Removing Home Generated Sharps from Household Waste
May 2008
Purpose of Presentation

- Understand the current and future sharps disposal problem in the U.S.
- Recognize that the waste industry can and should be involved in removing sharps from the solid waste stream.
- Introduce you to existing programs and solutions for safe needle disposal
- Help you identify what would be the most effective approach in Arkansas and Missouri
Sharps Outside of Medical Facilities

- 9 million Americans self inject prescription drugs.
- 1 in 12 homes in the U.S. houses a self-injector.
- 3 billion needle injections occur yearly outside of medical facilities.
- 2 billion from patients treating their own diseases the other 1 billion injections are illicit drugs users.
- 93% of responding self-injectors dispose of their used syringes in the trash.
- 4% placed syringes in puncture-resistant containers.
- 3% flushed syringes down the toilet.

Most sharps end up in the municipal waste stream!
And The Problem Will Only Get Worse…

Unchecked, a number of factors will conspire to exponentially increase needle use/waste/sticks and their personal/social/economic consequences.

…IUnless We Work Together on Solutions
Improper Disposal: Many Forms/ Locations
Why Billions of Needles?

- Older population.
- Increase in incidence of chronic illnesses.
- Patient care pushed out of medical facilities.
- Pharmaceutical industry pipeline of injectable drugs developed and marketed to treat chronic illnesses.
- 21 million Americans have diabetes and incidence will increase 165% over 50 years.
Who’s Impacted?

- **Household residents**
  - (family members, guests, pets)

- **General population in public venues**
  - (airports, casinos, hotels, parks, restaurants, stadiums, stores)

- **Workers in various service industries**
  - **Environmental Services** (janitorial, recycling, waste disposal, water treatment)
  - **Hospitality** (hotels, theme parks, stadiums, casinos, airports)
  - **Retail** (stores, restaurants)
Reaction to Needles in Public Waste

- Needles in public waste are of unknown origin
- Needles of unknown origin must be considered as potentially dangerous infectious material
- Needles in public waste create exposure to accidental needle-stick injuries
- Needles discarded by self-injectors have historically been non-regulated by state and federal legislation generators
- Due to increasing visibility of public health safety issue, state and federal legislation is emerging
“Cost” Impact of Accidental Needle Sticks

- Physical/emotional trauma to individual
- Loss of work productivity and income
- Cost of diagnostic testing and treatment
- Transmission of pathogenic diseases
- Life altering illnesses (HIV, HEP B & C)
- Life-long consumption of medical care
- Lawsuits, litigation and settlements
Manufacturers of Home Care Injectibles

- **Arthritis:** Humira and Enbrel (Abbott, Amgen)
- **Diabetes:** Insulin, Byetta, Symlin and Diagnostic (Eli Lilly, Sanofi-Aventis, Novo Nordisk, Lifescan, Roche Diagnostics, Abbott, Bayer)
- **Hepatitis C & B:** Interferon (Roche, Schering-Plough)
- **HIV:** Retrovir (Roche)
- **Infertility:** FSH, HCG, and HMG (Serono, Organon, Ferring)
- **Migraine:** Imitrex (GlaxoSmithKline)
- **Multiple Sclerosis:** Interferon (Serono, Teva, Biogen, Berlex-Schering AG)
- **Osteoporosis:** Teriparatide (Eli Lilly)
- **Psoriasis:** Amevive (Biogen)
- **Others Include:** Vitamin B12, Allergies, Blood Thinning, Growth Hormones, Veterinary Care
- **In Development:** Hundreds of “designer” drugs in the pipeline
Solving the Problem

- Gaining attention of industry, public and Federal agencies
- Creation of Coalition for Safe Community Needle Disposal
- Development of grass-roots community disposal programs
- Evolving State and Federal legislation
- Initiating help from Product Stewardship Institute to develop safe disposal solution from industry stakeholders
Coalition Agenda

- Advocate to all 50 States to create legislation re-writing non-regulated medical waste regulations
- Advocate development of reimbursement strategies
- Advocate to industry stakeholders to develop needle disposal solutions for all self-injecting drugs
- With the help of PSI (Product Stewardship Institute) determine nationwide disposal solution including cost responsibility.
Senator Johnny Isakson (R-GA) and Representative Mike Ferguson (R-NJ) introduced companion bills (S. 1909 and HB 3251) in August that will provide coverage for home needle destruction devices or the disposal of sharps through a mail back under Part D of the Medicare Program.
State Needle Disposal Progress

**Current State Legislation** (Ultimately removing needles from the household garbage)

**Passed:** California, Massachusetts, New Jersey, Louisiana, Wisconsin, Oregon

**Pending:** Pennsylvania, New Hampshire, Mississippi

**Considering Legislation:** Texas, Rhode Island, Tennessee, Florida, Minnesota
Immediate Opportunities

**California:** Must have needle disposal options in place by Sept. 2008. AB 501 just passed in House and is now in Senate that says “Pharmaceutical manufacturers that dispense a pre-filled syringe must provide a safe needle disposal at patients request either with a sharps by mail program or a sharps container with information with the closest disposal site in their community.

**Massachusetts:** Must have needle disposal options in place by August 2008. Currently work with Product Stewardship Institute to identify pay structure using pharmacies and product manufacturers.

**Louisiana:** Must have needle disposal options in place by January 2009.
Amendment to Reenact the Louisiana Sanitary Code - SB 226

II. Regulate the packaging, storage, treatment, and transportation of home-generated sharps waste. "Home-generated sharps waste" means needles, syringes, and other medical instruments that are capable of puncturing the skin for the delivery of medications derived from a household, including a multifamily residence or household.

III. Prohibit any person from knowingly placing home-generated sharps waste in any container used for the collection of solid waste, recyclable materials, or greenwaste, any container used for the commercial collection of solid waste or recyclable materials from business establishments, or any roll-off container used for the collection of solid waste, construction, and demolition debris, greenwaste, or other recyclable materials.
New Hampshire Legislation HB 1502

This bill:
I. Prohibits the disposal of medical needles in waste collection containers effective July 1, 2009.
II. Requires any person who disburses needles, syringes, or other similar medical instruments to participate in a take-back program approved by the department of environmental services effective July 1, 2009.
III. Requires the department of environmental services to develop an educational program to educate the public about the safe disposal of needles, syringes, or other similar medical instruments.
California - AB 501

Legislation was passed in January 2007 that made it unlawful to throw needles in the household garbage and gave communities until Sept. 2008 to implement safer disposal programs.

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Types of Needle Disposal Programs

Community-Centric Needle Disposal Programs
- Drop Box Collection Sites
- Residential Special Waste Pick-Up
- Household Hazardous Waste Programs
- Syringe Exchange Programs

Patient-Centric Needle Disposal Programs
- Disposal by Mail Programs
- In-Home Individual Disposal Products (needle destruction devices)
Sharps By Mail Programs

The Sharps Disposal by Mail System®:

- Containers available to residents at local pharmacies
- Resident fills container with used sharps
- Convenient (local pharmacy distribution)
- Transportation via the US Postal Service
Community-Based Programs

Kiosk Programs

Chrysalis Environmental Solutions, LLC
Rhode Island Community-based Program

Program Specifics

- 5.3 Years
- 5,009,106 pounds of needles collected
- 58% collected at CVS Locations

Site Locations

- Pharmacies
- Fire and Police Stations
- Healthcare Agencies (hospitals, clinics, nursing homes, doctor offices, etc.)
- Government Buildings
- Transfer Stations
Options for Site Funding

- Pharmaceutical Company re-imbursement
- Town funding (i.e.-San Francisco is increasing residential disposal fees by .5% to cover sharps disposal.)
- Charge a collection fee at point of purchase ($5.00 co-pay)
- Sponsorship on Kiosk
- Local Hospital Funding
Boone County, Indiana

- County Waste Department provides containers to all Boone County Residents FREE OF CHARGE

- Residents can obtain the containers at the County Health Department

- When the container is full, return it to the Health Department where appropriate disposal will be accomplished at no charge and residents can obtain another free container.

- Annual cost for distribution and disposal is $604 (2002)
Pulaski County, Arkansas (Little Rock)

- Pulaski County Residents can obtain a free container from a participating pharmacy (provided by the county Waste Department).

- When the container is full, residents return it to one of five public works facilities (household hazardous waste facilities) in the county at no cost.

- Annual cost for disposal is virtually nothing because the needles are disposed of as hazardous waste not medical waste.
Riverview Hospital - Wisconsin Rapids, WI

- *Sharps Smart* was implemented to help sharps users follow the state law.

- Self-injectors bring their filled sharps or household container to the hospital lobby where it is disposed in a large kiosk open 24/7.

- Maintaining the program costs about $2500 per year and is paid for by the Hospital Foundation.
Pharmacy Approach

- Business Opportunity
- Provide Valuable Service for Patients
- Convenient and Easily Accessible to Patients
- Drive Store Traffic
- Gain Diabetes Patient Business
64% of the 3.2mm Medicare eligible patients with DM had drug expenditures exceed $2,250\textsuperscript{1} in 2001\textsuperscript{*} (*cost adjusted to 2006 adj.dollars)

A typical person with Type II DM used 4.1 medications with annual cost of $2,700 in 2001\textsuperscript{2,3}

Source:
A person with diabetes averaged $13,243 in 2002 health care costs, compared with $2,560 for a non-diabetic person, according to the American Diabetes Association.  

It is estimated that people with diabetes have spent over $122 billion on prescriptions, over the counter medications and sundries in 1998.

Source:
Coalition National Efforts

- Meeting with chain pharmacies as well as regional grocery chains with active pharmacies.

- Working with states to help identify and develop programs specific to local residents.

- Working with Product Stewardship Institute a national non-profit that takes a product stewardship, shared responsibility approach that involves those responsible for the manufacture, distribution, use, and end-of-life management of medical sharps. The primary goal is to maximize the safe collection and disposal of waste sharps by developing a nationally coordinated system that is financially sustainable.
Help identify and support state legislators that would introduce needle disposal legislation and work with that state leader in writing legislation for 2009

Introduce you to existing programs that offer safe disposal solutions

Help educate the public and develop educational/informational materials

Encourage reimbursement at Federal Level
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