



How to Dispose of Unused Medicines

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 potentially harmful medicines have specific disposal instructions on their labeling or patient information to immediately flush them down the sink or toilet when they are no longer needed. Visit the FDA website at www.fda.gov for a list of medicines recommended for disposal by flushing.

Guidelines for Drug Disposal FDA and the White House Office of National Drug Control Policy developed federal guidelines that are summarized here:

- 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 community drug takeback programs that allow the public to bring unused drugs to a central location for proper disposal. Call your city or county government's household trash and recycling service (see blue pages in phone book) to see if a takeback program is available in your community. The U.S. Drug Enforcement Administration, working with state and local law enforcement agencies, periodically sponsors National Prescription Drug Take-Back Days www.deadiversion.usdoj.gov/drug_disposal/takeback/index.html.
- 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 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.

Additional tips:

- Before throwing out a medicine container, 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 a person's specific symptoms and medical history. A medicine that works for you could be dangerous for someone else.
- When in doubt about proper disposal, talk to your pharmacist. The same disposal methods for prescription drugs could apply to over-the-counter drugs as well.

Why the Precautions?

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., a pharmacist reviewer on FDA's Controlled Substance Staff, "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 in FDA's Center for Drug Evaluation and

Research. Bloom goes on to say "many drugs are not completely absorbed or metabolized by the body and can enter the environment after passing through waste water 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," says Bloom. In addition, according to the Environmental Protection Agency, scientists to date have found no evidence of adverse human health effects from drug residues in the environment.

"Nonetheless, FDA does not want to add drug residues into water systems unnecessarily," says Hunter. The agency reviewed its drug labels to identify products with disposal directions recommending flushing down the sink or toilet. This continuously revised list of medicines recommended for disposal by flushing can be found on the FDA's website www.fda.gov

Disposal of Inhaler Products

Another environmental concern lies with 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. However, CFCs have been phased out of inhalers and are being replaced with more environmentally friendly inhalers by the end of 2013. 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.