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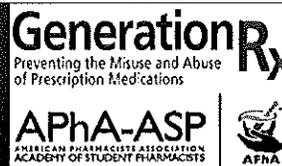
Gressit, Stevan and Heather Stewart
(2011) Maine State Medication
Take-Back Data

Maine State Medication Take Back Data

2011 International Symposium on Safe Medicine
October 4, 2011

Heather Stewart
Doctor of Pharmacy Candidate, 2014
Generation Rx Co-Chair, APhA-ASP

Stevan Gressitt, M.D.
Founding Director, International
Institute for Pharmaceutical Safety



Disclosure

- The content from Heather Stewart does not relate to any product of a commercial interest. Therefore, there are no relevant financial relationships to disclose.
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 - Lenard Kaye, Principal Investigator and Director
 - Jennifer Crittenden, Program Manager and Research Associate, University of Maine Center on Aging, Bangor, ME
 - Stevan Gressitt, Co-Principal Investigator, and former Medical Director Maine Office of Adult Mental Health Services, Maine Department of Health and Human Services, Augusta, ME

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Objectives

Data Collected Independent of DEA

- To summarize the Maine data collected from the "National Medication Take Back" event on April 30, 2011.
- To raise awareness of the growing need for successful medication disposal programs.
- To compare and contrast results from the "Safe Medicine Disposal for ME" program and the "National Medication Take Back" event.

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Pounds Collected, According to 2010 Decennial Census

County	County Population	Lbs Collected
Sagadahoc	35293	766.2
Aroostook	71870	1470.8
Androscoggin	107702	1503.3
Piscataquis	17535	180.1
Cumberland	281674	2537.2
Hancock	54418	474.9
Kennebec	122151	1054.6
Lincoln	34457	261.6
Knox	39736	297.9
Franklin	30768	228.1
York	197131	1427.3
Waldo	38786	271.7
Penobscot	153923	938
Washington	32856	153.6
Oxford	57833	234.8
Somerset	52228	119.9
Maine Total Collection: 11920 lbs		(Source US DEA Maine Office) 4

Maine State Medication Take Back Participation, April 30, 2011

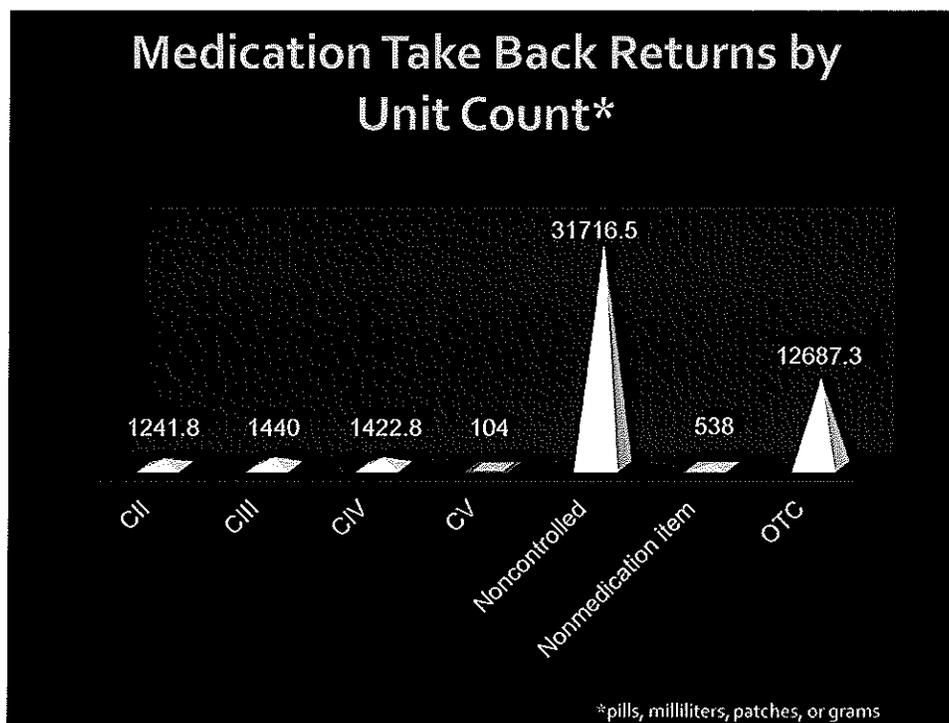
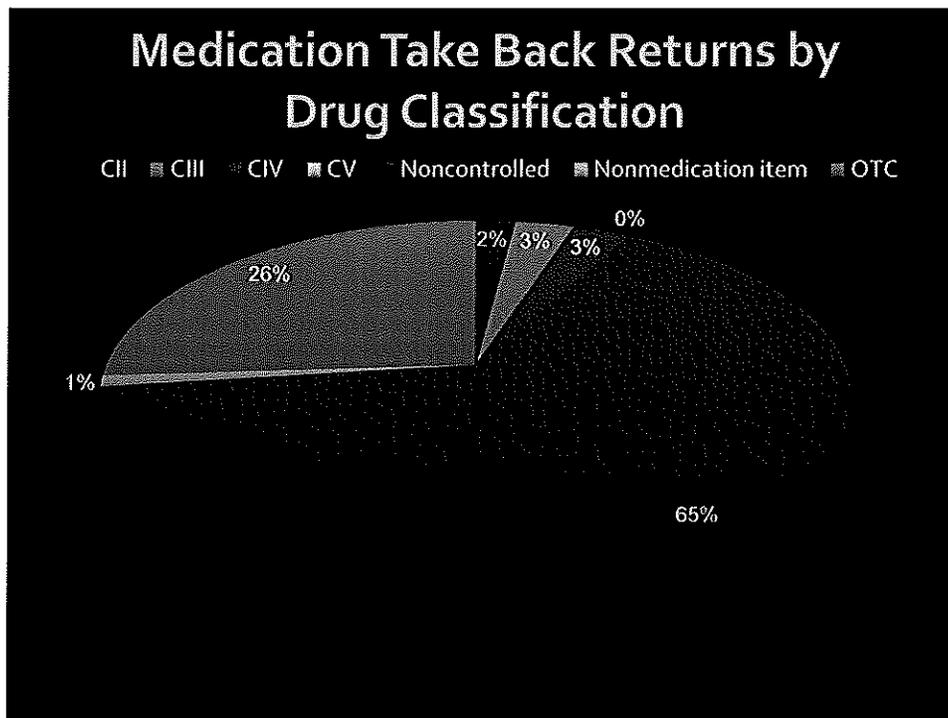
- **Portland**
 - 55 Participants
 - Logged 797 individual medications
 - Collected 43,278 Units*
 - 73.7% Waste
- **Belfast**
 - 13 Participants
 - Logged 97 individual medications
 - Collected 3,166 Units*
 - 68.5% Waste
- **Long Term Care Facility**
 - 3 Participants
 - Logged 75 individual medications
 - Collected 2,761 Units*
 - 65.1% Waste

*pills, milliliters, patches, or grams 5

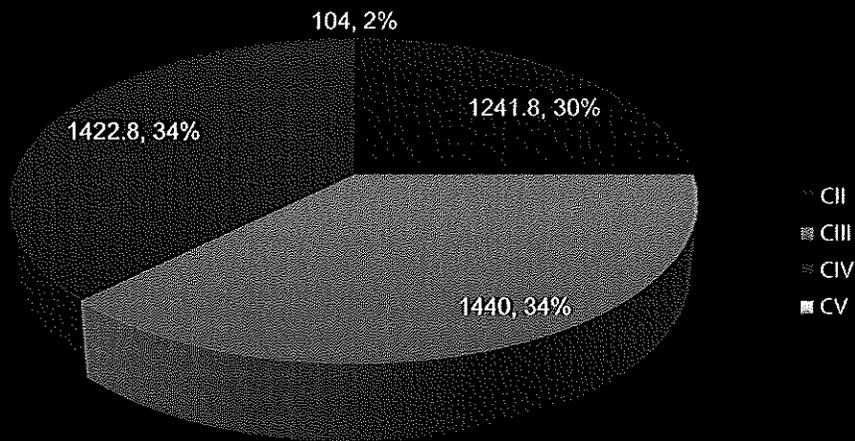
Questions

- Why did more LTCFs not take part in removing their old/unused medication?
- Why do we have so much waste?
- How can we utilize more collection sites to gain the data necessary in order to educate society, healthcare providers, and obtain funding for removal of these medications along with furthering education efforts?

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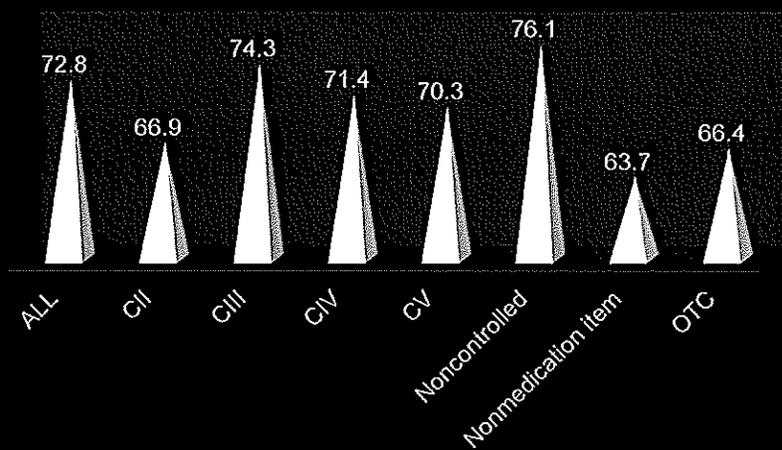


Medication Take Back Returns by Controlled Substance Category*



* Classification as a controlled substance is defined by the Controlled Substance Act of 1974

Percent Returned from Dispensed, by Medication Class

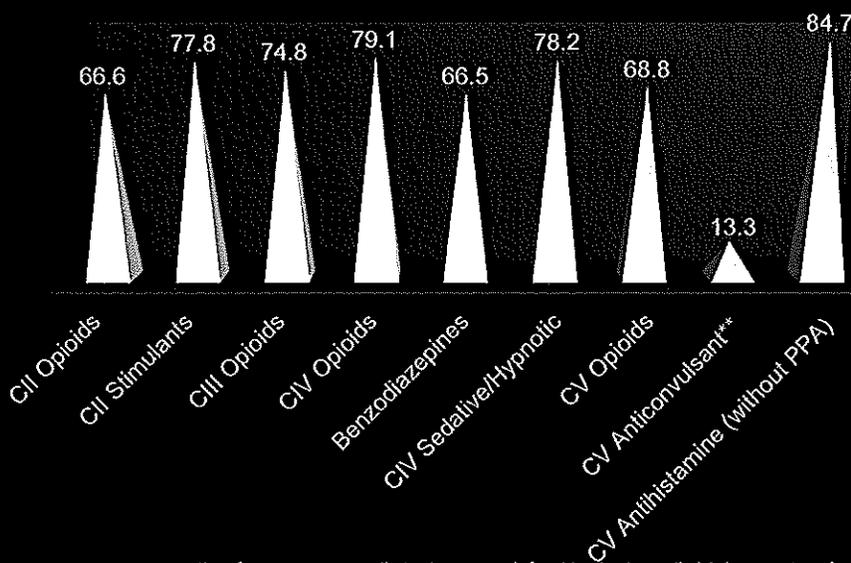


Top 10 Therapeutic Class, Wastage by Pill Count

Therapeutic Class	Original Amount	Returned Amount	Waste (%)
Cardiovascular	12350	9344	75.7
Hormone & Hormone Replacement	4201	2601	61.9
Diuretic	2537	1703	67.1
Anticonvulsant	1983	1684	84.9
Antibiotic	1797	1487	82.7
Antidepressant	1692	1280	75.7
Antineoplastic	1966	1144	58.2
Anticoagulant	1567	1116	71.2
Gastrointestinal	1069	968	90.6
NSAID	962	572	59.5

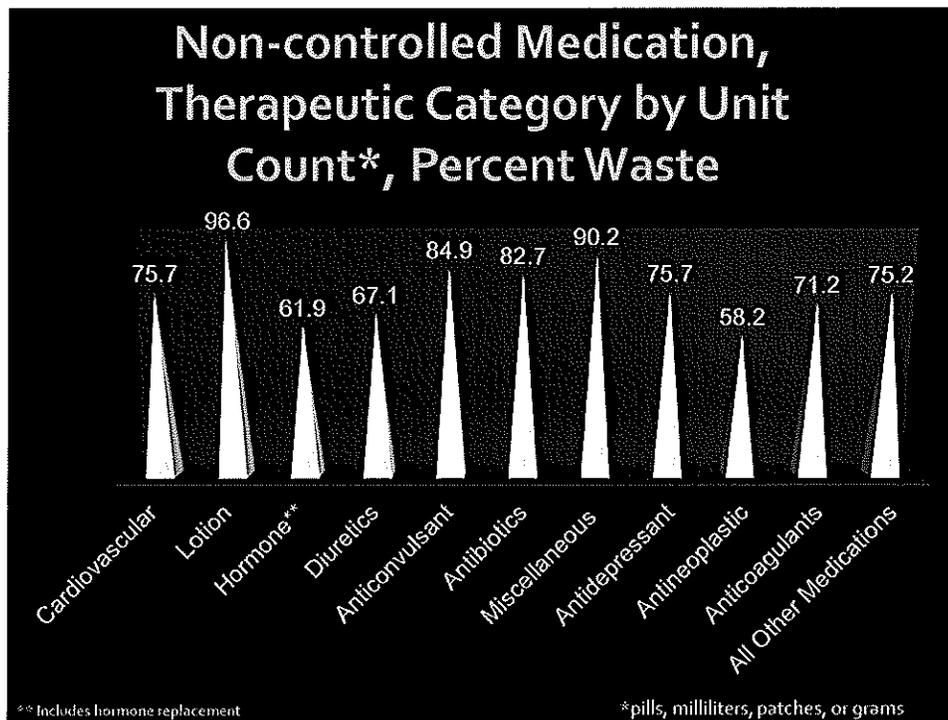
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Controlled Substance*, Percent Waste by Class



** Excludes Barbiturates

* Classification as a controlled substance is defined by the Controlled Substance Act of 1974



Safe Medicine Disposal for Me (SMDME)

- Enabled through state legislation
 - Public Law 2003, Chapter 679 "An Act to Encourage the Proper Disposal of Unused Pharmaceuticals"
 - Sponsored by Senator Lynn Bromley
 - <http://www.maine.gov/legis/opla/drugrpt.pdf>
- Prototype model (statewide and national replication) for the disposal of unused household medications (controlled and non-controlled)
- Anonymous, free way to dispose of unused medications safely and properly
- High heat incineration, according to Maine's law enforcement drug seizures procedure
- Utilizes U.S. Postal Service to solve Maine challenges
 - Maine has a high degree of rurality
 - Oldest state in the nation
 - Maine median age 42.7 years old versus U.S. 37.2 years old (2010 U.S. Census Bureau)

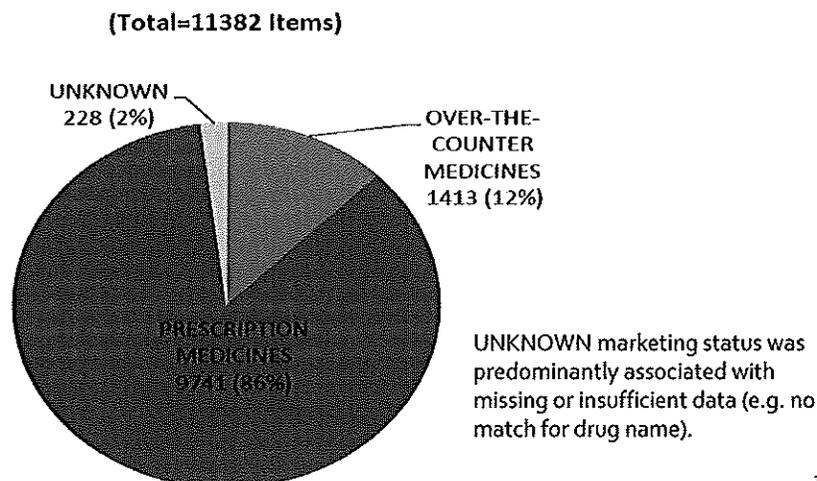
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Participant Survey Results: Top Reasons for Medication Collection in Patient Homes

- A physician told the patient to stop taking the medication or gave the patient a new prescription. (27.3%)
- Medicine belonged to a deceased family member. (19.6%)
- The person felt better or no longer needed the medicine. (18%)
- The person had a negative reaction or allergy to the medicine. (11.9%)

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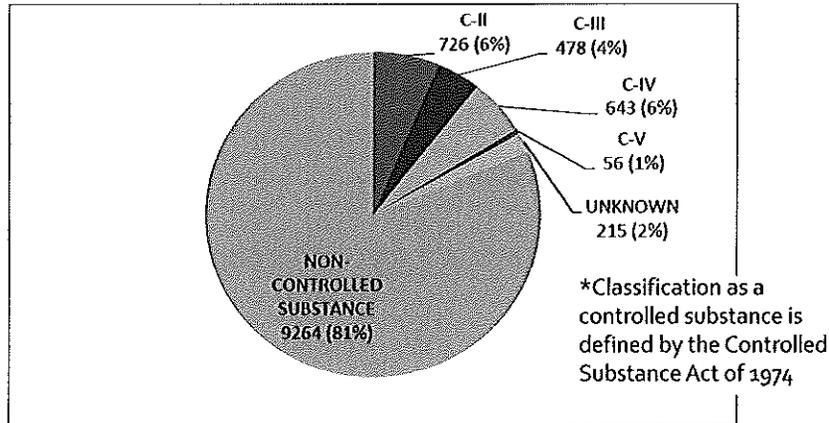
Marketing Status of Returned Medication



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Medication Returns by Federal Controlled Substance Category*

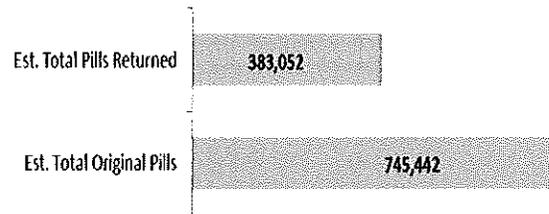
(Total=11382 Items)



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Estimated Proportion of Waste (Percentage) By Pill Count

(Total=9646 Items)



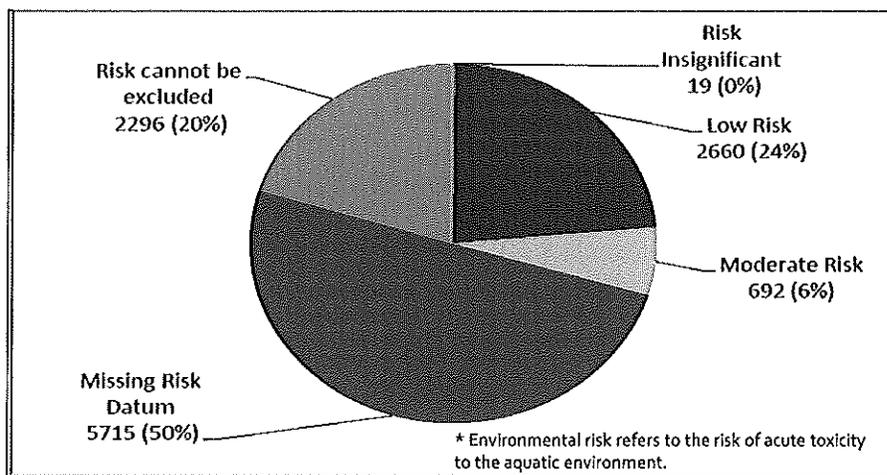
The estimated proportion of wasted medicines, by PILL FORM and PILL COUNT only, is calculated by dividing the estimated total quantity returned by the estimated total standard packsize. The total PILL count is the sum of PILL form (coded as pill, capsule, or tablets). The estimated total standard packsize corresponds exactly to the total line items of this variable (n=9646).

ESTIMATED PROPORTION OF WASTE = 51.39%

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Potential Environmental Risk* of Medication Returns

(Total=11382 Items)



Conclusion

- Need for data while ensuring the highest level of security
 - Justification for policy
 - Improved pharmacy practice
 - Health care professionals need to collaborate to avoid prescription abuse, misuse, and diversion
 - Patient Safety
 - Primary Concern
- Immediate need for education on all fronts
 - Pharmacists, prescribers, patients, and government officials
- Need to utilize student pharmacists for greatest impact
- Need to take affirmative position

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For Further Information

Heather Stewart

Doctor of Pharmacy Candidate, 2014
Generation Rx Co-Chair
University of New England
716 Stevens Avenue
Portland, Maine 04103
hstewart@une.edu
Cell: 207-710-7047

Stevan Gressitt, M.D.

Faculty Associate, University of Maine Center on Aging
Academic Member, Athens Institute for Education and Research Athens, Greece
Founding Director, International Institute for Pharmaceutical Safety
University of New England, College of Pharmacy, Department of Pharmaceutical Sciences
Associate Professor of Clinical Psychiatry, University of New England, College of Osteopathic
Medicine
716 Stevens Avenue
Portland, Maine 04103
gressitt@gmail.com
Cell: 207-441-0291
www.benzos.une.edu
www.safemeddisposal.com

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