

**U.S. National Registry for Unused or Expired Medications
Questionnaire for Returned Medications by Individual Donor[®]**

CRG Medical Foundation for Patient Safety
(CRGFORM0019-Individual Donor Version 01-07-05)

Use black or blue ink pen and print information legibly. Check boxes as appropriate. Follow skip pattern as indicated.

1. Zip Code: _____

TODAY'S DATE: _____

2. County: _____

Questions 3-5 are optional. You do not have to answer Questions 3-5, and you can skip to Question 6. If you wish to answer them, your answers will be used for research to learn about the demographic characteristics of donors.

3. Age: _____

4. Gender: Male Female

5. Ethnic background: White, not of Hispanic origin
 Black, not of Hispanic origin
 Hispanic
 Asian or Pacific Islander
 American Indian, Aleut, or Eskimo

6. Is this your first time to use this Registry to record your unused or expired medicines?
 No Yes, **Go To Question # 8.**

7. How many times have you used this Registry before today? _____

MEDICATIONS INFORMATION

8. Whom does the unused or expired medicine(s) belong to?

- Me
- Family
- Friend
- A patient, not related to family
- Pet
- Unknown
- Other: _____

GO TO NEXT PAGE.

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9. What are the medications you are returning? Use the table below to list your medicines.

List drug(s) from pill bottle or package. Name of Drug	From pill bottle or written prescription, write the numbers after NDC, if available NDC Number	Liquid, gel, or ointment	Concentration Or Dosage	Write approx. number of pills or capsules or amount of liquids Quantity (e.g. approx number of pills or capsules, half tube, etc.)	Drug Type		Why was drug returned? Check box or write reason in space provided.								
					Prescription	Over-the-counter	Drug expired or outdated	Doctor ordered new drug	Patient felt better	Adverse or allergic reaction	Patient died or moved away	Did not want to take it	Unknown	Other Reason	

Use Supplemental Form (CRGFORM0016) for additional medications and attach form(s) to this questionnaire.

10. May I ask you a few more questions? Yes, **Go To Question 11.** No, **STOP! END OF QUESTIONNAIRE. Thank you!**

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This section of the Questionnaire is optional; answers will be used for research only.

11. How did you hear about this Registry?

- My doctor or nurse
- Family or friend
- Newspaper or radio
- AARP chapter or other community groups (such as church, social organizations)
- Internet websearch
- Other: _____

12. How have you been getting rid of unused or expired medicines?

- Threw away in garbage
- Flushed down toilet or sink
- Gave to my doctor or nurse
- Gave to my friend or family
- Other: _____

13. Did you find this Registry easy and convenient to record unused or expired medicines?

- Yes No, Why? _____

14. Would you support a state or national effort to expand and promote this Registry?

- Yes No

15. Would you recommend this Registry to your family, friends, and/or co-workers?

- Yes No

16. Are you aware of the potential harm to the environment caused by improper disposal of drugs?

- Yes No

17. Would you like to get more information about this Registry and how to safely get rid of unused or expired medicines?

- Yes No

18. Do you have any other comments about this Registry?

**END OF QUESTIONNAIRE.
THANK YOU!**

Community Medical Foundation for Patient Safety RESEARCH ABSTRACT

“Unused and Expired Drugs: A Patient Safety & Public Health Epidemic in the Making”
Stevan Gressitt, M.D., Matthew C. Mireles, Ph.D., M.P.H., and Elizabeth A. Smith, Ph.D.

Unused and expired medications in the U.S. and other countries exact an incredible toll on patient safety and public health. In the U.S., an estimated minimum of \$1 billion of prescription drugs are thrown away each year. Increasing availability, marketing, and purchase of prescription and over-the-counter pharmaceutical products, coupled with the tendency of patients to stockpile drugs at home, is a unique phenomenon that has long been ignored. Compounding this problem is that no state or federal program exists to safely collect unwanted drugs and dispose of them properly, except through reverse distributors and only for large healthcare institutions.

Many significant problems are associated with unused and expired drugs in the home. While medication errors are commonly studied in hospital settings, few studies investigate patient safety related to medications after the patient is discharged. Elderly patients, who use the most prescription drugs, must deal with cumbersome lists of drugs, dosages, and time schedules. Drugs often are left unsecured in cabinets and on counters. Improper use of drugs may cause an overdose and drug interactions. Accidental poisoning from ingestion of drugs among children and pets often occurs in homes where medicine is easily accessible. About 40% of poisoning among children occurs in grandparents' homes. Drug diversion, involving theft, burglary, illegal possession, and drug abuse, is a major crime in households where narcotics are present. All are a significant patient safety problem of epidemic proportion. Furthermore, the disposal of unwanted drugs as household trash or by flushing them down the sink or toilet is unwise and dangerous to the environment, potentially contaminating the water supply.

The Main Benzodiazepine Study Group, Northeast Occupational Exchange, and CRG Medical Foundation for Patient Safety have assumed the leadership to study the problem of unused and expired medicine. Using the new concept and methodology of Community of Competence™, this study group, consisting of many experts from numerous professions located in different states and countries, convenes monthly to discuss this universal problem and develop solutions. One solution was to establish the *Unused Medicine Registry* to collect information about any drugs that should be removed from the home. This study presents the methods, data collection instruments, and preliminary results from several community-based drug return programs to safely collect and transfer the unused and expired drugs from the patient's home to the proper authorities for approved destruction.

Preliminary analyses of *Registry* data show unique patterns of frequently unused medications, including those that are federally controlled. In one community in Maine, approximately 40% of the prescription drugs were returned unused by the patients. *Antidepressants* were the most commonly unused drugs. In another community in Maine, an estimate cash value of the returned drugs was calculated at more than \$67,000, from a collection involving 106 individuals who returned more than 1200 drugs. Average time of storage at home is 2-3 years; some drugs were kept up to 10 years.

Medicine should be taken by patients as prescribed by doctors in order to maximize therapeutic benefits. Otherwise, when patients stop taking them, it becomes a medical compliance issue, as well as a tremendous financial cost. Stockpiling unused and expired drugs beyond expiration is a patient safety problem. Indiscriminately disposing of these drugs creates an environmental hazard with potential long-term consequences. Results from one Canadian study showed that *antibiotics* and *anti-infectives* were the most commonly unused and discarded drugs, which promote multiple-resistant bacteria when they are introduced into the ground water.

Presently, no systematic program exists to collect and destroy patients' unwanted drugs. Patients cannot return dispensed drugs back to the first registrants--physicians and pharmacists. The *Unused Medicine Registry* is a first step to collecting the data for understanding the magnitude of the problem. Data from the *Registry* will be used to design better community-based collection programs to remove unwanted drugs from the home and safely destroy them. An immediate and far-reaching application of the *Registry* data is to improve international donations of needed drugs as humanitarian aids in preparation for or during the aftermath of a natural catastrophe, such as the tsunami in Indonesia and the recent earthquake in Pakistan. Other research and solutions applications of data are being considered.