Lessons Learned: Voluntary Pharmaceutical Take-Back Programs in the Great Lakes States

The Problem:
Every 14 minutes, someone in the U.S. dies from an unintentional drug overdose, and more people die each year from overdoses involving prescription painkillers than from heroin and cocaine combined. What’s more, over 70 percent of people who abuse prescription medications get them from friends or family members, who often stockpile leftover medicine in their cabinets. It’s from these same stockpiles that both children and pets can also access and accidentally ingest medication. In fact, among children, emergency room visits for drug poisonings (excluding misuse or abuse) are twice as common as poisonings from other household products.

However, disposing of leftover medications in the trash or flushing them down the toilet does not solve the problem. This only sends medicine into our rivers, streams, and waterways. That’s because most water treatment plants in the U.S. are not designed to filter out pharmaceutical compounds. In fact, a 2002 study conducted by the U.S. Geological Survey found that 80 percent of streams tested across the country were contaminated with at least one pharmaceutical, personal care product, or other organic wastewater contaminant. Studies have also found trace amounts of antibiotics, anti-seizure medicines, mood stabilizers, and sex hormones in drinking water across the U.S. While the long-term effects of repeated exposure to low levels of these chemicals is not yet known, research shows that it seriously harms fish.

Pharmaceutical take-back programs provide a simple, convenient way for consumers to dispose of their leftover medications safely and responsibly. They help reduce the safety and environmental risks associated with improper storage and disposal of pharmaceuticals by making leftover medicine inaccessible to children, pets, and potential abusers. Some local police stations, pharmacies, community organizations, and governments, as well as the U.S. Drug Enforcement Administration (DEA), provide drug take-back collections. However, only a patchwork of collection options exists nationwide, and the vast majority of medicine sold in the U.S. is improperly discarded or stored in homes indefinitely.

What makes a successful take-back program?
PSI conducted interviews with key stakeholders in the Great Lakes who are operating or supporting drug take-back initiatives in their communities. There is no “one size fits all” model or approach to designing medicine collections, since multiple factors—such as program funding, partnerships, transportation, and disposal options—vary by jurisdiction. Instead, the following recommendations are based on key themes of successful pharmaceutical take-back initiatives in the Great Lakes:

✓ Enlist a champion.
Recruit an individual to your cause who is passionate and committed to establishing a pharmaceutical take-back program in your community.

✓ Review your outreach materials.
Ensure that your messaging and outreach materials resonate with advocates of environmental protection, public safety, and drug abuse prevention. As part of your outreach, a “no flushing” message should be prominent.

✓ Partner with law enforcement agencies.
Develop a partnership with your local law enforcement department to be able to collect, transport, and properly dispose of controlled substances, either through permanent drop-boxes or one-day events. The most comprehensive collection programs can accept all medicine, including controlled substances. Under current regulations, only law enforcement officials are authorized to accept controlled substances from consumers, although there will likely be more collection options once the DEA issues its final rule.

✓ Reach out to pharmacies.
Develop a relationship with local pharmacies, state pharmacy associations, and/or state pharmacy boards. Even if your program does not include medicine collection sites at retail pharmacies, this key stakeholder group can help spread the message and educate consumers.

✓ Meet regulations and standards.
Comply with all relevant federal, state, and local regulations for handling, transporting, and properly disposing of household pharmaceutical waste. This includes registering with the DEA (if accepting controlled substances) and meeting state disposal guidelines for household pharmaceuticals.
LESSON #1

Establish a broad, multi-stakeholder coalition

Establishing a broad, multi-stakeholder coalition is critical for obtaining continued support for drug take-back programs and for reaching the widest audience. Partnering with law enforcement and retail pharmacies is often a natural way to expand the scope and level of access to pharmaceutical take-back programs. However, there are many other stakeholder groups that you may want to approach as well because the environmental and public health and safety messages resonate differently with different people.

Potential stakeholders to involve in your medicine collection efforts:

- Local law enforcement
- Retail pharmacies
- Pharmacy associations and state boards of pharmacy
- Hospitals and medical clinics
- Drug abuse prevention organizations and service providers
- Poison control centers
- Waste-to-energy facilities (e.g., Covanta) and other waste
- Waste water treatment plants and reclamation districts
- Religious organizations
- Public and private colleges and universities
- Mayor, town council or other elected official(s)
- Citizen activists/volunteers
- Local media
- Supermarket chains with retail pharmacies
- State Triad agencies (i.e., partnership of three organizations: law enforcement, senior citizens, and community groups)
- Pharmaceutical manufacturers and their national associations

LESSON #2

Understand and Comply with DEA Regulations

In addition to state and local regulations in some jurisdictions for handling, transporting, and properly disposing of household pharmaceutical waste, the DEA established federal restrictions on how controlled substances (e.g., OxyContin®, Percocet®, and Adderall®) are handled and disposed of from households. Currently, only law enforcement officers can accept expired or unused controlled substances, and only through take-back programs or one-day collection events. However, this DEA rule is currently being revised to expand collection options.

The Controlled Substances Act (CSA) was passed in 1970 to limit drug abuse and addiction in the U.S. by regulating how certain substances are managed. Ironically, the CSA’s tough restrictions on the handling of controlled substances make it challenging to establish convenient options for drug take-back programs, which are also very important for keeping drugs out of the hands of abusers. In October 2010, Congress passed the Secure and Responsible Drug Disposal Act, which amends the CSA by requiring that the DEA make disposal of controlled substances easier for consumers.

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LESSON #3

Determine Collection Type Based on Program Resources and Goals

Various drug take-back initiatives in the Great Lakes began by hosting one-day events that were widely publicized and required a number of supporting partners. Although many of these events brought in large amounts of returned medicine, and some of them inventoried the drugs collected and/or surveyed participants, they were also very time- and resource-intensive. While one-day events can be a good way to start out, trends show that permanent drop-off sites are becoming the standard. Ultimately, most one-day events provide limited access and convenience to consumers compared to permanent collection sites that are available throughout the year.

It is widely agreed that permanent medicine collections through retail pharmacy is the preferred model because it is a convenient, accessible, and logical option for consumers. However, since pharmacies are not currently authorized by existing DEA regulations to accept controlled substances, additional collection options, such as drop-boxes at law enforcement facilities, are needed. PSI envisions a system whereby a strong infrastructure of permanent drop-off sites for consumers will reduce the need for one-day collection events.

LESSON #4

Maximize Efficiency

Maximizing efficiencies for collecting, transporting, and disposing of medicines collected at permanent drop-boxes is necessary to minimize program costs and staff resources. Each drug take-back initiative has its own unique logistical challenges to overcome. By working with surrounding communities, you may be able to reduce the frequency of trips needed to collect and dispose of medicines—especially programs that accept controlled substances and, therefore, require law enforcement officers to handle them.

Examples of how drug take-back programs in the Great Lakes manage efficient collection, transportation, and disposal activities:

» Red Barrels Program, MI: Participating law enforcement agencies in Livingston County bring collected medicines to monthly police meetings for aggregation. Then, the departments take turns storing and properly disposing of collected medicines at a facility in Michigan.

» West Michigan Take Back Meds: Employees of the Clean Water Plant in Wyoming, Michigan pick up medicines collected at participating pharmacies during their regular duties servicing the utility’s collection system. Local police departments store the controlled substances, usually for a few months at a time, before they are taken to a waste-to-energy facility for combustion, where law enforcement is also present.

» Minnesota Pollution Control Agency (MPCA): The MPCA regulations classify collected household pharmaceuticals as a hazardous waste, which require collected drugs to be shipped to a permitted hazardous waste facility outside Minnesota for destruction. The agency has since used an existing alternative regulatory pathway to allow approved waste-to-energy facilities in Minnesota to accept all collected household medicines, thereby providing a more economically sustainable option for proper disposal.
LESSON #5

Collect Data

A number of one-day drug take-back events held in the Great Lakes region and elsewhere have recorded data on the types and dosages of leftover medicines collected, which is only possible if medicine is returned in its original container. Taking inventory of collected medicine helps the broader product stewardship network understand how much and what types of medicine are unused or expired, and to what extent current drug take-back efforts are addressing the problem of pharmaceutical waste. The data can also inform strategies for improved prescribing practices to reduce waste. Similarly, surveys can be an effective tool for gathering data. Consider conducting an anonymous survey of program participants to learn how to increase awareness and participation. (See sample drug collection data reporting forms in Appendix J of Wisconsin Household Pharmaceutical Waste Collection: Challenges and Opportunities, which can be found at http://dnr.wi.gov.)

NOTE: It is important to find a balance between collecting data and ensuring anonymity for residents dropping off medicine. Program operators often encourage residents to cross out all contact information on medicine containers and highlight a “no questions asked” policy.

LESSON #6

Identify Temporary Funding Sources

Obtaining sufficient funding to cover operational costs often presents the biggest challenge to creating new take-back programs. There may be one-time costs, such as the purchase of permanent drop-boxes, as well as ongoing costs, including transportation, disposal, brochures, signage, and other outreach materials. In addition, staff time is a significant resource, even if law enforcement officials provide their time as in-kind resources.

- Local government agencies (e.g., environmental protection, health department, solid waste management districts, wastewater treatment plants, etc.)
- State agency grants (e.g., Wisconsin Department of Agriculture Trade and Consumer Protection’s “Clean Sweep” program)
- Foundations and private donors
- Drug abuse prevention and religious organizations
- Retail pharmacies (e.g., Yellow Jug, Old Drugs program)
- Hospitals
- Environmental organizations
- Dedicated funds approved by the state legislature
- Drug forfeiture money

Examples of how drug take-back programs in the Great Lakes are funded:
LESSON #7

Seek Sustainable Funding – Consider an Extended Producer Responsibility Approach

The burden for funding medicine take-back programs currently falls almost exclusively on government agencies (including law enforcement) and taxpayers, whose budgets are shrinking. A lack of sustainable funding for these programs represents a critical barrier to establishing comprehensive pharmaceutical take-back programs throughout the Great Lakes and beyond. Therefore, PSI and many other stakeholders are advocating for a product stewardship solution whereby pharmaceutical companies fund and manage drug take-back programs as part of doing business.

Benefits of Extended Producer Responsibility (EPR) for Pharmaceuticals

EPR is a mandatory type of product stewardship that shifts the financial and operational responsibility of post-consumer product management from government to manufacturers. EPR programs absorb the cost of responsible end-of-life management into the cost of products. Pharmaceuticals is the only product category for which EPR legislation has been introduced at the local, state, and federal level. Although there are no EPR laws for pharmaceuticals in the Great Lakes, Minnesota introduced an EPR bill in 2010 (H.F. 1217) and stakeholders in Wisconsin are considering introducing legislation in 2013.

Pharmaceutical Take-Back Laws and Legislation in North America

Local
Alameda County, California (2012), and King County, Washington (2013), have passed laws that require drug manufacturers to manage and finance the collection of unwanted pharmaceuticals.

State
Since 2009, nine states have introduced bills requiring pharmaceutical manufacturers to finance and manage take-back programs for unwanted, leftover drugs. These states are California, Florida, Maine, Maryland, Minnesota, New York, Oregon, Pennsylvania, and Washington.

Federal
In 2011, U.S. Congresswoman Louise Slaughter (D-NY) introduced the Pharmaceutical Stewardship Act (H.R. 2939) in Congress and has plans to reintroduce it in 2013.

Canada
British Columbia, Manitoba, Ontario, and other provinces have been taking a product stewardship approach to managing pharmaceutical waste for over 15 years.

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