

# Pharmaceutical Disposal

## and their impact on our waterways

*For decades, we have been told the proper disposal method for pharmaceuticals was to flush. However, traces of chemical compounds from medications are now being detected in our water sources. Although the effects of long-term exposure to humans is currently unknown, there is increasing evidence of compromised endocrine and reproductive systems in aquatic life resulting from environmental exposure to these chemical compounds. The Office of National Drug Control Policy has a guideline for pharmaceutical disposal practices. This fact sheet is designed to address these concerns as well as water pollution prevention.*

### Did you know?

- In 2002, scientists from the United States Geological Survey detected pharmaceuticals in 80% of the waterways they sampled.
- 3.7 billion prescriptions were filled and 3.3 billion units of over-the-counter medications were sold in 2007.
- 250 million pounds of unused pharmaceuticals and packaging are disposed of by hospitals and health care providers annually.



[WWW.GHPCO.ORG](http://WWW.GHPCO.ORG)

### Should it be flushed?

- Approximately 30% of Hospice Professionals report flushing unused pharmaceuticals as their current disposal method.
- Wastewater treatment facilities are designed to disinfect wastewater from bacteria and viruses. They are typically not equipped to remove pharmaceutical compounds from wastewater.
- Septic tank systems do not remove chemical compounds found in pharmaceuticals; therefore they have the potential to contaminate the surrounding soils, surface water and ground water.



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### How can we limit pharmaceuticals entering our waterways?

- Use the "mix and toss" method as recommended in federal guidelines. Mix pharmaceuticals with undesirable substances such as liquid soap, coffee grounds, or kitty litter and dispose of them in a sealed plastic bag.
- Be mindful of pharmaceutical quantities. The best solution is to avoid pharmaceutical waste of any kind.
- Do not flush unless specifically instructed to do so.

### Sources:

United States Environmental Protection Agency  
United States Geological Survey  
United States Food and Drug Administration  
University of Wisconsin  
Associated Press



# Pharmaceutical Disposal Method

## Supplies needed:

Zip-sealing bag(s)  
Liquid Dishwashing Soap

## Procedure:

1. Collect all medications.
2. Remove all medications from their original containers, emptying all bottles, blister packs, syringes, suppositories, pills, tablets, liquids, etc. into the zip-sealing bag(s).
3. Dispense liquid dishwashing soap over the medication. Use a sufficient quantity of soap to completely coat the contents of the bag(s).
4. Seal the bag(s).
5. Manipulate the outside of the bag(s) by hand to ensure everything inside is fully covered in soap.
6. Dispose of bag(s) in household garbage.

