A growing number of pharmaceutical drugs and chemicals found in personal care products are ending up in waterways across the country. Because drinking water is drawn from these same sources, there is a growing concern about how these drugs and other substances may affect people, especially over time and with repeated exposure. To protect our drinking water and our health, it is reasonable that we reduce the amount of these PPCPs in our wastewater as much as possible.

Federal guidelines recommend three ways to dispose of prescription drugs:

1. Take unused drugs and medications to a “community pharmaceutical take-back program” that allows the public to bring unused drugs to a central location for proper disposal.

2. Do not flush unused portions of drugs and medicines down the toilet, except where the label or instructions indicate to flush.

3. Throw them in the trash, but only after removing them from their original bottle, making them unpalatable by mixing them with wet coffee grounds, glue, or kitty litter, and putting them in a leak-proof container.

Lotions, sunscreen, shampoo and perfume all wash off easily when we shower, bathe or go swimming. These chemicals also end up in our waterways, and little is known about the effect they may have. We can make conscientious choices to buy products that contain only biodegradable or natural ingredients. People are also urged to avoid purchasing products that are labeled “antibacterial” to lessen the likelihood of resistant microorganisms increasing in the environment.

PPCPs are pharmaceuticals and personal care products, which along with drugs, include lotions, soaps, cosmetics and perfumes. PPCPs can be washed off, flushed, or poured down the drain and into our waterways.

PPCPs also include veterinary medications, such as hormones and antibiotics, used to treat livestock. These compounds are excreted by animals and can leach into groundwater and nearby rivers, lakes, ponds, or streams and contaminate water supplies for surrounding farms and communities.

When people take medications, some of the compounds are absorbed, but many are not. They pass through the body and are flushed down the toilet.

$200.7 billion was spent in the U.S. for prescriptions in 2005, almost five times the amount spent in 1990. Currently, almost 65% of Americans take prescription drugs.

It is estimated that every day people use between 9 and 15 personal care products and apply an average of 126 different ingredients to their skin.

Wastewater treatment plants are not specifically designed to remove PPCPs from the water that they treat and discharge into our waterways, some of which serve as drinking water sources.

Researchers have found male fish with female sex characteristics and some fish with both male and female reproductive organs in some contaminated waterways, and are investigating whether this is caused by PPCPs.

There is currently no federal requirement for testing drinking water supplies for PPCPs.

Most bottled water distributors do not necessarily test or treat their water for PPCPs.

Read more about PPCPs
The U.S. Environmental Protection Agency: www.epa.gov/ppcp.


The National Environmental Services Center: Winter 2007 Pipeline free newsletter Pharmaceutical and Personal Care Products: An Overview, available online at www.nesc.wvu.edu or at 800-624-8301.