

Recycling Mystery: Medication

by [Amanda Wills](#)

Whether it's a bottle of baby aspirin in a cabinet above your kitchen sink or a shelf of prescriptions on the bathroom shelf, medication is a common household item.

In fact, a Maine Department of Environmental Protection study says the use of over-the-counter medications has risen **60 percent** since the 1990s.

But what happens when you get rid of the nasty cold and no longer need that cough medicine? Should you throw it in the trash? Or can you flush it? Disposing of medication and (its containers) can be tricky. So, let's get down to the bottom of this week's recycling mystery.

Where Do I Start?

First, let's define what "pharmaceutical waste" actually encompasses. Dubbed "pharmaceuticals and personal care products as pollutants" (PPCPs) by the EPA, these products include:



The University of Illinois reports approximately 4,600 tons of PPCPs are discarded annually in the U.S. alone.

- Prescription and over-the counter therapeutic drugs
- Veterinary drugs

- Fragrances
- Cosmetics
- Sun-screen products
- Diagnostic agents
- Nutraceuticals (e.g., vitamins)

Sources of PPCPs range from pharmaceutical manufacturing and residues in hospitals to your very own medicine cabinet.

[According to the EPA](#), some PPCPs do not pose a significant threat, however this isn't the case for all medications. Because PPCPs do not dissolve easily and don't evaporate at normal temperatures, they make their way to domestic sewers or waterways and can excrete toxic materials.

Your medication's label will denote if it can be safely flushed. If it does not, check the [FDA's Web site](#) for a list of flushable medications and the substances that can contaminate waterways.

What Can I Do With My Leftover Meds?

So, the question still remains: How do we properly dispose of harmful medications that cannot be flushed? First, contact your city or county government's household trash and recycling service to check if your community offers drug take-back programs or other household hazardous waste programs that may accept the substance.

If that is not an option, there is a proper way to dispose of the drugs at home. In February 2007, the White House Office of National Drug Control Policy issued the first consumer [guide for proper disposal of prescription drugs](#). Here's a quick rundown of disposing of your medications:

1. Take prescription drugs out of original containers.
2. Mix drugs with a substance such as cat litter or used coffee grounds.
3. Place this mixture in a disposable container with a lid. The guide suggests an empty margarine tub or a sealable bag.

4. Remember to conceal or remove any personal information and prescription number by covering it with permanent black marker or simply scratching it off.
5. Put the sealed container with the mixture along with the drug containers in the trash.

Is There Another Option?

Donating your excess medication is a great way to avoid flushing medication while scoring some philanthropic points. [UNICEF](#) estimates that around 9.7 million children under the age of five die due to preventable causes and lack of basic services to treat illnesses such as pneumonia, diarrhea, malaria and HIV/AIDS. These deaths could be preventable with some medications that could be hanging around in your bathroom.

[The Health Equity Project](#) is a nonprofit organization that is dedicated to making healthcare a universal human right by providing access to quality medications to developing countries. The Health Equity Project accepts some medicinal donations such as antibiotics, anti-malarials, pain-relievers, HIV/AIDS anti-retrovirals, Diflucan and fluconazole.

Why Is It Important?

There's a lot of controversy surrounding the issue of flushing any drug. A 2008 [investigation](#) by The Associated Press found that [250 million pounds](#) of pharmaceuticals are flushed each year by hospitals and long-term care facilities. There's a notable presence of pharmaceutical substances in our drinking water. In 2008, a [CNN report](#) found that, "A vast array of pharmaceuticals – including antibiotics, anti-convulsants, mood stabilizers and sex hormones – have been found in the drinking water supplies of at least 41 million Americans."

What does that mean for us? According to the EPA, studies have shown that pharmaceuticals are present in our nation's waterbodies, some causing ecological harm. However, to date, scientists have found no evidence of detrimental effects on human health.

According to Dr. Raanan Bloom, an environmental assessment expert for the FDA, the main way [medications enter water systems](#) is by people taking them and then naturally passing the substance through their systems.

“For those drugs for which environmental assessments have been required, there has been no indication of environmental effects due to flushing,” says Bloom.