

Holding an Unwanted Medication Collection for Community Pharmacies

A Quick Guide

Written by Lynn Rubinstein
Supported with a grant from the Community Pharmacy Foundation
© November 2008

NERC | Northeast Recycling Council, Inc.

139 Main St., Suite 401, Brattleboro, VT 05301 802-254-3636 www.nerc.org info@nerc.org NERC is an equal opportunity provider and employer.

Acknowledgements

We would like to thank the following individuals and companies for their participation on the project.

- John O. Beckner, RPh, Director, Pharmacy and Health Services, Ukrop's Super Markets, Inc.
- Sophie McIntyre, PharmD, RPh, Director of Clinical Services, Eaton Apothecary
- Carlos Ortiz, RPh, Consultant
- Alisa Phillips-Griggs, Water Quality and Projects Coordinator, Farmington River Watershed Association
- Troy J. Ruff, RPh, Manager, Quality Assurance and Patient Safety, CVS/Caremark
- Mike Semanie, Director of Pharmacy, Big Y Foods

This document addresses unwanted medications collected from individuals.

These include over-the-counter, prescription, and veterinary medications. This document does not address issues associated with unwanted medications from doctor's offices, facilities, hospitals, nursing homes, hospice, or other organized medical delivery programs and services.

CONTENTS

	nowledgements tents	i
ı	Introduction	1
	A Quick Guide to Collections	,
	A Legal Strategy for Collecting Unwanted Medications	1
	Controlled substances are segregated from non-controlled substances	1
	State Legal Requirements	1
	Board of Pharmacy	1
	Controlled substance laws and agencies	1
	Public safety laws	1
	Privacy laws	1
Ш	Holding a Collection Event	2
	Before Your Event, A Guide for the Event Organizer	3
	Pre-Event	3
	State Agency Authorization	3
	Budget	3
	Site Selection	3
	Agreement of Law Enforcement	3
	Arrange for Staffing	
	Hazardous Waste Hauler/Disposal Arrangements	4
	Determine Site Set-Up Determine What Will Be Collected	;
		;
	Arrangements for Handling Sharps Arrangements for Handling Thermometers	;
	Equipment and Supplies	,
	Advertising	,
	Data Collection	-
	During Your Event, A Collection Event in Detail	,
	Staff	
	Law Enforcement	8, 9
	Pharmacist	,
	Greeter	10
	Data Entry	10
	Event Organizer/Supervisor	10
	Hazardous Waste Company	11
	Signage	11
	Personal Protective Equipment and Practices	11
	Packing Medications for Disposal	12
	Packing of Non-controlled substances	12
	Packing of Controlled Substances	12
	Items for the Trash or Recycling	13
	Number and Size of Containers	13
IV	Conclusion	13
TAB	LES	
	Table 1: Example of controlled substance inventory	7
	Table 2: Number of containers to be delivered	13

Introduction

The Northeast Recycling Council, Inc. (NERC), a non-profit organization that focuses on issues related to solid waste, recycling, and the decreased toxicity of the solid waste stream, was awarded a grant by the Community Pharmacy Foundation to work with community pharmacies to hold pilot unwanted medication collections, and then to develop best management practices and guidance for how to safely and legally hold such events.

The need for such a project arose from the growing scientific evidence that over-the-counter and prescription medications are finding their way into water supplies. While excretion of medication and its metabolites is certainly the primary source of this contamination, disposing of unwanted medications down the drain, down the toilet, or in the trash has added to this problem.

This project sought to develop and test strategies to ensure that unwanted medications are collected and destroyed in an environmental sound and legal manner, and prevented from being stolen or used by unauthorized persons - also known as "diversion."

Throughout this document, we refer to the materials being collected as "medication." The word "drug" is avoided. In addition, every effort has been made to make clear that the medications are "destroyed" and not "recycled."

A Quick Guide to Collections

This document is a streamlined version of a much more comprehensive companion document, entitled Best Management Practices for Holding Unwanted Medication Collections: A Legal & Safe Approach for Community Pharmacies. Please refer to that document for detail about the legal requirements, case studies, examples of documents, and more. This Quick Guide is intended as a "punch list" of sorts; describing the bare minimum action steps necessary for holding a successful and legal collection event.

A Legal Strategy for Collecting Unwanted Medications

While there are many steps for holding a successful legal and safe collection event, essential to the program are:

- Law enforcement participation, including taking possession of controlled substances, and assuming responsibility for their destruction.
- Segregation of controlled substances from non-controlled substances.
- Appropriate destruction of all medications.

Controlled substances are segregated from non-controlled substances

In order to ensure that controlled substances are secure from the risk of diversion and are handled as required by USDEA and state law, all controlled substances pass from the consumer to the custody of law enforcement. The collection strategy presented in this Quick Guide relies upon the expertise of a pharmacist to determine which medications are regulated as controlled substances and to direct law enforcement to take custody of these materials.

State Legal Requirements

A myriad of state laws and regulations have the potential to affect whether and how to hold unwanted medication collections. In addition to hazardous waste laws, state specific requirements may include:

- Board of Pharmacy regulations and laws
- Controlled substance laws and agencies
- Public safety laws about law enforcement being in possession of non-criminal evidence
- Privacy laws

It is essential that these be addressed in advance of holding a collection.

Board of Pharmacy

Each state Board of Pharmacy regulates the licensing of pharmacists and the handling and dispensing of prescription medications. Before holding a collection event, it is essential to obtain the authorization of the Board of Pharmacv.

Controlled substance laws and agencies

Many states have agencies specifically charged with the oversight of the movement and handling of controlled substances.1 Advance permission from such agencies must be secured.

Public safety laws

Some states have laws that prohibit law enforcement from being in possession of non-criminal evidence. It will be at the discretion of law enforcement whether to participate in the event and whether to take physical, permanent responsibility for the controlled substances. Therefore it is imperative to secure their voluntary participation.

Privacy laws

While the federal privacy law, the USDHHS Health Insurance Portability and Accountability Act of 1996 (HIPAA), generally does not apply in the case of unwanted medication collections, state laws may be more stringent. If this is the case, ensure that all personal information is marked off of prescription containers before being handed to either the pharmacist or law enforcement official, while being sure that the medication information remains legible.

III Holding a Collection Event

What happens at a collection event?

- Individuals come in with their medications.
- They drop off their medications and leave. You may have a few survey questions for them before they leave.
- The pharmacist sorts and categorizes the medications as controlled and non-controlled items. The non-controlled medications are put in hazardous waste containers. The controlled substances are inventoried and given to law enforcement. Any medications not in the original containers are identified. Any unknowns are managed as a controlled substance.
- At the end of the event, the controlled substance inventory is printed out and signed by the law enforcement official and the pharmacist.
- At the end of the event, the hazardous waste hauler removes all of the non-controlled substances and transports it to a hazardous waste incinerator.
- After the hazardous waste hauler has left, the law enforcement official takes the controlled substances to the station and puts them in the evidence storage locker, awaiting destruction.

The overriding goals of any unwanted medication collection must be to:

- Be in full compliance with federal and state laws.
- Avoid illegal diversion of the medications.
- Ensure the safe and environmentally sound destruction of the medications.

Your Collection Event

A Quick Guide

Before Your Event

A Guide for the Event Organizer



Pre-Event

The event organizer has a number of responsibilities in advance of the collection.

- Ensure that all relevant state agencies have agreed to the procedures to be used
- Budget
- 3. Site selection
- 4. Agreement of law enforcement to participate
- 5. Arrange for staffing
- Hazardous waste hauler/disposal arrangements
- 7. Determine site set-up
- Determine what will be collected
- 9. Arrangements for handling sharps
- 10. Arrangements for handling thermometers
- Secure equipment and supplies
- Advertise/press release
- Arrange for adequate signage

State Agency Authorization

It is essential to ensure that all relevant state agencies and programs have authorized the collection and its procedures.

Budget

While the final cost of this new program is hard to predict, examples can be found in the Case Studies in the Best Management Practices for Holding Unwanted Medication Collections: A Legal & Safe Approach for Community Pharmacies. We strongly recommend that this service be provided at no cost to the public. Particularly with the high cost of purchasing medications, being charged a disposal fee is likely to be a disincentive to participation.

Site Selection

Where the collection is held has only one pre-requisite: indoor with electricity. If the collection will take place in a community pharmacy the collection should not take place behind the counter. Ensure that the State Drug Control Agency and Board of Pharmacy have approved the site configuration.

Agreement of Law Enforcement

An absolute pre-requisite to holding a collection is the agreement of law enforcement to participate and provide all of the essential services, including taking physical possession of the controlled substances and being responsible for its destruction. Without this, the collection cannot take place. The request for assistance should be in writing, and there should also be a follow-up memo sent to confirm the collection specifics and duties of the officer.

The number of individuals required in each role will be a function of the potential size of the event. We recommend the following staffing levels:

- Pharmacist(s) 2
- Pharmacy students 3
- Pharmacy Technicians 2

For large urban areas, it would be worthwhile considering a higher level of staffing.

Be sure that the pharmacist(s) are licensed and in good standing with the state Board of Pharmacy. If pharmacy students will participate, ensure that a licensed pharmacist in good standing will be on site and will act as the pharmacist supervisor.

- Greeters 2
- Law Enforcement 1
- Data entry same as number of pharmacists

For each pharmacist that is inventorying medications, a dedicated data entry person is required, along with a laptop.

It may take several weeks to arrange for law enforcement and pharmacists. Do not advertise a program until arrangements for these essential participants have been finalized.

Hazardous Waste Hauler/Disposal Arrangements

Advance arrangements with the hazardous waste hauler include:

- 1. Agreement on fee schedule.
- 2. Agreement that all materials will be sent for hazardous waste incineration.
- 3. Guidance on packing of materials (e.g., can mercury-containing medications go into the same container as the other medications?)
- 4. Decision whether to ship under hazardous waste manifest.
- 5. Proof of insurance.
- 6. Size and number of containers to be provided.
- 7. Requirements relative to inventorying of medications.
- 8. When and where to deliver the containers.
- 9. Who will pay for their services.
- 10. Sign a contract.
- 11. Determine if an EPA ID number is required, and if yes, who will obtain it.
- 12. Schedule pick-up for no later than one hour after the close of the event. Medications should never be stored on site, or even off-site. This presents an extremely unsafe situation with a grave potential for diversion.
- 13. Arrange for certificate(s) of destruction.
- 14. Contact phone numbers for day of event.
- 15. Provide directions to container drop-off and collection site(s).

It is the responsibility of the event organizer to make these arrangements and ensure that all terms are satisfactorily fulfilled.

Determine Site Set-Up

Placement of the workstation, law enforcement, and supplies is an important component of the program design. Key considerations include:

- Law enforcement is positioned so that no one can sneak up behind them.
- Law enforcement can see the collection and movement of the medications from the public to the workstation (this may require more than one law enforcement official).
- Indoors.
- Electricity.
- Room for the hazardous waste containers (in use and awaiting use).
- Room for workstations.
- Not behind the pharmacy counter.

Each pharmacist, student, technician, data entry person, and law enforcement official will need a chair. The pharmacist, students, and technicians will require a six-foot table for every two people. Depending on the size of the event, the data entry person may be able to share that table or may require an additional four-foot table. There should be extra chairs for greeters. In addition, there needs to be room for a hazardous waste drum next to each pharmacist or data entry person, as well as recycling and trash containers.

Determine What Will Be Collected

At a minimum, all prescription medications should be accepted. This includes veterinary. It is recommended to accept over-the-counter medications. If the program is fully equipped for sharps and thermometers, these can be included in the event.

Arrangements for Handling Sharps

Whether sharps are invited into the collection or not you must be equipped to handle them. Many companies offer mail-back service for sharps. Be sure to have the collection containers on site.

Arrangements for Handling Thermometers

Even if the advertising says "do not bring thermometers," be prepared to receive them by having a container dedicated to collecting these materials - a glass jar with a tight fitting lid or a five-gallon pail with some kitty litter in the bottom is ideal – and knowing how you'll have them recycled.

Essential equipment and supplies are:

- Tools for counting medications. Electronic counting devices are preferred (one for each pharmacist).
- Reference documents for researching unknown tablets² (e.g., book, CD format, online access).
- Tables.
- Chairs.
- Hazardous waste containers. These need to be on-site the day before the collection.
- Containers for trash, recycling containers for cardboard, paperboard, and plastic bags.
- Ziploc® bags (One-gallon with external slide mechanism and lunch bag size).
- Laptop(s) (With spreadsheet software and compatible with printer one for each pharmacist).
- Back-up memory (e.g. memory stick, CD).
- Printer (Compatible with laptop. Be sure there is enough ink and paper).
- Extension cords, grounded.
- Pens.
- Paper.
- Survey forms.
- Clipboard(s).
- Indelible markers (such as SHARPIE®).
- Packing tape.
- Drinking water.
- Toilet and sink.
- Instant hand cleaner/sanitizer.
- Phone.
- Sharps kits.

Advertising

In addition to promoting the collection event, advertising serves the purpose of educating the public about the need to properly manage and dispose of unwanted medications. It is important to provide information about the specific collection opportunity, as well as to provide basic education to avoid improper disposal.

Advertising may include newspaper ads, fliers (posted at municipal buildings and pharmacies), press releases, and community cable announcements.

Critical Information for the Event

- Medications stay in their original containers.
- Personal information can be crossed out, but keep information about medication legible.
- Do not remove labels.
- No sharps.
- No thermometers.
- No medical waste.
- Medications will be destroyed.
- No refunds and medications will not be resold or used.
- Where, when, hours of operation, and who to contact for more information.
- No cost to participate.

²There are several resources available, but perhaps the most comprehensive is "Ident-a-Drug Reference," written by Jeff M. Jellin, PharmD, published by the Therapeutic Research Center. It is available in paperback, CD, PDA, and online.

The amount and type of data collected will be a function of how you intend to use the data. An inventory of the controlled substances received is required. Federal law dictates that an inventory of the type, dosage, and amount of controlled substances accompany it through final destruction. The point of collection is the moment at which that data should be recorded. Below, Table 2, is a sample controlled substance inventory. When accounting for the amount of material, be sure to indicate if it is in a form other than a tablet, and what that form is. Unknowns should include a brief description of the item.

Table 1: Example of controlled substance inventory

Federally Controlled Substances Receive	d						
Date:							
Received by: Name & signature of law enforcement							
Witnessed by: Name & signature of pharmacist							
DRUG	DOSAGE	AMOUNT					
Acetaminophen/codeine	#3	62 tablets					
Alprazolam	0.25 mg	30 tablets					
Ambien™	10 mg	198 tablets					
Clonazepam	.5 mg	177 tablets					
Codeine sulphate	30 mg	49 tablets					
Concerta™	27 mg	27 tablets					
Darvocet [™]	100 mg	6 tablets					
Diazepam	5 mg	2 tablets					
Duragesic [™]	75 mcg	1 patch					
Endodan™	4.88/325	42 tablets					
Hydrocodone-acetaminophen	650 mg	13 tablets					
Hydrocodone/apap	5/500	120 tablets					
Robitussin™ with codeine liquid		230 ml					
Unknown		4 white oval tablets					

During Your Event

A Collection Event in Detail

Staff

There are certain staff requirements essential to the safe and legal conduct of an unwanted medication collection event:

- Law enforcement (on- and off-site)
- 2. Pharmacist and assistants
- 3. Greeter
- 4. Data entry
- 5. Event organizer/supervisor
- Hazardous waste company

Law Enforcement

Responsibilities

- Provide security
- Take possession of the controlled substances
- Transport the controlled substances to the agency's evidence storage locker and take whatever steps are necessary to store the medications in that locker.
- Ensure the witnessed destruction of the controlled substances.

The law enforcement official must be in uniform.



During the collection



- The pharmacist will determine if a medication is a controlled substance. If it is a controlled substance (or an 'unknown'), the law enforcement official will be alerted. (S)he should watch the physical inventory that will be conducted by the pharmacist and the return of the medications to the original container.
- After the inventory is completed, the controlled substance will be handed to the law enforcement official. A container for collecting the controlled substances will be provided, for example a covered five-gallon pail.
- Once the inventory is completed, the controlled substances must stay in the sole physical possession of law enforcement throughout the collection and until placed in the evidence storage locker or taken for destruction. At no time may the container of medications leave the physical possession of law enforcement.
- At the end of the event, an inventory of controlled substances will be printed out. The pharmacist will sign as a witness that the inventory accurately represents what went into the custody of law enforcement. The law enforcement official will sign as well, verifying that (s)he received these materials. An original of the signed and witnessed inventory will be provided to accompany the controlled substances back to the evidence storage locker. Depending on the preference of the law enforcement agency, the inventory may be physically attached to the container of controlled substances, placed inside it, or carried separately. It is suggested that the inventory be printed and signed in duplicate, and that the community pharmacy retain a copy for its records.
- Depending on the type of container the law enforcement agency chooses for transporting to and storing the controlled substances in the evidence storage locker, the law enforcement official may also be required to initial over a seal securing the container of medications for example if a Ziploc[®] bag is used.
- For security sake, law enforcement should stay on site until the container(s) of non-controlled substances are closed, labeled, and placed in the hazardous waste hauler's truck; effectively removing them from the site and public access.

It is essential that the law enforcement official be in a position to have visual contact with the individuals dropping off the medications and the point of drop-off.

Off-site, after the collection

- Maintain secured, locked possession of controlled substances along with USDEA required inventory.
- Arrange for and ensure USDEA authorized witnessed destruction of controlled substances.

Timing: Law enforcement should be on-site at least one-half hour before the event begins and should remain on-site until the hazardous waste hauler has completed all of its paperwork, closed the containers, and put the containers on the hazardous waste truck. At that time, the law enforcement official should return to their office, complete whatever paperwork is necessary, and secure the controlled substances in the evidence storage locker or take it directly for witnessed destruction.

Pharmacist

The pharmacist must be licensed and in good standing in the state

The pharmacist's primary responsibilities during the collection are to:



- Determine if a medication is a controlled substance.
- Make every reasonable effort to identify unknown or non-labeled medications. This will include using reference materials and may include calling poison control or other reference sources. If it is not possible to identify the medication, the USDEA has indicated that it should be handled as a controlled substance.
- If it is a controlled substance, alert the law enforcement official as well as the person entering the inventory into the computer.
- Conduct a physical inventory of the controlled substance. Provide the medication name, dosage, and amount of material to the data entry person. The information will be entered into the computer by the data entry person. If it the medication remains 'unknown,' that should be listed in the inventory as well and a separate bag or other container created that is so labeled.
- Put medications back in the original container and hand the controlled substances to the law enforcement official.
- Put non-controlled substances in their original containers in the hazardous waste container.

Staffing suggestion



Students and pharmacy technicians can help with the inventory of non-controlled substances, with identifying unknowns, and in providing other support.

We recommend the following staffing levels:

- Pharmacist(s) 2
- Pharmacy students 3
- Pharmacy Technicians 2.

For large urban areas, it would be worthwhile considering a higher level of staffing.

At the end of the event

- An inventory of controlled substances will be printed out. The pharmacist will sign as a witness that the inventory accurately represents what went into the custody of law enforcement. The law enforcement official will also sign, verifying that (s)he received these materials. An original of the signed and witnessed inventory will be provided to the pharmacist for his/her records.
- The hazardous waste hauler removes all non-controlled substances.

Gloves must be worn at all times when handling/counting medications.

Timing: The pharmacist should be on-site at least one-half hour before the event. The pharmacist should assume that (s)he will have to be on-site for at least one hour after the event closes. There may be remaining inventory work to be done, the controlled substance inventory must be completed and signed, the hazardous waste company paperwork is completed, and supplies packed.

Responsibilities

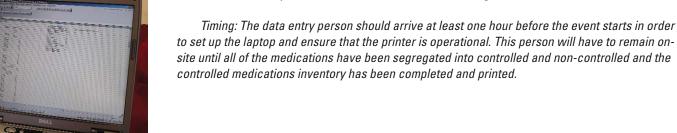
- Direct people to the collection and answer questions.
- If the collection is not accepting sharps, ask participants if they are bringing any needles or sharps. If they say yes, explain that the only needles that can be accepted are ones that are part of a drug delivery system; for example EpiPens™ and Lovenox™. Other needles need to be taken back with the customer.
- Provide pens for obscuring personal information, as desired.
- Optional: Conduct survey.

Timing: Greeters should be on-site at least one-half hour before the event begins. The greeter is likely to be able to leave very shortly after the scheduled end of the event.

Data Entry

Responsibilities

- Enter inventory of medications into computer.
 - Should back-up data entry every few minutes on memory stick or other external memory device.
- Print out inventory of controlled substances for witnessing.



Event Organizer/Supervisor

Responsibilities

- Arrange for the hazardous waste company (including securing a contract, pricing agreement, arranging for containers to be delivered in advance of event, etc.)
- Arrange for staffing.
- Provide all supplies and equipment.
- Set up site.
- Instruct each staff person about responsibilities and procedures.
- Ensure that all operations are running smoothly and that personal protective equipment is being used.
- Ensure that law enforcement does not leave site until all non-controlled medications have been packed and placed on the hazardous waste truck.
- Maintain records, including copy of witnessed controlled substance inventory.
- Answer operational questions as they arise.
- Ensure that recycling and trash are taken care of.
- Follow-up with hazardous waste company and law enforcement agency to ensure destruction.

Timing: The site supervisor should arrive at least one hour before the start of the event. The site supervisor will have to remain on-site until all of the medications have been segregated into controlled and non-controlled, the controlled medications inventory completed and signed, the controlled substances packaged for transportation by law enforcement, the hazardous waste company has come and gone, and the site is entirely cleaned-up and put back together. Depending on the size of the event, this will take approximately two hours after the event closes.

Responsibilities



- Provide drums/containers for collection of non-controlled substances.
- Seal containers, prepare paperwork, and transport non-controlled substances for hazardous waste destruction.
- Remove medications on the same day as the event.
- Provide tracking paperwork from point of collection through destruction.
- Incinerate non-controlled substances in licensed hazardous waste incinerator.
- Provide certificate of destruction.

Timing: The hazardous waste company needs to drop-off containers at least one day before the event. The site supervisor should instruct the hazardous waste company, at least one week in advance, of the number and size of containers to be delivered.

The hazardous waste company should be scheduled to return for pick-up of the noncontrolled medications and unused containers one hour after the scheduled close of the event. Medications should never be stored on-site. It creates too great of a risk of theft.

Entering into a contract with a hazardous waste hauler is essential

Before entering into a contract with a hazardous waste hauler be sure of the following:

- Licensed to collect and transport hazardous waste in the state in which the collection will take
- That the company is in good standing with the state environmental and transportation agencies.
- That it is able (and willing) to accept pharmaceuticals making clear that no controlled substances will be shipped with them.

Signage





Having signage on the day of the event that clearly identifies that a collection is taking place and where to go is important.

Personal Protective Equipment and Practices

Things to do

Everyone working at the event who may contact the containers of medications must wear gloves (latex or non-latex) at all times when handling this material. Wearing facemasks should be considered, especially for the pharmacist who is doing the physical inventory of the medications.

Drinking or eating directly in the area that the medications are being collected and handled should be avoided - and be sure to take off the gloves before handling any food or beverages. Used gloves should be discarded in the hazardous waste container and replaced with new gloves after any breaks.

Controlled and non-controlled medications are packed separately. In both instances the medications are packed in their original containers.

Packing of Non-controlled Substances

Recommendations

There should be no loose pills in the hazardous waste container. Non-controlled substances, in their original containers, are placed in a hazardous waste drum or container for destruction. Sometimes pills will be brought in outside of the original container. It is important that the pharmacist (or other staff) make a best faith effort to identify the medication. This will include using reference materials. Once identified, put the medication in a Ziploc® bag and mark the bag with an indelible marker indicating the type of medication and dosage. If the tablets remain unidentifiable, mark the bag "unknown" and manage it as a controlled substance.

It is possible to save space by removing unnecessary packaging, specifically pressboard outer-packaging. This is commonly found around blister packaging and around unopened bottles of over-the-counter medications.

While the majority of non-controlled substances will go in one container, several types must be separated. Be sure to clarify in advance with the hazardous waste hauler what their packing requirements are as they relate to how the materials must be segregated. The following categories of medications are likely to require separate packing (in 5-gallon pails):

- Items under pressure,
- Needle delivery medications,
- Certain mercury-containing medications, and
- Nitro-based medications.

Items under pressure: Items under pressure are, most typically, inhalers. Use a five-gallon pail because it is very unlikely that you will receive more than this and smaller containers are generally not available. Remove the plastic housing from the inhalers in order to ship less material to the hazardous waste company. If pricing is by weight or volume this can help control costs.

Needle delivery medications: Medications such as EpiPen[™] and Lovenox[™] can usually be accepted by the hazardous waste hauler, but arrangements need to be made in advance.

While sharps should be expressly excluded from the collection, inevitably they come in. Be prepared by having sharps containers that can be mailed back to a sharps management company after the event.

Have the greeters ask people if they have brought needles before accepting their medications. This is simple strategy to prevent the sharps from coming into the collection.

Mercury-containing medications: Mercury-based antiseptics, such as Mercurochrome, may need to be packed separately. Mercury-containing preservatives, a more common form of mercury in medications, such as Thimerosal, do not require separate handling and can be packed with the rest of the non-controlled substances.

Although advertising for programs should specifically state not to bring thermometers, one or two will probably come in. They can be shipped with the mercury-containing medications, but preferably, the thermometers will be diverted to a mercury-recycling program.

Nitro-based medications: Some hazardous waste companies may require that nitro-based medications be packed separately.

Packing of Controlled Substances

The controlled substances remain in their original containers. There can be no loose pills. There are no set rules for how the controlled substances should be packed or transported to the evidence storage locker. This is at the discretion of the law enforcement agency. What is mandatory is that the signed inventory accompanies the medications and that it stays with them in the evidence storage locker and through the point of destruction.

Items for the Trash or Recycling

Inevitably, someone will bring materials that you might decide to put in the trash. For example, sun block, lipstick, deodorant, or skin cream. You will also throw out the rigid plastic housing from around inhalers.

Possible recyclables that will be generated include the cardboard over-packing from medications that can be removed around blister packs, plastic grocery bags, and cardboard boxes. Otherwise, this will be part of the solid waste stream.

Number and Size of Containers

Too many rather than too few should be the approach to how many containers to have delivered by the hazardous waste hauler in advance of the event. And, be sure that in the contract with the hauler that there is no cost for empty containers. They will remove the unused ones along with the full ones at the end of the event. While it is impossible to predict exactly how much material will be received, we recommend the following formula for number and size of containers to have delivered:

Table 2: Number of containers to be delivered

Population of Service Area	55 gallon	30 gallon	16 gallon	5 gallon
< 100,000	6	5	3	8
< 500,000	10	5	5	10
> 500,000	15	10	8	15

VI Conclusion

There is growing interest in and demand for environmentally responsible and legal ways to dispose of unwanted medications. Holding an unwanted medication collection requires careful compliance with state and federal legal requirements, and this can be daunting. This Quick Guide provides an abbreviated roadmap for conducting such an event. For more complete information, including examples of documents, case studies, and data on costs, see the complete Guidance Document, entitled Best Management Practices for Holding Unwanted Medication Collections: A Legal & Safe Approach for Community Pharmacies.