To Flush or Not to Flush:
The Question of Unused Pharmaceutical Disposal
A Pharmacy Perspective

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Regional eXcess MEEdication Disposal Service Partnership

Goal of RxMEDS Partnership:
Create an efficient regional model that removes and disposes of unwanted medications and informs the citizens of related health and environmental issues.

June 2007 – December 2008
Time Line

Phase 1
- 6 months of planning set-up: Controls, policies and procedures, marketing, scheduling

Phase 2
- 12 months of take-back programs: provide the service and educate the public

Phase 3
- Determine feasibility of on-going take-back programs
RxMEDS’ Partners

Area Resources for Community and Human Services (ARCHS)

Schnucks Markets, Inc.

Cintas Corporation

St. Louis College of Pharmacy

Missouri AARP

Mid-East Area Agency on Aging

St. Louis OASIS

Senior Services Plus
Partnership Growth

WK Health
Stericycle
St. Louis City Agency on Aging
MO Environmental Water Association
STL County Waste Management Program
Living Lands and Waters
American Water Company
Saint Louis University
Metropolitan Sewer District
PhRMA
Approvals

✓ US EPA
✓ US EPA Human Subjects Review & St. Louis University IRB Board
✓ Hazardous Materials Information Center (US Dept of Transportation)
✓ MO Bureau of Narcotics and Dangerous Drugs (BNDD)
✓ US DEA, MO & IL
✓ MO Board of Pharmacy
✓ MO and IL EPA
Unwanted Medication Disposal Program Set-up

- 20 locations, 3 hour drop off time once a month
- Document controls but do not accept
- Accept non-controlled unwanted medications
- Inform patrons what to do with non-returnable materials
- Only collect medications during collection times
Publications, Outreach and Schools

- Publications had a circulation of 704,300 in metropolitan area.
  - Belleville News Democrat
  - Schnucks’ Advertising Circulars
  - Metropolitan Sewer District Bill Inserts
  - 2 Television interviews on Channel 2
  - KMOX radio interview
  - Post Dispatch article (Metro Section)
- Community outreach activities of the partners included over 20 community based programs that contacted an additional 2,136 area residents.
- 220 collections days at Schnucks Stores
- Over 300 St. Louis College of Pharmacy students involved in one or more of the programs
- Over 1,000 volunteer hours
Disposal Day

Educating at AARP Health Fair
Plastics Recycling

- >2,500 lbs.
- Does not include box or container
Secondary survey

- Completed: 547 surveys
- Demographics
  - Average Age: 57
  - Ethnicity
    - Caucasian: 80%
  - Gender: 71% female
- 72% did not bring back any medications
- 70% preferred to bring back to pharmacy
Medications Collected

- Overall Participation: > 900 patients
- Store Participation: 4 patients per store per event
- Average # of Meds Returned: 9
- Average age: 63.5
- Gender: 75% female
- Ethnicity: 96% Caucasian
Medications Collected

“How did you dispose of your medications previously?”

- Kept: 20%
- Flushed: 44%
- Trash: 20%
- Saved for future use: 1%
- Gave to friend: 1%
- Collection Program: 4%
- Other: 10%
Medications Collected

- **8,800** individual prescriptions, OTC and herbals collected
  - **1/2** were tablet or capsules non-control prescription items
  - Controlled substances: **500** tablets and capsules attempted
  - OTC: **1,700** tablets and capsules
  - Herbal: **24** tablets and capsules
  - Others: Liquids, gels, creams, inhalers, etc.
Medications Collected

- Tablets and Capsules
  - >795,000
- Liquids
  - > 800 bottles
- Inhalers
  - 110 (MDI or DPI)
St. Louis Medication Disposal Initiative
Goals

- Increase awareness of the Drug Enforcement Administration’s (DEA) National Drug Take Back Day
- Focus on city dwelling seniors
St. Louis Medication Disposal Initiative

- Media
  - Cardinal Radio Network
  - FOX 2 Morning News (KTVI)
  - KMOX (AM 1120)
  - KTRS (AM 550)
  - St. Louis Post Dispatch
  - St. Louis American
  - St. Louis College of Pharmacy Website
    - [www.stlcop.edu/medicationdisposal](http://www.stlcop.edu/medicationdisposal)
Senior Focus

- Senior Centers (11)
  - Posters
  - Medication Disposal Talks
Senior Focus

- Senior Housing (14 buildings, 1593 apartments)
  - Posters
  - Flyers
  - Door-to-door collection
  - Referrals
- Meals –on-Wheels
  - Flyers
  - Door-to-door collection
April 30\textsuperscript{th} Take Back

- Four city locations
- Separation of drop offs for documentation
  - 2 sites
  - Each drop off separately bagged
- Pharmacy student involvement
Results Thus Far....

- **228** lbs. collected from senior focused areas
- **24%** of the six state total from St. Louis Metro Area
Results Coming Soon

- Pharmacy Collection Monitoring System (PCMS)
  - Drug name
  - Strength
  - Fill date
  - Original Quantity
  - Amount Remaining
  - Formulation
  - Manufacturer
  - Expiration Date
Take Aways

- Advertising is beneficial
- Man power is critical
- Involve your local pharmacies and/or school of pharmacy
- Involve other stakeholders