Pharmaceutical waste: Disposing of unwanted medications

Expired or unwanted prescription or over-the-counter medications from households have traditionally been disposed of by flushing them down the toilet or a drain. Although this method of disposal prevents immediate accidental ingestion, it can cause pollution in wastewater, which has been demonstrated to cause adverse effects to fish and other aquatic wildlife. When the water is eventually reused, it can also cause unintentional human exposure to chemicals in medications. Again, DO NOT FLUSH.

In addition to the environmental impacts, prescription drugs in home cabinets are highly susceptible to diversion, misuse, and abuse. Rates of prescription drug abuse in the U.S. are alarmingly high—more Americans currently abuse prescription drugs than the number of those using cocaine, hallucinogens, and heroin combined, according to the 2009 National Survey on Drug Use and Health. Studies show that people who abuse prescription drugs often obtained them from family and friends, including from the home medicine cabinet. Medications are also a significant cause of accidental poisoning and death, as reported by the Poison Control Center.

Collection sites for household pharmaceuticals

Due to the concerns of prescription drug abuse, and the fact that some of these are highly regulated controlled substances, the only current options for collection must involve law enforcement staff. Several counties hold regularly scheduled events and more than 20 counties have set up permanent collection sites at local sheriff or police facilities. If you would like to bring your pharmaceuticals to one of these sites, contact your county sheriff’s office or city police office to find out if there is a permanent collection site near you. New sites are being established monthly.

Incineration is the preferred method for destruction of household pharmaceuticals. If you know your garbage goes to an incinerator, you can safely dispose of your medications using the instructions below. If your garbage goes to a landfill and you would prefer not to wait until a collection option is available, it is still better to follow the instructions below than to flush any medications.

When you are checking through your medicine cabinet for outdated pharmaceuticals, please also be on the lookout for mercury thermometers. However, household pharmaceutical collection sites do not collect any mercury-containing devices or needles and syringes. It is very important for your family’s safety for you to take mercury thermometers to your local household hazardous waste collection sites. Please also check for cooking thermometers. Mercury cooking thermometers are especially dangerous because if they break in a pan of hot liquid the vapors are extremely toxic. Be very careful when handling thermometers. Keep them in their cases if they came with one, and remove them from the house as soon as you can.

If you plan to dispose of your pharmaceuticals at home, please follow the guidance below.

Disposing of medications at home

Your unwanted medications may be disposed of in your trash. Follow these precautions to prevent accidental or intentional ingestion.

1. **Keep the medication in its original container.** The labels may contain safety information and the caps are typically childproof. Leaving the content information clearly visible, cover the patient’s name with permanent maker.
2. **Modify the contents to discourage consumption.**
   - **Solid medications:** add a small amount of vinegar to pills or capsules to at least partially dissolve them.
   - **Liquid medications:** add enough table salt, flour, or nontoxic powdered spice, such as mustard to make a pungent, unsightly mixture that discourages anyone from eating it.
   - **Blister packs:** wrap packages containing pills in opaque tape like duct tape.
3. **Seal and conceal.** Tape the medication container lid shut with packing or duct tape and put it inside a non-transparent bag or container such as an empty yogurt or margarine tub to ensure that the contents cannot be seen. Do not conceal medicines in food products because they could be inadvertently consumed by wildlife scavengers.
4. **Discard the container in your garbage can**—do not place in the recycling bin.