause adverse effects in the environment and to human health. There are also concerns over the effects of medications ending up in drinking water sources.

Also, if a drug prescribed to fight infection is not taken as directed, antibiotic resistance

can occur. This is believed to be caused by the overuse or inappropriate use of drugs such as antibiotics, in preventing or treating infection and disease in people, animals and plants. When antibiotics are used inappropriately, the weak germs are killed but the stronger, more resistant ones survive and multiply. These drug-resistant germs make it harder to prevent and treat infections and diseases because fewer antibiotics are effective against them.

Although there is not yet any solid evidence, there is also some concern about leftover prescriptions being disposed of in the environment and possibly adding to the problem of antibiotic resistance.

### Proper Use and Disposal of Drugs

You can help lessen the impact of these risks by disposing of drugs in a responsible way.

- Take drugs as directed by your doctor or pharmacist. Don't stop taking a drug part way through the course of treatment, unless you are having a serious adverse reaction, without first discussing it with your doctor. Even if you feel better, use up the entire prescription as directed to make sure that all the germs are destroyed.
- Do not put out-of-date or unused medication in the garbage or down the toilet or sink.
- Check to see if your pharmacy has a drug recycling program that disposes of unused or expired drugs in an



environmentally safe manner. Most pharmacies do and programs exist in B.C., Alberta and many parts of other provinces and territories to incinerate unused drugs.

- If your area does not have such a program, see if your municipality incinerates drugs. If so, take your unused drugs to your municipality's waste disposal depot.
- At least once a year, go through your medicine cabinet and remove prescription drugs that are old or that you no longer take. Check the expiry dates on non-prescription drugs and remove those that are outdated as well. Take them all back to your pharmacy or to your municipal waste disposal depot.
- If you don't know if a drug is still good, check with your pharmacist.

## How the Government is Taking Action Drug Disposal

The Canadian Environmental Protection Act (CEPA) is Canada's primary federal law to protect the environment and human health. It is jointly administered by Environment and Health Canada. Health Canada is now developing new Environmental Assessment Regulations (EAR) for products regulated under the Food and Drugs Act, including pharmaceuticals, personal care products, drugs, natural health products, veterinary drugs and other products. The draft regulations will be developed over the next few years.

Health Canada is engaging in preliminary discussion on developing a national education campaign on the proper use and disposal for products regulated under the Food and Drug Act.

## Need more info?

It's Your Health - Antibiotic Resistant Germs  
<http://www.hc-sc.gc.ca/english/iyh/medical/antibiotic.html>

It's Your Health - Safe Use of Medicines  
[http://www.hc-sc.gc.ca/english/iyh/medical/safe\\_medicine.html](http://www.hc-sc.gc.ca/english/iyh/medical/safe_medicine.html)

National Association of Pharmacy Regulatory Authorities - "Recycling" and Disposal of Dispensed Drugs  
<http://www.napra.org/docs/0/97/194/184.asp>

College of Veterinarians of Ontario - Recording, Security and Disposal of Controlled Substances  
<http://www.cvo.org/upload/attachments/RecordingSecurityandDisposal.pdf>

For more on EAR, go to [www.hc-sc.gc.ca/ear-ree](http://www.hc-sc.gc.ca/ear-ree)

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