

Franklin County Pilot Unwanted Medications Collection
Thursday, December 9, 2004
Senior Center, Turners Falls (Montague), Massachusetts
9 am – Noon

Overview

The Northeast Recycling Council (NERC), representing ten states in the Northeast, and the Franklin County Solid Waste Management District (FCSWMD) in Western, Massachusetts, partnered to carry out a pilot unused/unwanted medications collection and disposal event. Both entities had received grant funding to explore safe collection and disposal options for unused/unwanted medications. FCSWMD received funding from the USDA, Rural Utilities Service and NERC from the Environmental Protection Agency.

The collection of unused/unwanted medications is virtually unexplored in the United States and only a limited number of such collections have been held to date. Staff from FCSWMD and NERC conducted a wide range of research into the consequences of unsafe disposal of drugs. Research was also conducted on the various options that could be applied to the collection of unused/unwanted medications as well as the growing Contacts were made with other agencies (local, state and federal), as well as commercial and nonprofit agencies around the country. NERC established an advisory board representing interested parties, regulators, government representatives, pharmaceutical representatives and others.

NERC and FCSWMD decided to conduct a collection event in order to move forward with a pilot prior to the winter months. This event was to be the first of its kind in the Northeast. It was decided that the pilot would specifically target senior citizens. As this population segment has a higher percentage of individuals that utilize prescription drugs, it was deemed that they would most benefit from the collection. Additionally, it was determined that this course would keep the event more manageable, while also serving as an excellent test for collection event coordination and logistics.

The “Unwanted Medications Collection” pilot was pulled together with less than a month’s lead-time. Staff contacted the local police department to determine their willingness to partner for the event. After receiving approval from the Montague Police Chief to have a police officer on site, the Montague Senior Center was contacted as a site for the event. The Senior Center staff was more than willing to host the event at their center. Calls were also made to other senior centers and senior newsletter outlets to determine possible outreach methods. Due to the short turnaround, only one newsletter article was able to be published.

Media releases were distributed to area media outlets, resulting in three articles in the local press. Fliers were also developed and sent to most of the senior centers and town halls in the Franklin County Solid Waste Management District (10 senior centers and 15 town halls in closest proximity to the collection event site). Additionally, a fact sheet about storage and disposal of unused medications was developed for distribution at the

pilot and other events, as well as for posting on the FCSWMD website. A survey was developed for the event to track the town of residence of participants, the number of different types of drugs brought in and other pertinent information. Copies of the press release, flier, fact sheet and survey are attached. A complete database of prescription drugs and nonprescription drugs was also compiled in a spreadsheet for data entry at the event.

Clean Harbors was chosen as the provider to transport the collected, uncontrolled medications to a licensed hazardous waste incinerator. Contacts to various entities (from the Drug Enforcement Agency to the Massachusetts Department of the Environment) were made to determine the best way to handle disposal for controlled substances. After reviewing various options for disposal for controlled substances it was eventually decided to have the Montague Police Department temporarily store the controlled substances in their safe until destruction could be arranged through the Massachusetts Division of Food and Drugs. This was primarily determined as the most viable option due to the high cost of sending controlled substances (via Federal Express) to a Drug Enforcement Agency licensed incinerator¹.

The day of the event a sign was placed in front of the senior center. Tables were arranged for the pharmacist and data entry person with a laptop. Another table was set up for literature (and a staff person) from Franklin Medical Center. Pails were delivered by Clean Harbors and a label placed on one of the pails for controlled substances. As participants came in, they were asked to complete the survey. The medication brought in was set on the table in front of the pharmacist. The pharmacist went through each container, determining the type of drug and amount brought in. The information was recorded on the data sheet. The controlled substances were then handed directly to the police officer for placement in the "controlled substances" pail. The uncontrolled drugs were placed in a separate pail. For purposes of the pilot, the types of containers in which the drugs were brought in (e.g., types of plastics, etc.) were also recorded.

Problems

- One major issue that resulted from the short lead-time was inadequate publicity. While press releases and fliers were developed and distributed, only one article was in a newsletter specifically targeted to seniors. Additionally, press coverage in two of the regular media outlets only occurred several days prior to the event and one on the day of the event. Thus, most people would not have seen the announcement about the event until just a day or two before hand.
- The mailing of fliers to senior centers around the county did not serve to bring seniors from these areas to the event. However, there were several inquiries generated by town officials regarding the possibility for future events in their towns.

¹ This method requires the incinerator operator to shut down their operation and evacuate the facility in order to allow a DEA representative to witness the destruction of the controlled substances. The resulting costs are close to \$2000 just for the destruction of a 5-gallon pail of material.

- Several seniors at the host center said that they had heard about the event and were planning to participate, however, they forgot about it that morning. Perhaps for future events, purchased radio ads for the day of the event would be helpful or determining some other means to remind seniors the morning of the event.
- The issue of not wanting to attract unwanted attention to the event (e.g., from illicit drug users) was a concern. Careful wording of fliers and press releases tried to limit the use of the word “drug” and instead using “medications, medicine and prescription.”
- Seniors do not like to travel (or are unable to travel) long distances. Holding events in each town/community will most likely prove to be most successful. Working with agencies such as TRIAD may also be a way to provide a collection service to sheltered seniors. Another option for the future is to target the general public by collecting unused medications at a Household Hazardous Waste (HHW) collection event.
- Low numbers of participants could be overcome by holding the event in conjunction with a dinner or other event at which seniors were already attending. For example, the Montague TRIAD program hosts a quarterly meal at which some 200 seniors attend.
- The litany of agencies involved, regulations, opinions and confusion around the collection and destruction of controlled substances is a substantial barrier that will need to be overcome for such events to become universal around the country. Additionally, costs will be prohibitive unless arrangements can be made to work with local law enforcement to handle destruction through their normal channels or if federal/state regulators can make it easier and affordable to dispose of controlled substances through normal hazardous waste incineration facilities.

Event Staffing

- Pharmacist: Volunteered from Franklin Medical Center (local hospital). The pharmacist brought a tray in order to sort and count the collected drugs. The pharmacist also determined mixed drugs that came in and separated the controlled from the uncontrolled.
- Senior Educator: Volunteered from Franklin Medical Center and had an information table with educational resources targeted to seniors.
- Lynn Rubinstein, NERC: Entered inventory of drugs in laptop as pharmacist processed them. Developed complete spreadsheet of prescription/nonprescription drugs for fast entry into the system.
- Dan Miner, Police Officer, Montague Police Department: On-site from 8:30 until noon and responsible for placing controlled substances in a dedicated container.

At the end of the event he signed copies of the controlled substance inventory certifying receipt of the materials. It was witnessed by the pharmacist. Officer Miner then took the controlled substances and inventory back to the police station for storage in a secured locker for future destruction. The Police Department was paid an hourly duty fee for his participation, totaling \$150. FCSWMD covered this cost through its USDA – RUS grant.

- Athena Bradley, FCSWMD: Inventoried the containers for plastic type, color, size, etc. She also assisted in putting the non-controlled drugs in the hazardous waste disposal container (a 5-gallon pail).
- Mitch Garrity, Clean Harbors: Brought the containers and shipping paperwork and observed the event to learn about how these pilots can and should work. The hazardous waste truck arrived at noon and removed the non-controlled substances for transport to the Clean Harbors facility and ultimately its hazardous waste incinerator in Deer Park, TX. FCSWMD will be covering the disposal costs through its USDA-RUS grant.
- Jan Ameen, FCSWMD: Surveyed the participants.

The following on-site individuals were **essential** and should be part of all collections:

- Pharmacist
- Law enforcement officer
- Data entry person
- Survey taker

Essential Tools/Equipment

- Pharmacist tool for counting medications
- Tables
- Containers for non-controlled substances and controlled substances
- Signage: one or two signs for outside of event. Labels to place on containers
- Laptop, with prepared spreadsheet of drug listing and columns for drug count and other information.
- Printer
- Extension cords, grounded
- Chairs
- Disposable gloves
- Trash bags for disposal of empty containers. Recycle box for paperboard.
- Permanent markers for participants to cross out personal information, if desired.
- Pens
- Paper
- Survey forms
- Coffee
- Water
- Toilet
- Phone

- Informational handout

We had sharps boxes on site, but they were not used.

If appropriate for the setting: a receptacle for plastic container recycling.

Costs

- Police officer: \$150
- NERC & FCSWMD Staff:
 - Planning
 - Implementation
 - Analysis
- Hazardous Waste Disposal of Non-controlled substances: \$450
 - Pick-up on a weekday \$100
 - Staff for pick-up \$200
 - Disposal for 5-gallon pail \$150
- Disposal of controlled substances: Free through state evidence destruction program.
- Coffee & donuts
- Advertising
- Office supplies, copying, telephone, other:

Survey Results: See attached.

Volume of Material Received

Medication

- As shipped – 5-gallon bucket of non-controlled substances
- Approximately one-half gallon of controlled substances
- Excel spreadsheet was distributed separately with detailed information, but in summary:
 - We received approximately 140 medications (25 controlled, 115 non-controlled).
 - The controlled substances equaled 18% of the total medications
 - The estimated retail value of the medications received was \$3,753.68
 - The estimated “street value” for the controlled substances was \$6,056.25 (at \$7.50 per pill according to the Police Officer)

Medication Containers

190 containers were catalogued.

Overview of Containers	Amt.	Percent
Glass	20	11%
Metal	1	<1%
Plastic	169	89%
Total	190	100%

Plastic Containers		
Type	Amt.	Percent
# 2 HDPE	30	18%
# 3 PVC	1	<1%
# 5 PP	19	11%
#7 Other	7	4%
Unknown	60	36%
Soft	52	31%
Total	169	100%

Additional Observations

- While participation for the pilot was low, both FCSWMD and NERC learned about the various newsletters and media options to reach seniors as a target for future events. This includes outreach through Baystate and Franklin Medical Center, the various newsletters targeted to seniors and the TRIAD.
- Each participant tends to bring in multiple types of drugs. So, while participation was low, the volume collected for a pilot was significant. This gives some indication that if a larger event is held, whether targeted toward the general public or again with seniors, volumes could be quite substantial. If held in conjunction with a Household Hazardous Waste (HHW) event, these volumes could pose problems for on-site tracking of drugs if staffing is not adequate.
- In discussing the event with seniors at the host center, as well as others throughout the community, it is clear that a great deal of education is needed to inform the general public, as well as wastewater treatment staff, boards of health, and others about the contamination problems posed by disposal of drugs down the drain and in the garbage and the need for proper disposal to protect communities and the environment.
- Clearly it benefits the community to host such events, as not only are drugs removed for safe disposal to protect the environment, they are removed from homes where they can be potentially stolen or accidentally ingested. Stealing of drugs is on the rise, both from intruders and from relatives and others invited into homes. Thus, partnering with the local police departments may offer a solution for both cost-effective destruction of controlled substances as well as greater community awareness of the need for such events.

**Unwanted Medications Collection
SURVEY RESULTS**

Town of Residence:

- Montague - 2
- Greenfield – 2
- Warwick – 1
- Conway - 1

Why is the drug being disposed of?

- Didn't like the medicine (made me ill, etc.) 1
- Expired/out-of-date medicine 2
- Death (family member/friend) 3
- Cleaning house 1
- Never used the prescription 1

Whose medication was it?

- Mine 1
- Family or household member 4
- Friend 1

How did you learn about this event?

- Newspaper article 3
- Other FMH
Local ListServe

How long had you been “saving” your medicines for disposal?

- 1.5 years
- 2 months
- Years! – Including small free samples she had received in the mail.
- 11 years
- 6 months
- 2 years, plus clean-out from 60s & 70s

Comments/Recommendations:

- It's great!
- Fabulous!