Proper Disposal of Unwanted Medicines with a Focus on the Aging

2011 Northeast Water Science Forum
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April 29, 2011
Overview

- Background and Demographics
- Legislation and Stewardship
- Proper Disposal
- State and Local Disposal Initiatives
Background and Demographics

Goal: Older adults follow new National Guidelines on safe disposal of medicine
Background and Demographics

Potomac Basin PPCP Pilot: Source Water Protection and Older Adults

- Objective: Educate older adults on National Guidelines on safe disposal of medicine in the Potomac basin
Indicator 1 – Number of Older Americans

Population age 65 and over and age 85 and over, selected years 1900–2008 and projected 2010–2050

NOTE: Data for 2010–2050 are projections of the population.
Reference population: These data refer to the resident population.
Legislation and Stewardship

Important Developments in Safe Disposal of Medications in the U.S.

- May 2004: Maine enacts first state bill
- Sept. 2009: Maine Care 15 day Rx initial limit enacted
- Sept. 2010: Federal Legislation amends Controlled Substance Act -- Secure and Responsible Drug Disposal Act
NY Dept. of Environmental Conservation’s has proactive approach to household, institutional and manufacturing discharges

PharmEcovigilance, green pharmacy and product stewardship—working up stream

Product stewardship approach: life cycle—manufacturers, retailers, users and disposers share responsibility
Legislation and Stewardship

Congress Passed Secure & Responsible Drug Disposal Act of 2010

- Amends Controlled Substances Act (CSA) to address limitations of CSA re: safe drug disposal
  - CSA requirements had rarely allowed collection of controlled substances at take-back programs (Maine received waiver)
  - Permission required from the Drug Enforcement Administration (DEA) to accept controlled substances & had to arrange for 2 full time law enforcement officers to receive controlled substances directly
  - DEA Take-Back Days: Sep. 25, 2010 and **Apr. 30 (tomorrow!)**
Secure & Responsible Drug Disposal Act of 2010

- New bill administered by the Drug Enforcement Administration (DEA) of Dept. of Justice
  - More options to safely and responsibly dispose of unwanted or expired drugs, including controlled substances through community-based efforts
  - Provides for DEA to develop rule for long-term care facilities to dispose of drugs on behalf of residents
Don’t flush drugs down drain or toilet unless explicit on medication label.

For information on drugs that should be flushed, visit the below website.

Preferred method for disposal is take advantage of community drug take-back programs or other programs, such as household hazardous waste collection events….

*www.whitehousedrugpolicy.gov/publications/pdf/prescrip_disposal.pdf*
Proper Disposal
Take-Back Programs

- DEA 2nd Take-Back Event April 30 (tomorrow)
  - 1st National Collection Day Sept. 25: 121 tons collected

- Hazardous Waste Collection Days (ex: Frederick County, MD-2 Xs/Yr)

- Disposal of Unwanted Medicine Programs - Illinois-Indiana Sea Grant Program
  Toolkit:
  *http://www.iisgcp.org/unwantedmeds/index.html
Proper Disposal

Household Disposal*: If no take-backs

1. Take your prescription drugs out of their original containers unless disposal instructions indicate otherwise.

2. Mix drugs with an undesirable substance, such as cat litter or used coffee grounds.

3. Put the mixture into a disposable container with a lid, such as an empty margarine tub, or into a sealable bag.

*Drug Disposal Guidelines, Office of National Drug Control Policy, October 2009
Proper Disposal

Household Disposal*: If no take-backs

4. Conceal or remove any personal information, including Rx #, on the empty containers by covering it with black permanent marker or duct tape or by scratching it off.

5. Place sealed container with the mixture, & empty drug containers, in the trash.

*Drug Disposal Guidelines, Office of National Drug Control Policy, October 2009
State and Local Disposal Initiatives

PPCP Projects

- University of WI – “Get the Meds Out” (in progress)
- EPA Aging Initiative Pilots
  - Aging Mail-Back Program, State of Maine (ongoing)
    - Almost a ton collected
  - Take-Back at local pharmacy chain in St. Louis, MO (completed)
    - No controlled substances
- Source Water Protection: PPCPs and Aging in Potomac Basin (ongoing)
State and Local Disposal Initiatives

Drug Returns Data

- 3,850 envelopes returned
- 43% return rate
- 1,800 lbs collected
- 240,000 pills collected
- 85% of returns are RX drugs,
- 12% OTC
- 31% of returns included mail order drugs

TOTAL ESTIMATED COST OF UEMs = $208,024.85 (US Dollars)
Motivation for Using the Mailback Program

- Best for the environment: 77%
- Safest for me and my family: 16%
- Free to use: 4%
- Most convenient: 3%

n = 1518
Why do you want to get rid of these medicines?

- Expired: 47%
- Doc told me to stop taking it: 30%
- Doc gave me new medicine: 27%
- Did not want anyone else to use it: 25%
- Other: 24%
- Felt better: 18%
- Didn't like the side effects: 12%
- Had a reaction or allergy: 12%
- Didn't want to take it: 7%
- I don't know: 1%

n = 1680
State and Local Disposal Initiatives

Established Potomac Safe Medicine Disposal Alliance

- Potomac Basin

- Potomac Safe Medicine Disposal Alliance
  - Potomac Drinking Water Source Protection Partnership
  - EPA Aging Initiative
  - EPA Region 3 (lead region-PPCPs)
  - Frederick County Dept. of Aging (MD)
State and Local Disposal Initiatives

1st Year: Partnered with Frederick County Dept. of Aging

- Distributed info. at 5 senior centers
- Staff nurse demonstrations at senior centers, health fairs
- Required by state to test effectiveness following education programs
- Assisted by student nursing program from state university
- Demonstrated at Annual Frederick Elder Expo
State and Local Disposal Initiatives
Frederick County Elder Expo

900-1000: mostly seniors, also caregivers, social workers, organizations, i.e., Alzheimer’s Association, kidney dialysis assoc.

EPA demonstrated proper disposal & handed out flyers, pillboxes and magnets at a booth
State and Local Disposal Initiatives

Visitors asked three questions:

1) What had they done with medicine and supplements before the demonstration?
2) Was the information they learned helpful?
3) What would they do with medicine and supplements after the Expo?
State and Local Disposal Initiatives

2nd Year and Beyond: Expanding outreach to seniors in Potomac Basin

- Demonstrated safe disposal at booth in Loudoun County Senior Expo, VA (950 attended)
- Conference call in June for MD Area Agencies on Aging (AAA)
- Gave talk and demonstration on proper disposal to managers at AAA meeting in VA
- Published article in Senior Gazette, Fairfax County, VA
- Distributed fliers to Senior Centers
- Partnering w/local community take-backs in 4 locations
State and Local Disposal Initiatives

What’s next?

- Continue efforts in Potomac
- Develop a “how-to” kit
- Work with partners, i.e., n4a
- Expand / replicate in other watersheds, regions
Environmental Wisdom

"Life is like a sewer – what you get out of it depends on what you put into it."

Tom Lehrer
Questions?

Marjorie Copeland at (202) 564-3876 or copeland.marjorie@epa.gov

Safe Drinking Water Hotline
  ▶ (800) 426-4791

EPA Aging Initiative
http://www.epa.gov/aging/

EPA Office of Water website
http://water.epa.gov/scitech/swguidance/ppcp/

EPA PPCP website
http://www.epa.gov/ppcp/

EPA Source Water Protection
http://water.epa.gov/infrastructure/drinkingwater/sourcewater/protection/index.cfm
Legislation and Stewardship

Controlled Contaminant List (CCL) 3 Sept. 2009

- Safe Drinking Water Act requires CCL published every 5 years
  - Unregulated contaminants may pose Potential health risks through drinking water exposure

- 2009 CCL3 lists 116 candidates
  - 5 or more selected for possible regulation or research

- CCL3 includes pharmaceuticals (10) for 1st time
  - 1 antibiotic (erithromycin)
  - 9 hormones (alpha-estradiol, 17-beta estradiol, equilenin, equilin, estriol, estrone, ethinyl estradiol, mestranol, and norethindrone)
Legislation and Stewardship

Best Management Practices (BMP) for Unused Rx at Health Care Facilities

- EPA Office of Water document
- Reviewed by Federal agencies (FDA, CMS, DEA)
- Comments were due November 8, 2010
- Revised draft will go through another round of internal and external review
- Expected to be published by fall 2011