

To Flush or Not to Flush:

The Question of Unused Pharmaceutical Disposal

A Pharmacy Perspective

NACWA
Pretreatment &
Pollutant
Prevention
Workshop

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18 May 2011

Regional **eX**cess **M**edication **D**isposal **S**ervice **P**artnership

June 2007 – December 2008

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.

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

Saint Louis University

Stericycle

Metropolitan Sewer District

St. Louis City Agency on Aging

PhRMA

MO Environmental Water Association

STL County Waste Management Program

Living Lands and Waters

American Water Company

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

April 2011



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



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 30th 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