## Proper Disposal of Prescription and Non-Prescription Medications

Proper disposal of pharmaceuticals is extremely important to the health of watersheds. Improper disposal of pharmaceutical products have caused

chemical components of drugs to be detected in water supplies (surface water, groundwater and drinking water). "There is growing evidence that throwing pharmaceuticals (prescription drugs and non-prescription/over-the-counter drugs) and other personal care products in the garbage, or flushing them down the toilet or the sink is contributing to this issue, and consequently may have a harmful effect on the environment and indirectly, on human health" (Proper Use and Disposal of Medication, 2011).

Currently the Canadian Pharmaceutical Take-Back Program is offered to the public. The goal of this program is to limit the entry of pharmaceutical products into the environment. However, "these programs are estimated to collect only a fraction of unused and expired pharmaceuticals" (Proper Use and Disposal of Medication, 2011).

## Risks of Improper Disposal Pharmaceuticals

When prescription or non-prescription drugs are throw in the garbage or flushed down the toilet or sink there is the likelihood that the chemical components may retain in the soil or water. The treatment of water at municipal treatment plants is not effective in the filtering of the chemical components of pharmaceutical drugs. Even in low concentration the chemical components may cause adverse effects on the environment, aquatic health and human health. "Of particular concern are the potential adverse effects of cumulative, long-term exposure to trace amounts and mixtures of pharmaceuticals on vulnerable populations. including pregnant women, newborns, and children" (Proper Use and Disposal of Medication, 2011).

## Proper Disposal of Pharmaceuticals

Proper disposal of prescription and nonprescription drugs is essential to health and well-being of a sustainable water supply. Methods of proper disposal include:

- Do not put pharmaceuticals in the garbage or flush down the toilet or sink.
- Check to see if your pharmacy has a drug collection program.
- If your area pharmacy does not have a drug collection program, contact your municipality to see if they collect un-used or expired drugs. Various municipalities have hazardous waste collection days or sites that may collect pharmaceuticals. (Proper Use and Disposal of Medication, 2011)

Resource: