
**Report to
The Vermont Legislature**

Statewide Drug Disposal Program in Vermont

In Accordance with Act 75, Section 16
*An Act Relating to Strengthening Vermont's Response to Opioid Addiction and
Methamphetamine Abuse*

Submitted to: House Committees on Human Services, on Health Care and on
Judiciary;
Senate Committees on Health and Welfare and on Judiciary

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Statewide Drug Disposal Program in Vermont

Act 75, Section 16

January 15, 2014

Executive Summary

Act 75, Section 16 directed the Commissioners of the Departments of Health and of Public Safety to provide recommendations about the design and implementation of a voluntary statewide drug disposal program for unused over-the-counter and prescription drugs at no cost to the consumer.

Because many prescription drugs used by almost half of all Americans go unused or partially used, there are potential safety and environmental consequences to unused medications. A number of models for drug-disposal programs have been tried, but there is no universal system for doing so. It is important that Vermont develop strategies for the convenient and safe method of disposing unused medications. The challenge will be to develop programs that are legal, have sustainable funding, are free to the consumer, have appropriate oversight and are not the sole responsibility of government.

As a result of the Secure and Responsible Drug Act of 2010, the federal government will be promulgating rules for prescription drug disposal. These rules, not yet drafted, are likely to clarify and simplify drug disposal and, perhaps, enable more options for disposal than currently exist. In the meantime, there are some strategies communities can adopt for making legal drug disposal available to citizens. This report outlines these strategies and identifies the advantages and disadvantages of each.

**Statewide Drug Disposal Program in Vermont
Act 75, Section 16
December 23, 2013**

Introduction

In 2013, The Vermont General Assembly passed Act 75, *An Act Relating to Strengthening Vermont's Response to Opioid Addiction and Methamphetamine Abuse*. Section 16 of the Act directed the Commissioners of the Departments of Health and of Public Safety to provide recommendations about the design and implementation of a voluntary statewide drug disposal program for unused over-the-counter and prescription drugs at no cost to the consumer. In response to this requirement, the two departments jointly convened a statewide committee to review current successful drug disposal programs and discuss realistic options for Vermont to implement drug take-back programs. This report reflects the Committee's work and offers recommendations for establishing voluntary unused drug disposal programs, promoting the program and making all Vermont residents aware of the opportunities to safely dispose of their unused or expired prescription drugs.

Background

The use of prescription drugs is common among Americans. According to the CDC, at least 48.5% of Americans were using at least one prescription drug in the past month¹. In spite of that, many prescription drugs go unused or partially used. The past decade has seen increased concern about the appropriate disposal of prescription medications for reasons discussed below. On October 26, the federal Drug Enforcement Administration (DEA) held a National Prescription Drug Take-Back Day. During that day, nearly 650,000 pounds of unused prescription medications were collected for proper disposal. The Vermont portion of that amount was estimated to have been 3,430 pounds². The magnitude of unused medications points to the need to develop ongoing strategies for drug take-back efforts.

Concerns about appropriate disposal of prescription drugs center around safety and environmental issues. Improperly stored or disposed of drugs, can lead to the following:

- Increasing numbers of home burglaries involving theft of prescription drugs.
- Prescription drug misuse and abuse: A national study indicated that 70% of the people reporting misuse of prescription drugs obtained them from a medicine cabinet or by other family members or friends³.
- Overdose by children and adolescents who obtain unused prescription drugs from medicine cabinets.

¹ <http://www.cdc.gov/nchs/fastats/drugs.htm>

² <http://www.justice.gov/dea/divisions/hq/2013/hq110613.pdf>

³ <http://www.safecoalition.org/2013-10-28-american-medicine-chest-challenge>

- Environmental contamination. People who do not have a safe or convenient method for disposing of their prescription drugs may resort to throwing their prescription drugs in the landfill or flushing them down the toilet. The US Geological Survey studied water from 139 streams in 30 states and found that 80% contained traces of pharmaceuticals⁴. The effect that those traces of pharmaceuticals may have on the environment, plants, and marine life are unknown. Medications that are flushed or poured down the drain have been found in lakes, rivers and streams. There is concern about the potential health effects to humans, animals or aquatic ecosystems if large amounts of these chemicals get into the nation's water supply.⁵

For these reasons, it is important that Vermont develop strategies for the convenient and safe method of disposing unused medications. The challenge will be to develop programs that have sustainable funding, are free to the consumer, have appropriate oversight, and are not the sole responsibility of government. As a result of the Secure and Responsible Drug Act of 2010, the federal government will be promulgating rules for prescription drug disposal. These rules, not yet drafted, are likely to simplify drug disposal and, perhaps, enable more options for disposal than current exist.

⁴ <http://www.usgs.gov>

⁵ <http://healthvermont.gov/adap/documents/disposalfactsht12-07.pdf>

Disposal Programs in Vermont

Vermont residents currently have a few choices of where and how to dispose of their unused or expired prescription drugs.

1. The Vermont Department of Health's website offers a list of disposal guidelines that is consistent with the FDA's recommended guidelines for safe disposal. The recommendations are as follows:

- Follow any specific disposal instructions on the drug label or patient information that accompanies the medication;
- Do not flush prescription drugs down the toilet unless information specially instructs you to;
- Take unused, unneeded or expired prescription and over-the-counter drugs out of their original containers;
- Mix the prescription or over-the-counter drugs with an undesirable substance (e.g. used kitty litter, coffee grounds, or soil); choose an undesirable substance that children and pets won't want to eat;
- When discarding a transdermal patch, fold the patch into itself and then place it in the undesirable mixture;
- Place the mixture into a sealable plastic bag or container, and place it in the trash. A small number of medicines, including Fentanyl patches, may be especially harmful, and in some cases fatal, with just one dose if someone other than the person they were prescribed for uses them. These expired, unwanted or unused medications should be flushed down the toilet or sink to help prevent danger to people and pets in the home.

2. A number of law enforcement agencies host drug disposal drop off sites at police departments located across Vermont throughout the year⁶. These collection sites are free of charge and there is a *no questions asked* policy for people dropping off medications.

⁶ <http://vsp.vermont.gov/drugdiversion>

3. The Bennington Sheriff's Department hosts a unique disposal program in their county. Similar to other law enforcement collection sites in Vermont, there is a 24/7 collection site at the Sheriff's Department for residents to drop off their unused medications with no questions asked. The Bennington Sheriff is so dedicated to the cause that he will allow residents who cannot get to the Sheriff's Department to call the Department and the Sheriff (or one of his dispatcher's) will go out to the resident's home to collect their prescription drugs.

It is important to note that all prescription drug take back programs hosted by law enforcement in Vermont are merely collection sites and do not incinerate drugs. Each site holds onto the collected unused medications until the next national Prescription Drug Take Back Day. The collected medications are given to the DEA for disposal.

4. The Brattleboro Prevention Area Coalition is piloting a disposal method called Element MDS⁷. Element MDS is a 33 ounce disposal bottle for any medication needing disposal. Solid or liquid medication is mixed with water and a powder to create a solid gel. This gel makes the medication unusable and ready for disposal. Originally developed for hospice nurses, each bottle costs \$9.99. The bottles are designed for a one-time use, which includes the pick up costs and incineration costs.

⁷ <http://www.elementmds.com/>

Regional Disposal Programs

1. All CVS/pharmacy locations offer the Sharps Compliance's Environmental Return System, which provides customers with the ability to safely dispose of unused, expired, or unwanted non-controlled prescription drugs using affordable medication disposal envelopes. Customers can purchase postage-paid envelopes to mail unwanted prescription and over-the-counter medications through the United States Postal Service to a licensed, secure facility for safe return. Controlled substances are excluded from this program by law⁸.
2. Since 2010, Walgreens pharmacies have hosted the Safe Medication Disposal Program. The program was created so that individuals can securely seal and drop these pre-paid envelopes into any U.S. Postal Service mailbox. The envelopes cost the customer \$2.99 each. The medications are then sent to an incinerator facility where, following incineration, the ashes are ground up and formed into pellets which are used as an additive to concrete.⁹
3. The Prescription Pill Drug Disposal Program (P2D2) has established many permanent drug drop boxes that are housed at law enforcement agencies throughout the United States. This program, available in 17 States, has collected over 150,000 pounds of pharmaceuticals to date¹⁰.

⁸ http://investor.cvs.com/phoenix.zhtml?c=99533&p=RssLanding_pf&cat=news&id=1596955

⁹ http://www.walgreens.com/topic/sr/sr_safe_medication_disposal.jsp

¹⁰ <http://p2d2program.wordpress.com/>

Challenges for Drug Disposal Initiatives

There is no consistent, state-wide manner in which Vermonters can easily dispose of their unused and expired prescription drugs. One of the reasons for this is the significant cost of transporting and incinerating prescription drugs. There are also legal impediments to developing a drug disposal system.

In 1972, Congress passed the Controlled Substances Act, which restricts the collecting of controlled substances. Under the Act, law enforcement is the only entity authorized to take possession of a controlled substance from the patient to whom it was prescribed.

In Vermont, some law enforcement agencies assist in providing collection sites for unused medications, but pharmacies and clinics are prohibited from accepting controlled substances from individuals. This creates a barrier for individuals to easily dispose of their unused or expired medications.

The Secure and Responsible Drug Disposal Act of 2010 authorizes the United States Attorney General to amend the Controlled Substances Act. While a number of law enforcement officials have created drug take-back programs in compliance with the Controlled Substances Act, other take-back programs, in pharmacies and clinics for example, have been prohibited from accepting controlled substances from individuals. Once implemented, this law will remove legal barriers to drug disposal programs. According to the DEA, as of November 2013, the Secure and Responsible Drug Disposal Act of 2010

has not yet been implemented meaning pharmacies and clinics are still prohibited from accepting controlled substances from individuals.

Drug Disposal Options for Vermont

The Committee convened by Departments of Health and of Public Safety discussed current disposal opportunities and options for a statewide prescription drug disposal program. Representatives from the Vermont Department of Health, Vermont State Police, the Bennington Sheriff, Brattleboro Area Prevention Coalition, Burlington Partnership for a Health Community, the Windham County Sheriff, Vermont Sherriff's Association, Springfield Police Chief and the Vermont Chief of Police Association comprised membership on the Committee. The Committee concluded that different communities might want different disposal options. The group decided that presenting a menu of choices for drug disposal programs would be the best resource to communities interested in drug disposal programs. The options are listed below, followed by a discussion and the advantages and disadvantages of each. It is important to note that all options for disposal strategies need to be consistent with current Federal Drug Administration Disposal Guidelines.¹¹

¹¹ http://www.healthvermont.gov/adap/documents/RxDisposalGuidelines_Nov2013.pdf

Options for Vermont Disposal Initiatives

Option I: Twenty Four- Hour drug and medication collection sites at law enforcement agencies

This option is currently available at a few police departments in Vermont. However; many Vermont drug and medication collection locations have limited hours that may not be convenient for some Vermont residents. The committee felt that having 24-hour drop off boxes located at all law enforcement agencies in all Vermont counties will encourage Vermonters to bring in their unused prescription drugs.

Advantages:

- Free for residents;
- No questions asked;
- Safe method for residents to dispose of unused prescription drugs.

Disadvantages:

- Some residents may not feel comfortable going to a law enforcement site to dispose of their prescription drugs;
- Agency locations may be out of the way and therefore not easily accessible for some residents;
- Law enforcement does not have a way to dispose of prescription drugs collected through on-site disposal programs; they would need to wait for the DEA's bi-annual take-back day to dispose of the prescription drugs;
- The lack of accountability for drugs disposed of leaving potential for abuse by law enforcement officers who could access drop boxes;

- This strategy is counter to some law enforcement agency's policies and procedures for handling items turned over to police;
 - Each law enforcement site needs DEA authorization to collect medications.
- The Secure and Responsible Drug Disposal Act's rules will simplify this when they are promulgated.

Option II: Mail-back program

The Committee felt that having a mail-back program, at no cost to consumers and consistent with current laws, would provide Vermont residents an option for disposing of their unused and unwanted medicines in a convenient and anonymous way. This would be similar to a program in Maine that was started in 2008 from the Center on Aging. The pilot program received funding from the United States Environmental Protection Agency to conduct a pilot program on a prescription medicine disposal program by mail. The program was funded through a Fund for Healthy Maine allocation to the Maine Drug Enforcement Agency. The Maine program is administered by the Maine Drug Enforcement Agency¹². A mail back program would assist residents by providing special prepaid envelopes that would need to be distributed by pharmacies, health care facilities and law enforcement agencies throughout Vermont.

Advantages:

- This would allow Vermont residents to send medicines through the US Postal Service for safe disposal;
- Mailing back prescription drugs is easy, free and anonymous;
- Cost effective to consumers

¹² <http://www.iisgcp.org/unwantedmeds/toolkit/maine.pdf>

Disadvantages:

- Concerns regarding the tampering or theft of prescription drugs through the mail.

Option III. Law enforcement agents pick up unused prescription drugs at consumers' residence in each community.

Advantages:

- Consumer friendly approach;
- No questions asked;
- Safe method for residents to dispose of unused prescription drugs.

Disadvantages:

- This option would only be possible in communities where there are law enforcement agents willing, able and resourced to assist in this effort;
- This approach would be cumbersome for law enforcement agencies.

Option IV: Element MDS disposal method (Brattleboro Program)

Any medication needing disposal, solid or liquid, is mixed with water and a powder to create a solid gel. This gel makes the medication unusable and ready for disposal.

Advantages:

- This approach would not only collect unused medication but also incinerates the unused medications.

Disadvantages:

- There are environmental concerns regarding the amount of plastic waste generated by this disposal method. The large containers are to be used for

one time only which means that the large containers will end up in landfills;

- This method can be costly.

Promoting the Menu:

The Committee's recommendation is to offer the above menu of options for various prescription drug disposal to Vermont communities. Consumer education about how and where to dispose of unused prescription drugs will be needed to communicate the proper and legal procedures for returning expired, unused, or unwanted medications and to motivate Vermonters to participate in disposing of their prescription drugs. The Committee recommends the following suggestions for promoting awareness:

- "Point-of-life" opportunities to inform (e.g. Hospital discharge, Hospice care, Pharmacy pick-ups, Veterinarian offices, Dentists, Funeral Homes);
- Flyers about how to dispose of unused prescription drugs should be available at pharmacies (displayed on the counter, not as inserts);
- Statewide/local media campaigns (as a supplement to "Lock Your Meds," "Family Meals," Partnerships for Success or other local/statewide prescription drug misuse prevention messaging);
- Joint press release from the Vermont Department of Health, Vermont Public Safety and Vermont 211 to promote existing permanent take back locations.

Funding needs

In order for disposal to be cost free to Vermont residents, funding to support disposal programs and the promotion of these programs will be needed. Cost estimates for the various disposal methods are set out in Figure I.

Figure I. Cost Estimates for Prescription Disposal Options

Concept	Cost	Other Considerations
Option 1: 24 hour drop off	Each box costs \$800 dollars including shipping to the law enforcement agency.	It is possible to receive a free drop off box if a grant is obtained from the National Association of Drug Diversion Investigators (NADDI) (http://rxdrugdropbox.org/purchase-rx-drug-drop-box/) ***Police departments have the drop off in their lobby area. This would be considered a 24 hour drop off location.
Option 2: Mail back program	Estimates of \$2-5 charge to Vermont resident per envelope.	A mail back program would be free to Vermont residents if grant funds were available to subsidize the program.
Option 3: Law enforcement agents pick up	Estimate costs for law enforcement agents time and gas	This particular option would only be possible with law enforcement agencies that have the time and resources to drive to consumers' residence.
Option 4: Elements MDS	Each bottle costs \$9.99 and is designed for a one-time use, which includes the pick up costs and incineration costs.	There is concern about these containers ending up in Vermont's landfills causing more environmental damage.
Additional Funding Needs: Print Material/Awareness Campaign	\$50,000.00	Funding is needed conduct an awareness campaign and for future awareness campaigns. Providing information to the public on the dangers of prescription drug misuse and abuse should not be a one-time event.

Conclusion

Prescription drugs that are unused can pose health and safety threats to the public.

Consequences such as accidental poisoning, unintended overdoses, prescription drug misuse, crime, pharmaceutical waste and environmental contamination can be reduced by the pursuit of legal drug disposal options. The drug disposal options must be accompanied by a public information campaign that educates communities about the risks of undisposed drugs and the options for disposing of them.

