

## Relatively little advice offered on disposal of medications

By Jeff Donn, Martha Mendoza and Justin Pritchard, Associated Press

American consumers know not to toss old car batteries in the trash or pour motor oil down the drain, but those who want to get rid of unused drugs face a barrage of conflicting guidance: flush, *don't* flush, toss in the trash, *don't* toss in the trash.

Often, there's no information at all.

The most likely source of guidance should be the instructions packaged with prescription drugs, or advice dispensed by a pharmacist or doctor.

But an Associated Press examination of hundreds of instructions provided with prescription medications found that Americans are almost never told how to safely dispose of unwanted drugs, despite mounting evidence that medications flushed down the toilet damage the environment and eventually reach drinking water supplies.

The AP reviewed information accompanying the 50 most-dispensed prescription drugs in the U.S., ranging from sheets that patients get when they pick up a prescription to detailed technical literature aimed at doctors and pharmacists.

Prescriptions for those 50 drugs were filled 1.1 billion times last year, representing 28% of the national market, according to the health care information company IMS Health. The AP also contacted working pharmacists around the country to find out what they tell customers.

None of the literature included federal drug disposal guidelines, published more than a year ago, nor any other step-by-step directions about how to get rid of medicines — even though much of the literature is produced or reviewed by the Food and Drug Administration, which helped develop the guidelines. The most common reason given: Space is very limited on drug instructions and people often don't read them carefully, so side effects and other risks are more important to detail than disposal.

The issue of disposal was mentioned in 118 out of 282 pieces of material that AP reviewed, but the typical advice given was to ask a doctor, pharmacist or waste disposal expert how to discard medication. At best, paperwork produced by a private publisher and given patients at some pharmacies warns them not to flush medicines down the toilet unless instructed, though it doesn't say what they should do instead.

The AP's findings were part of its ongoing investigation into the presence of pharmaceutical residues in the nation's drinking water supplies. The news agency has reported that at least 46 million Americans are drinking water from supplies tainted with minute concentrations of a vast array of pharmaceuticals.

Government and private scientists and researchers believe that most pharmaceutical contamination comes from unmetabolized drugs excreted by consumers, then flushed down toilets.

On Monday, the AP reported on an important secondary problem — that U.S. hospitals and long-term care facilities throw away an estimated 250 million pounds of drugs and contaminated packaging annually, flushing much of the unused pharmaceuticals down drains, toward drinking water supplies.

But there's another source — consumers who throw away unwanted, expired or unneeded prescriptions.

It doesn't help that they're often left confused about how to properly dispose of their discards.

"I've read about proper disposal of batteries, but I don't ever recall reading proper disposal of drugs," says Lisa Morris, of Hillsboro, N.D., who has worked in nursing homes in Minnesota and Montana.

More than half the 301 patients surveyed at a military base pharmacy in 2006 said they had flushed medications down a toilet; fewer than 20% said they had ever been given advice about proper disposal by a health care provider.

"It's one of those things providers and patients just don't know about," said Dr. Dean Seehusen, a family physician at the Eisenhower Army Medical Center at Fort Gordon, Ga., who conducted and published the survey. "I was never told what do with unused medication, not in medical school, not in residency, not in fellowship. I've taught family medicine for eight years now at three institutions and this is never part of the regular curriculum."

"Do not flush" represents part of the federal government's widely ignored and unenforceable guidelines. The guidelines suggest mixing most unwanted medicines with coffee grounds or kitty litter, then tossing the mess into the trash. There are 13 medicines — mostly strong narcotics — that the federal government explicitly says should be flushed so junkies won't get them.

But federal agencies don't have a consistent message. For example, the Fish and Wildlife Service says "DO NOT FLUSH unused medications" while the White House — backed by the FDA and Environmental Protection Agency — says "Flush prescription drugs down the toilet" if they are on the list in the special guidelines. Meanwhile, the Drug Enforcement Administration says there is no "safe, secure and reliable disposal system" for some narcotics.

The FDA even seems confused about whether it is pondering issuing disposal guidelines. Ilisa Bernstein, the FDA's director of pharmacy affairs, first said the agency was considering requiring guidelines on the materials it regulates. A spokesman later said that was not the case, and Bernstein added that no one at the agency has discussed a mandate in the year-plus she's worked on disposal issues.

A spokeswoman for the Environmental Protection Agency said that even unused pharmaceuticals considered hazardous waste at hospitals aren't regulated at home.

"Regulation of hazardous waste generated by the millions of households across the country — and usually in very small amounts — was deemed to be impractical by Congress and EPA," spokeswoman Roxanne Smith said.

There have been scattered public and private programs around the U.S. to take back unwanted medicines. Smith said the EPA encourages people to bring unused drugs to such local programs "to reduce the potential for harm posed by this waste." But officials who run such programs say effectiveness is limited by convoluted regulations or financial challenges.

Plus, it's tough to break habits.

Elephant Pharmacy, based in Berkeley, Calif., has a takeback program, but director Peter Koshland said, "I still think people are flushing their medication. That's what they've known to do, back from whenever."

Theoretically, health care professionals could guide consumers on disposal.

But pharmacists at leading chains Walgreens and CVS in a dozen major U.S. cities repeatedly told an AP reporter they had no advice about what to do with unwanted medications.

Spokesmen at the headquarters of Walgreens and CVS said company pharmacists are supposed to inform consumers never to flush medications — that without exception, medications should be tossed into the trash. This advice contradicts the instructions for the federally listed medications that are supposed to be flushed.

The federal government's showcase public service outreach has been the SMARxT Disposal partnership, a collaboration between the U.S. Fish and Wildlife Service and two associations representing pharmaceutical manufacturers and pharmacists.

The SMARxT program has printed about 25,000 bookmarks and 8,000 magnets with a "do-not-flush" message to be distributed at conferences and events. Earlier this year, SMARxT ran a booth at a fly fishing event next to the Potomac River in Washington, D.C. The Potomac is one source of drinking water that is contaminated with pharmaceuticals and is home to male fish that have developed eggs inside their sex organs.

The SMARxT website's message doesn't fully track the federal guidelines, either: "DO NOT FLUSH unused medications and DO NOT POUR them down a sink or drain." Leaving out the federally listed exceptions was intentional, according to the trade group Pharmaceutical Research and Manufacturers of America, which along with the American Pharmacists Association joined the wildlife service in the campaign.

The goal was "a clear message that applies to the vast majority of drugs," said Marjorie E. Powell, senior assistant general counsel for the pharmaceutical trade group.

There are other examples of mixed messages. The AP repeatedly found advice that is conflicting, confusing or simply missing.

For example: The commonly prescribed painkiller Percocet (generically known as oxycodone/acetaminophen) is supposed to be flushed down the toilet, according to the federal guidelines. But paperwork accompanying the top-selling version, a generic, states: "Do not flush medications down the toilet or pour them into a drain unless instructed to do so."

The cancer pain drug Actiq also is on the federal flush list. But patients who read the FDA-produced guide for the lollipop-like medication find far more opaque advice.

"Do not flush entire unused Actiq units, Actiq handles, or blister packages down the toilet," the medication guide reads. That language appears immediately after step-by-step instructions on how to dispose of unwanted medication, which specifies snipping the medication from the handle with wire cutters and letting it fall into the toilet.

"It may be a little bit confusing and maybe it's something that we can look at," the FDA's Bernstein said of the language.

*Copyright 2008 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.*