

Concerns About Medicine Disposal

- ◆ Medicines that are flushed down a toilet or sink contaminate water resources, resulting in reproductive and developmental problems in fish and other aquatic wildlife.
- ◆ Improperly discarded containers provide personal information that can be used illegally, including identity theft.
- ◆ There is the possibility of poisoning from accidental ingestions, particularly by small children and pets, if medicines are thrown “as is” in the trash or unneeded or expired medicines are kept in the house.



For More Information:

- ◆ MA Department of Environmental Protection: www.mass.gov/dep/toxics/stypes/ppcpedc.htm
- ◆ MA Water Resources Authority: www.mwra.com/04water/html/pharmaceuticals.htm
- ◆ SMAR_xT Disposal: www.smarxtdisposal.net
- ◆ US Environmental Protection Agency: www.epa.gov/ppcp
- ◆ White House Office of National Drug Control Policy: www.whitehouse.gov/ondcp



DIVISION OF WATER SUPPLY PROTECTION

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www.mass.gov/dcr/watersupply.htm

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Unused & Expired Pharmaceuticals

**Reduce water pollution and
promote a healthy environment
by properly disposing of
unneeded or expired medications**



Medications Impact the Environment

Prescription and over-the-counter medications are a source of pollution when they are flushed down the toilet or drain. Waste-water facilities and septic systems are not currently designed to process pharmaceutical products. Compounds passing through these systems can impact surface waters, groundwater, and drinking water supplies. Pharmaceuticals can also be released into waterways via stormwater run-off from fields applied with manure or biosolids.

Modern technology can detect more substances, at lower levels, than ever before. Fortunately, tests done in the spring of 2008 detected no compounds in Boston's source drinking water that comes from the Wachusett and Quabbin Reservoirs. According to the American Water Works Association, research has not demonstrated an impact on human health from pharmaceuticals at the very low levels reported nationally in some drinking water supplies. Studies have shown, however, that medicines that reach streams, rivers, and lakes do affect wildlife, as fish and wildfowl face continuous exposure to the drugs. Medications thrown haphazardly in the trash can also be eaten by wildlife that frequent landfills.



DCR's Division of Water Supply Protection

The Massachusetts Department of Conservation and Recreation, Division of Water Supply Protection, Office of Watershed Management manages and protects the drinking water supply watersheds that provide water for approximately 2.2 million Massachusetts residents. Its legislatively mandated mission is to utilize and conserve water and other natural resources to protect, preserve and enhance the environment of the Commonwealth and to assure the availability of pure water for future generations.

Guidelines for Proper Disposal

These guidelines are taken from the White House Office of National Drug Control Policy, the Department of Health and Human Services, and the Environmental Protection Agency.

DO NOT DISPOSE OF MEDICATION DOWN THE TOILET!*
Take unused, unneeded, or expired prescription drugs to a "TAKE BACK DAY" if available in your community or follow these steps:

- ◆ **Take unused, unneeded, or expired prescription drugs out of their original containers.**
- ◆ **Remove ALL personal identification or prescription label from the container before placing in the trash.**
- ◆ **Mix the prescription drugs with an undesirable substance, like used coffee grounds or kitty litter, and put them in impermeable, non-descript containers, such as empty cans or sealable bags, further ensuring that the drugs are not diverted or accidentally ingested by children or pets.**
- ◆ **Throw these containers in the trash.**

*The Food and Drug Administration advises, however, that medications that have a high abuse potential be disposed of by flushing down the toilet rather than being placed in the trash. The following list is current as of January 2012, but the FDA continually evaluates medicines for safety risks and will update the list as needed. The list can be found online at: www.fda.gov/Drugs/ResourcesForYou/Consumers/BuyingUsingMedicineSafely/EnsuringSafeUseofMedicine/SafeDisposalofMedicines/ucm186187.htm#MEDICINES. These medicines include:

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| ◆ Abstral , tablets (sublingual) | ◆ Methadose , tablets |
| ◆ Actiq , oral transmucosal lozenge | ◆ Morphine Sulfate , tablets (immediate release) |
| ◆ Avinza , capsules (extended release) | ◆ Morphine Sulfate , oral solution |
| ◆ Daytrana , transdermal patch system | ◆ MS Contin , tablets (extended release) |
| ◆ Demerol , tablets | ◆ Nucynta ER , tablets (extended release) |
| ◆ Demerol , oral solution | ◆ Onsolis , soluble film (buccal) |
| ◆ Diastat/Diastat AcuDial , rectal gel | ◆ Opana , tablets (immediate release) |
| ◆ Dilaudid , tablets | ◆ Opana ER , tablets (extended release) |
| ◆ Dilaudid , oral liquid | ◆ Oramorph SR , tablets (sustained release) |
| ◆ Dolophine Hydrochloride , tablets | ◆ Oxecta , tablets (immediate release) |
| ◆ Duragesic , patch (extended release) | ◆ Oxycodone Hydrochloride , capsules |
| ◆ Embeda , capsules (extended release) | ◆ Oxycodone Hydrochloride , oral solution |
| ◆ Exalgo , tablets (extended release) | ◆ Oxycontin , tablets (extended release) |
| ◆ Fentora , tablets (buccal) | ◆ Percocet , tablets |
| ◆ Kadian , capsules (extended release) | ◆ Percodan , tablets |
| ◆ Methadone Hydrochloride , oral solution | ◆ Xyrem , oral solution |