Why be concerned?

Increasing amounts of prescription drugs and personal care products (PP-CPs) are being detected in U.S. rivers, waterways, and groundwater.

Wastewater treatment facilities are not equipped to “filter out” these chemicals, so drugs like cholesterol reducers, blood pressure medication, sleeping pills, hypnotics, hormone replacement therapy, and antibiotics are being detected in drinking water supplies.

These medications endanger aquatic life in waterways all across the country. The risk to humans and animals of long-term exposure to these contaminants in drinking water is unknown.

Source of the Problem

The United States Geological Survey found that 80% of the watersheds they sampled nationally contained at least one type of pharmaceutical chemical, with half of the streams containing seven or more. While most of the effects of these products are unknown, increased concentrations of antibiotics have produced “super bugs,” bacteria that are resistant to antibiotics.

Human excretion is responsible for the majority of pharmaceutical pollution in our waterways. Animal feedlots also release antibiotics from waste outflows after storms. Antibiotics from cleaning products end up in local streams as well. However, a significant portion of the pollution is a result of the improper disposal of unused drugs and personal care products.

Previous information campaigns encouraged consumers to “flush” excess pharmaceuticals because of the potential harm they posed to children when left in the home or placed in household trash.

In the United States there is no national guidance for the proper disposal of PPCPs. However, there are measures you can take at home to prevent the contamination of waterways from unused medication and personal care products.

This guide was prepared by the Office of Washtenaw County’s Water Resources Commissioner, Janis A. Bobrin with the assistance of the Washtenaw County Home Toxics Reduction Program. Information sources include USGS Fact Sheet FS-027-02 and an MSNBC report. Original graphics by David Zinn.
If you are instructed to do so by your physician, finish the prescription. For any unused portions, follow the steps below. Remember to first remove or black-out any personal information on the label to protect privacy, but ensure the drug name is still visible.

**Capsules and Tablets in Containers**

- Secure the cap on the bottle.
- Cover top with duct tape, fully sealing the container to prevent breaking or leakage.
- Double wrap the sealed containers in opaque plastic bags. Tightly tie or secure the bags to prevent leackage and place in trash.

**Blister-Packaged Capsules and Tablets**

- Wrap package with several layers of duct tape, allowing visibility of the product name. This will prevent blister packs from breakage.
- Double bag the sealed packs in opaque plastic bags. Secure the bags to prevent leackage and place in trash.

**Liquid PPCPs**

- Seal the container with duct tape to prevent leaks and breakage.
- Double bag in opaque plastic bags and place in the trash. Carefully seal the bag to prevent leakage.
- To take further precautions, add salt, a pungent spice such as nutmeg or mustard, or a bitter tasting additive. Kitty litter, sawdust or an absorbing agent can also be added to the liquid to repel animals. Then double bag in a tightly sealed opaque plastic bag and place in the trash.

**Prescription Drugs**

- At present there are few, if any “take back” programs for prescription drugs.
- Call your local pharmacy to confirm information on the disposal of prescription drugs.

**Ampules, Vials, and Needles**

- Do not open or alter the original contents if possible.
- Call the Washtenaw County 24 hour home toxics hotline (734) 222-3950 for information and drop off hours at 705 N. Zeeb Road. Also check the Turning Trash to Treasure guide on www.ewashtenaw.org for a pharmacy drop off location near you.
- Residents outside Washtenaw County should call their Solid Waste Department or Waste Hauling Services for instructions on proper disposal.

**GETTING HELP**

- Washtenaw County Water Resources Commissioner’s Office…(734) 222-6833 or (734) 222-6860
- Washtenaw County Home Toxics Program...........................(734) 222-3950
- Michigan Department of Environmental Quality..................(800) 662-9278
- See the Washtenaw County websites: [www.ewashtenaw.org](http://www.ewashtenaw.org) [www.dontflushdrugs.com](http://www.dontflushdrugs.com)