

How to Dispose of Unused Medicines

Is your medicine cabinet full of expired drugs or medications you no longer use? How should you dispose of them?

Many community-based drug “take-back” programs offer the best option. Otherwise, almost all medicines can be thrown in the household trash, but consumers should take the precautions described below.

A small number of medicines may be especially harmful if taken by someone other than the person for whom the medicine was prescribed. Many of these medicines have specific disposal instructions on their labeling or patient information leaflet to immediately flush them down the sink or toilet when they are no longer needed. For a list of medicines recommended for disposal by flushing, go to www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafeUseofMedicine/SafeDisposalofMedicines/ucm186187.htm.

Drug Disposal Guidelines and Locations

The following guidelines were developed to encourage the proper disposal of medicines and help reduce harm from accidental exposure or intentional misuse after they are no longer needed:

- Follow any specific disposal instructions on the prescription drug labeling or patient information that accompanies the



medicine. Do not flush medicines down the sink or toilet unless this information specifically instructs you to do so.

- Take advantage of programs that allow the public to take unused drugs to a central location for

proper disposal. Call your local law enforcement agencies to see if they sponsor medicine take-back programs in your community. Contact your city's or county government's household trash and recycling service to learn about

medication disposal options and guidelines for your area.

- Transfer unused medicines to collectors registered with the Drug Enforcement Administration (DEA). Authorized sites may be retail, hospital or clinic pharmacies, and law enforcement locations. Some offer mail-back programs or collection receptacles (“drop-boxes”). Visit the DEA’s website (www.deadiversion.usdoj.gov/drug_disposal/index.html) or call 1-800-882-9539 for more information and to find an authorized collector in your community (www.deadiversion.usdoj.gov/pubdispsearch/spring/main?execution=e1s1).

If no disposal instructions are given on the prescription drug labeling and no take-back program is available in your area, throw the drugs in the household trash following these steps:

1. Remove them from their original containers and mix them with an undesirable substance, such as used coffee grounds, dirt or kitty litter (this makes the drug less appealing to children and pets, and unrecognizable to people who may intentionally go through the trash seeking drugs).
2. Place the mixture in a sealable bag, empty can or other container to prevent the drug from leaking or breaking out of a garbage bag.

FDA’s Ilisa Bernstein, Pharm.D., J.D., offers a few more tips:

- Scratch out all identifying information on the prescription label to make it unreadable. This will help protect your identity and the privacy of your personal health information.
- Do not give your medicine to friends. Doctors prescribe medicines based on your specific symptoms and medical history. Something that works for you could be dangerous for someone else.

- When in doubt about proper disposal, ask your pharmacist.

Bernstein says the same disposal methods for prescription drugs could apply to over-the-counter drugs as well.

Why the Precautions?

Some prescription drugs such as powerful narcotic pain relievers and other controlled substances carry instructions for flushing to reduce the danger of unintentional use or overdose and illegal abuse.

For example, the fentanyl patch, an adhesive patch that delivers a potent pain medicine through the skin, comes with instructions to flush used or leftover patches. Too much fentanyl can cause severe breathing problems and lead to death in babies, children, pets and even adults, especially those who have not been prescribed the medicine.

“Even after a patch is used, a lot of the medicine remains in the patch,” says Jim Hunter, R.Ph., M.P.H., an FDA pharmacist. “So you wouldn’t want to throw something in the trash that contains a powerful and potentially dangerous narcotic that could harm others.”

Environmental Concerns

Some people are questioning the practice of flushing certain medicines because of concerns about trace levels of drug residues found in surface water, such as rivers and lakes, and in some community drinking water supplies.

“The main way drug residues enter water systems is by people taking medicines and then naturally passing them through their bodies,” says Raanan Bloom, Ph.D., an environmental assessment expert at FDA. “Many drugs are not completely absorbed or metabolized by the body and can enter the environment after passing through wastewater treatment plants.”

“While FDA and the Environmental

Protection Agency take the concerns of flushing certain medicines in the environment seriously, there has been no indication of environmental effects due to flushing,” Bloom says.

“Nonetheless, FDA does not want to add drug residues into water systems unnecessarily,” adds Hunter.

FDA reviewed drug labels to identify products with disposal directions recommending flushing down the sink or toilet. This continuously updated listing can be found at FDA’s Web page on Disposal of Unused Medicines (www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafeUseofMedicine/SafeDisposalofMedicines/ucm186187.htm).

Disposal of Inhaler Products

Another environmental concern involves inhalers used by people who have asthma or other breathing problems, such as chronic obstructive pulmonary disease. Traditionally, many inhalers have contained chlorofluorocarbons (CFCs), a propellant that damages the protective ozone layer. CFCs have been phased out of inhalers and are being replaced with more environmentally friendly inhaler propellants.

Read handling instructions on the labeling of inhalers and aerosol products, because they could be dangerous if punctured or thrown into a fire or incinerator. To ensure safe disposal that complies with local regulations and laws, contact your local trash and recycling facility.

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