

Drug Return & Disposal

Oregon's Experience

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Oregon Political Environment

- Democratic supermajorities.
- Appeal of “firsts,” e.g. bottle bill.
- Strong environmental ethos.
- Water quality and access growing concerns.

Issue Background

- “Surface Waters” vs. “Drinking Water”
- USGS study of pharmaceuticals in Columbia River Basin front-page news in early 2007.
 - Amounts not harmful: parts per *trillion*
- Wastewater treatment licensing changed to include a requirement for utilities by 7/1/2011 to submit plans to reduce discharges of “persistent pollutants.” Plans “may” include undefined “pharmaceutical take-back programs.”

“Stewardship”

- “Product Stewardship” – cradle-to-grave manufacturer responsibility, gains foothold.
- 2007: Computer recycling mandate adopted by Oregon legislature.
- 2008/09: DEQ proposes broad authority to initiate stewardship programs, i.e. manufacturer-funded disposal.

Rx “Take-Back”

- Precautionary Principle: Remove from waste stream.
- Proponents: Redirect unused medicine only by special collection and incineration.
- Opponents:
 - Why does medicine go unused?
 - Are there more effective disposal methods?

Oregon Proposal – SB598

- Requires manufacturers to operate programs to take back and dispose via hazmat incineration any drug sold in the state.
- Programs must accept products from consumers, long-term care facilities and hospices.
- No special collection days, no landfill disposal, “convenient.”
- Primary proponents: Association of Clean Water Agencies (water & sewer utilities)
- Others: Public Health, tribes

Imperfect Consumers

Participation Rates in Existing “Take-Back” Programs:

Dry Cell Batteries – 3%

Plastic Shopping Bags – 3%

Household Hazardous Waste – 3%

Electronic Equipment – 15%

Curbside Recycling – 80%

Car Batteries – 90%

“Successful” Take-Back

- 20% participation
- Estimated 0.2 pp trillion influent difference vs. household trash disposal
- Plus:
 - Impact of transport and disposal
 - Creates an attractive hazard

What About Leachate?

- Assumptions:
 - 10% of consumer medicines unused
 - 100% of unused disposed via landfill
- Leachate contribution of pharmaceuticals detected in water:
 - 0.03% (5% disposed) to 0.1% (15% disposed)

If Not for...



Then for...



Diversion Prevention

- Drug-related poisonings rising
- Take-Back proponents claim a solution
- Problem: No data to support expired meds as the problem.

Bottom Line

- Most effective, least costly method to dispose of unwanted meds is household trash.
- Reduces both environmental impact and risk of abuse.
- Oregon Legislature rejected take-back and broad stewardship authorization.
- Need to continue to investigate why medicines go unused.

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