How To Properly Dispose Of Unused Medication

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People are familiar with many of the everyday ways to live an eco-conscious life, like recycling paper, drinking out of reusable containers and taking public transportation. But other aspects of environmental responsibility can be a bit trickier.

One area where many lack knowledge is the question of unused medications — from over-the-counter painkillers to prescription ointments and creams to vitamins and supplements.

While more state and local governments are <u>holding drug companies</u> accountable for medication collection and disposal, the onus falls mainly on the consumer to make responsible choices that will protect the environment and our health. So how does one safely dispose of old, expired, unused or unwanted meds? HuffPost spoke to a few experts to find out.

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There are a few different ways to responsibly dispose of unused medications.

Do NOT Flush

"Medication that is flushed goes into our waterways, <u>polluting our environment</u>," said Adam Kircher, a co-founder of the drug redistribution nonprofit <u>SIRUM</u>.

The process of disposing of medication through the toilet or sink is known as "sewering," and the <u>Environmental Protection Agency has banned businesses</u> from engaging in this practice due to its harmful consequences. Although individual consumers are still permitted to flush their drugs, it's not an environmentally responsible choice.

A large body of research has found pharmaceutical residues in lakes and rivers, as well as drinking water. In 2008, <u>The Associated Press reported</u> that pharmaceuticals like antibiotics, anti-convulsants and mood stabilizers had been found <u>in the drinking water</u> of 24 major metropolitan areas serving 41 million people around the U.S.

As of now, the concentrations of pharmaceuticals in our waters are relatively low, but they have the potential to cause real damage, especially when you look at <u>"bioaccumulation"</u> and <u>"biomagnification"</u> over time.

"Many studies have demonstrated negative effects on various aquatic organisms, including <u>fish</u> and <u>frogs</u>," said Sarah Zack, a pollution prevention specialist for <u>Illinois-Indiana Sea</u> <u>Grant</u>. "We also know very little about the long-term effects of this medication in our waters."

Once pharmaceuticals are in the water system, it's very <u>difficult to remove them</u>, as wastewater treatment plants weren't designed with drugs in mind.

"Water treatment plants were designed to handle three things: pee, poo and paper," the <u>National Stewardship Action Council's</u> executive director, Heidi Sanborn, told HuffPost. "We do not have screenings to deal with every single chemical put on planet Earth. And we're affecting the biology of the entire food chain."

Keep It Out Of The Trash

Tossing medication in the trash also creates environmental risks and public health concerns.

"Once the medication reaches the landfill, it can leach into the soil and eventually enter our waterways anyway," said Kircher, who noted that throwing away old meds simply delays that contamination process. "Often birds and other wildlife living in or nearby can ingest the drugs from the landfill directly as well."

There are also household risks: A child or pet may find unused medication in the trash, leading to the possibility of misuse, poisoning or even accidental overdose.

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- Adam Kircher, co-founder of SIRUM

"There are horrible stories of children getting into the trash, seeing colorful pills that look like candy and then having horrible reactions," said Sanborn. Other risks include illegal possession and drug abuse.

"For a long time, the recommended method for disposing of medicine was to mix it with an unappealing substance such as kitty litter or used coffee grounds," said Kircher. "The problem with this approach is that often the medication can be retrieved and abused by someone else, especially in the case of opioids."

Instead, Find A Drop-Off Location

Rather than flushing or throwing away unused medication, consumers should seek out a take-back drop box or collection event.

"The Drug Enforcement Administration hosts free semi-annual collection events in collaboration with law enforcement," said Zack. "I recommend calling your local police department or sheriff's office and asking if they have a drop box or will participate in the DEA's <u>Take Back Day</u>."

Additionally, many pharmacies and law enforcement offices have permanent drop boxes on site. These boxes are generally available whenever the location is open, or even 24/7 in many cases.

"There's no limit to how much medication can be disposed of at one time, as long as it's from your household. Some locations may have specific rules about liquids and creams, so I always recommend that you check with your local program about any specific regulations they might have," said Zack.

"Always keep the medication in its original container if possible, being sure to black out any personal information on the prescription bottles," she added.

The Food and Drug Administration also has a short "<u>flush list</u>" of harmful and potentially fatal medicines that the agency recommends sewering when there are no readily available take-back options. If your community does not offer a collection program, you can <u>help get</u> one started.

Or Donate It

Drug drop-offs are good options for expired medications, controlled substances like opioids and medicine that isn't in a sealed container. However, Kircher emphasized that there's another option for meds that don't fall into those categories: donation.

In 2009, he co-founded SIRUM, a nonprofit that aims to reduce waste by connecting organizations with surplus medications to patient populations in need.

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- Kircher

"If the medication is unexpired, sealed and not an opioid, then the absolute best thing to do is donate it. States have recently <u>passed laws</u> that <u>allow individuals</u> to donate their unused medicine to charitable clinics and pharmacies as long as it is inspected by the recipient and meets strict quality and safety standards," Kircher explained.

"Donated medications are provided to patients who are uninsured, low-income or otherwise cannot afford high medication costs," he added, noting 1 in 4 Americans taking prescription drugs say it's difficult to afford them. "Rising drug costs are in the headlines every day, so the ability to save someone in need hundreds of dollars by donating your medications makes a lot of sense."

Kircher remarked that drug donation not only prevents the unused medication from polluting the environment, but also means the recipient doesn't have to buy newly manufactured drugs.

"This is important because producing drugs is a very resource-intensive process," he explained, pointing to a study that found the amount of waste generated per kilogram of active ingredient produced can range from 200 to 30,000 kilograms. "By using a donated medication, a person is preventing this waste from being generated."

Reduce The Need To Donate Or Drop Off Meds

There are other ways to make safe, environmentally conscious choices when it comes to medicine.

"Keep your medications in a central location, so you can easily see what you have and don't over-purchase medications," Zack advised. "Avoid auto-refills and wait to refill prescriptions until you need them. Store medication properly to preserve its quality. Don't accept physician samples unless you're certain that you will use them up."