



**SMAR<sub>x</sub>T**

**DISPOSAL™**

**A prescription for a Healthy Planet**

**SMARxT DISPOSAL™** public awareness campaign is a unique public-private partnership between the U.S. Fish and Wildlife Service, the American Pharmacists Association, and the Pharmaceutical Research and Manufacturers of America



# Campaign Goals

- Raise awareness about proper medication disposal
- Encourage consumers not to use the outdated advice of “flush unused medications or pour them down the sink”\*
- Provide consumers with environmentally friendly alternatives

\*Unless on the list of medications the FDA advises to be flushed



# Organizations Involved

- **American Pharmacists Association (APhA)**
  - Founded in 1852 representing more than 63,000 practicing pharmacists, pharmaceutical scientists, students, technicians and others advancing our profession
- **U.S. Fish and Wildlife Service (USFWS)**
  - Works with others to conserve, protect, and enhance fish, wildlife, and their habitats for the benefit of Americans
- **Pharmaceutical Research and Manufacturers of America (PhRMA)**
  - Represents the country's leading pharmaceutical research and biotechnology companies devoted to inventing medicines to allow patients to live longer, healthier, more productive lives



# Potential Environmental Issues

- Current scientific data shows no short-term effect of pharmaceuticals on aquatic life
- The potential for long-term effects is currently being evaluated



# Recent Water News

- Officials in Philadelphia said testing there discovered 17 pharmaceuticals or byproducts in treated drinking water, including medicines for pain, infection, high cholesterol, asthma, epilepsy, mental illness and heart problems. Thirty-two pharmaceuticals or byproducts were found in the city's watersheds.
- The drinking water for Washington, D.C., and surrounding areas tested positive for 6 pharmaceuticals.



# Recent Water News

- It is unlikely for any of these amounts of products to have an effect on humans
  - Study from 20 water treatment facilities showed medications in the **parts-per-trillion range**; too small to have human effects
  - One part per trillion is equal to 1 second in 32,000 years or 1 penny for 10 billion dollars.



# Pharmaceuticals in the Water

- Even though the USE of medications is the primary pathway for pharmaceuticals to reach the environment (excreted from human body), it remains essential for consumers to know how to dispose of their unused medications.



# Schematic Demonstrating how Medications Leaked into Environment



Not flushing will prevent part of the waste from residential areas





# Pharmacists' Role

- Medications play a vital role in our health care system
  - It is important that all medications are taken as directed.
- Pharmacists have the most direct contact with consumers concerning medications.
- Pharmacists' play an important role in SMARxT Disposal <sup>TM</sup>:
  - Inform consumers of environmentally friendly disposal technique
  - Inform consumers of medications for which Food and Drug Administration (FDA) advises flushing



*“Do not flush, place in trash”*

- **Consumers who do not use all of their over the counter and prescribed medications should take the following steps...**



# Procedure for Disposal of Medications

- **DO NOT FLUSH unused medications\***
- **DO NOT POUR them down a sink or drain\***
- **Dispose of Unused Medication in Household Trash**

\*except for FDA identified exceptions

# Protect children, pets, and the environment by...



- Pour medication into sealable plastic bag.



- If medication is a solid, add water to dissolve.





# Protect children, pets, and the environment by...



- o Adding kitty litter, sawdust, coffee grounds (anything to make medication less appealing to eat) to the plastic bag.





# Protect children, pets, and the environment by...



- Sealing the plastic bag completely and disposing in the trash.

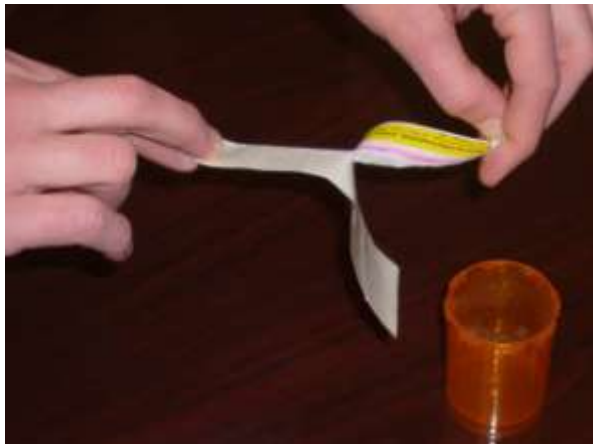




# Protect children, pets, and the environment by...



- Removing and destroying ALL personal identification information (i.e., prescription label )from the medication container



- Destroy personal information
- Recycle plastic container



# Procedure for Disposal of Medications

- **Check for approved state and local collection programs**

Certain pharmacies may take unused medications and dispose of them for consumers.

- **Consult your pharmacist with any questions**





# The FDA advises that the following medicines be flushed:

- **Actiq** (fentanyl citrate)
- **Daytrana Transdermal Patch** (methylphenidate)
- **Duragesic Transdermal System** (fentanyl)
- **OxyContin Tablets** (oxycodone)
- **Avinza Capsules** (morphine sulfate)
- **Baraclude Tablets** (entecavir)
- **Reyataz Capsules** (atazanavir sulfate)
- **Zerit for Oral Solution** (stavudine)
- **Meperidine HCl Tablets**
- **Percocet** (Oxycodone and Acetaminophen)
- **Xyrem** (Sodium Oxybate)
- **Fentora** (fentanyl buccal tablet)

\*Each medication label advises flushing due to abuse potential



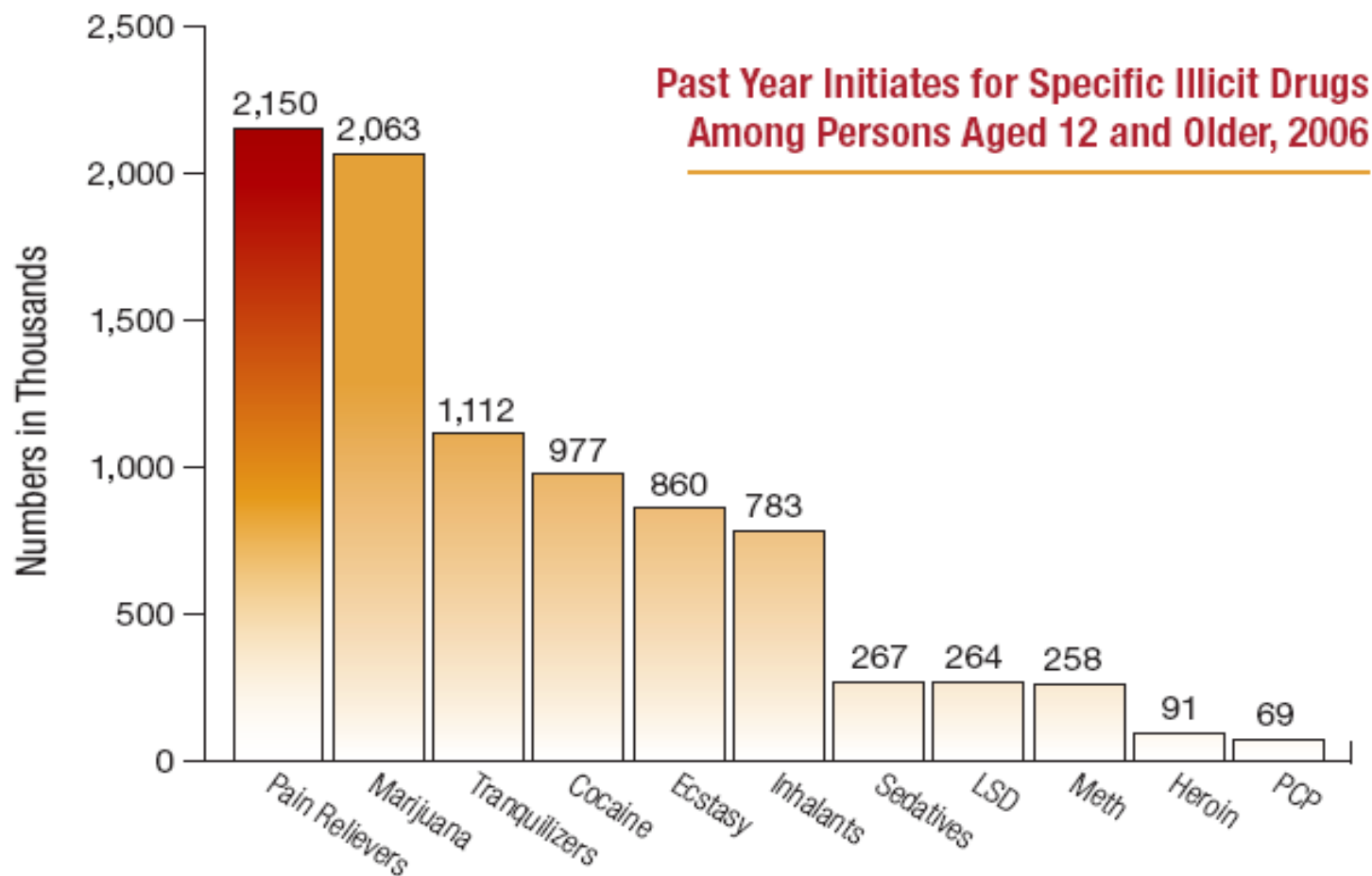
# Proper Disposal of Unused Medicine Could Decrease Abuse

- Young people ages 12-17 abuse prescription drugs more than all other illicit drugs except marijuana
- Majority of teens get these drugs easily or for free from friends or relatives
- Teens are abusing prescription drugs because they believe they will receive a “safe high” and they are easily available
  - More than three in five teens say prescription pain relievers are easy to get from parents’ medicine cabinets





# Drug Use Among Teens





# Secure your medicines and dispose of unused medications properly

- Prescription pain killers
  - Anti-anxiety medications
  - Medications for sleep
- 
- You play a big role in keeping these powerful medicines out of the hands of those who shouldn't have them





# What to DO... AT HOME



- Keep medications in original containers
- Never take someone else's medication
- Read the label every time you take a dose
- Keep a current list of your medications
- Store medication in a safe location
- Dispose of unused medications properly



# Resources-Website

o [www.smarxtdisposal.net](http://www.smarxtdisposal.net)

SMARxT Disposal - Home Page - Windows Internet Explorer

http://www.smarxtdisposal.net/

File Edit View Favorites Tools Help

Microsoft Outlook Web Access SMARxT Disposal - Home...

## SMART DISPOSAL™

A Prescription for a Healthy Planet

March 17, 2008

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### Responsible Medication Disposal Safeguards Lives and Protects the Environment.

Welcome to a site for anyone who is concerned about the environment, human safety, wildlife and aquatic resource conservation. As Americans, most of us enjoy an unparalleled quality of life. We have diverse hobbies, numerous economic opportunities, tremendous cultural and outdoor resources and the best health care in the world. In fact, many of us combine our hobbies with our passion for the natural environment. And protecting these resources is an important part of our overall enjoyment.

A concern we must all address is the disposal of medications and their effect on human life, wildlife, lakes, rivers and streams throughout our country. This issue is relevant to everyone's personal health safety and the protection of our environment.

A few small steps can make a important difference in safeguarding lives and protecting the environment.

Follow your medication prescriber's instructions and use all medications as instructed. If you do not use all of your prescribed or over-the-counter medication, you can take a few small steps to make a huge impact in safeguarding lives and protecting the environment by disposing of unused medicines properly:

- DO NOT FLUSH unused medications or POUR them down a sink or drain.
- Be Proactive and Dispose of Unused Medication In Household Trash. When discarding unused medications, ensure you protect children and pets from potentially negative effects:

Done

Internet 100%

Start SMARxT Disposal - Ho...

10:05 AM

# Additional Resources



Bookmark



Fact Sheet



- DO NOT FLUSH unused medications and DO NOT POUR them down a sink or drain.
- To ensure you protect children and pets:
  - a) Pour medication into a sealable plastic bag. If medication is a solid, crush it or add water to dissolve.
  - b) Add kitty litter, sawdust, or coffee grounds to the plastic bag.
  - c) Seal the plastic bag and dispose in the trash.

[www.smarxt disposal.net](http://www.smarxt disposal.net)

Magnet



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Together we can achieve  
a Healthy Planet

Questions?