

Milwaukee, Wisconsin

Program Overview: In September 2006, the Milwaukee Metropolitan Sewerage District (MMSD) partnered with the Milwaukee Police Department and Aurora Pharmacy to hold a single-day medicine drop-off event for Milwaukee households. Participants could drop off their unneeded medicines for safe disposal. Controlled substances were taken into the custody of the City of Milwaukee's police department and incinerated with confiscated items, while non-controlled medicines were incinerated by MMSD's contractor, Veolia Environmental Services, in an approved hazardous waste incinerator. All medicines were sorted and separated at the collection site into controlled and non-controlled bins by volunteer pharmacists from Aurora Pharmacy.

A second drop-off event took place in June 2007 and boasted increased participation as well as increased quantities of drugs collected.

In April 2008, the MMSD in coordination with Milwaukee, Racine, Ozaukee and Washington counties, put together an event that included the collection of unwanted medicines and personal care products. During the event more than 2,300 residents participated. Residents were encouraged to drop off unwanted prescription medications, over-the-counter medicine, ointments, sprays, inhalers, creams, and pet medications to one of the six different sites. The number of participants and amount of medications collected for each of the four counties are as follows:

	Participants	Non-Controlled Substances	Controlled Substances
Milwaukee County	1,080	4,487 lbs	36,831 (Pills, Patches & Bottles)
Ozaukee County	365	1,022 lbs	3 (30 gallon drums)
Racine County	523	761 lbs	50 lbs
Washington County	380	743 lbs	83 lbs
TOTAL:	2,348	7,013 lbs	----

Licensed pharmacists, law enforcement officials and waste disposal staff were positioned at each of the locations to properly identify, catalogue and dispose of the substances. All medicines were contained in fiber drums that were then incinerated at federally licensed facilities.

Public outreach and advertising efforts informed residents of the detrimental effects of flushing or pouring medicines down the drain. To boost participation for the event MMSD, as well as government, environmental and health organizations organized the following promotional efforts:

- Several hundred posters
- 200,000 printed postcards
- Thousands of electronic postcards
- Creation of the "pill fish" symbol by the MMSD
- Advertisements printed in the Milwaukee Journal Sentinel and other local newspapers

- Reader spots run on local radio stations

Collection Site: The parking lot of the Milwaukee Brewers' Miller Park baseball stadium served as a convenient drop-off site since it allows for streamlined traffic flow. Event coordinators used this site for the 2006 and 2007 events.

In the 2008 collection event four Wisconsin counties (Milwaukee, Ozaukee, Racine and Washington) participated. Drop-off locations included Miller Park in Milwaukee, the City of Racine, the City of Burlington, Ozaukee County Highway Department, Milwaukee Area Technical College at the Mequon Campus, and Washington County Fair Park.

Key Motivation: MMSD cited environmental concerns related to emerging research that shows trace amounts of pharmaceutical chemicals in waterways and the known and unknown adverse impacts on aquatic life and water quality. Police department participation was motivated by concerns relating to prescription drug abuse, theft and accidental poisonings.

Organizing Body: Milwaukee Metropolitan Sewerage District

Partners: Milwaukee Police Department, Aurora Pharmacy, Milwaukee Brewers baseball team, University of Wisconsin – Milwaukee Great Lakes WATER Institute, Veolia Environmental Services, City of Milwaukee Health Department.

In 2008, Ozaukee County Health Department, Veolia Environmental Services, City of Racine Health Department, Caledonia/Mt. Pleasant Health Department, Western Racine County Health Department, City of West Bend (West Bend Sewer Utility), the U.S. Environmental Protection Agency Great Lakes National Program Office, Aurora Pharmacy, Columbia St. Mary, Milwaukee Police Department, Milwaukee Health Department, Milwaukee Brewers Baseball Club and others.

Level of Implementation: The 2006 and 2007 collections were organized through MMSD's Household Hazardous Waste Program, which is funded by residents of Milwaukee County. The Medicine Collection Day was only open to Milwaukee County residents. MMSD continued to seek other partners or funding sources to be able to open the collection to more people in southeastern Wisconsin, and in 2008 the collection expanded to include three additional counties.

Costs:

2006

- Transportation & treatment for 824 lbs. of non-controlled = \$1,461
- Veolia Environmental Services labor costs = \$1,986
- Transportation, destruction & labor for controlled substances were donated by Milwaukee Police
- Pharmacists = volunteered
- Advertising = MMSD staff time and material for web site info, news release, posters, and informational handouts.
- Tent, tables, chairs, barricades = \$3,975

2007

- Transportation & treatment for 2,387 lbs. of non-controlled = \$3,904
- Veolia Environmental Services labor costs = \$1,058
- Transportation, destruction & labor for controlled substances were donated by Milwaukee Police
- Pharmacists = volunteered
- Advertising = \$1,500 for 80,000 postcard size informational fliers for distribution in Milwaukee area pharmacies. MMSD staff time and material for web site info, news release, and posters.
- Tent and traffic control = Aurora Health Care loss prevention officers provided on-site traffic control. This was provided by Aurora as a part of the partnership commitment. \$353

2008

MMSD received a grant of \$18,650 from the USEPA Great Lakes National Program Office and made the following reimbursement payments to partners for Medicine Collection contract related costs:

- Racine City Health Department \$2787.68
- Ozaukee County Public Health \$2300.00
- West Bend Sewer Utility \$2142.00

The remaining funds were used to reimburse MMSD for the \$10,000 radio buy and other advertising costs for promoting the collection. Aurora Pharmacy also contributed \$4,000 (not grant funded) to print 200,000 promotional postcards and distributed information through its pharmacies to customers.

Advertising: Interviews conducted at the collection indicated that most people found out about “Medicine Collection Day” from postcards handed out with prescriptions at pharmacies and from newspaper coverage. In 2007, the program received at least three newspaper stories and a free public service announcement. Survey results showed the following sources for program awareness:

172	Post card	162	Newspaper
63	Radio	50	Aurora Hospitals / Pharmacy
34	Pharmacy	25	TV
19	MMSD web site	18	Friend/family
8	Email	7	Doctor
6	Church	5	Poster

Aurora Pharmacy ran 15-second spots on two radio stations in 2007. Aurora also paid for live remotes from the collection during the event. Aurora provided multiple communications to its Milwaukee-area employees through internal e-mail messages. These messages were delivered by Aurora Pharmacy leadership to more than 10,000 Aurora employees who work in the Milwaukee area.

Outcome: Increasing numbers of participants in the single-day events each year, with 128 people in 2006 and 508 in 2007. 824 lbs. of non-controlled substances and 10,472 controlled substances

(counting individual pills, patches, and bottles) were collected in 2006, and the quantities increased to 2,387 lbs. of non-controlled and 24,751 controlled substances in 2007.

For 2008, all three goals of the program were met: 1) establish for the first time a coordinated annual, regional medicine collection program to keep drug related chemicals out of waste streams, 2) educate the public about what they can do to help protect area waterways and Lake Michigan, and, 3) build public awareness and support for the need for additional scientific research on the impact drug related chemical contamination in the environment. A secondary goal is to begin to raise awareness of the need for the medical and drug manufacturing industries to assume responsibility for the proper redistribution and/or disposal of drugs.

Contact: Bill Graffin (*for 2006 and 2007 collection events*)
Milwaukee Metropolitan Sewerage District
260 W Seeboth St
Milwaukee, WI 53204
Phone: (414) 272-5100
Email: BGraffin@mmsd.com

Steve Jacquart (*for 2008 collection event*)
Milwaukee Metropolitan Sewerage District
260 W. Seeboth Street
Milwaukee, WI 53204
Phone: (414) 225-2138
Email: sjacquart@mmsd.com
Fax: (414) 347-0690