



## CHANGE PERSONAL CARE HABITS TO PROTECT OUR DRINKING WATER

As personal care products evolve and we take more medications, the waste from our society has changed to include ingredients from soap, like microbeads and anti-bacterial agents, and trace amounts of prescription drugs. While public health has not been impacted, we need to look at how we use and dispose of these products to protect our drinking water supplies.

Pharmaceuticals and personal care products, known as PPCPs, provide a daily source of contaminants to our waste stream that wastewater treatment plants and septic tanks were not designed to fully remove. These waste byproducts are showing up in our nation's rivers and lakes in extremely low levels.

### Medical Drugs

According to the Mayo Clinic, nearly 70% of Americans take at least one prescription drug. More than half of the population takes two drugs. Antibiotics, anti-depressants, painkilling opioids and drugs to lower lipids are the most commonly prescribed medications. Trace contaminants from these and other drugs get into our waterways from people excreting them, flushing them down the toilet, or washing them off their bodies.

Some pharmaceuticals contain endocrine disrupting chemicals (EDCs) that mimic or block the function of natural hormones in the body. So far, scientific evidence has not determined that trace amounts of pharmaceuticals and EDCs in drinking water have an impact on human health. Further research is needed. However, scientific studies have concluded EDCs can affect the growth and development of fish and wildlife.

Proper use and disposal of prescription and over-the-counter (OTC) drugs is crucial. The old guideline of flushing expired or unneeded drugs down the toilet is no longer valid. Dispose of drugs in the trash to reduce their ecological footprint.



*Medicine cabinets should be cleaned twice a year to prevent unwanted medications from piling up. Limiting bulk purchases of medications can reduce the number of unused pills that can accumulate and require disposal. Steps to properly dispose of medications are highlighted in the adjacent box.*



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## Proper Medication Disposal

### Drug Take-Back Events

- Dispose of unused prescription drugs through a National Prescription Drug Take-Back Day held at local police stations and operated through the Drug Enforcement Agency. These occur annually in the Spring and Fall. In addition, some local government agencies and pharmacies host drug take-back programs for prescription and OTC medications.

- Never flush drugs down the toilet unless the label specifically tells you to do so and you can't wait until the next Take Back Day. (Some narcotic pain relievers and other controlled substances include instructions for flushing to reduce risk of illegal abuse.)

### Home Disposal

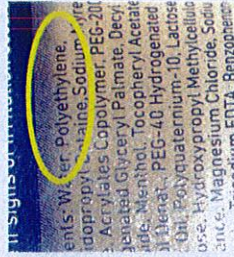
- Take your prescription or OTC drugs out of their original containers.
- Mix drugs with an undesirable substance, such as cat litter or coffee grounds.
- Put the mixture into a disposable container with a lid or a sealable bag and place in the trash.
- Use a permanent marker to cover personal information before discarding prescription drug bottles.

### Personal Care Products

Personal care products include soap, shampoo, toothpaste, deodorant, lotion, make-up and other products. While products are safe for personal use, some ingredients have proved harmful to the environment. Microbeads and 19 antibacterial chemicals were recently banned and are being phased out of products. Consumers can get a head start on water protection by reading labels and purchasing products without these ingredients.

### Avoid Harmful Products

- Do not purchase products that contain polyethylene or polypropylene, the chemical ingredients of microbeads. These plastic beads are too small to remove during the wastewater or water treatment processes.
- Do not purchase soaps that contain triclosan or triclocarban, the two most common antibacterial ingredients. There is no evidence to support that these ingredients are better than regular soap.
- Use alcohol-based hand sanitizers if soap is not available.



Water moves through the environment into our waterways, and is treated by our water treatment plants. Protecting the quality of this source water protects our future drinking water.

Take your responsibility seriously. Don't flush drugs or use personal care products that are harmful to the environment.

Lake Huron

St Clair River

Lake St Clair

Detroit River

Canada

Lake Erie



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