US ERA ARCHIVE DOCUMENT





### Maine: First US Legislation for Unused Pharmaceutical Returns

Stevan Gressitt, M.D.

Disclaimer: It is the opinion of the author that no single piece of legislation, nor any one single program, will fit the geographic differences, population disparities in density and age, and infrastructure variances across the United States. Though Maine has passed the first piece of state legislation regarding unused pharmaceuticals, it may or may not serve as a model for other states. I am also grateful to all I this room without whose work we could not have passed the legislation in Maine. The legislation would not have occurred without the preceding and credible work of Christian Daughton of the U.S. Environmental Protection Agency, and others. <sup>1</sup>

Legislation was the eventual outcome of a proposal that originated at the 2002 Maine Benzodiazepine Study Group annual meeting. There had been discussion of how to reduce abuse or misuse of benzodiazepines, a widely prescribed DEA Schedule IV class of medication. Rates of use, misuse, and abuse were difficult to obtain. Schedule IV pharmaceuticals are poorly tracked and, as a class, the benzodiazepines are not always reported discretely but are usually included in another category, such as sedative/hypnotic. Appended is a comprehensive compilation of FDA approved benzodiazepines.<sup>2</sup>

Subsequent to the conference, the pharmaceutical relationship to crime was presented by the National Drug Intelligence Center that substantiated our concerns:

States Where Pharmaceuticals Contribute Most to Violent Crime
<u>28.8</u>
17.3
15.1
8.9
7.0
<u>2.2</u>
)

Source: National Drug Threat Survey

2004 (in publication)

<sup>&</sup>lt;sup>1</sup> <u>Environmental Stewardship and Drugs as Pollutants</u>—Christian G. Daughton, US EPA/ORD, the Lancet, October 5, 2002, Vol 360, 1035-1036. Found at: http://www.epa.gov/nerlesd1/chemistry/pharma/images/lancet-final.pdf
<sup>2</sup> Appendix A

And it is quite likely that the overall use of illegal drugs is higher in the US than reported, as shown by the conclusion of "Cocaine in surface waters: a new evidence-based tool to monitor community drug abuse."<sup>3</sup>

Surveys of the general population are useful to describe patterns of drug abuse, but they are very expensive, and certainly too lengthy to detect changing trends promptly. Continuous monitoring of illicit drug consumption would be very important for assessing the actual extent of this phenomenon, and detecting changes in trends. A more realistic picture of local use patterns for the most common illicit drugs would also be needed to identify priority problems and plan selective countermeasures. The evidence-based approach first tested here, which is in principle adaptable to other illicit drugs, could be refined and further validated to become a general, rapid method to help estimate drug abuse at the local level. This approach, with its unique ability to monitor changing habits in real time, could be helpful to social scientists and authorities for continuously updated appraisal of drug abuse.

The rationale for the legislation, consisting of the following four points, was given in public discussions.

- 1. Accidental ingestion particularly among children and the elderly
- 2. "Pharming" or theft
- 3. Unnecessary accumulation and waste
- 4. Environmental impact

### 1. Accidental ingestion

One of the concerns that drove the legislation is the accidental ingestion of pharmaceuticals, both by children and by the elderly. Information on this can readily be found at the Centers for Disease Control.<sup>4</sup> In addition, the Poison Prevention Week Council has summarized some of the risks.<sup>5</sup> The following is from a press release of the Council: March 15, 2005 National Poison Prevention Week Warns: Most Child Poisonings Result from Common Household Products. *Every 7 minutes, a child arrives at an emergency room due to a suspected poisoning.* About 78,000 children under five years old visited U.S. hospital emergency rooms due to unintentional poisonings in 2003 – about one every seven minutes, the U.S. Consumer Product Safety Commission (CPSC) reported today. Most of these poisonings included products commonly found in the home.<sup>6</sup>

It is noteworthy that the EPA has already offered advice for purchasing potentially toxic chemicals. Not earth-shattering advice at that:

**Buy limited quantities.** If you use products only occasionally or seasonally, such as paints, paint strippers, and kerosene for space heaters or gasoline for lawn mowers, buy only as much as you will use right away.<sup>7</sup>

Perhaps we should bear this in mind as efforts to increase the duration between prescription refills results in larger quantities being mailed to patients many policies are directly counter to this and promote longer prescriptions.

### 2. Pharming

In Maine, we are concerned about appropriation of pharmaceuticals by family members, as well as by burglars, for inappropriate private use or for sale. I have no data on pharming and the numbers for pharmaceutica- related crime that are referenced above may be the best that I can provide today.

### 3. Accumulation

Concerns about accumulation relate to both pharming and environmental degradation, but also to prescription practice: patient compliance with prescriptions averages roughly 50%. There is a significant volume of literature addressing

<sup>&</sup>lt;sup>3</sup> Cocaine in surface waters: a new evidence-based tool to monitor community drug abuse, *Environmental Health: A Global Access Science Source* 2005, 4:14 doi:10.1186/1476-069X-4-14, Ettore Zuccato, et al.

<sup>&</sup>lt;sup>4</sup> Appendices D and E

<sup>&</sup>lt;sup>5</sup> Appendix F

http://www.poisonprevention.org/News%20Release.pdf

http://www.epa.gov/iag/pubs/insidest.html#Look5

methods to improve that figure. I am unfamiliar with any general survey of the non-institutionalized public. Nursing home data are available through the American Society of Consulting Pharmacists but it is unlikely there is much to compare to the general public.

A program that analyzes the accumulated drugs that are returned may also offer information that will be helpful to those who are trying to address the cost of prescription drugs, assuming that, with the exception of the death of a patient, an unused prescription is a waste of health care dollars.

### 4. Environmental impact

While we were aware of studies done in other states that showed the presence of pharmaceuticals in fish, rivers and water (post-treatment), we were unable to find any numbers in Maine for comparison, leaving a large research gap to be addressed. We became aware that water samples had been taken in Maine for pharmaceuticals, but which were being tested, and where, was unknown. The date for completion was extended repeatedly. This past week some results for endocrine disruptors arrived; there is word that the pharmaceutical numbers are "coming." Questions about volume were the most problematic. Currently the law enforcement community in Maine has been destroying approximately 9 tons of drugs per year, using incineration within the state. We knew from the Shipman report that 523 English tons were being collected for calendar year 2003 into pharmacies across the UK. We knew that 1,000 pounds had been collected in Prince Edward Island approximately six years ago, and that two years ago 3,000 pounds were collected. Both were in two-week, take-back-to-the-pharmacy programs. The method of return would not be acceptable in the US and, indeed, raised some security concerns there. The quantities collected in Alberta, British Columbia, and Australia are all through pharmacies and are publicly available. All point to a large volume, but this is not a comprehensive review of international collections.<sup>8</sup>

Starting from the proposal at the conference, and using the four major reasons for concern to look for support, we eventually obtained letters, calls of support or expressions of interest to the legislature from the following:

Maine Medical Association

Maine Psychiatric Association

Northeast Occupational Exchange

Maine Benzodiazepine Study Group

Maine Dental Association

Maine Rivers

Maine Children's Alliance

Memorial University of Newfoundland, Faculty of Medicine, Psychiatry

Lani Graham, MD, MPH

Theo Colborn, PhD

Maine Osteopathic Association

Maine Association of Substance Abuse Programs

Dave Galvin, Hazardous Waste Management, King County, Washington State

Abdelkrim Smine, PhD, Senior Program Associate, Global Assistance Initiatives, USP

Northern New England Poison Control Center

**Dominion Diagnostics** 

Strong Environmental

At the outset, the major problem seemed to be who would be willing to return the medications. Would an incentive be required? There were also efforts to derail the whole proposal. At one point fear of "white powder" in mailers was raised, and the cost of shutting down a postal center was brought up as well. Fear of diversion, fear of incineration and dioxins being generated were arguments raised against the proposal. The two controlling sets of regulations were those of the Maine Department of Environmental Protection and the federal DEA. As is now better known than a couple of years ago, DEA registrants (practitioners, clinics, hospitals) are not permitted to accept controlled drugs out

<sup>&</sup>lt;sup>8</sup> Shipman Report Volume 4. To be found at: <a href="http://www.the-shipman-inquiry.org.uk/fourthreport.asp">http://www.the-shipman-inquiry.org.uk/fourthreport.asp</a> see section 7.76

of the closed distribution system that has so carefully been put into place. This system exists to ensure pharmaceutical safety, to permit recalls, and to limit diversion.

As a slight aside here, it was only after the legislation passed that we noted a patent issued to Diebold, the self-service and security corporation, that was described as follows: "An apparatus for accepting return of unused medical items is part of a system (10) used for automated dispensing and tracking of medical items within a medical facility." (Patent application # 679203) <sup>9</sup> And it is noted that since then, the DEA has issued regulations on automated pharmacy dispensers.

Separating controlled from non-controlled drugs was felt to be an insurmountable problem; hence the decision tended to focus on including all pharmaceuticals under the most restrictive umbrella. A review of all legislation across the United States dealing with unused medicine returns form the public was performed by the Center for Substance Abuse Research (CESAR) at the University of Maryland. That study was placed on the CESAR web page and offered to the State of Maine's Joint Standing Committee on Health and Human Services in testimony.<sup>10</sup>

After the successful public hearing before the Committee, the partisan nature of the vote of the full Legislature proved to be disappointing. The two parties split and held their partisan positions. Other and larger issues were at hand, including some serious problems at the Department of Health and Human Services and with the State budget. A true help was having a web page put up by the State Democratic Party that had specific links to provide information on unused medicine. <sup>11</sup> What did pass was statute that established the Unused Pharmaceutical Disposal Program to be administered by the Maine Drug Enforcement Agency. The Legislature also authorized an Implementation Committee to address the design of the program. A copy of the law as passed is attached.<sup>12</sup>

It has been subsequently updated but formal text is not available as of yet, and will not be available until September. Essentially the start date is moved to July 1, 2006 and removes the restriction on public funds save for Maine General Fund as a source. This would permit County, Federal, municipal, foundation, or private funding. I was a member of the Implementation Committee that was designated and appointed by the Senate and House. That Committee's report is public on the State of Maine web page.<sup>13</sup> I will spend some time reviewing the Committee's recommendations now:

### III. RECOMMENDATIONS

### A. Voluntary turn-in events

The implementation group reviewed voluntary turn-in events for unneeded prescription drugs and recommends encouraging turn-in events on the local level. The implementation group anticipates an increasing number of these events and greater amounts of collected unneeded drugs. The implementation group recommends that the Legislature consider product stewardship for voluntary turn-in events in order to provide continuing responsibility from pharmaceutical manufacturers for their products, including funding for education, outreach, collection, disposal and reporting.

### Coordination

The implementation group recommends that the Maine Department of Environmental Protection, the Maine Drug Enforcement Agency, the Department of Health and Human Services and the Department of the Attorney General work together with manufacturers to enable more turn-in events to be held successfully. Coordination is needed to ensure that turn-in events are safe and convenient for individual citizens who participate, provide safeguards for the collection and identification of turned-in drugs and comply with state and federal law and rule regarding the handling of

<sup>&</sup>lt;sup>9</sup> Appendix G.

<sup>&</sup>lt;sup>10</sup> Appendix H.

<sup>&</sup>lt;sup>11</sup> Appendix I.

<sup>&</sup>lt;sup>12</sup> Appendix J

<sup>&</sup>lt;sup>13</sup> http://mainegov-images.informe.org/legis/opla/drugrpt.pdf

controlled substances and hazardous waste. The implementation group suggests that a statistically valid sampling of collected unneeded drugs be done and recorded to provide information about drug prescribing and waste.

### Educational materials and outreach

The implementation group suggests that the Office of the Attorney General, the Departments of Environmental Protection and Health and Human Service, the Maine Medical Association and the Maine Hospital Association work together to prepare informational materials for interested parties, participating municipalities, law enforcement, medical personnel and community service organizations. Good information on how to successfully hold a voluntary turn-in event will increase the number of events, public participation and success.

### **Funding**

Funding for collection, transportation, storage and disposal would enable a greater number of turn-in events to be held successfully. Funds may be needed for law enforcement, statistical sampling, reporting and disposal. The implementation group suggests that individuals and entities interested in voluntary turn-in events pursue funding for their local events and that the Legislature consider product stewardship to provide funding.

### Starting date

A starting date for voluntary turn-in events is not required because of their voluntary nature. If product stewardship were applied to voluntary turn-in events, a start date would be needed for manufacturer responsibility to begin.

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### B. Mail-in program

Public Law 2003, Chapter 679, which created the Unused Pharmaceutical Disposal Program, recognized that the enabling legislation was incomplete and established the implementation group to provide guidance to the Legislature. Specifically the legislation mentions the need for recommendations regarding postal regulations, methods and requirements for mailing packaging, minimizing drug diversion and theft and public education. The implementation group reached consensus on recommendations to move the disposal program forward. The implementation group recommends that the Legislature consider adding a product stewardship model to the mail-in program.

### Packaging for mailing

The implementation group suggests that pharmaceutical manufacturers or the State or both provide the mailing packaging for the mail-in program that meets the requirements of the United States Postal Service and the Maine Drug Enforcement Agency. The implementation group recommends that the mailing packaging be made available at pharmacies, hospitals, physicians' offices and health clinics.

### Mail receipt, storage and disposal

The implementation group recommends that the Maine Drug Enforcement Agency determine whether drugs would be mailed directly to MDEA or to a consolidator under contract with MDEA. MDEA rulemaking is necessary to establish the protocols for mailers and mailing, statistical sampling and reporting and disposal of drugs. Transportation to a disposal site, which is required to be done by a licensed handler of hazardous waste, would be accomplished by the consolidator. Hazardous waste disposal sites would accept the shipments of unneeded drugs shipped from Maine and would dispose of them by incineration.

### Educational materials and outreach

The implementation group suggests that educational materials for pharmaceutical manufacturers, pharmacies, hospitals, physicians' offices, health clinics, law enforcement and individual citizens be provided by the Office of the Attorney General, the Departments of Environmental Protection and Health and Human Service, the Maine Medical Association, the Maine Hospital Association and the drug manufacturers, all within the limits of their existing resources.

### **Funding**

Public Law 2003, Chapter 679 requires non-public funding in order to begin the mail-in program. Funding will be required for the prepaid mailers, distribution, postage, storage and disposal and public education materials. The implementation group recommends that Public Law 2003, Chapter 679 be amended in 22 MRSA section 2700, subsection 5, to allow receipt of non-General Fund public funding, including federal funds. Suggested legislation is included as Appendix E.

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### Starting date

The implementation group recommends that the starting date for the Unused Pharmaceutical Disposal Program be changed to allow for additional preparation time for the adoption of rules and the acquisition of funding. The implementation group recommends that Public Law 2003, Chapter 679, section 4 should be amended to provide for an effective date of July 1, 2006. Suggested legislation is included as Appendix E.

### C. Product stewardship

Product stewardship is a concept that recognizes the responsibility of the manufacturer of a product from the manufacturing process through final disposal in an environmentally sound manner. The implementation group recommends that the Legislature consider a product stewardship model for voluntary turn-in programs and the mail-in program for prescription drugs, recognizing the cooperative efforts of individual citizens, prescription drug manufacturers and State government to provide safe collection and disposal for those drugs. If product stewardship were to be adopted by the Legislature, the implementation group recommends a starting date of July 1, 2007.

### D. General recommendations

- The implementation group recommends that the Maine Legislature consider legislation to establish a redistribution program for unneeded pharmaceuticals. Under this program Maine residents of low and medium income who hold a valid prescription would be eligible to obtain for a very low fee prescription drugs that had been donated to the program from health facilities, drug manufacturers, drug wholesale and terminal distributors and hospitals. The drugs would all be unopened and packaged in tamper-evident unit dose packages or they would be unopened injectable, aerosol or topical medications. The program would not distribute controlled substances, drugs that had been tampered with or drugs within 6 months of their expiration date. See Appendix F for suggested legislation.
- The implementation group recommends that a letter be sent by the Maine Drug Enforcement Agency to the United States Drug Enforcement Administration supporting amendment to federal regulations to provide individual citizens and law enforcement safe and effective methods of disposal for controlled substances.

I would like to turn to support from two national medical groups that have taken a position on this problem. The first came form the United States Pharmacopoeia. Their resolution follows:

2005–2010 Resolutions Adopted at the 2005 USP Convention March 13, 2005

9. Promoting Safe Medication Use and Disposal USP resolves to work with appropriate constituencies to continue developing programs to promote safe medication use and disposal

Subsequently, The American Psychiatric Association passed resolution 12e this past June as follows:

Reference Committee 1 Assembly May 20-22, 2005 ACTION PAPER

SUBJECT: Unused Pharmaceutical Return Program

INTENT: To provide a safe means for patients to dispose of unused prescription medication.

PROBLEM: In the United States, there has not been a safe way for patients to dispose of unused prescription medication; and the accumulation of unused prescription medication has been dangerous. Some people are dying from

accidental poisoning, while others are dying by purposeful ingestion. Drug abusers are diverting unused controlled substances for illicit purposes. Americans are flushing unused or expired pharmaceuticals down the toilet and polluting our environment.

While most state governments and the federal government have not yet developed a response to this problem, the Maine Psychiatric Association in collaboration with the Maine Medical Association and other interested parties supported a bill that passed in the Maine Legislature entitled: "An Act to Encourage the Proper Disposal of Unused Pharmaceuticals." This bill allows individuals to safely dispose of their unused medications by mailing unused pharmaceuticals in a prepaid envelope to the Maine Drug Enforcement Agency for destruction.

### **ALTERNATIVES:**

1. To improve public health and safety, the APA should encourage state legislatures and the federal government to adopt programs for the proper disposal of unused pharmaceuticals.

RECOMMENDATION: Alternative 1.

IMPLEMENTATION: The Council on Advocacy and Public Policy should be charged with the task of developing a strategy to encourage state legislatures and the federal government to adopt programs for the proper disposal of unused pharmaceuticals.

SUBMITTED BY:

Stevan Gressitt, M.D., Councilor, Maine Psychiatric Association

W. Bogan Brooks, M.D., Rep., Maine Psychiatric Association

ENDORSED BY: Maine Psychiatric Association and Area 1

We recognized the need for data collection, and a standard for that collection. We could not find a standard in existence; the need to address the four problems that led to the legislation drove a need for a data repository. This has progressed to development of the following web page: http://www.communityofcompetence.com/sections/Registry.htm. I have attached a copy of the screenshot.<sup>14</sup>

In addition the American Society of Consultant Pharmacists and the American Society of Health System Pharmacists have both issued position or formally taken a review for their coming annual meeting for voting.

A number of data sets have been submitted or forwarded to the Registry. To date, only two sets have been felt to be obtained under controlled settings: those of Northeast Occupational Exchange and those of Lynn Rubenstein. What remains problematic is the final reporting from the registry- what form should be used, or which content should be extracted, remains unclear given the number of different purposes for which they could be evaluated. The first set of numbers was from a collection in Bangor that covered all clinics. I was the first medical director that NOE had hired, and certain procedures had been loosely followed. After some thought, I simply collected all the medication that existed in the facilities that no one knew what to do with. Those medications were counted by an RN and then later by a pharmacist. The counts matched and they were provided at last year's Maine Benzodiazepine Conference. The two data sets from Maine are attached, as well as the standard collection form agreed on by consensus at the Bangor Conference.<sup>15</sup> The second data set provided information on the reason for non-use, which was not collected the first time.

What is relevant is that the amount of controlled drug return dropped significantly between the first and unannounced clean up and the second that followed much discussion, press coverage, and internal conversation.

For comparison, the best survey of returned medication and pharmacoeconomic projection I have found is at the National Association of Board of Pharmacy in Canada. It is based on a take back in the Sudbury, Ontario region in 1995. It contains an interesting summary of was returned, one table from which I am attaching: 16 In summary, their projections were:

<sup>&</sup>lt;sup>14</sup> Appendix K.

<sup>&</sup>lt;sup>15</sup> Appendix L for the first data set and Appendix M for the second collection, Appendix N for the Bangor Consensus Data Collection

Appendix O.

By multiplying by the appropriate factor, the \$67,000 collected actually represents over \$510,649 for the 29 participating pharmacies. If we assume the pattern of waste is consistent across the province of Ontario and we extrapolate to the 2,380 pharmacies in the province, the cost of the waste is approximately \$41,908,435. If extrapolated across Canada, the cost of this waste reaches approximately \$113,381,687.

There is no formal taxonomy of return programs or types, but from the medical literature this appears to be what has been tried, written about or discussed:

- Pharmacy take-backs
- Visiting or Regional nurses or Public Health home visits (as in South Africa.)
- Return to physician offices or emergency rooms.
- Mail-back
- Household hazardous waste

For the "e-drug list" I am currently trying to compile an international listing of return programs. I have redacted personal information but have attached the current summary, which leaves much to be desired.<sup>17</sup> What seems clear is that in different countries, different specialties, disciplines or agencies are the lead; likewise, contacts are not uniformly one agency or one specialty or group.

Finally, product surety aspects must be noted. At present there is no cause (or motivation) except consumer suspicion to return a suspect pharmaceutical to the drug store. Maine has experienced counterfeit Lipitor. Unused medicine return quantification and assay or sampling could serve to provide one to identify what may be unidentified counterfeit drugs in a community. The Pharmaceutical Security Institute has published a public report on the impact of importation, and a cursory review of counterfeit medications. Global Options has released a far more extensive report. One identified sample that was not as labeled returned that had not been identified as a problem would prove the value of this both to the public, the manufacturer, and the health care industry.

Recommendations for clinical care are already published, in the Boivin paper on Waste Medicine and also in the Pharmaceutical Journal.

- Prescribe smaller quantities
- Optimize time intervals for repeat medication and prescribe in phase
- Regularly review repeat medication
- Improve information for patients
- Introduce policy guidelines within acute computer-generated prescribing
- Reduce unnecessary or inappropriate prescribing (this is a form of drug wastage) 18

These are not just reasonable, but will contribute to better patient care and reduction in adverse events and in waste prevention. Smarter prescribing may not be more economical in one analysis but will be when the totality of costs is calculated. For instance there is the argument that chiral pharmaceuticals, with some exceptions, are ecologically far superior to racemic preparations but are initially more expensive. Two examples are Lexapro and citalogram.

One assumption is that with a reduction in the "home medicine-cabinet shelf life," each of the four points I mentioned at the outset will be addressed. Underlying the entire process, underlying the negotiations of what date or who will pick up or be responsible for which element of the return and destruction of the unused pharmaceuticals, is the need for more data. Both a broad group of different interests are necessary to move this process forward, and a broad group is in need of different pieces or cuts through the data.

Appendix P.
 Pharmaceutical Journal
 Vol 267 No 7167 p424 29 September 2001 Comment, Drug wastage — what is acceptable? By Evelyn Cromarty and George Downie

Finally, the issue of re-use must be faced. Lack of standardized storage across the millions of homes in the U.S. means degradation rates due to temperature or humidity variations are unpredictable at present. DOD evaluations of properly stored medications have resulted in millions of dollars of savings due to clearly researched extended shelf life dates. Blind contributions sent to a recycler, however, are likely to include useless items. One Reverse Distribution facility I toured had a wheelchair that had been returned. In Bandah Aceh there is no clear reason why, after the Tsunami, seven boxes of silicone breast implants were received. The World Health Organization (WHO) has clear guidance on donations of medication; in the United States, the Partnership for Quality Medicine Donations has a lengthy history of trying to provide information on proper donations as it carries out humanitarian supply programs around the world. That they must now take on the cost of destruction. I claim no expertise in determining how to destroy unused medicine, but have found myself favoring plasma disintegration. There is always the WHO guidance on how to use a cement mixer to dispose of medication. And finally there is The Drug Terminator. <sup>19</sup>

So Maine has legislation, and I am here to say that although I do not have a returned mail envelope to show you, I have been told that it will take only \$15,000 to complete the regulations and testing for the program. All donations are to go to the MDEA/State Treasury. And I am here to offer-- to any who would care to help-- the mechanism, the template for other jurisdictions, and the ground floor of a Registry that may be one of the largest data sources to advance patient care efficiencies, quality and safety.

I would like to openly pass a tin can to move this process forward for the benefit of all of us. <sup>20</sup>

I would be happy to answer any questions. Thank you for the opportunity to speak to you. I now look forward to learning from you.

Stevan Gressitt, M.D. August 24, 2005

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<sup>&</sup>lt;sup>19</sup> Appendix Q.

<sup>&</sup>lt;sup>20</sup> Appendix R.





## Maine: First US Legislation for Unused Pharmaceutical Returns

### Appendix A

Chemical Name	Brand Names	GPI	ATC	DEA <sup>1</sup>	VA <sup>2</sup>	DEA Schedule	Maine
		Generic Product Identifier	Anatomic, Therapeutic, and Chemical	DEA Controlled Substances Code Number	US VA Drug Number		Main Statutory Controlled Drug Classification
Alprazolam	Xanax	571000	N05BA12	2882	CN302	IV	Z
Chlordiazepoxide	Librium, Libritabs, Limbitrol, SK-Lygen	571000	N05BA02	2744	CN302	IV	0
Clonazepam	Klonopin, Clonopin	721000	N03AE01	2737	CN302/CN400	IV	Z
Clorazepate	Tranxene	571000	N05BA05	2768	CN302/CN400	IV	Z
Diazepam	Valium, Valrelease	571000	N05BA01	2765	CN302/CN400; MS200	IV	Р
Estazolam	ProSom, Domnamid, Eurodin, Nuctalon	(02010	NOCCDOA	2756	CN302	11/	7
Flurazepam	Dalmane	602010	N05CD04	2767	CN302	IV IV	Z Z
Halazepam	Paxipam	602010 571000	N05CD01 N05BA13	2762	CN302	IV	Z
Lorazepam	Ativan	571000	N05BA06	2885	CN302/MS200/CN400; GA609	IV	Z
Midazolam	Versed	602010	N05CD08	2884	3	IV	Z
Oxazepam	Serax, Serenid-D	571000	N05BA04	2835	CN302	IV	Z
Quazepam	Doral, Dormalin	602010	N05CD10	2881	CN302	IV	Z
Temazepam	Restoril	602010	N05CD07	2925	CN302	IV	Z
Triazolam	Halcion	602010	N05CD05	2887	CN302	IV	Z
SOURCE:	Manufacturer		WHO	DEA	VA (as published in USP DI)	DEA	Title 17-A: MAINE CRIMINAL CODE, Part 2: SUBSTANTIVE OFFENSES Chapter 45: Drugs §1102. Schedules W, X, Y and Z

Compiled by Stevan Gressitt, M.D.

Appendix B (DELETED) Appendix C ( DELETED)

### Appendix D.

Deaths from unintentional ingestion of potentially poisonous substances among children under 5 years of age have decreased from a high of 456 in 1959 to a low of 57 in 1981 (1,2). Mortality data, however, underestimate the magnitude and public health impact of the childhood poisoning problem (Table 1). Data from the National Hospital Discharge Survey (NHDS), conducted by the National Center for Health Statistics (NCHS), show that, for each year between 1979 and 1982, an estimated 20,000 children under 5 years of age were hospitalized in the United States for ingestion of potentially toxic substances. Therefore, for each child death from unintentional poisoning, approximately 300 children were hospitalized. Medicinal substances accounted for 45% of the hospitalizations, and nonmedicinal substances accounted for the remainder. Of the medicinals, aspirin and other analgesics accounted for the most hospitalizations (11.8%). Of the nonmedicinals, products containing lead accounted for an additional 11.7% of hospitalizations.

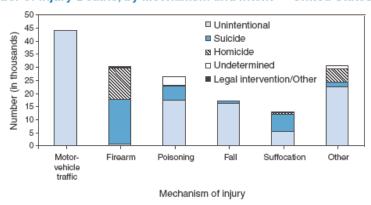
http://www.cdc.gov/mmwr/preview/mmwrhtml/00000496.htm

### Appendix E

# QuickStats: Number of Injury Deaths, by Mechanism and Intent --- United States, 2002 QuickStats:

### FROM THE NATIONAL CENTER FOR HEALTH STATISTICS

### Number of Injury Deaths, by Mechanism and Intent — United States, 2002



In 2002, the five leading mechanisms of injury death accounted for 81% of all 161,629 injury deaths: motor-vehicle traffic (MVT) (27%), firearm (19%), poisoning (16%), fall (11%), and suffocation (8%). All MVT-related and nearly all fall deaths were classified as unintentional. Of the firearm deaths, 57% were suicides, and 39% were homicides. Two thirds of poisonings were unintentional. Half of suffocations were suicides, and 43% were unintentional. Additional information is available at <a href="http://www.cdc.gov/nchs/injury.htm">http://www.cdc.gov/nchs/injury.htm</a>

### Appendix F.

Some 30 children die every year due to accidental poisonings, and approximately 1 million phone calls are placed to Poison Control Centers annually by adults seeking help when children have swallowed something harmful. In an effort to prevent such tragic events, National Poison Prevention Week was established by the U.S. Congress on September 16, 1961 (P.L. 87-319). Shortly thereafter, the Poison Prevention Week Council was organized to coordinate this annual event.

http://www.poisonprevention.org/main.html

## Appendix G

Inventors:	Dean; David M. (Burgettstown, PA); McGrady; R. Michael (Baden, PA)
Abstract:	An apparatus for accepting return of unused medical items is part of a system (10) used for automated dispensing and tracking of medical items within a medical facility. The apparatus includes a return drawer (52) and a retrieve drawer (54) which are opened responsive to signals received from a display terminal (26) which is networked with a computer (12) which includes a database (14). The return drawer includes a pocket (74) therein. The pocket is accessible from outside of a housing (56) when the return drawer is moved to an open position. The pocket includes an opening (76). The pocket is closed by a trap door (78) when the return drawer is in the open position. Medical items to be returned (132) are placed in the pocket and the return drawer is closed. Upon the closing of the return drawer the trap door is moved to an open position by an actuator. The returned medical item passes from the pocket to a retrieve area (84) in the retrieve drawer. Medical items are stored in the retrieve area until the retrieve drawer is opened by a user authorized to retrieve items from said retrieve area. The opening of the return and retrieve drawers is controlled responsive to the input of data at the display terminal corresponding to information in records (16) in the database.
Assignee:	Diebold, Incorporated (North Canton, OH)
Application Number:	679203
Filing Date:	July 12, 1996
Publication Date:	September 28, 1999
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http://www.freepatentsonline.com/5957372.html

## Appendix H



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# **Current Substance Abuse Legislation**

Use this form to search our online database of pending and approved legislation concerning prescription drugs and controlled substances. Information is provided by state on topics like the handling of unused prescriptions, the reuse of prescription drugs and the disposal of prescription drugs; references to controlled substance statutes are also included.

Each citation includes the number, title, subject, reference URL, and, when possible, the actual text of the legislation. These citations were collected from the LexisNexis (tm) Academic database in addition to individual state government websites.

### Other Resources:

- The National Association of State Controlled Substances
  Authorities
- State Legislative Actions Targeting Methamphetamine
- National Alliance for Model State Drug Laws

We are aware that the status and content of legislation changes frequently. If you have any corrections, updates or additions to what we have posted for your state, please contact the CESAR library at <a href="mailto:library@cesar.umd.edu">library@cesar.umd.edu</a>.

### Library

- Contact the Library
- Multimedia
- Current Substance Abuse Legislation
- Importing References from the ETOH Database into Endnote

http://www.cesar.umd.edu/cesar/library/statutes.asp Appendix I

# All States Alabama Alaska Arizona Arkansas California Colorado Connecticut Delaw are District of Columbia

# Select a Subject All subjects



# LD 1826

An Act to Encourage the Proper Disposal of Expired Pharmaceuticals

Sponsored by Senator Lynn Bromley (D-Cumberland County)

LD 1826 Bill Text • Background • Supporters of LD 1826 • Important Links • LD 1826 HomePage

# Supporters of LD 1826

Maine Medical Association

Maine Benzodiazepine Study Group

Northeast Occupational Exchange

Maine Psychiatric Association

Maine Association of Substance Abuse Programs

Maine Association Prevention Programs

# Senator Bromley Introduces Bill to Deal with Unused Medications



Augusta—State Senator Lynn Bromley (D-Cumberland County) of South Portland has introduced a bill that will encourage the proper disposal of expired pharmaceuticals in Maine. If approved, the bill would be the first of its kind in the United States.

"Many of us have had the experience of getting a prescription and for a variety of reasons we don't use it all. Our choices are to leave the medication in the cabinet, throw it in the trash, or flush it down the toilet. There are problems with all these alternatives," said Sen. Bromley.

LD 1826, An Act to Encourage the Proper Disposal of Expired Pharmaceuticals will provide for safe and proper disposal of unused or expired prescription drugs by making use of pre-paid mailing envelopes. This would allow the unused medication to be mailed to an appropriate location for proper disposal.

### Related Links to Expired Pharmaceutical Bill

- <u>Legislative Review</u> of <u>Current Substance</u> <u>Abuse Statutes</u> (CESAR)
- Alberta Canada looks for ways to cut unused pill costs
- Specific medications wasted and disposed
- U.S. EPA paper on pharmaceutical disposal
- British Columbia Ministry page on their pharmaceutical return program
- <u>U.S. Geological</u> <u>Survey site with links</u> <u>to water reports on</u> <u>pharmaceuticals</u>
- The original U.S.G.S. environmental study and map of study
- The Lake Mead study regarding pharmaceuticals (no study has been done yet on Maine)

More links...

### Headlines on LD 1826

**Senator Bromley Introduces Bill to Deal with Unused Medications** 

More news...

### Appendix J

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# §2700. Unused Pharmaceutical Disposal Program (CONTAINS TEXT WITH VARYING EFFECTIVE DATES)

### (WHOLE SECTION TEXT EFFECTIVE 7/1/05)

- 1. Establishment; purpose. There is established the Unused Pharmaceutical Disposal Program, referred to in this chapter as "the program." The purpose of the program is to ensure the safe, effective and proper disposal of unused pharmaceuticals. For purposes of compliance with federal law and regulation, the return of pharmaceuticals under this section is deemed to be for law enforcement purposes. [2003, c. 679, §1 (new); §4 (aff).]
- **2. Administration.** The program is administered by the Maine Drug Enforcement Agency, referred to in this chapter as "the agency," established in Title 25, section 2955. [2003, c. 679, §1 (new); §4 (aff).]
- **3. Return of pharmaceuticals.** The agency shall create a system for the return of unused pharmaceuticals. The system must use prepaid mailing envelopes into which the unused pharmaceuticals are placed and returned to a single collection location. The prepaid mailing envelopes must be made available to the public at various locations, including, but not limited to, pharmacies, physicians' offices and post offices. The agency may randomly assess the toxicity of materials received under the program as long as the assessment results do not identify the patient, person who mailed the material, prescriber or pharmacy. [2003, c. 679, §1 (new); §4 (aff).]
- **4. Disposal of pharmaceuticals.** The agency shall ensure that only agency officers handle the unused pharmaceuticals received pursuant to subsection 3. The unused pharmaceuticals must be disposed of by the agency in a manner that is designed to be effective, secure and in compliance with local, state and federal environmental requirements, including the federal Resource Conservation and Recovery Act of 1976, as amended. [2003, c. 679, §1 (new); §4 (aff).]
- **5.** Unused Pharmaceutical Disposal Program Fund; funding. The Unused Pharmaceutical Disposal Program Fund, referred to in this chapter as "the fund," is established within the agency to be used by the director of the agency to fund or assist in funding the program. Any balance in the fund does not lapse but is carried forward to be expended for the same purposes in succeeding fiscal years. The fund must be deposited with and maintained and administered by the agency. The agency may accept funds into the fund from any non-General Fund, nonpublic fund source, including grants or contributions of money or other things of value, that it determines necessary to carry out the purposes of this chapter. Money received by the agency to establish and maintain the program must be used for the expenses of administering this chapter. [2003, c. 679, §1 (new); §4 (aff).]
- **6. Rulemaking.** The agency shall adopt rules to carry out the purposes of this chapter. Rules adopted pursuant to this subsection are routine technical rules as defined in Title 5, chapter 375, subchapter 2-A. [2003, c. 679, §1 (new); §4 (aff).]
- **Sec. 2. Maine Drug Return Implementation Group.** The Maine Drug Return Implementation Group, referred to in this section as "the implementation group," is established to work on implementation issues for the Unused Pharmaceutical Disposal Program, established in the Maine Revised Statutes, Title 22, chapter 604, referred to in this section as "the program."
- **1. Issues.** The implementation group shall study the following issues and make recommendations for implementation of the program in a manner that addresses the issues, safeguards the public health and environment and meets the requirements of local, state and federal law, rule and regulation:
  - A. Postal regulations;
  - B. The methods and requirements for packaging, including prepaid mailing envelopes;
  - C. Minimizing drug diversion and theft;

- D. Public education regarding program requirements and operation; and
- E. Encouraging the development of drug drop-off programs at the local level.
- **2. Membership.** The implementation group consists of 11 members.
  - A. The President of the Senate shall appoint one Senator, one representative of local municipal enforcement agencies and one representative of pharmacies. The appointed Senator serves as chair of the implementation group.
  - B. The Speaker of the House shall appoint 2 representatives, one person representing pharmaceutical manufacturers and one representative of a statewide association of medical professionals.
  - C. The implementation group must also include the Attorney General or the Attorney General's designee, the Commissioner of Human Services or the commissioner's designee, the Commissioner of Environmental Protection or the commissioner's designee and the Director of the Maine Drug Enforcement Agency or the director's designee.

The implementation group shall invite the participation of the federal Drug Enforcement Agency, the Office of the United States Attorney for the District of Maine, the United States Postal Service and interested parties and persons with expertise and interest in issues related to the disposal of unused pharmaceuticals. All appointments must be made by September 1, 2004. The appointing authorities shall notify the Executive Director of the Legislative Council upon making their appointments. When appointment of all members of the implementation group is completed, the chair shall call and convene the first meeting no later than September 30, 2004.

- **3. Staffing.** Staffing must be provided by a statewide association of medical professionals and, upon approval of the Legislative Council, the Office of Policy and Legal Analysis.
- **4. Compensation.** Legislative members of the implementation group are entitled to the legislative per diem, as defined in the Maine Revised Statutes, Title 3, section 2, and reimbursement for travel and other necessary expenses related to their attendance at authorized meetings of the group. Public members not otherwise compensated by their employers or other entities that they represent are entitled to receive reimbursement of necessary expenses and, upon a demonstration of financial hardship, a per diem equal to the legislative per diem for their attendance at authorized meetings of the implementation group.
- **5. Report.** The implementation group shall report to the joint standing committee of the Legislature having jurisdiction over health and human services matters by January 31, 2005. The report must include information and recommendations on implementing the program. The joint standing committee of the Legislature having jurisdiction over health and human services matters shall review the report and may report out legislation to the First Regular Session of the 122nd Legislature.
- **6. Extension.** If the implementation group requires a limited extension of time to conclude its study and make its report, it may apply to the Legislative Council, which may grant an extension.
- 7. Funding. The implementation group shall seek outside funds to fully fund all costs of the implementation group. If sufficient outside funding has not been received by September 15, 2004 to fully fund all costs of the implementation group, no meetings are authorized and no expenses of any kind may be incurred or reimbursed. Contributions to support the work of the implementation group may not be accepted from any party having a pecuniary or other vested interest in the outcome of the matters being studied. Any person, other than a state agency, desiring to make a financial or in-kind contribution must certify to the Legislative Council that it has no pecuniary or other vested interest in the outcome of the study. Such certification must be made in the manner prescribed by the Legislative Council. All contributions are subject to approval by the Legislative Council. All funds accepted must be forwarded to the Executive Director of the Legislative Council along with an accounting record that includes the amount of funds, the date the funds were received, from whom the funds were received and the purpose of and any limitation on the use of those funds. The Executive Director of the Legislative Council shall administer any funds received by the implementation group. The executive director shall notify the chair of the implementation group when sufficient funding has been received.

Sec. 3. Appropriations and allocations. The following appropriations and allocations are made.

### **LEGISLATURE**

### **Miscellaneous Studies - Funding**

Initiative: Allocates funds for the per diem and expenses of members of the Maine Drug Return Implementation Group and printing a report in fiscal year 2004-05.

Other Special Revenue Funds 2003-04 2004-05

Personal Services \$0 \$660 All Other 0 2,200

Other Special Revenue Funds Total \$0 \$2,860

**Sec. 4. Effective date.** That section of this Act that enacts the Maine Revised Statutes, Title 22, chapter 604 takes effect July 1, 2005.





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### Registries

⇒ Registries

The U.S. National Registry for Unused and Expired Medications (USNRUEM) is developed through collaboration with CRG Medical Foundation for Patient Safety, Maine Benzodiazepine Study Group, and Northeast Occupational Exchange.



The systematic collection and safe disposal of unused and expired medications is an important aim of these agencies for the purpose of improving patient safety at home and protecting the environment. This Registry is intended as a focal point for national efforts to remove excess medications from medicine cabinets and drawers across the U.S. It is anticipated that this will result in fewer childhood overdoses, less abuse and misuse of medications and adverse medication error in the homes among other age groups, and protection of the environment.

Data collected will help researchers, physicians, drug manufacturers, and health policy makers understand the diverse impact of unused and expired medications in order to improve pharmacy policy, patient education and safety, and options in prescribing medications.

The electronic Registry is under implementation and will be operational within 3 months, and it is hoped that a broad array of involvement will ensure balance, utility, and value of the Registry. Please check this website for further notice. If you have comments about or suggestion for the Registry, contact Matthew Mireles, Ph.D., at mirelesmc@earthlink.net or Stevan Gressitt, M.D., at gressitt@uninets.net

USNRUEM will provide users the options among four versions of questionnaires or forms to submit medication data into the Registry, depending on the mode and purpose of data collection:

**Version 1: Individual Donor (CRGFORM19)** The user/donor at home may complete this anonymous questionnaire for individual return of medications.

Download "Individual Donor Form"



Version 2: Bulk Collection (CRGFORM17) In an organized collection event, the user

provides data for many returned medications on one form. Only the collector or collection sponsor of the event is identified

Download "Bulk Collection Form"



Download "Bulk Collection Supplemental Form"



**Version 3: Research Questionnaire (CRGFORM15)** This questionnaire is the most detailed in data collection and is used only in a closely monitored research study with a defined study population. Access to this questionnaire is provided by approval and permission of CRG Medical Foundation for Patient Safety.

Download "Research Questionnaire Form"



Download "Research Questionnaire Supplemental Form"



**Version 4: Original Form (MBSG Version 1.1)** This form is the most basic data collection format with minimal data fields.

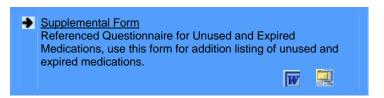
Download "Original Form"



See related documents for more information.

### Documents





### **Collaborators**



**CRG Medical Foundation** for Patient Safety



Northeast Occupational Exchange Maine Benzodiazepine www.noemaine.org 29 Franklin Street Bangor, Maine 04401 (207) 942-3816 (800) 857-0500 Fax: (207) 561-4725



Study Group www.noemaine.org mbsg@noemaine.org (207) 441-0291 Fax: (207) 561-4725

www.communityofcompetence.com

## Appendix L





## September 2004 Preliminary NOE Unused Pharmaceutical Return

DRUG (Sorted Alpha)	Strength	Quantity	Price quote	Cost	DEA SCHE DULE	EPA CLAS SIFIC ATION ?	EPA preferred Destructi on method?	Pos- Session Charge	Sex	NDC Code ?	age
ADDERALL	5MG	1	8.49	1.52	2						
ALAVERT	отс	7	5.25	4.28	6						
ALAVERT	OTC	19	12.25	11.61	6						
ALAVERT	отс	28	18.05	17.11	6						
ALAVERT	OTC	11	7.09	6.72	6						
ALBUTEROL IH	17GM	1	19.68	14.50	6						
ALBUTEROL IH	90MCG	1	8.49	7.64	6						
ALPRAZOLAM	1MG	24	12.10	7.20	4						
AMITRIPTYLINE	10MG	15	8.49	1.43	6						
AMITRIPTYLINE	25MG	15	8.49	2.10	6						
AMITRIPTYLINE	25MG	20	8.49	2.80	6						
AMOXICILLIN	875MG	1	3.49	1.02	6						
APAP/COD	#3	14	8.49	3.98							
BENEADRYL	25MG	6	8.49	8.28	6						
CARBAMAZEPINE	200MG	19	12.54	7.48	6						
CIMETIDINE	300MG	9	12.00	8.00	6						
CLONAZEPAM	1MG	1	8.49	0.26	4						
CLONAZEPAM	0.5MG	6	8.49	2.64	4						
CLONAZEPAM	1MG	29	12.50	7.45	4						
CLONAZEPAM	0.5MG	90	29.60	23.13	4						
CLONIDINE	1MG	1	8.49	0.81	6						
CLONIDINE HCL	0.1MG	10	8.49	1.20	6						
DEPAKOTE	500MG	16	38.10	37.10	6						
DEPAKOTE	500MG	1	3.49	2.32	6						
DEPAKOTE ER	500MG	39	87.24	86.24	6						

DEPAKOTEER	500MG	1	3.49	2.21	6				$\perp$		
DIGOXIN	250MCG	1	8.49	0.16	6						
DIPHENHYDRAM	25MG	24	8.49	0.64	6						
DOCUSATE SODIUM	50MG	1	5.25	0.32	6						
DOCUSATE SODIUM	100MG	28	5.25	1.63	6						
EFFEXOR XR	150MG	52	193.95	192.95	6						
DRUG (Sorted Alpha)	Strength	Quantity	Price quote	Cost	DEA SCHE DULE	EPA CLAS SIFIC ATION ?	EPA preferred Destructi on method?	Pos- Session Charge	Sex	NDC Code?	age ?
EFFEXOR XR	150MG	62	231.06	230.06							
EFFEXOR XR	75MG	8	28.26	27.26							
ENALAPRIL	5MG	2	8.49	0.40							
ENALAPRIL/HCTZ	10/25MG	5	10.38	6.10							
ENALAPRIL/HCTZ	10-25MG	8	14.16	9.54							
EPI E-Z PEN JR	0.15MG	1	65.12	52.28							
EPI E-Z PEN JR	0.15MG	1	65.12	52.28							
EPI E-Z PEN JR	0.15MG	1	65.12	52.28							
ESKALITH CR	450MG	136	105.84	86.82							
FOCALIN	2.5MG	2	8.49	1.07							
GEMFIBROZIL	600MG	1	8.49	0.42							
GLUCOTROL XL	5MG	61	31.55	24.83							
GUANFACINE	1MG	7	8.49	2.73							
HYD.COD.APAP	5/500	20	10.22	6.00							
IBU	800MG	22	8.49	2.99							
		22 11	8.49 20.60	2.99 15.30							_
IBU	800MG										
IBU INDERAL LA	800MG 80MG	11	20.60	15.30							
IBU INDERAL LA INDERAL LA	800MG 80MG 60MG	11 16	20.60 26.07	15.30 20.06							
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IBU INDERAL LA INDERAL LA LAMICTAL LAMICTAL LEXAPRO LISINOPRIL LORAZEPAM LORAZEPAM LORAZEPAM METHYLPHENIDATE NAPROXEN PAXIL CR	800MG 80MG 60MG 100MG 200MG 10MG 20MG 1MG 0.5MG 1MG 5MG 375MG 25MG	11 16 1 3 23 1 25 9 17 40 20	20.60 26.07 4.62 12.96 54.19 8.49 11.60 8.49 8.60 18.36 8.49	15.30 20.06 3.62 11.96 53.19 0.50 6.88 1.80 4.68 13.36 4.00							
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IBU INDERAL LA INDERAL LA INDERAL LA LAMICTAL LAMICTAL LEXAPRO LISINOPRIL LORAZEPAM LORAZEPAM METHYLPHENIDATE NAPROXEN PAXIL CR PERPHENAZINE PERPHENAZINE PERPHENAZINE PHENOBARBITAL PROMENTHAZINE	800MG 80MG 60MG 100MG 200MG 10MG 20MG 1MG 0.5MG 1MG 5MG 375MG 25MG 8MG 16MG	11 16 1 3 23 1 25 9 17 40 20 5 7 18	20.60 26.07 4.62 12.96 54.19 8.49 11.60 8.49 8.60 18.36 8.49 16.20 8.49 19.34 133.65 8.49 8.49	15.30 20.06 3.62 11.96 53.19 0.50 6.88 1.80 4.68 13.36 4.00 15.20 4.11 14.21 111.00 0.09 1.01							
IBU INDERAL LA INDERAL LA INDERAL LA LAMICTAL LEXAPRO LISINOPRIL LORAZEPAM LORAZEPAM LORAZEPAM METHYLPHENIDATE NAPROXEN PAXIL CR PERPHENAZINE PERPHENAZINE PERPHENAZINE PHENOBARBITAL PROMENTHAZINE PROPOX-N/AP	800MG 80MG 80MG 60MG 100MG 200MG 10MG 20MG 1MG 20MG 1MG 375MG 25MG 8MG 16MG 4MG 30MG 25MG	11 16 1 3 23 1 25 9 17 40 20 5 7 18	20.60 26.07 4.62 12.96 54.19 8.49 11.60 8.49 16.20 8.49 19.34 133.65 8.49 11.57	15.30 20.06 3.62 11.96 53.19 0.50 6.88 1.80 4.68 13.36 4.00 15.20 4.11 14.21 111.00 0.09 1.01 6.86							
IBU INDERAL LA INDERAL LA INDERAL LA LAMICTAL LEXAPRO LISINOPRIL LORAZEPAM LORAZEPAM METHYLPHENIDATE NAPROXEN PAXIL CR PERPHENAZINE PERPHENAZINE PHENOBARBITAL PROMENTHAZINE PROPOX-N/AP QUINNE SULFATE	800MG 80MG 80MG 60MG 100MG 100MG 200MG 10MG 20MG 1MG 0.5MG 1MG 375MG 25MG 8MG 16MG 4MG 30MG 25MG 100/650 260MG	11 16 1 3 23 1 25 9 17 40 20 5 7 18	20.60 26.07 4.62 12.96 54.19 8.49 11.60 8.49 8.60 18.36 8.49 16.20 8.49 19.34 133.65 8.49 11.57 8.49	15.30 20.06 3.62 11.96 53.19 0.50 6.88 1.80 4.68 13.36 4.00 15.20 4.11 14.21 111.00 0.09 1.01 6.86 0.70							

RISPERDAL	1MG	1	4.65	3.65							
RISPERDAL	0.5MG	40	138.43	137.43							
RISPERDAL	4MG	23	216.58	215.58							
RISPERDAL	0.5MG	1	4.44	3.44							
SEROQUEL	100MG	90	293.77	292.77							
STRATTERA	10MG	18	73.47	59.54							
STRATTERA	25MG	26	104.90	86.00							
DRUG (Sorted Alpha)	Strength	QUANTITY	PRICE QUOTE	COST	DEA SCHED ULE	EPA CLAS SIFIC ATION ?	EPA preferred Destructi on method?	Possessi	Sex	NDC Code?	age
SUDAFED	ОТС	11	5.25	4.83							
TEQUIN	400MG	3	30.18	29.18							
TRAMADOL	50MG	11	12.04	8.03							
TRAZODONE	50MG	36	20.14	14.90							
VERAPAMIL	120MG SR	13	8.49	4.04							
VIOXX	25MG	3	10.47	9.47							
WELBUTRIN SR	200MG	19	76.94	75.94							
WELLBUTRINSR	100MG	31	76.59	62.25							
WELLBUTRINSR	150MG	33	72.02	71.02							
ZOLOFT	100MG	1	3.87	2.87							
ZONEGRAN	100MG	6	14.80	13.80							
ZYPREXA	10MG	11	119.95	118.95							
ZYPREXA	5MG	16	121.26	120.26							

TOTALS	1621	3093.17	2666.04
Controlled			
Pharmaceuticals	291	165.96	87.02
Benzodiazpines	201	99.87	54.04
Controlled			
Pharmaceuticals	17.95%	5.37%	3.26%
Benzodiazpines	12.40%	3.23%	2.03%

### Questions?

Where possible include number of people returning per take back?

Where possible count the number of mail packages that returned?

Summarize by Drug Class? If so Which Classification?

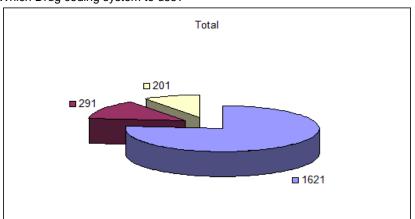
Where possible identify source of prescription (Chain, mail order?)

Where possible estimate number of doses taken from the returned prescription?

Estimate rates of non-compliance?

Compress each name or dose of drug?

Which Drug coding system to use?



Who Collected, from whom What count/volume/weight

When date Where location(s)

Type of collection, mail, drop off,

Why etc.

### **Data Registry:**

## Appendix M





June 2005
Preliminary NOE
Unused
Pharmaceutical
Return

	DRUG (Sorted Alpha)	Strength	Quanti ty		Pric e Quo te	C O S T	DE A Sch edul e	EPA Classif ication ?	EPA preferr ed Destru ction metho d?	Possessi on charge?	S e x ?	Age of Pati ent?	0 0
zip code		<del> </del>		Why Unused		$\vdash$	+	<del>                                     </del>	<del>                                     </del>	+	+	+	+'
4401	Amoxil	500 mg	42	Discontinued		+	+				+	<del>                                     </del>	
4401	APAP/Codeine	300-30 mg	40	Expired									
4401	Atenolol	25 mg	35	Discontinued			<u> </u>				$\perp$	<u> </u>	$\perp$ '
4401	Atenolol	50 mg	9	Discontinued							$\perp$	<u> </u>	⊥′
4401	Baclofen	10 mg	30	Discontinued								$\perp$	⊥'
4401	Buspar	10 mg	84	Discontinued									⊥'
4401	Carbatrol bottle	various pills	many										
4401	Celexa	20 mg	29	Discontinued						<u> </u>	$\perp$		
4401	Cephalexin	500 mg	15	Expired						<u> </u>	$\perp$		
4412	Chloral Hydrate	50	95 ml	Discontinued									$\perp$
4401	Clarinex	5 mg	15	Discontinued		<u> </u>	<u> </u>		<u> </u>		$\bot$	<del>                                     </del>	$\downarrow$
4412	Cogentin	1 mg	18	Discontinued		<u> </u>	<u> </u>				$\perp$	<del>                                     </del>	$\downarrow$
4401	Depakote	250 mg	120	Discontinued							$\perp$		L

	1	ı	ı	1	1	ı	1	1	ı	ı		1	_
4401	Diphenhydramine	25 mg	1	Discontinued									_
4401	Docusate Sodium	100 mg	34	Discontinued									+
4401	Fundame!! Made ate	10	F.4	Discontinued									
4401	Enalapril Maleate	10 mg	54	Discontinued									╁
4401	Enalapril Maleate	10 mg	3	Discontinued									
1101	Endiaphi Walcate	To mg	3	Discontinued									+
4401	Enalapril Maleate	10 mg	44	Discontinued									
4401	Etodolac	500 mg	28	Discontinued									
	DRUG (Sorted Alpha)	STRENG TH	QUAN TITY		PRI CE QU OT E	C O S T	DE A SC HE DUL E	EPA CLAS SIFIC ATION ?	EPA preferr ed Destru ction metho d?	Possessi on charge?	S e x ?	Age of Pati ent?	N
4401	Flonase N/S	16 gm	1	Discontinued									
4401	Folic Acid	1 mg	104	Expired									
4401	Gemfibrazil	600 mg	28	Discontinued									
4401	Gemfibrozil	600 mg	1	Discontinued									
4401	Geodon	20 mg	36	Discontinued									
4401	Geodon	80 mg	29	Discontinued									
4412	Geodon	20 mg	6	Discontinued									
4412	Haldol	5 mg	40	Discontinued									
4401	Hydrocodone/AP AP	5/500 mg	1	Discontinued									
4401	Ibuprofen	800 mg	31	Discontinued									
4401	Ibuprofen	800 mg	27	Discontinued									
4401	K-Dur	20 meq	16	Expired									
4401	Keflex	500 mg	21	Discontinued									
4412	Keppra	500 mg	88	Discontinued									
	Lexapro	20 mg	13	Discontinued									
4401	LExapro	20 mg	14	Discontinued									
4401	Lexapro	10 mg	5 1/2 tabs	Discontinued									
4401	Lipitor	10 mg	23	Discontinued									П
4401	Lipitor	20 mg	30	Discontinued									П
7.101	Lithium	209	00	Biocommudu									+
4401	Carbonate	300 mg	78	Hospitalized									
4401	Lithium Carbonate	300 mg	52	Discontinued									
4401	Lithium Carbonate	300 mg	26	Left behind									
4412	Lithium Carbonate	300 mg	101	Brought to office									
4412	Lithium Carbonate	300 mg	99	Brought to office									
			i .							1			

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4412	Lithium Carbonate	300 mg	5	Discontinued									
			-										T
4412	Lithium Carbonate	300 mg	64	Discontinued									
4401	Loperamide	2 mg	74	Discontinued									
4412	Lorazepam	1 mg	29	Discontinued									
4401	Luvox	100 mg	13	Discontinued									
4412	Mirapex	0.25 mg	51	Discontinued									Ī
4401	Nicotine Patches	21 mg	7	Discontinued									
4401	Nicotine Patches	21 mg	7	Discontinued									_
4401	Omeprazole	20 mg	26	Discontinued					EPA				_
	DRUG (Sorted Alpha)	STRENG TH	QUAN TITY		PRI CE QU OT E	C O S T	DE A SC HE DUL E	EPA CLAS SIFIC ATION ?	preferr ed Destru ction metho d?	Possessi on charge?	S e x ?	Age of Pati ent?	N
4401	Pepcid	20 mg	108	Expired									<u> </u>
4401	Phenytoin EX	100 mg	94	Expired									
4401	Phenytoin EX	100 mg	40	Expired									
4401	Phenytoin EX	100 mg	86	Expired									
4401	Prevacid	30 mg	19	Discontinued									
4401	Protonix	40 mg	12	Discontinued									
4401	Protonix	40 mg	25	Discontinued									
4401	Relafen	750 mg	20	Discontinued									
4401	Relafen	750 mg	18	Discontinued									
4412	Risperidol	2 mg	22	Discontinued									
4401	Ritalin	5 mg	21	Discontinued									
4401	Senna	8.6 mg	60	Discontinued									
4401	Seroquel	100 mg	1	Discontinued									
4401	Seroquel	100 mg	8	Hospitalized									
4401	Seroquel	200 mg	20	Left behind									
4401	Seroquel	100 mg	29	Discontinued									
4401	Seroquel	200 mg	1/2 tab	dose change									
4401	Stelazine	10 mg	38	Discontinued									
4412	Topamax	100 mg	56	Discontinued									
4412	Trazodone	150 mg	1/2 tab	Discontinued									
4401	Trileptal	150 mg	3	dose change									
4401	Trileptal	300 mg	1	dose change									
4401	Verapamil	180 mg	8	dose change									_
4401	Verapamil HCL	240 mg	30	Discontinued									
4401	Voranamillio	240 ma	20	Discontinued									
4401	Verapamil HCL	240 mg	30	Discontinued				-					$\vdash$
4401	Verapamil SR	240 mg	19	Discontinued				-	1				H
4401	Vioday M-V		30	Discontinued		1	1	1	1	Ī	1	Ī	

4401	Vioxx	25 mg	2	Discontinued					
4412	Vistaril	50 mg	82	Discontinued					
4401	VOID								
4401	Void								
4401	Wellbutrin XL	150 mg	1	Discontinued					
4401	Zithromax	250 mg	4	Discontinued					
4412	Zoloft	100 mg	4	Discontinued					
4401	Zonegran	100 mg	18	Discontinued					
4457	Zonegran	100 mg	79	Discontinued					
void									
void									

# Appendix N

National Unused Pharmaceutical Return Registry									
Collector or Collection Sponsor:									
Contact Person, email, phone, address:									
Date(s) From:									
To:									
Page of									

	ZIP CODE	DRUG	STRENGTH	QUANTITY	WHY UNUSED?
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					

12			
13			
14			
15			
16			
17			
18			
19			
20			

National Unused Pharmaceutical Registry Program Description ( Attach or use reverse)

Return form to: mbsg@noemaine.org

version 1.1

# Appendix O

# TABLE IV

# Medications Returned with the Greatest Frequency

Medications	Frequency	Medications	Frequency	
Ranitidine 150 mg	64	Losec 20 mg	24	
Tylenol #3	52	Tyleno1 #2	24	
Pen Vk 300 mg	36	Docusate Sodium 100 mg	23	
Novasen 325 mg	29	Erythromycin 250 mg	22	
Slow K	29	Naproxen 250 mg	22	
Ibuprofen 400 mg	28	Furosemide 40 mg	21	
Imodium 2 mg	28	Toradol 10 mg	21	
Lorazepam 1 mg	26	Norflex 100 mg	20	
Amoxicillin 250 mg	25	Sulfatrim DS	20	
Lanoxin 0.25 mg	25	Cytotec 200 u g	19	

# Appendix P

First Name	<u>Last</u> <u>Name</u>	<u>Title</u>	<u>Organization</u>	Address	<u>City</u>	<u>St.</u>	<u>Zip</u>	E- mail	<u>Phone</u>	Status	Type
						Alberta				active	to Pharmacy
					Dair	Bahrain				donvo	ritamidoy
						British Columbia				active	to Pharmacy
						California					
						Colorado					
Katri	Hameen- Anttila	University of Kuopio			Kuopio	Finland				active	to pharmacy
Laurie	Tenace					Florida					
		Cyclamed				France					
						Great Britain				active	to pharmacy
					Chicago	Illinois			(312) 744-4000	(773) 869-7725	
	Reardon					Indianna				active	TRIAD
		Ass Inde				Italy					
Douglas	Ball					Kuwait					

Shawn	Tiller					Maine		active	TRIAD / Mail pending
			Sultan Qaboos University Hospital	P.O.Box 38 Al Khoudh 123	Muscat	Oman			
Anna	Samborska					Poland		active	to pharmacy
						Prince Edward Island		active	to pharmacy
						South Africa			pick up
	Jeppson	Board of Pharmacy			Olympia	Washington			
						Oklahoma			recycle
			Opal Project			Australia			
			RUM			Australia			
	1								

### Appendix Q





After the preliminary fire is started, drugs are injected into the fire with the EZ Feed system.

This innovative, easy to use incinerator is specifically designed for safe and efficient disposal of confiscated drugs. Drug Terminator is used by local law enforcement when other disposal options are limited. Drug Terminator is wood or charcoal fired. Two high velocity electric blowers create a cyclone of intense heat eliminating illicit drugs quickly and completely. The volume of material is reduced to an average of 1% ash. Non-combustible drug paraphernalia is sterilized by heat and can be disposed in municipal waste.

### Appendix R

The Chief of the Maine Drug Enforcement Agency in a private communication informed me that I could pass on that the Department has not wasted money on a decal for me to put on the tin cup I will pass and so I should use that fact as an example of how frugal we will be with any donations or grants that we receive.

