These materials were developed under the auspices of CalRecycle for specific technical training presentations and are posted as reference documents for the local government and CalRecycle staff who attended this technical training series. They are not intended to stand alone as informational or training materials.

If you require assistance in obtaining access to the presentations, call the Public Affairs Office at (916) 341-6300 or Dennis Corcoran at (916) 341-6395.

No Drugs Down the Drain

in Santa Cruz County, California

SHARP SOLUTIONS

for home medicines

Safe, Free Disposal of Medicines and Sharps

SHARP SOLUTIONS
for home medicines

News Stories

Cleaning Up Medical Waste

Drugs in your drinking water?
Drugs in your swimming hole?
Is it a waste management problem?

By Lynn Rubinstein

Monday, September 15, 2008 SANTA CRUZ SENTINEL **A-5**

Health care dumps tons of drugs

Hospitals, long-term care facilities flush millions of pounds of unused pharmaceuticals down the drain

EDITOR'S NOTE: *The health care industry is contributing to the contamination of our nation's drinking water supplies by dumping tons of unused drugs annually, an Associated Press investigation finds. First of a two-part series.*

By JEFF DONN, MARTHA MENDOZA and JUSTIN PRITCHARD
THE ASSOCIATED PRESS

U.S. hospitals and long-term care facilities annually flush millions of pounds of unused pharmaceuticals

The mix is a scary one.

In tests of wastewater retrieved near other European hospitals and one in Davis County, Utah, scientists were able to link drug dumping to virulent antibiotic-resistant germs and genetic mutations that may promote cancers, according to scientific studies reviewed by the AP.

Researchers have focused on cell-poisoning anticancer drugs and fluoroquinolone class antibiotics, like anthrax fighter ciprofloxacin.

with the California Department of Toxic Substances Control, says not so fast. "I don't think we're encouraging incineration of anything. The public outcry would be so great."

The push for incineration hides an irony. Several decades ago, drug waste was routinely chucked into the trash and burned in hospital

- MSW Management, June 2007
- Santa Cruz Sentinel, September 15, 2008

SHARP SOLUTIONS
for home medicines

Partners

CITY OF SANTA CRUZ

THE COUNTY OF SANTA CRUZ · 1850 ·

CITY OF CAPITOLA · FOUNDED 1875 · INCORPORATED 1949

City of Watsonville

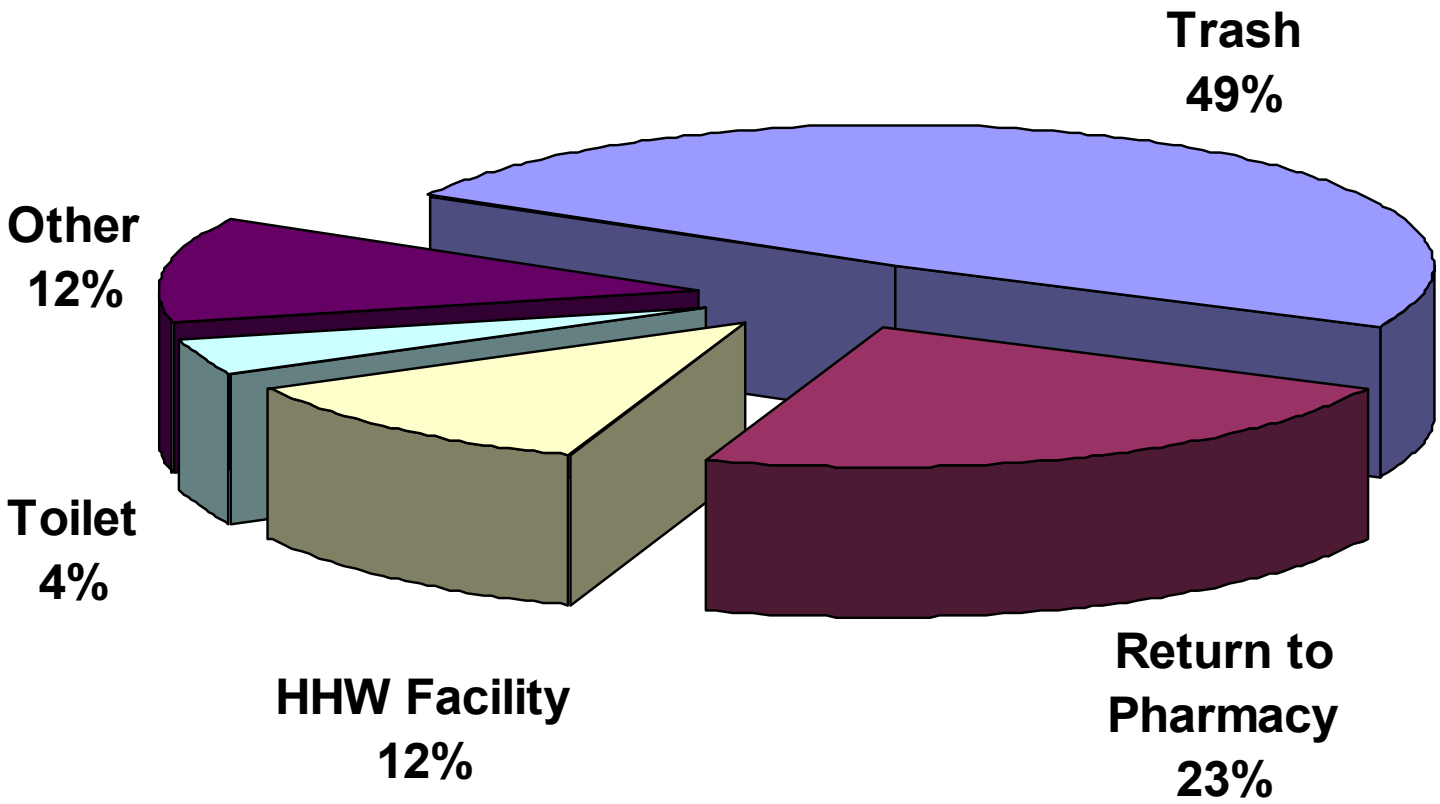
CITY · OF · SCOTTS · VALLEY · CALIFORNIA · 1966

All jurisdictions in Santa Cruz County

SHARP SOLUTIONS
for home medicines

Pre-Survey

"How do you dispose of your expired or unused pharmaceuticals?"



EcoCruz On-line poll, March 2008

SHARP SOLUTIONS
for home medicines

Public Outreach

Bilingual poster

SHARP SOLUTIONS
for home medicines

Public Outreach

Watsonville

Buena Vista Landfill HHW* 1231 Buena Vista Dr.	***Medicines and Sharps*** Tues, Wed & Sat, 7:30-3:30 454-2606
Longs 1966 Main St.	***Sharps only*** Open during store hours 722-1782
Longs 490 Rodriguez St.	***Sharps only*** Open during store hours 722-9454
Valle Verde Pharmacy 240 Green Valley Rd.	***Medicines and Sharps*** Open during store hours 728-2239
Walgreens 1810 Freedom Blvd.	***Medicines and Sharps*** Open during store hours 768-0183
Waste & Recycling Drop-off HHW* 320 Harvest Dr.	***Medicines and Sharps*** 2nd Sat, 9-3:30 768-3133
Watsonville Pharmacy 1433 Freedom Blvd.	***Medicines and Sharps*** Open during store hours 728-1818

HHW* = Household Hazardous Waste Facility

Your participation directly impacts our environment!

Call **454-2160**, or visit
www.sharpmedsolutions.org
for more details

BEGINNING SEPTEMBER 1, 2008, IT IS ILLEGAL TO DISCARD USED SHARPS IN THE GARBAGE OR RECYCLING, AND USED SHARPS MUST BE TRANSPORTED IN AN APPROVED SHARPS CONTAINER.

SHARP SOLUTIONS
for home medicines
IN SANTA CRUZ COUNTY

Your reference guide to local, free disposal sites for medicines and sharps

YES: Items Accepted
- Prescription medicines
- Over-the-counter medicines
- Syringes, pen needles, lancets (any sharps)
- Pet medicines
- Medicine samples
- Vitamins
- Medicated ointments & lotions
- Inhalers
- Liquid medicines in leakproof containers

NO: Items Not Accepted
- Controlled substances (narcotics)
- Personal care products
- Aerosol cans
- Bloody or infectious waste
- Thermometers
- IV bags
- Business waste
- Hydrogen peroxide
- Empty containers

Brochure
and
Location guide insert

SHARP SOLUTIONS
for home medicines

Public Outreach

Counter brochure display

Sharp Solutions - Safe, Free Disposal of Medicines and Sharps - Windows Internet Explorer

http://www.sharpmedsolutions.org/index.html

SHARP SOLUTIONS
for home medicines

No Drugs Down the Drain!

- Convenient Collection Sites
- Items Accepted
- Why Use These Locations?
- Reference Materials
- Contact Information
- En Espanol

Finally, a safe, free, and environmentally responsible way to get rid of old household medicines and sharps.

Take waste medications and needles to any convenient drop-off site including many pharmacies around Santa Cruz County.

Click here for details about our current collection sites, or call 831-454-2160 (County of Santa Cruz Public Works Department)

Be responsible, be informed...

Beginning September 1, 2008, it is illegal to discard used sharps in the garbage or recycling, and used sharps must be transported in an approved sharps container.

Safe, Free Disposal of Medicines and Sharps

"A vast array of pharmaceuticals...including antibiotics, anti-convulsants, mood stabilizers and sex hormones have been found in the drinking water of at least 41 million Americans...", Associated Press, 3/10/08

Home | Collection Sites | Items Accepted | Why Use These Locations? | Contact

Internet | Protected Mode: On

Website: www.sharpmedsolutions.org

SHARP SOLUTIONS
for home medicines

Public Outreach

"Point of Sale" instructions on pharmaceuticals collection box

Drop Off Your Unwanted Medicines Here

SHARP SOLUTIONS
for home medicines

What to do:

- Gather your unwanted medicines & any other accepted items (see list).
- Leave everything in the original container.
- Mark out personal information if you wish.
- Deposit all items in this medicine drop box.

YES: Items Accepted

- Prescription medicines
- Over-the-counter medicines
- Pet medicines
- Medicine samples
- Vitamins
- Medicated ointments & lotions
- Inhalers

NO: Items Not Accepted

- Controlled substances (narcotics)
- Needles, lancets, or pen needles (any sharps)
- Personal care products
- Aerosol cans
- Bloody or infectious waste
- Hydrogen peroxide
- Thermometers
- IV bags
- Business waste
- Empty containers

Funded by a grant from the California Integrated Waste Management Board. Zero Waste - You Make It Happen!

Deposite Aquí Todas las Medicinas que no Necesite

SHARP SOLUTIONS
for home medicines

Qué se debe hacer:

- Juntar todas las medicinas que no necesite.
- Dejar todo en su recipiente original.
- Si desea, borre sus datos personales.
- Depositar todo en la caja para desechos médicos.

Sí se aceptan

- Medicinas con receta médica
- Medicinas sin receta médica
- Medicinas en recipientes impermeables
- Ungüentos y lociones medicados
- Medicinas para mascotas
- Inhaladores
- Vitaminas
- Muestras médicas

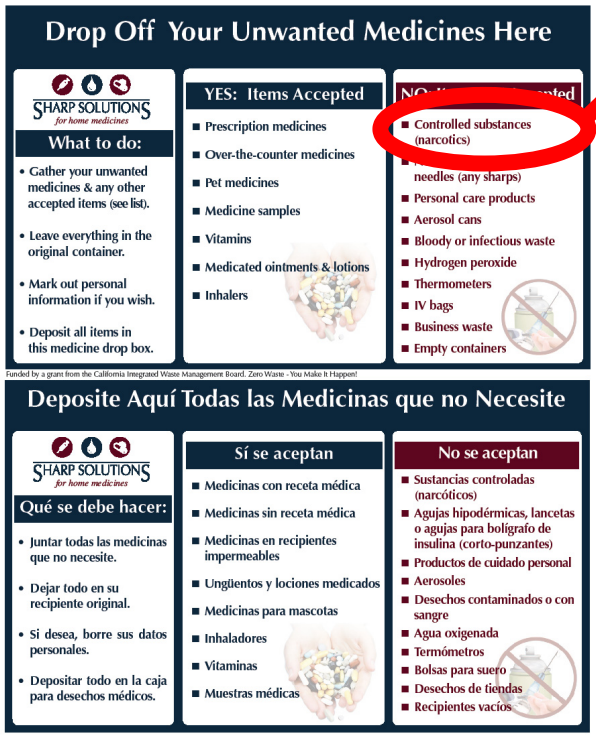
No se aceptan

- Sustancias controladas (narcóticos)
- Agujas hipodérmicas, lancetas o agujas para bolígrafo de insulina (corto-punzantes)
- Productos de cuidado personal
- Aerosoles
- Desechos contaminados o con sangre
- Agua oxigenada
- Termómetros
- Bolsas para suero
- Desechos de tiendas
- Recipientes vacíos

SHARP SOLUTIONS
for home medicines

Public Outreach

Prohibited items in medicines collection box



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SHARP SOLUTIONS *for home medicines*

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SHARP SOLUTIONS *for home medicines*

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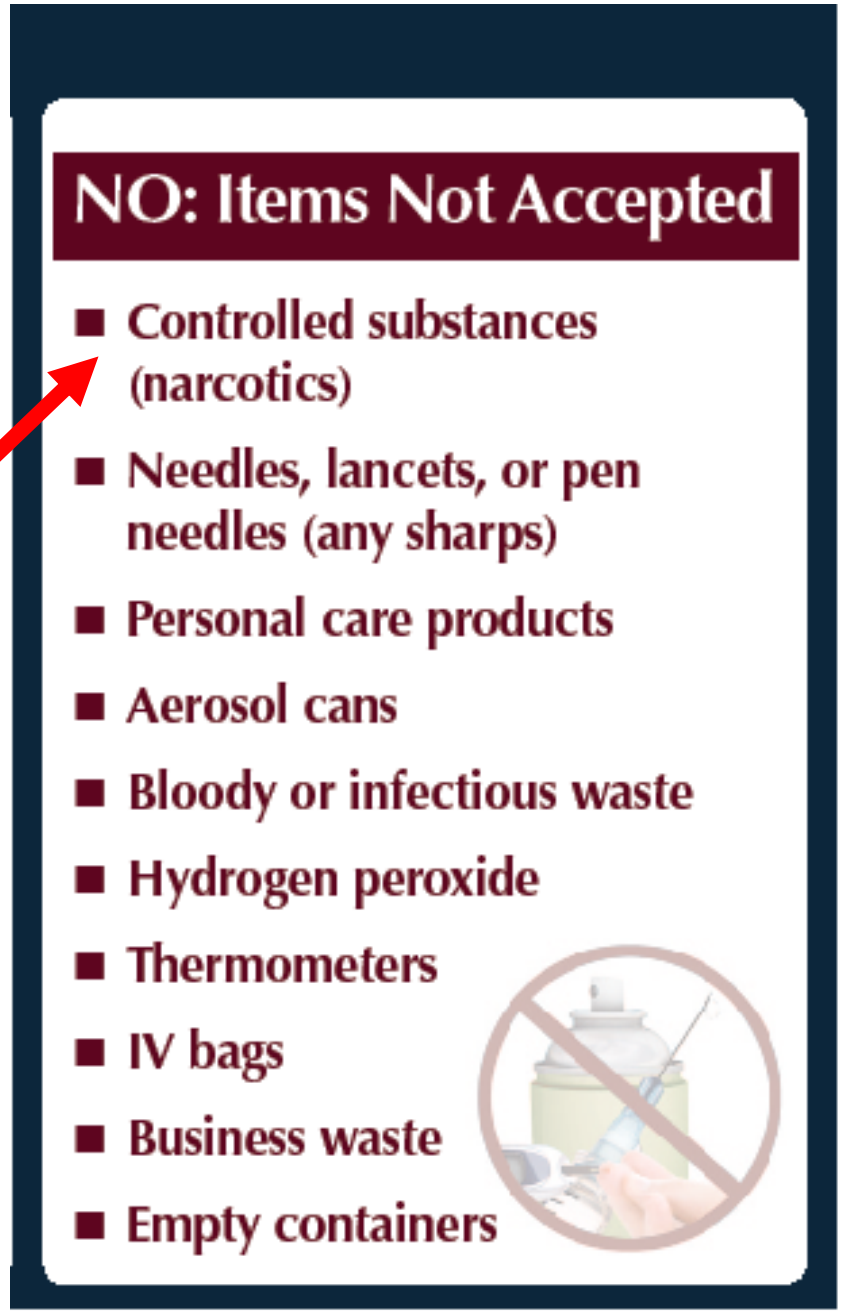

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Public Outreach

Tabling at “Caregiver University” event

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Retail Take-Back Site

Chain Pharmacy

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Retail Take-Back Site

Counter brochure display

Walgreens

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Retail Take-Back Site

Medicines self-serve drop box in pharmacy waiting area

Chain pharmacy - Walgreens

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Retail Take-Back Site

Medicines self-serve drop box in pharmacy waiting area

Walgreens

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Retail Take-Back Site

Sharps bio-hazard collection barrel in pharmacy stock room

Chain pharmacy - Walgreens

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Retail Take-Back Site

Local pharmacy

SHARP SOLUTIONS
for home medicines

Retail Take-Back Site

Counter brochure Display

Poster -English

Poster -Spanish

Local pharmacy – Horsnyder's

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Retail Take-Back Site

Sharps container offerings

Horsnyder's Pharmacy

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Coupon for Red Container

SHARP SOLUTIONS
for home medicines

$3 OFF

Cashier Use

Initials: _____

Date: _____

any approved sharps disposal container

Return filled sharps containers to participating disposal sites.
For more information and current free disposal sites, visit
www.SharpMedSolutions.org or call **(831) 454-2160**.

This coupon is valid through January 31, 2010.

It's The Law!

Beginning September 1, 2008,
it is illegal to discard used sharps in
garbage or recycling bins.

Used sharps must be
transported in an approved
sharps container.

Discarding sharps directly into
trash or recycling is a health hazard
to sanitation workers.

SHARP SOLUTIONS
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Safe, Free Disposal of Medicines and Sharps

Available at participating pharmacies

SHARP SOLUTIONS
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Sharps Processing

Bio-hazard barrels and transport

Advanced Waste Solutions

SHARP SOLUTIONS
for home medicines

Sharps Processing

Preparation for heat sterilization - autoclave

Advanced Waste Solutions

SHARP SOLUTIONS
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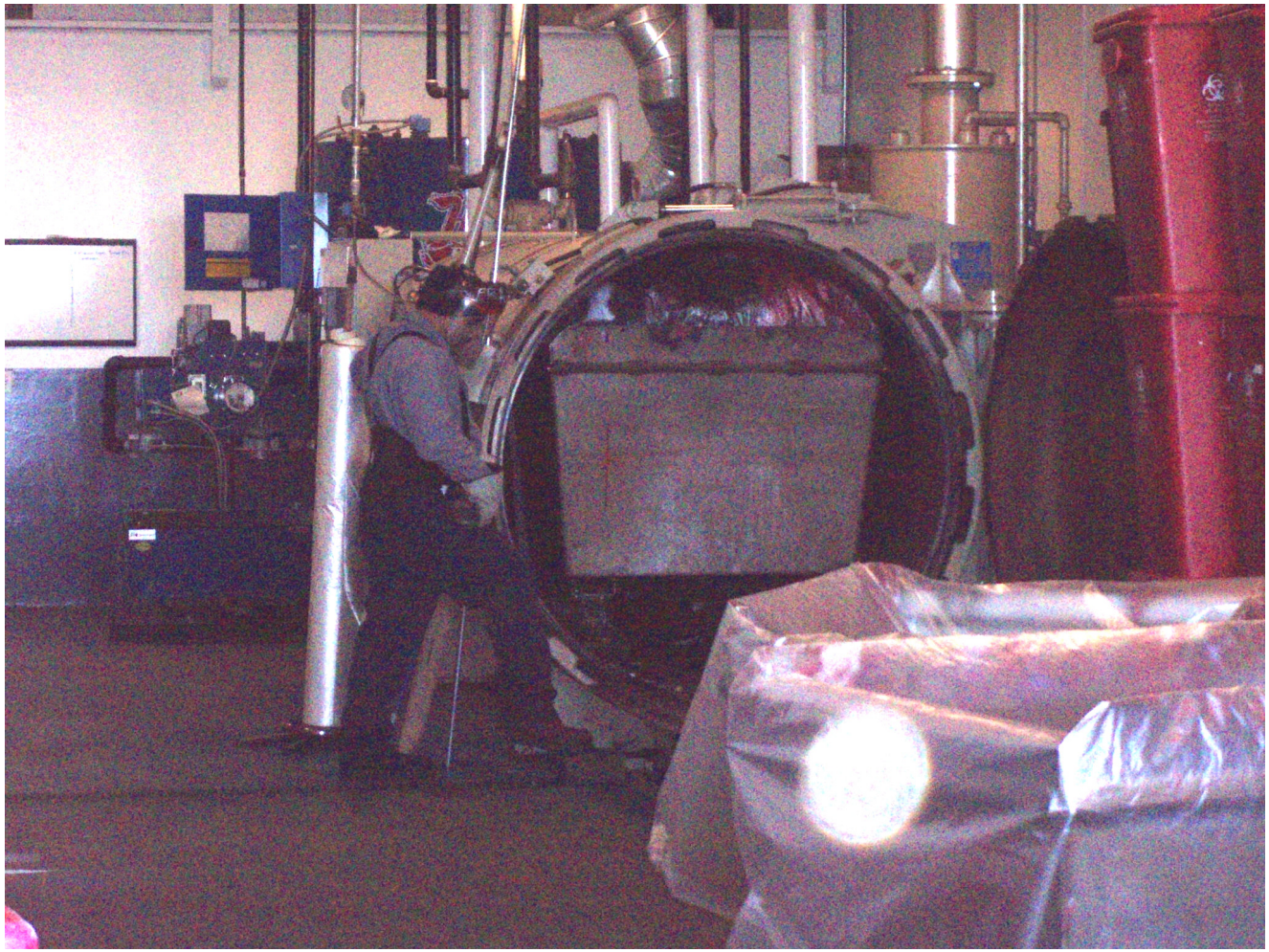
Sharps Processing

Heat sterilization - autoclave



Advanced Waste Solutions

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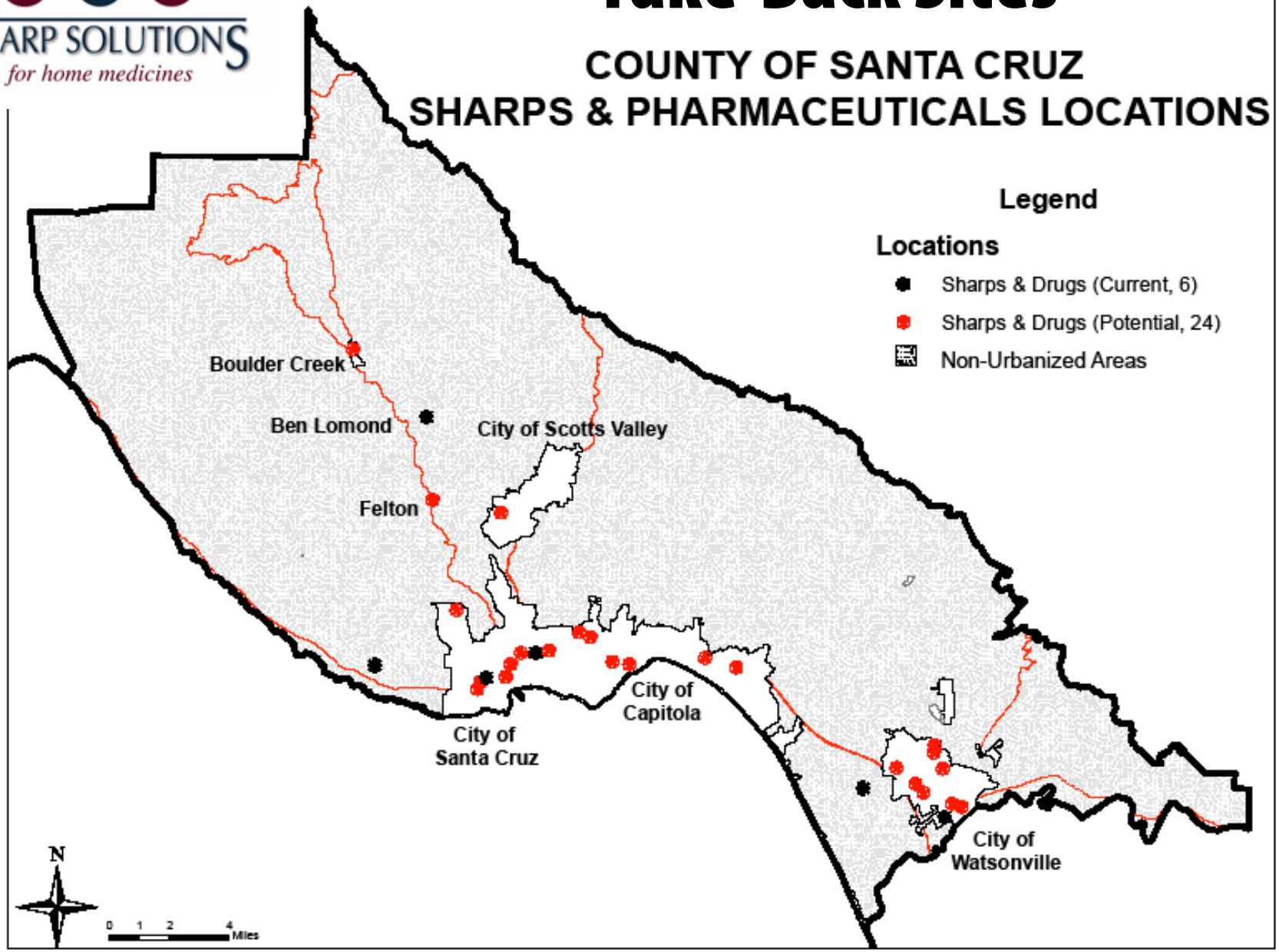
Pharmaceuticals Processing

Packaging for shipment to out-of-state incineration

Advanced Waste Solutions

SHARP SOLUTIONS
for home medicines

Take-Back Sites



SHARP SOLUTIONS
for home medicines

Collection Results

Initial Pharmaceutical Collection Program
Sponsored by the City and County of Santa Cruz
(Collection Quantities in Pounds)

Aug. 2007 – Jul. 2008	Pharmacies in Santa Cruz	Pharmacies in Watsonville	Santa Cruz Police Dept.	HHW Sites	Total Collected	Average Monthly Collection
(Number of sites)	(3)	(2)	(1)	(4)	(10)	
Sharps (9)	1126	123	0	194	1443	120
Pharmaceuticals (8)	811	0	55	405*	1271	106

* *Based on an approximation that pharmaceutical waste was about 1% of the total HHW waste for the year, which was 40,500 lbs.*

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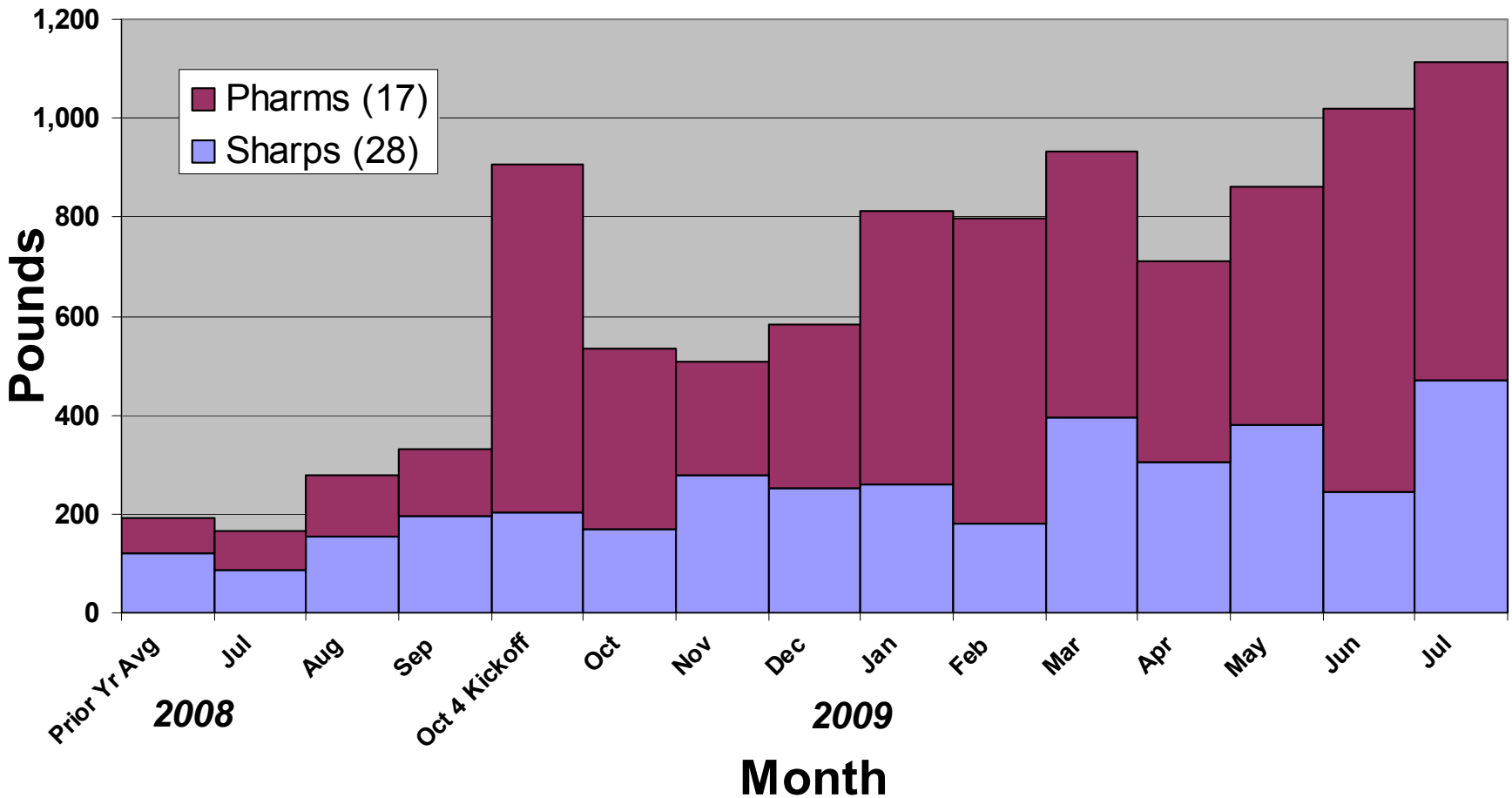
Collection Results



Total of 30 take-back sites. Prior Year included 10 sites; 8 Pharms and 9 Sharps.

Pharms does not include an estimated 34 lbs./mo. at HHW sites mixed with poisons.

SHARP SOLUTIONS
for home medicines

Program Overview

Program in operation	1+ year
Number of take-back sites	30 sites
Number of pickups	262 pickups
Sharps collected	3,577 lbs.
Pharmaceuticals collected	5,972 lbs.
Total collections	9,549 lbs.
Cost of pickups	$18,069

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Take-Back Site Detail

Typical Site	Monthly	Maximum	Minimum
Pickups	1 per month	weekly	yearly
Collections	30 lbs.	89 lbs.	7 lbs.
Cost per pound	$1.86	$6.86	$1.14
Cost per pickup	$55.54	$114	$48
Cost per month	$57.39	$261	$4

For the 5 month period March-July 2009
collections remained steady at 31 pickups per month

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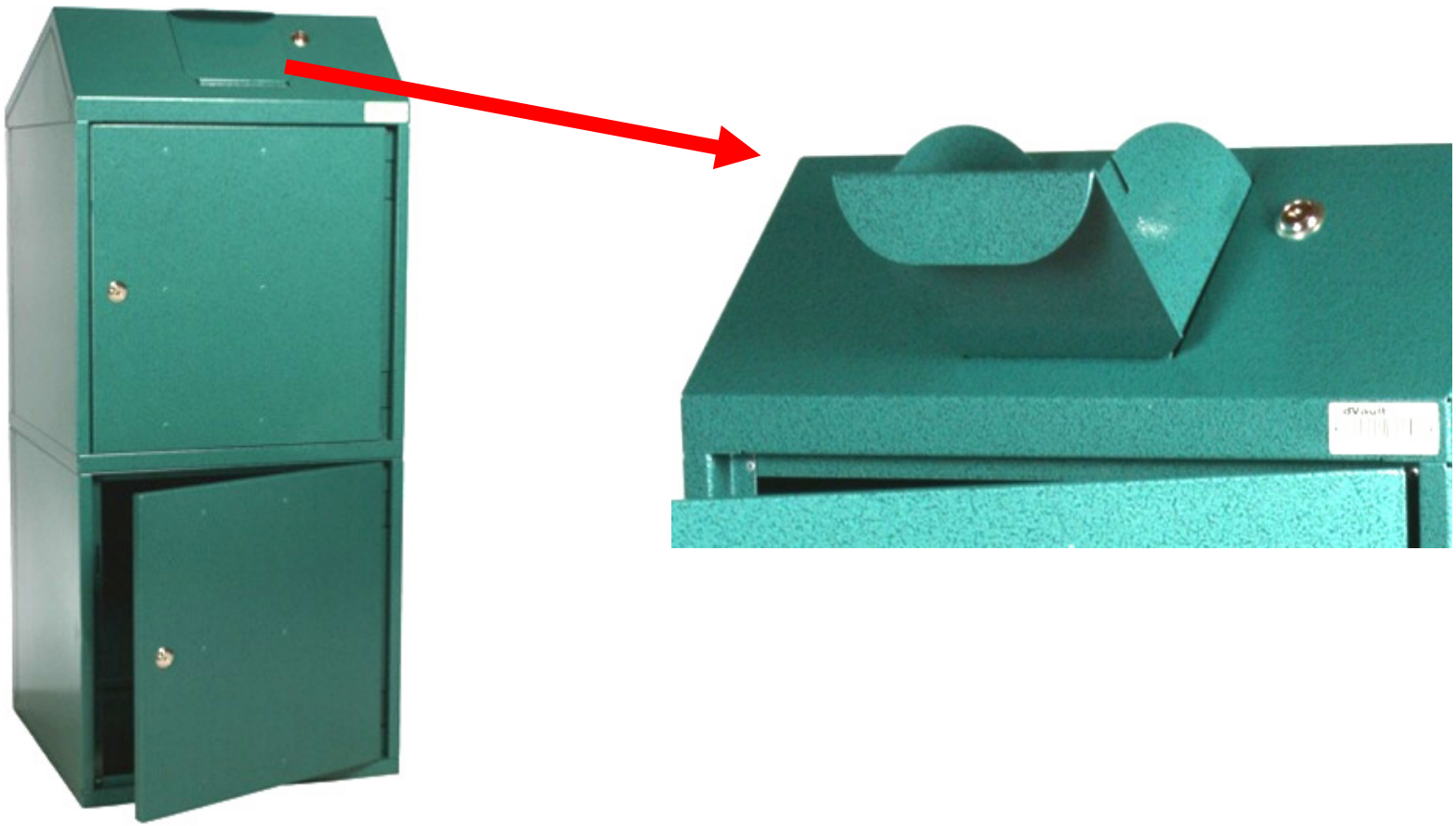
Pharms Collection Box



2-door Take Back Express by dVault Companies

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Pharms Collection Box

Dual-key system option

Single-door Take Back Express by dVault Companies

SHARP SOLUTIONS
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Pharms Mailback

- **Pre-paid postage and processing by incineration**
- **Tracking system accessible on-line**

MailAway by Sharps, Inc.

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Funding

2007	2008	2009	2010
No program	• City of Santa Cruz Wastewater Facility • County of Santa Cruz Sanitation District • Private medical waste hauler Advanced Waste Solutions • Household Hazardous Waste Facilities	• CIWMB HHW Grant • Local government agency in-kind contributions • Household Hazardous Waste Facilities	• State legislation? • Funding appeal to local and national businesses? • Take-back site operators? • Household Hazardous Waste Facilities

SHARP SOLUTIONS

for home medicines

Safe, Free Disposal of Medicines and Sharps

Jeffrey Smedberg
Recycling Programs Coordinator
County of Santa Cruz
Public Works Department
701 Ocean St., Rm. 410
Santa Cruz, CA 95060

(831) 454-2160
recycle@co.santa-cruz.ca.us