

**Eastern District Innovative Grant Program
Fiscal Year 2007/2008**

**Assessing People's Perceptions and Awareness of Medication
Disposal Issues in Calumet, Outagamie, and Waupaca Counties**

Submitted by:

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Situation:

Improper management of leftover medications can have negative human health and safety consequences, and has also been shown to negatively impact aquatic life. This issue was of concern in 2007 to several Calumet County departments, along with other counties in northeast Wisconsin specifically Waupaca, Winnebago, and Outagamie. Mary Kohrell partnered with other northeast WI counties in 2007 to develop a leftover medication collection program. In 2008, this issue became a higher priority for counties and agencies throughout Wisconsin at the local and state level, with policy and program staff searching for more effective ways to implement leftover medication collection programs locally and at the state level, along with more effective ways to educate the public about this topic.

Response:

Working collaboratively with partner departments in Calumet County; partners in Outagamie and Waupaca Counties; in 2008 the team continued the four-county leftover medication collection program which was started in 2007. In response to program effectiveness questions raised at the regional and state levels, Kohrell and Marilyn Herman applied for and received a District Resource Management grant to undertake a 4-county survey research project with the assistance of Steve Brachman, SHWEC; Bret Shaw with the Environmental Resources Center; and David Trechter, UW River Falls Survey Research Center. The purpose of the survey was to learn people's behaviors and awareness on leftover medication issues. The survey was completed in the summer of 2008. A statistically significant number of responses to the survey were received, and data were analyzed.

Results:

Preliminary analysis of the survey data was shared with several planning and policy groups. Of particular interest were survey results indicating that people's most preferred disposal option is a permanent drop off facility rather than one-day collection events for leftover medicines. Survey results also provided insights about people's preferred methods for learning more about leftover medication disposal. Finally, survey results indicate that based on prior UW Extension educational programs, people in the survey region have indeed changed their practices related to leftover medication disposal and have adopted safer methods. Complete analysis of the survey results is being conducted in partnership with Dr. Joy Jordan, Associate Professor of Statistics and Chair, Department of Mathematics, Lawrence University. Students of Dr. Jordan's Applied Statistical Methods, Math 217, course are analyzing this data in conjunction with Kohrell as a service-learning component of the class.

Evidence:

There are several outcomes from this innovative research. As a result of this research project, the Lake Winnebago MEG Unit, one of the regional partner organizations, now supports a

permanent collection drop box method for collecting leftover medicines. In addition, the WI DNR Hazardous Waste Bureau has utilized these research results to influence Wisconsin leftover medication disposal policy. Research results will also be utilized in 2009 to modify information and education materials for medication collection in northeastern Wisconsin and throughout the state.