

## **Case Study - Ukrop's Super Markets**

**Richmond, Virginia**

**Tuesday, September 25, 2007**

**Host:** Ukrop's Super Markets. Ukrop's is a family owned grocery store chain with 30 stores in central Virginia. Twenty-three (24) of the stores have pharmacies.

**Management Contact:** Director of Pharmacy and Health Services

**Collection Site:** Richmond, Virginia – in front of Wellness Center adjacent to pharmacy

**Collection Hours:** 10 – 2

### **Participation**

- 17 participants
- Volume: 14.5 gallons non-controlled, 2 gallons controlled
- Average of 0.94 gallons per participant
- 13% of items received were controlled

Most people arrived between 11 and 12. One person had dropped off a bag of medications the previous week at a different store. The pharmacist brought the materials over for processing.

### **Background:**

The Northeast Recycling Council, Inc. (NERC), through a Community Pharmacy Foundation grant, worked closely with the Ukrop's Director of Pharmacy (John Beckner) to develop and implement a one-day unwanted medication collection.

Discussions about the possibility of holding an unwanted medication collection first began with Ukrop's in March 2007, after a presentation at the Virginia Board of Pharmacy, at which Mr. Beckner expressed interest in such an event.

Mr. Beckner accepted NERC's offer to take the lead in organizing the event, including identifying a hazardous waste hauler and being the site supervisor/coordinator during the collection.

The Brook Run Richmond store was selected because it was centrally located, had an elderly demographic, good store traffic, and a store layout that was conducive to holding such an event. A Tuesday was selected because of the desire to target the senior population and is one of the busier days of the week. It was determined to hold the collection in September because of the desire to avoid the flu clinic season, which begins in October.

NERC's sole role was to provide organizational and administrative support. This assistance was provided through a Community Pharmacy Foundation grant. No direct

financial support for the collection was provided. Thus, all expenses were the responsibility of Ukrop's.

## Planning

Timeline	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7
Decision/commitment to hold collection							
Site and date selection							
Site visit with pharmacist and store manager to determine equipment, supply, storage, signage							
Secure agreement of law enforcement to participate							
Identify hazardous waste hauler, negotiate terms, sign contract							
Develop marketing plan							
Implement marketing plan							
Collection event							

## Site Visit

NERC staff visited the store in the company of the Pharmacy Director and the Manager of Loss Prevention. The grocery store manager was not available, but was assured that he was supportive of the event and would provide the staffing and equipment needed. The site presented a challenge since there was no "back" to the area being proposed – to the right of the pharmacy counter, adjacent to the Wellness Center, and abutting the bakery.



Previous conversations with the store manager had suggested the construction of a barrier perpendicular to the Wellness Center, thereby creating a space for the collection to take place. A scheme was then developed about how the collection site could be configured, based on the construction of this barrier. Part of the plan included having the Wellness Center door open. In this way, more floor space would become available while providing access to electricity, access to the internet for research of unknown tablets, and

space for container storage.

During the visit, we also reviewed the supplies and equipment that would be needed – from tables and chairs to signs and plastic bags – that would be provided by the store manager on the day of the event. It was also agreed that grocery store staff would be available to help set up and take down the collection site, as well as to move containers

during the event should that be necessary. In addition, an assessment was made about where in the storeroom the empty hazardous waste drums would be stored prior to the event.

A second site visit took place the day before the collection at which time the store manager met with the NERC representative and the Pharmacy Director. Detailed discussions about the barrier requirements, as well as the equipment that would be needed, were held. It was important that the barrier be solid and tall enough that someone could not reach over it. We also needed to be careful about not going too far into the general store traffic flow – the collection was being located in front of the bakery. It was determined that an “L” configuration of the tables would best suit this need. The barrier was to be erected overnight.

The containers that had been delivered by the hazardous waste company were also examined. It was discovered that far fewer than had been ordered were delivered and that they were of a type (metal) that would require tools to open. This too had been addressed in advance with the hazardous waste hauler. A call to the hauler quickly resulted in containers being brought over.

### **Law Enforcement**

The Ukrop’s Manager of Loss Prevention arranged with the Henrico County Police to provide staffing at the collection and to take custody of the controlled substances. The overtime charge for the County Police was \$30/hour.

### **Hazardous Waste Hauler**

Ukrop’s did not have an ongoing relationship with a hazardous waste hauler. As a result, NERC was asked to identify a hazardous waste hauler to provide the necessary services. Three companies were contacted and asked to provide quotes. NERC negotiated with the two companies over their pricing and the terms of services. A comparison of the pricing structures was provided to Ukrop’s along with a recommendation that Veolia Environmental Services be selected. Ukrop’s accepted this recommendation and signed a contract with Veolia.

The pricing agreement was as follows:

<b>General Medications</b>	
55 gallon	\$330
30 gallon	\$265
16 gallon	\$185
5 gallon	\$165
<b>Under Pressure 5 gallon</b>	\$115
<b>Mercury based 5 gallon</b>	\$265
<b>Nitro compounds 5 gallon</b>	\$165
<b>Epi-pens 5 gallon</b>	\$165
<b>Pick-up/Transportation</b>	\$220
<b>Fuel surcharge (recovery fee)</b>	--

Ultimately, a low turnout resulted in 14.5 gallons of material being shipped for hazardous waste destruction. The cost for the hazardous waste hauler was \$850. This averages as approximately \$59 per gallon and \$50 per participant.

Veolia required that a detailed inventory (printed) be provided for each container shipped so that it could ensure the hazardous waste profile of each. The inventory needed to provide the name of the medication and the container volume. Since most tablet containers do not indicate size, the pharmacist assigned drams to the containers when necessary. Sample of container inventory follows.

<b>DRUG</b>	<b>Unit of measure drams unless otherwise stated CONTAINER VOLUME</b>
Magnesium	40
Ibuprofen	60
chlo-amine	4 tabs
prevacid	30
altace	40
warfarin sodium	16
warfarin	40
avapro	30
altace	40
toprol xl	40
stool softener	29
warfarin sodium	16
protonix	20
atropine	15 ml
atropine	15 ml
prevacid	5 tabs
caltrate plus	39 tabs
Prilosec	39 tabs
aspirin	30
Ibuprofen	13
tussin cf	4 fl oz
nexium	45 tabs

In addition, Veolia required that the following materials be packed separately:

- Under pressure (such as inhalers)
- Mercury based (such as mercuriform)
- Nitro compounds (such as nitroglycerin)
- Epi-pens
- Other sharps containing medications

By pre-arrangement, containers were delivered the day before the collection and stored in the grocery storeroom. The following containers were delivered:

- 5 – 55 gallon (fiberboard)
- 5 – 30 gallon (fiberboard)
- 5 – 20 gallon (fiberboard)
- 5 – 5 gallon (plastic)

On the morning of the event, grocery store staff brought most of the containers to the pharmacy area for use during the collection. Should more containers have been needed, grocery staff would have been asked to bring the additional containers from the storage area.

The hazardous waste hauler was scheduled to pick-up the medications at 2:30. They arrived on time, but it took almost two hours for the paperwork to be completed for four containers. The driver reviewed the inventories for each of the containers and determined that segregating one of the medications into a separate container would be necessary due to its chemical characteristics and because it was in a sharp. The sharps required paperwork in addition to that for “simple” hazardous waste.

The store manager signed the manifests and other documents as the representative of Ukrop’s. The driver was not able to take all of the empty containers with him because he had a small truck and arranged to return before the weekend to pick them up. The store manager agreed to this.

## Marketing

A meeting was held with a member of the Ukrop’s public relations team to develop a marketing strategy for the collection. In support of this effort, NERC prepared several draft marketing pieces for Ukrop’s, but most were not used. The marketing pieces that were prepared in draft were:

- Press release
- Display advertisement (paid newspaper advertisement)
- Sign for store
- Counter-top sign
- Flier/bag stuffer

NERC, based on previous experience, had proposed the following marketing strategy:

- 1) A press release be distributed to media outlets at least two weeks before the event.



- 2) A newspaper advertisement be placed local papers, at least three times in the week preceding the event (Sunday, Wednesday and Saturday – the day of the event)
- 3) Post a large color sign made at the entrance to the store.
- 4) Distribute bag stuffers for all purchases in the Brook Run store, as well as stores in the area, for at least one week before the event.
- 5) Post an 8.5 x 11 black and white desktop sign at the pharmacy counter publicizing the event.

The Ukrop's public relations representative suggested that Ukrop's post an announcement on their Web site, use their email "blast" system, their store circular, and pursue radio and television promotion.

Ukrop's:

1. Posted color signs at the entrance to several stores in the area one week before the event,
2. Posted a color counter-top sign at the pharmacy in all Richmond area stores one week before the event.
3. Prepared and distributed ¼ page bag stuffer that was put in pharmacy purchases for the two weeks prior to the event in all Richmond area pharmacies.
4. Put an announcement in the store circular the week before.
5. Distributed a media alert about a week ahead of the collection.



There were no contacts from the press in advance of the event. However, on the morning of the collection a television crew arrived and did a short spot on the noon news, which resulted in a few individuals bringing medications to the collection. In addition, another local television station came over, did a much more in-depth interview, and ran a piece about the collection on the evening news that night.

During the collection, an in-store announcement was made several times over the public address system. The intention was to make customers aware of the event and to encourage them to return to the store with unwanted medications.

"Today, from 10 – 2, Ukrop's is hosting a free collection for unwanted medications. Stop by the pharmacy with medications you no longer need or want and they will be safely destroyed."

## Site Set-up



NERC staff arrived at the store at 7:30 a.m. to set-up the collection site. As promised, a barrier had been constructed overnight, and tables and chairs were in place. Grocery store staff brought the hazardous waste containers out and provided containers and boxes for recycling, trash, and controlled substance collection, as well as the other miscellaneous supplies necessary for the collection. NERC staff set up the site alone. It took about 45 minutes.

An unanticipated problem arose, which was the inability to open the Wellness Center Door. Only the pharmacy department staff had a key and they did not arrive until 9. At which time it was discovered that the door literally would not stay open and so lost access to that room. In addition, an electrical cord could not be run under the door. A long extension cord had to be run from behind the pharmacy counter, across its top, and then down across the floor.



At 9:30 a Ukrop's IT person arrived with a printer and cables to be connected to the laptop provided by NERC. At that time, it was also learned that the computer in the Wellness Center, which had been intended to be used to research unknown medications via the internet, was not operating. The IT person went to Ukrop's corporate offices, came back with a laptop with in-store wireless capability, and set it up as well.



When the pharmacist arrived, she brought with her an electric pill counter, which was a valuable addition to the collection. However, there were now more electrical devices than outlets on the extension cord and the IT person had to find an adaptor (two laptops, printer, and electric pill counter).

A poster was moved from the front door of the store to an easel near the collection area to help orient people to the activity.

### Collection Staffing

<b>Staff</b>	<b>Cost Paid By</b>	<b>Time On-Site</b>
Pharmacist	Ukrop's	8:30 – 2:00
Policeman	Ukrop's	9:30 - 3
Pharmacy students (3)	Volunteers	9:30 - 2
Data entry/site supervisor	Community Pharmacy Foundation grant	7:30 – 4:30
Loss Prevention Specialist/ Greeter	Ukrop's	9:45 - 2
IT Specialist	Ukrop's	9:30 – 10:30

In addition, grocery store management and personnel assisted with setting up and taking apart the collection site.

There were two primary staffing components: NERC staff time in organizing and holding the event, and Ukrop's staff in supporting the project development and participating in the event. In addition, there was staff from the Henrico County Police, and pharmacy students from the University of Virginia School of Pharmacy. Mr. Beckner arranged for the student participation.

NERC staff time was covered by a grant from the Community Pharmacy Foundation. The only staffing that had an out-of-pocket expense was for the police.

#### **Personal Information/Prescription Labels:**

In planning for the event, Ukrop's determined that personal information on the unwanted medication containers would be crossed out by Ukrop's in two circumstances:

- If empty containers came in that were then to be put in the trash, and
- If cardboard that is removed from a medication has a prescription label on it.

Such cardboard would be shredded pre-disposal.

However, customers were provided indelible markers for use if they wanted to cross out their name on the prescription bottle prior to leaving it at the collection.

#### **Sharps & Thermometers**

Because of their flu clinics, Ukrop's has an ongoing sharps management program and therefore decided to accept sharps at the collection. A number of individuals brought only sharps and all mentioned how grateful they were for the opportunity. "You have no idea how hard it is to find a way to dispose of these in the Richmond area," was a common comment. More than five gallons of used sharps were received at the collection, as well as approximately 1.5 gallons of unused sharps.

## **Supplies Used**

- Counting tools – Electronic pill counter and two counting trays.
- Reference materials for researching unknown tablets – on-line via a laptop.
- Tables - 1 - 8' and 1 – 6' folding tables arranged in an “L.”
- Chairs - 6
- Hazardous waste containers –1 16-gallon fiberboard drum, 3 5-gallon plastic containers.
- Container for controlled substances – cardboard box
- Containers for trash and recycling –
  - 1 30-gallon pail with plastic liner for trash
  - 1 30-gallon pail with plastic liner for recycling cardboard and office paper (thin & corrugated)
  - 1 box for shredding of thin cardboard with prescription labels
  - 1 30-gallon pail with plastic liner for recycling plastic bags
- Gloves, non-latex disposable - 2 boxes of 50 (medium and large)
- Ziploc® bags - 25-lunch bag sized with external slides.
- Laptops – 2 with power cords.
- Extension cord.
- Surge protector with extra outlets (two laptops, electric pill counter, and printer)
- Back-up memory - Flash card.
- Printer and paper (20 pages).
- Pens – 5.
- Indelible markers - 3 SHARPIE®s.
- Surveys - 100 brought to site, used 17.
- Clipboards for surveys – 2.
- Drinking water - 1 dozen bottles.
- Toilet and sink.

- Instant hand cleaner/sanitizer – 1.
- Phone.
- Sharps container – 8.2 quarts (for unused sharps).

### **Incentives**

Ukrop's distributed coupons for \$5 off a new or transferred prescription. They will be able to track their usage due to a coupon code.

### **Lessons Learned**

1. Needed more promotion. Recommendations include:
  - Do press releases – one at least two weeks in advance and another approximately five days before the event.
  - Paid advertising
  - Promote in store circular
  - Promote in store magazine
  - Web site
  - Email blast announcements
2. Having pharmacy students assisting was a great addition. They helped to count non-controlled medications and to identify unknown tablets.
3. Fill small (16-gallon for example) hazardous waste containers and then transfer to larger hazardous waste containers, as necessary, for shipment.
4. The timing of the collection conflicted with other media buy commitments. In this instance, the upcoming flu clinics used all of the pharmacy advertising budget.
5. The collection would have been better timed for the middle of the month to take advantage of the in-store marketing opportunities. For example, the market magazine goes out the first of the month and an advertisement in there would be well-timed for a mid-month event.
7. The day of the week and store location were not ideal for high participation rates. Tuesday is a slow day for them, with Mondays, Fridays, and Saturdays being the big shopping days. The pharmacy's busiest days are Monday and Friday. In addition, this was not one of the high volume stores.

**Survey:** A survey was developed for Ukrop's by NERC. The greeter asked each participant the following questions and completed the survey for them.

The survey asked the following questions:

1. Town you live in:
2. Are you a regular Ukrop's Pharmacy customer? Yes \_\_\_\_\_ No \_\_\_\_\_
4. Are you a regular Ukrop's Grocery customer? Yes \_\_\_\_\_ No \_\_\_\_\_
5. How did you find out about this event?

The responses were as follows:

1. Town you live in:

Town	Distance (Miles) to Store	Percent of Participants
Henrico County	6	41%
Glen Allen	8	18%
Richmond	4	18%
Chesterfield	20	12%
Midlothian	16	6%
Hanover County	14	6%

2. Are you a regular Ukrop's Pharmacy customer?

Yes	No
53%	47%

3. Are you a regular Ukrop's Grocery customer? Yes – 100%

4. How did you find out about this event?

How Heard	Percent
Flier	37%
Store sign	21%
TV	21%
Newspaper	16%
Other	5%