

Contra Costa Safe Medicine Disposal Forum

JFK University
July 18, 2013

Overview

- Environmental Impacts
- Human Impacts
- Collection Efforts
- SB 727 and Extended Producer Responsibility (EPR)
- Manufacturer Perspective on EPR
- Retail Perspective on EPR

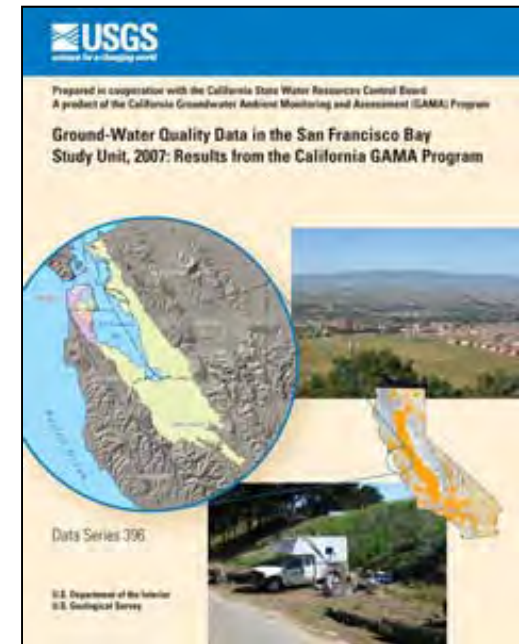


Environmental Impacts



Environmental Impacts


- 2002 US Geological Survey
 - Tested 139 streams across 30 states
 - 80% had measurable concentrations of prescription and non-prescription drugs, steroids and reproductive hormones.



Pharmaceuticals in the News

AP: Drugs found in drinking water

Updated 31d ago | Comments **147** | Recommend **76**

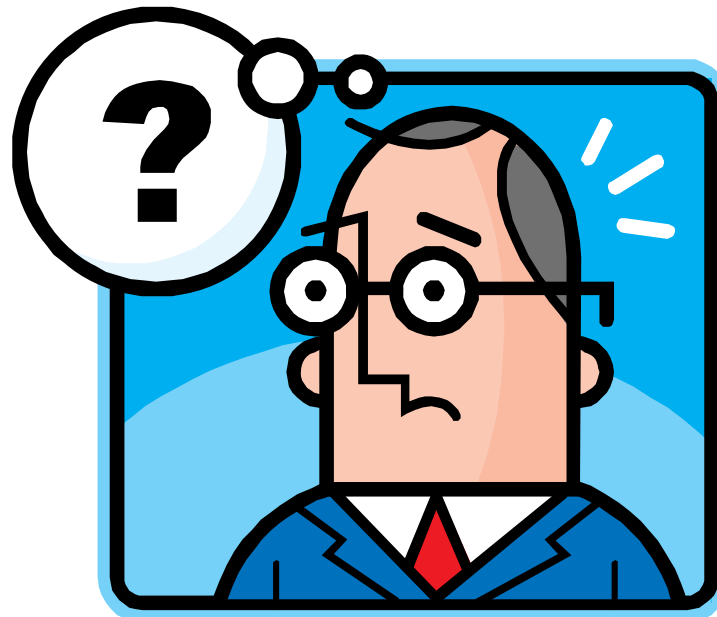
E-mail | 



By Jeff Donn, Martha Mendoza and Justin Pritchard, Associated Press

A vast array of pharmaceuticals — including antibiotics, anti-convulsants, mood stabilizers and sex hormones — have been found in the drinking water supplies of at least 41 million Americans, an Associated Press investigation shows.

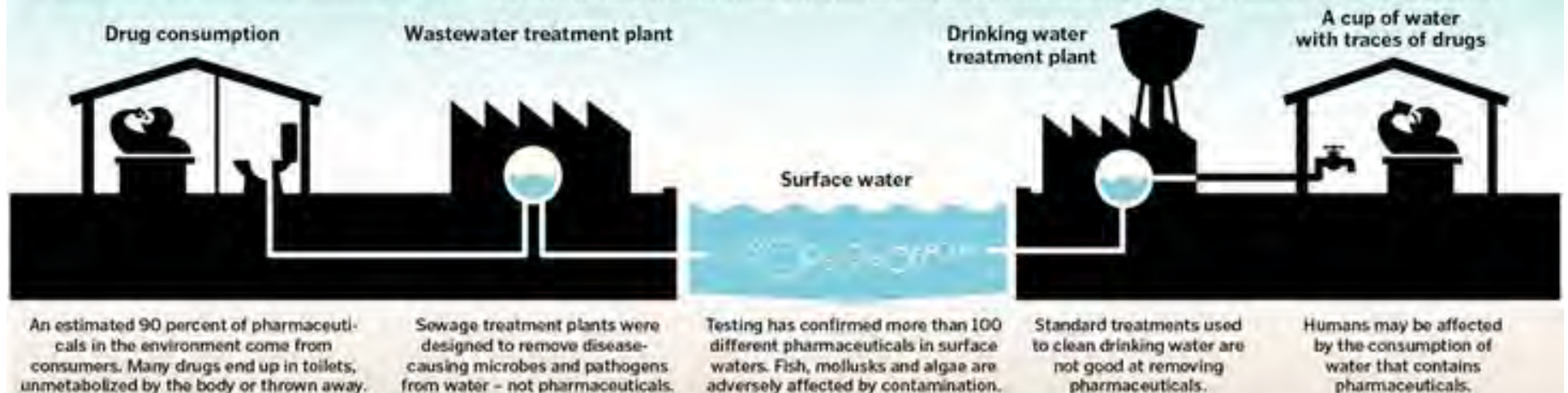
How Do Drugs Get Into Our Drinking Water Supplies???



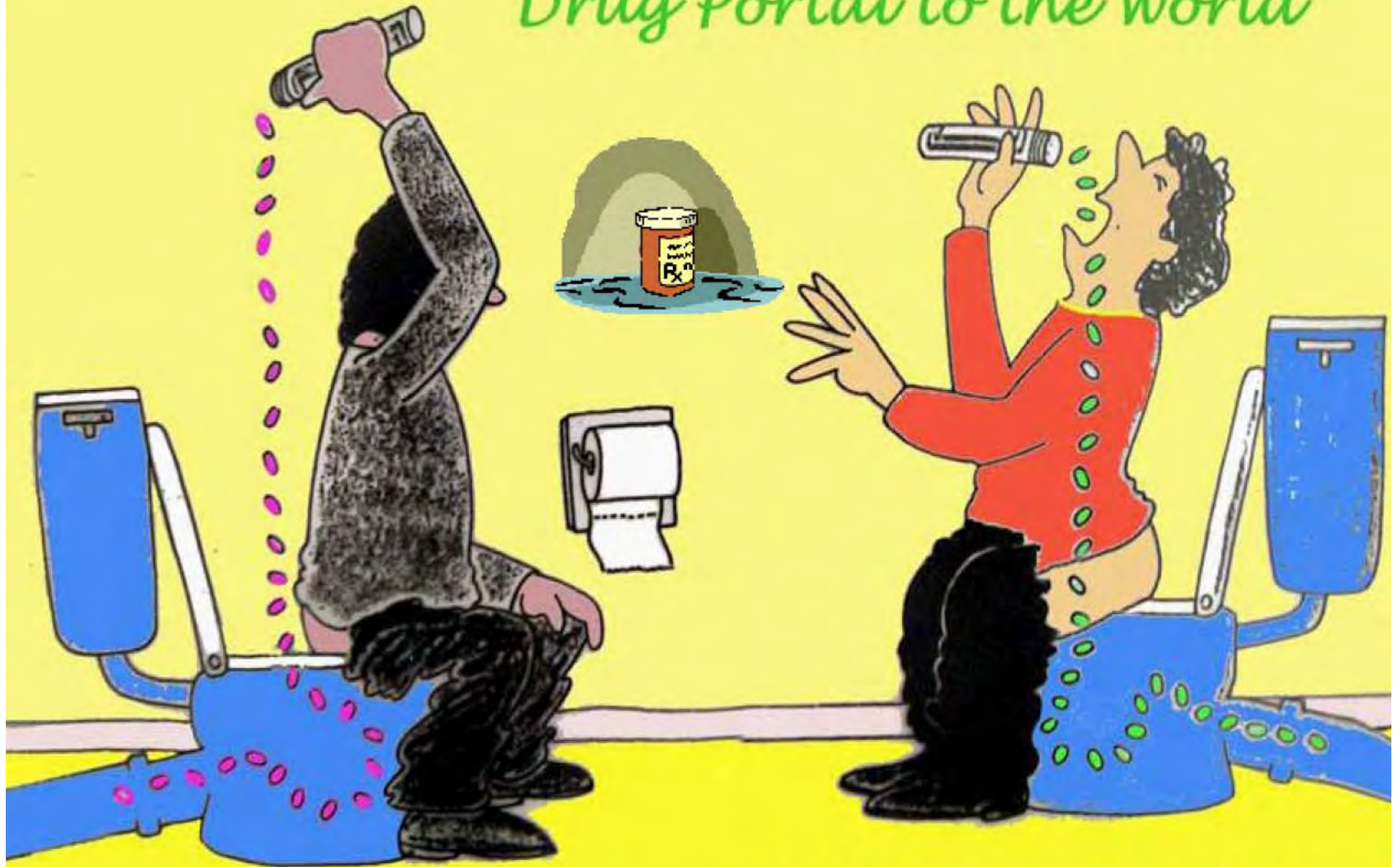
How Do Drugs Get Into Our Drinking Water Supplies???

Pharmaceuticals in drinking water

An investigation by The Associated Press found that drinking water supplied to at least 41 million Americans carried residues of antibiotics, anti-convulsants, mood stabilizers, sex hormones and other pharmaceuticals.



Drug Portal to the World



adapted by Daughton from Ternes (April 2000)


Pharmaceuticals in the News

NATIONAL GEOGRAPHIC Daily News

Home Animals Ancient Energy Environment Travel/Cultures Space/Tech Water Wild

Prozac Pollution Making Shrimp Reckless

Antidepressant's key ingredient is flushed into coastal waters, study says.



The glass shrimp (file photo) may be one of many aquatic species harmed by pharmaceuticals.

Share Like 1.7k

Kate Ravillious for National Geographic News

Mood drug that gets into waterways shows impact on fish

Hormonal chemicals may be imperiling fish

PERVASIVE IN AREA'S WATER | Even at the low levels detected, scientists worry about the possible effect on fish growth and reproduction.

BY WARREN CORNWALL AND KEITH ERVIN
Seattle Times staff reporters

As they swim deep beneath Seattle's Elliott Bay, male English sole carry something in their bodies that's not supposed to be there: a protein usually found only in female fish with developing eggs.

These so-called "feminized" fish, first found in the late 1990s, are thought to be victims of human hormones and hormone-mimicking chemicals — flushed into the water from sewage-treatment plants, factories, storm-water drains and runoff from roads — that had made their reproductive systems go haywire.

< Hormones FROM D1 FISH MAY BE AT RISK

Chemicals in water may affect growth and reproduction

King County study has found that those chemicals, from sources as varied as birth-control pills and pesticides, detergent and soap, may be altering the behavior of fish, researchers found.

Drugs in water causing troubling problems to fish, wildlife

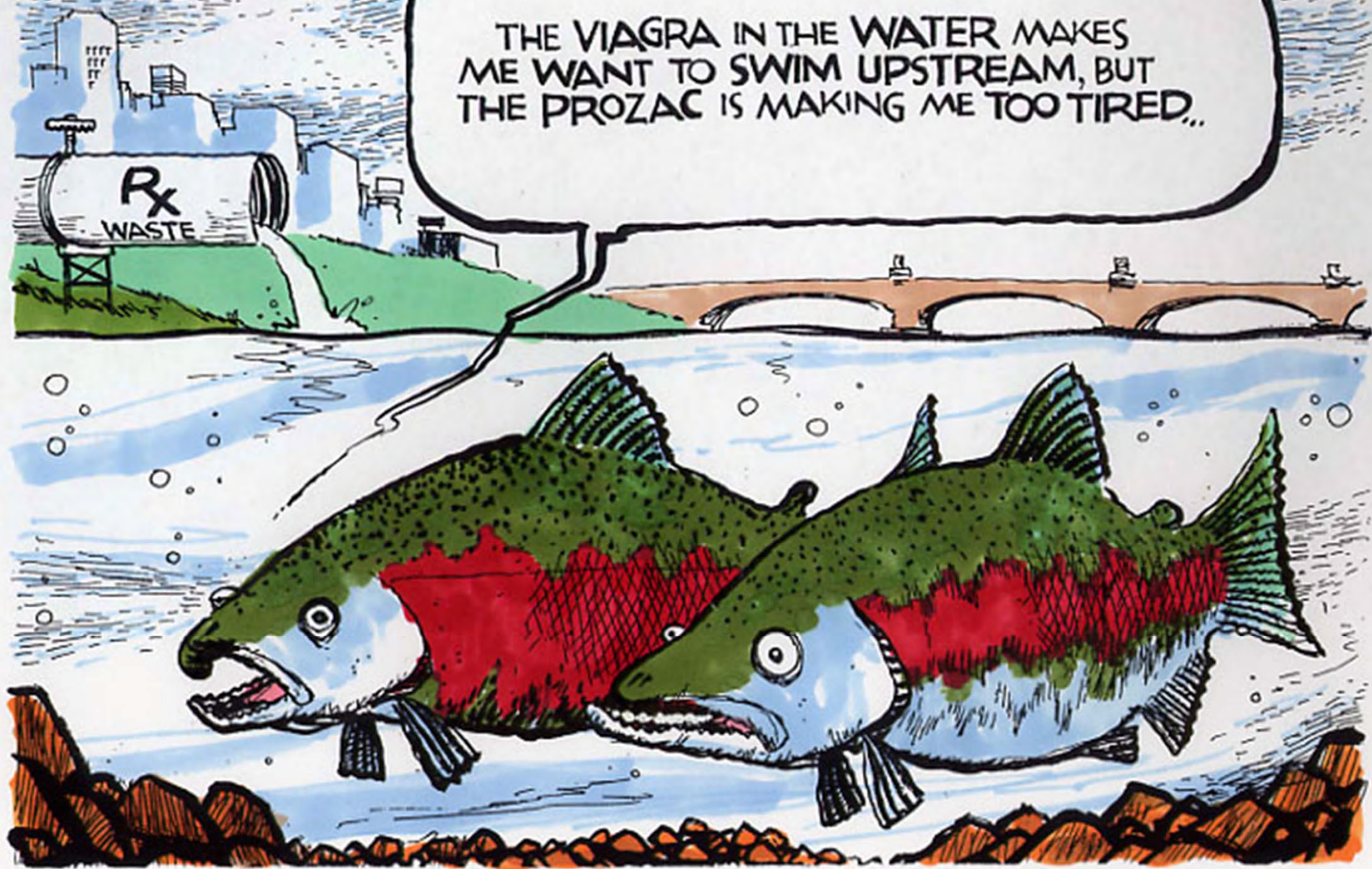
... lot of similarities between fish and humans, so ... in fish, as well," said Karen Kidd, a biologist at the ... not involved in the new research.

... throw unused pills into the waste stream, or excrete the drug in their ... ceuticals.

37 TWEET

OHMMA THE OREGONIAN © 2007 5/10

THE VIAGRA IN THE WATER MAKES
ME WANT TO SWIM UPSTREAM, BUT
THE PROZAC IS MAKING ME TOO TIRED..



Pharmaceuticals and Wastewater Treatment

- Most wastewater treatment plants were built decades ago.
- Thousands (?) of new medicines and chemicals have been created since that time.
 - Pesticides, plasticizers, flame retardants, cleaners, antibacterial agents, personal care products, etc.
- There is removal, but treatment plants aren't designed to remove dilute concentrations of a myriad of complex chemicals.

Pharmaceuticals in the Water Environment

- Pharmaceuticals are designed to impact biological systems in small doses.
- Intersex fish have been found around the country in effluent-dominated water bodies.
 - Many pharmaceutical and chemical compounds have an estrogenic effect on living organisms.
- Current levels of pharmaceuticals in waterways are not at therapeutic doses for humans, but will that change? When? What about fish?

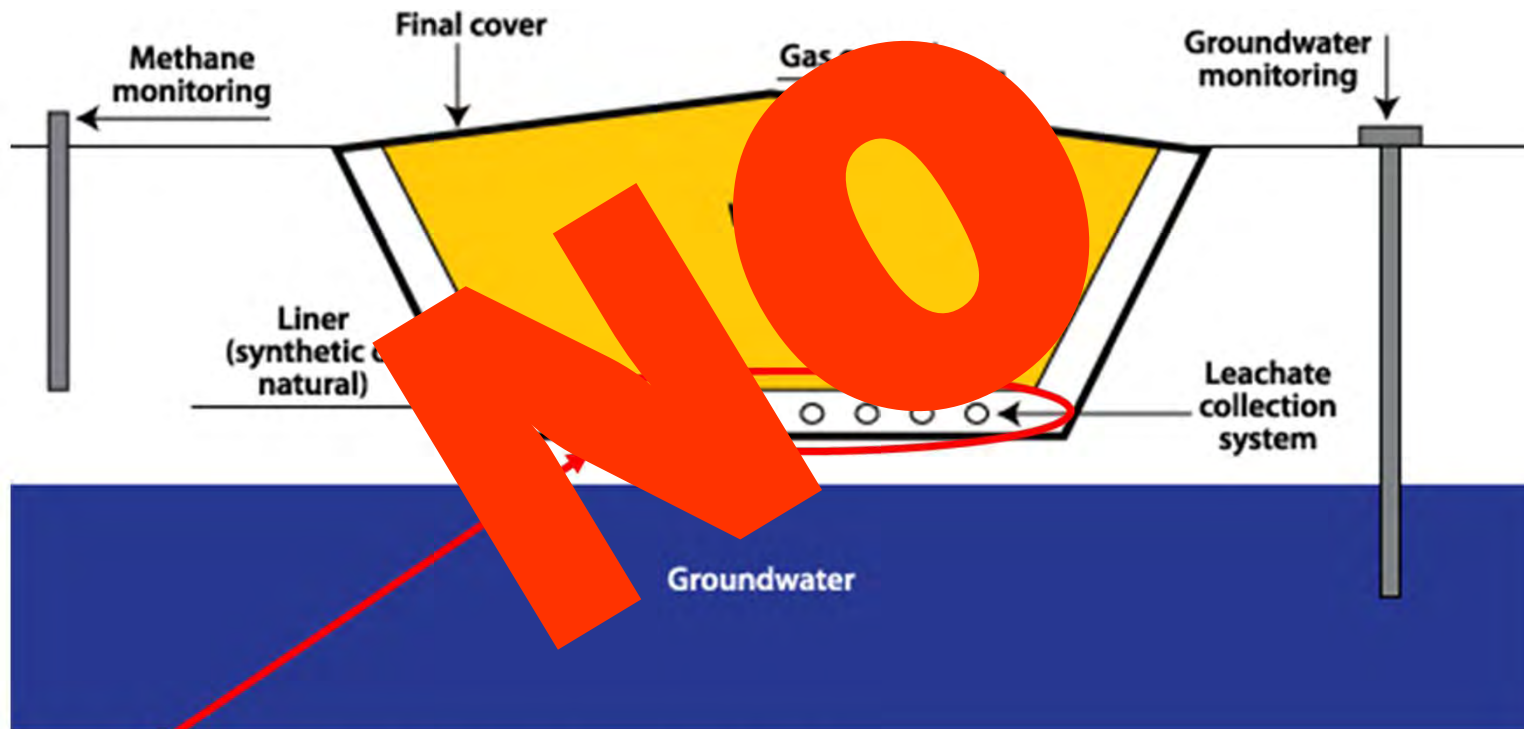
Reducing the Flow of Pharmaceutical Compounds to the Environment

- Source control is always less expensive and more effective than end-of-pipe treatment.
- Yanking drugs off shelves and sending them back to the manufacturers for redesign is not an option.
- Unwanted and expired medications are the “low hanging fruit.”

No Drugs Down the Drain!



Is Trash the Answer?



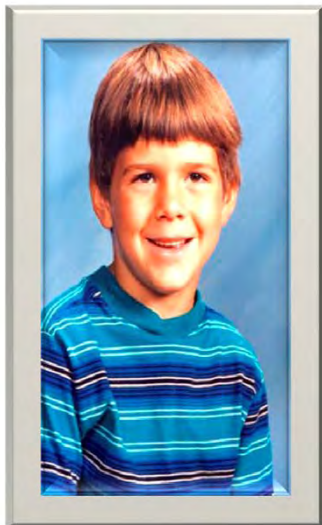
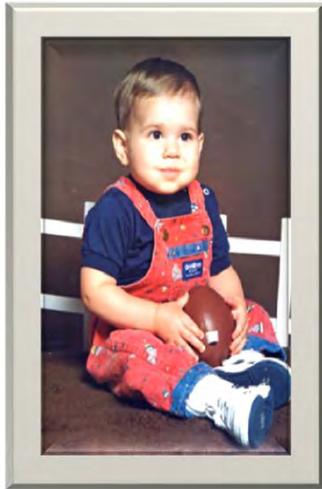
Where does leachate go?



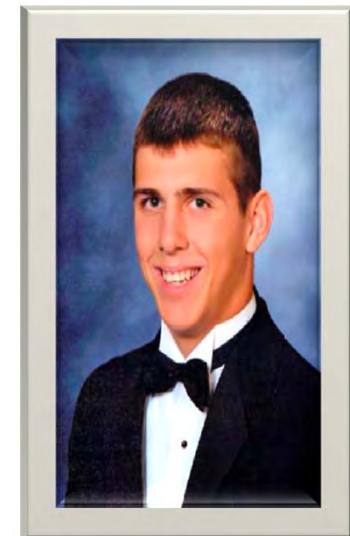
National Coalition Against Prescription Drug Abuse (NCAPDA)

**April Rovero
Founder, CEO**

Joseph John Rovero, III



March 9, 1988 RIP Dec. 18, 2009



National Epidemic



**Prescription Drugs More Abused Than All Illegal Drugs Combined
(except marijuana)**

MISCONCEPTION

**Safer Than Street Drugs Because
Doctor Prescribed**

They Are...

Just as Deadly

Just as Addictive

Just as Illegal

How Bad Is It?

**37,485+ Drug Induced Deaths
in 2009**

**2,500 Teens Abuse a Painkiller
for the First Time Every Day**

**Prescription Drug Deaths
Now Outnumber Traffic
Accidents in the U.S.**

**4x Increase in Substance
Abuse Treatment Admissions
from 2004 to 2008**

**1 Prescription Drug Overdose
Every 15 Minutes**





Contra Costa County Data Accidental Drug Deaths

2008-2012

408 Total Drug Related
Deaths

307 Involved Prescription
Drugs

Community Impact



Death



Crime



Family Trauma



Drugged Driving



\$72B/Year
r

Financial Cost \$72B/Year

Which PDs Are Most Abused?





Pill Party Danger



“Pharm Party”

“Skittle Party”



National PDA Prevention Plan

Office Of National Drug Control Policy (ONDCP)

PDA Monitoring Programs



Education



Law Enforcement



Medication Management

Essential: Medication Management



- **Lock Them Up**
- **Dispose of Expired and Unwanted Medications**

National Coalition Against Prescription Drug Abuse (NCA PDA)

925-480-7723

www.ncapda.org



Spread the Word...One Pill Can Kill

Contra Costa Safe Medicine Disposal Forum

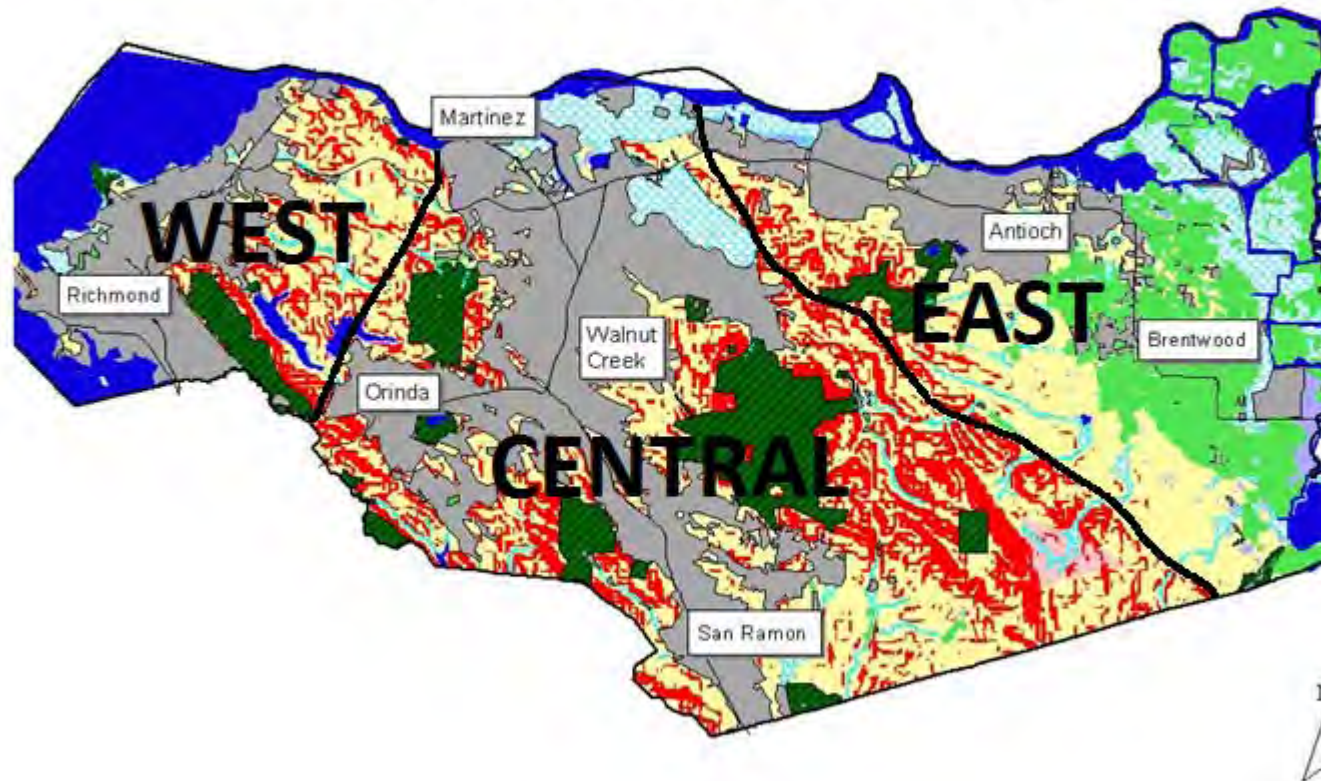
July 18, 2013

6:00 – 8:00 PM

Current Medicine Disposal Locations In Contra Costa County

Contra Costa County – 3 Regions for Collection Programs

CONTRA COSTA COUNTY



Central Contra Costa County

1. City of Walnut Creek, City Hall
2. Contra Costa County, Sheriff's Field Operations Building
3. Contra Costa County, County Hospital
4. City of Clayton, Police Department
5. City of Martinez, Police Department
6. Town of Moraga, Police Department
7. City of Orinda, Police Department
8. Town of Danville, Police Department
9. City of Pleasant Hill, Police Department
10. City of San Ramon, Police Substation
11. City of Concord, Police Department
12. Town of Alamo, Sheriff's Substation – Coming soon



CENTRAL CONTRA COSTA
SOLID WASTE AUTHORITY

Central Contra Costa County Collection Information

Total collected volume for all 11 collection sites:

Pilot 2/2009 to 6/2009 - 3 sites collected: **1,516 pounds**

FY 2009/10 - 11 sites collected: **7,199 pounds**

FY 2010/11 - 11 sites collected: **9,947 pounds**

FY 2011/12 - 11 sites collected: **10,963 pounds**

FY 2012/13 (estimated) - 11 sites collected: **12,476 pounds**

Total Collection: 42,101 pounds

West Contra Costa County

1. Richmond Household Hazardous Waste (HHW) Facility
 - Fiscal Year 2008-2013: **31,805 pounds***
2. San Pablo Police Station*
3. Pinole Police Station*
4. West County Wastewater District*
5. El Cerrito Recycling + Environmental Resource Center
 - May – December 2012: **2,739 pounds**
6. Kensington Fire Station
 - Hosts two take-back events per year
7. City of Richmond Police Station
 - September 2012 – Current: **200 pounds**

***Collection brought to the Richmond HHW Facility and included in the 31,805 pounds collected**

Total Collection: 34,744 pounds



East Contra Costa County

1. Delta Household Hazardous Waste Collection Facility
 - 2007 – 2013: **4,823 pounds**
2. City Center Pharmacy, Pittsburg
 - Not able to get collection information at this time.
3. City Center Pharmacy, Brentwood
 - 2012-2013: **195 pounds**
4. Antioch Police Department
 - Currently disposing of collected medications through the DEA take-back events.

Total Collection: 5,015+ pounds



RecycleWhere?

www.sfenvironment.org/recyclewhere

31 Drop-off
Locations by
Entering
Walnut Creek.

The screenshot shows the SF Environment RecycleWhere website interface. The browser address bar displays <http://www.sfenvironment.org/recyclewhere>. The page header includes the SF Environment logo and navigation links for Energy, Transportation, Zero Waste, Toxics & Health, Buildings & Environments, Education & Equity, and Climate Change. A search bar is present with the text "What are you looking for? Ask us!". The main content area features a "Recycle Where?" section with a search input field containing "Couch, plastic bottle, etc." and a "Your Location: Walnut Creek, CA 94596" field. Below this, there are tabs for "Residents" and "Business", with "Residents" selected. Under "Residents", there are options for "Single Family Home" and "Multi-Unit Building". The "Residential Drop-off & Pickup Options: Walnut Creek, CA 94596" section shows a table of options:

Best Match		Drop-off	Pick-up	Buy Back	Reuse Facilities
(Drop-off locations within 25 miles)		change your distance	Show all drop-off locations on map		
Concord Police Department () 1350 Galindo St., Concord, CA					
FACILITY		FREE	NOT FREE		
Reuse	Buy Back	Pick-up	Drop-off	Pick-up	Drop-off

A "Map It. Always call ahead!" button is visible next to the Concord Police Department entry. The page footer shows the time as 9:47 AM.

Contact Information

Central Contra Costa County:

- Central Contra Costa Sanitary District:
David Wyatt
DWyatt@centralsan.org
- Central Contra Costa Solid Waste Authority:
Ashley Louisiana
Ashley@wastediversion.org



West Contra Costa County:

- RecycleMore:
Nicole Forte
NicoleF@recyclemore.com



East Contra Costa County:

- Delta Diablo Sanitation District:
Amanda Roa
AmandaR@ddsd.org





CPSC

**California Product
Stewardship Council** SM

**Contra Costa Safe
Medicine Disposal Forum
July 18, 2013**

CPSC Mission



To shift California's product waste management system from one focused on government funded and ratepayer financed waste diversion to one that relies on producer responsibility in order to reduce public costs and drive improvements in product design that promote environmental sustainability.

Product stewardship vs. EPR

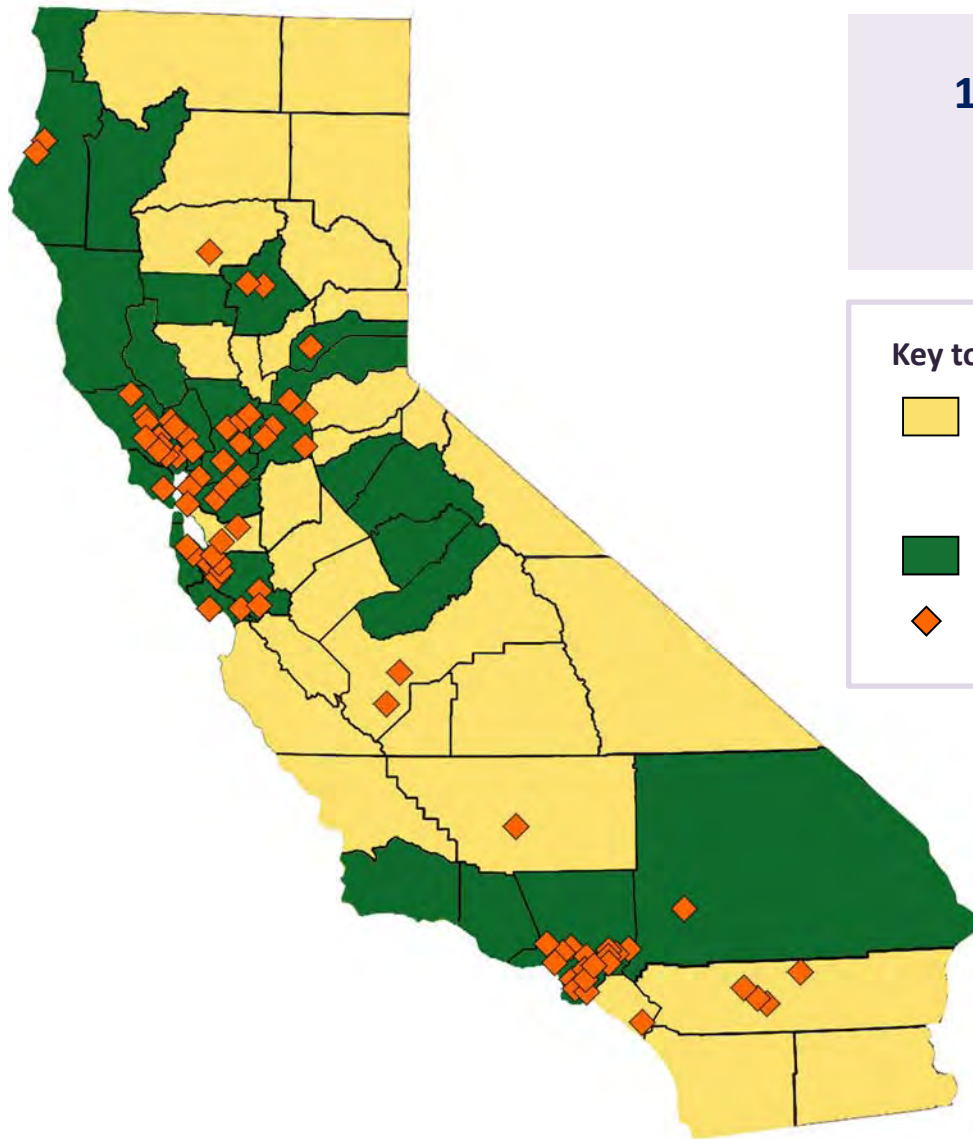
Product Stewardship:
Lifecycle and Sustainability

EPR:
Manufacturer responsibility
for managing product and
packaging at end-of-life








EPR Resolutions Adopted



As of June 19, 2013
135 resolutions have been passed
by California local
jurisdictions and organizations
supporting product stewardship!

Key to City & County Resolutions:

-  County is a member of an association¹ that has passed an EPR resolution or policy statement, but has not individually passed an EPR resolution
-  County has individually passed an EPR resolution
-  City has passed an EPR resolution

Three major local government associations have all adopted resolutions in support of EPR:

- California State Association of Counties
- League of Cities
- Regional Council of Rural Counties



Who Should Pay? Question Asked of Focus Group Retailers & Consumers

- Don't make general taxpayers and ratepayers pay
- Consumers and retailers say producers should be responsible
- Add cost to purchase price
- Want producers to make less toxic products

“If they’re going to be manufacturing these things, they need to be responsible.” – Retail Focus Group Participant



King County: Med Problem Statement

Why Producer Responsibility?

- Drug overdose deaths have surpassed car crashes as a leading cause of preventable death in King County.
- Medicines used in the home are the leading cause of poisonings, especially among children and seniors.
- Medicine take-back programs provide secure collection and destruction of unwanted medicines to protect public health and the environment.
- Currently, **no sustainable financing** for a medicine take-back system that meets community needs.



Epidemic: Responding to America's Prescription Drug Abuse Crisis

2013 National Drug Control Strategy:

1. Education of health providers and the public.
2. Expand prescription monitoring programs.
3. Safe drug disposal – increase return/take-back and disposal programs.
4. Effective enforcement to address “pill mills” and “doctor shopping.”



Canadian Stewardship of Meds

- Industry Stewardship Plan
- **Develop** program plan
- **Implement** program
- **Administer** program
- Reporting



2010: San Francisco Safe Drug Disposal Ordinance

INDEFINITELY SUSPENDED

- SF develops a Stewardship Plan template with metrics
- Producers submit plan describing collection system, convenience, outreach and performance
- SF approves the plan
- Producers submit an annual report, including volumes
- Phased-In: Prescription, non-prescription, controlled substances



Voluntary Collaborative Pilot



Funding (\$110,000)
*From PhRMA and
Genetech*



Collection

Program Logistics

Outreach



SF Drug Disposal Information Ordinance

- All pharmacies conduct outreach
- “...posted in an area visible to the public & adjacent to the area where prescription drugs are dispensed”





SAFE DISPOSAL HERE

可在此處安全棄置

DEPOSITE SUS
MEDICAMENTOS AQUÍ



To find more sites in San Francisco:

尋找更多位於舊金山的地點:

Para encontrar más sitios en San Francisco:

sfenvironment.org/medicinedisposal
(415) 355 - 3700

SF Residents only.
限三藩市居民。

Para los residentes de San Francisco solamente.

Controlled substances only accepted at designated police stations.
受控藥物只接受在指定的警察局。

Se aceptan sustancias controladas en la delegación de policía de SF solamente.



Drug disposal bill could resurface if funding for SF program is not found

By: [Joshua Sabatini](#) | 01/15/13 *SF Examiner*



- Supervisor President David Chiu sent a letter to the PhARMA asking them to fund a prescription drug disposal program in San Francisco.
- Read more at the San Francisco Examiner:
<http://www.sfexaminer.com/local/2013/01/drug-disposal-bill-could-resurface-if-funding-san-francisco-program-not-found#ixzz2M6kKpoPh>

Alameda County, CA Ordinance EPR for Meds Adopted July 2012



- Disposal Bins – 28 locations
 - Located at convenient designated sites, including unincorporated areas
 - Drop off pills only (no containers)
 - Picked up by integrated waste control and shipped to disposal site
 - \$40,000 per year disposal costs
 - Significant use of volunteers
 - Real cost est. over \$300K/yr

<https://www.youtube.com/watch?v=-6eUT8K0akc>

Alameda Ordinance Links

Alameda County Environmental Health
Safe Drug disposal program webpage

<http://www.acgov.org/aceh/safedisposal/index.htm>

Safe Drug Disposal Liaison Email address

safedrugdisposalliaison@acgov.org

DEA Controlled substances disposal draft regulations

[http://www.dea diversion.usdoj.gov/fed_regs/rules/2012/fr1221_8
.htm](http://www.dea diversion.usdoj.gov/fed_regs/rules/2012/fr1221_8.htm)

Product care <http://www.productcare.org/>

Paintcare <http://paintcare.org/>

RBRC <http://www.call2recycle.org/>

PCPSA <http://www.healthsteward.ca/>

The New York Times

Article in the New York Times 12/7/12:

“The household trash can is a better and safer alternative, the drug makers say”

Lawsuit Filed 12/7/12

- Three organizations filed lawsuit against Alameda County: Pharmaceutical Research and Manufacturers of America (PhARMA), General Pharmaceutical Association (GPhA) & Biotechnology Industry Association (BIO)
- Filed in Federal Court alleging violation of the Commerce Clause of the Constitution
- Both sides have filed motions for summary judgment and the hearing date is set for Aug. 1st, 1:30 pm Courtroom 3, San Francisco Hon. Richard Seeborg presiding

CA. Leg/Reg Activity



- **CA SB 966 (Simitian) 2007**
 - Developed “model program” guidelines
 - 2010 Report to the legislature encouraged extended producer responsibility (EPR) legislation
- **AB 1442 (Weikowski) 2012**
 - Amended Med Waste Mgmt Act - Allows common carrier transport (instead of costly medical waste haulers) of pharma waste
- **CA SB 727 (Hannah - Beth Jackson) 2013**
 - Producer Responsibility bill for pharmaceuticals



SB 727 – EPR for Medications

- Mirrors Alameda Ordinance, added OTCs
- Two-year bill
- Stakeholder meetings
- Contact Linda Barr at Senator Jackson’s office
916-651-4536 Linda.Barr@sen.ca.gov

Secure Medicine Return for King County, WA



Margaret Shield

Local Hazardous Waste Management Program in King County

June 11, 2013 – Pharmaceutical Waste Stewardship Summit

King County Board of Health



Legislative body that sets county-wide policies and regulations to protect and promote the health of King County residents.



Board Chair
Councilmember Joe
McDermott



Boardmember
Mayor David
Baker

Subcommittee on Secure Medicine Return

- First meeting July 2013, collected input from stakeholders during summer through fall of 2012.
- Policy discussions October 2012 through April 2013.
- Public hearing held May 16th on draft legislation.
- Public hearing & **adopted June 20th**

<http://www.kingcounty.gov/healthservices/health/BOH/MedicineTakeback.aspx>

Overview of Proposed Secure Medicine Return Rule & Regulation

Producers develop a stewardship plan

Producers must work together in the “standard” plan, unless approved to form an “independent” plan.

Drug producers pay for:

- Collection supplies, prepaid mailers, collection events
- Transporting collected medicines and final disposal
- Program promotion and evaluation
- Administrative costs
- Fees to Public Health to reimburse costs of oversight

Voluntary bin hosts will provide in-kind staff time at drop-off sites.

County Haz Waste will assist with start-up costs of secure drop boxes and with education/promotion.

Don't Rush to Flush Campaign



- twitter.com/DontRushToFlush
- www.facebook.com/DontRushToFlush
- www.DontRushToFlush.org



Get Connected

- Join CPSC
- Follow CPSC on Facebook, get on listserv
- Establish EPR transitional collections in partnership
- Get on SB 727 stakeholder list and participate in state bill discussions

Join CPSC



Heidi Sanborn
Executive Director
heidi@calpsc.org
916-706-3420

www.CalPSC.org

Connect!



What Can YOU Do?



Things You Can Do

- Lock up your medications
 - www.dea.gov
 - www.medicineabuseproject.org
- Safety dispose of the unused medications in your home
 - * Visit a collection site near your home
 - * Participate in the next DEA –“Got Drugs” one-day collection event October 26th
Visit www.dea.gov for more information
- Work with your doctor to minimize highly addictive narcotics prescriptions and don't stockpile them.

Educational Resources

- Join the CCC Prescription Drug Abuse Prevention Coalition - next meeting: **August 1st 9am - 11am, 1980 Muir Road in Martinez**
- Sign-up to learn more about SB 727
www.calpsc.org
- Learn more about the Medicine Abuse Project
www.MedicineAbuseProject.org

