REPORT OF THE JOINT COMMISSION ON HEALTH CARE

PHARMACY DRUG DISPOSAL PROGRAM

TO THE GOVERNOR AND THE GENERAL ASSEMBLY OF VIRGINIA



REPORT DOCUMENT NO. 272

COMMONWEALTH OF VIRGINIA RICHMOND 2019

Code of Virginia § 30-168.

The Joint Commission on Health Care (the Commission) is established in the legislative branch of state government. The purpose of the Commission is to study, report and make recommendations on all areas of health care provision, regulation, insurance, liability, licensing, and delivery of services. In so doing, the Commission shall endeavor to ensure that the Commonwealth as provider, financier, and regulator adopts the most cost-effective and efficacious means of delivery of health care services so that the greatest number of Virginians receive quality health care. Further, the Commission shall encourage the development of uniform policies and services to ensure the availability of quality, affordable and accessible health services and provide a forum for continuing the review and study of programs and services.

The Commission may make recommendations and coordinate the proposals and recommendations of all commissions and agencies as to legislation affecting the provision and delivery of health care.

For the purposes of this chapter, "health care" shall include behavioral health care.

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Preface

In 2018, Senate Bill 862 would have required participation in a drug disposal program by pharmacies that dispense Schedule II and III controlled substances; do not dispense primarily by mail, common carrier, or delivery service; and are not located within a hospital. The legislation was passed by indefinitely in Senate Education and Health committee with a letter from the Senate Clerk requesting that the Joint Commission on Health Care (JCHC) study the subject.

After receiving approval by Commission members during the work plan meeting, JCHC staff researched the topic and found that, despite a variety of health and environmental risks posed by unused and improperly disposed of medicines, consumer use of medicine collection and disposal methods recommended by Federal agencies remains low. Several states and municipalities support and/or oversee medicine tack-back programs, ranging from those that are publicly funded to those funded by pharmaceutical manufacturers with governmental oversight.

Four policy options were presented for consideration by members of the Joint Commission on Health Care, with an additional fifth option added by a JCHC member during the November decision matrix meeting. The JCHC approved two options:

- Introduce legislation to amend \$54.1-3319 of the Code of Virginia to add counseling on medicine disposal to the list of topics on which pharmacists may counsel persons who present a new prescription for filling
- Introduce legislation (Uncodified Act) directing the Board of Pharmacy to work with stakeholders to determine ways to enhance public awareness of proper drug disposal methods, including existing community-based disposal and collection opportunities¹

Joint Commission members and staff would like to acknowledge and thank those who assisted in this study including representatives from the Department of Environmental Quality, the Department of Health Professions, the Virginia Department of Health, and the Virginia Pharmacists' Association.

The study and this report was assigned to and completed by Andrew Mitchell, Senior Health Policy Analyst at the Joint Commission on Health Care. He may be contacted at amitchell@jchc.virginia.gov.

¹ This option was subsequently introduced as a budget amendment for the 2019 session.

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Executive Summary

In 2018, Senate Bill 862 would have required participation in a drug disposal program by pharmacies that dispense Schedule II and III controlled substances; do not dispense primarily by mail, common carrier, or delivery service; and are not located within a hospital. The legislation was passed by indefinitely in Senate Education and Health committee with a letter from the Senate Clerk requesting that the JCHC study the subject matter contained in the bill. The JCHC Executive Subcommittee and members approved the study for 2018.

After receiving approval by Commission members during the work plan meeting, JCHC staff researched the topic and found that while unused and inappropriately stored or disposed of medicines may pose a variety of health risks and environmental risks, use of disposal methods nationally that meet Federal DEA standards or recommended by the EPA/FDA remains highly limited. In Virginia, a recent task force's recommendations for improving appropriate medicine disposal and collection by consumers highlighted the need for additional funding and increasing consumer outreach and education.

Other states and municipalities have established a variety of medicine take-back programs, ranging from those directly funded by governments to those funded by pharmaceutical manufacturers and overseen by the state or local government (known as an "Extended Producer Responsibility" [EPR] model). Washington State established the first statewide EPR model covering all controlled and non-controlled pharmaceuticals, with manufacturers responsible for establishing and fully funding the program. A "program operator" contracts with manufacturers to implement the program and the State's Department of Health reviews, approves and monitors implementation of the program.

Four policy options were presented for consideration by members of the Joint Commission on Health Care, with an additional fifth option added by a JCHC member during the November decision matrix meeting. The JCHC approved two options:

- Introduce legislation to amend §54.1-3319 of the Code of Virginia to add counseling on medicine disposal to the list of topics on which pharmacists may counsel persons who present a new prescription for filling
- Introduce legislation (Uncodified Act) directing the Board of Pharmacy to work with stakeholders to determine ways to enhance public awareness of proper drug disposal methods, including existing community-based disposal and collection opportunities²

² This option was subsequently introduced as a language only budget amendment for the 2019 session.

PHARMACY DRUG DISPOSAL PROGRAM

Study Mandate

In 2018, Senate Bill 862 would have required participation in a drug disposal program by pharmacies that dispense Schedule II and III controlled substances; do not dispense primarily by mail, common carrier, or delivery service; and are not located within a hospital. The legislation was passed by indefinitely in Senate Education and Health committee with a letter from the Senate Clerk requesting that the Joint Commission on Health Care (JCHC) study the subject. The JCHC Executive Subcommittee and full membership approved the study for 2018.

Background

Unused and improperly disposed of medicines may pose a variety of health risks. Studies suggest that there is a high prevalence of medicine prescriptions – two-thirds or more – that are only partially consumed, with the majority of unused or expired medicines stored in the home (Bicket et al. 2017; Law et al. 2014; Seehusen & Edwards 2006). Potential health risks from unused medicines that are inappropriately stored or disposed of at home by consumers include drug diversion, inappropriate re-use, and poisonings. In terms of drug diversion, almost 60 percent of individuals who misuse painkillers identify friends, family members or dealers as their source, and data suggest that the majority of patients may stockpile medicines, including for recreational use (Substance Abuse and Mental Health Services Agency (SAMHSA) 2017; Lewis et al. 2014). Re-use of medicines without a new prescription is also common, with one study indicating that 17 percent of patients re-used leftover prescription antibiotics without consulting a physician (Richman et al. 2001). Finally, approximately 60,000 emergency department visits are made annually for unsupervised ingestion of medicine by children under six years of age (U.S. Food and Drug Administration 2018). While improper disposal of unused medicine is likely to be a risk factor, the exact degree to which unused medicines contribute to poisonings remains unquantified.

Improper disposal of medicines may also incur negative environmental impacts. Active Pharmaceutical Ingredients (APIs) can enter into the aquatic ecosystem through three main pathways – excretion after ingestion, removal by washing, and flushing or throwing out medicines. In recognition of the potential environmental risks, the EPA highlights to consumers environmental risks associated with flushing medicines (U.S. Environmental Protection Agency 2011). Studies indicate that APIs have been detected in up to 80 percent of U.S. streams across a variety of drug classes (Kolpin et al. 2002; Batt et al. 2015). However, the resulting health risks are not entirely known. Some studies suggest that the presence of those pharmaceuticals poses a low level of toxicity risks to humans, while others suggest that risks to aquatic life may be of concern (Kostich et al. 2013).

Recent federal actions have sought to address concerns about improper disposal of unused medicines. In 2010, the Secure and Responsible Drug Disposal Act amended the Controlled Substances Act, allowing the public to deliver unused controlled substances to law enforcement agencies – the only "authorized collector" recognized at the time. In 2014, a rule by the Drug

Enforcement Agency (DEA) expanded the list of authorized collectors to include several other entities – in particular pharmacies and hospitals/clinics with an on-site pharmacy³. Key disposal, collection and destruction requirements are that authorized collectors: may not accept illicit drugs; may not inspect material collected; must have collection receptacles that meet certain security requirements or put medicines in mail-back envelopes; and destruction must render pharmaceuticals "non-retrievable". At this time, incineration is the only destruction method that meets the DEA's non-retrievable standard.

As summarized in Table 1, use of disposal bins and mail-back envelopes are recommended by the FDA and EPA and meet DEA's "non-retrievable" standard due to the use of incineration by the entity that receives the unused medicines. Disposal by landfill and sewering are recommended by the EPA and FDA only under certain circumstances (e.g., for drugs for which there is a high risk of diversion or overdose potential) (U.S. Food and Drug Administration 2018; U.S. Environmental Protection Agency 2011). None of the federal agencies has provided guidance on the use of medicine destruction pouches.

Table 1. Common Medicine Disposal Methods

Method	Meets DEA	Recommendation:	
	standard	FDA	EPA
Disposal bin (secure receptacle maintained by authorized collector)	~	***	***
Mail-back (use of approved envelope)	✓	***	***
Landfill (co-mingling in household trash)		**	**
Sewering (flushing down toilet/drain)		*	*
Medicine destruction products (by disintegration)			
disintegration)			

*** 1st choice; ** 2nd choice; * 3rd choice/limited applicability

Despite the 2014 DEA rule expanding the list of authorized collectors, the public's use of methods meeting DEA standards or recommended by the EPA/FDA remains highly limited. Studies have found that fewer than 10 percent of individuals reportedly consider use of FDA-recommended disposal methods (Bicket et al. 2017). Nationally, as of 2017, fewer than 3 percent of entities eligible to become authorized collectors had done so (United States Government Accountability Office 2017). In Virginia, 4 percent of licensed pharmacies were registered as authorized collectors in 2018, although a national analysis from 2017 found that Virginia ranked below national average in terms of access to disposal bins (United States Government Accountability Office 2017).

³ Other authorized collectors include: manufacturers, distributors, reverse distributors, and narcotic treatment programs.

Medicine Disposal Initiatives in Virginia

Three years before the introduction of SB 862, the Governor's Task Force on Prescription Drug and Heroin Abuse made 10 recommendations related to medicine disposal/collection (Governor's Task Force on Prescription Drug and Heroin Abuse 2015). At the time of a final update published in 2015, the status of implementation of those recommendations varied (see Appendix

Table 4 in the Appendix for further detail). While some recommendations had been fully or mostly addressed (e.g., a recommendation to include guidance on Take Back events at law enforcement agencies), the majority were only partially addressed or mostly not addressed. Common themes of recommendations that had not been fully implemented were to increase disposal opportunities and participation by authorized collectors through both outreach and education, and secure additional sources of funding to fully implement recommendations.

Currently, Virginia's Department of Behavioral Health and Developmental Services (DBHDS) and Department of Health (VDH) implement agency-level initiatives to encourage appropriate medicine disposal, although neither support medicine disposal and destruction methods that meet DEA requirements for authorized collectors. Using funds from the federal Opioid Prevention, Treatment – Recovery (OPT-R) grant (2018-2019), DBHDS supports activities such as: distribution of medicine deactivation packets, prescription medicine lock boxes for consumers, smart pill bottles; and the organization of medicine take-back events. DBHDS reports that approximately 2,324,000 encounters were made or participants reached during the first year of funding. VDH's local offices offer medicine destruction pouches free-of-charge to consumers. As of September, 2018, VDH reported that approximately 110,000 pouches had been distributed to health districts and 100,000 pouches remained in stock at Virginia Department of Health (VDH) headquarters.

Available data from authorized collectors indicate that law enforcement agencies collected and disposed of over 15 tons of unused medicines in 2016 through a combination of on-site disposal bins supported through a CVS grant program (six tons), as well as national medicine take-back back days (11.5 tons) (CVS Health 2018; Office of the Attorney General 2016). Tonnage collected by authorized pharmacy collectors is not systematically collected and therefore unknown. Locations of law enforcement agencies and pharmacies that currently take back unused medicines is pictured in Figure 1, below.



Figure 1. Medicine Take-Back Locations in Virginia

Sources: Virginia Department of Health Professions (DHP) (2018); CVS Health (2018) (Virginia Department of Health Professions (DHP) 2018; CVS Health 2018)

To better understand how SB 862 might affect pharmacies, the Virginia Pharmacists Association (VPhA) surveyed their membership. Around 12 percent of VPhA members provided responses. Just over 60 percent of respondents representing pharmacies that are not currently authorized to take back unused medicines reported that they would have been required to do so under SB 862. Among all respondents, concerns about SB 862's requirements related to increased costs (60%), security concerns (33%) and increased workload (29%). When asked about their likelihood in participating in a take-back program if there were no costs to pharmacies for medicine collection/disposal, 81 percent of all respondents reported being very likely (44%) or somewhat likely (37%) to voluntarily collect/dispose of prescription medicines.

Medicine Take-Back Models

Nationally, two kinds of medicine take-back program models have been developed across other states and municipalities. In a government-supported or -implemented model, the government plays a direct funding and/or program administration role. These programs allow pharmacies and, in some states, any DEA-authorized collector to participate for free as medicine collection and disposal sites. Annual budgets in four states that have adopted this model – whose sources include General Funds, private funds and wholesale manufacturers fees – range from \$175,000 to \$600,000, with annual tonnage disposed ranging from 1.5 to 18 tons (Iowa Board of Pharmacy 2018; Iowa Pharmacy Association 2018; Colorado Department of Public Health and Environment 2018; North Dakota Board of Pharmacy 2018; Nebraska MEDS Coalition 2018). In addition, the state of New York funds a \$3M pilot take-back program (New York State Department of Environmental Conservation 2018).

Program Type	Public funding?	Pharmacy participation required?	Examples
Government- supported / implemented	Yes No	No No	CO, NE, NY*IA, ND
Government- regulated	No No	Yes No	 Santa Cruz County WA, MA, NY**, VT 22 municipalities

Table 2. Medicine Take-Back Models

* Refers to pilot program (2017) ** Refers to State law (2018)

Under a second "government-regulated" model, a state or municipality oversees program implementation by a 3rd party. This approach is known broadly as an Extended Producer Responsibility (EPR) model, and is commonly referred to as a Drug Stewardship Program model when applied to pharmaceuticals. The underlying premise of the EPR model is that manufacturers' responsibilities extend to post-consumer product management. As illustrated in Figure 2 below, the EPR model is in use across a variety of products. In Virginia, two EPR laws have been established, related to disposal of motor vehicle mercury switches and recycling of computers.





Source: Product Stewardship Institute (2018) (Product Stewardship Institute 2018)

Since 2012, 23 municipalities and four states have established EPR programs for unused medicines. As summarized in Table 3, below, a recent analysis of 12 municipal-level EPR ordinances for medicine collection and disposal found several program elements included in all or almost all of those programs, with a few elements included only in some. Of particular relevance to SB 862, only one of the 12 programs was found to mandate pharmacy participation.

Table 3. Municipal-level EPR Programs for Pharmaceuticals

Included in 100% of programs:

- Program must accept all medicines (prescription/non-prescription)
- Geographic "convenience" standards specified
- Manufacturers responsible for program costs and fees
- Manufacturer point-of-sale and point-of-collection fee prohibited
- Consumer education and outreach required
- Programs can be operated singly or jointly by manufacturers

Included in <100% of programs:

- Mail-back option required (11 of 12 programs)
- Disposal by incineration only (5 of 12 programs)
- Municipality specifies benchmark program (3 of 12 programs)
- Retail pharmacy participation required (1 of 12 programs)

Source: The Network for Public Health Law (2017) (The Network for Public Health Law 2017)

Washington State is one of four states to adopt an EPR approach through its Unwanted Medication Disposal Act (2018) (State of Washington 2018). The Act covers all controlled and non-controlled medicines, although it exempts from coverage medicines or biologicals for which manufacturers have already established a take-back program. Examples of other products not covered include: personal care products; medicines that are administered in a clinical setting; and medical products (e.g., injectors, needles, sharps). Primary stakeholders involved in program implementation include: manufacturers, who are responsible for establishing and funding the program; drug wholesalers, who provide a list of manufacturers to the Department of Health; a "program operator", a third party organization that contracts with manufacturers to implement the program; and the State's Department of Health, which reviews, approves and monitors implementation.

A variety of requirements surrounding collection and disposal of medicines are included in the Act. All eligible entities are permitted to take part in the program, including those who want to offer mail-back as an option. Each program approved by the Department of Health – which must be re-authorized every four years – must take steps to ensure adequate geographic coverage (for Washington, adequate is defined as at least one collection site for each city or town and surrounding area, as well as an additional site for every 50,000 residents). Program promotion, outreach and education efforts are required, with such minimum elements as: discouraging consumers from throwing away or sewering drugs; establishing a toll-free number for consumer questions; disseminating educational and outreach materials; and developing consistent signage, receptacle design, etc. Additionally, if multiple programs exist, programs must coordinate promotional activities.

In terms of funding, pharmaceutical manufacturers pay all administrative and programmatic costs through the program operator. To cover administrative costs, the Department of Health charges the program operator an annual fee. Manufacturers are prohibited from assessing any fee to consumers associated with the program, and the Department of Health's annual budget cannot exceed 10 percent of the program's annual expenditures.

Finally, the Act contains provisions to ensure accountability in program implementation. If any wholesalers or manufacturers are determined to be non-compliant with the law, the Department of Health is authorized to fine each according to a fine schedule specified in the law. Additionally, the program operator must submit an annual report documenting several aspects of the program. These include a list of participating covered manufacturers; weight of medicines collected; a description of the education, outreach, and evaluation activities; and a summary of program goals for collection amounts and public awareness, success in meeting goals and/or efforts to meet goals in following year, and annual expenditures.

Three other states currently have implemented EPR pharmaceutical laws. Since 2016, Vermont has funded "statewide unused prescription drug disposal initiatives" through a 1 percent increase on a pre-existing fee on pharmaceutical manufacturers paid to Vermont's Medicaid agency (General Assembly of the State of Vermont 2016). However, Vermont law does not specify any particular program model. Since 2016, Massachusetts has established an EPR program model similar to Washington State but with less detail provided in Code (e.g., it leaves to administrative regulations to define process for reviewing program applications; required components of annual report limited to program activity "description" and quantification of volume/type of medicines collected) (Senate and House of Representatives in General Court 2016). Additionally, Massachusetts' law is applicable only to opioids and benzodiazepines. Finally, New York passed a law in 2018 that is similar to Washington State's Act with minor differences (e.g., the program must be re-authorized every three years, instead of four, and uses different geographical convenience standards specifications) (Senate and Assembly of New York 2018).

Estimated Costs of Medicine Take-Back Collection Programs

A widely cited estimate is that medicine take-back programs cost approximately \$0.01 for every \$10 in pharmaceutical sales.⁴ Cost data obtained for this report from pharmacies in Virginia that currently take back medicines range from \$850 to \$1,200 per year for three to six annual collections. Data from other states suggest a range of \$500 to \$1,800 per year per pharmacy. Additionally, the New York pilot program reported \$2,300 per year/site in recurrent costs for twice a month collections (New York State Department of Environmental Conservation 2018).

Based on these datapoints, an estimated *annual cost* of a Virginia statewide program, if all DEAauthorized collectors participated, is \$3.2M to \$5.4M. The cost estimate is based on participation of all 1,822 registered pharmacies and 340 law enforcement agencies in Virginia with a cost of \$1,500 to \$2,500 per authorized collector.

⁴ This estimate was used by defendants in a 2014 court suit brought by PhRMA, Generic Pharmaceutical Association and the Biotechnology Industry Organization against Alameda County (CA) which reached the Supreme Court who refused to hear the case. The estimate of one cent for every \$10 in sales was not contested from either side during that case (The Network for Public Health Law 2017).

Policy Options and Public Comment

Four policy options were provided for consideration. Comments were received by:

- Patrick Plues, Vice President, State Government Affairs, **Biotechnology Innovation Organization (BIO)**
- Carlos Gutierrez, Vice President, State & Local Government Affairs, Consumer Healthcare Products Association (CHPA)
- Nicole Wood, Senior Director, State Advocacy, Pharmaceutical Research and Manufacturers of America (PhRMA)
- Christina Barrille, Executive Director, Virginia Pharmacists Association (VPhA)
- Marvin Rosman, Virginia citizen

Policy Focus	Policy Option(s)	Support	Oppose
Maintain status quo	Option 1: Take No Action	СНРА	
Public awareness of DEA-compliant / FDA- and EPA- recommended medicine disposal methods	Option 2: Introduce legislation to amend § 54.1- 3319 of the Code of Virginia to add counseling on medicine disposal to the list of topics on which pharmacists may counsel persons who present a new prescription for filling (Code currently only lists storage as a topic)	СНРА	
Statewide medicine	 Option 3: Re-introduce SB 862 to amend section §54.1-3411.2 of the code of Virginia requiring retail pharmacies to collect and dispose of: Option 3a: Schedule II-IV medicines; <i>OR</i> Option 3b: All prescription/non-prescription medicines 		CHPA PhRMA
disposal program OR – Option 4a: Introduce legislation and budget amendment to amend Title 54.1 of the code of Virginia to establish an Extended Producer Responsibility law, modeled after Washingto State's Unwanted Medication Disposal Act*; OR Option 4b: Option 4a + 1-year enactment clause**	Marvin Rosman	CHPA PhRMA	

* DHP estimates resource requirements of \$500,000 and 4 new FTEs; fiscal impact to be covered by fee assessed on program operator

** 1-year enactment clause would allow for implementation of competing DHP priorities (e.g., pharmaceutical processor selection) and obtainment of data from WA State implementation to inform VA legislation

Summary of Public Comments

Biotechnology Innovation Organization (BIO) indicated opposition to an Extended Producer Responsibility program for prescription medications, stating that it would not present a viable solution to the problem of prescription drug abuse and would fail to have a clear environmental benefit. Conversely, BIO is in favor or providing education on safeguarding of drugs stored in the home and information on appropriate and affordable household disposal options currently available. Additionally, BIO believes that that all stakeholders have a shared responsibility for the post-consumer management of the products put into the market.

The **Consumer Healthcare Products Association (CHPA)** indicated opposition to state-wide disposal, cautioning against creating a framework that could yield unintended consequences without addressing the issues highlighted in the report. Conversely, CHPA advocates for responsible medicine use by consumers, safe medicine storage, and proper medicine disposal.

The **Pharmaceutical Research and Manufacturers of America (PhRMA)** indicated opposition to state-wide disposal programs, citing a lack of evidence that drug take-back programs reduce pharmaceuticals in the environment or drug abuse concerns and the negative impact such programs can have on the cost of medicines. Conversely, PhRMA supports mechanisms to educate consumers on how to safeguard medicines in the home and how to safely and securely dispose of their truly unused medicines in the household trash.

The **Virginia Pharmacists Association (VPhA)** indicated that it does not support an unfunded mandate for drug disposal programs, highlighting concerns expressed by its members that responded to the report's pharmacists' survey, including those related to additional costs, safety fears, staffing requirements, and patient education.

Marvin Rosman indicated support for a state-wide program, highlighting that unwanted prescription drugs have environmental risks and that measures should be taken to make their disposal easier.

Subsequent Actions by the Joint Commission on Health Care

During the Joint Commission's 2018 Decision Matrix meeting, JCHC members voted to take action on two policy options:

- Introduce legislation to amend \$54.1-3319 of the Code of Virginia to add counseling on medicine disposal to the list of topics on which pharmacists may counsel persons who present a new prescription for filling
- Introduce legislation (Uncodified Act) directing the Board of Pharmacy to work with stakeholders to determine ways to enhance public awareness of proper drug disposal methods, including existing community-based disposal and collection opportunities. This option was added during the meeting by a JCHC member and was subsequently introduced as a language only budget amendment for the 2019 session.

Legislation Enacted

Pharmacist; counseling for new prescriptions; disposal of medicine.

HB 1743 – Delegate Bulova SB1405 – Senator Dance

Allows a pharmacist to include information regarding the proper disposal of medicine when giving counsel to a person who presents a new prescription for filling.

Enacted -Acts of Assembly Chapter text (CHAP0135 & CHAP0096) respectively

Board of Pharmacy; enhance awareness of drug disposal methods (language only)

HB 1700 Budget Amendment Item 299- Delegate Peace

The Board of Pharmacy shall report to the Joint Commission on Health Care by October 1, 2019, on state and local efforts to promote proper drug disposal methods, including existing community-based collection and disposal efforts.

JCHC Staff for this Report

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Citations

- Batt, A.L. et al., 2015. Evaluating the extent of pharmaceuticals in surface waters of the United States using a National-scale Rivers and Streams Assessment survey. *Environmental Toxicology and Chemistry*, 35(4), pp.874–881.
- Bicket, M. et al., 2017. Prescription opioid analgesics commonly unused after surgery: A systematic review. *JAMA Surgery*, 152(11), pp.1066–1071.
- CVS Health, 2018. Virginia law enforcement agencies receiving grant funding for medication disposal (personal communication),

Fabisiak, G., 2018. *Colorado Household Medication Take-Back Program (personal communication)*, Colorado Department of Public Health and Environment.

General Assembly of the State of Vermont, 2016. An act relating to combating opioid abuse in Vermont (S.243), General Assembly of the State of Vermont.

Governor's Task Force on Prescription Drug and Heroin Abuse, 2015. *Recommendations of* the Governor's Task Force on Prescription Drug and Heroin Abuse: Implementation Plan – Update, Fall 2015,

Kolpin, D. et al., 2002. Pharmaceuticals, Hormones, and Other Organic Wastewater Contaminants in U.S. Streams, 1999-2000: A National Reconnaissance. *Environmental Science & Technology*, 36, pp.1202–1211.

Kostich, M.S., Batt, A.L. & Lazorchak, J.M., 2013. Concentrations of prioritized pharmaceuticals in effluents from 50 large wastewater treatment plants in the US and implications for risk estimation. *Environmental Pollution*, 184, pp.354–359.

Law, A.V. et al., 2014. Taking stock of medication wastage: Unused medications in US households. *Research in Social and Administrative Pharmacy*, 11(4), pp.571–578.

- Lewis, E.T., Cucciare, M.A. & Trafton, J.A., 2013. What Do Patients Do With Unused Opioid Medications? *The Clinical Journal of Pain*, 30(8).
- Nebraska MEDS Coalition, 2018. *Nebraska MEDS Coalition (personal communication)*, Nebraska MEDS Coalition.
- New York State Department of Environmental Conservation, 2018. The Feasibility of Creating and Implementing a Statewide Pharmaceutical Stewardship Program in New York State,
- North Dakota Board of Pharmacy, 2018. North Dakota Take Back Program (personal communication), North Dakota Board of Pharmacy.
- Office of the Attorney General, 2016. Virginia NTBI 12 Results, Office of the Attorney General.
- Product Stewardship Institute, 2018. State of U.S. EPR Laws.
- Pudlo, A., 2018. EcoReturns (personal communication), Iowa Pharmacy Association.
- Richman, P.B. et al., 2000. Oral antibiotic use without consulting a physician: A survey of ED patients. *The American Journal of Emergency Medicine*, 19(1), pp.57–60.
- Seehusen, D.A. & Edwards, J., 2006. Patient Practices and Beliefs Concerning Disposal of Medications. *The Journal of the American Board of Family Medicine*, 19(6), pp.542– 547.
- Senate and Assembly of New York, 2018. *Drug Take Back Act (S9100)*, Senate and Assembly of New York.
- Senate and House of Representatives in General Court, 2016. An Act relative to substance use, treatment, education and prevention (H.4056), Senate and House of Representatives in General Court.

- State of Washington, 2018. Unwanted Medication Disposal (Chapter 196, Washington State Laws of 2018),
- Substance Abuse and Mental Health Services Agency (SAMHSA), 2017. Key Substance Use and Mental Health Indicators in the United States: Results from the 2016 National Survey on Drug Use and Health, SAMHSA.
- The Network for Public Health Law, 2017. Mandatory Drug Stewardship Programs in States and Municipalities across the United States,
- Tiffany, J., 2018. Med Drop (personal communication), Iowa Board of Pharmacy.
- United States Government Accountability Office, 2017. *Preventing Drug Abuse: Low Participation by Pharmacies and Other Entities as Voluntary Collectors of Unused Prescription Drugs*, United States Government Accountability Office.
- U.S. Environmental Protection Agency, 2011. *How to Dispose of Medicines Properly*, Washington, DC, USA: U.S. Environmental Protection Agency.
- U.S. Food and Drug Administration, 2018. Disposal of Unused Medicines: What You Should Know.
- Virginia Department of Health Professions (DHP), 2018. Virginia Board of Pharmacy: Authorized Collectors of Drugs for Destruction.

Appendix

Table 4. Medicine Disposal Recommendations from the Governor's Task Force on Heroin and Drug Abuse

Recommendation	Action(s) taken	Recommended action(s) not taken
Promulgate regulations regarding pharmacy collection and mail-back programs	Regulation promulgated (VA 18 VAC110-20-211)	N/A
Review/update Office of Attorney General's "Take Back Event" guidance for law enforcement document	OAG confirmed document updated (as of 2015)	N/A
Determine feasibility of using mobile incinerators for medicine disposal	Determined to not be a viable/sustainable option	N/A
Determine preferred methods for disposing of unwanted/needed medicines	Survey of law enforcement agencies conducted	N/A
Increase disposal opportunities via medicine take-back events held within the community	Letters sent by HHR/Public Safety Secretaries, DOE to stakeholders stressing importance of proper drug disposal	Emails from Secretaries to various audiences to increase awareness of prescription drug abuse; informational resources for state website; development of mechanism for receiving notifications regarding upcoming take-back events
Encourage placement of collection boxes in every locality and subsequently inform Virginians of their locations	DHP website lists pharmacy take-back locations	Purchase/place additional collection boxes
Increase # of law enforcement agencies participating as medicine collection sites/opportunities for take-back events	Additional law enforcement agencies applied for CVS Health grants for collection boxes	Identify funding resources for collection boxes; identify lead coordinator

Recommendation	Action(s) taken	Recommended action(s) not taken
Increase disposal opportunities via mail-back programs and collection boxes provided by pharmacies	Meet with stakeholders to evaluate feasibility of increasing voluntary participation	Increase disposal opportunities via mail-back programs and collection boxes provided by pharmacies
Determine ongoing funding sources for medicine disposal	Consider use of grants and/or state appropriation	Determine ongoing funding sources for medicine disposal
Encourage distribution of lock boxes with controlled substances when dispensed	Include funding for printing/shipment of brochures in an agency budget	Encourage distribution of lock boxes with controlled substances when dispensed